

Table S1: List of genes and their primers used for quantitative real time RT-PCR

Gene name (<i>Gene symbol</i>)	Accession number (mRNA RefSeq)	Primer sequences ¹
Adenylate cyclase 5 (<i>ADCY5</i>)	JV050413	GAGGATGAAGTGGATGAG (s) CAGATGAAGAGGAAGACG (as)
Adiponectin receptor 1 (<i>ADPORA1</i>)	NM_001261175	CAGGAAGAAGAGGAGGAG (s) TGTAGCAGATAGTCATTGTC (as)
Apoptosis, caspase activation inhibitor (<i>AVEN</i>)	JU490006	GAAGTGTGATGGCAAGG (s) CTGAGAATCCGTTGAAGG (as)
Beta actin (<i>ACTB</i>) ²	NM_001033084	GTGCGTGACATTAAGGAG (s) AGGAAGGAAGGTTGGAAG (as)
Beta-2-microglobulin (<i>B2M</i>) ²	NM_001047137	AGATGTCTCGCTCAGTGG (s) AGTCAACTTCAATATCAGATGG (as)
Cholinergic receptor nicotinic, delta (<i>CHRNA4</i>)	XM_002799072	GCCGACAGTGGTGAGAAGAC (s) GGAGATGAGCAGCAGGAAGAC (as)
Foxhead box D3 (<i>FOXD3</i>)	NM_001198733	CAGAGCCCGCAGAAGAAG (s) GCAGTCGTTGAGTGAGAGG (as)
Glyceraldehyde 3 phosphate dehydrogenase (<i>GAPDH</i>) ²	NM_002046	CGACAACGAATATGGCTA (s) CTGGGAAGGAAAGAAGGG (as)
Gap Junction protein, delta 4, 40 kDa (<i>GJD4</i>)	XM_001094309	GCTCTGGTTCGTCCTCAC (s) TCCTGCTCGTCCTGGTAG (as)
Mitogen-activated protein kinase 8 interacting protein 3 (<i>MAPK8IP3</i>)	JV461656	CAGGGTGGGATTTCTCAG (s) ACTTAGTAGCGTGTCTGG (as)
Meckel syndrome 1 (<i>MKS1</i>)	JV688066	AGAAGGAAGGAAGGAAGG (s) CCAAGCAGTAGAATGAGG (as)
Nicotinamide-N methyl transferase (<i>NNMT</i>)	XM_001086727	GATTGGCGAGCAGAAGTTC (s) GGTCACAGGCATCACAGG (as)
Nucleoporin 50 kDa (<i>NUP50</i>)	NM_001265689	TGCGAATCAGAAGACACAGC (s) TGGAACACAGACGATAAGAACG (as)
Phosphatidylinositol	JV043498	GTTCTCCAGTCACACGATACATTC (s)

glycan anchor biosynthesis receptor V (<i>PIGV</i>)		GGCAGCACAGGCAGTTCC (as)
Protein associated with topoisomerase II homolog I (<i>PATL1</i>)	JV703655	CTCTCCTCCTCTATCATCTTCC (s) GTCTTCACCACGGCTCAG (as)
Transforming growth factor beta receptor II (<i>TGFBR2</i>)	JV592166	TCTGTTTGGATGTTGGAAAGTCTC (s) GCCCTATGGTGCGAGTGG (as)
Tox high mobility group box family member 2 (<i>TOX2</i>)	JV699322	ACCGTTTCGTCATCCTCA (s) AAGTCGTCGCTGGCAATG (as)
von Willebrand Factor A domain containing 5B1 (<i>VWA5B1</i>)	XM_001108622	CTCTCCTGAACACTGATG (s) TGATGATGATGCTCTTGG (as)

¹primers were designed using Beacon Designer Software (Premier Biosoft, Palo Alto, CA, USA) based on gene sequences retrieved from NCBI data base. ²housekeeping gene. as, anti-sense. s, sense.

Table S2: Details of primary antibodies against target antigens

Serial number	Antigen (Alias)	Final concentration (µg/ml)
1.	Adenylate cyclase 5 (ADCY5) ^a	4.0
2.	Apoptosis, caspase activation (AVEN) ^a	4.0
3.	Cholinergic receptor nicotinic, delta CHRND) ^b	4.0
4.	Connexin 40.1 (GJD4) ^b	2.0
5.	Foxhead box D3 (FOXD3) ^b	2.0
6.	Meckel syndrome1 (MKS1) ^b	2.0
7.	Nicotinamide-N-methyl transferase (NNMT) ^c	4.0
8.	Transforming growth factor beta receptor 2 (TGFB2) ^b	4.0
9.	TOX high mobility group box family 2 (TOX2) ^a	4.0
10.	von Willebrand factor A containing 5B1 (VWA5B1) ^a	4.0

^agoat polyclonal. ^brabbit polyclonal. ^cmouse monoclonal.

Table S3: List of expressed genes in the endometrium of Conception cycle

(1) Expressed in groups 1a, 1b and 1c

Gene name	Gene symbol	Entrez Gene ID
1-acylglycerol-3-phosphate O-acyltransferase 1	AGPAT1	717174
3-hydroxyanthranilate 3,4-dioxygenase	HAAO	713101
5-phosphohydroxy-L-lysine phospho-lyase	PHYKPL	702302
8-oxoguanine DNA glycosylase	OGG1	700481
Aarf domain containing kinase 2	ADCK2	693303
Aarf domain containing kinase 4	ADCK4	702379
Abhydrolase domain containing 1	ABHD1	698700
Abhydrolase domain containing 8	ABHD8	718980
Achaete-scute family bhlh transcription factor 1	ASCL1	698820
Acid phosphatase 7, tartrate resistant (putative)	ACP7	695532
Acidic nuclear phosphoprotein 32 family member E	ANP32E	706251
Acrosin binding protein	ACRBP	713219
Actin like 7B	ACTL7B	710750
Actinin, alpha 2	ACTN2	710012
Activating transcription factor 3	ATF3	710832
ADAM metalloproteinase domain 19	ADAM19	715164
ADAM metalloproteinase domain 2	ADAM2	707303
ADAM metalloproteinase with thrombospondin type 1 motif 14	ADAMTS14	710154
ADAM metalloproteinase with thrombospondin type 1 motif 16	ADAMTS16	694474
ADAM metalloproteinase with thrombospondin type 1 motif 20	ADAMTS20	699935
ADAMTS like 2	ADAMTSL2	713492
Adaptor related protein complex 1 associated regulatory protein	AP1AR	700734
Adaptor related protein complex 2, mu 1 subunit	AP2M1	703554
Adaptor related protein complex 3, beta 2 subunit	AP3B2	694091
Adenosine deaminase domain containing 1	ADAD1	707910
Adenylate cyclase 4	ADCY4	714684
Adenylate cyclase 6	ADCY6	707978
Adhesion molecule with Ig-like domain 2	AMIGO2	705386
A-kinase anchoring protein 12	AKAP12	641446
Aladin WD repeat nucleoporin	AAAS	719095
Aldo-keto reductase family 1, member A1 (aldehyde reductase)	AKR1A1	693380
Aldo-keto reductase family 1, member C1 (dihydrodiol dehydrogenase 1; 20-alpha (3-alpha)-hydroxysteroid dehydrogenase)	AKR1C1	711198
Alkaline ceramidase 1	ACER1	699093
Alkb homolog 2, alpha-ketoglutarate-dependent dioxygenase	ALKBH2	706708
Alkb homolog 4, lysine demethylase	ALKBH4	715078
Alpha hemoglobin stabilizing protein	AHSP	714392
Alpha-2-HS-glycoprotein	AHSG	699348
Amine oxidase, copper containing 2	AOC2	100431015
Aminoacylase 3	ACY3	711083

Aminocarboxymuconate semialdehyde decarboxylase	ACMSD	708917
Amyloid beta (A4) precursor protein-binding, family B, member 1 (Fe65)	APBB1	712585
Amyloid beta (A4) precursor-like protein 2	APLP2	718819
Anaphase promoting complex subunit 2	ANAPC2	706384
Ancient ubiquitous protein 1	AUP1	710020
Angiopoietin like 7	ANGPTL7	714204
Ankyrin repeat and IBR domain containing 1	ANKIB1	703273
Ankyrin repeat and SOCS box containing 3	ASB3	716503
Ankyrin repeat domain 1 (cardiac muscle)	ANKRD1	696653
Ankyrin repeat domain 13C	ANKRD13C	702811
Ankyrin repeat domain 2 (stretch responsive muscle)	ANKRD2	707097
Ankyrin repeat domain 49	ANKRD49	697693
Ankyrin repeat domain 6	ANKRD6	701339
Anti-silencing function 1A histone chaperone	ASF1A	714761
Apolipoprotein B mrna editing enzyme, catalytic polypeptide-like 3G	APOBEC3G	574398
Apolipoprotein B mrna editing enzyme, catalytic polypeptide-like 3H	APOBEC3H	723811
Apolipoprotein C-III	APOC3	696726
Apoptosis inducing factor, mitochondria associated 1	AIFM1	702773
Apoptosis inducing factor, mitochondria associated 3	AIFM3	100430573
Aprataxin	APTIX	702671
Aquaporin 4	AQP4	703773
Aquaporin 8	AQP8	702167
Arachidonate 5-lipoxygenase-activating protein	ALOX5AP	713170
Arfgap with rhogap domain, ankyrin repeat and PH domain 3	ARAP3	701400
Arginine/serine-rich coiled-coil 2	RSRC2	706564
ARP3 actin-related protein 3 homolog B (yeast)	ACTR3B	715965
Artemin	ARTN	701641
Ash2 (absent, small, or homeotic)-like (Drosophila)	ASH2L	699382
Ataxin 2-like	ATXN2L	708359
ATP binding cassette subfamily G member 2 (Junior blood group)	ABCG2	574307
ATP binding cassette subfamily G member 8	ABCG8	713676
ATP citrate lyase	ACLY	708501
ATP synthase F0 subunit 6	ATP6	2846629
ATPase, class II, type 9A	ATP9A	710250
ATPase, H ⁺ transporting, lysosomal 14kda, V1 subunit F	ATP6V1F	702112
ATPase, H ⁺ /K ⁺ exchanging, alpha polypeptide	ATP4A	100426215
ATP-binding cassette transporter 13	ABCC13	574326
Atypical chemokine receptor 1 (Duffy blood group)	ACKR1	719284
Autophagy related 2A	ATG2A	717290
Autophagy related 7	ATG7	696238
B9 protein domain 2	B9D2	704873
BAI1-associated protein 2-like 2	BAIAP2L2	700058
Bardet-Biedl syndrome 9	BBS9	708412
Basic leucine zipper transcription factor, ATF-like 2	BATF2	722022
Basic transcription factor 3-like 4	BTF3L4	712955

B-cell CLL/lymphoma 9	BCL9	700800
B-cell receptor-associated protein 31	BCAP31	696663
BCL2 associated athanogene 2	BAG2	712778
BCL2/adenovirus E1B 19kda interacting protein 1	BNIP1	703576
BCL2-associated X protein	BAX	718948
BCS1-like (S. Cerevisiae)	BCS1L	699690
Beclin 1, autophagy related	BECN1	711649
Beta-1,3-galactosyltransferase 1	B3GALT1	704744
Beta-1,3-galactosyltransferase 4	B3GALT4	718178
Beta-1,4-glucuronyltransferase 1	B4GAT1	714270
Beta-2-microglobulin	B2M	712428
Bloom syndrome, recq helicase-like	BLM	703460
Bone morphogenetic protein 1	BMP1	707596
Bone morphogenetic protein receptor type IA	BMPRI1A	696898
BPI fold containing family A member 2	BPIFA2	710376
BPI fold containing family C	BPIFC	717287
Brain and reproductive organ-expressed (TNFRSF1A modulator)	BRE	702365
Breast cancer anti-estrogen resistance 1	BCAR1	713965
BRICHOS domain containing 5	BRICD5	695765
Bromodomain adjacent to zinc finger domain 1B	BAZ1B	716436
Bromodomain containing 2	BRD2	717893
C1GALT1 specific chaperone 1	C1GALT1C1	696662
Cadherin 11, type 2, OB-cadherin (osteoblast)	CDH11	708826
Cadherin 17, LI cadherin (liver-intestine)	CDH17	698886
Cadherin related family member 2	CDHR2	697249
Calcium homeostasis modulator 2	CALHM2	714662
Calcium/calmodulin-dependent protein kinase II delta	CAMK2D	702504
Calcium/calmodulin-dependent protein kinase kinase 1, alpha	CAMKK1	707562
Calcium/calmodulin-dependent serine protein kinase (MAGUK family)	CASK	707428
Calponin 3, acidic	CNN3	709538
Calreticulin	CALR	716910
Cannabinoid receptor 2	CNR2	711155
Carboxypeptidase N subunit 2	CPN2	106997189
Carnitine palmitoyltransferase 1A (liver)	CPT1A	709837
Casein kinase 1, alpha 1-like	CSNK1A1L	695190
Casein kinase 2, beta polypeptide	CSNK2B	715807
CASK interacting protein 2	CASKIN2	702477
Caspase 8 associated protein 2	CASP8AP2	702294
Caspase recruitment domain family member 18	CARD18	705678
Catalase	CAT	717406
Cathepsin C	CTSC	705320
Cbl proto-oncogene B, E3 ubiquitin protein ligase	CBLB	703879
CCCTC-binding factor (zinc finger protein)-like	CTCF	701500
CCR4-NOT transcription complex subunit 1	CNOT1	712880
CD14 molecule	CD14	697482
CD19 molecule	CD19	705211
CD1c molecule	CD1C	717148

CD40 ligand	CD40LG	574160
CD53 molecule	CD53	702350
CD63 molecule	CD63	709828
CD79b molecule	CD79B	718218
CD8b molecule	CD8B	699409
Cell death-inducing DFFA-like effector b	CIDEB	100425328
Cell division cycle 6	CDC6	700081
Cell growth regulator with ring finger domain 1	CGRRF1	695231
Centrin 1	CETN1	697701
Centrobin, centrosomal BRCA2 interacting protein	CNTROB	716660
Centrosomal protein 41kda	CEP41	703215
Centrosomal protein 57kda-like 1	CEP57L1	700109
Centrosomal protein 85kda-like	CEP85L	714810
Cerberus 1, DAN family BMP antagonist	CER1	713924
Cerebellar degeneration-related protein 2-like	CDR2L	700082
Cerebral cavernous malformation 2	CCM2	705037
Ceroid-lipofuscinosis, neuronal 6, late infantile, variant	CLN6	693873
Chaperonin containing TCP1, subunit 5 (epsilon)	CCT5	696640
Chemokine (C-C motif) ligand 18	CCL18	574181
Chemokine (C-C motif) ligand 7	CCL7	714751
Chemokine (C-X-C motif) receptor 3	CXCR3	699438
Chitinase domain containing 1	CHID1	701435
Choline kinase beta	CHKB	716377
Choline O-acetyltransferase	CHAT	709977
Cholinergic receptor, nicotinic alpha 3	CHRNA3	716571
Chondroitin polymerizing factor	CHPF	703860
Chondroitin sulfate N-acetylgalactosaminyltransferase 1	CSGALNACT1	704901
Chromodomain helicase DNA binding protein 3	CHD3	716508
Chromodomain helicase DNA binding protein 4	CHD4	713162
Chromosome 1 open reading frame, human c1orf198	C1H1orf198	714084
Chromosome 1 open reading frame, human c1orf54	C1H1orf54	107000835
Chromosome 10 open reading frame 93 ortholog	C9H10orf93	719561
Chromosome 11 open reading frame, human c12orf57	C11H12orf57	714482
Chromosome 13 open reading frame, human c2orf49	C13H2orf49	713165
Chromosome 15 open reading frame, human c9orf16	C15H9orf16	722628
Chromosome 16 open reading frame, human c17orf49	C16H17orf49	713820
Chromosome 19 open reading frame, human c19orf24	C19H19orf24	706393
Chromosome 3 open reading frame, human c21orf91	C3H21orf91	710406
Chromosome 5 open reading frame, human c4orf45	C5H4orf45	100427199
Chromosome 6 open reading frame, human c5orf22	C6H5orf22	695901
Chromosome 7 open reading frame, human c14orf166	C7H14orf166	710094
Chromosome 7 open reading frame, human c14orf169	C7H14orf169	696773
Chromosome 8 open reading frame, human c8orf59	C8H8orf59	703464
Chromosome X open reading frame, human cxorf40a	CXHXorf40A	702659
Cilia and flagella associated protein 65	CFAP65	701296
Ciliary neurotrophic factor	CNTF	701907
Ciliogenesis associated TTC17 interacting protein	CATIP	698579
Clarín 3	CLRN3	697496

Claudin 16	CLDN16	704442
Claudin 17	CLDN17	705582
Claudin 20	CLDN20	701937
Clavesin 2	CLVS2	713626
Cleavage and polyadenylation specific factor 1	CPSF1	702082
Cleavage and polyadenylation specific factor 4	CPSF4	708119
Cleft lip and palate associated transmembrane protein 1	CLPTM1	718306
Clpb homolog, mitochondrial AAA ATPase chaperonin	CLPB	718461
CNKSR family member 3	CNKSR3	702627
Coatmer protein complex subunit epsilon	COPE	719631
Cofilin 1 (non-muscle)	CFL1	721882
Cofilin 2 (muscle)	CFL2	693875
Coiled-coil domain containing 102B	CCDC102B	710808
Coiled-coil domain containing 142	CCDC142	709014
Coiled-coil domain containing 148	CCDC148	698322
Coiled-coil domain containing 17	CCDC17	706591
Coiled-coil domain containing 22	CCDC22	713063
Coiled-coil domain containing 62	CCDC62	707179
Coiled-coil domain containing 69	CCDC69	713304
Coiled-coil domain containing 82	CCDC82	700198
Coiled-coil domain containing 86	CCDC86	695978
Coiled-coil domain containing 92	CCDC92	705922
Coiled-coil-helix-coiled-coil-helix domain containing 2	CHCHD2	702967
Colipase	CLPS	719005
Collagen, type III, alpha 1	COL3A1	574131
Collagen, type VI, alpha 3	COL6A3	694701
Colony stimulating factor 3 receptor	CSF3R	713485
COMM domain containing 9	COMMMD9	716992
Complement component 1, q subcomponent, C chain	C1QC	708589
Complement component 1, s subcomponent	C1S	714589
Complement component 3a receptor 1	C3AR1	716086
Complement factor properdin	CFP	707386
Contactin 1	CNTN1	574365
Copine III	CPNE3	694013
Cornichon family AMPA receptor auxiliary protein 1	CNIH1	695002
Cornulin	CRNN	712894
COX19 cytochrome c oxidase assembly homolog (S. Cerevisiae)	COX19	696368
Creatine kinase, brain	CKB	711167
Crumbs family member 3	CRB3	700086
Cryptochrome circadian clock 2	CRY2	715000
C-src tyrosine kinase	CSK	702868
CTD small phosphatase 2	CTDSP2	715956
CTP synthase 2	CTPS2	721014
C-type lectin domain family 12 member A	CLEC12A	722319
CUE domain containing 2	CUEDC2	713243
C-x(9)-C motif containing 4	CMC4	100423505
Cyclin D binding myb-like transcription factor 1	DMTF1	706292
Cyclin D3	CCND3	695215

Cyclin Pas1/PHO80 domain containing 1	CNPPD1	704271
Cyclin-dependent kinase 4	CDK4	715650
Cyclin-dependent kinase 8	CDK8	709761
Cyclin-dependent kinase-like 1 (CDC2-related kinase)	CDKL1	705975
Cystatin C	CST3	574313
Cysteine-serine-rich nuclear protein 2	CSRNP2	694549
Cystinosin, lysosomal cystine transporter	CTNS	706721
Cytidine deaminase	CDA	705913
Cytochrome P450, family 2, subfamily D, polypeptide 6	CYP2D6	678691
Cytochrome P450, family 2, subfamily E, polypeptide 1	CYP2E1	678688
Cytochrome P450c17	CYP17A1	678693
Cytotoxic and regulatory T-cell molecule	CRTAM	707560
Dachsous cadherin-related 1	DCHS1	711938
D-amino-acid oxidase	DAO	706373
DAZ associated protein 2	DAZAP2	695282
DAZ interacting zinc finger protein 1-like	DZIP1L	716551
Dcmp deaminase	DCTD	700995
DC-STAMP domain containing 2	DCST2	717224
DDB1 and CUL4 associated factor 10	DCAF10	716256
DDB1 and CUL4 associated factor 11	DCAF11	714867
DEAD (Asp-Glu-Ala-Asp) box helicase 42	DDX42	717964
DEAD (Asp-Glu-Ala-Asp) box polypeptide 19B	DDX19B	709576
DEAD (Asp-Glu-Ala-Asp) box polypeptide 41	DDX41	700742
DEAD (Asp-Glu-Ala-Asp) box polypeptide 50	DDX50	712511
DEAH (Asp-Glu-Ala-Asp/His) box polypeptide 57	DHX57	713523
DEAH (Asp-Glu-Ala-His) box polypeptide 38	DHX38	709173
DEAH (Asp-Glu-Ala-His) box polypeptide 40	DHX40	715202
Dedicator of cytokinesis 2	DOCK2	704061
Dedicator of cytokinesis 5	DOCK5	711359
Dehydrogenase/reductase (SDR family) member 3	DHRS3	715548
DENN/MADD domain containing 4A	DENND4A	709675
Denticleless E3 ubiquitin protein ligase homolog (Drosophila)	DTL	711236
Deoxyhypusine synthase	DHPS	716213
Dihydropyrimidine dehydrogenase	DPYD	715672
Dihydrouridine synthase 1-like	DUS1L	715662
Discs, large (Drosophila) homolog-associated protein 4	DLGAP4	702928
Dishevelled segment polarity protein 2	DVL2	714381
DMRT like family B with proline rich C-terminal 1	DMRTB1	714424
Dnaj heat shock protein family (Hsp40) member B2	DNAJB2	702936
Dnaj heat shock protein family (Hsp40) member C27	DNAJC27	694037
Dnaj heat shock protein family (Hsp40) member C3	DNAJC3	695757
Docking protein 5	DOK5	698689
DR1-associated protein 1 (negative cofactor 2 alpha)	DRAP1	715271
Drosha, ribonuclease type III	DROSHA	692081
DTW domain containing 1	DTWD1	715084
DTW domain containing 2	DTWD2	697989
Dual oxidase maturation factor 2	DUOXA2	712992
Dual specificity phosphatase 22	DUSP22	705824

Dual specificity tyrosine-(Y)-phosphorylation regulated kinase 2	DYRK2	717941
Dynactin subunit 4	DCTN4	712783
Dyskeratosis congenita 1, dyskerin	DKC1	702563
Dystroglycan 1	DAG1	706179
Dystrophia myotonica protein kinase	DMPK	715328
E1A binding protein p300	EP300	706258
E74-like factor 2 (ets domain transcription factor)	ELF2	696760
Ectodysplasin A receptor	EDAR	695059
EF-hand and coiled-coil domain containing 1	EFCC1	706444
EGF-like-domain, multiple 7	EGFL7	709840
EGF-like-domain, multiple 8	EGFL8	717145
ELAV like neuron-specific RNA binding protein 2	ELAVL2	708195
ELK1, member of ETS oncogene family	ELK1	712610
ELOVL fatty acid elongase 4	ELOVL4	692070
Endonuclease domain containing 1	ENDOD1	699210
Enhancer of mrna decapping 3	EDC3	709182
Enhancer of polycomb homolog 2 (Drosophila)	EPC2	721916
Enhancer of rudimentary homolog (Drosophila)	ERH	712507
Ephrin-B1	EFNB1	694149
ERGIC and golgi 3	ERGIC3	704736
Ethylmalonic encephalopathy 1	ETHE1	718089
Eukaryotic translation elongation factor 1 beta 2	EEF1B2	707019
Eukaryotic translation elongation factor 1 gamma	EEF1G	722274
Eukaryotic translation initiation factor 2B subunit epsilon	EIF2B5	703673
Eukaryotic translation initiation factor 2B subunit gamma	EIF2B3	705862
Eukaryotic translation initiation factor 3 subunit F	EIF3F	706269
Eukaryotic translation initiation factor 3 subunit L	EIF3L	699189
Eukaryotic translation initiation factor 4E nuclear import factor 1	EIF4ENIF1	716871
Eukaryotic translation initiation factor 4H	EIF4H	693429
EWS RNA binding protein 1	EWSR1	714432
Exocyst complex component 2	EXOC2	706296
Exosome component 8	EXOSC8	695071
Exostosin glycosyltransferase 1	EXT1	701488
FAD-dependent oxidoreductase domain containing 1	FOXRED1	714271
Family with sequence similarity 127, member A	FAM127A	708766
Family with sequence similarity 134 member A	FAM134A	704378
Family with sequence similarity 178 member B	FAM178B	710890
Family with sequence similarity 181 member B	FAM181B	701184
Family with sequence similarity 186 member B	FAM186B	711001
Family with sequence similarity 206 member A	FAM206A	710486
Family with sequence similarity 234 member A	FAM234A	694729
Family with sequence similarity 3 member A	FAM3A	701159
Family with sequence similarity 53 member C	FAM53C	714176
Family with sequence similarity 71 member C	FAM71C	694296
Family with sequence similarity 83 member A	FAM83A	704023
Family with sequence similarity 89 member B	FAM89B	721925
Fanconi anemia complementation group B	FANCB	712083
Fanconi anemia complementation group G	FANCG	698837

Fanconi anemia complementation group I	FANCI	699878
Fanconi anemia core complex associated protein 100	FAAP100	713876
Far upstream element (FUSE) binding protein 3	FUBP3	722470
FBJ murine osteosarcoma viral oncogene homolog	FOS	702077
F-box and leucine-rich repeat protein 6	FBXL6	701594
F-box protein 6	FBXO6	722740
F-box protein 7	FBXO7	717317
Fc fragment of igg, receptor, transporter, alpha	FCGRT	718859
Fc receptor-like B	FCRLB	720028
Fem-1 homolog b (C. Elegans)	FEM1B	693955
Fermitin family member 3	FERMT3	722120
Ferritin mitochondrial	FTMT	699743
Fibroblast growth factor 20	FGF20	701847
Fibroblast growth factor receptor 1	FGFR1	700126
Ficolin 2	FCN2	712486
Filamin A, alpha	FLNA	699524
Filamin binding LIM protein 1	FBLIM1	695727
FK506 binding protein 10	FKBP10	707881
FK506 binding protein 8	FKBP8	720232
Folate receptor 2 (fetal)	FOLR2	718405
Follicular dendritic cell secreted protein	FDCSP	707784
Folliculogenesis specific bhlh transcription factor	FIGLA	710606
Follistatin like 1	FSTL1	713367
Forkhead box R2	FOXR2	704032
Four and a half LIM domains 3	FHL3	715313
Fucokinase	FUK	709226
Fuzzy planar cell polarity protein	FUZ	719442
FXYP domain containing ion transport regulator 7	FXYP7	718457
FYN proto-oncogene, Src family tyrosine kinase	FYN	574214
G protein pathway suppressor 1	GPS1	719343
G protein-coupled bile acid receptor 1	GPBAR1	697937
G protein-coupled receptor 1	GPR1	707120
G protein-coupled receptor 12	GPR12	710030
G protein-coupled receptor 137	GPR137	717722
G protein-coupled receptor 141	GPR141	705700
G protein-coupled receptor 182	GPR182	713866
G protein-coupled receptor 19	GPR19	697072
G protein-coupled receptor 31	GPR31	717158
G protein-coupled receptor 50	GPR50	703817
G protein-coupled receptor kinase 7	GRK7	714916
G protein-coupled receptor, class C, group 5, member B	GPRC5B	695204
G protein-coupled receptor, class C, group 5, member D	GPRC5D	698898
G2/M-phase specific E3 ubiquitin protein ligase	G2E3	717021
Gamma-aminobutyric acid (GABA) B receptor, 1	GABBR1	708987
Gamma-glutamylcyclotransferase	GGCT	695547
Gamma-glutamyltransferase 5	GGT5	720345
Gastrulation brain homeobox 2	GBX2	693901
General transcription factor IIIH subunit 4	GTF2H4	714285

General transcription factor IIH subunit 5	GTF2H5	700107
Germinal center-associated, signaling and motility	GCSAM	707891
GLE1, RNA export mediator	GLE1	717474
Glucagon-like peptide 2 receptor	GLP2R	717783
Glucose 6 phosphatase, catalytic, 3	G6PC3	714276
Glucose-6-phosphate dehydrogenase	G6PD	701137
Glucose-fructose oxidoreductase domain containing 1	GFOD1	700607
Glucosidase, beta (bile acid) 2	GBA2	696062
Glutamate receptor, ionotropic, kainate 1	GRIK1	705699
Glutamate receptor, ionotropic, N-methyl D-aspartate-associated protein 1 (glutamate binding)	GRINA	708234
Glutaminase	GLS	693520
Glutathione S-transferase alpha 4	GSTA4	709666
Glutathione S-transferase kappa 1	GSTK1	704240
Glutathione S-transferase pi 1	GSTP1	721704
Glyceraldehyde-3-phosphate dehydrogenase	GAPDH	574353
Glycogen synthase 2	GYS2	706152
Glycosylated lysosomal membrane protein	GLMP	719468
Golgi-associated, gamma adaptin ear containing, ARF binding protein 1	GGA1	697929
Golgi-associated, gamma adaptin ear containing, ARF binding protein 3	GGA3	705751
GRB2-related adaptor protein	GRAP	702473
GRIP and coiled-coil domain containing 1	GCC1	697975
Group-specific component (vitamin D binding protein)	GC	705708
Growth arrest and DNA damage inducible alpha	GADD45A	701054
Growth associated protein 43	GAP43	711260
Growth differentiation factor 3	GDF3	715605
Gse1 coiled-coil protein	GSE1	693298
Gtpase, IMAP family member 1	GIMAP1	100424486
Guanidinoacetate N-methyltransferase	GAMT	721263
Guanine nucleotide binding protein (G protein), beta polypeptide 1	GNB1	703399
Guanine nucleotide binding protein (G protein), beta polypeptide 2-like 1	GNB2L1	708526
Guanylate cyclase activator 1B	GUCA1B	695658
Guanylate kinase 1	GUK1	695272
H2A histone family, member Z	H2AFZ	709326
HAUS augmin like complex subunit 8	HAUS8	718874
Heat shock factor binding protein 1	HSBP1	714498
Heat shock protein 90kda alpha family class B member 1	HSP90AB1	702293
Heat shock protein family B (small) member 11	HSPB11	714791
Heat shock transcription factor 2	HSF2	713938
HECT domain containing E3 ubiquitin protein ligase 2	HECTD2	697258
Hematological and neurological expressed 1-like	HN1L	702283
Hematopoietic cell-specific Lyn substrate 1	HCLS1	714044
Hematopoietic prostaglandin D synthase	HPGDS	705227
Heme oxygenase 2	HMOX2	705461
Hemogen	HEMGN	715562

Hemoglobin subunit alpha 1	HBA1	701930
Hemoglobin subunit epsilon 1	HBE1	715414
HEN1 methyltransferase homolog 1 (Arabidopsis)	HENMT1	698896
Hepcidin antimicrobial peptide	HAMP	708397
Hexamethylene bis-acetamide inducible 1	HEXIM1	716006
Histocompatibility (minor) 13	HM13	713216
Histone deacetylase 3	HDAC3	704467
Histone deacetylase 5	HDAC5	711456
Homeobox D12	HOXD12	100428778
Homeodomain interacting protein kinase 1	HIPK1	707856
Host cell factor C2	HCFC2	700316
HRAS like suppressor family member 5	HRASLS5	718317
Hyaluronan and proteoglycan link protein 3	HAPLN3	698880
Hydroxysteroid dehydrogenase like 2	HSDL2	707233
Hyperpolarization activated cyclic nucleotide gated potassium channel 3	HCN3	717719
Iduronidase, alpha-L-	IDUA	106998222
IKAROS family zinc finger 3	IKZF3	698083
IMP (inosine 5'-monophosphate) dehydrogenase 2	IMPDH2	708307
IMP3, U3 small nucleolar ribonucleoprotein	IMP3	706202
Importin 5	IPO5	697448
Importin 9	IPO9	707210
Inhibin alpha	INHA	574379
Inositol-3-phosphate synthase 1	ISYNA1	719487
Insulin like 3	INSL3	100533194
Insulin like 6	INSL6	693735
Insulin like growth factor binding protein 4	IGFBP4	700963
Integrator complex subunit 5	INTS5	719124
Integrator complex subunit 7	INTS7	711152
Integrin linked kinase	ILK	709944
Integrin subunit alpha 2b	ITGA2B	714955
Integrin subunit alpha V	ITGAV	707756
Integrin subunit beta like 1	ITGBL1	700965
Integrin-binding sialoprotein	IBSP	701835
Intercellular adhesion molecule 4 (Landsteiner-Wiener blood group)	ICAM4	712354
Interferon regulatory factor 2	IRF2	694347
Interferon regulatory factor 2 binding protein 1	IRF2BP1	715611
Interferon, alpha 2	IFNA2	709948
Interferon, gamma-inducible protein 16	IFI16	719253
Interleukin 21 receptor	IL21R	705759
Interleukin 22	IL22	718047
Intraflagellar transport 172	IFT172	700948
Intraflagellar transport 20	IFT20	715773
Intraflagellar transport 57	IFT57	705088
Inturned planar cell polarity protein	INTU	709967
IQ motif containing K	IQCK	695417
IQ motif containing with AAA domain 1	IQCA1	694173
Isocitrate dehydrogenase 3 (NAD+) gamma	IDH3G	698558

Junction adhesion molecule like	JAML	704919
Junctophilin 1	JPH1	697014
KDEL endoplasmic reticulum protein retention receptor 1	KDELR1	717928
KDEL endoplasmic reticulum protein retention receptor 2	KDELR2	704335
KDEL motif containing 1	KDELC1	702156
Kelch domain containing 10	KLHDC10	702290
Kelch domain containing 8B	KLHDC8B	707348
Kelch like family member 11	KLHL11	708393
Kelch like family member 2	KLHL2	704790
Kelch like family member 40	KLHL40	717366
Kell blood group, metallo-endopeptidase	KEL	703492
Keratin 14, type I	KRT14	100426180
Keratin 222, type II	KRT222	701557
Keratin 25, type I	KRT25	701915
Keratin 4, type II	KRT4	700060
Keratin associated protein 12-4	KRTAP12-4	712284
Keratin associated protein 22-1	KRTAP22-1	100428224
Keratocan	KERA	709743
KIAA0141 ortholog	KIAA0141	702802
KIAA0355 ortholog	KIAA0355	705202
Kv channel interacting protein 2	KCNIP2	712434
Laminin subunit beta 2	LAMB2	707892
Late cornified envelope 3C	LCE3C	100423543
Late cornified envelope 5A	LCE5A	100423330
LCK proto-oncogene, Src family tyrosine kinase	LCK	717704
LDL receptor related protein 2	LRP2	705786
LETM1 domain containing 1	LETMD1	694422
Leucine rich repeat and coiled-coil centrosomal protein 1	LRRCC1	707964
Leucine rich repeat and fibronectin type III domain containing 4	LRFN4	713166
Leucine rich repeat and fibronectin type III domain containing 5	LRFN5	700512
Leucine rich repeat containing 36	LRRC36	697849
Leucine rich repeat containing 42	LRRC42	714839
Leucine rich repeat containing 61	LRRC61	704779
Leucine rich repeat transmembrane neuronal 3	LRRTM3	696536
Leucine-rich repeats and immunoglobulin-like domains 3	LRIG3	716344
Leucine-rich repeats and WD repeat domain containing 1	LRWD1	715187
Leukocyte immunoglobulin-like receptor, subfamily B (with TM and ITIM domains), member 1	LILRB1	692340
Leukocyte receptor cluster (LRC) member 1	LENG1	693417
Leukocyte-associated immunoglobulin-like receptor 1	LAIR1	695533
Leupaxin	LPXN	702033
Ligase IV, DNA, ATP-dependent	LIG4	695475
LIM domain binding 2	LDB2	714918
Limb development membrane protein 1-like	LMBR1L	709548
Lin-28 homolog B (C. Elegans)	LIN28B	696130
Lin-28 homolog B (C. Elegans)	LIN28B	696130
Lipocalin 1	LCN1	711974
Lipopolysaccharide-induced TNF factor	LITAF	711743

Low density lipoprotein receptor adaptor protein 1	LDLRAP1	713032
LSM12 homolog	LSM12	714219
LSM14A mrna processing body assembly factor	LSM14A	705085
Ly6/neurotoxin 1	LYNX1	100428508
Lymphocyte antigen 6 complex, locus G6C	LY6G6C	716220
Lysine-rich nucleolar protein 1	KNOP1	695144
Lysophosphatidylcholine acyltransferase 4	LPCAT4	696388
Lysophospholipase II	LYPLA2	719074
Lysozyme-like 4	LYZL4	716549
Lysyl oxidase like 1	LOXL1	706464
MAD2 mitotic arrest deficient-like 2 (yeast)	MAD2L2	714527
MAD2L1 binding protein	MAD2L1BP	701099
MAF1 homolog, negative regulator of RNA polymerase III	MAF1	700385
MAGE family member D2	MAGED2	701719
Mago homolog, exon junction complex core component	MAGOH	714261
Major facilitator superfamily domain containing 14B	MFSD14B	708498
Major histocompatibility complex, class I, A	MAMU-A3	699243
Major histocompatibility complex, class I, E	MAMU-E	711532
Male-enhanced antigen 1	MEA1	699300
Mannose receptor, C type 1	MRC1	701010
Mannosidase, alpha, class 1B, member 1	MAN1B1	706918
Mannosidase, alpha, class 2B, member 1	MAN2B1	716173
Mannosidase, beta A, lysosomal	MANBA	712531
Mannosyl (alpha-1,3-)-glycoprotein beta-1,2- N-acetylglucosaminyltransferase	MGAT1	707375
Mannosyl (alpha-1,6-)-glycoprotein beta-1,6- N-acetyl-glucosaminyltransferase	MGAT5	709108
MAP7 domain containing 1	MAP7D1	712899
MAP-kinase activating death domain	MADD	713613
MAS-related GPR, member X4	MRGPRX4	692123
Matrin 3	MATR3	100568450
MDM2 binding protein	MTBP	703121
Mediator complex subunit 6	MED6	693320
Meiosis 1 associated protein	M1AP	710210
Melatonin receptor 1A	MTNR1A	702686
Melatonin receptor 1B	MTNR1B	695629
Meprin A subunit beta	MEP1B	707036
Metallothionein 3	MT3	700602
Metaxin 1	MTX1	717595
Methionine sulfoxide reductase B3	MSRB3	717617
Microtubule associated protein 1 light chain 3 alpha	MAP1LC3A	707439
Microtubule associated protein 1S	MAP1S	719196
Microtubule associated protein 2	MAP2	710840
Midline 1	MID1	709683
Midnolin	MIDN	721215
Mitochondrial E3 ubiquitin protein ligase 1	MUL1	705429
Mitochondrial elongation factor 2	MIEF2	700705
Mitochondrial ribosomal protein L11	MRPL11	714094

Mitochondrial ribosomal protein L18	MRPL18	702629
Mitochondrial ribosomal protein L36	MRPL36	100430880
Mitochondrial ribosomal protein L37	MRPL37	715168
Mitochondrial ribosomal protein L42	MRPL42	715676
Mitochondrial ribosomal protein L43	MRPL43	711038
Mitochondrial ribosomal protein L9	MRPL9	711235
Mitochondrial ribosomal protein S18C	MRPS18C	707257
Mitochondrial ribosomal protein S21	MRPS21	706805
Mitochondrial ribosomal protein S9	MRPS9	712968
Mitogen-activated protein kinase 11	MAPK11	715794
Mitogen-activated protein kinase 12	MAPK12	715745
Mitogen-activated protein kinase kinase kinase 6	MAP3K6	715911
Mitogen-activated protein kinase kinase kinase kinase 2	MAP4K2	699331
Molybdenum cofactor synthesis 2	MOCS2	703689
Monoacylglycerol O-acyltransferase 2	MOGAT2	696347
Mov10 RISC complex RNA helicase	MOV10	705910
Msh homeobox 2	MSX2	694227
Multiple C2 domains, transmembrane 2	MCTP2	706949
Murine retrovirus integration site 1 homolog	MRVI1	702830
Muscle, skeletal, receptor tyrosine kinase	MUSK	709397
MYCBP-associated, testis expressed 1	MAATS1	712979
Myelin regulatory factor	MYRF	719083
Myeloid/lymphoid or mixed-lineage leukemia; translocated to, 6	MLLT6	694045
Myosin XVIII A	MYO18A	711171
Myotubularin 1	MTM1	703131
Myotubularin related protein 2	MTMR2	699703
N-6 adenine-specific DNA methyltransferase 2 (putative)	N6AMT2	703665
N-acetyltransferase 8-like (GCN5-related, putative)	NAT8L	722359
NAD(P)H dehydrogenase, quinone 2	NQO2	707675
NADH:ubiquinone oxidoreductase complex assembly factor 4	NDUFAF4	705102
NADH:ubiquinone oxidoreductase subunit A12	NDUFA12	711970
NADPH oxidase organizer 1	NOXO1	694059
Natriuretic peptide receptor 2	NPR2	695750
Nedd4 family interacting protein 1	NDFIP1	705716
Negative elongation factor complex member E	NELFE	716913
Neural precursor cell expressed, developmentally down-regulated 1	NEDD1	713673
Neural precursor cell expressed, developmentally down-regulated 4, E3 ubiquitin protein ligase	NEDD4	699550
Neural proliferation, differentiation and control, 1	NPDC1	707453
Neuritin 1	NRN1	722968
Neuroglobin	NGB	641331
Neuronal differentiation 1	NEUROD1	704954
Neuronal PAS domain protein 2	NPAS2	710480
Neuronal PAS domain protein 4	NPAS4	714161
Neuropilin and tolloid like 1	NETO1	694322
Neutrophil cytosolic factor 4	NCF4	695612
N-glycanase 1	NGLY1	700842

Nicotinamide nucleotide transhydrogenase	NNT	701110
NK2 homeobox 5	NKX2-5	703795
NKG2D protein	NKG2D	574240
NLR family, pyrin domain containing 1	NLRP1	721648
NLR family, pyrin domain containing 10	NLRP10	709794
NLR family, pyrin domain containing 4	NLRP4	703431
NLR family, pyrin domain containing 9	NLRP9	719115
N-myristoyltransferase 1	NMT1	715885
NOC2-like nucleolar associated transcriptional repressor	NOC2L	697809
Non-SMC condensin I complex subunit D2	NCAPD2	712834
Non-SMC condensin I complex subunit G	NCAPG	715235
N-terminal Xaa-Pro-Lys N-methyltransferase 1	NTMT1	716763
Nuclear casein kinase and cyclin-dependent kinase substrate 1	NUCKS1	697298
Nuclear factor of kappa light polypeptide gene enhancer in B-cells 1	NFKB1	710324
Nuclear pore associated protein 1	NPAP1	719891
Nuclear receptor binding SET domain protein 1	NSD1	706131
Nuclear receptor subfamily 1 group I member 2	NR1I2	574226
Nuclear transcription factor Y subunit alpha	NFYA	719697
Nucleoporin 50kda	NUP50	713282
Nude neurodevelopment protein 1-like 1	NDEL1	721973
Nudix hydrolase 1	NUDT1	713078
Olfactory receptor, family 1, subfamily Q, member 1	OR1Q1	697695
Olfactory receptor, family 10, subfamily A, member 4	OR10A4	100423176
Olfactory receptor, family 2, subfamily AG, member 2	OR2AG2	709556
Olfactory receptor, family 2, subfamily F, member 1	OR2F1	707900
Olfactory receptor, family 2, subfamily H, member 2	OR2H2	710946
Olfactory receptor, family 2, subfamily W, member 1	OR2W1	708515
Olfactory receptor, family 4, subfamily E, member 2	OR4E2	708887
Olfactory receptor, family 4, subfamily N, member 2	OR4N2	701881
Olfactory receptor, family 5, subfamily L, member 1	OR5L1	719174
Olfactory receptor, family 5, subfamily M, member 9	OR5M9	705878
Olfactory receptor, family 52, subfamily N, member 4	OR52N4	696970
Olfactory receptor, family 7, subfamily D, member 4	OR7D4	721322
Oncomodulin 2	OCM2	721827
Origin recognition complex subunit 5	ORC5	696683
ORMDL sphingolipid biosynthesis regulator 2	ORMDL2	710296
Ornithine decarboxylase antizyme 2	OAZ2	707593
Osteosarcoma amplified 9, endoplasmic reticulum lectin	OS9	715555
Outer dense fiber of sperm tails 1	ODF1	707269
Outer dense fiber of sperm tails 3	ODF3	696480
Outer dense fiber of sperm tails 3-like 1	ODF3L1	706545
Oviductal glycoprotein 1	OVGP1	703848
Oxysterol binding protein like 5	OSBPL5	706613
P21 protein (Cdc42/Rac)-activated kinase 1	PAK1	698585
P450 (cytochrome) oxidoreductase	POR	715888
P53 and DNA damage regulated 1	PDRG1	712622
Paired box 9	PAX9	100429091
Pancreatic and duodenal homeobox 1	PDX1	710936

Pancreatic polypeptide	PPY	713988
PAP associated domain containing 7	PAPD7	713853
Par-3 family cell polarity regulator	PARD3	706472
Paralemmin 2	PALM2	100532751
PCI domain containing 2	PCID2	714247
PDLIM1 interacting kinase 1 like	PDIK1L	719774
PDZ and LIM domain 1	PDLIM1	702998
PDZ domain containing 4	PDZD4	697387
Peptidyl arginine deiminase, type III	PADI3	700560
Peptidylprolyl isomerase B (cyclophilin B)	PPIB	706757
Peroxiredoxin 2	PRDX2	716665
Peroxisomal biogenesis factor 16	PEX16	714904
PHD finger protein 1	PHF1	718337
PHD finger protein 14	PHF14	694855
Phenylalanine hydroxylase	PAH	698696
Phosphatase and actin regulator 1	PHACTR1	700226
Phosphatase, orphan 1	PHOSPHO1	698959
Phosphatase, orphan 2	PHOSPHO2	100429653
Phosphate cytidylyltransferase 1, choline, alpha	PCYT1A	722105
Phosphatidylinositol 4-kinase, catalytic, beta	PI4KB	710104
Phosphatidylinositol glycan anchor biosynthesis class H	PIGH	710780
Phosphatidylinositol glycan anchor biosynthesis class S	PIGS	709115
Phosphatidylinositol transfer protein alpha	PITPNA	721228
Phosphodiesterase 6D	PDE6D	712629
Phosphodiesterase 9A	PDE9A	100301991
Phospholipase A2 group IB	PLA2G1B	696712
Phospholipase A2 group XIIB	PLA2G12B	708031
Phospholipase A2 group XV	PLA2G15	702619
Phospholipase B domain containing 1	PLBD1	698939
Phospholipase B domain containing 2	PLBD2	714669
Phospholipase C beta 2	PLCB2	701951
Phospholipase D family member 3	PLD3	701083
Phospholipid scramblase 3	PLSCR3	721831
Phosphoribosyl pyrophosphate synthetase 1-like 1	PRPS1L1	708413
Pituitary tumor-transforming 1 interacting protein	PTTG1IP	722061
Placental growth factor	PGF	701219
Placenta-specific 1-like	PLAC1L	698074
Platelet-derived growth factor beta polypeptide	PDGFB	703173
Pleckstrin homology domain containing A8	PLEKHA8	696127
Pleckstrin homology domain containing O1	PLEKHO1	706145
Poliovirus receptor-related 2 (herpesvirus entry mediator B)	PVRL2	713229
Poly(A) binding protein, cytoplasmic 1	PABPC1	705847
Poly(ADP-ribose) glycohydrolase	PARG	709432
Poly(ADP-ribose) polymerase family member 10	PARP10	708132
Poly(rc) binding protein 2	PCBP2	703175
Polybromo 1	PBRM1	696361
Polycomb group ring finger 2	PCGF2	694187
Polyglutamine binding protein 1	PQBP1	711678

Polyhomeotic homolog 2 (Drosophila)	PHC2	710201
Polymerase (DNA directed), epsilon 3, accessory subunit	POLE3	705074
Polymerase (RNA) II (DNA directed) polypeptide I, 14.5kda	POLR2I	712412
Polymerase (RNA) III (DNA directed) polypeptide H (22.9kd)	POLR3H	707546
Polymerase (RNA) mitochondrial (DNA directed)	POLRMT	100426183
Polynucleotide kinase 3'-phosphatase	PNKP	719084
Potassium channel tetramerization domain containing 10	KCTD10	707443
Potassium channel tetramerization domain containing 3	KCTD3	708471
Potassium channel tetramerization domain containing 9	KCTD9	711515
Potassium channel, two pore domain subfamily K, member 16	KCNK16	719585
Potassium channel, voltage gated modifier subfamily V, member 1	KCNV1	699636
Potassium channel, voltage gated shaker related subfamily A, member 5	KCNA5	711886
Potassium channel, voltage gated Shaw related subfamily C, member 2	KCNC2	100430906
Potassium voltage-gated channel, modifier subfamily S, member 1	KCNS1	711715
PR domain containing 14	PRDM14	693324
PR domain containing 2, with ZNF domain	PRDM2	716295
Pre-B-cell leukemia homeobox 1	PBX1	694416
PRELI domain containing 1	PRELID1	699254
Pre-mrna processing factor 3	PRPF3	706898
Presenilin enhancer gamma secretase subunit	PSENEN	100429005
Progesterone and adiponectin receptor family member VIII	PAQR8	708418
Prolactin regulatory element binding	PREB	700408
Proline rich 3	PRR3	711699
Proline rich membrane anchor 1	PRIMA1	100426274
Proline, glutamate and leucine rich protein 1	PELP1	677854
Proline-rich coiled-coil 2A	PRRC2A	715715
Prominin 1	PROM1	714610
Promyelocytic leukemia	PML	700379
Proprotein convertase subtilisin/kexin type 7	PCSK7	697567
Prosaposin	PSAP	709510
Prostaglandin E synthase 3	PTGES3	713353
Protease, serine 37	PRSS37	694908
Proteasomal ATPase associated factor 1	PAAF1	718755
Proteasome subunit alpha 4	PSMA4	710417
Proteasome subunit beta 2	PSMB2	712193
Protein inhibitor of activated STAT 2	PIAS2	696737
Protein kinase C and casein kinase substrate in neurons 1	PACSIN1	718624
Protein kinase C, alpha	PRKCA	718412
Protein phosphatase 1 regulatory subunit 12B	PPP1R12B	705775
Protein phosphatase 1 regulatory subunit 15A	PPP1R15A	718350
Protein phosphatase 1 regulatory subunit 16B	PPP1R16B	693349
Protein phosphatase 3, catalytic subunit, beta isozyme	PPP3CB	706955
Protein phosphatase 3, catalytic subunit, gamma isozyme	PPP3CC	708233
Protein phosphatase 4 catalytic subunit	PPP4C	708510
Protein S (alpha)	PROS1	694845
Protein serine kinase H2	PSKH2	693701

Protein tyrosine phosphatase domain containing 1	PTPDC1	707878
Protein tyrosine phosphatase type IVA, member 2	PTP4A2	706489
Protein tyrosine phosphatase, non-receptor type 20	PTPN20	711276
Protein tyrosine phosphatase, non-receptor type 23	PTPN23	711601
Protocadherin beta 4	PCDHB4	700373
Purinergic receptor P2Y, G-protein coupled, 11	P2RY11	100533473
PYD and CARD domain containing	PYCARD	713563
PYM homolog 1, exon junction complex associated factor	PYM1	708148
Pyridine nucleotide-disulphide oxidoreductase domain 2	PYROXD2	707797
Pyruvate dehydrogenase kinase, isozyme 2	PDK2	704169
Pyruvate dehydrogenase phosphatase regulatory subunit	PDPR	709861
Quiescin sulfhydryl oxidase 1	QSOX1	718589
RAB, member of RAS oncogene family-like 2B	RABL2B	716615
RAB5B, member RAS oncogene family	RAB5B	708347
RAB6A, member RAS oncogene family	RAB6A	718717
RAB8B, member RAS oncogene family	RAB8B	705597
RAD9 checkpoint clamp component A	RAD9A	712345
Ral gtpase activating protein, alpha subunit 1 (catalytic)	RALGAPA1	695674
Ral gtpase activating protein, beta subunit (non-catalytic)	RALGAPB	705742
Ral guanine nucleotide dissociation stimulator-like 1	RGL1	717554
RALY heterogeneous nuclear ribonucleoprotein	RALY	713317
RAN binding protein 10	RANBP10	700911
Ran gtpase activating protein 1	RANGAP1	710698
Ranbp-type and C3HC4-type zinc finger containing 1	RBCK1	714692
Rap guanine nucleotide exchange factor 2	RAPGEF2	704717
Ras and Rab interactor 3	RIN3	698125
Ras homolog family member A	RHOA	706455
Ras homolog family member C	RHOC	706034
Ras homolog family member J	RHOJ	705603
Ras-related C3 botulinum toxin substrate 2 (rho family, small GTP binding protein Rac2)	RAC2	696709
Ras-related GTP binding A	RRAGA	100430225
RBPJ interacting and tubulin associated 1	RITA1	712837
Receptor (chemosensory) transporter protein 3	RTP3	713050
Receptor interacting serine/threonine kinase 3	RIPK3	716138
Receptor tyrosine kinase-like orphan receptor 2	ROR2	715482
Recq helicase-like	RECQL	705871
Regulator of G-protein signaling 10	RGS10	703125
Regulatory factor X associated ankyrin containing protein	RFXANK	719706
Relaxin/insulin-like family peptide receptor 4	RXFP4	718025
Replication protein A1	RPA1	721272
Replication protein A3	RPA3	696248
Resistin	RETN	708781
Ret proto-oncogene	RET	703466
Retinoic acid induced 14	RAI14	698620
Retinol dehydrogenase 5 (11-cis/9-cis)	RDH5	709644
RFT1 homolog	RFT1	694586
Rh family, C glycoprotein	RHCG	664731

Rho GDP dissociation inhibitor (GDI) beta	ARHGDIB	702320
Rho gtpase activating protein 30	ARHGAP30	718236
Rho gtpase activating protein 9	ARHGAP9	711684
Rho guanine nucleotide exchange factor 1	ARHGEF1	722198
Rho/Rac guanine nucleotide exchange factor 2	ARHGEF2	719369
Ribonuclease H2 subunit B	RNASEH2B	707995
Ribonuclease P/MRP 21kda subunit	RPP21	713056
Ribonuclease T2	RNASET2	706533
Ribonuclease, rnase A family, 9 (non-active)	RNASE9	703346
Ribonucleoprotein, PTB-binding 1	RAVER1	715250
Ribophorin II	RPN2	708971
Ribosomal modification protein rimk-like family member A	RIMKLA	699767
Ribosomal protein l10a	RPL10A	718783
Ribosomal protein L17	RPL17	698967
Ribosomal protein L23	RPL23	694719
Ribosomal protein l23a	RPL23A	710490
Ribosomal protein L24	RPL24	702381
Ribosomal protein L29	RPL29	698602
Ribosomal protein L3 like	RPL3L	693424
Ribosomal protein L4	RPL4	710590
Ribosomal protein l7a	RPL7A	722215
Ribosomal protein L8	RPL8	708535
Ribosomal protein S10	RPS10	718606
Ribosomal protein S13	RPS13	697513
Ribosomal protein S14	RPS14	710901
Ribosomal protein S15	RPS15	707241
Ribosomal protein S16	RPS16	697219
Ribosomal protein S2	RPS2	693615
Ribosomal protein S27	RPS27	100430474
Ribosomal protein S28	RPS28	707133
Ribosomal protein S4, X-linked	RPS4X	699397
Ribosomal protein S5	RPS5	711259
Ribosomal protein S6 kinase, 90kda, polypeptide 4	RPS6KA4	717574
Ribosomal protein S7	RPS7	721900
Ribosomal protein S8	RPS8	703957
Ribosomal protein S9	RPS9	694053
Ribosomal protein, large, P0	RPLP0	574363
Ribosomal protein, large, P1	RPLP1	695442
Ribosomal protein, large, P2	RPLP2	700698
Ribosomal RNA processing 8, methyltransferase, homolog (yeast)	RRP8	712011
Ring finger protein 208	RNF208	705563
Ring finger protein 26	RNF26	704755
Ring finger protein 38	RNF38	693346
Ring finger protein 40, E3 ubiquitin protein ligase	RNF40	713148
Ring finger protein, transmembrane 1	RNFT1	712052
RNA binding motif protein 18	RBM18	698457
RNA binding motif protein 19	RBM19	715724
RNA binding motif protein 42	RBM42	709852

RNA binding motif protein 45	RBM45	702714
RNA binding motif protein 7	RBM7	695401
RNA binding motif, single stranded interacting protein 1	RBMS1	703608
RNA binding motif, single stranded interacting protein 2	RBMS2	713163
RNA binding protein, fox-1 homolog (C. Elegans) 2	RBFOX2	693642
RNA pseudouridylate synthase domain containing 3	RPUSD3	700349
RPTOR independent companion of MTOR, complex 2	RICTOR	694915
SAMM50 sorting and assembly machinery component	SAMM50	715675
Sarcoglycan zeta	SGCZ	106992521
Schlafen like 1	SLFNL1	695605
SEC11 homolog A, signal peptidase complex subunit	SEC11A	695951
Sec23 homolog A, COPII coat complex component	SEC23A	698500
SEC31 homolog A, COPII coat complex component	SEC31A	693687
Sec61 translocon alpha 2 subunit	SEC61A2	100427731
SECIS binding protein 2-like	SECISBP2L	714764
Secretory carrier membrane protein 2	SCAMP2	709720
Selenoprotein M	SELM	718290
Sepiapterin reductase (7,8-dihydrobiopterin:NADP+ oxidoreductase)	SPR	705317
Serine/threonine kinase 11 interacting protein	STK11IP	704531
Serine/threonine kinase 31	STK31	703886
Serine/threonine kinase 38	STK38	719169
Serologically defined colon cancer antigen 3	SDCCAG3	721750
Serin peptidase inhibitor, clade B (ovalbumin), member 7	SERPINB7	701671
Serrate, RNA effector molecule	SRRT	713235
SFI1 centrin binding protein	SFI1	716833
SH2 domain containing 3C	SH2D3C	699706
SH3 and cysteine rich domain	STAC	707350
SHANK associated RH domain interactor	SHARPIN	713534
Siah E3 ubiquitin protein ligase 1	SIAH1	716629
Signal peptide, CUB domain, EGF-like 2	SCUBE2	708152
Signal recognition particle 68kda	SRP68	705568
Signal sequence receptor, delta	SSR4	697266
Signal transducer and activator of transcription 4	STAT4	693854
Signal transducer and activator of transcription 5A	STAT5A	574129
Sin3A associated protein 25kda	SAP25	106997575
Single stranded DNA binding protein 4	SSBP4	719496
SKI-like proto-oncogene	SKIL	696680
SLIT and NTRK like family member 1	SLITRK1	699217
SLX1 homolog A, structure-specific endonuclease subunit	SLX1A	709225
Small integral membrane protein 13	SMIM13	703387
Small integral membrane protein 19	SMIM19	705371
Small nuclear ribonucleoprotein polypeptides B and B1	SNRPB	716578
Small nuclear ribonucleoprotein, U4/U6.U5 27kda subunit	SNRNP27	708670
Small ubiquitin-like modifier 1	SUMO1	703644
Small ubiquitin-like modifier 2	SUMO2	705512
SMYD family member 5	SMYD5	705926
SNF related kinase	SNRK	715803
Sodium channel, non voltage gated 1 beta subunit	SCNN1B	700093

Sodium channel, voltage gated, type X alpha subunit	SCN10A	694962
Solute carrier family 2 (facilitated glucose transporter), member 2	SLC2A2	695538
Solute carrier family 20 (phosphate transporter), member 2	SLC20A2	705242
Solute carrier family 22 (organic anion/urate transporter), member 12	SLC22A12	717530
Solute carrier family 22 member 14	SLC22A14	696120
Solute carrier family 22 member 15	SLC22A15	710102
Solute carrier family 25 (aspartate/glutamate carrier), member 12	SLC25A12	695173
Solute carrier family 25 (mitochondrial carrier; citrate transporter), member 1	SLC25A1	719075
Solute carrier family 25 (mitochondrial carrier; ornithine transporter) member 2	SLC25A2	701587
Solute carrier family 25 (mitochondrial carrier; oxoglutarate carrier), member 11	SLC25A11	710569
Solute carrier family 25 (mitochondrial iron transporter), member 37	SLC25A37	710518
Solute carrier family 25 (S-adenosylmethionine carrier), member 26	SLC25A26	697960
Solute carrier family 26 (anion exchanger), member 8	SLC26A8	719049
Solute carrier family 30 (zinc transporter), member 8	SLC30A8	701127
Solute carrier family 34 (type II sodium/phosphate cotransporter), member 2	SLC34A2	694217
Solute carrier family 35 (UDP-galactose transporter), member A2	SLC35A2	711587
Solute carrier family 35 (UDP-glca/UDP-galnac transporter), member D1	SLC35D1	700175
Solute carrier family 35 member A5	SLC35A5	708401
Solute carrier family 37 (glucose-6-phosphate transporter), member 2	SLC37A2	712841
Solute carrier family 38 member 9	SLC38A9	706752
Solute carrier family 39 (zinc transporter), member 3	SLC39A3	711564
Solute carrier family 4 (anion exchanger), member 1 (Diego blood group)	SLC4A1	100427618
Solute carrier family 4 (anion exchanger), member 2	SLC4A2	713966
Solute carrier family 4, sodium borate transporter, member 11	SLC4A11	718393
Solute carrier family 44 member 4	SLC44A4	715779
Solute carrier family 5 (sodium/glucose cotransporter), member 1	SLC5A1	717070
Solute carrier family 5 (sodium/multivitamin and iodide cotransporter), member 6	SLC5A6	699074
Solute carrier family 6 (neurotransmitter transporter), member 2	SLC6A2	613238
Solute carrier family 6 (neurotransmitter transporter), member 7	SLC6A7	711915
Solute carrier family 7 (anionic amino acid transporter), member 13	SLC7A13	693964
Solute carrier family 9, subfamily A (NHE9, cation proton antiporter 9), member 9	SLC9A9	713935
Solute carrier organic anion transporter family member 1C1	SLCO1C1	704740
Solute carrier organic anion transporter family member 2B1	SLCO2B1	694829
Sonic hedgehog	SHH	716553
Sorbin and SH3 domain containing 3	SORBS3	716198
Sorting nexin 12	SNX12	696408
Sorting nexin 13	SNX13	714019
Sorting nexin 22	SNX22	706850

Sorting nexin 33	SNX33	706309
Sorting nexin 4	SNX4	716049
Sp2 transcription factor	SP2	694834
Sp4 transcription factor	SP4	712174
SPARC like 1	SPARCL1	701468
SPARC related modular calcium binding 1	SMOC1	712994
Spectrin repeat containing, nuclear envelope family member 4	SYNE4	711904
Spectrin, beta, non-erythrocytic 1	SPTBN1	716794
Spermatogenesis associated 19	SPATA19	693524
Spermatogenesis associated 20	SPATA20	703313
Spermatogenesis associated 25	SPATA25	709097
Spermatogenesis associated 4	SPATA4	641336
Spermatogenesis associated 6	SPATA6	710827
Spermatogenesis associated 9	SPATA9	698748
Spermidine synthase	SRM	714028
Spermidine/spermine N1-acetyltransferase family member 2	SAT2	716044
Sphingomyelin phosphodiesterase 1	SMPD1	711248
Sphingosine-1-phosphate receptor 4	S1PR4	712637
Spindle and kinetochore associated complex subunit 2	SKA2	711092
SPT16 homolog, facilitates chromatin remodeling subunit	SUPT16H	708066
Src-related kinase lacking C-terminal regulatory tyrosine and N-terminal myristylation sites	SRMS	719587
ST3 beta-galactoside alpha-2,3-sialyltransferase 4	ST3GAL4	717792
Stannin	SNN	711909
Star related lipid transfer domain containing 13	STARD13	714104
Star related lipid transfer domain containing 3	STARD3	697212
Star related lipid transfer domain containing 5	STARD5	713308
Sterile alpha motif domain containing 4A	SAMD4A	695336
Steroid receptor RNA activator 1	SRA1	698169
Stomatin like 2	STOML2	698458
Storkhead box 2	STOX2	693692
Stress induced phosphoprotein 1	STIP1	717926
Striatin	STRN	708491
Sulfiredoxin 1	SRXN1	714997
SUMO1/sentrin specific peptidase 5	SENP5	710223
Suppression of tumorigenicity 13 (colon carcinoma) (Hsp70 interacting protein)	ST13	705664
SURP and G-patch domain containing 1	SUGP1	719772
Sushi domain containing 6	SUSD6	712719
SWAP switching B-cell complex 70kda subunit	SWAP70	703651
Synapsin III	SYN3	100430213
Synaptotagmin 6	SYT6	708175
Synaptotagmin like 4	SYTL4	700889
Synergin, gamma	SYNRG	717750
Synovial sarcoma translocation gene on chromosome 18-like 2	SS18L2	716387
Syntrophin, gamma 1	SNTG1	709244
Tankyrase 1 binding protein 1	TNKS1BP1	704825
TAO kinase 2	TAOK2	707777

TATA-box binding protein associated factor 2	TAF2	702411
TATA-box binding protein associated factor 5	TAF5	714558
Tax1 (human T-cell leukemia virus type I) binding protein 3	TAX1BP3	706829
TBK1 binding protein 1	TBKBP1	693913
T-box 21	TBX21	694044
TCF3 (E2A) fusion partner (in childhood Leukemia)	TFPT	720296
Teashirt zinc finger homeobox 1	TSHZ1	703018
TELO2 interacting protein 2	TTI2	696776
Telomeric repeat binding factor 2, interacting protein	TERF2IP	712149
Teneurin transmembrane protein 1	TENM1	699897
TERF1 (TRF1)-interacting nuclear factor 2	TINF2	715812
Testis expressed 26	TEX26	713363
Testis expressed 30	TEX30	701917
Tetraspanin 18	TSPAN18	715506
Tetraspanin 32	TSPAN32	704862
Tetratricopeptide repeat domain 1	TTC1	695225
Tetratricopeptide repeat domain 14	TTC14	710895
Tetratricopeptide repeat domain 21A	TTC21A	694904
Tetratricopeptide repeat domain 23	TTC23	708530
Tetratricopeptide repeat domain 7B	TTC7B	696029
TGF-beta activated kinase 1/MAP3K7 binding protein 1	TAB1	703409
THAP domain containing 7	THAP7	696208
Thioredoxin domain containing 9	TXNDC9	709303
Thioredoxin-related transmembrane protein 1	TMX1	707057
THO complex 3	THOC3	695561
THO complex 6	THOC6	700217
Thy-1 cell surface antigen	THY1	705321
Thymidine phosphorylase	TYMP	716161
Thymosin beta 4, X-linked	TMSB4X	710959
Thyroid hormone receptor associated protein 3	THRAP3	713033
TNF receptor associated factor 6	TRAF6	716907
Topoisomerase (DNA) I	TOP1	697300
Topoisomerase (DNA) III beta	TOP3B	698317
Trace amine associated receptor 6	TAAR6	709418
TRAF3 interacting protein 3	TRAF3IP3	712895
Transcription elongation factor A (SII), 2	TCEA2	694026
Transcription elongation factor A (SII)-like 1	TCEAL1	696826
Transcription factor 15 (basic helix-loop-helix)	TCF15	716916
Transcription factor 7-like 1 (T-cell specific, HMG-box)	TCF7L1	694560
Transcription factor Dp family member 3	TFDP3	706557
Transcription factor EC	TFEC	704124
Transcriptional adaptor 3	TADA3	700090
Transducin (beta)-like 1 X-linked receptor 1	TBL1XR1	712740
Transducin like enhancer of split 3	TLE3	698046
Transforming growth factor beta 1 induced transcript 1	TGFB1I1	714172
Transforming, acidic coiled-coil containing protein 3	TACC3	712898
Transient receptor potential cation channel, subfamily C, member 7	TRPC7	712863
Transketolase-like 1	TKTL1	699278

Translocase of inner mitochondrial membrane 17 homolog B (yeast)	TIMM17B	714895
Translocase of outer mitochondrial membrane 22 homolog (yeast)	TOMM22	701286
Transmembrane 4 L six family member 5	TM4SF5	709844
Transmembrane 9 superfamily protein member 4	TM9SF4	712260
Transmembrane phosphoinositide 3-phosphatase and tensin homolog 2	TPTE2	704870
Transmembrane protease, serine 13	TMPRSS13	698586
Transmembrane protein 104	TMEM104	698592
Transmembrane protein 11	TMEM11	704970
Transmembrane protein 115	TMEM115	702164
Transmembrane protein 121	TMEM121	700005
Transmembrane protein 123	TMEM123	702833
Transmembrane protein 135	TMEM135	704963
Transmembrane protein 138	TMEM138	693905
Transmembrane protein 145	TMEM145	709268
Transmembrane protein 150A	TMEM150A	696101
Transmembrane protein 160	TMEM160	716996
Transmembrane protein 163	TMEM163	709015
Transmembrane protein 179B	TMEM179B	718518
Transmembrane protein 183A	TMEM183A	704195
Transmembrane protein 205	TMEM205	714330
Transmembrane protein 248	TMEM248	695654
Transmembrane protein 5	TMEM5	717102
Transmembrane protein 55A	TMEM55A	696779
Transmembrane protein 55B	TMEM55B	100428001
Transmembrane protein 60	TMEM60	693679
Tribbles pseudokinase 3	TRIB3	714636
Tripartite motif containing 33	TRIM33	710600
Tripartite motif containing 62	TRIM62	709927
Tripartite motif family like 1	TRIML1	698114
TRK-fused gene	TFG	700972
Trophoblast glycoprotein	TPBG	693944
Tropomyosin 2 (beta)	TPM2	696604
Tropomyosin 3	TPM3	716336
Troponin T type 2 (cardiac)	TNNT2	709882
Trub pseudouridine (psi) synthase family member 2	TRUB2	717619
Tryptase gamma 1	TPSG1	100425751
TSSK6 activating co-chaperone	TSACC	719490
Tubulin alpha 3c	TUBA3C	707215
Tubulin alpha 4a	TUBA4A	702583
Tubulin beta class I	TUBB	574113
Tumor necrosis factor receptor superfamily member 13C	TNFRSF13C	712577
Tumor necrosis factor receptor superfamily member 25	TNFRSF25	703744
Tumor protein p53 inducible nuclear protein 2	TP53INP2	707113
Tumor protein, translationally-controlled 1	TPT1	702155
Twist family bhlh transcription factor 2	TWIST2	697078
Tyrosinase-related protein 1	TYRP1	714646
Tyrosine kinase, non-receptor, 1	TNK1	715180

UBA domain containing 2	UBAC2	703484
Ubiquitin A-52 residue ribosomal protein fusion product 1	UBA52	720243
Ubiquitin B	UBB	696110
Ubiquitin conjugating enzyme E2 variant 1	UBE2V1	1.00E+08
Ubiquitin conjugating enzyme E2O	UBE2O	710529
Ubiquitin domain containing 2	UBTD2	709455
Ubiquitin like 4B	UBL4B	701055
Ubiquitin like 5	UBL5	711015
Ubiquitin like 7	UBL7	702305
Ubiquitin protein ligase E3D	UBE3D	694910
Ubiquitin related modifier 1	URM1	722618
Ubiquitin specific peptidase 10	USP10	718471
Ubiquitin specific peptidase 11	USP11	706555
Ubiquitin specific peptidase 20	USP20	716505
Ubiquitin specific peptidase 21	USP21	719894
Ubiquitin specific peptidase 26	USP26	706435
Ubiquitin specific peptidase 47	USP47	701660
Ubiquitin specific peptidase 48	USP48	707110
Ubiquitin specific peptidase 7 (herpes virus-associated)	USP7	714625
Ubiquitin specific peptidase 9, Y-linked	USP9Y	100270703
Ubiquitination factor E4B	UBE4B	713348
Ubiquitin-conjugating enzyme E2E 2	UBE2E2	699101
UBX domain protein 1	UBXN1	718643
UBX domain protein 10	UBXN10	705058
UBX domain protein 11	UBXN11	719826
UHRF1 binding protein 1-like	UHRF1BP1L	694816
Upstream transcription factor family member 3	USF3	709660
Uridine monophosphate synthetase	UMPS	715664
USP6 N-terminal like	USP6NL	694275
V-akt murine thymoma viral oncogene homolog 3	AKT3	714717
Valyl-trna synthetase	VARS	715537
Vascular endothelial growth factor A	VEGFA	574209
Vasoactive intestinal peptide receptor 1	VIPR1	717438
V-crk avian sarcoma virus CT10 oncogene homolog	CRK	701185
Versican	VCAN	712365
Vesicle (multivesicular body) trafficking 1	VTA1	701578
Villin 1	VIL1	698946
Villin-like	VILL	696988
Visual system homeobox 1	VSX1	715973
Vitamin K epoxide reductase complex subunit 1	VKORC1	714412
Vitronectin	VTN	708499
Von Willebrand factor	VWF	722019
VPS39 HOPS complex subunit	VPS39	707791
VPS52 GARP complex subunit	VPS52	100430905
VPS54 GARP complex subunit	VPS54	695397
V-set and immunoglobulin domain containing 4	VSIG4	709685
WAP four-disulfide core domain 12	WFDC12	711552
WD repeat domain 74	WDR74	718460

Wingless-type MMTV integration site family member 7B	WNT7B	713864
Wolfram syndrome 1 (wolframin)	WFS1	710948
WW domain binding protein 1	WBP1	709202
WW domain containing E3 ubiquitin protein ligase 2	WWP2	705464
X-ray repair complementing defective repair in Chinese hamster cells 6	XRCC6	707975
YEATS domain containing 4	YEATS4	718376
Yip1 domain family member 4	YIPF4	706819
Yippee like 3	YPEL3	708740
YTH N(6)-methyladenosine RNA binding protein 2	YTHDF2	717225
Zinc binding alcohol dehydrogenase domain containing 2	ZADH2	701079
Zinc finger and BTB domain containing 39	ZBTB39	713914
Zinc finger and BTB domain containing 8 opposite strand	ZBTB8OS	708590
Zinc finger and SCAN domain containing 2	ZSCAN2	695673
Zinc finger CCCH-type containing 12A	ZC3H12A	713604
Zinc finger CCCH-type containing 3	ZC3H3	708584
Zinc finger protein 217	ZNF217	699314
Zinc finger protein 22	ZNF22	706208
Zinc finger protein 319	ZNF319	706286
Zinc finger protein 354B	ZNF354B	712885
Zinc finger protein 385A	ZNF385A	705436
Zinc finger protein 41	ZNF41	706770
Zinc finger protein 436	ZNF436	709638
Zinc finger protein 467	ZNF467	712106
Zinc finger protein 496	ZNF496	709694
Zinc finger protein 526	ZNF526	707135
Zinc finger protein 574	ZNF574	706729
Zinc finger protein 692	ZNF692	710010
Zinc finger protein 7	ZNF7	715735
Zinc finger protein 70	ZNF70	698442
Zinc finger protein 79	ZNF79	700961
Zinc finger protein 821	ZNF821	707355
Zinc finger, AN1-type domain 2B	ZFAND2B	702027
Zinc finger, CCCH-type with G-patch domain	ZGPAT	719499
Zinc finger, CCHC domain containing 10	ZCCHC10	709423
Zinc finger, CCHC domain containing 3	ZCCHC3	714477
Zinc finger, DHHC-type containing 12	ZDHHC12	722606
Zinc finger, DHHC-type containing 16	ZDHHC16	705982
Zinc finger, DHHC-type containing 17	ZDHHC17	693595
Zinc finger, DHHC-type containing 5	ZDHHC5	704863
Zinc finger, matrin-type 5	ZMAT5	715058
Zinc finger, MYM-type 4	ZMYM4	712793
Zinc finger, MYND-type containing 11	ZMYND11	708761
Zinc ribbon domain containing 1	ZNRD1	712151
Zona pellucida glycoprotein 2 (sperm receptor)	ZP2	697458
Zona pellucida glycoprotein 3 (sperm receptor)	ZP3	719925
Zyg-11 related, cell cycle regulator	ZER1	717262

(2) Expressed in both groups 1a and 1b, but not in group 1c

1-acylglycerol-3-phosphate O-acyltransferase 1	AGPAT1	717174
1-acylglycerol-3-phosphate O-acyltransferase 5	AGPAT5	716847
1-aminocyclopropane-1-carboxylate synthase homolog (inactive)	ACCS	715798
2-aminoethanethiol (cysteamine) dioxygenase	ADO	698259
2-oxoglutarate and iron-dependent oxygenase domain containing 3	OGFOD3	716172
2-phosphoxylose phosphatase 1	PXYLP1	715229
3-hydroxy-3-methylglutaryl-coa synthase 1	HMGCS1	702553
3-hydroxyacyl-coa dehydratase 1	HACD1	700635
3-hydroxyanthranilate 3,4-dioxygenase	HAAO	713101
3-oxoacyl-ACP synthase, mitochondrial	OXSM	703382
3'-phosphoadenosine 5'-phosphosulfate synthase 2	PAPSS2	704688
5'-3' exoribonuclease 2	XRN2	700934
5-aminoimidazole-4-carboxamide ribonucleotide formyltransferase/IMP cyclohydrolase	ATIC	694819
5-hydroxymethylcytosine (hmc) binding, ES cell-specific	HMCES	703524
5'-nucleotidase, cytosolic IIIA	NT5C3A	708743
5-phosphohydroxy-L-lysine phospho-lyase	PHYKPL	702302
5-phosphohydroxy-L-lysine phospho-lyase	PHYKPL	702302
8-oxoguanine DNA glycosylase	OGG1	700481
Aarf domain containing kinase 1	ADCK1	707060
Aarf domain containing kinase 2	ADCK2	693303
Aarf domain containing kinase 3	ADCK3	697920
Aarf domain containing kinase 4	ADCK4	702379
Abhydrolase domain containing 1	ABHD1	698700
Abhydrolase domain containing 14B	ABHD14B	698910
Abhydrolase domain containing 16A	ABHD16A	716051
Abhydrolase domain containing 6	ABHD6	702384
Abhydrolase domain containing 8	ABHD8	718980
Abl-interactor 2	ABI2	704956
Acetyl-coa acetyltransferase 1	ACAT1	707653
Acetyl-coa acyltransferase 2	ACAA2	709350
Acetyl-coa carboxylase alpha	ACACA	714218
Achaete-scute family bhlh transcription factor 1	ASCL1	698820
Acid phosphatase 6, lysophosphatidic	ACP6	710431
Acid phosphatase 7, tartrate resistant (putative)	ACP7	695532
Acidic nuclear phosphoprotein 32 family member B	ANP32B	715508
Acidic nuclear phosphoprotein 32 family member E	ANP32E	706251
Acidic residue methyltransferase 1	ARMT1	704570
Aconitase 1	ACO1	705075
Aconitase 2	ACO2	707441
Acrosin binding protein	ACRBP	713219
Actin binding LIM protein 1	ABLIM1	698641
Actin like 6A	ACTL6A	708935
Actin like 7B	ACTL7B	710750
Actin related protein 2/3 complex subunit 1A	ARPC1A	718635

Actin related protein 2/3 complex subunit 2	ARPC2	700536
Actin related protein 2/3 complex subunit 3	ARPC3	709199
Actinin, alpha 2	ACTN2	710012
Activating signal cointegrator 1 complex subunit 1	ASCC1	709049
Activating signal cointegrator 1 complex subunit 2	ASCC2	715117
Activating transcription factor 3	ATF3	710832
Activating transcription factor 4	ATF4	703965
Activating transcription factor 6	ATF6	720056
Activin A receptor type I	ACVR1	697935
Acyl-coa binding domain containing 6	ACBD6	716418
Acyl-coa oxidase 1, palmitoyl	ACOX1	705197
Acyl-coa thioesterase 8	ACOT8	717238
Acyloxyacyl hydrolase	AOAH	706291
ADAM metalloproteinase domain 10	ADAM10	701355
ADAM metalloproteinase domain 19	ADAM19	715164
ADAM metalloproteinase domain 2	ADAM2	707303
ADAM metalloproteinase with thrombospondin type 1 motif 14	ADAMTS14	710154
ADAM metalloproteinase with thrombospondin type 1 motif 16	ADAMTS16	694474
ADAM metalloproteinase with thrombospondin type 1 motif 20	ADAMTS20	699935
ADAM metalloproteinase with thrombospondin type 1 motif 6	ADAMTS6	696021
ADAM metalloproteinase with thrombospondin type 1 motif 9	ADAMTS9	698341
ADAMTS like 2	ADAMTSL2	713492
Adaptor related protein complex 1 associated regulatory protein	AP1AR	700734
Adaptor related protein complex 1 mu 1 subunit	AP1M1	718605
Adaptor related protein complex 2, mu 1 subunit	AP2M1	703554
Adaptor related protein complex 3, beta 2 subunit	AP3B2	694091
Adaptor related protein complex 3, sigma 1 subunit	AP3S1	696644
Adaptor related protein complex 4, beta 1 subunit	AP4B1	707634
Adaptor related protein complex 5, mu 1 subunit	AP5M1	701050
Additional sex combs like 2, transcriptional regulator	ASXL2	695057
Adducin 1	ADD1	700805
Adenosine deaminase domain containing 1	ADAD1	707910
Adenosine deaminase, RNA-specific	ADAR	718759
Adenosine deaminase, RNA-specific, B1	ADARB1	722016
Adenosine monophosphate deaminase 2	AMPD2	699561
Adenylate cyclase 4	ADCY4	714684
Adenylate cyclase 6	ADCY6	707978
Adenylate kinase 2	AK2	709737
Adenylosuccinate synthase	ADSS	713580
Adhesion G protein-coupled receptor A3	ADGRA3	715618
Adhesion G protein-coupled receptor G1	ADGRG1	613233
Adhesion molecule with Ig-like domain 2	AMIGO2	705386
Adiponectin receptor 2	ADIPOR2	707547
ADP ribosylation factor 4	ARF4	703432
ADP ribosylation factor gtpase activating protein 3	ARFGAP3	711160
ADP ribosylation factor guanine nucleotide exchange factor 1	ARFGEF1	704359
ADP ribosylation factor like gtpase 2 binding protein	ARL2BP	703999
ADP ribosylation factor like gtpase 8B	ARL8B	703201

ADP-ribosylhydrolase like 2	ADPRHL2	712758
AHA1, activator of heat shock 90kda protein ATPase homolog 1 (yeast)	AHSA1	706547
Ajuba LIM protein	AJUBA	712865
A-kinase anchoring protein 1	AKAP1	708500
A-kinase anchoring protein 10	AKAP10	710970
A-kinase anchoring protein 12	AKAP12	641446
A-kinase anchoring protein 17A	AKAP17A	693468
A-kinase anchoring protein 9	AKAP9	702970
Aladin WD repeat nucleoporin	AAAS	719095
Aldehyde dehydrogenase 18 family member A1	ALDH18A1	703357
Aldo-keto reductase family 1, member A1 (aldehyde reductase)	AKR1A1	693380
Aldo-keto reductase family 1, member B1 (aldose reductase)	AKR1B1	705957
Aldo-keto reductase family 1, member C1 (dihydrodiol dehydrogenase 1; 20-alpha (3-alpha)-hydroxysteroid dehydrogenase)	AKR1C1	711198
ALG2, alpha-1,3/1,6-mannosyltransferase	ALG2	714850
ALG5, dolichyl-phosphate beta-glucosyltransferase	ALG5	694836
Alkaline ceramidase 1	ACER1	699093
Alkb homolog 2, alpha-ketoglutarate-dependent dioxygenase	ALKBH2	706708
Alkb homolog 4, lysine demethylase	ALKBH4	715078
Alkb homolog 7	ALKBH7	699343
All-trans retinoic acid induced differentiation factor	ATRAID	699201
Alpha hemoglobin stabilizing protein	AHSP	714392
Alpha thalassemia/mental retardation syndrome X-linked	ATRX	705735
Alpha-2-HS-glycoprotein	AHSG	699348
Amine oxidase, copper containing 2	AOC2	100431015
Aminoacylase 3	ACY3	711083
Aminocarboxymuconate semialdehyde decarboxylase	ACMSD	708917
Aminomethyltransferase	AMT	706515
Amino-terminal enhancer of split	AES	712353
Amylase, alpha 2B (pancreatic)	AMY2B	712893
Amyloid beta (A4) precursor protein-binding, family B, member 1 (Fe65)	APBB1	712585
Amyloid beta (A4) precursor protein-binding, family B, member 3	APBB3	698296
Amyloid beta (A4) precursor-like protein 2	APLP2	718819
Anaphase promoting complex subunit 13	ANAPC13	717294
Anaphase promoting complex subunit 15	ANAPC15	718333
Anaphase promoting complex subunit 2	ANAPC2	706384
Anaphase promoting complex subunit 4	ANAPC4	694006
Ancient ubiquitous protein 1	AUP1	710020
Androgen-induced 1	AIG1	700988
Angiopoietin like 7	ANGPTL7	714204
Angiotensin II receptor-associated protein	AGTRAP	722746
Ankyrin 3, node of Ranvier (ankyrin G)	ANK3	699518
Ankyrin repeat and IBR domain containing 1	ANKIB1	703273
Ankyrin repeat and SOCS box containing 3	ASB3	716503
Ankyrin repeat domain 1 (cardiac muscle)	ANKRD1	696653

Ankyrin repeat domain 10	ANKRD10	695300
Ankyrin repeat domain 13C	ANKRD13C	702811
Ankyrin repeat domain 2 (stretch responsive muscle)	ANKRD2	707097
Ankyrin repeat domain 27	ANKRD27	716232
Ankyrin repeat domain 49	ANKRD49	697693
Ankyrin repeat domain 6	ANKRD6	701339
Ankyrin repeat, family A (RFXANK-like), 2	ANKRA2	703691
Annexin A11	ANXA11	707628
Anti-silencing function 1A histone chaperone	ASF1A	714761
Antizyme inhibitor 1	AZIN1	693581
APEX nuclease (multifunctional DNA repair enzyme) 1	APEX1	702757
Apolipoprotein B mrna editing enzyme, catalytic polypeptide-like 3G	APOBEC3G	574398
Apolipoprotein B mrna editing enzyme, catalytic polypeptide-like 3H	APOBEC3H	723811
Apolipoprotein C-III	APOC3	696726
Apolipoprotein O	APOO	698137
Apoptosis inducing factor, mitochondria associated 1	AIFM1	702773
Apoptosis inducing factor, mitochondria associated 3	AIFM3	100430573
Apoptosis inhibitor 5	API5	716346
Apoptosis, caspase activation inhibitor	AVEN	695227
Aprataxin	APTIX	702671
Aquaporin 4	AQP4	703773
Aquaporin 8	AQP8	702167
Arachidonate 5-lipoxygenase-activating protein	ALOX5AP	713170
Arfgap with rhogap domain, ankyrin repeat and PH domain 2	ARAP2	702115
Arfgap with rhogap domain, ankyrin repeat and PH domain 3	ARAP3	701400
Arginine and glutamate rich 1	ARGLU1	702840
Arginine/serine-rich coiled-coil 2	RSRC2	706564
Arginine/serine-rich protein 1	RSRP1	712757
Arginine-glutamic acid dipeptide (RE) repeats	RERE	708902
Arginyl aminopeptidase (aminopeptidase B)	RNPEP	706696
Arginyl aminopeptidase (aminopeptidase B)-like 1	RNPEPL1	716318
Arginyltransferase 1	ATE1	705248
Arginyl-trna synthetase	RARS	698998
Arginyl-trna synthetase 2, mitochondrial	RARS2	699240
Armadillo repeat containing 9	ARMC9	711891
Armadillo repeat containing, X-linked 3	ARMCX3	704035
ARP2 actin-related protein 2 homolog (yeast)	ACTR2	697080
ARP3 actin-related protein 3 homolog B (yeast)	ACTR3B	715965
ARP5 actin-related protein 5 homolog (yeast)	ACTR5	698191
Arrestin, beta 1	ARRB1	695250
Arrestin, beta 2	ARRB2	709399
Artemin	ARTN	701641
ARV1 homolog, fatty acid homeostasis modulator	ARV1	713975
Aryl hydrocarbon receptor nuclear translocator like	ARNTL	700464
Ash2 (absent, small, or homeotic)-like (Drosophila)	ASH2L	699382
Asparaginase like 1	ASRGL1	718871

Asparagine synthetase (glutamine-hydrolyzing)	ASNS	697232
Aspartyl aminopeptidase	DNPEP	703180
Asteroid homolog 1 (Drosophila)	ASTE1	719271
Ataxin 2-like	ATXN2L	708359
AT-hook containing transcription factor 1	AHCTF1	702705
Atlantin gtpase 2	ATL2	710647
ATP binding cassette subfamily A member 5	ABCA5	693795
ATP binding cassette subfamily A member 7	ABCA7	704976
ATP binding cassette subfamily B member 7	ABCB7	704034
ATP binding cassette subfamily E member 1	ABCE1	701945
ATP binding cassette subfamily F member 3	ABCF3	703319
ATP binding cassette subfamily G member 2 (Junior blood group)	ABCG2	574307
ATP binding cassette subfamily G member 8	ABCG8	713676
ATP citrate lyase	ACLY	708501
ATP synthase F0 subunit 6	ATP6	2846629
ATP synthase, H ⁺ transporting, mitochondrial F1 complex, alpha subunit 1, cardiac muscle	ATP5A1	701389
ATP synthase, H ⁺ transporting, mitochondrial F1 complex, beta polypeptide	ATP5B	713284
ATP synthase, H ⁺ transporting, mitochondrial F1 complex, gamma polypeptide 1	ATP5C1	713768
ATP synthase, H ⁺ transporting, mitochondrial F1 complex, O subunit	ATP5O	698480
ATP synthase, H ⁺ transporting, mitochondrial Fo complex subunit D	ATP5H	700338
ATP synthase, H ⁺ transporting, mitochondrial Fo complex subunit F6	ATP5J	708411
ATPase inhibitory factor 1	ATPIF1	716870
ATPase type 13A1	ATP13A1	100427506
ATPase type 13A2	ATP13A2	699678
ATPase, Ca ⁺⁺ transporting, plasma membrane 1	ATP2B1	709102
ATPase, class II, type 9A	ATP9A	710250
ATPase, H ⁺ transporting, lysosomal 13kda, V1 subunit G1	ATP6V1G1	703655
ATPase, H ⁺ transporting, lysosomal 14kda, V1 subunit F	ATP6V1F	702112
ATPase, H ⁺ transporting, lysosomal 31kda, V1 subunit E1	ATP6V1E1	709739
ATPase, H ⁺ transporting, lysosomal 56/58kda, V1 subunit B2	ATP6V1B2	705605
ATPase, H ⁺ transporting, lysosomal 9kda, V0 subunit e1	ATP6V0E1	703342
ATPase, H ⁺ transporting, lysosomal accessory protein 2	ATP6AP2	705048
ATPase, H ⁺ /K ⁺ exchanging, alpha polypeptide	ATP4A	100426215
ATPase, Na ⁺ /K ⁺ transporting, alpha 1 polypeptide	ATP1A1	710368
ATP-binding cassette transporter 13	ABCC13	574326
ATR serine/threonine kinase	ATR	714443
AT-rich interaction domain 4B	ARID4B	718320
Atypical chemokine receptor 1 (Duffy blood group)	ACKR1	719284
AU RNA binding protein/enoyl-coa hydratase	AUH	704542
Aurora kinase B	AURKB	721955
Autocrine motility factor receptor, E3 ubiquitin protein ligase	AMFR	699972
Autophagy related 16 like 1	ATG16L1	714092

Autophagy related 2A	ATG2A	717290
Autophagy related 3	ATG3	708305
Autophagy related 4A, cysteine peptidase	ATG4A	703367
Autophagy related 4D, cysteine peptidase	ATG4D	713111
Autophagy related 5	ATG5	696874
Autophagy related 7	ATG7	696238
Autophagy/beclin-1 regulator 1	AMBRA1	714434
B9 protein domain 2	B9D2	704873
BAI1-associated protein 2-like 2	BAIAP2L2	700058
Bardet-Biedl syndrome 10	BBS10	693270
Bardet-Biedl syndrome 2	BBS2	700353
Bardet-Biedl syndrome 4	BBS4	704508
Bardet-Biedl syndrome 5	BBS5	709701
Bardet-Biedl syndrome 9	BBS9	708412
Basic helix-loop-helix family member e40	BHLHE40	707083
Basic leucine zipper and W2 domains 1	BZW1	701731
Basic leucine zipper and W2 domains 2	BZW2	714627
Basic leucine zipper transcription factor, ATF-like 2	BATF2	722022
Basic transcription factor 3	BTF3	703339
Basic transcription factor 3-like 4	BTF3L4	712955
B-cell CLL/lymphoma 6	BCL6	708736
B-cell CLL/lymphoma 9	BCL9	700800
B-cell receptor-associated protein 31	BCAP31	696663
B-cell translocation gene 1, anti-proliferative	BTG1	710112
BCL2 associated athanogene 2	BAG2	712778
BCL2/adenovirus E1B 19kda interacting protein 1	BNIP1	703576
BCL2-associated X protein	BAX	718948
BCL2-like 1	BCL2L1	713035
BCL2-like 13 (apoptosis facilitator)	BCL2L13	709825
BCL2-like 14 (apoptosis facilitator)	BCL2L14	695971
BCS1-like (S. Cerevisiae)	BCS1L	699690
Beclin 1, autophagy related	BECN1	711649
BEN domain containing 6	BEND6	712498
Beta 3-glucosyltransferase	B3GLCT	713498
Beta-1,3-galactosyltransferase 1	B3GALT1	704744
Beta-1,3-galactosyltransferase 4	B3GALT4	718178
Beta-1,3-N-acetylgalactosaminyltransferase 1 (globoside blood group)	B3GALNT1	703939
Beta-1,4-glucuronyltransferase 1	B4GAT1	714270
Beta-2-microglobulin	B2M	712428
Beta-site APP-cleaving enzyme 1	BACE1	697694
Bicaudal D homolog 2 (Drosophila)	BICD2	706621
Biliverdin reductase A	BLVRA	700980
Bisphosphoglycerate mutase	BPGM	706741
Bladder cancer associated protein	BLCAP	708044
BLOC-1 related complex subunit 5	BORCS5	696469
Bloom syndrome, recq helicase-like	BLM	703460
Bola family member 1	BOLA1	705297

Bone morphogenetic protein 1	BMP1	707596
Bone morphogenetic protein receptor type IA	BMPRI1A	696898
BPI fold containing family A member 2	BPIFA2	710376
BPI fold containing family C	BPIFC	717287
Brain and reproductive organ-expressed (TNFRSF1A modulator)	BRE	702365
Brain protein I3	BRI3	706525
Branched chain amino-acid transaminase 2, mitochondrial	BCAT2	718305
Branched chain keto acid dehydrogenase E1, beta polypeptide	BCKDHB	718472
BRCA1 associated RING domain 1	BARD1	694301
BRCA2 and CDKN1A interacting protein	BCCIP	699437
Breast cancer anti-estrogen resistance 1	BCAR1	713965
BRICHOS domain containing 5	BRICD5	695765
BRISC and BRCA1 A complex member 1	BABAM1	718969
Bromo adjacent homology domain containing 1	BAHD1	702982
Bromodomain adjacent to zinc finger domain 1B	BAZ1B	716436
Bromodomain containing 1	BRD1	715059
Bromodomain containing 2	BRD2	717893
Bromodomain containing 7	BRD7	694850
BRX1, biogenesis of ribosomes	BRX1	698745
BTB (POZ) domain containing 1	BTBD1	718696
BTB (POZ) domain containing 10	BTBD10	700325
BTB (POZ) domain containing 16	BTBD16	705610
BTB and CNC homology 1, basic leucine zipper transcription factor 1	BACH1	705817
BTG3 associated nuclear protein	BANP	696125
BUB3 mitotic checkpoint protein	BUB3	708033
BUD31 homolog	BUD31	718694
Bystin like	BYSL	694976
C1GALT1 specific chaperone 1	C1GALT1C1	696662
C2CD2-like	C2CD2L	703424
Cadherin 11, type 2, OB-cadherin (osteoblast)	CDH11	708826
Cadherin 13	CDH13	718038
Cadherin 17, LI cadherin (liver-intestine)	CDH17	698886
Cadherin 5, type 2 (vascular endothelium)	CDH5	693297
Cadherin related family member 2	CDHR2	697249
Calcium activated nucleotidase 1	CANT1	710935
Calcium and integrin binding 1	CIB1	701842
Calcium binding protein 39	CAB39	711166
Calcium homeostasis endoplasmic reticulum protein	CHERP	718689
Calcium homeostasis modulator 2	CALHM2	714662
Calcium regulated heat stable protein 1	CARHSP1	709224
Calcium release activated channel regulator 2B	CRACR2B	700951
Calcium/calmodulin-dependent protein kinase II delta	CAMK2D	702504
Calcium/calmodulin-dependent protein kinase II gamma	CAMK2G	705980
Calcium/calmodulin-dependent protein kinase kinase 1, alpha	CAMKK1	707562
Calcium/calmodulin-dependent protein kinase kinase 2, beta	CAMKK2	699685
Calcium/calmodulin-dependent serine protein kinase	CASK	707428

(MAGUK family)		
Calcyclin binding protein	CACYBP	709343
Calmin (calponin-like, transmembrane)	CLMN	709910
Calmodulin regulated spectrin associated protein family member 2	CAMSAP2	709092
Calnexin	CANX	704794
Calpain 1, (mu/I) large subunit	CAPN1	716618
Calpain 10	CAPN10	716360
Calpain 15	CAPN15	695881
Calpain 3	CAPN3	707913
Calponin 3, acidic	CNN3	709538
Calreticulin	CALR	716910
Calumenin	CALU	699730
Camp responsive element binding protein 3	CREB3	696350
Camp responsive element binding protein 3-like 4	CREB3L4	715951
Cancer susceptibility candidate 3	CASC3	699712
Cannabinoid receptor 2	CNR2	711155
Cannabinoid receptor interacting protein 1	CNRIP1	698827
CAP, adenylate cyclase-associated protein 1 (yeast)	CAP1	693719
Capping protein (actin filament) muscle Z-line, alpha 1	CAPZA1	705653
Capping protein (actin filament) muscle Z-line, alpha 2	CAPZA2	704662
Caprin family member 2	CAPRIN2	693594
Carbamoyl-phosphate synthetase 2, aspartate transcarbamylase, and dihydroorotase	CAD	699460
Carbohydrate (N-acetylgalactosamine 4-0) sulfotransferase 14	CHST14	703115
Carboxypeptidase E	CPE	708881
Carboxypeptidase N subunit 2	CPN2	106997189
Carboxypeptidase Q	CPQ	701711
Carboxypeptidase, vitellogenic-like	CPVL	697111
Carnitine palmitoyltransferase 1A (liver)	CPT1A	709837
Carnitine palmitoyltransferase 2	CPT2	714150
Casein kinase 1, alpha 1	CSNK1A1	710775
Casein kinase 1, alpha 1-like	CSNK1A1L	695190
Casein kinase 1, gamma 3	CSNK1G3	701702
Casein kinase 2, alpha 1 polypeptide	CSNK2A1	714841
Casein kinase 2, beta polypeptide	CSNK2B	715807
Caseinolytic mitochondrial matrix peptidase chaperone subunit	CLPX	708954
CASK interacting protein 2	CASKIN2	702477
Caspase 1	CASP1	706568
Caspase 4	CASP4	704864
Caspase 8 associated protein 2	CASP8AP2	702294
Caspase 9	CASP9	694544
Caspase recruitment domain family member 18	CARD18	705678
Cat eye syndrome chromosome region, candidate 5	CECR5	709197
Catalase	CAT	717406
Catechol-O-methyltransferase	COMT	712548
Catechol-O-methyltransferase domain containing 1	COMTD1	704152
Catenin alpha 1	CTNNA1	574385
Catenin alpha-like 1	CTNNAL1	710389

Catenin beta 1	CTNNB1	574265
Catenin beta like 1	CTNNBL1	700310
Cathepsin B	CTSB	100424758
Cathepsin C	CTSC	705320
Cathepsin H	CTSH	711437
Cathepsin H	CTSH	711437
Cbl proto-oncogene B, E3 ubiquitin protein ligase	CBLB	703879
Cbl proto-oncogene C, E3 ubiquitin protein ligase	CBLC	713112
CCAAT/enhancer binding protein (C/EBP), zeta	CEBPZ	712090
CCCTC-binding factor (zinc finger protein)-like	CTCFL	701500
CCR4-NOT transcription complex subunit 1	CNOT1	712880
CCR4-NOT transcription complex subunit 10	CNOT10	704986
CCR4-NOT transcription complex subunit 3	CNOT3	693292
CCR4-NOT transcription complex subunit 7	CNOT7	702192
CCR4-NOT transcription complex subunit 8	CNOT8	714813
CD14 molecule	CD14	697482
CD19 molecule	CD19	705211
CD1c molecule	CD1C	717148
CD2 (cytoplasmic tail) binding protein 2	CD2BP2	709961
CD200 molecule	CD200	708110
CD2-associated protein	CD2AP	705221
CD40 ligand	CD40LG	574160
CD53 molecule	CD53	702350
CD58 molecule	CD58	710732
CD63 molecule	CD63	709828
CD79b molecule	CD79B	718218
CD86 molecule	CD86	714390
CD8b molecule	CD8B	699409
CD9 molecule	CD9	712262
CDC like kinase 1	CLK1	700320
CDC like kinase 3	CLK3	702511
CDC28 protein kinase regulatory subunit 1B	CKS1B	717164
CDC42 effector protein (Rho gtpase binding) 4	CDC42EP4	696227
CDGSH iron sulfur domain 1	CISD1	701716
CDKN1A interacting zinc finger protein 1	CIZ1	717725
CDKN2A interacting protein	CDKN2AIP	701583
CDKN2A interacting protein N-terminal like	CDKN2AIPNL	710774
Cell cycle and apoptosis regulator 2	CCAR2	716288
Cell death-inducing DFFA-like effector b	CIDEB	100425328
Cell division cycle 16	CDC16	699089
Cell division cycle 26	CDC26	706165
Cell division cycle 37	CDC37	715390
Cell division cycle 37-like 1	CDC37L1	694831
Cell division cycle 5 like	CDC5L	703099
Cell division cycle 6	CDC6	700081
Cell division cycle and apoptosis regulator 1	CCAR1	693585
Cell division cycle associated 7	CDCA7	696474
Cell growth regulator with ring finger domain 1	CGRRF1	695231

Centrin 1	CETN1	697701
Centrin 3	CETN3	695223
Centriolin	CNTRL	700200
Centrobin, centrosomal BRCA2 interacting protein	CNTROB	716660
Centromere protein C	CENPC	710620
Centromere protein M	CENPM	709006
Centrosomal protein 170kda	CEP170	705427
Centrosomal protein 192kda	CEP192	722121
Centrosomal protein 290kda	CEP290	708286
Centrosomal protein 41kda	CEP41	703215
Centrosomal protein 57kda-like 1	CEP57L1	700109
Centrosomal protein 70kda	CEP70	716263
Centrosomal protein 72kda	CEP72	708753
Centrosomal protein 83kda	CEP83	711408
Centrosomal protein 85kda-like	CEP85L	714810
Ceramide synthase 2	CERS2	716180
Ceramide synthase 4	CERS4	706728
Ceramide synthase 6	CERS6	704953
Cerberus 1, DAN family BMP antagonist	CER1	713924
Cerebellar degeneration related protein 2	CDR2	698974
Cerebellar degeneration-related protein 2-like	CDR2L	700082
Cerebral cavernous malformation 2	CCM2	705037
Ceroid-lipofuscinosis, neuronal 6, late infantile, variant	CLN6	693873
CGG triplet repeat binding protein 1	CGGBP1	693920
Chaperonin containing TCP1, subunit 2 (beta)	CCT2	717182
Chaperonin containing TCP1, subunit 3 (gamma)	CCT3	718374
Chaperonin containing TCP1, subunit 5 (epsilon)	CCT5	696640
Chaperonin containing TCP1, subunit 8 (theta)	CCT8	706184
Charged multivesicular body protein 1B	CHMP1B	106995257
Charged multivesicular body protein 4B	CHMP4B	709004
Charged multivesicular body protein 6	CHMP6	718353
Checkpoint kinase 2	CHEK2	713668
Checkpoint with forkhead and ring finger domains, E3 ubiquitin protein ligase	CHFR	694297
Chemokine (C-C motif) ligand 18	CCL18	574181
Chemokine (C-C motif) ligand 27	CCL27	574220
Chemokine (C-C motif) ligand 7	CCL7	714751
Chemokine (C-X-C motif) receptor 3	CXCR3	699438
Chemokine (C-X-C motif) receptor 4	CXCR4	707329
Chitinase domain containing 1	CHID1	701435
Chloride intracellular channel 4	CLIC4	712337
Choline kinase beta	CHKB	716377
Choline O-acetyltransferase	CHAT	709977
Choline/ethanolamine phosphotransferase 1	CEPT1	702700
Cholinergic receptor, nicotinic alpha 3	CHRNA3	716571
Chondroitin polymerizing factor	CHPF	703860
Chondroitin sulfate N-acetylgalactosaminyltransferase 1	CSGALNACT1	704901

Chromatin accessibility complex 1	CHRA1	700384
Chromatin target of PRMT1	CHTOP	715501
Chromobox 1	CBX1	696673
Chromobox 7	CBX7	703056
Chromodomain helicase DNA binding protein 3	CHD3	716508
Chromodomain helicase DNA binding protein 4	CHD4	713162
Chromodomain protein, Y-like	CDYL	722957
Chromosome 1 open reading frame, human c1orf123	C1H1orf123	714201
Chromosome 1 open reading frame, human c1orf131	C1H1orf131	719141
Chromosome 1 open reading frame, human c1orf198	C1H1orf198	714084
Chromosome 1 open reading frame, human c1orf50	C1H1orf50	698058
Chromosome 1 open reading frame, human c1orf52	C1H1orf52	711232
Chromosome 1 open reading frame, human c1orf54	C1H1orf54	107000835
Chromosome 10 open reading frame 93 ortholog	C9H10orf93	719561
Chromosome 11 open reading frame, human c12orf4	C11H12orf4	710836
Chromosome 11 open reading frame, human c12orf57	C11H12orf57	714482
Chromosome 12 open reading frame, human c2orf47	C12H2orf47	699322
Chromosome 13 open reading frame, human c2orf49	C13H2orf49	713165
Chromosome 14 open reading frame, human c11orf73	C14H11orf73	704098
Chromosome 14 open reading frame, human c11orf74	C14H11orf74	716798
Chromosome 15 open reading frame, human c9orf135	C15H9orf135	700202
Chromosome 15 open reading frame, human c9orf142	C15H9orf142	707874
Chromosome 15 open reading frame, human c9orf16	C15H9orf16	722628
Chromosome 15 open reading frame, human c9orf72	C15H9orf72	706828
Chromosome 15 open reading frame, human c9orf9	C15H9orf9	714749
Chromosome 16 open reading frame, human c17orf49	C16H17orf49	713820
Chromosome 18 open reading frame, human c18orf21	C18H18orf21	715440
Chromosome 19 open reading frame, human c19orf24	C19H19orf24	706393
Chromosome 19 open reading frame, human c19orf52	C19H19orf52	713825
Chromosome 19 open reading frame, human c19orf53	C19H19orf53	720745
Chromosome 2 open reading frame, human c3orf14	C2H3orf14	699965
Chromosome 20 open reading frame 24 ortholog	C10H20orf24	709696
Chromosome 3 open reading frame, human c21orf59	C3H21orf59	700721
Chromosome 3 open reading frame, human c21orf91	C3H21orf91	710406
Chromosome 3 open reading frame, human c7orf25	C3H7orf25	708455
Chromosome 4 open reading frame, human c6orf136	C4H6orf136	712108
Chromosome 4 open reading frame, human c6orf203	C4H6orf203	698108
Chromosome 4 open reading frame, human c6orf89	C4H6orf89	719165
Chromosome 5 open reading frame, human c4orf27	C5H4orf27	694607
Chromosome 5 open reading frame, human c4orf45	C5H4orf45	100427199
Chromosome 6 open reading frame, human c5orf15	C6H5orf15	709969
Chromosome 6 open reading frame, human c5orf22	C6H5orf22	695901
Chromosome 6 open reading frame, human c5orf28	C6H5orf28	100427219
Chromosome 6 open reading frame, human c5orf30	C6H5orf30	703692
Chromosome 6 open reading frame, human c5orf34	C6H5orf34	700618
Chromosome 7 open reading frame, human c14orf142	C7H14orf142	704509
Chromosome 7 open reading frame, human c14orf166	C7H14orf166	710094
Chromosome 7 open reading frame, human c14orf169	C7H14orf169	696773

Chromosome 7 open reading frame, human c15orf57	C7H15orf57	703343
Chromosome 8 open reading frame, human c8orf59	C8H8orf59	703464
Chromosome 8 open reading frame, human c8orf76	C8H8orf76	704150
Chromosome 9 open reading frame, human c10orf107	C9H10orf107	700172
Chromosome 9 open reading frame, human c10orf2	C9H10orf2	710958
Chromosome 9 open reading frame, human c10orf88	C9H10orf88	707385
Chromosome transmission fidelity factor 8	CHTF8	715804
Chromosome X open reading frame, human cxorf40a	CXHXorf40A	702659
Cilia and flagella associated protein 20	CFAP20	706737
Cilia and flagella associated protein 53	CFAP53	700084
Cilia and flagella associated protein 65	CFAP65	701296
Ciliary neurotrophic factor	CNTF	701907
Ciliogenesis associated TTC17 interacting protein	CATIP	698579
Circadian associated repressor of transcription	CIART	706693
CKLF-like MARVEL transmembrane domain containing 6	CMTM6	704441
Clarín 3	CLRN3	697496
Clathrin, light chain A	CLTA	693659
Claudin 15	CLDN15	719637
Claudin 16	CLDN16	704442
Claudin 17	CLDN17	705582
Claudin 20	CLDN20	701937
Claudin 3	CLDN3	716771
Claudin domain containing 1	CLDND1	698472
Clavesin 2	CLVS2	713626
Cleavage and polyadenylation factor I subunit 1	CLP1	705071
Cleavage and polyadenylation specific factor 1	CPSF1	702082
Cleavage and polyadenylation specific factor 4	CPSF4	708119
Cleavage stimulation factor, 3' pre-RNA, subunit 3	CSTF3	694040
Cleft lip and palate associated transmembrane protein 1	CLPTM1	718306
Clpb homolog, mitochondrial AAA ATPase chaperonin	CLPB	718461
CLPTM1-like	CLPTM1L	709968
Clusterin associated protein 1	CLUAP1	703676
CNKSR family member 3	CNKSR3	702627
Coagulation factor XII (Hageman factor)	F12	699875
Coatmer protein complex subunit beta 1	COPB1	699327
Coatmer protein complex subunit epsilon	COPE	719631
Coatmer protein complex subunit zeta 1	COPZ1	705176
Coenzyme Q10A	COQ10A	712341
Coenzyme Q3 methyltransferase	COQ3	694215
Cofilin 1 (non-muscle)	CFL1	721882
Cofilin 2 (muscle)	CFL2	693875
Coiled-coil domain containing 102B	CCDC102B	710808
Coiled-coil domain containing 117	CCDC117	713804
Coiled-coil domain containing 12	CCDC12	712061
Coiled-coil domain containing 134	CCDC134	708713
Coiled-coil domain containing 142	CCDC142	709014
Coiled-coil domain containing 148	CCDC148	698322
Coiled-coil domain containing 17	CCDC17	706591

Coiled-coil domain containing 174	CCDC174	701654
Coiled-coil domain containing 181	CCDC181	700803
Coiled-coil domain containing 186	CCDC186	722518
Coiled-coil domain containing 191	CCDC191	710219
Coiled-coil domain containing 22	CCDC22	713063
Coiled-coil domain containing 28A	CCDC28A	703104
Coiled-coil domain containing 43	CCDC43	715325
Coiled-coil domain containing 59	CCDC59	698443
Coiled-coil domain containing 62	CCDC62	707179
Coiled-coil domain containing 69	CCDC69	713304
Coiled-coil domain containing 82	CCDC82	700198
Coiled-coil domain containing 86	CCDC86	695978
Coiled-coil domain containing 90B	CCDC90B	702035
Coiled-coil domain containing 92	CCDC92	705922
Coiled-coil domain containing 97	CCDC97	706342
Coiled-coil-helix-coiled-coil-helix domain containing 1	CHCHD1	706322
Coiled-coil-helix-coiled-coil-helix domain containing 2	CHCHD2	702967
Coilin	COIL	708103
Cold inducible RNA binding protein	CIRBP	706175
Cold shock domain containing E1, RNA binding	CSDE1	708897
Colipase	CLPS	719005
Collagen triple helix repeat containing 1	CTHRC1	694882
Collagen, type I, alpha 2	COL1A2	700359
Collagen, type III, alpha 1	COL3A1	574131
Collagen, type VI, alpha 3	COL6A3	694701
Collectin subfamily member 12	COLEC12	700031
Colony stimulating factor 3 receptor	CSF3R	713485
COMM domain containing 2	COMMD2	711498
COMM domain containing 6	COMMD6	695191
COMM domain containing 7	COMMD7	711628
COMM domain containing 8	COMMD8	704346
COMM domain containing 9	COMMD9	716992
Complement component 1, q subcomponent binding protein	C1QBP	711817
Complement component 1, q subcomponent, C chain	C1QC	708589
Complement component 1, q subcomponent, C chain	C1QC	708589
Complement component 1, s subcomponent	C1S	714589
Complement component 3a receptor 1	C3AR1	716086
Complement factor properdin	CFP	707386
Component of oligomeric golgi complex 1	COG1	695754
Component of oligomeric golgi complex 2	COG2	714263
Component of oligomeric golgi complex 3	COG3	702375
Component of oligomeric golgi complex 6	COG6	697092
Component of oligomeric golgi complex 7	COG7	700218
Connector enhancer of kinase suppressor of Ras 1	CNKSR1	714154
Conserved helix-loop-helix ubiquitous kinase	CHUK	709511
Contactin 1	CNTN1	574365
COP9 signalosome subunit 2	COPS2	714814
COP9 signalosome subunit 3	COPS3	698461

COP9 signalosome subunit 5	COPS5	704584
COP9 signalosome subunit 6	COPS6	710667
Copine I	CPNE1	100329142
Copine II	CPNE2	703557
Copine III	CPNE3	694013
Copine VIII	CPNE8	696586
Coproporphyrinogen oxidase	CPOX	698849
Core-binding factor, beta subunit	CBFB	695767
Corepressor interacting with RBPJ, 1	CIR1	698068
Cornichon family AMPA receptor auxiliary protein 1	CNIH1	695002
Cornichon family AMPA receptor auxiliary protein 4	CNIH4	701767
Cornulin	CRNN	712894
Coronin, actin binding protein, 1A	CORO1A	710813
COX10 homolog, cytochrome c oxidase assembly protein, heme A: farnesyltransferase (yeast)	COX10	718301
COX19 cytochrome c oxidase assembly homolog (S. Cerevisiae)	COX19	696368
Craniofacial development protein 1	CFDP1	711343
Creatine kinase, brain	CKB	711167
Crumbs family member 3	CRB3	700086
Cryptochrome circadian clock 1	CRY1	703752
Cryptochrome circadian clock 2	CRY2	715000
CSE1 chromosome segregation 1-like (yeast)	CSE1L	704301
C-src tyrosine kinase	CSK	702868
CTD phosphatase subunit 1	CTDP1	698467
CTD small phosphatase 2	CTDSP2	715956
CTD small phosphatase like 2	CTDSPL2	711917
CTP synthase 1	CTPS1	695498
CTP synthase 2	CTPS2	721014
CTP synthase 2	CTPS2	721014
CTR9 homolog, Paf1/RNA polymerase II complex component	CTR9	705748
CTS telomere maintenance complex component 1	CTC1	717075
C-type lectin domain family 1, member A	CLEC1A	717526
C-type lectin domain family 12 member A	CLEC12A	722319
CUE domain containing 2	CUEDC2	713243
Cullin 4A	CUL4A	714302
Cullin 5	CUL5	707559
Cullin 7	CUL7	699545
Cullin-associated and neddylation-dissociated 1	CAND1	716184
Cutc copper transporter	CUTC	709050
CWC15 spliceosome-associated protein	CWC15	698332
CWC22 homolog, spliceosome-associated protein	CWC22	704087
CWF19-like 2, cell cycle control (S. Pombe)	CWF19L2	706825
C-x(9)-C motif containing 4	CMC4	100423505
Cyclin D binding myb-like transcription factor 1	DMTF1	706292
Cyclin D3	CCND3	695215
Cyclin G1	CCNG1	697738
Cyclin H	CCNH	694224
Cyclin I	CCNI	677687

Cyclin Pas1/PHO80 domain containing 1	CNPPD1	704271
Cyclin T2	CCNT2	708813
Cyclin T2	CCNT2	708813
Cyclin Y	CCNY	698889
Cyclin-dependent kinase 12	CDK12	696733
Cyclin-dependent kinase 2	CDK2	711002
Cyclin-dependent kinase 2 associated protein 2	CDK2AP2	711640
Cyclin-dependent kinase 4	CDK4	715650
Cyclin-dependent kinase 8	CDK8	709761
Cyclin-dependent kinase 9	CDK9	699840
Cyclin-dependent kinase inhibitor 2C (p18, inhibits CDK4)	CDKN2C	711877
Cyclin-dependent kinase-like 1 (CDC2-related kinase)	CDKL1	705975
Cystatin C	CST3	574313
Cysteine rich hydrophobic domain 2	CHIC2	697359
Cysteine-serine-rich nuclear protein 2	CSRNP2	694549
CysteinyI-trna synthetase	CARS	706502
CysteinyI-trna synthetase 2, mitochondrial (putative)	CARS2	694840
Cystinosin, lysosomal cystine transporter	CTNS	706721
Cytidine deaminase	CDA	705913
Cytidine monophosphate (UMP-CMP) kinase 1, cytosolic	CMPK1	710196
Cytidine monophosphate N-acetylneuraminic acid synthetase	CMAS	706604
Cytochrome b reductase 1	CYBRD1	694818
Cytochrome b-245 heavy chain	CYBB	696542
Cytochrome b5 reductase 4	CYB5R4	695553
Cytochrome b5 type B (outer mitochondrial membrane)	CYB5B	705093
Cytochrome c oxidase subunit 5A	COX5A	692061
Cytochrome c oxidase subunit 6C	COX6C	100428417
Cytochrome P450, family 2, subfamily D, polypeptide 6	CYP2D6	678691
Cytochrome P450, family 2, subfamily E, polypeptide 1	CYP2E1	678688
Cytochrome P450c17	CYP17A1	678693
Cytokine induced apoptosis inhibitor 1	CIAPIN1	704770
Cytokine inducible SH2-containing protein	CISH	701456
Cytoskeleton associated protein 5	CKAP5	714095
Cytotoxic and regulatory T-cell molecule	CRTAM	707560
Dachsous cadherin-related 1	DCHS1	711938
DALR anticodon binding domain containing 3	DALRD3	708403
D-amino-acid oxidase	DAO	706373
DAZ associated protein 1	DAZAP1	707132
DAZ associated protein 2	DAZAP2	695282
DAZ interacting zinc finger protein 1-like	DZIP1L	716551
Dcmp deaminase	DCTD	700995
DCN1, defective in cullin neddylation 1, domain containing 1	DCUN1D1	708357
DCN1, defective in cullin neddylation 1, domain containing 4	DCUN1D4	702908
DCN1, defective in cullin neddylation 1, domain containing 5	DCUN1D5	704099
DC-STAMP domain containing 2	DCST2	717224
Dctp pyrophosphatase 1	DCTPP1	710500
DDB1 and CUL4 associated factor 10	DCAF10	716256
DDB1 and CUL4 associated factor 11	DCAF11	714867

DDB1 and CUL4 associated factor 12	DCAF12	702148
DDB1 and CUL4 associated factor 4	DCAF4	695337
DDB1 and CUL4 associated factor 6	DCAF6	698686
DDR GK domain containing 1	DDR GK1	717226
DEAD (Asp-Glu-Ala-Asp) box helicase 3, Y-linked	DDX3Y	100270694
DEAD (Asp-Glu-Ala-Asp) box helicase 42	DDX42	717964
DEAD (Asp-Glu-Ala-Asp) box helicase 56	DDX56	698980
DEAD (Asp-Glu-Ala-Asp) box polypeptide 19B	DDX19B	709576
DEAD (Asp-Glu-Ala-Asp) box polypeptide 27	DDX27	703852
DEAD (Asp-Glu-Ala-Asp) box polypeptide 39A	DDX39A	718822
DEAD (Asp-Glu-Ala-Asp) box polypeptide 41	DDX41	700742
DEAD (Asp-Glu-Ala-Asp) box polypeptide 47	DDX47	697304
DEAD (Asp-Glu-Ala-Asp) box polypeptide 50	DDX50	712511
DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 26B	DDX26B	709688
DEAH (Asp-Glu-Ala-Asp/His) box polypeptide 57	DHX57	713523
DEAH (Asp-Glu-Ala-His) box helicase 30	DHX30	711178
DEAH (Asp-Glu-Ala-His) box helicase 9	DHX9	715453
DEAH (Asp-Glu-Ala-His) box polypeptide 29	DHX29	706306
DEAH (Asp-Glu-Ala-His) box polypeptide 32	DHX32	695919
DEAH (Asp-Glu-Ala-His) box polypeptide 36	DHX36	708112
DEAH (Asp-Glu-Ala-His) box polypeptide 38	DHX38	709173
DEAH (Asp-Glu-Ala-His) box polypeptide 40	DHX40	715202
Death associated protein 3	DAP3	719314
Death effector domain containing	DEDD	719875
Death inducer-obliterators 1	DIDO1	698313
Death inducer-obliterators 1	DIDO1	698313
Death inducer-obliterators 1	DIDO1	698313
Death-associated protein	DAP	697362
Death-associated protein kinase 3	DAPK3	714221
Decapping mrna 1B	DCP1B	708089
Decorin	DCN	709933
Dedicator of cytokinesis 2	DOCK2	704061
Dedicator of cytokinesis 5	DOCK5	711359
De-etiolated homolog 1 (Arabidopsis)	DET1	697994
Defender against cell death 1	DAD1	711840
Dehydrodolichyl diphosphate synthase subunit	DHDDS	714635
Dehydrogenase/reductase (SDR family) member 1	DHRS1	715933
Dehydrogenase/reductase (SDR family) member 11	DHRS11	713823
Dehydrogenase/reductase (SDR family) member 3	DHRS3	715548
DEK proto-oncogene	DEK	712460
Deltex 3, E3 ubiquitin ligase	DTX3	715175
DENN/MADD domain containing 2D	DENND2D	702568
DENN/MADD domain containing 4A	DENND4A	709675
DENN/MADD domain containing 5A	DENND5A	707945
DENN/MADD domain containing 6A	DENND6A	707616
Denticless E3 ubiquitin protein ligase homolog (Drosophila)	DTL	711236
Deoxyguanosine kinase	DGUOK	707554
Deoxyhypusine hydroxylase/monooxygenase	DOHH	713046

Deoxyhypusine synthase	DHPS	716213
Derlin 1	DERL1	703803
Derlin 2	DERL2	712051
Desmoplakin	DSP	694860
Destrin (actin depolymerizing factor)	DSTN	695969
Desumoylating isopeptidase 2	DESI2	713515
Developmentally regulated GTP binding protein 1	DRG1	716791
Dexi homolog (mouse)	DEXI	100430901
Diacylglycerol kinase alpha	DGKA	710559
Diacylglycerol kinase, delta 130kda	DGKD	714210
Digeorge syndrome critical region gene 6	DGCR6	693512
Dihydrolipoamide S-succinyltransferase (E2 component of 2-oxo-glutarate complex)	DLST	701006
Dihydropyrimidine dehydrogenase	DPYD	715672
Dihydrouridine synthase 1-like	DUS1L	715662
Dihydrouridine synthase 2	DUS2	702051
Dipeptidyl-peptidase 3	DPP3	721809
Diphthamide biosynthesis 3	DPH3	695309
DIS3 like exosome 3'-5' exoribonuclease	DIS3L	710238
Discoidin domain receptor tyrosine kinase 1	DDR1	714233
Discs, large (Drosophila) homolog-associated protein 4	DLGAP4	702928
Discs, large homolog 1 (Drosophila)	DLG1	709572
Discs, large homolog 4 (Drosophila)	DLG4	714273
Discs, large homolog 5 (Drosophila)	DLG5	703123
Dishevelled associated activator of morphogenesis 1	DAAM1	701706
Dishevelled segment polarity protein 1	DVL1	705864
Dishevelled segment polarity protein 2	DVL2	714381
Distal-less homeobox 5	DLX5	697853
DMRT like family B with proline rich C-terminal 1	DMRTB1	714424
DNA (cytosine-5-)-methyltransferase 1	DNMT1	574321
DNA damage inducible transcript 3	DDIT3	714901
DNA damage inducible transcript 4	DDIT4	715307
DNA methyltransferase 1 associated protein 1	DMAP1	702919
Dnaj heat shock protein family (Hsp40) member A1	DNAJA1	703765
Dnaj heat shock protein family (Hsp40) member B13	DNAJB13	720475
Dnaj heat shock protein family (Hsp40) member B2	DNAJB2	702936
Dnaj heat shock protein family (Hsp40) member B4	DNAJB4	707206
Dnaj heat shock protein family (Hsp40) member B6	DNAJB6	693305
Dnaj heat shock protein family (Hsp40) member C13	DNAJC13	717741
Dnaj heat shock protein family (Hsp40) member C27	DNAJC27	694037
Dnaj heat shock protein family (Hsp40) member C3	DNAJC3	695757
Dnaj heat shock protein family (Hsp40) member C6	DNAJC6	698682
Dnaj heat shock protein family (Hsp40) member C8	DNAJC8	720231
Dnaj heat shock protein family (Hsp40) member C9	DNAJC9	707599
Docking protein 4	DOK4	704443
Docking protein 5	DOK5	698689
Dolichyl-phosphate (UDP-N-acetylglucosamine)	DPAGT1	703538
N-acetylglucosamine phosphotransferase 1 (glcnac-1-P transferase)		

Dopey family member 1	DOPEY1	694339
Down-regulator of transcription 1	DR1	707632
Dpy-30, histone methyltransferase complex regulatory subunit	DPY30	706155
DR1-associated protein 1 (negative cofactor 2 alpha)	DRAP1	715271
Drebrin 1	DBN1	700375
Drosha, ribonuclease type III	DROSHA	692081
DTW domain containing 1	DTWD1	715084
DTW domain containing 2	DTWD2	697989
Dual oxidase maturation factor 2	DUOXA2	712992
Dual serine/threonine and tyrosine protein kinase	DSTYK	664732
Dual specificity phosphatase 11	DUSP11	707123
Dual specificity phosphatase 12	DUSP12	720034
Dual specificity phosphatase 22	DUSP22	705824
Dual specificity phosphatase 23	DUSP23	719474
Dual specificity tyrosine-(Y)-phosphorylation regulated kinase 1B	DYRK1B	698848
Dual specificity tyrosine-(Y)-phosphorylation regulated kinase 2	DYRK2	717941
Dynactin subunit 1	DCTN1	708290
Dynactin subunit 2	DCTN2	714948
Dynactin subunit 4	DCTN4	712783
Dynamin 1-like	DNM1L	695388
Dynamin 1-like	DNM1L	695388
Dynamin 2	DNM2	713558
Dynein, axonemal, assembly factor 2	DNAAF2	719026
Dynein, axonemal, light chain 4	DNAL4	702019
Dynein, light chain, LC8-type 1	DYNLL1	702360
Dynein, light chain, LC8-type 2	DYNLL2	100423738
Dynein, light chain, roadblock-type 2	DYNLRB2	713503
Dyskeratosis congenita 1, dyskerin	DKC1	702563
Dystroglycan 1	DAG1	706179
Dystrophia myotonica protein kinase	DMPK	715328
E1A binding protein p300	EP300	706258
E2F transcription factor 3	E2F3	713904
E2F transcription factor 4, p107/p130-binding	E2F4	696864
E2F transcription factor 5, p130-binding	E2F5	703352
E2F-associated phosphoprotein	EAPP	714727
E4F transcription factor 1	E4F1	695882
E74-like factor 2 (ets domain transcription factor)	ELF2	696760
Ecdysoless homolog (Drosophila)	ECD	707699
Ectodysplasin A receptor	EDAR	695059
Ectonucleoside triphosphate diphosphohydrolase 4	ENTPD4	717197
Ectonucleotide pyrophosphatase/phosphodiesterase 4 (putative)	ENPP4	703680
EF-hand and coiled-coil domain containing 1	EFCC1	706444
EF-hand domain (C-terminal) containing 1	EFHC1	708517
EGF-like-domain, multiple 7	EGFL7	709840
EGF-like-domain, multiple 8	EGFL8	717145
Egl-9 family hypoxia-inducible factor 1	EGLN1	713410
Egl-9 family hypoxia-inducible factor 1	EGLN1	713410
ELAV like neuron-specific RNA binding protein 2	ELAVL2	708195

Electron-transferring-flavoprotein dehydrogenase	ETFDH	701207
ELK1, member of ETS oncogene family	ELK1	712610
Elongation factor Tu GTP binding domain containing 2	EFTUD2	715512
ELOVL fatty acid elongase 4	ELOVL4	692070
Embryonic ectoderm development	EED	703866
Emopamil binding protein (sterol isomerase)	EBP	714315
Empty spiracles homeobox 2	EMX2	701370
Endonuclease domain containing 1	ENDOD1	699210
Endoplasmic reticulum lectin 1	ERLEC1	716460
Endosulfine alpha	ENSA	715857
Endothelin receptor type A	EDNRA	704135
Engulfment and cell motility 2	ELMO2	707316
Enhancer of mrna decapping 3	EDC3	709182
Enhancer of polycomb homolog 2 (Drosophila)	EPC2	721916
Enhancer of rudimentary homolog (Drosophila)	ERH	712507
Enolase 2 (gamma, neuronal)	ENO2	714208
Enolase superfamily member 1	ENOSF1	697333
Enoyl-coa delta isomerase 2	ECI2	709579
EP300 interacting inhibitor of differentiation 2	EID2	717578
Ephrin-B1	EFNB1	694149
Epidermal growth factor receptor pathway substrate 15-like 1	EPS15L1	719502
Epithelial cell transforming 2	ECT2	694056
EPS8 like 1	EPS8L1	698281
ER lipid raft associated 1	ERLIN1	709596
ER membrane protein complex subunit 1	EMC1	702573
ER membrane protein complex subunit 2	EMC2	697878
ER membrane protein complex subunit 4	EMC4	695907
ERGIC and golgi 3	ERGIC3	704736
Erythrocyte membrane protein band 4.1-like 1	EPB41L1	710697
Esterase D	ESD	708871
Estrogen receptor binding site associated, antigen, 9	EBAG9	699305
Ethylmalonic encephalopathy 1	ETHE1	718089
Ethylmalonyl-coa decarboxylase 1	ECHDC1	712072
Etoposide induced 2.4	EI24	713226
Eukaryotic translation elongation factor 1 beta 2	EEF1B2	707019
Eukaryotic translation elongation factor 1 epsilon 1	EEF1E1	695426
Eukaryotic translation elongation factor 1 gamma	EEF1G	722274
Eukaryotic translation initiation factor 1	EIF1	704606
Eukaryotic translation initiation factor 2 subunit beta	EIF2S2	708593
Eukaryotic translation initiation factor 2A, 65kda	EIF2A	710497
Eukaryotic translation initiation factor 2-alpha kinase 3	EIF2AK3	699575
Eukaryotic translation initiation factor 2B subunit beta	EIF2B2	701360
Eukaryotic translation initiation factor 2B subunit epsilon	EIF2B5	703673
Eukaryotic translation initiation factor 2B subunit gamma	EIF2B3	705862
Eukaryotic translation initiation factor 3 subunit D	EIF3D	695051
Eukaryotic translation initiation factor 3 subunit F	EIF3F	706269
Eukaryotic translation initiation factor 3 subunit G	EIF3G	714726
Eukaryotic translation initiation factor 3 subunit H	EIF3H	700517

Eukaryotic translation initiation factor 3 subunit K	EIF3K	693536
Eukaryotic translation initiation factor 3 subunit L	EIF3L	699189
Eukaryotic translation initiation factor 3 subunit M	EIF3M	695698
Eukaryotic translation initiation factor 4 gamma, 2	EIF4G2	705510
Eukaryotic translation initiation factor 4E binding protein 2	EIF4EBP2	100424761
Eukaryotic translation initiation factor 4E binding protein 3	EIF4EBP3	100532740
Eukaryotic translation initiation factor 4E family member 2	EIF4E2	713487
Eukaryotic translation initiation factor 4E nuclear import factor 1	EIF4ENIF1	716871
Eukaryotic translation initiation factor 4H	EIF4H	693429
Eukaryotic translation initiation factor 5B	EIF5B	714129
Eukaryotic translation termination factor 1	ETF1	714449
EWS RNA binding protein 1	EWSR1	714432
Excision repair cross-complementation group 3	ERCC3	698829
Exocyst complex component 1	EXOC1	695664
Exocyst complex component 2	EXOC2	706296
Exocyst complex component 4	EXOC4	712458
Exosome component 10	EXOSC10	714153
Exosome component 8	EXOSC8	695071
Exostosin glycosyltransferase 1	EXT1	701488
Exostosin glycosyltransferase 2	EXT2	715975
Exostosin-like glycosyltransferase 2	EXTL2	712189
Exportin 1	XPO1	718063
Extended synaptotagmin-like protein 1	ESYT1	711720
Extended synaptotagmin-like protein 2	ESYT2	693942
F11 receptor	F11R	719824
F11 receptor	F11R	719824
F11 receptor	F11R	719824
FAD-dependent oxidoreductase domain containing 1	FOXRED1	714271
Failed axon connections homolog	FAXC	693945
Family with sequence similarity 103 member A1	FAM103A1	714660
Family with sequence similarity 104 member A	FAM104A	695865
Family with sequence similarity 110 member A	FAM110A	717055
Family with sequence similarity 118 member B	FAM118B	714323
Family with sequence similarity 127, member A	FAM127A	708766
Family with sequence similarity 134 member A	FAM134A	704378
Family with sequence similarity 156 member B	FAM156B	698392
Family with sequence similarity 175 member B	FAM175B	694886
Family with sequence similarity 178 member B	FAM178B	710890
Family with sequence similarity 179 member B	FAM179B	702188
Family with sequence similarity 181 member B	FAM181B	701184
Family with sequence similarity 186 member B	FAM186B	711001
Family with sequence similarity 188 member A	FAM188A	699009
Family with sequence similarity 199, X-linked	FAM199X	699523
Family with sequence similarity 206 member A	FAM206A	710486
Family with sequence similarity 219 member A	FAM219A	700651
Family with sequence similarity 220 member A	FAM220A	703785
Family with sequence similarity 222 member B	FAM222B	710302
Family with sequence similarity 234 member A	FAM234A	694729

Family with sequence similarity 3 member A	FAM3A	701159
Family with sequence similarity 3 member B	FAM3B	722516
Family with sequence similarity 35 member A	FAM35A	694102
Family with sequence similarity 45 member A	FAM45A	713269
Family with sequence similarity 49 member B	FAM49B	695449
Family with sequence similarity 53 member C	FAM53C	714176
Family with sequence similarity 58 member A	FAM58A	695925
Family with sequence similarity 71 member C	FAM71C	694296
Family with sequence similarity 73 member B	FAM73B	722577
Family with sequence similarity 8 member A1	FAM8A1	703789
Family with sequence similarity 83 member A	FAM83A	704023
Family with sequence similarity 89 member B	FAM89B	721925
Family with sequence similarity 92 member A1	FAM92A1	698794
Fanconi anemia complementation group B	FANCB	712083
Fanconi anemia complementation group E	FANCE	718889
Fanconi anemia complementation group G	FANCG	698837
Fanconi anemia complementation group I	FANCI	699878
Fanconi anemia core complex associated protein 100	FAAP100	713876
Far upstream element (FUSE) binding protein 3	FUBP3	722470
Farnesyltransferase, CAAX box, beta	FNTB	708129
Fas (TNFRSF6) associated factor 1	FAF1	714405
Fatty acyl coa reductase 1	FAR1	699947
FBJ murine osteosarcoma viral oncogene homolog	FOS	702077
F-box and leucine-rich repeat protein 6	FBXL6	701594
F-box and WD repeat domain containing 7	FBXW7	695101
F-box and WD repeat domain containing 7	FBXW7	695101
F-box and WD repeat domain containing 9	FBXW9	716383
F-box protein 11	FBXO11	715651
F-box protein 15	FBXO15	694446
F-box protein 21	FBXO21	693647
F-box protein 3	FBXO3	693281
F-box protein 30	FBXO30	699241
F-box protein 31	FBXO31	695313
F-box protein 33	FBXO33	699629
F-box protein 34	FBXO34	697537
F-box protein 4	FBXO4	697007
F-box protein 6	FBXO6	722740
F-box protein 7	FBXO7	717317
F-box protein 8	FBXO8	699302
F-box protein 9	FBXO9	712024
Fc fragment of igg, receptor, transporter, alpha	FCGRT	718859
Fc receptor-like B	FCRLB	720028
FCH and double SH3 domains 2	FCHSD2	717996
Fem-1 homolog b (C. Elegans)	FEM1B	693955
Fermitin family member 3	FERMT3	722120
Fermitin family member 3	FERMT3	722120
Ferritin mitochondrial	FTMT	699743
FGFR1 oncogene partner 2	FGFR1OP2	708905

Fibrillarin	FBL	700286
Fibroblast growth factor 20	FGF20	701847
Fibroblast growth factor receptor 1	FGFR1	700126
Fibulin 2	FBLN2	100429735
Ficolin 2	FCN2	712486
FIG4 phosphoinositide 5-phosphatase	FIG4	699914
Filamin A, alpha	FLNA	699524
Filamin B, beta	FLNB	702732
Filamin binding LIM protein 1	FBLIM1	695727
Finkel-Biskis-Reilly murine sarcoma virus (FBR-musv) ubiquitously expressed	FAU	716761
FK506 binding protein 10	FKBP10	707881
FK506 binding protein 11	FKBP11	708598
FK506 binding protein 8	FKBP8	720232
FK506 binding protein 9	FKBP9	708827
FK506 binding protein 9	FKBP9	708827
Flightless I actin binding protein	FLII	700471
Flotillin 2	FLOT2	716527
Folate receptor 2 (fetal)	FOLR2	718405
Follicular dendritic cell secreted protein	FDCSP	707784
Folliculogenesis specific bhlh transcription factor	FIGLA	710606
Follistatin	FST	707420
Follistatin like 1	FSTL1	713367
Forkhead box O3	FOXO3	700731
Forkhead box R2	FOXR2	704032
Four and a half LIM domains 2	FHL2	713222
Four and a half LIM domains 3	FHL3	715313
FRAS1 related extracellular matrix 1	FREM1	713874
Frizzled class receptor 6	FZD6	694625
Fructosamine 3 kinase related protein	FN3KRP	716431
Ftsj RNA methyltransferase homolog 1 (E. Coli)	FTSJ1	710243
Fucokinase	FUK	709226
Fucosyltransferase 8 (alpha (1,6) fucosyltransferase)	FUT8	708839
Fumarylacetoacetate hydrolase (fumarylacetoacetase)	FAH	712716
FUN14 domain containing 1	FUNDC1	709370
Fuzzy planar cell polarity protein	FUZ	719442
FXYP domain containing ion transport regulator 7	FXYP7	718457
FYN proto-oncogene, Src family tyrosine kinase	FYN	574214
G elongation factor, mitochondrial 1	GFM1	706456
G elongation factor, mitochondrial 2	GFM2	704247
G kinase anchoring protein 1	GKAP1	708816
G protein pathway suppressor 1	GPS1	719343
G protein-coupled bile acid receptor 1	GPBAR1	697937
G protein-coupled receptor 1	GPR1	707120
G protein-coupled receptor 12	GPR12	710030
G protein-coupled receptor 137	GPR137	717722
G protein-coupled receptor 141	GPR141	705700
G protein-coupled receptor 182	GPR182	713866

G protein-coupled receptor 19	GPR19	697072
G protein-coupled receptor 31	GPR31	717158
G protein-coupled receptor 50	GPR50	703817
G protein-coupled receptor 89A	GPR89A	696579
G protein-coupled receptor kinase 7	GRK7	714916
G protein-coupled receptor kinase interacting arfgap 2	GIT2	708092
G protein-coupled receptor, class C, group 5, member B	GPRC5B	695204
G protein-coupled receptor, class C, group 5, member D	GPRC5D	698898
G2/M-phase specific E3 ubiquitin protein ligase	G2E3	717021
GA binding protein transcription factor, beta subunit 1	GABPB1	715334
GABA(A) receptor-associated protein like 2	GABARAPL2	714413
Galactosidase alpha	GLA	703129
Galactosylceramidase	GALC	693322
Gametogenetin binding protein 2	GGNBP2	713750
Gamma-aminobutyric acid (GABA) B receptor, 1	GABBR1	708987
Gamma-glutamylcyclotransferase	GGCT	695547
Gamma-glutamyltransferase 5	GGT5	720345
Ganglioside induced differentiation associated protein 2	GDAP2	705994
Gastrulation brain homeobox 2	GBX2	693901
GC-rich promoter binding protein 1	GPBP1	708322
GC-rich promoter binding protein 1-like 1	GPBP1L1	706690
GDP dissociation inhibitor 2	GDI2	712510
GDP-mannose 4,6-dehydratase	GMD5	707051
Gem nuclear organelle associated protein 4	GEMIN4	699841
Gem nuclear organelle associated protein 5	GEMIN5	714864
General transcription factor IIA 2	GTF2A2	702984
General transcription factor IIB	GTF2B	694770
General transcription factor IIE subunit 2	GTF2E2	694622
General transcription factor IIH subunit 4	GTF2H4	714285
General transcription factor IIH subunit 5	GTF2H5	700107
General transcription factor iii	GTF2I	574269
General transcription factor IIIA	GTF3A	710492
General transcription factor IIIC subunit 3	GTF3C3	696338
General transcription factor IIIC subunit 4	GTF3C4	714849
General transcription factor IIIC subunit 6	GTF3C6	696512
Germinal center-associated, signaling and motility	GCSAM	707891
GID complex subunit 4 homolog	GID4	699842
GID complex subunit 8	GID8	698189
GIN5 complex subunit 2 (Psf2 homolog)	GIN5	693426
GLE1, RNA export mediator	GLE1	717474
Glucagon-like peptide 2 receptor	GLP2R	717783
Glucose 6 phosphatase, catalytic, 3	G6PC3	714276
Glucose-6-phosphate dehydrogenase	G6PD	701137
Glucose-fructose oxidoreductase domain containing 1	GFOD1	700607
Glucose-fructose oxidoreductase domain containing 2	GFOD2	699723
Glucosidase, beta (bile acid) 2	GBA2	696062
Glutamate receptor, ionotropic, kainate 1	GRIK1	705699
Glutamate receptor, ionotropic, N-methyl D-aspartate-associated	GRINA	708234

protein 1 (glutamate binding)		
Glutamate-ammonia ligase	GLUL	715952
Glutamic-oxaloacetic transaminase 2	GOT2	707896
Glutaminase	GLS	693520
Glutaminyl-trna synthetase	QARS	708111
Glutaredoxin	GLRX	698997
Glutaredoxin 5	GLRX5	702989
Glutaryl-coa dehydrogenase	GCDH	716935
Glutathione S-transferase alpha 4	GSTA4	709666
Glutathione S-transferase kappa 1	GSTK1	704240
Glutathione S-transferase omega 1	GSTO1	716078
Glutathione S-transferase pi 1	GSTP1	721704
Glyceraldehyde-3-phosphate dehydrogenase	GAPDH	574353
Glycerol-3-phosphate acyltransferase 4	GPAT4	710363
Glycogen synthase 2	GYS2	706152
Glycogen synthase kinase 3 alpha	GSK3A	707037
Glycophorin C (Gerbich blood group)	GYPC	712092
Glycosylated lysosomal membrane protein	GLMP	719468
Glycosylphosphatidylinositol anchor attachment 1	GPAA1	699887
Glycosyltransferase 8 domain containing 1	GLT8D1	695999
Glycosyltransferase like domain containing 1	GTDC1	100424583
Glyoxalase I	GLO1	719518
Golgi apparatus membrane protein TVP23 homolog B	TVP23B	677707
Golgi reassembly stacking protein 2	GORASP2	694170
Golgi SNAP receptor complex member 2	GOSR2	716841
Golgi-associated, gamma adaptin ear containing, ARF binding protein 1	GGA1	697929
Golgi-associated, gamma adaptin ear containing, ARF binding protein 3	GGA3	705751
Golgin A4	GOLGA4	697455
Golgin A7	GOLGA7	709911
Golgin B1	GOLGB1	713993
Golgin, RAB6-interacting	GORAB	702571
Grancalcin	GCA	702138
GRB2-related adaptor protein	GRAP	702473
GRIP and coiled-coil domain containing 1	GCC1	697975
Group-specific component (vitamin D binding protein)	GC	705708
Growth arrest and DNA damage inducible alpha	GADD45A	701054
Growth arrest and DNA damage inducible gamma	GADD45G	697835
Growth arrest specific 8	GAS8	701458
Growth associated protein 43	GAP43	711260
Growth differentiation factor 3	GDF3	715605
Growth factor receptor bound protein 10	GRB10	694786
GRP1 (general receptor for phosphoinositides 1)-associated scaffold protein	GRASP	696547
Grpe-like 1, mitochondrial (E. Coli)	GRPEL1	709772
GS homeobox 2	GSX2	697240
Gse1 coiled-coil protein	GSE1	693298

GTF2I repeat domain containing 1	GTF2IRD1	693935
Gtpase activating protein (SH3 domain) binding protein 1	G3BP1	713884
Gtpase, IMAP family member 1	GIMAP1	100424486
Guanidinoacetate N-methyltransferase	GAMT	721263
Guanine nucleotide binding protein (G protein), alpha 11 (Gq class)	GNA11	721649
Guanine nucleotide binding protein (G protein), beta polypeptide 1	GNB1	703399
Guanine nucleotide binding protein (G protein), beta polypeptide 2-like 1	GNB2L1	708526
Guanine nucleotide binding protein (G protein), gamma 10	GNG10	708193
Guanine nucleotide binding protein (G protein), gamma 11	GNG11	700606
Guanine nucleotide binding protein-like 3 (nucleolar)	GNL3	695877
Guanosine monophosphate reductase 2	GMPR2	715719
Guanylate cyclase activator 1B	GUCA1B	695658
Guanylate kinase 1	GUK1	695272
H2.0-like homeobox	HLX	705298
H2A histone family, member X	H2AFX	703073
H2A histone family, member Y	H2AFY	711836
H2A histone family, member Z	H2AFZ	709326
Haloacid dehalogenase like hydrolase domain containing 2	HDHD2	697216
HAUS augmin like complex subunit 8	HAUS8	718874
HCLS1 binding protein 3	HS1BP3	702364
Hdc homolog, cell cycle regulator	HECA	702628
HEAT repeat containing 6	HEATR6	720089
Heat shock factor binding protein 1	HSBP1	714498
Heat shock protein 90kda alpha (cytosolic), class A member 1	HSP90AA1	708431
Heat shock protein 90kda alpha family class B member 1	HSP90AB1	702293
Heat shock protein family A (Hsp70) member 8	HSPA8	707989
Heat shock protein family B (small) member 11	HSPB11	714791
Heat shock protein family D (Hsp60) member 1	HSPD1	698024
Heat shock protein family H (Hsp110) member 1	HSPH1	721956
Heat shock transcription factor 2	HSF2	713938
HECT and RLD domain containing E3 ubiquitin protein ligase 3	HERC3	703108
HECT domain containing E3 ubiquitin protein ligase 1	HECTD1	717177
HECT domain containing E3 ubiquitin protein ligase 2	HECTD2	697258
HECT domain containing E3 ubiquitin protein ligase 3	HECTD3	705051
Helicase, lymphoid-specific	HELLS	701598
Hematological and neurological expressed 1	HN1	664729
Hematological and neurological expressed 1-like	HN1L	702283
Hematopoietic cell-specific Lyn substrate 1	HCLS1	714044
Hematopoietic prostaglandin D synthase	HPGDS	705227
Heme binding protein 2	HEBP2	709176
Heme oxygenase 2	HMOX2	705461
Hemogen	HEMGN	715562
Hemoglobin subunit alpha 1	HBA1	701930
Hemoglobin subunit epsilon 1	HBE1	715414
Hemoglobin, beta	HBB	715559

HEN1 methyltransferase homolog 1 (Arabidopsis)	HENMT1	698896
Hepatocyte growth factor-regulated tyrosine kinase substrate	HGS	714385
Hepcidin antimicrobial peptide	HAMP	708397
Hermansky-Pudlak syndrome 6	HPS6	712574
Hes-related family bhlh transcription factor with YRPW motif 2	HEY2	712988
Heterogeneous nuclear ribonucleoprotein A/B	HNRNPAB	702509
Heterogeneous nuclear ribonucleoprotein A2/B1	HNRNPA2B1	701821
Heterogeneous nuclear ribonucleoprotein C (C1/C2)	HNRNPC	706423
Heterogeneous nuclear ribonucleoprotein F	HNRNPF	717668
Heterogeneous nuclear ribonucleoprotein H2 (H')	HNRNPH2	703254
Heterogeneous nuclear ribonucleoprotein L	HNRNPL	694448
Heterogeneous nuclear ribonucleoprotein L-like	HNRNPLL	710841
Heterogeneous nuclear ribonucleoprotein R	HNRNPR	718721
Hexamethylene bis-acetamide inducible 1	HEXIM1	716006
Hexokinase 1	HK1	711922
Hexosaminidase (glycosyl hydrolase family 20, catalytic domain) containing	HEXDC	716128
HIG1 hypoxia inducible domain family member 2A	HIGD2A	696888
High mobility group 20A	HMG20A	714893
High mobility group box 1	HMGB1	712849
High mobility group nucleosomal binding domain 4	HMGN4	698039
HIRA interacting protein 3	HIRIP3	708004
Histidine triad nucleotide binding protein 2	HINT2	695521
Histidyl-trna synthetase 2	HARS2	697009
Histocompatibility (minor) 13	HM13	713216
Histone acetyltransferase 1	HAT1	695933
Histone cluster 2, h3d	HIST2H3D	696204
Histone deacetylase 3	HDAC3	704467
Histone deacetylase 5	HDAC5	711456
Histone deacetylase 8	HDAC8	699642
Histone H4 transcription factor	HINFP	703763
HIV-1 Tat specific factor 1	HTATSF1	693589
HNF1 homeobox B	HNF1B	714540
Homeobox D12	HOXD12	100428778
Homeodomain interacting protein kinase 1	HIPK1	707856
Homocysteine-inducible, endoplasmic reticulum stress-inducible, ubiquitin-like domain member 1	HERPUD1	703210
Host cell factor C2	HCFC2	700316
HRAS like suppressor family member 5	HRASLS5	718317
Hscb mitochondrial iron-sulfur cluster co-chaperone	HSCB	713734
Htra serine peptidase 1	HTRA1	705855
Human immunodeficiency virus type I enhancer binding protein 2	HIVEP2	701340
Hyaluronan and proteoglycan link protein 3	HAPLN3	698880
Hyaluronan binding protein 4	HABP4	710213
Hyaluronoglucosaminidase 2	HYAL2	702484
Hydroxyacyl-coa dehydrogenase	HADH	696181
Hydroxyacylglutathione hydrolase-like	HAGHL	697846
Hydroxymethylbilane synthase	HMBS	702943

Hydroxysteroid (17-beta) dehydrogenase 10	HSD17B10	700018
Hydroxysteroid dehydrogenase like 2	HSDL2	707233
Hyperpolarization activated cyclic nucleotide gated potassium channel 3	HCN3	717719
Hypoxia inducible lipid droplet-associated	HILPDA	701261
Iduronidase, alpha-L-	IDUA	106998222
Iga-inducing protein	IGIP	100423854
IKAROS family zinc finger 3	IKZF3	698083
Immediate early response 3	IER3	701939
Immediate early response 3	IER3	701939
IMP (inosine 5'-monophosphate) dehydrogenase 1	IMPDH1	701039
IMP (inosine 5'-monophosphate) dehydrogenase 2	IMPDH2	708307
IMP3, U3 small nucleolar ribonucleoprotein	IMP3	706202
Importin 5	IPO5	697448
Importin 9	IPO9	707210
Increased sodium tolerance 1 homolog (yeast)	IST1	707245
Inhibin alpha	INHA	574379
Inhibitor of DNA binding 1, dominant negative helix-loop-helix protein	ID1	713160
Inhibitor of growth family member 2	ING2	701839
Inhibitor of growth family member 4	ING4	722073
Inhibitor of kappa light polypeptide gene enhancer in B-cells, kinase beta	IKBKB	704683
INO80 complex subunit C	INO80C	708819
Inositol monophosphatase domain containing 1	IMPAD1	696893
Inositol polyphosphate-1-phosphatase	INPP1	703301
Inositol polyphosphate-5-phosphatase K	INPP5K	721222
Inositol-3-phosphate synthase 1	ISYNA1	719487
Inositol-tetrakisphosphate 1-kinase	ITPK1	698756
Insulin like 3	INSL3	100533194
Insulin like 6	INSL6	693735
Insulin like growth factor binding protein 3	IGFBP3	696868
Insulin like growth factor binding protein 4	IGFBP4	700963
Insulin-degrading enzyme	IDE	698640
Integrator complex subunit 12	INTS12	694344
Integrator complex subunit 2	INTS2	712351
Integrator complex subunit 5	INTS5	719124
Integrator complex subunit 7	INTS7	711152
Integrator complex subunit 8	INTS8	700255
Integrin alpha FG-GAP repeat containing 1	ITFG1	716435
Integrin linked kinase	ILK	709944
Integrin subunit alpha 10	ITGA10	100428484
Integrin subunit alpha 2b	ITGA2B	714955
Integrin subunit alpha V	ITGAV	707756
Integrin subunit beta like 1	ITGBL1	700965
Integrin-binding sialoprotein	IBSP	701835
Intercellular adhesion molecule 4 (Landsteiner-Wiener blood group)	ICAM4	712354
Interferon gamma receptor 1	IFNGR1	100423877

Interferon regulatory factor 1	IRF1	707788
Interferon regulatory factor 2	IRF2	694347
Interferon regulatory factor 2 binding protein 1	IRF2BP1	715611
Interferon, alpha 2	IFNA2	709948
Interferon, gamma-inducible protein 16	IFI16	719253
Interleukin 21 receptor	IL21R	705759
Interleukin 22	IL22	718047
Interleukin 27 receptor subunit alpha	IL27RA	717549
Interleukin 6 signal transducer	IL6ST	574127
Interleukin 6 signal transducer	IL6ST	574127
Interleukin enhancer binding factor 3	ILF3	713427
Intraflagellar transport 172	IFT172	700948
Intraflagellar transport 20	IFT20	715773
Intraflagellar transport 22	IFT22	714551
Intraflagellar transport 27	IFT27	697032
Intraflagellar transport 46	IFT46	700582
Intraflagellar transport 52	IFT52	694933
Intraflagellar transport 57	IFT57	705088
Intraflagellar transport 74	IFT74	707561
Intraflagellar transport 80	IFT80	705146
Intraflagellar transport 81	IFT81	710434
Inturned planar cell polarity protein	INTU	709967
IQ motif and Sec7 domain 1	IQSEC1	693922
IQ motif containing B1	IQCB1	715032
IQ motif containing K	IQCK	695417
IQ motif containing with AAA domain 1	IQCA1	694173
Iron-sulfur cluster assembly enzyme	ISCU	705669
Islet cell autoantigen 1	ICA1	695889
Isocitrate dehydrogenase 2 (NADP+), mitochondrial	IDH2	701480
Isocitrate dehydrogenase 3 (NAD+) alpha	IDH3A	677715
Isocitrate dehydrogenase 3 (NAD+) gamma	IDH3G	698558
Isoleucyl-trna synthetase	IARS	677705
IWS1 homolog (S. Cerevisiae)	IWS1	699205
Jagged 1	JAG1	718580
JNK1/MAPK8-associated membrane protein	JKAMP	702307
Jumonji domain containing 4	JMJD4	696580
Junction adhesion molecule like	JAML	704919
Junctophilin 1	JPH1	697014
Kallikrein related peptidase 8	KLK8	719488
Karyopherin alpha 1	KPNA1	692082
Karyopherin alpha 3 (importin alpha 4)	KPNA3	706925
Karyopherin alpha 4 (importin alpha 3)	KPNA4	702486
KAT8 regulatory NSL complex subunit 1	KANSL1	717172
KAT8 regulatory NSL complex subunit 3	KANSL3	706159
Katanin p60 (ATPase containing) subunit A 1	KATNA1	698291
KDEL endoplasmic reticulum protein retention receptor 1	KDELR1	717928
KDEL endoplasmic reticulum protein retention receptor 2	KDELR2	704335
KDEL endoplasmic reticulum protein retention receptor 3	KDELR3	700810

KDEL motif containing 1	KDELC1	702156
Kelch domain containing 10	KLHDC10	702290
Kelch domain containing 4	KLHDC4	695768
Kelch domain containing 8B	KLHDC8B	707348
Kelch like family member 11	KLHL11	708393
Kelch like family member 2	KLHL2	704790
Kelch like family member 28	KLHL28	702075
Kelch like family member 36	KLHL36	715423
Kelch like family member 40	KLHL40	717366
Kelch like family member 5	KLHL5	698740
Kelch repeat and BTB (POZ) domain containing 2	KBTBD2	709126
Kell blood group, metallo-endopeptidase	KEL	703492
Keratin 14, type I	KRT14	100426180
Keratin 222, type II	KRT222	701557
Keratin 25, type I	KRT25	701915
Keratin 4, type II	KRT4	700060
Keratin 80, type II	KRT80	697190
Keratin associated protein 12-4	KRTAP12-4	712284
Keratin associated protein 22-1	KRTAP22-1	100428224
Keratinocyte associated protein 3	KRTCAP3	701066
Keratinocyte differentiation factor 1	KDF1	715312
Keratocan	KERA	709743
KH homology domain containing 1	KHDC1	715576
KIAA0100 ortholog	KIAA0100	709307
KIAA0141 ortholog	KIAA0141	702802
KIAA0232 ortholog	KIAA0232	710141
KIAA0355 ortholog	KIAA0355	705202
KIAA0556 ortholog	KIAA0556	706125
KIAA0907 ortholog	KIAA0907	718005
KIAA1958 ortholog	KIAA1958	707028
KIAA2013 ortholog	KIAA2013	722762
Kinesin family member C3	KIFC3	705951
Kinesin light chain 4	KLC4	698356
Kizuna centrosomal protein	KIZ	700808
KTI12 chromatin associated homolog	KTI12	712824
Kv channel interacting protein 2	KCNIP2	712434
Kxdl motif containing 1	KXD1	720235
L-2-hydroxyglutarate dehydrogenase	L2HGDH	705721
La ribonucleoprotein domain family member 4B	LARP4B	721993
La ribonucleoprotein domain family member 6	LARP6	699664
La ribonucleoprotein domain family member 7	LARP7	703731
Lactamase beta	LACTB	705365
Lactate dehydrogenase B	LDHB	706110
Lamin A/C	LMNA	719414
Lamin B receptor	LBR	700801
Laminin subunit alpha 2	LAMA2	715394
Laminin subunit beta 2	LAMB2	707892
Late cornified envelope 3C	LCE3C	100423543

Late cornified envelope 5A	LCE5A	100423330
Late endosomal/lysosomal adaptor, MAPK and MTOR activator 1	LAMTOR1	718249
Late endosomal/lysosomal adaptor, MAPK and MTOR activator 3	LAMTOR3	709133
LCK proto-oncogene, Src family tyrosine kinase	LCK	717704
LDL receptor related protein 1	LRP1	710965
LDL receptor related protein 10	LRP10	712506
LDL receptor related protein 2	LRP2	705786
LDL receptor related protein associated protein 1	LRPAP1	699677
Lectin, mannose-binding, 1	LMAN1	697449
Lectin, mannose-binding, 1	LMAN1	697449
LEM domain containing 2	LEMD2	718463
LETM1 domain containing 1	LETMD1	694422
Leucine rich repeat (in FLII) interacting protein 1	LRRFIP1	704379
Leucine rich repeat and coiled-coil centrosomal protein 1	LRRCC1	707964
Leucine rich repeat and fibronectin type III domain containing 4	LRFN4	713166
Leucine rich repeat and fibronectin type III domain containing 5	LRFN5	700512
Leucine rich repeat and Ig domain containing 2	LINGO2	706386
Leucine rich repeat containing 20	LRRC20	710594
Leucine rich repeat containing 36	LRRC36	697849
Leucine rich repeat containing 4	LRRC4	698610
Leucine rich repeat containing 42	LRRC42	714839
Leucine rich repeat containing 61	LRRC61	704779
Leucine rich repeat containing 71	LRRC71	718714
Leucine rich repeat transmembrane neuronal 3	LRRTM3	696536
Leucine zipper putative tumor suppressor 3	PROSAP1P1	717136
Leucine zipper, down-regulated in cancer 1-like	LDOC1L	712760
Leucine-rich repeat containing 8 family member D	LRRC8D	100423127
Leucine-rich repeats and immunoglobulin-like domains 3	LRIG3	716344
Leucine-rich repeats and WD repeat domain containing 1	LRWD1	715187
Leukocyte immunoglobulin-like receptor, subfamily B (with TM and ITIM domains), member 1	LILRB1	692340
Leukocyte receptor cluster (LRC) member 1	LENG1	693417
Leukocyte-associated immunoglobulin-like receptor 1	LAIR1	695533
Leupaxin	LPXN	702033
Ligand dependent nuclear receptor interacting factor 1	LRIF1	702445
Ligase III, DNA, ATP-dependent	LIG3	715181
Ligase IV, DNA, ATP-dependent	LIG4	695475
Like-glycosyltransferase	LARGE	717403
LIM and SH3 protein 1	LASP1	694950
LIM domain binding 2	LDB2	714918
LIM domain only 2	LMO2	717502
Limb development membrane protein 1-like	LMBR1L	709548
Lin-28 homolog B (C. Elegans)	LIN28B	696130
Lin-9 DREAM muvb core complex component	LIN9	699056
Lines homolog 1	LINS1	693833
Lipid droplet associated hydrolase	LDAH	717510
Lipocalin 1	LCN1	711974
Lipopolysaccharide-induced TNF factor	LITAF	711743

Lipoyltransferase 1	LIPT1	708812
Lipoyltransferase 1	LIPT1	708812
Listerin E3 ubiquitin protein ligase 1	LTN1	714068
LMBR1 domain containing 1	LMBRD1	714710
Low density lipoprotein receptor adaptor protein 1	LDLRAP1	713032
LSM family member 14B	LSM14B	700561
LSM10, U7 small nuclear RNA associated	LSM10	713277
LSM12 homolog	LSM12	714219
LSM14A mrna processing body assembly factor	LSM14A	705085
LSM2 homolog, U6 small nuclear RNA and mrna degradation associated	LSM2	715592
LSM6 homolog, U6 small nuclear RNA and mrna degradation associated	LSM6	703226
LUC7-like 3 pre-mrna splicing factor	LUC7L3	703662
Ly6/neurotoxin 1	LYNX1	100428508
Lymphocyte antigen 6 complex, locus G6C	LY6G6C	716220
Lymphocyte antigen 86	LY86	711507
Lymphocyte cytosolic protein 2	LCP2	700374
Lymphoid enhancer-binding factor 1	LEF1	695776
Lysine (K)-specific demethylase 1A	KDM1A	718609
Lysine (K)-specific demethylase 3A	KDM3A	697775
Lysine (K)-specific methyltransferase 5B	KMT5B	710481
Lysine-rich nucleolar protein 1	KNOP1	695144
Lysophosphatidic acid receptor 6	LPAR6	705081
Lysophosphatidylcholine acyltransferase 4	LPCAT4	696388
Lysophospholipase II	LYPLA2	719074
Lysosomal protein transmembrane 4 alpha	LAPTM4A	701298
Lysozyme-like 4	LYZL4	716549
Lysyl oxidase like 1	LOXL1	706464
Lysyl oxidase like 3	LOXL3	709834
Lysyl-trna synthetase	KARS	714516
Macrophage erythroblast attacher	MAEA	702015
Macrophage stimulating 1	MST1	705811
MAD2 mitotic arrest deficient-like 2 (yeast)	MAD2L2	714527
MAD2L1 binding protein	MAD2L1BP	701099
MAF1 homolog, negative regulator of RNA polymerase III	MAF1	700385
MAGE family member D1	MAGED1	696658
MAGE family member D2	MAGED2	701719
MAGE family member F1	MAGEF1	701676
MAGE family member H1	MAGEH1	703812
Mago homolog, exon junction complex core component	MAGOH	714261
Major facilitator superfamily domain containing 1	MFSD1	703674
Major facilitator superfamily domain containing 14A	MFSD14A	711233
Major facilitator superfamily domain containing 14B	MFSD14B	708498
Major facilitator superfamily domain containing 3	MFSD3	703246
Major histocompatibility complex, class I, A	MAMU-A3	699243
Major histocompatibility complex, class I, E	MAMU-E	711532
Major histocompatibility complex, class II, DP alpha	MAMU-DPA	717992

MAK16 homolog	MAK16	696648
Makorin ring finger protein 1	MKRN1	716752
Malate dehydrogenase 1	MDH1	694703
Male-enhanced antigen 1	MEA1	699300
Male-specific lethal 3 homolog (Drosophila)	MSL3	720836
Malonyl-coa-acyl carrier protein transacylase	MCAT	711556
Mannose phosphate isomerase	MPI	722129
Mannose receptor, C type 1	MRC1	701010
Mannose-6-phosphate receptor (cation dependent)	M6PR	716696
Mannose-P-dolichol utilization defect 1	MPDU1	715962
Mannosidase, alpha, class 1B, member 1	MAN1B1	706918
Mannosidase, alpha, class 2B, member 1	MAN2B1	716173
Mannosidase, alpha, class 2C, member 1	MAN2C1	705599
Mannosidase, beta A, lysosomal	MANBA	712531
Mannosyl (alpha-1,3-)-glycoprotein beta-1,2-N-acetylglucosaminyl transferase	MGAT1	707375
Mannosyl (alpha-1,3-)-glycoprotein beta-1,4-N-acetylglucosaminyl transferase, isozyme B	MGAT4B	705006
Mannosyl (alpha-1,6-)-glycoprotein beta-1,2-N-acetylglucosaminyl transferase	MGAT2	706426
Mannosyl (alpha-1,6-)-glycoprotein beta-1,6-N-acetyl-glucosaminyl transferase	MGAT5	709108
Mannosyl-oligosaccharide glucosidase	MOGS	708913
MAP kinase interacting serine/threonine kinase 1	MKNK1	710061
MAP/microtubule affinity-regulating kinase 2	MARK2	718065
MAP7 domain containing 1	MAP7D1	712899
MAP-kinase activating death domain	MADD	713613
MARCKS-like 1	MARCKSL1	100428619
MAS-related GPR, member X4	MRGPRX4	692123
Mastermind like transcriptional coactivator 1	MAML1	715047
Matrin 3	MATR3	100568450
Mckusick-Kaufman syndrome	MKKS	718547
MDM2 binding protein	MTBP	703121
MDM4, p53 regulator	MDM4	699563
Mediator complex subunit 13-like	MED13L	713867
Mediator complex subunit 19	MED19	704421
Mediator complex subunit 21	MED21	710699
Mediator complex subunit 23	MED23	714629
Mediator complex subunit 6	MED6	693320
Mediator of cell motility 1	MEMO1	706051
Meiosis 1 associated protein	M1AP	710210
Meis homeobox 1	MEIS1	697685
Meis homeobox 2	MEIS2	699748
Melatonin receptor 1A	MTNR1A	702686
Melatonin receptor 1B	MTNR1B	695629
Membrane protein, palmitoylated 1	MPP1	702092
Meningioma (disrupted in balanced translocation) 1	MN1	107000621
Meningioma expressed antigen 5 (hyaluronidase)	MGEA5	712370

Meprin A subunit beta	MEP1B	707036
Mesoderm specific transcript	MEST	703327
Metadherin	MTDH	702410
Metal response element binding transcription factor 2	MTF2	707104
Metallothionein 2A	MT2A	700719
Metallothionein 3	MT3	700602
Metallothionein-1M	MT1M	708679
Metastasis associated 1 family member 2	MTA2	718772
Metastasis associated 1 family member 3	MTA3	712967
Metaxin 1	MTX1	717595
Methenyltetrahydrofolate synthetase domain containing	MTHFSD	694732
Methionine adenosyltransferase II, alpha	MAT2A	695362
Methionine sulfoxide reductase B3	MSRB3	717617
Methionyl aminopeptidase 2	METAP2	712400
Methionyl-trna synthetase	MARS	714744
Methyl-cpg binding domain 4 DNA glycosylase	MBD4	720557
Methylenetetrahydrofolate dehydrogenase (NADP+ dependent) 1, methenyl tetrahydrofolate cyclohydrolase, formyltetrahydrofolate synthetase	MTHFD1	707059
Methylmalonic aciduria (cobalamin deficiency) cblb type	MMAB	708973
Methylmalonic aciduria (cobalamin deficiency) cbld type, with homocystinuria	MMADHC	693783
Methyltransferase like 1	METTL1	715796
Methyltransferase like 13	METTL13	704943
Methyltransferase like 18	METTL18	701890
Methyltransferase like 22	METTL22	708739
Methyltransferase like 3	METTL3	706852
Methyltransferase like 8	METTL8	695361
MHC class II antigen	MAMU-DRB1	692100
Microsomal glutathione S-transferase 1	MGST1	701652
Microsomal glutathione S-transferase 2	MGST2	697983
Microsomal glutathione S-transferase 3	MGST3	695275
Microtubule associated protein 1 light chain 3 alpha	MAP1LC3A	707439
Microtubule associated protein 1S	MAP1S	719196
Microtubule associated protein 2	MAP2	710840
Microtubule associated protein 4	MAP4	1.00E+08
Microtubule associated protein RP/EB family member 1	MAPRE1	711404
Microtubule-associated protein 7	MAP7	705355
Midline 1	MID1	709683
Midnolin	MIDN	721215
Minichromosome maintenance complex component 3 associated protein	MCM3AP	721810
Missing oocyte, meiosis regulator, homolog (Drosophila)	MIOS	696371
Mitochondrial assembly of ribosomal large subunit 1	MALSU1	704884
Mitochondrial E3 ubiquitin protein ligase 1	MUL1	705429
Mitochondrial elongation factor 2	MIEF2	700705
Mitochondrial fission regulator 1	MTFR1	711143
Mitochondrial fission regulator 1-like	MTFR1L	713213

Mitochondrial genome maintenance exonuclease 1	MGME1	696467
Mitochondrial intermediate peptidase	MIPEP	707131
Mitochondrial poly(A) polymerase	MTPAP	694491
Mitochondrial ribosomal protein L10	MRPL10	695136
Mitochondrial ribosomal protein L11	MRPL11	714094
Mitochondrial ribosomal protein L16	MRPL16	698831
Mitochondrial ribosomal protein L18	MRPL18	702629
Mitochondrial ribosomal protein L19	MRPL19	711081
Mitochondrial ribosomal protein L20	MRPL20	701533
Mitochondrial ribosomal protein L22	MRPL22	714920
Mitochondrial ribosomal protein L24	MRPL24	718640
Mitochondrial ribosomal protein L36	MRPL36	100430880
Mitochondrial ribosomal protein L37	MRPL37	715168
Mitochondrial ribosomal protein L39	MRPL39	708631
Mitochondrial ribosomal protein L42	MRPL42	715676
Mitochondrial ribosomal protein L43	MRPL43	711038
Mitochondrial ribosomal protein L46	MRPL46	697872
Mitochondrial ribosomal protein L48	MRPL48	718240
Mitochondrial ribosomal protein L50	MRPL50	713923
Mitochondrial ribosomal protein L51	MRPL51	713036
Mitochondrial ribosomal protein L55	MRPL55	695962
Mitochondrial ribosomal protein L9	MRPL9	711235
Mitochondrial ribosomal protein S11	MRPS11	697743
Mitochondrial ribosomal protein S12	MRPS12	695196
Mitochondrial ribosomal protein S17	MRPS17	703678
Mitochondrial ribosomal protein S18A	MRPS18A	701465
Mitochondrial ribosomal protein S18C	MRPS18C	707257
Mitochondrial ribosomal protein S21	MRPS21	706805
Mitochondrial ribosomal protein S22	MRPS22	715845
Mitochondrial ribosomal protein S23	MRPS23	708818
Mitochondrial ribosomal protein S28	MRPS28	699755
Mitochondrial ribosomal protein S33	MRPS33	693681
Mitochondrial ribosomal protein S7	MRPS7	701800
Mitochondrial ribosomal protein S9	MRPS9	712968
Mitochondrial transcription termination factor 3	MTERF3	701366
Mitochondrial translational initiation factor 2	MTIF2	717042
Mitochondrial translational initiation factor 3	MTIF3	710571
Mitogen-activated protein kinase 1	MAPK1	698569
Mitogen-activated protein kinase 11	MAPK11	715794
Mitogen-activated protein kinase 12	MAPK12	715745
Mitogen-activated protein kinase kinase 1	MAP2K1	710415
Mitogen-activated protein kinase kinase 4	MAP2K4	718155
Mitogen-activated protein kinase kinase 5	MAP2K5	711672
Mitogen-activated protein kinase kinase kinase 11	MAP3K11	716038
Mitogen-activated protein kinase kinase kinase 3	MAP3K3	717866
Mitogen-activated protein kinase kinase kinase 4	MAP3K4	710360
Mitogen-activated protein kinase kinase kinase 6	MAP3K6	715911
Mitogen-activated protein kinase kinase kinase kinase 2	MAP4K2	699331

Mitogen-activated protein kinase kinase kinase kinase 4	MAP4K4	716595
Mitogen-activated protein kinase kinase kinase kinase 5	MAP4K5	706204
Mitogen-activated protein kinase-activated protein kinase 2	MAPKAPK2	695044
Mitogen-activated protein kinase-activated protein kinase 3	MAPKAPK3	701320
Mitogen-activated protein kinase-activated protein kinase 5	MAPKAPK5	713521
Mitotic spindle organizing protein 2B	MZT2B	701787
MNAT CDK-activating kinase assembly factor 1	MNAT1	703905
MOB family member 4, phocein	MOB4	698149
Molybdenum cofactor synthesis 2	MOCS2	703689
MON1 homolog B, secretory trafficking associated	MON1B	715104
Monoacylglycerol O-acyltransferase 2	MOGAT2	696347
Morf4 family associated protein 1	MRFAP1	710771
Morf4 family associated protein 1-like 1	MRFAP1L1	710411
MORN repeat containing 2	MORN2	106992909
Mortality factor 4 like 1	MORF4L1	711357
Mov10 RISC complex RNA helicase	MOV10	705910
M-phase phosphoprotein 6	MPHOSPH6	714335
M-phase specific PLK1 interacting protein	MPLKIP	703092
Mpv17 mitochondrial inner membrane protein	MPV17	701026
Msh homeobox 2	MSX2	694227
MSS51 mitochondrial translational activator	MSS51	707066
Multiple C2 domains, transmembrane 2	MCTP2	706949
Murine retrovirus integration site 1 homolog	MRVI1	702830
MUS81 structure-specific endonuclease subunit	MUS81	715558
Muscle, skeletal, receptor tyrosine kinase	MUSK	709397
Muscleblind like splicing regulator 1	MBNL1	708735
Mutl homolog 1	MLH1	698782
Muty DNA glycosylase	MUTYH	705651
Myb/SANT-like DNA-binding domain containing 2	MSANTD2	712347
MYC associated factor X	MAX	708228
MYCBP-associated, testis expressed 1	MAATS1	712979
Myelin protein zero-like 2	MPZL2	699330
Myelin regulatory factor	MYRF	719083
Myeloid cell leukemia 1	MCL1	707539
Myeloid differentiation primary response 88	MYD88	696494
Myeloid leukemia factor 1	MLF1	704116
Myeloid/lymphoid or mixed-lineage leukemia; translocated to, 6	MLLT6	694045
Myocyte enhancer factor 2A	MEF2A	708956
Myomesin 1	MYOM1	695301
Myosin light chain kinase 3	MYLK3	716132
Myosin XVIII A	MYO18A	711171
Myosin, light chain 12A, regulatory, non-sarcomeric	MYL12A	695077
Myotubularin 1	MTM1	703131
Myotubularin related protein 11	MTMR11	705542
Myotubularin related protein 2	MTMR2	699703
Myotubularin related protein 4	MTMR4	714621
Myotubularin related protein 6	MTMR6	709118
Myristoylated alanine-rich protein kinase C substrate	MARCKS	694077

MYST/Esa1-associated factor 6	MEAF6	713666
N(alpha)-acetyltransferase 30, natc catalytic subunit	NAA30	699379
N(alpha)-acetyltransferase 50, nate catalytic subunit	NAA50	709764
N(alpha)-acetyltransferase 60, natf catalytic subunit	NAA60	703207
N-6 adenine-specific DNA methyltransferase 2 (putative)	N6AMT2	703665
NACC family member 2, BEN and BTB (POZ) domain containing	NACC2	721794
N-acetylglucosamine kinase	NAGK	703976
N-acetylglucosamine-1-phosphodiester	NAGPA	707352
alpha-N-acetylglucosaminidase		
N-acetyltransferase 10 (GCN5-related)	NAT10	717452
N-acetyltransferase 8-like (GCN5-related, putative)	NAT8L	722359
NAD(P) dependent steroid dehydrogenase-like	NSDHL	693333
NAD(P)H dehydrogenase, quinone 2	NQO2	707675
NADH:ubiquinone oxidoreductase complex assembly factor 1	NDUFAF1	710275
NADH:ubiquinone oxidoreductase complex assembly factor 2	NDUFAF2	693441
NADH:ubiquinone oxidoreductase complex assembly factor 4	NDUFAF4	705102
NADH:ubiquinone oxidoreductase complex assembly factor 6	NDUFAF6	700515
NADH:ubiquinone oxidoreductase complex assembly factor 7	NDUFAF7	709473
NADH:ubiquinone oxidoreductase core subunit S2	NDUFS2	719935
NADH:ubiquinone oxidoreductase core subunit S3	NDUFS3	713040
NADH:ubiquinone oxidoreductase subunit A1	NDUFA1	694635
NADH:ubiquinone oxidoreductase subunit A12	NDUFA12	711970
NADH:ubiquinone oxidoreductase subunit A8	NDUFA8	698706
NADH:ubiquinone oxidoreductase subunit AB1	NDUFAB1	700718
NADH:ubiquinone oxidoreductase subunit B2	NDUFB2	693431
NADH:ubiquinone oxidoreductase subunit B4	NDUFB4	713428
NADH:ubiquinone oxidoreductase subunit B5	NDUFB5	708821
NADH:ubiquinone oxidoreductase subunit B8	NDUFB8	710521
NADH:ubiquinone oxidoreductase subunit B9	NDUFB9	711387
NADH:ubiquinone oxidoreductase subunit S4	NDUFS4	704137
NADH:ubiquinone oxidoreductase subunit S6	NDUFS6	709426
NADPH oxidase organizer 1	NOXO1	694059
Nascent polypeptide-associated complex alpha subunit	NACA	713416
Natriuretic peptide receptor 2	NPR2	695750
NCK adaptor protein 1	NCK1	716807
NCK adaptor protein 2	NCK2	713287
NCK interacting protein with SH3 domain	NCKIPSD	709410
NECAP endocytosis associated 2	NECAP2	698687
Nedd4 family interacting protein 1	NDFIP1	705716
Nedd4 family interacting protein 2	NDFIP2	698464
NEDD8 activating enzyme E1 subunit 1	NAE1	696429
Negative elongation factor complex member C/D	NELFCD	696053
Negative elongation factor complex member E	NELFE	716913
Negative regulator of ubiquitin-like proteins 1	NUB1	715231
Nerve growth factor receptor (TNFRSF16) associated protein 1	NGFRAP1	340542
N-ethylmaleimide-sensitive factor attachment protein, gamma	NAPG	704546
Neugrin, neurite outgrowth associated	NGRN	702187
Neural precursor cell expressed, developmentally down-regulated 1	NEDD1	713673

Neural proliferation, differentiation and control, 1	NPDC1	707453
Neurexophilin and PC-esterase domain family member 3	NXPE3	702612
Neuritin 1	NRN1	722968
Neurochondrin	NCDN	712930
Neuroglobin	NGB	641331
Neurolysin (metallopeptidase M3 family)	NLN	696884
Neuronal cell adhesion molecule	NRCAM	574228
Neuronal differentiation 1	NEUROD1	704954
Neuronal PAS domain protein 2	NPAS2	710480
Neuronal PAS domain protein 4	NPAS4	714161
Neuropilin 1	NRP1	697755
Neuropilin and tolloid like 1	NETO1	694322
Neutrophil cytosolic factor 4	NCF4	695612
NFKB activating protein	NKAP	694891
NFKB repressing factor	NKRF	693851
NGFI-A binding protein 2 (EGR1 binding protein 2)	NAB2	714209
N-glycanase 1	NGLY1	700842
NHL repeat containing 3	NHLRC3	696852
Nicastrin	NCSTN	719696
Nicotinamide nucleotide transhydrogenase	NNT	701110
Niemann-Pick disease, type C2	NPC2	699881
NIMA-related kinase 1	NEK1	694345
NIMA-related kinase 3	NEK3	710127
NIN1/RPN12 binding protein 1 homolog	NOB1	705344
Ninein	NIN	709532
Nitric oxide associated 1	NOA1	693437
NK2 homeobox 5	NKX2-5	703795
NKG2D protein	NKG2D	574240
NLR family, pyrin domain containing 1	NLRP1	721648
NLR family, pyrin domain containing 10	NLRP10	709794
NLR family, pyrin domain containing 4	NLRP4	703431
NLR family, pyrin domain containing 9	NLRP9	719115
NMD3 ribosome export adaptor	NMD3	701677
NME/NM23 nucleoside diphosphate kinase 2	NME2	100533957
N-myristoyltransferase 1	NMT1	715885
NOC2-like nucleolar associated transcriptional repressor	NOC2L	697809
Non imprinted in Prader-Willi/Angelman syndrome 2	NIPA2	710147
Non-POU domain containing, octamer-binding	NONO	697263
Non-SMC condensin I complex subunit D2	NCAPD2	712834
Non-SMC condensin I complex subunit G	NCAPG	715235
Non-SMC condensin II complex subunit D3	NCAPD3	700276
NOP16 nucleolar protein	NOP16	696768
NOP58 ribonucleoprotein	NOP58	703859
Notch 4	NOTCH4	717323
NRDE-2, necessary for RNA interference, domain containing	NRDE2	695676
NSA2, ribosome biogenesis homolog	NSA2	704670
NSE1 homolog, SMC5-SMC6 complex component	NSMCE1	703436
NSE3 homolog, SMC5-SMC6 complex component	NSMCE3	712714

NSE4 homolog A, SMC5-SMC6 complex component	NSMCE4A	705375
NSF attachment protein alpha	NAPA	717355
NSFL1 (p97) cofactor (p47)	NSFL1C	715743
NSL1, MIS12 kinetochore complex component	NSL1	710371
N-terminal Xaa-Pro-Lys N-methyltransferase 1	NTMT1	716763
NUAK family, SNF1-like kinase, 1	NUAK1	702256
Nuclear casein kinase and cyclin-dependent kinase substrate 1	NUCKS1	697298
Nuclear envelope integral membrane protein 1	NEMP1	710700
Nuclear factor I/A	NFIA	694022
Nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 3	NFATC3	702390
Nuclear factor of kappa light polypeptide gene enhancer in B-cells 1	NFKB1	710324
Nuclear factor, erythroid 2 like 1	NFE2L1	695404
Nuclear factor, erythroid 2 like 2	NFE2L2	707606
Nuclear fragile X mental retardation protein interacting protein 2	NUFIP2	711330
Nuclear pore associated protein 1	NPAP1	719891
Nuclear prelamin A recognition factor-like	NARFL	722381
Nuclear receptor binding SET domain protein 1	NSD1	706131
Nuclear receptor coactivator 4	NCOA4	709509
Nuclear receptor coactivator 6	NCOA6	706903
Nuclear receptor subfamily 1 group I member 2	NR1I2	574226
Nuclear receptor subfamily 2 group F member 2	NR2F2	707483
Nuclear receptor subfamily 2 group F member 6	NR2F6	719699
Nuclear RNA export factor 1	NXF1	718420
Nuclear transcription factor Y subunit alpha	NFYA	719697
Nuclear transcription factor Y subunit gamma	NFYC	696290
Nuclear transport factor 2-like export factor 1	NXT1	711846
Nuclear transport factor 2-like export factor 2	NXT2	704593
Nucleobindin 2	NUCB2	697084
Nucleolar and coiled-body phosphoprotein 1	NOLC1	712789
Nucleolar protein 8	NOL8	705799
Nucleoporin 107kda	NUP107	718214
Nucleoporin 205kda	NUP205	708216
Nucleoporin 210kda	NUP210	693669
Nucleoporin 35kda	NUP35	706497
Nucleoporin 50kda	NUP50	713282
Nucleoporin 85kda	NUP85	705628
Nucleoporin 88kda	NUP88	711734
Nucleosome assembly protein 1-like 5	NAP1L5	703223
Nudc domain containing 3	NUDCD3	699353
Nudc nuclear distribution protein	NUDC	719986
Nude neurodevelopment protein 1-like 1	NDEL1	721973
Nudix hydrolase 1	NUDT1	713078
Nudix hydrolase 2	NUDT2	701795
Nudix hydrolase 3	NUDT3	718568
Nudix hydrolase 5	NUDT5	694368
Nudix hydrolase 9	NUDT9	701344
Numb homolog (Drosophila)	NUMB	696528

NUS1 dehydrodolichyl diphosphate synthase subunit	NUS1	715015
O-6-methylguanine-DNA methyltransferase	MGMT	698134
O-acyl-ADP-ribose deacylase 1	OARD1	719685
Occludin/ELL domain containing 1	OCEL1	718921
Oculocerebrorenal syndrome of Lowe	OCRL	702345
Olfactomedin like 3	OLFML3	707969
Olfactory receptor, family 1, subfamily Q, member 1	OR1Q1	697695
Olfactory receptor, family 10, subfamily A, member 4	OR10A4	100423176
Olfactory receptor, family 2, subfamily AG, member 2	OR2AG2	709556
Olfactory receptor, family 2, subfamily F, member 1	OR2F1	707900
Olfactory receptor, family 2, subfamily H, member 2	OR2H2	710946
Olfactory receptor, family 2, subfamily W, member 1	OR2W1	708515
Olfactory receptor, family 4, subfamily E, member 2	OR4E2	708887
Olfactory receptor, family 4, subfamily N, member 2	OR4N2	701881
Olfactory receptor, family 5, subfamily L, member 1	OR5L1	719174
Olfactory receptor, family 5, subfamily M, member 9	OR5M9	705878
Olfactory receptor, family 52, subfamily N, member 4	OR52N4	696970
Olfactory receptor, family 7, subfamily D, member 4	OR7D4	721322
Oligonucleotide/oligosaccharide-binding fold containing 1	OBFC1	714968
Oncomodulin 2	OCM2	721827
Optic atrophy 1 (autosomal dominant)	OPA1	698540
ORAI calcium release-activated calcium modulator 1	ORAI1	700190
Oral-facial-digital syndrome 1	OFD1	711677
Origin recognition complex subunit 3	ORC3	700773
Origin recognition complex subunit 5	ORC5	696683
ORMDL sphingolipid biosynthesis regulator 2	ORMDL2	710296
ORMDL sphingolipid biosynthesis regulator 3	ORMDL3	699154
Ornithine aminotransferase	OAT	693970
Ornithine decarboxylase antizyme 1	OAZ1	721477
Ornithine decarboxylase antizyme 2	OAZ2	707593
Osteosarcoma amplified 9, endoplasmic reticulum lectin	OS9	715555
OTU deubiquitinase with linear linkage specificity	OTULIN	698991
OTU domain containing 6B	OTUD6B	697015
Outer dense fiber of sperm tails 1	ODF1	707269
Outer dense fiber of sperm tails 2	ODF2	717505
Outer dense fiber of sperm tails 3	ODF3	696480
Outer dense fiber of sperm tails 3-like 1	ODF3L1	706545
Oviductal glycoprotein 1	OVGP1	703848
Oxidative stress responsive 1	OXSR1	696362
Oxoglutarate (alpha-ketoglutarate) dehydrogenase (lipoamide)	OGDH	698854
Oxysterol binding protein like 10	OSBPL10	703555
Oxysterol binding protein like 11	OSBPL11	716096
Oxysterol binding protein like 5	OSBPL5	706613
P21 protein (Cdc42/Rac)-activated kinase 1	PAK1	698585
P21 protein (Cdc42/Rac)-activated kinase 2	PAK2	710314
P450 (cytochrome) oxidoreductase	POR	715888
P53 and DNA damage regulated 1	PDRG1	712622
Paired box 9	PAX9	100429091

PAK1 interacting protein 1	PAK1IP1	697856
Pancreatic and duodenal homeobox 1	PDX1	710936
Pancreatic polypeptide	PPY	713988
Pantothenate kinase 1	PANK1	696041
PAP associated domain containing 7	PAPD7	713853
Par-3 family cell polarity regulator	PARD3	706472
Paralemmin 2	PALM2	100532751
Paraspeckle component 1	PSPC1	705080
Parkinson protein 7	PARK7	708377
Partner and localizer of BRCA2	PALB2	700843
Partner of NOB1 homolog	PNO1	100337566
Paternally expressed 3	PEG3	707825
PCI domain containing 2	PCID2	714247
PDLIM1 interacting kinase 1 like	PDIK1L	719774
PDZ and LIM domain 1	PDLIM1	702998
PDZ domain containing 4	PDZD4	697387
Pecanex homolog (Drosophila)	PCNX	694094
Pecanex-like 4 (Drosophila)	PCNXL4	702758
Peptidase domain containing associated with muscle regeneration 1	PAMR1	717140
Peptide deformylase (mitochondrial)	PDF	100427223
Peptidyl arginine deiminase, type III	PADI3	700560
Peptidylprolyl isomerase A (cyclophilin A)	PPIA	574102
Peptidylprolyl isomerase B (cyclophilin B)	PPIB	706757
Peptidylprolyl isomerase domain and WD repeat containing 1	PPWD1	696267
Peptidylprolyl isomerase E (cyclophilin E)	PPIE	716340
Peptidylprolyl isomerase G (cyclophilin G)	PPIG	706262
Peptidylprolyl isomerase H (cyclophilin H)	PPIH	697669
Peptidylprolyl isomerase like 3	PPIL3	700456
Peripheral myelin protein 22	PMP22	693527
Peroxiredoxin 2	PRDX2	716665
Peroxiredoxin 3	PRDX3	702882
Peroxiredoxin 4	PRDX4	697635
Peroxisomal biogenesis factor 11 beta	PEX11B	698184
Peroxisomal biogenesis factor 13	PEX13	717886
Peroxisomal biogenesis factor 16	PEX16	714904
Peroxisomal membrane protein 2	PXMP2	693648
Peroxisome proliferator-activated receptor delta	PPARD	718861
PEST proteolytic signal containing nuclear protein	PCNP	702162
PH domain and leucine rich repeat protein phosphatase 1	PHLPP1	705882
PHD finger protein 1	PHF1	718337
PHD finger protein 12	PHF12	710851
PHD finger protein 14	PHF14	694855
PHD finger protein 2	PHF2	717585
PHD finger protein 23	PHF23	714538
PHD finger protein 6	PHF6	707390
PHD finger protein 7	PHF7	697103
Phenylalanine hydroxylase	PAH	698696
Phenylalanyl-trna synthetase 2, mitochondrial	FARS2	710945

Phosphatase and actin regulator 1	PHACTR1	700226
Phosphatase and tensin homolog	PTEN	705121
Phosphatase, orphan 1	PHOSPHO1	698959
Phosphatase, orphan 2	PHOSPHO2	100429653
Phosphate cytidylyltransferase 1, choline, alpha	PCYT1A	722105
Phosphatidylglycerophosphate synthase 1	PGS1	710125
Phosphatidylinositol 3-kinase catalytic subunit type 3	PIK3C3	693918
Phosphatidylinositol 4-kinase, catalytic, alpha	PI4KA	698020
Phosphatidylinositol 4-kinase, catalytic, alpha	PI4KA	698020
Phosphatidylinositol 4-kinase, catalytic, beta	PI4KB	710104
Phosphatidylinositol binding clathrin assembly protein	PICALM	706003
Phosphatidylinositol glycan anchor biosynthesis class A	PIGA	712514
Phosphatidylinositol glycan anchor biosynthesis class C	PIGC	705657
Phosphatidylinositol glycan anchor biosynthesis class C	PIGC	705657
Phosphatidylinositol glycan anchor biosynthesis class G	PIGG	714088
Phosphatidylinositol glycan anchor biosynthesis class H	PIGH	710780
Phosphatidylinositol glycan anchor biosynthesis class S	PIGS	709115
Phosphatidylinositol glycan anchor biosynthesis class U	PIGU	707317
Phosphatidylinositol glycan anchor biosynthesis class V	PIGV	714898
Phosphatidylinositol transfer protein alpha	PITPNA	721228
Phosphatidylinositol transfer protein beta	PITPNB	713414
Phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit alpha	PIK3CA	709959
Phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit beta	PIK3CB	716098
Phosphatidylserine synthase 1	PTDSS1	701486
Phosphodiesterase 12	PDE12	703552
Phosphodiesterase 4B	PDE4B	699309
Phosphodiesterase 6D	PDE6D	712629
Phosphodiesterase 8A	PDE8A	694750
Phosphodiesterase 9A	PDE9A	100301991
Phosphoenolpyruvate carboxykinase 2 (mitochondrial)	PCK2	714922
Phosphoglucomutase 1	PGM1	699401
Phosphohistidine phosphatase 1	PHPT1	721674
Phosphoinositide-3-kinase interacting protein 1	PIK3IP1	716694
Phosphoinositide-3-kinase regulatory subunit 4	PIK3R4	718012
Phospholipase A2 group IB	PLA2G1B	696712
Phospholipase A2 group VI	PLA2G6	700184
Phospholipase A2 group XIIB	PLA2G12B	708031
Phospholipase A2 group XV	PLA2G15	702619
Phospholipase A2, group IVB (cytosolic)	PLA2G4B	100533113
Phospholipase B domain containing 1	PLBD1	698939
Phospholipase B domain containing 2	PLBD2	714669
Phospholipase C beta 2	PLCB2	701951
Phospholipase D family member 3	PLD3	701083
Phospholipid phosphatase 2	PLPP2	721004
Phospholipid phosphatase 6	PLPP6	695188
Phospholipid scramblase 3	PLSCR3	721831

Phosphomevalonate kinase	PMVK	717014
Phosphopantothenoylcysteine synthetase	PPCS	697064
Phosphoribosyl pyrophosphate synthetase 1-like 1	PRPS1L1	708413
Phosphoribosyl pyrophosphate synthetase-associated protein 1	PRPSAP1	706625
Phosphoribosyl transferase domain containing 1	PRTFDC1	712819
Phosphoribosylglycinamide formyltransferase, phosphoribosylglycinamide synthetase, phosphoribosylaminoimidazole synthetase	GART	704926
Phosphorylase kinase, alpha 2 (liver)	PHKA2	694376
Phosphorylase, glycogen, liver	PYGL	706853
Piggybac transposable element derived 2	PGBD2	709925
PIGY upstream reading frame	PYURF	702862
PIH1 domain containing 1	PIH1D1	718787
PIN2/TERF1 interacting, telomerase inhibitor 1	PINX1	701523
Pinin, desmosome associated protein	PNN	700296
PITH (C-terminal proteasome-interacting domain of thioredoxin-like) domain containing 1	PITHD1	710737
Pituitary tumor-transforming 1 interacting protein	PTTG1IP	722061
Placental growth factor	PGF	701219
Placenta-specific 1-like	PLAC1L	698074
PLAG1 like zinc finger 1	PLAGL1	699985
Plasminogen receptor, C-terminal lysine transmembrane protein	PLGRKT	693286
Plastin 3	PLS3	709055
Platelet activating factor acetylhydrolase 1b catalytic subunit 2	PAFAH1B2	703013
Platelet activating factor acetylhydrolase 1b regulatory subunit 1	PAFAH1B1	574255
Platelet-derived growth factor beta polypeptide	PDGFB	703173
Platelet-derived growth factor receptor, beta polypeptide	PDGFRB	711353
Pleckstrin homology and FYVE domain containing 2	PLEKHF2	701884
Pleckstrin homology and rhogef domain containing G2	PLEKHG2	698408
Pleckstrin homology domain containing A3	PLEKHA3	703417
Pleckstrin homology domain containing A7	PLEKHA7	697646
Pleckstrin homology domain containing A8	PLEKHA8	696127
Pleckstrin homology domain containing O1	PLEKHO1	706145
Pleckstrin homology domain containing O2	PLEKHO2	712677
Pleckstrin homology domain interacting protein	PHIP	716810
Pleckstrin homology, myth4 and FERM domain containing H3	PLEKHH3	711013
Pleiotrophin	PTN	709496
Plexin A2	PLXNA2	713800
PNN-interacting serine/arginine-rich protein	PNISR	694075
Pogo transposable element with KRAB domain	POGK	696834
Pogo transposable element with ZNF domain	POGZ	710634
Poliovirus receptor-related 2 (herpesvirus entry mediator B)	PVRL2	713229
Polo-like kinase 3	PLK3	704071
Poly(A) binding protein interacting protein 1	PAIP1	700869
Poly(A) binding protein interacting protein 2	PAIP2	693317
Poly(A) binding protein, cytoplasmic 1	PABPC1	705847
Poly(A) polymerase alpha	PAPOLA	641447
Poly(A)-specific ribonuclease	PARN	712984

Poly(ADP-ribose) glycohydrolase	PARG	709432
Poly(ADP-ribose) polymerase 2	PARP2	701955
Poly(ADP-ribose) polymerase family member 10	PARP10	708132
Poly(ADP-ribose) polymerase family member 16	PARP16	709140
Poly(rc) binding protein 2	PCBP2	703175
Polybromo 1	PBRM1	696361
Polycomb group ring finger 2	PCGF2	694187
Polycomb group ring finger 3	PCGF3	697151
Polycomb group ring finger 6	PCGF6	714508
Polyglutamine binding protein 1	PQBP1	711678
Polyglutamine binding protein 1	PQBP1	711678
Polyhomeotic homolog 2 (Drosophila)	PHC2	710201
Polymerase (DNA directed), beta	POLB	704801
Polymerase (DNA directed), epsilon 3, accessory subunit	POLE3	705074
Polymerase (DNA directed), gamma	POLG	699750
Polymerase (RNA) II (DNA directed) polypeptide F	POLR2F	699566
Polymerase (RNA) II (DNA directed) polypeptide G	POLR2G	718548
Polymerase (RNA) II (DNA directed) polypeptide I, 14.5kda	POLR2I	712412
Polymerase (RNA) III (DNA directed) polypeptide B	POLR3B	702711
Polymerase (RNA) III (DNA directed) polypeptide D, 44kda	POLR3D	707923
Polymerase (RNA) III (DNA directed) polypeptide E (80kd)	POLR3E	697901
Polymerase (RNA) III (DNA directed) polypeptide G (32kd)-like	POLR3GL	698563
Polymerase (RNA) III (DNA directed) polypeptide H (22.9kd)	POLR3H	707546
Polymerase (RNA) mitochondrial (DNA directed)	POLRMT	100426183
Polynucleotide kinase 3'-phosphatase	PNKP	719084
Polypeptide N-acetylgalactosaminyltransferase 1	GALNT1	708930
Polypyrimidine tract binding protein 2	PTBP2	710101
Polysaccharide biosynthesis domain containing 1	PBDC1	705125
POP4 homolog, ribonuclease P/MRP subunit	POP4	700209
POP5 homolog, ribonuclease P/MRP subunit	POP5	697559
Potassium channel tetramerization domain containing 10	KCTD10	707443
Potassium channel tetramerization domain containing 17	KCTD17	696210
Potassium channel tetramerization domain containing 2	KCTD2	700474
Potassium channel tetramerization domain containing 3	KCTD3	708471
Potassium channel tetramerization domain containing 5	KCTD5	698663
Potassium channel tetramerization domain containing 6	KCTD6	701810
Potassium channel tetramerization domain containing 9	KCTD9	711515
Potassium channel, two pore domain subfamily K, member 16	KCNK16	719585
Potassium channel, voltage gated modifier subfamily V, member 1	KCNV1	699636
Potassium channel, voltage gated shaker related subfamily A, member 5	KCNA5	711886
Potassium channel, voltage gated Shaw related subfamily C, member 2	KCNC2	100430906
Potassium voltage-gated channel, modifier subfamily S, member 1	KCNS1	711715
POU class 2 homeobox 1	POU2F1	700530
POZ (BTB) and AT hook containing zinc finger 1	PATZ1	718381

PR domain containing 14	PRDM14	693324
PR domain containing 2, with ZNF domain	PRDM2	716295
PR domain containing 2, with ZNF domain	PRDM2	716295
PR domain containing 4	PRDM4	704529
PR domain containing 5	PRDM5	708790
Praja ring finger 1, E3 ubiquitin protein ligase	PJA1	695038
Pre-B-cell leukemia homeobox 1	PBX1	694416
Pre-B-cell leukemia homeobox 2	PBX2	716239
Pre-B-cell leukemia homeobox 4	PBX4	106994668
Prefoldin subunit 2	PFDN2	719886
Prefoldin subunit 5	PFDN5	702355
Prefoldin subunit 6	PFDN6	718253
PRELI domain containing 1	PRELID1	699254
Pre-mrna processing factor 3	PRPF3	706898
Pre-mrna processing factor 31	PRPF31	720567
Pre-mrna processing factor 40 homolog A	PRPF40A	696668
Presenilin enhancer gamma secretase subunit	PSENEN	100429005
Progesterone and adiponectin receptor family member VIII	PAQR8	708418
Programmed cell death 2	PDCD2	696380
Programmed cell death 2-like	PDCD2L	705688
Programmed cell death 6	PDCD6	723043
Programmed cell death 7	PDCD7	708758
Prolactin regulatory element binding	PREB	700408
Proliferating cell nuclear antigen	PCNA	718006
Proline and serine rich 2	PROSER2	693705
Proline rich 3	PRR3	711699
Proline rich membrane anchor 1	PRIMA1	100426274
Proline rich nuclear receptor coactivator 2	PNRC2	719213
Proline, glutamate and leucine rich protein 1	PELP1	677854
Proline-rich coiled-coil 1	PRRC1	704248
Proline-rich coiled-coil 2A	PRRC2A	715715
Prolyl endopeptidase-like	PREPL	713980
Prolylcarboxypeptidase	PRCP	701305
Prominin 1	PROM1	714610
Promyelocytic leukemia	PML	700379
Propionyl-coa carboxylase beta subunit	PCCB	716964
Proprotein convertase subtilisin/kexin type 7	PCSK7	697567
Prosaposin	PSAP	709510
Prostaglandin E synthase 3	PTGES3	713353
Protease, serine 37	PRSS37	694908
Proteasomal ATPase associated factor 1	PAAF1	718755
Proteasome (prosome, macropain) assembly chaperone 1	PSMG1	715758
Proteasome (prosome, macropain) assembly chaperone 2	PSMG2	717110
Proteasome 26S subunit, ATPase 4	PSMC4	699847
Proteasome 26S subunit, non-ATPase 1	PSMD1	711724
Proteasome 26S subunit, non-ATPase 10	PSMD10	703596
Proteasome 26S subunit, non-ATPase 12	PSMD12	718756
Proteasome 26S subunit, non-ATPase 14	PSMD14	701063

Proteasome 26S subunit, non-ATPase 4	PSMD4	100192390
Proteasome 26S subunit, non-ATPase 6	PSMD6	698601
Proteasome 26S subunit, non-ATPase 7	PSMD7	705581
Proteasome activator subunit 1	PSME1	714364
Proteasome activator subunit 2	PSME2	715288
Proteasome subunit alpha 1	PSMA1	701029
Proteasome subunit alpha 2	PSMA2	701683
Proteasome subunit alpha 3	PSMA3	700251
Proteasome subunit alpha 4	PSMA4	710417
Proteasome subunit alpha 5	PSMA5	698435
Proteasome subunit beta 1	PSMB1	696133
Proteasome subunit beta 2	PSMB2	712193
Proteasome subunit beta 4	PSMB4	710734
Proteasome subunit beta 6	PSMB6	710028
Proteasome subunit beta 7	PSMB7	694567
Proteasome subunit beta 9	PSMB9	716980
Protection of telomeres 1	POT1	696751
Protein arginine methyltransferase 5	PRMT5	712718
Protein associated with topoisomerase II homolog 1 (yeast)	PATL1	699207
Protein disulfide isomerase family A member 6	PDIA6	706781
Protein inhibitor of activated STAT 2	PIAS2	696737
Protein kinase C and casein kinase substrate in neurons 1	PACSLN1	718624
Protein kinase C, alpha	PRKCA	718412
Protein kinase C, beta	PRKCB	701195
Protein kinase, AMP-activated, beta 1 non-catalytic subunit	PRKAB1	695737
Protein kinase, interferon-inducible double stranded RNA dependent activator	PRKRA	703063
Protein O-glucosyltransferase 1	POGLUT1	712357
Protein O-linked mannose N-acetylglucosaminyltransferase 1 (beta 1,2-)	POMGNT1	707205
Protein phosphatase 1 regulatory subunit 12B	PPP1R12B	705775
Protein phosphatase 1 regulatory subunit 15A	PPP1R15A	718350
Protein phosphatase 1 regulatory subunit 16B	PPP1R16B	693349
Protein phosphatase 1 regulatory subunit 21	PPP1R21	715917
Protein phosphatase 1 regulatory subunit 35	PPP1R35	712067
Protein phosphatase 1, catalytic subunit, gamma isozyme	PPP1CC	709935
Protein phosphatase 2 regulatory subunit B', gamma	PPP2R5C	718894
Protein phosphatase 2 regulatory subunit B'', gamma	PPP2R3C	694616
Protein phosphatase 3, catalytic subunit, beta isozyme	PPP3CB	706955
Protein phosphatase 3, catalytic subunit, gamma isozyme	PPP3CC	708233
Protein phosphatase 4 catalytic subunit	PPP4C	708510
Protein phosphatase 4 regulatory subunit 3B	PPP4R3B	718961
Protein phosphatase 4, regulatory subunit 1	PPP4R1	705451
Protein phosphatase, Mg ²⁺ /Mn ²⁺ dependent 1A	PPM1A	702987
Protein phosphatase, Mg ²⁺ /Mn ²⁺ dependent 1F	PPM1F	698441
Protein phosphatase, Mg ²⁺ /Mn ²⁺ dependent 1G	PPM1G	700695
Protein S (alpha)	PROS1	694845
Protein serine kinase H2	PSKH2	693701

Protein tyrosine phosphatase domain containing 1	PTPDC1	707878
Protein tyrosine phosphatase type IVA, member 2	PTP4A2	706489
Protein tyrosine phosphatase, non-receptor type 1	PTPN1	702016
Protein tyrosine phosphatase, non-receptor type 12	PTPN12	721538
Protein tyrosine phosphatase, non-receptor type 20	PTPN20	711276
Protein tyrosine phosphatase, non-receptor type 23	PTPN23	711601
Protein tyrosine phosphatase, receptor type, D	PTPRD	714954
Protein tyrosine phosphatase, receptor type, G	PTPRG	703937
Protein-L-isoaspartate (D-aspartate) O-methyltransferase	PCMT1	695893
Proteolipid protein 2 (colonic epithelium-enriched)	PLP2	712869
Protocadherin beta 4	PCDHB4	700373
Pterin-4 alpha-carbinolamine dehydratase/dimerization cofactor of hepatocyte nuclear factor 1 alpha	PCBD1	709875
Pumilio RNA binding family member 1	PUM1	704848
Pumilio RNA binding family member 2	PUM2	701782
Purinergic receptor P2Y, G-protein coupled, 11	P2RY11	100533473
PWP2 periodic tryptophan protein homolog (yeast)	PWP2	722216
PYD and CARD domain containing	PYCARD	713563
PYM homolog 1, exon junction complex associated factor	PYM1	708148
Pyridine nucleotide-disulphide oxidoreductase domain 2	PYROXD2	707797
Pyruvate carboxylase	PC	713103
Pyruvate dehydrogenase (lipoamide) alpha 1	PDHA1	100423990
Pyruvate dehydrogenase (lipoamide) beta	PDHB	574227
Pyruvate dehydrogenase kinase, isozyme 2	PDK2	704169
Pyruvate dehydrogenase phosphatase regulatory subunit	PDPR	709861
Quiescin sulfhydryl oxidase 1	QSOX1	718589
R3H domain and coiled-coil containing 1 like	R3HCC1L	707600
Rab geranylgeranyltransferase, beta subunit	RABGGTB	705421
Rab interacting lysosomal protein-like 2	RILPL2	704853
RAB, member of RAS oncogene family-like 2B	RABL2B	716615
RAB11 family interacting protein 4 (class II)	RAB11FIP4	717629
RAB11A, member RAS oncogene family	RAB11A	714144
RAB13, member RAS oncogene family	RAB13	716156
RAB14, member RAS oncogene family	RAB14	699837
RAB23, member RAS oncogene family	RAB23	712860
RAB25, member RAS oncogene family	RAB25	718131
RAB28, member RAS oncogene family	RAB28	713566
RAB2A, member RAS oncogene family	RAB2A	699383
RAB3 gtpase activating non-catalytic protein subunit 2	RAB3GAP2	706252
RAB30, member RAS oncogene family	RAB30	701550
RAB32, member RAS oncogene family	RAB32	702431
RAB35, member RAS oncogene family	RAB35	698400
RAB3A interacting protein	RAB3IP	717215
RAB3D, member RAS oncogene family	RAB3D	714222
RAB5B, member RAS oncogene family	RAB5B	708347
RAB5C, member RAS oncogene family	RAB5C	709308
RAB6A, member RAS oncogene family	RAB6A	718717
RAB8B, member RAS oncogene family	RAB8B	705597

RAB9A, member RAS oncogene family	RAB9A	720906
Rabphilin 3A-like (without C2 domains)	RPH3AL	106993852
RAD17 checkpoint clamp loader component	RAD17	700116
RAD50 interactor 1	RINT1	698414
RAD51 paralog C	RAD51C	714828
RAD9 checkpoint clamp component A	RAD9A	712345
RAD9-HUS1-RAD1 interacting nuclear orphan 1	RHNO1	709008
Radical S-adenosyl methionine domain containing 1	RSAD1	705626
Radixin	RDX	709018
Raf-1 proto-oncogene, serine/threonine kinase	RAF1	694725
Raftlin family member 2	RFTN2	697562
Raftlin, lipid raft linker 1	RFTN1	695142
Ral GEF with PH domain and SH3 binding motif 1	RALGPS1	708253
Ral gtpase activating protein, alpha subunit 1 (catalytic)	RALGAPA1	695674
Ral gtpase activating protein, beta subunit (non-catalytic)	RALGAPB	705742
Ral guanine nucleotide dissociation stimulator-like 1	RGL1	717554
RALY heterogeneous nuclear ribonucleoprotein	RALY	713317
RAN binding protein 10	RANBP10	700911
RAN binding protein 2	RANBP2	694823
Ran gtpase activating protein 1	RANGAP1	710698
RAN guanine nucleotide release factor	RANGRF	717206
RAN, member RAS oncogene family	RAN	709200
Ranbp-type and C3HC4-type zinc finger containing 1	RBCK1	714692
Rap guanine nucleotide exchange factor 2	RAPGEF2	704717
Rap guanine nucleotide exchange factor 2	RAPGEF2	704717
RAP1, GTP-GDP dissociation stimulator 1	RAP1GDS1	706303
RAP2A, member of RAS oncogene family	RAP2A	697215
Ras and Rab interactor 1	RIN1	714321
Ras and Rab interactor 2	RIN2	702775
Ras and Rab interactor 3	RIN3	698125
Ras homolog family member A	RHOA	706455
Ras homolog family member C	RHOC	706034
Ras homolog family member J	RHOJ	705603
RAS p21 protein activator (gtpase activating protein) 1	RASA1	694085
RAS, dexamethasone-induced 1	RASD1	698839
RAS-like family 10 member A	RASL10A	714587
Ras-like without CAAX 1	RIT1	717985
Ras-related C3 botulinum toxin substrate 2 (rho family, small GTP binding protein Rac2)	RAC2	696709
Ras-related GTP binding A	RRAGA	100430225
Ras-related GTP binding C	RRAGC	715549
RB1 inducible coiled-coil 1	RB1CC1	710330
RBPJ interacting and tubulin associated 1	RITA1	712837
Rearranged L-myc fusion	RLF	693503
Receptor (chemosensory) transporter protein 3	RTP3	713050
Receptor interacting serine/threonine kinase 3	RIPK3	716138
Receptor interacting serine/threonine kinase 4	RIPK4	715077
Receptor tyrosine kinase-like orphan receptor 2	ROR2	715482

Recq helicase-like	RECQL	705871
Regucalcin	RGN	705733
Regulation of nuclear pre-mrna domain containing 1A	RPRD1A	709217
Regulator of calcineurin 1	RCAN1	697108
Regulator of cell cycle	RGCC	698962
Regulator of chromosome condensation (RCC1) and BTB (POZ) domain containing protein 1	RCBTB1	706627
Regulator of G-protein signaling 10	RGS10	703125
Regulator of microtubule dynamics 1	RMDN1	694237
Regulatory factor X associated ankyrin containing protein	RFXANK	719706
Related RAS viral (r-ras) oncogene homolog 2	RRAS2	699700
Relaxin/insulin-like family peptide receptor 4	RXFP4	718025
REM2 and RAB-like small gtpase 1	RSG1	697922
Replication protein A1	RPA1	721272
Replication protein A2	RPA2	716612
Replication protein A3	RPA3	696248
Replication timing regulatory factor 1	RIF1	694817
Required for meiotic nuclear division 5 homolog B	RMND5B	701840
Resistin	RETN	708781
Ret proto-oncogene	RET	703466
Reticulon 4	RTN4	619181
Retinoblastoma binding protein 4	RBBP4	708710
Retinoblastoma binding protein 8	RBBP8	677718
Retinoic acid induced 14	RAI14	698620
Retinoic acid induced 2	RAI2	693329
Retinol dehydrogenase 5 (11-cis/9-cis)	RDH5	709644
Reversion-inducing-cysteine-rich protein with kazal motifs	RECK	694043
RFT1 homolog	RFT1	694586
Rh family, C glycoprotein	RHCG	664731
Rho family gtpase 3	RND3	694168
Rho GDP dissociation inhibitor (GDI) beta	ARHGDIB	702320
Rho gtpase activating protein 10	ARHGAP10	708458
Rho gtpase activating protein 12	ARHGAP12	696402
Rho gtpase activating protein 18	ARHGAP18	711107
Rho gtpase activating protein 30	ARHGAP30	718236
Rho gtpase activating protein 9	ARHGAP9	711684
Rho guanine nucleotide exchange factor (GEF) 3	ARHGEF3	704764
Rho guanine nucleotide exchange factor 1	ARHGEF1	722198
Rho guanine nucleotide exchange factor 10	ARHGEF10	722745
Rho guanine nucleotide exchange factor 5	ARHGEF5	705891
Rho/Rac guanine nucleotide exchange factor 2	ARHGEF2	719369
Rhomboid 5 homolog 2 (Drosophila)	RHBDF2	707033
Rhomboid domain containing 1	RHBDD1	707982
Rhomboid domain containing 3	RHBDD3	714479
Rho-related BTB domain containing 1	RHOBTB1	699132
Rhotekin	RTKN	708722
Ribonuclease H2 subunit B	RNASEH2B	707995
Ribonuclease P/MRP 14kda subunit	RPP14	706788

Ribonuclease P/MRP 21kda subunit	RPP21	713056
Ribonuclease P/MRP 30kda subunit	RPP30	696537
Ribonuclease P/MRP 40kda subunit	RPP40	710505
Ribonuclease T2	RNASET2	706533
Ribonuclease, rnase A family, 4	RNASE4	703903
Ribonuclease, rnase A family, 9 (non-active)	RNASE9	703346
Ribonuclease/angiogenin inhibitor 1	RNH1	720791
Ribonucleoprotein, PTB-binding 1	RAVER1	715250
Ribonucleotide reductase M1	RRM1	717990
Ribonucleotide reductase M2	RRM2	703138
Ribophorin I	RPN1	705437
Ribophorin II	RPN2	708971
Ribosomal modification protein rimk-like family member A	RIMKLA	699767
Ribosomal protein l10a	RPL10A	718783
Ribosomal protein L17	RPL17	698967
Ribosomal protein L22	RPL22	703050
Ribosomal protein L23	RPL23	694719
Ribosomal protein l23a	RPL23A	710490
Ribosomal protein L24	RPL24	702381
Ribosomal protein L26 like 1	RPL26L1	703230
Ribosomal protein L27	RPL27	712352
Ribosomal protein L29	RPL29	698602
Ribosomal protein L3 like	RPL3L	693424
Ribosomal protein L4	RPL4	710590
Ribosomal protein l7a	RPL7A	722215
Ribosomal protein L8	RPL8	708535
Ribosomal protein S10	RPS10	718606
Ribosomal protein S13	RPS13	697513
Ribosomal protein S14	RPS14	710901
Ribosomal protein S15	RPS15	707241
Ribosomal protein S16	RPS16	697219
Ribosomal protein S17-like	RPS17L	100425105
Ribosomal protein S2	RPS2	693615
Ribosomal protein S27	RPS27	106992521
Ribosomal protein S27 like	RPS27L	705483
Ribosomal protein s27a	RPS27A	718909
Ribosomal protein S28	RPS28	707133
Ribosomal protein S4, X-linked	RPS4X	699397
Ribosomal protein S4, X-linked	RPS4X	699397
Ribosomal protein S5	RPS5	711259
Ribosomal protein S6 kinase, 90kda, polypeptide 1	RPS6KA1	714794
Ribosomal protein S6 kinase, 90kda, polypeptide 4	RPS6KA4	717574
Ribosomal protein S7	RPS7	721900
Ribosomal protein S8	RPS8	703957
Ribosomal protein S9	RPS9	694053
Ribosomal protein, large, P0	RPLP0	574363
Ribosomal protein, large, P1	RPLP1	695442
Ribosomal protein, large, P2	RPLP2	700698

Ribosomal RNA adenine dimethylase domain containing 1	RRNAD1	718599
Ribosomal RNA processing 8, methyltransferase, homolog (yeast)	RRP8	712011
Ribosomal RNA processing 9, small subunit (SSU) processome component, homolog (yeast)	RRP9	699421
Ribosome production factor 1 homolog	RPF1	710286
Ribosome production factor 2 homolog	RPF2	696378
Ring finger and WD repeat domain 2, E3 ubiquitin protein ligase	RFWD2	708802
Ring finger protein 112	RNF112	703312
Ring finger protein 121	RNF121	718216
Ring finger protein 14	RNF14	705363
Ring finger protein 149	RNF149	710926
Ring finger protein 185	RNF185	718351
Ring finger protein 20	RNF20	713614
Ring finger protein 208	RNF208	705563
Ring finger protein 217	RNF217	716647
Ring finger protein 219	RNF219	697577
Ring finger protein 26	RNF26	704755
Ring finger protein 38	RNF38	693346
Ring finger protein 40, E3 ubiquitin protein ligase	RNF40	713148
Ring finger protein 41, E3 ubiquitin protein ligase	RNF41	711969
Ring finger protein 5, E3 ubiquitin protein ligase	RNF5	717234
Ring finger protein, transmembrane 1	RNFT1	712052
RIO kinase 2	RIOK2	700738
RNA 2',3'-cyclic phosphate and 5'-OH ligase	RTCB	717258
RNA binding motif (RNP1, RRM) protein 3	RBM3	710689
RNA binding motif protein 15	RBM15	701414
RNA binding motif protein 17	RBM17	712996
RNA binding motif protein 18	RBM18	698457
RNA binding motif protein 19	RBM19	715724
RNA binding motif protein 22	RBM22	712713
RNA binding motif protein 39	RBM39	704198
RNA binding motif protein 41	RBM41	701761
RNA binding motif protein 42	RBM42	709852
RNA binding motif protein 45	RBM45	702714
RNA binding motif protein 5	RBM5	704114
RNA binding motif protein 7	RBM7	695401
RNA binding motif protein, X-linked 2	RBMX2	703472
RNA binding motif, single stranded interacting protein 1	RBMS1	703608
RNA binding motif, single stranded interacting protein 2	RBMS2	713163
RNA binding protein, fox-1 homolog (C. Elegans) 2	RBFOX2	693642
RNA exonuclease 2	REXO2	695292
RNA polymerase II associated protein 3	RPAP3	703749
RNA pseudouridylate synthase domain containing 3	RPUSD3	700349
Rotatin	RTTN	703989
RPTOR independent companion of MTOR, complex 2	RICTOR	694915
RRN3 homolog, RNA polymerase I transcription factor	RRN3	713500
Ruvb-like AAA ATPase 2	RUVBL2	100428794
RWD domain containing 3	RWDD3	709817

RWD domain containing 4	RWDD4	708882
SAC1 suppressor of actin mutations 1-like (yeast)	SACM1L	714107
SAMM50 sorting and assembly machinery component	SAMM50	715675
SAP30 binding protein	SAP30BP	703077
Sarcoglycan epsilon	SGCE	700104
Sarcoglycan zeta	SGCZ	100430474
Sarcolemma associated protein	SLMAP	703086
Schlafen like 1	SLFNL1	695605
Scm-like with four mbt domains 1	SFMBT1	694961
SCY1-like, kinase-like 2	SCYL2	695284
SCY1-like, kinase-like 3	SCYL3	701768
SEC11 homolog A, signal peptidase complex subunit	SEC11A	695951
SEC14 and spectrin domain containing 1	SESTD1	703755
SEC14-like lipid binding 1	SEC14L1	708394
SEC22 homolog A, vesicle trafficking protein	SEC22A	715277
SEC22 homolog C, vesicle trafficking protein	SEC22C	716351
Sec23 homolog A, COPII coat complex component	SEC23A	698500
Sec23 homolog B, COPII coat complex component	SEC23B	698440
SEC23 interacting protein	SEC23IP	704155
SEC24 homolog A, COPII coat complex component	SEC24A	711109
SEC24 homolog C, COPII coat complex component	SEC24C	714688
SEC24 homolog D, COPII coat complex component	SEC24D	707521
SEC31 homolog A, COPII coat complex component	SEC31A	693687
Sec61 translocon alpha 1 subunit	SEC61A1	709787
Sec61 translocon alpha 2 subunit	SEC61A2	100427731
Sec61 translocon beta subunit	SEC61B	717815
Sec61 translocon gamma subunit	SEC61G	716898
SECIS binding protein 2	SECISBP2	697442
SECIS binding protein 2-like	SECISBP2L	714764
Secreted frizzled-related protein 1	SFRP1	702876
Secretion associated, Ras related gtpase 1A	SAR1A	711277
Secretory carrier membrane protein 2	SCAMP2	709720
Sedoheptulokinase	SHPK	721465
Selenophosphate synthetase 1	SEPHS1	696038
Selenoprotein K	SELK	693421
Selenoprotein M	SELM	718290
Selenoprotein O	SELO	715604
Selenoprotein W, 1	SEPW1	718370
Sema domain, immunoglobulin domain (Ig), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 4D	SEMA4D	697697
Sepiapterin reductase (7,8-dihydrobiopterin:NADP+ oxidoreductase)	SPR	705317
Serglycin	SRGN	712299
Serine carboxypeptidase 1	SCPEP1	708197
Serine incorporator 1	SERINC1	713999
Serine incorporator 2	SERINC2	705303
Serine palmitoyltransferase small subunit A	SPTSSA	717580
Serine/arginine repetitive matrix 1	SRRM1	712258

Serine/arginine-rich splicing factor 1	SRSF1	713958
Serine/arginine-rich splicing factor 11	SRSF11	702698
Serine/arginine-rich splicing factor 12	SRSF12	700497
Serine/arginine-rich splicing factor 3	SRSF3	719123
Serine/arginine-rich splicing factor 4	SRSF4	717401
Serine/arginine-rich splicing factor 7	SRSF7	713388
Serine/arginine-rich splicing factor 8	SRSF8	699079
Serine/threonine kinase 11 interacting protein	STK11IP	704531
Serine/threonine kinase 24	STK24	697841
Serine/threonine kinase 25	STK25	701297
Serine/threonine kinase 3	STK3	707425
Serine/threonine kinase 31	STK31	703886
Serine/threonine kinase 36	STK36	699940
Serine/threonine kinase 38	STK38	719169
Serologically defined colon cancer antigen 3	SDCCAG3	721750
Serpin peptidase inhibitor, clade B (ovalbumin), member 7	SERPINB7	701671
Serpin peptidase inhibitor, clade G (C1 inhibitor), member 1	SERPING1	703928
Serpin peptidase inhibitor, clade I (neuroserpin), member 1	SERPINI1	699483
Serrate, RNA effector molecule	SRRT	713235
Serum amyloid A like 1	SAAL1	695747
Serum/glucocorticoid regulated kinase 1	SGK1	713082
Sestrin 2	SESN2	716904
Sestrin 3	SESN3	699329
SET and MYND domain containing 2	SMYD2	709375
SET domain containing (lysine methyltransferase) 7	SETD7	700426
SET domain containing 2	SETD2	711825
SET domain containing 4	SETD4	696003
SET domain containing 5	SETD5	704174
SET domain, bifurcated 1	SETDB1	716141
Sex comb on midleg homolog 1 (Drosophila)	SCMH1	695722
Sex comb on midleg-like 1 (Drosophila)	SCML1	714239
SFI1 centrin binding protein	SFI1	716833
SFT2 domain containing 3	SFT2D3	699830
SGT1 homolog, MIS12 kinetochore complex assembly cochaperone	SUGT1	694046
SH2 domain containing 3C	SH2D3C	699706
SH2 domain containing 3C	SH2D3C	699706
SH2B adaptor protein 2	SH2B2	714861
SH3 and cysteine rich domain	STAC	707350
SH3 domain containing ring finger 1	SH3RF1	694082
SH3-domain binding protein 4	SH3BP4	693393
SH3-domain GRB2-like endophilin B1	SH3GLB1	712393
SH3-domain GRB2-like endophilin B2	SH3GLB2	716994
SHANK associated RH domain interactor	SHARPIN	713534
SHC (Src homology 2 domain containing) transforming protein 1	SHC1	718982
SHOC2 leucine-rich repeat scaffold protein	SHOC2	695572
Siah E3 ubiquitin protein ligase 1	SIAH1	716629
Siah E3 ubiquitin protein ligase 1	SIAH1	716629
Sideroflexin 4	SFXN4	702765

Sideroflexin 4	SFXN4	702765
Sigma non-opioid intracellular receptor 1	SIGMAR1	700469
Signal peptidase complex subunit 1	SPCS1	696426
Signal peptidase complex subunit 2	SPCS2	694179
Signal peptide peptidase like 3	SPPL3	700898
Signal peptide, CUB domain, EGF-like 2	SCUBE2	708152
Signal recognition particle 68kda	SRP68	705568
Signal sequence receptor, alpha	SSR1	693818
Signal sequence receptor, beta (translocon-associated protein beta)	SSR2	719383
Signal sequence receptor, delta	SSR4	697266
Signal transducer and activator of transcription 1	STAT1	693650
Signal transducer and activator of transcription 4	STAT4	693854
Signal transducer and activator of transcription 5A	STAT5A	574129
Sin3A associated protein 25kda	SAP25	106997575
Sin3A associated protein 30kda	SAP30	696519
Single stranded DNA binding protein 4	SSBP4	719496
Single-pass membrane protein with coiled-coil domains 4	SMCO4	695982
Single-stranded DNA binding protein 1, mitochondrial	SSBP1	694459
Sirtuin 4	SIRT4	720498
Sirtuin 7	SIRT7	715069
SIVA1, apoptosis-inducing factor	SIVA1	706688
SIX homeobox 5	SIX5	715373
SKI-like proto-oncogene	SKIL	696680
Slingshot protein phosphatase 2	SSH2	711898
SLIT and NTRK like family member 1	SLITRK1	699217
SLU7 homolog, splicing factor	SLU7	696023
SLX1 homolog A, structure-specific endonuclease subunit	SLX1A	709225
SMAD family member 1	SMAD1	574340
Smad nuclear interacting protein 1	SNIP1	713733
Small arfgap2	SMAP2	694502
Small integral membrane protein 13	SMIM13	703387
Small integral membrane protein 15	SMIM15	693623
Small integral membrane protein 15	SMIM15	693623
Small integral membrane protein 19	SMIM19	705371
Small nuclear ribonucleoprotein D1 polypeptide	SNRPD1	698965
Small nuclear ribonucleoprotein D2 polypeptide	SNRPD2	715183
Small nuclear ribonucleoprotein polypeptide A	SNRPA	702730
Small nuclear ribonucleoprotein polypeptide B	SNRPB2	695387
Small nuclear ribonucleoprotein polypeptide G	SNRPG	702586
Small nuclear ribonucleoprotein polypeptides B and B1	SNRPB	716578
Small nuclear ribonucleoprotein, U1 70kda subunit	SNRNP70	719090
Small nuclear ribonucleoprotein, U11/U12 35kda subunit	SNRNP35	702933
Small nuclear ribonucleoprotein, U11/U12 35kda subunit	SNRNP35	702933
Small nuclear ribonucleoprotein, U11/U12 35kda subunit	SNRNP35	702933
Small nuclear ribonucleoprotein, U4/U6.U5 27kda subunit	SNRNP27	708670
Small ubiquitin-like modifier 1	SUMO1	703644
Small ubiquitin-like modifier 1	SUMO1	703644
Small ubiquitin-like modifier 2	SUMO2	705512

Small vasohibin binding protein	SVBP	698308
SMG5 nonsense mediated mrna decay factor	SMG5	719446
SMG7 nonsense mediated mrna decay factor	SMG7	717603
SMG8 nonsense mediated mrna decay factor	SMG8	711172
Smu-1 suppressor of mec-8 and unc-52 homolog (C. Elegans)	SMU1	703656
SMYD family member 5	SMYD5	705926
SNAP-associated protein	SNAPIN	715546
SNF related kinase	SNRK	715803
SNRPN upstream reading frame	SNURF	711028
Sodium channel modifier 1	SCNM1	709922
Sodium channel, non voltage gated 1 beta subunit	SCNN1B	700093
Sodium channel, voltage gated, type X alpha subunit	SCN10A	694962
Solute carrier family 10 member 3	SLC10A3	700759
Solute carrier family 12 (sodium/potassium/chloride transporter), member 2	SLC12A2	704672
Solute carrier family 18, subfamily B, member 1	SLC18B1	708518
Solute carrier family 2 (facilitated glucose transporter), member 2	SLC2A2	695538
Solute carrier family 20 (phosphate transporter), member 1	SLC20A1	699462
Solute carrier family 20 (phosphate transporter), member 2	SLC20A2	705242
Solute carrier family 22 (organic anion/urate transporter), member 12	SLC22A12	717530
Solute carrier family 22 (organic cation/carnitine transporter), member 5	SLC22A5	707590
Solute carrier family 22 member 14	SLC22A14	696120
Solute carrier family 22 member 15	SLC22A15	710102
Solute carrier family 22 member 17	SLC22A17	713765
Solute carrier family 25 (aspartate/glutamate carrier), member 12	SLC25A12	695173
Solute carrier family 25 (carnitine/acylcarnitine translocase), member 20	SLC25A20	709029
Solute carrier family 25 (mitochondrial carrier, brain), member 14	SLC25A14	703255
Solute carrier family 25 (mitochondrial carrier; adenine nucleotide translocator), member 5	SLC25A5	693502
Solute carrier family 25 (mitochondrial carrier; citrate transporter), member 1	SLC25A1	719075
Solute carrier family 25 (mitochondrial carrier; ornithine transporter) member 2	SLC25A2	701587
Solute carrier family 25 (mitochondrial carrier; oxoglutarate carrier), member 11	SLC25A11	710569
Solute carrier family 25 (mitochondrial carrier; phosphate carrier), member 24	SLC25A24	694803
Solute carrier family 25 (mitochondrial carrier; phosphate carrier), member 24	SLC25A24	694803
Solute carrier family 25 (mitochondrial carrier; phosphate carrier), member 25	SLC25A25	698216
Solute carrier family 25 (mitochondrial iron transporter), member 37	SLC25A37	710518
Solute carrier family 25 (pyrimidine nucleotide carrier), member 33	SLC25A33	722285
Solute carrier family 25 (S-adenosylmethionine carrier), member 26	SLC25A26	697960
Solute carrier family 25 member 46	SLC25A46	705968

Solute carrier family 26 (anion exchanger), member 8	SLC26A8	719049
Solute carrier family 29 (equilibrative nucleoside transporter), member 1	SLC29A1	703031
Solute carrier family 30 (zinc transporter), member 5	SLC30A5	699371
Solute carrier family 30 (zinc transporter), member 8	SLC30A8	701127
Solute carrier family 34 (type II sodium/phosphate cotransporter), member 2	SLC34A2	694217
Solute carrier family 35 (adenosine 3'-phospho 5'-phosphosulfate transporter), member B3	SLC35B3	698416
Solute carrier family 35 (UDP-galactose transporter), member A2	SLC35A2	711587
Solute carrier family 35 (UDP-glca/UDP-galnac transporter), member D1	SLC35D1	700175
Solute carrier family 35 member A5	SLC35A5	708401
Solute carrier family 35 member B1	SLC35B1	699953
Solute carrier family 35 member E1	SLC35E1	719559
Solute carrier family 37 (glucose-6-phosphate transporter), member 2	SLC37A2	712841
Solute carrier family 38 member 1	SLC38A1	702135
Solute carrier family 38 member 5	SLC38A5	710156
Solute carrier family 38 member 6	SLC38A6	704017
Solute carrier family 38 member 9	SLC38A9	706752
Solute carrier family 39 (zinc transporter), member 13	SLC39A13	713420
Solute carrier family 39 (zinc transporter), member 3	SLC39A3	711564
Solute carrier family 39 (zinc transporter), member 8	SLC39A8	710142
Solute carrier family 4 (anion exchanger), member 1 (Diego blood group)	SLC4A1	100427618
Solute carrier family 4 (anion exchanger), member 1, adaptor protein	SLC4A1AP	701783
Solute carrier family 4 (anion exchanger), member 2	SLC4A2	713966
Solute carrier family 4, sodium bicarbonate cotransporter, member 7	SLC4A7	701925
Solute carrier family 4, sodium borate transporter, member 11	SLC4A11	718393
Solute carrier family 41 member 3	SLC41A3	716921
Solute carrier family 41 member 3	SLC41A3	716921
Solute carrier family 44 member 3	SLC44A3	714768
Solute carrier family 44 member 4	SLC44A4	715779
Solute carrier family 44 member 4	SLC44A4	715779
Solute carrier family 5 (sodium/glucose cotransporter), member 1	SLC5A1	717070
Solute carrier family 5 (sodium/multivitamin and iodide cotransporter), member 6	SLC5A6	699074
Solute carrier family 50 (sugar efflux transporter), member 1	SLC50A1	717424
Solute carrier family 6 (neurotransmitter transporter), member 2	SLC6A2	613238
Solute carrier family 6 (neurotransmitter transporter), member 7	SLC6A7	711915
Solute carrier family 7 (anionic amino acid transporter), member 13	SLC7A13	693964
Solute carrier family 9, subfamily A (NHE6, cation proton antiporter 6), member 6	SLC9A6	710429
Solute carrier family 9, subfamily A (NHE9, cation proton antiporter 9), member 9	SLC9A9	713935
Solute carrier organic anion transporter family member 1C1	SLCO1C1	704740
Solute carrier organic anion transporter family member 2B1	SLCO2B1	694829

SON DNA binding protein	SON	704712
Sonic hedgehog	SHH	716553
Sorbin and SH3 domain containing 3	SORBS3	716198
Sorting nexin 1	SNX1	706544
Sorting nexin 12	SNX12	696408
Sorting nexin 13	SNX13	714019
Sorting nexin 17	SNX17	701614
Sorting nexin 2	SNX2	700507
Sorting nexin 22	SNX22	706850
Sorting nexin 33	SNX33	706309
Sorting nexin 4	SNX4	716049
SOS Ras/Rho guanine nucleotide exchange factor 2	SOS2	705601
SOS Ras/Rho guanine nucleotide exchange factor 2	SOS2	705601
SP110 nuclear body protein	SP110	714244
Sp2 transcription factor	SP2	694834
Sp3 transcription factor	SP3	699901
Sp4 transcription factor	SP4	712174
SPARC like 1	SPARCL1	701468
SPARC related modular calcium binding 1	SMOC1	712994
Spastic paraplegia 11 (autosomal recessive)	SPG11	712221
Spastic paraplegia 21 (autosomal recessive, Mast syndrome)	SPG21	712815
Spectrin repeat containing, nuclear envelope family member 4	SYNE4	711904
Spectrin, alpha, non-erythrocytic 1	SPTAN1	722610
Spectrin, beta, non-erythrocytic 1	SPTBN1	716794
Spen family transcriptional repressor	SPEN	696205
Sperm antigen with calponin homology and coiled-coil domains 1-like	SPECC1L	707641
Sperm associated antigen 1	SPAG1	705012
Sperm associated antigen 9	SPAG9	707613
Spermatid perinuclear RNA binding protein	STRBP	695402
Spermatogenesis associated 19	SPATA19	693524
Spermatogenesis associated 20	SPATA20	703313
Spermatogenesis associated 25	SPATA25	709097
Spermatogenesis associated 4	SPATA4	641336
Spermatogenesis associated 5-like 1	SPATA5L1	713376
Spermatogenesis associated 6	SPATA6	710827
Spermatogenesis associated 7	SPATA7	693836
Spermatogenesis associated 9	SPATA9	698748
Spermatogenesis associated, serine rich 2 like	SPATS2L	699458
Spermidine synthase	SRM	714028
Spermidine/spermine N1-acetyltransferase 1	SAT1	697884
Spermidine/spermine N1-acetyltransferase family member 2	SAT2	716044
S-phase kinase-associated protein 1	SKP1	100423634
Sphingomyelin phosphodiesterase 1	SMPD1	711248
Sphingomyelin phosphodiesterase 2	SMPD2	698865
Sphingosine-1-phosphate receptor 4	S1PR4	712637
Spindle and kinetochore associated complex subunit 2	SKA2	711092
Splicing factor 3b subunit 3	SF3B3	708939

Splicing factor 3b subunit 6	SF3B6	704090
Splicing factor 3b, subunit 1, 155kda	SF3B1	697773
Splicing factor 3b, subunit 4, 49kda	SF3B4	705655
Split hand/foot malformation (ectrodactyly) type 1	SHFM1	698349
Sprouty RTK signaling antagonist 1	SPRY1	708752
SPT16 homolog, facilitates chromatin remodeling subunit	SUPT16H	708066
SPT4 homolog, DSIF elongation factor subunit	SUPT4H1	710214
SPT5 homolog, DSIF elongation factor subunit	SUPT5H	697337
Squamous cell carcinoma antigen recognized by T-cells 3	SART3	705552
Src-related kinase lacking C-terminal regulatory tyrosine and N-terminal myristylation sites	SRMS	719587
SRSF protein kinase 1	SRPK1	719039
SRSF protein kinase 2	SRPK2	697351
SRY-box 13	SOX13	700802
SRY-box 17	SOX17	694097
SSU72 homolog, RNA polymerase II CTD phosphatase	SSU72	702348
ST3 beta-galactoside alpha-2,3-sialyltransferase 4	ST3GAL4	717792
ST3 beta-galactoside alpha-2,3-sialyltransferase 5	ST3GAL5	696842
ST6 (alpha-N-acetyl-neuraminyl-2,3-beta-galactosyl-1,3)-N-acetylgalactosaminide alpha-2,6-sialyltransferase 2	ST6GALNAC2	707237
STAM binding protein	STAMPB	714562
Stannin	SNN	711909
Staphylococcal nuclease and tudor domain containing 1	SND1	699542
Star related lipid transfer domain containing 13	STARD13	714104
Star related lipid transfer domain containing 3	STARD3	697212
Star related lipid transfer domain containing 5	STARD5	713308
STARD3 N-terminal like	STARD3NL	705212
Staufen double-stranded RNA binding protein 1	STAU1	704197
STE20-related kinase adaptor alpha	STRADA	717927
STE20-related kinase adaptor beta	STRADB	641449
Sterile alpha motif domain containing 4A	SAMD4A	695336
Steroid receptor RNA activator 1	SRA1	698169
Sterol regulatory element binding transcription factor 1	SREBF1	706972
STIP1 homology and U-box containing protein 1, E3 ubiquitin protein ligase	STUB1	697105
Stomatin like 2	STOML2	698458
Storkhead box 2	STOX2	693692
Strawberry notch homolog 2 (Drosophila)	SBNO2	721186
Stress induced phosphoprotein 1	STIP1	717926
Striatin	STRN	708491
Striatin interacting protein 1	STRIP1	700799
Stromal cell-derived factor 2	SDF2	716189
Stromal interaction molecule 1	STIM1	717963
Structural maintenance of chromosomes 4	SMC4	702615
Structure specific recognition protein 1	SSRP1	706614
STT3A, subunit of the oligosaccharyltransferase complex (catalytic)	STT3A	717056
SUB1 homolog, transcriptional regulator	SUB1	701045
Succinate dehydrogenase complex assembly factor 2	SDHAF2	693401

Succinate dehydrogenase complex subunit A, flavoprotein (Fp)	SDHA	708018
Succinate dehydrogenase complex subunit B, iron sulfur (Ip)	SDHB	699810
Succinate dehydrogenase complex, subunit D, integral membrane protein	SDHD	711326
Succinate-coa ligase, GDP-forming, beta subunit	SUCLG2	697454
Sulfide quinone reductase-like (yeast)	SQRDL	713699
Sulfiredoxin 1	SRXN1	714997
SUMO1/sentrin specific peptidase 5	SENP5	710223
SUN domain containing ossification factor	SUCO	705776
Superkiller viralicidic activity 2-like 2 (S. Cerevisiae)	SKIV2L2	706419
Superoxide dismutase 1, soluble	SOD1	574096
Supervillin	SVIL	695267
Suppression of tumorigenicity 13 (colon carcinoma) (Hsp70 interacting protein)	ST13	705664
Suppression of tumorigenicity 13 (colon carcinoma) (Hsp70 interacting protein)	ST13	705664
Suppression of tumorigenicity 14	ST14	718848
Suppression of tumorigenicity 7 like	ST7L	705541
Suppressor of cytokine signaling 7	SOCS7	693737
Suppressor of fused homolog (Drosophila)	SUFU	713576
SURP and G-patch domain containing 1	SUGP1	719772
SURP and G-patch domain containing 2	SUGP2	719666
Survival motor neuron domain containing 1	SMNDC1	694761
Survival of motor neuron 1, telomeric	SMN1	677703
Sushi domain containing 6	SUSD6	712719
SWAP switching B-cell complex 70kda subunit	SWAP70	703651
SWAP switching B-cell complex 70kda subunit	SWAP70	703651
SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 2	SMARCA2	696973
SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 5	SMARCA5	700614
SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a-like 1	SMARCA1	695741
SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily b, member 1	SMARCB1	699190
SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily d, member 2	SMARCD2	717461
SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily e, member 1	SMARCE1	701310
SWT1, RNA endoribonuclease homolog	SWT1	714083
SYF2 pre-mrna-splicing factor	SYF2	719564
Synapsin III	SYN3	100430213
Synaptophysin-like 1	SYPL1	698350
Synaptosome associated protein 25kda	SNAP25	574204
Synaptotagmin 6	SYT6	708175
Synaptotagmin binding, cytoplasmic RNA interacting protein	SYNCRIP	696756
Synaptotagmin like 1	SYTL1	715833
Synaptotagmin like 2	SYTL2	703187

Synaptotagmin like 4	SYTL4	700889
Syndecan 1	SDC1	701544
Syndecan 2	SDC2	703841
Syndecan 4	SDC4	710914
Syndecan binding protein	SDCBP	698381
Synergisin, gamma	SYNRG	717750
Synovial sarcoma translocation gene on chromosome 18-like 2	SS18L2	716387
Syntaxin 12	STX12	716455
Syntrophin, beta 2 (dystrophin-associated protein A1, 59kda, basic component 2)	SNTB2	704333
Syntrophin, gamma 1	SNTG1	709244
Tafazzin	TAZ	574297
TAM41, mitochondrial translocator assembly and maintenance protein, homolog (S. Cerevisiae)	C3orf31	695998
TANK-binding kinase 1	TBK1	717427
Tankyrase 1 binding protein 1	TNKS1BP1	704825
Tankyrase, TRF1-interacting ankyrin-related ADP-ribose polymerase 2	TNKS2	698050
TAO kinase 2	TAOK2	707777
TAP binding protein-like	TAPBPL	712626
TAR (HIV-1) RNA binding protein 1	TARBP1	712397
TAR (HIV-1) RNA binding protein 2	TARBP2	703294
Target of myb1 membrane trafficking protein	TOM1	717499
TATA-box binding protein associated factor 12	TAF12	717135
TATA-box binding protein associated factor 2	TAF2	702411
TATA-box binding protein associated factor 5	TAF5	714558
TATA-box binding protein associated factor 5 like	TAF5L	693770
TATA-box binding protein associated factor 7	TAF7	574347
TATA-box binding protein associated factor 9	TAF9	700239
TATA-box binding protein associated factor, RNA polymerase I, D	TAF1D	696602
Tatd dnase domain containing 1	TATDN1	706095
Tax1 (human T-cell leukemia virus type I) binding protein 1	TAX1BP1	698103
Tax1 (human T-cell leukemia virus type I) binding protein 3	TAX1BP3	706829
TBC1 domain family member 10C	TBC1D10C	712270
TBC1 domain family member 25	TBC1D25	710596
TBC1 domain family member 4	TBC1D4	696915
TBC1 domain family member 9	TBC1D9	702230
TBK1 binding protein 1	TBKBP1	693913
T-box 21	TBX21	694044
TCDD-inducible poly(ADP-ribose) polymerase	TIPARP	706180
T-cell activation rhoGTPase activating protein	TAGAP	701690
T-cell leukemia/lymphoma 1B	TCL1B	703241
TCF3 (E2A) fusion partner (in childhood Leukemia)	TFPT	720296
Teashirt zinc finger homeobox 1	TSHZ1	703018
Tectonic family member 3	TCTN3	703844
TELO2 interacting protein 1	TTI1	699930
TELO2 interacting protein 2	TTI2	696776
Telomeric repeat binding factor 2, interacting protein	TERF2IP	712149

Teneurin transmembrane protein 1	TENM1	699897
TERF1 (TRF1)-interacting nuclear factor 2	TINF2	715812
Testis expressed 10	TEX10	714536
Testis expressed 26	TEX26	713363
Testis expressed 264	TEX264	700350
Testis expressed 30	TEX30	701917
Testis-specific kinase 1	TESK1	697206
Testis-specific kinase 2	TESK2	705907
Tetraspanin 1	TSPAN1	707431
Tetraspanin 15	TSPAN15	711675
Tetraspanin 18	TSPAN18	715506
Tetraspanin 3	TSPAN3	708428
Tetraspanin 32	TSPAN32	704862
Tetratricopeptide repeat domain 1	TTC1	695225
Tetratricopeptide repeat domain 13	TTC13	714027
Tetratricopeptide repeat domain 14	TTC14	710895
Tetratricopeptide repeat domain 16	TTC16	706784
Tetratricopeptide repeat domain 21A	TTC21A	694904
Tetratricopeptide repeat domain 23	TTC23	708530
Tetratricopeptide repeat domain 32	TTC32	700947
Tetratricopeptide repeat domain 7B	TTC7B	696029
Tetratricopeptide repeat, ankyrin repeat and coiled-coil containing 1	TANC1	699196
TGF-beta activated kinase 1/MAP3K7 binding protein 1	TAB1	703409
TGF-beta activated kinase 1/MAP3K7 binding protein 2	TAB2	696875
THAP domain containing 11	THAP11	700354
THAP domain containing 7	THAP7	696208
Thioredoxin	TXN	712587
Thioredoxin domain containing 12 (endoplasmic reticulum)	TXNDC12	712891
Thioredoxin domain containing 9	TXNDC9	709303
Thioredoxin like 1	TXNL1	695194
Thioredoxin like 4A	TXNL4A	698969
Thioredoxin reductase 1	TXNRD1	701062
Thioredoxin-related transmembrane protein 1	TMX1	707057
Thiosulfate sulfurtransferase (rhodanese)	TST	698021
THO complex 1	THOC1	697954
THO complex 3	THOC3	695561
THO complex 6	THOC6	700217
THUMP domain containing 2	THUMPD2	712045
Thy-1 cell surface antigen	THY1	705321
Thymidine phosphorylase	TYMP	716161
Thymocyte nuclear protein 1	THYN1	700413
Thymosin beta 4, X-linked	TMSB4X	710959
Thyroid hormone receptor associated protein 3	THRAP3	713033
Thyroid hormone receptor interactor 11	TRIP11	697489
Thyroid hormone receptor interactor 12	TRIP12	710560
Thyroid hormone receptor interactor 4	TRIP4	707263
TIMELESS interacting protein	TIPIN	710328
TLC domain containing 1	TLCD1	710391

TM2 domain containing 2	TM2D2	701007
TNF receptor associated factor 6	TRAF6	716907
TNF receptor associated factor 7	TRAF7	695415
TNF receptor-associated protein 1	TRAP1	706234
Topoisomerase (DNA) I	TOP1	697300
Topoisomerase (DNA) II beta	TOP2B	677709
Topoisomerase (DNA) II binding protein 1	TOPBP1	719054
Topoisomerase (DNA) III beta	TOP3B	698317
Torsin family 1, member A (torsin A)	TOR1A	722520
Torsin family 2, member A	TOR2A	700203
Torsin family 3, member A	TOR3A	717100
Trace amine associated receptor 6	TAAR6	709418
TRAF family member associated NFkB activator	TANK	700942
TRAF3 interacting protein 2	TRAF3IP2	697530
TRAF3 interacting protein 3	TRAF3IP3	712895
Trafficking protein particle complex 11	TRAPPC11	702066
Trafficking protein particle complex 4	TRAPPC4	702469
Trafficking protein, kinesin binding 2	TRAK2	701779
TRAF-type zinc finger domain containing 1	TRAFD1	711635
Trans-2,3-enoyl-coa reductase	TECR	718928
Transcription elongation factor A (SII), 2	TCEA2	694026
Transcription elongation factor A (SII)-like 1	TCEAL1	696826
Transcription elongation factor A (SII)-like 3	TCEAL3	696692
Transcription elongation factor A (SII)-like 4	TCEAL4	696453
Transcription elongation factor A (SII)-like 7	TCEAL7	695831
Transcription elongation factor A (SII)-like 8	TCEAL8	695496
Transcription elongation factor B (SIII), polypeptide 1 (15kda, elongin C)	TCEB1	698922
Transcription elongation regulator 1	TCERG1	707912
Transcription factor 15 (basic helix-loop-helix)	TCF15	716916
Transcription factor 4	TCF4	695814
Transcription factor 7-like 1 (T-cell specific, HMG-box)	TCF7L1	694560
Transcription factor A, mitochondrial	TFAM	701368
Transcription factor B1, mitochondrial	TFB1M	701830
Transcription factor binding to IGHM enhancer 3	TFE3	712161
Transcription factor CP2	TFCP2	574399
Transcription factor Dp family member 3	TFDP3	706557
Transcription factor EC	TFEC	704124
Transcriptional adaptor 3	TADA3	700090
Transducer of ERBB2, 1	TOB1	706873
Transducin (beta)-like 1 X-linked receptor 1	TBL1XR1	712740
Transducin (beta)-like 2	TBL2	716515
Transducin like enhancer of split 3	TLE3	698046
Transformer 2 alpha homolog (Drosophila)	TRA2A	574247
Transformer 2 beta homolog (Drosophila)	TRA2B	574337
Transforming growth factor beta 1 induced transcript 1	TGFB1I1	714172
Transforming growth factor beta 2	TGFB2	707540
Transforming growth factor beta regulator 4	TBRG4	697717

Transforming, acidic coiled-coil containing protein 3	TACC3	712898
Transient receptor potential cation channel, subfamily C, member 7	TRPC7	712863
Transient receptor potential cation channel, subfamily V, member 4	TRPV4	709605
Transketolase-like 1	TKTL1	699278
Translation machinery associated 7 homolog	TMA7	710220
Translational activator of mitochondrially encoded cytochrome c oxidase I	TACO1	717828
Translin-associated factor X interacting protein 1	TSNAXIP1	700095
Translocase of inner mitochondrial membrane 17 homolog A (yeast)	TIMM17A	707001
Translocase of inner mitochondrial membrane 17 homolog B (yeast)	TIMM17B	714895
Translocase of inner mitochondrial membrane 21 homolog (yeast)	TIMM21	694581
Translocase of inner mitochondrial membrane 23 homolog (yeast)	TIMM23	709594
Translocase of inner mitochondrial membrane 44 homolog (yeast)	TIMM44	709800
Translocase of inner mitochondrial membrane 8 homolog B (yeast)	TIMM8B	711249
Translocase of outer mitochondrial membrane 22 homolog (yeast)	TOMM22	701286
Translocase of outer mitochondrial membrane 70 homolog A (S. Cerevisiae)	TOMM70A	700347
Translocated promoter region, nuclear basket protein	TPR	713910
Transmembrane 4 L six family member 1	TM4SF1	711908
Transmembrane 4 L six family member 5	TM4SF5	709844
Transmembrane 9 superfamily member 1	TM9SF1	715472
Transmembrane 9 superfamily protein member 4	TM9SF4	712260
Transmembrane and coiled-coil domain family 1	TMCC1	702576
Transmembrane and coiled-coil domains 4	TMCO4	703851
Transmembrane BAX inhibitor motif containing 6	TMBIM6	677702
Transmembrane p24 trafficking protein 1	TMED1	713618
Transmembrane p24 trafficking protein 3	TMED3	711993
Transmembrane p24 trafficking protein 7	TMED7	100533189
Transmembrane phosphoinositide 3-phosphatase and tensin homolog 2	TPTE2	704870
Transmembrane protease, serine 13	TMPRSS13	698586
Transmembrane protein 104	TMEM104	698592
Transmembrane protein 106C	TMEM106C	704741
Transmembrane protein 11	TMEM11	704970
Transmembrane protein 115	TMEM115	702164
Transmembrane protein 121	TMEM121	700005
Transmembrane protein 123	TMEM123	702833
Transmembrane protein 126A	TMEM126A	702831
Transmembrane protein 126B	TMEM126B	702719
Transmembrane protein 135	TMEM135	704963
Transmembrane protein 138	TMEM138	693905
Transmembrane protein 145	TMEM145	709268
Transmembrane protein 14C	TMEM14C	697976
Transmembrane protein 150A	TMEM150A	696101
Transmembrane protein 160	TMEM160	716996
Transmembrane protein 163	TMEM163	709015
Transmembrane protein 165	TMEM165	696262
Transmembrane protein 167A	TMEM167A	712218

Transmembrane protein 168	TMEM168	702972
Transmembrane protein 179B	TMEM179B	718518
Transmembrane protein 183A	TMEM183A	704195
Transmembrane protein 185A	TMEM185A	705538
Transmembrane protein 199	TMEM199	708298
Transmembrane protein 203	TMEM203	706164
Transmembrane protein 204	TMEM204	701926
Transmembrane protein 205	TMEM205	714330
Transmembrane protein 208	TMEM208	697228
Transmembrane protein 216	TMEM216	693655
Transmembrane protein 218	TMEM218	100430362
Transmembrane protein 248	TMEM248	695654
Transmembrane protein 25	TMEM25	700466
Transmembrane protein 254	TMEM254	701130
Transmembrane protein 261	TMEM261	716818
Transmembrane protein 261	TMEM261	716818
Transmembrane protein 30A	TMEM30A	717907
Transmembrane protein 31	TMEM31	100429773
Transmembrane protein 39A	TMEM39A	712208
Transmembrane protein 39B	TMEM39B	706700
Transmembrane protein 42	TMEM42	714654
Transmembrane protein 44	TMEM44	708003
Transmembrane protein 45A	TMEM45A	700594
Transmembrane protein 5	TMEM5	717102
Transmembrane protein 50A	TMEM50A	100424313
Transmembrane protein 55A	TMEM55A	696779
Transmembrane protein 55B	TMEM55B	100428001
Transmembrane protein 57	TMEM57	654415
Transmembrane protein 60	TMEM60	693679
Transmembrane protein 62	TMEM62	709505
Transmembrane protein 94	TMEM94	702374
Transmembrane protein with EGF-like and two follistatin-like domains 1	TMEFF1	714325
Transmembrane protein, adipocyte associated 1	TPRA1	707221
Transporter 1, ATP-binding cassette, sub-family B (MDR/TAP)	TAP1	717726
Transportin 2	TNPO2	717710
Tribbles pseudokinase 3	TRIB3	714636
Trinucleotide repeat containing 6A	TNRC6A	701680
Triokinase/FMN cyclase	TKFC	694117
Tripartite motif containing 11	TRIM11	694150
Tripartite motif containing 24	TRIM24	710229
Tripartite motif containing 27	TRIM27	706129
Tripartite motif containing 32	TRIM32	702595
Tripartite motif containing 33	TRIM33	710600
Tripartite motif containing 37	TRIM37	710934
Tripartite motif containing 41	TRIM41	708426
Tripartite motif containing 46	TRIM46	717498
Tripartite motif containing 6	TRIM6	100428125

Tripartite motif containing 62	TRIM62	709927
Tripartite motif containing 8	TRIM8	713701
Tripartite motif family like 1	TRIML1	698114
TRK-fused gene	TFG	700972
Trna 5-methylaminomethyl-2-thiouridylate methyltransferase	TRMU	714268
Trna isopentenyltransferase 1	TRIT1	716422
Trna methyltransferase 1	TRMT1	718227
Trna methyltransferase 11 homolog	TRMT11	712712
Trna methyltransferase 6	TRMT6	718229
Trna methyltransferase 61B	TRMT61B	703419
Trna methyltransferase O	TRMO	715609
Trna splicing endonuclease subunit 15	TSEN15	717481
Trophoblast glycoprotein	TPBG	693944
Tropomodulin 3	TMOD3	694478
Tropomodulin 4	TMOD4	709732
Tropomyosin 1 (alpha)	TPM1	705236
Tropomyosin 2 (beta)	TPM2	696604
Tropomyosin 3	TPM3	716336
Troponin T type 2 (cardiac)	TNNT2	709882
Trub pseudouridine (psi) synthase family member 2	TRUB2	717619
Tryptase gamma 1	TPSG1	100425751
TSC22 domain family member 1	TSC22D1	701076
TSC22 domain family member 3	TSC22D3	702656
TSC22 domain family member 4	TSC22D4	719183
TSPY-like 4	TSPYL4	716137
TSSK6 activating co-chaperone	TSACC	719490
Tu translation elongation factor, mitochondrial	TUFM	705462
Tubulin alpha 1a	TUBA1A	574194
Tubulin alpha 3c	TUBA3C	707215
Tubulin alpha 4a	TUBA4A	702583
Tubulin beta class I	TUBB	574113
Tubulin folding cofactor E	TBCE	711476
Tubulin gamma 1	TUBG1	710756
Tubulin, alpha 1b	TUBA1B	709643
Tudor domain containing 3	TDRD3	696228
Tuftelin interacting protein 11	TFIP11	712691
Tumor necrosis factor (ligand) superfamily, member 12	TNFSF12	100551506
Tumor necrosis factor receptor superfamily member 13C	TNFRSF13C	712577
Tumor necrosis factor receptor superfamily member 25	TNFRSF25	703744
Tumor necrosis factor receptor superfamily, member 14	TNFRSF14	695042
Tumor necrosis factor superfamily member 13	TNFSF13	100551507
Tumor necrosis factor superfamily member 13b	TNFSF13B	693917
Tumor protein D52-like 1	TPD52L1	716568
Tumor protein p53	TP53	716170
Tumor protein p53 binding protein 1	TP53BP1	710237
Tumor protein p53 binding protein 2	TP53BP2	705383
Tumor protein p53 inducible nuclear protein 2	TP53INP2	707113
Tumor protein, translationally-controlled 1	TPT1	702155

Tumor suppressor candidate 1	TUSC1	708101
Twist family bhlh transcription factor 2	TWIST2	697078
TWIST neighbor	TWISTNB	707781
Twisted gastrulation homolog 1 (Drosophila)	TWSG1	705804
Tyrosinase-related protein 1	TYRP1	714646
Tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, beta	YWHAB	717788
Tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, eta	YWHAH	717016
Tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, gamma	YWHAG	715517
Tyrosine kinase, non-receptor, 1	TNK1	715180
Tyrosine kinase, non-receptor, 2	TNK2	711655
Tyrosyl-DNA phosphodiesterase 2	TDP2	715162
Tyrosyl-trna synthetase	YARS	709003
U2 small nuclear RNA auxiliary factor 1	U2AF1	722383
UBA domain containing 2	UBAC2	703484
Ubiquilin 1	UBQLN1	713525
Ubiquinol-cytochrome c reductase core protein II	UQCRC2	697967
Ubiquinol-cytochrome c reductase, 6.4kda subunit	UQCR	708396
Ubiquinol-cytochrome c reductase, complex III subunit VII, 9.5kda	UQCRQ	708950
Ubiquitin A-52 residue ribosomal protein fusion product 1	UBA52	720243
Ubiquitin B	UBB	696110
Ubiquitin conjugating enzyme E2 variant 1	UBE2V1	100425552
Ubiquitin conjugating enzyme E2A	UBE2A	693716
Ubiquitin conjugating enzyme E2D 3	UBE2D3	710772
Ubiquitin conjugating enzyme E2D 4 (putative)	UBE2D4	707831
Ubiquitin conjugating enzyme E2E 3	UBE2E3	704530
Ubiquitin conjugating enzyme E2F (putative)	UBE2F	695394
Ubiquitin conjugating enzyme E2H	UBE2H	702056
Ubiquitin conjugating enzyme E2I	UBE2I	722434
Ubiquitin conjugating enzyme E2L 3	UBE2L3	697675
Ubiquitin conjugating enzyme E2O	UBE2O	710529
Ubiquitin C-terminal hydrolase L3	UCHL3	697276
Ubiquitin domain containing 2	UBTD2	709455
Ubiquitin fusion degradation 1 like (yeast)	UFD1L	711716
Ubiquitin like 4B	UBL4B	701055
Ubiquitin like 5	UBL5	711015
Ubiquitin like 7	UBL7	702305
Ubiquitin protein ligase E3 component n-recogin 7 (putative)	UBR7	698882
Ubiquitin protein ligase E3B	UBE3B	707324
Ubiquitin protein ligase E3D	UBE3D	694910
Ubiquitin related modifier 1	URM1	722618
Ubiquitin specific peptidase 10	USP10	718471
Ubiquitin specific peptidase 10	USP10	718471
Ubiquitin specific peptidase 11	USP11	706555
Ubiquitin specific peptidase 14 (trna-guanine transglycosylase)	USP14	698087

Ubiquitin specific peptidase 15	USP15	716793
Ubiquitin specific peptidase 16	USP16	706403
Ubiquitin specific peptidase 20	USP20	716505
Ubiquitin specific peptidase 21	USP21	719894
Ubiquitin specific peptidase 26	USP26	706435
Ubiquitin specific peptidase 38	USP38	700235
Ubiquitin specific peptidase 39	USP39	696217
Ubiquitin specific peptidase 47	USP47	701660
Ubiquitin specific peptidase 48	USP48	707110
Ubiquitin specific peptidase 7 (herpes virus-associated)	USP7	714625
Ubiquitin specific peptidase 8	USP8	715523
Ubiquitin specific peptidase 9, Y-linked	USP9Y	100270703
Ubiquitination factor E4B	UBE4B	713348
Ubiquitin-conjugating enzyme E2E 2	UBE2E2	699101
Ubiquitin-like modifier activating enzyme 1	UBA1	706324
Ubiquitin-like modifier activating enzyme 2	UBA2	705808
Ubiquitin-like modifier activating enzyme 3	UBA3	696493
U-box domain containing 5	UBOX5	717166
UBX domain protein 1	UBXN1	718643
UBX domain protein 10	UBXN10	705058
UBX domain protein 11	UBXN11	719826
UBX domain protein 6	UBXN6	715070
UDP-Gal:betaglcnaac beta 1,4- galactosyltransferase, polypeptide 1	B4GALT1	703541
UDP-glcnaac:betagal beta-1,3-N-acetylglucosaminyltransferase 2	B3GNT2	693396
UDP-N-acetylglucosamine pyrophosphorylase 1	UAP1	720116
UHRF1 binding protein 1-like	UHRF1BP1L	694816
Unconventional SNARE in the ER 1 homolog (S. Cerevisiae)	USE1	718905
UPF3 regulator of nonsense transcripts homolog B (yeast)	UPF3B	694247
Up-regulated during skeletal muscle growth 5 homolog (mouse)	USMG5	100428450
Upstream binding protein 1 (LBP-1a)	UBP1	706283
Upstream transcription factor family member 3	USF3	709660
Uracil DNA glycosylase	UNG	706816
Uracil phosphoribosyltransferase homolog	UPRT	704157
Uridine monophosphate synthetase	UMPS	715664
Uridine-cytidine kinase 2	UCK2	695725
USP6 N-terminal like	USP6NL	694275
UTP14, U3 small nucleolar ribonucleoprotein, homolog C (yeast)	UTP14C	709657
UTP20 small subunit processome component	UTP20	696472
UTP6 small subunit processome component	UTP6	713361
UV radiation resistance associated	UVRAG	696601
Vaccinia related kinase 1	VRK1	704798
Vacuolar protein sorting 36 homolog (S. Cerevisiae)	VPS36	693290
Vacuolar protein sorting 45 homolog (S. Cerevisiae)	VPS45	706035
Vacuolar protein sorting 72 homolog (S. Cerevisiae)	VPS72	709818
V-akt murine thymoma viral oncogene homolog 3	AKT3	714717
Valosin containing protein lysine (K) methyltransferase	VCPKMT	705487
Valyl-trna synthetase	VARS	715537
Vascular endothelial growth factor A	VEGFA	574209

Vasoactive intestinal peptide receptor 1	VIPR1	717438
VCP-interacting membrane selenoprotein	VIMP	694752
V-crk avian sarcoma virus CT10 oncogene homolog	CRK	701185
Versican	VCAN	712365
Vesicle (multivesicular body) trafficking 1	VTG1	701578
Vesicle associated membrane protein 2	VAMP2	574134
Vesicle associated membrane protein 3	VAMP3	707972
Vesicle associated membrane protein 8	VAMP8	695851
Vesicle transport through interaction with t-snares 1B	VTG1B	711113
Vestigial like family member 4	VGLL4	699034
Vezatin, adherens junctions transmembrane protein	VEZT	716675
Villin 1	VIL1	698946
Villin-like	VILL	696988
Visual system homeobox 1	VSX1	715973
Vitamin K epoxide reductase complex subunit 1	VKORC1	714412
Vitamin K epoxide reductase complex subunit 1 like 1	VKORC1L1	697591
Vitronectin	VTN	708499
V-kit Hardy-Zuckerman 4 feline sarcoma viral oncogene homolog	KIT	696759
Voltage-dependent anion channel 1	VDAC1	710045
Voltage-dependent anion channel 2	VDAC2	704257
Von Willebrand factor	VWF	722019
VPS11, CORVET/HOPS core subunit	VPS11	702834
VPS18, CORVET/HOPS core subunit	VPS18	704795
VPS26 retromer complex component A	VPS26A	717371
VPS33B interacting protein, apical-basolateral polarity regulator, spe-39 homolog	VIPAS39	706315
VPS39 HOPS complex subunit	VPS39	707791
VPS52 GARP complex subunit	VPS52	100430905
VPS54 GARP complex subunit	VPS54	695397
VPS8, CORVET complex subunit	VPS8	701567
V-ral simian leukemia viral oncogene homolog A (ras related)	RALA	703440
V-ral simian leukemia viral oncogene homolog B	RALB	695852
V-set and immunoglobulin domain containing 4	VSIG4	709685
WAP four-disulfide core domain 12	WFDC12	711552
WD repeat containing, antisense to TP53	WRAP53	716125
WD repeat domain 11	WDR11	714990
WD repeat domain 12	WDR12	705623
WD repeat domain 18	WDR18	704547
WD repeat domain 19	WDR19	698866
WD repeat domain 20	WDR20	708533
WD repeat domain 26	WDR26	704911
WD repeat domain 3	WDR3	711960
WD repeat domain 37	WDR37	709975
WD repeat domain 4	WDR4	714230
WD repeat domain 44	WDR44	710598
WD repeat domain 47	WDR47	696942
WD repeat domain 59	WDR59	710576
WD repeat domain 6	WDR6	708505

WD repeat domain 61	WDR61	709971
WD repeat domain 74	WDR74	718460
WD repeat domain 75	WDR75	709104
Werner helicase interacting protein 1	WRNIP1	707250
Wilms tumor 1 associated protein	WTAP	702295
Wingless-type MMTV integration site family member 3	WNT3	716909
Wingless-type MMTV integration site family member 7B	WNT7B	713864
Wiskott-Aldrich syndrome-like	WASL	696556
Wolfram syndrome 1 (wolframin)	WFS1	710948
WW domain binding protein 1	WBP1	709202
WW domain binding protein 11	WBP11	699451
WW domain binding protein 4	WBP4	698220
WW domain binding protein 5	WBP5	696661
WW domain containing adaptor with coiled-coil	WAC	715828
WW domain containing E3 ubiquitin protein ligase 2	WWP2	705464
X-box binding protein 1	XBP1	713863
Xeroderma pigmentosum, complementation group A	XPA	715705
Xeroderma pigmentosum, complementation group C	XPC	700938
X-prolyl aminopeptidase (aminopeptidase P) 1, soluble	XPNPEP1	696570
X-ray repair complementing defective repair in Chinese hamster cells 5	XRCC5	574279
X-ray repair complementing defective repair in Chinese hamster cells 6	XRCC6	707975
Yae1 domain containing 1	YAE1D1	703786
Y-box binding protein 3	YBX3	722347
YEATS domain containing 4	YEATS4	718376
Yip1 domain family member 1	YIPF1	714632
Yip1 domain family member 4	YIPF4	706819
Yippee like 3	YPEL3	708740
Yippee like 5	YPEL5	704532
YKT6 v-SNARE homolog (S. Cerevisiae)	YKT6	699606
YTH domain containing 1	YTHDC1	709717
YTH N(6)-methyladenosine RNA binding protein 1	YTHDF1	697816
YTH N(6)-methyladenosine RNA binding protein 2	YTHDF2	717225
ZFP36 ring finger protein	ZFP36	722000
Zinc binding alcohol dehydrogenase domain containing 2	ZADH2	701079
Zinc finger (CCCH type), RNA binding motif and serine/arginine rich 2	ZRSR2	720986
Zinc finger and BTB domain containing 17	ZBTB17	696327
Zinc finger and BTB domain containing 33	ZBTB33	695801
Zinc finger and BTB domain containing 39	ZBTB39	713914
Zinc finger and BTB domain containing 40	ZBTB40	708181
Zinc finger and BTB domain containing 48	ZBTB48	704628
Zinc finger and BTB domain containing 49	ZBTB49	712422
Zinc finger and BTB domain containing 5	ZBTB5	718482
Zinc finger and BTB domain containing 8 opposite strand	ZBTB8OS	708590
Zinc finger and SCAN domain containing 2	ZSCAN2	695673
Zinc finger and SCAN domain containing 2	ZSCAN2	695673

Zinc finger and SCAN domain containing 21	ZSCAN21	710501
Zinc finger and SCAN domain containing 29	ZSCAN29	710414
Zinc finger CCCH-type containing 12A	ZC3H12A	713604
Zinc finger CCCH-type containing 3	ZC3H3	708584
Zinc finger CCCH-type containing 7A	ZC3H7A	711984
Zinc finger E-box binding homeobox 2	ZEB2	705439
Zinc finger protein 140	ZNF140	695171
Zinc finger protein 143	ZNF143	703978
Zinc finger protein 155	ZNF155	712736
Zinc finger protein 17	ZNF17	707664
Zinc finger protein 177	ZNF177	709851
Zinc finger protein 180	ZNF180	712493
Zinc finger protein 181	ZNF181	106992423
Zinc finger protein 207	ZNF207	100689489
Zinc finger protein 217	ZNF217	699314
Zinc finger protein 22	ZNF22	706208
Zinc finger protein 250	ZNF250	704805
Zinc finger protein 285	ZNF285	106994795
Zinc finger protein 296	ZNF296	713620
Zinc finger protein 319	ZNF319	706286
Zinc finger protein 32	ZNF32	705373
Zinc finger protein 322	ZNF322	701098
Zinc finger protein 343	ZNF343	716613
Zinc finger protein 354B	ZNF354B	712885
Zinc finger protein 362	ZNF362	710013
Zinc finger protein 385A	ZNF385A	705436
Zinc finger protein 41	ZNF41	706770
Zinc finger protein 410	ZNF410	698124
Zinc finger protein 436	ZNF436	709638
Zinc finger protein 462	ZNF462	711489
Zinc finger protein 467	ZNF467	712106
Zinc finger protein 496	ZNF496	709694
Zinc finger protein 521	ZNF521	709169
Zinc finger protein 526	ZNF526	707135
Zinc finger protein 532	ZNF532	701146
Zinc finger protein 574	ZNF574	706729
Zinc finger protein 613	ZNF613	719851
Zinc finger protein 620	ZNF620	100423711
Zinc finger protein 622	ZNF622	100429385
Zinc finger protein 627	ZNF627	716820
Zinc finger protein 646	ZNF646	712774
Zinc finger protein 653	ZNF653	714754
Zinc finger protein 664	ZNF664	710703
Zinc finger protein 687	ZNF687	716590
Zinc finger protein 692	ZNF692	710010
Zinc finger protein 7	ZNF7	715735
Zinc finger protein 70	ZNF70	698442
Zinc finger protein 777	ZNF777	711987

Zinc finger protein 79	ZNF79	700961
Zinc finger protein 821	ZNF821	707355
Zinc finger protein 830	ZNF830	715130
Zinc finger protein 84	ZNF84	694939
Zinc finger protein 92	ZNF92	708683
Zinc finger RNA binding protein	ZFR	696882
Zinc finger with UFM1-specific peptidase domain	ZUFSP	718059
Zinc finger, AN1-type domain 2A	ZFAND2A	100426344
Zinc finger, AN1-type domain 2B	ZFAND2B	702027
Zinc finger, AN1-type domain 6	ZFAND6	717543
Zinc finger, C3H1-type containing	ZFC3H1	718671
Zinc finger, CCCH-type with G-patch domain	ZGPAT	719499
Zinc finger, CCCH-type with G-patch domain	ZGPAT	719499
Zinc finger, CCCH-type with G-patch domain	ZGPAT	719499
Zinc finger, CCHC domain containing 10	ZCCHC10	709423
Zinc finger, CCHC domain containing 11	ZCCHC11	713406
Zinc finger, CCHC domain containing 14	ZCCHC14	703833
Zinc finger, CCHC domain containing 17	ZCCHC17	705172
Zinc finger, CCHC domain containing 3	ZCCHC3	714477
Zinc finger, CCHC domain containing 7	ZCCHC7	716658
Zinc finger, CCHC domain containing 8	ZCCHC8	702359
Zinc finger, DHHC-type containing 12	ZDHHC12	722606
Zinc finger, DHHC-type containing 16	ZDHHC16	705982
Zinc finger, DHHC-type containing 17	ZDHHC17	693595
Zinc finger, DHHC-type containing 5	ZDHHC5	704863
Zinc finger, DHHC-type containing 6	ZDHHC6	696538
Zinc finger, FYVE domain containing 16	ZFYVE16	710872
Zinc finger, matrin-type 2	ZMAT2	697247
Zinc finger, matrin-type 5	ZMAT5	715058
Zinc finger, MYM-type 2	ZMYM2	721255
Zinc finger, MYM-type 3	ZMYM3	697147
Zinc finger, MYM-type 4	ZMYM4	712793
Zinc finger, MYND-type containing 11	ZMYND11	708761
Zinc finger, RAN-binding domain containing 2	ZRANB2	703513
Zinc finger, SWIM-type containing 3	ZSWIM3	708804
Zinc finger, ZZ-type with EF-hand domain 1	ZZEF1	721518
Zinc metalloproteinase STE24	ZMPSTE24	693765
Zinc ribbon domain containing 1	ZNRD1	712151
Zona pellucida glycoprotein 2 (sperm receptor)	ZP2	697458
Zona pellucida glycoprotein 3 (sperm receptor)	ZP3	719925
Zyg-11 related, cell cycle regulator	ZER1	717262

(3) Expressed in both groups 1b and 1c, but not in group 1a

1-acylglycerol-3-phosphate O-acyltransferase 1	AGPAT1	717174
2'-5'-oligoadenylate synthetase 1	OAS1	712265
2'-5'-oligoadenylate synthetase-like	OASL	698943

3-hydroxyanthranilate 3,4-dioxygenase	HAAO	713101
3-hydroxymethyl-3-methylglutaryl-coa lyase-like 1	HMGCLL1	714982
5,10-methenyltetrahydrofolate synthetase (5-formyltetrahydrofolate cyclo-ligase)	MTHFS	717493
5-hydroxytryptamine (serotonin) receptor 1A, G protein-coupled	HTR1A	694991
5-hydroxytryptamine (serotonin) receptor 1B, G protein-coupled	HTR1B	716704
5-hydroxytryptamine (serotonin) receptor 1E, G protein-coupled	HTR1E	697598
5-hydroxytryptamine (serotonin) receptor 2C, G protein-coupled	HTR2C	708141
5-hydroxytryptamine (serotonin) receptor 3B, ionotropic	HTR3B	694830
5-hydroxytryptamine (serotonin) receptor 4, G protein-coupled	HTR4	710046
5-hydroxytryptamine (serotonin) receptor 5A, G protein-coupled	HTR5A	716134
5-phosphohydroxy-L-lysine phospho-lyase	PHYKPL	702302
8-oxoguanine DNA glycosylase	OGG1	700481
Aarf domain containing kinase 2	ADCK2	693303
Aarf domain containing kinase 4	ADCK4	702379
Abhydrolase domain containing 1	ABHD1	698700
Abhydrolase domain containing 16B	ABHD16B	695048
Abhydrolase domain containing 8	ABHD8	718980
Achaete-scute family bhlh transcription factor 1	ASCL1	698820
Achaete-scute family bhlh transcription factor 4	ASCL4	704632
Acid phosphatase 7, tartrate resistant (putative)	ACP7	695532
Acid sensing ion channel subunit 3	ASIC3	714396
Acid sensing ion channel subunit family member 5	ASIC5	699617
Acidic nuclear phosphoprotein 32 family member E	ANP32E	706251
Acrosin binding protein	ACRBP	713219
Acrosomal vesicle protein 1	ACRV1	713422
Actin like 6B	ACTL6B	712643
Actin like 7A	ACTL7A	710653
Actin like 7B	ACTL7B	710750
Actin like 8	ACTL8	701280
Actin related protein T2	ACTRT2	711475
Actinin, alpha 2	ACTN2	710012
Activating transcription factor 3	ATF3	710832
Activin A receptor type IB	ACVR1B	696587
Activin A receptor type IL	ACVRL1	696471
Acyl-coa thioesterase 12	ACOT12	711665
Acyl-coa wax alcohol acyltransferase 2	AWAT2	696451
ADAM metallopeptidase domain 19	ADAM19	715164
ADAM metallopeptidase domain 2	ADAM2	707303
ADAM metallopeptidase domain 21	ADAM21	715640
ADAM metallopeptidase domain 29	ADAM29	698113
ADAM metallopeptidase with thrombospondin type 1 motif 14	ADAMTS14	710154
ADAM metallopeptidase with thrombospondin type 1 motif 15	ADAMTS15	715608
ADAM metallopeptidase with thrombospondin type 1 motif 16	ADAMTS16	694474
ADAM metallopeptidase with thrombospondin type 1 motif 17	ADAMTS17	693447
ADAM metallopeptidase with thrombospondin type 1 motif 20	ADAMTS20	699935
ADAM-like, decysin 1	ADAMDEC1	711034
ADAMTS like 2	ADAMTSL2	713492

Adaptor related protein complex 1 associated regulatory protein	AP1AR	700734
Adaptor related protein complex 2, mu 1 subunit	AP2M1	703554
Adaptor related protein complex 3, beta 2 subunit	AP3B2	694091
Adaptor related protein complex 5, beta 1 subunit	AP5B1	721904
Adenosine A3 receptor	ADORA3	704295
Adenosine deaminase domain containing 1	ADAD1	707910
Adenosine deaminase, trna-specific 1	ADAT1	712066
Adenylate cyclase 4	ADCY4	714684
Adenylate cyclase 6	ADCY6	707978
Adenylate cyclase 8 (brain)	ADCY8	695792
Adenylate kinase 8	AK8	714698
Adhesion G protein-coupled receptor F4	ADGRF4	100425760
Adhesion G protein-coupled receptor G3	ADGRG3	705580
Adhesion G protein-coupled receptor G5	ADGRG5	711378
Adhesion G protein-coupled receptor G7	ADGRG7	700839
Adhesion molecule with Ig-like domain 2	AMIGO2	705386
Adhesion molecule with Ig-like domain 3	AMIGO3	705693
ADP-ribosyltransferase 1	ART1	718154
ADP-ribosyltransferase 3	ART3	100424032
ADP-ribosyltransferase 4 (Dombrock blood group)	ART4	699934
Adrenoceptor alpha 1A	ADRA1A	712509
Adrenoceptor alpha 2A	ADRA2A	695684
Adrenoceptor beta 1	ADRB1	100426600
Adrenoceptor beta 2	ADRB2	710146
AF4/FMR2 family member 2	AFF2	700758
Agouti related neuropeptide	AGRP	698479
A-kinase anchoring protein 12	AKAP12	641446
A-kinase anchoring protein 4	AKAP4	694888
Aladin WD repeat nucleoporin	AAAS	719095
Aldo-keto reductase family 1, member A1 (aldehyde reductase)	AKR1A1	693380
Aldo-keto reductase family 1, member C1 (dihydrodiol dehydrogenase 1; 20-alpha (3-alpha)-hydroxysteroid dehydrogenase)	AKR1C1	711198
Aldo-keto reductase family 1, member D1	AKR1D1	709863
Alkaline ceramidase 1	ACER1	699093
Alkb homolog 2, alpha-ketoglutarate-dependent dioxygenase	ALKBH2	706708
Alkb homolog 4, lysine demethylase	ALKBH4	715078
Allantoicase	ALLC	707445
Alpha 1,4-galactosyltransferase	A4GALT	710998
Alpha hemoglobin stabilizing protein	AHSP	714392
Alpha-1,4-N-acetylglucosaminyltransferase	A4GNT	716512
Alpha-2-glycoprotein 1, zinc-binding	AZGP1	710136
Alpha-2-HS-glycoprotein	AHSG	699348
Alpha-fetoprotein	AFP	704786
Ameloblastin	AMBN	706845
Amine oxidase, copper containing 2	AOC2	100431016
Aminoacylase 3	ACY3	711083
Aminocarboxymuconate semialdehyde decarboxylase	ACMSD	708917

Amphiregulin	AREG	702396
Amyloid beta (A4) precursor protein-binding, family B, member 1 (Fe65)	APBB1	712585
Amyloid beta (A4) precursor-like protein 2	APLP2	718819
Amyloid P component, serum	APCS	719421
Anaphase promoting complex subunit 2	ANAPC2	706384
Ancient ubiquitous protein 1	AUP1	710020
Angiopoietin 4	ANGPT4	715213
Angiopoietin like 5	ANGPTL5	702036
Angiopoietin like 7	ANGPTL7	714204
ANKH inorganic pyrophosphate transport regulator	ANKH	717689
Ankyrin repeat and IBR domain containing 1	ANKIB1	703273
Ankyrin repeat and SOCS box containing 11	ASB11	712435
Ankyrin repeat and SOCS box containing 15	ASB15	695656
Ankyrin repeat and SOCS box containing 3	ASB3	716503
Ankyrin repeat domain 1 (cardiac muscle)	ANKRD1	696653
Ankyrin repeat domain 13C	ANKRD13C	702811
Ankyrin repeat domain 2 (stretch responsive muscle)	ANKRD2	707097
Ankyrin repeat domain 44	ANKRD44	696592
Ankyrin repeat domain 49	ANKRD49	697693
Ankyrin repeat domain 50	ANKRD50	709327
Ankyrin repeat domain 55	ANKRD55	710177
Ankyrin repeat domain 6	ANKRD6	701339
Ankyrin repeat, SAM and basic leucine zipper domain containing 1	ASZ1	705097
Annexin A13	ANXA13	705013
Anoctamin 3	ANO3	700072
Anthrax toxin receptor 1	ANTXR1	100425392
Anti-silencing function 1A histone chaperone	ASF1A	714761
Apelin receptor	APLNR	706823
Apolipoprotein A-I	APOA1	696969
Apolipoprotein A-II	APOA2	719946
Apolipoprotein B mRNA editing enzyme, catalytic polypeptide-like 2	APOBEC2	719677
Apolipoprotein B mRNA editing enzyme, catalytic polypeptide-like 3G	APOBEC3G	574398
Apolipoprotein B mRNA editing enzyme, catalytic polypeptide-like 3H	APOBEC3H	723811
Apolipoprotein B mRNA editing enzyme, catalytic polypeptide-like 4 (putative)	APOBEC4	714993
Apolipoprotein C-III	APOC3	696726
Apolipoprotein F	APOF	712761
Apolipoprotein L4	APOL4	694250
Apoptosis inducing factor, mitochondria associated 1	AIFM1	702773
Apoptosis inducing factor, mitochondria associated 3	AIFM3	100430576
Aprataxin	APTXX	702671
Aquaporin 11	AQP11	698835
Aquaporin 4	AQP4	703773

Aquaporin 8	AQP8	702167
Aquaporin 9	AQP9	700743
Arachidonate 15-lipoxygenase	ALOX15	709212
Arachidonate 5-lipoxygenase-activating protein	ALOX5AP	713170
Arfgap with rhogap domain, ankyrin repeat and PH domain 3	ARAP3	701400
Arginine vasopressin receptor 1B	AVPR1B	695963
Arginine vasopressin receptor 2	AVPR2	697763
Arginine/serine-rich coiled-coil 2	RSRC2	706564
ARP3 actin-related protein 3 homolog B (yeast)	ACTR3B	715965
Artemin	ARTN	701641
Aryl hydrocarbon receptor interacting protein-like 1	AIPL1	574331
Arylacetamide deacetylase-like 2	AADACL2	709222
Ash2 (absent, small, or homeotic)-like (Drosophila)	ASH2L	699382
Aspartate beta-hydroxylase domain containing 2	ASPHD2	712623
Ataxin 2-like	ATXN2L	708359
Atonal bhlh transcription factor 1	ATOH1	704893
ATP binding cassette subfamily B member 9	ABCB9	707709
ATP binding cassette subfamily C member 9	ABCC9	654489
ATP binding cassette subfamily D member 2	ABCD2	697556
ATP binding cassette subfamily G member 2 (Junior blood group)	ABCG2	574307
ATP binding cassette subfamily G member 8	ABCG8	713676
ATP citrate lyase	ACLY	708501
ATP synthase F0 subunit 6	ATP6	2846629
ATP synthase mitochondrial F1 complex assembly factor 2	ATPAF2	699709
ATPase, Ca ⁺⁺ transporting, ubiquitous	ATP2A3	707768
ATPase, class II, type 9A	ATP9A	710250
ATPase, H ⁺ transporting, lysosomal 14kda, V1 subunit F	ATP6V1F	702112
ATPase, H ⁺ transporting, lysosomal 31kda, V1 subunit E2	ATP6V1E2	714746
ATPase, H ⁺ /K ⁺ exchanging, alpha polypeptide	ATP4A	100426216
ATPase, H ⁺ /K ⁺ exchanging, beta polypeptide	ATP4B	698222
ATPase, Na ⁺ /K ⁺ transporting, alpha 3 polypeptide	ATP1A3	706513
ATPase, Na ⁺ /K ⁺ transporting, beta 2 polypeptide	ATP1B2	716093
ATP-binding cassette transporter 13	ABCC13	574326
Atypical chemokine receptor 1 (Duffy blood group)	ACKR1	719284
Autophagy related 2A	ATG2A	717290
Autophagy related 7	ATG7	696238
Autophagy related 9B	ATG9B	714284
B and T lymphocyte associated	BTLA	708202
B9 protein domain 2	B9D2	704873
BAI1-associated protein 2-like 2	BAIAP2L2	700058
Bardet-Biedl syndrome 9	BBS9	708412
Barttin CLCNK-type chloride channel accessory beta subunit	BSND	715740
Basic leucine zipper transcription factor, ATF-like 2	BATF2	722022
Basic transcription factor 3-like 4	BTF3L4	712955
Basonuclin 1	BNC1	718655
B-cell CLL/lymphoma 9	BCL9	700800
B-cell receptor-associated protein 31	BCAP31	696663

BCL2 associated athanogene 2	BAG2	712778
BCL2 associated athanogene 4	BAG4	703953
BCL2/adenovirus E1B 19kda interacting protein 1	BNIP1	703576
BCL2/adenovirus E1B 19kda interacting protein 2	BNIP2	703234
BCL2-associated X protein	BAX	718948
BCS1-like (S. Cerevisiae)	BCS1L	699690
Beclin 1, autophagy related	BECN1	711649
BEN domain containing 4	BEND4	702395
Beta-1,3-galactosyltransferase 1	B3GALT1	704744
Beta-1,3-galactosyltransferase 2	B3GALT2	712334
Beta-1,3-galactosyltransferase 4	B3GALT4	718178
Beta-1,3-galactosyltransferase 5	B3GALT5	715466
Beta-1,3-glucuronyltransferase 1	B3GAT1	695293
Beta-1,3-glucuronyltransferase 2	B3GAT2	717157
Beta-1,4-glucuronyltransferase 1	B4GAT1	714270
Beta-1,4-N-acetyl-galactosaminyl transferase 3	B4GALNT3	706259
Beta-2-microglobulin	B2M	712428
Beta-carotene oxygenase 2	BCO2	712095
Bile acid-coa:amino acid N-acyltransferase	BAAT	100429416
Biogenesis of lysosomal organelles complex-1, subunit 3	BLOC1S3	713932
Bloom syndrome, recq helicase-like	BLM	703460
Bone morphogenetic protein 1	BMP1	707596
Bone morphogenetic protein 15	BMP15	695457
Bone morphogenetic protein 3	BMP3	695432
Bone morphogenetic protein 5	BMP5	711989
Bone morphogenetic protein receptor type IA	BMPRIIA	696898
Boule homolog, RNA binding protein	BOLL	698402
BPI fold containing family A member 2	BPIFA2	710376
BPI fold containing family B member 1	BPIFB1	710014
BPI fold containing family B member 4	BPIFB4	714667
BPI fold containing family C	BPIFC	717287
Brain and reproductive organ-expressed (TNFRSF1A modulator)	BRE	702365
Breast cancer anti-estrogen resistance 1	BCAR1	713965
BRICHOS domain containing 5	BRICD5	695765
Bromodomain adjacent to zinc finger domain 1B	BAZ1B	716436
Bromodomain containing 2	BRD2	717893
Bromodomain containing 8	BRD8	716492
Bruton agammaglobulinemia tyrosine kinase	BTK	703000
BTB (POZ) domain containing 9	BTBD9	719457
BTG family member 4	BTG4	709946
C1GALT1 specific chaperone 1	C1GALT1C1	696662
C1q and tumor necrosis factor related protein 7	C1QTNF7	714049
Cadherin 11, type 2, OB-cadherin (osteoblast)	CDH11	708826
Cadherin 16	CDH16	697166
Cadherin 17, LI cadherin (liver-intestine)	CDH17	698886
Cadherin 19, type 2	CDH19	702726
Cadherin 7, type 2	CDH7	702481

Cadherin related family member 2	CDHR2	697249
Calcium binding protein 4	CABP4	711973
Calcium channel, voltage-dependent, alpha 2/delta subunit 1	CACNA2D1	708215
Calcium channel, voltage-dependent, beta 4 subunit	CACNB4	695172
Calcium homeostasis modulator 2	CALHM2	714662
Calcium/calmodulin-dependent protein kinase I	CAMK1	700212
Calcium/calmodulin-dependent protein kinase II delta	CAMK2D	702504
Calcium/calmodulin-dependent protein kinase IV	CAMK4	712322
Calcium/calmodulin-dependent protein kinase kinase 1, alpha	CAMKK1	707562
Calcium/calmodulin-dependent serine protein kinase (MAGUK family)	CASK	707428
Calcium-binding protein, spermatid-specific 1	CABS1	707584
Caldesmon 1	CALD1	707050
Calicin	CCIN	693791
Calpain 2, (m/II) large subunit	CAPN2	703047
Calponin 3, acidic	CNN3	709538
Calreticulin	CALR	716910
Camp regulated phosphoprotein 21kda	ARPP21	707139
Camp responsive element modulator	CREM	698636
Cannabinoid receptor 2	CNR2	711155
Cap methyltransferase 2	CMTR2	711529
Capping protein (actin filament) muscle Z-line, alpha 3	CAPZA3	703410
Carbamoyl-phosphate synthase 1	CPS1	711806
Carbohydrate (keratan sulfate Gal-6) sulfotransferase 1	CHST1	715176
Carbohydrate (N-acetylgalactosamine 4-O) sulfotransferase 9	CHST9	703877
Carbohydrate (N-acetylgalactosamine 4-sulfate 6-O) sulfotransferase 15	CHST15	693845
Carbohydrate (N-acetylglucosamine 6-O) sulfotransferase 4	CHST4	708116
Carbohydrate (N-acetylglucosamine 6-O) sulfotransferase 7	CHST7	704906
Carbonic anhydrase VII	CA7	696681
Carbonic anhydrase X	CA10	704971
Carbonic anhydrase XI	CA11	718066
Carboxypeptidase A1	CPA1	703095
Carboxypeptidase A5	CPA5	702974
Carboxypeptidase A6	CPA6	705117
Carboxypeptidase B1	CPB1	712639
Carboxypeptidase B2	CPB2	703317
Carboxypeptidase N subunit 2	CPN2	106997192
Carnitine palmitoyltransferase 1A (liver)	CPT1A	709837
Carnosine dipeptidase 1 (metallopeptidase M20 family)	CNDP1	695195
CART prepropeptide	CARTPT	701350
Cas scaffolding protein family member 4	CASS4	697924
Casein beta	CSN2	707520
Casein kappa	CSN3	707297
Casein kinase 1, alpha 1-like	CSNK1A1L	695190
Casein kinase 2, beta polypeptide	CSNK2B	715807
CASK interacting protein 2	CASKIN2	702477
Caspase 14	CASP14	718049

Caspase 8 associated protein 2	CASP8AP2	702294
Caspase activity and apoptosis inhibitor 1	CAAP1	707992
Caspase recruitment domain family member 18	CARD18	705678
Catalase	CAT	717406
Cathepsin C	CTSC	705320
Cathepsin G	CTSG	716440
Cation channel, sperm associated 2	CATSPER2	710876
Catsper channel auxiliary subunit beta	CATSPERB	697012
Caudal type homeobox 2	CDX2	711094
Caudal type homeobox 4	CDX4	701374
Caveolin 3	CAV3	702163
Cbl proto-oncogene B, E3 ubiquitin protein ligase	CBLB	703879
CCCTC-binding factor (zinc finger protein)-like	CTCFL	701500
CCR4-NOT transcription complex subunit 1	CNOT1	712880
CD14 molecule	CD14	697482
CD19 molecule	CD19	705211
CD1a molecule	CD1A	698438
CD1c molecule	CD1C	717148
CD1e molecule	CD1E	718968
CD200 receptor 1	CD200R1	708734
CD207 molecule, langerin	CD207	703420
CD274 molecule	CD274	716043
CD300 molecule like family member f	CD300LF	703830
CD3g molecule, gamma (CD3-TCR complex)	CD3G	705270
CD40 ligand	CD40LG	574160
CD53 molecule	CD53	702350
CD63 molecule	CD63	709828
CD69 molecule	CD69	717288
CD79b molecule	CD79B	718218
CD80 molecule	CD80	732518
CD8b molecule	CD8B	699409
Cell cycle exit and neuronal differentiation 1	CEND1	100427040
Cell death-inducing DFFA-like effector b	CIDEB	100425328
Cell division cycle 14A	CDC14A	716475
Cell division cycle 6	CDC6	700081
Cell growth regulator with ring finger domain 1	CGRRF1	695231
Centrin 1	CETN1	697701
Centrobin, centrosomal BRCA2 interacting protein	CNTROB	716660
Centromere protein I	CENPI	702316
Centrosomal protein 41kda	CEP41	703215
Centrosomal protein 44kda	CEP44	697478
Centrosomal protein 57kda-like 1	CEP57L1	700109
Centrosomal protein 85kda-like	CEP85L	714810
Ceramide synthase 3	CERS3	693696
Cerberus 1, DAN family BMP antagonist	CER1	713924
Cerebellar degeneration-related protein 2-like	CDR2L	700082
Cerebral cavernous malformation 2	CCM2	705037
Ceroid-lipofuscinosis, neuronal 6, late infantile, variant	CLN6	693873

Ceruloplasmin (ferroxidase)	CP	712210
Chaperonin containing TCP1, subunit 5 (epsilon)	CCT5	696640
Chemokine (C-C motif) ligand 18	CCL18	574181
Chemokine (C-C motif) ligand 19	CCL19	574386
Chemokine (C-C motif) ligand 2	CCL2	574138
Chemokine (C-C motif) ligand 7	CCL7	714751
Chemokine (C-C motif) receptor 4	CCR4	705457
Chemokine (C-C motif) receptor 6	CCR6	574335
Chemokine (C-C motif) receptor 8	CCR8	693806
Chemokine (C-X3-C motif) ligand 1	CX3CL1	574225
Chemokine (C-X3-C motif) receptor 1	CX3CR1	693926
Chemokine (C-X-C motif) ligand 9	CXCL9	574336
Chemokine (C-X-C motif) receptor 3	CXCR3	699438
Chitinase domain containing 1	CHID1	701435
Chloride channel accessory 2	CLCA2	711959
Chloride channel, voltage-sensitive 3	CLCN3	694472
Choline kinase beta	CHKB	716377
Choline O-acetyltransferase	CHAT	709977
Cholinergic receptor, muscarinic 1	CHRM1	574362
Cholinergic receptor, muscarinic 5	CHRM5	574330
Cholinergic receptor, nicotinic alpha 3	CHRNA3	716571
Chondroitin polymerizing factor	CHPF	703860
Chondroitin sulfate N-acetylgalactosaminyltransferase 1	CSGALNACT1	704901
Choroideremia (Rab escort protein 1)	CHM	694499
Chromodomain helicase DNA binding protein 3	CHD3	716508
Chromodomain helicase DNA binding protein 4	CHD4	713162
Chromosome 1 open reading frame, human c1orf100	C1H1orf100	704944
Chromosome 1 open reading frame, human c1orf111	C1H1orf111	720087
Chromosome 1 open reading frame, human c1orf168	C1H1orf168	716080
Chromosome 1 open reading frame, human c1orf189	C1H1orf189	718569
Chromosome 1 open reading frame, human c1orf198	C1H1orf198	714084
Chromosome 1 open reading frame, human c1orf54	C1H1orf54	107000832
Chromosome 10 open reading frame 93 ortholog	C9H10orf93	719561
Chromosome 10 open reading frame, human c20orf202	C10H20orf202	717213
Chromosome 11 open reading frame, human c12orf57	C11H12orf57	714482
Chromosome 11 open reading frame, human c12orf60	C11H12orf60	699817
Chromosome 12 open reading frame, human c2orf88	C12H2orf88	100427288
Chromosome 13 open reading frame, human c2orf16	C13H2orf16	702215
Chromosome 13 open reading frame, human c2orf49	C13H2orf49	713165
Chromosome 14 open reading frame, human c11orf84	C14H11orf84	718112
Chromosome 14 open reading frame, human c11orf87	C14H11orf87	708608
Chromosome 15 open reading frame, human c9orf131	C15H9orf131	698029
Chromosome 15 open reading frame, human c9orf16	C15H9orf16	722628
Chromosome 15 open reading frame, human c9orf84	C15H9orf84	707991
Chromosome 16 open reading frame, human c17orf49	C16H17orf49	713820
Chromosome 19 open reading frame, human c19orf24	C19H19orf24	706393
Chromosome 2 open reading frame, human c3orf30	C2H3orf30	711824
Chromosome 20 open reading frame, human c16orf45	C20H16orf45	713757

Chromosome 20 open reading frame, human c16orf78	C20H16orf78	693672
Chromosome 3 open reading frame, human c21orf91	C3H21orf91	710406
Chromosome 3 open reading frame, human c7orf61	C3H7orf61	712150
Chromosome 4 open reading frame, human c6orf15	C4H6orf15	100141392
Chromosome 4 open reading frame, human c6orf25	C4H6orf25	716265
Chromosome 5 open reading frame, human c4orf32	C5H4orf32	700501
Chromosome 5 open reading frame, human c4orf45	C5H4orf45	100427200
Chromosome 6 open reading frame, human c5orf22	C6H5orf22	695901
Chromosome 7 open reading frame, human c14orf166	C7H14orf166	710094
Chromosome 7 open reading frame, human c14orf169	C7H14orf169	696773
Chromosome 7 open reading frame, human c14orf177	C7H14orf177	705010
Chromosome 8 open reading frame, human c8orf59	C8H8orf59	703464
Chromosome 9 open reading frame, human c10orf120	C9H10orf120	706212
Chromosome 9 open reading frame, human c10orf62	C9H10orf62	706769
Chromosome 9 open reading frame, human c10orf90	C9H10orf90	696655
Chromosome X open reading frame, human cxorf21	CXHXorf21	704259
Chromosome X open reading frame, human cxorf40a	CXHXorf40A	702659
Chromosome X open reading frame, human cxorf58	CXHXorf58	698265
Chymotrypsin-like	CTRL	701625
Cilia and flagella associated protein 65	CFAP65	701296
Ciliary neurotrophic factor	CNTF	701907
Ciliogenesis associated TTC17 interacting protein	CATIP	698579
CKLF-like MARVEL transmembrane domain containing 1	CMTM1	715757
CKLF-like MARVEL transmembrane domain containing 2	CMTM2	693810
Clarin 3	CLRN3	697496
Claudin 16	CLDN16	704442
Claudin 17	CLDN17	705582
Claudin 20	CLDN20	701937
Claudin 6	CLDN6	699854
Claudin 9	CLDN9	699721
Clavesin 2	CLVS2	713626
Cleavage and polyadenylation specific factor 1	CPSF1	702082
Cleavage and polyadenylation specific factor 4	CPSF4	708119
Cleft lip and palate associated transmembrane protein 1	CLPTM1	718306
CLOCK-interacting pacemaker	CIPC	704679
Clpb homolog, mitochondrial AAA ATPase chaperonin	CLPB	718461
CMT1A duplicated region transcript 4	CDRT4	693912
CNKSR family member 3	CNKSR3	702627
Coagulation factor XIII, A1 polypeptide	F13A1	711264
Coagulation factor XIII, B polypeptide	F13B	711237
Coatmer protein complex subunit epsilon	COPE	719631
Cochlin	COCH	717114
Cofilin 1 (non-muscle)	CFL1	721882
Cofilin 2 (muscle)	CFL2	693875
Coiled-coil domain containing 102B	CCDC102B	710808
Coiled-coil domain containing 142	CCDC142	709014
Coiled-coil domain containing 148	CCDC148	698322
Coiled-coil domain containing 151	CCDC151	714600

Coiled-coil domain containing 17	CCDC17	706591
Coiled-coil domain containing 178	CCDC178	707566
Coiled-coil domain containing 22	CCDC22	713063
Coiled-coil domain containing 27	CCDC27	695384
Coiled-coil domain containing 3	CCDC3	694884
Coiled-coil domain containing 50	CCDC50	705459
Coiled-coil domain containing 54	CCDC54	704648
Coiled-coil domain containing 62	CCDC62	707179
Coiled-coil domain containing 69	CCDC69	713304
Coiled-coil domain containing 70	CCDC70	709312
Coiled-coil domain containing 82	CCDC82	700198
Coiled-coil domain containing 83	CCDC83	703306
Coiled-coil domain containing 86	CCDC86	695978
Coiled-coil domain containing 87	CCDC87	713677
Coiled-coil domain containing 92	CCDC92	705922
Coiled-coil serine rich protein 1	CCSER1	707418
Coiled-coil serine rich protein 2	CCSER2	698006
Coiled-coil-helix-coiled-coil-helix domain containing 2	CHCHD2	702967
Colipase	CLPS	719005
Collagen, type II, alpha 1	COL2A1	704851
Collagen, type III, alpha 1	COL3A1	574131
Collagen, type VI, alpha 3	COL6A3	694701
Collagen, type VIII, alpha 1	COL8A1	100423512
Collagen, type VIII, alpha 2	COL8A2	713447
Colony stimulating factor 2 receptor, beta, low-affinity (granulocyte-macrophage)	CSF2RB	697508
Colony stimulating factor 3	CSF3	698961
Colony stimulating factor 3 receptor	CSF3R	713485
COMM domain containing 2	COMMD2	711498
COMM domain containing 5	COMMD5	704586
COMM domain containing 9	COMMD9	716992
Complement component 1, q subcomponent, C chain	C1QC	708589
Complement component 1, q subcomponent-like 1	C1QL1	715801
Complement component 1, q subcomponent-like 3	C1QL3	100429968
Complement component 1, s subcomponent	C1S	714589
Complement component 3a receptor 1	C3AR1	716086
Complement component 4 binding protein, beta	C4BPB	693636
Complement component 7	C7	696926
Complement component 8, alpha polypeptide	C8A	716114
Complement component 9	C9	694223
Complement factor properdin	CFP	707386
Complexin 4	CPLX4	697217
Connector enhancer of kinase suppressor of Ras 2	CNKSR2	696046
Contactin 1	CNTN1	574365
Contactin 2	CNTN2	574333
Contactin 5	CNTN5	700826
Contactin 6	CNTN6	705207
Contactin associated protein 1	CNTNAP1	574229

Contactin associated protein-like 5	CNTNAP5	697828
Copine III	CPNE3	694013
Cornichon family AMPA receptor auxiliary protein 1	CNIH1	695002
Cornulin	CRNN	712894
Corticotropin releasing hormone	CRH	702877
COX19 cytochrome c oxidase assembly homolog (S. Cerevisiae)	COX19	696368
Creatine kinase, brain	CKB	711167
CREB regulated transcription coactivator 3	CRTC3	709458
Crumbs family member 3	CRB3	700086
Cryptochrome circadian clock 2	CRY2	715000
Crystallin beta B3	CRYBB3	711554
Crystallin gamma B	CRYGB	711767
Crystallin gamma N	CRYGN	715040
Crystallin, gamma C	CRYGC	709553
C-src tyrosine kinase	CSK	702868
CTD small phosphatase 1	CTDSP1	698824
CTD small phosphatase 2	CTDSP2	715956
CTP synthase 2	CTPS2	721014
C-type lectin domain family 12 member A	CLEC12A	722319
C-type lectin domain family 19 member A	CLEC19A	694333
C-type lectin domain family 3 member A	CLEC3A	713054
C-type lectin domain family 6 member A	CLEC6A	716162
C-type lectin domain family 9 member A	CLEC9A	717472
CUB and zona pellucida-like domains 1	CUZD1	706861
CUE domain containing 2	CUEDC2	713243
CUGBP, Elav-like family member 3	CELF3	716884
C-x(9)-C motif containing 4	CMC4	100423504
Cyclic nucleotide binding domain containing 2	CNBD2	703290
Cyclic nucleotide gated channel alpha 1	CNGA1	704891
Cyclin A1	CCNA1	693797
Cyclin and CBS domain divalent metal cation transport mediator 2	CNNM2	714238
Cyclin and CBS domain divalent metal cation transport mediator 3	CNNM3	710345
Cyclin D binding myb-like transcription factor 1	DMTF1	706292
Cyclin D3	CCND3	695215
Cyclin Pas1/PHO80 domain containing 1	CNPPD1	704271
Cyclin-dependent kinase 17	CDK17	717183
Cyclin-dependent kinase 4	CDK4	715650
Cyclin-dependent kinase 8	CDK8	709761
Cyclin-dependent kinase-like 1 (CDC2-related kinase)	CDKL1	705975
Cystatin 11	CST11	654419
Cystatin 8	CST8	703172
Cystatin C	CST3	574313
Cystatin D	CST5	704408
Cysteine and glycine rich protein 3	CSRP3	702466
Cysteine-serine-rich nuclear protein 2	CSRNP2	694549

Cysteine-serine-rich nuclear protein 3	CSRNP3	703526
Cysteinyl leukotriene receptor 1	CYSLTR1	706663
Cystinosin, lysosomal cystine transporter	CTNS	706721
Cytidine deaminase	CDA	705913
Cytochrome c oxidase subunit viib2	COX7B2	100428440
Cytochrome P450, family 2, subfamily D, polypeptide 6	CYP2D6	678691
Cytochrome P450, family 2, subfamily E, polypeptide 1	CYP2E1	678688
Cytochrome P450, family 27, subfamily B, polypeptide 1	CYP27B1	715747
Cytochrome P450, family 4, subfamily F, polypeptide 22	CYP4F22	718303
Cytochrome P450, family 7, subfamily A, polypeptide 1	CYP7A1	698127
Cytochrome P450c17	CYP17A1	678693
Cytoplasmic polyadenylation element binding protein 1	CPEB1	694357
Cytotoxic and regulatory T-cell molecule	CRTAM	707560
Dab, reelin signal transducer, homolog 1 (Drosophila)	DAB1	716200
DAB2 interacting protein	DAB2IP	699080
Dachshund family transcription factor 1	DACH1	693532
Dachsous cadherin-related 1	DCHS1	711938
D-amino-acid oxidase	DAO	706373
DAZ associated protein 2	DAZAP2	695282
DAZ interacting zinc finger protein 1-like	DZIP1L	716551
Dcmp deaminase	DCTD	700995
DC-STAMP domain containing 2	DCST2	717224
DDB1 and CUL4 associated factor 10	DCAF10	716256
DDB1 and CUL4 associated factor 11	DCAF11	714867
DEAD (Asp-Glu-Ala-Asp) box helicase 25	DDX25	713920
DEAD (Asp-Glu-Ala-Asp) box helicase 42	DDX42	717964
DEAD (Asp-Glu-Ala-Asp) box polypeptide 19B	DDX19B	709576
DEAD (Asp-Glu-Ala-Asp) box polypeptide 4	DDX4	706943
DEAD (Asp-Glu-Ala-Asp) box polypeptide 41	DDX41	700742
DEAD (Asp-Glu-Ala-Asp) box polypeptide 50	DDX50	712511
DEAH (Asp-Glu-Ala-Asp/His) box polypeptide 57	DHX57	713523
DEAH (Asp-Glu-Ala-His) box polypeptide 38	DHX38	709173
DEAH (Asp-Glu-Ala-His) box polypeptide 40	DHX40	715202
Decapping mrna 1A	DCP1A	694198
Dedicator of cytokinesis 2	DOCK2	704061
Dedicator of cytokinesis 5	DOCK5	711359
Defensin alpha 6	DEFA6	717000
Defensin beta 108B	DEFB108B	696933
Defensin beta 121	DEFB121	619507
Defensin beta 123	DEFB123	619504
Defensin beta 125	DEFB125	714029
Defensin beta 129	DEFB129	714266
Defensin, alpha 4, corticostatin	DEFA4	574311
Dehydrogenase/reductase (SDR family) member 13	DHRS13	710755
Dehydrogenase/reductase (SDR family) member 3	DHRS3	715548
Deleted in lymphocytic leukemia, 7	DLEU7	707886
Delta-like 4 (Drosophila)	DLL4	704898
DENN/MADD domain containing 4A	DENND4A	709675

Denticleless E3 ubiquitin protein ligase homolog (Drosophila)	DTL	711236
Deoxycytidine kinase	DCK	705040
Deoxyhypusine synthase	DHPS	716213
Deoxyribonuclease I	DNASE1	704119
Desmoglein 1	DSG1	705452
Developing brain homeobox 2	DBX2	701170
Dickkopf WNT signaling pathway inhibitor 4	DKK4	705011
Dihydropyrimidine dehydrogenase	DPYD	715672
Dihydrouridine synthase 1-like	DUS1L	715662
Dipeptidase 3	DPEP3	701327
Dipeptidyl-peptidase 10 (inactive)	DPP10	714671
Discs, large (Drosophila) homolog-associated protein 4	DLGAP4	702928
Dishevelled segment polarity protein 2	DVL2	714381
Distal-less homeobox 3	DLX3	700831
Distal-less homeobox 4	DLX4	700706
DMRT like family B with proline rich C-terminal 1	DMRTB1	714424
DMRT-like family C2	DMRTC2	706178
DNA damage inducible 1 homolog 1	DDI1	704423
DNA damage-induced apoptosis suppressor	DDIAS	701440
DNA meiotic recombinase 1	DMC1	700935
Dnaj heat shock protein family (Hsp40) member B2	DNAJB2	702936
Dnaj heat shock protein family (Hsp40) member B8	DNAJB8	705667
Dnaj heat shock protein family (Hsp40) member C22	DNAJC22	710205
Dnaj heat shock protein family (Hsp40) member C27	DNAJC27	694037
Dnaj heat shock protein family (Hsp40) member C3	DNAJC3	695757
Docking protein 5	DOK5	698689
Docking protein 6	DOK6	703667
Dopa decarboxylase	DDC	693677
Dopamine receptor D1	DRD1	697796
Dopamine receptor D3	DRD3	100425048
Dopamine receptor D5	DRD5	712862
Doublesex and mab-3 related transcription factor 1	DMRT1	694516
Doublesex and mab-3 related transcription factor 2	DMRT2	697088
Doublesex and mab-3 related transcription factor 3	DMRT3	697323
DR1-associated protein 1 (negative cofactor 2 alpha)	DRAP1	715271
Drosha, ribonuclease type III	DROSHA	692081
DTW domain containing 1	DTWD1	715084
DTW domain containing 2	DTWD2	697989
Dual oxidase maturation factor 2	DUOXA2	712992
Dual specificity phosphatase 21	DUSP21	702770
Dual specificity phosphatase 22	DUSP22	705824
Dual specificity phosphatase 9	DUSP9	696161
Dual specificity tyrosine-(Y)-phosphorylation regulated kinase 2	DYRK2	717941
Dynactin subunit 4	DCTN4	712783
Dynein, axonemal, heavy chain 5	DNAH5	717339
Dynein, axonemal, light intermediate chain 1	DNALI1	713912

Dysbindin (dystrobrevin binding protein 1) domain containing 1	DBNDD1	701328
Dyskeratosis congenita 1, dyskerin	DKC1	702563
Dystroglycan 1	DAG1	706179
Dystrophia myotonica protein kinase	DMPK	715328
Dystrophin related protein 2	DRP2	702655
E1A binding protein p300	EP300	706258
E74-like factor 2 (ets domain transcription factor)	ELF2	696760
Ectodysplasin A receptor	EDAR	695059
Ecto-NOX disulfide-thiol exchanger 2	ENOX2	703816
Ectonucleotide pyrophosphatase/phosphodiesterase 1	ENPP1	710140
EF-hand and coiled-coil domain containing 1	EFCC1	706444
EF-hand calcium binding domain 1	EFCAB1	708842
EGF-like repeats and discoidin I-like domains 3	EDIL3	693315
EGF-like-domain, multiple 7	EGFL7	709840
EGF-like-domain, multiple 8	EGFL8	717145
EH domain containing 3	EHD3	705316
ELAV like neuron-specific RNA binding protein 2	ELAVL2	708195
ELAV like neuron-specific RNA binding protein 4	ELAVL4	711231
ELK1, member of ETS oncogene family	ELK1	712610
ELK4, ETS-domain protein (SRF accessory protein 1)	ELK4	699281
ELKS/RAB6-interacting/CAST family member 2	ERC2	705338
ELOVL fatty acid elongase 4	ELOVL4	692070
Endonuclease domain containing 1	ENDOD1	699210
Endoplasmic reticulum to nucleus signaling 1	ERN1	717751
Endothelial cell adhesion molecule	ESAM	712200
Endothelin 2	EDN2	695960
Enhancer of mrna decapping 3	EDC3	709182
Enhancer of polycomb homolog 2 (Drosophila)	EPC2	721916
Enhancer of rudimentary homolog (Drosophila)	ERH	712507
ENTH domain containing 1	ENTHD1	704302
Eomesodermin	EOMES	704711
Eosinophil peroxidase	EPX	709655
EPH receptor A5	EPHA5	712074
EPH receptor B6	EPHB6	704886
Ephrin-B1	EFNB1	694149
Epididymal sperm binding protein 1	ELSPBP1	718468
Epiphykan	EPYC	709645
ER degradation enhancer, mannosidase alpha-like 3	EDEM3	714475
ERGIC and golgi 3	ERGIC3	704736
Espin-like	ESPNL	695742
Estrogen receptor 2 (ER beta)	ESR2	574110
Ethylmalonic encephalopathy 1	ETHE1	718089
Eukaryotic translation elongation factor 1 beta 2	EEF1B2	707019
Eukaryotic translation elongation factor 1 gamma	EEF1G	722274
Eukaryotic translation initiation factor 2B subunit epsilon	EIF2B5	703673
Eukaryotic translation initiation factor 2B subunit gamma	EIF2B3	705862
Eukaryotic translation initiation factor 3 subunit F	EIF3F	706269

Eukaryotic translation initiation factor 3 subunit L	EIF3L	699189
Eukaryotic translation initiation factor 4E family member 3	EIF4E3	696303
Eukaryotic translation initiation factor 4E nuclear import factor 1	EIF4ENIF1	716871
Eukaryotic translation initiation factor 4H	EIF4H	693429
Even-skipped homeobox 1	EVX1	699106
EWS RNA binding protein 1	EWSR1	714432
Excision repair cross-complementation group 6 like	ERCC6L	699138
Exocyst complex component 2	EXOC2	706296
Exocyst complex component 3-like 2	EXOC3L2	713992
Exonuclease 3'-5' domain containing 1	EXD1	705364
Exosome component 8	EXOSC8	695071
Exostosin glycosyltransferase 1	EXT1	701488
EYA transcriptional coactivator and phosphatase 2	EYA2	716182
EYA transcriptional coactivator and phosphatase 3	EYA3	716724
FAD-dependent oxidoreductase domain containing 1	FOXRED1	714271
Family with sequence similarity 109 member B	FAM109B	709545
Family with sequence similarity 120C	FAM120C	700888
Family with sequence similarity 122A	FAM122A	698955
Family with sequence similarity 126 member A	FAM126A	705467
Family with sequence similarity 127, member A	FAM127A	708766
Family with sequence similarity 129 member A	FAM129A	714427
Family with sequence similarity 134 member A	FAM134A	704378
Family with sequence similarity 151 member A	FAM151A	715361
Family with sequence similarity 166 member A	FAM166A	705446
Family with sequence similarity 178 member B	FAM178B	710890
Family with sequence similarity 181 member B	FAM181B	701184
Family with sequence similarity 186 member B	FAM186B	711001
Family with sequence similarity 187, member B	FAM187B	707890
Family with sequence similarity 19 (chemokine (C-C motif)-like), member A3	FAM19A3	706250
Family with sequence similarity 206 member A	FAM206A	710486
Family with sequence similarity 210 member B	FAM210B	698314
Family with sequence similarity 234 member A	FAM234A	694729
Family with sequence similarity 26 member F	FAM26F	715967
Family with sequence similarity 3 member A	FAM3A	701159
Family with sequence similarity 43 member B	FAM43B	705659
Family with sequence similarity 53 member C	FAM53C	714176
Family with sequence similarity 65 member B	FAM65B	715354
Family with sequence similarity 69 member A	FAM69A	706803
Family with sequence similarity 71 member A	FAM71A	710735
Family with sequence similarity 71 member B	FAM71B	715428
Family with sequence similarity 71 member C	FAM71C	694296
Family with sequence similarity 71 member F1	FAM71F1	699608
Family with sequence similarity 83 member A	FAM83A	704023
Family with sequence similarity 83 member F	FAM83F	704523
Family with sequence similarity 89 member B	FAM89B	721925
FANCD2 opposite strand	FANCD2OS	715980

Fanconi anemia complementation group B	FANCB	712083
Fanconi anemia complementation group G	FANCG	698837
Fanconi anemia complementation group I	FANCI	699878
Fanconi anemia core complex associated protein 100	FAAP100	713876
Far upstream element (FUSE) binding protein 3	FUBP3	722470
Fascin actin-bundling protein 2, retinal	FSCN2	713824
FAST kinase domains 1	FASTKD1	706154
Fatty acid binding protein 1, liver	FABP1	699776
FBJ murine osteosarcoma viral oncogene homolog	FOS	702077
F-box and leucine-rich repeat protein 6	FBXL6	701594
F-box protein 39	FBXO39	713494
F-box protein 40	FBXO40	713933
F-box protein 44	FBXO44	714585
F-box protein 47	FBXO47	695069
F-box protein 6	FBXO6	722740
F-box protein 7	FBXO7	717317
Fc fragment of ige, high affinity I, receptor for; alpha polypeptide	FCER1A	719324
Fc fragment of igg, low affinity iib, receptor (CD32)	FCGR2B	720009
Fc fragment of igg, receptor, transporter, alpha	FCGRT	718859
Fc receptor-like 1	FCRL1	718841
Fc receptor-like B	FCRLB	720028
FCF1 rna-processing protein	FCF1	700044
Feline leukemia virus subgroup C cellular receptor 1	FLVCR1	710008
Fem-1 homolog b (C. Elegans)	FEM1B	693955
FERM and PDZ domain containing 1	FRMPD1	716380
FERM domain containing 5	FRMD5	711670
FERM domain containing 7	FRMD7	705736
Fermitin family member 3	FERMT3	722120
Ferritin mitochondrial	FTMT	699743
Ferritin, heavy polypeptide-like 17	FTHL17	707851
Fetuin B	FETUB	699226
FEV (ETS oncogene family)	FEV	701065
Fibrinogen beta chain	FGB	698487
Fibrinogen gamma chain	FGG	698363
Fibrinogen-like 2	FGL2	694856
Fibroblast growth factor 1 (acidic)	FGF1	705970
Fibroblast growth factor 10	FGF10	701584
Fibroblast growth factor 16	FGF16	705612
Fibroblast growth factor 20	FGF20	701847
Fibroblast growth factor 3	FGF3	708918
Fibroblast growth factor 4	FGF4	709016
Fibroblast growth factor 6	FGF6	710739
Fibroblast growth factor receptor 1	FGFR1	700126
Fibronectin leucine rich transmembrane protein 1	FLRT1	717942
Fibronectin type III and SPRY domain containing 2	FSD2	693575
Fibrous sheath CABYR binding protein	FSCB	701592
FIC domain containing	FICD	706780

Ficolin 1	FCN1	712405
Ficolin 2	FCN2	712486
Filamin A, alpha	FLNA	699524
Filamin binding LIM protein 1	FBLIM1	695727
Fizzy/cell division cycle 20 related 1	FZR1	721711
FK506 binding protein 10	FKBP10	707881
FK506 binding protein 7	FKBP7	703299
FK506 binding protein 8	FKBP8	720232
Flavin containing monooxygenase 1	FMO1	703743
Flavin containing monooxygenase 3	FMO3	574244
Folate receptor 2 (fetal)	FOLR2	718405
Follicle stimulating hormone receptor	FSHR	716123
Follicle stimulating hormone, beta polypeptide	FSHB	697317
Follicular dendritic cell secreted protein	FDCSP	707784
Folliculogenesis specific bhlh transcription factor	FIGLA	710606
Follistatin like 1	FSTL1	713367
Forkhead box A1	FOXA1	697909
Forkhead box R2	FOXR2	704032
Four and a half LIM domains 3	FHL3	715313
Free fatty acid receptor 1	FFAR1	708620
Frizzled class receptor 3	FZD3	713839
Frizzled-related protein	FRZB	706048
Fucokinase	FUK	709226
Fucosidase, alpha-L- 2, plasma	FUCA2	700611
Fuzzy planar cell polarity protein	FUZ	719442
FXYP domain containing ion transport regulator 7	FXYP7	718457
FYN proto-oncogene, Src family tyrosine kinase	FYN	574214
FYVE, rhogef and PH domain containing 6	FGD6	712132
G protein pathway suppressor 1	GPS1	719343
G protein-coupled bile acid receptor 1	GPBAR1	697937
G protein-coupled receptor 1	GPR1	707120
G protein-coupled receptor 119	GPR119	703368
G protein-coupled receptor 12	GPR12	710030
G protein-coupled receptor 137	GPR137	717722
G protein-coupled receptor 139	GPR139	695541
G protein-coupled receptor 141	GPR141	705700
G protein-coupled receptor 153	GPR153	703169
G protein-coupled receptor 158	GPR158	707065
G protein-coupled receptor 17	GPR17	699576
G protein-coupled receptor 171	GPR171	709960
G protein-coupled receptor 174	GPR174	707800
G protein-coupled receptor 176	GPR176	701115
G protein-coupled receptor 179	GPR179	693410
G protein-coupled receptor 18	GPR18	698714
G protein-coupled receptor 182	GPR182	713866
G protein-coupled receptor 183	GPR183	698844
G protein-coupled receptor 19	GPR19	697072
G protein-coupled receptor 20	GPR20	693582

G protein-coupled receptor 22	GPR22	699492
G protein-coupled receptor 25	GPR25	709001
G protein-coupled receptor 26	GPR26	693327
G protein-coupled receptor 31	GPR31	717158
G protein-coupled receptor 34	GPR34	700887
G protein-coupled receptor 35	GPR35	699073
G protein-coupled receptor 37 (endothelin receptor type B-like)	GPR37	696628
G protein-coupled receptor 50	GPR50	703817
G protein-coupled receptor 61	GPR61	699055
G protein-coupled receptor 63	GPR63	704888
G protein-coupled receptor 65	GPR65	693449
G protein-coupled receptor 68	GPR68	696529
G protein-coupled receptor 75	GPR75	100426872
G protein-coupled receptor 78	GPR78	708831
G protein-coupled receptor 84	GPR84	705309
G protein-coupled receptor 85	GPR85	703214
G protein-coupled receptor kinase 7	GRK7	714916
G protein-coupled receptor, class C, group 5, member B	GPRC5B	695204
G protein-coupled receptor, class C, group 5, member D	GPRC5D	698898
G protein-coupled receptor, class C, group 6, member A	GPRC6A	715520
G2/M-phase specific E3 ubiquitin protein ligase	G2E3	717021
Galactokinase 2	GALK2	714866
Galactose-3-O-sulfotransferase 1	GAL3ST1	715998
Galanin like peptide	GALP	704323
Gametogenetin	GGN	715072
Gamma-aminobutyric acid (GABA) A receptor, alpha 2	GABRA2	703894
Gamma-aminobutyric acid (GABA) A receptor, alpha 3	GABRA3	711230
Gamma-aminobutyric acid (GABA) A receptor, alpha 6	GABRA6	697010
Gamma-aminobutyric acid (GABA) A receptor, beta 2	GABRB2	696767
Gamma-aminobutyric acid (GABA) A receptor, gamma 2	GABRG2	697248
Gamma-aminobutyric acid (GABA) A receptor, rho 1	GABRR1	700728
Gamma-aminobutyric acid (GABA) B receptor, 1	GABBR1	708987
Gamma-glutamylcyclotransferase	GGCT	695547
Gamma-glutamyltransferase 5	GGT5	720345
Gap junction protein alpha 10	GJA10	704282
Gap junction protein alpha 8	GJA8	701415
Gap junction protein beta 7	GJB7	100424944
Gap junction protein delta 2	GJD2	697250
Gap junction protein delta 3	GJD3	700473
Gap junction protein delta 4	GJD4	699010
Gastric inhibitory polypeptide	GIP	698335
Gastric intrinsic factor	GIF	698704
Gastrin	GAST	707564
Gastrokin 2	GKN2	700323
Gastrulation brain homeobox 2	GBX2	693901
GEM interacting protein	GMIP	720380
Gem nuclear organelle associated protein 8	GEMIN8	720922

General transcription factor IIH subunit 4	GTF2H4	714285
General transcription factor IIH subunit 5	GTF2H5	700107
Germinal center-associated, signaling and motility	GCSAM	707891
Ghrelin/obestatin prepropeptide	GHRL	574280
Gigaxonin	GAN	713996
GLE1, RNA export mediator	GLE1	717474
GLI pathogenesis-related 1	GLIPR1	718956
Glial cell derived neurotrophic factor	GDNF	706345
Glial cells missing homolog 2 (Drosophila)	GCM2	698614
Glucagon-like peptide 2 receptor	GLP2R	717783
Glucose 6 phosphatase, catalytic, 3	G6PC3	714276
Glucose-6-phosphate dehydrogenase	G6PD	701137
Glucose-fructose oxidoreductase domain containing 1	GFOD1	700607
Glucosidase, beta (bile acid) 2	GBA2	696062
Glutamate decarboxylase 2	GAD2	613029
Glutamate receptor, ionotropic, AMPA 4	GRIA4	705794
Glutamate receptor, ionotropic, kainate 1	GRIK1	705699
Glutamate receptor, ionotropic, N-methyl D-aspartate 2B	GRIN2B	698571
Glutamate receptor, ionotropic, N-methyl D-aspartate 2C	GRIN2C	699216
Glutamate receptor, ionotropic, N-methyl D-aspartate-associated protein 1 (glutamate binding)	GRINA	708234
Glutamate receptor, metabotropic 2	GRM2	700214
Glutamate receptor, metabotropic 3	GRM3	706645
Glutamate receptor, metabotropic 8	GRM8	697465
Glutaminase	GLS	693520
Glutathione peroxidase 5	GPX5	708014
Glutathione peroxidase 6	GPX6	100286832
Glutathione S-transferase alpha 4	GSTA4	709666
Glutathione S-transferase kappa 1	GSTK1	704240
Glutathione S-transferase pi 1	GSTP1	721704
Glyceraldehyde-3-phosphate dehydrogenase	GAPDH	574353
Glycerol-3-phosphate acyltransferase 2, mitochondrial	GPAT2	707076
Glycine receptor alpha 1	GLRA1	713940
Glycine receptor alpha 2	GLRA2	711926
Glycine receptor alpha 3	GLRA3	697984
Glycogen synthase 2	GYS2	706152
Glycosylated lysosomal membrane protein	GLMP	719468
Glycosylphosphatidylinositol anchored molecule like	GML	705046
Glycosyltransferase-like 1B	GYLTL1B	714846
Golgi-associated, gamma adaptin ear containing, ARF binding protein 1	GGA1	697929
Golgi-associated, gamma adaptin ear containing, ARF binding protein 3	GGA3	705751
Goosecoid homeobox	GSC	702308
Goosecoid homeobox 2	GSC2	719051
G-protein signaling modulator 1	GPSM1	710652
Granzyme K	GZMK	705477
GRB2-related adaptor protein	GRAP	702473

GRB2-related adaptor protein 2	GRAP2	704410
G-rich RNA sequence binding factor 1	GRSF1	706301
GRIP and coiled-coil domain containing 1	GCC1	697975
Group-specific component (vitamin D binding protein)	GC	705708
Growth arrest and DNA damage inducible alpha	GADD45A	701054
Growth associated protein 43	GAP43	711260
Growth differentiation factor 10	GDF10	711441
Growth differentiation factor 3	GDF3	715605
Growth differentiation factor 6	GDF6	701126
Growth factor independent 1B transcription repressor	GFI1B	714593
Growth hormone 1	GH1	718156
Growth hormone inducible transmembrane protein	GHITM	702691
Gse1 coiled-coil protein	GSE1	693298
Gtpase, IMAP family member 1	GIMAP1	100424488
Gtpase, IMAP family member 4	GIMAP4	713506
Guanidinoacetate N-methyltransferase	GAMT	721263
Guanine nucleotide binding protein (G protein), beta polypeptide 1	GNB1	703399
Guanine nucleotide binding protein (G protein), beta polypeptide 2-like 1	GNB2L1	708526
Guanylate cyclase 2C	GUCY2C	699191
Guanylate cyclase 2F, retinal	GUCY2F	704485
Guanylate cyclase activator 1B	GUCA1B	695658
Guanylate cyclase activator 1C	GUCA1C	706071
Guanylate kinase 1	GUK1	695272
H2A histone family, member Y	H2AFY	711836
H2A histone family, member Z	H2AFZ	709326
HAUS augmin like complex subunit 8	HAUS8	718874
Heart and neural crest derivatives expressed 1	HAND1	714450
Heat shock factor binding protein 1	HSBP1	714498
Heat shock protein 90kda alpha family class B member 1	HSP90AB1	702293
Heat shock protein family B (small) member 11	HSPB11	714791
Heat shock transcription factor 2	HSF2	713938
HECT domain containing E3 ubiquitin protein ligase 2	HECTD2	697258
HECT, C2 and WW domain containing E3 ubiquitin protein ligase 1	HECW1	701331
Hematological and neurological expressed 1-like	HN1L	702283
Hematopoietic cell-specific Lyn substrate 1	HCLS1	714044
Hematopoietic prostaglandin D synthase	HPGDS	705227
Heme oxygenase 1	HMOX1	719266
Heme oxygenase 2	HMOX2	705461
Hemogen	HEMGN	715562
Hemoglobin subunit alpha 1	HBA1	701930
Hemoglobin subunit epsilon 1	HBE1	715414
HEN1 methyltransferase homolog 1 (Arabidopsis)	HENMT1	698896
HEPACAM family member 2	HEPACAM2	702110
Heparan sulfate-glucosamine 3-sulfotransferase 2	HS3ST2	699722
Heparan sulfate-glucosamine 3-sulfotransferase 3A1	HS3ST3A1	718232

Heparan sulfate-glucosamine 3-sulfotransferase 5	HS3ST5	693684
Hepatocyte nuclear factor 4, alpha	HNF4A	717972
Hepcidin antimicrobial peptide	HAMP	708397
Hexamethylene bis-acetamide inducible 1	HEXIM1	716006
Hexokinase 3 (white cell)	HK3	698120
High mobility group box 3	HMGB3	703598
High mobility group box 4	HMGB4	710554
Histamine receptor H2	HRH2	695226
Histamine receptor H3	HRH3	574253
Histocompatibility (minor) 13	HM13	713216
Histone cluster 1, h1b	HIST1H1B	705100
Histone cluster 1, h1t	HIST1H1T	696375
Histone cluster 1, h2bm	HIST1H2BM	704452
Histone cluster 2, h2ab	HIST2H2AB	705170
Histone cluster 3, H3	HIST3H3	694024
Histone deacetylase 11	HDAC11	693537
Histone deacetylase 3	HDAC3	704467
Histone deacetylase 5	HDAC5	711456
Homeobox A6	HOXA6	700102
Homeobox B1	HOXB1	696111
Homeobox B7	HOXB7	697089
Homeobox C12	HOXC12	704201
Homeobox C13	HOXC13	704082
Homeobox C4	HOXC4	100430432
Homeobox D12	HOXD12	100428776
Homeodomain interacting protein kinase 1	HIPK1	707856
Host cell factor C2	HCFC2	700316
HRAS like suppressor family member 5	HRASLS5	718317
Htra serine peptidase 3	HTRA3	722638
Human immunodeficiency virus type I enhancer binding protein 3	HIVEP3	696084
HUS1 checkpoint clamp component B	HUS1B	706408
Hyaluronan and proteoglycan link protein 1	HAPLN1	712501
Hyaluronan and proteoglycan link protein 3	HAPLN3	698880
Hydroxyacid oxidase (glycolate oxidase) 1	HAO1	718360
Hydroxyacyl-coa dehydrogenase/3-ketoacyl-coa t hiolase/enoyl-coa hydratase (trifunctional protein), alpha subunit	HADHA	695975
Hydroxysteroid (17-beta) dehydrogenase 3	HSD17B3	709843
Hydroxysteroid dehydrogenase like 2	HSDL2	707233
Hyperpolarization activated cyclic nucleotide gated potassium channel 3	HCN3	717719
Hypocretin (orexin) receptor 2	HCRT2	711662
Iduronidase, alpha-L-	IDUA	106998224
IKAROS family zinc finger 1	IKZF1	693936
IKAROS family zinc finger 3	IKZF3	698083
IKAROS family zinc finger 5	IKZF5	716950
IL2-inducible T-cell kinase	ITK	715471

Immunity-related gtpase family, Q	IRGQ	710309
Immunoglobulin superfamily member 21	IGSF21	701539
Immunoglobulin superfamily member 8	IGSF8	720186
IMP (inosine 5'-monophosphate) dehydrogenase 2	IMPDH2	708307
IMP3, U3 small nucleolar ribonucleoprotein	IMP3	706202
Importin 13	IPO13	702007
Importin 5	IPO5	697448
Importin 9	IPO9	707210
Inducible T-cell co-stimulator	ICOS	705788
Inhibin alpha	INHA	574379
Inhibin beta C	INHBC	714640
Inositol polyphosphate multikinase	IPMK	703630
Inositol polyphosphate-4-phosphatase type I A	INPP4A	707986
Inositol polyphosphate-4-phosphatase type II B	INPP4B	699738
Inositol polyphosphate-5-phosphatase F	INPP5F	703808
Inositol-3-phosphate synthase 1	ISYNA1	719487
Insulin like 3	INSL3	100533192
Insulin like 4	INSL4	693911
Insulin like 5	INSL5	699803
Insulin like 6	INSL6	693735
Insulin like growth factor binding protein 4	IGFBP4	700963
Insulin like growth factor binding protein acid labile subunit	IGFALS	722493
Insulinoma-associated 2	INSM2	695563
Integral membrane protein 2B	ITM2B	709896
Integrator complex subunit 5	INTS5	719124
Integrator complex subunit 7	INTS7	711152
Integrin linked kinase	ILK	709944
Integrin subunit alpha 2b	ITGA2B	714955
Integrin subunit alpha 4	ITGA4	704745
Integrin subunit alpha V	ITGAV	707756
Integrin subunit beta 6	ITGB6	700454
Integrin subunit beta 7	ITGB7	699405
Integrin subunit beta like 1	ITGBL1	700965
Integrin-binding sialoprotein	IBSP	701835
Intelectin 1 (galactofuranose binding)	ITLN1	719807
Interactor of little elongation complex ELL subunit 2	ICE2	706347
Inter-alpha-trypsin inhibitor heavy chain 2	ITIH2	713575
Intercellular adhesion molecule 4 (Landsteiner-Wiener blood group)	ICAM4	712354
Interferon (alpha, beta and omega) receptor 2	IFNAR2	699726
Interferon regulatory factor 2	IRF2	694347
Interferon regulatory factor 2 binding protein 1	IRF2BP1	715611
Interferon regulatory factor 5	IRF5	700725
Interferon, alpha 2	IFNA2	709948
Interferon, gamma	IFNG	574282
Interferon, gamma-inducible protein 16	IFI16	719253
Interferon, kappa	IFNK	707234
Interferon, lambda receptor 1	IFNLR1	711625

Interleukin 17 receptor B	IL17RB	693671
Interleukin 18 receptor accessory protein	IL18RAP	712046
Interleukin 19	IL19	694806
Interleukin 20 receptor subunit beta	IL20RB	716769
Interleukin 21	IL21	708125
Interleukin 21 receptor	IL21R	705759
Interleukin 22	IL22	718047
Interleukin 4	IL4	574281
Interphotoreceptor matrix proteoglycan 1	IMPG1	716669
Interphotoreceptor matrix proteoglycan 2	IMPG2	701319
Intraflagellar transport 172	IFT172	700948
Intraflagellar transport 20	IFT20	715773
Intraflagellar transport 57	IFT57	705088
Inturned planar cell polarity protein	INTU	709967
IQ motif containing K	IQCK	695417
IQ motif containing with AAA domain 1	IQCA1	694173
Iroquois homeobox 1	IRX1	693825
Iroquois homeobox 2	IRX2	695599
Iroquois homeobox 4	IRX4	710675
Iroquois homeobox 5	IRX5	697968
ISL LIM homeobox 2	ISL2	707916
Isocitrate dehydrogenase 3 (NAD+) gamma	IDH3G	698558
Izumo sperm-egg fusion 1	IZUMO1	718234
Junction adhesion molecule like	JAML	704919
Junctophilin 1	JPH1	697014
Kallikrein B1	KLKB1	696639
Kallikrein related peptidase 5	KLK5	719467
Kallikrein related peptidase 8	KLK8	719488
KDEL endoplasmic reticulum protein retention receptor 1	KDELR1	717928
KDEL endoplasmic reticulum protein retention receptor 2	KDELR2	704335
KDEL motif containing 1	KDELC1	702156
Kelch domain containing 10	KLHDC10	702290
Kelch domain containing 8B	KLHDC8B	707348
Kelch like family member 11	KLHL11	708393
Kelch like family member 2	KLHL2	704790
Kelch like family member 21	KLHL21	704734
Kelch like family member 26	KLHL26	719583
Kelch like family member 32	KLHL32	709276
Kelch like family member 34	KLHL34	696156
Kelch like family member 40	KLHL40	717366
Kell blood group, metallo-endoropeptidase	KEL	703492
Keratin 13, type I	KRT13	706830
Keratin 14, type I	KRT14	100426176
Keratin 17, type I	KRT17	100426328
Keratin 222, type II	KRT222	701557
Keratin 25, type I	KRT25	701915
Keratin 28, type I	KRT28	702274
Keratin 39, type I	KRT39	702838

Keratin 4, type II	KRT4	700060
Keratin 71, type II	KRT71	698941
Keratin 74, type II	KRT74	699069
Keratin 76, type II	KRT76	699194
Keratin 79, type II	KRT79	700188
Keratin associated protein 12-4	KRTAP12-4	712284
Keratin associated protein 22-1	KRTAP22-1	100428224
Keratin associated protein 3-1	KRTAP3-1	697574
Keratin associated protein 8-1	KRTAP8-1	711461
Keratocan	KERA	709743
KIAA0141 ortholog	KIAA0141	702802
KIAA0355 ortholog	KIAA0355	705202
KIAA1033 ortholog	KIAA1033	701501
KIAA1107 ortholog	KIAA1107	705652
KIAA1429 ortholog	KIAA1429	699635
Killer cell lectin-like receptor subfamily C, member 2	KLRC2	709885
Killer cell lectin-like receptor subfamily C, member 3	KLRC3	709790
Killer cell lectin-like receptor subfamily F, member 1	KLRF1	574389
Killer cell lectin-like receptor subfamily G, member 1	KLRG1	716727
Killer-cell Ig-like receptor KIR3DL12	KIR3DL12	100125560
Kin of IRRE like 2 (Drosophila)	KIRREL2	711175
Kinesin family member 13A	KIF13A	704126
Kinesin family member 2B	KIF2B	705683
Kinesin family member 3C	KIF3C	695287
Kinesin family member 5A	KIF5A	711936
Kinesin light chain 3	KLC3	714331
Klotho beta	KLB	699115
KN motif and ankyrin repeat domains 4	KANK4	695040
Kv channel interacting protein 2	KCNIP2	712434
Lacritin	LACRT	654418
Lactalbumin, alpha-	LALBA	707442
Lactoperoxidase	LPO	709848
Ladybird homeobox 1	LBX1	711761
Laminin subunit beta 2	LAMB2	707892
Late cornified envelope 3C	LCE3C	100423544
Late cornified envelope 4A	LCE4A	100423936
Late cornified envelope 5A	LCE5A	100423328
Late cornified envelope-like proline-rich 1	LELP1	714425
LCK proto-oncogene, Src family tyrosine kinase	LCK	717704
LDL receptor related protein 2	LRP2	705786
Lectin, galactoside-binding, soluble, 12	LGALS12	718300
Lectin, galactoside-binding, soluble, 14	LGALS14	698227
Lectin, galactoside-binding, soluble, 2	LGALS2	697820
Leiomodin 3 (fetal)	LMOD3	696239
Lengsin, lens protein with glutamine synthetase domain	LGSN	715903
Lens intrinsic membrane protein 2	LIM2	719639
LETM1 domain containing 1	LETMD1	694422
Leucine rich repeat and coiled-coil centrosomal protein 1	LRRCC1	707964

Leucine rich repeat and fibronectin type III domain containing 2	LRFN2	719621
Leucine rich repeat and fibronectin type III domain containing 4	LRFN4	713166
Leucine rich repeat and fibronectin type III domain containing 5	LRFN5	700512
Leucine rich repeat containing 10	LRRC10	718434
Leucine rich repeat containing 14	LRRC14	703587
Leucine rich repeat containing 31	LRRC31	697710
Leucine rich repeat containing 36	LRRC36	697849
Leucine rich repeat containing 42	LRRC42	714839
Leucine rich repeat containing 61	LRRC61	704779
Leucine rich repeat neuronal 4	LRN4	718283
Leucine rich repeat transmembrane neuronal 2	LRRTM2	714713
Leucine rich repeat transmembrane neuronal 3	LRRTM3	696536
Leucine rich repeat transmembrane neuronal 4	LRRTM4	711411
Leucine-rich repeat containing 8 family member E	LRRC8E	706394
Leucine-rich repeat LGI family member 3	LGI3	715871
Leucine-rich repeat, immunoglobulin-like and transmembrane domains 1	LRIT1	698385
Leucine-rich repeats and immunoglobulin-like domains 3	LRIG3	716344
Leucine-rich repeats and transmembrane domains 1	LRTM1	705947
Leucine-rich repeats and WD repeat domain containing 1	LRWD1	715187
Leucine-rich single-pass membrane protein 2	LSMEM2	703202
Leucine-rich, glioma inactivated 1	LGI1	700520
Leukocyte cell derived chemotaxin 1	LECT1	694189
Leukocyte cell-derived chemotaxin 2	LECT2	712424
Leukocyte immunoglobulin-like receptor, subfamily A (without TM domain), member 3	LILRA3	692337
Leukocyte immunoglobulin-like receptor, subfamily B (with TM and ITIM domains), member 1	LILRB1	692340
Leukocyte receptor cluster (LRC) member 1	LENG1	693417
Leukocyte-associated immunoglobulin-like receptor 1	LAIR1	695533
Leukotriene B4 receptor 2	LTB4R2	716012
Leupaxin	LPXN	702033
Ligase III, DNA, ATP-dependent	LIG3	715181
Ligase IV, DNA, ATP-dependent	LIG4	695475
LIM domain binding 2	LDB2	714918
LIM domain only 1	LMO1	100425592
LIM homeobox 5	LHX5	713417
LIM homeobox 9	LHX9	710636
Limb and CNS expressed 1	LIX1	700619
Limb development membrane protein 1-like	LMBR1L	709548
Lin-28 homolog B (C. Elegans)	LIN28B	696130
Lipase, family member J	LIPJ	693463
Lipocalin 1	LCN1	711974
Lipocalin 6	LCN6	574148
Lipoma HMGIC fusion partner-like 1	LHFPL1	707492

Lipopolysaccharide-induced TNF factor	LITAF	711743
Low density lipoprotein receptor adaptor protein 1	LDLRAP1	713032
Low density lipoprotein receptor class A domain containing 1	LDLRAD1	716707
LSM12 homolog	LSM12	714219
LSM14A mrna processing body assembly factor	LSM14A	705085
Ly6/neurotoxin 1	LYNX1	574359
Ly6/neurotoxin 1	LYNX1	100428512
LY6/PLAUR domain containing 4	LYPD4	706070
Lymphocyte antigen 6 complex, locus D	LY6D	695450
Lymphocyte antigen 6 complex, locus G6C	LY6G6C	716220
Lymphotoxin alpha	LTA	715425
Lysine (K)-specific methyltransferase 5C	KMT5C	699963
Lysine-rich nucleolar protein 1	KNOP1	695144
Lysophosphatidic acid receptor 5	LPAR5	713283
Lysophosphatidylcholine acyltransferase 4	LPCAT4	696388
Lysophospholipase II	LYPLA2	719074
Lysozyme G-like 1	LYG1	709203
Lysozyme G-like 2	LYG2	713778
Lysozyme-like 4	LYZL4	716549
Lysyl oxidase like 1	LOXL1	706464
MAD2 mitotic arrest deficient-like 2 (yeast)	MAD2L2	714527
MAD2L1 binding protein	MAD2L1BP	701099
MAF1 homolog, negative regulator of RNA polymerase III	MAF1	700385
MAGE family member B1	MAGEB1	703810
MAGE family member B18	MAGEB18	700524
MAGE family member B3	MAGEB3	703705
MAGE family member D2	MAGED2	701719
Mago homolog, exon junction complex core component	MAGOH	714261
Major facilitator superfamily domain containing 14B	MFSD14B	708498
Major histocompatibility complex, class I, A	MAMU-A3	699243
Major histocompatibility complex, class I, E	MAMU-E	711532
Major histocompatibility complex, class II, DM alpha	MAMU-DMA	717870
Major histocompatibility complex, class II, DM beta	MAMU-DMB	100429856
Major intrinsic protein of lens fiber	MIP	712901
Mal, T-cell differentiation protein-like	MALL	696102
Male-enhanced antigen 1	MEA1	699300
Mannose receptor, C type 1	MRC1	701010
Mannosidase, alpha, class 1B, member 1	MAN1B1	706918
Mannosidase, alpha, class 2B, member 1	MAN2B1	716173
Mannosidase, beta A, lysosomal	MANBA	712531
Mannosyl (alpha-1,3-)-glycoprotein beta-1,2-N-acetylglucosaminyltransferase	MGAT1	707375
Mannosyl (alpha-1,6-)-glycoprotein beta-1,6-N-acetylglucosaminyltransferase	MGAT5	709108
Mannosyl (alpha-1,6-)-glycoprotein beta-1,6-N-acetylglucosaminyltransferase, isozyme B	MGAT5B	708299
MAP7 domain containing 1	MAP7D1	712899
MAP-kinase activating death domain	MADD	713613

MAS related GPR family member D	MRGPRD	709555
MAS-related GPR, member X4	MRGPRX4	692123
Mast cell immunoglobulin-like receptor 1	MILR1	717835
Matrin 3	MATR3	100568448
Matrix extracellular phosphoglycoprotein	MEPE	701943
Matrix metallopeptidase 12	MMP12	703867
Matrix metallopeptidase 20	MMP20	703188
Matrix metallopeptidase 21	MMP21	695797
Matrix metallopeptidase 24	MMP24	712005
Matrix metallopeptidase 27	MMP27	703307
Matrix metallopeptidase 8	MMP8	703536
MAX dimerization protein 1	MXD1	701784
MDM2 binding protein	MTBP	703121
Mediator complex subunit 14	MED14	699395
Mediator complex subunit 23	MED23	714629
Mediator complex subunit 6	MED6	693320
Meiosis 1 associated protein	M1AP	710210
Melanin concentrating hormone receptor 2	MCHR2	574369
Melanocortin 2 receptor accessory protein	MRAP	701330
Melanocortin 4 receptor	MC4R	698596
Melanocortin 5 receptor	MC5R	701447
Melanoma antigen family B, 4	MAGEB4	703918
Melanoma antigen family C, 2	MAGEC2	697762
Melatonin receptor 1A	MTNR1A	702686
Melatonin receptor 1B	MTNR1B	695629
Membrane associated guanylate kinase, WW and PDZ domain containing 3	MAGI3	709341
Membrane frizzled-related protein	MFRP	704965
Membrane protein, palmitoylated 7	MPP7	709246
Membrane-spanning 4-domains, subfamily A, member 1	MS4A1	696843
Membrane-spanning 4-domains, subfamily A, member 4A	MS4A4A	698027
Membrane-spanning 4-domains, subfamily A, member 7	MS4A7	697200
Meprin A subunit beta	MEP1B	707036
Metallothionein 3	MT3	700602
Metaxin 1	MTX1	717595
Methionine adenosyltransferase I, alpha	MAT1A	700519
Methionine sulfoxide reductase B3	MSRB3	717617
Microfibrillar associated protein 3 like	MFAP3L	694985
Microtubule associated protein 1 light chain 3 alpha	MAP1LC3A	707439
Microtubule associated protein 1S	MAP1S	719196
Microtubule associated protein 2	MAP2	710840
Microtubule associated serine/threonine kinase 1	MAST1	717903
Microtubule associated serine/threonine kinase like	MASTL	708134
Midline 1	MID1	709683
Midnolin	MIDN	721215
Minichromosome maintenance complex binding protein	MCMBP	704028
Mitochondrial E3 ubiquitin protein ligase 1	MUL1	705429
Mitochondrial elongation factor 2	MIEF2	700705

Mitochondrial ribosomal protein L11	MRPL11	714094
Mitochondrial ribosomal protein L17	MRPL17	697086
Mitochondrial ribosomal protein L18	MRPL18	702629
Mitochondrial ribosomal protein L36	MRPL36	100430880
Mitochondrial ribosomal protein L37	MRPL37	715168
Mitochondrial ribosomal protein L42	MRPL42	715676
Mitochondrial ribosomal protein L43	MRPL43	711038
Mitochondrial ribosomal protein L9	MRPL9	711235
Mitochondrial ribosomal protein S18C	MRPS18C	707257
Mitochondrial ribosomal protein S21	MRPS21	706805
Mitochondrial ribosomal protein S9	MRPS9	712968
Mitogen-activated protein kinase 11	MAPK11	715794
Mitogen-activated protein kinase 12	MAPK12	715745
Mitogen-activated protein kinase kinase kinase 14	MAP3K14	716258
Mitogen-activated protein kinase kinase kinase 6	MAP3K6	715911
Mitogen-activated protein kinase kinase kinase 9	MAP3K9	693835
Mitogen-activated protein kinase kinase kinase kinase 2	MAP4K2	699331
Molybdenum cofactor synthesis 2	MOCS2	703689
Monoacylglycerol O-acyltransferase 2	MOGAT2	696347
Motilin receptor	MLNR	705803
Mov10 RISC complex RNA helicase	MOV10	705910
MRE11 homolog A, double strand break repair nuclease	MRE11A	697566
Msh homeobox 2	MSX2	694227
Mucin 13, cell surface associated	MUC13	716407
Multiple C2 domains, transmembrane 2	MCTP2	706949
Murine retrovirus integration site 1 homolog	MRVI1	702830
Muscle RAS oncogene homolog	MRAS	716352
Muscle, skeletal, receptor tyrosine kinase	MUSK	709397
MYCBP-associated, testis expressed 1	MAATS1	712979
Myelin oligodendrocyte glycoprotein	MOG	711347
Myelin regulatory factor	MYRF	719083
Myelin transcription factor 1	MYT1	719050
Myeloid/lymphoid or mixed-lineage leukemia; translocated to, 6	MLLT6	694045
Myeloperoxidase	MPO	714246
Myocardin	MYOCD	718193
Myocyte enhancer factor 2C	MEF2C	694992
Myogenic differentiation 1	MYOD1	696222
Myogenic factor 5	MYF5	697426
Myoglobin	MB	693269
Myosin IG	MYO1G	698101
Myosin IIIA	MYO3A	707165
Myosin light chain 2	MYL2	711937
Myosin VA	MYO5A	574273
Myosin XVIII A	MYO18A	711171
Myosin, heavy chain 2, skeletal muscle, adult	MYH2	717912
Myosin, heavy chain 4, skeletal muscle	MYH4	717888
Myotilin	MYOT	716285

Myotubularin 1	MTM1	703131
Myotubularin related protein 2	MTMR2	699703
Myotubularin related protein 8	MTMR8	708037
Myozenin 1	MYOZ1	706768
Myozenin 2	MYOZ2	705000
N(alpha)-acetyltransferase 16, nata auxiliary subunit	NAA16	698843
N-6 adenine-specific DNA methyltransferase 1 (putative)	N6AMT1	706937
N-6 adenine-specific DNA methyltransferase 2 (putative)	N6AMT2	703665
N-acetyltransferase 2 (arylamine N-acetyltransferase)	NAT2	704357
N-acetyltransferase 8-like (GCN5-related, putative)	NAT8L	722359
NAD(P)H dehydrogenase, quinone 2	NQO2	707675
NADH:ubiquinone oxidoreductase complex assembly factor 4	NDUFAF4	705102
NADH:ubiquinone oxidoreductase subunit A12	NDUFA12	711970
NADPH oxidase organizer 1	NOXO1	694059
Napsin A aspartic peptidase	NAPSA	719243
Natriuretic peptide A	NPPA	714994
Natriuretic peptide receptor 2	NPR2	695750
Natural cytotoxicity triggering receptor 2	NCR2	693869
N-deacetylase/N-sulfotransferase (heparan glucosaminyl) 3	NDST3	704244
Nebulette	NEBL	702764
Nedd4 family interacting protein 1	NDFIP1	705716
Negative elongation factor complex member E	NELFE	716913
Nephrosis 2, idiopathic, steroid-resistant (podocin)	NPHS2	100430824
Nerve growth factor receptor	NGFR	574304
Neudesin neurotrophic factor	NENF	710911
Neural cell adhesion molecule 1	NCAM1	693789
Neural EGFL like 1	NELL1	701438
Neural EGFL like 2	NELL2	703134
Neural precursor cell expressed, developmentally down-regulated 1	NEDD1	713673
Neural precursor cell expressed, developmentally down-regulated 4, E3 ubiquitin protein ligase	NEDD4	699550
Neural proliferation, differentiation and control, 1	NPDC1	707453
Neural retina leucine zipper	NRL	714967
Neuraminidase 2 (cytosolic sialidase)	NEU2	713979
Neuraminidase 3 (membrane sialidase)	NEU3	694310
Neuraminidase 4 (sialidase)	NEU4	702264
Neurensin 2	NRSN2	714586
Neurexophilin 2	NXPH2	704413
Neuritin 1	NRN1	722968
Neurofibromin 2 (merlin)	NF2	714945
Neurofilament, light polypeptide	NEFL	641444
Neurogenin 3	NEUROG3	711583
Neuroglobin	NGB	641331
Neuron navigator 3	NAV3	694815
Neuronal differentiation 1	NEUROD1	704954
Neuronal differentiation 2	NEUROD2	696976
Neuronal differentiation 4	NEUROD4	706605

Neuronal PAS domain protein 2	NPAS2	710480
Neuronal PAS domain protein 3	NPAS3	717281
Neuronal PAS domain protein 4	NPAS4	714161
Neuronal pentraxin I	NPTX1	718259
Neuropeptide S receptor 1	NPSR1	574355
Neuropeptide Y receptor Y4	NPY4R	694492
Neuropeptide Y receptor Y5	NPY5R	574150
Neuropeptides B/W receptor 2	NPBWR2	719200
Neuropilin 2	NRP2	574301
Neuropilin and tolloid like 1	NETO1	694322
Neurotensin receptor 2	NTSR2	697563
Neurotrophic tyrosine kinase, receptor, type 2	NTRK2	709757
Neutrophil cytosolic factor 1	NCF1	694207
Neutrophil cytosolic factor 4	NCF4	695612
N-glycanase 1	NGLY1	700842
Nicotinamide nucleotide transhydrogenase	NNT	701110
NK2 homeobox 1	NKX2-1	696771
NK2 homeobox 5	NKX2-5	703795
NK3 homeobox 2	NKX3-2	713627
NK6 homeobox 1	NKX6-1	706844
NK6 homeobox 2	NKX6-2	700637
NKG2D protein	NKG2D	574240
NLR family, CARD domain containing 3	NLRC3	705633
NLR family, CARD domain containing 4	NLRC4	706378
NLR family, pyrin domain containing 1	NLRP1	721648
NLR family, pyrin domain containing 10	NLRP10	709794
NLR family, pyrin domain containing 13	NLRP13	703668
NLR family, pyrin domain containing 4	NLRP4	703431
NLR family, pyrin domain containing 6	NLRP6	720741
NLR family, pyrin domain containing 8	NLRP8	100135416
NLR family, pyrin domain containing 9	NLRP9	719115
N-myristoyltransferase 1	NMT1	715885
NOC2-like nucleolar associated transcriptional repressor	NOC2L	697809
Nodal growth differentiation factor	NODAL	710424
Non-SMC condensin I complex subunit D2	NCAPD2	712834
Non-SMC condensin I complex subunit G	NCAPG	715235
N-terminal EF-hand calcium binding protein 1	NECAB1	696533
N-terminal Xaa-Pro-Lys N-methyltransferase 1	NTMT1	716763
Nuclear casein kinase and cyclin-dependent kinase substrate 1	NUCKS1	697298
Nuclear factor of kappa light polypeptide gene enhancer in B-cells 1	NFKB1	710324
Nuclear factor, erythroid 2	NFE2	705061
Nuclear pore associated protein 1	NPAP1	719891
Nuclear receptor binding SET domain protein 1	NSD1	706131
Nuclear receptor coactivator 2	NCOA2	693455
Nuclear receptor subfamily 0 group B member 2	NR0B2	715170
Nuclear receptor subfamily 1 group I member 2	NR1I2	574226

Nuclear receptor subfamily 2 group E member 1	NR2E1	701101
Nuclear receptor subfamily 5 group A member 1	NR5A1	694183
Nuclear transcription factor Y subunit alpha	NFYA	719697
Nucleolar protein 4	NOL4	707772
Nucleoporin 50kda	NUP50	713282
Nucleoredoxin-like 1	NXNL1	719125
Nude neurodevelopment protein 1-like 1	NDEL1	721973
Nudix hydrolase 1	NUDT1	713078
NUT midline carcinoma, family member 1	NUTM1	696271
Odontogenic, ameloblast associated	ODAM	707906
Olfactory marker protein	OMP	698210
Olfactory receptor 10G2	OR10G2	708692
Olfactory receptor 4D9	OR4D9	699152
Olfactory receptor 4S2	OR4S2	708446
Olfactory receptor 5B3	OR5B3	701735
Olfactory receptor 8B8	OR8B8	715727
Olfactory receptor, family 1, subfamily M, member 1	OR1M1	713073
Olfactory receptor, family 1, subfamily Q, member 1	OR1Q1	697695
Olfactory receptor, family 1, subfamily S, member 2	OR1S1	703185
Olfactory receptor, family 10, subfamily A, member 4	OR10A4	100423176
Olfactory receptor, family 10, subfamily A, member 6	OR10A6	709892
Olfactory receptor, family 10, subfamily A, member 7	OR10A7	707219
Olfactory receptor, family 10, subfamily G, member 3	OR10G3	707265
Olfactory receptor, family 10, subfamily G, member 7	OR10G7	714975
Olfactory receptor, family 10, subfamily Q, member 1	OR10Q1	702100
Olfactory receptor, family 12, subfamily D, member 2	OR12D2	708163
Olfactory receptor, family 13, subfamily C, member 8	OR13C8	716401
Olfactory receptor, family 14, subfamily J, member 1	OR14J1	710039
Olfactory receptor, family 2, subfamily A, member 1	OR2A1	709416
Olfactory receptor, family 2, subfamily A, member 2	OR2A2	708745
Olfactory receptor, family 2, subfamily A, member 25	OR2A25	708513
Olfactory receptor, family 2, subfamily AG, member 2	OR2AG2	709556
Olfactory receptor, family 2, subfamily AT, member 4	OR2AT4	694711
Olfactory receptor, family 2, subfamily B, member 3	OR2B3	708747
Olfactory receptor, family 2, subfamily F, member 1	OR2F1	707900
Olfactory receptor, family 2, subfamily H, member 2	OR2H2	710946
Olfactory receptor, family 2, subfamily J, member 3	OR2J3	708943
Olfactory receptor, family 2, subfamily W, member 1	OR2W1	708515
Olfactory receptor, family 4, subfamily A, member 47	OR4A47	709347
Olfactory receptor, family 4, subfamily B, member 1	OR4B1	712346
Olfactory receptor, family 4, subfamily D, member 11	OR4D11	699579
Olfactory receptor, family 4, subfamily D, member 5	OR4D5	709394
Olfactory receptor, family 4, subfamily D, member 6	OR4D6	699831
Olfactory receptor, family 4, subfamily E, member 2	OR4E2	708887
Olfactory receptor, family 4, subfamily F, member 15	OR4F15	699433
Olfactory receptor, family 4, subfamily F, member 3	OR4F3	696525
Olfactory receptor, family 4, subfamily F, member 6	OR4F6	699304
Olfactory receptor, family 4, subfamily K, member 1	OR4K1	698752

Olfactory receptor, family 4, subfamily K, member 17	OR4K17	697616
Olfactory receptor, family 4, subfamily N, member 2	OR4N2	701881
Olfactory receptor, family 4, subfamily N, member 4	OR4N4	699628
Olfactory receptor, family 4, subfamily N, member 5	OR4N5	700553
Olfactory receptor, family 4, subfamily Q, member 3	OR4Q3	100426664
Olfactory receptor, family 5, subfamily A, member 2	OR5A2	700070
Olfactory receptor, family 5, subfamily AN, member 1	OR5AN1	699535
Olfactory receptor, family 5, subfamily AP, member 2	OR5AP2	707331
Olfactory receptor, family 5, subfamily AU, member 1	OR5AU1	707735
Olfactory receptor, family 5, subfamily K, member 1	OR5K1	698340
Olfactory receptor, family 5, subfamily L, member 1	OR5L1	719174
Olfactory receptor, family 5, subfamily M, member 1	OR5M1	719278
Olfactory receptor, family 5, subfamily M, member 9	OR5M9	705878
Olfactory receptor, family 5, subfamily V, member 1	OR5V1	710231
Olfactory receptor, family 51, subfamily A, member 4	OR51A4	100425536
Olfactory receptor, family 51, subfamily B, member 5	OR51B5	696727
Olfactory receptor, family 51, subfamily G, member 2	OR51G2	716960
Olfactory receptor, family 51, subfamily M, member 1	OR51M1	715244
Olfactory receptor, family 51, subfamily S, member 1	OR51S1	717205
Olfactory receptor, family 52, subfamily M, member 1	OR52M1	717723
Olfactory receptor, family 52, subfamily N, member 4	OR52N4	696970
Olfactory receptor, family 52, subfamily W, member 1	OR52W1	713141
Olfactory receptor, family 6, subfamily C, member 4	OR6C4	708807
Olfactory receptor, family 6, subfamily M, member 1	OR6M1	714825
Olfactory receptor, family 6, subfamily N, member 1	OR6N1	719958
Olfactory receptor, family 6, subfamily X, member 1	OR6X1	714774
Olfactory receptor, family 7, subfamily D, member 4	OR7D4	721322
Olfactory receptor, family 8, subfamily B, member 12	OR8B12	715893
Olfactory receptor, family 8, subfamily B, member 4	OR8B4	715678
Olfactory receptor, family 8, subfamily G, member 5	OR8G5	715245
Olfactory receptor, family 8, subfamily H, member 3	OR8H3	707077
Olfactory receptor, family 8, subfamily I, member 2	OR8I2	709392
Olfactory receptor, family 9, subfamily K, member 2	OR9K2	706908
Oligodendrocyte myelin glycoprotein	OMG	713044
Oligodendrocyte transcription factor 3	OLIG3	704455
Oncomodulin 2	OCM2	721827
Oncoprotein induced transcript 3	OIT3	708137
Oncostatin M	OSM	717994
Opioid binding protein/cell adhesion molecule-like	OPCML	693404
Opioid receptor, mu 1	OPRM1	574141
Opsin 5	OPN5	705586
Optic atrophy 3 (autosomal recessive, with chorea and spastic paraplegia)	OPA3	714806
Origin recognition complex subunit 5	ORC5	696683
ORMDL sphingolipid biosynthesis regulator 2	ORMDL2	710296
Ornithine decarboxylase antizyme 2	OAZ2	707593
Orthodenticle homeobox 2	OTX2	698501
Osteosarcoma amplified 9, endoplasmic reticulum lectin	OS9	715555

Otoancorin	OTOA	699600
Otopetrin 1	OTOP1	712780
Otoraplin	OTOR	695505
OTU deubiquitinase 6A	OTUD6A	694498
Outer dense fiber of sperm tails 1	ODF1	707269
Outer dense fiber of sperm tails 3	ODF3	696480
Outer dense fiber of sperm tails 3-like 1	ODF3L1	706545
Oviductal glycoprotein 1	OVGP1	703848
Ovochymase 2	OVCH2	707558
Oxidized low density lipoprotein (lectin-like) receptor 1	OLR1	717596
Oxoglutarate (alpha-ketoglutarate) receptor 1	OXGR1	696735
Oxysterol binding protein like 5	OSBPL5	706613
P21 protein (Cdc42/Rac)-activated kinase 1	PAK1	698585
P21 protein (Cdc42/Rac)-activated kinase 6	PAK6	701589
P450 (cytochrome) oxidoreductase	POR	715888
P53 and DNA damage regulated 1	PDRG1	712622
PAGE family member 4	PAGE4	693847
Paired box 3	PAX3	705315
Paired box 9	PAX9	100429088
Paired related homeobox 2	PRRX2	716699
Paired-like homeobox 2b	PHOX2B	701940
Paired-like homeodomain 2	PITX2	699737
Pancreatic and duodenal homeobox 1	PDX1	710936
Pancreatic lipase	PNLIP	706689
Pancreatic lipase-related protein 3	PNLIPRP3	699762
Pancreatic polypeptide	PPY	713988
Pannexin 3	PANX3	711728
PAP associated domain containing 7	PAPD7	713853
Par-3 family cell polarity regulator	PARD3	706472
Par-6 family cell polarity regulator alpha	PARD6A	699351
Paralemmin 2	PALM2	100532752
Paraoxonase 1	PON1	699355
Patatin like phospholipase domain containing 5	PNPLA5	712261
PAX3 and PAX7 binding protein 1	PAXBP1	700489
PCI domain containing 2	PCID2	714247
PDLIM1 interacting kinase 1 like	PDIK1L	719774
PDZ and LIM domain 1	PDLIM1	702998
PDZ domain containing 3	PDZD3	704100
PDZ domain containing 4	PDZD4	697387
Peptidyl arginine deiminase, type III	PADI3	700560
Peptidyl arginine deiminase, type IV	PADI4	700806
Peptidylprolyl isomerase B (cyclophilin B)	PIIB	706757
Peripherin	PRPH	709827
Peroxiredoxin 2	PRDX2	716665
Peroxisomal biogenesis factor 16	PEX16	714904
Peroxisome proliferator-activated receptor gamma	PPARG	574190
PHD finger protein 1	PHF1	718337
PHD finger protein 14	PHF14	694855

Phenylalanine hydroxylase	PAH	698696
Phosducin	PDC	716775
Phosducin like 2	PDCL2	696014
Phosphatase and actin regulator 1	PHACTR1	700226
Phosphatase and actin regulator 2	PHACTR2	700363
Phosphatase, orphan 1	PHOSPHO1	698959
Phosphatase, orphan 2	PHOSPHO2	100429656
Phosphate cytidylyltransferase 1, choline, alpha	PCYT1A	722105
Phosphatidylinositol 4-kinase, catalytic, beta	PI4KB	710104
Phosphatidylinositol glycan anchor biosynthesis class B	PIGB	698122
Phosphatidylinositol glycan anchor biosynthesis class H	PIGH	710780
Phosphatidylinositol glycan anchor biosynthesis class S	PIGS	709115
Phosphatidylinositol transfer protein alpha	PITPNA	721228
Phosphatidylinositol transfer protein, membrane associated 2	PITPNM2	703969
Phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit beta	PIK3CB	716098
Phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit gamma	PIK3CG	698857
Phosphodiesterase 6D	PDE6D	712629
Phosphodiesterase 6H	PDE6H	700447
Phosphodiesterase 9A	PDE9A	100301992
Phosphoinositide kinase, FYVE finger containing	PIKFYVE	710115
Phospholipase A2 group IB	PLA2G1B	696712
Phospholipase A2 group IIA	PLA2G2A	704520
Phospholipase A2 group XIIB	PLA2G12B	708031
Phospholipase A2 group XV	PLA2G15	702619
Phospholipase B domain containing 1	PLBD1	698939
Phospholipase B domain containing 2	PLBD2	714669
Phospholipase C beta 2	PLCB2	701951
Phospholipase C zeta 1	PLCZ1	703293
Phospholipase D family member 3	PLD3	701083
Phospholipid scramblase 2	PLSCR2	713298
Phospholipid scramblase 3	PLSCR3	721831
Phosphopantothenoylcysteine decarboxylase	PPCDC	704015
Phosphoribosyl pyrophosphate synthetase 1-like 1	PRPS1L1	708413
Pituitary tumor-transforming 1 interacting protein	PTTG1IP	722061
Piwi-like RNA-mediated gene silencing 2	PIWIL2	708028
Placental growth factor	PGF	701219
Placenta-specific 1-like	PLAC1L	698074
Platelet-derived growth factor beta polypeptide	PDGFB	703173
Pleckstrin 2	PLEK2	710419
Pleckstrin and Sec7 domain containing 4	PSD4	701785
Pleckstrin homology domain containing A8	PLEKHA8	696127
Pleckstrin homology domain containing O1	PLEKHO1	706145
Plexin B3	PLXNB3	696903
Poliovirus receptor-related 2 (herpesvirus entry mediator B)	PVRL2	713229
Poliovirus receptor-related 4	PVRL4	719843
Poly(A) binding protein, cytoplasmic 1	PABPC1	705847

Poly(A) polymerase beta	PAPOLB	100429856
Poly(ADP-ribose) glycohydrolase	PARG	709432
Poly(ADP-ribose) polymerase family member 10	PARP10	708132
Poly(ADP-ribose) polymerase family member 11	PARP11	721828
Poly(ADP-ribose) polymerase family member 15	PARP15	715533
Poly(rc) binding protein 2	PCBP2	703175
Poly(rc) binding protein 3	PCBP3	709663
Polybromo 1	PBRM1	696361
Polycomb group ring finger 2	PCGF2	694187
Polyglutamine binding protein 1	PQBP1	711678
Polyhomeotic homolog 2 (Drosophila)	PHC2	710201
Polymerase (DNA directed) kappa	POLK	705713
Polymerase (DNA directed), epsilon 3, accessory subunit	POLE3	705074
Polymerase (RNA) II (DNA directed) polypeptide I, 14.5kda	POLR2I	712412
Polymerase (RNA) III (DNA directed) polypeptide H (22.9kd)	POLR3H	707546
Polymerase (RNA) mitochondrial (DNA directed)	POLRMT	100426184
Polynucleotide kinase 3'-phosphatase	PNKP	719084
Polypeptide N-acetylgalactosaminyltransferase 13	GALNT13	696337
Polypeptide N-acetylgalactosaminyltransferase 14	GALNT14	705068
Polypeptide N-acetylgalactosaminyltransferase 15	GALNT15	694784
Polypeptide N-acetylgalactosaminyltransferase 4	GALNT4	100430608
Polypeptide N-acetylgalactosaminyltransferase 8	GALNT8	721912
Potassium channel tetramerization domain containing 10	KCTD10	707443
Potassium channel tetramerization domain containing 3	KCTD3	708471
Potassium channel tetramerization domain containing 9	KCTD9	711515
Potassium channel, inwardly rectifying subfamily J, member 14	KCNJ14	718011
Potassium channel, inwardly rectifying subfamily J, member 15	KCNJ15	693427
Potassium channel, inwardly rectifying subfamily J, member 5	KCNJ5	714799
Potassium channel, inwardly rectifying subfamily J, member 6	KCNJ6	693675
Potassium channel, inwardly rectifying subfamily J, member 8	KCNJ8	706369
Potassium channel, subfamily K, member 4	KCNK4	717696
Potassium channel, two pore domain subfamily K, member 16	KCNK16	719585
Potassium channel, two pore domain subfamily K, member 18	KCNK18	701013
Potassium channel, voltage gated eag related subfamily H, member 5	KCNH5	705368
Potassium channel, voltage gated eag related subfamily H, member 6	KCNH6	717765
Potassium channel, voltage gated eag related	KCNH7	702259

subfamily H, member 7		
Potassium channel, voltage gated eag related subfamily H, member 8	KCNH8	697225
Potassium channel, voltage gated KQT-like subfamily Q, member 5	KCNQ5	715426
Potassium channel, voltage gated modifier subfamily V, member 1	KCNV1	699636
Potassium channel, voltage gated shaker related subfamily A, member 2	KCNA2	702126
Potassium channel, voltage gated shaker related subfamily A, member 5	KCNA5	711886
Potassium channel, voltage gated Shaw related subfamily C, member 2	KCNC2	100430904
Potassium voltage-gated channel, modifier subfamily S, member 1	KCNS1	711715
Potassium voltage-gated channel, modifier subfamily S, member 2	KCNS2	703802
POU class 3 homeobox 4	POU3F4	710157
POU class 4 homeobox 2	POU4F2	703568
POU class 4 homeobox 3	POU4F3	707789
PR domain containing 14	PRDM14	693324
PR domain containing 2, with ZNF domain	PRDM2	716295
Pre T-cell antigen receptor alpha	PTCRA	697470
Pre-B-cell leukemia homeobox 1	PBX1	694416
PRELI domain containing 1	PRELID1	699254
Pre-mrna processing factor 3	PRPF3	706898
Presenilin enhancer gamma secretase subunit	PSENEN	100429008
Prodynorphin	PDYN	716341
Progesterone and adiponectin receptor family member VIII	PAQR8	708418
Programmed cell death 1 ligand 2	PDCD1LG2	716003
Prokineticin 2	PROK2	694450
Prokineticin receptor 1	PROKR1	699574
Prolactin receptor	PRLR	699369
Prolactin regulatory element binding	PREB	700408
Prolactin-induced protein	PIP	705823
Proline rich 19	PRR19	707663
Proline rich 3	PRR3	711699
Proline rich membrane anchor 1	PRIMA1	100426272
Proline, glutamate and leucine rich protein 1	PELP1	677854
Proline-rich coiled-coil 2A	PRRC2A	715715
Prominin 1	PROM1	714610
Promyelocytic leukemia	PML	700379
Proprotein convertase subtilisin/kexin type 2	PCSK2	695730
Proprotein convertase subtilisin/kexin type 7	PCSK7	697567
Prosaposin	PSAP	709510
Prospero homeobox 1	PROX1	709465
Prostaglandin D2 receptor (DP)	PTGDR	707918
Prostaglandin E synthase 3	PTGES3	713353

Prostaglandin F receptor (FP)	PTGFR	707535
Prostate and testis expressed 1	PATE1	713491
Protamine 1	PRM1	716327
Protease, serine 37	PRSS37	694908
Protease, serine 48	PRSS48	694666
Protease, serine 50	PRSS50	713399
Protease, serine 8	PRSS8	713176
Proteasomal ATPase associated factor 1	PAAF1	718755
Proteasome subunit alpha 4	PSMA4	710417
Proteasome subunit beta 2	PSMB2	712193
Protein inhibitor of activated STAT 2	PIAS2	696737
Protein kinase C and casein kinase substrate in neurons 1	PACSIN1	718624
Protein kinase C, alpha	PRKCA	718412
Protein kinase C, gamma	PRKCG	720263
Protein kinase, AMP-activated, alpha 2 catalytic subunit	PRKAA2	717703
Protein kinase, AMP-activated, gamma 3 non-catalytic subunit	PRKAG3	702782
Protein kinase, camp-dependent, beta catalytic subunit	PRKACB	709728
Protein kinase, cgmp-dependent, type II	PRKG2	696308
Protein phosphatase 1 regulatory subunit 12B	PPP1R12B	705775
Protein phosphatase 1 regulatory subunit 15A	PPP1R15A	718350
Protein phosphatase 1 regulatory subunit 16B	PPP1R16B	693349
Protein phosphatase 1 regulatory subunit 27	PPP1R27	714648
Protein phosphatase 1, regulatory subunit 17	PPP1R17	694066
Protein phosphatase 3, catalytic subunit, beta isozyme	PPP3CB	706955
Protein phosphatase 3, catalytic subunit, gamma isozyme	PPP3CC	708233
Protein phosphatase 4 catalytic subunit	PPP4C	708510
Protein phosphatase, EF-hand calcium binding domain 2	PPEF2	701103
Protein S (alpha)	PROS1	694845
Protein serine kinase H2	PSKH2	693701
Protein tyrosine kinase 2 beta	PTK2B	712787
Protein tyrosine phosphatase domain containing 1	PTPDC1	707878
Protein tyrosine phosphatase type IVA, member 2	PTP4A2	706489
Protein tyrosine phosphatase, non-receptor type 20	PTPN20	711276
Protein tyrosine phosphatase, non-receptor type 23	PTPN23	711601
Proteoglycan 2, bone marrow (natural killer cell activator, eosinophil granule major basic protein)	PRG2	100423552
Proteoglycan 3	PRG3	706381
Protocadherin 8	PCDH8	694442
Protocadherin alpha 1	PCDHA1	698493
Protocadherin alpha 4	PCDHA4	697990
Protocadherin alpha 5	PCDHA5	692083
Protocadherin alpha 7	PCDHA7	698370
Protocadherin alpha subfamily C, 1	PCDHAC1	699374
Protocadherin beta 1	PCDHB1	699508

Protocadherin beta 12	PCDHB12	699044
Protocadherin beta 13	PCDHB13	700999
Protocadherin beta 4	PCDHB4	700373
Protocadherin-related 15	PCDH15	702413
Psoriasis susceptibility 1 candidate 2	PSORS1C2	714607
Purinergic receptor P2Y, G-protein coupled, 10	P2RY10	707388
Purinergic receptor P2Y, G-protein coupled, 11	P2RY11	100533472
Purinergic receptor P2Y, G-protein coupled, 12	P2RY12	710036
Purinergic receptor P2Y, G-protein coupled, 13	P2RY13	106997048
PYD and CARD domain containing	PYCARD	713563
PYM homolog 1, exon junction complex associated factor	PYM1	708148
Pyridine nucleotide-disulphide oxidoreductase domain 2	PYROXD2	707797
Pyrimidineric receptor P2Y, G-protein coupled, 6	P2RY6	718623
Pyruvate dehydrogenase kinase, isozyme 2	PDK2	704169
Pyruvate dehydrogenase phosphatase regulatory subunit	PDPR	709861
Quiescin sulfhydryl oxidase 1	QSOX1	718589
RAB, member of RAS oncogene family-like 2B	RABL2B	716615
RAB27B, member RAS oncogene family	RAB27B	694445
RAB3C, member RAS oncogene family	RAB3C	709039
RAB5B, member RAS oncogene family	RAB5B	708347
RAB6A, member RAS oncogene family	RAB6A	718717
RAB8B, member RAS oncogene family	RAB8B	705597
Rabphilin 3A	RPH3A	712197
RAD9 checkpoint clamp component A	RAD9A	712345
Ral gtpase activating protein, alpha subunit 1 (catalytic)	RALGAPA1	695674
Ral gtpase activating protein, beta subunit (non-catalytic)	RALGAPB	705742
Ral guanine nucleotide dissociation stimulator-like 1	RGL1	717554
RALY heterogeneous nuclear ribonucleoprotein	RALY	713317
RAN binding protein 10	RANBP10	700911
Ran gtpase activating protein 1	RANGAP1	710698
Ranbp-type and C3HC4-type zinc finger containing 1	RBCK1	714692
Rap guanine nucleotide exchange factor 2	RAPGEF2	704717
Ras and Rab interactor 3	RIN3	698125
Ras association (ralgds/AF-6) domain family (N-terminal) member 8	RASSF8	708284
Ras homolog family member A	RHOA	706455
Ras homolog family member C	RHOC	706034
Ras homolog family member D	RHOD	712969
Ras homolog family member J	RHOJ	705603
Ras homolog family member V	RHOV	704675
Ras-related C3 botulinum toxin substrate 2 (rho family, small GTP binding protein Rac2)	RAC2	696709
Ras-related GTP binding A	RRAGA	100430224
RBPI interacting and tubulin associated 1	RITA1	712837
RCAN family member 3	RCAN3	719315
Receptor (chemosensory) transporter protein 1	RTP1	708309
Receptor (chemosensory) transporter protein 3	RTP3	713050
Receptor interacting serine/threonine kinase 3	RIPK3	716138

Receptor tyrosine kinase-like orphan receptor 2	ROR2	715482
Recq helicase-like	RECQL	705871
Regenerating islet-derived 1 beta	REG1B	711725
Regulating synaptic membrane exocytosis 4	RIMS4	712194
Regulator of G-protein signaling 10	RGS10	703125
Regulator of G-protein signaling 11	RGS11	694588
Regulator of G-protein signaling like 1	RGSL1	715693
Regulatory factor X associated ankyrin containing protein	RFXANK	719706
Regulatory factor X4	RFX4	702824
Regulatory factor X6	RFX6	715469
Relaxin 2	RLN2	693473
Relaxin 3	RLN3	717577
Relaxin/insulin-like family peptide receptor 3	RXFP3	698115
Relaxin/insulin-like family peptide receptor 4	RXFP4	718025
Replication protein A1	RPA1	721272
Replication protein A3	RPA3	696248
Reprimo-like	RPRML	716801
Resistin	RETN	708781
Ret proto-oncogene	RET	703466
Retbindin	RTBDN	716766
Retina and anterior neural fold homeobox	RAX	697100
Retinal G protein coupled receptor	RGR	698258
Retinaldehyde binding protein 1	RLBP1	699510
Retinoic acid induced 14	RAI14	698620
Retinol dehydrogenase 5 (11-cis/9-cis)	RDH5	709644
REX1, RNA exonuclease 1 homolog	REXO1	708931
RFT1 homolog	RFT1	694586
Rh family, B glycoprotein	RHBG	692069
Rh family, C glycoprotein	RHCG	664731
Rh-associated glycoprotein	RHAG	574120
Rho GDP dissociation inhibitor (GDI) beta	ARHGDIB	702320
Rho gtpase activating protein 25	ARHGAP25	699828
Rho gtpase activating protein 29	ARHGAP29	708896
Rho gtpase activating protein 30	ARHGAP30	718236
Rho gtpase activating protein 6	ARHGAP6	709978
Rho gtpase activating protein 9	ARHGAP9	711684
Rho guanine nucleotide exchange factor 1	ARHGEF1	722198
Rho guanine nucleotide exchange factor 5	ARHGEF5	705891
Rho/Rac guanine nucleotide exchange factor 2	ARHGEF2	719369
Rhomboid, veinlet-like 3 (Drosophila)	RHBDL3	713926
Rhophilin associated tail protein 1	ROPN1	721050
Rhophilin associated tail protein 1B	ROPN1B	716215
Ribonuclease H2 subunit B	RNASEH2B	707995
Ribonuclease H2 subunit C	RNASEH2C	700330
Ribonuclease P/MRP 21kda subunit	RPP21	713056
Ribonuclease T2	RNASET2	706533
Ribonuclease, rnase A family, 11 (non-active)	RNASE11	703578
Ribonuclease, rnase A family, 3	RNASE3	100425328

Ribonuclease, rnase A family, 7	RNASE7	705600
Ribonuclease, rnase A family, 9 (non-active)	RNASE9	703346
Ribonucleoprotein, PTB-binding 1	RAVER1	715250
Ribophorin II	RPN2	708971
Ribosomal modification protein rimk-like family member A	RIMKLA	699767
Ribosomal protein l10a	RPL10A	718783
Ribosomal protein L17	RPL17	698967
Ribosomal protein L23	RPL23	694719
Ribosomal protein l23a	RPL23A	710490
Ribosomal protein L24	RPL24	702381
Ribosomal protein L29	RPL29	698602
Ribosomal protein L3 like	RPL3L	693424
Ribosomal protein L4	RPL4	710590
Ribosomal protein l7a	RPL7A	722215
Ribosomal protein L8	RPL8	708535
Ribosomal protein S10	RPS10	718606
Ribosomal protein S13	RPS13	697513
Ribosomal protein S14	RPS14	710901
Ribosomal protein S15	RPS15	707241
Ribosomal protein S16	RPS16	697219
Ribosomal protein S2	RPS2	693615
Ribosomal protein S27	RPS27	106992520
Ribosomal protein S28	RPS28	707133
Ribosomal protein S4, X-linked	RPS4X	699397
Ribosomal protein S5	RPS5	711259
Ribosomal protein S6 kinase, 90kda, polypeptide 4	RPS6KA4	717574
Ribosomal protein S7	RPS7	721900
Ribosomal protein S8	RPS8	703957
Ribosomal protein S9	RPS9	694053
Ribosomal protein, large, P0	RPLP0	574363
Ribosomal protein, large, P1	RPLP1	695442
Ribosomal protein, large, P2	RPLP2	700698
Ribosomal RNA processing 8, methyltransferase, homolog (yeast)	RRP8	712011
Ring finger protein 133	RNF133	694972
Ring finger protein 152	RNF152	699091
Ring finger protein 168, E3 ubiquitin protein ligase	RNF168	709903
Ring finger protein 17	RNF17	708198
Ring finger protein 208	RNF208	705563
Ring finger protein 26	RNF26	704755
Ring finger protein 38	RNF38	693346
Ring finger protein 40, E3 ubiquitin protein ligase	RNF40	713148
Ring finger protein, transmembrane 1	RNFT1	712052
RNA binding motif protein 18	RBM18	698457
RNA binding motif protein 19	RBM19	715724
RNA binding motif protein 42	RBM42	709852
RNA binding motif protein 45	RBM45	702714

RNA binding motif protein 7	RBM7	695401
RNA binding motif, single stranded interacting protein 1	RBMS1	703608
RNA binding motif, single stranded interacting protein 2	RBMS2	713163
RNA binding protein, fox-1 homolog (C. Elegans) 2	RBFox2	693642
RNA pseudouridylate synthase domain containing 3	RPUSD3	700349
RPGRIP1-like	RPGRIP1L	697345
RPTOR independent companion of MTOR, complex 2	RICTOR	694915
RRN3 homolog, RNA polymerase I transcription factor	RRN3	713500
R-spondin 2	RSPO2	697376
S100 calcium binding protein A8	S100A8	714740
S100 calcium binding protein G	S100G	713702
S100 calcium binding protein P	S100P	710510
Saitohin	STH	106994064
SAM and SH3 domain containing 3	SASH3	702089
SAMM50 sorting and assembly machinery component	SAMM50	715675
Sarcoglycan zeta	SGCZ	100430472
Sarcolipin	SLN	100424360
Schlafen like 1	SLFNL1	695605
Schwannomin interacting protein 1	SCHIP1	703321
Sclerostin domain containing 1	SOSTDC1	709577
SCP2 sterol-binding domain containing 1	SCP2D1	698938
Scratch family zinc finger 1	SCRT1	714311
SEC11 homolog A, signal peptidase complex subunit	SEC11A	695951
Sec23 homolog A, COPII coat complex component	SEC23A	698500
SEC31 homolog A, COPII coat complex component	SEC31A	693687
Sec61 translocon alpha 2 subunit	SEC61A2	100427728
Secernin 3	SCRN3	698199
SECIS binding protein 2-like	SECISBP2L	714764
Secretagogin, EF-hand calcium binding protein	SCGN	694072
Secretoglobin, family 3A, member 2	SCGB3A2	709138
Secretogranin II	SCG2	706499
Secretogranin III	SCG3	694089
Secretory carrier membrane protein 2	SCAMP2	709720
Selectin E	SELE	701538
Selenoprotein M	SELM	718290
Sema domain, immunoglobulin domain (Ig), short basic domain, secreted, (semaphorin) 3D	SEMA3D	707146
Semaphorin 7A, GPI membrane anchor (John Milton Hagen blood group)	SEMA7A	702185
Semenogelin I pseudogene	SEMG1P	100424776
Sepiapterin reductase (7,8-dihydrobiopterin:NADP+ oxidoreductase)	SPR	705317
Serine peptidase inhibitor, Kazal type 4	SPINK4	702218
Serine/threonine kinase 11 interacting protein	STK11IP	704531
Serine/threonine kinase 31	STK31	703886
Serine/threonine kinase 38	STK38	719169
Serine/threonine kinase 38 like	STK38L	711047
Serologically defined colon cancer antigen 3	SDCCAG3	721750

Serpin peptidase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin), member 12	SERPINA12	701708
Serpin peptidase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin), member 7	SERPINA7	700439
Serpin peptidase inhibitor, clade B (ovalbumin), member 7	SERPINB7	701671
Serpin peptidase inhibitor, clade D (heparin cofactor), member 1	SERPIND1	696950
Serrate, RNA effector molecule	SRRT	713235
SET domain containing 4	SETD4	696003
SFI1 centrin binding protein	SFI1	716833
SH2 domain containing 1B	SH2D1B	720097
SH2 domain containing 3C	SH2D3C	699706
SH3 and cysteine rich domain	STAC	707350
SH3 domain and tetratricopeptide repeats 2	SH3TC2	709970
SH3 domain containing 19	SH3D19	694606
SH3-domain GRB2-like 3	SH3GL3	718542
SHANK associated RH domain interactor	SHARPIN	713534
SHC (Src homology 2 domain containing) transforming protein 3	SHC3	574275
Shugoshin-like 1 (S. Pombe)	SGOL1	698231
Siah E3 ubiquitin protein ligase 1	SIAH1	716629
Sialic acid binding Ig-like lectin 1, sialoadhesin	SIGLEC1	717470
Sialic acid binding Ig-like lectin 10	SIGLEC10	719648
Sialic acid binding Ig-like lectin 5	SIGLEC5	719730
Sialic acid binding Ig-like lectin 9	SIGLEC9	719831
Signal peptide peptidase like 2C	SPPL2C	717107
Signal peptide, CUB domain, EGF-like 2	SCUBE2	708152
Signal recognition particle 68kda	SRP68	705568
Signal sequence receptor, delta	SSR4	697266
Signal transducer and activator of transcription 2	STAT2	712694
Signal transducer and activator of transcription 4	STAT4	693854
Signal transducer and activator of transcription 5A	STAT5A	574129
Signal transducer and activator of transcription 6, interleukin-4 induced	STAT6	714159
Signal transducing adaptor family member 1	STAP1	711834
Sin3A associated protein 18kda	SAP18	703078
Sin3A associated protein 25kda	SAP25	106997576
Single stranded DNA binding protein 4	SSBP4	719496
Single-pass membrane protein with aspartate-rich tail 1	SMDT1	709741
SIX homeobox 1	SIX1	703696
SKI-like proto-oncogene	SKIL	696680
SLAM family member 6	SLAMF6	719728
SLAM family member 8	SLAMF8	719494
SLIT and NTRK like family member 1	SLITRK1	699217
SLIT and NTRK like family member 2	SLITRK2	699766
SLIT and NTRK like family member 4	SLITRK4	698270
SLP adaptor and CSK interacting membrane protein	SCIMP	721635

SLX1 homolog A, structure-specific endonuclease subunit	SLX1A	709225
SMAD family member 2	SMAD2	697581
Small integral membrane protein 12	SMIM12	712003
Small integral membrane protein 13	SMIM13	703387
Small integral membrane protein 19	SMIM19	705371
Small nuclear ribonucleoprotein polypeptides B and B1	SNRPB	716578
Small nuclear ribonucleoprotein, U4/U6.U5 27kda subunit	SNRNP27	708670
Small proline-rich protein 1B	SPRR1B	613022
Small proline-rich protein 3	SPRR3	713857
Small ubiquitin-like modifier 1	SUMO1	703644
Small ubiquitin-like modifier 2	SUMO2	705512
SMYD family member 5	SMYD5	705926
SNF related kinase	SNRK	715803
Sodium channel, non voltage gated 1 beta subunit	SCNN1B	700093
Sodium channel, voltage gated, type I alpha subunit	SCN1A	704086
Sodium channel, voltage gated, type X alpha subunit	SCN10A	694962
Solute carrier family 10 member 4	SLC10A4	705961
Solute carrier family 12 (potassium/chloride transporter), member 5	SLC12A5	707974
Solute carrier family 12 (sodium/potassium/chloride transporter), member 1	SLC12A1	714289
Solute carrier family 16 (aromatic amino acid transporter), member 10	SLC16A10	696132
Solute carrier family 16 member 13	SLC16A13	713985
Solute carrier family 16, member 6	SLC16A6	718903
Solute carrier family 17 (vesicular glutamate transporter), member 7	SLC17A7	574349
Solute carrier family 18 (vesicular acetylcholine transporter), member 3	SLC18A3	710053
Solute carrier family 2 (facilitated glucose transporter), member 13	SLC2A13	697822
Solute carrier family 2 (facilitated glucose transporter), member 2	SLC2A2	695538
Solute carrier family 20 (phosphate transporter), member 2	SLC20A2	705242
Solute carrier family 22 (organic anion transporter), member 6	SLC22A6	718377
Solute carrier family 22 (organic anion/urate transporter), member 11	SLC22A11	699212
Solute carrier family 22 (organic anion/urate transporter), member 12	SLC22A12	717530
Solute carrier family 22 member 14	SLC22A14	696120
Solute carrier family 22 member 15	SLC22A15	710102
Solute carrier family 24 (sodium/potassium/calcium exchanger), member 2	SLC24A2	711896
Solute carrier family 25 (aspartate/glutamate carrier), member 12	SLC25A12	695173
Solute carrier family 25 (mitochondrial carrier; adenine nucleotide translocator), member 31	SLC25A31	710042
Solute carrier family 25 (mitochondrial carrier;	SLC25A1	719075

citrate transporter), member 1		
Solute carrier family 25 (mitochondrial carrier; ornithine transporter) member 2	SLC25A2	701587
Solute carrier family 25 (mitochondrial carrier; oxoglutarate carrier), member 11	SLC25A11	710569
Solute carrier family 25 (mitochondrial iron transporter), member 37	SLC25A37	710518
Solute carrier family 25 (S-adenosylmethionine carrier), member 26	SLC25A26	697960
Solute carrier family 25 member 40	SLC25A40	705584
Solute carrier family 26 (anion exchanger), member 8	SLC26A8	719049
Solute carrier family 26 (anion exchanger), member 9	SLC26A9	696461
Solute carrier family 30 (zinc transporter), member 8	SLC30A8	701127
Solute carrier family 34 (type II sodium/phosphate cotransporter), member 2	SLC34A2	694217
Solute carrier family 35 (UDP-galactose transporter), member A2	SLC35A2	711587
Solute carrier family 35 (UDP-glca/UDP-galnac transporter), member D1	SLC35D1	700175
Solute carrier family 35 member A5	SLC35A5	708401
Solute carrier family 35 member E4	SLC35E4	716119
Solute carrier family 36 member 3	SLC36A3	713439
Solute carrier family 37 (glucose-6-phosphate transporter), member 2	SLC37A2	712841
Solute carrier family 38 member 4	SLC38A4	702354
Solute carrier family 38 member 7	SLC38A7	707671
Solute carrier family 38 member 9	SLC38A9	706752
Solute carrier family 39 (zinc transporter), member 12	SLC39A12	701128
Solute carrier family 39 (zinc transporter), member 3	SLC39A3	711564
Solute carrier family 4 (anion exchanger), member 1 (Diego blood group)	SLC4A1	100427616
Solute carrier family 4 (anion exchanger), member 2	SLC4A2	713966
Solute carrier family 4, sodium bicarbonate transporter, member 10	SLC4A10	705263
Solute carrier family 4, sodium borate transporter, member 11	SLC4A11	718393
Solute carrier family 41 (magnesium transporter), member 1	SLC41A1	696944
Solute carrier family 44 member 4	SLC44A4	715779
Solute carrier family 44 member 5	SLC44A5	704729
Solute carrier family 45 member 2	SLC45A2	698246
Solute carrier family 5 (sodium/glucose cotransporter), member 1	SLC5A1	717070
Solute carrier family 5 (sodium/multivitamin and iodide cotransporter), member 6	SLC5A6	699074
Solute carrier family 5 (sodium/myo-inositol cotransporter), member 3	SLC5A3	698346
Solute carrier family 5 (sodium/sugar cotransporter),	SLC5A10	709069

member 10		
Solute carrier family 5 (sodium/sugar cotransporter), member 9	SLC5A9	713064
Solute carrier family 6 (amino acid transporter), member 14	SLC6A14	709598
Solute carrier family 6 (neurotransmitter transporter), member 1	SLC6A1	696617
Solute carrier family 6 (neurotransmitter transporter), member 11	SLC6A11	696741
Solute carrier family 6 (neurotransmitter transporter), member 2	SLC6A2	613238
Solute carrier family 6 (neurotransmitter transporter), member 3	SLC6A3	574143
Solute carrier family 6 (neurotransmitter transporter), member 7	SLC6A7	711915
Solute carrier family 6 (neutral amino acid transporter), member 19	SLC6A19	100424680
Solute carrier family 7 (anionic amino acid transporter), member 13	SLC7A13	693964
Solute carrier family 7 member 4	SLC7A4	695731
Solute carrier family 8 (sodium/calcium exchanger), member 3	SLC8A3	713061
Solute carrier family 9, subfamily A (NHE9, cation proton antiporter 9), member 9	SLC9A9	713935
Solute carrier organic anion transporter family member 1B1	SLCO1B1	705308
Solute carrier organic anion transporter family member 1B3	SLCO1B3	574354
Solute carrier organic anion transporter family member 1C1	SLCO1C1	704740
Solute carrier organic anion transporter family member 2B1	SLCO2B1	694829
Solute carrier organic anion transporter family member 5A1	SLCO5A1	705846
Solute carrier organic anion transporter family member 6A1	SLCO6A1	707421
Somatostatin receptor 2	SSTR2	695526
Somatostatin receptor 3	SSTR3	696585
Sonic hedgehog	SHH	716553
Sorbin and SH3 domain containing 3	SORBS3	716198
Sortilin-related VPS10 domain containing receptor 1	SORCS1	693969
Sorting nexin 12	SNX12	696408
Sorting nexin 13	SNX13	714019
Sorting nexin 14	SNX14	696632
Sorting nexin 22	SNX22	706850
Sorting nexin 33	SNX33	706309
Sorting nexin 4	SNX4	716049
SP140 nuclear body protein	SP140	710925
Sp2 transcription factor	SP2	694834
Sp4 transcription factor	SP4	712174
Spalt-like transcription factor 4	SALL4	700309
SPARC like 1	SPARCL1	701468
SPARC related modular calcium binding 1	SMOC1	712994
Spectrin repeat containing, nuclear envelope family member 3	SYNE3	710721

Spectrin repeat containing, nuclear envelope family member 4	SYNE4	711904
Spectrin, beta, non-erythrocytic 1	SPTBN1	716794
Sperm acrosome associated 1	SPACA1	699611
Sperm acrosome associated 3	SPACA3	714491
Sperm adhesion molecule 1 (PH-20 hyaluronidase, zona pellucida binding)	SPAM1	696249
Sperm associated antigen 11B	SPAG11B	641436
Sperm equatorial segment protein 1	SPESP1	694614
Sperm specific antigen 2	SSFA2	705181
Spermatid associated	SPERT	707821
Spermatogenesis and centriole associated 1-like	SPATC1L	709320
Spermatogenesis associated 19	SPATA19	693524
Spermatogenesis associated 20	SPATA20	703313
Spermatogenesis associated 25	SPATA25	709097
Spermatogenesis associated 4	SPATA4	641336
Spermatogenesis associated 6	SPATA6	710827
Spermatogenesis associated 6-like	SPATA6L	695067
Spermatogenesis associated 9	SPATA9	698748
Spermatogenesis associated, serine-rich 1	SPATS1	703218
Spermatogenic leucine zipper 1	SPZ1	710676
Spermidine synthase	SRM	714028
Spermidine/spermine N1-acetyltransferase family member 2	SAT2	716044
Sphingomyelin phosphodiesterase 1	SMPD1	711248
Sphingosine kinase 2	SPHK2	718088
Sphingosine-1-phosphate receptor 2	S1PR2	712143
Sphingosine-1-phosphate receptor 4	S1PR4	712637
Spindle and kinetochore associated complex subunit 2	SKA2	711092
SPO11 meiotic protein covalently bound to DSB	SPO11	696836
SPT16 homolog, facilitates chromatin remodeling subunit	SUPT16H	708066
SRC proto-oncogene, non-receptor tyrosine kinase	SRC	701057
Src-related kinase lacking C-terminal regulatory tyrosine and N-terminal myristylation sites	SRMS	719587
SREK1-interacting protein 1	SREK1IP1	695436
SRY-box 21	SOX21	695074
SRY-box 3	SOX3	696412
ST3 beta-galactoside alpha-2,3-sialyltransferase 4	ST3GAL4	717792
ST6 beta-galactosamide alpha-2,6-sialyltransferase 1	ST6GAL1	708113
ST8 alpha-N-acetyl-neuraminide alpha-2,8-sialyltransferase 6	ST8SIA6	700128
Stannin	SNN	711909
Star related lipid transfer domain containing 13	STARD13	714104
Star related lipid transfer domain containing 3	STARD3	697212
Star related lipid transfer domain containing 5	STARD5	713308
Star related lipid transfer domain containing 6	STARD6	694051
STEAP4 metalloreductase	STEAP4	705096
Sterile alpha motif domain containing 4A	SAMD4A	695336
Sterile alpha motif domain containing 7	SAMD7	697223
Steroid receptor RNA activator 1	SRA1	698169
Sterol O-acyltransferase 2	SOAT2	701171

Stimulated by retinoic acid 8	STRA8	713651
Stomatin like 2	STOML2	698458
Stomatin like 3	STOML3	696490
Stonin 1	STON1	106992944
Storkhead box 2	STOX2	693692
Stratifin	SFN	715055
Stress induced phosphoprotein 1	STIP1	717926
Striatin	STRN	708491
Sulfiredoxin 1	SRXN1	714997
Sulfotransferase family 1B member 1	SULT1B1	708638
SUMO1/sentrin specific peptidase 5	SEN5	710223
SUMO1/sentrin specific peptidase 7	SEN7	701453
Superoxide dismutase 3, extracellular	SOD3	715931
Suppression of tumorigenicity 13 (colon carcinoma) (Hsp70 interacting protein)	ST13	705664
Suppression of tumorigenicity 18, zinc finger	ST18	709973
Suppression of tumorigenicity 7	ST7	704776
Surfactant associated 2	SFTA2	714397
Surfactant protein C	SFTPC	707696
Surfactant protein D	SFTPD	678657
SURP and G-patch domain containing 1	SUGP1	719772
Sushi domain containing 6	SUSD6	712719
SWAP switching B-cell complex 70kda subunit	SWAP70	703651
Synapsin III	SYN3	100430216
Synaptogyrin 1	SYNGR1	100427480
Synaptonemal complex protein 1	SYCP1	709189
Synaptophysin	SYP	715739
Synaptosome associated protein 91kda	SNAP91	695216
Synaptotagmin 14	SYT14	717383
Synaptotagmin 16	SYT16	705114
Synaptotagmin 6	SYT6	708175
Synaptotagmin like 4	SYTL4	700889
Synaptotagmin VII	SYT7	722368
Syndecan 3	SDC3	704374
Synergin, gamma	SYNRG	717750
Synovial sarcoma translocation gene on chromosome 18-like 2	SS18L2	716387
Syntaxin 11	STX11	699733
Syntaxin binding protein 1	STXBP1	707185
Syntrophin, gamma 1	SNTG1	709244
Tachykinin receptor 1	TACR1	653008
Tankyrase 1 binding protein 1	TNKS1BP1	704825
TAO kinase 2	TAOK2	707777
TAP binding protein (tapasin)	TAPBP	718235
Target of myb1 like 2 membrane trafficking protein	TOM1L2	699471
Taste 1 receptor member 2	TAS1R2	714666
Taste 2 receptor member 13	TAS2R13	718046
Taste 2 receptor member 14	TAS2R14	718111
Taste 2 receptor member 16	TAS2R16	695211

Taste 2 receptor member 3	TAS2R3	694595
Taste 2 receptor member 39	TAS2R39	705958
Taste 2 receptor member 4	TAS2R4	694737
Taste 2 receptor member 42	TAS2R42	695053
Taste 2 receptor member 5	TAS2R5	694858
Taste 2 receptor member 60	TAS2R60	706742
Taste 2 receptor member 7	TAS2R7	717909
Taste 2 receptor member 9	TAS2R9	717940
TATA-box binding protein associated factor 2	TAF2	702411
TATA-box binding protein associated factor 5	TAF5	714558
TATA-box binding protein like 2	TBPL2	697371
Tax1 (human T-cell leukemia virus type I) binding protein 3	TAX1BP3	706829
TBC1 domain family member 17	TBC1D17	719093
TBC1 domain family member 19	TBC1D19	694865
TBC1 domain family member 21	TBC1D21	700124
TBK1 binding protein 1	TBKBP1	693913
T-box 15	TBX15	712254
T-box 21	TBX21	694044
T-box 22	TBX22	708338
T-box 4	TBX4	712702
T-cell leukemia homeobox 2	TLX2	709649
TCF3 (E2A) fusion partner (in childhood Leukemia)	TFPT	720296
T-complex 10-like	TCP10L	700847
T-complex 11, testis-specific	TCP11	718695
T-complex 11, testis-specific-like 1	TCP11L1	694899
Tctex1 domain containing 1	TCTEX1D1	699673
Teashirt zinc finger homeobox 1	TSHZ1	703018
TEK tyrosine kinase, endothelial	TEK	707455
TELO2 interacting protein 2	TTI2	696776
Telomeric repeat binding factor 2, interacting protein	TERF2IP	712149
Teneurin transmembrane protein 1	TENM1	699897
TERF1 (TRF1)-interacting nuclear factor 2	TINF2	715812
Testis expressed 13A	TEX13A	699896
Testis expressed 26	TEX26	713363
Testis expressed 28	TEX28	699141
Testis expressed 30	TEX30	701917
Testis expressed 35	TEX35	717255
Testis expressed 37	TEX37	699461
Testis expressed 43	TEX43	703228
Testis-specific serine kinase 1B	TSSK1B	694352
Testis-specific serine kinase 3	TSSK3	708182
Testis-specific serine kinase substrate	TSKS	719028
Tetraspanin 18	TSPAN18	715506
Tetraspanin 32	TSPAN32	704862
Tetratricopeptide repeat domain 1	TTC1	695225
Tetratricopeptide repeat domain 14	TTC14	710895
Tetratricopeptide repeat domain 21A	TTC21A	694904
Tetratricopeptide repeat domain 23	TTC23	708530

Tetratricopeptide repeat domain 7B	TTC7B	696029
TGF-beta activated kinase 1/MAP3K7 binding protein 1	TAB1	703409
THAP domain containing 7	THAP7	696208
Thioredoxin domain containing 17	TXNDC17	712910
Thioredoxin domain containing 9	TXNDC9	709303
Thioredoxin-related transmembrane protein 1	TMX1	707057
THO complex 3	THOC3	695561
THO complex 5	THOC5	714842
THO complex 6	THOC6	700217
Thrombospondin type 1 domain containing 1	THSD1	100430744
Thy-1 cell surface antigen	THY1	705321
Thymidine phosphorylase	TYMP	716161
Thymosin beta 4, X-linked	TMSB4X	710959
Thymus, brain and testes associated	TBATA	710055
Thyroid hormone receptor associated protein 3	THRAP3	713033
Thyroid hormone receptor, beta	THRB	699969
Thyroid stimulating hormone receptor	TSHR	574251
Thyrotropin-releasing hormone degrading enzyme	TRHDE	717653
Thyrotropin-releasing hormone receptor	TRHR	698511
TNF alpha induced protein 6	TNFAIP6	694699
TNF receptor associated factor 6	TRAF6	716907
Tocopherol (alpha) transfer protein	TTPA	700876
Toll-like receptor 4	TLR4	574360
Toll-like receptor 7	TLR7	574291
Toll-like receptor adaptor molecule 1	TICAM1	574294
Topoisomerase (DNA) I	TOP1	697300
Topoisomerase (DNA) III beta	TOP3B	698317
Torsin A interacting protein 2	TOR1AIP2	716691
Trace amine associated receptor 1	TAAR1	708944
Trace amine associated receptor 5	TAAR5	709325
Trace amine associated receptor 6	TAAR6	709418
TRAF3 interacting protein 3	TRAF3IP3	712895
Transcription elongation factor A (SII), 2	TCEA2	694026
Transcription elongation factor A (SII)-like 1	TCEAL1	696826
Transcription elongation factor A (SII)-like 4	TCEAL4	696453
Transcription factor 15 (basic helix-loop-helix)	TCF15	716916
Transcription factor 21	TCF21	707680
Transcription factor 7-like 1 (T-cell specific, HMG-box)	TCF7L1	694560
Transcription factor AP-2 delta (activating enhancer binding protein 2 delta)	TFAP2D	707582
Transcription factor Dp family member 3	TFDP3	706557
Transcription factor EC	TFEC	704124
Transcriptional adaptor 3	TADA3	700090
Transducin (beta)-like 1 X-linked receptor 1	TBL1XR1	712740
Transducin like enhancer of split 3	TLE3	698046
Transforming growth factor beta 1 induced transcript 1	TGFB1I1	714172
Transforming growth factor beta receptor associated protein 1	TGFBRAP1	713102
Transforming, acidic coiled-coil containing protein 3	TACC3	712898

Transglutaminase 3	TGM3	716498
Transglutaminase 5	TGM5	712605
Transient receptor potential cation channel, subfamily C, member 3	TRPC3	707586
Transient receptor potential cation channel, subfamily C, member 7	TRPC7	712863
Transient receptor potential cation channel, subfamily M, member 3	TRPM3	702898
Transient receptor potential cation channel, subfamily V, member 5	TRPV5	705218
Transketolase-like 1	TKTL1	699278
Translocase of inner mitochondrial membrane 10 homolog B (yeast)	TIMM10B	711085
Translocase of inner mitochondrial membrane 17 homolog B (yeast)	TIMM17B	714895
Translocase of outer mitochondrial membrane 22 homolog (yeast)	TOMM22	701286
Transmembrane (C-terminal) protease, serine 12	TMPRSS12	693778
Transmembrane 4 L six family member 5	TM4SF5	709844
Transmembrane 6 superfamily member 2	TM6SF2	719756
Transmembrane 9 superfamily protein member 4	TM9SF4	712260
Transmembrane and immunoglobulin domain containing 3	TMIGD3	104564312
Transmembrane phosphoinositide 3-phosphatase and tensin homolog 2	TPTE2	704870
Transmembrane protease, serine 11D	TMPRSS11D	711510
Transmembrane protease, serine 13	TMPRSS13	698586
Transmembrane protease, serine 4	TMPRSS4	704604
Transmembrane protease, serine 6	TMPRSS6	696094
Transmembrane protein 104	TMEM104	698592
Transmembrane protein 11	TMEM11	704970
Transmembrane protein 115	TMEM115	702164
Transmembrane protein 121	TMEM121	700005
Transmembrane protein 123	TMEM123	702833
Transmembrane protein 135	TMEM135	704963
Transmembrane protein 138	TMEM138	693905
Transmembrane protein 145	TMEM145	709268
Transmembrane protein 150A	TMEM150A	696101
Transmembrane protein 156	TMEM156	698617
Transmembrane protein 160	TMEM160	716996
Transmembrane protein 163	TMEM163	709015
Transmembrane protein 174	TMEM174	703111
Transmembrane protein 179B	TMEM179B	718518
Transmembrane protein 183A	TMEM183A	704195
Transmembrane protein 19	TMEM19	718700
Transmembrane protein 205	TMEM205	714330
Transmembrane protein 248	TMEM248	695654
Transmembrane protein 37	TMEM37	695060
Transmembrane protein 45B	TMEM45B	718735

Transmembrane protein 5	TMEM5	717102
Transmembrane protein 55A	TMEM55A	696779
Transmembrane protein 55B	TMEM55B	100428000
Transmembrane protein 60	TMEM60	693679
Transmembrane protein 74	TMEM74	698257
Trefoil factor 2	TFF2	714550
Tribbles pseudokinase 3	TRIB3	714636
Triggering receptor expressed on myeloid cells like 1	TREML1	719732
Tripartite motif containing 14	TRIM14	715418
Tripartite motif containing 29	TRIM29	705796
Tripartite motif containing 33	TRIM33	710600
Tripartite motif containing 40	TRIM40	100427928
Tripartite motif containing 42	TRIM42	715465
Tripartite motif containing 62	TRIM62	709927
Tripartite motif containing 67	TRIM67	713730
Tripartite motif containing 69	TRIM69	712505
Tripartite motif containing 7	TRIM7	708324
Tripartite motif family like 1	TRIML1	698114
TRK-fused gene	TFG	700972
Trophoblast glycoprotein	TPBG	693944
Tropomyosin 2 (beta)	TPM2	696604
Tropomyosin 3	TPM3	716336
Troponin T type 2 (cardiac)	TNNT2	709882
Trub pseudouridine (psi) synthase family member 2	TRUB2	717619
Tryptase gamma 1	TPSG1	100425752
Tryptophan hydroxylase 2	TPH2	664730
Tryptophanyl trna synthetase 2, mitochondrial	WARS2	712332
TSPY-like 6	TSPYL6	716697
TSSK6 activating co-chaperone	TSACC	719490
Tubulin alpha 3c	TUBA3C	707215
Tubulin alpha 4a	TUBA4A	702583
Tubulin alpha like 3	TUBAL3	722506
Tubulin beta 3 class III	TUBB3	699231
Tubulin beta class I	TUBB	574113
Tubulin folding cofactor E-like	TBCEL	706506
Tubulointerstitial nephritis antigen-like 1	TINAGL1	705660
Tudor domain containing 5	TDRD5	716831
Tumor necrosis factor receptor superfamily member 13C	TNFRSF13C	712577
Tumor necrosis factor receptor superfamily member 17	TNFRSF17	712212
Tumor necrosis factor receptor superfamily member 25	TNFRSF25	703744
Tumor necrosis factor superfamily member 8	TNFSF8	702944
Tumor protein p53 inducible nuclear protein 2	TP53INP2	707113
Tumor protein, translationally-controlled 1	TPT1	702155
Twist family bhlh transcription factor 2	TWIST2	697078
TXK tyrosine kinase	TXK	705104
Tyrosinase-related protein 1	TYRP1	714646
Tyrosine kinase, non-receptor, 1	TNK1	715180
UBA domain containing 2	UBAC2	703484

Ubiquitin A-52 residue ribosomal protein fusion product 1	UBA52	720243
Ubiquitin B	UBB	696110
Ubiquitin conjugating enzyme E2 variant 1	UBE2V1	100425552
Ubiquitin conjugating enzyme E2O	UBE2O	710529
Ubiquitin domain containing 2	UBTD2	709455
Ubiquitin family domain containing 1	UBFD1	700601
Ubiquitin like 4B	UBL4B	701055
Ubiquitin like 5	UBL5	711015
Ubiquitin like 7	UBL7	702305
Ubiquitin protein ligase E3D	UBE3D	694910
Ubiquitin related modifier 1	URM1	722618
Ubiquitin specific peptidase 10	USP10	718471
Ubiquitin specific peptidase 11	USP11	706555
Ubiquitin specific peptidase 2	USP2	705191
Ubiquitin specific peptidase 20	USP20	716505
Ubiquitin specific peptidase 21	USP21	719894
Ubiquitin specific peptidase 26	USP26	706435
Ubiquitin specific peptidase 29	USP29	706514
Ubiquitin specific peptidase 32	USP32	716857
Ubiquitin specific peptidase 45	USP45	694340
Ubiquitin specific peptidase 47	USP47	701660
Ubiquitin specific peptidase 48	USP48	707110
Ubiquitin specific peptidase 50	USP50	716718
Ubiquitin specific peptidase 51	USP51	705861
Ubiquitin specific peptidase 7 (herpes virus-associated)	USP7	714625
Ubiquitin specific peptidase 9, Y-linked	USP9Y	100270704
Ubiquitination factor E4B	UBE4B	713348
Ubiquitin-conjugating enzyme E2E 2	UBE2E2	699101
UBX domain protein 1	UBXN1	718643
UBX domain protein 10	UBXN10	705058
UBX domain protein 11	UBXN11	719826
UDP-Gal:betaglcnaac beta 1,4- galactosyltransferase, polypeptide 6	B4GALT6	706068
UDP-glcnaac:betagal beta-1,3-N-acetylglucosaminyl transferase 3	B3GNT3	719221
UFM1-specific ligase 1	UFL1	704454
UHRF1 binding protein 1-like	UHRF1BP1L	694816
Uncoupling protein 1 (mitochondrial, proton carrier)	UCP1	574124
Uncoupling protein 3 (mitochondrial, proton carrier)	UCP3	574125
Upstream transcription factor family member 3	USF3	709660
Uridine monophosphate synthetase	UMPS	715664
Urocanate hydratase 1	UROC1	716511
Uroplakin 2	UPK2	707184
Usher syndrome 1C	USH1C	696911
Usher syndrome 1G (autosomal recessive)	USH1G	704494
USP6 N-terminal like	USP6NL	694275
Vacuolar protein sorting 13 homolog B (yeast)	VPS13B	704477
Vacuolar protein sorting 36 homolog (S. Cerevisiae)	VPS36	693290

V-akt murine thymoma viral oncogene homolog 3	AKT3	714717
Valyl-trna synthetase	VARS	715537
VAMP (vesicle-associated membrane protein)-associated protein B and C	VAPB	695049
Vanin 2	VNN2	708637
Vascular endothelial growth factor A	VEGFA	574209
Vasoactive intestinal peptide receptor 1	VIPR1	717438
V-crk avian sarcoma virus CT10 oncogene homolog	CRK	701185
Versican	VCAN	712365
Vesicle (multivesicular body) trafficking 1	VT A1	701578
Villin 1	VIL1	698946
Villin-like	VILL	696988
Visual system homeobox 1	VSX1	715973
Vitamin K epoxide reductase complex subunit 1	VKORC1	714412
Vitronectin	VTN	708499
V-maf avian musculoaponeurotic fibrosarcoma oncogene homolog B	MAFB	712578
Von Willebrand factor	VWF	722019
Von Willebrand factor A domain containing 1	VWA1	701765
VPS39 HOPS complex subunit	VPS39	707791
VPS52 GARP complex subunit	VPS52	100430904
VPS54 GARP complex subunit	VPS54	695397
V-set and immunoglobulin domain containing 4	VSIG4	709685
V-set and transmembrane domain containing 4	VSTM4	710593
WAP four-disulfide core domain 10A	WFDC10A	717384
WAP four-disulfide core domain 12	WFDC12	711552
WAP four-disulfide core domain 8	WFDC8	710108
WD repeat domain 31	WDR31	705565
WD repeat domain 70	WDR70	706130
WD repeat domain 72	WDR72	697128
WD repeat domain 74	WDR74	718460
WD repeat domain 77	WDR77	677686
Wingless-type MMTV integration site family member 10A	WNT10A	700692
Wingless-type MMTV integration site family member 10B	WNT10B	708906
Wingless-type MMTV integration site family member 7B	WNT7B	713864
Wingless-type MMTV integration site family member 8A	WNT8A	713764
Wingless-type MMTV integration site family member 9B	WNT9B	716877
WNT1 inducible signaling pathway protein 1	WISP1	697624
Wolfram syndrome 1 (wolframin)	WFS1	710948
WW domain binding protein 1	WBP1	709202
WW domain containing E3 ubiquitin protein ligase 2	WWP2	705464
X antigen family, member 5	XAGE5	697885
X-linked Kx blood group related 7	XKR7	715770
X-linked Kx blood group related, X-linked	XKRX	701721
XPA binding protein 2	XAB2	704109
X-prolyl aminopeptidase (aminopeptidase P) 2, membrane-bound	XPNPEP2	701972
X-ray repair complementing defective repair in	XRCC6	707975

Chinese hamster cells 6		
YEATS domain containing 4	YEATS4	718376
Yip1 domain family member 4	YIPF4	706819
Yippee like 3	YPEL3	708740
YTH N(6)-methyladenosine RNA binding protein 2	YTHDF2	717225
ZFP28 zinc finger protein	ZFP28	100425272
Zinc and ring finger 2, E3 ubiquitin protein ligase	ZNRF2	698413
Zinc and ring finger 4	ZNRF4	695996
Zinc binding alcohol dehydrogenase domain containing 2	ZADH2	701079
Zinc finger and BTB domain containing 12	ZBTB12	716846
Zinc finger and BTB domain containing 39	ZBTB39	713914
Zinc finger and BTB domain containing 6	ZBTB6	695858
Zinc finger and BTB domain containing 8 opposite strand	ZBTB8OS	708590
Zinc finger and SCAN domain containing 1	ZSCAN1	709853
Zinc finger and SCAN domain containing 2	ZSCAN2	695673
Zinc finger CCCH-type containing 12A	ZC3H12A	713604
Zinc finger CCCH-type containing 3	ZC3H3	708584
Zinc finger protein 19	ZNF19	708211
Zinc finger protein 215	ZNF215	708494
Zinc finger protein 217	ZNF217	699314
Zinc finger protein 22	ZNF22	706208
Zinc finger protein 280D	ZNF280D	699509
Zinc finger protein 286A	ZNF286A	694716
Zinc finger protein 319	ZNF319	706286
Zinc finger protein 354B	ZNF354B	712885
Zinc finger protein 365	ZNF365	698386
Zinc finger protein 382	ZNF382	713048
Zinc finger protein 385A	ZNF385A	705436
Zinc finger protein 41	ZNF41	706770
Zinc finger protein 436	ZNF436	709638
Zinc finger protein 460	ZNF460	710080
Zinc finger protein 467	ZNF467	712106
Zinc finger protein 474	ZNF474	700119
Zinc finger protein 48	ZNF48	100429352
Zinc finger protein 496	ZNF496	709694
Zinc finger protein 503	ZNF503	703912
Zinc finger protein 526	ZNF526	707135
Zinc finger protein 574	ZNF574	706729
Zinc finger protein 595	ZNF595	716693
Zinc finger protein 619	ZNF619	718207
Zinc finger protein 645	ZNF645	698427
Zinc finger protein 648	ZNF648	716032
Zinc finger protein 658	ZNF658	100425456
Zinc finger protein 662	ZNF662	716008
Zinc finger protein 668	ZNF668	712709
Zinc finger protein 692	ZNF692	710010
Zinc finger protein 7	ZNF7	715735
Zinc finger protein 70	ZNF70	698442

Zinc finger protein 708	ZNF708	693803
Zinc finger protein 710	ZNF710	701358
Zinc finger protein 713	ZNF713	715444
Zinc finger protein 79	ZNF79	700961
Zinc finger protein 821	ZNF821	707355
Zinc finger protein 835	ZNF835	705945
Zinc finger protein, X-linked	ZFX	106992280
Zinc finger, AN1-type domain 2B	ZFAND2B	702027
Zinc finger, CCCH-type with G-patch domain	ZGPAT	719499
Zinc finger, CCHC domain containing 10	ZCCHC10	709423
Zinc finger, CCHC domain containing 16	ZCCHC16	707389
Zinc finger, CCHC domain containing 3	ZCCHC3	714477
Zinc finger, DHHC-type containing 12	ZDHHC12	722606
Zinc finger, DHHC-type containing 16	ZDHHC16	705982
Zinc finger, DHHC-type containing 17	ZDHHC17	693595
Zinc finger, DHHC-type containing 4	ZDHHC4	704660
Zinc finger, DHHC-type containing 5	ZDHHC5	704863
Zinc finger, matrin-type 5	ZMAT5	715058
Zinc finger, MYM-type 4	ZMYM4	712793
Zinc finger, MYND-type containing 11	ZMYND11	708761
Zinc finger, MYND-type containing 12	ZMYND12	696941
Zinc ribbon domain containing 1	ZNRD1	712151
Zona pellucida binding protein 2	ZPBP2	698217
Zona pellucida glycoprotein 2 (sperm receptor)	ZP2	697458
Zona pellucida glycoprotein 3 (sperm receptor)	ZP3	719925
Zona pellucida glycoprotein 4	ZP4	709637
Zyg-11 related, cell cycle regulator	ZER1	717262
Zygote arrest 1	ZAR1	705829

(4) Expressed in both groups 1a and 1c, but not in group 1b

1-acylglycerol-3-phosphate O-acyltransferase 1	AGPAT1	717174
1-acylglycerol-3-phosphate O-acyltransferase 3	AGPAT3	713301
3-hydroxyanthranilate 3,4-dioxygenase	HAAO	713101
3-hydroxybutyrate dehydrogenase, type 2	BDH2	711108
5-phosphohydroxy-L-lysine phospho-lyase	PHYKPL	702302
8-oxoguanine DNA glycosylase	OGG1	700481
Aarf domain containing kinase 2	ADCK2	693303
Aarf domain containing kinase 4	ADCK4	702379
Abhydrolase domain containing 1	ABHD1	698700
Abhydrolase domain containing 4	ABHD4	711758
Abhydrolase domain containing 8	ABHD8	718980
ABI family member 3	ABI3	698710
Achaete-scute family bhlh transcription factor 1	ASCL1	698820
Acid phosphatase 2, lysosomal	ACP2	713744
Acid phosphatase 7, tartrate resistant (putative)	ACP7	695532
Acidic nuclear phosphoprotein 32 family member E	ANP32E	706251

Acrosin binding protein	ACRBP	713219
Actin like 7B	ACTL7B	710750
Actinin, alpha 2	ACTN2	710012
Activating transcription factor 3	ATF3	710832
Activin A receptor type IIB	ACVR2B	696071
Acyl-coa dehydrogenase family member 9	ACAD9	704527
Acyl-coa dehydrogenase, C-2 to C-3 short chain	ACADS	698196
Acylglycerol kinase	AGK	694070
ADAM metalloproteinase domain 19	ADAM19	715164
ADAM metalloproteinase domain 2	ADAM2	707303
ADAM metalloproteinase with thrombospondin type 1 motif 14	ADAMTS14	710154
ADAM metalloproteinase with thrombospondin type 1 motif 16	ADAMTS16	694474
ADAM metalloproteinase with thrombospondin type 1 motif 20	ADAMTS20	699935
ADAM metalloproteinase with thrombospondin type 1 motif 6	ADAMTS6	696021
ADAMTS like 2	ADAMTSL2	713492
Adaptor related protein complex 1 associated regulatory protein	AP1AR	700734
Adaptor related protein complex 2 sigma 1 subunit	AP2S1	716911
Adaptor related protein complex 2, mu 1 subunit	AP2M1	703554
Adaptor related protein complex 3, beta 2 subunit	AP3B2	694091
Adaptor related protein complex 5, sigma 1 subunit	AP5S1	718611
Adenosine deaminase domain containing 1	ADAD1	707910
Adenosine deaminase domain containing 2	ADAD2	715076
Adenylate cyclase 4	ADCY4	714684
Adenylate cyclase 6	ADCY6	707978
Adhesion molecule with Ig-like domain 2	AMIGO2	705386
ADP-ribosylation factor like gtpase 6 interacting protein 6	ARL6IP6	695619
ADP-ribose/CDP-alcohol diphosphatase, manganese-dependent	ADPRM	717991
ADP-ribosylarginine hydrolase	ADPRH	712562
ADP-ribosyltransferase 5	ART5	574238
A-kinase anchoring protein 12	AKAP12	641446
A-kinase anchoring protein 2	AKAP2	709841
A-kinase anchoring protein 8 like	AKAP8L	719202
Aladin WD repeat nucleoporin	AAAS	719095
Aldo-keto reductase family 1, member A1 (aldehyde reductase)	AKR1A1	693380
Aldo-keto reductase family 1, member C1 (dihydrodiol dehydrogenase 1; 20-alpha (3-alpha)-hydroxysteroid dehydrogenase)	AKR1C1	711198
Aldo-keto reductase family 1, member E2	AKR1E2	711035
Alkaline ceramidase 1	ACER1	699093
Alkb homolog 2, alpha-ketoglutarate-dependent dioxygenase	ALKBH2	706708
Alkb homolog 4, lysine demethylase	ALKBH4	715078
Allograft inflammatory factor 1	AIF1	574115

Alpha 1,4-galactosyltransferase	A4GALT	710998
Alpha hemoglobin stabilizing protein	AHSP	714392
Alpha-2-HS-glycoprotein	AHSG	699348
Alport syndrome, mental retardation, midface hypoplasia and elliptocytosis chromosomal region gene 1	AMMECR1	705858
Amidohydrolase domain containing 2	AMDHD2	697051
Amine oxidase, copper containing 2	AOC2	100431016
Aminoacylase 3	ACY3	711083
Aminoadipate-semialdehyde dehydrogenase-phosphopantetheinyl transferase	AASDHPPT	100328984
Aminocarboxymuconate semialdehyde decarboxylase	ACMSD	708917
Amyloid beta (A4) precursor protein-binding, family B, member 1 (Fe65)	APBB1	712585
Amyloid beta (A4) precursor-like protein 1	APLP1	711258
Amyloid beta (A4) precursor-like protein 2	APLP2	718819
Anaphase promoting complex subunit 2	ANAPC2	706384
Ancient ubiquitous protein 1	AUP1	710020
Angiomotin like 2	AMOTL2	718868
Angiopoietin like 2	ANGPTL2	701444
Angiopoietin like 7	ANGPTL7	714204
Ankyrin 2, neuronal	ANK2	702180
Ankyrin repeat and IBR domain containing 1	ANKIB1	703273
Ankyrin repeat and SOCS box containing 12	ASB12	707931
Ankyrin repeat and SOCS box containing 3	ASB3	716503
Ankyrin repeat domain 1 (cardiac muscle)	ANKRD1	696653
Ankyrin repeat domain 13 family member D	ANKRD13D	721749
Ankyrin repeat domain 13C	ANKRD13C	702811
Ankyrin repeat domain 2 (stretch responsive muscle)	ANKRD2	707097
Ankyrin repeat domain 49	ANKRD49	697693
Ankyrin repeat domain 6	ANKRD6	701339
Anoctamin 4	ANO4	695973
Anti-Mullerian hormone receptor, type II	AMHR2	702822
Anti-silencing function 1A histone chaperone	ASF1A	714761
Antizyme inhibitor 2	AZIN2	709823
Aph-1 homolog A, gamma secretase subunit	APH1A	706483
Aph-1 homolog B, gamma secretase subunit	APH1B	705718
Apolipoprotein B mrna editing enzyme, catalytic polypeptide-like 3G	APOBEC3G	574398
Apolipoprotein B mrna editing enzyme, catalytic polypeptide-like 3H	APOBEC3H	723811
Apolipoprotein B receptor	APOBR	705950
Apolipoprotein C-I	APOC1	106994800
Apolipoprotein C-III	APOC3	696726
Apoptosis inducing factor, mitochondria associated 1	AIFM1	702773
Apoptosis inducing factor, mitochondria associated 3	AIFM3	100430576
Aprataxin	APTIX	702671
Aquaporin 4	AQP4	703773
Aquaporin 8	AQP8	702167

Arachidonate 5-lipoxygenase-activating protein	ALOX5AP	713170
Aralkylamine N-acetyltransferase	AANAT	706924
Arfgap with rhogap domain, ankyrin repeat and PH domain 3	ARAP3	701400
Arginine/serine-rich coiled-coil 1	RSRC1	704232
Arginine/serine-rich coiled-coil 2	RSRC2	706564
ARP1 actin-related protein 1 homolog A, centractin alpha (yeast)	ACTR1A	713513
ARP1 actin-related protein 1 homolog B, centractin beta (yeast)	ACTR1B	707328
ARP3 actin-related protein 3 homolog B (yeast)	ACTR3B	715965
Arsa arsenite transporter, ATP-binding, homolog 1 (bacterial)	ASNA1	717734
Artemin	ARTN	701641
Aryl hydrocarbon receptor nuclear translocator 2	ARNT2	712786
Arylsulfatase A	ARSA	716500
Ash2 (absent, small, or homeotic)-like (Drosophila)	ASH2L	699382
Aspartate beta-hydroxylase domain containing 1	ASPHD1	707467
Aspartate dehydrogenase domain containing	ASPDH	719609
Ataxin 2-like	ATXN2L	708359
Atlantin gtpase 1	ATL1	706313
ATP binding cassette subfamily B member 6 (Langereis blood group)	ABCB6	704599
ATP binding cassette subfamily C member 8	ABCC8	654490
ATP binding cassette subfamily G member 2 (Junior blood group)	ABCG2	574307
ATP binding cassette subfamily G member 8	ABCG8	713676
ATP citrate lyase	ACLY	708501
ATP synthase F0 subunit 6	ATP6	2846629
ATP synthase, H ⁺ transporting, mitochondrial F1 complex, delta subunit	ATP5D	705944
ATP synthase, H ⁺ transporting, mitochondrial Fo complex subunit C1 (subunit 9)	ATP5G1	697950
ATP synthase, H ⁺ transporting, mitochondrial Fo complex subunit C2 (subunit 9)	ATP5G2	703751
ATPase family, AAA domain containing 2	ATAD2	704478
ATPase, aminophospholipid transporter (APLT), class I, type 8A, member 1	ATP8A1	702630
ATPase, class II, type 9A	ATP9A	710250
ATPase, H ⁺ transporting, lysosomal 14kda, V1 subunit F	ATP6V1F	702112
ATPase, H ⁺ transporting, lysosomal 21kda, V0 subunit b	ATP6V0B	702243
ATPase, H ⁺ /K ⁺ exchanging, alpha polypeptide	ATP4A	100426216
ATP-binding cassette transporter 13	ABCC13	574326
Atypical chemokine receptor 1 (Duffy blood group)	ACKR1	719284
Aurora kinase A interacting protein 1	AURKAIP1	706329
Aurora kinase C	AURKC	709801
Autophagy related 13	ATG13	714322
Autophagy related 2A	ATG2A	717290
Autophagy related 7	ATG7	696238

B9 protein domain 1	B9D1	702949
B9 protein domain 2	B9D2	704873
Baculoviral IAP repeat containing 7	BIRC7	697671
BAI1-associated protein 2-like 2	BAIAP2L2	700058
Bardet-Biedl syndrome 9	BBS9	708412
BARX homeobox 2	BARX2	715001
Basic leucine zipper transcription factor, ATF-like 2	BATF2	722022
Basic transcription factor 3-like 4	BTF3L4	712955
BCDIN3 domain containing RNA methyltransferase	BCDIN3D	711559
B-cell CLL/lymphoma 2	BCL2	707407
B-cell CLL/lymphoma 7B	BCL7B	716470
B-cell CLL/lymphoma 7C	BCL7C	712065
B-cell CLL/lymphoma 9	BCL9	700800
B-cell receptor-associated protein 31	BCAP31	696663
BCL2 associated athanogene 2	BAG2	712778
BCL2/adenovirus E1B 19kda interacting protein 1	BNIP1	703576
BCL2-associated X protein	BAX	718948
BCL6 corepressor	BCOR	698644
BCS1-like (S. Cerevisiae)	BCS1L	699690
Beclin 1, autophagy related	BECN1	711649
Bestrophin 1	BEST1	718993
Beta-1,3-galactosyltransferase 1	B3GALT1	704744
Beta-1,3-galactosyltransferase 4	B3GALT4	718178
Beta-1,3-glucuronyltransferase 3	B3GAT3	718744
Beta-1,4-glucuronyltransferase 1	B4GAT1	714270
Beta-1,4-N-acetyl-galactosaminyl transferase 1	B4GALNT1	715317
Beta-2-microglobulin	B2M	712428
Bloom syndrome, recq helicase-like	BLM	703460
Bone morphogenetic protein 1	BMP1	707596
Bone morphogenetic protein receptor type IA	BMPRI1A	696898
BPI fold containing family A member 2	BPIFA2	710376
BPI fold containing family C	BPIFC	717287
Brain and reproductive organ-expressed (TNFRSF1A modulator)	BRE	702365
Brain-derived neurotrophic factor	BDNF	701245
BRCA1 associated protein 1	BAP1	697221
Breast cancer anti-estrogen resistance 1	BCAR1	713965
Breast cancer metastasis-suppressor 1-like	BRMS1L	695909
Breast carcinoma amplified sequence 4	BCAS4	701649
Brevican	BCAN	718545
BRF1, RNA polymerase III transcription initiation factor 90 kda subunit	BRF1	709533
BRICHOS domain containing 5	BRICD5	695765
Bromodomain adjacent to zinc finger domain 1B	BAZ1B	716436
Bromodomain containing 2	BRD2	717893
BUB3 mitotic checkpoint protein	BUB3	708033
C1GALT1 specific chaperone 1	C1GALT1C1	696662
C1q and tumor necrosis factor related protein 1	C1QTNF1	711093

Cadherin 11, type 2, OB-cadherin (osteoblast)	CDH11	708826
Cadherin 17, LI cadherin (liver-intestine)	CDH17	698886
Cadherin 24, type 2	CDH24	713241
Cadherin related family member 2	CDHR2	697249
Calcitonin-related polypeptide alpha	CALCA	700649
Calcium and integrin binding family member 2	CIB2	709429
Calcium binding protein 5	CABP5	718484
Calcium channel, voltage-dependent, beta 3 subunit	CACNB3	708091
Calcium homeostasis modulator 2	CALHM2	714662
Calcium/calmodulin-dependent protein kinase II delta	CAMK2D	702504
Calcium/calmodulin-dependent protein kinase kinase 1, alpha	CAMKK1	707562
Calcium/calmodulin-dependent serine protein kinase (MAGUK family)	CASK	707428
Calcyon neuron-specific vesicular protein	CALY	702415
Calmegin	CLGN	698361
Calmodulin like 3	CALML3	722513
Calponin 3, acidic	CNN3	709538
Calreticulin	CALR	716910
Cannabinoid receptor 2	CNR2	711155
Canopy FGF signaling regulator 3	CNPY3	100424672
CAP-Gly domain containing linker protein 3	CLIP3	712058
Capping protein (actin filament), gelsolin-like	CAPG	695288
Carbohydrate (chondroitin 4) sulfotransferase 13	CHST13	716548
Carbohydrate sulfotransferase 8	CHST8	106992408
Carbonic anhydrase IX	CA9	696729
Carbonic anhydrase VB, mitochondrial	CA5B	713128
Carbonyl reductase 3	CBR3	695769
Carboxypeptidase N subunit 2	CPN2	106997192
Carboxypeptidase X (M14 family), member 1	CPXM1	716790
Cardiotrophin 1	CTF1	713850
Carnitine palmitoyltransferase 1A (liver)	CPT1A	709837
Cartilage acidic protein 1	CRTAC1	707486
Casein kinase 1, alpha 1-like	CSNK1A1L	695190
Casein kinase 2, beta polypeptide	CSNK2B	715807
CASK interacting protein 2	CASKIN2	702477
Caspase 8 associated protein 2	CASP8AP2	702294
Caspase recruitment domain family member 18	CARD18	705678
Catalase	CAT	717406
Cathepsin C	CTSC	705320
Cathepsin K	CTSK	574112
Caveolin 2	CAV2	706980
Cbl proto-oncogene B, E3 ubiquitin protein ligase	CBLB	703879
Cbp/p300-interacting transactivator, with Glu/Asp rich carboxy-terminal domain, 1	CITED1	703165
CCCTC-binding factor (zinc finger protein)-like	CTCFL	701500
CCR4-NOT transcription complex subunit 1	CNOT1	712880
CD14 molecule	CD14	697482

CD19 molecule	CD19	705211
CD1c molecule	CD1C	717148
CD37 molecule	CD37	718718
CD4 molecule	CD4	713807
CD40 ligand	CD40LG	574160
CD40 molecule, TNF receptor superfamily member 5	CD40	707749
CD52 molecule	CD52	714429
CD53 molecule	CD53	702350
CD63 molecule	CD63	709828
CD79b molecule	CD79B	718218
CD81 molecule	CD81	704961
CD8b molecule	CD8B	699409
CDC42 effector protein (Rho gtpase binding) 2	CDC42EP2	716504
Cell death-inducing DFFA-like effector b	CIDEB	100425328
Cell death-inducing p53 target 1	CDIP1	705579
Cell division cycle 23	CDC23	714000
Cell division cycle 6	CDC6	700081
Cell growth regulator with ring finger domain 1	CGRRF1	695231
Centrin 1	CETN1	697701
Centrobin, centrosomal BRCA2 interacting protein	CNTROB	716660
Centromere protein J	CENPJ	721498
Centromere protein Q	CENPQ	721027
Centrosomal protein 131kda	CEP131	718613
Centrosomal protein 250kda	CEP250	705173
Centrosomal protein 41kda	CEP41	703215
Centrosomal protein 57kda-like 1	CEP57L1	700109
Centrosomal protein 85kda-like	CEP85L	714810
Ceramide synthase 5	CERS5	713449
Cerberus 1, DAN family BMP antagonist	CER1	713924
Cerebellar degeneration-related protein 2-like	CDR2L	700082
Cerebral cavernous malformation 2	CCM2	705037
Ceroid-lipofuscinosis, neuronal 6, late infantile, variant	CLN6	693873
Chaperonin containing TCP1, subunit 5 (epsilon)	CCT5	696640
Chemokine (C-C motif) ligand 13	CCL13	714907
Chemokine (C-C motif) ligand 18	CCL18	574181
Chemokine (C-C motif) ligand 25	CCL25	574219
Chemokine (C-C motif) ligand 7	CCL7	714751
Chemokine (C-C motif) receptor 9	CCR9	713934
Chemokine (C-X-C motif) receptor 3	CXCR3	699438
Chemokine-like factor	CKLF	693673
Chitinase 1	CHIT1	703286
Chitinase domain containing 1	CHID1	701435
Chitobiase, di-N-acetyl-	CTBS	710366
Chloride channel, voltage-sensitive 2	CLCN2	704709
Choline kinase beta	CHKB	716377
Choline O-acetyltransferase	CHAT	709977
Cholinergic receptor, nicotinic alpha 10	CHRNA10	718133
Cholinergic receptor, nicotinic alpha 3	CHRNA3	716571

Cholinergic receptor, nicotinic alpha 7	CHRNA7	574230
Chondroitin polymerizing factor	CHPF	703860
Chondroitin sulfate N-acetylgalactosaminyltransferase 1	CSGALNACT1	704901
Chromodomain helicase DNA binding protein 3	CHD3	716508
Chromodomain helicase DNA binding protein 4	CHD4	713162
Chromosome 1 open reading frame, human c1orf198	C1H1orf198	714084
Chromosome 1 open reading frame, human c1orf35	C1H1orf35	695723
Chromosome 1 open reading frame, human c1orf54	C1H1orf54	107000832
Chromosome 1 open reading frame, human c1orf56	C1H1orf56	709090
Chromosome 10 open reading frame 93 ortholog	C9H10orf93	719561
Chromosome 10 open reading frame, human c20orf27	C10H20orf27	717525
Chromosome 10 open reading frame, human c22orf23	C10H22orf23	699449
Chromosome 11 open reading frame, human c12orf10	C11H12orf10	702255
Chromosome 11 open reading frame, human c12orf57	C11H12orf57	714482
Chromosome 13 open reading frame, human c2orf40	C13H2orf40	713611
Chromosome 13 open reading frame, human c2orf49	C13H2orf49	713165
Chromosome 14 open reading frame, human c11orf68	C14H11orf68	715318
Chromosome 15 open reading frame, human c9orf16	C15H9orf16	722628
Chromosome 16 open reading frame, human c17orf49	C16H17orf49	713820
Chromosome 16 open reading frame, human c17orf53	C16H17orf53	711524
Chromosome 19 open reading frame, human c19orf24	C19H19orf24	706393
Chromosome 19 open reading frame, human c19orf43	C19H19orf43	716466
Chromosome 19 open reading frame, human c19orf47	C19H19orf47	701191
Chromosome 19 open reading frame, human c19orf66	C19H19orf66	714622
Chromosome 2 open reading frame, human c3orf18	C2H3orf18	701675
Chromosome 20 open reading frame, human c16orf13	C20H16orf13	696495
Chromosome 20 open reading frame, human c16orf62	C20H16orf62	695027
Chromosome 3 open reading frame, human c21orf91	C3H21orf91	710406
Chromosome 3 open reading frame, human c7orf62	C3H7orf62	704775
Chromosome 5 open reading frame, human c4orf45	C5H4orf45	100427200
Chromosome 6 open reading frame, human c5orf22	C6H5orf22	695901
Chromosome 7 open reading frame, human c14orf166	C7H14orf166	710094
Chromosome 7 open reading frame, human c14orf169	C7H14orf169	696773
Chromosome 7 open reading frame, human c14orf37	C7H14orf37	699880
Chromosome 7 open reading frame, human c14orf80	C7H14orf80	699883
Chromosome 7 open reading frame, human c15orf39	C7H15orf39	704143
Chromosome 8 open reading frame, human c8orf46	C8H8orf46	703243
Chromosome 8 open reading frame, human c8orf48	C8H8orf48	700746
Chromosome 8 open reading frame, human c8orf59	C8H8orf59	703464
Chromosome X open reading frame, human cxorf40a	CXHXorf40A	702659
Chymotrypsinogen B2	CTRB2	711100
Cilia and flagella associated protein 161	CFAP161	713184
Cilia and flagella associated protein 65	CFAP65	701296
Ciliary neurotrophic factor	CNTF	701907
Ciliogenesis associated TTC17 interacting protein	CATIP	698579
CKLF-like MARVEL transmembrane domain containing 3	CMTM3	695592
Clarín 3	CLRN3	697496
Clathrin, heavy chain-like 1	CLTCL1	719087

Claudin 16	CLDN16	704442
Claudin 17	CLDN17	705582
Claudin 20	CLDN20	701937
Clavesin 2	CLVS2	713626
Cleavage and polyadenylation specific factor 1	CPSF1	702082
Cleavage and polyadenylation specific factor 4	CPSF4	708119
Cleft lip and palate associated transmembrane protein 1	CLPTM1	718306
Clpb homolog, mitochondrial AAA ATPase chaperonin	CLPB	718461
CNKSR family member 3	CNKSR3	702627
Coatmer protein complex subunit epsilon	COPE	719631
Coatmer protein complex subunit zeta 2	COPZ2	696299
Codanin 1	CDAN1	708838
Cofilin 1 (non-muscle)	CFL1	721882
Cofilin 2 (muscle)	CFL2	693875
Coiled-coil domain containing 102B	CCDC102B	710808
Coiled-coil domain containing 136	CCDC136	701874
Coiled-coil domain containing 142	CCDC142	709014
Coiled-coil domain containing 148	CCDC148	698322
Coiled-coil domain containing 17	CCDC17	706591
Coiled-coil domain containing 22	CCDC22	713063
Coiled-coil domain containing 24	CCDC24	702564
Coiled-coil domain containing 42	CCDC42	717532
Coiled-coil domain containing 62	CCDC62	707179
Coiled-coil domain containing 69	CCDC69	713304
Coiled-coil domain containing 82	CCDC82	700198
Coiled-coil domain containing 85B	CCDC85B	715413
Coiled-coil domain containing 86	CCDC86	695978
Coiled-coil domain containing 92	CCDC92	705922
Coiled-coil-helix-coiled-coil-helix domain containing 10	CHCHD10	720205
Coiled-coil-helix-coiled-coil-helix domain containing 2	CHCHD2	702967
Coiled-coil-helix-coiled-coil-helix domain containing 8	CHCHD8	718275
Colipase	CLPS	719005
Collagen, type III, alpha 1	COL3A1	574131
Collagen, type VI, alpha 1	COL6A1	721855
Collagen, type VI, alpha 3	COL6A3	694701
Collagen, type XII, alpha 1	COL12A1	717820
Collagen, type XVI, alpha 1	COL16A1	706149
Collagen, type XXIV, alpha 1	COL24A1	711713
Colony stimulating factor 1 (macrophage)	CSF1	702532
Colony stimulating factor 3	CSF3	698961
Colony stimulating factor 3 receptor	CSF3R	713485
COMM domain containing 9	COMMMD9	716992
Complement component 1, q subcomponent, C chain	C1QC	708589
Complement component 1, s subcomponent	C1S	714589
Complement component 3a receptor 1	C3AR1	716086
Complement factor properdin	CFP	707386
Complexin 1	CPLX1	703519
Contactin 1	CNTN1	574365

Coordinator of PRMT5, differentiation stimulator	COPRS	713293
COP9 signalosome subunit 4	COPS4	693435
Copine III	CPNE3	694013
Copper chaperone for superoxide dismutase	CCS	721802
Core-binding factor, runt domain, alpha subunit 2; translocated to, 3	CBFA2T3	698233
Cornichon family AMPA receptor auxiliary protein 1	CNIH1	695002
Cornulin	CRNN	712894
Coronin, actin binding protein, 1B	CORO1B	721725
COX19 cytochrome c oxidase assembly homolog (<i>S. Cerevisiae</i>)	COX19	696368
Creatine kinase, brain	CKB	711167
CREB regulated transcription coactivator 2	CRTC2	715908
Crumbs family member 3	CRB3	700086
Cryptochrome circadian clock 2	CRY2	715000
Crystallin lambda 1	CRYL1	703988
C-src tyrosine kinase	CSK	702868
CTD small phosphatase 2	CTDSP2	715956
CTP synthase 2	CTPS2	721014
C-type lectin domain family 12 member A	CLEC12A	722319
CUE domain containing 2	CUEDC2	713243
C-x(9)-C motif containing 4	CMC4	100423504
Cyclin D binding myb-like transcription factor 1	DMTF1	706292
Cyclin D3	CCND3	695215
Cyclin Pas1/PHO80 domain containing 1	CNPPD1	704271
Cyclin T1	CCNT1	707754
Cyclin-dependent kinase 14	CDK14	703442
Cyclin-dependent kinase 16	CDK16	712033
Cyclin-dependent kinase 19	CDK19	698292
Cyclin-dependent kinase 2 interacting protein	CINP	709044
Cyclin-dependent kinase 4	CDK4	715650
Cyclin-dependent kinase 5, regulatory subunit 1 (p35)	CDK5R1	714274
Cyclin-dependent kinase 8	CDK8	709761
Cyclin-dependent kinase-like 1 (CDC2-related kinase)	CDKL1	705975
Cystatin C	CST3	574313
Cystatin F	CST7	704850
Cysteine-serine-rich nuclear protein 2	CSRNP2	694549
Cystinosin, lysosomal cystine transporter	CTNS	706721
Cytidine deaminase	CDA	705913
Cytochrome b-561 domain containing 2	CYB561D2	702280
Cytochrome c oxidase subunit III	COX3	2846633
Cytochrome c oxidase subunit viia polypeptide 2 like	COX7A2L	712764
Cytochrome c oxidase subunit viib	COX7B	706099
Cytochrome c oxidase subunit VIIIA (ubiquitous)	COX8A	718007
Cytochrome P450, family 2, subfamily D, polypeptide 6	CYP2D6	678691
Cytochrome P450, family 2, subfamily E, polypeptide 1	CYP2E1	678688
Cytochrome P450, family 4, subfamily F, polypeptide 8	CYP4F8	718335
Cytochrome P450c17	CYP17A1	678693

Cytosolic thiouridylase subunit 1	CTU1	719536
Cytotoxic and regulatory T-cell molecule	CRTAM	707560
Dab, mitogen-responsive phosphoprotein, homolog 2 (Drosophila)	DAB2	694349
Dachsous cadherin-related 1	DCHS1	711938
Damage-specific DNA binding protein 2	DDB2	713813
D-amino-acid oxidase	DAO	706373
DAZ associated protein 2	DAZAP2	695282
DAZ interacting zinc finger protein 1-like	DZIP1L	716551
Dcmp deaminase	DCTD	700995
DC-STAMP domain containing 2	DCST2	717224
DDB1 and CUL4 associated factor 10	DCAF10	716256
DDB1 and CUL4 associated factor 11	DCAF11	714867
DEAD (Asp-Glu-Ala-Asp) box helicase 42	DDX42	717964
DEAD (Asp-Glu-Ala-Asp) box polypeptide 19B	DDX19B	709576
DEAD (Asp-Glu-Ala-Asp) box polypeptide 41	DDX41	700742
DEAD (Asp-Glu-Ala-Asp) box polypeptide 50	DDX50	712511
DEAD (Asp-Glu-Ala-Asp) box polypeptide 54	DDX54	712763
Deafness, autosomal recessive 31	DFNB31	708051
DEAH (Asp-Glu-Ala-Asp/His) box polypeptide 57	DHX57	713523
DEAH (Asp-Glu-Ala-His) box polypeptide 38	DHX38	709173
DEAH (Asp-Glu-Ala-His) box polypeptide 40	DHX40	715202
Death-associated protein	DAP	697362
Decapping exoribonuclease	DXO	716027
Dedicator of cytokinesis 2	DOCK2	704061
Dedicator of cytokinesis 5	DOCK5	711359
Defensin beta 118	DEFB118	641438
Dehydrogenase/reductase (SDR family) member 3	DHRS3	715548
Dehydrogenase/reductase (SDR family) member 7B	DHRS7B	704869
Delta-like 2 homolog (Drosophila)	DLK2	700106
DENN/MADD domain containing 4A	DENND4A	709675
Denticleless E3 ubiquitin protein ligase homolog (Drosophila)	DTL	711236
Deoxyhypusine synthase	DHPS	716213
Dephospho-coa kinase domain containing	DCAKD	715841
Diacylglycerol O-acyltransferase 1	DGAT1	701489
Dihydropyrimidine dehydrogenase	DPYD	715672
Dihydrouridine synthase 1-like	DUS1L	715662
Dipeptidase 2	DPEP2	701570
Discoidin domain receptor tyrosine kinase 2	DDR2	720124
Discs, large (Drosophila) homolog-associated protein 4	DLGAP4	702928
Dishevelled segment polarity protein 2	DVL2	714381
Dishevelled-binding antagonist of beta-catenin 1	DACT1	701218
DMRT like family B with proline rich C-terminal 1	DMRTB1	714424
DNA cross-link repair 1A	DCLRE1A	697882
Dnaj heat shock protein family (Hsp40) member B2	DNAJB2	702936
Dnaj heat shock protein family (Hsp40) member C15	DNAJC15	700339
Dnaj heat shock protein family (Hsp40) member C17	DNAJC17	704013

Dnaj heat shock protein family (Hsp40) member C27	DNAJC27	694037
Dnaj heat shock protein family (Hsp40) member C3	DNAJC3	695757
Docking protein 2	DOK2	706317
Docking protein 5	DOK5	698689
Dolichyl-phosphate mannosyltransferase polypeptide 2, regulatory subunit	DPM2	698709
Dolichyl-phosphate mannosyltransferase polypeptide 3	DPM3	717446
DR1-associated protein 1 (negative cofactor 2 alpha)	DRAP1	715271
Drosha, ribonuclease type III	DROSHA	692081
DSN1 homolog, MIS12 kinetochore complex component	DSN1	702251
DTW domain containing 1	DTWD1	715084
DTW domain containing 2	DTWD2	697989
Dual oxidase maturation factor 2	DUOXA2	712992
Dual specificity phosphatase 16	DUSP16	696332
Dual specificity phosphatase 22	DUSP22	705824
Dual specificity tyrosine-(Y)-phosphorylation regulated kinase 2	DYRK2	717941
Dynactin subunit 4	DCTN4	712783
Dynactin subunit 6	DCTN6	694273
Dynein regulatory complex subunit 3	DRC3	699590
Dynein, axonemal, intermediate chain 1	DNAI1	701307
Dyskeratosis congenita 1, dyskerin	DKC1	702563
Dystroglycan 1	DAG1	706179
Dystrophia myotonica protein kinase	DMPK	715328
E1A binding protein p300	EP300	706258
E74-like factor 2 (ets domain transcription factor)	ELF2	696760
Ecotropic viral integration site 5-like	EVI5L	706628
Ectodysplasin A receptor	EDAR	695059
EF-hand and coiled-coil domain containing 1	EFCC1	706444
EF-hand calcium binding domain 11	EFCAB11	695233
EF-hand calcium binding domain 12	EFCAB12	703176
EF-hand domain family member D2	EFHD2	694155
EGF-like, fibronectin type III and laminin G domains	EGFLAM	693314
EGF-like-domain, multiple 7	EGFL7	709840
EGF-like-domain, multiple 8	EGFL8	717145
Egl-9 family hypoxia-inducible factor 2	EGLN2	703083
EH domain containing 1	EHD1	722036
EH domain containing 4	EHD4	707376
Elastin microfibril interfacer 1	EMILIN1	698204
ELAV like neuron-specific RNA binding protein 2	ELAVL2	708195
ELK1, member of ETS oncogene family	ELK1	712610
ELMO/CED-12 domain containing 3	ELMOD3	695180
ELOVL fatty acid elongase 4	ELOVL4	692070
Embryonal Fyn-associated substrate	EFS	713838
Emerin	EMD	699400
Empty spiracles homeobox 1	EMX1	705441
Endonuclease domain containing 1	ENDOD1	699210
Endoplasmic reticulum protein 27	ERP27	700186

Energy homeostasis associated	ENHO	701072
Enhancer of mrna decapping 3	EDC3	709182
Enhancer of polycomb homolog 2 (Drosophila)	EPC2	721916
Enhancer of rudimentary homolog (Drosophila)	ERH	712507
Enhancer of yellow 2 homolog (Drosophila)	ENY2	699048
Enolase 1, (alpha)	ENO1	709378
EP300 interacting inhibitor of differentiation 3	EID3	701175
EPH receptor A2	EPHA2	692343
EPH receptor B4	EPHB4	719320
Ephrin-A3	EFNA3	717373
Ephrin-B1	EFNB1	694149
Epilepsy, progressive myoclonus type 2A, Lafora disease (laforin)	EPM2A	699361
Epithelial membrane protein 1	EMP1	698319
Epoxide hydrolase 1, microsomal (xenobiotic)	EPHX1	700180
ER lipid raft associated 2	ERLIN2	698126
ER membrane protein complex subunit 10	EMC10	719285
ERGIC and golgi 3	ERGIC3	704736
ES cell expressed Ras	ERAS	711442
Ethanolamine kinase 2	ETNK2	700683
Ethylmalonic encephalopathy 1	ETHE1	718089
Eukaryotic elongation factor, selenocysteine-trna-specific	EEFSEC	705784
Eukaryotic translation elongation factor 1 beta 2	EEF1B2	707019
Eukaryotic translation elongation factor 1 gamma	EEF1G	722274
Eukaryotic translation elongation factor 2	EEF2	721806
Eukaryotic translation initiation factor 2B subunit epsilon	EIF2B5	703673
Eukaryotic translation initiation factor 2B subunit gamma	EIF2B3	705862
Eukaryotic translation initiation factor 3 subunit B	EIF3B	698481
Eukaryotic translation initiation factor 3 subunit F	EIF3F	706269
Eukaryotic translation initiation factor 3 subunit I	EIF3I	708145
Eukaryotic translation initiation factor 3 subunit L	EIF3L	699189
Eukaryotic translation initiation factor 4E binding protein 1	EIF4EBP1	703628
Eukaryotic translation initiation factor 4E nuclear import factor 1	EIF4ENIF1	716871
Eukaryotic translation initiation factor 4H	EIF4H	693429
Eva-1 homolog B (C. Elegans)	EVA1B	713159
EWS RNA binding protein 1	EWSR1	714432
Excision repair cross-complementation group 2	ERCC2	715485
Exocyst complex component 2	EXOC2	706296
Exonuclease 5	EXO5	694536
Exosome component 3	EXOSC3	716347
Exosome component 4	EXOSC4	700012
Exosome component 8	EXOSC8	695071
Exostosin glycosyltransferase 1	EXT1	701488
Exportin 6	XPO6	704332
Exportin, trna	XPOT	717375
FAD-dependent oxidoreductase domain containing 1	FOXRED1	714271
Family with sequence similarity 110 member B	FAM110B	703840

Family with sequence similarity 127, member A	FAM127A	708766
Family with sequence similarity 134 member A	FAM134A	704378
Family with sequence similarity 151 member B	FAM151B	715256
Family with sequence similarity 170 member A	FAM170A	701046
Family with sequence similarity 171 member B	FAM171B	712442
Family with sequence similarity 178 member B	FAM178B	710890
Family with sequence similarity 181 member B	FAM181B	701184
Family with sequence similarity 184 member A	FAM184A	714658
Family with sequence similarity 185 member A	FAM185A	694971
Family with sequence similarity 186 member B	FAM186B	711001
Family with sequence similarity 19 (chemokine (C-C motif)-like), member A5	FAM19A5	107000696
Family with sequence similarity 206 member A	FAM206A	710486
Family with sequence similarity 214 member B	FAM214B	698214
Family with sequence similarity 234 member A	FAM234A	694729
Family with sequence similarity 3 member A	FAM3A	701159
Family with sequence similarity 53 member C	FAM53C	714176
Family with sequence similarity 57 member B	FAM57B	708210
Family with sequence similarity 71 member C	FAM71C	694296
Family with sequence similarity 83 member A	FAM83A	704023
Family with sequence similarity 89 member B	FAM89B	721925
Family with sequence similarity 91 member A1	FAM91A1	705119
Fanconi anemia complementation group B	FANCB	712083
Fanconi anemia complementation group G	FANCG	698837
Fanconi anemia complementation group I	FANCI	699878
Fanconi anemia core complex associated protein 100	FAAP100	713876
Far upstream element (FUSE) binding protein 3	FUBP3	722470
Fas-activated serine/threonine kinase	FASTK	714020
Fat storage-inducing transmembrane protein 1	FITM1	715085
Fatty acid desaturase 2	FADS2	719037
FBJ murine osteosarcoma viral oncogene homolog	FOS	702077
F-box and leucine-rich repeat protein 6	FBXL6	701594
F-box protein 6	FBXO6	722740
F-box protein 7	FBXO7	717317
Fc fragment of igg, high affinity Ia, receptor (CD64)	FCGR1A	714664
Fc fragment of igg, receptor, transporter, alpha	FCGRT	718859
Fc receptor-like A	FCRLA	720016
Fc receptor-like B	FCRLB	720028
Fem-1 homolog b (C. Elegans)	FEM1B	693955
Fermitin family member 3	FERMT3	722120
Ferritin mitochondrial	FTMT	699743
FGFR1 oncogene partner	FGFR1OP	706749
Fibroblast growth factor 20	FGF20	701847
Fibroblast growth factor receptor 1	FGFR1	700126
Fibroblast growth factor receptor substrate 3	FRS3	694462
Fibronectin 1	FN1	613269
Ficolin 2	FCN2	712486
Fidgetin-like 1	FIGNL1	694906

Filamin A, alpha	FLNA	699524
Filamin binding LIM protein 1	FBLIM1	695727
FK506 binding protein 10	FKBP10	707881
FK506 binding protein 6	FKBP6	716306
FK506 binding protein 8	FKBP8	720232
FLYWCH-type zinc finger 1	FLYWCH1	700909
Fms-related tyrosine kinase 3 ligand	FLT3LG	719239
Folate receptor 2 (fetal)	FOLR2	718405
Follicular dendritic cell secreted protein	FDCSP	707784
Folliculogenesis specific bhlh transcription factor	FIGLA	710606
Follistatin like 1	FSTL1	713367
Forkhead box R2	FOXR2	704032
Forty-two-three domain containing 1	FYTTD1	714705
Four and a half LIM domains 3	FHL3	715313
Fragile site, folic acid type, rare, fra(10)(q23.3) or fra(10)(q24.2) candidate 1	FRA10AC1	700389
Frataxin	FXN	699469
Frizzled class receptor 10	FZD10	717812
Fructose-bisphosphatase 2	FBP2	100430824
Fucokinase	FUK	709226
Fucosyltransferase 10 (alpha (1,3) fucosyltransferase)	FUT10	697659
Fucosyltransferase 9 (alpha (1,3) fucosyltransferase)	FUT9	708361
Fuzzy planar cell polarity protein	FUZ	719442
FXYP domain containing ion transport regulator 7	FXYP7	718457
FYN proto-oncogene, Src family tyrosine kinase	FYN	574214
FYVE, rhogef and PH domain containing 1	FGD1	701134
G protein pathway suppressor 1	GPS1	719343
G protein-coupled bile acid receptor 1	GPBAR1	697937
G protein-coupled receptor 1	GPR1	707120
G protein-coupled receptor 12	GPR12	710030
G protein-coupled receptor 135	GPR135	701843
G protein-coupled receptor 137	GPR137	717722
G protein-coupled receptor 141	GPR141	705700
G protein-coupled receptor 143	GPR143	709148
G protein-coupled receptor 161	GPR161	698934
G protein-coupled receptor 162	GPR162	100428264
G protein-coupled receptor 173	GPR173	698645
G protein-coupled receptor 182	GPR182	713866
G protein-coupled receptor 19	GPR19	697072
G protein-coupled receptor 3	GPR3	716033
G protein-coupled receptor 31	GPR31	717158
G protein-coupled receptor 50	GPR50	703817
G protein-coupled receptor kinase 6	GRK6	700000
G protein-coupled receptor kinase 7	GRK7	714916
G protein-coupled receptor, class C, group 5, member B	GPRC5B	695204
G protein-coupled receptor, class C, group 5, member D	GPRC5D	698898
G2/M-phase specific E3 ubiquitin protein ligase	G2E3	717021
GABA(A) receptor-associated protein	GABARAP	714597

Gamma-aminobutyric acid (GABA) B receptor, 1	GABBR1	708987
Gamma-glutamylcyclotransferase	GGCT	695547
Gamma-glutamyltransferase 5	GGT5	720345
Ganglioside induced differentiation associated protein 1	GDAP1	697136
Gap junction protein beta 4	GJB4	710994
Gastrulation brain homeobox 2	GBX2	693901
GCN1, eif2 alpha kinase activator homolog	GCN1	698528
GDP-mannose pyrophosphorylase A	GMPPA	703756
General transcription factor IIH subunit 4	GTF2H4	714285
General transcription factor IIH subunit 5	GTF2H5	700107
General transcription factor IIIC subunit 1	GTF3C1	703998
General transcription factor IIIC subunit 5	GTF3C5	714489
Germ cell-less, spermatogenesis associated 1	GMCL1	701545
Germinal center-associated, signaling and motility	GCSAM	707891
GLE1, RNA export mediator	GLE1	717474
Glucagon-like peptide 2 receptor	GLP2R	717783
Glucose 6 phosphatase, catalytic, 3	G6PC3	714276
Glucose-6-phosphate dehydrogenase	G6PD	701137
Glucose-fructose oxidoreductase domain containing 1	GFOD1	700607
Glucosidase, beta (bile acid) 2	GBA2	696062
Glutamate receptor, ionotropic, kainate 1	GRIK1	705699
Glutamate receptor, ionotropic, N-methyl D-aspartate-associated protein 1 (glutamate binding)	GRINA	708234
Glutaminase	GLS	693520
Glutaryl-coa dehydrogenase	GCDH	716935
Glutathione peroxidase 1	GPX1	706732
Glutathione peroxidase 4	GPX4	705333
Glutathione peroxidase 7	GPX7	715474
Glutathione peroxidase 8 (putative)	GPX8	705965
Glutathione S-transferase alpha 4	GSTA4	709666
Glutathione S-transferase kappa 1	GSTK1	704240
Glutathione S-transferase mu 2 (muscle)	GSTM2	700053
Glutathione S-transferase omega 2	GSTO2	715291
Glutathione S-transferase pi 1	GSTP1	721704
Glutathione S-transferase theta 2	GSTT2	700185
Glyceraldehyde-3-phosphate dehydrogenase	GAPDH	574353
Glyceraldehyde-3-phosphate dehydrogenase, spermatogenic	GAPDHS	709485
Glycerol kinase 2	GK2	696635
Glycerophosphodiester phosphodiesterase 1	GDE1	694849
Glycerophosphodiester phosphodiesterase domain containing 5	GDPD5	695518
Glycine receptor beta	GLRB	700368
Glycogen synthase 2	GYS2	706152
Glycoprotein (transmembrane) nmb	GPNMB	704990
Glycosylated lysosomal membrane protein	GLMP	719468
Glycosyltransferase 8 domain containing 2	GLT8D2	699937
Golgi brefeldin A resistant guanine nucleotide exchange factor 1	GBF1	714579

Golgi phosphoprotein 3-like	GOLPH3L	707858
Golgi-associated, gamma adaptin ear containing, ARF binding protein 1	GGA1	697929
Golgi-associated, gamma adaptin ear containing, ARF binding protein 3	GGA3	705751
Granulysin	GNLY	696059
Granzyme B	GZMB	716518
GRB2-related adaptor protein	GRAP	702473
GRIP and coiled-coil domain containing 1	GCC1	697975
Group-specific component (vitamin D binding protein)	GC	705708
Growth arrest and DNA damage inducible alpha	GADD45A	701054
Growth arrest specific 2	GAS2	700952
Growth arrest specific 2 like 1	GAS2L1	714530
Growth associated protein 43	GAP43	711260
Growth differentiation factor 15	GDF15	719466
Growth differentiation factor 3	GDF3	715605
Growth differentiation factor 7	GDF7	702462
Gse1 coiled-coil protein	GSE1	693298
Gtpase, IMAP family member 1	GIMAP1	100424488
Guanidinoacetate N-methyltransferase	GAMT	721263
Guanine nucleotide binding protein (G protein), alpha 14	GNA14	705448
Guanine nucleotide binding protein (G protein), beta polypeptide 1	GNB1	703399
Guanine nucleotide binding protein (G protein), beta polypeptide 2-like 1	GNB2L1	708526
Guanine nucleotide binding protein (G protein), beta polypeptide 3	GNB3	713913
Guanine nucleotide binding protein (G protein), gamma 2	GNG2	710000
Guanine nucleotide binding protein (G protein), gamma 5	GNG5	710548
Guanylate cyclase activator 1B	GUCA1B	695658
Guanylate kinase 1	GUK1	695272
H19, imprinted maternally expressed transcript (non-protein coding)	H19	704308
H2A histone family, member J	H2AFJ	701863
H2A histone family, member Y2	H2AFY2	711117
H2A histone family, member Z	H2AFZ	709326
Haloacid dehalogenase like hydrolase domain containing 3	HDHD3	705447
HAUS augmin like complex subunit 8	HAUS8	718874
HCLS1 associated protein X-1	HAX1	716495
Heat shock factor binding protein 1	HSBP1	714498
Heat shock protein 90kda alpha family class B member 1	HSP90AB1	702293
Heat shock protein family B (small) member 1	HSPB1	715615
Heat shock protein family B (small) member 11	HSPB11	714791
Heat shock protein family B (small) member 6	HSPB6	710760
Heat shock transcription factor 2	HSF2	713938
HECT domain containing E3 ubiquitin protein ligase 2	HECTD2	697258
Helicase (DNA) B	HELB	717860
Hematological and neurological expressed 1-like	HN1L	702283

Hematopoietic cell signal transducer	HCST	574152
Hematopoietic cell-specific Lyn substrate 1	HCLS1	714044
Hematopoietic prostaglandin D synthase	HPGDS	705227
Heme oxygenase 2	HMOX2	705461
Hemogen	HEMGN	715562
Hemoglobin subunit alpha 1	HBA1	701930
Hemoglobin subunit epsilon 1	HBE1	715414
Hemoglobin, gamma G	HBG2	715368
HEN1 methyltransferase homolog 1 (Arabidopsis)	HENMT1	698896
Hepatocyte growth factor (hepapoietin A; scatter factor)	HGF	708316
Hepcidin antimicrobial peptide	HAMP	708397
Hexamethylene bis-acetamide inducible 1	HEXIM1	716006
HIG1 hypoxia inducible domain family member 1B	HIGD1B	715566
Histocompatibility (minor) 13	HM13	713216
Histone cluster 1, h2aj	HIST1H2AJ	704127
Histone deacetylase 3	HDAC3	704467
Histone deacetylase 5	HDAC5	711456
Histone deacetylase 6	HDAC6	711363
Homeobox D12	HOXD12	100428776
Homeodomain interacting protein kinase 1	HIPK1	707856
Homer scaffolding protein 3	HOMER3	719647
Host cell factor C2	HCFC2	700316
HRAS like suppressor family member 5	HRASLS5	718317
Hyaluronan and proteoglycan link protein 3	HAPLN3	698880
Hyaluronan synthase 1	HAS1	719773
Hydrogen voltage gated channel 1	HVCN1	709745
Hydroxyacid oxidase 2 (long chain)	HAO2	712615
Hydroxypyruvate isomerase (putative)	HYI	700926
Hydroxysteroid dehydrogenase like 2	HSDL2	707233
Hyperpolarization activated cyclic nucleotide gated potassium channel 3	HCN3	717719
Hypocretin (orexin) neuropeptide precursor	HCRT	709564
Iduronidase, alpha-L-	IDUA	106998224
IKAROS family zinc finger 1	IKZF1	693936
IKAROS family zinc finger 3	IKZF3	698083
ILK associated serine/threonine phosphatase	ILKAP	706334
Ilvb (bacterial acetolactate synthase)-like	ILVBL	718086
Immunoglobulin superfamily member 10	IGSF10	709661
IMP (inosine 5'-monophosphate) dehydrogenase 2	IMPDH2	708307
IMP3, U3 small nucleolar ribonucleoprotein	IMP3	706202
Importin 5	IPO5	697448
Importin 9	IPO9	707210
Inhibin alpha	INHA	574379
Inhibitor of growth family member 1	ING1	694955
Inner centromere protein	INCENP	722320
Inositol polyphosphate phosphatase like 1	INPPL1	718421
Inositol-3-phosphate synthase 1	ISYNA1	719487
Insulin like 3	INSL3	100533192

Insulin like 6	INSL6	693735
Insulin like growth factor 1 receptor	IGF1R	708227
Insulin like growth factor binding protein 4	IGFBP4	700963
Insulin like growth factor binding protein 7	IGFBP7	693564
Integrator complex subunit 5	INTS5	719124
Integrator complex subunit 7	INTS7	711152
Integrin linked kinase	ILK	709944
Integrin subunit alpha 1	ITGA1	703456
Integrin subunit alpha 2b	ITGA2B	714955
Integrin subunit alpha V	ITGAV	707756
Integrin subunit beta like 1	ITGBL1	700965
Integrin-binding sialoprotein	IBSP	701835
Intercellular adhesion molecule 1	ICAM1	712280
Intercellular adhesion molecule 4 (Landsteiner-Wiener blood group)	ICAM4	712354
Intercellular adhesion molecule 5	ICAM5	720495
Interferon regulatory factor 2	IRF2	694347
Interferon regulatory factor 2 binding protein 1	IRF2BP1	715611
Interferon regulatory factor 3	IRF3	718970
Interferon stimulated exonuclease gene 20kda like 2	ISG20L2	718621
Interferon, alpha 2	IFNA2	709948
Interferon, gamma-inducible protein 16	IFI16	719253
Interleukin 1 receptor accessory protein	IL1RAP	574387
Interleukin 17 receptor E	IL17RE	698972
Interleukin 18	IL18	574151
Interleukin 2 receptor subunit gamma	IL2RG	641338
Interleukin 21 receptor	IL21R	705759
Interleukin 22	IL22	718047
Interleukin enhancer binding factor 3	ILF3	713427
Intestine-specific homeobox	ISX	717448
Intraflagellar transport 172	IFT172	700948
Intraflagellar transport 20	IFT20	715773
Intraflagellar transport 57	IFT57	705088
Inturned planar cell polarity protein	INTU	709967
IQ motif containing K	IQCK	695417
IQ motif containing with AAA domain 1	IQCA1	694173
Iroquois homeobox 6	IRX6	698232
Isocitrate dehydrogenase 3 (NAD+) beta	IDH3B	716726
Isocitrate dehydrogenase 3 (NAD+) gamma	IDH3G	698558
Jagunal homolog 1	JAGN1	699718
Jumonji domain containing 1C	JMJD1C	697630
Junction adhesion molecule like	JAML	704919
Junctophilin 1	JPH1	697014
Kaptein (actin binding protein)	KPTN	717322
Karyopherin alpha 2 (RAG cohort 1, importin alpha 1)	KPNA2	100430008
Katanin p60 subunit A-like 1	KATNAL1	712636
KDEL endoplasmic reticulum protein retention receptor 1	KDELRL1	717928
KDEL endoplasmic reticulum protein retention receptor 2	KDELRL2	704335

KDEL motif containing 1	KDELC1	702156
Kelch domain containing 10	KLHDC10	702290
Kelch domain containing 8B	KLHDC8B	707348
Kelch like family member 11	KLHL11	708393
Kelch like family member 18	KLHL18	711943
Kelch like family member 2	KLHL2	704790
Kelch like family member 25	KLHL25	697129
Kelch like family member 40	KLHL40	717366
Kelch like family member 9	KLHL9	710804
Kell blood group, metallo-endopeptidase	KEL	703492
Keratin 14, type I	KRT14	100426176
Keratin 2, type II	KRT2	699567
Keratin 222, type II	KRT222	701557
Keratin 25, type I	KRT25	701915
Keratin 4, type II	KRT4	700060
Keratin associated protein 12-4	KRTAP12-4	712284
Keratin associated protein 22-1	KRTAP22-1	100428224
Keratocan	KERA	709743
KIAA0040 ortholog	KIAA0040	100423512
KIAA0141 ortholog	KIAA0141	702802
KIAA0355 ortholog	KIAA0355	705202
KIAA2013 ortholog	KIAA2013	722762
Killer cell lectin-like receptor subfamily B, member 1	KLRB1	100430784
Kin17 DNA and RNA binding protein	KIN	713634
Kinesin family member 1C	KIF1C	721601
Kinesin family member 22	KIF22	706401
Kinesin heavy chain member 2A	KIF2A	696561
Kininogen 1	KNG1	707466
KRAB-A domain containing 1	KRBA1	711863
Kv channel interacting protein 2	KCNIP2	712434
L-3-hydroxyproline dehydratase (trans-)	L3HYPDH	702076
Lactate dehydrogenase A	LDHA	694309
Lamin A/C	LMNA	719414
Laminin subunit beta 2	LAMB2	707892
Lanc lantibiotic synthetase component C-like 2 (bacterial)	LANCL2	704882
Late cornified envelope 3C	LCE3C	100423544
Late cornified envelope 5A	LCE5A	100423328
Late endosomal/lysosomal adaptor, MAPK and MTOR activator 2	LAMTOR2	718110
LCK proto-oncogene, Src family tyrosine kinase	LCK	717704
LDL receptor related protein 2	LRP2	705786
LDL receptor related protein 3	LRP3	703776
Lectin, galactoside-binding, soluble, 7B	LGALS7B	694781
LETM1 domain containing 1	LETMD1	694422
Leucine rich repeat and coiled-coil centrosomal protein 1	LRRCC1	707964
Leucine rich repeat and fibronectin type III domain containing 3	LRFN3	711565
Leucine rich repeat and fibronectin type III domain	LRFN4	713166

containing 4		
Leucine rich repeat and fibronectin type III domain containing 5	LRFN5	700512
Leucine rich repeat containing 28	LRRC28	708649
Leucine rich repeat containing 36	LRRC36	697849
Leucine rich repeat containing 42	LRRC42	714839
Leucine rich repeat containing 45	LRRC45	715420
Leucine rich repeat containing 61	LRRC61	704779
Leucine rich repeat containing 73	LRRC73	700361
Leucine rich repeat neuronal 1	LRRN1	703993
Leucine rich repeat protein 1	LRR1	706658
Leucine rich repeat transmembrane neuronal 3	LRRTM3	696536
Leucine zipper, down-regulated in cancer 1	LDOC1	696902
Leucine zipper, putative tumor suppressor 2	LZTS2	711279
Leucine-rich repeats and calponin homology (CH) domain containing 2	LRCH2	708436
Leucine-rich repeats and immunoglobulin-like domains 3	LRIG3	716344
Leucine-rich repeats and WD repeat domain containing 1	LRWD1	715187
Leukocyte immunoglobulin-like receptor, subfamily A, member b	LILRAB	692334
Leukocyte immunoglobulin-like receptor, subfamily B (with TM and ITIM domains), member 1	LILRB1	692340
Leukocyte receptor cluster (LRC) member 1	LENG1	693417
Leukocyte specific transcript 1	LST1	100141392
Leukocyte-associated immunoglobulin-like receptor 1	LAIR1	695533
Leukotriene C4 synthase	LTC4S	705233
Leupaxin	LPXN	702033
Ligase I, DNA, ATP-dependent	LIG1	718528
Ligase IV, DNA, ATP-dependent	LIG4	695475
LIM and cysteine-rich domains 1	LMCD1	702382
LIM domain binding 1	LDB1	712653
LIM domain binding 2	LDB2	714918
Limb development membrane protein 1-like	LMBR1L	709548
Lin-28 homolog B (C. Elegans)	LIN28B	696130
Linker for activation of T-cells family member 2	LAT2	693676
Lipocalin 1	LCN1	711974
Lipoma HMGIC fusion partner-like 2	LHFPL2	709040
Lipopolysaccharide-induced TNF factor	LITAF	711743
Liver expressed antimicrobial peptide 2	LEAP2	709041
Low density lipoprotein receptor adaptor protein 1	LDLRAP1	713032
LSM12 homolog	LSM12	714219
LSM14A mrna processing body assembly factor	LSM14A	705085
LSM5 homolog, U6 small nuclear RNA and mRNA degradation associated	LSM5	693550
Ly6/neurotoxin 1	LYNX1	100428512
Lymphocyte antigen 6 complex, locus E	LY6E	696037
Lymphocyte antigen 6 complex, locus G6C	LY6G6C	716220
LYR motif containing 2	LYRM2	701575

Lysine (K)-specific demethylase 4B	KDM4B	695760
Lysine (K)-specific demethylase 8	KDM8	703323
Lysine-rich nucleolar protein 1	KNOP1	695144
Lysophosphatidylcholine acyltransferase 4	LPCAT4	696388
Lysophospholipase II	LYPLA2	719074
Lysozyme-like 4	LYZL4	716549
Lysyl oxidase like 1	LOXL1	706464
MACRO domain containing 1	MACROD1	717961
MAD2 mitotic arrest deficient-like 2 (yeast)	MAD2L2	714527
MAD2L1 binding protein	MAD2L1BP	701099
MAF1 homolog, negative regulator of RNA polymerase III	MAF1	700385
MAGE family member D2	MAGED2	701719
Mago homolog, exon junction complex core component	MAGOH	714261
Major facilitator superfamily domain containing 14B	MFSD14B	708498
Major histocompatibility complex, class I, A	MAMU-A3	699243
Major histocompatibility complex, class I, E	MAMU-E	711532
Male-enhanced antigen 1	MEA1	699300
Mannose receptor, C type 1	MRC1	701010
Mannosidase, alpha, class 1B, member 1	MAN1B1	706918
Mannosidase, alpha, class 2B, member 1	MAN2B1	716173
Mannosidase, beta A, lysosomal	MANBA	712531
Mannosidase, beta A, lysosomal-like	MANBAL	701167
Mannosyl (alpha-1,3-)-glycoprotein beta-1,2-N-acetylglucosaminyltransferase	MGAT1	707375
Mannosyl (alpha-1,6-)-glycoprotein beta-1,6-N-acetylglucosaminyltransferase	MGAT5	709108
MAP7 domain containing 1	MAP7D1	712899
MAP-kinase activating death domain	MADD	713613
MARVEL domain containing 1	MARVELD1	708237
MAS-related GPR, member X4	MRGPRX4	692123
Matrilin 1, cartilage matrix protein	MATN1	704521
Matrin 3	MATR3	100568448
Matrix metalloproteinase 2	MMP2	698478
Matrix-remodelling associated 5	MXRA5	706214
Mdm1 nuclear protein	MDM1	718062
MDM2 binding protein	MTBP	703121
Mediator complex subunit 11	MED11	709561
Mediator complex subunit 27	MED27	715219
Mediator complex subunit 4	MED4	704644
Mediator complex subunit 6	MED6	693320
Mediator complex subunit 8	MED8	700676
Meiosis 1 associated protein	M1AP	710210
Meiosis specific with OB domains	MEIOB	703322
Melatonin receptor 1A	MTNR1A	702686
Melatonin receptor 1B	MTNR1B	695629
Membrane bound transcription factor peptidase, site 2	MBTPS2	696540
Membrane frizzled-related protein	MFRP	704965
Membrane protein, palmitoylated 4	MPP4	702459

Meprin A subunit beta	MEP1B	707036
Mesoderm induction early response 1, family member 2	MIER2	701450
Metallo-beta-lactamase domain containing 2	MBLAC2	695437
Metallothionein 3	MT3	700602
Metaxin 1	MTX1	717595
Methionine sulfoxide reductase B3	MSRB3	717617
Methylphosphate capping enzyme	MEPCE	711829
Methyltransferase like 2A	METTL2A	717533
Microfibrillar associated protein 2	MFAP2	710885
Microtubule associated monooxygenase, calponin and LIM domain containing 1	MICAL1	698737
Microtubule associated protein 1 light chain 3 alpha	MAP1LC3A	707439
Microtubule associated protein 1S	MAP1S	719196
Microtubule associated protein 2	MAP2	710840
Midline 1	MID1	709683
Midnolin	MIDN	721215
Mitochondrial carrier 1	MTCH1	719313
Mitochondrial E3 ubiquitin protein ligase 1	MUL1	705429
Mitochondrial elongation factor 2	MIEF2	700705
Mitochondrial ribosomal protein L11	MRPL11	714094
Mitochondrial ribosomal protein L18	MRPL18	702629
Mitochondrial ribosomal protein L23	MRPL23	704210
Mitochondrial ribosomal protein L34	MRPL34	719004
Mitochondrial ribosomal protein L36	MRPL36	100430880
Mitochondrial ribosomal protein L37	MRPL37	715168
Mitochondrial ribosomal protein L41	MRPL41	702768
Mitochondrial ribosomal protein L42	MRPL42	715676
Mitochondrial ribosomal protein L43	MRPL43	711038
Mitochondrial ribosomal protein L53	MRPL53	709302
Mitochondrial ribosomal protein L9	MRPL9	711235
Mitochondrial ribosomal protein S18C	MRPS18C	707257
Mitochondrial ribosomal protein S21	MRPS21	706805
Mitochondrial ribosomal protein S24	MRPS24	700722
Mitochondrial ribosomal protein S9	MRPS9	712968
Mitochondrial trans-2-enoyl-coa reductase	MECR	717425
Mitogen-activated protein kinase 11	MAPK11	715794
Mitogen-activated protein kinase 12	MAPK12	715745
Mitogen-activated protein kinase 7	MAPK7	702837
Mitogen-activated protein kinase 8	MAPK8	711115
Mitogen-activated protein kinase associated protein 1	MAPKAP1	702599
Mitogen-activated protein kinase kinase 2	MAP2K2	721821
Mitogen-activated protein kinase kinase kinase 6	MAP3K6	715911
Mitogen-activated protein kinase kinase kinase kinase 1	MAP4K1	694259
Mitogen-activated protein kinase kinase kinase kinase 2	MAP4K2	699331
Molybdenum cofactor synthesis 2	MOCS2	703689
Monoacylglycerol O-acyltransferase 2	MOGAT2	696347
MORC family CW-type zinc finger 4	MORC4	701136
Mov10 RISC complex RNA helicase	MOV10	705910

MPV17 mitochondrial membrane protein-like 2	MPV17L2	719413
Msh homeobox 2	MSX2	694227
Mucolipin 1	MCOLN1	703775
Multiple C2 domains, transmembrane 2	MCTP2	706949
Multivesicular body subunit 12A	MVB12A	716261
Murine retrovirus integration site 1 homolog	MRVI1	702830
Muscle, skeletal, receptor tyrosine kinase	MUSK	709397
Myb/SANT-like DNA-binding domain containing 4 with coiled-coils	MSANTD4	706055
MYC associated factor X	MAX	708228
MYCBP-associated, testis expressed 1	MAATS1	712979
Myelin regulatory factor	MYRF	719083
Myeloid cell nuclear differentiation antigen	MNDA	719220
Myeloid/lymphoid or mixed-lineage leukemia; translocated to, 6	MLLT6	694045
Myod family inhibitor	MDFI	694074
Myosin binding protein H-like	MYBPHL	698183
Myosin IA	MYO1A	714033
Myosin light chain 4	MYL4	717354
Myosin light chain 6	MYL6	711889
Myosin XVIIIa	MYO18A	711171
Myotubularin 1	MTM1	703131
Myotubularin related protein 2	MTMR2	699703
N(alpha)-acetyltransferase 35, natc auxiliary subunit	NAA35	710122
N-6 adenine-specific DNA methyltransferase 2 (putative)	N6AMT2	703665
N-acetylglucosamine-1-phosphate transferase, gamma subunit	GNPTG	722441
N-acetylglutamate synthase	NAGS	714102
N-acetyltransferase 8-like (GCN5-related, putative)	NAT8L	722359
N-acetyltransferase 9 (GCN5-related, putative)	NAT9	699085
NAD(P)H dehydrogenase, quinone 2	NQO2	707675
NADH dehydrogenase subunit 1	ND1	2846627
NADH:ubiquinone oxidoreductase complex assembly factor 4	NDUFAF4	705102
NADH:ubiquinone oxidoreductase subunit A12	NDUFA12	711970
NADH:ubiquinone oxidoreductase subunit B7	NDUFB7	717849
NADPH oxidase organizer 1	NOXO1	694059
Natriuretic peptide receptor 2	NPR2	695750
Natural killer cell granule protein 7	NKG7	719624
NEDD4 binding protein 2	N4BP2	700365
Nedd4 family interacting protein 1	NDFIP1	705716
Negative elongation factor complex member C/D	NELFCD	696053
Negative elongation factor complex member E	NELFE	716913
Netrin G2	NTNG2	715127
Neural precursor cell expressed, developmentally down- regulated 1	NEDD1	713673
Neural precursor cell expressed, developmentally down- regulated 4, E3 ubiquitin protein ligase	NEDD4	699550

Neural precursor cell expressed, developmentally down-regulated 8	NEDD8	715763
Neural precursor cell expressed, developmentally down-regulated 9	NEDD9	699359
Neural proliferation, differentiation and control, 1	NPDC1	707453
Neurensin 1	NRSN1	707362
Neuritin 1	NRN1	722968
Neuroglobin	NGB	641331
Neuroigin 2	NLGN2	574368
Neuroigin 3	NLGN3	574216
Neuroigin 4, Y-linked	NLGN4Y	100270696
Neuronal differentiation 1	NEUROD1	704954
Neuronal PAS domain protein 2	NPAS2	710480
Neuronal PAS domain protein 3	NPAS3	717281
Neuronal PAS domain protein 4	NPAS4	714161
Neuronal regeneration related protein	NREP	712463
Neuronal tyrosine-phosphorylated phosphoinositide-3-kinase adaptor 1	NYAP1	719205
Neuropeptide FF-amide peptide precursor	NPFF	703412
Neuropilin and tolloid like 1	NETO1	694322
Neutrophil cytosolic factor 4	NCF4	695612
NFKB inhibitor interacting Ras-like 1	NKIRAS1	699598
NGG1 interacting factor 3 like 1	NIF3L1	700572
N-glycanase 1	NGLY1	700842
NHL repeat containing 2	NHLRC2	698009
Nicotinamide nucleotide transhydrogenase	NNT	701110
Nidogen 1	NID1	711154
NIM1 serine/threonine protein kinase	NIM1K	699870
Ninein	NIN	709532
Ninjurin 1	NINJ1	717218
NK2 homeobox 5	NKX2-5	703795
NKG2D protein	NKG2D	574240
NLR family member X1	NLRX1	703981
NLR family, pyrin domain containing 1	NLRP1	721648
NLR family, pyrin domain containing 10	NLRP10	709794
NLR family, pyrin domain containing 3	NLRP3	701278
NLR family, pyrin domain containing 4	NLRP4	703431
NLR family, pyrin domain containing 9	NLRP9	719115
N-myristoyltransferase 1	NMT1	715885
NOC2-like nucleolar associated transcriptional repressor	NOC2L	697809
Non-SMC condensin I complex subunit D2	NCAPD2	712834
Non-SMC condensin I complex subunit G	NCAPG	715235
Non-SMC condensin II complex subunit H2	NCAPH2	716120
NPL4 homolog, ubiquitin recognition factor	NPLOC4	713927
N-terminal asparagine amidase	NTAN1	100427568
N-terminal Xaa-Pro-Lys N-methyltransferase 1	NTMT1	716763
Nth-like DNA glycosylase 1	NTHL1	694848
Nuclear casein kinase and cyclin-dependent kinase	NUCKS1	697298

substrate 1		
Nuclear factor of kappa light polypeptide gene enhancer in B-cells 1	NFKB1	710324
Nuclear factor of kappa light polypeptide gene enhancer in B-cells 2 (p49/p100)	NFKB2	714689
Nuclear pore associated protein 1	NPAP1	719891
Nuclear receptor binding SET domain protein 1	NSD1	706131
Nuclear receptor subfamily 1 group H member 3	NR1H3	713679
Nuclear receptor subfamily 1 group I member 2	NR1I2	574226
Nuclear RNA export factor 3	NXF3	695351
Nuclear transcription factor Y subunit alpha	NFYA	719697
Nucleic acid binding protein 2	NABP2	709344
Nucleoporin 50kda	NUP50	713282
Nucleosome assembly protein 1-like 3	NAP1L3	697636
Nude neurodevelopment protein 1-like 1	NDEL1	721973
Nudix hydrolase 1	NUDT1	713078
Nudix hydrolase 22	NUDT22	717864
Olfactomedin 2	OLFM2	711336
Olfactory receptor, family 1, subfamily Q, member 1	OR1Q1	697695
Olfactory receptor, family 10, subfamily A, member 4	OR10A4	100423176
Olfactory receptor, family 2, subfamily AG, member 2	OR2AG2	709556
Olfactory receptor, family 2, subfamily F, member 1	OR2F1	707900
Olfactory receptor, family 2, subfamily H, member 2	OR2H2	710946
Olfactory receptor, family 2, subfamily W, member 1	OR2W1	708515
Olfactory receptor, family 4, subfamily E, member 2	OR4E2	708887
Olfactory receptor, family 4, subfamily N, member 2	OR4N2	701881
Olfactory receptor, family 5, subfamily F, member 1	OR5F1	709943
Olfactory receptor, family 5, subfamily L, member 1	OR5L1	719174
Olfactory receptor, family 5, subfamily M, member 9	OR5M9	705878
Olfactory receptor, family 52, subfamily N, member 4	OR52N4	696970
Olfactory receptor, family 7, subfamily D, member 4	OR7D4	721322
Olfactory receptor, family 9, subfamily I, member 1	OR9I1	703649
Oncomodulin 2	OCM2	721827
Origin recognition complex subunit 5	ORC5	696683
ORMDL sphingolipid biosynthesis regulator 2	ORMDL2	710296
Ornithine decarboxylase antizyme 2	OAZ2	707593
Osteosarcoma amplified 9, endoplasmic reticulum lectin	OS9	715555
Outer dense fiber of sperm tails 1	ODF1	707269
Outer dense fiber of sperm tails 3	ODF3	696480
Outer dense fiber of sperm tails 3-like 1	ODF3L1	706545
Oviductal glycoprotein 1	OVGP1	703848
Oxoeicosanoid (OXE) receptor 1	OXER1	713039
Oxysterol binding protein like 5	OSBPL5	706613
P21 protein (Cdc42/Rac)-activated kinase 1	PAK1	698585
P450 (cytochrome) oxidoreductase	POR	715888
P53 and DNA damage regulated 1	PDRG1	712622
Paired box 9	PAX9	100429088
Palmitoyl-protein thioesterase 1	PPT1	693377

Pancreatic and duodenal homeobox 1	PDX1	710936
Pancreatic polypeptide	PPY	713988
Pantothenate kinase 2	PANK2	717639
Pantothenate kinase 4	PANK4	694804
PAP associated domain containing 7	PAPD7	713853
Par-3 family cell polarity regulator	PARD3	706472
Paralemmin 2	PALM2	100532752
Paraneoplastic Ma antigen 1	PNMA1	697618
Paraneoplastic Ma antigen 3	PNMA3	694406
Parathyroid hormone 1 receptor	PTH1R	712147
Parvin gamma	PARVG	712624
PC-esterase domain containing 1A	PCED1A	716956
PCI domain containing 2	PCID2	714247
PDLIM1 interacting kinase 1 like	PDIK1L	719774
PDZ and LIM domain 1	PDLIM1	702998
PDZ domain containing 4	PDZD4	697387
Peptidoglycan recognition protein 3	PGLYRP3	714583
Peptidyl arginine deiminase, type III	PADI3	700560
Peptidylprolyl isomerase B (cyclophilin B)	PPIB	706757
Peptidylprolyl isomerase F	PPIF	574137
Periaxin	PRX	702329
Peroxiredoxin 2	PRDX2	716665
Peroxisomal biogenesis factor 16	PEX16	714904
Peroxisomal biogenesis factor 6	PEX6	697597
PHD finger protein 1	PHF1	718337
PHD finger protein 14	PHF14	694855
PHD finger protein 19	PHF19	704050
PHD finger protein 21A	PHF21A	714798
Phenylalanine hydroxylase	PAH	698696
Phenylalanyl-trna synthetase alpha subunit	FARSA	716878
Phosphatase and actin regulator 1	PHACTR1	700226
Phosphatase and actin regulator 4	PHACTR4	716990
Phosphatase, orphan 1	PHOSPHO1	698959
Phosphatase, orphan 2	PHOSPHO2	100429656
Phosphate cytidylyltransferase 1, choline, alpha	PCYT1A	722105
Phosphate cytidylyltransferase 1, choline, beta	PCYT1B	701760
Phosphatidylethanolamine binding protein 1	PEBP1	694697
Phosphatidylinositol 4-kinase, catalytic, beta	PI4KB	710104
Phosphatidylinositol glycan anchor biosynthesis class H	PIGH	710780
Phosphatidylinositol glycan anchor biosynthesis class S	PIGS	709115
Phosphatidylinositol transfer protein alpha	PITPNA	721228
Phosphatidylinositol transfer protein, membrane associated 1	PITPNM1	721716
Phosphodiesterase 11A	PDE11A	702458
Phosphodiesterase 6D	PDE6D	712629
Phosphodiesterase 9A	PDE9A	100301992
Phosphofructokinase, muscle	PFKM	707806
Phosphofurin acidic cluster sorting protein 1	PACS1	714696

Phosphofurin acidic cluster sorting protein 2	PACS2	709722
Phospholipase A2 group IB	PLA2G1B	696712
Phospholipase A2 group XIIB	PLA2G12B	708031
Phospholipase A2 group XV	PLA2G15	702619
Phospholipase A2 group XVI	PLA2G16	722178
Phospholipase B domain containing 1	PLBD1	698939
Phospholipase B domain containing 2	PLBD2	714669
Phospholipase C beta 2	PLCB2	701951
Phospholipase C delta 1	PLCD1	696860
Phospholipase D family member 3	PLD3	701083
Phospholipid phosphatase 7 (inactive)	PLPP7	722411
Phospholipid scramblase 3	PLSCR3	721831
Phosphoribosyl pyrophosphate synthetase 1-like 1	PRPS1L1	708413
Pituitary tumor-transforming 1 interacting protein	PTTG1IP	722061
Placental growth factor	PGF	701219
Placenta-specific 1-like	PLAC1L	698074
Plastin 1	PLS1	714391
Platelet derived growth factor D	PDGFD	704310
Platelet-derived growth factor beta polypeptide	PDGFB	703173
Pleckstrin and Sec7 domain containing	PSD	714737
Pleckstrin homology domain containing A8	PLEKHA8	696127
Pleckstrin homology domain containing J1	PLEKHJ1	710129
Pleckstrin homology domain containing O1	PLEKHO1	706145
Plectin	PLEC	699517
Poliovirus receptor-related 2 (herpesvirus entry mediator B)	PVRL2	713229
Polo-like kinase 1	PLK1	697686
Poly(A) binding protein, cytoplasmic 1	PABPC1	705847
Poly(A) binding protein, cytoplasmic 3	PABPC3	708617
Poly(ADP-ribose) glycohydrolase	PARG	709432
Poly(ADP-ribose) polymerase family member 10	PARP10	708132
Poly(rc) binding protein 2	PCBP2	703175
Poly(rc) binding protein 4	PCBP4	699225
Poly(U) binding splicing factor 60kda	PUF60	699008
Polybromo 1	PBRM1	696361
Polycomb group ring finger 2	PCGF2	694187
Polyglutamine binding protein 1	PQBP1	711678
Polyhomeotic homolog 2 (Drosophila)	PHC2	710201
Polymerase (DNA directed), alpha 2, accessory subunit	POLA2	716541
Polymerase (DNA directed), delta 2, accessory subunit	POLD2	700100
Polymerase (DNA directed), epsilon 3, accessory subunit	POLE3	705074
Polymerase (RNA) II (DNA directed) polypeptide H	POLR2H	100429040
Polymerase (RNA) II (DNA directed) polypeptide I, 14.5kda	POLR2I	712412
Polymerase (RNA) III (DNA directed) polypeptide C (62kd)	POLR3C	696943
Polymerase (RNA) III (DNA directed) polypeptide H (22.9kd)	POLR3H	707546
Polymerase (RNA) mitochondrial (DNA directed)	POLRMT	100426184
Polynucleotide kinase 3'-phosphatase	PNKP	719084
POP7 homolog, ribonuclease P/MRP subunit	POP7	712859
Post-GPI attachment to proteins 3	PGAP3	697699

Potassium channel tetramerization domain containing 10	KCTD10	707443
Potassium channel tetramerization domain containing 18	KCTD18	699824
Potassium channel tetramerization domain containing 3	KCTD3	708471
Potassium channel tetramerization domain containing 9	KCTD9	711515
Potassium channel, calcium activated intermediate/small conductance subfamily N alpha, member 1	KCNN1	720091
Potassium channel, two pore domain subfamily K, member 16	KCNK16	719585
Potassium channel, voltage gated modifier subfamily V, member 1	KCNV1	699636
Potassium channel, voltage gated shaker related subfamily A, member 5	KCNA5	711886
Potassium channel, voltage gated Shal related subfamily D, member 1	KCND1	711997
Potassium channel, voltage gated Shaw related subfamily C, member 2	KCNC2	100430904
Potassium voltage-gated channel, modifier subfamily S, member 1	KCNS1	711715
PQ loop repeat containing 3	PQLC3	696961
PR domain containing 14	PRDM14	693324
PR domain containing 2, with ZNF domain	PRDM2	716295
PRA1 domain family member 2	PRAF2	712436
Pre-B-cell leukemia homeobox 1	PBX1	694416
PRELI domain containing 1	PRELID1	699254
Premelanosome protein	PMEL	710921
Pre-mrna processing factor 3	PRPF3	706898
Prenyl (decaprenyl) diphosphate synthase, subunit 1	PDSS1	707598
Presenilin enhancer gamma secretase subunit	PSEENEN	100429008
Presequence translocase-associated motor 16 homolog (S. Cerevisiae)	PAM16	704987
Prickle homolog 1	PRICKLE1	701864
Prickle homolog 3	PRICKLE3	715644
Procollagen-lysine, 2-oxoglutarate 5-dioxygenase 1	PLOD1	722763
Profilin 1	PFN1	710753
Progestin and adipoq receptor family member VII	PAQR7	713411
Progestin and adipoq receptor family member VIII	PAQR8	708418
Prolactin regulatory element binding	PREB	700408
Prolactin releasing hormone	PRLH	694941
Proline rich 3	PRR3	711699
Proline rich 7 (synaptic)	PRR7	700123
Proline rich Gla (G-carboxyglutamic acid) 1	PRRG1	696938
Proline rich membrane anchor 1	PRIMA1	100426272
Proline, glutamate and leucine rich protein 1	PELP1	677854
Proline-rich coiled-coil 2A	PRRC2A	715715
Prolyl 3-hydroxylase 1	P3H1	697917
Prolyl 4-hydroxylase, transmembrane (endoplasmic reticulum)	P4HTM	708158
Prominin 1	PROM1	714610

Promyelocytic leukemia	PML	700379
Proprotein convertase subtilisin/kexin type 7	PCSK7	697567
Prosaposin	PSAP	709510
Prostaglandin D2 synthase	PTGDS	707990
Prostaglandin E synthase 3	PTGES3	713353
Prostaglandin I2 (prostacyclin) receptor (IP)	PTGIR	716546
Protease, serine 27	PRSS27	697848
Protease, serine 37	PRSS37	694908
Protease, serine 55	PRSS55	698379
Proteasomal ATPase associated factor 1	PAAF1	718755
Proteasome subunit alpha 4	PSMA4	710417
Proteasome subunit beta 2	PSMB2	712193
Proteasome subunit beta 3	PSMB3	694318
Protein disulfide isomerase family A member 2	PDIA2	694964
Protein inhibitor of activated STAT 2	PIAS2	696737
Protein inhibitor of activated STAT 3	PIAS3	706775
Protein kinase C and casein kinase substrate in neurons 1	PACSN1	718624
Protein kinase C and casein kinase substrate in neurons 3	PACSN3	713919
Protein kinase C, alpha	PRKCA	718412
Protein kinase C, theta	PRKCQ	722559
Protein kinase N3	PKN3	717319
Protein kinase, camp-dependent, regulatory subunit type II beta	PRKAR2B	700770
Protein phosphatase 1 regulatory subunit 12B	PPP1R12B	705775
Protein phosphatase 1 regulatory subunit 12C	PPP1R12C	698538
Protein phosphatase 1 regulatory subunit 15A	PPP1R15A	718350
Protein phosphatase 1 regulatory subunit 16A	PPP1R16A	702995
Protein phosphatase 1 regulatory subunit 16B	PPP1R16B	693349
Protein phosphatase 2 regulatory subunit A, alpha	PPP2R1A	719929
Protein phosphatase 3, catalytic subunit, beta isozyme	PPP3CB	706955
Protein phosphatase 3, catalytic subunit, gamma isozyme	PPP3CC	708233
Protein phosphatase 4 catalytic subunit	PPP4C	708510
Protein phosphatase 5, catalytic subunit	PPP5C	716214
Protein phosphatase methylesterase 1	PPME1	718858
Protein S (alpha)	PROS1	694845
Protein serine kinase H2	PSKH2	693701
Protein tyrosine phosphatase domain containing 1	PTPDC1	707878
Protein tyrosine phosphatase type IVA, member 2	PTP4A2	706489
Protein tyrosine phosphatase, non-receptor type 20	PTPN20	711276
Protein tyrosine phosphatase, non-receptor type 23	PTPN23	711601
Protein tyrosine phosphatase, receptor type, f polypeptide (PTPRF), interacting protein (liprin), alpha 2	PPFIA2	698065
Protein-O-mannosyltransferase 2	POMT2	705604
Protocadherin alpha 5	PCDHA5	692083
Protocadherin beta 4	PCDHB4	700373
Protoporphyrinogen oxidase	PPOX	719910
Pseudouridylate synthase 3	PUS3	713746
Purinergic receptor P2Y, G-protein coupled, 11	P2RY11	100533472

Putative homeodomain transcription factor 2	PHTF2	693552
PYD and CARD domain containing	PYCARD	713563
PYM homolog 1, exon junction complex associated factor	PYM1	708148
Pyridine nucleotide-disulphide oxidoreductase domain 2	PYROXD2	707797
Pyrroline-5-carboxylate reductase family member 2	PYCR2	699808
Pyruvate dehydrogenase kinase, isozyme 2	PDK2	704169
Pyruvate dehydrogenase phosphatase regulatory subunit	PDPR	709861
Quiescin sulfhydryl oxidase 1	QSOX1	718589
Rab acceptor 1 (prenylated)	RABAC1	706397
RAB, member of RAS oncogene family-like 2B	RABL2B	716615
RAB, member of RAS oncogene family-like 3	RABL3	713621
RAB1B, member RAS oncogene family	RAB1B	721852
RAB38, member RAS oncogene family	RAB38	705189
RAB3A, member RAS oncogene family	RAB3A	719400
RAB5B, member RAS oncogene family	RAB5B	708347
RAB6A, member RAS oncogene family	RAB6A	718717
RAB8B, member RAS oncogene family	RAB8B	705597
RAD21 cohesin complex component	RAD21	700633
RAD9 checkpoint clamp component A	RAD9A	712345
Ral gtpase activating protein, alpha subunit 1 (catalytic)	RALGAPA1	695674
Ral gtpase activating protein, beta subunit (non-catalytic)	RALGAPB	705742
Ral guanine nucleotide dissociation stimulator-like 1	RGL1	717554
RALY heterogeneous nuclear ribonucleoprotein	RALY	713317
RAN binding protein 10	RANBP10	700911
Ran gtpase activating protein 1	RANGAP1	710698
Ranbp-type and C3HC4-type zinc finger containing 1	RBCK1	714692
Rap guanine nucleotide exchange factor 2	RAPGEF2	704717
Ras and Rab interactor 3	RIN3	698125
Ras homolog family member A	RHOA	706455
Ras homolog family member C	RHOC	706034
Ras homolog family member J	RHOJ	705603
RAS p21 protein activator 2	RASA2	715074
RAS protein activator like 2	RASAL2	718958
Rasgef domain family member 1C	RASGEF1C	706085
RAS-like family 10 member B	RASL10B	716171
Ras-related C3 botulinum toxin substrate 2 (rho family, small GTP binding protein Rac2)	RAC2	696709
Ras-related C3 botulinum toxin substrate 3 (rho family, small GTP binding protein Rac3)	RAC3	719305
Ras-related GTP binding A	RRAGA	100430224
RBPI interacting and tubulin associated 1	RITA1	712837
Reactive oxygen species modulator 1	ROMO1	711369
Receptor (chemosensory) transporter protein 3	RTP3	713050
Receptor (G protein-coupled) activity modifying protein 1	RAMP1	574329
Receptor accessory protein 4	REEP4	707267
Receptor interacting serine/threonine kinase 3	RIPK3	716138
Receptor tyrosine kinase-like orphan receptor 2	ROR2	715482
Recq helicase-like	RECQL	705871

Regenerating family member 3 gamma	REG3G	711637
Regulator of calcineurin 1	RCAN1	697108
Regulator of G-protein signaling 10	RGS10	703125
Regulator of G-protein signaling 14	RGS14	699625
Regulator of G-protein signaling 18	RGS18	712896
Regulator of G-protein signaling 19	RGS19	719265
Regulatory factor X associated ankyrin containing protein	RFXANK	719706
Relaxin/insulin-like family peptide receptor 4	RXFP4	718025
Renin	REN	574299
Replication factor C subunit 3	RFC3	714220
Replication initiator 1	REPIN1	712920
Replication protein A1	RPA1	721272
Replication protein A3	RPA3	696248
Required for meiotic nuclear division 1 homolog	RMND1	704665
Resistin	RETN	708781
REST corepressor 1	RCOR1	694670
Ret proto-oncogene	RET	703466
Retinal outer segment membrane protein 1	ROM1	100426296
Retinoic acid induced 14	RAI14	698620
Retinoic acid receptor responder (tazarotene induced) 2	RARRES2	704993
Retinol dehydrogenase 5 (11-cis/9-cis)	RDH5	709644
RFT1 homolog	RFT1	694586
Rh family, C glycoprotein	RHCG	664731
Rho GDP dissociation inhibitor (GDI) beta	ARHGDIB	702320
Rho gtpase activating protein 24	ARHGAP24	699614
Rho gtpase activating protein 30	ARHGAP30	718236
Rho gtpase activating protein 9	ARHGAP9	711684
Rho guanine nucleotide exchange factor 1	ARHGEF1	722198
Rho guanine nucleotide exchange factor 17	ARHGEF17	718644
Rho/Rac guanine nucleotide exchange factor 2	ARHGEF2	719369
Ribonuclease H2 subunit B	RNASEH2B	707995
Ribonuclease P/MRP 21kda subunit	RPP21	713056
Ribonuclease T2	RNASET2	706533
Ribonuclease, rnase A family, 1 (pancreatic)	RNASE1	704676
Ribonuclease, rnase A family, 9 (non-active)	RNASE9	703346
Ribonucleic acid export 1	RAE1	696706
Ribonucleoprotein, PTB-binding 1	RAVER1	715250
Ribophorin II	RPN2	708971
Ribosomal modification protein rimk-like family member A	RIMKLA	699767
Ribosomal protein L10 like	RPL10L	702986
Ribosomal protein l10a	RPL10A	718783
Ribosomal protein L17	RPL17	698967
Ribosomal protein L23	RPL23	694719
Ribosomal protein l23a	RPL23A	710490
Ribosomal protein L24	RPL24	702381
Ribosomal protein L26	RPL26	717378
Ribosomal protein l27a	RPL27A	708863
Ribosomal protein L29	RPL29	698602

Ribosomal protein L3	RPL3	707176
Ribosomal protein L3 like	RPL3L	693424
Ribosomal protein l35a	RPL35A	714858
Ribosomal protein L4	RPL4	710590
Ribosomal protein l7a	RPL7A	722215
Ribosomal protein L8	RPL8	708535
Ribosomal protein S10	RPS10	718606
Ribosomal protein S11	RPS11	718844
Ribosomal protein S13	RPS13	697513
Ribosomal protein S14	RPS14	710901
Ribosomal protein S15	RPS15	707241
Ribosomal protein S16	RPS16	697219
Ribosomal protein S2	RPS2	693615
Ribosomal protein S21	RPS21	699565
Ribosomal protein S27	RPS27	106992520
Ribosomal protein S28	RPS28	707133
Ribosomal protein S4, X-linked	RPS4X	699397
Ribosomal protein S5	RPS5	711259
Ribosomal protein S6 kinase, 90kda, polypeptide 4	RPS6KA4	717574
Ribosomal protein S7	RPS7	721900
Ribosomal protein S8	RPS8	703957
Ribosomal protein S9	RPS9	694053
Ribosomal protein, large, P0	RPLP0	574363
Ribosomal protein, large, P1	RPLP1	695442
Ribosomal protein, large, P2	RPLP2	700698
Ribosomal RNA processing 8, methyltransferase, homolog (yeast)	RRP8	712011
Ribosome binding protein 1	RRBP1	698019
Ribulose-5-phosphate-3-epimerase	RPE	711322
Ring finger protein 10	RNF10	697428
Ring finger protein 167	RNF167	710656
Ring finger protein 181	RNF181	695977
Ring finger protein 208	RNF208	705563
Ring finger protein 26	RNF26	704755
Ring finger protein 32	RNF32	716703
Ring finger protein 38	RNF38	693346
Ring finger protein 40, E3 ubiquitin protein ligase	RNF40	713148
Ring finger protein, transmembrane 1	RNFT1	712052
Ripply transcriptional repressor 3	RIPPLY3	100429272
RNA binding motif protein 18	RBM18	698457
RNA binding motif protein 19	RBM19	715724
RNA binding motif protein 38	RBM38	696583
RNA binding motif protein 42	RBM42	709852
RNA binding motif protein 45	RBM45	702714
RNA binding motif protein 7	RBM7	695401
RNA binding motif, single stranded interacting protein 1	RBMS1	703608
RNA binding motif, single stranded interacting protein 2	RBMS2	713163
RNA binding protein, fox-1 homolog (C. Elegans) 2	RBFOX2	693642

RNA pseudouridylate synthase domain containing 3	RPUSD3	700349
RPTOR independent companion of MTOR, complex 2	RICTOR	694915
SAC3 domain containing 1	SAC3D1	717043
SAGA complex associated factor 29	SGF29	709124
SAM domain, SH3 domain and nuclear localization signals 1	SAMSN1	694064
SAMM50 sorting and assembly machinery component	SAMM50	715675
Sarcoglycan zeta	SGCZ	100430472
Sarcosine dehydrogenase	SARDH	713289
SAS-6 centriolar assembly protein	SASS6	711310
Scavenger receptor class F member 2	SCARF2	695466
Schlafen like 1	SLFNL1	695605
SEC11 homolog A, signal peptidase complex subunit	SEC11A	695951
SEC16 homolog B, endoplasmic reticulum export factor	SEC16B	709635
SEC22 homolog C, vesicle trafficking protein	SEC22C	716351
Sec23 homolog A, COPII coat complex component	SEC23A	698500
SEC31 homolog A, COPII coat complex component	SEC31A	693687
Sec61 translocon alpha 2 subunit	SEC61A2	100427728
SECIS binding protein 2-like	SECISBP2L	714764
Secreted frizzled-related protein 4	SFRP4	574393
Secretory carrier membrane protein 2	SCAMP2	709720
Selenoprotein M	SELM	718290
Sema domain, transmembrane domain (TM), and cytoplasmic domain, (semaphorin) 6C	SEMA6C	709464
Sepiapterin reductase (7,8-dihydrobiopterin:NADP+ oxidoreductase)	SPR	705317
Serine dehydratase-like	SDSL	714721
Serine/threonine kinase 11 interacting protein	STK11IP	704531
Serine/threonine kinase 16	STK16	702715
Serine/threonine kinase 31	STK31	703886
Serine/threonine kinase 32C	STK32C	100426744
Serine/threonine kinase 38	STK38	719169
Serologically defined colon cancer antigen 3	SDCCAG3	721750
Serpin peptidase inhibitor, clade B (ovalbumin), member 10	SERPINB10	100430160
Serpin peptidase inhibitor, clade B (ovalbumin), member 7	SERPINB7	701671
Serpin peptidase inhibitor, clade C (antithrombin), member 1	SERPINC1	708854
Serrate, RNA effector molecule	SRRT	713235
SET domain containing 9	SETD9	708019
SFI1 centrin binding protein	SFI1	716833
SH2 domain containing 3C	SH2D3C	699706
SH2B adaptor protein 1	SH2B1	708160
SH3 and cysteine rich domain	STAC	707350
SH3-domain binding protein 1	SH3BP1	700647
SHANK associated RH domain interactor	SHARPIN	713534
Siah E3 ubiquitin protein ligase 1	SIAH1	716629
Signal peptide, CUB domain, EGF-like 2	SCUBE2	708152
Signal recognition particle 68kda	SRP68	705568
Signal sequence receptor, delta	SSR4	697266
Signal transducer and activator of transcription 4	STAT4	693854

Signal transducer and activator of transcription 5A	STAT5A	574129
Sin3A associated protein 25kda	SAP25	106997576
Single stranded DNA binding protein 4	SSBP4	719496
SKI-like proto-oncogene	SKIL	696680
SLIT and NTRK like family member 1	SLITRK1	699217
SLIT and NTRK like family member 5	SLITRK5	705032
SLX1 homolog A, structure-specific endonuclease subunit	SLX1A	709225
SMAD family member 4	SMAD4	701803
SMAD family member 9	SMAD9	694572
Small integral membrane protein 13	SMIM13	703387
Small integral membrane protein 19	SMIM19	705371
Small nuclear ribonucleoprotein polypeptide E	SNRPE	701418
Small nuclear ribonucleoprotein polypeptides B and B1	SNRPB	716578
Small nuclear ribonucleoprotein, U4/U6.U5 27kda subunit	SNRNP27	708670
Small nuclear RNA activating complex polypeptide 2	SNAPC2	706176
Small ubiquitin-like modifier 1	SUMO1	703644
Small ubiquitin-like modifier 2	SUMO2	705512
SMG9 nonsense mediated mrna decay factor	SMG9	710940
Smoothelin	SMTN	716424
SMYD family member 5	SMYD5	705926
SNF related kinase	SNRK	715803
SNRPN upstream reading frame	SNURF	711028
Sodium channel, non voltage gated 1 beta subunit	SCNN1B	700093
Sodium channel, voltage gated, type I beta subunit	SCN1B	707134
Sodium channel, voltage gated, type X alpha subunit	SCN10A	694962
Solute carrier family 15 (oligopeptide transporter), member 3	SLC15A3	696060
Solute carrier family 16 member 11	SLC16A11	721775
Solute carrier family 2 (facilitated glucose transporter), member 2	SLC2A2	695538
Solute carrier family 20 (phosphate transporter), member 2	SLC20A2	705242
Solute carrier family 22 (organic anion/urate transporter), member 12	SLC22A12	717530
Solute carrier family 22 member 14	SLC22A14	696120
Solute carrier family 22 member 15	SLC22A15	710102
Solute carrier family 23 (ascorbic acid transporter), member 2	SLC23A2	717939
Solute carrier family 25 (aspartate/glutamate carrier), member 12	SLC25A12	695173
Solute carrier family 25 (mitochondrial carrier; adenine nucleotide translocator), member 6	SLC25A6	719811
Solute carrier family 25 (mitochondrial carrier; citrate transporter), member 1	SLC25A1	719075
Solute carrier family 25 (mitochondrial carrier; ornithine transporter) member 2	SLC25A2	701587
Solute carrier family 25 (mitochondrial carrier; oxoglutarate carrier), member 11	SLC25A11	710569

Solute carrier family 25 (mitochondrial iron transporter), member 28	SLC25A28	710002
Solute carrier family 25 (mitochondrial iron transporter), member 37	SLC25A37	710518
Solute carrier family 25 (mitochondrial oxoadipate carrier), member 21	SLC25A21	697370
Solute carrier family 25 (S-adenosylmethionine carrier), member 26	SLC25A26	697960
Solute carrier family 26 (anion exchanger), member 8	SLC26A8	719049
Solute carrier family 27 (fatty acid transporter), member 2	SLC27A2	715237
Solute carrier family 28 (concentrative nucleoside transporter), member 2	SLC28A2	713240
Solute carrier family 30 (zinc transporter), member 8	SLC30A8	701127
Solute carrier family 34 (type II sodium/phosphate cotransporter), member 2	SLC34A2	694217
Solute carrier family 35 (UDP-galactose transporter), member A2	SLC35A2	711587
Solute carrier family 35 (UDP-glca/UDP-galnac transporter), member D1	SLC35D1	700175
Solute carrier family 35 member A5	SLC35A5	708401
Solute carrier family 37 (glucose-6-phosphate transporter), member 2	SLC37A2	712841
Solute carrier family 38 member 9	SLC38A9	706752
Solute carrier family 39 (zinc transporter), member 3	SLC39A3	711564
Solute carrier family 39 (zinc transporter), member 7	SLC39A7	100430704
Solute carrier family 4 (anion exchanger), member 1 (Diego blood group)	SLC4A1	100427616
Solute carrier family 4 (anion exchanger), member 2	SLC4A2	713966
Solute carrier family 4, sodium borate transporter, member 11	SLC4A11	718393
Solute carrier family 44 member 4	SLC44A4	715779
Solute carrier family 5 (sodium/glucose cotransporter), member 1	SLC5A1	717070
Solute carrier family 5 (sodium/multivitamin and iodide cotransporter), member 6	SLC5A6	699074
Solute carrier family 6 (neurotransmitter transporter), member 13	SLC6A13	705918
Solute carrier family 6 (neurotransmitter transporter), member 2	SLC6A2	613238
Solute carrier family 6 (neurotransmitter transporter), member 7	SLC6A7	711915
Solute carrier family 6 (neurotransmitter transporter), member 8	SLC6A8	698307
Solute carrier family 6 (neutral amino acid transporter), member 18	SLC6A18	723065
Solute carrier family 7 (anionic amino acid transporter), member 13	SLC7A13	693964
Solute carrier family 9, subfamily A (NHE3, cation proton	SLC9A3R2	694658

antiporter 3), member 3 regulator 2		
Solute carrier family 9, subfamily A (NHE4, cation proton antiporter 4), member 4	SLC9A4	712136
Solute carrier family 9, subfamily A (NHE9, cation proton antiporter 9), member 9	SLC9A9	713935
Solute carrier organic anion transporter family member 1C1	SLCO1C1	704740
Solute carrier organic anion transporter family member 2B1	SLCO2B1	694829
Sonic hedgehog	SHH	716553
Sorbin and SH3 domain containing 3	SORBS3	716198
Sorting nexin 11	SNX11	696913
Sorting nexin 12	SNX12	696408
Sorting nexin 13	SNX13	714019
Sorting nexin 22	SNX22	706850
Sorting nexin 32	SNX32	721888
Sorting nexin 33	SNX33	706309
Sorting nexin 4	SNX4	716049
Sp2 transcription factor	SP2	694834
Sp4 transcription factor	SP4	712174
SPARC like 1	SPARCL1	701468
SPARC related modular calcium binding 1	SMOC1	712994
Spectrin repeat containing, nuclear envelope family member 4	SYNE4	711904
Spectrin, beta, non-erythrocytic 1	SPTBN1	716794
Sperm flagellar 1	SPEF1	717547
Spermatogenesis associated 17	SPATA17	707859
Spermatogenesis associated 19	SPATA19	693524
Spermatogenesis associated 20	SPATA20	703313
Spermatogenesis associated 25	SPATA25	709097
Spermatogenesis associated 2-like	SPATA2L	699974
Spermatogenesis associated 4	SPATA4	641336
Spermatogenesis associated 6	SPATA6	710827
Spermatogenesis associated 9	SPATA9	698748
Spermidine synthase	SRM	714028
Spermidine/spermine N1-acetyltransferase family member 2	SAT2	716044
S-phase kinase-associated protein 2, E3 ubiquitin protein ligase	SKP2	700617
Sphingomyelin phosphodiesterase 1	SMPD1	711248
Sphingomyelin phosphodiesterase acid-like 3A	SMPDL3A	713696
Sphingosine-1-phosphate receptor 4	S1PR4	712637
Spindle and kinetochore associated complex subunit 2	SKA2	711092
Spinster homolog 1 (Drosophila)	SPNS1	704769
Spla/ryanodine receptor domain and SOCS box containing 3	SPSB3	722489
Splicing factor 3a subunit 2	SF3A2	721469
Splicing factor, suppressor of white-apricot family	SFSWAP	709551
SPRY domain containing 4	SPRYD4	713037
SPT16 homolog, facilitates chromatin remodeling subunit	SUPT16H	708066

Src-related kinase lacking C-terminal regulatory tyrosine and N-terminal myristylation sites	SRMS	719587
SRSF protein kinase 3	SRPK3	100429808
ST3 beta-galactoside alpha-2,3-sialyltransferase 4	ST3GAL4	717792
Stannin	SNN	711909
Star related lipid transfer domain containing 13	STARD13	714104
Star related lipid transfer domain containing 3	STARD3	697212
Star related lipid transfer domain containing 5	STARD5	713308
Stathmin 4	STMN4	712651
Sterile alpha motif domain containing 4A	SAMD4A	695336
Sterile alpha motif domain containing 9	SAMD9	702224
Steroid receptor RNA activator 1	SRA1	698169
Stomatin like 2	STOML2	698458
Storkhead box 2	STOX2	693692
Stress induced phosphoprotein 1	STIP1	717926
Striatin	STRN	708491
Stromal antigen 3	STAG3	711345
Sulfiredoxin 1	SRXN1	714997
Sulfite oxidase	SUOX	711164
SUMO1/sentrin specific peptidase 5	SEN5	710223
Suppression of tumorigenicity 13 (colon carcinoma) (Hsp70 interacting protein)	ST13	705664
Suppressor of variegation 3-9 homolog 1	SUV39H1	711040
SURP and G-patch domain containing 1	SUGP1	719772
Sushi domain containing 1	SUSD1	707656
Sushi domain containing 6	SUSD6	712719
SWAP switching B-cell complex 70kda subunit	SWAP70	703651
SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily d, member 3	SMARCD3	715080
SWIM-type zinc finger 7 associated protein 1	SWSAP1	716529
Symplekin	SYMPK	722436
Synapsin III	SYN3	100430216
Synaptotagmin 6	SYT6	708175
Synaptotagmin like 3	SYTL3	699497
Synaptotagmin like 4	SYTL4	700889
Synergin, gamma	SYNRG	717750
Synovial sarcoma translocation gene on chromosome 18-like 2	SS18L2	716387
Syntaxin 1B	STX1B	714251
Syntaxin 5	STX5	718435
Syntrophin, alpha 1	SNTA1	709824
Syntrophin, gamma 1	SNTG1	709244
Synuclein alpha interacting protein	SNCAIP	700372
Tankyrase 1 binding protein 1	TNKS1BP1	704825
TAO kinase 2	TAOK2	707777
Target of EGR1, member 1 (nuclear)	TOE1	705770
TATA-box binding protein associated factor 1	TAF1	698800
TATA-box binding protein associated factor 10	TAF10	710022

TATA-box binding protein associated factor 2	TAF2	702411
TATA-box binding protein associated factor 5	TAF5	714558
TATA-box binding protein associated factor 6 like	TAF6L	722233
Tax1 (human T-cell leukemia virus type I) binding protein 3	TAX1BP3	706829
TBK1 binding protein 1	TBKBP1	693913
T-box 21	TBX21	694044
TCF3 (E2A) fusion partner (in childhood Leukemia)	TFPT	720296
Tctex1 domain containing 2	TCTEX1D2	711098
Teashirt zinc finger homeobox 1	TSHZ1	703018
Tektin 1	TEKT1	713555
TELO2 interacting protein 2	TTI2	696776
Telomeric repeat binding factor 2, interacting protein	TERF2IP	712149
Tenascin XB	TNXB	716998
Teneurin transmembrane protein 1	TENM1	699897
Tensin 2	TNS2	700813
TERF1 (TRF1)-interacting nuclear factor 2	TINF2	715812
Testis expressed 26	TEX26	713363
Testis expressed 30	TEX30	701917
Testis-specific serine kinase 2	TSSK2	711241
Tetraspanin 18	TSPAN18	715506
Tetraspanin 32	TSPAN32	704862
Tetraspanin 5	TSPAN5	706537
Tetraspanin 7	TSPAN7	698011
Tetratricopeptide repeat domain 1	TTC1	695225
Tetratricopeptide repeat domain 14	TTC14	710895
Tetratricopeptide repeat domain 21A	TTC21A	694904
Tetratricopeptide repeat domain 23	TTC23	708530
Tetratricopeptide repeat domain 31	TTC31	708810
Tetratricopeptide repeat domain 7B	TTC7B	696029
Tetratricopeptide repeat domain 9C	TTC9C	718583
TGF-beta activated kinase 1/MAP3K7 binding protein 1	TAB1	703409
THAP domain containing 7	THAP7	696208
Thiamine triphosphatase	THTPA	714403
Thioredoxin domain containing 9	TXNDC9	709303
Thioredoxin reductase 2	TXNRD2	712475
Thioredoxin-related transmembrane protein 1	TMX1	707057
Thioredoxin-related transmembrane protein 4	TMX4	718375
THO complex 3	THOC3	695561
THO complex 6	THOC6	700217
Thy-1 cell surface antigen	THY1	705321
Thymidine phosphorylase	TYMP	716161
Thymosin beta 4, X-linked	TMSB4X	710959
Thyroid hormone receptor associated protein 3	THRAP3	713033
TIA1 cytotoxic granule-associated RNA binding protein	TIA1	702366
Tigger transposable element derived 4	TIGD4	695777
TIMP metalloproteinase inhibitor 1	TIMP1	574348
Tissue specific transplantation antigen P35B	TSTA3	698005
Titin-cap	TCAP	697327

TMEM9 domain family member B	TMEM9B	708447
TNF alpha induced protein 8 like 2	TNFAIP8L2	709632
TNF receptor associated factor 3	TRAF3	693961
TNF receptor associated factor 6	TRAF6	716907
Tocopherol (alpha) transfer protein-like	TTPAL	712620
Toll-like receptor 9	TLR9	574395
Topoisomerase (DNA) I	TOP1	697300
Topoisomerase (DNA) III beta	TOP3B	698317
Trace amine associated receptor 6	TAAR6	709418
TRAF2 and NCK interacting kinase	TNIK	695414
TRAF3 interacting protein 3	TRAF3IP3	712895
Trafficking protein particle complex 1	TRAPPC1	716622
Trafficking protein particle complex 3	TRAPPC3	713705
Transaldolase 1	TALDO1	720828
Transcobalamin 1	TCN1	698583
Transcription elongation factor A (SII), 2	TCEA2	694026
Transcription elongation factor A (SII)-like 1	TCEAL1	696826
Transcription factor 15 (basic helix-loop-helix)	TCF15	716916
Transcription factor 7-like 1 (T-cell specific, HMG-box)	TCF7L1	694560
Transcription factor Dp family member 3	TFDP3	706557
Transcription factor EC	TFEC	704124
Transcriptional adaptor 3	TADA3	700090
Transducin (beta)-like 1 X-linked receptor 1	TBL1XR1	712740
Transducin (beta)-like 3	TBL3	693864
Transducin like enhancer of split 3	TLE3	698046
Transforming growth factor beta 1 induced transcript 1	TGFB1I1	714172
Transforming, acidic coiled-coil containing protein 3	TACC3	712898
Transgelin 2	TAGLN2	719527
Transient receptor potential cation channel, subfamily C, member 5	TRPC5	707171
Transient receptor potential cation channel, subfamily C, member 7	TRPC7	712863
Transketolase-like 1	TKTL1	699278
Translocase of inner mitochondrial membrane 17 homolog B (yeast)	TIMM17B	714895
Translocase of inner mitochondrial membrane domain containing 1	TIMMDC1	712414
Translocase of outer mitochondrial membrane 22 homolog (yeast)	TOMM22	701286
Translocase of outer mitochondrial membrane 40 homolog (yeast)	TOMM40	713297
Translocase of outer mitochondrial membrane 6 homolog (yeast)	TOMM6	100423264
Transmembrane 4 L six family member 5	TM4SF5	709844
Transmembrane 9 superfamily protein member 4	TM9SF4	712260
Transmembrane channel like 8	TMC8	100423640
Transmembrane p24 trafficking protein 9	TMED9	701114
Transmembrane phosphoinositide 3-phosphatase and	TPTE2	704870

tensin homolog 2		
Transmembrane protease, serine 13	TMPRSS13	698586
Transmembrane protease, serine 2	TMPRSS2	715138
Transmembrane protein 104	TMEM104	698592
Transmembrane protein 11	TMEM11	704970
Transmembrane protein 115	TMEM115	702164
Transmembrane protein 121	TMEM121	700005
Transmembrane protein 123	TMEM123	702833
Transmembrane protein 135	TMEM135	704963
Transmembrane protein 138	TMEM138	693905
Transmembrane protein 145	TMEM145	709268
Transmembrane protein 150A	TMEM150A	696101
Transmembrane protein 160	TMEM160	716996
Transmembrane protein 163	TMEM163	709015
Transmembrane protein 173	TMEM173	694353
Transmembrane protein 177	TMEM177	695399
Transmembrane protein 179B	TMEM179B	718518
Transmembrane protein 183A	TMEM183A	704195
Transmembrane protein 187	TMEM187	698397
Transmembrane protein 205	TMEM205	714330
Transmembrane protein 237	TMEM237	702262
Transmembrane protein 246	TMEM246	713682
Transmembrane protein 248	TMEM248	695654
Transmembrane protein 256	TMEM256	715274
Transmembrane protein 5	TMEM5	717102
Transmembrane protein 55A	TMEM55A	696779
Transmembrane protein 55B	TMEM55B	100428000
Transmembrane protein 59 like	TMEM59L	719572
Transmembrane protein 60	TMEM60	693679
Transmembrane protein with EGF-like and two follistatin-like domains 2	TMEFF2	694555
Tribbles pseudokinase 3	TRIB3	714636
Triggering receptor expressed on myeloid cells 2	TREM2	719740
Trinucleotide repeat containing 6A	TNRC6A	701680
Tripartite motif containing 21	TRIM21	717826
Tripartite motif containing 22	TRIM22	713814
Tripartite motif containing 33	TRIM33	710600
Tripartite motif containing 47	TRIM47	704642
Tripartite motif containing 62	TRIM62	709927
Tripartite motif family like 1	TRIML1	698114
TRK-fused gene	TFG	700972
Trna methyltransferase 11-2 homolog (S. Cerevisiae)	TRMT112	717676
Trna splicing endonuclease subunit 54	TSEN54	702604
Trophoblast glycoprotein	TPBG	693944
Tropomyosin 2 (beta)	TPM2	696604
Tropomyosin 3	TPM3	716336
Troponin C type 2 (fast)	TNNC2	717270
Troponin T type 2 (cardiac)	TNNT2	709882

Troponin T type 3 (skeletal, fast)	TNNT3	704095
Trub pseudouridine (psi) synthase family member 2	TRUB2	717619
Tryptase gamma 1	TPSG1	100425752
TSR2, 20S rRNA accumulation, homolog (S. Cerevisiae)	TSR2	701234
TSSK6 activating co-chaperone	TSACC	719490
Tuberous sclerosis 2	TSC2	694965
Tubulin alpha 3c	TUBA3C	707215
Tubulin alpha 4a	TUBA4A	702583
Tubulin beta class I	TUBB	574113
Tubulin folding cofactor C	TBCC	696997
Tubulin polymerization-promoting protein family member 3	TPPP3	100429880
Tubulin tyrosine ligase like 4	TTLL4	700064
Tumor necrosis factor receptor superfamily member 13C	TNFRSF13C	712577
Tumor necrosis factor receptor superfamily member 25	TNFRSF25	703744
Tumor protein p53 inducible nuclear protein 2	TP53INP2	707113
Tumor protein p53 inducible protein 3	TP53I3	704206
Tumor protein p63	TP63	703997
Tumor protein, translationally-controlled 1	TPT1	702155
Tumor suppressing subtransferable candidate 1	TSSC1	707650
Twist family bHLH transcription factor 2	TWIST2	697078
TYRO protein tyrosine kinase binding protein	TYROBP	574207
Tyrosinase-related protein 1	TYRP1	714646
Tyrosine hydroxylase	TH	721137
Tyrosine kinase, non-receptor, 1	TNK1	715180
UBA domain containing 2	UBAC2	703484
Ubiquitin A-52 residue ribosomal protein fusion product 1	UBA52	720243
Ubiquitin B	UBB	696110
Ubiquitin conjugating enzyme E2 variant 1	UBE2V1	100425552
Ubiquitin conjugating enzyme E2G 2	UBE2G2	710862
Ubiquitin conjugating enzyme E2O	UBE2O	710529
Ubiquitin C-terminal hydrolase L1	UCHL1	701579
Ubiquitin domain containing 2	UBTD2	709455
Ubiquitin like 4B	UBL4B	701055
Ubiquitin like 5	UBL5	711015
Ubiquitin like 7	UBL7	702305
Ubiquitin protein ligase E3D	UBE3D	694910
Ubiquitin related modifier 1	URM1	722618
Ubiquitin specific peptidase 10	USP10	718471
Ubiquitin specific peptidase 11	USP11	706555
Ubiquitin specific peptidase 20	USP20	716505
Ubiquitin specific peptidase 21	USP21	719894
Ubiquitin specific peptidase 26	USP26	706435
Ubiquitin specific peptidase 47	USP47	701660
Ubiquitin specific peptidase 48	USP48	707110
Ubiquitin specific peptidase 5 (isopeptidase T)	USP5	714032
Ubiquitin specific peptidase 7 (herpes virus-associated)	USP7	714625
Ubiquitin specific peptidase 9, Y-linked	USP9Y	100270704
Ubiquitination factor E4B	UBE4B	713348

Ubiquitin-conjugating enzyme E2E 2	UBE2E2	699101
Ubiquitin-like modifier activating enzyme 7	UBA7	704875
UBX domain protein 1	UBXN1	718643
UBX domain protein 10	UBXN10	705058
UBX domain protein 11	UBXN11	719826
UDP-Gal:betaglcnac beta 1,4- galactosyltransferase, polypeptide 3	B4GALT3	719920
UHRF1 binding protein 1-like	UHRF1BP1L	694816
Unc-119 lipid binding chaperone B	UNC119B	698066
Unc-79 homolog (C. Elegans)	UNC79	699262
Upstream transcription factor family member 3	USF3	709660
Uridine monophosphate synthetase	UMPS	715664
Uridine-cytidine kinase 1	UCK1	715417
Urocortin	UCN	699942
Uroporphyrinogen III synthase	UROS	696043
Usher syndrome 1C	USH1C	696911
USP6 N-terminal like	USP6NL	694275
Vac14 homolog (S. Cerevisiae)	VAC14	708741
Vacuolar protein sorting 28 homolog (S. Cerevisiae)	VPS28	702412
Vacuolar protein sorting 4 homolog A (S. Cerevisiae)	VPS4A	705277
V-akt murine thymoma viral oncogene homolog 1	AKT1	697747
V-akt murine thymoma viral oncogene homolog 3	AKT3	714717
Valyl-trna synthetase	VARS	715537
VANGL planar cell polarity protein 1	VANGL1	709730
Vascular endothelial growth factor A	VEGFA	574209
Vasoactive intestinal peptide receptor 1	VIPR1	717438
V-crk avian sarcoma virus CT10 oncogene homolog	CRK	701185
Ventral anterior homeobox 2	VAX2	703531
Versican	VCAN	712365
Vesicle (multivesicular body) trafficking 1	VT A1	701578
Vesicle associated membrane protein 1	VAMP1	722049
Vesicle associated membrane protein 5	VAMP5	695471
Villin 1	VIL1	698946
Villin-like	VILL	696988
Visual system homeobox 1	VSX1	715973
Vitamin K epoxide reductase complex subunit 1	VKORC1	714412
Vitrin	VIT	708384
Vitronectin	VTN	708499
Von Willebrand factor	VWF	722019
Von Willebrand factor C and EGF domains	VWCE	694385
VPS16, CORVET/HOPS core subunit	VPS16	100426688
VPS26 retromer complex component B	VPS26B	694566
VPS39 HOPS complex subunit	VPS39	707791
VPS52 GARP complex subunit	VPS52	100430904
VPS54 GARP complex subunit	VPS54	695397
V-set and immunoglobulin domain containing 4	VSIG4	709685
WAP four-disulfide core domain 12	WFDC12	711552
WAP four-disulfide core domain 3	WFDC3	709542

WD repeat domain 45	WDR45	715262
WD repeat domain 74	WDR74	718460
WD repeat domain 83 opposite strand	WDR83OS	716302
Williams-Beuren syndrome chromosome region 17	WBSCR17	695207
Wilms tumor 1 associated protein	WTAP	702295
Wingless-type MMTV integration site family member 7B	WNT7B	713864
WNK lysine deficient protein kinase 1	WNK1	706493
Wolfram syndrome 1 (wolframin)	WFS1	710948
WSC domain containing 1	WSCD1	712488
WW domain binding protein 1	WBP1	709202
WW domain containing E3 ubiquitin protein ligase 2	WWP2	705464
X-ray repair complementing defective repair in Chinese hamster cells 6	XRCC6	707975
Xylosyltransferase II	XYLT2	705139
YEATS domain containing 4	YEATS4	718376
Yip1 domain family member 2	YIPF2	713753
Yip1 domain family member 4	YIPF4	706819
Yippee like 3	YPEL3	708740
YTH N(6)-methyladenosine RNA binding protein 2	YTHDF2	717225
ZFP69 zinc finger protein	ZFP69	694407
ZFP69 zinc finger protein B	ZFP69B	694281
Zinc binding alcohol dehydrogenase domain containing 2	ZADH2	701079
Zinc finger and BTB domain containing 2	ZBTB2	704782
Zinc finger and BTB domain containing 39	ZBTB39	713914
Zinc finger and BTB domain containing 47	ZBTB47	100428360
Zinc finger and BTB domain containing 8 opposite strand	ZBTB8OS	708590
Zinc finger and SCAN domain containing 2	ZSCAN2	695673
Zinc finger CCCH-type containing 11A	ZC3H11A	701537
Zinc finger CCCH-type containing 12A	ZC3H12A	713604
Zinc finger CCCH-type containing 3	ZC3H3	708584
Zinc finger homeobox 3	ZFH3	706074
Zinc finger protein 101	ZNF101	720388
Zinc finger protein 112	ZNF112	713527
Zinc finger protein 142	ZNF142	702214
Zinc finger protein 202	ZNF202	708814
Zinc finger protein 217	ZNF217	699314
Zinc finger protein 22	ZNF22	706208
Zinc finger protein 230	ZNF230	711566
Zinc finger protein 304	ZNF304	100428176
Zinc finger protein 319	ZNF319	706286
Zinc finger protein 335	ZNF335	708282
Zinc finger protein 354B	ZNF354B	712885
Zinc finger protein 385A	ZNF385A	705436
Zinc finger protein 408	ZNF408	714213
Zinc finger protein 41	ZNF41	706770
Zinc finger protein 436	ZNF436	709638
Zinc finger protein 467	ZNF467	712106
Zinc finger protein 484	ZNF484	711976

Zinc finger protein 496	ZNF496	709694
Zinc finger protein 526	ZNF526	707135
Zinc finger protein 543	ZNF543	100428080
Zinc finger protein 574	ZNF574	706729
Zinc finger protein 576	ZNF576	710398
Zinc finger protein 584	ZNF584	711420
Zinc finger protein 599	ZNF599	706512
Zinc finger protein 692	ZNF692	710010
Zinc finger protein 7	ZNF7	715735
Zinc finger protein 70	ZNF70	698442
Zinc finger protein 79	ZNF79	700961
Zinc finger protein 821	ZNF821	707355
Zinc finger protein interacting with K protein 1	ZIK1	708621
Zinc finger, AN1-type domain 2B	ZFAND2B	702027
Zinc finger, AN1-type domain 4	ZFAND4	708136
Zinc finger, C2HC-type containing 1A	ZC2HC1A	698760
Zinc finger, C4H2 domain containing	ZC4H2	708764
Zinc finger, CCCH-type with G-patch domain	ZGPAT	719499
Zinc finger, CCHC domain containing 10	ZCCHC10	709423
Zinc finger, CCHC domain containing 3	ZCCHC3	714477
Zinc finger, DHHC-type containing 12	ZDHHC12	722606
Zinc finger, DHHC-type containing 16	ZDHHC16	705982
Zinc finger, DHHC-type containing 17	ZDHHC17	693595
Zinc finger, DHHC-type containing 2	ZDHHC2	710001
Zinc finger, DHHC-type containing 5	ZDHHC5	704863
Zinc finger, HIT-type containing 1	ZNHIT1	714339
Zinc finger, matrin-type 5	ZMAT5	715058
Zinc finger, MYM-type 4	ZMYM4	712793
Zinc finger, MYND-type containing 11	ZMYND11	708761
Zinc ribbon domain containing 1	ZNRD1	712151
Zona pellucida glycoprotein 2 (sperm receptor)	ZP2	697458
Zona pellucida glycoprotein 3 (sperm receptor)	ZP3	719925
Zyg-11 related, cell cycle regulator	ZER1	717262
Zyxin	ZYX	706407

Table S4: List of expressed genes in the endometrium of Non-fecund cycle

(1) Expressed in groups 2a, 2b and 2c

Gene Name	Gene Symbol	Entrez Gene ID
1-acylglycerol-3-phosphate O-acyltransferase 1	AGPAT1	717174
1-acylglycerol-3-phosphate O-acyltransferase 5	AGPAT5	716847
2,4-dienoyl-coa reductase 1, mitochondrial	DECR1	696035
2-phosphoxylose phosphatase 1	PXYLP1	715229
3-hydroxyacyl-coa dehydratase 1	HACD1	700635
3-oxoacyl-ACP synthase, mitochondrial	OXSM	703382
5'-3' exoribonuclease 2	XRN2	700934
5'-nucleotidase, cytosolic IIIA	NT5C3A	708743
5-phosphohydroxy-L-lysine phospho-lyase	PHYKPL	702302
8-oxoguanine DNA glycosylase	OGG1	700481
Abhydrolase domain containing 12	ABHD12	705915
Abhydrolase domain containing 8	ABHD8	718980
ABI family member 3	ABI3	698710
Acetyl-coa acetyltransferase 1	ACAT1	707653
Acetyl-coa acyltransferase 2	ACAA2	709350
Acetyl-coa carboxylase alpha	ACACA	714218
Acidic nuclear phosphoprotein 32 family member B	ANP32B	715508
Acidic residue methyltransferase 1	ARMT1	704570
Aconitase 1	ACO1	705075
Aconitase 2	ACO2	707441
Actin like 7B	ACTL7B	710750
Actin related protein 2/3 complex subunit 1A	ARPC1A	718635
Actin related protein 2/3 complex subunit 2	ARPC2	700536
Actin related protein 2/3 complex subunit 3	ARPC3	709199
Activating transcription factor 4	ATF4	703965
Activin A receptor type I	ACVR1	697935
Acyl-coa binding domain containing 3	ACBD3	699311
Acyl-coa binding domain containing 6	ACBD6	716418
Acyl-coa dehydrogenase, C-4 to C-12 straight chain	ACADM	705168
Acyl-coa oxidase 1, palmitoyl	ACOX1	705197
Acyl-coa thioesterase 13	ACOT13	100335136
ADAM metallopeptidase domain 21	ADAM21	715640
ADAM metallopeptidase with thrombospondin type 1 motif 14	ADAMTS14	710154
ADAM metallopeptidase with thrombospondin type 1 motif 6	ADAMTS6	696021
Adaptor related protein complex 1 associated regulatory protein	AP1AR	700734
Adaptor related protein complex 3, sigma 1 subunit	AP3S1	696644
Adaptor related protein complex 4, beta 1 subunit	AP4B1	707634
Adducin 1	ADD1	700805
Adducin 3	ADD3	677712
Adenosine monophosphate deaminase 2	AMPD2	699561

Adenylate cyclase 4	ADCY4	714684
Adenylate kinase 3	AK3	694714
Adenylosuccinate synthase	ADSS	713580
Adhesion G protein-coupled receptor A3	ADGRA3	715618
Adhesion G protein-coupled receptor L2	ADGRL2	708998
Adhesion molecule with Ig-like domain 1	AMIGO1	698932
Adipogenesis regulatory factor	ADIRF	699173
Adiponectin receptor 2	ADIPOR2	707547
ADP ribosylation factor 4	ARF4	703432
ADP ribosylation factor guanine nucleotide exchange factor 1	ARFGEF1	704359
ADP ribosylation factor like gtpase 10	ARL10	696524
ADP ribosylation factor like gtpase 6	ARL6	696616
ADP ribosylation factor like gtpase 6 interacting protein 5	ARL6IP5	696360
ADP-ribosylhydrolase like 2	ADPRHL2	712758
Aftiphilin	AFTPH	696100
AHA1, activator of heat shock 90kda protein ATPase homolog 1 (yeast)	AHSA1	706547
Ajuba LIM protein	AJUBA	712865
A-kinase anchoring protein 2	AKAP2	709841
A-kinase anchoring protein 9	AKAP9	702970
Aladin WD repeat nucleoporin	AAAS	719095
Alanine--glyoxylate aminotransferase 2	AGXT2	699250
Aldehyde dehydrogenase 1 family member A1	ALDH1A1	702598
Aldehyde dehydrogenase 18 family member A1	ALDH18A1	703357
Aldo-keto reductase family 1, member B1 (aldose reductase)	AKR1B1	705957
ALG2, alpha-1,3/1,6-mannosyltransferase	ALG2	714850
ALG5, dolichyl-phosphate beta-glucosyltransferase	ALG5	694836
Alkb homolog 4, lysine demethylase	ALKBH4	715078
Alkb homolog 5, RNA demethylase	ALKBH5	700205
All-trans retinoic acid induced differentiation factor	ATRAID	699201
Alpha thalassemia/mental retardation syndrome X-linked	ATRX	705735
Alpha-2-macroglobulin	A2M	716834
Alpha-defensin 1A	MNP1A	574196
Aminoacylase 3	ACY3	711083
Aminoadipate-semialdehyde dehydrogenase-phosphopantetheinyl transferase	AASDHPPT	100328984
Aminoadipate-semialdehyde synthase	AASS	694594
Amino-terminal enhancer of split	AES	712353
Amphiphysin	AMPH	704559
Amylase, alpha 2B (pancreatic)	AMY2B	712893
Amyloid beta (A4) precursor protein-binding, family B, member 3	APBB3	698296
Anaphase promoting complex subunit 15	ANAPC15	718333
Anaphase promoting complex subunit 2	ANAPC2	706384
Anaphase promoting complex subunit 4	ANAPC4	694006
Ancient ubiquitous protein 1	AUP1	710020
Androgen-induced 1	AIG1	700988
Angio associated migratory cell protein	AAMP	700763
Ankyrin 2, neuronal	ANK2	702180

Ankyrin 3, node of Ranvier (ankyrin G)	ANK3	699518
Ankyrin repeat and IBR domain containing 1	ANKIB1	703273
Ankyrin repeat and MYND domain containing 2	ANKMY2	709414
Ankyrin repeat domain 2 (stretch responsive muscle)	ANKRD2	707097
Ankyrin repeat domain 27	ANKRD27	716232
Ankyrin repeat domain 35	ANKRD35	706961
Ankyrin repeat domain 46	ANKRD46	705491
Ankyrin repeat domain 6	ANKRD6	701339
Annexin A1	ANXA1	702946
Annexin A11	ANXA11	707628
Annexin A2	ANXA2	706240
Annexin A3	ANXA3	697239
Annexin A7	ANXA7	707166
Anoctamin 10	ANO10	715666
Anoctamin 4	ANO4	695973
Anterior gradient 2, protein disulphide isomerase family member	AGR2	709127
Anterior gradient 3, protein disulphide isomerase family member	AGR3	714517
APEX nuclease (apurinic/aprimidinic endonuclease) 2	APEX2	702084
APEX nuclease (multifunctional DNA repair enzyme) 1	APEX1	702757
Apolipoprotein B mRNA editing enzyme, catalytic polypeptide-like 3H	APOBEC3H	723811
Apolipoprotein O	APOO	698137
Apoptosis inducing factor, mitochondria associated 1	AIFM1	702773
Apoptosis inhibitor 5	API5	716346
Arfgap with gtpase domain, ankyrin repeat and PH domain 1	AGAP1	693652
Arginine and glutamate rich 1	ARGLU1	702840
Arginine/serine-rich protein 1	RSRP1	712757
Arginine-glutamic acid dipeptide (RE) repeats	RERE	708902
Arginyltransferase 1	ATE1	705248
Arginyl-trna synthetase	RARS	698998
Arginyl-trna synthetase 2, mitochondrial	RARS2	699240
Armadillo repeat containing 9	ARMC9	711891
Armadillo repeat gene deleted in velocardiofacial syndrome	ARVCF	712399
ARP2 actin-related protein 2 homolog (yeast)	ACTR2	697080
ARP5 actin-related protein 5 homolog (yeast)	ACTR5	698191
Arrestin, beta 2	ARRB2	709399
Artemin	ARTN	701641
ARV1 homolog, fatty acid homeostasis modulator	ARV1	713975
Aryl hydrocarbon receptor nuclear translocator like	ARNTL	700464
Aspartate beta-hydroxylase domain containing 1	ASPHD1	707467
Aspartate dehydrogenase domain containing	ASPDH	719609
Aspartoacylase	ASPA	706170
Aspartyl aminopeptidase	DNPEP	703180
Asteroid homolog 1 (Drosophila)	ASTE1	719271
Ataxin 2-like	ATXN2L	708359
ATP binding cassette subfamily A member 1	ABCA1	716146
ATP binding cassette subfamily D member 1	ABCD1	696794
ATP binding cassette subfamily E member 1	ABCE1	701945
ATP synthase F0 subunit 6	ATP6	2846629

ATP synthase, H ⁺ transporting, mitochondrial F1 complex, alpha subunit 1, cardiac muscle	ATP5A1	701389
ATP synthase, H ⁺ transporting, mitochondrial F1 complex, beta polypeptide	ATP5B	713284
ATP synthase, H ⁺ transporting, mitochondrial F1 complex, delta subunit	ATP5D	705944
ATP synthase, H ⁺ transporting, mitochondrial F1 complex, gamma polypeptide 1	ATP5C1	713768
ATP synthase, H ⁺ transporting, mitochondrial F1 complex, O subunit	ATP5O	698480
ATP synthase, H ⁺ transporting, mitochondrial Fo complex subunit F6	ATP5J	708411
ATPase inhibitory factor 1	ATPIF1	716870
ATPase type 13A1	ATP13A1	100427504
ATPase, Ca ⁺⁺ transporting, plasma membrane 1	ATP2B1	709102
ATPase, H ⁺ transporting, lysosomal 14kda, V1 subunit F	ATP6V1F	702112
ATPase, H ⁺ transporting, lysosomal 21kda, V0 subunit b	ATP6V0B	702243
ATPase, H ⁺ transporting, lysosomal 31kda, V1 subunit E1	ATP6V1E1	709739
ATPase, H ⁺ transporting, lysosomal 9kda, V0 subunit e1	ATP6V0E1	703342
ATPase, H ⁺ transporting, lysosomal accessory protein 2	ATP6AP2	705048
ATPase, H ⁺ /K ⁺ exchanging, alpha polypeptide	ATP4A	100426216
ATPase, Na ⁺ /K ⁺ transporting, alpha 1 polypeptide	ATP1A1	710368
ATR interacting protein	ATRIP	710035
ATR serine/threonine kinase	ATR	714443
AT-rich interaction domain 2	ARID2	703823
AT-rich interaction domain 4B	ARID4B	718320
Aurora kinase A interacting protein 1	AURKAIP1	706329
Aurora kinase B	AURKB	721955
Aurora kinase C	AURKC	709801
Autophagy related 16 like 1	ATG16L1	714092
Autophagy related 16 like 2	ATG16L2	717952
Autophagy related 2A	ATG2A	717290
Autophagy related 3	ATG3	708305
Autophagy related 4C, cysteine peptidase	ATG4C	695606
Autophagy related 4D, cysteine peptidase	ATG4D	713111
Autophagy related 5	ATG5	696874
Autophagy related 7	ATG7	696238
B9 protein domain 2	B9D2	704873
Bardet-Biedl syndrome 12	BBS12	710538
Bardet-Biedl syndrome 4	BBS4	704508
Bardet-Biedl syndrome 5	BBS5	709701
Basic leucine zipper and W2 domains 2	BZW2	714627
Basic transcription factor 3	BTF3	703339
B-cell CLL/lymphoma 6	BCL6	708736
B-cell CLL/lymphoma 7B	BCL7B	716470
B-cell translocation gene 1, anti-proliferative	BTG1	710112
BCL2 associated athanogene 3	BAG3	714420
BCL2/adenovirus E1B 19kda interacting protein 2	BNIP2	703234

BCL2-associated X protein	BAX	718948
BCS1-like (S. Cerevisiae)	BCS1L	699690
Beclin 1, autophagy related	BECN1	711649
BEN domain containing 5	BEND5	711150
BEN domain containing 6	BEND6	712498
Beta-1,3-glucuronyltransferase 3	B3GAT3	718744
Beta-2-microglobulin	B2M	712428
Bicaudal D homolog 2 (Drosophila)	BICD2	706621
Bisphosphoglycerate mutase	BPGM	706741
BLOC-1 related complex subunit 5	BORCS5	696469
Bloom syndrome, recq helicase-like	BLM	703460
Bola family member 1	BOLA1	705297
Bola family member 3	BOLA3	707871
Bone morphogenetic protein 1	BMP1	707596
Bone morphogenetic protein 4	BMP4	694618
Bone morphogenetic protein/retinoic acid inducible neural-specific 1	BRINP1	701794
Bora, aurora kinase A activator	BORA	693798
BPI fold containing family A member 2	BPIFA2	710376
Brain protein I3	BRI3	706525
Branched chain keto acid dehydrogenase E1, beta polypeptide	BCKDHB	718472
Branched chain ketoacid dehydrogenase kinase	BCKDK	712985
BRCA1 associated RING domain 1	BARD1	694301
BRISC and BRCA1 A complex member 1	BABAM1	718969
Bromo adjacent homology domain containing 1	BAHD1	702982
Bromodomain adjacent to zinc finger domain 1B	BAZ1B	716436
Bromodomain containing 1	BRD1	715059
Bromodomain containing 2	BRD2	717893
Bromodomain containing 7	BRD7	694850
BTB (POZ) domain containing 1	BTBD1	718696
BTG family member 3	BTG3	710579
BTG3 associated nuclear protein	BANP	696125
BUB3 mitotic checkpoint protein	BUB3	708033
Bystin like	BYSL	694976
C2CD2-like	C2CD2L	703424
Cadherin 11, type 2, OB-cadherin (osteoblast)	CDH11	708826
Cadherin 2, type 1, N-cadherin (neuronal)	CDH2	711526
Cadherin related family member 2	CDHR2	697249
Calcitonin-related polypeptide alpha	CALCA	700649
Calcium and integrin binding family member 2	CIB2	709429
Calcium binding protein 39	CAB39	711166
Calcium binding tyrosine-(Y)-phosphorylation regulated	CABYR	701670
Calcium homeostasis endoplasmic reticulum protein	CHERP	718689
Calcium/calmodulin-dependent protein kinase II delta	CAMK2D	702504
Calcium/calmodulin-dependent protein kinase II gamma	CAMK2G	705980
Calmin (calponin-like, transmembrane)	CLMN	709910
Calmodulin regulated spectrin associated protein family member 2	CAMSAP2	709092
Calnexin	CANX	704794

Calpain 10	CAPN10	716360
Calpain 15	CAPN15	695881
Calpain 2, (m/II) large subunit	CAPN2	703047
Calpain 3	CAPN3	707913
Calreticulin	CALR	716910
Camp responsive element binding protein 3	CREB3	696350
Camp responsive element binding protein 3-like 4	CREB3L4	715951
CAP, adenylate cyclase-associated protein 1 (yeast)	CAP1	693719
Capping protein (actin filament) muscle Z-line, alpha 1	CAPZA1	705653
Capping protein (actin filament), gelsolin-like	CAPG	695288
Caprin family member 2	CAPRIN2	693594
Carbamoyl-phosphate synthetase 2, aspartate transcarbamylase, and dihydroorotase	CAD	699460
Carbohydrate (chondroitin 4) sulfotransferase 13	CHST13	716548
Carbohydrate (keratan sulfate Gal-6) sulfotransferase 1	CHST1	715176
Carbohydrate (N-acetylgalactosamine 4-O) sulfotransferase 14	CHST14	703115
Carbohydrate (N-acetylgalactosamine 4-sulfate 6-O) sulfo transferase 15	CHST15	693845
Carbohydrate (N-acetylglucosamine 6-O) sulfotransferase 7	CHST7	704906
Carboxypeptidase A5	CPA5	702974
Carboxypeptidase N subunit 2	CPN2	106997192
Carboxypeptidase Q	CPQ	701711
Carboxypeptidase, vitellogenic-like	CPVL	697111
Cardiotrophin 1	CTF1	713850
Carnitine O-acetyltransferase	CRAT	716908
Carnitine palmitoyltransferase 1B	CPT1B	720697
Carnosine dipeptidase 1 (metallopeptidase M20 family)	CNDP1	695195
Cartilage acidic protein 1	CRTAC1	707486
Casein kinase 2, alpha 1 polypeptide	CSNK2A1	714841
Casein kinase 2, beta polypeptide	CSNK2B	715807
Caspase 1	CASP1	706568
Caspase 4	CASP4	704864
Caspase 9	CASP9	694544
Caspase activity and apoptosis inhibitor 1	CAAP1	707992
Caspase recruitment domain family member 9	CARD9	710485
Cat eye syndrome chromosome region, candidate 5	CECR5	709197
Catalase	CAT	717406
Catechol-O-methyltransferase	COMT	712548
Catenin alpha-like 1	CTNNAL1	710389
Catenin delta 1	CTNND1	704212
Cathepsin A	CTSA	708592
Cathepsin B	CTSB	100424760
Cathepsin C	CTSC	705320
Cathepsin L	CTSL	694569
Cation channel, sperm associated 2	CATSPER2	710876
Caudal type homeobox 4	CDX4	701374
Cbl proto-oncogene B, E3 ubiquitin protein ligase	CBLB	703879
CCAAT/enhancer binding protein (C/EBP), zeta	CEBPZ	712090

CCR4-NOT transcription complex subunit 3	CNOT3	693292
CCR4-NOT transcription complex subunit 7	CNOT7	702192
CD19 molecule	CD19	705211
CD1c molecule	CD1C	717148
CD200 molecule	CD200	708110
CD274 molecule	CD274	716043
CD4 molecule	CD4	713807
CD63 molecule	CD63	709828
CD7 molecule	CD7	719501
CD9 molecule	CD9	712262
CDC like kinase 3	CLK3	702511
CDC28 protein kinase regulatory subunit 1B	CKS1B	717164
Cell cycle and apoptosis regulator 2	CCAR2	716288
Cell death-inducing DFFA-like effector b	CIDEB	100425328
Cell division cycle 123	CDC123	694239
Cell division cycle 16	CDC16	699089
Cell division cycle 23	CDC23	714000
Cell division cycle 25C	CDC25C	714115
Cell division cycle 26	CDC26	706165
Cell division cycle 37	CDC37	715390
Cell division cycle 5 like	CDC5L	703099
Cell division cycle 7	CDC7	704730
Cell division cycle and apoptosis regulator 1	CCAR1	693585
Cell division cycle associated 3	CDCA3	722088
Cell division cycle associated 5	CDCA5	721998
Cell division cycle associated 7	CDCA7	696474
Cell division cycle associated 8	CDCA8	719808
Cell growth regulator with ring finger domain 1	CGRRF1	695231
Centrin 2	CETN2	693376
Centrin 3	CETN3	695223
Centriolin	CNTRL	700200
Centromere protein C	CENPC	710620
Centromere protein F	CENPF	709000
Centromere protein J	CENPJ	721498
Centrosomal protein 192kda	CEP192	722121
Centrosomal protein 290kda	CEP290	708286
Centrosomal protein 41kda	CEP41	703215
Centrosomal protein 57kda-like 1	CEP57L1	700109
Centrosomal protein 72kda	CEP72	708753
Centrosomal protein 83kda	CEP83	711408
Ceramide synthase 2	CERS2	716180
Cerebellar degeneration related protein 2	CDR2	698974
CGG triplet repeat binding protein 1	CGGBP1	693920
Chaperonin containing TCP1, subunit 2 (beta)	CCT2	717182
Chaperonin containing TCP1, subunit 8 (theta)	CCT8	706184
Charged multivesicular body protein 2A	CHMP2A	712059
Charged multivesicular body protein 4B	CHMP4B	709004
Charged multivesicular body protein 5	CHMP5	703191

Checkpoint kinase 2	CHEK2	713668
Chemokine (C-C motif) ligand 27	CCL27	574220
Chemokine (C-X-C motif) receptor 4	CXCR4	707329
Chemokine-like factor	CKLF	693673
Chloride intracellular channel 4	CLIC4	712337
Choline/ethanolamine phosphotransferase 1	CEPT1	702700
Chondroitin sulfate N-acetylgalactosaminyltransferase 2	CSGALNACT2	703703
Chromatin target of PRMT1	CHTOP	715501
Chromobox 1	CBX1	696673
Chromodomain helicase DNA binding protein 1	CHD1	702070
Chromosome 1 open reading frame, human c1orf123	C1H1orf123	714201
Chromosome 1 open reading frame, human c1orf198	C1H1orf198	714084
Chromosome 1 open reading frame, human c1orf50	C1H1orf50	698058
Chromosome 1 open reading frame, human c1orf52	C1H1orf52	711232
Chromosome 1 open reading frame, human c1orf54	C1H1orf54	107000832
Chromosome 1 open reading frame, human c1orf74	C1H1orf74	713029
Chromosome 10 open reading frame, human c20orf27	C10H20orf27	717525
Chromosome 11 open reading frame, human c12orf4	C11H12orf4	710836
Chromosome 12 open reading frame, human c2orf47	C12H2orf47	699322
Chromosome 14 open reading frame, human c11orf68	C14H11orf68	715318
Chromosome 14 open reading frame, human c11orf73	C14H11orf73	704098
Chromosome 16 open reading frame, human c17orf62	C16H17orf62	716212
Chromosome 18 open reading frame, human c18orf21	C18H18orf21	715440
Chromosome 19 open reading frame, human c19orf53	C19H19orf53	720745
Chromosome 2 open reading frame, human c3orf18	C2H3orf18	701675
Chromosome 2 open reading frame, human c3orf58	C2H3orf58	713830
Chromosome 20 open reading frame 24 ortholog	C10H20orf24	709696
Chromosome 20 open reading frame, human c16orf13	C20H16orf13	696495
Chromosome 20 open reading frame, human c16orf78	C20H16orf78	693672
Chromosome 3 open reading frame, human c21orf91	C3H21orf91	710406
Chromosome 3 open reading frame, human c7orf25	C3H7orf25	708455
Chromosome 4 open reading frame, human c6orf1	C4H6orf1	718551
Chromosome 4 open reading frame, human c6orf136	C4H6orf136	712108
Chromosome 4 open reading frame, human c6orf203	C4H6orf203	698108
Chromosome 4 open reading frame, human c6orf89	C4H6orf89	719165
Chromosome 5 open reading frame, human c4orf27	C5H4orf27	694607
Chromosome 7 open reading frame, human c14orf142	C7H14orf142	704509
Chromosome 7 open reading frame, human c14orf166	C7H14orf166	710094
Chromosome 8 open reading frame, human c8orf59	C8H8orf59	703464
Chromosome 8 open reading frame, human c8orf76	C8H8orf76	704150
Chromosome 9 open reading frame, human c10orf2	C9H10orf2	710958
Chromosome X open reading frame, human cxorf23	CXHXorf23	696449
Cilia and flagella associated protein 43	CFAP43	716031
Cilia and flagella associated protein 65	CFAP65	701296
Ciliary neurotrophic factor	CNTF	701907
Circadian associated repressor of transcription	CIART	706693
Citrate lyase beta like	CLYBL	699339
CKLF-like MARVEL transmembrane domain containing 8	CMTM8	704234

Clathrin, light chain A	CLTA	693659
Claudin 12	CLDN12	704058
Claudin 15	CLDN15	719637
Claudin 3	CLDN3	716771
Cleavage and polyadenylation factor I subunit 1	CLP1	705071
Cleavage and polyadenylation specific factor 4	CPSF4	708119
Cleavage stimulation factor, 3' pre-RNA, subunit 2	CSTF2	701235
Cleavage stimulation factor, 3' pre-RNA, subunit 3	CSTF3	694040
Cleft lip and palate associated transmembrane protein 1	CLPTM1	718306
Cms1 ribosomal small subunit homolog (yeast)	CMSS1	699717
Coatomer protein complex subunit beta 1	COPB1	699327
Coatomer protein complex subunit zeta 1	COPZ1	705176
Codanin 1	CDAN1	708838
Coenzyme Q10A	COQ10A	712341
Coenzyme Q2 4-hydroxybenzoate polyprenyltransferase	COQ2	707681
Cofilin 1 (non-muscle)	CFL1	721882
Cofilin 2 (muscle)	CFL2	693875
Coiled-coil domain containing 12	CCDC12	712061
Coiled-coil domain containing 174	CCDC174	701654
Coiled-coil domain containing 181	CCDC181	700803
Coiled-coil domain containing 28A	CCDC28A	703104
Coiled-coil domain containing 36	CCDC36	707136
Coiled-coil domain containing 43	CCDC43	715325
Coiled-coil domain containing 59	CCDC59	698443
Coiled-coil domain containing 92	CCDC92	705922
Coiled-coil domain containing 97	CCDC97	706342
Coiled-coil serine rich protein 2	CCSER2	698006
Coiled-coil-helix-coiled-coil-helix domain containing 10	CHCHD10	720205
Coiled-coil-helix-coiled-coil-helix domain containing 6	CHCHD6	716767
Cold shock domain containing E1, RNA binding	CSDE1	708897
Collagen, type III, alpha 1	COL3A1	574131
Collagen, type XII, alpha 1	COL12A1	717820
COMM domain containing 2	COMMD2	711498
COMM domain containing 6	COMMD6	695191
Complement component 1, q subcomponent binding protein	C1QBP	711817
Complement factor properdin	CFP	707386
Component of oligomeric golgi complex 1	COG1	695754
Component of oligomeric golgi complex 4	COG4	712103
Conserved helix-loop-helix ubiquitous kinase	CHUK	709511
Coordinator of PRMT5, differentiation stimulator	COPRS	713293
COP9 signalosome subunit 2	COPS2	714814
COP9 signalosome subunit 3	COPS3	698461
COP9 signalosome subunit 4	COPS4	693435
COP9 signalosome subunit 5	COPS5	704584
COP9 signalosome subunit 6	COPS6	710667
Copine II	CPNE2	703557
Core-binding factor, beta subunit	CBFB	695767
Core-binding factor, runt domain, alpha subunit 2;	CBFA2T3	698233

translocated to, 3		
Cornichon family AMPA receptor auxiliary protein 1	CNIH1	695002
Cornichon family AMPA receptor auxiliary protein 4	CNIH4	701767
Coronin, actin binding protein, 1B	CORO1B	721725
Cortactin	CTTN	708291
Cryptochrome circadian clock 1	CRY1	703752
CSE1 chromosome segregation 1-like (yeast)	CSE1L	704301
C-src tyrosine kinase	CSK	702868
CTD phosphatase subunit 1	CTDP1	698467
CTD small phosphatase like 2	CTDSPL2	711917
C-terminal binding protein 1	CTBP1	694507
CTP synthase 1	CTPS1	695498
CTR9 homolog, Paf1/RNA polymerase II complex component	CTR9	705748
C-type lectin domain family 1, member A	CLEC1A	717526
C-type lectin domain family 9 member A	CLEC9A	717472
CUE domain containing 2	CUEDC2	713243
CUGBP, Elav-like family member 3	CELF3	716884
Cullin 4A	CUL4A	714302
Cullin 7	CUL7	699545
Cutc copper transporter	CUTC	709050
CWC15 spliceosome-associated protein	CWC15	698332
CWF19-like 2, cell cycle control (S. Pombe)	CWF19L2	706825
C-x(9)-C motif containing 1	CMC1	705147
Cyclic nucleotide binding domain containing 2	CNBD2	703290
Cyclin A2	CCNA2	707259
Cyclin and CBS domain divalent metal cation transport mediator 2	CNNM2	714238
Cyclin B2	CCNB2	702184
Cyclin D3	CCND3	695215
Cyclin D-type binding-protein 1	CCNDBP1	709589
Cyclin E1	CCNE1	700589
Cyclin G1	CCNG1	697738
Cyclin H	CCNH	694224
Cyclin I	CCNI	677687
Cyclin T2	CCNT2	708813
Cyclin-dependent kinase 1	CDK1	699269
Cyclin-dependent kinase 12	CDK12	696733
Cyclin-dependent kinase 14	CDK14	703442
Cyclin-dependent kinase 17	CDK17	717183
Cyclin-dependent kinase 2	CDK2	711002
Cyclin-dependent kinase 4	CDK4	715650
Cyclin-dependent kinase 9	CDK9	699840
Cyclin-dependent kinase inhibitor 2C (p18, inhibits CDK4)	CDKN2C	711877
Cyclin-dependent kinase inhibitor 2D (p19, inhibits CDK4)	CDKN2D	713172
Cystatin C	CST3	574313
Cysteine/histidine-rich 1	CYHR1	702522
CysteinyI-trna synthetase	CARS	706502
CysteinyI-trna synthetase 2, mitochondrial (putative)	CARS2	694840
Cytidine monophosphate (UMP-CMP) kinase 1, cytosolic	CMPK1	710196

Cytidine monophosphate N-acetylneuraminic acid synthetase	CMAS	706604
Cytochrome b-245 heavy chain	CYBB	696542
Cytochrome c oxidase subunit 5A	COX5A	692061
Cytochrome c oxidase subunit 6C	COX6C	100428416
Cytochrome c oxidase subunit IV isoform 1	COX4I1	693811
Cytochrome c oxidase subunit viic	COX7C	100429280
Cytochrome c-1	CYC1	700518
Cytochrome P450, family 2, subfamily D, polypeptide 6	CYP2D6	678691
Cytochrome P450, family 21, subfamily A, polypeptide 2	CYP21A2	717020
Cytochrome P450c17	CYP17A1	678693
Cytoplasmic polyadenylation element binding protein 2	CPEB2	722844
Cytoskeleton associated protein 2 like	CKAP2L	704381
Cytoskeleton associated protein 5	CKAP5	714095
Cytosolic thiouridylase subunit 1	CTU1	719536
Dachshund family transcription factor 1	DACH1	693532
Dachsous cadherin-related 1	DCHS1	711938
DALR anticodon binding domain containing 3	DALRD3	708403
DCN1, defective in cullin neddylation 1, domain containing 1	DCUN1D1	708357
DCN1, defective in cullin neddylation 1, domain containing 4	DCUN1D4	702908
DCN1, defective in cullin neddylation 1, domain containing 5	DCUN1D5	704099
DDB1 and CUL4 associated factor 11	DCAF11	714867
DDB1 and CUL4 associated factor 4	DCAF4	695337
DDB1 and CUL4 associated factor 6	DCAF6	698686
D-dopachrome tautomerase	DDT	699933
DEAD (Asp-Glu-Ala-Asp) box helicase 1	DDX1	698327
DEAD (Asp-Glu-Ala-Asp) box helicase 5	DDX5	677694
DEAD (Asp-Glu-Ala-Asp) box polypeptide 27	DDX27	703852
DEAD (Asp-Glu-Ala-Asp) box polypeptide 39A	DDX39A	718822
DEAD (Asp-Glu-Ala-Asp) box polypeptide 41	DDX41	700742
DEAD (Asp-Glu-Ala-Asp) box polypeptide 54	DDX54	712763
DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 26B	DDX26B	709688
Deafness, autosomal recessive 31	DFNB31	708051
DEAH (Asp-Glu-Ala-His) box helicase 15	DHX15	715852
DEAH (Asp-Glu-Ala-His) box helicase 30	DHX30	711178
DEAH (Asp-Glu-Ala-His) box helicase 9	DHX9	715453
DEAH (Asp-Glu-Ala-His) box polypeptide 29	DHX29	706306
DEAH (Asp-Glu-Ala-His) box polypeptide 38	DHX38	709173
Death associated protein 3	DAP3	719314
Death inducer-obliterators 1	DIDO1	698313
Decapping exoribonuclease	DXO	716027
Decapping mrna 1B	DCP1B	708089
Dedicator of cytokinesis 5	DOCK5	711359
Defender against cell death 1	DAD1	711840
Defensin beta 118	DEFB118	641438
Dehydrodolichyl diphosphate synthase subunit	DHDDS	714635
Dehydrogenase/reductase (SDR family) member 1	DHRS1	715933
Dehydrogenase/reductase (SDR family) member 3	DHRS3	715548
Deiodinase, iodothyronine, type II	DIO2	707484

DEK proto-oncogene	DEK	712460
Delta-like 1 homolog (Drosophila)	DLK1	707595
Deltex 3, E3 ubiquitin ligase	DTX3	715175
DENN/MADD domain containing 5A	DENND5A	707945
Denticleless E3 ubiquitin protein ligase homolog (Drosophila)	DTL	711236
Deoxyguanosine kinase	DGUOK	707554
Deoxyhypusine synthase	DHPS	716213
Deoxythymidylate kinase	DTYMK	701781
Derlin 1	DERL1	703803
Derlin 2	DERL2	712051
Dermatan sulfate epimerase	DSE	716054
Desmoplakin	DSP	694860
Desumoylating isopeptidase 2	DESI2	713515
Developmentally regulated GTP binding protein 1	DRG1	716791
Dexi homolog (mouse)	DEXI	100430904
Dicer 1, ribonuclease type III	DICER1	702516
Dihydrolipoamide S-acetyltransferase	DLAT	710930
Dihydropyrimidinase like 3	DPYSL3	708425
Dihydrouridine synthase 3-like	DUS3L	719524
Dimethylarginine dimethylaminohydrolase 1	DDAH1	711395
Dipeptidyl-peptidase 8	DPP8	709428
Diphosphoinositol pentakisphosphate kinase 2	PPIP5K2	703458
Discoidin domain receptor tyrosine kinase 1	DDR1	714233
Discoidin domain receptor tyrosine kinase 2	DDR2	720124
Discs, large homolog 1 (Drosophila)	DLG1	709572
Discs, large homolog 5 (Drosophila)	DLG5	703123
Dishevelled segment polarity protein 1	DVL1	705864
Dispatched homolog 1 (Drosophila)	DISP1	703960
Distal-less homeobox 5	DLX5	697853
DNA (cytosine-5-)-methyltransferase 1	DNMT1	574321
DNA cross-link repair 1B	DCLRE1B	707742
Dnaj heat shock protein family (Hsp40) member A1	DNAJA1	703765
Dnaj heat shock protein family (Hsp40) member B1	DNAJB1	718890
Dnaj heat shock protein family (Hsp40) member C1	DNAJC1	704151
Dnaj heat shock protein family (Hsp40) member C12	DNAJC12	695795
Dnaj heat shock protein family (Hsp40) member C27	DNAJC27	694037
Dnaj heat shock protein family (Hsp40) member C3	DNAJC3	695757
Dnaj heat shock protein family (Hsp40) member C5 beta	DNAJC5B	702408
Dnaj heat shock protein family (Hsp40) member C8	DNAJC8	720231
Dnaj heat shock protein family (Hsp40) member C9	DNAJC9	707599
Docking protein 5	DOK5	698689
Dolichyl-phosphate mannosyltransferase polypeptide 2, regulatory subunit	DPM2	698709
Double C2-like domains, alpha	DOC2A	707895
Double zinc ribbon and ankyrin repeat domains 1	DZANK1	700143
DR1-associated protein 1 (negative cofactor 2 alpha)	DRAP1	715271
Drosha, ribonuclease type III	DROSHA	692081
DTW domain containing 1	DTWD1	715084

D-tyrosyl-trna deacylase 1	DTD1	700895
Dual serine/threonine and tyrosine protein kinase	DSTYK	664732
Dual specificity phosphatase 11	DUSP11	707123
Dual specificity phosphatase 12	DUSP12	720034
Dual specificity phosphatase 14	DUSP14	714383
Dual specificity phosphatase 23	DUSP23	719474
Dual specificity phosphatase 26 (putative)	DUSP26	697134
Dual specificity phosphatase 6	DUSP6	708907
Dual specificity tyrosine-(Y)-phosphorylation regulated kinase 3	DYRK3	695163
Dynactin subunit 1	DCTN1	708290
Dynactin subunit 2	DCTN2	714948
Dynactin subunit 6	DCTN6	694273
Dynamin 1-like	DNM1L	695388
Dynein, axonemal, assembly factor 2	DNAAF2	719026
Dynein, light chain, LC8-type 1	DYNLL1	702360
Dynein, light chain, roadblock-type 2	DYNLRB2	713503
E1A binding protein p300	EP300	706258
E2F transcription factor 1	E2F1	714126
E2F transcription factor 3	E2F3	713904
E2F transcription factor 4, p107/p130-binding	E2F4	696864
E2F transcription factor 5, p130-binding	E2F5	703352
E2F-associated phosphoprotein	EAPP	714727
E74-like factor 2 (ets domain transcription factor)	ELF2	696760
E74-like factor 5 (ets domain transcription factor)	ELF5	717377
Ecdysoneless homolog (Drosophila)	ECD	707699
Ectodermal-neural cortex 1 (with BTB domain)	ENC1	704577
Ectodysplasin A receptor	EDAR	695059
Ectonucleotide pyrophosphatase/phosphodiesterase 2	ENPP2	705287
EF-hand calcium binding domain 7	EFCAB7	696830
EF-hand domain family member D2	EFHD2	694155
EGF-like, fibronectin type III and laminin G domains	EGFLAM	693314
EGF-like-domain, multiple 7	EGFL7	709840
EGF-like-domain, multiple 8	EGFL8	717145
Egl-9 family hypoxia-inducible factor 2	EGLN2	703083
EH domain binding protein 1	EHBP1	693902
Electron-transferring-flavoprotein dehydrogenase	ETFDH	701207
ELMO/CED-12 domain containing 2	ELMOD2	698742
ELOVL fatty acid elongase 1	ELOVL1	700557
ELOVL fatty acid elongase 4	ELOVL4	692070
Embryonic ectoderm development	EED	703866
Emopamil binding protein (sterol isomerase)	EBP	714315
Endonuclease G	ENDOG	717171
Endoplasmic reticulum lectin 1	ERLEC1	716460
Endothelin 3	EDN3	693385
Enhancer of rudimentary homolog (Drosophila)	ERH	712507
Enhancer of yellow 2 homolog (Drosophila)	ENY2	699048
Enhancer of zeste 1 polycomb repressive complex 2 subunit	EZH1	711173
Enolase 1, (alpha)	ENO1	709378

Enoyl-coa delta isomerase 2	ECI2	709579
EPH receptor B6	EPHB6	704886
Epididymal protein 3A	EDDM3A	704355
Epithelial cell transforming 2	ECT2	694056
ER degradation enhancer, mannosidase alpha-like 3	EDEM3	714475
ER membrane protein complex subunit 4	EMC4	695907
ER membrane protein complex subunit 6	EMC6	707030
ERGIC and golgi 3	ERGIC3	704736
ESF1 nucleolar pre-rrna processing protein homolog	ESF1	694159
Esterase D	ESD	708871
Ethanolamine-phosphate phospho-lyase	ETNPPL	696880
Eukaryotic translation elongation factor 1 beta 2	EEF1B2	707019
Eukaryotic translation elongation factor 1 epsilon 1	EEF1E1	695426
Eukaryotic translation elongation factor 1 gamma	EEF1G	722274
Eukaryotic translation initiation factor 2 subunit beta	EIF2S2	708593
Eukaryotic translation initiation factor 2-alpha kinase 3	EIF2AK3	699575
Eukaryotic translation initiation factor 2D	EIF2D	695274
Eukaryotic translation initiation factor 3 subunit D	EIF3D	695051
Eukaryotic translation initiation factor 3 subunit E	EIF3E	697622
Eukaryotic translation initiation factor 3 subunit H	EIF3H	700517
Eukaryotic translation initiation factor 3 subunit K	EIF3K	693536
Eukaryotic translation initiation factor 3 subunit L	EIF3L	699189
Eukaryotic translation initiation factor 3 subunit M	EIF3M	695698
Eukaryotic translation initiation factor 4A2	EIF4A2	707775
Eukaryotic translation initiation factor 4A3	EIF4A3	712141
Eukaryotic translation initiation factor 4E binding protein 2	EIF4EBP2	100424760
Eukaryotic translation initiation factor 4E binding protein 3	EIF4EBP3	100532736
Eukaryotic translation initiation factor 4E family member 2	EIF4E2	713487
Eukaryotic translation initiation factor 4H	EIF4H	693429
Eukaryotic translation termination factor 1	ETF1	714449
Eva-1 homolog B (C. Elegans)	EVA1B	713159
EWS RNA binding protein 1	EWSR1	714432
Excision repair cross-complementation group 3	ERCC3	698829
Exocyst complex component 1	EXOC1	695664
Exocyst complex component 2	EXOC2	706296
Exocyst complex component 4	EXOC4	712458
Exosome component 10	EXOSC10	714153
Exosome component 3	EXOSC3	716347
Exostosin glycosyltransferase 1	EXT1	701488
Exostosin glycosyltransferase 2	EXT2	715975
Exportin 1	XPO1	718063
Exportin 5	XPO5	700664
Exportin 6	XPO6	704332
Extended synaptotagmin-like protein 1	ESYT1	711720
Extra spindle pole bodies like 1, separase	ESPL1	702136
F11 receptor	F11R	719824
Family with sequence similarity 104 member A	FAM104A	695865
Family with sequence similarity 110 member B	FAM110B	703840

Family with sequence similarity 117 member A	FAM117A	700079
Family with sequence similarity 129 member B	FAM129B	707403
Family with sequence similarity 156 member B	FAM156B	698392
Family with sequence similarity 160 member A2	FAM160A2	711641
Family with sequence similarity 171 member B	FAM171B	712442
Family with sequence similarity 175 member B	FAM175B	694886
Family with sequence similarity 178 member B	FAM178B	710890
Family with sequence similarity 179 member B	FAM179B	702188
Family with sequence similarity 181 member B	FAM181B	701184
Family with sequence similarity 212 member A	FAM212A	704983
Family with sequence similarity 219 member A	FAM219A	700651
Family with sequence similarity 220 member A	FAM220A	703785
Family with sequence similarity 35 member A	FAM35A	694102
Family with sequence similarity 58 member A	FAM58A	695925
Family with sequence similarity 76 member B	FAM76B	699581
Family with sequence similarity 8 member A1	FAM8A1	703789
Family with sequence similarity 92 member A1	FAM92A1	698794
Fanconi anemia complementation group E	FANCE	718889
Farnesyl-diphosphate farnesyltransferase 1	FDFT1	696396
Farnesyltransferase, CAAX box, beta	FNTB	708129
Fas apoptotic inhibitory molecule	FAIM	716216
Fasciculation and elongation protein zeta 1	FEZ1	713106
Fasciculation and elongation protein zeta 2 (zygin II)	FEZ2	708288
FAST kinase domains 1	FASTKD1	706154
Fat storage-inducing transmembrane protein 1	FITM1	715085
Fatty acid binding protein 7, brain	FABP7	713762
Fatty acyl coa reductase 1	FAR1	699947
F-box and WD repeat domain containing 4	FBXW4	711996
F-box and WD repeat domain containing 7	FBXW7	695101
F-box protein 11	FBXO11	715651
F-box protein 4	FBXO4	697007
FCH and double SH3 domains 2	FCHSD2	717996
Feline leukemia virus subgroup C cellular receptor 1	FLVCR1	710008
Fem-1 homolog b (C. Elegans)	FEM1B	693955
FERM domain containing 3	FRMD3	713394
Fetal and adult testis expressed 1	FATE1	704368
Fibrillarlin	FBL	700286
Fibroblast activation protein alpha	FAP	701541
Fibroblast growth factor 13	FGF13	695460
Fibroblast growth factor 16	FGF16	705612
Fibroblast growth factor receptor substrate 3	FRS3	694462
Fibronectin type III domain containing 4	FNDC4	702098
FIG4 phosphoinositide 5-phosphatase	FIG4	699914
Filamin B, beta	FLNB	702732
Filamin binding LIM protein 1	FBLIM1	695727
Finkel-Biskis-Reilly murine sarcoma virus (FBR-musv) ubiquitously expressed	FAU	716761
FK506 binding protein 11	FKBP11	708598

FK506 binding protein 7	FKBP7	703299
FK506 binding protein 9	FKBP9	708827
Flavin adenine dinucleotide synthetase 1	FLAD1	717133
Flightless I actin binding protein	FLII	700471
FLYWCH-type zinc finger 1	FLYWCH1	700909
Follistatin like 1	FSTL1	713367
Formin homology 2 domain containing 1	FHOD1	697346
Four and a half LIM domains 2	FHL2	713222
Fragile X mental retardation, autosomal homolog 1	FXR1	710170
FRAS1 related extracellular matrix 1	FREM1	713874
Frataxin	FXN	699469
Frizzled class receptor 6	FZD6	694625
Ftsj RNA methyltransferase homolog 1 (E. Coli)	FTSJ1	710243
Fumarylacetoacetate hydrolase (fumarylacetoacetase)	FAH	712716
FUN14 domain containing 1	FUNDC1	709370
Fuzzy planar cell polarity protein	FUZ	719442
FXYP domain containing ion transport regulator 7	FXYP7	718457
FYN proto-oncogene, Src family tyrosine kinase	FYN	574214
FYVE, rhogef and PH domain containing 2	FGD2	719329
G elongation factor, mitochondrial 2	GFM2	704247
G kinase anchoring protein 1	GKAP1	708816
G protein pathway suppressor 1	GPS1	719343
G protein-coupled bile acid receptor 1	GPBAR1	697937
G protein-coupled receptor 135	GPR135	701843
G protein-coupled receptor 151	GPR151	708020
G protein-coupled receptor 31	GPR31	717158
G protein-coupled receptor 89A	GPR89A	696579
G protein-coupled receptor kinase interacting arfgap 2	GIT2	708092
G2/M-phase specific E3 ubiquitin protein ligase	G2E3	717021
GA binding protein transcription factor, beta subunit 1	GABPB1	715334
GABA(A) receptor-associated protein like 2	GABARAPL2	714413
Galactosidase alpha	GLA	703129
Gametogenetin binding protein 2	GGNBP2	713750
Gamma-glutamyl hydrolase (conjugase, folylpolygammaglutamyl hydrolase)	GGH	700747
Gamma-glutamylcyclotransferase	GGCT	695547
Gap junction protein alpha 1	GJA1	714344
GATA binding protein 2	GATA2	705551
GCN1, eif2 alpha kinase activator homolog	GCN1	698528
GC-rich promoter binding protein 1	GPBP1	708322
GC-rich promoter binding protein 1-like 1	GPBP1L1	706690
GDP-mannose 4,6-dehydratase	GMDS	707051
GDP-mannose pyrophosphorylase B	GMPPB	705454
General transcription factor IIA 2	GTF2A2	702984
General transcription factor IIB	GTF2B	694770
General transcription factor IIE subunit 2	GTF2E2	694622
General transcription factor IIH subunit 5	GTF2H5	700107
General transcription factor IIIA	GTF3A	710492

General transcription factor IIIC subunit 4	GTF3C4	714849
General transcription factor IIIC subunit 6	GTF3C6	696512
Geranylgeranyl diphosphate synthase 1	GGPS1	100425248
Germ cell-less, spermatogenesis associated 1	GMCL1	701545
GID complex subunit 8	GID8	698189
GIN5 complex subunit 2 (Psf2 homolog)	GIN52	693426
GLE1, RNA export mediator	GLE1	717474
GLI family zinc finger 1	GLI1	714843
Glucokinase (hexokinase 4) regulator	GCKR	701431
Glucose-fructose oxidoreductase domain containing 1	GFOD1	700607
Glucosidase, beta (bile acid) 2	GBA2	696062
Glutamate-cysteine ligase, catalytic subunit	GCLC	710508
Glutamic-oxaloacetic transaminase 2	GOT2	707896
Glutamine--fructose-6-phosphate transaminase 1	GFPT1	574376
Glutaminyl-trna synthetase	QARS	708111
Glutaredoxin 5	GLRX5	702989
Glutathione peroxidase 1	GPX1	706732
Glutathione peroxidase 8 (putative)	GPX8	705965
Glutathione S-transferase alpha 4	GSTA4	709666
Glutathione S-transferase omega 1	GSTO1	716078
Glutathione S-transferase omega 2	GSTO2	715291
Glutathione S-transferase, C-terminal domain containing	GSTCD	694220
Glycerol-3-phosphate acyltransferase, mitochondrial	GPAM	696042
Glycophorin C (Gerbich blood group)	GYPE	712092
Glycosylphosphatidylinositol anchor attachment 1	GPAA1	699887
Glycosyltransferase 8 domain containing 1	GLT8D1	695999
Glycosyltransferase like domain containing 1	GTDC1	100424584
Golgi reassembly stacking protein 2	GORASP2	694170
Golgi-associated, gamma adaptin ear containing, ARF binding protein 3	GGA3	705751
Golgin A7	GOLGA7	709911
Golgin B1	GOLGB1	713993
Grancalcin	GCA	702138
Granulysin	GNLY	696059
GRB2-related adaptor protein	GRAP	702473
Gremlin 2, DAN family BMP antagonist	GREM2	708280
Growth arrest and DNA damage inducible beta	GADD45B	711257
Growth arrest and DNA damage inducible gamma	GADD45G	697835
Growth arrest specific 6	GAS6	716066
Growth differentiation factor 7	GDF7	702462
Growth factor receptor bound protein 10	GRB10	694786
Growth hormone inducible transmembrane protein	GHITM	702691
Growth hormone secretagogue receptor	GHSR	694587
GRP1 (general receptor for phosphoinositides 1)-associated scaffold protein	GRASP	696547
Gtpase activating protein (SH3 domain) binding protein 1	G3BP1	713884
Gtpase, IMAP family member 4	GIMAP4	713506
Guanidinoacetate N-methyltransferase	GAMT	721263

Guanine nucleotide binding protein (G protein), beta polypeptide 2-like 1	GNB2L1	708526
Guanine nucleotide binding protein (G protein), gamma 10	GNG10	708193
Guanine nucleotide binding protein (G protein), gamma 11	GNG11	700606
Guanosine monophosphate reductase 2	GMPR2	715719
Guanylate kinase 1	GUK1	695272
H2A histone family, member X	H2AFX	703073
H2A histone family, member Y	H2AFY	711836
H2A histone family, member Y2	H2AFY2	711117
H2A histone family, member Z	H2AFZ	709326
Haloacid dehalogenase like hydrolase domain containing 2	HDHD2	697216
HAUS augmin like complex subunit 8	HAUS8	718874
Hdc homolog, cell cycle regulator	HECA	702628
Heat shock factor binding protein 1	HSBP1	714498
Heat shock protein 90kda alpha (cytosolic), class A member 1	HSP90AA1	708431
Heat shock protein 90kda alpha family class B member 1	HSP90AB1	702293
Heat shock protein 90kda beta family member 1	HSP90B1	699568
Heat shock protein family A (Hsp70) member 8	HSPA8	707989
Heat shock protein family B (small) member 11	HSPB11	714791
Heat shock protein family B (small) member 6	HSPB6	710760
Heat shock protein family D (Hsp60) member 1	HSPD1	698024
Heat shock protein family H (Hsp110) member 1	HSPH1	721956
Heat shock transcription factor 2	HSF2	713938
HECT domain containing E3 ubiquitin protein ligase 1	HECTD1	717177
HECT domain containing E3 ubiquitin protein ligase 3	HECTD3	705051
Helicase (DNA) B	HELB	717860
Helicase, lymphoid-specific	HELLS	701598
Hematological and neurological expressed 1	HN1	664729
Hematopoietic prostaglandin D synthase	HPGDS	705227
Hepatocyte growth factor-regulated tyrosine kinase substrate	HGS	714385
Hes family bhlh transcription factor 7	HES7	721942
Hes-related family bhlh transcription factor with YRPW motif 2	HEY2	712988
Heterogeneous nuclear ribonucleoprotein A/B	HNRNPAB	702509
Heterogeneous nuclear ribonucleoprotein A1	HNRNPA1	702977
Heterogeneous nuclear ribonucleoprotein A2/B1	HNRNPA2B1	701821
Heterogeneous nuclear ribonucleoprotein C (C1/C2)	HNRNPC	706423
Heterogeneous nuclear ribonucleoprotein D	HNRNPD	694867
Heterogeneous nuclear ribonucleoprotein D like	HNRNPDL	694603
Heterogeneous nuclear ribonucleoprotein H2 (H')	HNRNPH2	703254
Heterogeneous nuclear ribonucleoprotein L	HNRNPL	694448
Heterogeneous nuclear ribonucleoprotein L-like	HNRNPLL	710841
Hexamethylene bis-acetamide inducible 2	HEXIM2	716047
High mobility group box 3	HMGB3	703598
Hippocalcin	HPCA	710249
HIRA interacting protein 3	HIRIP3	708004
Histidine triad nucleotide binding protein 1	HINT1	706083
Histidyl-trna synthetase 2	HARS2	697009
Histone H4 transcription factor	HINFP	703763

HMG-box transcription factor 1	HBP1	699237
Holliday junction recognition protein	HJURP	718180
Homeodomain interacting protein kinase 1	HIPK1	707856
Homocysteine-inducible, endoplasmic reticulum stress-inducible, ubiquitin-like domain member 1	HERPUD1	703210
Hyaluronan and proteoglycan link protein 3	HAPLN3	698880
Hyaluronoglucosaminidase 2	HYAL2	702484
Hydroxyacyl-coa dehydrogenase/3-ketoacyl-coa thiolase /enoyl-coa hydratase (trifunctional protein), alpha subunit	HADHA	695975
Hydroxysteroid (17-beta) dehydrogenase 10	HSD17B10	700018
Hydroxysteroid (17-beta) dehydrogenase 8	HSD17B8	718119
Hyperpolarization activated cyclic nucleotide gated potassium channel 3	HCN3	717719
Hypocretin (orexin) neuropeptide precursor	HCRT	709564
Hypoxia up-regulated 1	HYOU1	707715
IKAROS family zinc finger 5	IKZF5	716950
ILK associated serine/threonine phosphatase	ILKAP	706334
Immunoglobulin superfamily member 10	IGSF10	709661
IMP (inosine 5'-monophosphate) dehydrogenase 1	IMPDH1	701039
IMP3, U3 small nucleolar ribonucleoprotein	IMP3	706202
Importin 8	IPO8	693514
Increased sodium tolerance 1 homolog (yeast)	IST1	707245
Inhibin alpha	INHA	574379
Inhibitor of DNA binding 1, dominant negative helix-loop-helix protein	ID1	713160
Inhibitor of growth family member 2	ING2	701839
Inhibitor of growth family member 4	ING4	722073
Inhibitor of kappa light polypeptide gene enhancer in B-cells, kinase beta	IKBKB	704683
INO80 complex subunit C	INO80C	708819
Inosine triphosphatase	ITPA	717257
Inositol hexakisphosphate kinase 1	IP6K1	705576
Inositol monophosphatase domain containing 1	IMPAD1	696893
Inositol polyphosphate-1-phosphatase	INPP1	703301
Inositol(myo)-1(or 4)-monophosphatase 2	IMPA2	704320
Insulin like 3	INSL3	100533192
Insulin like growth factor binding protein 3	IGFBP3	696868
Insulin like growth factor binding protein 5	IGFBP5	696339
Insulin like growth factor binding protein 7	IGFBP7	693564
Integral membrane protein 2C	ITM2C	711245
Integrator complex subunit 10	INTS10	705240
Integrator complex subunit 12	INTS12	694344
Integrator complex subunit 2	INTS2	712351
Integrator complex subunit 4	INTS4	699466
Integrator complex subunit 8	INTS8	700255
Integrin alpha FG-GAP repeat containing 1	ITFG1	716435
Integrin linked kinase	ILK	709944

Integrin subunit alpha 4	ITGA4	704745
Integrin subunit beta 7	ITGB7	699405
Interferon induced protein with tetratricopeptide repeats 2	IFIT2	695452
Interferon induced, with helicase C domain 1	IFIH1	702024
Interferon regulatory factor 2	IRF2	694347
Interferon, lambda receptor 1	IFNLR1	711625
Interferon-related developmental regulator 2	IFRD2	702959
Interleukin 17 receptor A	IL17RA	709005
Interleukin 20 receptor subunit beta	IL20RB	716769
Interleukin enhancer binding factor 3	ILF3	713427
Intraflagellar transport 20	IFT20	715773
Intraflagellar transport 22	IFT22	714551
Intraflagellar transport 27	IFT27	697032
Intraflagellar transport 46	IFT46	700582
Intraflagellar transport 57	IFT57	705088
Intraflagellar transport 74	IFT74	707561
Intraflagellar transport 80	IFT80	705146
IQ motif and Sec7 domain 1	IQSEC1	693922
IQ motif containing B1	IQCB1	715032
IQ motif containing K	IQCK	695417
IQ motif containing with AAA domain 1	IQCA1	694173
Iron-sulfur cluster assembly 2	ISCA2	700004
Iron-sulfur cluster assembly enzyme	ISCU	705669
Iroquois homeobox 6	IRX6	698232
Isocitrate dehydrogenase 3 (NAD+) alpha	IDH3A	677715
Isocitrate dehydrogenase 3 (NAD+) gamma	IDH3G	698558
Isoleucyl-trna synthetase	IARS	677705
IWS1 homolog (S. Cerevisiae)	IWS1	699205
Izumo sperm-egg fusion 1	IZUMO1	718234
JNK1/MAPK8-associated membrane protein	JKAMP	702307
Jumonji domain containing 1C	JMJD1C	697630
Kallikrein related peptidase 8	KLK8	719488
Karyopherin alpha 4 (importin alpha 3)	KPNA4	702486
KDEL endoplasmic reticulum protein retention receptor 3	KDELR3	700810
KDEL motif containing 1	KDELC1	702156
Kelch domain containing 4	KLHDC4	695768
Kelch domain containing 9	KLHDC9	719863
Kelch like family member 3	KLHL3	713123
Kelch like family member 32	KLHL32	709276
Kelch like family member 5	KLHL5	698740
Kelch repeat and BTB (POZ) domain containing 4	KBTBD4	711452
Keratin associated protein 12-4	KRTAP12-4	712284
Keratin associated protein 19-3	KRTAP19-3	703677
KIAA0226-like ortholog	KIAA0226L	703875
KIAA0907 ortholog	KIAA0907	718005
KIAA0922 ortholog	KIAA0922	696761
KIAA1024 ortholog	KIAA1024	712078
KIAA1033 ortholog	KIAA1033	701501

KIAA1143 ortholog	KIAA1143	714979
KIAA1958 ortholog	KIAA1958	707028
KIAA2013 ortholog	KIAA2013	722762
Killer cell lectin-like receptor subfamily F, member 1	KLRF1	574389
Kin17 DNA and RNA binding protein	KIN	713634
Kinase D-interacting substrate 220kda	KIDINS220	693522
Kinesin family member 2C	KIF2C	705381
Kinesin family member C3	KIFC3	705951
Kinesin heavy chain member 2A	KIF2A	696561
Kinesin light chain 4	KLC4	698356
Kininogen 1	KNG1	707466
Kizuna centrosomal protein	KIZ	700808
KN motif and ankyrin repeat domains 1	KANK1	697569
Kruppel-like factor 10	KLF10	693458
Kruppel-like factor 11	KLF11	702323
Kxd1 motif containing 1	KXD1	720235
L-2-hydroxyglutarate dehydrogenase	L2HGDH	705721
La ribonucleoprotein domain family member 7	LARP7	703731
Lactate dehydrogenase B	LDHB	706110
Lamin B receptor	LBR	700801
Late cornified envelope 4A	LCE4A	100423936
Late endosomal/lysosomal adaptor, MAPK and MTOR activator 1	LAMTOR1	718249
Late endosomal/lysosomal adaptor, MAPK and MTOR activator 3	LAMTOR3	709133
Latexin	LXN	703996
LCK proto-oncogene, Src family tyrosine kinase	LCK	717704
LDL receptor related protein 1	LRP1	710965
Lectin, galactoside-binding, soluble, 14	LGALS14	698227
Lectin, mannose-binding, 1	LMAN1	697449
Leucine rich repeat and coiled-coil centrosomal protein 1	LRRCC1	707964
Leucine rich repeat containing 14	LRRC14	703587
Leucine rich repeat containing 20	LRRC20	710594
Leucine rich repeat containing 40	LRRC40	702565
Leucine rich repeat containing 42	LRRC42	714839
Leucine rich repeat protein 1	LRR1	706658
Leucine zipper, down-regulated in cancer 1	LDOC1	696902
Leucine zipper, down-regulated in cancer 1-like	LDOC1L	712760
Leucine-rich repeat containing 8 family member D	LRRC8D	100423128
Leucine-rich repeat LGI family member 4	LGI4	718426
Leucine-rich repeats and WD repeat domain containing 1	LRWD1	715187
Leukocyte immunoglobulin-like receptor, subfamily B (with TM and ITIM domains), member 1	LILRB1	692340
Leukocyte-associated immunoglobulin-like receptor 1	LAIR1	695533
Leupaxin	LPXN	702033
Ligand dependent nuclear receptor interacting factor 1	LRIF1	702445
Ligase III, DNA, ATP-dependent	LIG3	715181
LIM domain containing 2	LIMD2	717889
Limb bud and heart development	LBH	704749

Lin-9 DREAM muvb core complex component	LIN9	699056
Lipase A, lysosomal acid, cholesterol esterase	LIPA	695240
Lipid droplet associated hydrolase	LDAH	717510
Lipocalin 1	LCN1	711974
Lipocalin 6	LCN6	574148
Lipoma HMGIC fusion partner-like 4	LHFPL4	700973
LSM10, U7 small nuclear RNA associated	LSM10	713277
LSM14A mrna processing body assembly factor	LSM14A	705085
LSM6 homolog, U6 small nuclear RNA and mrna degradation associated	LSM6	703226
LUC7-like 3 pre-mrna splicing factor	LUC7L3	703662
Lymphocyte antigen 6 complex, locus G6C	LY6G6C	716220
Lymphoid enhancer-binding factor 1	LEF1	695776
Lymphotoxin alpha	LTA	715425
Lysine (K)-specific demethylase 1A	KDM1A	718609
Lysine (K)-specific methyltransferase 5B	KMT5B	710481
Lysine-rich nucleolar protein 1	KNOP1	695144
Lysophosphatidic acid receptor 6	LPAR6	705081
Lysosomal protein transmembrane 4 alpha	LAPTM4A	701298
Lysyl oxidase like 3	LOXL3	709834
Lysyl-trna synthetase	KARS	714516
MACRO domain containing 1	MACROD1	717961
Macrophage erythroblast attacher	MAEA	702015
MAD2L1 binding protein	MAD2L1BP	701099
MAGE family member D1	MAGED1	696658
MAGE family member F1	MAGEF1	701676
MAGE family member H1	MAGEH1	703812
Major facilitator superfamily domain containing 5	MFSD5	702021
Major histocompatibility complex, class II, DM beta	MAMU-DMB	100429856
Malate dehydrogenase 1	MDH1	694703
Male-specific lethal 3 homolog (Drosophila)	MSL3	720836
Malonyl-coa-acyl carrier protein transacylase	MCAT	711556
Mannose phosphate isomerase	MPI	722129
Mannosyl (alpha-1,3-)-glycoprotein beta-1,4-N-acetylglucosaminyl transferase, isozyme B	MGAT4B	705006
Mannosyl (alpha-1,6-)-glycoprotein beta-1,2-N-acetylglucosaminyl transferase	MGAT2	706426
Mannosyl-oligosaccharide glucosidase	MOGS	708913
MANSC domain containing 1	MANSC1	696667
MARCKS-like 1	MARCKSL1	100428616
Mastermind like transcriptional coactivator 1	MAML1	715047
Matrin 3	MATR3	100568448
Mckusick-Kaufman syndrome	MKKS	718547
Mdm1 nuclear protein	MDM1	718062
MDM2 binding protein	MTBP	703121
Mediator complex subunit 11	MED11	709561
Mediator complex subunit 13-like	MED13L	713867
Mediator complex subunit 19	MED19	704421

Mediator complex subunit 21	MED21	710699
Mediator complex subunit 23	MED23	714629
Mediator complex subunit 6	MED6	693320
Mediator complex subunit 8	MED8	700676
Meiosis 1 associated protein	M1AP	710210
Meiosis specific nuclear structural 1	MNS1	699377
Membrane frizzled-related protein	MFRP	704965
Membrane protein, palmitoylated 1	MPP1	702092
Meningioma expressed antigen 5 (hyaluronidase)	MGEA5	712370
Mesoderm development candidate 1	MESDC1	713059
Mesoderm induction early response 1, family member 2	MIER2	701450
Mesoderm specific transcript	MEST	703327
MET proto-oncogene, receptor tyrosine kinase	MET	704562
Metadherin	MTDH	702410
Metal response element binding transcription factor 2	MTF2	707104
Metallo-beta-lactamase domain containing 2	MBLAC2	695437
Metastasis associated 1 family member 2	MTA2	718772
Metastasis associated 1 family member 3	MTA3	712967
Methionine sulfoxide reductase A	MSRA	698628
Methionine sulfoxide reductase B1	MSRB1	693358
Methionyl aminopeptidase 1	METAP1	710537
Methionyl-trna synthetase	MARS	714744
Methyl-cpg binding domain 4 DNA glycosylase	MBD4	720557
Methylcrotonoyl-coa carboxylase 1	MCCC1	708258
Methylenetetrahydrofolate dehydrogenase (NADP+ dependent) 1, methenyltetrahydrofolate cyclohydrolase, formyltetrahydrofolate synthetase	MTHFD1	707059
Methylmalonic aciduria (cobalamin deficiency) cblb type	MMAB	708973
Methyltransferase like 1	METTL1	715796
Methyltransferase like 13	METTL13	704943
Methyltransferase like 18	METTL18	701890
Mevalonate kinase	MVK	707645
Mex-3 RNA binding family member B	MEX3B	713441
Microfibrillar associated protein 1	MFAP1	711111
Microsomal glutathione S-transferase 2	MGST2	697983
Microtubule associated protein 1S	MAP1S	719196
Microtubule associated protein 4	MAP4	100423616
Microtubule associated protein RP/EB family member 1	MAPRE1	711404
Midline 1	MID1	709683
MIF4G domain containing	MIF4GD	706005
Minichromosome maintenance complex component 3	MCM3	708320
Minichromosome maintenance complex component 3 associated protein	MCM3AP	721810
Minichromosome maintenance complex component 5	MCM5	717548
Mitochondrial assembly of ribosomal large subunit 1	MALSU1	704884
Mitochondrial carrier 1	MTCH1	719313
Mitochondrial E3 ubiquitin protein ligase 1	MUL1	705429
Mitochondrial fission regulator 1	MTFR1	711143

Mitochondrial fission regulator 1-like	MTFR1L	713213
Mitochondrial genome maintenance exonuclease 1	MGME1	696467
Mitochondrial intermediate peptidase	MIPEP	707131
Mitochondrial poly(A) polymerase	MTPAP	694491
Mitochondrial pyruvate carrier 1	MPC1	716864
Mitochondrial ribosomal protein L11	MRPL11	714094
Mitochondrial ribosomal protein L13	MRPL13	702994
Mitochondrial ribosomal protein L16	MRPL16	698831
Mitochondrial ribosomal protein L19	MRPL19	711081
Mitochondrial ribosomal protein L20	MRPL20	701533
Mitochondrial ribosomal protein L22	MRPL22	714920
Mitochondrial ribosomal protein L24	MRPL24	718640
Mitochondrial ribosomal protein L39	MRPL39	708631
Mitochondrial ribosomal protein L41	MRPL41	702768
Mitochondrial ribosomal protein L42	MRPL42	715676
Mitochondrial ribosomal protein L46	MRPL46	697872
Mitochondrial ribosomal protein L50	MRPL50	713923
Mitochondrial ribosomal protein L51	MRPL51	713036
Mitochondrial ribosomal protein L55	MRPL55	695962
Mitochondrial ribosomal protein S11	MRPS11	697743
Mitochondrial ribosomal protein S17	MRPS17	703678
Mitochondrial ribosomal protein S21	MRPS21	706805
Mitochondrial ribosomal protein S22	MRPS22	715845
Mitochondrial ribosomal protein S33	MRPS33	693681
Mitochondrial ribosomal protein S6	MRPS6	106997264
Mitochondrial transcription termination factor 2	MTERF2	703925
Mitochondrial transcription termination factor 3	MTERF3	701366
Mitochondrial translational initiation factor 2	MTIF2	717042
Mitochondrial trna translation optimization 1	MTO1	717688
Mitogen-activated protein kinase 1	MAPK1	698569
Mitogen-activated protein kinase 7	MAPK7	702837
Mitogen-activated protein kinase associated protein 1	MAPKAP1	702599
Mitogen-activated protein kinase kinase 1	MAP2K1	710415
Mitogen-activated protein kinase kinase 4	MAP2K4	718155
Mitogen-activated protein kinase kinase 5	MAP2K5	711672
Mitogen-activated protein kinase kinase kinase 14	MAP3K14	716258
Mitogen-activated protein kinase kinase kinase 3	MAP3K3	717866
Mitogen-activated protein kinase kinase kinase 4	MAP3K4	710360
Mitogen-activated protein kinase kinase kinase 6	MAP3K6	715911
Mitogen-activated protein kinase kinase kinase kinase 1	MAP4K1	694259
Mitogen-activated protein kinase kinase kinase kinase 5	MAP4K5	706204
Mitogen-activated protein kinase-activated protein kinase 2	MAPKAPK2	695044
Mitogen-activated protein kinase-activated protein kinase 5	MAPKAPK5	713521
Mitotic spindle organizing protein 2B	MZT2B	701787
MNAT CDK-activating kinase assembly factor 1	MNAT1	703905
MON1 homolog B, secretory trafficking associated	MON1B	715104
Monoamine oxidase B	MAOB	708468
Monocyte to macrophage differentiation-associated	MMD	706723

MORC family CW-type zinc finger 4	MORC4	701136
Morf4 family associated protein 1-like 1	MRFAP1L1	710411
MORN repeat containing 2	MORN2	106992912
Mortality factor 4 like 1	MORF4L1	711357
Motilin	MLN	574099
M-phase phosphoprotein 6	MPHOSPH6	714335
M-phase specific PLK1 interacting protein	MPLKIP	703092
MRT4 homolog, ribosome maturation factor	MRT04	702926
Msh homeobox 2	MSX2	694227
Muscleblind like splicing regulator 1	MBNL1	708735
Mutl homolog 1	MLH1	698782
Muty DNA glycosylase	MUTYH	705651
Myb/SANT-like DNA-binding domain containing 2	MSANTD2	712347
MYC associated factor X	MAX	708228
Myelin protein zero-like 2	MPZL2	699330
Myeloid cell leukemia 1	MCL1	707539
Myeloid/lymphoid or mixed-lineage leukemia; translocated to, 6	MLLT6	694045
Myoferlin	MYOF	700922
Myoneurin	MYNN	698094
Myosin IF	MYO1F	712101
Myosin light chain 4	MYL4	717354
Myosin, light chain 12A, regulatory, non-sarcomeric	MYL12A	695077
Myotrophin	MTPN	708941
Myotubularin 1	MTM1	703131
Myotubularin related protein 2	MTMR2	699703
Myotubularin related protein 4	MTMR4	714621
Myotubularin related protein 6	MTMR6	709118
Myotubularin related protein 8	MTMR8	708037
Myristoylated alanine-rich protein kinase C substrate	MARCKS	694077
MYST/Esa1-associated factor 6	MEAF6	713666
N(alpha)-acetyltransferase 35, natc auxiliary subunit	NAA35	710122
N(alpha)-acetyltransferase 50, nate catalytic subunit	NAA50	709764
N(alpha)-acetyltransferase 60, natf catalytic subunit	NAA60	703207
N-acetylglucosamine kinase	NAGK	703976
N-acetylglucosamine-1-phosphate transferase, gamma subunit	GNPTG	722441
NAD(P) dependent steroid dehydrogenase-like	NSDHL	693333
NAD(P)H dehydrogenase, quinone 2	NQO2	707675
NADH:ubiquinone oxidoreductase complex assembly factor 1	NDUFAF1	710275
NADH:ubiquinone oxidoreductase complex assembly factor 2	NDUFAF2	693441
NADH:ubiquinone oxidoreductase complex assembly factor 4	NDUFAF4	705102
NADH:ubiquinone oxidoreductase complex assembly factor 6	NDUFAF6	700515
NADH:ubiquinone oxidoreductase complex assembly factor 7	NDUFAF7	709473
NADH:ubiquinone oxidoreductase core subunit S2	NDUFS2	719935
NADH:ubiquinone oxidoreductase core subunit S3	NDUFS3	713040
NADH:ubiquinone oxidoreductase subunit A1	NDUFA1	694635
NADH:ubiquinone oxidoreductase subunit A12	NDUFA12	711970
NADH:ubiquinone oxidoreductase subunit A8	NDUFA8	698706
NADH:ubiquinone oxidoreductase subunit AB1	NDUFAB1	700718

NADH:ubiquinone oxidoreductase subunit B10	NDUFB10	693482
NADH:ubiquinone oxidoreductase subunit B2	NDUFB2	693431
NADH:ubiquinone oxidoreductase subunit B4	NDUFB4	713428
NADH:ubiquinone oxidoreductase subunit B8	NDUFB8	710521
NADH:ubiquinone oxidoreductase subunit B9	NDUFB9	711387
NADH:ubiquinone oxidoreductase subunit C1	NDUFC1	697242
NADH:ubiquinone oxidoreductase subunit S4	NDUFS4	704137
Nascent polypeptide-associated complex alpha subunit	NACA	713416
Natural killer cell granule protein 7	NKG7	719624
NCK adaptor protein 2	NCK2	713287
NCK interacting protein with SH3 domain	NCKIPSD	709410
NCK-associated protein 1	NCKAP1	711124
NECAP endocytosis associated 2	NECAP2	698687
NEDD8 activating enzyme E1 subunit 1	NAE1	696429
Negative elongation factor complex member C/D	NELFCD	696053
Negative elongation factor complex member E	NELFE	716913
Negative regulator of ubiquitin-like proteins 1	NUB1	715231
Nerve growth factor receptor (TNFRSF16) associated protein 1	NGFRAP1	100428976
Neural precursor cell expressed, developmentally down-regulated 1	NEDD1	713673
Neurexophilin and PC-esterase domain family member 3	NXPE3	702612
Neurologin 2	NLGN2	574368
Neuronal pentraxin I	NPTX1	718259
Neuron-derived neurotrophic factor	NDNF	706304
Neuropeptide FF-amide peptide precursor	NPFF	703412
Neuropilin 1	NRP1	697755
Neuroplastin	NPTN	699627
NGFI-A binding protein 1	NAB1	693274
NGFI-A binding protein 2 (EGR1 binding protein 2)	NAB2	714209
N-glycanase 1	NGLY1	700842
NHL repeat containing 2	NHLRC2	698009
NHP2 ribonucleoprotein	NHP2	701950
Nicotinamide nucleotide transhydrogenase	NNT	701110
Niemann-Pick disease, type C2	NPC2	699881
NIMA-related kinase 1	NEK1	694345
NIN1/RPN12 binding protein 1 homolog	NOB1	705344
Ninein	NIN	709532
Ninjurin 1	NINJ1	717218
Nitric oxide associated 1	NOA1	693437
NMD3 ribosome export adaptor	NMD3	701677
NME/NM23 nucleoside diphosphate kinase 2	NME2	100533960
N-myc and STAT interactor	NMI	694554
Non-POU domain containing, octamer-binding	NONO	697263
Non-SMC condensin II complex subunit D3	NCAPD3	700276
Non-SMC condensin II complex subunit H2	NCAPH2	716120
NOP16 nucleolar protein	NOP16	696768
NOP2/Sun RNA methyltransferase family member 5	NSUN5	716219
NOP58 ribonucleoprotein	NOP58	703859
NOP9 nucleolar protein	NOP9	715969

NPR2-like, GATOR1 complex subunit	NPRL2	701924
NRDE-2, necessary for RNA interference, domain containing	NRDE2	695676
NSA2, ribosome biogenesis homolog	NSA2	704670
NSE4 homolog A, SMC5-SMC6 complex component	NSMCE4A	705375
NSFL1 (p97) cofactor (p47)	NSFL1C	715743
N-terminal Xaa-Pro-Lys N-methyltransferase 1	NTMT1	716763
Nth-like DNA glycosylase 1	NTHL1	694848
Nuclear casein kinase and cyclin-dependent kinase substrate 1	NUCKS1	697298
Nuclear envelope integral membrane protein 1	NEMP1	710700
Nuclear factor of kappa light polypeptide gene enhancer in B-cells 1	NFKB1	710324
Nuclear factor, erythroid 2 like 1	NFE2L1	695404
Nuclear factor, erythroid 2 like 2	NFE2L2	707606
Nuclear fragile X mental retardation protein interacting protein 2	NUFIP2	711330
Nuclear receptor coactivator 4	NCOA4	709509
Nuclear receptor coactivator 6	NCOA6	706903
Nuclear receptor subfamily 1 group I member 2	NR1I2	574226
Nuclear receptor subfamily 2 group F member 2	NR2F2	707483
Nuclear RNA export factor 1	NXF1	718420
Nuclear RNA export factor 3	NXF3	695351
Nuclear transcription factor Y subunit gamma	NFYC	696290
Nuclear transport factor 2-like export factor 1	NXT1	711846
Nuclear transport factor 2-like export factor 2	NXT2	704593
Nucleobindin 2	NUCB2	697084
Nucleolar protein 10	NOL10	695849
Nucleolar protein 8	NOL8	705799
Nucleolar protein interacting with the FHA domain of MKI67	NIFK	697198
Nucleolin	NCL	720965
Nucleophosmin/nucleoplasmin 3	NPM3	712300
Nucleoporin 107kda	NUP107	718214
Nucleoporin 205kda	NUP205	708216
Nucleoporin 35kda	NUP35	706497
Nucleoporin 37kda	NUP37	697933
Nucleoporin 50kda	NUP50	713282
Nucleoporin 85kda	NUP85	705628
Nucleoporin 88kda	NUP88	711734
Nucleosome assembly protein 1-like 5	NAP1L5	703223
Nude neurodevelopment protein 1	NDE1	717754
Nudix hydrolase 1	NUDT1	713078
Nudix hydrolase 13	NUDT13	707796
Nudix hydrolase 22	NUDT22	717864
Nudix hydrolase 5	NUDT5	694368
O-6-methylguanine-DNA methyltransferase	MGMT	698134
O-acyl-ADP-ribose deacylase 1	OARD1	719685
Oculocerebrorenal syndrome of Lowe	OCRL	702345
Olfactomedin 2	OLFM2	711336
Olfactomedin like 2B	OLFML2B	720062
Olfactomedin like 3	OLFML3	707969
Olfactory receptor, family 2, subfamily AG, member 2	OR2AG2	709556

Oligonucleotide/oligosaccharide-binding fold containing 1	OBFC1	714968
Optic atrophy 3 (autosomal recessive, with chorea and spastic paraplegia)	OPA3	714806
Oral-facial-digital syndrome 1	OFD1	711677
Origin recognition complex subunit 1	ORC1	713271
Origin recognition complex subunit 3	ORC3	700773
Origin recognition complex subunit 5	ORC5	696683
ORMDL sphingolipid biosynthesis regulator 2	ORMDL2	710296
ORMDL sphingolipid biosynthesis regulator 3	ORMDL3	699154
Ornithine aminotransferase	OAT	693970
Ornithine decarboxylase antizyme 1	OAZ1	721477
O-sialoglycoprotein endopeptidase	OSGEP	702512
Oxysterol binding protein	OSBP	699325
Oxysterol binding protein like 8	OSBPL8	693338
P450 (cytochrome) oxidoreductase	POR	715888
PAN2 poly(A) specific ribonuclease subunit	PAN2	712478
Pancreatic polypeptide	PPY	713988
Pantothenate kinase 1	PANK1	696041
Pantothenate kinase 4	PANK4	694804
PAP associated domain containing 7	PAPD7	713853
Par-3 family cell polarity regulator	PARD3	706472
Paraoxonase 2	PON2	699107
Paraspeckle component 1	PSPC1	705080
Parkinson protein 7	PARK7	708377
Paternally expressed 3	PEG3	707825
PAX3 and PAX7 binding protein 1	PAXBP1	700489
PAXIP1 associated glutamate-rich protein 1	PAGR1	706839
PC-esterase domain containing 1A	PCED1A	716956
PDZ domain containing 4	PDZD4	697387
PDZ domain containing ring finger 3	PDZRN3	709901
Peptidase (mitochondrial processing) alpha	PMPCA	721742
Peptide deformylase (mitochondrial)	PDF	100427224
Peptidoglycan recognition protein 1	PGLYRP1	718480
Peptidylprolyl isomerase domain and WD repeat containing 1	PPWD1	696267
Peptidylprolyl isomerase E (cyclophilin E)	PPIE	716340
Peptidylprolyl isomerase G (cyclophilin G)	PPIG	706262
Peptidylprolyl isomerase H (cyclophilin H)	PPIH	697669
Peptidylprolyl isomerase like 3	PPIL3	700456
Periaxin	PRX	702329
Peroxiredoxin 2	PRDX2	716665
Peroxiredoxin 3	PRDX3	702882
Peroxiredoxin 4	PRDX4	697635
Peroxiredoxin 6	PRDX6	706486
Peroxisomal biogenesis factor 11 beta	PEX11B	698184
Peroxisomal membrane protein 2	PXMP2	693648
Peroxisome proliferator-activated receptor delta	PPARD	718861
PHD finger protein 1	PHF1	718337
PHD finger protein 2	PHF2	717585

PHD finger protein 23	PHF23	714538
PHD finger protein 6	PHF6	707390
PHD finger protein 7	PHF7	697103
Phenylalanyl-trna synthetase 2, mitochondrial	FARS2	710945
Phosphatase, orphan 1	PHOSPHO1	698959
Phosphatase, orphan 2	PHOSPHO2	100429656
Phosphate cytidylyltransferase 1, choline, alpha	PCYT1A	722105
Phosphatidylglycerophosphate synthase 1	PGS1	710125
Phosphatidylinositol 3-kinase catalytic subunit type 3	PIK3C3	693918
Phosphatidylinositol 4-kinase, catalytic, alpha	PI4KA	698020
Phosphatidylinositol 4-kinase, catalytic, beta	PI4KB	710104
Phosphatidylinositol glycan anchor biosynthesis class A	PIGA	712514
Phosphatidylinositol glycan anchor biosynthesis class C	PIGC	705657
Phosphatidylinositol glycan anchor biosynthesis class F	PIGF	714844
Phosphatidylinositol glycan anchor biosynthesis class G	PIGG	714088
Phosphatidylinositol glycan anchor biosynthesis class H	PIGH	710780
Phosphatidylinositol glycan anchor biosynthesis class S	PIGS	709115
Phosphatidylinositol transfer protein beta	PITPNB	713414
Phosphodiesterase 12	PDE12	703552
Phosphodiesterase 5A	PDE5A	705592
Phosphodiesterase 8A	PDE8A	694750
Phosphohistidine phosphatase 1	PHPT1	721674
Phosphoinositide-3-kinase regulatory subunit 4	PIK3R4	718012
Phospholipase A2 group XVI	PLA2G16	722178
Phospholipase B domain containing 1	PLBD1	698939
Phospholipase C delta 1	PLCD1	696860
Phospholipase D family member 3	PLD3	701083
Phospholipid phosphatase 2	PLPP2	721004
Phospholipid phosphatase 6	PLPP6	695188
Phosphopantothenoylcysteine decarboxylase	PPCDC	704015
Phosphopantothenoylcysteine synthetase	PPCS	697064
Phosphoribosyl pyrophosphate synthetase 1	PRPS1	702529
Phosphoribosyl pyrophosphate synthetase-associated protein 1	PRPSAP1	706625
Phosphoribosylglycinamide formyltransferase, phosphoribosyl glycinamide synthetase, phosphoribosylaminoimidazole synthetase	GART	704926
Phosphorylase kinase, alpha 2 (liver)	PHKA2	694376
Phosphorylase, glycogen, liver	PYGL	706853
PIH1 domain containing 1	PIH1D1	718787
Pirin	PIR	720959
Pituitary tumor-transforming 1	PTTG1	696143
Plakophilin 2	PKP2	100429376
Plasminogen receptor, C-terminal lysine transmembrane protein	PLGRKT	693286
Plastin 3	PLS3	709055
Platelet derived growth factor C	PDGFC	700236
Platelet derived growth factor D	PDGFD	704310
Platelet-derived growth factor beta polypeptide	PDGFB	703173
Pleckstrin homology domain containing A1	PLEKHA1	705731

Pleckstrin homology domain containing A3	PLEKHA3	703417
Pleckstrin homology domain containing O2	PLEKHO2	712677
Pleckstrin homology domain interacting protein	PHIP	716810
Plexin B3	PLXNB3	696903
Pogo transposable element with ZNF domain	POGZ	710634
Poliovirus receptor-related 2 (herpesvirus entry mediator B)	PVRL2	713229
Poly(A) binding protein interacting protein 1	PAIP1	700869
Poly(A) binding protein interacting protein 2	PAIP2	693317
Poly(A) binding protein, cytoplasmic 1	PABPC1	705847
Poly(A) binding protein, cytoplasmic 3	PABPC3	708617
Poly(A) polymerase gamma	PAPOLG	717781
Poly(ADP-ribose) glycohydrolase	PARG	709432
Poly(ADP-ribose) polymerase 2	PARP2	701955
Poly(rc) binding protein 2	PCBP2	703175
Polycomb group ring finger 2	PCGF2	694187
Polycomb group ring finger 6	PCGF6	714508
Polyglutamine binding protein 1	PQBP1	711678
Polyhomeotic homolog 2 (Drosophila)	PHC2	710201
Polymerase (DNA directed), beta	POLB	704801
Polymerase (DNA directed), gamma	POLG	699750
Polymerase (RNA) I polypeptide C	POLR1C	700727
Polymerase (RNA) II (DNA directed) polypeptide C, 33kda	POLR2C	704555
Polymerase (RNA) II (DNA directed) polypeptide F	POLR2F	699566
Polymerase (RNA) II (DNA directed) polypeptide G	POLR2G	718548
Polymerase (RNA) II (DNA directed) polypeptide H	POLR2H	100429040
Polymerase (RNA) II (DNA directed) polypeptide I, 14.5kda	POLR2I	712412
Polymerase (RNA) III (DNA directed) polypeptide B	POLR3B	702711
Polymerase (RNA) III (DNA directed) polypeptide C (62kd)	POLR3C	696943
Polypeptide N-acetylgalactosaminyltransferase 1	GALNT1	708930
Polysaccharide biosynthesis domain containing 1	PBDC1	705125
POP5 homolog, ribonuclease P/MRP subunit	POP5	697559
Post-GPI attachment to proteins 3	PGAP3	697699
Potassium channel tetramerization domain containing 2	KCTD2	700474
Potassium channel tetramerization domain containing 6	KCTD6	701810
Potassium channel tetramerization domain containing 9	KCTD9	711515
Potassium channel, voltage gated eag related subfamily H, member 3	KCNH3	710838
Potassium channel, voltage gated Shaw related subfamily C, member 2	KCNC2	100430904
Potassium voltage-gated channel, modifier subfamily S, member 1	KCNS1	711715
PR domain containing 1, with ZNF domain	PRDM1	696757
PR domain containing 2, with ZNF domain	PRDM2	716295
PR domain containing 4	PRDM4	704529
Praja ring finger 1, E3 ubiquitin protein ligase	PJA1	695038
Pre-B-cell leukemia homeobox 4	PBX4	106994672
Prefoldin subunit 2	PFDN2	719886
Prefoldin subunit 5	PFDN5	702355
Pre-mrna processing factor 40 homolog A	PRPF40A	696668

Presenilin 1	PSEN1	696274
Presenilin enhancer gamma secretase subunit	PSENE1	100429008
Presequence translocase-associated motor 16 homolog (S. Cerevisiae)	PAM16	704987
Prion protein	PRNP	717859
Progesterone receptor membrane component 1	PGRMC1	711792
Programmed cell death 2	PDCD2	696380
Programmed cell death 2-like	PDCD2L	705688
Programmed cell death 5	PDCD5	702277
Programmed cell death 6	PDCD6	723043
Programmed cell death 7	PDCD7	708758
Prohibitin	PHB	699334
Prohibitin 2	PHB2	714693
Proliferating cell nuclear antigen	PCNA	718006
Proline and serine rich 1	PROSER1	696606
Proline rich 15	PRR15	696869
Proline rich 3	PRR3	711699
Proline rich Gla (G-carboxyglutamic acid) 1	PRRG1	696938
Proline/serine-rich coiled-coil 1	PSRC1	698060
Proline-rich coiled-coil 1	PRRC1	704248
Prolyl 4-hydroxylase, alpha polypeptide II	P4HA2	707157
Prolylcarboxypeptidase	PRCP	701305
Propionyl-coa carboxylase beta subunit	PCCB	716964
Prostaglandin D2 receptor 2	PTGDR2	695853
Prostaglandin D2 synthase	PTGDS	707990
Proteasomal ATPase associated factor 1	PAAF1	718755
Proteasome (prosome, macropain) assembly chaperone 1	PSMG1	715758
Proteasome (prosome, macropain) assembly chaperone 2	PSMG2	717110
Proteasome (prosome, macropain) assembly chaperone 3	PSMG3	697590
Proteasome 26S subunit, ATPase 4	PSMC4	699847
Proteasome 26S subunit, non-ATPase 1	PSMD1	711724
Proteasome 26S subunit, non-ATPase 12	PSMD12	718756
Proteasome 26S subunit, non-ATPase 6	PSMD6	698601
Proteasome 26S subunit, non-ATPase 7	PSMD7	705581
Proteasome activator subunit 2	PSME2	715288
Proteasome subunit alpha 2	PSMA2	701683
Proteasome subunit alpha 3	PSMA3	700251
Proteasome subunit alpha 4	PSMA4	710417
Proteasome subunit alpha 5	PSMA5	698435
Proteasome subunit alpha 6	PSMA6	695113
Proteasome subunit beta 10	PSMB10	701088
Proteasome subunit beta 2	PSMB2	712193
Proteasome subunit beta 4	PSMB4	710734
Proteasome subunit beta 7	PSMB7	694567
Proteasome subunit beta 9	PSMB9	716980
Protection of telomeres 1	POT1	696751
Protein disulfide isomerase family A member 5	PDIA5	715226
Protein kinase, AMP-activated, alpha 2 catalytic subunit	PRKAA2	717703

Protein kinase, AMP-activated, beta 1 non-catalytic subunit	PRKAB1	695737
Protein kinase, interferon-inducible double stranded RNA dependent activator	PRKRA	703063
Protein odr-4 homolog	C1H1orf27	713801
Protein O-glucosyltransferase 1	POGLUT1	712357
Protein phosphatase 1 regulatory subunit 12C	PPP1R12C	698538
Protein phosphatase 1 regulatory subunit 15A	PPP1R15A	718350
Protein phosphatase 1 regulatory subunit 35	PPP1R35	712067
Protein phosphatase 2 regulatory subunit B', gamma	PPP2R5C	718894
Protein phosphatase 2 regulatory subunit B'', gamma	PPP2R3C	694616
Protein phosphatase 2, catalytic subunit, beta isozyme	PPP2CB	695118
Protein phosphatase 3, catalytic subunit, gamma isozyme	PPP3CC	708233
Protein phosphatase, Mg ²⁺ /Mn ²⁺ dependent 1A	PPM1A	702987
Protein phosphatase, Mg ²⁺ /Mn ²⁺ dependent 1B	PPM1B	713918
Protein phosphatase, Mg ²⁺ /Mn ²⁺ dependent 1F	PPM1F	698441
Protein phosphatase, Mg ²⁺ /Mn ²⁺ dependent 1G	PPM1G	700695
Protein tyrosine phosphatase type IVA, member 2	PTP4A2	706489
Protein tyrosine phosphatase, non-receptor type 1	PTPN1	702016
Protein tyrosine phosphatase, non-receptor type 12	PTPN12	721538
Protein tyrosine phosphatase, non-receptor type 4 (megakaryocyte)	PTPN4	695516
Protein-L-isoaspartate (D-aspartate) O-methyltransferase	PCMT1	695893
Protoporphyrinogen oxidase	PPOX	719910
Pumilio RNA binding family member 1	PUM1	704848
Pumilio RNA binding family member 2	PUM2	701782
PWP2 periodic tryptophan protein homolog (yeast)	PWP2	722216
Pyruvate dehydrogenase (lipoamide) alpha 1	PDHA1	100423992
Pyruvate dehydrogenase (lipoamide) beta	PDHB	574227
Rab geranylgeranyltransferase, beta subunit	RABGGTB	705421
RAB, member of RAS oncogene family-like 2B	RABL2B	716615
RAB18, member RAS oncogene family	RAB18	708843
RAB23, member RAS oncogene family	RAB23	712860
RAB30, member RAS oncogene family	RAB30	701550
RAB3A interacting protein	RAB3IP	717215
RAB4A, member RAS oncogene family	RAB4A	694288
RAB5A, member RAS oncogene family	RAB5A	697712
RAB5B, member RAS oncogene family	RAB5B	708347
RAB6A, member RAS oncogene family	RAB6A	718717
Rac gtpase activating protein 1	RACGAP1	711887
RAD17 checkpoint clamp loader component	RAD17	700116
RAD50 interactor 1	RINT1	698414
RAD51 associated protein 1	RAD51AP1	710918
RAD51 paralog C	RAD51C	714828
RAD52 motif containing 1	RDM1	716624
RAD9 checkpoint clamp component A	RAD9A	712345
RAD9-HUS1-RAD1 interacting nuclear orphan 1	RHNO1	709008
Raf-1 proto-oncogene, serine/threonine kinase	RAF1	694725
Raftlin, lipid raft linker 1	RFTN1	695142

Ral GEF with PH domain and SH3 binding motif 1	RALGPS1	708253
Ral gtpase activating protein, alpha subunit 1 (catalytic)	RALGAPA1	695674
RALBP1 associated Eps domain containing 2	REPS2	721024
RALY heterogeneous nuclear ribonucleoprotein	RALY	713317
RAN binding protein 10	RANBP10	700911
RAN binding protein 6	RANBP6	715799
RAN guanine nucleotide release factor	RANGRF	717206
Rap guanine nucleotide exchange factor 2	RAPGEF2	704717
RAS and EF-hand domain containing	RASEF	708296
Ras association (ralgds/AF-6) domain family member 4	RASSF4	706096
Ras homolog family member C	RHOC	706034
Ras homolog family member D	RHOD	712969
Ras homolog family member J	RHOJ	705603
RAS p21 protein activator (gtpase activating protein) 1	RASA1	694085
RAS protein activator like 2	RASAL2	718958
RAS-like family 10 member A	RASL10A	714587
Ras-like without CAAX 1	RIT1	717985
Ras-related GTP binding C	RRAGC	715549
RB1 inducible coiled-coil 1	RB1CC1	710330
Rearranged L-myc fusion	RLF	693503
Receptor (G protein-coupled) activity modifying protein 1	RAMP1	574329
Receptor interacting serine/threonine kinase 4	RIPK4	715077
Recq helicase-like	RECQL	705871
Regucalcin	RGN	705733
Regulation of nuclear pre-mrna domain containing 1A	RPRD1A	709217
Regulator of G-protein signaling 7	RGS7	707747
Regulator of microtubule dynamics 1	RMDN1	694237
Renin	REN	574299
Replication protein A3	RPA3	696248
Replication timing regulatory factor 1	RIF1	694817
REST corepressor 3	RCOR3	712037
Retbindin	RTBDN	716766
Reticulon 4	RTN4	619181
Reticulon 4 interacting protein 1	RTN4IP1	697236
Retinoblastoma binding protein 4	RBBP4	708710
Retinoblastoma binding protein 8	RBBP8	677718
Retinoic acid induced 1	RAI1	699215
Retinol dehydrogenase 5 (11-cis/9-cis)	RDH5	709644
Reversion-inducing-cysteine-rich protein with kazal motifs	RECK	694043
RFT1 homolog	RFT1	694586
Rho family gtpase 3	RND3	694168
Rho gtpase activating protein 21	ARHGAP21	706428
Rho guanine nucleotide exchange factor 1	ARHGEF1	722198
Rho guanine nucleotide exchange factor 10	ARHGEF10	722745
Rhomboid 5 homolog 2 (Drosophila)	RHBDF2	707033
Ribonuclease P/MRP 21kda subunit	RPP21	713056
Ribonuclease P/MRP 40kda subunit	RPP40	710505
Ribophorin II	RPN2	708971

Ribosomal protein l10a	RPL10A	718783
Ribosomal protein L17	RPL17	698967
Ribosomal protein L22	RPL22	703050
Ribosomal protein L23	RPL23	694719
Ribosomal protein l23a	RPL23A	710490
Ribosomal protein L24	RPL24	702381
Ribosomal protein L26	RPL26	717378
Ribosomal protein L26 like 1	RPL26L1	703230
Ribosomal protein L27	RPL27	712352
Ribosomal protein l27a	RPL27A	708863
Ribosomal protein L3	RPL3	707176
Ribosomal protein L35	RPL35	693604
Ribosomal protein l35a	RPL35A	714858
Ribosomal protein L4	RPL4	710590
Ribosomal protein l7a	RPL7A	722215
Ribosomal protein L8	RPL8	708535
Ribosomal protein S10	RPS10	718606
Ribosomal protein S11	RPS11	718844
Ribosomal protein S13	RPS13	697513
Ribosomal protein S14	RPS14	710901
Ribosomal protein S16	RPS16	697219
Ribosomal protein S17-like	RPS17L	100425104
Ribosomal protein S19 binding protein 1	RPS19BP1	704079
Ribosomal protein S2	RPS2	693615
Ribosomal protein S21	RPS21	699565
Ribosomal protein S27	RPS27	106992520
Ribosomal protein S27 like	RPS27L	705483
Ribosomal protein s27a	RPS27A	718909
Ribosomal protein S28	RPS28	707133
Ribosomal protein S4, X-linked	RPS4X	699397
Ribosomal protein S5	RPS5	711259
Ribosomal protein S7	RPS7	721900
Ribosomal protein S8	RPS8	703957
Ribosomal protein, large, P0	RPLP0	574363
Ribosomal protein, large, P1	RPLP1	695442
Ribosomal protein, large, P2	RPLP2	700698
Ribosomal RNA adenine dimethylase domain containing 1	RRNAD1	718599
Ribosomal RNA processing 12 homolog	RRP12	705854
Ribosomal RNA processing 8, methyltransferase, homolog (yeast)	RRP8	712011
Ribosome production factor 1 homolog	RPF1	710286
Ring finger and WD repeat domain 2, E3 ubiquitin protein ligase	RFWD2	708802
Ring finger protein (C3H2C3 type) 6	RNF6	721550
Ring finger protein 112	RNF112	703312
Ring finger protein 115	RNF115	697067
Ring finger protein 130	RNF130	715356
Ring finger protein 14	RNF14	705363
Ring finger protein 146	RNF146	712152
Ring finger protein 167	RNF167	710656

Ring finger protein 185	RNF185	718351
Ring finger protein 219	RNF219	697577
Ring finger protein 34, E3 ubiquitin protein ligase	RNF34	700062
Ring finger protein 38	RNF38	693346
RNA 2',3'-cyclic phosphate and 5'-OH ligase	RTCB	717258
RNA binding motif protein 10	RBM10	711791
RNA binding motif protein 15	RBM15	701414
RNA binding motif protein 17	RBM17	712996
RNA binding motif protein 22	RBM22	712713
RNA binding motif protein 39	RBM39	704198
RNA binding motif protein 45	RBM45	702714
RNA binding motif protein 5	RBM5	704114
RNA exonuclease 2	REXO2	695292
RNA polymerase II associated protein 3	RPAP3	703749
RNA pseudouridylylase domain containing 3	RPUSD3	700349
Runt-related transcription factor 1; translocated to, 1 (cyclin D -related)	RUNX1T1	696934
Ruvb-like AAA ATPase 2	RUVBL2	100428792
RWD domain containing 2A	RWDD2A	694598
RWD domain containing 3	RWDD3	709817
SAC1 suppressor of actin mutations 1-like (yeast)	SACM1L	714107
SAGA complex associated factor 29	SGF29	709124
Sarcoglycan epsilon	SGCE	700104
Sarcolemma associated protein	SLMAP	703086
SCY1-like, kinase-like 2	SCYL2	695284
SCY1-like, kinase-like 3	SCYL3	701768
SEC13 homolog, nuclear pore and COPII coat complex component	SEC13	697339
SEC22 homolog A, vesicle trafficking protein	SEC22A	715277
SEC22 homolog C, vesicle trafficking protein	SEC22C	716351
Sec23 homolog B, COPII coat complex component	SEC23B	698440
SEC24 homolog C, COPII coat complex component	SEC24C	714688
SEC31 homolog A, COPII coat complex component	SEC31A	693687
Sec61 translocon alpha 1 subunit	SEC61A1	709787
Sec61 translocon alpha 2 subunit	SEC61A2	100427728
Sec61 translocon beta subunit	SEC61B	717815
Sec61 translocon gamma subunit	SEC61G	716898
SECIS binding protein 2	SECISBP2	697442
Secreted frizzled-related protein 1	SFRP1	702876
Secretion associated, Ras related gtpase 1A	SAR1A	711277
Sel-1 suppressor of lin-12-like 3 (C. Elegans)	SEL1L3	695033
Selenoprotein K	SELK	693421
Selenoprotein M	SELM	718290
Serglycin	SRGN	712299
Serine carboxypeptidase 1	SCPEP1	708197
Serine dehydratase-like	SDSL	714721
Serine incorporator 1	SERINC1	713999
Serine palmitoyltransferase small subunit A	SPTSSA	717580
Serine peptidase inhibitor, Kunitz type, 2	SPINT2	714755

Serine/arginine-rich splicing factor 1	SRSF1	713958
Serine/arginine-rich splicing factor 12	SRSF12	700497
Serine/arginine-rich splicing factor 3	SRSF3	719123
Serine/arginine-rich splicing factor 4	SRSF4	717401
Serine/arginine-rich splicing factor 7	SRSF7	713388
Serine/arginine-rich splicing factor 8	SRSF8	699079
Serine/threonine kinase 3	STK3	707425
Serine/threonine protein kinase 26	STK26	707739
Serine/threonine/tyrosine kinase 1	STYK1	717844
Serpin peptidase inhibitor, clade G (C1 inhibitor), member 1	SERPING1	703928
Serpin peptidase inhibitor, clade I (neuroserpin), member 1	SERPINI1	699483
SERPINE1 mrna binding protein 1	SERBP1	700797
Serum amyloid A like 1	SAAL1	695747
Sestrin 1	SESN1	700232
SET and MYND domain containing 2	SMYD2	709375
SET and MYND domain containing 3	SMYD3	703402
SET domain containing 2	SETD2	711825
SET domain containing 5	SETD5	704174
SET domain containing 9	SETD9	708019
SFI1 centrin binding protein	SFI1	716833
SFT2 domain containing 3	SFT2D3	699830
SGT1 homolog, MIS12 kinetochore complex assembly cochaperone	SUGT1	694046
SH2B adaptor protein 2	SH2B2	714861
SH3 domain binding glutamate-rich protein	SH3BGR	722581
SH3 domain containing ring finger 1	SH3RF1	694082
SH3-domain binding protein 1	SH3BP1	700647
SH3-domain binding protein 4	SH3BP4	693393
SH3-domain GRB2-like endophilin B1	SH3GLB1	712393
SHC (Src homology 2 domain containing) transforming protein 1	SHC1	718982
Shroom family member 3	SHROOM3	699613
Siah E3 ubiquitin protein ligase 1	SIAH1	716629
Sialic acid binding Ig-like lectin 10	SIGLEC10	719648
Sideroflexin 1	SFXN1	695107
Sideroflexin 2	SFXN2	713841
Sideroflexin 4	SFXN4	702765
Signal peptidase complex subunit 1	SPCS1	696426
Signal peptide, CUB domain, EGF-like 2	SCUBE2	708152
Signal recognition particle 68kda	SRP68	705568
Signal sequence receptor, alpha	SSR1	693818
Signal sequence receptor, beta (translocon-associated protein beta)	SSR2	719383
Signal sequence receptor, delta	SSR4	697266
Sin3A associated protein 18kda	SAP18	703078
Sin3A associated protein 25kda	SAP25	106997576
Sin3A associated protein 30kda	SAP30	696519
Single-stranded DNA binding protein 1, mitochondrial	SSBP1	694459
SIVA1, apoptosis-inducing factor	SIVA1	706688
Sjogren syndrome nuclear autoantigen 1	SSNA1	706507

SKI-like proto-oncogene	SKIL	696680
SLIT and NTRK like family member 1	SLITRK1	699217
Smad nuclear interacting protein 1	SNIP1	713733
Small nuclear ribonucleoprotein D2 polypeptide	SNRPD2	715183
Small nuclear ribonucleoprotein polypeptide E	SNRPE	701418
Small nuclear ribonucleoprotein polypeptide G	SNRPG	702586
Small nuclear ribonucleoprotein polypeptides B and B1	SNRPB	716578
Small ubiquitin-like modifier 1	SUMO1	703644
SMG7 nonsense mediated mrna decay factor	SMG7	717603
SMG8 nonsense mediated mrna decay factor	SMG8	711172
Smoothelin	SMTN	716424
SMYD family member 5	SMYD5	705926
SNAP-associated protein	SNAPIN	715546
SNRPN upstream reading frame	SNURF	711028
Sodium channel modifier 1	SCNM1	709922
Sodium channel, non voltage gated 1 beta subunit	SCNN1B	700093
Solute carrier family 16 member 11	SLC16A11	721775
Solute carrier family 18 (vesicular monoamine transporter), member 2	SLC18A2	701133
Solute carrier family 2 (facilitated glucose transporter), member 13	SLC2A13	697822
Solute carrier family 2 (facilitated glucose transporter), member 3	SLC2A3	715915
Solute carrier family 20 (phosphate transporter), member 1	SLC20A1	699462
Solute carrier family 22 (organic anion transporter), member 6	SLC22A6	718377
Solute carrier family 22 member 17	SLC22A17	713765
Solute carrier family 22 member 18	SLC22A18	721230
Solute carrier family 25 (aspartate/glutamate carrier), member 12	SLC25A12	695173
Solute carrier family 25 (carnitine/acylcarnitine translocase), member 20	SLC25A20	709029
Solute carrier family 25 (mitochondrial carrier; adenine nucleotide translocator), member 5	SLC25A5	693502
Solute carrier family 25 (mitochondrial carrier; phosphate carrier), member 24	SLC25A24	694803
Solute carrier family 25 (mitochondrial carrier; phosphate carrier), member 25	SLC25A25	698216
Solute carrier family 25 (S-adenosylmethionine carrier), member 26	SLC25A26	697960
Solute carrier family 25 member 41	SLC25A41	702790
Solute carrier family 25 member 46	SLC25A46	705968
Solute carrier family 26 (anion exchanger), member 8	SLC26A8	719049
Solute carrier family 35 (adenosine 3'-phospho 5'-phosphosulfate transporter), member B3	SLC35B3	698416
Solute carrier family 35 (UDP-galactose transporter), member A2	SLC35A2	711587
Solute carrier family 35 (UDP-glca/UDP-galnac transporter), member D1	SLC35D1	700175
Solute carrier family 35 member B1	SLC35B1	699953

Solute carrier family 38 member 1	SLC38A1	702135
Solute carrier family 38 member 6	SLC38A6	704017
Solute carrier family 39 (zinc transporter), member 13	SLC39A13	713420
Solute carrier family 4 (anion exchanger), member 1, adaptor protein	SLC4A1AP	701783
Solute carrier family 4 (anion exchanger), member 2	SLC4A2	713966
Solute carrier family 4, sodium borate transporter, member 11	SLC4A11	718393
Solute carrier family 41 member 3	SLC41A3	716921
Solute carrier family 44 member 3	SLC44A3	714768
Solute carrier family 44 member 4	SLC44A4	715779
Solute carrier family 6 (neurotransmitter transporter), member 8	SLC6A8	698307
Solute carrier family 7 (amino acid transporter light chain, L system), member 8	SLC7A8	713511
Solute carrier family 9, subfamily A (NHE3, cation proton antiporter 3), member 3 regulator 2	SLC9A3R2	694658
Solute carrier organic anion transporter family member 2B1	SLCO2B1	694829
SON DNA binding protein	SON	704712
Sorting nexin 1	SNX1	706544
Sorting nexin 11	SNX11	696913
Sorting nexin 13	SNX13	714019
Sorting nexin 14	SNX14	696632
Sorting nexin 3	SNX3	700989
Sorting nexin 33	SNX33	706309
SOS Ras/Rho guanine nucleotide exchange factor 2	SOS2	705601
SP110 nuclear body protein	SP110	714244
Sp2 transcription factor	SP2	694834
Sp3 transcription factor	SP3	699901
SPARC like 1	SPARCL1	701468
Spastic paraplegia 11 (autosomal recessive)	SPG11	712221
Spastic paraplegia 21 (autosomal recessive, Mast syndrome)	SPG21	712815
Spectrin, beta, non-erythrocytic 1	SPTBN1	716794
Spen family transcriptional repressor	SPEN	696205
Sperm acrosome associated 1	SPACA1	699611
Sperm antigen with calponin homology and coiled-coil domains 1-like	SPECC1L	707641
Sperm associated antigen 5	SPAG5	709400
Sperm flagellar 1	SPEF1	717547
Spermatid perinuclear RNA binding protein	STRBP	695402
Spermatogenesis associated 2-like	SPATA2L	699974
Spermatogenesis associated 5-like 1	SPATA5L1	713376
Spermatogenesis associated 7	SPATA7	693836
Spermatogenesis associated, serine rich 2 like	SPATS2L	699458
Spermidine/spermine N1-acetyltransferase 1	SAT1	697884
Spermine synthase	SMS	698179
Sphingomyelin phosphodiesterase 2	SMPD2	698865
Splicing factor 3a subunit 2	SF3A2	721469
Splicing factor 3b subunit 5	SF3B5	699863

Splicing factor 3b, subunit 1, 155kda	SF3B1	697773
Splicing factor 3b, subunit 4, 49kda	SF3B4	705655
Split hand/foot malformation (ectrodactyly) type 1	SHFM1	698349
SPRY domain containing 4	SPRYD4	713037
SPT4 homolog, DSIF elongation factor subunit	SUPT4H1	710214
Squamous cell carcinoma antigen recognized by T-cells 3	SART3	705552
Src-related kinase lacking C-terminal regulatory tyrosine and N-terminal myristylation sites	SRMS	719587
SRP receptor alpha subunit	SRPRA	714215
SR-related CTD-associated factor 11	SCAF11	701894
SRSF protein kinase 1	SRPK1	719039
SRY-box 11	SOX11	707983
SRY-box 13	SOX13	700802
ST3 beta-galactoside alpha-2,3-sialyltransferase 4	ST3GAL4	717792
Staphylococcal nuclease and tudor domain containing 1	SND1	699542
Star related lipid transfer domain containing 3	STARD3	697212
Star related lipid transfer domain containing 5	STARD5	713308
STARD3 N-terminal like	STARD3NL	705212
Stathmin 1	STMN1	719733
Staufen double-stranded RNA binding protein 1	STAU1	704197
STE20-related kinase adaptor alpha	STRADA	717927
STIP1 homology and U-box containing protein 1, E3 ubiquitin protein ligase	STUB1	697105
Stomatin like 2	STOML2	698458
Storkhead box 2	STOX2	693692
Stratifin	SFN	715055
Strawberry notch homolog 2 (Drosophila)	SBNO2	721186
Striatin interacting protein 1	STRIP1	700799
Stromal cell derived factor 4	SDF4	699804
Stromal cell-derived factor 2	SDF2	716189
Structural maintenance of chromosomes 4	SMC4	702615
Structure specific recognition protein 1	SSRP1	706614
STT3A, subunit of the oligosaccharyltransferase complex (catalytic)	STT3A	717056
SUB1 homolog, transcriptional regulator	SUB1	701045
Succinate dehydrogenase complex assembly factor 2	SDHAF2	693401
Succinate dehydrogenase complex subunit A, flavoprotein (Fp)	SDHA	708018
Succinate dehydrogenase complex subunit B, iron sulfur (Ip)	SDHB	699810
Succinate dehydrogenase complex, subunit D, integral membrane protein	SDHD	711326
Succinate-coa ligase, GDP-forming, beta subunit	SUCLG2	697454
Sulfatase 2	SULF2	715937
Sulfiredoxin 1	SRXN1	714997
SUMO1/sentrin specific peptidase 5	SEN5	710223
SUMO1/sentrin specific peptidase 6	SEN6	716554
SUMO1/sentrin specific peptidase 7	SEN7	701453
SUN domain containing ossification factor	SUCO	705776
Superkiller viralicidic activity 2-like 2 (S. Cerevisiae)	SKIV2L2	706419

Superoxide dismutase 1, soluble	SOD1	574096
Supervillin	SVIL	695267
Suppression of tumorigenicity 13 (colon carcinoma) (Hsp70 interacting protein)	ST13	705664
Suppressor of cytokine signaling 6	SOCS6	704108
Suppressor of fused homolog (Drosophila)	SUFU	713576
Surfactant associated 2	SFTA2	714397
Surfeit 4	SURF4	100429960
SURP and G-patch domain containing 1	SUGP1	719772
Survival motor neuron domain containing 1	SMNDC1	694761
Survival of motor neuron 1, telomeric	SMN1	677703
SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 2	SMARCA2	696973
SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 5	SMARCA5	700614
SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily b, member 1	SMARCB1	699190
SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily e, member 1	SMARCE1	701310
SWT1, RNA endoribonuclease homolog	SWT1	714083
Synaptophysin-like 1	SYPL1	698350
Synaptosome associated protein 47kda	SNAP47	696700
Synaptotagmin VII	SYT7	722368
Syndecan binding protein	SDCBP	698381
Synemin	SYNM	717194
Synovial sarcoma translocation gene on chromosome 18-like 2	SS18L2	716387
Syntaxin 1B	STX1B	714251
Syntaxin binding protein 3	STXBP3	699144
Syntaxin binding protein 6 (amisyn)	STXBP6	715357
Synuclein beta	SNCB	697484
Tafazzin	TAZ	574297
TAM41, mitochondrial translocator assembly and maintenance protein, homolog (S. Cerevisiae)	C3orf31	695998
TAO kinase 2	TAOK2	707777
TAR (HIV-1) RNA binding protein 1	TARBP1	712397
TAR (HIV-1) RNA binding protein 2	TARBP2	703294
Taspase 1	TASP1	694028
Taste 1 receptor member 1	TAS1R1	720987
TATA-box binding protein associated factor 10	TAF10	710022
TATA-box binding protein associated factor 12	TAF12	717135
TATA-box binding protein associated factor 5	TAF5	714558
TATA-box binding protein associated factor 5 like	TAF5L	693770
TATA-box binding protein associated factor 9	TAF9	700239
TATA-box binding protein associated factor, RNA polymerase I, D	TAF1D	696602
Tatd dnase domain containing 1	TATDN1	706095
Tax1 (human T-cell leukemia virus type I) binding protein 1	TAX1BP1	698103
TBC1 domain family member 15	TBC1D15	718743

TBC1 domain family member 25	TBC1D25	710596
TBC1 domain family member 9	TBC1D9	702230
T-box 21	TBX21	694044
T-cell acute lymphocytic leukemia 2	TAL2	712138
TCF3 (E2A) fusion partner (in childhood Leukemia)	TFPT	720296
Teashirt zinc finger homeobox 1	TSHZ1	703018
TELO2 interacting protein 1	TTI1	699930
Telomeric repeat binding factor 2, interacting protein	TERF2IP	712149
Tensin 4	TNS4	701075
TERF1 (TRF1)-interacting nuclear factor 2	TINF2	715812
Testin LIM domain protein	TES	706879
Testis expressed 10	TEX10	714536
Testis expressed 28	TEX28	699141
Testis expressed 30	TEX30	701917
Tetraspanin 3	TSPAN3	708428
Tetraspanin 8	TSPAN8	718622
Tetratricopeptide repeat domain 27	TTC27	707021
Tetratricopeptide repeat domain 7B	TTC7B	696029
Tetratricopeptide repeat domain 9C	TTC9C	718583
TGF-beta activated kinase 1/MAP3K7 binding protein 1	TAB1	703409
TGF-beta activated kinase 1/MAP3K7 binding protein 2	TAB2	696875
THAP domain containing 7	THAP7	696208
Thioredoxin domain containing 11	TXNDC11	711826
Thioredoxin domain containing 12 (endoplasmic reticulum)	TXNDC12	712891
Thioredoxin domain containing 9	TXNDC9	709303
Thioredoxin like 1	TXNL1	695194
Thioredoxin like 4A	TXNL4A	698969
Thiosulfate sulfurtransferase (rhodanese)	TST	698021
THO complex 1	THOC1	697954
THO complex 6	THOC6	700217
Thrombospondin 3	THBS3	717572
THUMP domain containing 2	THUMPD2	712045
Thyroid hormone receptor interactor 11	TRIP11	697489
Thyroid hormone receptor interactor 12	TRIP12	710560
Thyroid hormone receptor interactor 4	TRIP4	707263
TIA1 cytotoxic granule-associated RNA binding protein	TIA1	702366
Titin-cap	TCAP	697327
TM2 domain containing 2	TM2D2	701007
TNF receptor associated factor 2	TRAF2	708391
TNF receptor associated factor 7	TRAF7	695415
TNF receptor-associated protein 1	TRAP1	706234
Tocopherol (alpha) transfer protein-like	TTPAL	712620
Topoisomerase (DNA) II alpha	TOP2A	700707
Topoisomerase (DNA) II beta	TOP2B	677709
Topoisomerase (DNA) II binding protein 1	TOPBP1	719054
Topoisomerase I binding, arginine/serine-rich, E3 ubiquitin protein ligase	TOPORS	703930
Torsin family 1, member A (torsin A)	TOR1A	722520

Torsin family 2, member A	TOR2A	700203
TP53 induced glycolysis regulatory phosphatase	TIGAR	721886
TPX2, microtubule-associated	TPX2	712961
TRAF family member associated NFkB activator	TANK	700942
TRAF3 interacting protein 2	TRAF3IP2	697530
Trafficking protein particle complex 11	TRAPPC11	702066
Trans-2,3-enoyl-coa reductase	TECR	718928
Transaldolase 1	TALDO1	720828
Transcription elongation factor A (SII)-like 7	TCEAL7	695831
Transcription elongation factor A (SII)-like 8	TCEAL8	695496
Transcription elongation factor B (SIII), polypeptide 1 (15kda, elongin C)	TCEB1	698922
Transcription factor A, mitochondrial	TFAM	701368
Transcription factor B1, mitochondrial	TFB1M	701830
Transducin (beta)-like 1 X-linked receptor 1	TBL1XR1	712740
Transducin (beta)-like 3	TBL3	693864
Transducin like enhancer of split 1	TLE1	707336
Transferrin receptor	TFRC	711568
Transformer 2 alpha homolog (Drosophila)	TRA2A	574247
Transformer 2 beta homolog (Drosophila)	TRA2B	574337
Transforming, acidic coiled-coil containing protein 2	TACC2	705497
Transforming, acidic coiled-coil containing protein 3	TACC3	712898
Transient receptor potential cation channel, subfamily M, member 5	TRPM5	705070
Transient receptor potential cation channel, subfamily V, member 4	TRPV4	709605
Translational activator of mitochondrially encoded cytochrome c oxidase I	TACO1	717828
Translocase of inner mitochondrial membrane 17 homolog A (yeast)	TIMM17A	707001
Translocase of inner mitochondrial membrane 17 homolog B (yeast)	TIMM17B	714895
Translocase of inner mitochondrial membrane 44 homolog (yeast)	TIMM44	709800
Translocase of inner mitochondrial membrane 8 homolog B (yeast)	TIMM8B	711249
Translocase of inner mitochondrial membrane domain containing 1	TIMMDC1	712414
Translocase of outer mitochondrial membrane 6 homolog (yeast)	TOMM6	100423264
Translocase of outer mitochondrial membrane 70 homolog A (S. Cerevisiae)	TOMM70A	700347
Translocated promoter region, nuclear basket protein	TPR	713910
Transmembrane 4 L six family member 5	TM4SF5	709844
Transmembrane 6 superfamily member 2	TM6SF2	719756
Transmembrane 9 superfamily member 1	TM9SF1	715472
Transmembrane and ubiquitin-like domain containing 2	TMUB2	714541
Transmembrane p24 trafficking protein 1	TMED1	713618

Transmembrane p24 trafficking protein 3	TMED3	711993
Transmembrane p24 trafficking protein 4	TMED4	699105
Transmembrane p24 trafficking protein 7	TMED7	100533192
Transmembrane phosphoinositide 3-phosphatase and tensin homolog 2	TPTE2	704870
Transmembrane protease, serine 13	TMPRSS13	698586
Transmembrane protein 104	TMEM104	698592
Transmembrane protein 115	TMEM115	702164
Transmembrane protein 125	TMEM125	699920
Transmembrane protein 126A	TMEM126A	702831
Transmembrane protein 126B	TMEM126B	702719
Transmembrane protein 132A	TMEM132A	695291
Transmembrane protein 135	TMEM135	704963
Transmembrane protein 138	TMEM138	693905
Transmembrane protein 141	TMEM141	721687
Transmembrane protein 14A	TMEM14A	708829
Transmembrane protein 14C	TMEM14C	697976
Transmembrane protein 165	TMEM165	696262
Transmembrane protein 168	TMEM168	702972
Transmembrane protein 204	TMEM204	701926
Transmembrane protein 208	TMEM208	697228
Transmembrane protein 216	TMEM216	693655
Transmembrane protein 218	TMEM218	100430360
Transmembrane protein 243	TMEM243	706405
Transmembrane protein 245	TMEM245	710299
Transmembrane protein 254	TMEM254	701130
Transmembrane protein 261	TMEM261	716818
Transmembrane protein 30A	TMEM30A	717907
Transmembrane protein 33	TMEM33	702063
Transmembrane protein 39B	TMEM39B	706700
Transmembrane protein 42	TMEM42	714654
Transmembrane protein 45B	TMEM45B	718735
Transmembrane protein 5	TMEM5	717102
Transmembrane protein 59	TMEM59	714942
Transmembrane protein 94	TMEM94	702374
Transmembrane protein, adipocyte associated 1	TPRA1	707221
Transporter 1, ATP-binding cassette, sub-family B (MDR/TAP)	TAP1	717726
Tribbles pseudokinase 2	TRIB2	710966
Triokinase/FMN cyclase	TKFC	694117
Tripartite motif containing 11	TRIM11	694150
Tripartite motif containing 24	TRIM24	710229
Tripartite motif containing 27	TRIM27	706129
Tripartite motif containing 37	TRIM37	710934
Tripartite motif containing 41	TRIM41	708426
Tripartite motif containing 8	TRIM8	713701
TRK-fused gene	TFG	700972
Trna 5-methylaminomethyl-2-thiouridylate methyltransferase	TRMU	714268
Trna isopentenyltransferase 1	TRIT1	716422

Trna methyltransferase 11 homolog	TRMT11	712712
Trna methyltransferase 11-2 homolog (S. Cerevisiae)	TRMT112	717676
Trna methyltransferase 6	TRMT6	718229
Trna methyltransferase O	TRMO	715609
Trna phosphotransferase 1	TRPT1	717911
Trna splicing endonuclease subunit 15	TSEN15	717481
Tropomodulin 4	TMOD4	709732
Tropomyosin 2 (beta)	TPM2	696604
Tryptase gamma 1	TPSG1	100425752
TSC22 domain family member 1	TSC22D1	701076
TSPY-like 4	TSPYL4	716137
TSSK6 activating co-chaperone	TSACC	719490
Tubulin alpha 1a	TUBA1A	574194
Tubulin folding cofactor C	TBCC	696997
Tubulin folding cofactor E	TBCE	711476
Tubulin, alpha 1b	TUBA1B	709643
Tudor domain containing 3	TDRD3	696228
Tudor domain containing 7	TDRD7	641450
Tumor necrosis factor (ligand) superfamily, member 12	TNFSF12	100551504
Tumor protein D52-like 1	TPD52L1	716568
Tumor protein p53 binding protein 1	TP53BP1	710237
Tumor protein, translationally-controlled 1	TPT1	702155
Tumor suppressing subtransferable candidate 4	TSSC4	705185
Tumor suppressor candidate 3	TUSC3	701123
Twist family bhlh transcription factor 1	TWIST1	574278
Twist family bhlh transcription factor 2	TWIST2	697078
TWIST neighbor	TWISTNB	707781
Twisted gastrulation homolog 1 (Drosophila)	TWSG1	705804
Tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, beta	YWHAB	717788
Tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, eta	YWHAH	717016
Tyrosine hydroxylase	TH	721137
Tyrosine kinase, non-receptor, 1	TNK1	715180
Tyrosyl-DNA phosphodiesterase 2	TDP2	715162
Ubiquilin 1	UBQLN1	713525
Ubiquinol-cytochrome c reductase core protein II	UQCRC2	697967
Ubiquinol-cytochrome c reductase, 6.4kda subunit	UQCR	708396
Ubiquinol-cytochrome c reductase, complex III subunit VII, 9.5kda	UQCRQ	708950
Ubiquitin A-52 residue ribosomal protein fusion product 1	UBA52	720243
Ubiquitin B	UBB	696110
Ubiquitin conjugating enzyme E2 variant 1	UBE2V1	100425552
Ubiquitin conjugating enzyme E2A	UBE2A	693716
Ubiquitin conjugating enzyme E2D 4 (putative)	UBE2D4	707831
Ubiquitin conjugating enzyme E2E 3	UBE2E3	704530
Ubiquitin conjugating enzyme E2F (putative)	UBE2F	695394
Ubiquitin conjugating enzyme E2I	UBE2I	722434

Ubiquitin conjugating enzyme E2O	UBE2O	710529
Ubiquitin C-terminal hydrolase L3	UCHL3	697276
Ubiquitin like 5	UBL5	711015
Ubiquitin like 7	UBL7	702305
Ubiquitin like domain containing CTD phosphatase 1	UBLCP1	694476
Ubiquitin protein ligase E3 component n-recognin 7 (putative)	UBR7	698882
Ubiquitin protein ligase E3B	UBE3B	707324
Ubiquitin related modifier 1	URM1	722618
Ubiquitin specific peptidase 10	USP10	718471
Ubiquitin specific peptidase 13 (isopeptidase T-3)	USP13	708624
Ubiquitin specific peptidase 16	USP16	706403
Ubiquitin specific peptidase 21	USP21	719894
Ubiquitin specific peptidase 25	USP25	716923
Ubiquitin specific peptidase 3	USP3	705973
Ubiquitin specific peptidase 38	USP38	700235
Ubiquitin specific peptidase 39	USP39	696217
Ubiquitin specific peptidase 51	USP51	705861
Ubiquitin specific peptidase 8	USP8	715523
Ubiquitination factor E4B	UBE4B	713348
Ubiquitin-like modifier activating enzyme 2	UBA2	705808
Ubiquitin-like modifier activating enzyme 3	UBA3	696493
Ubiquitin-like with PHD and ring finger domains 1	UHRF1	695531
U-box domain containing 5	UBOX5	717166
UBX domain protein 11	UBXN11	719826
UDP-Gal:betaglcnaac beta 1,4- galactosyltransferase, polypeptide 3	B4GALT3	719920
UDP-glcnaac:betagal beta-1,3-N-acetylglucosaminyltransferase 2	B3GNT2	693396
UDP-glucose pyrophosphorylase 2	UGP2	695178
UDP-N-acetylglucosamine pyrophosphorylase 1	UAP1	720116
Unconventional SNARE in the ER 1 homolog (S. Cerevisiae)	USE1	718905
UPF3 regulator of nonsense transcripts homolog B (yeast)	UPF3B	694247
Up-regulated during skeletal muscle growth 5 homolog (mouse)	USMG5	100428448
Upstream binding protein 1 (LBP-1a)	UBP1	706283
Uranyl-2-sulfotransferase	UST	697355
USP6 N-terminal like	USP6NL	694275
UTP14, U3 small nucleolar ribonucleoprotein, homolog C (yeast)	UTP14C	709657
UTP6 small subunit processome component	UTP6	713361
UV radiation resistance associated	UVRAG	696601
Vac14 homolog (S. Cerevisiae)	VAC14	708741
Vaccinia related kinase 1	VRK1	704798
Vacuolar protein sorting 13 homolog C (S. Cerevisiae)	VPS13C	709080
Vacuolar protein sorting 4 homolog A (S. Cerevisiae)	VPS4A	705277
Vacuolar protein sorting 45 homolog (S. Cerevisiae)	VPS45	706035
Vacuolar protein sorting 72 homolog (S. Cerevisiae)	VPS72	709818
V-akt murine thymoma viral oncogene homolog 3	AKT3	714717
Valosin containing protein lysine (K) methyltransferase	VCPKMT	705487
Valyl-trna synthetase	VARS	715537
Vav guanine nucleotide exchange factor 1	VAV1	100424248
Vav guanine nucleotide exchange factor 3	VAV3	694685

Very low density lipoprotein receptor	VLDLR	574284
Vesicle associated membrane protein 7	VAMP7	704160
Vitronectin	VTN	708499
V-myc avian myelocytomatosis viral oncogene neuroblastoma derived homolog	MYCN	698699
Voltage-dependent anion channel 1	VDAC1	710045
Voltage-dependent anion channel 2	VDAC2	704257
VPS11, CORVET/HOPS core subunit	VPS11	702834
VPS26 retromer complex component B	VPS26B	694566
VPS29 retromer complex component	VPS29	709646
VPS33B interacting protein, apical-basolateral polarity regulator, spe-39 homolog	VIPAS39	706315
VPS8, CORVET complex subunit	VPS8	701567
V-ral simian leukemia viral oncogene homolog A (ras related)	RALA	703440
V-ral simian leukemia viral oncogene homolog B	RALB	695852
WD repeat containing, antisense to TP53	WRAP53	716125
WD repeat domain 11	WDR11	714990
WD repeat domain 12	WDR12	705623
WD repeat domain 19	WDR19	698866
WD repeat domain 20	WDR20	708533
WD repeat domain 26	WDR26	704911
WD repeat domain 3	WDR3	711960
WD repeat domain 35	WDR35	716638
WD repeat domain 4	WDR4	714230
WD repeat domain 47	WDR47	696942
WD repeat domain 53	WDR53	709710
WD repeat domain 6	WDR6	708505
WD repeat domain 61	WDR61	709971
WD repeat domain 70	WDR70	706130
WD repeat domain 74	WDR74	718460
WD repeat domain 75	WDR75	709104
WD repeat domain 77	WDR77	677686
WD repeat, sterile alpha motif and U-box domain containing 1	WDSUB1	699456
WDYHV motif containing 1	WDYHV1	704686
WEE1 G2 checkpoint kinase	WEE1	703760
Werner helicase interacting protein 1	WRNIP1	707250
Williams Beuren syndrome chromosome region 22	WBSCR22	720121
Wilms tumor 1 associated protein	WTAP	702295
Wingless-type MMTV integration site family member 11	WNT11	696845
Wiskott-Aldrich syndrome-like	WASL	696556
WSC domain containing 1	WSCD1	712488
WW domain binding protein 1	WBP1	709202
WW domain binding protein 11	WBP11	699451
WW domain binding protein 2	WBP2	704545
WW domain binding protein 5	WBP5	696661
WW domain containing adaptor with coiled-coil	WAC	715828
WW domain containing E3 ubiquitin protein ligase 2	WWP2	705464
X-box binding protein 1	XBP1	713863

Xeroderma pigmentosum, complementation group A	XPA	715705
X-ray repair complementing defective repair in Chinese hamster cells 6	XRCC6	707975
XRCC6 binding protein 1	XRCC6BP1	712932
Yae1 domain containing 1	YAE1D1	703786
YEATS domain containing 4	YEATS4	718376
Yip1 domain family member 4	YIPF4	706819
Yip1 interacting factor homolog A (S. Cerevisiae)	YIF1A	714486
Yippee like 3	YPEL3	708740
Zinc finger (CCCH type), RNA binding motif and serine/arginine rich 2	ZRSR2	720986
Zinc finger and BTB domain containing 26	ZBTB26	698776
Zinc finger and BTB domain containing 33	ZBTB33	695801
Zinc finger and BTB domain containing 39	ZBTB39	713914
Zinc finger and BTB domain containing 49	ZBTB49	712422
Zinc finger and BTB domain containing 5	ZBTB5	718482
Zinc finger and SCAN domain containing 29	ZSCAN29	710414
Zinc finger and SCAN domain containing 32	ZSCAN32	702733
Zinc finger CCCH-type containing 12A	ZC3H12A	713604
Zinc finger CCCH-type containing 3	ZC3H3	708584
Zinc finger CCCH-type containing 7A	ZC3H7A	711984
Zinc finger protein 140	ZNF140	695171
Zinc finger protein 180	ZNF180	712493
Zinc finger protein 181	ZNF181	106992424
Zinc finger protein 207	ZNF207	100689488
Zinc finger protein 211	ZNF211	100429296
Zinc finger protein 22	ZNF22	706208
Zinc finger protein 221	ZNF221	100423744
Zinc finger protein 239	ZNF239	717737
Zinc finger protein 25	ZNF25	701129
Zinc finger protein 263	ZNF263	702166
Zinc finger protein 280D	ZNF280D	699509
Zinc finger protein 281	ZNF281	709466
Zinc finger protein 322	ZNF322	701098
Zinc finger protein 385A	ZNF385A	705436
Zinc finger protein 410	ZNF410	698124
Zinc finger protein 436	ZNF436	709638
Zinc finger protein 460	ZNF460	710080
Zinc finger protein 462	ZNF462	711489
Zinc finger protein 484	ZNF484	711976
Zinc finger protein 496	ZNF496	709694
Zinc finger protein 521	ZNF521	709169
Zinc finger protein 593	ZNF593	714086
Zinc finger protein 595	ZNF595	716693
Zinc finger protein 608	ZNF608	702182
Zinc finger protein 620	ZNF620	100423712
Zinc finger protein 622	ZNF622	100429384
Zinc finger protein 627	ZNF627	716820

Zinc finger protein 638	ZNF638	704418
Zinc finger protein 646	ZNF646	712774
Zinc finger protein 653	ZNF653	714754
Zinc finger protein 664	ZNF664	710703
Zinc finger protein 684	ZNF684	695691
Zinc finger protein 687	ZNF687	716590
Zinc finger protein 7	ZNF7	715735
Zinc finger protein 777	ZNF777	711987
Zinc finger protein 804B	ZNF804B	704561
Zinc finger protein 92	ZNF92	708683
Zinc finger RNA binding protein	ZFR	696882
Zinc finger with UFM1-specific peptidase domain	ZUFSP	718059
Zinc finger, AN1-type domain 2A	ZFAND2A	100426344
Zinc finger, AN1-type domain 3	ZFAND3	719346
Zinc finger, AN1-type domain 4	ZFAND4	708136
Zinc finger, C3H1-type containing	ZFC3H1	718671
Zinc finger, CCHC domain containing 11	ZCCHC11	713406
Zinc finger, CCHC domain containing 14	ZCCHC14	703833
Zinc finger, CCHC domain containing 17	ZCCHC17	705172
Zinc finger, CCHC domain containing 6	ZCCHC6	693660
Zinc finger, CCHC domain containing 7	ZCCHC7	716658
Zinc finger, CCHC domain containing 8	ZCCHC8	702359
Zinc finger, DHHC-type containing 12	ZDHHC12	722606
Zinc finger, DHHC-type containing 16	ZDHHC16	705982
Zinc finger, matrin-type 2	ZMAT2	697247
Zinc finger, matrin-type 5	ZMAT5	715058
Zinc finger, MYM-type 2	ZMYM2	721255
Zinc finger, MYM-type 3	ZMYM3	697147
Zinc finger, MYND-type containing 11	ZMYND11	708761
Zinc finger, RAN-binding domain containing 2	ZRANB2	703513
Zinc metalloproteinase STE24	ZMPSTE24	693765
Zona pellucida glycoprotein 3 (sperm receptor)	ZP3	719925
Zyxin	ZYX	706407

(2) Expressed in both groups 2a and 2b, not in group 2c

1-acylglycerol-3-phosphate O-acyltransferase 1	AGPAT1	717174
1-acylglycerol-3-phosphate O-acyltransferase 5	AGPAT5	716847
2,4-dienoyl-coa reductase 1, mitochondrial	DECR1	696035
2-phosphoxylose phosphatase 1	PXYLP1	715229
3-hydroxyacyl-coa dehydratase 1	HACD1	700635
3-hydroxyacyl-coa dehydratase 3	HACD3	709590
3-hydroxyanthranilate 3,4-dioxygenase	HAAO	713101
3-hydroxybutyrate dehydrogenase, type 2	BDH2	711108
3-oxoacyl-ACP synthase, mitochondrial	OXSM	703382
3'-phosphoadenosine 5'-phosphosulfate synthase 1	PAPSS1	695099
3'-phosphoadenosine 5'-phosphosulfate synthase 2	PAPSS2	704688

5'-3' exoribonuclease 2	XRN2	700934
5-aminoimidazole-4-carboxamide ribonucleotide formyltransferase /IMP cyclohydrolase	ATIC	694819
5-hydroxymethylcytosine (hmc) binding, ES cell-specific	HMCEs	703524
5-hydroxytryptamine (serotonin) receptor 2B, G protein-coupled	HTR2B	711808
5'-nucleotidase, cytosolic IIIA	NT5C3A	708743
5-phosphohydroxy-L-lysine phospho-lyase	PHYKPL	702302
8-oxoguanine DNA glycosylase	OGG1	700481
Aarf domain containing kinase 1	ADCK1	707060
Aarf domain containing kinase 3	ADCK3	697920
Aarf domain containing kinase 5	ADCK5	100425840
Abhydrolase domain containing 12	ABHD12	705915
Abhydrolase domain containing 15	ABHD15	711493
Abhydrolase domain containing 17A	ABHD17A	709119
Abhydrolase domain containing 8	ABHD8	718980
ABI family member 3	ABI3	698710
Abl-interactor 1	ABI1	707698
Abl-interactor 2	ABI2	704956
Absent in melanoma 1	AIM1	697117
Acetyl-coa acetyltransferase 1	ACAT1	707653
Acetyl-coa acyltransferase 1	ACAA1	696743
Acetyl-coa acyltransferase 2	ACAA2	709350
Acetyl-coa carboxylase alpha	ACACA	714218
Acid sensing ion channel subunit 1	ASIC1	713320
Acid sensing ion channel subunit 2	ASIC2	718204
Acidic nuclear phosphoprotein 32 family member B	ANP32B	715508
Acidic residue methyltransferase 1	ARMT1	704570
Aconitase 1	ACO1	705075
Aconitase 2	ACO2	707441
Actin binding LIM protein 1	ABLIM1	698641
Actin like 7B	ACTL7B	710750
Actin related protein 2/3 complex subunit 1A	ARPC1A	718635
Actin related protein 2/3 complex subunit 2	ARPC2	700536
Actin related protein 2/3 complex subunit 3	ARPC3	709199
Activating signal cointegrator 1 complex subunit 2	ASCC2	715117
Activating transcription factor 4	ATF4	703965
Activating transcription factor 6	ATF6	720056
Activin A receptor type I	ACVR1	697935
Activin A receptor type IIB	ACVR2B	696071
Acylaminoacyl-peptide hydrolase	APEH	705948
Acyl-coa binding domain containing 3	ACBD3	699311
Acyl-coa binding domain containing 4	ACBD4	715963
Acyl-coa binding domain containing 6	ACBD6	716418
Acyl-coa dehydrogenase, C-2 to C-3 short chain	ACADS	698196
Acyl-coa dehydrogenase, C-4 to C-12 straight chain	ACADM	705168
Acyl-coa dehydrogenase, long chain	ACADL	711485
Acyl-coa oxidase 1, palmitoyl	ACOX1	705197
Acyl-coa thioesterase 13	ACOT13	100335136

ADAM metallopeptidase domain 19	ADAM19	715164
ADAM metallopeptidase domain 21	ADAM21	715640
ADAM metallopeptidase domain 32	ADAM32	706797
ADAM metallopeptidase with thrombospondin type 1 motif 14	ADAMTS14	710154
ADAM metallopeptidase with thrombospondin type 1 motif 3	ADAMTS3	705473
ADAM metallopeptidase with thrombospondin type 1 motif 6	ADAMTS6	696021
ADAM metallopeptidase with thrombospondin type 1 motif 9	ADAMTS9	698341
ADAMTS like 2	ADAMTSL2	713492
Adaptor related protein complex 1 associated regulatory protein	APIAR	700734
Adaptor related protein complex 1 sigma 1 subunit	AP1S1	719569
Adaptor related protein complex 2 sigma 1 subunit	AP2S1	716911
Adaptor related protein complex 3, mu 1 subunit	AP3M1	705729
Adaptor related protein complex 3, sigma 1 subunit	AP3S1	696644
Adaptor related protein complex 4, beta 1 subunit	AP4B1	707634
Adaptor related protein complex 4, mu 1 subunit	AP4M1	710944
Additional sex combs like 2, transcriptional regulator	ASXL2	695057
Adducin 1	ADD1	700805
Adducin 3	ADD3	677712
Adenine phosphoribosyltransferase	APRT	697715
Adenomatosis polyposis coli down-regulated 1	APCDD1	722280
Adenosine deaminase domain containing 2	ADAD2	715076
Adenosine monophosphate deaminase 2	AMPD2	699561
Adenylate cyclase 4	ADCY4	714684
Adenylate cyclase 6	ADCY6	707978
Adenylate kinase 2	AK2	709737
Adenylate kinase 3	AK3	694714
Adenylate kinase 4	AK4	698560
Adenylate kinase 7	AK7	704250
Adenylosuccinate synthase	ADSS	713580
Adhesion G protein-coupled receptor A3	ADGRA3	715618
Adhesion G protein-coupled receptor E5	ADGRE5	100426360
Adhesion G protein-coupled receptor L2	ADGRL2	708998
Adhesion molecule with Ig-like domain 1	AMIGO1	698932
Adipogenesis regulatory factor	ADIRF	699173
Adiponectin receptor 2	ADIPOR2	707547
ADNP homeobox 2	ADNP2	718342
ADP ribosylation factor 4	ARF4	703432
ADP ribosylation factor guanine nucleotide exchange factor 1	ARFGEF1	704359
ADP ribosylation factor interacting protein 1	ARFIP1	697533
ADP ribosylation factor like gtpase 10	ARL10	696524
ADP ribosylation factor like gtpase 4A	ARL4A	693302
ADP ribosylation factor like gtpase 5B	ARL5B	701595
ADP ribosylation factor like gtpase 6	ARL6	696616
ADP ribosylation factor like gtpase 6 interacting protein 5	ARL6IP5	696360
ADP ribosylation factor like gtpase 6 interacting protein 6	ARL6IP6	695619
ADP-ribose/CDP-alcohol diphosphatase, manganese-dependent	ADPRM	717991
ADP-ribosylhydrolase like 2	ADPRHL2	712758
ADP-ribosyltransferase 5	ART5	574238

Adrenomedullin	ADM	703305
Aftiphilin	AFTPH	696100
AHA1, activator of heat shock 90kda protein ATPase homolog 1 (yeast)	AHSA1	706547
Ajuba LIM protein	AJUBA	712865
A-kinase anchoring protein 14	AKAP14	694769
A-kinase anchoring protein 2	AKAP2	709841
A-kinase anchoring protein 8 like	AKAP8L	719202
A-kinase anchoring protein 9	AKAP9	702970
Aladin WD repeat nucleoporin	AAAS	719095
Alanine--glyoxylate aminotransferase 2	AGXT2	699250
Aldehyde dehydrogenase 1 family member A1	ALDH1A1	702598
Aldehyde dehydrogenase 1 family member A3	ALDH1A3	694231
Aldehyde dehydrogenase 18 family member A1	ALDH18A1	703357
Aldehyde dehydrogenase 6 family member A1	ALDH6A1	698755
Aldo-keto reductase family 1, member B1 (aldose reductase)	AKR1B1	705957
Aldo-keto reductase family 1, member C1 (dihydrodiol dehydrogenase 1; 20-alpha (3-alpha)-hydroxysteroid dehydrogenase)	AKR1C1	711198
Aldo-keto reductase family 1, member E2	AKR1E2	711035
ALG2, alpha-1,3/1,6-mannosyltransferase	ALG2	714850
ALG5, dolichyl-phosphate beta-glucosyltransferase	ALG5	694836
Alkb homolog 4, lysine demethylase	ALKBH4	715078
Alkb homolog 5, RNA demethylase	ALKBH5	700205
Alkb homolog 7	ALKBH7	699343
Allograft inflammatory factor 1	AIF1	574115
All-trans retinoic acid induced differentiation factor	ATRAID	699201
Alpha- and gamma-adaptin binding protein	AAGAB	711436
Alpha kinase 1	ALPK1	700993
Alpha thalassemia/mental retardation syndrome X-linked	ATRX	705735
Alpha-2-glycoprotein 1, zinc-binding	AZGP1	710136
Alpha-2-macroglobulin	A2M	716834
Alpha-defensin 1A	MNP1A	574196
Alpha-methylacyl-coa racemase	AMACR	698365
Aminoacylase 3	ACY3	711083
Aminoadipate-semialdehyde dehydrogenase-phosphopantetheinyl transferase	AASDHPPT	100328984
Aminoadipate-semialdehyde synthase	AASS	694594
Aminomethyltransferase	AMT	706515
Aminopeptidase puromycin sensitive	NPEPPS	693995
Amino-terminal enhancer of split	AES	712353
Amphiphysin	AMPH	704559
Amylase, alpha 2B (pancreatic)	AMY2B	712893
Amyloid beta (A4) precursor protein-binding, family B, member 1 (Fe65)	APBB1	712585
Amyloid beta (A4) precursor protein-binding, family B, member 3	APBB3	698296
Anaphase promoting complex subunit 15	ANAPC15	718333
Anaphase promoting complex subunit 2	ANAPC2	706384

Anaphase promoting complex subunit 4	ANAPC4	694006
Ancient ubiquitous protein 1	AUP1	710020
Androgen-induced 1	AIG1	700988
Angio associated migratory cell protein	AAMP	700763
Angiopoietin like 5	ANGPTL5	702036
Angiotensin II receptor-associated protein	AGTRAP	722746
Ankyrin 2, neuronal	ANK2	702180
Ankyrin 3, node of Ranvier (ankyrin G)	ANK3	699518
Ankyrin repeat and IBR domain containing 1	ANKIB1	703273
Ankyrin repeat and MYND domain containing 2	ANKMY2	709414
Ankyrin repeat and SOCS box containing 12	ASB12	707931
Ankyrin repeat domain 13 family member D	ANKRD13D	721749
Ankyrin repeat domain 2 (stretch responsive muscle)	ANKRD2	707097
Ankyrin repeat domain 22	ANKRD22	694240
Ankyrin repeat domain 27	ANKRD27	716232
Ankyrin repeat domain 35	ANKRD35	706961
Ankyrin repeat domain 37	ANKRD37	100426384
Ankyrin repeat domain 46	ANKRD46	705491
Ankyrin repeat domain 50	ANKRD50	709327
Ankyrin repeat domain 6	ANKRD6	701339
Annexin A1	ANXA1	702946
Annexin A11	ANXA11	707628
Annexin A2	ANXA2	706240
Annexin A3	ANXA3	697239
Annexin A4	ANXA4	701433
Annexin A7	ANXA7	707166
Anoctamin 10	ANO10	715666
Anoctamin 4	ANO4	695973
Anterior gradient 2, protein disulphide isomerase family member	AGR2	709127
Anterior gradient 3, protein disulphide isomerase family member	AGR3	714517
Anti-Mullerian hormone receptor, type II	AMHR2	702822
APEX nuclease (apurinic/apyrimidinic endonuclease) 2	APEX2	702084
APEX nuclease (multifunctional DNA repair enzyme) 1	APEX1	702757
Aph-1 homolog A, gamma secretase subunit	APH1A	706483
Aph-1 homolog B, gamma secretase subunit	APH1B	705718
Apolipoprotein B mrna editing enzyme, catalytic polypeptide-like 3A	APOBEC3A	721030
Apolipoprotein B mrna editing enzyme, catalytic polypeptide-like 3C	APOBEC3C	705870
Apolipoprotein B mrna editing enzyme, catalytic polypeptide-like 3G	APOBEC3G	574398
Apolipoprotein B mrna editing enzyme, catalytic polypeptide-like 3H	APOBEC3H	723811
Apolipoprotein B receptor	APOBR	705950
Apolipoprotein O	APOO	698137
Apoptosis inducing factor, mitochondria associated 1	AIFM1	702773
Apoptosis inducing factor, mitochondria associated 3	AIFM3	100430576
Apoptosis inhibitor 5	API5	716346

Arachidonate 12-lipoxygenase, 12R type	ALOX12B	721936
Arachidonate 5-lipoxygenase-activating protein	ALOX5AP	713170
Arachidonate lipoxygenase 3	ALOXE3	716840
Aralkylamine N-acetyltransferase	AANAT	706924
Arfgap with gtpase domain, ankyrin repeat and PH domain 1	AGAP1	693652
Arfgap with rhogap domain, ankyrin repeat and PH domain 2	ARAP2	702115
Arfgap with SH3 domain, ankyrin repeat and PH domain 1	ASAP1	695681
Arginine and glutamate rich 1	ARGLU1	702840
Arginine/serine-rich coiled-coil 1	RSRC1	704232
Arginine/serine-rich protein 1	RSRP1	712757
Arginine-glutamic acid dipeptide (RE) repeats	RERE	708902
Arginyltransferase 1	ATE1	705248
Arginyl-trna synthetase	RARS	698998
Arginyl-trna synthetase 2, mitochondrial	RARS2	699240
Argonaute 4, RISC catalytic component	AGO4	713134
Armadillo repeat containing 3	ARMC3	705015
Armadillo repeat containing 5	ARMC5	715103
Armadillo repeat containing 8	ARMC8	716388
Armadillo repeat containing 9	ARMC9	711891
Armadillo repeat containing, X-linked 2	ARMCX2	704263
Armadillo repeat gene deleted in velocardiofacial syndrome	ARVCF	712399
ARP1 actin-related protein 1 homolog B, centractin beta (yeast)	ACTR1B	707328
ARP2 actin-related protein 2 homolog (yeast)	ACTR2	697080
ARP5 actin-related protein 5 homolog (yeast)	ACTR5	698191
Arrestin domain containing 3	ARRDC3	695903
Arrestin domain containing 4	ARRDC4	708023
Arrestin, beta 2	ARRB2	709399
Arsa arsenite transporter, ATP-binding, homolog 1 (bacterial)	ASNA1	717734
Artemin	ARTN	701641
ARV1 homolog, fatty acid homeostasis modulator	ARV1	713975
Aryl hydrocarbon receptor nuclear translocator like	ARNTL	700464
Arylsulfatase A	ARSA	716500
Arylsulfatase E (chondrodysplasia punctata 1)	ARSE	720575
Asparagine synthetase domain containing 1	ASNSD1	709388
Aspartate beta-hydroxylase	ASPH	699884
Aspartate beta-hydroxylase domain containing 1	ASPHD1	707467
Aspartate dehydrogenase domain containing	ASPDH	719609
Aspartoacylase	ASPA	706170
Aspartyl aminopeptidase	DNPEP	703180
Asteroid homolog 1 (Drosophila)	ASTE1	719271
Astrotactin 1	ASTN1	709094
Ataxin 10	ATXN10	713805
Ataxin 2-like	ATXN2L	708359
AT-hook containing transcription factor 1	AHCTF1	702705
Atlastin gtpase 1	ATL1	706313
ATP binding cassette subfamily A member 1	ABCA1	716146
ATP binding cassette subfamily A member 4	ABCA4	714054
ATP binding cassette subfamily A member 5	ABCA5	693795

ATP binding cassette subfamily B member 10	ABCB10	574117
ATP binding cassette subfamily B member 7	ABCB7	704034
ATP binding cassette subfamily C member 5	ABCC5	704326
ATP binding cassette subfamily C member 8	ABCC8	654490
ATP binding cassette subfamily D member 1	ABCD1	696794
ATP binding cassette subfamily E member 1	ABCE1	701945
ATP binding cassette subfamily G member 2 (Junior blood group)	ABCG2	574307
ATP citrate lyase	ACLY	708501
ATP synthase F0 subunit 6	ATP6	2846629
ATP synthase, H ⁺ transporting, mitochondrial F1 complex, alpha subunit 1, cardiac muscle	ATP5A1	701389
ATP synthase, H ⁺ transporting, mitochondrial F1 complex, beta polypeptide	ATP5B	713284
ATP synthase, H ⁺ transporting, mitochondrial F1 complex, delta subunit	ATP5D	705944
ATP synthase, H ⁺ transporting, mitochondrial F1 complex, gamma polypeptide 1	ATP5C1	713768
ATP synthase, H ⁺ transporting, mitochondrial F1 complex, O subunit	ATP5O	698480
ATP synthase, H ⁺ transporting, mitochondrial Fo complex subunit C1 (subunit 9)	ATP5G1	697950
ATP synthase, H ⁺ transporting, mitochondrial Fo complex subunit C2 (subunit 9)	ATP5G2	703751
ATP synthase, H ⁺ transporting, mitochondrial Fo complex subunit D	ATP5H	700338
ATP synthase, H ⁺ transporting, mitochondrial Fo complex subunit F6	ATP5J	708411
ATPase family, AAA domain containing 1	ATAD1	704809
ATPase family, AAA domain containing 2	ATAD2	704478
ATPase inhibitory factor 1	ATPIF1	716870
ATPase type 13A1	ATP13A1	100427504
ATPase type 13A2	ATP13A2	699678
ATPase, aminophospholipid transporter (APLT), class I, type 8A, member 1	ATP8A1	702630
ATPase, Ca ⁺⁺ transporting, plasma membrane 1	ATP2B1	709102
ATPase, Ca ⁺⁺ transporting, type 2C, member 1	ATP2C1	719281
ATPase, class II, type 9A	ATP9A	710250
ATPase, H ⁺ transporting V0 subunit e2	ATP6V0E2	712644
ATPase, H ⁺ transporting, lysosomal 14kda, V1 subunit F	ATP6V1F	702112
ATPase, H ⁺ transporting, lysosomal 21kda, V0 subunit b	ATP6V0B	702243
ATPase, H ⁺ transporting, lysosomal 31kda, V1 subunit E1	ATP6V1E1	709739
ATPase, H ⁺ transporting, lysosomal 9kda, V0 subunit e1	ATP6V0E1	703342
ATPase, H ⁺ transporting, lysosomal accessory protein 2	ATP6AP2	705048
ATPase, H ⁺ /K ⁺ exchanging, alpha polypeptide	ATP4A	100426216
ATPase, Na ⁺ /K ⁺ transporting, alpha 1 polypeptide	ATP1A1	710368
ATR interacting protein	ATRIP	710035
ATR serine/threonine kinase	ATR	714443

AT-rich interaction domain 2	ARID2	703823
AT-rich interaction domain 3A	ARID3A	704435
AT-rich interaction domain 4B	ARID4B	718320
Atypical chemokine receptor 4	ACKR4	717701
AU RNA binding protein/enoyl-coa hydratase	AUH	704542
Aurora kinase A interacting protein 1	AURKAIP1	706329
Aurora kinase B	AURKB	721955
Aurora kinase C	AURKC	709801
Autoimmune regulator	AIRE	712858
Autophagy related 16 like 1	ATG16L1	714092
Autophagy related 16 like 2	ATG16L2	717952
Autophagy related 2A	ATG2A	717290
Autophagy related 3	ATG3	708305
Autophagy related 4A, cysteine peptidase	ATG4A	703367
Autophagy related 4C, cysteine peptidase	ATG4C	695606
Autophagy related 4D, cysteine peptidase	ATG4D	713111
Autophagy related 5	ATG5	696874
Autophagy related 7	ATG7	696238
Autophagy/beclin-1 regulator 1	AMBRA1	714434
B9 protein domain 2	B9D2	704873
Baculoviral IAP repeat containing 3	BIRC3	702468
BAI1-associated protein 2-like 2	BAIAP2L2	700058
Bardet-Biedl syndrome 12	BBS12	710538
Bardet-Biedl syndrome 4	BBS4	704508
Bardet-Biedl syndrome 5	BBS5	709701
Basic helix-loop-helix domain containing, class B, 9	BHLHB9	694634
Basic leucine zipper and W2 domains 2	BZW2	714627
Basic leucine zipper transcription factor, ATF-like	BATF	702646
Basic transcription factor 3	BTF3	703339
B-cell CLL/lymphoma 2	BCL2	707407
B-cell CLL/lymphoma 6	BCL6	708736
B-cell CLL/lymphoma 7B	BCL7B	716470
B-cell CLL/lymphoma 7C	BCL7C	712065
B-cell CLL/lymphoma 9	BCL9	700800
B-cell linker	BLNK	704363
B-cell scaffold protein with ankyrin repeats 1	BANK1	710040
B-cell translocation gene 1, anti-proliferative	BTG1	710112
BCL2 associated athanogene 2	BAG2	712778
BCL2 associated athanogene 3	BAG3	714420
BCL2 associated athanogene 4	BAG4	703953
BCL2/adenovirus E1B 19kda interacting protein 1	BNIP1	703576
BCL2/adenovirus E1B 19kda interacting protein 2	BNIP2	703234
BCL2-associated X protein	BAX	718948
BCS1-like (S. Cerevisiae)	BCS1L	699690
Beclin 1, autophagy related	BECN1	711649
BEN domain containing 5	BEND5	711150
BEN domain containing 6	BEND6	712498
Bestrophin 1	BEST1	718993

Beta 3-glucosyltransferase	B3GLCT	713498
Beta-1,3-glucuronyltransferase 2	B3GAT2	717157
Beta-1,3-glucuronyltransferase 3	B3GAT3	718744
Beta-1,3-N-acetylgalactosaminyltransferase 1 (globoside blood group)	B3GALNT1	703939
Beta-1,4-N-acetyl-galactosaminyl transferase 1	B4GALNT1	715317
Beta-2-microglobulin	B2M	712428
Beta-site APP-cleaving enzyme 1	BACE1	697694
Bicaudal D homolog 2 (Drosophila)	BICD2	706621
Bisphosphoglycerate mutase	BPGM	706741
BLOC-1 related complex subunit 5	BORCS5	696469
Bloom syndrome, recq helicase-like	BLM	703460
BMP and activin membrane-bound inhibitor	BAMBI	710152
Bola family member 1	BOLA1	705297
Bola family member 3	BOLA3	707871
Bone morphogenetic protein 1	BMP1	707596
Bone morphogenetic protein 4	BMP4	694618
Bone morphogenetic protein 7	BMP7	696948
Bone morphogenetic protein receptor type IA	BMPR1A	696898
Bone morphogenetic protein/retinoic acid inducible neural -specific 1	BRINP1	701794
Bora, aurora kinase A activator	BORA	693798
BPI fold containing family A member 2	BPIFA2	710376
Brain protein I3	BRI3	706525
Brain-derived neurotrophic factor	BDNF	701245
Branched chain amino-acid transaminase 2, mitochondrial	BCAT2	718305
Branched chain keto acid dehydrogenase E1, beta polypeptide	BCKDHB	718472
Branched chain ketoacid dehydrogenase kinase	BCKDK	712985
BRCA1 associated RING domain 1	BARD1	694301
Breast cancer metastasis suppressor 1	BRMS1	714212
Breast cancer metastasis-suppressor 1-like	BRMS1L	695909
Breast carcinoma amplified sequence 3	BCAS3	712846
BRF1, RNA polymerase III transcription initiation factor 90 kda subunit	BRF1	709533
BRISC and BRCA1 A complex member 1	BABAM1	718969
Bromo adjacent homology domain containing 1	BAHD1	702982
Bromodomain adjacent to zinc finger domain 1B	BAZ1B	716436
Bromodomain containing 1	BRD1	715059
Bromodomain containing 2	BRD2	717893
Bromodomain containing 7	BRD7	694850
BTB (POZ) domain containing 1	BTBD1	718696
BTB and CNC homology 1, basic leucine zipper transcription factor 1	BACH1	705817
BTG family member 3	BTG3	710579
BTG3 associated nuclear protein	BANP	696125
BUB3 mitotic checkpoint protein	BUB3	708033
BUD31 homolog	BUD31	718694
Bystin like	BYSL	694976

C1GALT1 specific chaperone 1	C1GALT1C1	696662
C2 calcium-dependent domain containing 3	C2CD3	718842
C2CD2-like	C2CD2L	703424
C3 and PZP-like, alpha-2-macroglobulin domain containing 8	CPAMD8	719660
Cadherin 11, type 2, OB-cadherin (osteoblast)	CDH11	708826
Cadherin 13	CDH13	718038
Cadherin 2, type 1, N-cadherin (neuronal)	CDH2	711526
Cadherin 24, type 2	CDH24	713241
Cadherin 5, type 2 (vascular endothelium)	CDH5	693297
Cadherin related family member 2	CDHR2	697249
Calcitonin-related polypeptide alpha	CALCA	700649
Calcium and integrin binding family member 2	CIB2	709429
Calcium and integrin binding family member 3	CIB3	718586
Calcium binding protein 39	CAB39	711166
Calcium binding protein 5	CABP5	718484
Calcium binding tyrosine-(Y)-phosphorylation regulated	CABYR	701670
Calcium channel, voltage-dependent, beta 2 subunit	CACNB2	701226
Calcium channel, voltage-dependent, beta subunit associated regulatory protein	CBARP	721208
Calcium channel, voltage-dependent, gamma subunit 2	CACNG2	696294
Calcium homeostasis endoplasmic reticulum protein	CHERP	718689
Calcium regulated heat stable protein 1	CARHSP1	709224
Calcium/calmodulin-dependent protein kinase II delta	CAMK2D	702504
Calcium/calmodulin-dependent protein kinase II gamma	CAMK2G	705980
Calcium/calmodulin-dependent protein kinase II inhibitor 1	CAMK2N1	705302
Calcium/calmodulin-dependent protein kinase kinase 2, beta	CAMKK2	699685
Calcyclin binding protein	CACYBP	709343
Calcyon neuron-specific vesicular protein	CALY	702415
Calmegin	CLGN	698361
Calmin (calponin-like, transmembrane)	CLMN	709910
Calmodulin like 6	CALML6	703514
Calmodulin regulated spectrin associated protein family member 2	CAMSAP2	709092
Calnexin	CANX	704794
Calpain 10	CAPN10	716360
Calpain 15	CAPN15	695881
Calpain 2, (m/II) large subunit	CAPN2	703047
Calpain 3	CAPN3	707913
Calpain 6	CAPN6	706434
Calreticulin	CALR	716910
Camp responsive element binding protein 3	CREB3	696350
Camp responsive element binding protein 3-like 4	CREB3L4	715951
Canopy FGF signaling regulator 3	CNPY3	100424672
Cap methyltransferase 2	CMTR2	711529
CAP, adenylate cyclase-associated protein 1 (yeast)	CAP1	693719
CAP, adenylate cyclase-associated protein, 2 (yeast)	CAP2	703445
CAP-Gly domain containing linker protein 3	CLIP3	712058
CAP-Gly domain containing linker protein family member 4	CLIP4	704092

Capping protein (actin filament) muscle Z-line, alpha 1	CAPZA1	705653
Capping protein (actin filament) muscle Z-line, alpha 2	CAPZA2	704662
Capping protein (actin filament), gelsolin-like	CAPG	695288
Caprin family member 2	CAPRIN2	693594
Carbamoyl-phosphate synthetase 2, aspartate trans carbamylase, and dihydroorotase	CAD	699460
Carbohydrate (chondroitin 4) sulfotransferase 13	CHST13	716548
Carbohydrate (keratan sulfate Gal-6) sulfotransferase 1	CHST1	715176
Carbohydrate (N-acetylgalactosamine 4-O) sulfotransferase 14	CHST14	703115
Carbohydrate (N-acetylgalactosamine 4-sulfate 6-O) sulfo transferase 15	CHST15	693845
Carbohydrate (N-acetylglucosamine 6-O) sulfotransferase 7	CHST7	704906
Carbonic anhydrase II	CA2	574263
Carbonic anhydrase IX	CA9	696729
Carbonyl reductase 3	CBR3	695769
Carboxypeptidase A5	CPA5	702974
Carboxypeptidase E	CPE	708881
Carboxypeptidase N subunit 2	CPN2	106997192
Carboxypeptidase Q	CPQ	701711
Carboxypeptidase X (M14 family), member 2	CPXM2	693465
Carboxypeptidase, vitellogenic-like	CPVL	697111
Cardiotrophin 1	CTF1	713850
Carnitine O-acetyltransferase	CRAT	716908
Carnitine palmitoyltransferase 1B	CPT1B	720697
Carnosine dipeptidase 1 (metallopeptidase M20 family)	CNDP1	695195
Cartilage acidic protein 1	CRTAC1	707486
Casein kinase 1, alpha 1	CSNK1A1	710775
Casein kinase 2, alpha 1 polypeptide	CSNK2A1	714841
Casein kinase 2, beta polypeptide	CSNK2B	715807
CASK interacting protein 2	CASKIN2	702477
CASP2 and RIPK1 domain containing adaptor with death domain	CRADD	711165
Caspase 1	CASP1	706568
Caspase 4	CASP4	704864
Caspase 9	CASP9	694544
Caspase activity and apoptosis inhibitor 1	CAAP1	707992
Caspase recruitment domain family member 9	CARD9	710485
Cat eye syndrome chromosome region, candidate 5	CECR5	709197
Catalase	CAT	717406
Catechol-O-methyltransferase	COMT	712548
Catenin alpha 1	CTNNA1	574385
Catenin alpha 2	CTNNA2	712135
Catenin alpha-like 1	CTNNAL1	710389
Catenin beta interacting protein 1	CTNNBIP1	712257
Catenin beta like 1	CTNNBL1	700310
Catenin delta 1	CTNND1	704212
Cathelicidin antimicrobial peptide	CAMP	619186

Cathepsin A	CTSA	708592
Cathepsin B	CTSB	100424760
Cathepsin C	CTSC	705320
Cathepsin L	CTSL	694569
Cation channel, sperm associated 2	CATSPER2	710876
Cation channel, sperm associated 3	CATSPER3	713905
Catsper channel auxiliary subunit gamma	CATSPERG	714958
Caudal type homeobox 4	CDX4	701374
Caveolin 2	CAV2	706980
Cbl proto-oncogene B, E3 ubiquitin protein ligase	CBLB	703879
Cbl proto-oncogene-like 1, E3 ubiquitin protein ligase	CBL1	699980
Cbp/p300-interacting transactivator, with Glu/Asp rich carboxy-terminal domain, 1	CITED1	703165
CCAAT/enhancer binding protein (C/EBP), zeta	CEBPZ	712090
CCR4-NOT transcription complex subunit 10	CNOT10	704986
CCR4-NOT transcription complex subunit 2	CNOT2	718501
CCR4-NOT transcription complex subunit 3	CNOT3	693292
CCR4-NOT transcription complex subunit 7	CNOT7	702192
CCR4-NOT transcription complex subunit 8	CNOT8	714813
CD19 molecule	CD19	705211
CD1c molecule	CD1C	717148
CD2 molecule	CD2	677855
CD200 molecule	CD200	708110
CD248 molecule, endosialin	CD248	714375
CD274 molecule	CD274	716043
CD3e molecule, epsilon (CD3-TCR complex)	CD3E	699467
CD4 molecule	CD4	713807
CD40 molecule, TNF receptor superfamily member 5	CD40	707749
CD53 molecule	CD53	702350
CD63 molecule	CD63	709828
CD7 molecule	CD7	719501
CD79b molecule	CD79B	718218
CD81 molecule	CD81	704961
CD83 molecule	CD83	701825
CD9 molecule	CD9	712262
CDC like kinase 1	CLK1	700320
CDC like kinase 3	CLK3	702511
CDC28 protein kinase regulatory subunit 1B	CKS1B	717164
CDC28 protein kinase regulatory subunit 2	CKS2	697324
CDC42 small effector 2	CDC42SE2	708885
CDKN2A interacting protein	CDKN2AIP	701583
Cell cycle and apoptosis regulator 2	CCAR2	716288
Cell death-inducing DFFA-like effector b	CIDEB	100425328
Cell division cycle 123	CDC123	694239
Cell division cycle 16	CDC16	699089
Cell division cycle 20	CDC20	702317
Cell division cycle 23	CDC23	714000
Cell division cycle 25C	CDC25C	714115

Cell division cycle 26	CDC26	706165
Cell division cycle 37	CDC37	715390
Cell division cycle 5 like	CDC5L	703099
Cell division cycle 7	CDC7	704730
Cell division cycle 73	CDC73	712256
Cell division cycle and apoptosis regulator 1	CCAR1	693585
Cell division cycle associated 3	CDCA3	722088
Cell division cycle associated 5	CDCA5	721998
Cell division cycle associated 7	CDCA7	696474
Cell division cycle associated 8	CDCA8	719808
Cell growth regulator with ring finger domain 1	CGRRF1	695231
Cell wall biogenesis 43 C-terminal homolog	CWH43	706415
Centlein	CNTLN	713456
Centrin 2	CETN2	693376
Centrin 3	CETN3	695223
Centriolin	CNTRL	700200
Centrobin, centrosomal BRCA2 interacting protein	CNTROB	716660
Centromere protein A	CENPA	697312
Centromere protein C	CENPC	710620
Centromere protein F	CENPF	709000
Centromere protein J	CENPJ	721498
Centromere protein M	CENPM	709006
Centromere protein O	CENPO	693599
Centrosomal protein 112kda	CEP112	718585
Centrosomal protein 170kda	CEP170	705427
Centrosomal protein 192kda	CEP192	722121
Centrosomal protein 290kda	CEP290	708286
Centrosomal protein 350kda	CEP350	716537
Centrosomal protein 41kda	CEP41	703215
Centrosomal protein 55kda	CEP55	699890
Centrosomal protein 57kda-like 1	CEP57L1	700109
Centrosomal protein 63kda	CEP63	717266
Centrosomal protein 72kda	CEP72	708753
Centrosomal protein 83kda	CEP83	711408
Centrosomal protein 85kda	CEP85	714264
Centrosomal protein 97kda	CEP97	702482
Ceramide synthase 2	CERS2	716180
Ceramide synthase 4	CERS4	706728
Cerebellar degeneration related protein 2	CDR2	698974
Cerebellin 4 precursor	CBLN4	698567
CGG triplet repeat binding protein 1	CGGBP1	693920
Chaperonin containing TCP1, subunit 2 (beta)	CCT2	717182
Chaperonin containing TCP1, subunit 8 (theta)	CCT8	706184
Charged multivesicular body protein 2A	CHMP2A	712059
Charged multivesicular body protein 4B	CHMP4B	709004
Charged multivesicular body protein 5	CHMP5	703191
Charged multivesicular body protein 6	CHMP6	718353
Checkpoint kinase 2	CHEK2	713668

Chemokine (C-C motif) ligand 27	CCL27	574220
Chemokine (C-X-C motif) receptor 4	CXCR4	707329
Chemokine (C-X-C motif) receptor 5	CXCR5	701792
Chemokine-like factor	CKLF	693673
Chitinase 3 like 2	CHI3L2	705024
Chitobiase, di-N-acetyl-	CTBS	710366
Chloride channel, voltage-sensitive 2	CLCN2	704709
Chloride channel, voltage-sensitive 6	CLCN6	714793
Chloride intracellular channel 2	CLIC2	703475
Chloride intracellular channel 4	CLIC4	712337
Choline kinase beta	CHKB	716377
Choline/ethanolamine phosphotransferase 1	CEPT1	702700
Chondroitin polymerizing factor	CHPF	703860
Chondroitin sulfate N-acetylgalactosaminyltransferase 2	CSGALNACT2	703703
Chordin	CHRD	702281
Chromatin accessibility complex 1	CHRA1	700384
Chromatin target of PRMT1	CHTOP	715501
Chromobox 1	CBX1	696673
Chromobox 7	CBX7	703056
Chromodomain helicase DNA binding protein 1	CHD1	702070
Chromodomain helicase DNA binding protein 4	CHD4	713162
Chromodomain helicase DNA binding protein 9	CHD9	696367
Chromodomain protein, Y-like	CDYL	722957
Chromosome 1 open reading frame, human c1orf123	C1H1orf123	714201
Chromosome 1 open reading frame, human c1orf198	C1H1orf198	714084
Chromosome 1 open reading frame, human c1orf35	C1H1orf35	695723
Chromosome 1 open reading frame, human c1orf50	C1H1orf50	698058
Chromosome 1 open reading frame, human c1orf52	C1H1orf52	711232
Chromosome 1 open reading frame, human c1orf54	C1H1orf54	107000832
Chromosome 1 open reading frame, human c1orf74	C1H1orf74	713029
Chromosome 1 open reading frame, human c1orf87	C1H1orf87	693884
Chromosome 10 open reading frame, human c20orf195	C10H20orf195	696464
Chromosome 10 open reading frame, human c20orf27	C10H20orf27	717525
Chromosome 10 open reading frame, human c20orf96	C10H20orf96	714431
Chromosome 10 open reading frame, human c22orf23	C10H22orf23	699449
Chromosome 11 open reading frame, human c12orf10	C11H12orf10	702255
Chromosome 11 open reading frame, human c12orf29	C11H12orf29	708382
Chromosome 11 open reading frame, human c12orf4	C11H12orf4	710836
Chromosome 11 open reading frame, human c12orf57	C11H12orf57	714482
Chromosome 12 open reading frame, human c2orf47	C12H2orf47	699322
Chromosome 13 open reading frame, human c2orf49	C13H2orf49	713165
Chromosome 14 open reading frame, human c11orf57	C14H11orf57	711168
Chromosome 14 open reading frame, human c11orf58	C14H11orf58	697690
Chromosome 14 open reading frame, human c11orf68	C14H11orf68	715318
Chromosome 14 open reading frame, human c11orf73	C14H11orf73	704098
Chromosome 14 open reading frame, human c11orf74	C14H11orf74	716798
Chromosome 15 open reading frame, human c9orf135	C15H9orf135	700202
Chromosome 15 open reading frame, human c9orf16	C15H9orf16	722628

Chromosome 15 open reading frame, human c9orf24	C15H9orf24	701552
Chromosome 16 open reading frame, human c17orf53	C16H17orf53	711524
Chromosome 16 open reading frame, human c17orf62	C16H17orf62	716212
Chromosome 18 open reading frame, human c18orf21	C18H18orf21	715440
Chromosome 19 open reading frame, human c19orf24	C19H19orf24	706393
Chromosome 19 open reading frame, human c19orf43	C19H19orf43	716466
Chromosome 19 open reading frame, human c19orf53	C19H19orf53	720745
Chromosome 2 open reading frame, human c3orf14	C2H3orf14	699965
Chromosome 2 open reading frame, human c3orf18	C2H3orf18	701675
Chromosome 2 open reading frame, human c3orf58	C2H3orf58	713830
Chromosome 20 open reading frame 24 ortholog	C10H20orf24	709696
Chromosome 20 open reading frame, human c16orf13	C20H16orf13	696495
Chromosome 20 open reading frame, human c16orf78	C20H16orf78	693672
Chromosome 20 open reading frame, human c16orf87	C20H16orf87	716218
Chromosome 3 open reading frame, human c21orf91	C3H21orf91	710406
Chromosome 3 open reading frame, human c7orf25	C3H7orf25	708455
Chromosome 4 open reading frame, human c6orf1	C4H6orf1	718551
Chromosome 4 open reading frame, human c6orf136	C4H6orf136	712108
Chromosome 4 open reading frame, human c6orf203	C4H6orf203	698108
Chromosome 4 open reading frame, human c6orf25	C4H6orf25	716265
Chromosome 4 open reading frame, human c6orf62	C4H6orf62	708218
Chromosome 4 open reading frame, human c6orf89	C4H6orf89	719165
Chromosome 5 open reading frame, human c4orf17	C5H4orf17	708639
Chromosome 5 open reading frame, human c4orf27	C5H4orf27	694607
Chromosome 6 open reading frame, human c5orf15	C6H5orf15	709969
Chromosome 6 open reading frame, human c5orf30	C6H5orf30	703692
Chromosome 7 open reading frame, human c14orf142	C7H14orf142	704509
Chromosome 7 open reading frame, human c14orf166	C7H14orf166	710094
Chromosome 7 open reading frame, human c15orf57	C7H15orf57	703343
Chromosome 8 open reading frame, human c8orf46	C8H8orf46	703243
Chromosome 8 open reading frame, human c8orf48	C8H8orf48	700746
Chromosome 8 open reading frame, human c8orf59	C8H8orf59	703464
Chromosome 8 open reading frame, human c8orf76	C8H8orf76	704150
Chromosome 9 open reading frame, human c10orf107	C9H10orf107	700172
Chromosome 9 open reading frame, human c10orf2	C9H10orf2	710958
Chromosome alignment maintaining phosphoprotein 1	CHAMP1	699474
Chromosome X open reading frame, human cxorf23	CXHXorf23	696449
Chromosome X open reading frame, human cxorf38	CXHXorf38	699271
Chromosome X open reading frame, human cxorf57	CXHXorf57	700757
Chymotrypsinogen B2	CTRB2	711100
Cilia and flagella associated protein 100	CFAP100	716433
Cilia and flagella associated protein 161	CFAP161	713184
Cilia and flagella associated protein 43	CFAP43	716031
Cilia and flagella associated protein 52	CFAP52	722040
Cilia and flagella associated protein 53	CFAP53	700084
Cilia and flagella associated protein 65	CFAP65	701296
Ciliary neurotrophic factor	CNTF	701907
Circadian associated repressor of transcription	CIART	706693

Citrate lyase beta like	CLYBL	699339
CKLF-like MARVEL transmembrane domain containing 3	CMTM3	695592
CKLF-like MARVEL transmembrane domain containing 7	CMTM7	704329
CKLF-like MARVEL transmembrane domain containing 8	CMTM8	704234
Clathrin, light chain A	CLTA	693659
Claudin 12	CLDN12	704058
Claudin 15	CLDN15	719637
Claudin 16	CLDN16	704442
Claudin 3	CLDN3	716771
Cleavage and polyadenylation factor I subunit 1	CLP1	705071
Cleavage and polyadenylation specific factor 1	CPSF1	702082
Cleavage and polyadenylation specific factor 4	CPSF4	708119
Cleavage stimulation factor, 3' pre-RNA, subunit 2	CSTF2	701235
Cleavage stimulation factor, 3' pre-RNA, subunit 3	CSTF3	694040
Cleft lip and palate associated transmembrane protein 1	CLPTM1	718306
Cms1 ribosomal small subunit homolog (yeast)	CMSS1	699717
Coagulation factor XII (Hageman factor)	F12	699875
Coatomer protein complex subunit beta 1	COPB1	699327
Coatomer protein complex subunit zeta 1	COPZ1	705176
Codanin 1	CDAN1	708838
Coenzyme Q10A	COQ10A	712341
Coenzyme Q2 4-hydroxybenzoate polyprenyltransferase	COQ2	707681
Cofilin 1 (non-muscle)	CFL1	721882
Cofilin 2 (muscle)	CFL2	693875
Coiled-coil domain containing 106	CCDC106	702611
Coiled-coil domain containing 12	CCDC12	712061
Coiled-coil domain containing 121	CCDC121	702143
Coiled-coil domain containing 134	CCDC134	708713
Coiled-coil domain containing 136	CCDC136	701874
Coiled-coil domain containing 146	CCDC146	694907
Coiled-coil domain containing 151	CCDC151	714600
Coiled-coil domain containing 17	CCDC17	706591
Coiled-coil domain containing 174	CCDC174	701654
Coiled-coil domain containing 181	CCDC181	700803
Coiled-coil domain containing 186	CCDC186	722518
Coiled-coil domain containing 191	CCDC191	710219
Coiled-coil domain containing 28A	CCDC28A	703104
Coiled-coil domain containing 36	CCDC36	707136
Coiled-coil domain containing 42	CCDC42	717532
Coiled-coil domain containing 43	CCDC43	715325
Coiled-coil domain containing 59	CCDC59	698443
Coiled-coil domain containing 85B	CCDC85B	715413
Coiled-coil domain containing 92	CCDC92	705922
Coiled-coil domain containing 96	CCDC96	722716
Coiled-coil domain containing 97	CCDC97	706342
Coiled-coil serine rich protein 2	CCSER2	698006
Coiled-coil-helix-coiled-coil-helix domain containing 10	CHCHD10	720205
Coiled-coil-helix-coiled-coil-helix domain containing 6	CHCHD6	716767

Cold inducible RNA binding protein	CIRBP	706175
Cold shock domain containing E1, RNA binding	CSDE1	708897
Collagen, type I, alpha 2	COL1A2	700359
Collagen, type III, alpha 1	COL3A1	574131
Collagen, type IX, alpha 1	COL9A1	714809
Collagen, type VI, alpha 1	COL6A1	721855
Collagen, type XII, alpha 1	COL12A1	717820
Collagen, type XXIV, alpha 1	COL24A1	711713
Colony stimulating factor 1 (macrophage)	CSF1	702532
Colony stimulating factor 3	CSF3	698961
Colony stimulating factor 3 receptor	CSF3R	713485
COMM domain containing 2	COMMD2	711498
COMM domain containing 6	COMMD6	695191
COMM domain containing 8	COMMD8	704346
Complement component 1, q subcomponent binding protein	C1QBP	711817
Complement component 1, s subcomponent	C1S	714589
Complement component 5	C5	700467
Complement component 7	C7	696926
Complement factor properdin	CFP	707386
Complexin 1	CPLX1	703519
Component of oligomeric golgi complex 1	COG1	695754
Component of oligomeric golgi complex 2	COG2	714263
Component of oligomeric golgi complex 4	COG4	712103
Conserved helix-loop-helix ubiquitous kinase	CHUK	709511
Coordinator of PRMT5, differentiation stimulator	COPRS	713293
COP9 signalosome subunit 2	COPS2	714814
COP9 signalosome subunit 3	COPS3	698461
COP9 signalosome subunit 4	COPS4	693435
COP9 signalosome subunit 5	COPS5	704584
COP9 signalosome subunit 6	COPS6	710667
Copine I	CPNE1	100329144
Copine II	CPNE2	703557
Copine V	CPNE5	719255
Copine VIII	CPNE8	696586
Copper chaperone for superoxide dismutase	CCS	721802
Core 1 synthase, glycoprotein-N-acetylgalactosamine 3-beta-galactosyltransferase 1	C1GALT1	696870
Core-binding factor, beta subunit	CBFB	695767
Core-binding factor, runt domain, alpha subunit 2; translocated to, 3	CBFA2T3	698233
Cornichon family AMPA receptor auxiliary protein 1	CNIH1	695002
Cornichon family AMPA receptor auxiliary protein 4	CNIH4	701767
Coronin, actin binding protein, 1B	CORO1B	721725
Cortactin	CTTN	708291
Cortactin binding protein 2	CTTNBP2	705351
Corticotropin releasing hormone binding protein	CRHBP	707589
Corticotropin releasing hormone receptor 1	CRHR1	574095
COX11 homolog, cytochrome c oxidase assembly protein	COX11	641445

COX20 Cox2 chaperone homolog	COX20	704298
Creatine kinase, brain	CKB	711167
CREB regulated transcription coactivator 2	CRTC2	715908
Cryptochrome circadian clock 1	CRY1	703752
Crystallin beta A4	CRYBA4	715477
Crystallin gamma S	CRYGS	699720
Crystallin, gamma C	CRYGC	709553
CSE1 chromosome segregation 1-like (yeast)	CSE1L	704301
C-src tyrosine kinase	CSK	702868
CTD phosphatase subunit 1	CTDP1	698467
CTD small phosphatase like 2	CTDSPL2	711917
C-terminal binding protein 1	CTBP1	694507
CTP synthase 1	CTPS1	695498
CTP synthase 2	CTPS2	721014
CTR9 homolog, Paf1/RNA polymerase II complex component	CTR9	705748
CTS telomere maintenance complex component 1	CTC1	717075
C-type lectin domain family 1, member A	CLEC1A	717526
C-type lectin domain family 9 member A	CLEC9A	717472
CUE domain containing 2	CUEDC2	713243
CUGBP, Elav-like family member 1	CELF1	713167
CUGBP, Elav-like family member 3	CELF3	716884
Cullin 4A	CUL4A	714302
Cullin 5	CUL5	707559
Cullin 7	CUL7	699545
Cutc copper transporter	CUTC	709050
CWC15 spliceosome-associated protein	CWC15	698332
CWF19-like 2, cell cycle control (S. Pombe)	CWF19L2	706825
C-x(9)-C motif containing 1	CMC1	705147
C-x(9)-C motif containing 4	CMC4	100423504
Cyclic nucleotide binding domain containing 2	CNBD2	703290
Cyclin A2	CCNA2	707259
Cyclin and CBS domain divalent metal cation transport mediator 2	CNNM2	714238
Cyclin B2	CCNB2	702184
Cyclin D2	CCND2	710379
Cyclin D3	CCND3	695215
Cyclin D-type binding-protein 1	CCNDBP1	709589
Cyclin E1	CCNE1	700589
Cyclin G1	CCNG1	697738
Cyclin H	CCNH	694224
Cyclin I	CCNI	677687
Cyclin O	CCNO	706193
Cyclin T2	CCNT2	708813
Cyclin-dependent kinase 1	CDK1	699269
Cyclin-dependent kinase 12	CDK12	696733
Cyclin-dependent kinase 14	CDK14	703442
Cyclin-dependent kinase 17	CDK17	717183

Cyclin-dependent kinase 19	CDK19	698292
Cyclin-dependent kinase 2	CDK2	711002
Cyclin-dependent kinase 4	CDK4	715650
Cyclin-dependent kinase 9	CDK9	699840
Cyclin-dependent kinase inhibitor 1B (p27, Kip1)	CDKN1B	697188
Cyclin-dependent kinase inhibitor 2C (p18, inhibits CDK4)	CDKN2C	711877
Cyclin-dependent kinase inhibitor 2D (p19, inhibits CDK4)	CDKN2D	713172
Cyclin-dependent kinase-like 2 (CDC2-related kinase)	CDKL2	701467
Cystatin C	CST3	574313
Cysteine rich hydrophobic domain 1	CHIC1	701720
Cysteine rich hydrophobic domain 2	CHIC2	697359
Cysteine/histidine-rich 1	CYHR1	702522
Cysteine-rich transmembrane module containing 1	CYSTM1	697656
Cysteine-serine-rich nuclear protein 1	CSRNP1	694328
Cysteine-serine-rich nuclear protein 2	CSRNP2	694549
CysteinyI-trna synthetase	CARS	706502
CysteinyI-trna synthetase 2, mitochondrial (putative)	CARS2	694840
Cystinosin, lysosomal cystine transporter	CTNS	706721
Cytidine deaminase	CDA	705913
Cytidine monophosphate (UMP-CMP) kinase 1, cytosolic	CMPK1	710196
Cytidine monophosphate N-acetylneuraminic acid synthetase	CMAS	706604
Cytochrome b reductase 1	CYBRD1	694818
Cytochrome b-245 heavy chain	CYBB	696542
Cytochrome b5 reductase 1	CYB5R1	704519
Cytochrome c oxidase subunit 5A	COX5A	692061
Cytochrome c oxidase subunit 6C	COX6C	100428416
Cytochrome c oxidase subunit IV isoform 1	COX4I1	693811
Cytochrome c oxidase subunit viib	COX7B	706099
Cytochrome c oxidase subunit viic	COX7C	100429280
Cytochrome c-1	CYC1	700518
Cytochrome P450, family 2, subfamily C, polypeptide 75	CYP2C75	678686
Cytochrome P450, family 2, subfamily D, polypeptide 6	CYP2D6	678691
Cytochrome P450, family 21, subfamily A, polypeptide 2	CYP21A2	717020
Cytochrome P450, family 3, subfamily A, polypeptide 5	CYP3A5	678692
Cytochrome P450, family 4, subfamily F, polypeptide 8	CYP4F8	718335
Cytochrome P450c17	CYP17A1	678693
Cytokine inducible SH2-containing protein	CISH	701456
Cytoplasmic FMR1 interacting protein 2	CYFIP2	714984
Cytoplasmic linker associated protein 2	CLASP2	706519
Cytoplasmic polyadenylation element binding protein 2	CPEB2	722844
Cytoskeleton associated protein 2 like	CKAP2L	704381
Cytoskeleton associated protein 5	CKAP5	714095
Cytosolic thiouridylase subunit 1	CTU1	719536
Dab, mitogen-responsive phosphoprotein, homolog 2 (Drosophila)	DAB2	694349
Dachshund family transcription factor 1	DACH1	693532
Dachsous cadherin-related 1	DCHS1	711938
DALR anticodon binding domain containing 3	DALRD3	708403

Damage-specific DNA binding protein 2	DDB2	713813
DAZ associated protein 1	DAZAP1	707132
DCN1, defective in cullin neddylation 1, domain containing 1	DCUN1D1	708357
DCN1, defective in cullin neddylation 1, domain containing 4	DCUN1D4	702908
DCN1, defective in cullin neddylation 1, domain containing 5	DCUN1D5	704099
DDB1 and CUL4 associated factor 11	DCAF11	714867
DDB1 and CUL4 associated factor 4	DCAF4	695337
DDB1 and CUL4 associated factor 5	DCAF5	714522
DDB1 and CUL4 associated factor 6	DCAF6	698686
D-dopachrome tautomerase	DDT	699933
DDRKG domain containing 1	DDRKG1	717226
DEAD (Asp-Glu-Ala-Asp) box helicase 1	DDX1	698327
DEAD (Asp-Glu-Ala-Asp) box helicase 3, Y-linked	DDX3Y	100270696
DEAD (Asp-Glu-Ala-Asp) box helicase 5	DDX5	677694
DEAD (Asp-Glu-Ala-Asp) box helicase 56	DDX56	698980
DEAD (Asp-Glu-Ala-Asp) box polypeptide 27	DDX27	703852
DEAD (Asp-Glu-Ala-Asp) box polypeptide 39A	DDX39A	718822
DEAD (Asp-Glu-Ala-Asp) box polypeptide 41	DDX41	700742
DEAD (Asp-Glu-Ala-Asp) box polypeptide 47	DDX47	697304
DEAD (Asp-Glu-Ala-Asp) box polypeptide 54	DDX54	712763
DEAD (Asp-Glu-Ala-Asp) box polypeptide 60	DDX60	693567
DEAD/H (Asp-Glu-Ala-Asp/His) box helicase 11	DDX11	717040
DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 26B	DDX26B	709688
Deafness, autosomal dominant 5	DFNA5	703441
Deafness, autosomal recessive 31	DFNB31	708051
DEAH (Asp-Glu-Ala-Asp/His) box polypeptide 57	DHX57	713523
DEAH (Asp-Glu-Ala-His) box helicase 15	DHX15	715852
DEAH (Asp-Glu-Ala-His) box helicase 30	DHX30	711178
DEAH (Asp-Glu-Ala-His) box helicase 9	DHX9	715453
DEAH (Asp-Glu-Ala-His) box polypeptide 29	DHX29	706306
DEAH (Asp-Glu-Ala-His) box polypeptide 38	DHX38	709173
DEAQ box RNA-dependent ATPase 1	DQX1	709749
Death associated protein 3	DAP3	719314
Death effector domain containing	DEDD	719875
Death inducer-obliterator 1	DIDO1	698313
Death-associated protein	DAP	697362
Debranching RNA lariats 1	DBR1	716467
Decapping exoribonuclease	DXO	716027
Decapping mrna 1A	DCP1A	694198
Decapping mrna 1B	DCP1B	708089
Decorin	DCN	709933
Dedicator of cytokinesis 5	DOCK5	711359
Defender against cell death 1	DAD1	711840
Defensin beta 118	DEFB118	641438
Defensin, alpha 4, corticostatin	DEFA4	574311
Dehydrodolichyl diphosphate synthase subunit	DHDDS	714635
Dehydrogenase/reductase (SDR family) member 1	DHRS1	715933
Dehydrogenase/reductase (SDR family) member 11	DHRS11	713823

Dehydrogenase/reductase (SDR family) member 3	DHRS3	715548
Dehydrogenase/reductase (SDR family) member 7	DHRS7	702872
Dehydrogenase/reductase (SDR family) member 9	DHRS9	705554
Deiodinase, iodothyronine, type II	DIO2	707484
DEK proto-oncogene	DEK	712460
Deleted in lung and esophageal cancer 1	DLEC1	697163
Deleted in primary ciliary dyskinesia homolog (mouse)	DPCD	712082
Delta(4)-desaturase, sphingolipid 1	DEGS1	702128
Delta(4)-desaturase, sphingolipid 2	DEGS2	717222
Delta-like 1 homolog (Drosophila)	DLK1	707595
Delta-like 2 homolog (Drosophila)	DLK2	700106
Deltex 3, E3 ubiquitin ligase	DTX3	715175
DENN/MADD domain containing 4A	DENND4A	709675
DENN/MADD domain containing 5A	DENND5A	707945
DENN/MADD domain containing 6A	DENND6A	707616
Denticleless E3 ubiquitin protein ligase homolog (Drosophila)	DTL	711236
Deoxyguanosine kinase	DGUOK	707554
Deoxyhypusine synthase	DHPS	716213
Deoxythymidylate kinase	DTYMK	701781
DEP domain containing 1B	DEPDC1B	709670
Dephospho-coa kinase domain containing	DCAKD	715841
Derlin 1	DERL1	703803
Derlin 2	DERL2	712051
Dermatan sulfate epimerase	DSE	716054
Dermatopontin	DPT	700181
Desmoplakin	DSP	694860
Desumoylating isopeptidase 2	DESI2	713515
Developmentally regulated GTP binding protein 1	DRG1	716791
Dexi homolog (mouse)	DEXI	100430904
Diacylglycerol kinase, beta 90kda	DGKB	715254
Diaphanous related formin 2	DIAPH2	699140
Dicer 1, ribonuclease type III	DICER1	702516
Dickkopf WNT signaling pathway inhibitor 1	DKK1	702997
Dickkopf WNT signaling pathway inhibitor 2	DKK2	694869
Digeorge syndrome critical region gene 6	DGCR6	693512
Dihydrolipoamide S-acetyltransferase	DLAT	710930
Dihydropyrimidinase like 3	DPYSL3	708425
Dihydropyrimidine dehydrogenase	DPYD	715672
Dihydrouridine synthase 1-like	DUS1L	715662
Dihydrouridine synthase 3-like	DUS3L	719524
Dimethylarginine dimethylaminohydrolase 1	DDAH1	711395
Dimethylglycine dehydrogenase	DMGDH	709237
Dipeptidase 2	DPEP2	701570
Dipeptidyl-peptidase 3	DPP3	721809
Dipeptidyl-peptidase 8	DPP8	709428
Diphosphoinositol pentakisphosphate kinase 2	PPIP5K2	703458
Diphthamine biosynthesis 6	DPH6	701401
DIS3 like exosome 3'-5' exoribonuclease	DIS3L	710238

Discoidin domain receptor tyrosine kinase 1	DDR1	714233
Discoidin domain receptor tyrosine kinase 2	DDR2	720124
Discs, large homolog 1 (Drosophila)	DLG1	709572
Discs, large homolog 4 (Drosophila)	DLG4	714273
Discs, large homolog 5 (Drosophila)	DLG5	703123
Dishevelled segment polarity protein 1	DVL1	705864
Dishevelled segment polarity protein 2	DVL2	714381
Dishevelled-binding antagonist of beta-catenin 1	DACT1	701218
Dispatched homolog 1 (Drosophila)	DISP1	703960
Distal-less homeobox 5	DLX5	697853
Dmx-like 1	DMXL1	698117
DNA (cytosine-5-)-methyltransferase 1	DNMT1	574321
DNA cross-link repair 1B	DCLRE1B	707742
DNA methyltransferase 1 associated protein 1	DMAPI	702919
Dnaj heat shock protein family (Hsp40) member A1	DNAJA1	703765
Dnaj heat shock protein family (Hsp40) member A4	DNAJA4	709872
Dnaj heat shock protein family (Hsp40) member B1	DNAJB1	718890
Dnaj heat shock protein family (Hsp40) member B4	DNAJB4	707206
Dnaj heat shock protein family (Hsp40) member B9	DNAJB9	701094
Dnaj heat shock protein family (Hsp40) member C1	DNAJC1	704151
Dnaj heat shock protein family (Hsp40) member C12	DNAJC12	695795
Dnaj heat shock protein family (Hsp40) member C19	DNAJC19	710082
Dnaj heat shock protein family (Hsp40) member C27	DNAJC27	694037
Dnaj heat shock protein family (Hsp40) member C3	DNAJC3	695757
Dnaj heat shock protein family (Hsp40) member C5 beta	DNAJC5B	702408
Dnaj heat shock protein family (Hsp40) member C6	DNAJC6	698682
Dnaj heat shock protein family (Hsp40) member C8	DNAJC8	720231
Dnaj heat shock protein family (Hsp40) member C9	DNAJC9	707599
Docking protein 5	DOK5	698689
Dolichyl-phosphate mannosyltransferase polypeptide 2, regulatory subunit	DPM2	698709
Double C2-like domains, alpha	DOC2A	707895
Double zinc ribbon and ankyrin repeat domains 1	DZANK1	700143
DR1-associated protein 1 (negative cofactor 2 alpha)	DRAP1	715271
Drebrin 1	DBN1	700375
Drosha, ribonuclease type III	DROSHA	692081
DTW domain containing 1	DTWD1	715084
D-tyrosyl-trna deacylase 1	DTD1	700895
Dual serine/threonine and tyrosine protein kinase	DSTYK	664732
Dual specificity phosphatase 1	DUSP1	702981
Dual specificity phosphatase 10	DUSP10	705056
Dual specificity phosphatase 11	DUSP11	707123
Dual specificity phosphatase 12	DUSP12	720034
Dual specificity phosphatase 14	DUSP14	714383
Dual specificity phosphatase 23	DUSP23	719474
Dual specificity phosphatase 26 (putative)	DUSP26	697134
Dual specificity phosphatase 6	DUSP6	708907

Dual specificity tyrosine-(Y)-phosphorylation regulated kinase 1B	DYRK1B	698848
Dual specificity tyrosine-(Y)-phosphorylation regulated kinase 2	DYRK2	717941
Dual specificity tyrosine-(Y)-phosphorylation regulated kinase 3	DYRK3	695163
Dynactin subunit 1	DCTN1	708290
Dynactin subunit 2	DCTN2	714948
Dynactin subunit 6	DCTN6	694273
Dynamamin 1-like	DNM1L	695388
Dynamamin 2	DNM2	713558
Dynein regulatory complex subunit 3	DRC3	699590
Dynein, axonemal, assembly factor 2	DNAAF2	719026
Dynein, axonemal, heavy chain 7	DNAH7	695393
Dynein, axonemal, intermediate chain 1	DNAI1	701307
Dynein, cytoplasmic 1, intermediate chain 2	DYNC1I2	695696
Dynein, light chain, LC8-type 1	DYNLL1	702360
Dynein, light chain, roadblock-type 2	DYNLRB2	713503
E1A binding protein p300	EP300	706258
E2F transcription factor 1	E2F1	714126
E2F transcription factor 2	E2F2	710200
E2F transcription factor 3	E2F3	713904
E2F transcription factor 4, p107/p130-binding	E2F4	696864
E2F transcription factor 5, p130-binding	E2F5	703352
E2F transcription factor 7	E2F7	694423
E2F-associated phosphoprotein	EAPP	714727
E74-like factor 1 (ets domain transcription factor)	ELF1	697952
E74-like factor 2 (ets domain transcription factor)	ELF2	696760
E74-like factor 5 (ets domain transcription factor)	ELF5	717377
Ecdysoneless homolog (Drosophila)	ECD	707699
ECSIT signalling integrator	ECSIT	714805
Ectodermal-neural cortex 1 (with BTB domain)	ENC1	704577
Ectodysplasin A receptor	EDAR	695059
Ecto-NOX disulfide-thiol exchanger 1	ENOX1	700475
Ecto-NOX disulfide-thiol exchanger 2	ENOX2	703816
Ectonucleoside triphosphate diphosphohydrolase 5	ENTPD5	698503
Ectonucleotide pyrophosphatase/phosphodiesterase 2	ENPP2	705287
Ectonucleotide pyrophosphatase/phosphodiesterase 4 (putative)	ENPP4	703680
Ectonucleotide pyrophosphatase/phosphodiesterase 6	ENPP6	693950
EF-hand calcium binding domain 12	EFCAB12	703176
EF-hand calcium binding domain 6	EFCAB6	712043
EF-hand calcium binding domain 7	EFCAB7	696830
EF-hand domain (C-terminal) containing 1	EFHC1	708517
EF-hand domain family member D1	EFHD1	717627
EF-hand domain family member D2	EFHD2	694155
EGF-like, fibronectin type III and laminin G domains	EGFLAM	693314
EGF-like-domain, multiple 6	EGFL6	711280

EGF-like-domain, multiple 7	EGFL7	709840
EGF-like-domain, multiple 8	EGFL8	717145
Egl-9 family hypoxia-inducible factor 1	EGLN1	713410
Egl-9 family hypoxia-inducible factor 2	EGLN2	703083
EH domain binding protein 1	EHBP1	693902
Elastin microfibril interfacer 1	EMILIN1	698204
Electron-transferring-flavoprotein dehydrogenase	ETFDH	701207
ELL associated factor 2	EAF2	714223
ELMO/CED-12 domain containing 2	ELMOD2	698742
Elongation factor RNA polymerase II-like 3	ELL3	711271
Elongation factor Tu GTP binding domain containing 2	EFTUD2	715512
ELOVL fatty acid elongase 1	ELOVL1	700557
ELOVL fatty acid elongase 2	ELOVL2	703030
ELOVL fatty acid elongase 4	ELOVL4	692070
ELOVL fatty acid elongase 6	ELOVL6	698870
Embryonal Fyn-associated substrate	EFS	713838
Embryonic ectoderm development	EED	703866
Emopamil binding protein (sterol isomerase)	EBP	714315
Empty spiracles homeobox 1	EMX1	705441
Endogenous Bornavirus-like nucleoprotein 2	EBLN2	693420
Endonuclease domain containing 1	ENDOD1	699210
Endonuclease G	ENDOG	717171
Endonuclease, poly(U) specific	ENDOU	703854
Endonuclease/exonuclease/phosphatase family domain containing 1	EEPD1	706642
Endoplasmic reticulum aminopeptidase 2	ERAP2	700118
Endoplasmic reticulum lectin 1	ERLEC1	716460
Endoplasmic reticulum protein 27	ERP27	700186
Endothelin 3	EDN3	693385
Energy homeostasis associated	ENHO	701072
Engulfment and cell motility 1	ELMO1	705818
Engulfment and cell motility 2	ELMO2	707316
Enhancer of polycomb homolog 2 (Drosophila)	EPC2	721916
Enhancer of rudimentary homolog (Drosophila)	ERH	712507
Enhancer of yellow 2 homolog (Drosophila)	ENY2	699048
Enhancer of zeste 1 polycomb repressive complex 2 subunit	EZH1	711173
Enhancer of zeste 2 polycomb repressive complex 2 subunit	EZH2	709075
Enkurin domain containing 1	ENKD1	699487
Enolase 1, (alpha)	ENO1	709378
Enolase superfamily member 1	ENOSF1	697333
Enoyl-coa delta isomerase 2	ECI2	709579
EPH receptor B6	EPHB6	704886
Ephrin-B1	EFNB1	694149
Epidermal growth factor receptor pathway substrate 15-like 1	EPS15L1	719502
Epidermal growth factor receptor pathway substrate 8	EPS8	702777
Epididymal protein 3A	EDDM3A	704355
Epilepsy, progressive myoclonus type 2A, Lafora disease (laforin)	EPM2A	699361

Epithelial cell transforming 2	ECT2	694056
Epithelial membrane protein 3	EMP3	717867
EPS8 like 1	EPS8L1	698281
EPS8-like 3	EPS8L3	700441
Epsin 1	EPN1	702956
ER degradation enhancer, mannosidase alpha-like 3	EDEM3	714475
ER membrane protein complex subunit 4	EMC4	695907
ER membrane protein complex subunit 6	EMC6	707030
ER membrane protein complex subunit 8	EMC8	693674
ER membrane protein complex subunit 9	EMC9	715192
ERBB receptor feedback inhibitor 1	ERRFI1	722072
ERGIC and golgi 3	ERGIC3	704736
Erythrocyte membrane protein band 4.1-like 1	EPB41L1	710697
ES cell expressed Ras	ERAS	711442
ESF1 nucleolar pre-rRNA processing protein homolog	ESF1	694159
Esterase D	ESD	708871
Ethanolamine kinase 2	ETNK2	700683
Ethanolamine-phosphate phospho-lyase	ETNPPL	696880
Ethanolaminephosphotransferase 1	EPT1	698276
Eukaryotic elongation factor, selenocysteine-trna-specific	EEFSEC	705784
Eukaryotic translation elongation factor 1 beta 2	EEF1B2	707019
Eukaryotic translation elongation factor 1 epsilon 1	EEF1E1	695426
Eukaryotic translation elongation factor 1 gamma	EEF1G	722274
Eukaryotic translation initiation factor 2 subunit alpha	EIF2S1	710150
Eukaryotic translation initiation factor 2 subunit beta	EIF2S2	708593
Eukaryotic translation initiation factor 2A, 65kda	EIF2A	710497
Eukaryotic translation initiation factor 2-alpha kinase 3	EIF2AK3	699575
Eukaryotic translation initiation factor 2D	EIF2D	695274
Eukaryotic translation initiation factor 3 subunit D	EIF3D	695051
Eukaryotic translation initiation factor 3 subunit E	EIF3E	697622
Eukaryotic translation initiation factor 3 subunit F	EIF3F	706269
Eukaryotic translation initiation factor 3 subunit G	EIF3G	714726
Eukaryotic translation initiation factor 3 subunit H	EIF3H	700517
Eukaryotic translation initiation factor 3 subunit K	EIF3K	693536
Eukaryotic translation initiation factor 3 subunit L	EIF3L	699189
Eukaryotic translation initiation factor 3 subunit M	EIF3M	695698
Eukaryotic translation initiation factor 4A2	EIF4A2	707775
Eukaryotic translation initiation factor 4A3	EIF4A3	712141
Eukaryotic translation initiation factor 4E binding protein 1	EIF4EBP1	703628
Eukaryotic translation initiation factor 4E binding protein 2	EIF4EBP2	100424760
Eukaryotic translation initiation factor 4E binding protein 3	EIF4EBP3	100532736
Eukaryotic translation initiation factor 4E family member 2	EIF4E2	713487
Eukaryotic translation initiation factor 4H	EIF4H	693429
Eukaryotic translation termination factor 1	ETF1	714449
Eva-1 homolog B (C. Elegans)	EVA1B	713159
EWS RNA binding protein 1	EWSR1	714432
Excision repair cross-complementation group 2	ERCC2	715485
Excision repair cross-complementation group 3	ERCC3	698829

Excision repair cross-complementation group 6	ERCC6	710153
Exocyst complex component 1	EXOC1	695664
Exocyst complex component 2	EXOC2	706296
Exocyst complex component 4	EXOC4	712458
Exosome component 10	EXOSC10	714153
Exosome component 3	EXOSC3	716347
Exostosin glycosyltransferase 1	EXT1	701488
Exostosin glycosyltransferase 2	EXT2	715975
Exportin 1	XPO1	718063
Exportin 4	XPO4	703548
Exportin 5	XPO5	700664
Exportin 6	XPO6	704332
Exportin, trna	XPOT	717375
Extended synaptotagmin-like protein 1	ESYT1	711720
Extra spindle pole bodies like 1, separase	ESPL1	702136
Extracellular matrix protein 1	ECM1	707209
F11 receptor	F11R	719824
Factor interacting with PAPOLA and CPSF1	FIP1L1	697725
Failed axon connections homolog	FAXC	693945
Family with sequence similarity 102 member A	FAM102A	698590
Family with sequence similarity 104 member A	FAM104A	695865
Family with sequence similarity 110 member A	FAM110A	717055
Family with sequence similarity 110 member B	FAM110B	703840
Family with sequence similarity 117 member A	FAM117A	700079
Family with sequence similarity 122A	FAM122A	698955
Family with sequence similarity 122C	FAM122C	709915
Family with sequence similarity 124 member B	FAM124B	707444
Family with sequence similarity 127, member A	FAM127A	708766
Family with sequence similarity 129 member B	FAM129B	707403
Family with sequence similarity 134 member A	FAM134A	704378
Family with sequence similarity 134 member B	FAM134B	717983
Family with sequence similarity 151 member B	FAM151B	715256
Family with sequence similarity 156 member B	FAM156B	698392
Family with sequence similarity 160 member A2	FAM160A2	711641
Family with sequence similarity 162 member A	FAM162A	714652
Family with sequence similarity 170 member A	FAM170A	701046
Family with sequence similarity 171 member B	FAM171B	712442
Family with sequence similarity 174 member A	FAM174A	702300
Family with sequence similarity 175 member B	FAM175B	694886
Family with sequence similarity 178 member B	FAM178B	710890
Family with sequence similarity 179 member B	FAM179B	702188
Family with sequence similarity 181 member B	FAM181B	701184
Family with sequence similarity 185 member A	FAM185A	694971
Family with sequence similarity 188 member A	FAM188A	699009
Family with sequence similarity 199, X-linked	FAM199X	699523
Family with sequence similarity 20 member C	FAM20C	695088
Family with sequence similarity 212 member A	FAM212A	704983
Family with sequence similarity 219 member A	FAM219A	700651

Family with sequence similarity 220 member A	FAM220A	703785
Family with sequence similarity 222 member B	FAM222B	710302
Family with sequence similarity 26 member F	FAM26F	715967
Family with sequence similarity 3 member A	FAM3A	701159
Family with sequence similarity 35 member A	FAM35A	694102
Family with sequence similarity 49 member A	FAM49A	698947
Family with sequence similarity 58 member A	FAM58A	695925
Family with sequence similarity 63 member B	FAM63B	703159
Family with sequence similarity 64 member A	FAM64A	712701
Family with sequence similarity 76 member A	FAM76A	716420
Family with sequence similarity 76 member B	FAM76B	699581
Family with sequence similarity 8 member A1	FAM8A1	703789
Family with sequence similarity 81 member A	FAM81A	702510
Family with sequence similarity 89 member B	FAM89B	721925
Family with sequence similarity 91 member A1	FAM91A1	705119
Family with sequence similarity 92 member A1	FAM92A1	698794
FANCD2/FANCI-associated nuclease 1	FAN1	713125
Fanconi anemia complementation group E	FANCE	718889
Fanconi anemia complementation group G	FANCG	698837
Far upstream element (FUSE) binding protein 1	FUBP1	707102
Farnesyl-diphosphate farnesyltransferase 1	FDFT1	696396
Farnesyltransferase, CAAX box, beta	FNTB	708129
Fas (TNFRSF6) associated factor 1	FAF1	714405
Fas apoptotic inhibitory molecule	FAIM	716216
Fasciculation and elongation protein zeta 1	FEZ1	713106
Fasciculation and elongation protein zeta 2 (zygin II)	FEZ2	708288
FAST kinase domains 1	FASTKD1	706154
Fat storage-inducing transmembrane protein 1	FITM1	715085
Fatty acid 2-hydroxylase	FA2H	710403
Fatty acid binding protein 7, brain	FABP7	713762
Fatty acid desaturase 2	FADS2	719037
Fatty acid desaturase 3	FADS3	722337
Fatty acyl coa reductase 1	FAR1	699947
F-box and WD repeat domain containing 11	FBXW11	708990
F-box and WD repeat domain containing 4	FBXW4	711996
F-box and WD repeat domain containing 7	FBXW7	695101
F-box and WD repeat domain containing 9	FBXW9	716383
F-box protein 11	FBXO11	715651
F-box protein 25	FBXO25	716139
F-box protein 30	FBXO30	699241
F-box protein 32	FBXO32	704804
F-box protein 4	FBXO4	697007
Fc fragment of igg, receptor, transporter, alpha	FCGRT	718859
Fc receptor-like B	FCRLB	720028
FCH and double SH3 domains 2	FCHSD2	717996
Feline leukemia virus subgroup C cellular receptor 1	FLVCR1	710008
Fem-1 homolog b (C. Elegans)	FEM1B	693955
Fer (fps/fes related) tyrosine kinase	FER	711220

FERM domain containing 3	FRMD3	713394
FERM domain containing 6	FRMD6	707266
Fermitin family member 2	FERMT2	693958
Fetal and adult testis expressed 1	FATE1	704368
FGFR1 oncogene partner	FGFR1OP	706749
Fibrillarlin	FBL	700286
Fibroblast activation protein alpha	FAP	701541
Fibroblast growth factor 10	FGF10	701584
Fibroblast growth factor 13	FGF13	695460
Fibroblast growth factor 16	FGF16	705612
Fibroblast growth factor 7	FGF7	574345
Fibroblast growth factor receptor substrate 3	FRS3	694462
Fibronectin 1	FN1	613269
Fibronectin type III and ankyrin repeat domains 1	FANK1	696281
Fibronectin type III domain containing 4	FNDC4	702098
FIC domain containing	FICD	706780
FIG4 phosphoinositide 5-phosphatase	FIG4	699914
Filamin A interacting protein 1	FILIP1	716439
Filamin B, beta	FLNB	702732
Filamin binding LIM protein 1	FBLIM1	695727
Finkel-Biskis-Reilly murine sarcoma virus (FBR-musv) ubiquitously expressed	FAU	716761
FK506 binding protein 11	FKBP11	708598
FK506 binding protein 1B	FKBP1B	703973
FK506 binding protein 6	FKBP6	716306
FK506 binding protein 7	FKBP7	703299
FK506 binding protein 9	FKBP9	708827
Flavin adenine dinucleotide synthetase 1	FLAD1	717133
Flavin containing monooxygenase 5	FMO5	709691
Flightless I actin binding protein	FLII	700471
FLYWCH-type zinc finger 1	FLYWCH1	700909
Fms-related tyrosine kinase 3 ligand	FLT3LG	719239
Folate receptor 1 (adult)	FOLR1	718388
Follistatin like 1	FSTL1	713367
Forkhead box A3	FOXA3	715663
Forkhead box O3	FOXO3	700731
Forkhead box P2	FOXP2	613237
Forkhead box P4	FOXP4	693943
Formin homology 2 domain containing 1	FHOD1	697346
Four and a half LIM domains 2	FHL2	713222
Fragile site, folic acid type, rare, fra(10)(q23.3) or fra (10)(q24.2) candidate 1	FRA10AC1	700389
Fragile X mental retardation, autosomal homolog 1	FXR1	710170
FRAS1 related extracellular matrix 1	FREM1	713874
Frataxin	FXN	699469
Free fatty acid receptor 2	FFAR2	709026
Frizzled class receptor 5	FZD5	710796

Frizzled class receptor 6	FZD6	694625
Ftsj RNA methyltransferase homolog 1 (E. Coli)	FTSJ1	710243
Fucokinase	FUK	709226
Fucosidase, alpha-L- 2, plasma	FUCA2	700611
Fukutin related protein	FKRP	716804
Fumarylacetoacetate hydrolase (fumarylacetoacetase)	FAH	712716
FUN14 domain containing 1	FUNDC1	709370
Fuzzy planar cell polarity protein	FUZ	719442
FXYP domain containing ion transport regulator 6	FXYP6	698456
FXYP domain containing ion transport regulator 7	FXYP7	718457
FYN proto-oncogene, Src family tyrosine kinase	FYN	574214
FYVE, rhogef and PH domain containing 2	FGD2	719329
FYVE, rhogef and PH domain containing 4	FGD4	695281
G elongation factor, mitochondrial 1	GFM1	706456
G elongation factor, mitochondrial 2	GFM2	704247
G kinase anchoring protein 1	GKAP1	708816
G protein pathway suppressor 1	GPS1	719343
G protein regulated inducer of neurite outgrowth 2	GPRIN2	694369
G protein-coupled bile acid receptor 1	GPBAR1	697937
G protein-coupled receptor 135	GPR135	701843
G protein-coupled receptor 137	GPR137	717722
G protein-coupled receptor 143	GPR143	709148
G protein-coupled receptor 151	GPR151	708020
G protein-coupled receptor 156	GPR156	713174
G protein-coupled receptor 161	GPR161	698934
G protein-coupled receptor 162	GPR162	100428264
G protein-coupled receptor 173	GPR173	698645
G protein-coupled receptor 19	GPR19	697072
G protein-coupled receptor 3	GPR3	716033
G protein-coupled receptor 31	GPR31	717158
G protein-coupled receptor 37 (endothelin receptor type B-like)	GPR37	696628
G protein-coupled receptor 87	GPR87	709766
G protein-coupled receptor 89A	GPR89A	696579
G protein-coupled receptor kinase 6	GRK6	700000
G protein-coupled receptor kinase interacting arfgap 2	GIT2	708092
G protein-coupled receptor, class C, group 5, member C	GPRC5C	697446
G2/M-phase specific E3 ubiquitin protein ligase	G2E3	717021
GA binding protein transcription factor, beta subunit 1	GABPB1	715334
GABA(A) receptor-associated protein	GABARAP	714597
GABA(A) receptor-associated protein like 2	GABARAPL2	714413
Galactosidase alpha	GLA	703129
Galactosylceramidase	GALC	693322
Galanin receptor 3	GALR3	701727
Galanin/GMAP prepropeptide	GAL	721572
Gametogenetin binding protein 2	GGNBP2	713750
Gamma-aminobutyric acid (GABA) B receptor, 1	GABBR1	708987
Gamma-glutamyl hydrolase (conjugase, folylpolygamma glutamyl hydrolase)	GGH	700747

Gamma-glutamylcyclotransferase	GGCT	695547
Ganglioside induced differentiation associated protein 1	GDAP1	697136
Ganglioside induced differentiation associated protein 2	GDAP2	705994
Gap junction protein alpha 1	GJA1	714344
Gap junction protein alpha 4	GJA4	710913
Gap junction protein beta 4	GJB4	710994
Gap junction protein gamma 1	GJC1	715463
GATA binding protein 2	GATA2	705551
GCN1, eif2 alpha kinase activator homolog	GCN1	698528
GC-rich promoter binding protein 1	GPBP1	708322
GC-rich promoter binding protein 1-like 1	GPBP1L1	706690
GDP dissociation inhibitor 2	GDI2	712510
GDP-mannose 4,6-dehydratase	GMDS	707051
GDP-mannose pyrophosphorylase A	GMPPA	703756
GDP-mannose pyrophosphorylase B	GMPPB	705454
Gelsolin	GSN	699705
GEM interacting protein	GMIP	720380
Gem nuclear organelle associated protein 2	GEMIN2	698881
General transcription factor IIA 2	GTF2A2	702984
General transcription factor IIB	GTF2B	694770
General transcription factor IIE subunit 2	GTF2E2	694622
General transcription factor IIF subunit 2	GTF2F2	701668
General transcription factor IIH subunit 5	GTF2H5	700107
General transcription factor IIIA	GTF3A	710492
General transcription factor IIIC subunit 1	GTF3C1	703998
General transcription factor IIIC subunit 4	GTF3C4	714849
General transcription factor IIIC subunit 6	GTF3C6	696512
Geranylgeranyl diphosphate synthase 1	GGPS1	100425248
Germ cell-less, spermatogenesis associated 1	GMCL1	701545
GID complex subunit 4 homolog	GID4	699842
GID complex subunit 8	GID8	698189
Gigaxonin	GAN	713996
GIN5 complex subunit 2 (Psf2 homolog)	GIN52	693426
GIPC PDZ domain containing family member 1	GIPC1	717785
GLE1, RNA export mediator	GLE1	717474
GLI family zinc finger 1	GLI1	714843
Glomulin, FKBP associated protein	GLMN	706249
Glucan (1,4-alpha-), branching enzyme 1	GBE1	722884
Glucokinase (hexokinase 4)	GCK	699728
Glucokinase (hexokinase 4) regulator	GCKR	701431
Glucosamine-6-phosphate deaminase 1	GNPDA1	703036
Glucose 6 phosphatase, catalytic, 3	G6PC3	714276
Glucose-6-phosphate dehydrogenase	G6PD	701137
Glucose-fructose oxidoreductase domain containing 1	GFOD1	700607
Glucosidase, alpha; neutral C	GANC	708126
Glucosidase, beta (bile acid) 2	GBA2	696062
Glutamate receptor, ionotropic, AMPA 2	GRIA2	574344
Glutamate receptor, ionotropic, N-methyl D-aspartate-	GRINA	708234

associated protein 1 (glutamate binding)		
Glutamate rich 6	ERICH6	710313
Glutamate-cysteine ligase, catalytic subunit	GCLC	710508
Glutamic-oxaloacetic transaminase 2	GOT2	707896
Glutamic-pyruvate transaminase (alanine aminotransferase)	GPT	703122
Glutaminase	GLS	693520
Glutamine--fructose-6-phosphate transaminase 1	GFPT1	574376
Glutamine-fructose-6-phosphate transaminase 2	GFPT2	715826
Glutaminyl-trna synthetase	QARS	708111
Glutaredoxin	GLRX	698997
Glutaredoxin 2	GLRX2	712396
Glutaredoxin 5	GLRX5	702989
Glutaryl-coa dehydrogenase	GCDH	716935
Glutathione peroxidase 1	GPX1	706732
Glutathione peroxidase 4	GPX4	705333
Glutathione peroxidase 7	GPX7	715474
Glutathione peroxidase 8 (putative)	GPX8	705965
Glutathione S-transferase alpha 2	GSTA2	709037
Glutathione S-transferase alpha 4	GSTA4	709666
Glutathione S-transferase mu 2 (muscle)	GSTM2	700053
Glutathione S-transferase omega 1	GSTO1	716078
Glutathione S-transferase omega 2	GSTO2	715291
Glutathione S-transferase pi 1	GSTP1	721704
Glutathione S-transferase, C-terminal domain containing	GSTCD	694220
Glyceraldehyde-3-phosphate dehydrogenase	GAPDH	574353
Glycerol kinase 2	GK2	696635
Glycerol-3-phosphate acyltransferase, mitochondrial	GPAM	696042
Glycerophosphodiester phosphodiesterase domain containing 5	GDPD5	695518
Glycine amidinotransferase (L-arginine:glycine amidinotransferase)	GATM	713306
Glycine dehydrogenase (decarboxylating)	GLDC	715563
Glycine receptor beta	GLRB	700368
Glycophorin C (Gerbich blood group)	GYPC	712092
Glycoprotein hormone alpha 2	GPHA2	717261
Glycoprotein IX (platelet)	GP9	704202
Glycoprotein M6B	GPM6B	711762
Glycosylphosphatidylinositol anchor attachment 1	GPAA1	699887
Glycosyltransferase 8 domain containing 1	GLT8D1	695999
Glycosyltransferase 8 domain containing 2	GLT8D2	699937
Glycosyltransferase like domain containing 1	GTDC1	100424584
Golgi phosphoprotein 3-like	GOLPH3L	707858
Golgi reassembly stacking protein 2	GORASP2	694170
Golgi-associated, gamma adaptin ear containing, ARF binding protein 1	GGA1	697929
Golgi-associated, gamma adaptin ear containing, ARF binding protein 3	GGA3	705751
Golgin A7	GOLGA7	709911
Golgin B1	GOLGB1	713993

Gonadotropin releasing hormone 1	GNRH1	613033
G-patch domain containing 3	GPATCH3	715116
G-protein signaling modulator 3	GPSM3	717356
Grancalcin	GCA	702138
Granulysin	GNLY	696059
GRB2 associated binding protein 1	GAB1	700367
GRB2-related adaptor protein	GRAP	702473
Gremlin 2, DAN family BMP antagonist	GREM2	708280
Growth arrest and DNA damage inducible beta	GADD45B	711257
Growth arrest and DNA damage inducible gamma	GADD45G	697835
Growth arrest specific 2 like 1	GAS2L1	714530
Growth arrest specific 6	GAS6	716066
Growth associated protein 43	GAP43	711260
Growth differentiation factor 7	GDF7	702462
Growth factor receptor bound protein 10	GRB10	694786
Growth hormone inducible transmembrane protein	GHITM	702691
Growth hormone secretagogue receptor	GHSR	694587
GRP1 (general receptor for phosphoinositides 1)-associated scaffold protein	GRASP	696547
GTF2I repeat domain containing 1	GTF2IRD1	693935
GTP binding protein 2	GTPBP2	700913
Gtpase activating protein (SH3 domain) binding protein 1	G3BP1	713884
Gtpase, IMAP family member 4	GIMAP4	713506
Guanidinoacetate N-methyltransferase	GAMT	721263
Guanine nucleotide binding protein (G protein), alpha 11 (Gq class)	GNA11	721649
Guanine nucleotide binding protein (G protein), beta polypeptide 1	GNB1	703399
Guanine nucleotide binding protein (G protein), beta polypeptide 2-like 1	GNB2L1	708526
Guanine nucleotide binding protein (G protein), beta polypeptide 3	GNB3	713913
Guanine nucleotide binding protein (G protein), gamma 10	GNG10	708193
Guanine nucleotide binding protein (G protein), gamma 11	GNG11	700606
Guanine nucleotide binding protein (G protein), q polypeptide	GNAQ	705680
Guanosine monophosphate reductase 2	GMPR2	715719
Guanylate cyclase 1, soluble, alpha 2	GUCY1A2	706615
Guanylate cyclase activator 1A	GUCA1A	695552
Guanylate kinase 1	GUK1	695272
GULP, engulfment adaptor PTB domain containing 1	GULP1	708601
H2A histone family, member X	H2AFX	703073
H2A histone family, member Y	H2AFY	711836
H2A histone family, member Y2	H2AFY2	711117
H2A histone family, member Z	H2AFZ	709326
Haloacid dehalogenase like hydrolase domain containing 2	HDHD2	697216
HAUS augmin like complex subunit 4	HAUS4	717252
HAUS augmin like complex subunit 8	HAUS8	718874
Hdc homolog, cell cycle regulator	HECA	702628

HEAT repeat containing 6	HEATR6	720089
HEAT repeat containing 9	HEATR9	716382
Heat shock factor binding protein 1	HSBP1	714498
Heat shock protein 90kda alpha (cytosolic), class A member 1	HSP90AA1	708431
Heat shock protein 90kda alpha family class B member 1	HSP90AB1	702293
Heat shock protein 90kda beta family member 1	HSP90B1	699568
Heat shock protein family A (Hsp70) member 8	HSPA8	707989
Heat shock protein family B (small) member 11	HSPB11	714791
Heat shock protein family B (small) member 6	HSPB6	710760
Heat shock protein family D (Hsp60) member 1	HSPD1	698024
Heat shock protein family H (Hsp110) member 1	HSPH1	721956
Heat shock transcription factor 2	HSF2	713938
HECT and RLD domain containing E3 ubiquitin protein ligase 3	HERC3	703108
HECT and RLD domain containing E3 ubiquitin protein ligase 4	HERC4	695571
HECT domain containing E3 ubiquitin protein ligase 1	HECTD1	717177
HECT domain containing E3 ubiquitin protein ligase 2	HECTD2	697258
HECT domain containing E3 ubiquitin protein ligase 3	HECTD3	705051
Helicase (DNA) B	HELB	717860
Helicase, lymphoid-specific	HELLS	701598
Hematological and neurological expressed 1	HN1	664729
Hematological and neurological expressed 1-like	HN1L	702283
Hematopoietic prostaglandin D synthase	HPGDS	705227
Heme binding protein 1	HEBP1	697821
Heme binding protein 2	HEBP2	709176
Heme oxygenase 2	HMOX2	705461
Hemoglobin subunit epsilon 1	HBE1	715414
Hemoglobin, beta	HBB	715559
Hemoglobin, gamma G	HBG2	715368
HEN1 methyltransferase homolog 1 (Arabidopsis)	HENMT1	698896
Hepatic leukemia factor	HLF	706623
Hepatocyte growth factor-regulated tyrosine kinase substrate	HGS	714385
Hepcidin antimicrobial peptide	HAMP	708397
Hermansky-Pudlak syndrome 6	HPS6	712574
Hes family bhlh transcription factor 7	HES7	721942
Hes-related family bhlh transcription factor with YRPW motif 2	HEY2	712988
HESX homeobox 1	HESX1	704551
Heterogeneous nuclear ribonucleoprotein A/B	HNRNPAB	702509
Heterogeneous nuclear ribonucleoprotein A1	HNRNPA1	702977
Heterogeneous nuclear ribonucleoprotein A2/B1	HNRNPA2B1	701821
Heterogeneous nuclear ribonucleoprotein C (C1/C2)	HNRNPC	706423
Heterogeneous nuclear ribonucleoprotein D	HNRNPD	694867
Heterogeneous nuclear ribonucleoprotein D like	HNRNPDL	694603
Heterogeneous nuclear ribonucleoprotein H2 (H')	HNRNPH2	703254
Heterogeneous nuclear ribonucleoprotein L	HNRNPL	694448
Heterogeneous nuclear ribonucleoprotein L-like	HNRNPLL	710841
Hexamethylene bis-acetamide inducible 2	HEXIM2	716047
Hexokinase domain containing 1	HKDC1	711995
Hexose-6-phosphate dehydrogenase (glucose 1-dehydrogenase)	H6PD	710107

HIG1 hypoxia inducible domain family member 1B	HIGD1B	715566
HIG1 hypoxia inducible domain family member 2A	HIGD2A	696888
High mobility group box 3	HMGB3	703598
Highly divergent homeobox	HDX	710427
Hippocalcin	HPCA	710249
HIRA interacting protein 3	HIRIP3	708004
Histidine triad nucleotide binding protein 1	HINT1	706083
Histidyl-trna synthetase 2	HARS2	697009
Histocompatibility (minor) 13	HM13	713216
Histone cluster 1, h2aj	HIST1H2AJ	704127
Histone deacetylase 3	HDAC3	704467
Histone deacetylase 5	HDAC5	711456
Histone H4 transcription factor	HINFP	703763
HMG-box transcription factor 1	HBP1	699237
Holliday junction recognition protein	HJURP	718180
Homeobox A9	HOXA9	699729
Homeobox D10	HOXD10	700318
Homeodomain interacting protein kinase 1	HIPK1	707856
Homer scaffolding protein 3	HOMER3	719647
Homocysteine-inducible, endoplasmic reticulum stress-inducible, ubiquitin-like domain member 1	HERPUD1	703210
Homogentisate 1,2-dioxygenase	HGD	713499
Hook microtubule-tethering protein 1	HOOK1	693504
HRAS like suppressor family member 5	HRASLS5	718317
Htra serine peptidase 2	HTRA2	709938
Htra serine peptidase 4	HTRA4	700875
HUS1 checkpoint clamp component	HUS1	699541
Hyaluronan and proteoglycan link protein 3	HAPLN3	698880
Hyaluronan synthase 3	HAS3	704121
Hyaluronoglucosaminidase 2	HYAL2	702484
Hydrogen voltage gated channel 1	HVCN1	709745
Hydroxyacyl-coa dehydrogenase/3-ketoacyl-coa thiolase/enoyl-coa hydratase (trifunctional protein), alpha subunit	HADHA	695975
Hydroxysteroid (17-beta) dehydrogenase 10	HSD17B10	700018
Hydroxysteroid (17-beta) dehydrogenase 6	HSD17B6	713549
Hydroxysteroid (17-beta) dehydrogenase 8	HSD17B8	718119
Hydroxysteroid dehydrogenase like 1	HSDL1	714962
Hyperpolarization activated cyclic nucleotide gated potassium channel 3	HCN3	717719
Hypocretin (orexin) neuropeptide precursor	HCRT	709564
Hypoxia inducible factor 1, alpha subunit (basic helix-loop-helix transcription factor)	HIF1A	704678
Hypoxia inducible lipid droplet-associated	HILPDA	701261
Hypoxia up-regulated 1	HYOU1	707715
Idnk, gluconokinase homolog (E. Coli)	IDNK	708613
IKAROS family zinc finger 2	IKZF2	693521
IKAROS family zinc finger 5	IKZF5	716950
ILK associated serine/threonine phosphatase	ILKAP	706334

Immunoglobulin superfamily member 1	IGSF1	704264
Immunoglobulin superfamily member 10	IGSF10	709661
Immunoglobulin superfamily member 6	IGSF6	699485
IMP (inosine 5'-monophosphate) dehydrogenase 1	IMPDH1	701039
IMP3, U3 small nucleolar ribonucleoprotein	IMP3	706202
Importin 8	IPO8	693514
Increased sodium tolerance 1 homolog (yeast)	IST1	707245
Influenza virus NS1A binding protein	IVNS1ABP	714152
Inhibin alpha	INHA	574379
Inhibitor of DNA binding 1, dominant negative helix-loop-helix protein	ID1	713160
Inhibitor of growth family member 2	ING2	701839
Inhibitor of growth family member 4	ING4	722073
Inhibitor of kappa light polypeptide gene enhancer in B-cells, kinase beta	IKBKB	704683
INO80 complex subunit C	INO80C	708819
Inosine triphosphatase	ITPA	717257
Inositol 1,4,5-trisphosphate receptor interacting protein-like 1	ITPRIPL1	705560
Inositol hexakisphosphate kinase 1	IP6K1	705576
Inositol monophosphatase domain containing 1	IMPAD1	696893
Inositol polyphosphate multikinase	IPMK	703630
Inositol polyphosphate phosphatase like 1	INPPL1	718421
Inositol polyphosphate-1-phosphatase	INPP1	703301
Inositol polyphosphate-4-phosphatase type II B	INPP4B	699738
Inositol(myo)-1(or 4)-monophosphatase 2	IMPA2	704320
Inositol-trisphosphate 3-kinase A	ITPKA	710541
Insulin like 3	INSL3	100533192
Insulin like 4	INSL4	693911
Insulin like growth factor binding protein 3	IGFBP3	696868
Insulin like growth factor binding protein 5	IGFBP5	696339
Insulin like growth factor binding protein 7	IGFBP7	693564
Integral membrane protein 2A	ITM2A	708039
Integral membrane protein 2C	ITM2C	711245
Integrator complex subunit 10	INTS10	705240
Integrator complex subunit 12	INTS12	694344
Integrator complex subunit 2	INTS2	712351
Integrator complex subunit 4	INTS4	699466
Integrator complex subunit 8	INTS8	700255
Integrin alpha FG-GAP repeat containing 1	ITFG1	716435
Integrin linked kinase	ILK	709944
Integrin subunit alpha 1	ITGA1	703456
Integrin subunit alpha 10	ITGA10	100428480
Integrin subunit alpha 4	ITGA4	704745
Integrin subunit beta 7	ITGB7	699405
Integrin subunit beta 8	ITGB8	707247
Interactor of little elongation complex ELL subunit 1	ICE1	710176
Intercellular adhesion molecule 2	ICAM2	574158
Interferon induced protein with tetratricopeptide repeats 2	IFIT2	695452

Interferon induced, with helicase C domain 1	IFIH1	702024
Interferon regulatory factor 1	IRF1	707788
Interferon regulatory factor 2	IRF2	694347
Interferon regulatory factor 2 binding protein 1	IRF2BP1	715611
Interferon stimulated exonuclease gene 20kda	ISG20	698376
Interferon, alpha 13	IFNA13	709559
Interferon, lambda receptor 1	IFNLR1	711625
Interferon-related developmental regulator 1	IFRD1	702624
Interferon-related developmental regulator 2	IFRD2	702959
Interleukin 17 receptor A	IL17RA	709005
Interleukin 2 receptor subunit gamma	IL2RG	641338
Interleukin 20 receptor subunit beta	IL20RB	716769
Interleukin 6	IL6	705819
Interleukin enhancer binding factor 2	ILF2	715452
Interleukin enhancer binding factor 3	ILF3	713427
Intermediate filament family orphan 1	IFFO1	712900
Internexin neuronal intermediate filament protein alpha	INA	714455
Intestine-specific homeobox	ISX	717448
Intraflagellar transport 172	IFT172	700948
Intraflagellar transport 20	IFT20	715773
Intraflagellar transport 22	IFT22	714551
Intraflagellar transport 27	IFT27	697032
Intraflagellar transport 46	IFT46	700582
Intraflagellar transport 57	IFT57	705088
Intraflagellar transport 74	IFT74	707561
Intraflagellar transport 80	IFT80	705146
Inturned planar cell polarity protein	INTU	709967
IQ motif and Sec7 domain 1	IQSEC1	693922
IQ motif containing B1	IQCB1	715032
IQ motif containing K	IQCK	695417
IQ motif containing with AAA domain 1	IQCA1	694173
Iron responsive element binding protein 2	IREB2	710239
Iron-sulfur cluster assembly 2	ISCA2	700004
Iron-sulfur cluster assembly enzyme	ISCU	705669
Iroquois homeobox 6	IRX6	698232
Isocitrate dehydrogenase 2 (NADP+), mitochondrial	IDH2	701480
Isocitrate dehydrogenase 3 (NAD+) alpha	IDH3A	677715
Isocitrate dehydrogenase 3 (NAD+) beta	IDH3B	716726
Isocitrate dehydrogenase 3 (NAD+) gamma	IDH3G	698558
Isoleucyl-trna synthetase	IARS	677705
IWS1 homolog (S. Cerevisiae)	IWS1	699205
Izumo sperm-egg fusion 1	IZUMO1	718234
Jade family PHD finger 1	JADE1	693690
Jade family PHD finger 3	JADE3	711390
Janus kinase 1	JAK1	677689
JAZF zinc finger 1	JAZF1	697973
JNK1/MAPK8-associated membrane protein	JKAMP	702307
Jumonji domain containing 1C	JMJD1C	697630

Jumping translocation breakpoint	JTB	718537
Kallikrein 3	KLK3	719444
Kallikrein related peptidase 8	KLK8	719488
Kaptein (actin binding protein)	KPTN	717322
Karyopherin alpha 2 (RAG cohort 1, importin alpha 1)	KPNA2	100430008
Karyopherin alpha 4 (importin alpha 3)	KPNA4	702486
Karyopherin alpha 6 (importin alpha 7)	KPNA6	706812
KAT8 regulatory NSL complex subunit 1	KANSL1	717172
Katanin p60 (ATPase containing) subunit A 1	KATNA1	698291
KDEL endoplasmic reticulum protein retention receptor 1	KDELR1	717928
KDEL endoplasmic reticulum protein retention receptor 2	KDELR2	704335
KDEL endoplasmic reticulum protein retention receptor 3	KDELR3	700810
KDEL motif containing 1	KDELC1	702156
Kelch domain containing 10	KLHDC10	702290
Kelch domain containing 4	KLHDC4	695768
Kelch domain containing 9	KLHDC9	719863
Kelch like family member 11	KLHL11	708393
Kelch like family member 22	KLHL22	694160
Kelch like family member 26	KLHL26	719583
Kelch like family member 28	KLHL28	702075
Kelch like family member 3	KLHL3	713123
Kelch like family member 32	KLHL32	709276
Kelch like family member 41	KLHL41	706047
Kelch like family member 5	KLHL5	698740
Kelch like family member 7	KLHL7	705349
Kelch repeat and BTB (POZ) domain containing 4	KBTBD4	711452
Kelch repeat and BTB (POZ) domain containing 8	KBTBD8	699158
Kell blood group, metallo-endorpeptidase	KEL	703492
Keratin 2, type II	KRT2	699567
Keratin 7, type II	KRT7	697425
Keratin 80, type II	KRT80	697190
Keratin associated protein 12-4	KRTAP12-4	712284
Keratin associated protein 19-3	KRTAP19-3	703677
Keratinocyte associated protein 3	KRTCAP3	701066
KH homology domain containing 1	KHDC1	715576
KIAA0100 ortholog	KIAA0100	709307
KIAA0226-like ortholog	KIAA0226L	703875
KIAA0232 ortholog	KIAA0232	710141
KIAA0895 ortholog	KIAA0895	706527
KIAA0907 ortholog	KIAA0907	718005
KIAA0922 ortholog	KIAA0922	696761
KIAA1024 ortholog	KIAA1024	712078
KIAA1033 ortholog	KIAA1033	701501
KIAA1143 ortholog	KIAA1143	714979
KIAA1524 ortholog	KIAA1524	705690
KIAA1958 ortholog	KIAA1958	707028
KIAA2013 ortholog	KIAA2013	722762
Killer cell lectin-like receptor subfamily F, member 1	KLRF1	574389

Killer-cell Ig-like receptor KIR3DL12	KIR3DL12	100125560
Kin17 DNA and RNA binding protein	KIN	713634
Kinase D-interacting substrate 220kda	KIDINS220	693522
Kinesin family member 16B	KIF16B	695167
Kinesin family member 22	KIF22	706401
Kinesin family member 23	KIF23	695229
Kinesin family member 2C	KIF2C	705381
Kinesin family member 9	KIF9	711742
Kinesin family member C3	KIFC3	705951
Kinesin heavy chain member 2A	KIF2A	696561
Kinesin light chain 2	KLC2	714643
Kinesin light chain 4	KLC4	698356
Kininogen 1	KNG1	707466
Kizuna centrosomal protein	KIZ	700808
KN motif and ankyrin repeat domains 1	KANK1	697569
KRAB-A domain containing 1	KRBA1	711863
Kruppel-like factor 10	KLF10	693458
Kruppel-like factor 11	KLF11	702323
Kruppel-like factor 15	KLF15	716386
Kruppel-like factor 7 (ubiquitous)	KLF7	708487
Kruppel-like factor 8	KLF8	704591
Kv channel interacting protein 2	KCNIP2	712434
Kv channel interacting protein 3, calsenilin	KCNIP3	704307
Kxdl motif containing 1	KXD1	720235
L-2-hydroxyglutarate dehydrogenase	L2HGDH	705721
La ribonucleoprotein domain family member 1B	LARP1B	693747
La ribonucleoprotein domain family member 6	LARP6	699664
La ribonucleoprotein domain family member 7	LARP7	703731
Lactate dehydrogenase B	LDHB	706110
Lamin B receptor	LBR	700801
Laminin subunit alpha 2	LAMA2	715394
Lanc lantibiotic synthetase component C-like 2 (bacterial)	LANCL2	704882
Large tumor suppressor kinase 1	LATS1	696131
Late cornified envelope 4A	LCE4A	100423936
Late endosomal/lysosomal adaptor, MAPK and MTOR activator 1	LAMTOR1	718249
Late endosomal/lysosomal adaptor, MAPK and MTOR activator 3	LAMTOR3	709133
Latexin	LXN	703996
Layilin	LAYN	710211
LCK proto-oncogene, Src family tyrosine kinase	LCK	717704
LDL receptor related protein 1	LRP1	710965
LDL receptor related protein 11	LRP11	697652
LDL receptor related protein 3	LRP3	703776
LDL receptor related protein 6	LRP6	695843
Lectin, galactoside-binding, soluble, 14	LGALS14	698227
Lectin, galactoside-binding, soluble, 4	LGALS4	694195
Lectin, mannose-binding, 1	LMAN1	697449
LEM domain containing 2	LEMD2	718463
Leucine rich repeat and coiled-coil centrosomal protein 1	LRRCC1	707964

Leucine rich repeat and fibronectin type III domain containing 3	LRFN3	711565
Leucine rich repeat and fibronectin type III domain containing 4	LRFN4	713166
Leucine rich repeat containing 14	LRRC14	703587
Leucine rich repeat containing 18	LRRC18	710785
Leucine rich repeat containing 20	LRRC20	710594
Leucine rich repeat containing 28	LRRC28	708649
Leucine rich repeat containing 39	LRRC39	711471
Leucine rich repeat containing 40	LRRC40	702565
Leucine rich repeat containing 42	LRRC42	714839
Leucine rich repeat containing 45	LRRC45	715420
Leucine rich repeat containing 49	LRRC49	696391
Leucine rich repeat containing 56	LRRC56	698952
Leucine rich repeat containing 57	LRRC57	711785
Leucine rich repeat protein 1	LRR1	706658
Leucine zipper and CTNNBIP1 domain containing	LZIC	712335
Leucine zipper, down-regulated in cancer 1	LDOC1	696902
Leucine zipper, down-regulated in cancer 1-like	LDOC1L	712760
Leucine, glutamate and lysine rich 1	LEKR1	705456
Leucine-rich repeat containing 8 family member D	LRRC8D	100423128
Leucine-rich repeat containing G protein-coupled receptor 5	LGR5	718661
Leucine-rich repeat kinase 1	LRRK1	694358
Leucine-rich repeat LGI family member 4	LGI4	718426
Leucine-rich repeats and calponin homology (CH) domain containing 2	LRCH2	708436
Leucine-rich repeats and WD repeat domain containing 1	LRWD1	715187
Leukocyte immunoglobulin-like receptor, subfamily B (with TM and ITIM domains), member 1	LILRB1	692340
Leukocyte-associated immunoglobulin-like receptor 1	LAIR1	695533
Leukotriene A4 hydrolase	LTA4H	713038
Leukotriene C4 synthase	LTC4S	705233
Leupaxin	LPXN	702033
LFNG O-fucosylpeptide 3-beta-N-acetylglucosaminyltransferase	LFNG	100428736
Ligand dependent nuclear receptor interacting factor 1	LRIF1	702445
Ligand of numb-protein X 1, E3 ubiquitin protein ligase	LNK1	697862
Ligase III, DNA, ATP-dependent	LIG3	715181
Like-glycosyltransferase	LARGE	717403
LIM and SH3 protein 1	LASP1	694950
LIM domain containing 2	LIMD2	717889
LIM domain only 3	LMO3	701893
LIM homeobox 6	LHX6	698587
Limb bud and heart development	LBH	704749
Lin-7 homolog B (C. Elegans)	LIN7B	718587
Lin-9 DREAM muvb core complex component	LIN9	699056
Lines homolog 1	LINS1	693833
Lipase A, lysosomal acid, cholesterol esterase	LIPA	695240
Lipase, hepatic	LIPC	701116
Lipase, member H	LIPH	701743
Lipid droplet associated hydrolase	LDAH	717510

Lipocalin 1	LCN1	711974
Lipocalin 6	LCN6	574148
Lipoma HMGIC fusion partner	LHFP	696978
Lipoma HMGIC fusion partner-like 2	LHFPL2	709040
Lipoma HMGIC fusion partner-like 4	LHFPL4	700973
Lipoprotein lipase	LPL	712887
Liver expressed antimicrobial peptide 2	LEAP2	709041
LMBR1 domain containing 2	LMBRD2	700369
LON peptidase N-terminal domain and ring finger 1	LONRF1	706469
Low density lipoprotein receptor class A domain containing 4	LDLRAD4	701919
LSM family member 14B	LSM14B	700561
LSM10, U7 small nuclear RNA associated	LSM10	713277
LSM14A mrna processing body assembly factor	LSM14A	705085
LSM2 homolog, U6 small nuclear RNA and mrna degradation associated	LSM2	715592
LSM5 homolog, U6 small nuclear RNA and mrna degradation associated	LSM5	693550
LSM6 homolog, U6 small nuclear RNA and mrna degradation associated	LSM6	703226
LUC7-like 3 pre-mrna splicing factor	LUC7L3	703662
Ly6/neurotoxin 1	LYNX1	100428512
LY6/PLAUR domain containing 6	LYPD6	693649
Lymphocyte antigen 6 complex, locus G6C	LY6G6C	716220
Lymphocyte antigen 86	LY86	711507
Lymphoid enhancer-binding factor 1	LEF1	695776
Lymphotoxin alpha	LTA	715425
Lysine (K)-specific demethylase 1A	KDM1A	718609
Lysine (K)-specific demethylase 3A	KDM3A	697775
Lysine (K)-specific demethylase 4B	KDM4B	695760
Lysine (K)-specific demethylase 8	KDM8	703323
Lysine (K)-specific methyltransferase 5B	KMT5B	710481
Lysine-rich nucleolar protein 1	KNOP1	695144
Lysophosphatidic acid receptor 6	LPAR6	705081
Lysophosphatidylcholine acyltransferase 3	LPCAT3	714639
Lysophospholipase II	LYPLA2	719074
Lysosomal protein transmembrane 4 alpha	LAPTM4A	701298
Lysyl oxidase	LOX	699997
Lysyl oxidase like 1	LOXL1	706464
Lysyl oxidase like 3	LOXL3	709834
Lysyl-trna synthetase	KARS	714516
Mab-21-like 2 (C. Elegans)	MAB21L2	693948
MACRO domain containing 1	MACROD1	717961
Macrophage erythroblast attacher	MAEA	702015
MAD2L1 binding protein	MAD2L1BP	701099
Maestro heat-like repeat family member 8	MROH8	701423
MAGE family member D1	MAGED1	696658
MAGE family member F1	MAGEF1	701676
MAGE family member H1	MAGEH1	703812

Major facilitator superfamily domain containing 11	MFSD11	707770
Major facilitator superfamily domain containing 14A	MFSD14A	711233
Major facilitator superfamily domain containing 3	MFSD3	703246
Major facilitator superfamily domain containing 5	MFSD5	702021
Major histocompatibility complex, class II, DM beta	MAMU-DMB	100429856
Major histocompatibility complex, class II, DP beta	MAMU-DPB	717969
Malate dehydrogenase 1	MDH1	694703
Male-specific lethal 2 homolog (Drosophila)	MSL2	717049
Male-specific lethal 3 homolog (Drosophila)	MSL3	720836
Malonyl-coa-acyl carrier protein transacylase	MCAT	711556
Mannose phosphate isomerase	MPI	722129
Mannosidase, alpha, class 2C, member 1	MAN2C1	705599
Mannosyl (alpha-1,3-)-glycoprotein beta-1,4-N-acetyl glucosaminyl transferase, isozyme B	MGAT4B	705006
Mannosyl (alpha-1,6-)-glycoprotein beta-1,2-N-acetyl glucosaminyl transferase	MGAT2	706426
Mannosyl-oligosaccharide glucosidase	MOGS	708913
MANSC domain containing 1	MANSC1	696667
MAP/microtubule affinity-regulating kinase 2	MARK2	718065
MAP7 domain containing 1	MAP7D1	712899
MAP-kinase activating death domain	MADD	713613
MARCKS-like 1	MARCKSL1	100428616
Mast cell immunoglobulin-like receptor 1	MILR1	717835
Mastermind like transcriptional coactivator 1	MAML1	715047
Matrilin 1, cartilage matrix protein	MATN1	704521
Matrin 3	MATR3	100568448
Matrix metalloproteinase 28	MMP28	574250
MAX dimerization protein 1	MXD1	701784
Mckusick-Kaufman syndrome	MKKS	718547
Mdm1 nuclear protein	MDM1	718062
MDM2 binding protein	MTBP	703121
Mediator complex subunit 10	MED10	694872
Mediator complex subunit 11	MED11	709561
Mediator complex subunit 13-like	MED13L	713867
Mediator complex subunit 19	MED19	704421
Mediator complex subunit 21	MED21	710699
Mediator complex subunit 23	MED23	714629
Mediator complex subunit 27	MED27	715219
Mediator complex subunit 6	MED6	693320
Mediator complex subunit 8	MED8	700676
Mediator complex subunit 9	MED9	698957
Mediator of cell motility 1	MEMO1	706051
Meiosis 1 associated protein	M1AP	710210
Meiosis specific nuclear structural 1	MNS1	699377
Meiosis specific with OB domains	MEIOB	703322
Meis homeobox 1	MEIS1	697685
Meis homeobox 2	MEIS2	699748
Membrane bound transcription factor peptidase, site 2	MBTPS2	696540

Membrane frizzled-related protein	MFRP	704965
Membrane protein, palmitoylated 1	MPP1	702092
Meningioma expressed antigen 5 (hyaluronidase)	MGEA5	712370
Mesoderm development candidate 1	MESDC1	713059
Mesoderm induction early response 1, family member 2	MIER2	701450
Mesoderm specific transcript	MEST	703327
Mesothelin	MSLN	698095
MET proto-oncogene, receptor tyrosine kinase	MET	704562
Metadherin	MTDH	702410
Metal response element binding transcription factor 2	MTF2	707104
Metallo-beta-lactamase domain containing 2	MBLAC2	695437
Metallophosphoesterase domain containing 2	MPPED2	696968
Metallothionein 1X	MT1X	709905
Metastasis associated 1 family member 2	MTA2	718772
Metastasis associated 1 family member 3	MTA3	712967
Methionine sulfoxide reductase A	MSRA	698628
Methionine sulfoxide reductase B1	MSRB1	693358
Methionyl aminopeptidase 1	METAP1	710537
Methionyl aminopeptidase 2	METAP2	712400
Methionyl-trna synthetase	MARS	714744
Methyl-cpg binding domain 4 DNA glycosylase	MBD4	720557
Methyl-cpg binding domain protein 5	MBD5	721892
Methylcrotonoyl-coa carboxylase 1	MCCC1	708258
Methylenetetrahydrofolate dehydrogenase (NADP+ dependent) 1, methenyltetrahydrofolate cyclohydrolase, formyltetrahydrofolate synthetase	MTHFD1	707059
Methylmalonic aciduria (cobalamin deficiency) cblb type	MMAB	708973
Methylmalonic aciduria (cobalamin deficiency) cbld type, with homocystinuria	MMADHC	693783
Methylmalonyl coa epimerase	MCEE	704094
Methyltransferase like 1	METTL1	715796
Methyltransferase like 13	METTL13	704943
Methyltransferase like 17	METTL17	705009
Methyltransferase like 18	METTL18	701890
Methyltransferase like 22	METTL22	708739
Methyltransferase like 4	METTL4	696353
Methyltransferase like 5	METTL5	707119
Methyltransferase like 6	METTL6	694202
Mevalonate kinase	MVK	707645
Mex-3 RNA binding family member B	MEX3B	713441
Microfibrillar associated protein 1	MFAP1	711111
Microfibrillar associated protein 2	MFAP2	710885
Microfibrillar associated protein 3	MFAP3	713265
Microfibrillar associated protein 5	MFAP5	716459
Microsomal glutathione S-transferase 2	MGST2	697983
Microtubule associated monooxygenase, calponin and LIM domain containing 1	MICAL1	698737
Microtubule associated protein 1B	MAP1B	574272

Microtubule associated protein 1S	MAP1S	719196
Microtubule associated protein 4	MAP4	100423616
Microtubule associated protein RP/EB family member 1	MAPRE1	711404
Microtubule associated protein RP/EB family member 2	MAPRE2	707996
Microtubule associated serine/threonine kinase like	MASTL	708134
MID1 interacting protein 1	MID1IP1	698138
Midline 1	MID1	709683
Midline 2	MID2	703281
MIF4G domain containing	MIF4GD	706005
Minichromosome maintenance complex component 3	MCM3	708320
Minichromosome maintenance complex component 3 associated protein	MCM3AP	721810
Minichromosome maintenance complex component 5	MCM5	717548
Missing oocyte, meiosis regulator, homolog (Drosophila)	MIOS	696371
Mitochondrial assembly of ribosomal large subunit 1	MALSU1	704884
Mitochondrial carrier 1	MTCH1	719313
Mitochondrial E3 ubiquitin protein ligase 1	MUL1	705429
Mitochondrial elongation factor 2	MIEF2	700705
Mitochondrial fission regulator 1	MTFR1	711143
Mitochondrial fission regulator 1-like	MTFR1L	713213
Mitochondrial genome maintenance exonuclease 1	MGME1	696467
Mitochondrial intermediate peptidase	MIPEP	707131
Mitochondrial poly(A) polymerase	MTPAP	694491
Mitochondrial pyruvate carrier 1	MPC1	716864
Mitochondrial ribosomal protein L10	MRPL10	695136
Mitochondrial ribosomal protein L11	MRPL11	714094
Mitochondrial ribosomal protein L12	MRPL12	714438
Mitochondrial ribosomal protein L13	MRPL13	702994
Mitochondrial ribosomal protein L16	MRPL16	698831
Mitochondrial ribosomal protein L19	MRPL19	711081
Mitochondrial ribosomal protein L20	MRPL20	701533
Mitochondrial ribosomal protein L22	MRPL22	714920
Mitochondrial ribosomal protein L23	MRPL23	704210
Mitochondrial ribosomal protein L24	MRPL24	718640
Mitochondrial ribosomal protein L33	MRPL33	702783
Mitochondrial ribosomal protein L37	MRPL37	715168
Mitochondrial ribosomal protein L39	MRPL39	708631
Mitochondrial ribosomal protein L41	MRPL41	702768
Mitochondrial ribosomal protein L42	MRPL42	715676
Mitochondrial ribosomal protein L46	MRPL46	697872
Mitochondrial ribosomal protein L50	MRPL50	713923
Mitochondrial ribosomal protein L51	MRPL51	713036
Mitochondrial ribosomal protein L53	MRPL53	709302
Mitochondrial ribosomal protein L55	MRPL55	695962
Mitochondrial ribosomal protein S11	MRPS11	697743
Mitochondrial ribosomal protein S17	MRPS17	703678
Mitochondrial ribosomal protein S18A	MRPS18A	701465
Mitochondrial ribosomal protein S21	MRPS21	706805

Mitochondrial ribosomal protein S22	MRPS22	715845
Mitochondrial ribosomal protein S24	MRPS24	700722
Mitochondrial ribosomal protein S30	MRPS30	701699
Mitochondrial ribosomal protein S33	MRPS33	693681
Mitochondrial ribosomal protein S6	MRPS6	106997264
Mitochondrial transcription termination factor 1	MTERF1	703725
Mitochondrial transcription termination factor 2	MTERF2	703925
Mitochondrial transcription termination factor 3	MTERF3	701366
Mitochondrial translational initiation factor 2	MTIF2	717042
Mitochondrial trna translation optimization 1	MTO1	717688
Mitogen-activated protein kinase 1	MAPK1	698569
Mitogen-activated protein kinase 10	MAPK10	699736
Mitogen-activated protein kinase 12	MAPK12	715745
Mitogen-activated protein kinase 7	MAPK7	702837
Mitogen-activated protein kinase 8	MAPK8	711115
Mitogen-activated protein kinase 8 interacting protein 1	MAPK8IP1	714950
Mitogen-activated protein kinase associated protein 1	MAPKAP1	702599
Mitogen-activated protein kinase kinase 1	MAP2K1	710415
Mitogen-activated protein kinase kinase 2	MAP2K2	721821
Mitogen-activated protein kinase kinase 4	MAP2K4	718155
Mitogen-activated protein kinase kinase 5	MAP2K5	711672
Mitogen-activated protein kinase kinase kinase 13	MAP3K13	701085
Mitogen-activated protein kinase kinase kinase 14	MAP3K14	716258
Mitogen-activated protein kinase kinase kinase 3	MAP3K3	717866
Mitogen-activated protein kinase kinase kinase 4	MAP3K4	710360
Mitogen-activated protein kinase kinase kinase 6	MAP3K6	715911
Mitogen-activated protein kinase kinase kinase kinase 1	MAP4K1	694259
Mitogen-activated protein kinase kinase kinase kinase 4	MAP4K4	716595
Mitogen-activated protein kinase kinase kinase kinase 5	MAP4K5	706204
Mitogen-activated protein kinase-activated protein kinase 2	MAPKAPK2	695044
Mitogen-activated protein kinase-activated protein kinase 5	MAPKAPK5	713521
Mitotic spindle organizing protein 2B	MZT2B	701787
Mixed lineage kinase 4	KIAA1804	712755
Mixed lineage kinase domain-like	MLKL	710316
MLX, MAX dimerization protein	MLX	710570
MNAT CDK-activating kinase assembly factor 1	MNAT1	703905
MOB family member 4, phocein	MOB4	698149
Molybdenum cofactor sulfurase	MOCOS	715633
MON1 homolog B, secretory trafficking associated	MON1B	715104
Monoamine oxidase B	MAOB	708468
Monocyte to macrophage differentiation-associated	MMD	706723
MORC family CW-type zinc finger 4	MORC4	701136
Morf4 family associated protein 1-like 1	MRFAP1L1	710411
MORN repeat containing 2	MORN2	106992912
Mortality factor 4 like 1	MORF4L1	711357
Motile sperm domain containing 2	MOSPD2	712225
Motilin	MLN	574099
M-phase phosphoprotein 10 (U3 small nucleolar	MPHOSPH10	704207

ribonucleoprotein)		
M-phase phosphoprotein 6	MPHOSPH6	714335
M-phase specific PLK1 interacting protein	MPLKIP	703092
Mpv17 mitochondrial inner membrane protein	MPV17	701026
MPV17 mitochondrial membrane protein-like 2	MPV17L2	719413
MRS2, magnesium transporter	MRS2	707676
MRT4 homolog, ribosome maturation factor	MRT04	702926
Msh homeobox 2	MSX2	694227
MSS51 mitochondrial translational activator	MSS51	707066
Mucolipin 1	MCOLN1	703775
Mucolipin 3	MCOLN3	710987
Multiple C2 domains, transmembrane 1	MCTP1	697733
Multiple C2 domains, transmembrane 2	MCTP2	706949
Multiple inositol-polyphosphate phosphatase 1	MINPP1	704362
Multivesicular body subunit 12A	MVB12A	716261
Musashi RNA binding protein 2	MSI2	100423536
Muscleblind like splicing regulator 1	MBNL1	708735
Mutl homolog 1	MLH1	698782
Muty DNA glycosylase	MUTYH	705651
MYB binding protein (P160) 1a	MYBBP1A	708817
Myb/SANT-like DNA-binding domain containing 2	MSANTD2	712347
Myb/SANT-like DNA-binding domain containing 4 with coiled-coils	MSANTD4	706055
MYC associated factor X	MAX	708228
Myc target 1	MYCT1	711296
MYCBP associated protein	MYCBPAP	705880
Myelin associated glycoprotein	MAG	718575
Myelin protein zero-like 2	MPZL2	699330
Myeloid cell leukemia 1	MCL1	707539
Myeloid cell nuclear differentiation antigen	MNDA	719220
Myeloid differentiation primary response 88	MYD88	696494
Myeloid leukemia factor 1	MLF1	704116
Myeloid zinc finger 1	MZF1	712144
Myeloid/lymphoid or mixed-lineage leukemia; translocated to, 11	MLLT11	709190
Myeloid/lymphoid or mixed-lineage leukemia; translocated to, 6	MLLT6	694045
Myocyte enhancer factor 2B	MEF2B	100568440
Myocyte enhancer factor 2C	MEF2C	694992
Myod family inhibitor	MDFI	694074
Myoferlin	MYOF	700922
Myomesin 2	MYOM2	716555
Myoneurin	MYNN	698094
Myosin IA	MYO1A	714033
Myosin IF	MYO1F	712101
Myosin light chain 4	MYL4	717354
Myosin, light chain 12A, regulatory, non-sarcomeric	MYL12A	695077
Myostatin	MSTN	710114
Myotrophin	MTPN	708941
Myotubularin 1	MTM1	703131

Myotubularin related protein 11	MTMR11	705542
Myotubularin related protein 2	MTMR2	699703
Myotubularin related protein 4	MTMR4	714621
Myotubularin related protein 6	MTMR6	709118
Myotubularin related protein 8	MTMR8	708037
Myozenin 1	MYOZ1	706768
Myristoylated alanine-rich protein kinase C substrate	MARCKS	694077
MYST/Esa1-associated factor 6	MEAF6	713666
N(alpha)-acetyltransferase 15, nata auxiliary subunit	NAA15	697123
N(alpha)-acetyltransferase 30, natc catalytic subunit	NAA30	699379
N(alpha)-acetyltransferase 35, natc auxiliary subunit	NAA35	710122
N(alpha)-acetyltransferase 50, nate catalytic subunit	NAA50	709764
N(alpha)-acetyltransferase 60, natf catalytic subunit	NAA60	703207
NACC family member 2, BEN and BTB (POZ) domain containing	NACC2	721794
N-acetylglucosamine kinase	NAGK	703976
N-acetylglucosamine-1-phosphate transferase, gamma subunit	GNPTG	722441
N-acetylglucosamine-1-phosphodiester alpha-N-acetylglucosaminidase	NAGPA	707352
N-acetylglutamate synthase	NAGS	714102
N-acetyltransferase 8 (GCN5-related, putative)	NAT8	706820
NAD(P) dependent steroid dehydrogenase-like	NSDHL	693333
NAD(P)H dehydrogenase, quinone 2	NQO2	707675
NADH:ubiquinone oxidoreductase complex assembly factor 1	NDUFAF1	710275
NADH:ubiquinone oxidoreductase complex assembly factor 2	NDUFAF2	693441
NADH:ubiquinone oxidoreductase complex assembly factor 4	NDUFAF4	705102
NADH:ubiquinone oxidoreductase complex assembly factor 6	NDUFAF6	700515
NADH:ubiquinone oxidoreductase complex assembly factor 7	NDUFAF7	709473
NADH:ubiquinone oxidoreductase core subunit S2	NDUFS2	719935
NADH:ubiquinone oxidoreductase core subunit S3	NDUFS3	713040
NADH:ubiquinone oxidoreductase core subunit S8	NDUFS8	710845
NADH:ubiquinone oxidoreductase subunit A1	NDUFA1	694635
NADH:ubiquinone oxidoreductase subunit A12	NDUFA12	711970
NADH:ubiquinone oxidoreductase subunit A8	NDUFA8	698706
NADH:ubiquinone oxidoreductase subunit AB1	NDUFAB1	700718
NADH:ubiquinone oxidoreductase subunit B10	NDUFB10	693482
NADH:ubiquinone oxidoreductase subunit B2	NDUFB2	693431
NADH:ubiquinone oxidoreductase subunit B4	NDUFB4	713428
NADH:ubiquinone oxidoreductase subunit B8	NDUFB8	710521
NADH:ubiquinone oxidoreductase subunit B9	NDUFB9	711387
NADH:ubiquinone oxidoreductase subunit C1	NDUFC1	697242
NADH:ubiquinone oxidoreductase subunit S4	NDUFS4	704137
Naked cuticle homolog 1 (Drosophila)	NKD1	698036
Nascent polypeptide-associated complex alpha subunit	NACA	713416
Natriuretic peptide C	NPPC	717026
Natriuretic peptide receptor 2	NPR2	695750
Natural killer cell granule protein 7	NKG7	719624
NCK adaptor protein 2	NCK2	713287

NCK interacting protein with SH3 domain	NCKIPSD	709410
NCK-associated protein 1	NCKAP1	711124
NECAP endocytosis associated 2	NECAP2	698687
NEDD8 activating enzyme E1 subunit 1	NAE1	696429
Negative elongation factor complex member C/D	NELFCD	696053
Negative elongation factor complex member E	NELFE	716913
Negative regulator of ubiquitin-like proteins 1	NUB1	715231
Nerve growth factor receptor (TNFRSF16) associated protein 1	NGFRAP1	100428976
N-ethylmaleimide sensitive factor	NSF	715297
Netrin G2	NTNG2	715127
Neural precursor cell expressed, developmentally down-regulated 1	NEDD1	713673
Neuralized E3 ubiquitin protein ligase 2	NEURL2	708904
Neuraminidase 1 (lysosomal sialidase)	NEU1	716740
Neurensin 1	NRSN1	707362
Neurexophilin and PC-esterase domain family member 3	NXPE3	702612
Neurologin 2	NLGN2	574368
Neurologin 3	NLGN3	574216
Neurologin 4, Y-linked	NLGN4Y	100270696
Neuromedin U	NMU	697171
Neuron navigator 2	NAV2	702146
Neuronal cell adhesion molecule	NRCAM	574228
Neuronal pentraxin I	NPTX1	718259
Neuronal regeneration related protein	NREP	712463
Neuronal tyrosine-phosphorylated phosphoinositide-3-kinase adaptor 1	NYAP1	719205
Neuron-derived neurotrophic factor	NDNF	706304
Neuropeptide FF-amide peptide precursor	NPFF	703412
Neuropeptide VF precursor	NPVF	613271
Neuropeptide Y receptor Y1	NPY1R	574206
Neuropilin 1	NRP1	697755
Neuroplastin	NPTN	699627
Neurotrophic tyrosine kinase, receptor, type 3	NTRK3	697615
NFS1 cysteine desulfurase	NFS1	704077
NGFI-A binding protein 1	NAB1	693274
NGFI-A binding protein 2 (EGR1 binding protein 2)	NAB2	714209
N-glycanase 1	NGLY1	700842
NHL repeat containing 2	NHLRC2	698009
NHP2 ribonucleoprotein	NHP2	701950
Nicastrin	NCSTN	719696
Nicotinamide N-methyltransferase	NNMT	695185
Nicotinamide nucleotide transhydrogenase	NNT	701110
Niemann-Pick disease, type C2	NPC2	699881
NIMA-related kinase 1	NEK1	694345
NIMA-related kinase 2	NEK2	711473
NIMA-related kinase 3	NEK3	710127
NIMA-related kinase 7	NEK7	710464
NIN1/RPN12 binding protein 1 homolog	NOB1	705344

Ninein	NIN	709532
Ninjurin 1	NINJ1	717218
Nitric oxide associated 1	NOA1	693437
Nitric oxide synthase trafficking	NOSTRIN	705063
NMD3 ribosome export adaptor	NMD3	701677
NME/NM23 nucleoside diphosphate kinase 2	NME2	100533960
N-methylpurine DNA glycosylase	MPG	722257
Nmra-like family domain containing 1	NMRAL1	705343
N-myc and STAT interactor	NMI	694554
Noggin	NOG	707338
Non imprinted in Prader-Willi/Angelman syndrome 2	NIPA2	710147
Non-POU domain containing, octamer-binding	NONO	697263
Non-SMC condensin II complex subunit D3	NCAPD3	700276
Non-SMC condensin II complex subunit H2	NCAPH2	716120
NOP16 nucleolar protein	NOP16	696768
NOP2 nucleolar protein	NOP2	713097
NOP2/Sun RNA methyltransferase family member 5	NSUN5	716219
NOP58 ribonucleoprotein	NOP58	703859
NOP9 nucleolar protein	NOP9	715969
Norrie disease (pseudoglioma)	NDP	702203
NPL4 homolog, ubiquitin recognition factor	NPLOC4	713927
NPR2-like, GATOR1 complex subunit	NPRL2	701924
NRDE-2, necessary for RNA interference, domain containing	NRDE2	695676
NSA2, ribosome biogenesis homolog	NSA2	704670
NSE4 homolog A, SMC5-SMC6 complex component	NSMCE4A	705375
NSF attachment protein alpha	NAPA	717355
NSFL1 (p97) cofactor (p47)	NSFL1C	715743
N-terminal asparagine amidase	NTAN1	100427568
N-terminal EF-hand calcium binding protein 1	NECAB1	696533
N-terminal Xaa-Pro-Lys N-methyltransferase 1	NTMT1	716763
Nth-like DNA glycosylase 1	NTHL1	694848
Nuclear assembly factor 1 ribonucleoprotein	NAF1	702745
Nuclear casein kinase and cyclin-dependent kinase substrate 1	NUCKS1	697298
Nuclear envelope integral membrane protein 1	NEMP1	710700
Nuclear factor I/A	NFIA	694022
Nuclear factor of kappa light polypeptide gene enhancer in B-cells 1	NFKB1	710324
Nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, alpha	NFKBIA	695335
Nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, delta	NFKBID	711338
Nuclear factor, erythroid 2	NFE2	705061
Nuclear factor, erythroid 2 like 1	NFE2L1	695404
Nuclear factor, erythroid 2 like 2	NFE2L2	707606
Nuclear factor, interleukin 3 regulated	NFIL3	704757
Nuclear fragile X mental retardation protein interacting protein 2	NUFIP2	711330
Nuclear prelamin A recognition factor	NARF	716259
Nuclear receptor binding SET domain protein 1	NSD1	706131

Nuclear receptor coactivator 4	NCOA4	709509
Nuclear receptor coactivator 5	NCOA5	717054
Nuclear receptor coactivator 6	NCOA6	706903
Nuclear receptor subfamily 1 group H member 3	NR1H3	713679
Nuclear receptor subfamily 1 group I member 2	NR1I2	574226
Nuclear receptor subfamily 2 group F member 2	NR2F2	707483
Nuclear RNA export factor 1	NXF1	718420
Nuclear RNA export factor 3	NXF3	695351
Nuclear transcription factor Y subunit gamma	NFYC	696290
Nuclear transport factor 2-like export factor 1	NXT1	711846
Nuclear transport factor 2-like export factor 2	NXT2	704593
Nuclear VCP-like	NVL	702010
Nucleic acid binding protein 1	NABP1	694172
Nucleobindin 2	NUCB2	697084
Nucleolar protein 10	NOL10	695849
Nucleolar protein 8	NOL8	705799
Nucleolar protein interacting with the FHA domain of MKI67	NIFK	697198
Nucleolin	NCL	720965
Nucleophosmin/nucleoplasmin 3	NPM3	712300
Nucleoporin 107kda	NUP107	718214
Nucleoporin 153kda	NUP153	703888
Nucleoporin 205kda	NUP205	708216
Nucleoporin 210kda	NUP210	693669
Nucleoporin 35kda	NUP35	706497
Nucleoporin 37kda	NUP37	697933
Nucleoporin 50kda	NUP50	713282
Nucleoporin 85kda	NUP85	705628
Nucleoporin 88kda	NUP88	711734
Nucleosome assembly protein 1-like 5	NAP1L5	703223
Nucleotide binding oligomerization domain containing 1	NOD1	695655
Nucleotide binding oligomerization domain containing 2	NOD2	695542
Nude neurodevelopment protein 1	NDE1	717754
Nudix hydrolase 1	NUDT1	713078
Nudix hydrolase 13	NUDT13	707796
Nudix hydrolase 22	NUDT22	717864
Nudix hydrolase 5	NUDT5	694368
NUF2, NDC80 kinetochore complex component	NUF2	693637
O-6-methylguanine-DNA methyltransferase	MGMT	698134
O-acyl-ADP-ribose deacylase 1	OARD1	719685
OCIA domain containing 1	OCIAD1	706191
OCIA domain containing 2	OCIAD2	706300
Oculocerebrorenal syndrome of Lowe	OCRL	702345
Odd-skipped related transcription factor 1	OSR1	106992848
Odd-skipped related transcription factor 2	OSR2	704253
Olfactomedin 1	OLFM1	712348
Olfactomedin 2	OLFM2	711336
Olfactomedin like 2B	OLFML2B	720062
Olfactomedin like 3	OLFML3	707969

Olfactory marker protein	OMP	698210
Olfactory receptor, family 2, subfamily AG, member 2	OR2AG2	709556
Olfactory receptor, family 2, subfamily W, member 1	OR2W1	708515
Olfactory receptor, family 4, subfamily K, member 13	OR4K13	700920
Oligonucleotide/oligosaccharide-binding fold containing 1	OBFC1	714968
Opa interacting protein 5	OIP5	705837
Opsin 3	OPN3	707436
Optic atrophy 3 (autosomal recessive, with chorea and spastic paraplegia)	OPA3	714806
ORAI calcium release-activated calcium modulator 1	ORAI1	700190
Oral-facial-digital syndrome 1	OFD1	711677
Origin recognition complex subunit 1	ORC1	713271
Origin recognition complex subunit 3	ORC3	700773
Origin recognition complex subunit 5	ORC5	696683
Origin recognition complex subunit 6	ORC6	716175
ORMDL sphingolipid biosynthesis regulator 1	ORMDL1	709832
ORMDL sphingolipid biosynthesis regulator 2	ORMDL2	710296
ORMDL sphingolipid biosynthesis regulator 3	ORMDL3	699154
Ornithine aminotransferase	OAT	693970
Ornithine decarboxylase 1	ODC1	695625
Ornithine decarboxylase antizyme 1	OAZ1	721477
O-sialoglycoprotein endopeptidase	OSGEP	702512
Osteosarcoma amplified 9, endoplasmic reticulum lectin	OS9	715555
Otopetrin 1	OTOP1	712780
OTU deubiquitinase with linear linkage specificity	OTULIN	698991
OTU domain containing 6B	OTUD6B	697015
Outer dense fiber of sperm tails 1	ODF1	707269
Outer dense fiber of sperm tails 2	ODF2	717505
Oxidative stress induced growth inhibitor family member 2	OSGIN2	695376
Oxoeicosanoid (OXE) receptor 1	OXER1	713039
Oxysterol binding protein	OSBP	699325
Oxysterol binding protein like 10	OSBPL10	703555
Oxysterol binding protein like 11	OSBPL11	716096
Oxysterol binding protein like 8	OSBPL8	693338
P450 (cytochrome) oxidoreductase	POR	715888
P53 and DNA damage regulated 1	PDRG1	712622
PAN2 poly(A) specific ribonuclease subunit	PAN2	712478
Pancreatic polypeptide	PPY	713988
Pantothenate kinase 1	PANK1	696041
Pantothenate kinase 2	PANK2	717639
Pantothenate kinase 4	PANK4	694804
PAP associated domain containing 7	PAPD7	713853
Papillary renal cell carcinoma (translocation-associated)	PRCC	718660
Par-3 family cell polarity regulator	PARD3	706472
Paralemmin 2	PALM2	100532752
Paraneoplastic Ma antigen 3	PNMA3	694406
Paraoxonase 2	PON2	699107
Paraspeckle component 1	PSPC1	705080

Parathyroid hormone 1 receptor	PTH1R	712147
Parkinson protein 7	PARK7	708377
Partner and localizer of BRCA2	PALB2	700843
Paternally expressed 3	PEG3	707825
PAX3 and PAX7 binding protein 1	PAXBP1	700489
PAXIP1 associated glutamate-rich protein 1	PAGR1	706839
PC-esterase domain containing 1A	PCED1A	716956
PCI domain containing 2	PCID2	714247
PDLIM1 interacting kinase 1 like	PDIK1L	719774
PDZ domain containing 4	PDZD4	697387
PDZ domain containing ring finger 3	PDZRN3	709901
PDZK1 interacting protein 1	PDZK1IP1	709916
Pellino E3 ubiquitin protein ligase 1	PELI1	696416
Peptidase (mitochondrial processing) alpha	PMPCA	721742
Peptide deformylase (mitochondrial)	PDF	100427224
Peptidoglycan recognition protein 1	PGLYRP1	718480
Peptidoglycan recognition protein 3	PGLYRP3	714583
Peptidyl arginine deiminase, type II	PADI2	711044
Peptidylprolyl isomerase domain and WD repeat containing 1	PPWD1	696267
Peptidylprolyl isomerase E (cyclophilin E)	PPIE	716340
Peptidylprolyl isomerase G (cyclophilin G)	PIIG	706262
Peptidylprolyl isomerase H (cyclophilin H)	PPIH	697669
Peptidylprolyl isomerase like 3	PPIL3	700456
Periaxin	PRX	702329
Period circadian clock 1	PER1	721948
Periostin, osteoblast specific factor	POSTN	695528
Peripheral myelin protein 22	PMP22	693527
Peroxiredoxin 2	PRDX2	716665
Peroxiredoxin 3	PRDX3	702882
Peroxiredoxin 4	PRDX4	697635
Peroxiredoxin 6	PRDX6	706486
Peroxisomal biogenesis factor 11 alpha	PEX11A	700511
Peroxisomal biogenesis factor 11 beta	PEX11B	698184
Peroxisomal biogenesis factor 11 gamma	PEX11G	703198
Peroxisomal biogenesis factor 16	PEX16	714904
Peroxisomal biogenesis factor 3	PEX3	700730
Peroxisomal biogenesis factor 6	PEX6	697597
Peroxisomal membrane protein 2	PXMP2	693648
Peroxisome proliferator-activated receptor delta	PPARD	718861
PH domain and leucine rich repeat protein phosphatase 1	PHLPP1	705882
PHD finger protein 1	PHF1	718337
PHD finger protein 19	PHF19	704050
PHD finger protein 2	PHF2	717585
PHD finger protein 21A	PHF21A	714798
PHD finger protein 23	PHF23	714538
PHD finger protein 6	PHF6	707390
PHD finger protein 7	PHF7	697103
Phenylalanyl-trna synthetase 2, mitochondrial	FARS2	710945

Phenylethanolamine N-methyltransferase	PNMT	697444
Phosphatase, orphan 1	PHOSPHO1	698959
Phosphatase, orphan 2	PHOSPHO2	100429656
Phosphate cytidylyltransferase 1, choline, alpha	PCYT1A	722105
Phosphate regulating endopeptidase homolog, X-linked	PHEX	697025
Phosphatidylethanolamine N-methyltransferase	PEMT	699083
Phosphatidylglycerophosphate synthase 1	PGS1	710125
Phosphatidylinositol 3-kinase catalytic subunit type 3	PIK3C3	693918
Phosphatidylinositol 4-kinase, catalytic, alpha	PI4KA	698020
Phosphatidylinositol 4-kinase, catalytic, beta	PI4KB	710104
Phosphatidylinositol glycan anchor biosynthesis class A	PIGA	712514
Phosphatidylinositol glycan anchor biosynthesis class C	PIGC	705657
Phosphatidylinositol glycan anchor biosynthesis class F	PIGF	714844
Phosphatidylinositol glycan anchor biosynthesis class G	PIGG	714088
Phosphatidylinositol glycan anchor biosynthesis class H	PIGH	710780
Phosphatidylinositol glycan anchor biosynthesis class M	PIGM	719582
Phosphatidylinositol glycan anchor biosynthesis class O	PIGO	698588
Phosphatidylinositol glycan anchor biosynthesis class S	PIGS	709115
Phosphatidylinositol transfer protein beta	PITPNB	713414
Phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit beta	PIK3CB	716098
Phosphodiesterase 12	PDE12	703552
Phosphodiesterase 4B	PDE4B	699309
Phosphodiesterase 5A	PDE5A	705592
Phosphodiesterase 8A	PDE8A	694750
Phosphodiesterase 9A	PDE9A	100301992
Phosphoglycerate kinase 1	PGK1	706325
Phosphohistidine phosphatase 1	PHPT1	721674
Phosphoinositide-3-kinase interacting protein 1	PIK3IP1	716694
Phosphoinositide-3-kinase regulatory subunit 4	PIK3R4	718012
Phospholipase A2 group VI	PLA2G6	700184
Phospholipase A2 group XIIB	PLA2G12B	708031
Phospholipase A2 group XV	PLA2G15	702619
Phospholipase A2 group XVI	PLA2G16	722178
Phospholipase A2, group IVB (cytosolic)	PLA2G4B	100533112
Phospholipase B domain containing 1	PLBD1	698939
Phospholipase B domain containing 2	PLBD2	714669
Phospholipase C beta 1	PLCB1	718387
Phospholipase C delta 1	PLCD1	696860
Phospholipase C eta 1	PLCH1	707243
Phospholipase D family member 3	PLD3	701083
Phospholipid phosphatase 1	PLPP1	706539
Phospholipid phosphatase 2	PLPP2	721004
Phospholipid phosphatase 6	PLPP6	695188
Phospholipid phosphatase 7 (inactive)	PLPP7	722411
Phospholipid scramblase 1	PLSCR1	713232
Phospholipid scramblase 3	PLSCR3	721831
Phosphopantothenoylcysteine decarboxylase	PPCDC	704015

Phosphopantothenoylcysteine synthetase	PPCS	697064
Phosphoribosyl pyrophosphate synthetase 1	PRPS1	702529
Phosphoribosyl pyrophosphate synthetase-associated protein 1	PRPSAP1	706625
Phosphoribosyl transferase domain containing 1	PRTFDC1	712819
Phosphoribosylglycinamide formyltransferase, phosphoribosyl glycinamide synthetase, phosphoribosylaminoimidazole synthetase	GART	704926
Phosphorylase kinase, alpha 2 (liver)	PHKA2	694376
Phosphorylase, glycogen, liver	PYGL	706853
Phytanoyl-coa dioxygenase domain containing 1	PHYHD1	717104
Piggybac transposable element derived 2	PGBD2	709925
PIH1 domain containing 1	PIH1D1	718787
PIH1 domain containing 2	PIH1D2	711087
PILR alpha associated neural protein	PIANP	713548
Pirin	PIR	720959
Pituitary tumor-transforming 1	PTTG1	696143
Placenta specific 9	PLAC9	700881
Plakophilin 2	PKP2	100429376
Plasminogen activator, tissue	PLAT	704475
Plasminogen receptor, C-terminal lysine transmembrane protein	PLGRKT	693286
Plastin 3	PLS3	709055
Platelet derived growth factor C	PDGFC	700236
Platelet derived growth factor D	PDGFD	704310
Platelet-derived growth factor beta polypeptide	PDGFB	703173
Pleckstrin and Sec7 domain containing	PSD	714737
Pleckstrin and Sec7 domain containing 2	PSD2	694873
Pleckstrin homology and FYVE domain containing 1	PLEKHF1	700343
Pleckstrin homology and FYVE domain containing 2	PLEKHF2	701884
Pleckstrin homology and rhogef domain containing G2	PLEKHG2	698408
Pleckstrin homology domain containing A1	PLEKHA1	705731
Pleckstrin homology domain containing A3	PLEKHA3	703417
Pleckstrin homology domain containing A7	PLEKHA7	697646
Pleckstrin homology domain containing N1	PLEKHN1	697918
Pleckstrin homology domain containing O1	PLEKHO1	706145
Pleckstrin homology domain containing O2	PLEKHO2	712677
Pleckstrin homology domain interacting protein	PHIP	716810
Pleckstrin homology, myth4 and FERM domain containing H3	PLEKHH3	711013
Pleiotrophin	PTN	709496
Plexin B3	PLXNB3	696903
Plexin domain containing 2	PLXDC2	702523
PNN-interacting serine/arginine-rich protein	PNISR	694075
POC1 centriolar protein A	POC1A	698157
Pogo transposable element with KRAB domain	POGK	696834
Pogo transposable element with ZNF domain	POGZ	710634
Poliovirus receptor-related 2 (herpesvirus entry mediator B)	PVRL2	713229
Polo-like kinase 1	PLK1	697686
Polo-like kinase 4	PLK4	710233
Poly(A) binding protein interacting protein 1	PAIP1	700869

Poly(A) binding protein interacting protein 2	PAIP2	693317
Poly(A) binding protein, cytoplasmic 1	PABPC1	705847
Poly(A) binding protein, cytoplasmic 3	PABPC3	708617
Poly(A) polymerase gamma	PAPOLG	717781
Poly(A)-specific ribonuclease	PARN	712984
Poly(ADP-ribose) glycohydrolase	PARG	709432
Poly(ADP-ribose) polymerase 2	PARP2	701955
Poly(ADP-ribose) polymerase family member 10	PARP10	708132
Poly(ADP-ribose) polymerase family member 16	PARP16	709140
Poly(rc) binding protein 2	PCBP2	703175
Poly(rc) binding protein 4	PCBP4	699225
Polybromo 1	PBRM1	696361
Polycomb group ring finger 2	PCGF2	694187
Polycomb group ring finger 3	PCGF3	697151
Polycomb group ring finger 6	PCGF6	714508
Polyglutamine binding protein 1	PQBP1	711678
Polyhomeotic homolog 2 (Drosophila)	PHC2	710201
Polymerase (DNA directed), beta	POLB	704801
Polymerase (DNA directed), gamma	POLG	699750
Polymerase (DNA-directed), delta 4, accessory subunit	POLD4	712632
Polymerase (RNA) I polypeptide C	POLR1C	700727
Polymerase (RNA) II (DNA directed) polypeptide C, 33kda	POLR2C	704555
Polymerase (RNA) II (DNA directed) polypeptide F	POLR2F	699566
Polymerase (RNA) II (DNA directed) polypeptide G	POLR2G	718548
Polymerase (RNA) II (DNA directed) polypeptide H	POLR2H	100429040
Polymerase (RNA) II (DNA directed) polypeptide I, 14.5kda	POLR2I	712412
Polymerase (RNA) III (DNA directed) polypeptide B	POLR3B	702711
Polymerase (RNA) III (DNA directed) polypeptide C (62kd)	POLR3C	696943
Polymerase (RNA) mitochondrial (DNA directed)	POLRMT	100426184
Polynucleotide kinase 3'-phosphatase	PNKP	719084
Polypeptide N-acetylgalactosaminyltransferase 1	GALNT1	708930
Polypyrimidine tract binding protein 2	PTBP2	710101
Polysaccharide biosynthesis domain containing 1	PBDC1	705125
POP5 homolog, ribonuclease P/MRP subunit	POP5	697559
Post-GPI attachment to proteins 2	PGAP2	718085
Post-GPI attachment to proteins 3	PGAP3	697699
Potassium channel modulatory factor 1	KCMF1	694645
Potassium channel subfamily M regulatory beta subunit 4	KCNMB4	717360
Potassium channel tetramerization domain containing 2	KCTD2	700474
Potassium channel tetramerization domain containing 6	KCTD6	701810
Potassium channel tetramerization domain containing 9	KCTD9	711515
Potassium channel, calcium activated intermediate/small conductance subfamily N alpha, member 1	KCNN1	720091
Potassium channel, inwardly rectifying subfamily J, member 12	KCNJ12	705326
Potassium channel, two pore domain subfamily K, member 12	KCNK12	715556
Potassium channel, two pore domain subfamily K, member 13	KCNK13	695445
Potassium channel, two pore domain subfamily K, member 17	KCNK17	719574
Potassium channel, voltage gated eag related subfamily H,	KCNH3	710838

member 3		
Potassium channel, voltage gated Shab related subfamily B, member 1	KCNB1	703520
Potassium channel, voltage gated Shal related subfamily D, member 1	KCND1	711997
Potassium channel, voltage gated Shaw related subfamily C, member 2	KCNC2	100430904
Potassium voltage-gated channel, Isk-related family, member 4	KCNE4	706263
Potassium voltage-gated channel, modifier subfamily S, member 1	KCNS1	711715
Potassium voltage-gated channel, modifier subfamily S, member 3	KCNS3	700065
POU class 2 homeobox 1	POU2F1	700530
PQ loop repeat containing 3	PQLC3	696961
PR domain containing 1, with ZNF domain	PRDM1	696757
PR domain containing 2, with ZNF domain	PRDM2	716295
PR domain containing 4	PRDM4	704529
PR domain containing 5	PRDM5	708790
PRA1 domain family member 2	PRAF2	712436
Praja ring finger 1, E3 ubiquitin protein ligase	PJA1	695038
Pre-B-cell leukemia homeobox 1	PBX1	694416
Pre-B-cell leukemia homeobox 4	PBX4	106994672
Prefoldin subunit 2	PFDN2	719886
Prefoldin subunit 5	PFDN5	702355
PRELI domain containing 1	PRELID1	699254
Pre-mrna processing factor 31	PRPF31	720567
Pre-mrna processing factor 40 homolog A	PRPF40A	696668
Prepronociceptin	PNOC	713633
Presenilin 1	PSEN1	696274
Presenilin enhancer gamma secretase subunit	PSENEN	100429008
Presequence translocase-associated motor 16 homolog (S. Cerevisiae)	PAM16	704987
Prion protein	PRNP	717859
Profilin family member 4	PFN4	704416
Progesterone receptor	PGR	613024
Progesterone receptor membrane component 1	PGRMC1	711792
Programmed cell death 2	PDCD2	696380
Programmed cell death 2-like	PDCD2L	705688
Programmed cell death 5	PDCD5	702277
Programmed cell death 6	PDCD6	723043
Programmed cell death 7	PDCD7	708758
Prohibitin	PHB	699334
Prohibitin 2	PHB2	714693
Proliferating cell nuclear antigen	PCNA	718006
Proline and serine rich 1	PROSER1	696606
Proline rich 13	PRR13	702930
Proline rich 15	PRR15	696869
Proline rich 15-like	PRR15L	695068

Proline rich 3	PRR3	711699
Proline rich 7 (synaptic)	PRR7	700123
Proline rich Gla (G-carboxyglutamic acid) 1	PRRG1	696938
Proline rich membrane anchor 1	PRIMA1	100426272
Proline/serine-rich coiled-coil 1	PSRC1	698060
Proline-rich coiled-coil 1	PRRC1	704248
Proline-rich coiled-coil 2A	PRRC2A	715715
Prolyl 4-hydroxylase, alpha polypeptide II	P4HA2	707157
Prolyl 4-hydroxylase, transmembrane (endoplasmic reticulum)	P4HTM	708158
Prolyl endopeptidase-like	PREPL	713980
Prolylcarboxypeptidase	PRCP	701305
Promyelocytic leukemia	PML	700379
Propionyl-coa carboxylase alpha subunit	PCCA	699844
Propionyl-coa carboxylase beta subunit	PCCB	716964
Prostaglandin D2 receptor 2	PTGDR2	695853
Prostaglandin D2 synthase	PTGDS	707990
Prostaglandin-endoperoxide synthase 2 (prostaglandin G/H synthase and cyclooxygenase)	PTGS2	716671
Protease, serine 23	PRSS23	704537
Protease, serine 27	PRSS27	697848
Protease, serine 55	PRSS55	698379
Proteasomal ATPase associated factor 1	PAAF1	718755
Proteasome (prosome, macropain) assembly chaperone 1	PSMG1	715758
Proteasome (prosome, macropain) assembly chaperone 2	PSMG2	717110
Proteasome (prosome, macropain) assembly chaperone 3	PSMG3	697590
Proteasome 26S subunit, ATPase 4	PSMC4	699847
Proteasome 26S subunit, non-ATPase 1	PSMD1	711724
Proteasome 26S subunit, non-ATPase 12	PSMD12	718756
Proteasome 26S subunit, non-ATPase 6	PSMD6	698601
Proteasome 26S subunit, non-ATPase 7	PSMD7	705581
Proteasome activator subunit 2	PSME2	715288
Proteasome maturation protein	POMP	711980
Proteasome subunit alpha 1	PSMA1	701029
Proteasome subunit alpha 2	PSMA2	701683
Proteasome subunit alpha 3	PSMA3	700251
Proteasome subunit alpha 4	PSMA4	710417
Proteasome subunit alpha 5	PSMA5	698435
Proteasome subunit alpha 6	PSMA6	695113
Proteasome subunit beta 10	PSMB10	701088
Proteasome subunit beta 2	PSMB2	712193
Proteasome subunit beta 3	PSMB3	694318
Proteasome subunit beta 4	PSMB4	710734
Proteasome subunit beta 7	PSMB7	694567
Proteasome subunit beta 9	PSMB9	716980
Protection of telomeres 1	POT1	696751
Protein arginine methyltransferase 5	PRMT5	712718
Protein associated with topoisomerase II homolog 1 (yeast)	PATL1	699207
Protein disulfide isomerase family A member 5	PDIA5	715226

Protein geranylgeranyltransferase type I, beta subunit	PGGT1B	696437
Protein inhibitor of activated STAT 1	PIAS1	693445
Protein inhibitor of activated STAT 2	PIAS2	696737
Protein interacting with cyclin A1	PROCA1	709846
Protein kinase, AMP-activated, alpha 2 catalytic subunit	PRKAA2	717703
Protein kinase, AMP-activated, beta 1 non-catalytic subunit	PRKAB1	695737
Protein kinase, camp-dependent, beta catalytic subunit	PRKACB	709728
Protein kinase, interferon-inducible double stranded RNA dependent activator	PRKRA	703063
Protein odr-4 homolog	C1H1orf27	713801
Protein O-glucosyltransferase 1	POGLUT1	712357
Protein O-linked mannose N-acetylglucosaminyltransferase 1 (beta 1,2-)	POMGNT1	707205
Protein phosphatase 1 regulatory subunit 12C	PPP1R12C	698538
Protein phosphatase 1 regulatory subunit 15A	PPP1R15A	718350
Protein phosphatase 1 regulatory subunit 16A	PPP1R16A	702995
Protein phosphatase 1 regulatory subunit 27	PPP1R27	714648
Protein phosphatase 1 regulatory subunit 35	PPP1R35	712067
Protein phosphatase 1, regulatory subunit 17	PPP1R17	694066
Protein phosphatase 2 regulatory subunit A, alpha	PPP2R1A	719929
Protein phosphatase 2 regulatory subunit B", alpha	PPP2R3A	717078
Protein phosphatase 2 regulatory subunit B', gamma	PPP2R5C	718894
Protein phosphatase 2 regulatory subunit B", gamma	PPP2R3C	694616
Protein phosphatase 2, catalytic subunit, beta isozyme	PPP2CB	695118
Protein phosphatase 3, catalytic subunit, gamma isozyme	PPP3CC	708233
Protein phosphatase 4 catalytic subunit	PPP4C	708510
Protein phosphatase 5, catalytic subunit	PPP5C	716214
Protein phosphatase methylesterase 1	PPME1	718858
Protein phosphatase, Mg2+/Mn2+ dependent 1A	PPM1A	702987
Protein phosphatase, Mg2+/Mn2+ dependent 1B	PPM1B	713918
Protein phosphatase, Mg2+/Mn2+ dependent 1F	PPM1F	698441
Protein phosphatase, Mg2+/Mn2+ dependent 1G	PPM1G	700695
Protein tyrosine phosphatase domain containing 1	PTPDC1	707878
Protein tyrosine phosphatase type IVA, member 2	PTP4A2	706489
Protein tyrosine phosphatase, non-receptor type 1	PTPN1	702016
Protein tyrosine phosphatase, non-receptor type 12	PTPN12	721538
Protein tyrosine phosphatase, non-receptor type 13 (APO-1/CD95 (Fas)-associated phosphatase)	PTPN13	699866
Protein tyrosine phosphatase, non-receptor type 23	PTPN23	711601
Protein tyrosine phosphatase, non-receptor type 4 (megakaryocyte)	PTPN4	695516
Protein tyrosine phosphatase, receptor type, D	PTPRD	714954
Protein-L-isoaspartate (D-aspartate) O-methyltransferase	PCMT1	695893
Proteolipid protein 2 (colonic epithelium-enriched)	PLP2	712869
Protocadherin 7	PCDH7	696011
Protocadherin alpha 5	PCDHA5	692083
Protoporphyrinogen oxidase	PPOX	719910
Pseudouridylate synthase 10	PUS10	717862

PTPRF interacting protein, binding protein 1 (liprin beta 1)	PPFIBP1	709742
Pumilio RNA binding family member 1	PUM1	704848
Pumilio RNA binding family member 2	PUM2	701782
Purinergic receptor P2Y, G-protein coupled, 11	P2RY11	100533472
Purinergic receptor P2Y, G-protein coupled, 13	P2RY13	106997048
Putative homeodomain transcription factor 2	PHTF2	693552
PWP2 periodic tryptophan protein homolog (yeast)	PWP2	722216
PYM homolog 1, exon junction complex associated factor	PYM1	708148
Pyrimidinergic receptor P2Y, G-protein coupled, 4	P2RY4	695127
Pyrroline-5-carboxylate reductase 1	PYCR1	715182
Pyruvate dehydrogenase (lipoamide) alpha 1	PDHA1	100423992
Pyruvate dehydrogenase (lipoamide) beta	PDHB	574227
Pyruvate dehydrogenase phosphatase regulatory subunit	PDPR	709861
Rab acceptor 1 (prenylated)	RABAC1	706397
Rab geranylgeranyltransferase, beta subunit	RABGGTB	705421
RAB, member of RAS oncogene family-like 2B	RABL2B	716615
RAB, member of RAS oncogene family-like 3	RABL3	713621
RAB18, member RAS oncogene family	RAB18	708843
RAB1B, member RAS oncogene family	RAB1B	721852
RAB20, member RAS oncogene family	RAB20	694578
RAB23, member RAS oncogene family	RAB23	712860
RAB3 gtpase activating non-catalytic protein subunit 2	RAB3GAP2	706252
RAB30, member RAS oncogene family	RAB30	701550
RAB32, member RAS oncogene family	RAB32	702431
RAB33B, member RAS oncogene family	RAB33B	697603
RAB37, member RAS oncogene family	RAB37	698842
RAB3A interacting protein	RAB3IP	717215
RAB4A, member RAS oncogene family	RAB4A	694288
RAB5A, member RAS oncogene family	RAB5A	697712
RAB5B, member RAS oncogene family	RAB5B	708347
RAB6A, member RAS oncogene family	RAB6A	718717
RAB8B, member RAS oncogene family	RAB8B	705597
Rabenosyn, RAB effector	RBSN	702356
Rac gtpase activating protein 1	RACGAP1	711887
RAD17 checkpoint clamp loader component	RAD17	700116
RAD50 interactor 1	RINT1	698414
RAD51 associated protein 1	RAD51AP1	710918
RAD51 paralog C	RAD51C	714828
RAD52 motif containing 1	RDM1	716624
RAD9 checkpoint clamp component A	RAD9A	712345
RAD9-HUS1-RAD1 interacting nuclear orphan 1	RHNO1	709008
Radial spoke head 1 homolog (Chlamydomonas)	RSPH1	714394
Raf-1 proto-oncogene, serine/threonine kinase	RAF1	694725
Raftlin family member 2	RFTN2	697562
Raftlin, lipid raft linker 1	RFTN1	695142
Ral GEF with PH domain and SH3 binding motif 1	RALGPS1	708253
Ral gtpase activating protein, alpha subunit 1 (catalytic)	RALGAPA1	695674
Ral gtpase activating protein, beta subunit (non-catalytic)	RALGAPB	705742

RALBP1 associated Eps domain containing 2	REPS2	721024
RALY heterogeneous nuclear ribonucleoprotein	RALY	713317
RAN binding protein 1	RANBP1	719448
RAN binding protein 10	RANBP10	700911
RAN binding protein 17	RANBP17	701214
RAN binding protein 6	RANBP6	715799
Ran gtpase activating protein 1	RANGAP1	710698
RAN guanine nucleotide release factor	RANGRF	717206
Ranbp-type and C3HC4-type zinc finger containing 1	RBCK1	714692
Rap guanine nucleotide exchange factor 2	RAPGEF2	704717
RAP2A, member of RAS oncogene family	RAP2A	697215
RAR-related orphan receptor A	RORA	704014
RAR-related orphan receptor B	RORB	703310
RAR-related orphan receptor C	RORC	717052
RAS and EF-hand domain containing	RASEF	708296
Ras association (ralgds/AF-6) and pleckstrin homology domains 1	RAPH1	705065
Ras association (ralgds/AF-6) domain family member 4	RASSF4	706096
Ras homolog family member B	RHOB	702141
Ras homolog family member C	RHOC	706034
Ras homolog family member D	RHOD	712969
Ras homolog family member G	RHOG	718113
Ras homolog family member J	RHOJ	705603
RAS p21 protein activator (gtpase activating protein) 1	RASA1	694085
RAS p21 protein activator 2	RASA2	715074
RAS protein activator like 2	RASAL2	718958
RAS, dexamethasone-induced 1	RASD1	698839
RAS-like family 10 member A	RASL10A	714587
RAS-like family 11 member A	RASL11A	710394
Ras-like without CAAX 1	RIT1	717985
Ras-related GTP binding C	RRAGC	715549
RB1 inducible coiled-coil 1	RB1CC1	710330
RBPJ interacting and tubulin associated 1	RITA1	712837
RCSD domain containing 1	RCSD1	701239
Reactive oxygen species modulator 1	ROMO1	711369
Rearranged L-myc fusion	RLF	693503
REC8 meiotic recombination protein	REC8	715430
Receptor (G protein-coupled) activity modifying protein 1	RAMP1	574329
Receptor accessory protein 1	REEP1	697390
Receptor accessory protein 3	REEP3	697494
Receptor accessory protein 4	REEP4	707267
Receptor interacting serine/threonine kinase 4	RIPK4	715077
Receptor tyrosine kinase-like orphan receptor 1	ROR1	700760
Recq helicase-like	RECQL	705871
Regucalcin	RGN	705733
Regulation of nuclear pre-mrna domain containing 1A	RPRD1A	709217
Regulator of G-protein signaling 10	RGS10	703125
Regulator of G-protein signaling 14	RGS14	699625
Regulator of G-protein signaling 22	RGS22	704685

Regulator of G-protein signaling 6	RGS6	694620
Regulator of G-protein signaling 7	RGS7	707747
Regulator of microtubule dynamics 1	RMDN1	694237
Regulatory factor X associated ankyrin containing protein	RFXANK	719706
RELT-like 2	RELL2	704673
Renin	REN	574299
Replication factor C subunit 3	RFC3	714220
Replication factor C subunit 5	RFC5	694166
Replication protein A3	RPA3	696248
Replication protein A4	RPA4	699274
Replication timing regulatory factor 1	RIF1	694817
REST corepressor 1	RCOR1	694670
REST corepressor 3	RCOR3	712037
Retbindin	RTBDN	716766
Reticulon 4	RTN4	619181
Reticulon 4 interacting protein 1	RTN4IP1	697236
Retinoblastoma 1	RB1	704871
Retinoblastoma binding protein 4	RBBP4	708710
Retinoblastoma binding protein 8	RBBP8	677718
Retinoic acid induced 1	RAI1	699215
Retinoic acid receptor responder (tazarotene induced) 2	RARRES2	704993
Retinoic acid receptor, gamma	RARG	699532
Retinol binding protein 5	RBP5	715060
Retinol dehydrogenase 12 (all-trans/9-cis/11-cis)	RDH12	711438
Retinol dehydrogenase 5 (11-cis/9-cis)	RDH5	709644
Reversion-inducing-cysteine-rich protein with kazal motifs	RECK	694043
RFT1 homolog	RFT1	694586
Rh family, C glycoprotein	RHCG	664731
Rho family gtpase 3	RND3	694168
Rho gtpase activating protein 18	ARHGAP18	711107
Rho gtpase activating protein 21	ARHGAP21	706428
Rho gtpase activating protein 25	ARHGAP25	699828
Rho gtpase activating protein 6	ARHGAP6	709978
Rho guanine nucleotide exchange factor (GEF) 3	ARHGEF3	704764
Rho guanine nucleotide exchange factor 1	ARHGEF1	722198
Rho guanine nucleotide exchange factor 10	ARHGEF10	722745
Rho guanine nucleotide exchange factor 17	ARHGEF17	718644
Rhomboid 5 homolog 2 (Drosophila)	RHBDF2	707033
Rho-related BTB domain containing 1	RHOBTB1	699132
Rhotekin	RTKN	708722
Ribonuclease H1	RNASEH1	707122
Ribonuclease H2 subunit A	RNASEH2A	716701
Ribonuclease H2 subunit B	RNASEH2B	707995
Ribonuclease P/MRP 14kda subunit	RPP14	706788
Ribonuclease P/MRP 21kda subunit	RPP21	713056
Ribonuclease P/MRP 30kda subunit	RPP30	696537
Ribonuclease P/MRP 40kda subunit	RPP40	710505
Ribonuclease, rnase A family, 1 (pancreatic)	RNASE1	704676

Ribonuclease, rnase A family, 4	RNASE4	703903
Ribonuclease, rnase K	RNASEK	100423496
Ribonucleic acid export 1	RAE1	696706
Ribonucleoprotein, PTB-binding 1	RAVER1	715250
Ribophorin I	RPN1	705437
Ribophorin II	RPN2	708971
Ribosomal protein l10a	RPL10A	718783
Ribosomal protein L13	RPL13	700603
Ribosomal protein L17	RPL17	698967
Ribosomal protein L22	RPL22	703050
Ribosomal protein L23	RPL23	694719
Ribosomal protein l23a	RPL23A	710490
Ribosomal protein L24	RPL24	702381
Ribosomal protein L26	RPL26	717378
Ribosomal protein L26 like 1	RPL26L1	703230
Ribosomal protein L27	RPL27	712352
Ribosomal protein l27a	RPL27A	708863
Ribosomal protein L29	RPL29	698602
Ribosomal protein L3	RPL3	707176
Ribosomal protein L30	RPL30	703120
Ribosomal protein L35	RPL35	693604
Ribosomal protein l35a	RPL35A	714858
Ribosomal protein L4	RPL4	710590
Ribosomal protein l7a	RPL7A	722215
Ribosomal protein L8	RPL8	708535
Ribosomal protein S10	RPS10	718606
Ribosomal protein S11	RPS11	718844
Ribosomal protein S13	RPS13	697513
Ribosomal protein S14	RPS14	710901
Ribosomal protein S15	RPS15	707241
Ribosomal protein S16	RPS16	697219
Ribosomal protein S17-like	RPS17L	100425104
Ribosomal protein S19 binding protein 1	RPS19BP1	704079
Ribosomal protein S2	RPS2	693615
Ribosomal protein S21	RPS21	699565
Ribosomal protein S27	RPS27	106992520
Ribosomal protein S27 like	RPS27L	705483
Ribosomal protein s27a	RPS27A	718909
Ribosomal protein S28	RPS28	707133
Ribosomal protein S4, X-linked	RPS4X	699397
Ribosomal protein S5	RPS5	711259
Ribosomal protein S6 kinase, 90kda, polypeptide 4	RPS6KA4	717574
Ribosomal protein S6 kinase, 90kda, polypeptide 6	RPS6KA6	710337
Ribosomal protein S7	RPS7	721900
Ribosomal protein S8	RPS8	703957
Ribosomal protein S9	RPS9	694053
Ribosomal protein, large, P0	RPLP0	574363
Ribosomal protein, large, P1	RPLP1	695442

Ribosomal protein, large, P2	RPLP2	700698
Ribosomal RNA adenine dimethylase domain containing 1	RRNAD1	718599
Ribosomal RNA processing 12 homolog	RRP12	705854
Ribosomal RNA processing 8, methyltransferase, homolog (yeast)	RRP8	712011
Ribosomal RNA processing 9, small subunit (SSU) processome component, homolog (yeast)	RRP9	699421
Ribosome production factor 1 homolog	RPF1	710286
Ring finger and WD repeat domain 2, E3 ubiquitin protein ligase	RFWD2	708802
Ring finger protein (C3H2C3 type) 6	RNF6	721550
Ring finger protein 112	RNF112	703312
Ring finger protein 115	RNF115	697067
Ring finger protein 130	RNF130	715356
Ring finger protein 14	RNF14	705363
Ring finger protein 146	RNF146	712152
Ring finger protein 167	RNF167	710656
Ring finger protein 185	RNF185	718351
Ring finger protein 20	RNF20	713614
Ring finger protein 208	RNF208	705563
Ring finger protein 219	RNF219	697577
Ring finger protein 32	RNF32	716703
Ring finger protein 34, E3 ubiquitin protein ligase	RNF34	700062
Ring finger protein 38	RNF38	693346
Ring finger protein, LIM domain interacting	RLIM	703471
RIO kinase 2	RIOK2	700738
Ripply transcriptional repressor 3	RIPPLY3	100429272
RNA 2',3'-cyclic phosphate and 5'-OH ligase	RTCB	717258
RNA 3'-terminal phosphate cyclase	RTCA	711623
RNA binding motif protein 10	RBM10	711791
RNA binding motif protein 12B	RBM12B	698382
RNA binding motif protein 15	RBM15	701414
RNA binding motif protein 17	RBM17	712996
RNA binding motif protein 22	RBM22	712713
RNA binding motif protein 27	RBM27	707688
RNA binding motif protein 39	RBM39	704198
RNA binding motif protein 42	RBM42	709852
RNA binding motif protein 45	RBM45	702714
RNA binding motif protein 5	RBM5	704114
RNA binding motif protein, X-linked 2	RBMX2	703472
RNA binding motif, single stranded interacting protein 1	RBMS1	703608
RNA binding motif, single stranded interacting protein 2	RBMS2	713163
RNA binding motif, single stranded interacting protein 3	RBMS3	702852
RNA binding protein S1, serine-rich domain	RNPS1	695816
RNA binding protein with multiple splicing	RPMS	694363
RNA exonuclease 2	REXO2	695292
RNA polymerase II associated protein 3	RPAP3	703749
RNA pseudouridylate synthase domain containing 3	RPUSD3	700349
Rotatin	RTTN	703989

Round spermatid basic protein 1-like	RSBN1L	693814
RPGRIP1-like	RPGRIP1L	697345
RPTOR independent companion of MTOR, complex 2	RICTOR	694915
RRN3 homolog, RNA polymerase I transcription factor	RRN3	713500
RUN domain containing 3B	RUNDC3B	705821
Runt-related transcription factor 1; translocated to, 1 (cyclin D -related)	RUNX1T1	696934
Ruvb-like AAA ATPase 2	RUVBL2	100428792
RWD domain containing 2A	RWDD2A	694598
RWD domain containing 3	RWDD3	709817
S100 calcium binding protein A2	S100A2	715264
S100 calcium binding protein A6	S100A6	715169
SAC1 suppressor of actin mutations 1-like (yeast)	SACM1L	714107
SAC3 domain containing 1	SAC3D1	717043
SAGA complex associated factor 29	SGF29	709124
SAP30 binding protein	SAP30BP	703077
SAP30-like	SAP30L	714400
Sarcoglycan epsilon	SGCE	700104
Sarcolemma associated protein	SLMAP	703086
Scaffold attachment factor B	SAFB	696356
SCAN domain containing 1	SCAND1	711046
Scavenger receptor class F member 2	SCARF2	695466
Schlafen like 1	SLFNL1	695605
SCY1-like, kinase-like 2	SCYL2	695284
SCY1-like, kinase-like 3	SCYL3	701768
SEC13 homolog, nuclear pore and COPII coat complex component	SEC13	697339
SEC22 homolog A, vesicle trafficking protein	SEC22A	715277
SEC22 homolog C, vesicle trafficking protein	SEC22C	716351
Sec23 homolog A, COPII coat complex component	SEC23A	698500
Sec23 homolog B, COPII coat complex component	SEC23B	698440
SEC24 homolog C, COPII coat complex component	SEC24C	714688
SEC24 homolog D, COPII coat complex component	SEC24D	707521
SEC31 homolog A, COPII coat complex component	SEC31A	693687
Sec61 translocon alpha 1 subunit	SEC61A1	709787
Sec61 translocon alpha 2 subunit	SEC61A2	100427728
Sec61 translocon beta subunit	SEC61B	717815
Sec61 translocon gamma subunit	SEC61G	716898
SEC62 homolog, preprotein translocation factor	SEC62	696989
Secernin 2	SCRN2	694571
SECIS binding protein 2	SECISBP2	697442
Secreted frizzled-related protein 1	SFRP1	702876
Secreted frizzled-related protein 4	SFRP4	574393
Secreted frizzled-related protein 5	SFRP5	707738
Secretion associated, Ras related gtpase 1A	SAR1A	711277
Secretoglobulin, family 1D, member 1	SCGB1D1	718936
Secretogranin V	SCG5	694088
Secretory carrier membrane protein 2	SCAMP2	709720

Secretory leukocyte peptidase inhibitor	SLPI	711156
Sedoheptulokinase	SHPK	721465
Sel-1 suppressor of lin-12-like 3 (C. Elegans)	SEL1L3	695033
Selenoprotein K	SELK	693421
Selenoprotein M	SELM	718290
Selenoprotein P, plasma, 1	SEPP1	698917
Selenoprotein W, 1	SEPW1	718370
Sema domain, immunoglobulin domain (Ig), short basic domain, secreted, (semaphorin) 3C	SEMA3C	708633
Sema domain, immunoglobulin domain (Ig), short basic domain, secreted, (semaphorin) 3F	SEMA3F	703995
Sema domain, transmembrane domain (TM), and cytoplasmic domain, (semaphorin) 6D	SEMA6D	713885
Serglycin	SRGN	712299
Serine carboxypeptidase 1	SCPEP1	708197
Serine dehydratase-like	SDSL	714721
Serine incorporator 1	SERINC1	713999
Serine palmitoyltransferase small subunit A	SPTSSA	717580
Serine peptidase inhibitor, Kazal type 5	SPINK5	709424
Serine peptidase inhibitor, Kazal type 6	SPINK6	709586
Serine peptidase inhibitor, Kunitz type, 2	SPINT2	714755
Serine/arginine repetitive matrix 1	SRRM1	712258
Serine/arginine-rich splicing factor 1	SRSF1	713958
Serine/arginine-rich splicing factor 12	SRSF12	700497
Serine/arginine-rich splicing factor 3	SRSF3	719123
Serine/arginine-rich splicing factor 4	SRSF4	717401
Serine/arginine-rich splicing factor 7	SRSF7	713388
Serine/arginine-rich splicing factor 8	SRSF8	699079
Serine/threonine kinase 11 interacting protein	STK11IP	704531
Serine/threonine kinase 25	STK25	701297
Serine/threonine kinase 3	STK3	707425
Serine/threonine kinase 35	STK35	716423
Serine/threonine kinase 36	STK36	699940
Serine/threonine protein kinase 26	STK26	707739
Serine/threonine/tyrosine kinase 1	STYK1	717844
Serologically defined colon cancer antigen 8	SDCCAG8	705545
Serpin peptidase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin), member 3	SERPINA3	574106
Serpin peptidase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin), member 6	SERPINA6	701121
Serpin peptidase inhibitor, clade B (ovalbumin), member 10	SERPINB10	100430160
Serpin peptidase inhibitor, clade B (ovalbumin), member 7	SERPINB7	701671
Serpin peptidase inhibitor, clade C (antithrombin), member 1	SERPINC1	708854
Serpin peptidase inhibitor, clade E (nexin, plasminogen activator inhibitor type 1), member 2	SERPINE2	707121
Serpin peptidase inhibitor, clade G (C1 inhibitor), member 1	SERPING1	703928
Serpin peptidase inhibitor, clade I (neuroserpin), member 1	SERPINI1	699483
SERPINE1 mrna binding protein 1	SERBP1	700797

Serum amyloid A like 1	SAAL1	695747
Serum deprivation response	SDPR	694299
Sestrin 1	SESN1	700232
Sestrin 2	SESN2	716904
Sestrin 3	SESN3	699329
SET and MYND domain containing 2	SMYD2	709375
SET and MYND domain containing 3	SMYD3	703402
SET binding protein 1	SETBP1	699652
SET domain containing (lysine methyltransferase) 7	SETD7	700426
SET domain containing 2	SETD2	711825
SET domain containing 3	SETD3	705369
SET domain containing 5	SETD5	704174
SET domain containing 9	SETD9	708019
SET domain, bifurcated 1	SETDB1	716141
Sex comb on midleg-like 1 (Drosophila)	SCML1	714239
SFI1 centrin binding protein	SFI1	716833
SFT2 domain containing 3	SFT2D3	699830
SGT1 homolog, MIS12 kinetochore complex assembly cochaperone	SUGT1	694046
SH2 domain containing 2A	SH2D2A	718686
SH2 domain containing 3C	SH2D3C	699706
SH2B adaptor protein 2	SH2B2	714861
SH3 domain binding glutamate-rich protein	SH3BGR	722581
SH3 domain containing ring finger 1	SH3RF1	694082
SH3-domain binding protein 1	SH3BP1	700647
SH3-domain binding protein 4	SH3BP4	693393
SH3-domain GRB2-like endophilin B1	SH3GLB1	712393
SHANK associated RH domain interactor	SHARPIN	713534
SHC (Src homology 2 domain containing) family member 4	SHC4	714611
SHC (Src homology 2 domain containing) transforming protein 1	SHC1	718982
SHOC2 leucine-rich repeat scaffold protein	SHOC2	695572
Shroom family member 3	SHROOM3	699613
Shugoshin-like 1 (S. Pombe)	SGOL1	698231
Siah E3 ubiquitin protein ligase 1	SIAH1	716629
Siah E3 ubiquitin protein ligase 2	SIAH2	710222
Sialic acid binding Ig-like lectin 10	SIGLEC10	719648
Sideroflexin 1	SFXN1	695107
Sideroflexin 2	SFXN2	713841
Sideroflexin 4	SFXN4	702765
Signal peptidase complex subunit 1	SPCS1	696426
Signal peptidase complex subunit 3	SPCS3	100429720
Signal peptide, CUB domain, EGF-like 2	SCUBE2	708152
Signal recognition particle 68kda	SRP68	705568
Signal sequence receptor, alpha	SSR1	693818
Signal sequence receptor, beta (translocon-associated protein beta)	SSR2	719383
Signal sequence receptor, delta	SSR4	697266
Signal transducer and activator of transcription 1	STAT1	693650

Sin3A associated protein 18kda	SAP18	703078
Sin3A associated protein 25kda	SAP25	106997576
Sin3A associated protein 30kda	SAP30	696519
Single stranded DNA binding protein 4	SSBP4	719496
Single-stranded DNA binding protein 1, mitochondrial	SSBP1	694459
Single-strand-selective monofunctional uracil-DNA glycosylase 1	SMUG1	704743
Sirtuin 4	SIRT4	720498
Sirtuin 5	SIRT5	700855
Sirtuin 7	SIRT7	715069
SIVA1, apoptosis-inducing factor	SIVA1	706688
SIX homeobox 5	SIX5	715373
Sjogren syndrome nuclear autoantigen 1	SSNA1	706507
SKI-like proto-oncogene	SKIL	696680
Slingshot protein phosphatase 2	SSH2	711898
SLIT and NTRK like family member 1	SLITRK1	699217
SLU7 homolog, splicing factor	SLU7	696023
SLX4 interacting protein	SLX4IP	718563
SMAD family member 1	SMAD1	574340
Smad nuclear interacting protein 1	SNIP1	713733
Small arfgap2	SMAP2	694502
Small integral membrane protein 11A	SMIM11A	702792
Small integral membrane protein 13	SMIM13	703387
Small nuclear ribonucleoprotein D2 polypeptide	SNRPD2	715183
Small nuclear ribonucleoprotein polypeptide A	SNRPA	702730
Small nuclear ribonucleoprotein polypeptide E	SNRPE	701418
Small nuclear ribonucleoprotein polypeptide G	SNRPG	702586
Small nuclear ribonucleoprotein polypeptides B and B1	SNRPB	716578
Small nuclear RNA activating complex polypeptide 2	SNAPC2	706176
Small ubiquitin-like modifier 1	SUMO1	703644
Small vasohibin binding protein	SVBP	698308
SMG7 nonsense mediated mrna decay factor	SMG7	717603
SMG8 nonsense mediated mrna decay factor	SMG8	711172
SMG9 nonsense mediated mrna decay factor	SMG9	710940
Smoothelin	SMTN	716424
Smoothened, frizzled class receptor	SMO	701334
Smu-1 suppressor of mec-8 and unc-52 homolog (C. Elegans)	SMU1	703656
SMYD family member 5	SMYD5	705926
SNAP-associated protein	SNAPIN	715546
SNF related kinase	SNRK	715803
SNRPN upstream reading frame	SNURF	711028
Sodium channel modifier 1	SCNM1	709922
Sodium channel, non voltage gated 1 beta subunit	SCNN1B	700093
Sodium channel, voltage gated, type III alpha subunit	SCN3A	703178
Solute carrier family 11 (proton-coupled divalent metal ion transporter), member 2	SLC11A2	693986
Solute carrier family 12 (potassium/chloride transporter), member 6	SLC12A6	697536

Solute carrier family 12 (sodium/potassium/chloride transporter), member 2	SLC12A2	704672
Solute carrier family 15 (oligopeptide transporter), member 1	SLC15A1	574257
Solute carrier family 15 (oligopeptide transporter), member 3	SLC15A3	696060
Solute carrier family 16 member 11	SLC16A11	721775
Solute carrier family 16, member 2 (thyroid hormone transporter)	SLC16A2	703252
Solute carrier family 17 (vesicular glutamate transporter), member 8	SLC17A8	695508
Solute carrier family 18 (vesicular monoamine transporter), member 2	SLC18A2	701133
Solute carrier family 18, subfamily B, member 1	SLC18B1	708518
Solute carrier family 19 (thiamine transporter), member 2	SLC19A2	700684
Solute carrier family 2 (facilitated glucose transporter), member 13	SLC2A13	697822
Solute carrier family 2 (facilitated glucose transporter), member 3	SLC2A3	715915
Solute carrier family 20 (phosphate transporter), member 1	SLC20A1	699462
Solute carrier family 22 (organic anion transporter), member 6	SLC22A6	718377
Solute carrier family 22 (organic anion transporter), member 8	SLC22A8	718363
Solute carrier family 22 member 14	SLC22A14	696120
Solute carrier family 22 member 15	SLC22A15	710102
Solute carrier family 22 member 17	SLC22A17	713765
Solute carrier family 22 member 18	SLC22A18	721230
Solute carrier family 24 (sodium/potassium/calcium exchanger), member 4	SLC24A4	697997
Solute carrier family 25 (aspartate/glutamate carrier), member 12	SLC25A12	695173
Solute carrier family 25 (carnitine/acylcarnitine translocase), member 20	SLC25A20	709029
Solute carrier family 25 (mitochondrial carrier, brain), member 14	SLC25A14	703255
Solute carrier family 25 (mitochondrial carrier; adenine nucleotide translocator), member 31	SLC25A31	710042
Solute carrier family 25 (mitochondrial carrier; adenine nucleotide translocator), member 5	SLC25A5	693502
Solute carrier family 25 (mitochondrial carrier; adenine nucleotide translocator), member 6	SLC25A6	719811
Solute carrier family 25 (mitochondrial carrier; citrate transporter), member 1	SLC25A1	719075
Solute carrier family 25 (mitochondrial carrier; oxoglutarate carrier), member 11	SLC25A11	710569
Solute carrier family 25 (mitochondrial carrier; phosphate carrier), member 24	SLC25A24	694803
Solute carrier family 25 (mitochondrial carrier; phosphate carrier), member 25	SLC25A25	698216
Solute carrier family 25 (mitochondrial carrier; phosphate carrier),	SLC25A3	693780

member 3		
Solute carrier family 25 (mitochondrial iron transporter), member 37	SLC25A37	710518
Solute carrier family 25 (pyrimidine nucleotide carrier), member 33	SLC25A33	722285
Solute carrier family 25 (S-adenosylmethionine carrier), member 26	SLC25A26	697960
Solute carrier family 25 member 41	SLC25A41	702790
Solute carrier family 25 member 46	SLC25A46	705968
Solute carrier family 25, member 44	SLC25A44	719424
Solute carrier family 26 (anion exchanger), member 8	SLC26A8	719049
Solute carrier family 28 (concentrative nucleoside transporter), member 3	SLC28A3	709560
Solute carrier family 30 (zinc transporter), member 1	SLC30A1	711624
Solute carrier family 30 (zinc transporter), member 5	SLC30A5	699371
Solute carrier family 35 (adenosine 3'-phospho 5'-phosphosulfate transporter), member B3	SLC35B3	698416
Solute carrier family 35 (UDP-galactose transporter), member A2	SLC35A2	711587
Solute carrier family 35 (UDP-glca/UDP-galnac transporter), member D1	SLC35D1	700175
Solute carrier family 35 member B1	SLC35B1	699953
Solute carrier family 35 member G1	SLC35G1	700750
Solute carrier family 38 member 1	SLC38A1	702135
Solute carrier family 38 member 11	SLC38A11	703062
Solute carrier family 38 member 6	SLC38A6	704017
Solute carrier family 39 (zinc transporter), member 10	SLC39A10	696669
Solute carrier family 39 (zinc transporter), member 13	SLC39A13	713420
Solute carrier family 39 (zinc transporter), member 2	SLC39A2	705112
Solute carrier family 39 (zinc transporter), member 8	SLC39A8	710142
Solute carrier family 39, member 9	SLC39A9	712430
Solute carrier family 4 (anion exchanger), member 1, adaptor protein	SLC4A1AP	701783
Solute carrier family 4 (anion exchanger), member 2	SLC4A2	713966
Solute carrier family 4, sodium bicarbonate cotransporter, member 7	SLC4A7	701925
Solute carrier family 4, sodium borate transporter, member 11	SLC4A11	718393
Solute carrier family 41 member 3	SLC41A3	716921
Solute carrier family 44 member 3	SLC44A3	714768
Solute carrier family 44 member 4	SLC44A4	715779
Solute carrier family 45 member 3	SLC45A3	697420
Solute carrier family 5 (sodium/choline cotransporter), member 7	SLC5A7	714093
Solute carrier family 5 (sodium/inositol cotransporter), member 11	SLC5A11	701816
Solute carrier family 5 (sodium/multivitamin and iodide co transporter), member 6	SLC5A6	699074
Solute carrier family 51 alpha subunit	SLC51A	711340
Solute carrier family 52 (riboflavin transporter), member 1	SLC52A1	711253
Solute carrier family 6 (neurotransmitter transporter), member 11	SLC6A11	696741

Solute carrier family 6 (neurotransmitter transporter), member 8	SLC6A8	698307
Solute carrier family 7 (amino acid transporter light chain, bo,+ system), member 9	SLC7A9	703081
Solute carrier family 7 (amino acid transporter light chain, L system), member 8	SLC7A8	713511
Solute carrier family 7 (anionic amino acid transporter), member 13	SLC7A13	693964
Solute carrier family 7 (cationic amino acid transporter, y+ system), member 3	SLC7A3	696288
Solute carrier family 9, subfamily A (NHE3, cation proton antiporter 3), member 3 regulator 1	SLC9A3R1	703933
Solute carrier family 9, subfamily A (NHE3, cation proton antiporter 3), member 3 regulator 2	SLC9A3R2	694658
Solute carrier family 9, subfamily A (NHE9, cation proton antiporter 9), member 9	SLC9A9	713935
Solute carrier organic anion transporter family member 1B1	SLCO1B1	705308
Solute carrier organic anion transporter family member 2B1	SLCO2B1	694829
SON DNA binding protein	SON	704712
Sorting nexin 1	SNX1	706544
Sorting nexin 10	SNX10	701684
Sorting nexin 11	SNX11	696913
Sorting nexin 13	SNX13	714019
Sorting nexin 14	SNX14	696632
Sorting nexin 17	SNX17	701614
Sorting nexin 24	SNX24	700621
Sorting nexin 3	SNX3	700989
Sorting nexin 32	SNX32	721888
Sorting nexin 33	SNX33	706309
SOS Ras/Rho guanine nucleotide exchange factor 2	SOS2	705601
SP110 nuclear body protein	SP110	714244
Sp2 transcription factor	SP2	694834
Sp3 transcription factor	SP3	699901
Sp5 transcription factor	SP5	693989
SPARC like 1	SPARCL1	701468
Spastic paraplegia 11 (autosomal recessive)	SPG11	712221
Spastic paraplegia 21 (autosomal recessive, Mast syndrome)	SPG21	712815
Speckle type POZ protein like	SPOPL	704203
Spectrin, beta, non-erythrocytic 1	SPTBN1	716794
Spen family transcriptional repressor	SPEN	696205
Sperm acrosome associated 1	SPACA1	699611
Sperm acrosome associated 4	SPACA4	718177
Sperm acrosome associated 5	SPACA5	708435
Sperm acrosome associated 7	SPACA7	695869
Sperm antigen with calponin homology and coiled-coil domains 1-like	SPECC1L	707641
Sperm associated antigen 11B	SPAG11B	641436
Sperm associated antigen 5	SPAG5	709400
Sperm associated antigen 9	SPAG9	707613

Sperm flagellar 1	SPEF1	717547
Spermatid perinuclear RNA binding protein	STRBP	695402
Spermatogenesis associated 17	SPATA17	707859
Spermatogenesis associated 2-like	SPATA2L	699974
Spermatogenesis associated 5-like 1	SPATA5L1	713376
Spermatogenesis associated 7	SPATA7	693836
Spermatogenesis associated, serine rich 2 like	SPATS2L	699458
Spermatogenesis associated, serine-rich 1	SPATS1	703218
Spermidine/spermine N1-acetyltransferase 1	SAT1	697884
Spermine synthase	SMS	698179
S-phase cyclin A-associated protein in the ER	SCAPER	708022
S-phase kinase-associated protein 2, E3 ubiquitin protein ligase	SKP2	700617
Sphingomyelin phosphodiesterase 2	SMPD2	698865
Sphingomyelin phosphodiesterase acid-like 3A	SMPDL3A	713696
Sphingomyelin synthase 1	SGMS1	704027
Spinster homolog 1 (Drosophila)	SPNS1	704769
Spla/ryanodine receptor domain and SOCS box containing 4	SPSB4	715278
Splicing factor 3a subunit 2	SF3A2	721469
Splicing factor 3b subunit 5	SF3B5	699863
Splicing factor 3b subunit 6	SF3B6	704090
Splicing factor 3b, subunit 1, 155kda	SF3B1	697773
Splicing factor 3b, subunit 4, 49kda	SF3B4	705655
Splicing factor, suppressor of white-apricot family	SFSWAP	709551
Split hand/foot malformation (ectrodactyly) type 1	SHFM1	698349
Spondin 1, extracellular matrix protein	SPON1	699833
Spondin 2, extracellular matrix protein	SPON2	702450
SPRY domain containing 4	SPRYD4	713037
SPT3 homolog, SAGA and STAGA complex component	SUPT3H	703447
SPT4 homolog, DSIF elongation factor subunit	SUPT4H1	710214
Squamous cell carcinoma antigen recognized by T-cells 3	SART3	705552
Src-related kinase lacking C-terminal regulatory tyrosine and N-terminal myristylation sites	SRMS	719587
SRP receptor alpha subunit	SRPRA	714215
SR-related CTD-associated factor 11	SCAF11	701894
SRSF protein kinase 1	SRPK1	719039
SRSF protein kinase 3	SRPK3	100429808
SRY-box 11	SOX11	707983
SRY-box 13	SOX13	700802
SRY-box 3	SOX3	696412
SRY-box 7	SOX7	697999
SRY-box 9	SOX9	574208
ST3 beta-galactoside alpha-2,3-sialyltransferase 1	ST3GAL1	698004
ST3 beta-galactoside alpha-2,3-sialyltransferase 4	ST3GAL4	717792
ST6 (alpha-N-acetyl-neuraminyl-2,3-beta-galactosyl-1,3)-N-acetyl galactosaminide alpha-2,6-sialyltransferase 3	ST6GALNAC3	709779
STAM binding protein	STAMBP	714562
STAM binding protein like 1	STAMBPL1	694629
Staphylococcal nuclease and tudor domain containing 1	SND1	699542

Star related lipid transfer domain containing 3	STARD3	697212
Star related lipid transfer domain containing 5	STARD5	713308
STARD3 N-terminal like	STARD3NL	705212
Stathmin 1	STMN1	719733
Stathmin 3	STMN3	719538
Stathmin 4	STMN4	712651
Staufen double-stranded RNA binding protein 1	STAU1	704197
STE20 like kinase	SLK	715086
STE20-related kinase adaptor alpha	STRADA	717927
Stereocilin	STRC	677720
Sterile alpha motif domain containing 13	SAMD13	713946
Sterol O-acyltransferase 1	SOAT1	716989
Sterol-C5-desaturase	SC5D	706827
STIP1 homology and U-box containing protein 1, E3 ubiquitin protein ligase	STUB1	697105
Stomatin like 2	STOML2	698458
Storkhead box 2	STOX2	693692
Stratifin	SFN	715055
Strawberry notch homolog 1 (Drosophila)	SBNO1	709260
Strawberry notch homolog 2 (Drosophila)	SBNO2	721186
Stress induced phosphoprotein 1	STIP1	717926
Striatin	STRN	708491
Striatin interacting protein 1	STRIP1	700799
Stromal cell derived factor 4	SDF4	699804
Stromal cell-derived factor 2	SDF2	716189
Structural maintenance of chromosomes 1B	SMC1B	713486
Structural maintenance of chromosomes 2	SMC2	713359
Structural maintenance of chromosomes 4	SMC4	702615
Structure specific recognition protein 1	SSRP1	706614
STT3A, subunit of the oligosaccharyltransferase complex (catalytic)	STT3A	717056
STT3B, subunit of the oligosaccharyltransferase complex (catalytic)	STT3B	703434
SUB1 homolog, transcriptional regulator	SUB1	701045
Succinate dehydrogenase complex assembly factor 2	SDHAF2	693401
Succinate dehydrogenase complex subunit A, flavoprotein (Fp)	SDHA	708018
Succinate dehydrogenase complex subunit B, iron sulfur (Ip)	SDHB	699810
Succinate dehydrogenase complex, subunit D, integral membrane protein	SDHD	711326
Succinate-coa ligase, GDP-forming, beta subunit	SUCLG2	697454
Sulfatase 2	SULF2	715937
Sulfiredoxin 1	SRXN1	714997
SUMO1/sentrin specific peptidase 5	SEN5	710223
SUMO1/sentrin specific peptidase 6	SEN6	716554
SUMO1/sentrin specific peptidase 7	SEN7	701453
SUMO1/sentrin/SMT3 specific peptidase 3	SEN3	715884
SUMO-interacting motifs containing 1	SIMC1	701880
SUN domain containing ossification factor	SUCO	705776

Superkiller viralicidic activity 2-like 2 (S. Cerevisiae)	SKIV2L2	706419
Superoxide dismutase 1, soluble	SOD1	574096
Supervillin	SVIL	695267
Suppression of tumorigenicity 13 (colon carcinoma) (Hsp70 interacting protein)	ST13	705664
Suppression of tumorigenicity 7 like	ST7L	705541
Suppressor of cytokine signaling 1	SOCS1	711180
Suppressor of cytokine signaling 2	SOCS2	715772
Suppressor of cytokine signaling 4	SOCS4	696146
Suppressor of cytokine signaling 6	SOCS6	704108
Suppressor of fused homolog (Drosophila)	SUFU	713576
Suppressor of IKBKE 1	SIKE1	708999
Suppressor of variegation 3-9 homolog 1	SUV39H1	711040
Surfactant associated 2	SFTA2	714397
Surfactant protein D	SFTPD	678657
Surfeit 2	SURF2	100430368
Surfeit 4	SURF4	100429960
SURP and G-patch domain containing 1	SUGP1	719772
SURP and G-patch domain containing 2	SUGP2	719666
Survival motor neuron domain containing 1	SMNDC1	694761
Survival of motor neuron 1, telomeric	SMN1	677703
Sushi domain containing 4	SUSD4	703741
Sushi-repeat containing protein, X-linked	SRPX	697145
SUV3-like helicase	SUPV3L1	712081
SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 2	SMARCA2	696973
SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 5	SMARCA5	700614
SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a-like 1	SMARCAL1	695741
SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily b, member 1	SMARCB1	699190
SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily d, member 3	SMARCD3	715080
SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily e, member 1	SMARCE1	701310
SWT1, RNA endoribonuclease homolog	SWT1	714083
Symplekin	SYMPK	722436
Synapsin II	SYN2	695412
Synaptogyrin 1	SYNGR1	100427480
Synaptogyrin 4	SYNGR4	717913
Synaptojanin 2 binding protein	SYNJ2BP	713312
Synaptophysin-like 1	SYPL1	698350
Synaptosome associated protein 29kda	SNAP29	696708
Synaptosome associated protein 47kda	SNAP47	696700
Synaptotagmin 1	SYT1	695390
Synaptotagmin like 1	SYTL1	715833
Synaptotagmin like 2	SYTL2	703187

Synaptotagmin VII	SYT7	722368
Syndecan 1	SDC1	701544
Syndecan binding protein	SDCBP	698381
Syndecan binding protein 2	SDCBP2	715602
Synemin	SYNM	717194
Synergisin, gamma	SYNRG	717750
Synovial sarcoma translocation gene on chromosome 18-like 2	SS18L2	716387
Syntaxin 12	STX12	716455
Syntaxin 1B	STX1B	714251
Syntaxin binding protein 3	STXBP3	699144
Syntaxin binding protein 6 (amisyn)	STXBP6	715357
Synuclein beta	SNCB	697484
Tafazzin	TAZ	574297
TAM41, mitochondrial translocator assembly and maintenance protein, homolog (S. Cerevisiae)	C3orf31	695998
Tankyrase, TRF1-interacting ankyrin-related ADP-ribose polymerase	TNKS	699004
Tankyrase, TRF1-interacting ankyrin-related ADP-ribose polymerase 2	TNKS2	698050
TAO kinase 2	TAOK2	707777
TAR (HIV-1) RNA binding protein 1	TARBP1	712397
TAR (HIV-1) RNA binding protein 2	TARBP2	703294
Target of myb1 like 1 membrane trafficking protein	TOM1L1	710262
Taspase 1	TASP1	694028
Taste 1 receptor member 1	TAS1R1	720987
TATA-box binding protein associated factor 10	TAF10	710022
TATA-box binding protein associated factor 12	TAF12	717135
TATA-box binding protein associated factor 5	TAF5	714558
TATA-box binding protein associated factor 5 like	TAF5L	693770
TATA-box binding protein associated factor 6 like	TAF6L	722233
TATA-box binding protein associated factor 9	TAF9	700239
TATA-box binding protein associated factor, RNA polymerase I, D	TAF1D	696602
Tatd dnase domain containing 1	TATDN1	706095
Tax1 (human T-cell leukemia virus type I) binding protein 1	TAX1BP1	698103
TBC1 domain family member 15	TBC1D15	718743
TBC1 domain family member 25	TBC1D25	710596
TBC1 domain family member 9	TBC1D9	702230
T-box 2	TBX2	716277
T-box 21	TBX21	694044
T-box 3	TBX3	713740
TCDD-inducible poly(ADP-ribose) polymerase	TIPARP	706180
T-cell acute lymphocytic leukemia 2	TAL2	712138
T-cell leukemia/lymphoma 1B	TCL1B	703241
TCF3 (E2A) fusion partner (in childhood Leukemia)	TFPT	720296
T-complex-associated-testis-expressed 3	TCTE3	695431
Tctex1 domain containing 2	TCTEX1D2	711098
TEA domain family member 4	TEAD4	721772

Teashirt zinc finger homeobox 1	TSHZ1	703018
Tectonic family member 3	TCTN3	703844
Tektin 1	TEKT1	713555
Tektin 3	TEKT3	693793
TELO2 interacting protein 1	TTI1	699930
Telomeric repeat binding factor 2, interacting protein	TERF2IP	712149
Tensin 2	TNS2	700813
Tensin 4	TNS4	701075
TERF1 (TRF1)-interacting nuclear factor 2	TINF2	715812
Testin LIM domain protein	TES	706879
Testis expressed 10	TEX10	714536
Testis expressed 26	TEX26	713363
Testis expressed 28	TEX28	699141
Testis expressed 30	TEX30	701917
Testis expressed 40	TEX40	717642
Testis specific 10 interacting protein	TSGA10IP	715217
Testis-specific kinase 1	TESK1	697206
Tetraspanin 15	TSPAN15	711675
Tetraspanin 3	TSPAN3	708428
Tetraspanin 5	TSPAN5	706537
Tetraspanin 7	TSPAN7	698011
Tetraspanin 8	TSPAN8	718622
Tetratricopeptide repeat domain 16	TTC16	706784
Tetratricopeptide repeat domain 21A	TTC21A	694904
Tetratricopeptide repeat domain 26	TTC26	715688
Tetratricopeptide repeat domain 27	TTC27	707021
Tetratricopeptide repeat domain 31	TTC31	708810
Tetratricopeptide repeat domain 32	TTC32	700947
Tetratricopeptide repeat domain 39C	TTC39C	701560
Tetratricopeptide repeat domain 7A	TTC7A	715122
Tetratricopeptide repeat domain 7B	TTC7B	696029
Tetratricopeptide repeat domain 9C	TTC9C	718583
TGF-beta activated kinase 1/MAP3K7 binding protein 1	TAB1	703409
TGF-beta activated kinase 1/MAP3K7 binding protein 2	TAB2	696875
THAP domain containing 10	THAP10	696770
THAP domain containing 4	THAP4	701543
THAP domain containing 7	THAP7	696208
Thioredoxin	TXN	712587
Thioredoxin domain containing 11	TXNDC11	711826
Thioredoxin domain containing 12 (endoplasmic reticulum)	TXNDC12	712891
Thioredoxin domain containing 9	TXNDC9	709303
Thioredoxin like 1	TXNL1	695194
Thioredoxin like 4A	TXNL4A	698969
Thioredoxin reductase 1	TXNRD1	701062
Thioredoxin reductase 2	TXNRD2	712475
Thiosulfate sulfurtransferase (rhodanese)	TST	698021
THO complex 1	THOC1	697954
THO complex 6	THOC6	700217

Thrombospondin 3	THBS3	717572
THUMP domain containing 2	THUMPD2	712045
Thymocyte nuclear protein 1	THYN1	700413
Thymocyte selection associated high mobility group box	TOX	698759
Thymopoietin	TMPO	693387
Thymosin beta 10	TMSB10	694305
Thyroid adenoma associated	THADA	716361
Thyroid hormone receptor associated protein 3	THRAP3	713033
Thyroid hormone receptor interactor 11	TRIP11	697489
Thyroid hormone receptor interactor 12	TRIP12	710560
Thyroid hormone receptor interactor 13	TRIP13	709328
Thyroid hormone receptor interactor 4	TRIP4	707263
Thyroid hormone responsive	THRSP	699701
TIA1 cytotoxic granule-associated RNA binding protein	TIA1	702366
TIMP metalloproteinase inhibitor 1	TIMP1	574348
Titin-cap	TCAP	697327
TM2 domain containing 2	TM2D2	701007
TMEM9 domain family member B	TMEM9B	708447
TNF receptor associated factor 2	TRAF2	708391
TNF receptor associated factor 6	TRAF6	716907
TNF receptor associated factor 7	TRAF7	695415
TNF receptor-associated protein 1	TRAP1	706234
Tocopherol (alpha) transfer protein-like	TTPAL	712620
Toll-like receptor 9	TLR9	574395
Toll-like receptor adaptor molecule 1	TICAM1	574294
Toll-like receptor adaptor molecule 2	TICAM2	100426352
Topoisomerase (DNA) II alpha	TOP2A	700707
Topoisomerase (DNA) II beta	TOP2B	677709
Topoisomerase (DNA) II binding protein 1	TOPBP1	719054
Topoisomerase (DNA) III beta	TOP3B	698317
Topoisomerase I binding, arginine/serine-rich, E3 ubiquitin protein ligase	TOPORS	703930
Torsin family 1, member A (torsin A)	TOR1A	722520
Torsin family 2, member A	TOR2A	700203
TP53 induced glycolysis regulatory phosphatase	TIGAR	721886
TPX2, microtubule-associated	TPX2	712961
TRAF family member associated NFKB activator	TANK	700942
TRAF2 and NCK interacting kinase	TNIK	695414
TRAF3 interacting protein 2	TRAF3IP2	697530
Trafficking protein particle complex 11	TRAPPC11	702066
Trafficking protein, kinesin binding 2	TRAK2	701779
TRAF-type zinc finger domain containing 1	TRAFD1	711635
Trans-2,3-enoyl-coa reductase	TECR	718928
Transaldolase 1	TALDO1	720828
Transcription elongation factor A (SII), 2	TCEA2	694026
Transcription elongation factor A (SII)-like 4	TCEAL4	696453
Transcription elongation factor A (SII)-like 7	TCEAL7	695831
Transcription elongation factor A (SII)-like 8	TCEAL8	695496

Transcription elongation factor B (SIII), polypeptide 1 (15kda, elongin C)	TCEB1	698922
Transcription factor 4	TCF4	695814
Transcription factor A, mitochondrial	TFAM	701368
Transcription factor AP-2 alpha (activating enhancer binding protein 2 alpha)	TFAP2A	700663
Transcription factor B1, mitochondrial	TFB1M	701830
Transcriptional adaptor 3	TADA3	700090
Transducer of ERBB2, 1	TOB1	706873
Transducin (beta)-like 1 X-linked receptor 1	TBL1XR1	712740
Transducin (beta)-like 3	TBL3	693864
Transducin like enhancer of split 1	TLE1	707336
Transferrin receptor	TFRC	711568
Transformer 2 alpha homolog (Drosophila)	TRA2A	574247
Transformer 2 beta homolog (Drosophila)	TRA2B	574337
Transforming growth factor beta 1 induced transcript 1	TGFB1I1	714172
Transforming growth factor beta 2	TGFB2	707540
Transforming growth factor beta receptor II	TGFBR2	703088
Transforming growth factor beta receptor III	TGFBR3	705053
Transforming growth factor, beta receptor 1	TGFBR1	714952
Transforming, acidic coiled-coil containing protein 2	TACC2	705497
Transforming, acidic coiled-coil containing protein 3	TACC3	712898
Transgelin 2	TAGLN2	719527
Transglutaminase 2	TGM2	706777
Transient receptor potential cation channel, subfamily M, member 5	TRPM5	705070
Transient receptor potential cation channel, subfamily V, member 4	TRPV4	709605
Translational activator of mitochondrially encoded cytochrome c oxidase I	TACO1	717828
Translocase of inner mitochondrial membrane 17 homolog A (yeast)	TIMM17A	707001
Translocase of inner mitochondrial membrane 17 homolog B (yeast)	TIMM17B	714895
Translocase of inner mitochondrial membrane 44 homolog (yeast)	TIMM44	709800
Translocase of inner mitochondrial membrane 8 homolog B (yeast)	TIMM8B	711249
Translocase of inner mitochondrial membrane domain containing 1	TIMMDC1	712414
Translocase of outer mitochondrial membrane 6 homolog (yeast)	TOMM6	100423264
Translocase of outer mitochondrial membrane 70 homolog A (S. Cerevisiae)	TOMM70A	700347
Translocated promoter region, nuclear basket protein	TPR	713910
Translocator protein	TSPO	711717
Transmembrane 4 L six family member 18	TM4SF18	712063
Transmembrane 4 L six family member 5	TM4SF5	709844

Transmembrane 6 superfamily member 2	TM6SF2	719756
Transmembrane 7 superfamily member 3	TM7SF3	710602
Transmembrane 9 superfamily member 1	TM9SF1	715472
Transmembrane 9 superfamily protein member 4	TM9SF4	712260
Transmembrane and coiled-coil domain family 3	TMCC3	716185
Transmembrane and ubiquitin-like domain containing 1	TMUB1	714606
Transmembrane and ubiquitin-like domain containing 2	TMUB2	714541
Transmembrane p24 trafficking protein 1	TMED1	713618
Transmembrane p24 trafficking protein 3	TMED3	711993
Transmembrane p24 trafficking protein 4	TMED4	699105
Transmembrane p24 trafficking protein 7	TMED7	100533192
Transmembrane phosphoinositide 3-phosphatase and tensin homolog 2	TPTE2	704870
Transmembrane protease, serine 13	TMPRSS13	698586
Transmembrane protein 104	TMEM104	698592
Transmembrane protein 115	TMEM115	702164
Transmembrane protein 121	TMEM121	700005
Transmembrane protein 125	TMEM125	699920
Transmembrane protein 126A	TMEM126A	702831
Transmembrane protein 126B	TMEM126B	702719
Transmembrane protein 132A	TMEM132A	695291
Transmembrane protein 135	TMEM135	704963
Transmembrane protein 138	TMEM138	693905
Transmembrane protein 141	TMEM141	721687
Transmembrane protein 147	TMEM147	709568
Transmembrane protein 14A	TMEM14A	708829
Transmembrane protein 14C	TMEM14C	697976
Transmembrane protein 150A	TMEM150A	696101
Transmembrane protein 160	TMEM160	716996
Transmembrane protein 164	TMEM164	705380
Transmembrane protein 165	TMEM165	696262
Transmembrane protein 168	TMEM168	702972
Transmembrane protein 171	TMEM171	702863
Transmembrane protein 177	TMEM177	695399
Transmembrane protein 186	TMEM186	714067
Transmembrane protein 187	TMEM187	698397
Transmembrane protein 19	TMEM19	718700
Transmembrane protein 192	TMEM192	708459
Transmembrane protein 204	TMEM204	701926
Transmembrane protein 208	TMEM208	697228
Transmembrane protein 216	TMEM216	693655
Transmembrane protein 218	TMEM218	100430360
Transmembrane protein 237	TMEM237	702262
Transmembrane protein 243	TMEM243	706405
Transmembrane protein 245	TMEM245	710299
Transmembrane protein 246	TMEM246	713682
Transmembrane protein 248	TMEM248	695654
Transmembrane protein 254	TMEM254	701130

Transmembrane protein 256	TMEM256	715274
Transmembrane protein 261	TMEM261	716818
Transmembrane protein 27	TMEM27	712928
Transmembrane protein 30A	TMEM30A	717907
Transmembrane protein 31	TMEM31	100429776
Transmembrane protein 33	TMEM33	702063
Transmembrane protein 38B	TMEM38B	715679
Transmembrane protein 39B	TMEM39B	706700
Transmembrane protein 42	TMEM42	714654
Transmembrane protein 45A	TMEM45A	700594
Transmembrane protein 45B	TMEM45B	718735
Transmembrane protein 5	TMEM5	717102
Transmembrane protein 53	TMEM53	705023
Transmembrane protein 55A	TMEM55A	696779
Transmembrane protein 56	TMEM56	709729
Transmembrane protein 57	TMEM57	654415
Transmembrane protein 59	TMEM59	714942
Transmembrane protein 67	TMEM67	698631
Transmembrane protein 81	TMEM81	699180
Transmembrane protein 94	TMEM94	702374
Transmembrane protein with EGF-like and two follistatin-like domains 2	TMEFF2	694555
Transmembrane protein, adipocyte associated 1	TPRA1	707221
Transporter 1, ATP-binding cassette, sub-family B (MDR/TAP)	TAP1	717726
Transportin 2	TNPO2	717710
Tribbles pseudokinase 2	TRIB2	710966
Triggering receptor expressed on myeloid cells like 2	TREML2	719749
Trinucleotide repeat containing 6A	TNRC6A	701680
Triokinase/FMN cyclase	TKFC	694117
Tripartite motif containing 11	TRIM11	694150
Tripartite motif containing 22	TRIM22	713814
Tripartite motif containing 23	TRIM23	696386
Tripartite motif containing 24	TRIM24	710229
Tripartite motif containing 27	TRIM27	706129
Tripartite motif containing 32	TRIM32	702595
Tripartite motif containing 33	TRIM33	710600
Tripartite motif containing 34	TRIM34	100568288
Tripartite motif containing 36	TRIM36	694994
Tripartite motif containing 37	TRIM37	710934
Tripartite motif containing 41	TRIM41	708426
Tripartite motif containing 46	TRIM46	717498
Tripartite motif containing 47	TRIM47	704642
Tripartite motif containing 5	TRIM5	574288
Tripartite motif containing 8	TRIM8	713701
TRK-fused gene	TFG	700972
Trna 5-methylaminomethyl-2-thiouridylate methyltransferase	TRMU	714268
Trna isopentenyltransferase 1	TRIT1	716422
Trna methyltransferase 1	TRMT1	718227

Trna methyltransferase 1 like	TRMT1L	714319
Trna methyltransferase 11 homolog	TRMT11	712712
Trna methyltransferase 11-2 homolog (S. Cerevisiae)	TRMT112	717676
Trna methyltransferase 6	TRMT6	718229
Trna methyltransferase O	TRMO	715609
Trna phosphotransferase 1	TRPT1	717911
Trna splicing endonuclease subunit 15	TSEN15	717481
Trna splicing endonuclease subunit 54	TSEN54	702604
Tropomodulin 4	TMOD4	709732
Tropomyosin 1 (alpha)	TPM1	705236
Tropomyosin 2 (beta)	TPM2	696604
TRPM8 channel-associated factor 1	TCAF1	705151
TRPM8 channel-associated factor 2	TCAF2	707579
Trub pseudouridine (psi) synthase family member 1	TRUB1	699133
Tryptase gamma 1	TPSG1	100425752
TSC22 domain family member 1	TSC22D1	701076
TSC22 domain family member 3	TSC22D3	702656
TSC22 domain family member 4	TSC22D4	719183
TSPY-like 4	TSPYL4	716137
TSR3, 20S rRNA accumulation, homolog (S. Cerevisiae)	TSR3	677691
TSSK6 activating co-chaperone	TSACC	719490
Tuberous sclerosis 2	TSC2	694965
Tubulin alpha 1a	TUBA1A	574194
Tubulin alpha 3c	TUBA3C	707215
Tubulin beta 4B class ivb	TUBB4B	100425864
Tubulin beta class I	TUBB	574113
Tubulin folding cofactor C	TBCC	696997
Tubulin folding cofactor E	TBCE	711476
Tubulin folding cofactor E-like	TBCEL	706506
Tubulin gamma complex associated protein 4	TUBGCP4	710327
Tubulin tyrosine ligase like 12	TLL12	714871
Tubulin, alpha 1b	TUBA1B	709643
Tudor domain containing 3	TDRD3	696228
Tudor domain containing 6	TDRD6	704453
Tudor domain containing 7	TDRD7	641450
Tuftelin interacting protein 11	TFIP11	712691
Tumor necrosis factor (ligand) superfamily, member 12	TNFSF12	100551504
Tumor necrosis factor receptor superfamily member 11b	TNFRSF11B	701850
Tumor necrosis factor receptor superfamily member 25	TNFRSF25	703744
Tumor necrosis factor receptor superfamily member 4	TNFRSF4	699674
Tumor necrosis factor superfamily member 13	TNFSF13	100551504
Tumor necrosis factor superfamily member 13b	TNFSF13B	693917
Tumor necrosis factor superfamily member 4	TNFSF4	706255
Tumor protein D52-like 1	TPD52L1	716568
Tumor protein p53	TP53	716170
Tumor protein p53 binding protein 1	TP53BP1	710237
Tumor protein p53 inducible protein 3	TP53I3	704206
Tumor protein, translationally-controlled 1	TPT1	702155

Tumor suppressing subtransferable candidate 4	TSSC4	705185
Tumor suppressor candidate 3	TUSC3	701123
Twist family bhlh transcription factor 1	TWIST1	574278
Twist family bhlh transcription factor 2	TWIST2	697078
TWIST neighbor	TWISTNB	707781
Twisted gastrulation homolog 1 (Drosophila)	TWSG1	705804
TYRO3 protein tyrosine kinase	TYRO3	710902
Tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, beta	YWHAB	717788
Tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, eta	YWHAH	717016
Tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, gamma	YWHAG	715517
Tyrosine hydroxylase	TH	721137
Tyrosine kinase, non-receptor, 1	TNK1	715180
Tyrosine kinase, non-receptor, 2	TNK2	711655
Tyrosyl-DNA phosphodiesterase 2	TDP2	715162
Tyrosyl-trna synthetase	YARS	709003
U2AF homology motif (UHM) kinase 1	UHMK1	720105
Ubiquilin 1	UBQLN1	713525
Ubiquinol-cytochrome c reductase core protein II	UQCRC2	697967
Ubiquinol-cytochrome c reductase, 6.4kda subunit	UQCR	708396
Ubiquinol-cytochrome c reductase, complex III subunit VII, 9.5kda	UQCRQ	708950
Ubiquitin A-52 residue ribosomal protein fusion product 1	UBA52	720243
Ubiquitin B	UBB	696110
Ubiquitin conjugating enzyme E2 variant 1	UBE2V1	100425552
Ubiquitin conjugating enzyme E2 variant 2	UBE2V2	714735
Ubiquitin conjugating enzyme E2A	UBE2A	693716
Ubiquitin conjugating enzyme E2D 1	UBE2D1	701491
Ubiquitin conjugating enzyme E2D 4 (putative)	UBE2D4	707831
Ubiquitin conjugating enzyme E2E 3	UBE2E3	704530
Ubiquitin conjugating enzyme E2F (putative)	UBE2F	695394
Ubiquitin conjugating enzyme E2I	UBE2I	722434
Ubiquitin conjugating enzyme E2O	UBE2O	710529
Ubiquitin conjugating enzyme E2S	UBE2S	700592
Ubiquitin C-terminal hydrolase L1	UCHL1	701579
Ubiquitin C-terminal hydrolase L3	UCHL3	697276
Ubiquitin domain containing 2	UBTD2	709455
Ubiquitin family domain containing 1	UBFD1	700601
Ubiquitin interaction motif containing 1	UIMC1	705412
Ubiquitin like 4A	UBL4A	700643
Ubiquitin like 5	UBL5	711015
Ubiquitin like 7	UBL7	702305
Ubiquitin like domain containing CTD phosphatase 1	UBLCP1	694476
Ubiquitin protein ligase E3 component n-recognin 7 (putative)	UBR7	698882
Ubiquitin protein ligase E3B	UBE3B	707324
Ubiquitin related modifier 1	URM1	722618

Ubiquitin specific peptidase 10	USP10	718471
Ubiquitin specific peptidase 11	USP11	706555
Ubiquitin specific peptidase 13 (isopeptidase T-3)	USP13	708624
Ubiquitin specific peptidase 15	USP15	716793
Ubiquitin specific peptidase 16	USP16	706403
Ubiquitin specific peptidase 20	USP20	716505
Ubiquitin specific peptidase 21	USP21	719894
Ubiquitin specific peptidase 25	USP25	716923
Ubiquitin specific peptidase 3	USP3	705973
Ubiquitin specific peptidase 30	USP30	706607
Ubiquitin specific peptidase 32	USP32	716857
Ubiquitin specific peptidase 38	USP38	700235
Ubiquitin specific peptidase 39	USP39	696217
Ubiquitin specific peptidase 45	USP45	694340
Ubiquitin specific peptidase 48	USP48	707110
Ubiquitin specific peptidase 51	USP51	705861
Ubiquitin specific peptidase 8	USP8	715523
Ubiquitin specific peptidase 9, Y-linked	USP9Y	100270704
Ubiquitination factor E4B	UBE4B	713348
Ubiquitin-conjugating enzyme E2E 2	UBE2E2	699101
Ubiquitin-like modifier activating enzyme 2	UBA2	705808
Ubiquitin-like modifier activating enzyme 3	UBA3	696493
Ubiquitin-like modifier activating enzyme 7	UBA7	704875
Ubiquitin-like with PHD and ring finger domains 1	UHRF1	695531
U-box domain containing 5	UBOX5	717166
UBX domain protein 1	UBXN1	718643
UBX domain protein 10	UBXN10	705058
UBX domain protein 11	UBXN11	719826
UDP glucuronosyltransferase 1 family, polypeptide A1	UGT1A1	574210
UDP glycosyltransferase 3 family, polypeptide A1	UGT3A1	700115
UDP-Gal:betaglcnaac beta 1,4- galactosyltransferase, polypeptide 1	B4GALT1	703541
UDP-Gal:betaglcnaac beta 1,4- galactosyltransferase, polypeptide 3	B4GALT3	719920
UDP-Gal:betaglcnaac beta 1,4- galactosyltransferase, polypeptide 6	B4GALT6	706068
UDP-glcnaac:betagal beta-1,3-N-acetylglucosaminyltransferase 2	B3GNT2	693396
UDP-glcnaac:betagal beta-1,3-N-acetylglucosaminyltransferase 8	B3GNT8	705336
UDP-glcnaac:betagal beta-1,3-N-acetylglucosaminyltransferase 9	B3GNT9	698037
UDP-glucose ceramide glucosyltransferase	UGCG	707875
UDP-glucose pyrophosphorylase 2	UGP2	695178
UDP-N-acetylglucosamine pyrophosphorylase 1	UAP1	720116
UFM1-specific ligase 1	UFL1	704454
Unc-5 family C-terminal like	UNC5CL	719655
Unconventional SNARE in the ER 1 homolog (S. Cerevisiae)	USE1	718905
UPF3 regulator of nonsense transcripts homolog B (yeast)	UPF3B	694247
Up-regulated during skeletal muscle growth 5 homolog (mouse)	USMG5	100428448
Upstream binding protein 1 (LBP-1a)	UBP1	706283

Uracil DNA glycosylase	UNG	706816
Uracil phosphoribosyltransferase homolog	UPRT	704157
Uridine-cytidine kinase 1-like 1	UCKL1	694692
Uridine-cytidine kinase 2	UCK2	695725
Urocortin	UCN	699942
Uronyl-2-sulfotransferase	UST	697355
Uroplakin 2	UPK2	707184
USP6 N-terminal like	USP6NL	694275
UTP14, U3 small nucleolar ribonucleoprotein, homolog C (yeast)	UTP14C	709657
UTP23, small subunit processome component	UTP23	702915
UTP6 small subunit processome component	UTP6	713361
UV radiation resistance associated	UVRAG	696601
Uveal autoantigen with coiled-coil domains and ankyrin repeats	UACA	696026
Vac14 homolog (S. Cerevisiae)	VAC14	708741
Vaccinia related kinase 1	VRK1	704798
Vacuolar protein sorting 13 homolog C (S. Cerevisiae)	VPS13C	709080
Vacuolar protein sorting 36 homolog (S. Cerevisiae)	VPS36	693290
Vacuolar protein sorting 37 homolog C (S. Cerevisiae)	VPS37C	694898
Vacuolar protein sorting 4 homolog A (S. Cerevisiae)	VPS4A	705277
Vacuolar protein sorting 45 homolog (S. Cerevisiae)	VPS45	706035
Vacuolar protein sorting 72 homolog (S. Cerevisiae)	VPS72	709818
V-akt murine thymoma viral oncogene homolog 3	AKT3	714717
Valosin containing protein (p97)/p47 complex interacting protein 1	VCPIP1	703582
Valosin containing protein lysine (K) methyltransferase	VCPKMT	705487
Valyl-trna synthetase	VARS	715537
Vasohibin 2	VASH2	709924
Vav guanine nucleotide exchange factor 1	VAV1	100424248
Vav guanine nucleotide exchange factor 3	VAV3	694685
Ventral anterior homeobox 2	VAX2	703531
Versican	VCAN	712365
Very low density lipoprotein receptor	VLDLR	574284
Vesicle associated membrane protein 1	VAMP1	722049
Vesicle associated membrane protein 5	VAMP5	695471
Vesicle associated membrane protein 7	VAMP7	704160
Vezeatin, adherens junctions transmembrane protein	VEZT	716675
Vitronectin	VTN	708499
V-kit Hardy-Zuckerman 4 feline sarcoma viral oncogene homolog	KIT	696759
V-myc avian myelocytomatosis viral oncogene homolog	MYC	694626
V-myc avian myelocytomatosis viral oncogene neuroblastoma derived homolog	MYCN	698699
Voltage-dependent anion channel 1	VDAC1	710045
Voltage-dependent anion channel 2	VDAC2	704257
Von Willebrand factor C and EGF domains	VWCE	694385
VPS11, CORVET/HOPS core subunit	VPS11	702834
VPS16, CORVET/HOPS core subunit	VPS16	100426688
VPS26 retromer complex component B	VPS26B	694566
VPS29 retromer complex component	VPS29	709646
VPS33B interacting protein, apical-basolateral polarity regulator,	VIPAS39	706315

spe-39 homolog		
VPS41 HOPS complex subunit	VPS41	712457
VPS52 GARP complex subunit	VPS52	100430904
VPS8, CORVET complex subunit	VPS8	701567
V-ral simian leukemia viral oncogene homolog A (ras related)	RALA	703440
V-ral simian leukemia viral oncogene homolog B	RALB	695852
V-set and immunoglobulin domain containing 2	VSIG2	712047
WAP, follistatin/kazal, immunoglobulin, kunitz and netrin domain containing 2	WFIKK2	703871
WD repeat containing, antisense to TP53	WRAP53	716125
WD repeat domain 11	WDR11	714990
WD repeat domain 12	WDR12	705623
WD repeat domain 18	WDR18	704547
WD repeat domain 19	WDR19	698866
WD repeat domain 20	WDR20	708533
WD repeat domain 26	WDR26	704911
WD repeat domain 3	WDR3	711960
WD repeat domain 35	WDR35	716638
WD repeat domain 4	WDR4	714230
WD repeat domain 44	WDR44	710598
WD repeat domain 47	WDR47	696942
WD repeat domain 48	WDR48	695026
WD repeat domain 53	WDR53	709710
WD repeat domain 59	WDR59	710576
WD repeat domain 6	WDR6	708505
WD repeat domain 61	WDR61	709971
WD repeat domain 70	WDR70	706130
WD repeat domain 74	WDR74	718460
WD repeat domain 75	WDR75	709104
WD repeat domain 77	WDR77	677686
WD repeat, sterile alpha motif and U-box domain containing 1	WDSUB1	699456
WDYHV motif containing 1	WDYHV1	704686
WEE1 G2 checkpoint kinase	WEE1	703760
Werner helicase interacting protein 1	WRNIP1	707250
Williams Beuren syndrome chromosome region 22	WBSCR22	720121
Williams-Beuren syndrome chromosome region 17	WBSCR17	695207
Wilms tumor 1 associated protein	WTAP	702295
Wingless-type MMTV integration site family member 10A	WNT10A	700692
Wingless-type MMTV integration site family member 11	WNT11	696845
Wingless-type MMTV integration site family member 4	WNT4	707864
Wiskott-Aldrich syndrome-like	WASL	696556
WNK lysine deficient protein kinase 3	WNK3	701015
WSC domain containing 1	WSCD1	712488
WW and C2 domain containing 2	WWC2	701208
WW domain binding protein 1	WBP1	709202
WW domain binding protein 11	WBP11	699451
WW domain binding protein 2	WBP2	704545
WW domain binding protein 5	WBP5	696661

WW domain containing adaptor with coiled-coil	WAC	715828
WW domain containing E3 ubiquitin protein ligase 2	WWP2	705464
X-box binding protein 1	XBP1	713863
Xeroderma pigmentosum, complementation group A	XPA	715705
Xeroderma pigmentosum, complementation group C	XPC	700938
Xg blood group	XG	705377
X-ray repair complementing defective repair in Chinese hamster cells 6	XRCC6	707975
XRCC6 binding protein 1	XRCC6BP1	712932
Xylosylprotein beta 1,4-galactosyltransferase, polypeptide 7	B4GALT7	701000
Yael domain containing 1	YAE1D1	703786
Y-box binding protein 2	YBX2	714750
Y-box binding protein 3	YBX3	722347
YEATS domain containing 4	YEATS4	718376
Yip1 domain family member 4	YIPF4	706819
Yip1 interacting factor homolog A (S. Cerevisiae)	YIF1A	714486
Yippee like 3	YPEL3	708740
YTH domain containing 2	YTHDC2	694612
ZFP14 zinc finger protein	ZFP14	719135
ZFP69 zinc finger protein	ZFP69	694407
Zinc and ring finger 4	ZNRF4	695996
Zinc binding alcohol dehydrogenase domain containing 2	ZADH2	701079
Zinc finger (CCCH type), RNA binding motif and serine/arginine rich 2	ZRSR2	720986
Zinc finger and AT-hook domain containing	ZFAT	698512
Zinc finger and BTB domain containing 16	ZBTB16	695064
Zinc finger and BTB domain containing 2	ZBTB2	704782
Zinc finger and BTB domain containing 20	ZBTB20	712238
Zinc finger and BTB domain containing 25	ZBTB25	707380
Zinc finger and BTB domain containing 26	ZBTB26	698776
Zinc finger and BTB domain containing 33	ZBTB33	695801
Zinc finger and BTB domain containing 39	ZBTB39	713914
Zinc finger and BTB domain containing 40	ZBTB40	708181
Zinc finger and BTB domain containing 43	ZBTB43	701797
Zinc finger and BTB domain containing 48	ZBTB48	704628
Zinc finger and BTB domain containing 49	ZBTB49	712422
Zinc finger and BTB domain containing 5	ZBTB5	718482
Zinc finger and BTB domain containing 6	ZBTB6	695858
Zinc finger and BTB domain containing 7B	ZBTB7B	719006
Zinc finger and BTB domain containing 8 opposite strand	ZBTB8OS	708590
Zinc finger and SCAN domain containing 22	ZSCAN22	712666
Zinc finger and SCAN domain containing 25	ZSCAN25	709125
Zinc finger and SCAN domain containing 29	ZSCAN29	710414
Zinc finger and SCAN domain containing 32	ZSCAN32	702733
Zinc finger and SCAN domain containing 5A	ZSCAN5A	705629
Zinc finger and SCAN domain containing 9	ZSCAN9	703493
Zinc finger CCCH-type containing 12A	ZC3H12A	713604
Zinc finger CCCH-type containing 3	ZC3H3	708584

Zinc finger CCCH-type containing 7A	ZC3H7A	711984
Zinc finger E-box binding homeobox 2	ZEB2	705439
Zinc finger protein 112	ZNF112	713527
Zinc finger protein 140	ZNF140	695171
Zinc finger protein 155	ZNF155	712736
Zinc finger protein 169	ZNF169	718203
Zinc finger protein 17	ZNF17	707664
Zinc finger protein 180	ZNF180	712493
Zinc finger protein 181	ZNF181	106992424
Zinc finger protein 207	ZNF207	100689488
Zinc finger protein 211	ZNF211	100429296
Zinc finger protein 22	ZNF22	706208
Zinc finger protein 221	ZNF221	100423744
Zinc finger protein 239	ZNF239	717737
Zinc finger protein 24	ZNF24	100426672
Zinc finger protein 25	ZNF25	701129
Zinc finger protein 250	ZNF250	704805
Zinc finger protein 263	ZNF263	702166
Zinc finger protein 280D	ZNF280D	699509
Zinc finger protein 281	ZNF281	709466
Zinc finger protein 285	ZNF285	106994792
Zinc finger protein 296	ZNF296	713620
Zinc finger protein 304	ZNF304	100428176
Zinc finger protein 32	ZNF32	705373
Zinc finger protein 322	ZNF322	701098
Zinc finger protein 330	ZNF330	699364
Zinc finger protein 334	ZNF334	706702
Zinc finger protein 335	ZNF335	708282
Zinc finger protein 354B	ZNF354B	712885
Zinc finger protein 383	ZNF383	100425344
Zinc finger protein 385A	ZNF385A	705436
Zinc finger protein 385B	ZNF385B	704204
Zinc finger protein 41	ZNF41	706770
Zinc finger protein 410	ZNF410	698124
Zinc finger protein 423	ZNF423	693808
Zinc finger protein 436	ZNF436	709638
Zinc finger protein 460	ZNF460	710080
Zinc finger protein 462	ZNF462	711489
Zinc finger protein 484	ZNF484	711976
Zinc finger protein 496	ZNF496	709694
Zinc finger protein 513	ZNF513	700577
Zinc finger protein 521	ZNF521	709169
Zinc finger protein 532	ZNF532	701146
Zinc finger protein 572	ZNF572	712116
Zinc finger protein 573	ZNF573	719389
Zinc finger protein 581	ZNF581	100428424
Zinc finger protein 583	ZNF583	705205
Zinc finger protein 593	ZNF593	714086

Zinc finger protein 595	ZNF595	716693
Zinc finger protein 597	ZNF597	703089
Zinc finger protein 599	ZNF599	706512
Zinc finger protein 608	ZNF608	702182
Zinc finger protein 613	ZNF613	719851
Zinc finger protein 620	ZNF620	100423712
Zinc finger protein 622	ZNF622	100429384
Zinc finger protein 627	ZNF627	716820
Zinc finger protein 638	ZNF638	704418
Zinc finger protein 646	ZNF646	712774
Zinc finger protein 652	ZNF652	699084
Zinc finger protein 653	ZNF653	714754
Zinc finger protein 664	ZNF664	710703
Zinc finger protein 671	ZNF671	708932
Zinc finger protein 684	ZNF684	695691
Zinc finger protein 687	ZNF687	716590
Zinc finger protein 7	ZNF7	715735
Zinc finger protein 777	ZNF777	711987
Zinc finger protein 79	ZNF79	700961
Zinc finger protein 800	ZNF800	697855
Zinc finger protein 804B	ZNF804B	704561
Zinc finger protein 821	ZNF821	707355
Zinc finger protein 92	ZNF92	708683
Zinc finger protein interacting with K protein 1	ZIK1	708621
Zinc finger protein, X-linked	ZFX	106992280
Zinc finger RNA binding protein	ZFR	696882
Zinc finger with KRAB and SCAN domains 3	ZKSCAN3	707581
Zinc finger with UFM1-specific peptidase domain	ZUFSP	718059
Zinc finger, AN1-type domain 2A	ZFAND2A	100426344
Zinc finger, AN1-type domain 3	ZFAND3	719346
Zinc finger, AN1-type domain 4	ZFAND4	708136
Zinc finger, B-box domain containing	ZBBX	700091
Zinc finger, BED-type containing 4	ZBED4	715118
Zinc finger, BED-type containing 8	ZBED8	695905
Zinc finger, BED-type containing 9	ZBED9	708122
Zinc finger, C3H1-type containing	ZFC3H1	718671
Zinc finger, C4H2 domain containing	ZC4H2	708764
Zinc finger, CCHC-type with G-patch domain	ZGPAT	719499
Zinc finger, CCHC domain containing 11	ZCCHC11	713406
Zinc finger, CCHC domain containing 14	ZCCHC14	703833
Zinc finger, CCHC domain containing 17	ZCCHC17	705172
Zinc finger, CCHC domain containing 6	ZCCHC6	693660
Zinc finger, CCHC domain containing 7	ZCCHC7	716658
Zinc finger, CCHC domain containing 8	ZCCHC8	702359
Zinc finger, DHHC-type containing 12	ZDHHC12	722606
Zinc finger, DHHC-type containing 15	ZDHHC15	704366
Zinc finger, DHHC-type containing 16	ZDHHC16	705982
Zinc finger, DHHC-type containing 2	ZDHHC2	710001

Zinc finger, HIT-type containing 1	ZNHIT1	714339
Zinc finger, HIT-type containing 2	ZNHIT2	716729
Zinc finger, matrin-type 2	ZMAT2	697247
Zinc finger, matrin-type 5	ZMAT5	715058
Zinc finger, MYM-type 2	ZMYM2	721255
Zinc finger, MYM-type 3	ZMYM3	697147
Zinc finger, MYND-type containing 11	ZMYND11	708761
Zinc finger, MYND-type containing 12	ZMYND12	696941
Zinc finger, RAN-binding domain containing 2	ZRANB2	703513
Zinc finger, ZZ-type with EF-hand domain 1	ZZEF1	721518
Zinc metalloproteinase STE24	ZMPSTE24	693765
Zinc ribbon domain containing 1	ZNRD1	712151
Zona pellucida glycoprotein 3 (sperm receptor)	ZP3	719925
Zyg-11 related, cell cycle regulator	ZER1	717262
Zyxin	ZYX	706407

(3) Expressed in both groups 2b and 2c, not in group 2a

1-acylglycerol-3-phosphate O-acyltransferase 1	AGPAT1	717174
1-acylglycerol-3-phosphate O-acyltransferase 5	AGPAT5	716847
2,4-dienoyl-coa reductase 1, mitochondrial	DECR1	696035
2-phosphoxylose phosphatase 1	PXYLP1	715229
3-hydroxy-3-methylglutaryl-coa synthase 2 (mitochondrial)	HMGCS2	713541
3-hydroxyacyl-coa dehydratase 1	HACD1	700635
3-oxoacyl-ACP synthase, mitochondrial	OXSM	703382
5'-3' exoribonuclease 2	XRN2	700934
5'-nucleotidase, cytosolic IIIA	NT5C3A	708743
5-phosphohydroxy-L-lysine phospho-lyase	PHYKPL	702302
8-oxoguanine DNA glycosylase	OGG1	700481
Abhydrolase domain containing 12	ABHD12	705915
Abhydrolase domain containing 8	ABHD8	718980
ABI family member 3	ABI3	698710
Acetyl-coa acetyltransferase 1	ACAT1	707653
Acetyl-coa acyltransferase 2	ACAA2	709350
Acetyl-coa carboxylase alpha	ACACA	714218
Acid sensing ion channel subunit 3	ASIC3	714396
Acidic nuclear phosphoprotein 32 family member B	ANP32B	715508
Acidic residue methyltransferase 1	ARMT1	704570
Aconitase 1	ACO1	705075
Aconitase 2	ACO2	707441
Acrosin binding protein	ACRBP	713219
Actin like 7B	ACTL7B	710750
Actin related protein 2/3 complex subunit 1A	ARPC1A	718635
Actin related protein 2/3 complex subunit 2	ARPC2	700536
Actin related protein 2/3 complex subunit 3	ARPC3	709199
Actin, alpha 2, smooth muscle, aorta	ACTA2	100427024
Activating transcription factor 4	ATF4	703965

Activin A receptor type I	ACVR1	697935
Activin A receptor type IB	ACVR1B	696587
Activin A receptor type IL	ACVRL1	696471
Acyl-coa binding domain containing 3	ACBD3	699311
Acyl-coa binding domain containing 6	ACBD6	716418
Acyl-coa dehydrogenase, C-4 to C-12 straight chain	ACADM	705168
Acyl-coa oxidase 1, palmitoyl	ACOX1	705197
Acyl-coa thioesterase 13	ACOT13	100335136
Acyloxyacyl hydrolase	AOAH	706291
ADAM metallopeptidase domain 21	ADAM21	715640
ADAM metallopeptidase domain 29	ADAM29	698113
ADAM metallopeptidase with thrombospondin type 1 motif 1	ADAMTS1	707778
ADAM metallopeptidase with thrombospondin type 1 motif 14	ADAMTS14	710154
ADAM metallopeptidase with thrombospondin type 1 motif 17	ADAMTS17	693447
ADAM metallopeptidase with thrombospondin type 1 motif 6	ADAMTS6	696021
Adaptor related protein complex 1 associated regulatory protein	AP1AR	700734
Adaptor related protein complex 3, beta 2 subunit	AP3B2	694091
Adaptor related protein complex 3, sigma 1 subunit	AP3S1	696644
Adaptor related protein complex 4, beta 1 subunit	AP4B1	707634
Adducin 1	ADD1	700805
Adducin 2	ADD2	702939
Adducin 3	ADD3	677712
Adenosine deaminase, RNA-specific, B1	ADARB1	722016
Adenosine monophosphate deaminase 2	AMPD2	699561
Adenylate cyclase 4	ADCY4	714684
Adenylate kinase 3	AK3	694714
Adenylosuccinate synthase	ADSS	713580
Adhesion G protein-coupled receptor A3	ADGRA3	715618
Adhesion G protein-coupled receptor L2	ADGRL2	708998
Adhesion molecule with Ig-like domain 1	AMIGO1	698932
Adhesion molecule with Ig-like domain 2	AMIGO2	705386
Adipogenesis regulatory factor	ADIRF	699173
Adiponectin receptor 2	ADIPOR2	707547
ADP ribosylation factor 3	ARF3	708716
ADP ribosylation factor 4	ARF4	703432
ADP ribosylation factor guanine nucleotide exchange factor 1	ARFGEF1	704359
ADP ribosylation factor like gtpase 10	ARL10	696524
ADP ribosylation factor like gtpase 6	ARL6	696616
ADP ribosylation factor like gtpase 6 interacting protein 5	ARL6IP5	696360
ADP-ribosylhydrolase like 2	ADPRHL2	712758
Aftiphilin	AFTPH	696100
AHA1, activator of heat shock 90kda protein ATPase homolog 1 (yeast)	AHSA1	706547
Ajuba LIM protein	AJUBA	712865
A-kinase anchoring protein 2	AKAP2	709841
A-kinase anchoring protein 3	AKAP3	711162
A-kinase anchoring protein 7	AKAP7	710509
A-kinase anchoring protein 9	AKAP9	702970

Aladin WD repeat nucleoporin	AAAS	719095
Alanine-glyoxylate aminotransferase	AGXT	699941
Alanine--glyoxylate aminotransferase 2	AGXT2	699250
Aldehyde dehydrogenase 1 family member A1	ALDH1A1	702598
Aldehyde dehydrogenase 18 family member A1	ALDH18A1	703357
Aldo-keto reductase family 1, member B1 (aldose reductase)	AKR1B1	705957
ALG2, alpha-1,3/1,6-mannosyltransferase	ALG2	714850
ALG5, dolichyl-phosphate beta-glucosyltransferase	ALG5	694836
Alkb homolog 4, lysine demethylase	ALKBH4	715078
Alkb homolog 5, RNA demethylase	ALKBH5	700205
All-trans retinoic acid induced differentiation factor	ATRAID	699201
Alpha hemoglobin stabilizing protein	AHSP	714392
Alpha thalassemia/mental retardation syndrome X-linked	ATRX	705735
Alpha-2-macroglobulin	A2M	716834
Alpha-defensin 1A	MNP1A	574196
Aly/REF export factor	ALYREF	714852
Amine oxidase, copper containing 1	AOC1	714112
Aminoacylase 3	ACY3	711083
Aminoadipate-semialdehyde dehydrogenase-phospho pantetheinyl transferase	AASDHPPT	100328984
Aminoadipate-semialdehyde synthase	AASS	694594
Amino-terminal enhancer of split	AES	712353
Amphiphysin	AMPH	704559
Amylase, alpha 2B (pancreatic)	AMY2B	712893
Amyloid beta (A4) precursor protein-binding, family A, member 1	APBA1	699838
Amyloid beta (A4) precursor protein-binding, family B, member 3	APBB3	698296
Anaphase promoting complex subunit 15	ANAPC15	718333
Anaphase promoting complex subunit 2	ANAPC2	706384
Anaphase promoting complex subunit 4	ANAPC4	694006
Ancient ubiquitous protein 1	AUP1	710020
Androgen-induced 1	AIG1	700988
Angio associated migratory cell protein	AAMP	700763
Angiopoietin like 2	ANGPTL2	701444
Ankyrin 2, neuronal	ANK2	702180
Ankyrin 3, node of Ranvier (ankyrin G)	ANK3	699518
Ankyrin repeat and IBR domain containing 1	ANKIB1	703273
Ankyrin repeat and MYND domain containing 2	ANKMY2	709414
Ankyrin repeat domain 2 (stretch responsive muscle)	ANKRD2	707097
Ankyrin repeat domain 27	ANKRD27	716232
Ankyrin repeat domain 35	ANKRD35	706961
Ankyrin repeat domain 46	ANKRD46	705491
Ankyrin repeat domain 6	ANKRD6	701339
Annexin A1	ANXA1	702946
Annexin A11	ANXA11	707628
Annexin A2	ANXA2	706240
Annexin A3	ANXA3	697239
Annexin A7	ANXA7	707166
Annexin A9	ANXA9	708704

Anoctamin 10	ANO10	715666
Anoctamin 4	ANO4	695973
Anterior gradient 2, protein disulphide isomerase family member	AGR2	709127
Anterior gradient 3, protein disulphide isomerase family member	AGR3	714517
Apelin receptor	APLNR	706823
APEX nuclease (apurinic/apyrimidinic endonuclease) 2	APEX2	702084
APEX nuclease (multifunctional DNA repair enzyme) 1	APEX1	702757
Apolipoprotein A-II	APOA2	719946
Apolipoprotein A-V	APOA5	696484
Apolipoprotein B mrna editing enzyme, catalytic polypeptide-like 3H	APOBEC3H	723811
Apolipoprotein L2	APOL2	694029
Apolipoprotein O	APOO	698137
Apoptosis inducing factor, mitochondria associated 1	AIFM1	702773
Apoptosis inhibitor 5	API5	716346
Arfgap with gtpase domain, ankyrin repeat and PH domain 1	AGAP1	693652
ARFGEF family member 3	ARFGEF3	703791
Arginine and glutamate rich 1	ARGLU1	702840
Arginine/serine-rich protein 1	RSRP1	712757
Arginine-glutamic acid dipeptide (RE) repeats	RERE	708902
Arginyltransferase 1	ATE1	705248
Arginyl-trna synthetase	RARS	698998
Arginyl-trna synthetase 2, mitochondrial	RARS2	699240
Armadillo repeat containing 9	ARMC9	711891
Armadillo repeat gene deleted in velocardiofacial syndrome	ARVCF	712399
ARP2 actin-related protein 2 homolog (yeast)	ACTR2	697080
ARP5 actin-related protein 5 homolog (yeast)	ACTR5	698191
Arrestin, beta 2	ARRB2	709399
Artemin	ARTN	701641
ARV1 homolog, fatty acid homeostasis modulator	ARV1	713975
Aryl hydrocarbon receptor nuclear translocator like	ARNTL	700464
Aspartate beta-hydroxylase domain containing 1	ASPHD1	707467
Aspartate dehydrogenase domain containing	ASPDH	719609
Aspartoacylase	ASPA	706170
Aspartyl aminopeptidase	DNPEP	703180
Asteroid homolog 1 (Drosophila)	ASTE1	719271
Ataxin 2-like	ATXN2L	708359
ATP binding cassette subfamily A member 1	ABCA1	716146
ATP binding cassette subfamily B member 6 (Langereis blood group)	ABCB6	704599
ATP binding cassette subfamily D member 1	ABCD1	696794
ATP binding cassette subfamily E member 1	ABCE1	701945
ATP synthase F0 subunit 6	ATP6	2846629
ATP synthase, H ⁺ transporting, mitochondrial F1 complex, alpha subunit 1, cardiac muscle	ATP5A1	701389
ATP synthase, H ⁺ transporting, mitochondrial F1 complex, beta polypeptide	ATP5B	713284
ATP synthase, H ⁺ transporting, mitochondrial F1 complex,	ATP5D	705944

delta subunit		
ATP synthase, H ⁺ transporting, mitochondrial F1 complex, gamma polypeptide 1	ATP5C1	713768
ATP synthase, H ⁺ transporting, mitochondrial F1 complex, O subunit	ATP5O	698480
ATP synthase, H ⁺ transporting, mitochondrial Fo complex subunit F6	ATP5J	708411
ATPase inhibitory factor 1	ATPIF1	716870
ATPase type 13A1	ATP13A1	100427504
ATPase, Ca ⁺⁺ transporting, plasma membrane 1	ATP2B1	709102
ATPase, Ca ⁺⁺ transporting, ubiquitous	ATP2A3	707768
ATPase, class II, type 9A	ATP9A	710250
ATPase, H ⁺ transporting, lysosomal 14kda, V1 subunit F	ATP6V1F	702112
ATPase, H ⁺ transporting, lysosomal 21kda, V0 subunit b	ATP6V0B	702243
ATPase, H ⁺ transporting, lysosomal 31kda, V1 subunit E1	ATP6V1E1	709739
ATPase, H ⁺ transporting, lysosomal 9kda, V0 subunit e1	ATP6V0E1	703342
ATPase, H ⁺ transporting, lysosomal accessory protein 2	ATP6AP2	705048
ATPase, H ⁺ /K ⁺ exchanging, alpha polypeptide	ATP4A	100426216
ATPase, Na ⁺ /K ⁺ transporting, alpha 1 polypeptide	ATP1A1	710368
ATR interacting protein	ATRIP	710035
ATR serine/threonine kinase	ATR	714443
AT-rich interaction domain 2	ARID2	703823
AT-rich interaction domain 4B	ARID4B	718320
Aurora kinase A interacting protein 1	AURKAIP1	706329
Aurora kinase B	AURKB	721955
Aurora kinase C	AURKC	709801
Autophagy related 16 like 1	ATG16L1	714092
Autophagy related 16 like 2	ATG16L2	717952
Autophagy related 2A	ATG2A	717290
Autophagy related 3	ATG3	708305
Autophagy related 4C, cysteine peptidase	ATG4C	695606
Autophagy related 4D, cysteine peptidase	ATG4D	713111
Autophagy related 5	ATG5	696874
Autophagy related 7	ATG7	696238
B9 protein domain 2	B9D2	704873
Bardet-Biedl syndrome 12	BBS12	710538
Bardet-Biedl syndrome 4	BBS4	704508
Bardet-Biedl syndrome 5	BBS5	709701
BARX homeobox 2	BARX2	715001
Basic leucine zipper and W2 domains 2	BZW2	714627
Basic transcription factor 3	BTF3	703339
Basonuclin 2	BNC2	713291
B-cell CLL/lymphoma 6	BCL6	708736
B-cell CLL/lymphoma 7B	BCL7B	716470
B-cell translocation gene 1, anti-proliferative	BTG1	710112
BCL2 associated athanogene 3	BAG3	714420
BCL2/adenovirus E1B 19kda interacting protein 2	BNIP2	703234
BCL2-associated X protein	BAX	718948

BCS1-like (S. Cerevisiae)	BCS1L	699690
Beclin 1, autophagy related	BECN1	711649
BEN domain containing 5	BEND5	711150
BEN domain containing 6	BEND6	712498
Beta-1,3-glucuronyltransferase 3	B3GAT3	718744
Beta-1,4-N-acetyl-galactosaminyl transferase 2	B4GALNT2	700278
Beta-1,4-N-acetyl-galactosaminyl transferase 3	B4GALNT3	706259
Beta-2-microglobulin	B2M	712428
Beta-carotene oxygenase 2	BCO2	712095
Bicaudal D homolog 2 (Drosophila)	BICD2	706621
Bisphosphoglycerate mutase	BPGM	706741
BLOC-1 related complex subunit 5	BORCS5	696469
Bloom syndrome, recq helicase-like	BLM	703460
Bola family member 1	BOLA1	705297
Bola family member 3	BOLA3	707871
Bone marrow stromal cell antigen 2	BST2	719092
Bone morphogenetic protein 1	BMP1	707596
Bone morphogenetic protein 4	BMP4	694618
Bone morphogenetic protein/retinoic acid inducible neural-specific 1	BRINP1	701794
Bora, aurora kinase A activator	BORA	693798
BPI fold containing family A member 2	BPIFA2	710376
Brain protein I3	BRI3	706525
Branched chain keto acid dehydrogenase E1, beta polypeptide	BCKDHB	718472
Branched chain ketoacid dehydrogenase kinase	BCKDK	712985
BRCA1 associated RING domain 1	BARD1	694301
BRISC and BRCA1 A complex member 1	BABAM1	718969
Bromo adjacent homology domain containing 1	BAHD1	702982
Bromodomain adjacent to zinc finger domain 1B	BAZ1B	716436
Bromodomain containing 1	BRD1	715059
Bromodomain containing 2	BRD2	717893
Bromodomain containing 7	BRD7	694850
BTB (POZ) domain containing 1	BTBD1	718696
BTB (POZ) domain containing 16	BTBD16	705610
BTG family member 3	BTG3	710579
BTG3 associated nuclear protein	BANP	696125
BUB3 mitotic checkpoint protein	BUB3	708033
Bystin like	BYSL	694976
C2CD2-like	C2CD2L	703424
Cadherin 11, type 2, OB-cadherin (osteoblast)	CDH11	708826
Cadherin 2, type 1, N-cadherin (neuronal)	CDH2	711526
Cadherin related family member 2	CDHR2	697249
Calcitonin-related polypeptide alpha	CALCA	700649
Calcium and integrin binding family member 2	CIB2	709429
Calcium binding protein 39	CAB39	711166
Calcium binding protein 4	CABP4	711973
Calcium binding tyrosine-(Y)-phosphorylation regulated	CABYR	701670
Calcium homeostasis endoplasmic reticulum protein	CHERP	718689

Calcium/calmodulin-dependent protein kinase I	CAMK1	700212
Calcium/calmodulin-dependent protein kinase II delta	CAMK2D	702504
Calcium/calmodulin-dependent protein kinase II gamma	CAMK2G	705980
Calcium/calmodulin-dependent protein kinase kinase 1, alpha	CAMKK1	707562
Calmin (calponin-like, transmembrane)	CLMN	709910
Calmodulin like 3	CALML3	722513
Calmodulin regulated spectrin associated protein family member 2	CAMSAP2	709092
Calnexin	CANX	704794
Calpain 10	CAPN10	716360
Calpain 15	CAPN15	695881
Calpain 2, (m/II) large subunit	CAPN2	703047
Calpain 3	CAPN3	707913
Calreticulin	CALR	716910
Camp responsive element binding protein 3	CREB3	696350
Camp responsive element binding protein 3-like 4	CREB3L4	715951
Camp responsive element modulator	CREM	698636
CAP, adenylate cyclase-associated protein 1 (yeast)	CAP1	693719
Capping protein (actin filament) muscle Z-line, alpha 1	CAPZA1	705653
Capping protein (actin filament), gelsolin-like	CAPG	695288
Caprin family member 2	CAPRIN2	693594
Carbamoyl-phosphate synthetase 2, aspartate transcarbamylase, and dihydroorotase	CAD	699460
Carbohydrate (chondroitin 4) sulfotransferase 11	CHST11	700690
Carbohydrate (chondroitin 4) sulfotransferase 13	CHST13	716548
Carbohydrate (keratan sulfate Gal-6) sulfotransferase 1	CHST1	715176
Carbohydrate (N-acetylgalactosamine 4-O) sulfotransferase 14	CHST14	703115
Carbohydrate (N-acetylgalactosamine 4-sulfate 6-O) sulfo transferase 15	CHST15	693845
Carbohydrate (N-acetylglucosamine 6-O) sulfotransferase 7	CHST7	704906
Carbohydrate sulfotransferase 8	CHST8	106992408
Carbonic anhydrase VB, mitochondrial	CA5B	713128
Carbonic anhydrase VII	CA7	696681
Carbonic anhydrase XIV	CA14	706360
Carboxypeptidase A5	CPA5	702974
Carboxypeptidase N subunit 2	CPN2	106997192
Carboxypeptidase Q	CPQ	701711
Carboxypeptidase X (M14 family), member 1	CPXM1	716790
Carboxypeptidase, vitellogenic-like	CPVL	697111
Cardiotrophin 1	CTF1	713850
Carnitine O-acetyltransferase	CRAT	716908
Carnitine palmitoyltransferase 1B	CPT1B	720697
Carnosine dipeptidase 1 (metallopeptidase M20 family)	CNDP1	695195
Cartilage acidic protein 1	CRTAC1	707486
Casein kinase 2, alpha 1 polypeptide	CSNK2A1	714841
Casein kinase 2, beta polypeptide	CSNK2B	715807
Caspase 1	CASP1	706568
Caspase 4	CASP4	704864

Caspase 9	CASP9	694544
Caspase activity and apoptosis inhibitor 1	CAAP1	707992
Caspase recruitment domain family member 9	CARD9	710485
Cat eye syndrome chromosome region, candidate 5	CECR5	709197
Catalase	CAT	717406
Catechol-O-methyltransferase	COMT	712548
Catenin alpha-like 1	CTNNAL1	710389
Catenin delta 1	CTNND1	704212
Cathepsin A	CTSA	708592
Cathepsin B	CTSB	100424760
Cathepsin C	CTSC	705320
Cathepsin H	CTSH	711437
Cathepsin L	CTSL	694569
Cation channel, sperm associated 2	CATSPER2	710876
Caudal type homeobox 4	CDX4	701374
Cbl proto-oncogene B, E3 ubiquitin protein ligase	CBLB	703879
CCAAT/enhancer binding protein (C/EBP), zeta	CEBPZ	712090
CCR4-NOT transcription complex subunit 3	CNOT3	693292
CCR4-NOT transcription complex subunit 7	CNOT7	702192
CD19 molecule	CD19	705211
CD1c molecule	CD1C	717148
CD200 molecule	CD200	708110
CD274 molecule	CD274	716043
CD4 molecule	CD4	713807
CD40 ligand	CD40LG	574160
CD63 molecule	CD63	709828
CD7 molecule	CD7	719501
CD8b molecule	CD8B	699409
CD9 molecule	CD9	712262
CD99 molecule like 2	CD99L2	708996
CDC like kinase 3	CLK3	702511
CDC28 protein kinase regulatory subunit 1B	CKS1B	717164
CDKN1A interacting zinc finger protein 1	CIZ1	717725
Cell cycle and apoptosis regulator 2	CCAR2	716288
Cell death-inducing DFFA-like effector b	CIDEB	100425328
Cell division cycle 123	CDC123	694239
Cell division cycle 14A	CDC14A	716475
Cell division cycle 16	CDC16	699089
Cell division cycle 23	CDC23	714000
Cell division cycle 25C	CDC25C	714115
Cell division cycle 26	CDC26	706165
Cell division cycle 37	CDC37	715390
Cell division cycle 5 like	CDC5L	703099
Cell division cycle 7	CDC7	704730
Cell division cycle and apoptosis regulator 1	CCAR1	693585
Cell division cycle associated 3	CDCA3	722088
Cell division cycle associated 5	CDCA5	721998
Cell division cycle associated 7	CDCA7	696474

Cell division cycle associated 8	CDCA8	719808
Cell growth regulator with ring finger domain 1	CGRRF1	695231
Centrin 2	CETN2	693376
Centrin 3	CETN3	695223
Centriolin	CNTRL	700200
Centromere protein C	CENPC	710620
Centromere protein F	CENPF	709000
Centromere protein J	CENPJ	721498
Centrosomal protein 192kda	CEP192	722121
Centrosomal protein 290kda	CEP290	708286
Centrosomal protein 41kda	CEP41	703215
Centrosomal protein 57kda-like 1	CEP57L1	700109
Centrosomal protein 72kda	CEP72	708753
Centrosomal protein 83kda	CEP83	711408
Ceramide synthase 2	CERS2	716180
Cerebellar degeneration related protein 2	CDR2	698974
Cerebellar degeneration-related protein 2-like	CDR2L	700082
CGG triplet repeat binding protein 1	CGGBP1	693920
Chaperonin containing TCP1, subunit 2 (beta)	CCT2	717182
Chaperonin containing TCP1, subunit 5 (epsilon)	CCT5	696640
Chaperonin containing TCP1, subunit 8 (theta)	CCT8	706184
Charged multivesicular body protein 2A	CHMP2A	712059
Charged multivesicular body protein 4B	CHMP4B	709004
Charged multivesicular body protein 5	CHMP5	703191
Checkpoint kinase 2	CHEK2	713668
Chemokine (C-C motif) ligand 27	CCL27	574220
Chemokine (C-C motif) receptor 7	CCR7	574231
Chemokine (C-X-C motif) receptor 4	CXCR4	707329
Chemokine-like factor	CKLF	693673
Chimerin 2	CHN2	697231
Chitinase domain containing 1	CHID1	701435
Chloride intracellular channel 3	CLIC3	721634
Chloride intracellular channel 4	CLIC4	712337
Choline/ethanolamine phosphotransferase 1	CEPT1	702700
Cholinergic receptor, muscarinic 4	CHRM4	574195
Cholinergic receptor, nicotinic alpha 10	CHRNA10	718133
Cholinergic receptor, nicotinic beta 2	CHRNA2	716830
Cholinergic receptor, nicotinic gamma	CHRNA3	713418
Chondroitin sulfate N-acetylgalactosaminyltransferase 2	CSGALNACT2	703703
Chromatin target of PRMT1	CHTOP	715501
Chromobox 1	CBX1	696673
Chromodomain helicase DNA binding protein 1	CHD1	702070
Chromogranin B	CHGB	719171
Chromosome 1 open reading frame, human c1orf123	C1H1orf123	714201
Chromosome 1 open reading frame, human c1orf198	C1H1orf198	714084
Chromosome 1 open reading frame, human c1orf50	C1H1orf50	698058
Chromosome 1 open reading frame, human c1orf52	C1H1orf52	711232
Chromosome 1 open reading frame, human c1orf54	C1H1orf54	107000832

Chromosome 1 open reading frame, human c1orf74	C1H1orf74	713029
Chromosome 10 open reading frame, human c20orf27	C10H20orf27	717525
Chromosome 11 open reading frame, human c12orf4	C11H12orf4	710836
Chromosome 12 open reading frame, human c2orf47	C12H2orf47	699322
Chromosome 14 open reading frame, human c11orf68	C14H11orf68	715318
Chromosome 14 open reading frame, human c11orf73	C14H11orf73	704098
Chromosome 16 open reading frame, human c17orf62	C16H17orf62	716212
Chromosome 16 open reading frame, human c17orf74	C16H17orf74	721838
Chromosome 18 open reading frame, human c18orf21	C18H18orf21	715440
Chromosome 19 open reading frame, human c19orf53	C19H19orf53	720745
Chromosome 2 open reading frame, human c3orf18	C2H3orf18	701675
Chromosome 2 open reading frame, human c3orf58	C2H3orf58	713830
Chromosome 2 open reading frame, human c3orf67	C2H3orf67	705402
Chromosome 20 open reading frame 24 ortholog	C10H20orf24	709696
Chromosome 20 open reading frame, human c16orf13	C20H16orf13	696495
Chromosome 20 open reading frame, human c16orf54	C20H16orf54	706285
Chromosome 20 open reading frame, human c16orf78	C20H16orf78	693672
Chromosome 20 open reading frame, human c16orf82	C20H16orf82	702965
Chromosome 3 open reading frame, human c21orf91	C3H21orf91	710406
Chromosome 3 open reading frame, human c7orf25	C3H7orf25	708455
Chromosome 4 open reading frame, human c6orf1	C4H6orf1	718551
Chromosome 4 open reading frame, human c6orf136	C4H6orf136	712108
Chromosome 4 open reading frame, human c6orf203	C4H6orf203	698108
Chromosome 4 open reading frame, human c6orf89	C4H6orf89	719165
Chromosome 5 open reading frame, human c4orf27	C5H4orf27	694607
Chromosome 7 open reading frame, human c14orf142	C7H14orf142	704509
Chromosome 7 open reading frame, human c14orf166	C7H14orf166	710094
Chromosome 7 open reading frame, human c14orf37	C7H14orf37	699880
Chromosome 8 open reading frame, human c8orf59	C8H8orf59	703464
Chromosome 8 open reading frame, human c8orf76	C8H8orf76	704150
Chromosome 9 open reading frame, human c10orf2	C9H10orf2	710958
Chromosome 9 open reading frame, human c10orf62	C9H10orf62	706769
Chromosome 9 open reading frame, human c10orf82	C9H10orf82	707098
Chromosome X open reading frame, human cxorf23	CXHXorf23	696449
Chymotrypsin-like	CTRL	701625
Cilia and flagella associated protein 43	CFAP43	716031
Cilia and flagella associated protein 65	CFAP65	701296
Ciliary neurotrophic factor	CNTF	701907
Circadian associated repressor of transcription	CIART	706693
Citrate lyase beta like	CLYBL	699339
CKLF-like MARVEL transmembrane domain containing 8	CMTM8	704234
Clathrin, light chain A	CLTA	693659
Claudin 12	CLDN12	704058
Claudin 15	CLDN15	719637
Claudin 3	CLDN3	716771
Claudin 9	CLDN9	699721
Cleavage and polyadenylation factor I subunit 1	CLP1	705071
Cleavage and polyadenylation specific factor 4	CPSF4	708119

Cleavage stimulation factor, 3' pre-RNA, subunit 2	CSTF2	701235
Cleavage stimulation factor, 3' pre-RNA, subunit 3	CSTF3	694040
Cleft lip and palate associated transmembrane protein 1	CLPTM1	718306
CLK4-associating serine/arginine rich protein	CLASRP	713561
Cms1 ribosomal small subunit homolog (yeast)	CMSS1	699717
Coagulation factor II (thrombin) receptor	F2R	707370
Coatomer protein complex subunit beta 1	COPB1	699327
Coatomer protein complex subunit zeta 1	COPZ1	705176
Codanin 1	CDAN1	708838
Coenzyme Q10A	COQ10A	712341
Coenzyme Q2 4-hydroxybenzoate polyprenyltransferase	COQ2	707681
Cofilin 1 (non-muscle)	CFL1	721882
Cofilin 2 (muscle)	CFL2	693875
Coiled-coil domain containing 12	CCDC12	712061
Coiled-coil domain containing 174	CCDC174	701654
Coiled-coil domain containing 181	CCDC181	700803
Coiled-coil domain containing 27	CCDC27	695384
Coiled-coil domain containing 28A	CCDC28A	703104
Coiled-coil domain containing 3	CCDC3	694884
Coiled-coil domain containing 36	CCDC36	707136
Coiled-coil domain containing 43	CCDC43	715325
Coiled-coil domain containing 59	CCDC59	698443
Coiled-coil domain containing 84	CCDC84	707400
Coiled-coil domain containing 92	CCDC92	705922
Coiled-coil domain containing 97	CCDC97	706342
Coiled-coil serine rich protein 2	CCSER2	698006
Coiled-coil-helix-coiled-coil-helix domain containing 10	CHCHD10	720205
Coiled-coil-helix-coiled-coil-helix domain containing 6	CHCHD6	716767
Coiled-coil-helix-coiled-coil-helix domain containing 8	CHCHD8	718275
Cold shock domain containing E1, RNA binding	CSDE1	708897
Collagen, type III, alpha 1	COL3A1	574131
Collagen, type VI, alpha 3	COL6A3	694701
Collagen, type XII, alpha 1	COL12A1	717820
Collapsin response mediator protein 1	CRMP1	711349
COMM domain containing 2	COMMD2	711498
COMM domain containing 6	COMMD6	695191
Complement component 1, q subcomponent binding protein	C1QBP	711817
Complement component 1, q subcomponent-like 1	C1QL1	715801
Complement component 5a receptor 1	C5AR1	718056
Complement factor properdin	CFP	707386
Component of oligomeric golgi complex 1	COG1	695754
Component of oligomeric golgi complex 4	COG4	712103
Conserved helix-loop-helix ubiquitous kinase	CHUK	709511
Contactin 1	CNTN1	574365
Coordinator of PRMT5, differentiation stimulator	COPRS	713293
COP9 signalosome subunit 2	COPS2	714814
COP9 signalosome subunit 3	COPS3	698461
COP9 signalosome subunit 4	COPS4	693435

COP9 signalosome subunit 5	COPS5	704584
COP9 signalosome subunit 6	COPS6	710667
Copine II	CPNE2	703557
Core-binding factor, beta subunit	CBFB	695767
Core-binding factor, runt domain, alpha subunit 2; translocated to, 3	CBFA2T3	698233
Cornichon family AMPA receptor auxiliary protein 1	CNIH1	695002
Cornichon family AMPA receptor auxiliary protein 4	CNIH4	701767
Coronin, actin binding protein, 1B	CORO1B	721725
Cortactin	CTTN	708291
Cryptochrome circadian clock 1	CRY1	703752
Crystallin beta B3	CRYBB3	711554
CSE1 chromosome segregation 1-like (yeast)	CSE1L	704301
C-src tyrosine kinase	CSK	702868
CTD phosphatase subunit 1	CTDP1	698467
CTD small phosphatase like 2	CTDSPL2	711917
C-terminal binding protein 1	CTBP1	694507
CTP synthase 1	CTPS1	695498
CTR9 homolog, Paf1/RNA polymerase II complex component	CTR9	705748
C-type lectin domain family 1, member A	CLEC1A	717526
C-type lectin domain family 4 member A	CLEC4A	716122
C-type lectin domain family 9 member A	CLEC9A	717472
CUE domain containing 2	CUEDC2	713243
CUGBP, Elav-like family member 3	CELF3	716884
Cullin 4A	CUL4A	714302
Cullin 7	CUL7	699545
Cutc copper transporter	CUTC	709050
CWC15 spliceosome-associated protein	CWC15	698332
CWF19-like 2, cell cycle control (S. Pombe)	CWF19L2	706825
C-x(9)-C motif containing 1	CMC1	705147
Cyclic nucleotide binding domain containing 2	CNBD2	703290
Cyclin A2	CCNA2	707259
Cyclin and CBS domain divalent metal cation transport mediator 2	CNNM2	714238
Cyclin B2	CCNB2	702184
Cyclin D3	CCND3	695215
Cyclin D-type binding-protein 1	CCNDBP1	709589
Cyclin E1	CCNE1	700589
Cyclin G1	CCNG1	697738
Cyclin H	CCNH	694224
Cyclin I	CCNI	677687
Cyclin T1	CCNT1	707754
Cyclin T2	CCNT2	708813
Cyclin-dependent kinase 1	CDK1	699269
Cyclin-dependent kinase 12	CDK12	696733
Cyclin-dependent kinase 14	CDK14	703442
Cyclin-dependent kinase 17	CDK17	717183
Cyclin-dependent kinase 2	CDK2	711002

Cyclin-dependent kinase 4	CDK4	715650
Cyclin-dependent kinase 9	CDK9	699840
Cyclin-dependent kinase inhibitor 2C (p18, inhibits CDK4)	CDKN2C	711877
Cyclin-dependent kinase inhibitor 2D (p19, inhibits CDK4)	CDKN2D	713172
Cystatin C	CST3	574313
Cysteine conjugate-beta lyase, cytoplasmic	CCBL1	717142
Cysteine/histidine-rich 1	CYHR1	702522
CysteinyI-trna synthetase	CARS	706502
CysteinyI-trna synthetase 2, mitochondrial (putative)	CARS2	694840
Cytidine monophosphate (UMP-CMP) kinase 1, cytosolic	CMPK1	710196
Cytidine monophosphate N-acetylneuraminic acid synthetase	CMAS	706604
Cytochrome b-245 heavy chain	CYBB	696542
Cytochrome b5 domain containing 2	CYB5D2	708196
Cytochrome c oxidase subunit 5A	COX5A	692061
Cytochrome c oxidase subunit 6C	COX6C	100428416
Cytochrome c oxidase subunit IV isoform 1	COX4I1	693811
Cytochrome c oxidase subunit via polypeptide 2	COX6A2	713995
Cytochrome c oxidase subunit viic	COX7C	100429280
Cytochrome c-1	CYC1	700518
Cytochrome P450, family 2, subfamily D, polypeptide 6	CYP2D6	678691
Cytochrome P450, family 2, subfamily F, polypeptide 6	CYP2F1	678696
Cytochrome P450, family 21, subfamily A, polypeptide 2	CYP21A2	717020
Cytochrome P450c17	CYP17A1	678693
Cytoplasmic polyadenylation element binding protein 2	CPEB2	722844
Cytoskeleton associated protein 2 like	CKAP2L	704381
Cytoskeleton associated protein 5	CKAP5	714095
Cytosolic thiouridylase subunit 1	CTU1	719536
Cytotoxic and regulatory T-cell molecule	CRTAM	707560
Dachshund family transcription factor 1	DACH1	693532
Dachsous cadherin-related 1	DCHS1	711938
DALR anticodon binding domain containing 3	DALRD3	708403
DCN1, defective in cullin neddylation 1, domain containing 1	DCUN1D1	708357
DCN1, defective in cullin neddylation 1, domain containing 4	DCUN1D4	702908
DCN1, defective in cullin neddylation 1, domain containing 5	DCUN1D5	704099
DC-STAMP domain containing 2	DCST2	717224
DDB1 and CUL4 associated factor 11	DCAF11	714867
DDB1 and CUL4 associated factor 4	DCAF4	695337
DDB1 and CUL4 associated factor 6	DCAF6	698686
D-dopachrome tautomerase	DDT	699933
DEAD (Asp-Glu-Ala-Asp) box helicase 1	DDX1	698327
DEAD (Asp-Glu-Ala-Asp) box helicase 5	DDX5	677694
DEAD (Asp-Glu-Ala-Asp) box polypeptide 27	DDX27	703852
DEAD (Asp-Glu-Ala-Asp) box polypeptide 39A	DDX39A	718822
DEAD (Asp-Glu-Ala-Asp) box polypeptide 41	DDX41	700742
DEAD (Asp-Glu-Ala-Asp) box polypeptide 54	DDX54	712763
DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 26B	DDX26B	709688
Deafness, autosomal recessive 31	DFNB31	708051
DEAH (Asp-Glu-Ala-His) box helicase 15	DHX15	715852

DEAH (Asp-Glu-Ala-His) box helicase 30	DHX30	711178
DEAH (Asp-Glu-Ala-His) box helicase 9	DHX9	715453
DEAH (Asp-Glu-Ala-His) box polypeptide 29	DHX29	706306
DEAH (Asp-Glu-Ala-His) box polypeptide 38	DHX38	709173
Death associated protein 3	DAP3	719314
Death inducer-obliterator 1	DIDO1	698313
Decapping exoribonuclease	DXO	716027
Decapping mrna 1B	DCP1B	708089
Dedicator of cytokinesis 5	DOCK5	711359
Defender against cell death 1	DAD1	711840
Defensin beta 108B	DEFB108B	696933
Defensin beta 118	DEFB118	641438
Dehydrodolichyl diphosphate synthase subunit	DHDDS	714635
Dehydrogenase/reductase (SDR family) member 1	DHRS1	715933
Dehydrogenase/reductase (SDR family) member 3	DHRS3	715548
Deiodinase, iodothyronine, type II	DIO2	707484
DEK proto-oncogene	DEK	712460
Delta-like 1 homolog (Drosophila)	DLK1	707595
Delta-like 4 (Drosophila)	DLL4	704898
Deltex 3, E3 ubiquitin ligase	DTX3	715175
DENN/MADD domain containing 5A	DENND5A	707945
Denticleless E3 ubiquitin protein ligase homolog (Drosophila)	DTL	711236
Deoxyguanosine kinase	DGUOK	707554
Deoxyhypusine synthase	DHPS	716213
Deoxythymidylate kinase	DTYMK	701781
Derlin 1	DERL1	703803
Derlin 2	DERL2	712051
Dermatan sulfate epimerase	DSE	716054
Desmoplakin	DSP	694860
Desumoylating isopeptidase 2	DESI2	713515
Developmentally regulated GTP binding protein 1	DRG1	716791
Dexi homolog (mouse)	DEXI	100430904
Dicer 1, ribonuclease type III	DICER1	702516
Dickkopf WNT signaling pathway inhibitor 3	DKK3	701549
Dickkopf-like 1	DKKL1	718731
Dihydrolipoamide S-acetyltransferase	DLAT	710930
Dihydropyrimidinase like 3	DPYSL3	708425
Dihydrouridine synthase 3-like	DUS3L	719524
Dimethylarginine dimethylaminohydrolase 1	DDAH1	711395
Dipeptidase 3	DPEP3	701327
Dipeptidyl-peptidase 8	DPP8	709428
Diphosphoinositol pentakisphosphate kinase 2	PIP5K2	703458
Discoidin domain receptor tyrosine kinase 1	DDR1	714233
Discoidin domain receptor tyrosine kinase 2	DDR2	720124
Discs, large homolog 1 (Drosophila)	DLG1	709572
Discs, large homolog 5 (Drosophila)	DLG5	703123
Dishevelled segment polarity protein 1	DVL1	705864
Dispatched homolog 1 (Drosophila)	DISP1	703960

Distal-less homeobox 5	DLX5	697853
DNA (cytosine-5-)-methyltransferase 1	DNMT1	574321
DNA cross-link repair 1B	DCLRE1B	707742
Dnaj heat shock protein family (Hsp40) member A1	DNAJA1	703765
Dnaj heat shock protein family (Hsp40) member B1	DNAJB1	718890
Dnaj heat shock protein family (Hsp40) member B5	DNAJB5	699081
Dnaj heat shock protein family (Hsp40) member C1	DNAJC1	704151
Dnaj heat shock protein family (Hsp40) member C12	DNAJC12	695795
Dnaj heat shock protein family (Hsp40) member C22	DNAJC22	710205
Dnaj heat shock protein family (Hsp40) member C27	DNAJC27	694037
Dnaj heat shock protein family (Hsp40) member C3	DNAJC3	695757
Dnaj heat shock protein family (Hsp40) member C5 beta	DNAJC5B	702408
Dnaj heat shock protein family (Hsp40) member C8	DNAJC8	720231
Dnaj heat shock protein family (Hsp40) member C9	DNAJC9	707599
Docking protein 4	DOK4	704443
Docking protein 5	DOK5	698689
Dolichol kinase	DOLK	717045
Dolichyl-phosphate mannosyltransferase polypeptide 2, regulatory subunit	DPM2	698709
Double C2-like domains, alpha	DOC2A	707895
Double zinc ribbon and ankyrin repeat domains 1	DZANK1	700143
DR1-associated protein 1 (negative cofactor 2 alpha)	DRAP1	715271
Drosha, ribonuclease type III	DROSHA	692081
DTW domain containing 1	DTWD1	715084
D-tyrosyl-trna deacylase 1	DTD1	700895
Dual serine/threonine and tyrosine protein kinase	DSTYK	664732
Dual specificity phosphatase 11	DUSP11	707123
Dual specificity phosphatase 12	DUSP12	720034
Dual specificity phosphatase 14	DUSP14	714383
Dual specificity phosphatase 23	DUSP23	719474
Dual specificity phosphatase 26 (putative)	DUSP26	697134
Dual specificity phosphatase 6	DUSP6	708907
Dual specificity tyrosine-(Y)-phosphorylation regulated kinase 3	DYRK3	695163
Dynactin subunit 1	DCTN1	708290
Dynactin subunit 2	DCTN2	714948
Dynactin subunit 6	DCTN6	694273
Dynamin 1-like	DNM1L	695388
Dynein, axonemal, assembly factor 2	DNAAF2	719026
Dynein, light chain, LC8-type 1	DYNLL1	702360
Dynein, light chain, roadblock-type 2	DYNLRB2	713503
E1A binding protein p300	EP300	706258
E2F transcription factor 1	E2F1	714126
E2F transcription factor 3	E2F3	713904
E2F transcription factor 4, p107/p130-binding	E2F4	696864
E2F transcription factor 5, p130-binding	E2F5	703352
E2F-associated phosphoprotein	EAPP	714727
E74-like factor 2 (ets domain transcription factor)	ELF2	696760
E74-like factor 5 (ets domain transcription factor)	ELF5	717377

Ecdysoneless homolog (Drosophila)	ECD	707699
Ectodermal-neural cortex 1 (with BTB domain)	ENC1	704577
Ectodysplasin A receptor	EDAR	695059
Ectonucleoside triphosphate diphosphohydrolase 8	ENTPD8	704424
Ectonucleotide pyrophosphatase/phosphodiesterase 1	ENPP1	710140
Ectonucleotide pyrophosphatase/phosphodiesterase 2	ENPP2	705287
Ectonucleotide pyrophosphatase/phosphodiesterase 3	ENPP3	710232
EF-hand calcium binding domain 7	EFCAB7	696830
EF-hand domain family member D2	EFHD2	694155
EGF-like, fibronectin type III and laminin G domains	EGFLAM	693314
EGF-like-domain, multiple 7	EGFL7	709840
EGF-like-domain, multiple 8	EGFL8	717145
Egl-9 family hypoxia-inducible factor 2	EGLN2	703083
EH domain binding protein 1	EHBP1	693902
EH domain containing 1	EHD1	722036
Elastin microfibril interfacer 3	EMILIN3	696465
Electron-transferring-flavoprotein dehydrogenase	ETFDH	701207
ELMO/CED-12 domain containing 2	ELMOD2	698742
ELOVL fatty acid elongase 1	ELOVL1	700557
ELOVL fatty acid elongase 4	ELOVL4	692070
Embryonic ectoderm development	EED	703866
Emopamil binding protein (sterol isomerase)	EBP	714315
Endonuclease G	ENDOG	717171
Endoplasmic reticulum lectin 1	ERLEC1	716460
Endothelial cell adhesion molecule	ESAM	712200
Endothelin 3	EDN3	693385
Enhancer of rudimentary homolog (Drosophila)	ERH	712507
Enhancer of yellow 2 homolog (Drosophila)	ENY2	699048
Enhancer of zeste 1 polycomb repressive complex 2 subunit	EZH1	711173
Enolase 1, (alpha)	ENO1	709378
Enoyl-coa delta isomerase 2	ECI2	709579
Eomesodermin	EOMES	704711
EPH receptor A1	EPHA1	706295
EPH receptor B6	EPHB6	704886
Epididymal protein 3A	EDDM3A	704355
Epithelial cell transforming 2	ECT2	694056
Epithelial stromal interaction 1 (breast)	EPSTI1	700208
ER degradation enhancer, mannosidase alpha-like 3	EDEM3	714475
ER lipid raft associated 2	ERLIN2	698126
ER membrane protein complex subunit 1	EMC1	702573
ER membrane protein complex subunit 10	EMC10	719285
ER membrane protein complex subunit 4	EMC4	695907
ER membrane protein complex subunit 6	EMC6	707030
ErbB2 interacting protein	ERBB2IP	700429
ERGIC and golgi 3	ERGIC3	704736
ESF1 nucleolar pre-rRNA processing protein homolog	ESF1	694159
Esterase D	ESD	708871
Ethanolamine-phosphate phospho-lyase	ETNPPL	696880

Eukaryotic translation elongation factor 1 beta 2	EEF1B2	707019
Eukaryotic translation elongation factor 1 epsilon 1	EEF1E1	695426
Eukaryotic translation elongation factor 1 gamma	EEF1G	722274
Eukaryotic translation initiation factor 2 subunit beta	EIF2S2	708593
Eukaryotic translation initiation factor 2-alpha kinase 3	EIF2AK3	699575
Eukaryotic translation initiation factor 2D	EIF2D	695274
Eukaryotic translation initiation factor 3 subunit D	EIF3D	695051
Eukaryotic translation initiation factor 3 subunit E	EIF3E	697622
Eukaryotic translation initiation factor 3 subunit H	EIF3H	700517
Eukaryotic translation initiation factor 3 subunit K	EIF3K	693536
Eukaryotic translation initiation factor 3 subunit L	EIF3L	699189
Eukaryotic translation initiation factor 3 subunit M	EIF3M	695698
Eukaryotic translation initiation factor 4A2	EIF4A2	707775
Eukaryotic translation initiation factor 4A3	EIF4A3	712141
Eukaryotic translation initiation factor 4E binding protein 2	EIF4EBP2	100424760
Eukaryotic translation initiation factor 4E binding protein 3	EIF4EBP3	100532736
Eukaryotic translation initiation factor 4E family member 2	EIF4E2	713487
Eukaryotic translation initiation factor 4H	EIF4H	693429
Eukaryotic translation termination factor 1	ETF1	714449
Eva-1 homolog B (C. Elegans)	EVA1B	713159
Even-skipped homeobox 1	EVX1	699106
EWS RNA binding protein 1	EWSR1	714432
Excision repair cross-complementation group 3	ERCC3	698829
Exocyst complex component 1	EXOC1	695664
Exocyst complex component 2	EXOC2	706296
Exocyst complex component 4	EXOC4	712458
Exocyst complex component 7	EXOC7	705801
Exophilin 5	EXPH5	708977
Exosome component 10	EXOSC10	714153
Exosome component 3	EXOSC3	716347
Exostosin glycosyltransferase 1	EXT1	701488
Exostosin glycosyltransferase 2	EXT2	715975
Exportin 1	XPO1	718063
Exportin 5	XPO5	700664
Exportin 6	XPO6	704332
Extended synaptotagmin-like protein 1	ESYT1	711720
Extra spindle pole bodies like 1, separase	ESPL1	702136
F11 receptor	F11R	719824
Family with sequence similarity 104 member A	FAM104A	695865
Family with sequence similarity 110 member B	FAM110B	703840
Family with sequence similarity 117 member A	FAM117A	700079
Family with sequence similarity 126 member A	FAM126A	705467
Family with sequence similarity 129 member B	FAM129B	707403
Family with sequence similarity 13 member C	FAM13C	702439
Family with sequence similarity 156 member B	FAM156B	698392
Family with sequence similarity 160 member A2	FAM160A2	711641
Family with sequence similarity 171 member B	FAM171B	712442
Family with sequence similarity 175 member B	FAM175B	694886

Family with sequence similarity 178 member B	FAM178B	710890
Family with sequence similarity 179 member B	FAM179B	702188
Family with sequence similarity 181 member B	FAM181B	701184
Family with sequence similarity 20 member A	FAM20A	718937
Family with sequence similarity 212 member A	FAM212A	704983
Family with sequence similarity 219 member A	FAM219A	700651
Family with sequence similarity 220 member A	FAM220A	703785
Family with sequence similarity 35 member A	FAM35A	694102
Family with sequence similarity 43 member B	FAM43B	705659
Family with sequence similarity 58 member A	FAM58A	695925
Family with sequence similarity 71 member D	FAM71D	713472
Family with sequence similarity 76 member B	FAM76B	699581
Family with sequence similarity 8 member A1	FAM8A1	703789
Family with sequence similarity 92 member A1	FAM92A1	698794
Fanconi anemia complementation group E	FANCE	718889
Fanconi anemia complementation group F	FANCF	704048
Farnesyl-diphosphate farnesyltransferase 1	FDFT1	696396
Farnesyltransferase, CAAX box, beta	FNTB	708129
Fas apoptotic inhibitory molecule	FAIM	716216
Fas ligand (TNF superfamily, member 6)	FASLG	574159
Fasciculation and elongation protein zeta 1	FEZ1	713106
Fasciculation and elongation protein zeta 2 (zygin II)	FEZ2	708288
Fascin actin-bundling protein 2, retinal	FSCN2	713824
FAST kinase domains 1	FASTKD1	706154
Fat storage-inducing transmembrane protein 1	FITM1	715085
Fatty acid binding protein 6, ileal	FABP6	695439
Fatty acid binding protein 7, brain	FABP7	713762
Fatty acyl coa reductase 1	FAR1	699947
FBJ murine osteosarcoma viral oncogene homolog	FOS	702077
F-box and leucine-rich repeat protein 6	FBXL6	701594
F-box and WD repeat domain containing 4	FBXW4	711996
F-box and WD repeat domain containing 7	FBXW7	695101
F-box protein 11	FBXO11	715651
F-box protein 4	FBXO4	697007
FCH and double SH3 domains 2	FCHSD2	717996
Feline leukemia virus subgroup C cellular receptor 1	FLVCR1	710008
Fem-1 homolog b (C. Elegans)	FEM1B	693955
FERM domain containing 3	FRMD3	713394
Fermitin family member 3	FERMT3	722120
Fetal and adult testis expressed 1	FATE1	704368
FEV (ETS oncogene family)	FEV	701065
FGR proto-oncogene, Src family tyrosine kinase	FGR	716296
Fibrillarin	FBL	700286
Fibrinogen-like 2	FGL2	694856
Fibroblast activation protein alpha	FAP	701541
Fibroblast growth factor 13	FGF13	695460
Fibroblast growth factor 16	FGF16	705612
Fibroblast growth factor 17	FGF17	706659

Fibroblast growth factor receptor 1	FGFR1	700126
Fibroblast growth factor receptor substrate 3	FRS3	694462
Fibromodulin	FMOD	703048
Fibronectin 1	FN1	613269
Fibronectin type III domain containing 4	FNDC4	702098
FIG4 phosphoinositide 5-phosphatase	FIG4	699914
Filamin B, beta	FLNB	702732
Filamin binding LIM protein 1	FBLIM1	695727
Finkel-Biskis-Reilly murine sarcoma virus (FBR-musv) ubiquitously expressed	FAU	716761
FK506 binding protein 11	FKBP11	708598
FK506 binding protein 7	FKBP7	703299
FK506 binding protein 9	FKBP9	708827
Flavin adenine dinucleotide synthetase 1	FLAD1	717133
Flightless I actin binding protein	FLII	700471
FLYWCH-type zinc finger 1	FLYWCH1	700909
Follicle stimulating hormone, beta polypeptide	FSHB	697317
Follistatin like 1	FSTL1	713367
Forkhead box C2	FOXC2	694852
Formin homology 2 domain containing 1	FHOD1	697346
Four and a half LIM domains 2	FHL2	713222
Four and a half LIM domains 3	FHL3	715313
Fragile X mental retardation, autosomal homolog 1	FXR1	710170
FRAS1 related extracellular matrix 1	FREM1	713874
Frataxin	FXN	699469
Free fatty acid receptor 4	FFAR4	700014
Frizzled class receptor 6	FZD6	694625
Ftsj RNA methyltransferase homolog 1 (E. Coli)	FTSJ1	710243
Fucosyltransferase 8 (alpha (1,6) fucosyltransferase)	FUT8	708839
Fumarylacetoacetate hydrolase (fumarylacetoacetase)	FAH	712716
FUN14 domain containing 1	FUNDC1	709370
Fuzzy planar cell polarity protein	FUZ	719442
FXYP domain containing ion transport regulator 7	FXYP7	718457
FYN proto-oncogene, Src family tyrosine kinase	FYN	574214
FYVE, rhogef and PH domain containing 2	FGD2	719329
G elongation factor, mitochondrial 2	GFM2	704247
G kinase anchoring protein 1	GKAP1	708816
G protein pathway suppressor 1	GPS1	719343
G protein-coupled bile acid receptor 1	GPBAR1	697937
G protein-coupled receptor 101	GPR101	694636
G protein-coupled receptor 135	GPR135	701843
G protein-coupled receptor 151	GPR151	708020
G protein-coupled receptor 157	GPR157	722176
G protein-coupled receptor 171	GPR171	709960
G protein-coupled receptor 18	GPR18	698714
G protein-coupled receptor 183	GPR183	698844
G protein-coupled receptor 31	GPR31	717158
G protein-coupled receptor 63	GPR63	704888

G protein-coupled receptor 89A	GPR89A	696579
G protein-coupled receptor kinase interacting arfgap 2	GIT2	708092
G2/M-phase specific E3 ubiquitin protein ligase	G2E3	717021
GA binding protein transcription factor, beta subunit 1	GABPB1	715334
GABA(A) receptor-associated protein like 2	GABARAPL2	714413
Galactose-3-O-sulfotransferase 3	GAL3ST3	714845
Galactosidase alpha	GLA	703129
Gametogenetin	GGN	715072
Gametogenetin binding protein 2	GGNBP2	713750
Gamma-aminobutyric acid (GABA) A receptor, beta 1	GABRB1	711217
Gamma-glutamyl hydrolase (conjugase, folylpolygamma glutamyl hydrolase)	GGH	700747
Gamma-glutamylcyclotransferase	GGCT	695547
Gamma-glutamyltransferase 5	GGT5	720345
Gap junction protein alpha 1	GJA1	714344
Gap junction protein alpha 3	GJA3	704432
Gap junction protein delta 4	GJD4	699010
Gastrulation brain homeobox 2	GBX2	693901
GATA binding protein 2	GATA2	705551
GCN1, eif2 alpha kinase activator homolog	GCN1	698528
GC-rich promoter binding protein 1	GPBP1	708322
GC-rich promoter binding protein 1-like 1	GPBP1L1	706690
GDP-mannose 4,6-dehydratase	GMDS	707051
GDP-mannose pyrophosphorylase B	GMPPB	705454
General transcription factor IIA 2	GTF2A2	702984
General transcription factor IIB	GTF2B	694770
General transcription factor IIE subunit 2	GTF2E2	694622
General transcription factor IIH subunit 5	GTF2H5	700107
General transcription factor IIIA	GTF3A	710492
General transcription factor IIIC subunit 4	GTF3C4	714849
General transcription factor IIIC subunit 6	GTF3C6	696512
Geranylgeranyl diphosphate synthase 1	GGPS1	100425248
Germ cell-less, spermatogenesis associated 1	GMCL1	701545
GID complex subunit 8	GID8	698189
GIN5 complex subunit 2 (Psf2 homolog)	GIN2	693426
GLE1, RNA export mediator	GLE1	717474
GLI family zinc finger 1	GLI1	714843
Glucokinase (hexokinase 4) regulator	GCKR	701431
Glucose-fructose oxidoreductase domain containing 1	GFOD1	700607
Glucosidase, beta (bile acid) 2	GBA2	696062
Glutamate decarboxylase 1	GAD1	613030
Glutamate-cysteine ligase, catalytic subunit	GCLC	710508
Glutamic-oxaloacetic transaminase 2	GOT2	707896
Glutamine--fructose-6-phosphate transaminase 1	GFPT1	574376
Glutaminy-peptide cyclotransferase	QPCT	712233
Glutaminyl-trna synthetase	QARS	708111
Glutamyl aminopeptidase (aminopeptidase A)	ENPEP	699615
Glutaredoxin 5	GLRX5	702989

Glutathione peroxidase 1	GPX1	706732
Glutathione peroxidase 6	GPX6	100286832
Glutathione peroxidase 8 (putative)	GPX8	705965
Glutathione S-transferase alpha 4	GSTA4	709666
Glutathione S-transferase omega 1	GSTO1	716078
Glutathione S-transferase omega 2	GSTO2	715291
Glutathione S-transferase, C-terminal domain containing	GSTCD	694220
Glyceraldehyde-3-phosphate dehydrogenase, spermatogenic	GAPDHS	709485
Glycerol-3-phosphate acyltransferase, mitochondrial	GPAM	696042
Glycophorin C (Gerbich blood group)	GYPC	712092
Glycosylphosphatidylinositol anchor attachment 1	GPAA1	699887
Glycosyltransferase 8 domain containing 1	GLT8D1	695999
Glycosyltransferase like domain containing 1	GTDC1	100424584
Glypican 1	GPC1	698326
Golgi reassembly stacking protein 2	GORASP2	694170
Golgi-associated, gamma adaptin ear containing, ARF binding protein 3	GGA3	705751
Golgin A7	GOLGA7	709911
Golgin B1	GOLGB1	713993
G-protein signaling modulator 1	GPSM1	710652
Grancalcin	GCA	702138
Granulysin	GNLY	696059
Granzyme A	GZMA	705712
GRB2-related adaptor protein	GRAP	702473
Gremlin 2, DAN family BMP antagonist	GREM2	708280
Growth arrest and DNA damage inducible beta	GADD45B	711257
Growth arrest and DNA damage inducible gamma	GADD45G	697835
Growth arrest specific 6	GAS6	716066
Growth differentiation factor 2	GDF2	711516
Growth differentiation factor 7	GDF7	702462
Growth factor receptor bound protein 10	GRB10	694786
Growth hormone inducible transmembrane protein	GHITM	702691
Growth hormone secretagogue receptor	GHSR	694587
GRP1 (general receptor for phosphoinositides 1)-associated scaffold protein	GRASP	696547
GTP binding protein overexpressed in skeletal muscle	GEM	699130
Gtpase activating protein (SH3 domain) binding protein 1	G3BP1	713884
Gtpase, IMAP family member 4	GIMAP4	713506
Guanidinoacetate N-methyltransferase	GAMT	721263
Guanine nucleotide binding protein (G protein), alpha inhibiting activity polypeptide 2	GNAI2	703780
Guanine nucleotide binding protein (G protein), beta polypeptide 2-like 1	GNB2L1	708526
Guanine nucleotide binding protein (G protein), gamma 10	GNG10	708193
Guanine nucleotide binding protein (G protein), gamma 11	GNG11	700606
Guanosine monophosphate reductase 2	GMPR2	715719
Guanylate binding protein 2, interferon-inducible	GBP2	694684
Guanylate kinase 1	GUK1	695272

H2A histone family, member X	H2AFX	703073
H2A histone family, member Y	H2AFY	711836
H2A histone family, member Y2	H2AFY2	711117
H2A histone family, member Z	H2AFZ	709326
Haloacid dehalogenase like hydrolase domain containing 2	HDHD2	697216
HAUS augmin like complex subunit 8	HAUS8	718874
Hdc homolog, cell cycle regulator	HECA	702628
Heat shock factor binding protein 1	HSBP1	714498
Heat shock protein 90kda alpha (cytosolic), class A member 1	HSP90AA1	708431
Heat shock protein 90kda alpha family class B member 1	HSP90AB1	702293
Heat shock protein 90kda beta family member 1	HSP90B1	699568
Heat shock protein family A (Hsp70) member 8	HSPA8	707989
Heat shock protein family B (small) member 11	HSPB11	714791
Heat shock protein family B (small) member 6	HSPB6	710760
Heat shock protein family D (Hsp60) member 1	HSPD1	698024
Heat shock protein family H (Hsp110) member 1	HSPH1	721956
Heat shock transcription factor 2	HSF2	713938
HECT domain containing E3 ubiquitin protein ligase 1	HECTD1	717177
HECT domain containing E3 ubiquitin protein ligase 3	HECTD3	705051
Helicase (DNA) B	HELB	717860
Helicase, lymphoid-specific	HELLS	701598
Hematological and neurological expressed 1	HN1	664729
Hematopoietic cell-specific Lyn substrate 1	HCLS1	714044
Hematopoietic prostaglandin D synthase	HPGDS	705227
Hemoglobin subunit alpha 1	HBA1	701930
Hepatocyte growth factor-regulated tyrosine kinase substrate	HGS	714385
Hes family bhlh transcription factor 7	HES7	721942
Hes-related family bhlh transcription factor with YRPW motif 2	HEY2	712988
Heterogeneous nuclear ribonucleoprotein A/B	HNRNPAB	702509
Heterogeneous nuclear ribonucleoprotein A1	HNRNPA1	702977
Heterogeneous nuclear ribonucleoprotein A2/B1	HNRNPA2B1	701821
Heterogeneous nuclear ribonucleoprotein C (C1/C2)	HNRNPC	706423
Heterogeneous nuclear ribonucleoprotein D	HNRNPD	694867
Heterogeneous nuclear ribonucleoprotein D like	HNRNPDL	694603
Heterogeneous nuclear ribonucleoprotein H2 (H')	HNRNPH2	703254
Heterogeneous nuclear ribonucleoprotein L	HNRNPL	694448
Heterogeneous nuclear ribonucleoprotein L-like	HNRNPLL	710841
Hexamethylene bis-acetamide inducible 2	HEXIM2	716047
High mobility group box 3	HMGB3	703598
Hippocalcin	HPCA	710249
HIRA interacting protein 3	HIRIP3	708004
Histidine triad nucleotide binding protein 1	HINT1	706083
Histidyl-trna synthetase 2	HARS2	697009
Histone cluster 1, h3d	HIST1H3D	695092
Histone cluster 3, h2a	HIST3H2A	693768
Histone deacetylase 10	HDAC10	715698
Histone deacetylase 11	HDAC11	693537
Histone deacetylase 5	HDAC5	711456

Histone H4 transcription factor	HINFP	703763
HMG-box transcription factor 1	HBP1	699237
Holliday junction recognition protein	HJURP	718180
Homeodomain interacting protein kinase 1	HIPK1	707856
Homocysteine-inducible, endoplasmic reticulum stress-inducible, ubiquitin-like domain member 1	HERPUD1	703210
Hyaluronan and proteoglycan link protein 3	HAPLN3	698880
Hyaluronoglucosaminidase 2	HYAL2	702484
Hydroxyacyl-coa dehydrogenase/3-ketoacyl-coa thiolase/enoyl-coa hydratase (trifunctional protein), alpha subunit	HADHA	695975
Hydroxysteroid (17-beta) dehydrogenase 10	HSD17B10	700018
Hydroxysteroid (17-beta) dehydrogenase 8	HSD17B8	718119
Hyperpolarization activated cyclic nucleotide gated potassium channel 3	HCN3	717719
Hypocretin (orexin) neuropeptide precursor	HCRT	709564
Hypoxia up-regulated 1	HYOU1	707715
IKAROS family zinc finger 5	IKZF5	716950
IL2-inducible T-cell kinase	ITK	715471
ILK associated serine/threonine phosphatase	ILKAP	706334
Immunoglobulin superfamily member 21	IGSF21	701539
Immunoglobulin superfamily member 10	IGSF10	709661
IMP (inosine 5'-monophosphate) dehydrogenase 1	IMPDH1	701039
IMP3, U3 small nucleolar ribonucleoprotein	IMP3	706202
Importin 13	IPO13	702007
Importin 8	IPO8	693514
Increased sodium tolerance 1 homolog (yeast)	IST1	707245
Inhibin alpha	INHA	574379
Inhibitor of DNA binding 1, dominant negative helix-loop-helix protein	ID1	713160
Inhibitor of growth family member 2	ING2	701839
Inhibitor of growth family member 4	ING4	722073
Inhibitor of kappa light polypeptide gene enhancer in B-cells, kinase beta	IKBKB	704683
INO80 complex subunit C	INO80C	708819
Inosine triphosphatase	ITPA	717257
Inositol hexakisphosphate kinase 1	IP6K1	705576
Inositol monophosphatase domain containing 1	IMPAD1	696893
Inositol polyphosphate-1-phosphatase	INPP1	703301
Inositol(myo)-1(or 4)-monophosphatase 2	IMPA2	704320
Inositol-3-phosphate synthase 1	ISYNA1	719487
Insulin like 3	INSL3	100533192
Insulin like growth factor 1 receptor	IGF1R	708227
Insulin like growth factor binding protein 3	IGFBP3	696868
Insulin like growth factor binding protein 5	IGFBP5	696339
Insulin like growth factor binding protein 7	IGFBP7	693564
Insulin like growth factor binding protein acid labile subunit	IGFALS	722493
Integral membrane protein 2C	ITM2C	711245
Integrator complex subunit 10	INTS10	705240

Integrator complex subunit 12	INTS12	694344
Integrator complex subunit 2	INTS2	712351
Integrator complex subunit 4	INTS4	699466
Integrator complex subunit 8	INTS8	700255
Integrin alpha FG-GAP repeat containing 1	ITFG1	716435
Integrin linked kinase	ILK	709944
Integrin subunit alpha 4	ITGA4	704745
Integrin subunit beta 7	ITGB7	699405
Interferon induced protein with tetratricopeptide repeats 2	IFIT2	695452
Interferon induced, with helicase C domain 1	IFIH1	702024
Interferon regulatory factor 2	IRF2	694347
Interferon, alpha-inducible protein 6	IFI6	716339
Interferon, lambda receptor 1	IFNLR1	711625
Interferon-related developmental regulator 2	IFRD2	702959
Interleukin 1 receptor associated kinase 1 binding protein 1	IRAK1BP1	716772
Interleukin 1 receptor-like 1	IL1RL1	711893
Interleukin 17 receptor A	IL17RA	709005
Interleukin 17B	IL17B	710679
Interleukin 20 receptor subunit beta	IL20RB	716769
Interleukin enhancer binding factor 3	ILF3	713427
Intracisternal A particle-promoted polypeptide	IPP	706893
Intraflagellar transport 20	IFT20	715773
Intraflagellar transport 22	IFT22	714551
Intraflagellar transport 27	IFT27	697032
Intraflagellar transport 46	IFT46	700582
Intraflagellar transport 57	IFT57	705088
Intraflagellar transport 74	IFT74	707561
Intraflagellar transport 80	IFT80	705146
IQ motif and Sec7 domain 1	IQSEC1	693922
IQ motif containing B1	IQCB1	715032
IQ motif containing F1	IQCF1	699719
IQ motif containing K	IQCK	695417
IQ motif containing with AAA domain 1	IQCA1	694173
Iron-sulfur cluster assembly 2	ISCA2	700004
Iron-sulfur cluster assembly enzyme	ISCU	705669
Iroquois homeobox 6	IRX6	698232
Isocitrate dehydrogenase 3 (NAD+) alpha	IDH3A	677715
Isocitrate dehydrogenase 3 (NAD+) gamma	IDH3G	698558
Isoleucyl-trna synthetase	IARS	677705
IWS1 homolog (S. Cerevisiae)	IWS1	699205
Izumo sperm-egg fusion 1	IZUMO1	718234
Janus kinase and microtubule interacting protein 1	JAKMIP1	722750
JNK1/MAPK8-associated membrane protein	JKAMP	702307
Jumonji domain containing 1C	JMJD1C	697630
Junction adhesion molecule like	JAML	704919
Kallikrein related peptidase 8	KLK8	719488
Karyopherin alpha 4 (importin alpha 3)	KPNA4	702486
KAT8 regulatory NSL complex subunit 3	KANSL3	706159

KDEL endoplasmic reticulum protein retention receptor 3	KDELR3	700810
KDEL motif containing 1	KDELC1	702156
Kelch domain containing 4	KLHDC4	695768
Kelch domain containing 9	KLHDC9	719863
Kelch like family member 3	KLHL3	713123
Kelch like family member 32	KLHL32	709276
Kelch like family member 5	KLHL5	698740
Kelch repeat and BTB (POZ) domain containing 3	KBTBD3	706382
Kelch repeat and BTB (POZ) domain containing 4	KBTBD4	711452
Keratin 14, type I	KRT14	100426176
Keratin 79, type II	KRT79	700188
Keratin associated protein 12-4	KRTAP12-4	712284
Keratin associated protein 19-3	KRTAP19-3	703677
KIAA0141 ortholog	KIAA0141	702802
KIAA0226-like ortholog	KIAA0226L	703875
KIAA0907 ortholog	KIAA0907	718005
KIAA0922 ortholog	KIAA0922	696761
KIAA1024 ortholog	KIAA1024	712078
KIAA1033 ortholog	KIAA1033	701501
KIAA1143 ortholog	KIAA1143	714979
KIAA1324-like ortholog	KIAA1324L	707191
KIAA1958 ortholog	KIAA1958	707028
KIAA2013 ortholog	KIAA2013	722762
Killer cell lectin-like receptor subfamily F, member 1	KLRF1	574389
Kin17 DNA and RNA binding protein	KIN	713634
Kinase D-interacting substrate 220kda	KIDINS220	693522
Kinesin family member 2C	KIF2C	705381
Kinesin family member 5A	KIF5A	711936
Kinesin family member 6	KIF6	719593
Kinesin family member C3	KIFC3	705951
Kinesin heavy chain member 2A	KIF2A	696561
Kinesin light chain 4	KLC4	698356
Kininogen 1	KNG1	707466
Kizuna centrosomal protein	KIZ	700808
Klotho	KL	714042
KN motif and ankyrin repeat domains 1	KANK1	697569
KRAB-A domain containing 2	KRBA2	717353
Kruppel-like factor 10	KLF10	693458
Kruppel-like factor 11	KLF11	702323
Kxd1 motif containing 1	KXD1	720235
L-2-hydroxyglutarate dehydrogenase	L2HGDH	705721
La ribonucleoprotein domain family member 7	LARP7	703731
Lactase like	LCTL	710515
Lactate dehydrogenase B	LDHB	706110
Lamin B receptor	LBR	700801
Late cornified envelope 4A	LCE4A	100423936
Late endosomal/lysosomal adaptor, MAPK and MTOR activator 1	LAMTOR1	718249

Late endosomal/lysosomal adaptor, MAPK and MTOR activator 3	LAMTOR3	709133
Latexin	LXN	703996
LCK proto-oncogene, Src family tyrosine kinase	LCK	717704
LDL receptor related protein 1	LRP1	710965
Lectin, galactoside-binding, soluble, 14	LGALS14	698227
Lectin, mannose-binding, 1	LMAN1	697449
Leucine rich repeat and coiled-coil centrosomal protein 1	LRRCC1	707964
Leucine rich repeat and Ig domain containing 2	LINGO2	706386
Leucine rich repeat containing 14	LRRC14	703587
Leucine rich repeat containing 20	LRRC20	710594
Leucine rich repeat containing 40	LRRC40	702565
Leucine rich repeat containing 42	LRRC42	714839
Leucine rich repeat protein 1	LRR1	706658
Leucine zipper putative tumor suppressor 3	PROSAP1P1	717136
Leucine zipper, down-regulated in cancer 1	LDOC1	696902
Leucine zipper, down-regulated in cancer 1-like	LDOC1L	712760
Leucine-rich repeat containing 8 family member D	LRRC8D	100423128
Leucine-rich repeat LGI family member 2	LGI2	693308
Leucine-rich repeat LGI family member 4	LGI4	718426
Leucine-rich repeats and WD repeat domain containing 1	LRWD1	715187
Leukocyte immunoglobulin-like receptor, subfamily B (with TM and ITIM domains), member 1	LILRB1	692340
Leukocyte specific transcript 1	LST1	100141392
Leukocyte-associated immunoglobulin-like receptor 1	LAIR1	695533
Leupaxin	LPXN	702033
Ligand dependent nuclear receptor interacting factor 1	LRIF1	702445
Ligase III, DNA, ATP-dependent	LIG3	715181
LIM domain containing 2	LIMD2	717889
LIM homeobox 5	LHX5	713417
Limb bud and heart development	LBH	704749
Lin-9 DREAM muv b core complex component	LIN9	699056
Linker for activation of T-cells family member 2	LAT2	693676
Lipase A, lysosomal acid, cholesterol esterase	LIPA	695240
Lipid droplet associated hydrolase	LDAH	717510
Lipocalin 1	LCN1	711974
Lipocalin 6	LCN6	574148
Lipoma HMGIC fusion partner-like 3	LHFPL3	697053
Lipoma HMGIC fusion partner-like 4	LHFPL4	700973
LSM10, U7 small nuclear RNA associated	LSM10	713277
LSM14A mrna processing body assembly factor	LSM14A	705085
LSM6 homolog, U6 small nuclear RNA and mrna degradation associated	LSM6	703226
LUC7-like 3 pre-mrna splicing factor	LUC7L3	703662
Lymphocyte antigen 6 complex, locus G6C	LY6G6C	716220
Lymphoid enhancer-binding factor 1	LEF1	695776
Lymphotoxin alpha	LTA	715425
Lysine (K)-specific demethylase 1A	KDM1A	718609

Lysine (K)-specific methyltransferase 5B	KMT5B	710481
Lysine-rich nucleolar protein 1	KNOP1	695144
Lysophosphatidic acid receptor 6	LPAR6	705081
Lysophosphatidylcholine acyltransferase 4	LPCAT4	696388
Lysosomal protein transmembrane 4 alpha	LAPTM4A	701298
Lysyl oxidase like 3	LOXL3	709834
Lysyl-trna synthetase	KARS	714516
MACRO domain containing 1	MACROD1	717961
Macrophage erythroblast attacher	MAEA	702015
MAD2L1 binding protein	MAD2L1BP	701099
MAGE family member D1	MAGED1	696658
MAGE family member F1	MAGEF1	701676
MAGE family member H1	MAGEH1	703812
Major facilitator superfamily domain containing 5	MFSD5	702021
Major histocompatibility complex, class II, DM alpha	MAMU-DMA	717870
Major histocompatibility complex, class II, DM beta	MAMU-DMB	100429856
Malate dehydrogenase 1	MDH1	694703
Male-specific lethal 3 homolog (Drosophila)	MSL3	720836
Malonyl-coa-acyl carrier protein transacylase	MCAT	711556
Mannose phosphate isomerase	MPI	722129
Mannose receptor, C type 1	MRC1	701010
Mannosyl (alpha-1,3-)-glycoprotein beta-1,4-N-acetyl glucosaminyltransferase, isozyme A	MGAT4A	708094
Mannosyl (alpha-1,3-)-glycoprotein beta-1,4-N-acetyl glucosaminyltransferase, isozyme B	MGAT4B	705006
Mannosyl (alpha-1,6-)-glycoprotein beta-1,2-N-acetyl glucosaminyltransferase	MGAT2	706426
Mannosyl-oligosaccharide glucosidase	MOGS	708913
MANSC domain containing 1	MANSC1	696667
MAP kinase interacting serine/threonine kinase 1	MKNK1	710061
MARCKS-like 1	MARCKSL1	100428616
Mastermind like transcriptional coactivator 1	MAML1	715047
Matrin 3	MATR3	100568448
Matrix metalloproteinase 11	MMP11	699067
Mckusick-Kaufman syndrome	MKKS	718547
Mdm1 nuclear protein	MDM1	718062
MDM2 binding protein	MTBP	703121
Mediator complex subunit 11	MED11	709561
Mediator complex subunit 13-like	MED13L	713867
Mediator complex subunit 19	MED19	704421
Mediator complex subunit 21	MED21	710699
Mediator complex subunit 23	MED23	714629
Mediator complex subunit 4	MED4	704644
Mediator complex subunit 6	MED6	693320
Mediator complex subunit 8	MED8	700676
Meiosis 1 associated protein	M1AP	710210
Meiosis specific nuclear structural 1	MNS1	699377
Melanocortin 2 receptor accessory protein	MRAP	701330

Membrane frizzled-related protein	MFRP	704965
Membrane protein, palmitoylated 1	MPP1	702092
Membrane protein, palmitoylated 4	MPP4	702459
Membrane-spanning 4-domains, subfamily A, member 1	MS4A1	696843
Membrane-spanning 4-domains, subfamily A, member 4A	MS4A4A	698027
Meningioma expressed antigen 5 (hyaluronidase)	MGEA5	712370
Meprin A subunit alpha	MEP1A	704781
Mesoderm development candidate 1	MESDC1	713059
Mesoderm induction early response 1, family member 2	MIER2	701450
Mesoderm specific transcript	MEST	703327
MET proto-oncogene, receptor tyrosine kinase	MET	704562
Metadherin	MTDH	702410
Metal response element binding transcription factor 2	MTF2	707104
Metallo-beta-lactamase domain containing 2	MBLAC2	695437
Metastasis associated 1 family member 2	MTA2	718772
Metastasis associated 1 family member 3	MTA3	712967
Methionine adenosyltransferase II, beta	MAT2B	698119
Methionine sulfoxide reductase A	MSRA	698628
Methionine sulfoxide reductase B1	MSRB1	693358
Methionyl aminopeptidase 1	METAP1	710537
Methionyl-trna synthetase	MARS	714744
Methionyl-trna synthetase 2, mitochondrial	MARS2	698275
Methyl-cpg binding domain 4 DNA glycosylase	MBD4	720557
Methylcrotonoyl-coa carboxylase 1	MCCC1	708258
Methylenetetrahydrofolate dehydrogenase (NADP+ dependent) 1, methenyltetrahydrofolate cyclohydrolase, formyltetrahydrofolate synthetase	MTHFD1	707059
Methylmalonic aciduria (cobalamin deficiency) cblb type	MMAB	708973
Methylphosphate capping enzyme	MEPCE	711829
Methyltransferase like 1	METTL1	715796
Methyltransferase like 13	METTL13	704943
Methyltransferase like 18	METTL18	701890
Methyltransferase like 2A	METTL2A	717533
Mevalonate kinase	MVK	707645
Mex-3 RNA binding family member B	MEX3B	713441
Microfibrillar associated protein 1	MFAP1	711111
Microsomal glutathione S-transferase 2	MGST2	697983
Microtubule associated protein 1S	MAP1S	719196
Microtubule associated protein 4	MAP4	100423616
Microtubule associated protein RP/EB family member 1	MAPRE1	711404
Midline 1	MID1	709683
Midnolin	MIDN	721215
MIF4G domain containing	MIF4GD	706005
Minichromosome maintenance complex binding protein	MCMBP	704028
Minichromosome maintenance complex component 3	MCM3	708320
Minichromosome maintenance complex component 3 associated protein	MCM3AP	721810
Minichromosome maintenance complex component 5	MCM5	717548

Mitochondrial assembly of ribosomal large subunit 1	MALSU1	704884
Mitochondrial carrier 1	MTCH1	719313
Mitochondrial E3 ubiquitin protein ligase 1	MUL1	705429
Mitochondrial fission regulator 1	MTFR1	711143
Mitochondrial fission regulator 1-like	MTFR1L	713213
Mitochondrial genome maintenance exonuclease 1	MGME1	696467
Mitochondrial intermediate peptidase	MIPEP	707131
Mitochondrial poly(A) polymerase	MTPAP	694491
Mitochondrial pyruvate carrier 1	MPC1	716864
Mitochondrial ribosomal protein L11	MRPL11	714094
Mitochondrial ribosomal protein L13	MRPL13	702994
Mitochondrial ribosomal protein L16	MRPL16	698831
Mitochondrial ribosomal protein L17	MRPL17	697086
Mitochondrial ribosomal protein L19	MRPL19	711081
Mitochondrial ribosomal protein L20	MRPL20	701533
Mitochondrial ribosomal protein L22	MRPL22	714920
Mitochondrial ribosomal protein L24	MRPL24	718640
Mitochondrial ribosomal protein L39	MRPL39	708631
Mitochondrial ribosomal protein L41	MRPL41	702768
Mitochondrial ribosomal protein L42	MRPL42	715676
Mitochondrial ribosomal protein L44	MRPL44	677716
Mitochondrial ribosomal protein L46	MRPL46	697872
Mitochondrial ribosomal protein L50	MRPL50	713923
Mitochondrial ribosomal protein L51	MRPL51	713036
Mitochondrial ribosomal protein L55	MRPL55	695962
Mitochondrial ribosomal protein S11	MRPS11	697743
Mitochondrial ribosomal protein S17	MRPS17	703678
Mitochondrial ribosomal protein S18C	MRPS18C	707257
Mitochondrial ribosomal protein S21	MRPS21	706805
Mitochondrial ribosomal protein S22	MRPS22	715845
Mitochondrial ribosomal protein S33	MRPS33	693681
Mitochondrial ribosomal protein S6	MRPS6	106997264
Mitochondrial transcription termination factor 2	MTERF2	703925
Mitochondrial transcription termination factor 3	MTERF3	701366
Mitochondrial translational initiation factor 2	MTIF2	717042
Mitochondrial trna translation optimization 1	MTO1	717688
Mitogen-activated protein kinase 1	MAPK1	698569
Mitogen-activated protein kinase 7	MAPK7	702837
Mitogen-activated protein kinase 8 interacting protein 3	MAPK8IP3	702388
Mitogen-activated protein kinase associated protein 1	MAPKAP1	702599
Mitogen-activated protein kinase kinase 1	MAP2K1	710415
Mitogen-activated protein kinase kinase 4	MAP2K4	718155
Mitogen-activated protein kinase kinase 5	MAP2K5	711672
Mitogen-activated protein kinase kinase kinase 14	MAP3K14	716258
Mitogen-activated protein kinase kinase kinase 3	MAP3K3	717866
Mitogen-activated protein kinase kinase kinase 4	MAP3K4	710360
Mitogen-activated protein kinase kinase kinase 6	MAP3K6	715911
Mitogen-activated protein kinase kinase kinase kinase 1	MAP4K1	694259

Mitogen-activated protein kinase kinase kinase kinase 5	MAP4K5	706204
Mitogen-activated protein kinase-activated protein kinase 2	MAPKAPK2	695044
Mitogen-activated protein kinase-activated protein kinase 5	MAPKAPK5	713521
Mitotic spindle organizing protein 2B	MZT2B	701787
MNAT CDK-activating kinase assembly factor 1	MNAT1	703905
MON1 homolog B, secretory trafficking associated	MON1B	715104
Monoamine oxidase B	MAOB	708468
Monocyte to macrophage differentiation-associated	MMD	706723
MORC family CW-type zinc finger 4	MORC4	701136
Morf4 family associated protein 1-like 1	MRFAP1L1	710411
MORN repeat containing 2	MORN2	106992912
Mortality factor 4 like 1	MORF4L1	711357
Motilin	MLN	574099
M-phase phosphoprotein 6	MPHOSPH6	714335
M-phase specific PLK1 interacting protein	MPLKIP	703092
MRE11 homolog A, double strand break repair nuclease	MRE11A	697566
MRT4 homolog, ribosome maturation factor	MRT04	702926
Msh homeobox 2	MSX2	694227
Muscle RAS oncogene homolog	MRAS	716352
Muscleblind like splicing regulator 1	MBNL1	708735
Mutl homolog 1	MLH1	698782
Muty DNA glycosylase	MUTYH	705651
Myb/SANT-like DNA-binding domain containing 2	MSANTD2	712347
MYC associated factor X	MAX	708228
Myelin protein zero-like 2	MPZL2	699330
Myeloid cell leukemia 1	MCL1	707539
Myeloid/lymphoid or mixed-lineage leukemia; translocated to, 6	MLLT6	694045
Myoferlin	MYOF	700922
Myoneurin	MYNN	698094
Myosin binding protein H	MYBPH	703516
Myosin IF	MYO1F	712101
Myosin IIIB	MYO3B	693391
Myosin light chain 4	MYL4	717354
Myosin, light chain 12A, regulatory, non-sarcomeric	MYL12A	695077
Myotrophin	MTPN	708941
Myotubularin 1	MTM1	703131
Myotubularin related protein 2	MTMR2	699703
Myotubularin related protein 4	MTMR4	714621
Myotubularin related protein 6	MTMR6	709118
Myotubularin related protein 8	MTMR8	708037
Myristoylated alanine-rich protein kinase C substrate	MARCKS	694077
MYST/Esa1-associated factor 6	MEAF6	713666
N(alpha)-acetyltransferase 35, natc auxiliary subunit	NAA35	710122
N(alpha)-acetyltransferase 50, nate catalytic subunit	NAA50	709764
N(alpha)-acetyltransferase 60, natf catalytic subunit	NAA60	703207
N-acetylglucosamine kinase	NAGK	703976
N-acetylglucosamine-1-phosphate transferase, gamma subunit	GNPTG	722441
N-acetyltransferase 10 (GCN5-related)	NAT10	717452

NAD(P) dependent steroid dehydrogenase-like	NSDHL	693333
NAD(P)H dehydrogenase, quinone 2	NQO2	707675
NADH:ubiquinone oxidoreductase complex assembly factor 1	NDUFAF1	710275
NADH:ubiquinone oxidoreductase complex assembly factor 2	NDUFAF2	693441
NADH:ubiquinone oxidoreductase complex assembly factor 4	NDUFAF4	705102
NADH:ubiquinone oxidoreductase complex assembly factor 6	NDUFAF6	700515
NADH:ubiquinone oxidoreductase complex assembly factor 7	NDUFAF7	709473
NADH:ubiquinone oxidoreductase core subunit S2	NDUFS2	719935
NADH:ubiquinone oxidoreductase core subunit S3	NDUFS3	713040
NADH:ubiquinone oxidoreductase subunit A1	NDUFA1	694635
NADH:ubiquinone oxidoreductase subunit A12	NDUFA12	711970
NADH:ubiquinone oxidoreductase subunit A8	NDUFA8	698706
NADH:ubiquinone oxidoreductase subunit AB1	NDUFAB1	700718
NADH:ubiquinone oxidoreductase subunit B10	NDUFB10	693482
NADH:ubiquinone oxidoreductase subunit B2	NDUFB2	693431
NADH:ubiquinone oxidoreductase subunit B4	NDUFB4	713428
NADH:ubiquinone oxidoreductase subunit B8	NDUFB8	710521
NADH:ubiquinone oxidoreductase subunit B9	NDUFB9	711387
NADH:ubiquinone oxidoreductase subunit C1	NDUFC1	697242
NADH:ubiquinone oxidoreductase subunit S4	NDUFS4	704137
NADPH oxidase 1	NOX1	701376
Nascent polypeptide-associated complex alpha subunit	NACA	713416
Natural killer cell granule protein 7	NKG7	719624
NCK adaptor protein 2	NCK2	713287
NCK interacting protein with SH3 domain	NCKIPSD	709410
NCK-associated protein 1	NCKAP1	711124
Nebulette	NEBL	702764
NECAP endocytosis associated 2	NECAP2	698687
Necdin, MAGE family member	NDN	574323
NEDD8 activating enzyme E1 subunit 1	NAE1	696429
Negative elongation factor complex member C/D	NELFCD	696053
Negative elongation factor complex member E	NELFE	716913
Negative regulator of ubiquitin-like proteins 1	NUB1	715231
Nerve growth factor receptor (TNFRSF16) associated protein 1	NGFRAP1	100428976
Neural precursor cell expressed, developmentally down-regulated 1	NEDD1	713673
Neurexophilin and PC-esterase domain family member 3	NXPE3	702612
Neuritin 1	NRN1	722968
Neurofibromin 2 (merlin)	NF2	714945
Neuroigin 2	NLGN2	574368
Neuronal differentiation 2	NEUROD2	696976
Neuronal guanine nucleotide exchange factor	NGEF	713917
Neuronal PAS domain protein 3	NPAS3	717281
Neuronal pentraxin I	NPTX1	718259
Neuron-derived neurotrophic factor	NDNF	706304
Neuropeptide FF-amide peptide precursor	NPFF	703412
Neuropilin 1	NRP1	697755
Neuroplastin	NPTN	699627

Neutrophil cytosolic factor 1	NCF1	694207
NGFI-A binding protein 1	NAB1	693274
NGFI-A binding protein 2 (EGR1 binding protein 2)	NAB2	714209
N-glycanase 1	NGLY1	700842
NHL repeat containing 2	NHLRC2	698009
NHP2 ribonucleoprotein	NHP2	701950
Nicotinamide nucleotide transhydrogenase	NNT	701110
Niemann-Pick disease, type C2	NPC2	699881
NIMA-related kinase 1	NEK1	694345
NIN1/RPN12 binding protein 1 homolog	NOB1	705344
Ninein	NIN	709532
Ninjurin 1	NINJ1	717218
Nitric oxide associated 1	NOA1	693437
NK2 homeobox 5	NKX2-5	703795
NLR family, pyrin domain containing 6	NLRP6	720741
NMD3 ribosome export adaptor	NMD3	701677
NME/NM23 nucleoside diphosphate kinase 2	NME2	100533960
N-myc and STAT interactor	NMI	694554
N-myristoyltransferase 1	NMT1	715885
Non-POU domain containing, octamer-binding	NONO	697263
Non-SMC condensin I complex subunit G	NCAPG	715235
Non-SMC condensin II complex subunit D3	NCAPD3	700276
Non-SMC condensin II complex subunit H2	NCAPH2	716120
NOP16 nucleolar protein	NOP16	696768
NOP2/Sun RNA methyltransferase family member 5	NSUN5	716219
NOP58 ribonucleoprotein	NOP58	703859
NOP9 nucleolar protein	NOP9	715969
Notch 4	NOTCH4	717323
NPR2-like, GATOR1 complex subunit	NPRL2	701924
NRDE-2, necessary for RNA interference, domain containing	NRDE2	695676
NSA2, ribosome biogenesis homolog	NSA2	704670
NSE4 homolog A, SMC5-SMC6 complex component	NSMCE4A	705375
NSFL1 (p97) cofactor (p47)	NSFL1C	715743
N-terminal Xaa-Pro-Lys N-methyltransferase 1	NTMT1	716763
Nth-like DNA glycosylase 1	NTHL1	694848
Nuclear casein kinase and cyclin-dependent kinase substrate 1	NUCKS1	697298
Nuclear envelope integral membrane protein 1	NEMP1	710700
Nuclear factor of kappa light polypeptide gene enhancer in B-cells 1	NFKB1	710324
Nuclear factor, erythroid 2 like 1	NFE2L1	695404
Nuclear factor, erythroid 2 like 2	NFE2L2	707606
Nuclear fragile X mental retardation protein interacting protein 2	NUFIP2	711330
Nuclear receptor coactivator 2	NCOA2	693455
Nuclear receptor coactivator 4	NCOA4	709509
Nuclear receptor coactivator 6	NCOA6	706903
Nuclear receptor subfamily 1 group I member 2	NR1I2	574226
Nuclear receptor subfamily 1 group I member 3	NR1I3	574249
Nuclear receptor subfamily 2 group F member 2	NR2F2	707483

Nuclear receptor subfamily 5 group A member 1	NR5A1	694183
Nuclear RNA export factor 1	NXF1	718420
Nuclear RNA export factor 3	NXF3	695351
Nuclear transcription factor Y subunit gamma	NFYC	696290
Nuclear transport factor 2-like export factor 1	NXT1	711846
Nuclear transport factor 2-like export factor 2	NXT2	704593
Nucleobindin 2	NUCB2	697084
Nucleolar protein 10	NOL10	695849
Nucleolar protein 8	NOL8	705799
Nucleolar protein interacting with the FHA domain of MKI67	NIFK	697198
Nucleolin	NCL	720965
Nucleophosmin/nucleoplasmin 3	NPM3	712300
Nucleoporin 107kda	NUP107	718214
Nucleoporin 205kda	NUP205	708216
Nucleoporin 35kda	NUP35	706497
Nucleoporin 37kda	NUP37	697933
Nucleoporin 50kda	NUP50	713282
Nucleoporin 85kda	NUP85	705628
Nucleoporin 88kda	NUP88	711734
Nucleosome assembly protein 1-like 5	NAP1L5	703223
Nude neurodevelopment protein 1	NDE1	717754
Nudix hydrolase 1	NUDT1	713078
Nudix hydrolase 13	NUDT13	707796
Nudix hydrolase 22	NUDT22	717864
Nudix hydrolase 5	NUDT5	694368
O-6-methylguanine-DNA methyltransferase	MGMT	698134
O-acyl-ADP-ribose deacylase 1	OARD1	719685
Occludin	OCLN	700504
Oculocerebrorenal syndrome of Lowe	OCRL	702345
Olfactomedin 2	OLFM2	711336
Olfactomedin like 2B	OLFML2B	720062
Olfactomedin like 3	OLFML3	707969
Olfactory receptor, family 2, subfamily AG, member 2	OR2AG2	709556
Olfactory receptor, family 2, subfamily H, member 2	OR2H2	710946
Olfactory receptor, family 5, subfamily F, member 1	OR5F1	709943
Olfactory receptor, family 6, subfamily N, member 1	OR6N1	719958
Olfactory receptor, family 7, subfamily D, member 4	OR7D4	721322
Oligodendrocyte lineage transcription factor 2	OLIG2	700098
Oligonucleotide/oligosaccharide-binding fold containing 1	OBFC1	714968
Optic atrophy 3 (autosomal recessive, with chorea and spastic paraplegia)	OPA3	714806
Oral-facial-digital syndrome 1	OFD1	711677
Origin recognition complex subunit 1	ORC1	713271
Origin recognition complex subunit 3	ORC3	700773
Origin recognition complex subunit 5	ORC5	696683
ORMDL sphingolipid biosynthesis regulator 2	ORMDL2	710296
ORMDL sphingolipid biosynthesis regulator 3	ORMDL3	699154
Ornithine aminotransferase	OAT	693970

Ornithine decarboxylase antizyme 1	OAZ1	721477
O-sialoglycoprotein endopeptidase	OSGEP	702512
Oxidized low density lipoprotein (lectin-like) receptor 1	OLR1	717596
Oxysterol binding protein	OSBP	699325
Oxysterol binding protein like 8	OSBPL8	693338
P450 (cytochrome) oxidoreductase	POR	715888
PAN2 poly(A) specific ribonuclease subunit	PAN2	712478
Pancreatic polypeptide	PPY	713988
Pantothenate kinase 1	PANK1	696041
Pantothenate kinase 4	PANK4	694804
PAP associated domain containing 7	PAPD7	713853
Par-3 family cell polarity regulator	PARD3	706472
Paraoxonase 2	PON2	699107
Paraspeckle component 1	PSPC1	705080
Parkinson protein 7	PARK7	708377
Paternally expressed 3	PEG3	707825
PAX3 and PAX7 binding protein 1	PAXBP1	700489
PAXIP1 associated glutamate-rich protein 1	PAGR1	706839
PC-esterase domain containing 1A	PCED1A	716956
PDZ domain containing 4	PDZD4	697387
PDZ domain containing ring finger 3	PDZRN3	709901
Peptidase (mitochondrial processing) alpha	PMPCA	721742
Peptidase domain containing associated with muscle regeneration 1	PAMR1	717140
Peptide deformylase (mitochondrial)	PDF	100427224
Peptidoglycan recognition protein 1	PGLYRP1	718480
Peptidylprolyl isomerase domain and WD repeat containing 1	PPWD1	696267
Peptidylprolyl isomerase E (cyclophilin E)	PPIE	716340
Peptidylprolyl isomerase G (cyclophilin G)	PPIG	706262
Peptidylprolyl isomerase H (cyclophilin H)	PPIH	697669
Peptidylprolyl isomerase like 3	PPIL3	700456
Periaxin	PRX	702329
Peroxiredoxin 2	PRDX2	716665
Peroxiredoxin 3	PRDX3	702882
Peroxiredoxin 4	PRDX4	697635
Peroxiredoxin 6	PRDX6	706486
Peroxisomal biogenesis factor 11 beta	PEX11B	698184
Peroxisomal membrane protein 2	PXMP2	693648
Peroxisome proliferator-activated receptor delta	PPARD	718861
PHD finger protein 1	PHF1	718337
PHD finger protein 14	PHF14	694855
PHD finger protein 2	PHF2	717585
PHD finger protein 23	PHF23	714538
PHD finger protein 6	PHF6	707390
PHD finger protein 7	PHF7	697103
Phenylalanyl-trna synthetase 2, mitochondrial	FARS2	710945
Phorbol-12-myristate-13-acetate-induced protein 1	PMAIP1	702789
Phosphatase and actin regulator 2	PHACTR2	700363

Phosphatase, orphan 1	PHOSPHO1	698959
Phosphatase, orphan 2	PHOSPHO2	100429656
Phosphate cytidylyltransferase 1, choline, alpha	PCYT1A	722105
Phosphatidylglycerophosphate synthase 1	PGS1	710125
Phosphatidylinositol 3-kinase catalytic subunit type 3	PIK3C3	693918
Phosphatidylinositol 4-kinase, catalytic, alpha	PI4KA	698020
Phosphatidylinositol 4-kinase, catalytic, beta	PI4KB	710104
Phosphatidylinositol glycan anchor biosynthesis class A	PIGA	712514
Phosphatidylinositol glycan anchor biosynthesis class C	PIGC	705657
Phosphatidylinositol glycan anchor biosynthesis class F	PIGF	714844
Phosphatidylinositol glycan anchor biosynthesis class G	PIGG	714088
Phosphatidylinositol glycan anchor biosynthesis class H	PIGH	710780
Phosphatidylinositol glycan anchor biosynthesis class S	PIGS	709115
Phosphatidylinositol transfer protein alpha	PITPNA	721228
Phosphatidylinositol transfer protein beta	PITPNB	713414
Phosphatidylinositol transfer protein, membrane associated 1	PITPNM1	721716
Phosphatidylinositol transfer protein, membrane associated 2	PITPNM2	703969
Phosphodiesterase 11A	PDE11A	702458
Phosphodiesterase 12	PDE12	703552
Phosphodiesterase 5A	PDE5A	705592
Phosphodiesterase 8A	PDE8A	694750
Phosphofurin acidic cluster sorting protein 1	PACS1	714696
Phosphohistidine phosphatase 1	PHPT1	721674
Phosphoinositide-3-kinase regulatory subunit 4	PIK3R4	718012
Phospholipase A2 group XVI	PLA2G16	722178
Phospholipase B domain containing 1	PLBD1	698939
Phospholipase C delta 1	PLCD1	696860
Phospholipase D family member 3	PLD3	701083
Phospholipase D family member 4	PLD4	707527
Phospholipase D family member 5	PLD5	706256
Phospholipid phosphatase 2	PLPP2	721004
Phospholipid phosphatase 6	PLPP6	695188
Phosphopantothenoylcysteine decarboxylase	PPCDC	704015
Phosphopantothenoylcysteine synthetase	PPCS	697064
Phosphoribosyl pyrophosphate synthetase 1	PRPS1	702529
Phosphoribosyl pyrophosphate synthetase-associated protein 1	PRPSAP1	706625
Phosphoribosylglycinamide formyltransferase, phospho ribosylglycinamide synthetase, phosphoribosylamino imidazole synthetase	GART	704926
Phosphorylase kinase, alpha 2 (liver)	PHKA2	694376
Phosphorylase, glycogen, liver	PYGL	706853
Phosphorylase, glycogen, muscle	PYGM	717451
Phytanoyl-coa 2-hydroxylase interacting protein	PHYHIP	715990
Piggybac transposable element derived 1	PGBD1	707252
PIH1 domain containing 1	PIH1D1	718787
Pirin	PIR	720959
Pituitary tumor-transforming 1	PTTG1	696143
Plakophilin 2	PKP2	100429376

Plasminogen receptor, C-terminal lysine transmembrane protein	PLGRKT	693286
Plastin 3	PLS3	709055
Platelet derived growth factor C	PDGFC	700236
Platelet derived growth factor D	PDGFD	704310
Platelet-derived growth factor beta polypeptide	PDGFB	703173
Pleckstrin homology domain containing A1	PLEKHA1	705731
Pleckstrin homology domain containing A3	PLEKHA3	703417
Pleckstrin homology domain containing O2	PLEKHO2	712677
Pleckstrin homology domain interacting protein	PHIP	716810
Plexin A2	PLXNA2	713800
Plexin B3	PLXNB3	696903
Pogo transposable element with ZNF domain	POGZ	710634
Poliovirus receptor-related 2 (herpesvirus entry mediator B)	PVRL2	713229
Poly(A) binding protein interacting protein 1	PAIP1	700869
Poly(A) binding protein interacting protein 2	PAIP2	693317
Poly(A) binding protein, cytoplasmic 1	PABPC1	705847
Poly(A) binding protein, cytoplasmic 3	PABPC3	708617
Poly(A) polymerase gamma	PAPOLG	717781
Poly(ADP-ribose) glycohydrolase	PARG	709432
Poly(ADP-ribose) polymerase 2	PARP2	701955
Poly(rc) binding protein 2	PCBP2	703175
Polycomb group ring finger 2	PCGF2	694187
Polycomb group ring finger 6	PCGF6	714508
Polyglutamine binding protein 1	PQBP1	711678
Polyhomeotic homolog 2 (Drosophila)	PHC2	710201
Polymerase (DNA directed) kappa	POLK	705713
Polymerase (DNA directed), beta	POLB	704801
Polymerase (DNA directed), gamma	POLG	699750
Polymerase (RNA) I polypeptide C	POLR1C	700727
Polymerase (RNA) II (DNA directed) polypeptide C, 33kda	POLR2C	704555
Polymerase (RNA) II (DNA directed) polypeptide F	POLR2F	699566
Polymerase (RNA) II (DNA directed) polypeptide G	POLR2G	718548
Polymerase (RNA) II (DNA directed) polypeptide H	POLR2H	100429040
Polymerase (RNA) II (DNA directed) polypeptide I, 14.5kda	POLR2I	712412
Polymerase (RNA) III (DNA directed) polypeptide B	POLR3B	702711
Polymerase (RNA) III (DNA directed) polypeptide C (62kd)	POLR3C	696943
Polypeptide N-acetylgalactosaminyltransferase 1	GALNT1	708930
Polysaccharide biosynthesis domain containing 1	PBDC1	705125
POP5 homolog, ribonuclease P/MRP subunit	POP5	697559
Post-GPI attachment to proteins 3	PGAP3	697699
Potassium channel tetramerization domain containing 2	KCTD2	700474
Potassium channel tetramerization domain containing 6	KCTD6	701810
Potassium channel tetramerization domain containing 9	KCTD9	711515
Potassium channel, inwardly rectifying subfamily J, member 11	KCNJ11	696722
Potassium channel, inwardly rectifying subfamily J, member 5	KCNJ5	714799
Potassium channel, inwardly rectifying subfamily J, member 8	KCNJ8	706369
Potassium channel, two pore domain subfamily K, member 16	KCNK16	719585
Potassium channel, voltage gated eag related subfamily H,	KCNH3	710838

member 3		
Potassium channel, voltage gated Shaw related subfamily C, member 2	KCNC2	100430904
Potassium voltage-gated channel, modifier subfamily S, member 1	KCNS1	711715
PR domain containing 1, with ZNF domain	PRDM1	696757
PR domain containing 2, with ZNF domain	PRDM2	716295
PR domain containing 4	PRDM4	704529
Praja ring finger 1, E3 ubiquitin protein ligase	PJA1	695038
Pre-B-cell leukemia homeobox 4	PBX4	106994672
Prefoldin subunit 2	PFDN2	719886
Prefoldin subunit 5	PFDN5	702355
Prefoldin subunit 6	PFDN6	718253
Pre-mrna processing factor 40 homolog A	PRPF40A	696668
Presenilin 1	PSEN1	696274
Presenilin enhancer gamma secretase subunit	PSENEN	100429008
Presequence translocase-associated motor 16 homolog (S. Cerevisiae)	PAM16	704987
Prion protein	PRNP	717859
Progesterone receptor membrane component 1	PGRMC1	711792
Progestin and adipoq receptor family member VIII	PAQR8	708418
Programmed cell death 2	PDCD2	696380
Programmed cell death 2-like	PDCD2L	705688
Programmed cell death 5	PDCD5	702277
Programmed cell death 6	PDCD6	723043
Programmed cell death 7	PDCD7	708758
Prohibitin	PHB	699334
Prohibitin 2	PHB2	714693
Prolactin releasing hormone	PRLH	694941
Proliferating cell nuclear antigen	PCNA	718006
Proline and serine rich 1	PROSER1	696606
Proline rich 15	PRR15	696869
Proline rich 3	PRR3	711699
Proline rich Gla (G-carboxyglutamic acid) 1	PRRG1	696938
Proline, glutamate and leucine rich protein 1	PELP1	677854
Proline/serine-rich coiled-coil 1	PSRC1	698060
Proline-rich coiled-coil 1	PRRC1	704248
Prolyl 4-hydroxylase, alpha polypeptide II	P4HA2	707157
Prolylcarboxypeptidase	PRCP	701305
Proopiomelanocortin	POMC	694430
Propionyl-coa carboxylase beta subunit	PCCB	716964
Prostaglandin D2 receptor (DP)	PTGDR	707918
Prostaglandin D2 receptor 2	PTGDR2	695853
Prostaglandin D2 synthase	PTGDS	707990
Proteasomal ATPase associated factor 1	PAAF1	718755
Proteasome (prosome, macropain) assembly chaperone 1	PSMG1	715758
Proteasome (prosome, macropain) assembly chaperone 2	PSMG2	717110
Proteasome (prosome, macropain) assembly chaperone 3	PSMG3	697590

Proteasome 26S subunit, ATPase 4	PSMC4	699847
Proteasome 26S subunit, non-ATPase 1	PSMD1	711724
Proteasome 26S subunit, non-ATPase 12	PSMD12	718756
Proteasome 26S subunit, non-ATPase 6	PSMD6	698601
Proteasome 26S subunit, non-ATPase 7	PSMD7	705581
Proteasome activator subunit 2	PSME2	715288
Proteasome subunit alpha 2	PSMA2	701683
Proteasome subunit alpha 3	PSMA3	700251
Proteasome subunit alpha 4	PSMA4	710417
Proteasome subunit alpha 5	PSMA5	698435
Proteasome subunit alpha 6	PSMA6	695113
Proteasome subunit beta 10	PSMB10	701088
Proteasome subunit beta 2	PSMB2	712193
Proteasome subunit beta 4	PSMB4	710734
Proteasome subunit beta 7	PSMB7	694567
Proteasome subunit beta 9	PSMB9	716980
Protection of telomeres 1	POT1	696751
Protein disulfide isomerase family A member 5	PDIA5	715226
Protein kinase C, gamma	PRKCG	720263
Protein kinase, AMP-activated, alpha 2 catalytic subunit	PRKAA2	717703
Protein kinase, AMP-activated, beta 1 non-catalytic subunit	PRKAB1	695737
Protein kinase, interferon-inducible double stranded RNA dependent activator	PRKRA	703063
Protein odr-4 homolog	C1H1orf27	713801
Protein O-glucosyltransferase 1	POGLUT1	712357
Protein phosphatase 1 regulatory subunit 12C	PPP1R12C	698538
Protein phosphatase 1 regulatory subunit 15A	PPP1R15A	718350
Protein phosphatase 1 regulatory subunit 35	PPP1R35	712067
Protein phosphatase 2 regulatory subunit B', gamma	PPP2R5C	718894
Protein phosphatase 2 regulatory subunit B'', gamma	PPP2R3C	694616
Protein phosphatase 2, catalytic subunit, beta isozyme	PPP2CB	695118
Protein phosphatase 3, catalytic subunit, gamma isozyme	PPP3CC	708233
Protein phosphatase, Mg ²⁺ /Mn ²⁺ dependent 1A	PPM1A	702987
Protein phosphatase, Mg ²⁺ /Mn ²⁺ dependent 1B	PPM1B	713918
Protein phosphatase, Mg ²⁺ /Mn ²⁺ dependent 1F	PPM1F	698441
Protein phosphatase, Mg ²⁺ /Mn ²⁺ dependent 1G	PPM1G	700695
Protein serine kinase H1	PSKH1	700845
Protein tyrosine kinase 2 beta	PTK2B	712787
Protein tyrosine phosphatase type IVA, member 2	PTP4A2	706489
Protein tyrosine phosphatase, non-receptor type 1	PTPN1	702016
Protein tyrosine phosphatase, non-receptor type 12	PTPN12	721538
Protein tyrosine phosphatase, non-receptor type 4 (megakaryocyte)	PTPN4	695516
Proteinase 3	PRTN3	721131
Protein-L-isoaspartate (D-aspartate) O-methyltransferase	PCMT1	695893
Proteoglycan 3	PRG3	706381
Protocadherin alpha 5	PCDHA5	692083
Protocadherin alpha 7	PCDHA7	698370

Protoporphyrinogen oxidase	PPOX	719910
Pumilio RNA binding family member 1	PUM1	704848
Pumilio RNA binding family member 2	PUM2	701782
PWP2 periodic tryptophan protein homolog (yeast)	PWP2	722216
Pyruvate dehydrogenase (lipoamide) alpha 1	PDHA1	100423992
Pyruvate dehydrogenase (lipoamide) beta	PDHB	574227
Rab geranylgeranyltransferase, beta subunit	RABGGTB	705421
RAB, member of RAS oncogene family-like 2B	RABL2B	716615
RAB11B, member RAS oncogene family	RAB11B	707462
RAB18, member RAS oncogene family	RAB18	708843
RAB19, member RAS oncogene family	RAB19	716684
RAB23, member RAS oncogene family	RAB23	712860
RAB30, member RAS oncogene family	RAB30	701550
RAB38, member RAS oncogene family	RAB38	705189
RAB3A interacting protein	RAB3IP	717215
RAB4A, member RAS oncogene family	RAB4A	694288
RAB5A, member RAS oncogene family	RAB5A	697712
RAB5B, member RAS oncogene family	RAB5B	708347
RAB6A, member RAS oncogene family	RAB6A	718717
Rac gtpase activating protein 1	RACGAP1	711887
RAD17 checkpoint clamp loader component	RAD17	700116
RAD50 interactor 1	RINT1	698414
RAD51 associated protein 1	RAD51AP1	710918
RAD51 paralog C	RAD51C	714828
RAD52 motif containing 1	RDM1	716624
RAD9 checkpoint clamp component A	RAD9A	712345
RAD9-HUS1-RAD1 interacting nuclear orphan 1	RHNO1	709008
Raf-1 proto-oncogene, serine/threonine kinase	RAF1	694725
Raftlin, lipid raft linker 1	RFTN1	695142
Ral GEF with PH domain and SH3 binding motif 1	RALGPS1	708253
Ral gtpase activating protein, alpha subunit 1 (catalytic)	RALGAPA1	695674
Ral guanine nucleotide dissociation stimulator	RALGDS	714436
RALBP1 associated Eps domain containing 2	REPS2	721024
RALY heterogeneous nuclear ribonucleoprotein	RALY	713317
RAN binding protein 10	RANBP10	700911
RAN binding protein 6	RANBP6	715799
RAN guanine nucleotide release factor	RANGRF	717206
Rap guanine nucleotide exchange factor 2	RAPGEF2	704717
RAS and EF-hand domain containing	RASEF	708296
Ras association (ralgds/AF-6) domain family member 4	RASSF4	706096
Ras homolog enriched in brain like 1	RHEBL1	709384
Ras homolog family member C	RHOC	706034
Ras homolog family member D	RHOD	712969
Ras homolog family member J	RHOJ	705603
Ras homolog family member V	RHOV	704675
RAS p21 protein activator (gtpase activating protein) 1	RASA1	694085
RAS protein activator like 2	RASAL2	718958
Rasgef domain family member 1C	RASGEF1C	706085

RAS-like family 10 member A	RASL10A	714587
Ras-like without CAAX 1	RIT1	717985
Ras-related associated with diabetes	RRAD	695086
Ras-related GTP binding C	RRAGC	715549
RB1 inducible coiled-coil 1	RB1CC1	710330
Rearranged L-myc fusion	RLF	693503
Receptor (G protein-coupled) activity modifying protein 1	RAMP1	574329
Receptor interacting serine/threonine kinase 4	RIPK4	715077
Recombination activating gene 1	RAG1	697322
Recq helicase-like	RECQL	705871
Regenerating family member 3 gamma	REG3G	711637
Regucalcin	RGN	705733
Regulation of nuclear pre-mrna domain containing 1A	RPRD1A	709217
Regulator of G-protein signaling 7	RGS7	707747
Regulator of G-protein signaling like 1	RGSL1	715693
Regulator of microtubule dynamics 1	RMDN1	694237
Renin	REN	574299
Replication protein A3	RPA3	696248
Replication timing regulatory factor 1	RIF1	694817
REST corepressor 3	RCOR3	712037
Retbindin	RTBDN	716766
Reticulon 4	RTN4	619181
Reticulon 4 interacting protein 1	RTN4IP1	697236
Retinal outer segment membrane protein 1	ROM1	100426296
Retinaldehyde binding protein 1	RLBP1	699510
Retinoblastoma binding protein 4	RBBP4	708710
Retinoblastoma binding protein 8	RBBP8	677718
Retinoic acid induced 1	RAI1	699215
Retinoid X receptor gamma	RXRG	694807
Retinol dehydrogenase 10 (all-trans)	RDH10	695791
Retinol dehydrogenase 5 (11-cis/9-cis)	RDH5	709644
Reversion-inducing-cysteine-rich protein with kazal motifs	RECK	694043
REX1, RNA exonuclease 1 homolog	REXO1	708931
RFT1 homolog	RFT1	694586
Rho family gtpase 3	RND3	694168
Rho gtpase activating protein 21	ARHGAP21	706428
Rho guanine nucleotide exchange factor 1	ARHGEF1	722198
Rho guanine nucleotide exchange factor 10	ARHGEF10	722745
Rhomboid 5 homolog 2 (Drosophila)	RHBDF2	707033
Ribonuclease P/MRP 21kda subunit	RPP21	713056
Ribonuclease P/MRP 40kda subunit	RPP40	710505
Ribonuclease T2	RNASET2	706533
Ribonuclease, rnase A family, k6	RNASE6	704579
Ribophorin II	RPN2	708971
Ribosomal modification protein rimk-like family member A	RIMKLA	699767
Ribosomal protein l10a	RPL10A	718783
Ribosomal protein L17	RPL17	698967
Ribosomal protein L22	RPL22	703050

Ribosomal protein L23	RPL23	694719
Ribosomal protein l23a	RPL23A	710490
Ribosomal protein L24	RPL24	702381
Ribosomal protein L26	RPL26	717378
Ribosomal protein L26 like 1	RPL26L1	703230
Ribosomal protein L27	RPL27	712352
Ribosomal protein l27a	RPL27A	708863
Ribosomal protein L3	RPL3	707176
Ribosomal protein L35	RPL35	693604
Ribosomal protein l35a	RPL35A	714858
Ribosomal protein L4	RPL4	710590
Ribosomal protein l7a	RPL7A	722215
Ribosomal protein L8	RPL8	708535
Ribosomal protein S10	RPS10	718606
Ribosomal protein S11	RPS11	718844
Ribosomal protein S13	RPS13	697513
Ribosomal protein S14	RPS14	710901
Ribosomal protein S16	RPS16	697219
Ribosomal protein S17-like	RPS17L	100425104
Ribosomal protein S19 binding protein 1	RPS19BP1	704079
Ribosomal protein S2	RPS2	693615
Ribosomal protein S21	RPS21	699565
Ribosomal protein S27	RPS27	106992520
Ribosomal protein S27 like	RPS27L	705483
Ribosomal protein s27a	RPS27A	718909
Ribosomal protein S28	RPS28	707133
Ribosomal protein S4, X-linked	RPS4X	699397
Ribosomal protein S5	RPS5	711259
Ribosomal protein S7	RPS7	721900
Ribosomal protein S8	RPS8	703957
Ribosomal protein, large, P0	RPLP0	574363
Ribosomal protein, large, P1	RPLP1	695442
Ribosomal protein, large, P2	RPLP2	700698
Ribosomal RNA adenine dimethylase domain containing 1	RRNAD1	718599
Ribosomal RNA processing 12 homolog	RRP12	705854
Ribosomal RNA processing 8, methyltransferase, homolog (yeast)	RRP8	712011
Ribosome production factor 1 homolog	RPF1	710286
Ring finger and WD repeat domain 2, E3 ubiquitin protein ligase	RFWD2	708802
Ring finger protein (C3H2C3 type) 6	RNF6	721550
Ring finger protein 10	RNF10	697428
Ring finger protein 112	RNF112	703312
Ring finger protein 115	RNF115	697067
Ring finger protein 130	RNF130	715356
Ring finger protein 14	RNF14	705363
Ring finger protein 146	RNF146	712152
Ring finger protein 152	RNF152	699091
Ring finger protein 167	RNF167	710656
Ring finger protein 182	RNF182	707517

Ring finger protein 185	RNF185	718351
Ring finger protein 219	RNF219	697577
Ring finger protein 34, E3 ubiquitin protein ligase	RNF34	700062
Ring finger protein 38	RNF38	693346
RNA 2',3'-cyclic phosphate and 5'-OH ligase	RTCB	717258
RNA binding motif protein 10	RBM10	711791
RNA binding motif protein 15	RBM15	701414
RNA binding motif protein 17	RBM17	712996
RNA binding motif protein 22	RBM22	712713
RNA binding motif protein 38	RBM38	696583
RNA binding motif protein 39	RBM39	704198
RNA binding motif protein 45	RBM45	702714
RNA binding motif protein 5	RBM5	704114
RNA exonuclease 2	REXO2	695292
RNA polymerase II associated protein 3	RPAP3	703749
RNA pseudouridylate synthase domain containing 3	RPUSD3	700349
RPTOR independent companion of MTOR, complex 2	RICTOR	694915
Runt-related transcription factor 1; translocated to, 1 (cyclin D-related)	RUNX1T1	696934
Ruvb-like AAA ATPase 2	RUVBL2	100428792
RWD domain containing 2A	RWDD2A	694598
RWD domain containing 3	RWDD3	709817
SAC1 suppressor of actin mutations 1-like (yeast)	SACM1L	714107
SAGA complex associated factor 29	SGF29	709124
SAM and SH3 domain containing 3	SASH3	702089
Sarcoglycan epsilon	SGCE	700104
Sarcolemma associated protein	SLMAP	703086
Scm-like with four mbt domains 1	SFMBT1	694961
SCY1-like, kinase-like 2	SCYL2	695284
SCY1-like, kinase-like 3	SCYL3	701768
SEC13 homolog, nuclear pore and COPII coat complex component	SEC13	697339
SEC22 homolog A, vesicle trafficking protein	SEC22A	715277
SEC22 homolog C, vesicle trafficking protein	SEC22C	716351
Sec23 homolog B, COPII coat complex component	SEC23B	698440
SEC24 homolog C, COPII coat complex component	SEC24C	714688
SEC31 homolog A, COPII coat complex component	SEC31A	693687
Sec61 translocon alpha 1 subunit	SEC61A1	709787
Sec61 translocon alpha 2 subunit	SEC61A2	100427728
Sec61 translocon beta subunit	SEC61B	717815
Sec61 translocon gamma subunit	SEC61G	716898
Secernin 3	SCRN3	698199
SECIS binding protein 2	SECISBP2	697442
Secreted frizzled-related protein 1	SFRP1	702876
Secretion associated, Ras related gtpase 1A	SAR1A	711277
Sel-1 suppressor of lin-12-like 3 (C. Elegans)	SEL1L3	695033
Selectin P	SELP	701277
Selenoprotein K	SELK	693421

Selenoprotein M	SELM	718290
Semenogelin I pseudogene	SEMG1P	100424776
Serglycin	SRGN	712299
Serine carboxypeptidase 1	SCPEP1	708197
Serine dehydratase-like	SDSL	714721
Serine hydroxymethyltransferase 1 (soluble)	SHMT1	701186
Serine incorporator 1	SERINC1	713999
Serine palmitoyltransferase small subunit A	SPTSSA	717580
Serine peptidase inhibitor, Kunitz type, 2	SPINT2	714755
Serine/arginine-rich splicing factor 1	SRSF1	713958
Serine/arginine-rich splicing factor 12	SRSF12	700497
Serine/arginine-rich splicing factor 3	SRSF3	719123
Serine/arginine-rich splicing factor 4	SRSF4	717401
Serine/arginine-rich splicing factor 5	SRSF5	712867
Serine/arginine-rich splicing factor 7	SRSF7	713388
Serine/arginine-rich splicing factor 8	SRSF8	699079
Serine/threonine kinase 3	STK3	707425
Serine/threonine protein kinase 26	STK26	707739
Serine/threonine/tyrosine kinase 1	STYK1	717844
Serpin peptidase inhibitor, clade B (ovalbumin), member 1	SERPINB1	707471
Serpin peptidase inhibitor, clade B (ovalbumin), member 11	SERPINB11	701449
Serpin peptidase inhibitor, clade G (C1 inhibitor), member 1	SERPING1	703928
Serpin peptidase inhibitor, clade I (neuroserpin), member 1	SERPINI1	699483
SERPINE1 mrna binding protein 1	SERBP1	700797
Serum amyloid A like 1	SAAL1	695747
Sestrin 1	SESN1	700232
SET and MYND domain containing 2	SMYD2	709375
SET and MYND domain containing 3	SMYD3	703402
SET domain containing 2	SETD2	711825
SET domain containing 5	SETD5	704174
SET domain containing 9	SETD9	708019
SFI1 centrin binding protein	SFI1	716833
SFT2 domain containing 3	SFT2D3	699830
SGT1 homolog, MIS12 kinetochore complex assembly cochaperone	SUGT1	694046
SH2B adaptor protein 2	SH2B2	714861
SH3 domain binding glutamate-rich protein	SH3BGR	722581
SH3 domain containing ring finger 1	SH3RF1	694082
SH3-domain binding protein 1	SH3BP1	700647
SH3-domain binding protein 4	SH3BP4	693393
SH3-domain GRB2-like endophilin B1	SH3GLB1	712393
SHC (Src homology 2 domain containing) transforming protein 1	SHC1	718982
Shroom family member 3	SHROOM3	699613
Siah E3 ubiquitin protein ligase 1	SIAH1	716629
Sialic acid binding Ig-like lectin 1, sialoadhesin	SIGLEC1	717470
Sialic acid binding Ig-like lectin 10	SIGLEC10	719648
Sideroflexin 1	SFXN1	695107

Sideroflexin 2	SFXN2	713841
Sideroflexin 4	SFXN4	702765
Signal peptidase complex subunit 1	SPCS1	696426
Signal peptide, CUB domain, EGF-like 2	SCUBE2	708152
Signal recognition particle 68kda	SRP68	705568
Signal sequence receptor, alpha	SSR1	693818
Signal sequence receptor, beta (translocon-associated protein beta)	SSR2	719383
Signal sequence receptor, delta	SSR4	697266
Signal transducing adaptor family member 1	STAP1	711834
Sin3A associated protein 18kda	SAP18	703078
Sin3A associated protein 25kda	SAP25	106997576
Sin3A associated protein 30kda	SAP30	696519
Single-stranded DNA binding protein 1, mitochondrial	SSBP1	694459
SIVA1, apoptosis-inducing factor	SIVA1	706688
SIX homeobox 4	SIX4	703798
Sjogren syndrome nuclear autoantigen 1	SSNA1	706507
SKI-like proto-oncogene	SKIL	696680
SLIT and NTRK like family member 1	SLITRK1	699217
SMAD family member 2	SMAD2	697581
Smad nuclear interacting protein 1	SNIP1	713733
Small nuclear ribonucleoprotein D2 polypeptide	SNRPD2	715183
Small nuclear ribonucleoprotein polypeptide E	SNRPE	701418
Small nuclear ribonucleoprotein polypeptide G	SNRPG	702586
Small nuclear ribonucleoprotein polypeptides B and B1	SNRPB	716578
Small ubiquitin-like modifier 1	SUMO1	703644
SMG7 nonsense mediated mrna decay factor	SMG7	717603
SMG8 nonsense mediated mrna decay factor	SMG8	711172
Smoothelin	SMTN	716424
SMYD family member 5	SMYD5	705926
SNAP-associated protein	SNAPIN	715546
SNRPN upstream reading frame	SNURF	711028
Sodium channel modifier 1	SCNM1	709922
Sodium channel, non voltage gated 1 beta subunit	SCNN1B	700093
Solute carrier family 1 (neuronal/epithelial high affinity glutamate transporter, system Xag), member 1	SLC1A1	694947
Solute carrier family 13 (sodium/sulfate symporter), member 4	SLC13A4	708744
Solute carrier family 16 member 11	SLC16A11	721775
Solute carrier family 18 (vesicular monoamine transporter), member 2	SLC18A2	701133
Solute carrier family 2 (facilitated glucose transporter), member 13	SLC2A13	697822
Solute carrier family 2 (facilitated glucose transporter), member 3	SLC2A3	715915
Solute carrier family 2 (facilitated glucose transporter), member 4	SLC2A4	714701
Solute carrier family 20 (phosphate transporter), member 1	SLC20A1	699462
Solute carrier family 22 (organic anion transporter), member 6	SLC22A6	718377

Solute carrier family 22 member 17	SLC22A17	713765
Solute carrier family 22 member 18	SLC22A18	721230
Solute carrier family 24 (sodium/potassium/calcium exchanger), member 2	SLC24A2	711896
Solute carrier family 25 (aspartate/glutamate carrier), member 12	SLC25A12	695173
Solute carrier family 25 (carnitine/acylcarnitine translocase), member 20	SLC25A20	709029
Solute carrier family 25 (mitochondrial carrier; adenine nucleotide translocator), member 5	SLC25A5	693502
Solute carrier family 25 (mitochondrial carrier; phosphate carrier), member 24	SLC25A24	694803
Solute carrier family 25 (mitochondrial carrier; phosphate carrier), member 25	SLC25A25	698216
Solute carrier family 25 (mitochondrial oxoadipate carrier), member 21	SLC25A21	697370
Solute carrier family 25 (S-adenosylmethionine carrier), member 26	SLC25A26	697960
Solute carrier family 25 member 40	SLC25A40	705584
Solute carrier family 25 member 41	SLC25A41	702790
Solute carrier family 25 member 46	SLC25A46	705968
Solute carrier family 26 (anion exchanger), member 8	SLC26A8	719049
Solute carrier family 34 (type II sodium/phosphate cotransporter), member 2	SLC34A2	694217
Solute carrier family 35 (adenosine 3'-phospho 5'-phosphosulfate transporter), member B3	SLC35B3	698416
Solute carrier family 35 (UDP-galactose transporter), member A2	SLC35A2	711587
Solute carrier family 35 (UDP-glca/UDP-galnac transporter), member D1	SLC35D1	700175
Solute carrier family 35 member B1	SLC35B1	699953
Solute carrier family 37 (glucose-6-phosphate transporter), member 2	SLC37A2	712841
Solute carrier family 38 member 1	SLC38A1	702135
Solute carrier family 38 member 6	SLC38A6	704017
Solute carrier family 38 member 7	SLC38A7	707671
Solute carrier family 39 (zinc transporter), member 13	SLC39A13	713420
Solute carrier family 39 (zinc transporter), member 3	SLC39A3	711564
Solute carrier family 4 (anion exchanger), member 1, adaptor protein	SLC4A1AP	701783
Solute carrier family 4 (anion exchanger), member 2	SLC4A2	713966
Solute carrier family 4, sodium borate transporter, member 11	SLC4A11	718393
Solute carrier family 41 (magnesium transporter), member 1	SLC41A1	696944
Solute carrier family 41 member 3	SLC41A3	716921
Solute carrier family 44 member 3	SLC44A3	714768
Solute carrier family 44 member 4	SLC44A4	715779
Solute carrier family 46 member 2	SLC46A2	719542
Solute carrier family 5 (sodium/glucose cotransporter), member 2	SLC5A2	714228
Solute carrier family 51 beta subunit	SLC51B	708427

Solute carrier family 6 (neurotransmitter transporter), member 13	SLC6A13	705918
Solute carrier family 6 (neurotransmitter transporter), member 2	SLC6A2	613238
Solute carrier family 6 (neurotransmitter transporter), member 8	SLC6A8	698307
Solute carrier family 6 (neutral amino acid transporter), member 18	SLC6A18	723065
Solute carrier family 7 (amino acid transporter light chain, L system), member 8	SLC7A8	713511
Solute carrier family 9, subfamily A (NHE3, cation proton antiporter 3), member 3 regulator 2	SLC9A3R2	694658
Solute carrier family 9, subfamily A (NHE4, cation proton antiporter 4), member 4	SLC9A4	712136
Solute carrier family 9, subfamily B (NHA1, cation proton antiporter 1), member 1	SLC9B1	710949
Solute carrier organic anion transporter family member 2B1	SLCO2B1	694829
SON DNA binding protein	SON	704712
Sonic hedgehog	SHH	716553
Sorbin and SH3 domain containing 3	SORBS3	716198
Sorting nexin 1	SNX1	706544
Sorting nexin 11	SNX11	696913
Sorting nexin 13	SNX13	714019
Sorting nexin 14	SNX14	696632
Sorting nexin 3	SNX3	700989
Sorting nexin 33	SNX33	706309
SOS Ras/Rho guanine nucleotide exchange factor 2	SOS2	705601
SP110 nuclear body protein	SP110	714244
Sp2 transcription factor	SP2	694834
Sp3 transcription factor	SP3	699901
SPARC like 1	SPARCL1	701468
Spastic paraplegia 11 (autosomal recessive)	SPG11	712221
Spastic paraplegia 21 (autosomal recessive, Mast syndrome)	SPG21	712815
Spectrin, beta, non-erythrocytic 1	SPTBN1	716794
Spen family transcriptional repressor	SPEN	696205
Sperm acrosome associated 1	SPACA1	699611
Sperm antigen with calponin homology and coiled-coil domains 1-like	SPECC1L	707641
Sperm associated antigen 5	SPAG5	709400
Sperm flagellar 1	SPEF1	717547
Spermatid perinuclear RNA binding protein	STRBP	695402
Spermatogenesis associated 22	SPATA22	706060
Spermatogenesis associated 2-like	SPATA2L	699974
Spermatogenesis associated 5-like 1	SPATA5L1	713376
Spermatogenesis associated 7	SPATA7	693836
Spermatogenesis associated, serine rich 2 like	SPATS2L	699458
Spermidine/spermine N1-acetyltransferase 1	SAT1	697884
Spermine synthase	SMS	698179
Sphingomyelin phosphodiesterase 2	SMPD2	698865
Sphingosine-1-phosphate phosphatase 2	SGPP2	705674
Spla/ryanodine receptor domain and SOCS box containing 1	SPSB1	722211

Splicing factor 3a subunit 2	SF3A2	721469
Splicing factor 3b subunit 3	SF3B3	708939
Splicing factor 3b subunit 5	SF3B5	699863
Splicing factor 3b, subunit 1, 155kda	SF3B1	697773
Splicing factor 3b, subunit 4, 49kda	SF3B4	705655
Split hand/foot malformation (ectrodactyly) type 1	SHFM1	698349
SPRY domain containing 4	SPRYD4	713037
SPT4 homolog, DSIF elongation factor subunit	SUPT4H1	710214
SPT5 homolog, DSIF elongation factor subunit	SUPT5H	697337
Squamous cell carcinoma antigen recognized by T-cells 3	SART3	705552
Src-related kinase lacking C-terminal regulatory tyrosine and N-terminal myristylation sites	SRMS	719587
SRP receptor alpha subunit	SRPRA	714215
SR-related CTD-associated factor 11	SCAF11	701894
SRSF protein kinase 1	SRPK1	719039
SRY-box 11	SOX11	707983
SRY-box 13	SOX13	700802
ST3 beta-galactoside alpha-2,3-sialyltransferase 4	ST3GAL4	717792
Stabilizer of axonemal microtubules 1	SAXO1	712700
Staphylococcal nuclease and tudor domain containing 1	SND1	699542
Star related lipid transfer domain containing 3	STARD3	697212
Star related lipid transfer domain containing 5	STARD5	713308
STARD3 N-terminal like	STARD3NL	705212
Stathmin 1	STMN1	719733
Stathmin 2	STMN2	699264
Staufen double-stranded RNA binding protein 1	STAU1	704197
STE20-related kinase adaptor alpha	STRADA	717927
Sterile alpha motif domain containing 15	SAMD15	706090
Steroid-5-alpha-reductase, alpha polypeptide 1 (3-oxo-5 alpha-steroid delta 4-dehydrogenase alpha 1)	SRD5A1	695103
STIP1 homology and U-box containing protein 1, E3 ubiquitin protein ligase	STUB1	697105
Stomatin like 2	STOML2	698458
Storkhead box 2	STOX2	693692
Stratifin	SFN	715055
Strawberry notch homolog 2 (Drosophila)	SBNO2	721186
Striatin interacting protein 1	STRIP1	700799
Stromal cell derived factor 4	SDF4	699804
Stromal cell-derived factor 2	SDF2	716189
Structural maintenance of chromosomes 4	SMC4	702615
Structure specific recognition protein 1	SSRP1	706614
STT3A, subunit of the oligosaccharyltransferase complex (catalytic)	STT3A	717056
SUB1 homolog, transcriptional regulator	SUB1	701045
Succinate dehydrogenase complex assembly factor 2	SDHAF2	693401
Succinate dehydrogenase complex subunit A, flavoprotein (Fp)	SDHA	708018
Succinate dehydrogenase complex subunit B, iron sulfur (Ip)	SDHB	699810
Succinate dehydrogenase complex, subunit D, integral	SDHD	711326

membrane protein		
Succinate-coa ligase, GDP-forming, beta subunit	SUCLG2	697454
Sulfatase 2	SULF2	715937
Sulfiredoxin 1	SRXN1	714997
SUMO1 activating enzyme subunit 1	SAE1	717918
SUMO1/sentrin specific peptidase 5	SENP5	710223
SUMO1/sentrin specific peptidase 6	SENP6	716554
SUMO1/sentrin specific peptidase 7	SENP7	701453
SUN domain containing ossification factor	SUCO	705776
Superkiller viralicidic activity 2-like 2 (S. Cerevisiae)	SKIV2L2	706419
Superoxide dismutase 1, soluble	SOD1	574096
Superoxide dismutase 3, extracellular	SOD3	715931
Supervillin	SVIL	695267
Suppression of tumorigenicity 13 (colon carcinoma) (Hsp70 interacting protein)	ST13	705664
Suppression of tumorigenicity 7	ST7	704776
Suppressor of cytokine signaling 6	SOCS6	704108
Suppressor of cytokine signaling 7	SOCS7	693737
Suppressor of fused homolog (Drosophila)	SUFU	713576
Surfactant associated 2	SFTA2	714397
Surfeit 4	SURF4	100429960
SURP and G-patch domain containing 1	SUGP1	719772
Survival motor neuron domain containing 1	SMNDC1	694761
Survival of motor neuron 1, telomeric	SMN1	677703
SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 2	SMARCA2	696973
SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 5	SMARCA5	700614
SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily b, member 1	SMARCB1	699190
SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily e, member 1	SMARCE1	701310
SWT1, RNA endoribonuclease homolog	SWT1	714083
Synapse differentiation inducing 1	SYNDIG1	704737
Synaptophysin	SYP	715739
Synaptophysin-like 1	SYPL1	698350
Synaptopodin	SYNPO	711221
Synaptosome associated protein 47kda	SNAP47	696700
Synaptotagmin VII	SYT7	722368
Syndecan binding protein	SDCBP	698381
Synemin	SYNM	717194
Synovial sarcoma translocation gene on chromosome 18-like 2	SS18L2	716387
Syntaxin 1B	STX1B	714251
Syntaxin binding protein 3	STXBP3	699144
Syntaxin binding protein 6 (amisyn)	STXBP6	715357
Synuclein alpha interacting protein	SNCAIP	700372
Synuclein beta	SNCB	697484
Tafazzin	TAZ	574297

TAM41, mitochondrial translocator assembly and maintenance protein, homolog (S. Cerevisiae)	C3orf31	695998
TAO kinase 2	TAOK2	707777
TAR (HIV-1) RNA binding protein 1	TARBP1	712397
TAR (HIV-1) RNA binding protein 2	TARBP2	703294
Taspase 1	TASP1	694028
Taste 1 receptor member 1	TAS1R1	720987
TATA-box binding protein associated factor 10	TAF10	710022
TATA-box binding protein associated factor 12	TAF12	717135
TATA-box binding protein associated factor 5	TAF5	714558
TATA-box binding protein associated factor 5 like	TAF5L	693770
TATA-box binding protein associated factor 9	TAF9	700239
TATA-box binding protein associated factor, RNA polymerase I, D	TAF1D	696602
Tatd dnase domain containing 1	TATDN1	706095
Tax1 (human T-cell leukemia virus type I) binding protein 1	TAX1BP1	698103
TBC1 domain family member 15	TBC1D15	718743
TBC1 domain family member 17	TBC1D17	719093
TBC1 domain family member 25	TBC1D25	710596
TBC1 domain family member 9	TBC1D9	702230
TBK1 binding protein 1	TBKBP1	693913
T-box 21	TBX21	694044
T-cell activation rhogtpase activating protein	TAGAP	701690
T-cell acute lymphocytic leukemia 2	TAL2	712138
TCF3 (E2A) fusion partner (in childhood Leukemia)	TFPT	720296
T-complex 11, testis-specific	TCP11	718695
T-complex 11, testis-specific-like 1	TCP11L1	694899
Teashirt zinc finger homeobox 1	TSHZ1	703018
TEK tyrosine kinase, endothelial	TEK	707455
TELO2 interacting protein 1	TTI1	699930
Telomeric repeat binding factor 2, interacting protein	TERF2IP	712149
Tensin 4	TNS4	701075
TERF1 (TRF1)-interacting nuclear factor 2	TINF2	715812
Testin LIM domain protein	TES	706879
Testis expressed 10	TEX10	714536
Testis expressed 28	TEX28	699141
Testis expressed 30	TEX30	701917
Testis-specific serine kinase 2	TSSK2	711241
Testis-specific serine kinase 3	TSSK3	708182
Tetraspanin 3	TSPAN3	708428
Tetraspanin 8	TSPAN8	718622
Tetratricopeptide repeat domain 12	TTC12	693909
Tetratricopeptide repeat domain 27	TTC27	707021
Tetratricopeptide repeat domain 7B	TTC7B	696029
Tetratricopeptide repeat domain 9C	TTC9C	718583
TGF-beta activated kinase 1/MAP3K7 binding protein 1	TAB1	703409
TGF-beta activated kinase 1/MAP3K7 binding protein 2	TAB2	696875
THAP domain containing 7	THAP7	696208

THAP domain containing, apoptosis associated protein 3	THAP3	704946
Thioredoxin domain containing 11	TXNDC11	711826
Thioredoxin domain containing 12 (endoplasmic reticulum)	TXNDC12	712891
Thioredoxin domain containing 9	TXNDC9	709303
Thioredoxin like 1	TXNL1	695194
Thioredoxin like 4A	TXNL4A	698969
Thioredoxin-related transmembrane protein 4	TMX4	718375
Thiosulfate sulfurtransferase (rhodanese)	TST	698021
THO complex 1	THOC1	697954
THO complex 6	THOC6	700217
Thrombospondin 3	THBS3	717572
THUMP domain containing 2	THUMPD2	712045
Thy-1 cell surface antigen	THY1	705321
Thymidine phosphorylase	TYMP	716161
Thyroid hormone receptor interactor 11	TRIP11	697489
Thyroid hormone receptor interactor 12	TRIP12	710560
Thyroid hormone receptor interactor 4	TRIP4	707263
TIA1 cytotoxic granule-associated RNA binding protein	TIA1	702366
Titin-cap	TCAP	697327
TM2 domain containing 2	TM2D2	701007
TNF alpha induced protein 6	TNFAIP6	694699
TNF receptor associated factor 2	TRAF2	708391
TNF receptor associated factor 7	TRAF7	695415
TNF receptor-associated protein 1	TRAP1	706234
Tocopherol (alpha) transfer protein-like	TTPAL	712620
Topoisomerase (DNA) II alpha	TOP2A	700707
Topoisomerase (DNA) II beta	TOP2B	677709
Topoisomerase (DNA) II binding protein 1	TOPBP1	719054
Topoisomerase I binding, arginine/serine-rich, E3 ubiquitin protein ligase	TOPORS	703930
Torsin family 1, member A (torsin A)	TOR1A	722520
Torsin family 2, member A	TOR2A	700203
TP53 induced glycolysis regulatory phosphatase	TIGAR	721886
TPX2, microtubule-associated	TPX2	712961
TRAF family member associated NFKB activator	TANK	700942
TRAF3 interacting protein 2	TRAF3IP2	697530
TRAF3 interacting protein 3	TRAF3IP3	712895
Trafficking protein particle complex 11	TRAPPC11	702066
Trans-2,3-enoyl-coa reductase	TECR	718928
Transaldolase 1	TALDO1	720828
Transcription elongation factor A (SII)-like 3	TCEAL3	696692
Transcription elongation factor A (SII)-like 7	TCEAL7	695831
Transcription elongation factor A (SII)-like 8	TCEAL8	695496
Transcription elongation factor B (SIIL), polypeptide 1 (15kda, elongin C)	TCEB1	698922
Transcription factor A, mitochondrial	TFAM	701368
Transcription factor B1, mitochondrial	TFB1M	701830
Transcription factor binding to IGHM enhancer 3	TFE3	712161

Transducin (beta)-like 1 X-linked receptor 1	TBL1XR1	712740
Transducin (beta)-like 3	TBL3	693864
Transducin like enhancer of split 1	TLE1	707336
Transferrin receptor	TFRC	711568
Transformer 2 alpha homolog (Drosophila)	TRA2A	574247
Transformer 2 beta homolog (Drosophila)	TRA2B	574337
Transforming growth factor beta induced	TGFBI	712503
Transforming growth factor beta receptor associated protein 1	TGFBRAP1	713102
Transforming, acidic coiled-coil containing protein 2	TACC2	705497
Transforming, acidic coiled-coil containing protein 3	TACC3	712898
Transient receptor potential cation channel, subfamily M, member 5	TRPM5	705070
Transient receptor potential cation channel, subfamily V, member 4	TRPV4	709605
Translational activator of mitochondrially encoded cytochrome c oxidase I	TACO1	717828
Translocase of inner mitochondrial membrane 10 homolog B (yeast)	TIMM10B	711085
Translocase of inner mitochondrial membrane 17 homolog A (yeast)	TIMM17A	707001
Translocase of inner mitochondrial membrane 17 homolog B (yeast)	TIMM17B	714895
Translocase of inner mitochondrial membrane 44 homolog (yeast)	TIMM44	709800
Translocase of inner mitochondrial membrane 8 homolog B (yeast)	TIMM8B	711249
Translocase of inner mitochondrial membrane domain containing 1	TIMMDC1	712414
Translocase of outer mitochondrial membrane 6 homolog (yeast)	TOMM6	100423264
Translocase of outer mitochondrial membrane 70 homolog A (S. Cerevisiae)	TOMM70A	700347
Translocated promoter region, nuclear basket protein	TPR	713910
Transmembrane 4 L six family member 5	TM4SF5	709844
Transmembrane 6 superfamily member 2	TM6SF2	719756
Transmembrane 9 superfamily member 1	TM9SF1	715472
Transmembrane and immunoglobulin domain containing 3	TMIGD3	104564312
Transmembrane and ubiquitin-like domain containing 2	TMUB2	714541
Transmembrane channel like 8	TMC8	100423640
Transmembrane p24 trafficking protein 1	TMED1	713618
Transmembrane p24 trafficking protein 3	TMED3	711993
Transmembrane p24 trafficking protein 4	TMED4	699105
Transmembrane p24 trafficking protein 7	TMED7	100533192
Transmembrane phosphoinositide 3-phosphatase and tensin homolog 2	TPTE2	704870
Transmembrane protease, serine 13	TMPRSS13	698586
Transmembrane protein 104	TMEM104	698592
Transmembrane protein 115	TMEM115	702164
Transmembrane protein 125	TMEM125	699920
Transmembrane protein 126A	TMEM126A	702831

Transmembrane protein 126B	TMEM126B	702719
Transmembrane protein 132A	TMEM132A	695291
Transmembrane protein 135	TMEM135	704963
Transmembrane protein 136	TMEM136	706163
Transmembrane protein 138	TMEM138	693905
Transmembrane protein 141	TMEM141	721687
Transmembrane protein 145	TMEM145	709268
Transmembrane protein 14A	TMEM14A	708829
Transmembrane protein 14C	TMEM14C	697976
Transmembrane protein 165	TMEM165	696262
Transmembrane protein 168	TMEM168	702972
Transmembrane protein 175	TMEM175	696545
Transmembrane protein 204	TMEM204	701926
Transmembrane protein 208	TMEM208	697228
Transmembrane protein 216	TMEM216	693655
Transmembrane protein 218	TMEM218	100430360
Transmembrane protein 243	TMEM243	706405
Transmembrane protein 245	TMEM245	710299
Transmembrane protein 254	TMEM254	701130
Transmembrane protein 261	TMEM261	716818
Transmembrane protein 30A	TMEM30A	717907
Transmembrane protein 33	TMEM33	702063
Transmembrane protein 37	TMEM37	695060
Transmembrane protein 39B	TMEM39B	706700
Transmembrane protein 42	TMEM42	714654
Transmembrane protein 45B	TMEM45B	718735
Transmembrane protein 5	TMEM5	717102
Transmembrane protein 59	TMEM59	714942
Transmembrane protein 94	TMEM94	702374
Transmembrane protein, adipocyte associated 1	TPRA1	707221
Transporter 1, ATP-binding cassette, sub-family B (MDR/TAP)	TAP1	717726
Transportin 1	TNPO1	707195
Tribbles pseudokinase 1	TRIB1	693459
Tribbles pseudokinase 2	TRIB2	710966
Trinucleotide repeat containing 6C	TNRC6C	714829
Triokinase/FMN cyclase	TKFC	694117
Tripartite motif containing 11	TRIM11	694150
Tripartite motif containing 14	TRIM14	715418
Tripartite motif containing 24	TRIM24	710229
Tripartite motif containing 27	TRIM27	706129
Tripartite motif containing 3	TRIM3	710846
Tripartite motif containing 37	TRIM37	710934
Tripartite motif containing 41	TRIM41	708426
Tripartite motif containing 62	TRIM62	709927
Tripartite motif containing 72, E3 ubiquitin protein ligase	TRIM72	713623
Tripartite motif containing 8	TRIM8	713701
TRK-fused gene	TFG	700972
Trna 5-methylaminomethyl-2-thiouridylate methyltransferase	TRMU	714268

Trna isopentenyltransferase 1	TRIT1	716422
Trna methyltransferase 11 homolog	TRMT11	712712
Trna methyltransferase 11-2 homolog (S. Cerevisiae)	TRMT112	717676
Trna methyltransferase 6	TRMT6	718229
Trna methyltransferase O	TRMO	715609
Trna phosphotransferase 1	TRPT1	717911
Trna splicing endonuclease subunit 15	TSEN15	717481
Tropomodulin 4	TMOD4	709732
Tropomyosin 2 (beta)	TPM2	696604
Troponin T type 2 (cardiac)	TNNT2	709882
Tryptase gamma 1	TPSG1	100425752
TSC22 domain family member 1	TSC22D1	701076
TSPY-like 4	TSPYL4	716137
TSSK6 activating co-chaperone	TSACC	719490
Tubulin alpha 1a	TUBA1A	574194
Tubulin alpha 4a	TUBA4A	702583
Tubulin alpha like 3	TUBAL3	722506
Tubulin folding cofactor C	TBCC	696997
Tubulin folding cofactor E	TBCE	711476
Tubulin, alpha 1b	TUBA1B	709643
Tudor domain containing 3	TDRD3	696228
Tudor domain containing 7	TDRD7	641450
Tumor necrosis factor (ligand) superfamily, member 12	TNFSF12	100551504
Tumor protein D52-like 1	TPD52L1	716568
Tumor protein p53 binding protein 1	TP53BP1	710237
Tumor protein, translationally-controlled 1	TPT1	702155
Tumor suppressing subtransferable candidate 4	TSSC4	705185
Tumor suppressor candidate 3	TUSC3	701123
Twist family bhlh transcription factor 1	TWIST1	574278
Twist family bhlh transcription factor 2	TWIST2	697078
TWIST neighbor	TWISTNB	707781
Twisted gastrulation homolog 1 (Drosophila)	TWSG1	705804
Two pore segment channel 1	TPCN1	712964
Tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, beta	YWHAB	717788
Tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, eta	YWHAH	717016
Tyrosine hydroxylase	TH	721137
Tyrosine kinase, non-receptor, 1	TNK1	715180
Tyrosyl-DNA phosphodiesterase 2	TDP2	715162
Ubiquilin 1	UBQLN1	713525
Ubiquinol-cytochrome c reductase core protein II	UQCRC2	697967
Ubiquinol-cytochrome c reductase, 6.4kda subunit	UQCR	708396
Ubiquinol-cytochrome c reductase, complex III subunit VII, 9.5kda	UQCRQ	708950
Ubiquitin A-52 residue ribosomal protein fusion product 1	UBA52	720243
Ubiquitin B	UBB	696110
Ubiquitin conjugating enzyme E2 variant 1	UBE2V1	100425552

Ubiquitin conjugating enzyme E2A	UBE2A	693716
Ubiquitin conjugating enzyme E2D 4 (putative)	UBE2D4	707831
Ubiquitin conjugating enzyme E2E 3	UBE2E3	704530
Ubiquitin conjugating enzyme E2F (putative)	UBE2F	695394
Ubiquitin conjugating enzyme E2I	UBE2I	722434
Ubiquitin conjugating enzyme E2O	UBE2O	710529
Ubiquitin C-terminal hydrolase L3	UCHL3	697276
Ubiquitin like 5	UBL5	711015
Ubiquitin like 7	UBL7	702305
Ubiquitin like domain containing CTD phosphatase 1	UBLCP1	694476
Ubiquitin protein ligase E3 component n-recogin 7 (putative)	UBR7	698882
Ubiquitin protein ligase E3B	UBE3B	707324
Ubiquitin related modifier 1	URM1	722618
Ubiquitin specific peptidase 10	USP10	718471
Ubiquitin specific peptidase 13 (isopeptidase T-3)	USP13	708624
Ubiquitin specific peptidase 16	USP16	706403
Ubiquitin specific peptidase 2	USP2	705191
Ubiquitin specific peptidase 21	USP21	719894
Ubiquitin specific peptidase 25	USP25	716923
Ubiquitin specific peptidase 3	USP3	705973
Ubiquitin specific peptidase 38	USP38	700235
Ubiquitin specific peptidase 39	USP39	696217
Ubiquitin specific peptidase 51	USP51	705861
Ubiquitin specific peptidase 8	USP8	715523
Ubiquitination factor E4B	UBE4B	713348
Ubiquitin-like modifier activating enzyme 2	UBA2	705808
Ubiquitin-like modifier activating enzyme 3	UBA3	696493
Ubiquitin-like with PHD and ring finger domains 1	UHRF1	695531
U-box domain containing 5	UBOX5	717166
UBX domain protein 11	UBXN11	719826
UDP-Gal:betaglcnac beta 1,4- galactosyltransferase, polypeptide 3	B4GALT3	719920
UDP-glcna:betagal beta-1,3-N-acetylglucosaminyltransferase 2	B3GNT2	693396
UDP-glucose pyrophosphorylase 2	UGP2	695178
UDP-N-acetylglucosamine pyrophosphorylase 1	UAP1	720116
Unc-79 homolog (C. Elegans)	UNC79	699262
Unconventional SNARE in the ER 1 homolog (S. Cerevisiae)	USE1	718905
UPF3 regulator of nonsense transcripts homolog B (yeast)	UPF3B	694247
Up-regulated during skeletal muscle growth 5 homolog (mouse)	USMG5	100428448
Upstream binding protein 1 (LBP-1a)	UBP1	706283
Uromodulin	UMOD	695883
Uronyl-2-sulfotransferase	UST	697355
Urotensin 2 receptor	UTS2R	574245
USP6 N-terminal like	USP6NL	694275
UTP14, U3 small nucleolar ribonucleoprotein, homolog C (yeast)	UTP14C	709657
UTP6 small subunit processome component	UTP6	713361
UV radiation resistance associated	UVRAG	696601
Vac14 homolog (S. Cerevisiae)	VAC14	708741
Vaccinia related kinase 1	VRK1	704798

Vacuolar protein sorting 13 homolog C (<i>S. Cerevisiae</i>)	VPS13C	709080
Vacuolar protein sorting 4 homolog A (<i>S. Cerevisiae</i>)	VPS4A	705277
Vacuolar protein sorting 45 homolog (<i>S. Cerevisiae</i>)	VPS45	706035
Vacuolar protein sorting 72 homolog (<i>S. Cerevisiae</i>)	VPS72	709818
V-akt murine thymoma viral oncogene homolog 3	AKT3	714717
Valosin containing protein lysine (K) methyltransferase	VCPKMT	705487
Valyl-trna synthetase	VARS	715537
Vascular cell adhesion molecule 1	VCAM1	712036
Vasohibin 1	VASH1	703906
Vav guanine nucleotide exchange factor 1	VAV1	100424248
Vav guanine nucleotide exchange factor 3	VAV3	694685
Very low density lipoprotein receptor	VLDLR	574284
Vesicle associated membrane protein 7	VAMP7	704160
V-ets avian erythroblastosis virus E26 oncogene homolog 1	ETS1	714697
VGf nerve growth factor inducible	VGf	719578
Vitronectin	VTN	708499
V-myc avian myelocytomatosis viral oncogene neuroblastoma derived homolog	MYCN	698699
Voltage-dependent anion channel 1	VDAC1	710045
Voltage-dependent anion channel 2	VDAC2	704257
Von Willebrand factor A domain containing 1	VWA1	701765
VPS11, CORVET/HOPS core subunit	VPS11	702834
VPS26 retromer complex component B	VPS26B	694566
VPS29 retromer complex component	VPS29	709646
VPS33B interacting protein, apical-basolateral polarity regulator, spe-39 homolog	VIPAS39	706315
VPS8, CORVET complex subunit	VPS8	701567
V-ral simian leukemia viral oncogene homolog A (ras related)	RALA	703440
V-ral simian leukemia viral oncogene homolog B	RALB	695852
WAP four-disulfide core domain 10A	WFDC10A	717384
WAS protein family member 3	WASF3	709849
WD repeat containing, antisense to TP53	WRAP53	716125
WD repeat domain 11	WDR11	714990
WD repeat domain 12	WDR12	705623
WD repeat domain 19	WDR19	698866
WD repeat domain 20	WDR20	708533
WD repeat domain 26	WDR26	704911
WD repeat domain 3	WDR3	711960
WD repeat domain 35	WDR35	716638
WD repeat domain 4	WDR4	714230
WD repeat domain 47	WDR47	696942
WD repeat domain 53	WDR53	709710
WD repeat domain 6	WDR6	708505
WD repeat domain 61	WDR61	709971
WD repeat domain 70	WDR70	706130
WD repeat domain 74	WDR74	718460
WD repeat domain 75	WDR75	709104
WD repeat domain 77	WDR77	677686

WD repeat, sterile alpha motif and U-box domain containing 1	WDSUB1	699456
WDYHV motif containing 1	WDYHV1	704686
WEE1 G2 checkpoint kinase	WEE1	703760
Werner helicase interacting protein 1	WRNIP1	707250
Williams Beuren syndrome chromosome region 22	WBSCR22	720121
Wilms tumor 1 associated protein	WTAP	702295
Wingless-type MMTV integration site family member 10B	WNT10B	708906
Wingless-type MMTV integration site family member 11	WNT11	696845
Wiskott-Aldrich syndrome-like	WASL	696556
WSC domain containing 1	WSCD1	712488
WW domain binding protein 1	WBP1	709202
WW domain binding protein 11	WBP11	699451
WW domain binding protein 2	WBP2	704545
WW domain binding protein 5	WBP5	696661
WW domain containing adaptor with coiled-coil	WAC	715828
WW domain containing E3 ubiquitin protein ligase 2	WWP2	705464
X-box binding protein 1	XBP1	713863
Xeroderma pigmentosum, complementation group A	XPA	715705
X-linked Kx blood group	XK	696407
X-linked Kx blood group related, X-linked	XKRX	701721
XPA binding protein 2	XAB2	704109
X-ray repair complementing defective repair in Chinese hamster cells 6	XRCC6	707975
XRCC6 binding protein 1	XRCC6BP1	712932
Yae1 domain containing 1	YAE1D1	703786
Ybey metallopeptidase (putative)	YBEY	721807
YEATS domain containing 4	YEATS4	718376
Yip1 domain family member 4	YIPF4	706819
Yip1 interacting factor homolog A (S. Cerevisiae)	YIF1A	714486
Yippee like 3	YPEL3	708740
Zinc and ring finger 2, E3 ubiquitin protein ligase	ZNRF2	698413
Zinc finger (CCCH type), RNA binding motif and serine/arginine rich 2	ZRSR2	720986
Zinc finger and BTB domain containing 26	ZBTB26	698776
Zinc finger and BTB domain containing 33	ZBTB33	695801
Zinc finger and BTB domain containing 37	ZBTB37	708769
Zinc finger and BTB domain containing 39	ZBTB39	713914
Zinc finger and BTB domain containing 49	ZBTB49	712422
Zinc finger and BTB domain containing 5	ZBTB5	718482
Zinc finger and SCAN domain containing 2	ZSCAN2	695673
Zinc finger and SCAN domain containing 29	ZSCAN29	710414
Zinc finger and SCAN domain containing 32	ZSCAN32	702733
Zinc finger CCCH-type containing 12A	ZC3H12A	713604
Zinc finger CCCH-type containing 3	ZC3H3	708584
Zinc finger CCCH-type containing 7A	ZC3H7A	711984
Zinc finger protein 140	ZNF140	695171
Zinc finger protein 180	ZNF180	712493
Zinc finger protein 181	ZNF181	106992424

Zinc finger protein 207	ZNF207	100689488
Zinc finger protein 211	ZNF211	100429296
Zinc finger protein 22	ZNF22	706208
Zinc finger protein 221	ZNF221	100423744
Zinc finger protein 239	ZNF239	717737
Zinc finger protein 25	ZNF25	701129
Zinc finger protein 263	ZNF263	702166
Zinc finger protein 280D	ZNF280D	699509
Zinc finger protein 281	ZNF281	709466
Zinc finger protein 287	ZNF287	695524
Zinc finger protein 322	ZNF322	701098
Zinc finger protein 362	ZNF362	710013
Zinc finger protein 385A	ZNF385A	705436
Zinc finger protein 397	ZNF397	714878
Zinc finger protein 410	ZNF410	698124
Zinc finger protein 436	ZNF436	709638
Zinc finger protein 460	ZNF460	710080
Zinc finger protein 462	ZNF462	711489
Zinc finger protein 484	ZNF484	711976
Zinc finger protein 496	ZNF496	709694
Zinc finger protein 503	ZNF503	703912
Zinc finger protein 521	ZNF521	709169
Zinc finger protein 584	ZNF584	711420
Zinc finger protein 593	ZNF593	714086
Zinc finger protein 595	ZNF595	716693
Zinc finger protein 608	ZNF608	702182
Zinc finger protein 620	ZNF620	100423712
Zinc finger protein 622	ZNF622	100429384
Zinc finger protein 627	ZNF627	716820
Zinc finger protein 638	ZNF638	704418
Zinc finger protein 646	ZNF646	712774
Zinc finger protein 653	ZNF653	714754
Zinc finger protein 664	ZNF664	710703
Zinc finger protein 684	ZNF684	695691
Zinc finger protein 687	ZNF687	716590
Zinc finger protein 7	ZNF7	715735
Zinc finger protein 774	ZNF774	702985
Zinc finger protein 777	ZNF777	711987
Zinc finger protein 804B	ZNF804B	704561
Zinc finger protein 92	ZNF92	708683
Zinc finger RNA binding protein	ZFR	696882
Zinc finger with UFM1-specific peptidase domain	ZUFSP	718059
Zinc finger, AN1-type domain 2A	ZFAND2A	100426344
Zinc finger, AN1-type domain 3	ZFAND3	719346
Zinc finger, AN1-type domain 4	ZFAND4	708136
Zinc finger, C3H1-type containing	ZFC3H1	718671
Zinc finger, CCHC domain containing 11	ZCCHC11	713406
Zinc finger, CCHC domain containing 14	ZCCHC14	703833

Zinc finger, CCHC domain containing 17	ZCCHC17	705172
Zinc finger, CCHC domain containing 6	ZCCHC6	693660
Zinc finger, CCHC domain containing 7	ZCCHC7	716658
Zinc finger, CCHC domain containing 8	ZCCHC8	702359
Zinc finger, DHHC-type containing 12	ZDHHC12	722606
Zinc finger, DHHC-type containing 16	ZDHHC16	705982
Zinc finger, matrin-type 2	ZMAT2	697247
Zinc finger, matrin-type 5	ZMAT5	715058
Zinc finger, MYM-type 2	ZMYM2	721255
Zinc finger, MYM-type 3	ZMYM3	697147
Zinc finger, MYND-type containing 11	ZMYND11	708761
Zinc finger, RAN-binding domain containing 2	ZRANB2	703513
Zinc metalloproteinase STE24	ZMPSTE24	693765
Zona pellucida glycoprotein 3 (sperm receptor)	ZP3	719925
Zyxin	ZYX	706407

(4) Expressed in both groups 2a and 2c, not in group 2b

1-acylglycerol-3-phosphate O-acyltransferase 1	AGPAT1	717174
1-acylglycerol-3-phosphate O-acyltransferase 5	AGPAT5	716847
2,4-dienoyl-coa reductase 1, mitochondrial	DECR1	696035
2-phosphoxylose phosphatase 1	PXYLP1	715229
3-hydroxyacyl-coa dehydratase 1	HACD1	700635
3-oxoacyl-ACP synthase, mitochondrial	OXSM	703382
5'-3' exoribonuclease 2	XRN2	700934
5-hydroxytryptamine (serotonin) receptor 5A, G protein-coupled	HTR5A	716134
5'-nucleotidase, cytosolic IIIA	NT5C3A	708743
5-phosphohydroxy-L-lysine phospho-lyase	PHYKPL	702302
8-oxoguanine DNA glycosylase	OGG1	700481
Abhydrolase domain containing 12	ABHD12	705915
Abhydrolase domain containing 6	ABHD6	702384
Abhydrolase domain containing 8	ABHD8	718980
ABI family member 3	ABI3	698710
Acetyl-coa acetyltransferase 1	ACAT1	707653
Acetyl-coa acyltransferase 2	ACAA2	709350
Acetyl-coa carboxylase alpha	ACACA	714218
Acid phosphatase 6, lysophosphatidic	ACP6	710431
Acidic nuclear phosphoprotein 32 family member B	ANP32B	715508
Acidic residue methyltransferase 1	ARMT1	704570
Aconitase 1	ACO1	705075
Aconitase 2	ACO2	707441
Actin like 6A	ACTL6A	708935
Actin like 7B	ACTL7B	710750
Actin related protein 2/3 complex subunit 1A	ARPC1A	718635
Actin related protein 2/3 complex subunit 2	ARPC2	700536
Actin related protein 2/3 complex subunit 3	ARPC3	709199
Activating transcription factor 2	ATF2	699072

Activating transcription factor 4	ATF4	703965
Activin A receptor type I	ACVR1	697935
Acyl-coa binding domain containing 3	ACBD3	699311
Acyl-coa binding domain containing 6	ACBD6	716418
Acyl-coa dehydrogenase, C-4 to C-12 straight chain	ACADM	705168
Acyl-coa oxidase 1, palmitoyl	ACOX1	705197
Acyl-coa thioesterase 13	ACOT13	100335133
ADAM metallopeptidase domain 21	ADAM21	715640
ADAM metallopeptidase with thrombospondin type 1 motif 14	ADAMTS14	710154
ADAM metallopeptidase with thrombospondin type 1 motif 6	ADAMTS6	696021
ADAMTS like 5	ADAMTSL5	721290
Adaptor related protein complex 1 associated regulatory protein	AP1AR	700734
Adaptor related protein complex 3, sigma 1 subunit	AP3S1	696644
Adaptor related protein complex 4, beta 1 subunit	AP4B1	707634
Adaptor related protein complex 5, mu 1 subunit	AP5M1	701050
Adducin 1	ADD1	700805
Adducin 3	ADD3	677712
Adenosine deaminase, RNA-specific	ADAR	718759
Adenosine monophosphate deaminase 2	AMPD2	699561
Adenylate cyclase 4	ADCY4	714684
Adenylate kinase 3	AK3	694714
Adenylosuccinate synthase	ADSS	713580
Adhesion G protein-coupled receptor A3	ADGRA3	715618
Adhesion G protein-coupled receptor L2	ADGRL2	708998
Adhesion molecule with Ig-like domain 1	AMIGO1	698932
Adipocyte plasma membrane associated protein	APMAP	704948
Adipogenesis associated, Mth938 domain containing	AAMDC	699328
Adipogenesis regulatory factor	ADIRF	699173
Adiponectin receptor 2	ADIPOR2	707547
ADP ribosylation factor 4	ARF4	703432
ADP ribosylation factor gtpase activating protein 3	ARFGAP3	711160
ADP ribosylation factor guanine nucleotide exchange factor 1	ARFGEF1	704359
ADP ribosylation factor like gtpase 10	ARL10	696524
ADP ribosylation factor like gtpase 6	ARL6	696616
ADP ribosylation factor like gtpase 6 interacting protein 5	ARL6IP5	696360
ADP ribosylation factor like gtpase 8B	ARL8B	703201
ADP-ribosylhydrolase like 2	ADPRHL2	712758
Aftiphilin	AFTPH	696100
AHA1, activator of heat shock 90kda protein ATPase homolog 1 (yeast)	AHSA1	706547
Ajuba LIM protein	AJUBA	712865
A-kinase anchoring protein 1	AKAP1	708500
A-kinase anchoring protein 12	AKAP12	641446
A-kinase anchoring protein 2	AKAP2	709841
A-kinase anchoring protein 9	AKAP9	702970
AKT interacting protein	AKTIP	697107
Aladin WD repeat nucleoporin	AAAS	719095
Alanine--glyoxylate aminotransferase 2	AGXT2	699250

Aldehyde dehydrogenase 1 family member A1	ALDH1A1	702598
Aldehyde dehydrogenase 18 family member A1	ALDH18A1	703357
Aldo-keto reductase family 1, member B1 (aldose reductase)	AKR1B1	705957
ALG14, UDP-N-acetylglucosaminyltransferase subunit	ALG14	709630
ALG2, alpha-1,3/1,6-mannosyltransferase	ALG2	714850
ALG5, dolichyl-phosphate beta-glucosyltransferase	ALG5	694836
Alkb homolog 2, alpha-ketoglutarate-dependent dioxygenase	ALKBH2	706708
Alkb homolog 3, alpha-ketoglutarate-dependent dioxygenase	ALKBH3	715921
Alkb homolog 4, lysine demethylase	ALKBH4	715078
Alkb homolog 5, RNA demethylase	ALKBH5	700205
All-trans retinoic acid induced differentiation factor	ATRAID	699201
Alpha thalassemia/mental retardation syndrome X-linked	ATRX	705735
Alpha-2-macroglobulin	A2M	716834
Alpha-defensin 1A	MNP1A	574196
Aminoacylase 3	ACY3	711083
Aminoadipate-semialdehyde dehydrogenase-phosphopantetheinyl transferase	AASDHPPT	100328983
Aminoadipate-semialdehyde synthase	AASS	694594
Amino-terminal enhancer of split	AES	712353
Amino-terminal enhancer of split	AES	712353
Amphiphysin	AMPH	704559
Amylase, alpha 2B (pancreatic)	AMY2B	712893
Amyloid beta (A4) precursor protein-binding, family B, member 3	APBB3	698296
Amyloid beta (A4) precursor-like protein 2	APLP2	718819
Anaphase promoting complex subunit 15	ANAPC15	718333
Anaphase promoting complex subunit 2	ANAPC2	706384
Anaphase promoting complex subunit 4	ANAPC4	694006
Ancient ubiquitous protein 1	AUP1	710020
Androgen-induced 1	AIG1	700988
Angio associated migratory cell protein	AAMP	700763
Ankyrin 2, neuronal	ANK2	702180
Ankyrin 3, node of Ranvier (ankyrin G)	ANK3	699518
Ankyrin repeat and IBR domain containing 1	ANKIB1	703273
Ankyrin repeat and MYND domain containing 2	ANKMY2	709414
Ankyrin repeat and SOCS box containing 3	ASB3	716503
Ankyrin repeat domain 13C	ANKRD13C	702811
Ankyrin repeat domain 2 (stretch responsive muscle)	ANKRD2	707097
Ankyrin repeat domain 27	ANKRD27	716232
Ankyrin repeat domain 35	ANKRD35	706961
Ankyrin repeat domain 46	ANKRD46	705491
Ankyrin repeat domain 49	ANKRD49	697693
Ankyrin repeat domain 6	ANKRD6	701339
Annexin A1	ANXA1	702946
Annexin A11	ANXA11	707628
Annexin A2	ANXA2	706240
Annexin A3	ANXA3	697239
Annexin A7	ANXA7	707166
Anoctamin 10	ANO10	715666

Anoctamin 4	ANO4	695973
Anterior gradient 2, protein disulphide isomerase family member	AGR2	709127
Anterior gradient 3, protein disulphide isomerase family member	AGR3	714517
Anti-silencing function 1A histone chaperone	ASF1A	714761
APEX nuclease (apurinic/apyrimidinic endonuclease) 2	APEX2	702084
APEX nuclease (multifunctional DNA repair enzyme) 1	APEX1	702757
Apolipoprotein B mrna editing enzyme, catalytic polypeptide-like 3H	APOBEC3H	723811
Apolipoprotein O	APOO	698137
Apoptosis inducing factor, mitochondria associated 1	AIFM1	702773
Apoptosis inhibitor 5	API5	716346
Aprataxin	APTX	702671
Aquaporin 11	AQP11	698835
Arfgap with gtpase domain, ankyrin repeat and PH domain 1	AGAP1	693652
Arginine and glutamate rich 1	ARGLU1	702840
Arginine/serine-rich coiled-coil 2	RSRC2	706564
Arginine/serine-rich protein 1	RSRP1	712757
Arginine-glutamic acid dipeptide (RE) repeats	RERE	708902
Arginyltransferase 1	ATE1	705248
Arginyl-trna synthetase	RARS	698998
Arginyl-trna synthetase 2, mitochondrial	RARS2	699240
Armadillo repeat containing 9	ARMC9	711891
Armadillo repeat containing, X-linked 5	ARMCX5	100427780
Armadillo repeat gene deleted in velocardiofacial syndrome	ARVCF	712399
ARP2 actin-related protein 2 homolog (yeast)	ACTR2	697080
ARP3 actin-related protein 3 homolog B (yeast)	ACTR3B	715965
ARP5 actin-related protein 5 homolog (yeast)	ACTR5	698191
Arrestin, beta 1	ARRB1	695250
Arrestin, beta 2	ARRB2	709399
Artemin	ARTN	701641
ARV1 homolog, fatty acid homeostasis modulator	ARV1	713975
Aryl hydrocarbon receptor nuclear translocator like	ARNTL	700464
Asparagine synthetase (glutamine-hydrolyzing)	ASNS	697232
Aspartate beta-hydroxylase domain containing 1	ASPHD1	707467
Aspartate dehydrogenase domain containing	ASPDH	719609
Aspartoacylase	ASPA	706170
Aspartyl aminopeptidase	DNPEP	703180
Asteroid homolog 1 (Drosophila)	ASTE1	719271
Ataxin 2-like	ATXN2L	708359
ATP binding cassette subfamily A member 1	ABCA1	716146
ATP binding cassette subfamily C member 9	ABCC9	654489
ATP binding cassette subfamily D member 1	ABCD1	696794
ATP binding cassette subfamily E member 1	ABCE1	701945
ATP synthase F0 subunit 6	ATP6	2846629
ATP synthase mitochondrial F1 complex assembly factor 1	ATPAF1	708798
ATP synthase mitochondrial F1 complex assembly factor 2	ATPAF2	699709
ATP synthase, H+ transporting, mitochondrial F1 complex, alpha subunit 1, cardiac muscle	ATP5A1	701389

ATP synthase, H ⁺ transporting, mitochondrial F1 complex, beta polypeptide	ATP5B	713284
ATP synthase, H ⁺ transporting, mitochondrial F1 complex, delta subunit	ATP5D	705944
ATP synthase, H ⁺ transporting, mitochondrial F1 complex, gamma polypeptide 1	ATP5C1	713768
ATP synthase, H ⁺ transporting, mitochondrial F1 complex, O subunit	ATP5O	698480
ATP synthase, H ⁺ transporting, mitochondrial Fo complex subunit F6	ATP5J	708411
ATPase inhibitory factor 1	ATPIF1	716870
ATPase type 13A1	ATP13A1	100427506
ATPase, Ca ⁺⁺ transporting, plasma membrane 1	ATP2B1	709102
ATPase, H ⁺ transporting, lysosomal 14kda, V1 subunit F	ATP6V1F	702112
ATPase, H ⁺ transporting, lysosomal 21kda, V0 subunit b	ATP6V0B	702243
ATPase, H ⁺ transporting, lysosomal 31kda, V1 subunit E1	ATP6V1E1	709739
ATPase, H ⁺ transporting, lysosomal 9kda, V0 subunit e1	ATP6V0E1	703342
ATPase, H ⁺ transporting, lysosomal accessory protein 2	ATP6AP2	705048
ATPase, H ⁺ /K ⁺ exchanging, alpha polypeptide	ATP4A	100426215
ATPase, Na ⁺ /K ⁺ transporting, alpha 1 polypeptide	ATP1A1	710368
ATPase, Na ⁺ /K ⁺ transporting, beta 3 polypeptide	ATP1B3	716682
ATR interacting protein	ATRIP	710035
ATR serine/threonine kinase	ATR	714443
AT-rich interaction domain 2	ARID2	703823
AT-rich interaction domain 4B	ARID4B	718320
Aurora kinase A interacting protein 1	AURKAIP1	706329
Aurora kinase B	AURKB	721955
Aurora kinase C	AURKC	709801
Autophagy related 101	ATG101	696954
Autophagy related 16 like 1	ATG16L1	714092
Autophagy related 16 like 2	ATG16L2	717952
Autophagy related 2A	ATG2A	717290
Autophagy related 3	ATG3	708305
Autophagy related 4C, cysteine peptidase	ATG4C	695606
Autophagy related 4D, cysteine peptidase	ATG4D	713111
Autophagy related 5	ATG5	696874
Autophagy related 7	ATG7	696238
B9 protein domain 2	B9D2	704873
Bardet-Biedl syndrome 12	BBS12	710538
Bardet-Biedl syndrome 2	BBS2	700353
Bardet-Biedl syndrome 4	BBS4	704508
Bardet-Biedl syndrome 5	BBS5	709701
Basic leucine zipper and W2 domains 1	BZW1	701731
Basic leucine zipper and W2 domains 2	BZW2	714627
Basic transcription factor 3	BTF3	703339
B-cell CLL/lymphoma 6	BCL6	708736
B-cell CLL/lymphoma 7B	BCL7B	716470
B-cell receptor-associated protein 31	BCAP31	696663

B-cell translocation gene 1, anti-proliferative	BTG1	710112
BCL2 associated athanogene 3	BAG3	714420
BCL2/adenovirus E1B 19kda interacting protein 2	BNIP2	703234
BCL2-associated X protein	BAX	718948
BCS1-like (S. Cerevisiae)	BCS1L	699690
Beclin 1, autophagy related	BECN1	711649
BEN domain containing 5	BEND5	711150
BEN domain containing 6	BEND6	712498
Beta-1,3-galactosyltransferase 4	B3GALT4	718178
Beta-1,3-glucuronyltransferase 3	B3GAT3	718744
Beta-1,4-glucuronyltransferase 1	B4GAT1	714270
Beta-2-microglobulin	B2M	712428
Bicaudal D homolog 2 (Drosophila)	BICD2	706621
Bicaudal D homolog 2 (Drosophila)	BICD2	706621
Biliverdin reductase A	BLVRA	700980
Bisphosphoglycerate mutase	BPGM	706741
Bladder cancer associated protein	BLCAP	708044
BLOC-1 related complex subunit 5	BORCS5	696469
Bloom syndrome, recq helicase-like	BLM	703460
Bola family member 1	BOLA1	705297
Bola family member 3	BOLA3	707871
Bone morphogenetic protein 1	BMP1	707596
Bone morphogenetic protein 4	BMP4	694618
Bone morphogenetic protein/retinoic acid inducible neural-specific 1	BRINP1	701794
Bora, aurora kinase A activator	BORA	693798
BPI fold containing family A member 2	BPIFA2	710376
Brain and reproductive organ-expressed (TNFRSF1A modulator)	BRE	702365
Brain protein I3	BRI3	706525
Branched chain keto acid dehydrogenase E1, beta polypeptide	BCKDHB	718472
Branched chain ketoacid dehydrogenase kinase	BCKDK	712985
BRCA1 associated RING domain 1	BARD1	694301
BRCA2 and CDKN1A interacting protein	BCCIP	699437
BRISC and BRCA1 A complex member 1	BABAM1	718969
Bromo adjacent homology domain containing 1	BAHD1	702982
Bromodomain adjacent to zinc finger domain 1B	BAZ1B	716436
Bromodomain and PHD finger containing 3	BRPF3	718997
Bromodomain containing 1	BRD1	715059
Bromodomain containing 2	BRD2	717893
Bromodomain containing 7	BRD7	694850
Bruton agammaglobulinemia tyrosine kinase	BTK	703000
BRX1, biogenesis of ribosomes	BRX1	698745
BTB (POZ) domain containing 1	BTBD1	718696
BTG family member 3	BTG3	710579
BTG3 associated nuclear protein	BANP	696125
BUB3 mitotic checkpoint protein	BUB3	708033
Bystin like	BYSL	694976
C2CD2-like	C2CD2L	703424
Cache domain containing 1	CACHD1	701608

Cadherin 11, type 2, OB-cadherin (osteoblast)	CDH11	708826
Cadherin 2, type 1, N-cadherin (neuronal)	CDH2	711526
Cadherin related family member 2	CDHR2	697249
Calcitonin-related polypeptide alpha	CALCA	700649
Calcium and integrin binding family member 2	CIB2	709429
Calcium binding protein 39	CAB39	711166
Calcium binding tyrosine-(Y)-phosphorylation regulated	CABYR	701670
Calcium homeostasis endoplasmic reticulum protein	CHERP	718689
Calcium/calmodulin-dependent protein kinase II delta	CAMK2D	702504
Calcium/calmodulin-dependent protein kinase II gamma	CAMK2G	705980
Caldesmon 1	CALD1	707050
Calmin (calponin-like, transmembrane)	CLMN	709910
Calmodulin regulated spectrin associated protein family member 2	CAMSAP2	709092
Calnexin	CANX	704794
Calpain 10	CAPN10	716360
Calpain 15	CAPN15	695881
Calpain 2, (m/II) large subunit	CAPN2	703047
Calpain 3	CAPN3	707913
Calponin 3, acidic	CNN3	709538
Calreticulin	CALR	716910
Calumenin	CALU	699730
Camp responsive element binding protein 3	CREB3	696350
Camp responsive element binding protein 3-like 4	CREB3L4	715951
CAP, adenylate cyclase-associated protein 1 (yeast)	CAP1	693719
Capping protein (actin filament) muscle Z-line, alpha 1	CAPZA1	705653
Capping protein (actin filament), gelsolin-like	CAPG	695288
Caprin family member 2	CAPRIN2	693594
Carbamoyl-phosphate synthetase 2, aspartate transcarbamylase, and dihydroorotase	CAD	699460
Carbohydrate (chondroitin 4) sulfotransferase 13	CHST13	716548
Carbohydrate (keratan sulfate Gal-6) sulfotransferase 1	CHST1	715176
Carbohydrate (N-acetylgalactosamine 4-O) sulfotransferase 14	CHST14	703115
Carbohydrate (N-acetylgalactosamine 4-sulfate 6-O) sulfotransferase 15	CHST15	693845
Carbohydrate (N-acetylglucosamine 6-O) sulfotransferase 7	CHST7	704906
Carboxypeptidase A5	CPA5	702974
Carboxypeptidase N subunit 2	CPN2	106997189
Carboxypeptidase Q	CPQ	701711
Carboxypeptidase, vitellogenic-like	CPVL	697111
Cardiotrophin 1	CTF1	713850
Carnitine O-acetyltransferase	CRAT	716908
Carnitine palmitoyltransferase 1A (liver)	CPT1A	709837
Carnitine palmitoyltransferase 1B	CPT1B	720697
Carnitine palmitoyltransferase 2	CPT2	714150
Carnosine dipeptidase 1 (metallopeptidase M20 family)	CNDP1	695195
Cartilage acidic protein 1	CRTAC1	707486
Casein kinase 2, alpha 1 polypeptide	CSNK2A1	714841
Casein kinase 2, beta polypeptide	CSNK2B	715807

Caseinolytic mitochondrial matrix peptidase chaperone subunit	CLPX	708954
Caspase 1	CASP1	706568
Caspase 4	CASP4	704864
Caspase 8 associated protein 2	CASP8AP2	702294
Caspase 9	CASP9	694544
Caspase activity and apoptosis inhibitor 1	CAAP1	707992
Caspase recruitment domain family member 9	CARD9	710485
Cat eye syndrome chromosome region, candidate 5	CECR5	709197
Catalase	CAT	717406
Catechol-O-methyltransferase	COMT	712548
Catenin alpha-like 1	CTNNAL1	710389
Catenin beta 1	CTNNB1	574265
Catenin delta 1	CTNND1	704212
Cathepsin A	CTSA	708592
Cathepsin B	CTSB	100424758
Cathepsin C	CTSC	705320
Cathepsin L	CTSL	694569
Cation channel, sperm associated 2	CATSPER2	710876
Caudal type homeobox 1	CDX1	711837
Caudal type homeobox 4	CDX4	701374
Cbl proto-oncogene B, E3 ubiquitin protein ligase	CBLB	703879
CCAAT/enhancer binding protein (C/EBP), zeta	CEBPZ	712090
CCR4-NOT transcription complex subunit 1	CNOT1	712880
CCR4-NOT transcription complex subunit 3	CNOT3	693292
CCR4-NOT transcription complex subunit 7	CNOT7	702192
CD19 molecule	CD19	705211
CD1c molecule	CD1C	717148
CD2 (cytoplasmic tail) binding protein 2	CD2BP2	709961
CD200 molecule	CD200	708110
CD274 molecule	CD274	716043
CD2-associated protein	CD2AP	705221
CD300 molecule like family member f	CD300LF	703830
CD4 molecule	CD4	713807
CD58 molecule	CD58	710732
CD63 molecule	CD63	709828
CD7 molecule	CD7	719501
CD9 molecule	CD9	712262
CDC like kinase 3	CLK3	702511
CDC28 protein kinase regulatory subunit 1B	CKS1B	717164
CDGSH iron sulfur domain 1	CISD1	701716
CDK5 regulatory subunit associated protein 3	CDK5RAP3	695189
CDKN2A interacting protein N-terminal like	CDKN2AIPNL	710774
Cell cycle and apoptosis regulator 2	CCAR2	716288
Cell death-inducing DFFA-like effector b	CIDEB	100425328
Cell division cycle 123	CDC123	694239
Cell division cycle 16	CDC16	699089
Cell division cycle 23	CDC23	714000
Cell division cycle 25C	CDC25C	714115

Cell division cycle 26	CDC26	706165
Cell division cycle 37	CDC37	715390
Cell division cycle 37-like 1	CDC37L1	694831
Cell division cycle 5 like	CDC5L	703099
Cell division cycle 7	CDC7	704730
Cell division cycle and apoptosis regulator 1	CCAR1	693585
Cell division cycle associated 3	CDCA3	722088
Cell division cycle associated 5	CDCA5	721998
Cell division cycle associated 7	CDCA7	696474
Cell division cycle associated 8	CDCA8	719808
Cell growth regulator with ring finger domain 1	CGRRF1	695231
Centrin 2	CETN2	693376
Centrin 3	CETN3	695223
Centriolin	CNTRL	700200
Centromere protein C	CENPC	710620
Centromere protein F	CENPF	709000
Centromere protein J	CENPJ	721498
Centromere protein W	CENPW	712570
Centrosomal protein 192kda	CEP192	722121
Centrosomal protein 290kda	CEP290	708286
Centrosomal protein 41kda	CEP41	703215
Centrosomal protein 57kda-like 1	CEP57L1	700109
Centrosomal protein 70kda	CEP70	716263
Centrosomal protein 72kda	CEP72	708753
Centrosomal protein 83kda	CEP83	711408
Ceramide synthase 2	CERS2	716180
Ceramide synthase 5	CERS5	713449
Cerebellar degeneration related protein 2	CDR2	698974
CGG triplet repeat binding protein 1	CGGBP1	693920
Chaperonin containing TCP1, subunit 2 (beta)	CCT2	717182
Chaperonin containing TCP1, subunit 3 (gamma)	CCT3	718374
Chaperonin containing TCP1, subunit 8 (theta)	CCT8	706184
Charged multivesicular body protein 2A	CHMP2A	712059
Charged multivesicular body protein 4B	CHMP4B	709004
Charged multivesicular body protein 5	CHMP5	703191
Checkpoint kinase 2	CHEK2	713668
Chemokine (C-C motif) ligand 25	CCL25	574219
Chemokine (C-C motif) ligand 27	CCL27	574220
Chemokine (C-X-C motif) receptor 4	CXCR4	707329
Chemokine (C-X-C motif) receptor 4	CXCR4	707329
Chemokine-like factor	CKLF	693673
Chloride intracellular channel 4	CLIC4	712337
Choline/ethanolamine phosphotransferase 1	CEPT1	702700
Cholinergic receptor, nicotinic alpha 7	CHRNA7	574230
Chondroitin sulfate N-acetylgalactosaminyltransferase 2	CSGALNACT2	703703
Chromatin target of PRMT1	CHTOP	715501
Chromobox 1	CBX1	696673
Chromodomain helicase DNA binding protein 1	CHD1	702070

Chromodomain helicase DNA binding protein 3	CHD3	716508
Chromosome 1 open reading frame, human c1orf123	C1H1orf123	714201
Chromosome 1 open reading frame, human c1orf131	C1H1orf131	719141
Chromosome 1 open reading frame, human c1orf198	C1H1orf198	714084
Chromosome 1 open reading frame, human c1orf50	C1H1orf50	698058
Chromosome 1 open reading frame, human c1orf52	C1H1orf52	711232
Chromosome 1 open reading frame, human c1orf54	C1H1orf54	107000835
Chromosome 1 open reading frame, human c1orf74	C1H1orf74	713029
Chromosome 10 open reading frame, human c20orf27	C10H20orf27	717525
Chromosome 11 open reading frame, human c12orf4	C11H12orf4	710836
Chromosome 11 open reading frame, human c12orf66	C11H12orf66	717230
Chromosome 12 open reading frame, human c2orf47	C12H2orf47	699322
Chromosome 14 open reading frame, human c11orf68	C14H11orf68	715318
Chromosome 14 open reading frame, human c11orf73	C14H11orf73	704098
Chromosome 16 open reading frame, human c17orf49	C16H17orf49	713820
Chromosome 16 open reading frame, human c17orf62	C16H17orf62	716212
Chromosome 18 open reading frame, human c18orf21	C18H18orf21	715440
Chromosome 19 open reading frame, human c19orf53	C19H19orf53	720745
Chromosome 2 open reading frame, human c3orf18	C2H3orf18	701675
Chromosome 2 open reading frame, human c3orf52	C2H3orf52	100430016
Chromosome 2 open reading frame, human c3orf58	C2H3orf58	713830
Chromosome 20 open reading frame 24 ortholog	C10H20orf24	709696
Chromosome 20 open reading frame, human c16orf13	C20H16orf13	696495
Chromosome 20 open reading frame, human c16orf62	C20H16orf62	695027
Chromosome 20 open reading frame, human c16orf78	C20H16orf78	693672
Chromosome 3 open reading frame, human c21orf91	C3H21orf91	710406
Chromosome 3 open reading frame, human c7orf25	C3H7orf25	708455
Chromosome 3 open reading frame, human c7orf60	C3H7orf60	704714
Chromosome 4 open reading frame, human c6orf1	C4H6orf1	718551
Chromosome 4 open reading frame, human c6orf136	C4H6orf136	712108
Chromosome 4 open reading frame, human c6orf203	C4H6orf203	698108
Chromosome 4 open reading frame, human c6orf89	C4H6orf89	719165
Chromosome 5 open reading frame, human c4orf27	C5H4orf27	694607
Chromosome 6 open reading frame, human c5orf22	C6H5orf22	695901
Chromosome 6 open reading frame, human c5orf34	C6H5orf34	700618
Chromosome 7 open reading frame, human c14orf142	C7H14orf142	704509
Chromosome 7 open reading frame, human c14orf166	C7H14orf166	710094
Chromosome 8 open reading frame, human c8orf59	C8H8orf59	703464
Chromosome 8 open reading frame, human c8orf76	C8H8orf76	704150
Chromosome 9 open reading frame, human c10orf2	C9H10orf2	710958
Chromosome 9 open reading frame, human c10orf88	C9H10orf88	707385
Chromosome 9 open reading frame, human c10orf90	C9H10orf90	696655
Chromosome X open reading frame, human cxorf23	CXHXorf23	696449
Chromosome X open reading frame, human cxorf40a	CXHXorf40A	702659
Cilia and flagella associated protein 43	CFAP43	716031
Cilia and flagella associated protein 65	CFAP65	701296
Ciliary neurotrophic factor	CNTF	701907
Circadian associated repressor of transcription	CIART	706693

Citrate lyase beta like	CLYBL	699339
CKLF-like MARVEL transmembrane domain containing 8	CMTM8	704234
Clathrin, light chain A	CLTA	693659
Claudin 12	CLDN12	704058
Claudin 15	CLDN15	719637
Claudin 3	CLDN3	716771
Cleavage and polyadenylation factor I subunit 1	CLP1	705071
Cleavage and polyadenylation specific factor 4	CPSF4	708119
Cleavage stimulation factor, 3' pre-RNA, subunit 2	CSTF2	701235
Cleavage stimulation factor, 3' pre-RNA, subunit 3	CSTF3	694040
Cleft lip and palate associated transmembrane protein 1	CLPTM1	718306
Cms1 ribosomal small subunit homolog (yeast)	CMSS1	699717
Coatmer protein complex subunit beta 1	COPB1	699327
Coatmer protein complex subunit epsilon	COPE	719631
Coatmer protein complex subunit zeta 1	COPZ1	705176
Codanin 1	CDAN1	708838
Coenzyme Q10A	COQ10A	712341
Coenzyme Q2 4-hydroxybenzoate polyprenyltransferase	COQ2	707681
Cofilin 1 (non-muscle)	CFL1	721882
Cofilin 2 (muscle)	CFL2	693875
Coiled-coil domain containing 12	CCDC12	712061
Coiled-coil domain containing 142	CCDC142	709014
Coiled-coil domain containing 174	CCDC174	701654
Coiled-coil domain containing 178	CCDC178	707566
Coiled-coil domain containing 181	CCDC181	700803
Coiled-coil domain containing 28A	CCDC28A	703104
Coiled-coil domain containing 36	CCDC36	707136
Coiled-coil domain containing 43	CCDC43	715325
Coiled-coil domain containing 59	CCDC59	698443
Coiled-coil domain containing 82	CCDC82	700198
Coiled-coil domain containing 90B	CCDC90B	702035
Coiled-coil domain containing 92	CCDC92	705922
Coiled-coil domain containing 97	CCDC97	706342
Coiled-coil serine rich protein 2	CCSER2	698006
Coiled-coil-helix-coiled-coil-helix domain containing 1	CHCHD1	706322
Coiled-coil-helix-coiled-coil-helix domain containing 10	CHCHD10	720205
Coiled-coil-helix-coiled-coil-helix domain containing 2	CHCHD2	702967
Coiled-coil-helix-coiled-coil-helix domain containing 2	CHCHD2	702967
Coiled-coil-helix-coiled-coil-helix domain containing 6	CHCHD6	716767
Coilin	COIL	708103
Cold shock domain containing E1, RNA binding	CSDE1	708897
Collagen triple helix repeat containing 1	CTHRC1	694882
Collagen, type III, alpha 1	COL3A1	574131
Collagen, type XII, alpha 1	COL12A1	717820
COMM domain containing 2	COMMD2	711498
COMM domain containing 6	COMMD6	695191
Complement component 1, q subcomponent binding protein	C1QBP	711817
Complement factor properdin	CFP	707386

Component of oligomeric golgi complex 1	COG1	695754
Component of oligomeric golgi complex 4	COG4	712103
Component of oligomeric golgi complex 6	COG6	697092
Component of oligomeric golgi complex 7	COG7	700218
Conserved helix-loop-helix ubiquitous kinase	CHUK	709511
Coordinator of PRMT5, differentiation stimulator	COPRS	713293
COP9 signalosome subunit 2	COPS2	714814
COP9 signalosome subunit 3	COPS3	698461
COP9 signalosome subunit 4	COPS4	693435
COP9 signalosome subunit 5	COPS5	704584
COP9 signalosome subunit 6	COPS6	710667
Copine II	CPNE2	703557
Copine III	CPNE3	694013
Core-binding factor, beta subunit	CBFB	695767
Core-binding factor, runt domain, alpha subunit 2; translocated to, 3	CBFA2T3	698233
Corepressor interacting with RBPJ, 1	CIR1	698068
Cornichon family AMPA receptor auxiliary protein 1	CNIH1	695002
Cornichon family AMPA receptor auxiliary protein 4	CNIH4	701767
Coronin, actin binding protein, 1B	CORO1B	721725
Cortactin	CTTN	708291
COX19 cytochrome c oxidase assembly homolog (S. Cerevisiae)	COX19	696368
Craniofacial development protein 1	CFDP1	711343
Crumbs family member 3	CRB3	700086
Cryptochrome circadian clock 1	CRY1	703752
CSE1 chromosome segregation 1-like (yeast)	CSE1L	704301
C-src tyrosine kinase	CSK	702868
CTD phosphatase subunit 1	CTDP1	698467
CTD small phosphatase like 2	CTDSP12	711917
C-terminal binding protein 1	CTBP1	694507
C-terminal binding protein 2	CTBP2	695124
CTP synthase 1	CTPS1	695498
CTR9 homolog, Paf1/RNA polymerase II complex component	CTR9	705748
C-type lectin domain family 1, member A	CLEC1A	717526
C-type lectin domain family 9 member A	CLEC9A	717472
CUE domain containing 2	CUEDC2	713243
CUGBP, Elav-like family member 3	CELF3	716884
Cullin 4A	CUL4A	714302
Cullin 7	CUL7	699545
Cullin-associated and neddylation-dissociated 1	CAND1	716184
Cutc copper transporter	CUTC	709050
Cut-like homeobox 2	CUX2	107001015
CWC15 spliceosome-associated protein	CWC15	698332
CWC22 homolog, spliceosome-associated protein	CWC22	704087
CWF19-like 2, cell cycle control (S. Pombe)	CWF19L2	706825
C-x(9)-C motif containing 1	CMC1	705147
CXXC finger protein 1	CXXC1	700341
Cyclic nucleotide binding domain containing 2	CNBD2	703290
Cyclin A2	CCNA2	707259

Cyclin and CBS domain divalent metal cation transport mediator 2	CNNM2	714238
Cyclin B2	CCNB2	702184
Cyclin D binding myb-like transcription factor 1	DMTF1	706292
Cyclin D3	CCND3	695215
Cyclin D-type binding-protein 1	CCNDBP1	709589
Cyclin E1	CCNE1	700589
Cyclin G1	CCNG1	697738
Cyclin H	CCNH	694224
Cyclin I	CCNI	677687
Cyclin T2	CCNT2	708813
Cyclin-dependent kinase 1	CDK1	699269
Cyclin-dependent kinase 12	CDK12	696733
Cyclin-dependent kinase 14	CDK14	703442
Cyclin-dependent kinase 17	CDK17	717183
Cyclin-dependent kinase 2	CDK2	711002
Cyclin-dependent kinase 2 associated protein 2	CDK2AP2	711640
Cyclin-dependent kinase 2 interacting protein	CINP	709044
Cyclin-dependent kinase 4	CDK4	715650
Cyclin-dependent kinase 9	CDK9	699840
Cyclin-dependent kinase inhibitor 2C (p18, inhibits CDK4)	CDKN2C	711877
Cyclin-dependent kinase inhibitor 2D (p19, inhibits CDK4)	CDKN2D	713172
Cyclin-dependent kinase inhibitor 3	CDKN3	694877
Cystatin C	CST3	574313
Cysteine/histidine-rich 1	CYHR1	702522
CysteinyI-trna synthetase	CARS	706502
CysteinyI-trna synthetase 2, mitochondrial (putative)	CARS2	694840
Cytidine monophosphate (UMP-CMP) kinase 1, cytosolic	CMPK1	710196
Cytidine monophosphate N-acetylneuraminic acid synthetase	CMAS	706604
Cytochrome b-245 heavy chain	CYBB	696542
Cytochrome b5 reductase 4	CYB5R4	695553
Cytochrome b5 type B (outer mitochondrial membrane)	CYB5B	705093
Cytochrome c oxidase subunit 5A	COX5A	692061
Cytochrome c oxidase subunit 6C	COX6C	100428417
Cytochrome c oxidase subunit IV isoform 1	COX4I1	693811
Cytochrome c oxidase subunit viia polypeptide 2 like	COX7A2L	712764
Cytochrome c oxidase subunit viic	COX7C	100429280
Cytochrome c-1	CYC1	700518
Cytochrome P450, family 2, subfamily D, polypeptide 6	CYP2D6	678691
Cytochrome P450, family 2, subfamily R, polypeptide 1	CYP2R1	698834
Cytochrome P450, family 21, subfamily A, polypeptide 2	CYP21A2	717020
Cytochrome P450c17	CYP17A1	678693
Cytokine induced apoptosis inhibitor 1	CIAPIN1	704770
Cytokine like 1	CYTL1	711664
Cytoplasmic polyadenylation element binding protein 1	CPEB1	694357
Cytoplasmic polyadenylation element binding protein 2	CPEB2	722844
Cytoskeleton associated protein 2 like	CKAP2L	704381
Cytoskeleton associated protein 5	CKAP5	714095
Cytosolic thiouridylase subunit 1	CTU1	719536

Dachshund family transcription factor 1	DACH1	693532
Dachsous cadherin-related 1	DCHS1	711938
DALR anticodon binding domain containing 3	DALRD3	708403
DAZ associated protein 2	DAZAP2	695282
DCN1, defective in cullin neddylation 1, domain containing 1	DCUN1D1	708357
DCN1, defective in cullin neddylation 1, domain containing 4	DCUN1D4	702908
DCN1, defective in cullin neddylation 1, domain containing 5	DCUN1D5	704099
Dctp pyrophosphatase 1	DCTPP1	710500
DDB1 and CUL4 associated factor 11	DCAF11	714867
DDB1 and CUL4 associated factor 4	DCAF4	695337
DDB1 and CUL4 associated factor 6	DCAF6	698686
D-dopachrome tautomerase	DDT	699933
DEAD (Asp-Glu-Ala-Asp) box helicase 1	DDX1	698327
DEAD (Asp-Glu-Ala-Asp) box helicase 42	DDX42	717964
DEAD (Asp-Glu-Ala-Asp) box helicase 5	DDX5	677694
DEAD (Asp-Glu-Ala-Asp) box polypeptide 27	DDX27	703852
DEAD (Asp-Glu-Ala-Asp) box polypeptide 39A	DDX39A	718822
DEAD (Asp-Glu-Ala-Asp) box polypeptide 41	DDX41	700742
DEAD (Asp-Glu-Ala-Asp) box polypeptide 50	DDX50	712511
DEAD (Asp-Glu-Ala-Asp) box polypeptide 54	DDX54	712763
DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 26B	DDX26B	709688
Deafness, autosomal recessive 31	DFNB31	708051
DEAH (Asp-Glu-Ala-His) box helicase 15	DHX15	715852
DEAH (Asp-Glu-Ala-His) box helicase 30	DHX30	711178
DEAH (Asp-Glu-Ala-His) box helicase 9	DHX9	715453
DEAH (Asp-Glu-Ala-His) box polypeptide 29	DHX29	706306
DEAH (Asp-Glu-Ala-His) box polypeptide 36	DHX36	708112
DEAH (Asp-Glu-Ala-His) box polypeptide 38	DHX38	709173
DEAH (Asp-Glu-Ala-His) box polypeptide 40	DHX40	715202
Death associated protein 3	DAP3	719314
Death inducer-obliterators 1	DIDO1	698313
Decapping exoribonuclease	DXO	716027
Decapping mrna 1B	DCP1B	708089
Dedicator of cytokinesis 5	DOCK5	711359
De-etiolated homolog 1 (Arabidopsis)	DET1	697994
Defender against cell death 1	DAD1	711840
Defensin beta 118	DEFB118	641438
Dehydrodolichyl diphosphate synthase subunit	DHDDS	714635
Dehydrogenase/reductase (SDR family) member 1	DHRS1	715933
Dehydrogenase/reductase (SDR family) member 13	DHRS13	710755
Dehydrogenase/reductase (SDR family) member 3	DHRS3	715548
Dehydrogenase/reductase (SDR family) member 4 like 1	DHRS4L1	714661
Dehydrogenase/reductase (SDR family) member 4 like 1	DHRS4L1	714661
Deiodinase, iodothyronine, type II	DIO2	707484
DEK proto-oncogene	DEK	712460
Delta-like 1 homolog (Drosophila)	DLK1	707595
Deltex 3, E3 ubiquitin ligase	DTX3	715175
DENN/MADD domain containing 2D	DENND2D	702568

DENN/MADD domain containing 5A	DENND5A	707945
Denticleless E3 ubiquitin protein ligase homolog (Drosophila)	DTL	711236
Deoxyguanosine kinase	DGUOK	707554
Deoxyhypusine synthase	DHPS	716213
Deoxyribonuclease I	DNASE1	704119
Deoxythymidylate kinase	DTYMK	701781
DEP domain containing MTOR-interacting protein	DEPTOR	702649
Derlin 1	DERL1	703803
Derlin 2	DERL2	712051
Dermatan sulfate epimerase	DSE	716054
Desmoplakin	DSP	694860
Destrin (actin depolymerizing factor)	DSTN	695969
Desumoylating isopeptidase 2	DESI2	713515
Developmentally regulated GTP binding protein 1	DRG1	716791
Dexi homolog (mouse)	DEXI	100430901
Diacylglycerol kinase alpha	DGKA	710559
Dicer 1, ribonuclease type III	DICER1	702516
Differentially expressed in FDCP 8 homolog (mouse)	DEF8	699856
Dihydrolipoamide S-acetyltransferase	DLAT	710930
Dihydropyrimidinase like 3	DPYSL3	708425
Dihydrouridine synthase 3-like	DUS3L	719524
Dimethylarginine dimethylaminohydrolase 1	DDAH1	711395
Dipeptidyl-peptidase 8	DPP8	709428
Diphosphoinositol pentakisphosphate kinase 2	PIPIP5K2	703458
Diphthamide biosynthesis 3	DPH3	695309
Diphthamide biosynthesis 5	DPH5	712253
Discoidin domain receptor tyrosine kinase 1	DDR1	714233
Discoidin domain receptor tyrosine kinase 2	DDR2	720124
Discs, large homolog 1 (Drosophila)	DLG1	709572
Discs, large homolog 5 (Drosophila)	DLG5	703123
Dishevelled segment polarity protein 1	DVL1	705864
Dishevelled segment polarity protein 1	DVL1	705864
Dispatched homolog 1 (Drosophila)	DISP1	703960
Distal-less homeobox 5	DLX5	697853
DNA (cytosine-5-)-methyltransferase 1	DNMT1	574321
DNA cross-link repair 1B	DCLRE1B	707742
Dnaj heat shock protein family (Hsp40) member A1	DNAJA1	703765
Dnaj heat shock protein family (Hsp40) member B1	DNAJB1	718890
Dnaj heat shock protein family (Hsp40) member B2	DNAJB2	702936
Dnaj heat shock protein family (Hsp40) member B6	DNAJB6	693305
Dnaj heat shock protein family (Hsp40) member C1	DNAJC1	704151
Dnaj heat shock protein family (Hsp40) member C12	DNAJC12	695795
Dnaj heat shock protein family (Hsp40) member C15	DNAJC15	700339
Dnaj heat shock protein family (Hsp40) member C27	DNAJC27	694037
Dnaj heat shock protein family (Hsp40) member C3	DNAJC3	695757
Dnaj heat shock protein family (Hsp40) member C5 beta	DNAJC5B	702408
Dnaj heat shock protein family (Hsp40) member C8	DNAJC8	720231
Dnaj heat shock protein family (Hsp40) member C9	DNAJC9	707599

Docking protein 5	DOK5	698689
Dolichyl-phosphate mannosyltransferase polypeptide 2, regulatory subunit	DPM2	698709
Dolichyl-phosphate mannosyltransferase polypeptide 3	DPM3	717446
Double C2-like domains, alpha	DOC2A	707895
Double zinc ribbon and ankyrin repeat domains 1	DZANK1	700143
Dpy-30, histone methyltransferase complex regulatory subunit	DPY30	706155
DR1-associated protein 1 (negative cofactor 2 alpha)	DRAP1	715271
Drosha, ribonuclease type III	DROSHA	692081
DTW domain containing 1	DTWD1	715084
D-tyrosyl-trna deacylase 1	DTD1	700895
Dual serine/threonine and tyrosine protein kinase	DSTYK	664732
Dual specificity phosphatase 11	DUSP11	707123
Dual specificity phosphatase 12	DUSP12	720034
Dual specificity phosphatase 14	DUSP14	714383
Dual specificity phosphatase 23	DUSP23	719474
Dual specificity phosphatase 26 (putative)	DUSP26	697134
Dual specificity phosphatase 6	DUSP6	708907
Dual specificity tyrosine-(Y)-phosphorylation regulated kinase 3	DYRK3	695163
Dynactin subunit 1	DCTN1	708290
Dynactin subunit 2	DCTN2	714948
Dynactin subunit 6	DCTN6	694273
Dynamamin 1-like	DNM1L	695388
Dynamamin 1-like	DNM1L	695388
Dynein, axonemal, assembly factor 2	DNAAF2	719026
Dynein, axonemal, light chain 4	DNAL4	702019
Dynein, cytoplasmic 1, intermediate chain 1	DYNC1I1	574351
Dynein, light chain, LC8-type 1	DYNLL1	702360
Dynein, light chain, LC8-type 2	DYNLL2	100423738
Dynein, light chain, roadblock-type 2	DYNLRB2	713503
Dyskeratosis congenita 1, dyskerin	DKC1	702563
Dystrobrevin beta	DTNB	696167
E1A binding protein p300	EP300	706258
E2F transcription factor 1	E2F1	714126
E2F transcription factor 3	E2F3	713904
E2F transcription factor 4, p107/p130-binding	E2F4	696864
E2F transcription factor 5, p130-binding	E2F5	703352
E2F-associated phosphoprotein	EAPP	714727
E74-like factor 2 (ets domain transcription factor)	ELF2	696760
E74-like factor 5 (ets domain transcription factor)	ELF5	717377
Ecdysoneless homolog (Drosophila)	ECD	707699
Ecotropic viral integration site 5-like	EVI5L	706628
Ectodermal-neural cortex 1 (with BTB domain)	ENC1	704577
Ectodysplasin A receptor	EDAR	695059
Ectonucleoside triphosphate diphosphohydrolase 7	ENTPD7	708844
Ectonucleotide pyrophosphatase/phosphodiesterase 2	ENPP2	705287
EF-hand calcium binding domain 7	EFCAB7	696830
EF-hand domain family member D2	EFHD2	694155

EGF-like, fibronectin type III and laminin G domains	EGFLAM	693314
EGF-like-domain, multiple 7	EGFL7	709840
EGF-like-domain, multiple 8	EGFL8	717145
Egl-9 family hypoxia-inducible factor 2	EGLN2	703083
EH domain binding protein 1	EHBP1	693902
Electron-transferring-flavoprotein dehydrogenase	ETFDH	701207
ELMO/CED-12 domain containing 2	ELMOD2	698742
ELMO/CED-12 domain containing 3	ELMOD3	695180
ELOVL fatty acid elongase 1	ELOVL1	700557
ELOVL fatty acid elongase 4	ELOVL4	692070
Embryonic ectoderm development	EED	703866
Emopamil binding protein (sterol isomerase)	EBP	714315
Empty spiracles homeobox 2	EMX2	701370
Endonuclease domain containing 1	ENDOD1	699210
Endonuclease G	ENDOG	717171
Endoplasmic reticulum lectin 1	ERLEC1	716460
Endosulfine alpha	ENSA	715857
Endothelin 3	EDN3	693385
Enhancer of rudimentary homolog (Drosophila)	ERH	712507
Enhancer of yellow 2 homolog (Drosophila)	ENY2	699048
Enhancer of zeste 1 polycomb repressive complex 2 subunit	EZH1	711173
Enolase 1, (alpha)	ENO1	709378
Enoyl-coa delta isomerase 2	ECI2	709579
EP300 interacting inhibitor of differentiation 3	EID3	701175
EPH receptor B6	EPHB6	704886
Ephrin-A3	EFNA3	717373
Epididymal protein 3A	EDDM3A	704355
Epithelial cell transforming 2	ECT2	694056
ER degradation enhancer, mannosidase alpha-like 3	EDEM3	714475
ER lipid raft associated 1	ERLIN1	709596
ER membrane protein complex subunit 4	EMC4	695907
ER membrane protein complex subunit 6	EMC6	707030
ERGIC and golgi 3	ERGIC3	704736
ESF1 nucleolar pre-rRNA processing protein homolog	ESF1	694159
Esterase D	ESD	708871
Estrogen receptor binding site associated, antigen, 9	EBAG9	699305
Ethanolamine-phosphate phospho-lyase	ETNPPL	696880
Ethylmalonyl-coa decarboxylase 1	ECHDC1	712072
Etoposide induced 2.4	EI24	713226
Eukaryotic translation elongation factor 1 beta 2	EEF1B2	707019
Eukaryotic translation elongation factor 1 epsilon 1	EEF1E1	695426
Eukaryotic translation elongation factor 1 gamma	EEF1G	722274
Eukaryotic translation initiation factor 1	EIF1	704606
Eukaryotic translation initiation factor 2 subunit beta	EIF2S2	708593
Eukaryotic translation initiation factor 2-alpha kinase 3	EIF2AK3	699575
Eukaryotic translation initiation factor 2B subunit gamma	EIF2B3	705862
Eukaryotic translation initiation factor 2D	EIF2D	695274
Eukaryotic translation initiation factor 3 subunit D	EIF3D	695051

Eukaryotic translation initiation factor 3 subunit E	EIF3E	697622
Eukaryotic translation initiation factor 3 subunit H	EIF3H	700517
Eukaryotic translation initiation factor 3 subunit I	EIF3I	708145
Eukaryotic translation initiation factor 3 subunit K	EIF3K	693536
Eukaryotic translation initiation factor 3 subunit L	EIF3L	699189
Eukaryotic translation initiation factor 3 subunit M	EIF3M	695698
Eukaryotic translation initiation factor 4 gamma, 2	EIF4G2	705510
Eukaryotic translation initiation factor 4A2	EIF4A2	707775
Eukaryotic translation initiation factor 4A3	EIF4A3	712141
Eukaryotic translation initiation factor 4E binding protein 3	EIF4EBP3	100532740
Eukaryotic translation initiation factor 4E family member 2	EIF4E2	713487
Eukaryotic translation initiation factor 4E nuclear import factor 1	EIF4ENIF1	716871
Eukaryotic translation initiation factor 4H	EIF4H	693429
Eukaryotic translation termination factor 1	ETF1	714449
Eva-1 homolog B (C. Elegans)	EVA1B	713159
EWS RNA binding protein 1	EWSR1	714432
Excision repair cross-complementation group 3	ERCC3	698829
Exocyst complex component 1	EXOC1	695664
Exocyst complex component 2	EXOC2	706296
Exocyst complex component 4	EXOC4	712458
Exosome component 10	EXOSC10	714153
Exosome component 3	EXOSC3	716347
Exosome component 5	EXOSC5	705203
Exosome component 8	EXOSC8	695071
Exostosin glycosyltransferase 1	EXT1	701488
Exostosin glycosyltransferase 2	EXT2	715975
Exportin 1	XPO1	718063
Exportin 5	XPO5	700664
Exportin 6	XPO6	704332
Extended synaptotagmin-like protein 1	ESYT1	711720
Extra spindle pole bodies like 1, separase	ESPL1	702136
F11 receptor	F11R	719824
Family with sequence similarity 103 member A1	FAM103A1	714660
Family with sequence similarity 104 member A	FAM104A	695865
Family with sequence similarity 110 member B	FAM110B	703840
Family with sequence similarity 117 member A	FAM117A	700079
Family with sequence similarity 129 member B	FAM129B	707403
Family with sequence similarity 156 member B	FAM156B	698392
Family with sequence similarity 160 member A2	FAM160A2	711641
Family with sequence similarity 171 member B	FAM171B	712442
Family with sequence similarity 175 member B	FAM175B	694886
Family with sequence similarity 178 member B	FAM178B	710890
Family with sequence similarity 179 member B	FAM179B	702188
Family with sequence similarity 181 member B	FAM181B	701184
Family with sequence similarity 206 member A	FAM206A	710486
Family with sequence similarity 212 member A	FAM212A	704983
Family with sequence similarity 219 member A	FAM219A	700651
Family with sequence similarity 220 member A	FAM220A	703785

Family with sequence similarity 35 member A	FAM35A	694102
Family with sequence similarity 45 member A	FAM45A	713269
Family with sequence similarity 46 member A	FAM46A	693306
Family with sequence similarity 58 member A	FAM58A	695925
Family with sequence similarity 76 member B	FAM76B	699581
Family with sequence similarity 8 member A1	FAM8A1	703789
Family with sequence similarity 92 member A1	FAM92A1	698794
Fanconi anemia complementation group B	FANCB	712083
Fanconi anemia complementation group E	FANCE	718889
Fanconi anemia complementation group I	FANCI	699878
Farnesyl-diphosphate farnesyltransferase 1	FDFT1	696396
Farnesyltransferase, CAAX box, beta	FNTB	708129
Fas apoptotic inhibitory molecule	FAIM	716216
Fas associated via death domain	FADD	708606
Fasciculation and elongation protein zeta 1	FEZ1	713106
Fasciculation and elongation protein zeta 2 (zygin II)	FEZ2	708288
FAST kinase domains 1	FASTKD1	706154
Fat storage-inducing transmembrane protein 1	FITM1	715085
Fatty acid binding protein 7, brain	FABP7	713762
Fatty acyl coa reductase 1	FAR1	699947
F-box and WD repeat domain containing 4	FBXW4	711996
F-box and WD repeat domain containing 7	FBXW7	695101
F-box protein 11	FBXO11	715651
F-box protein 21	FBXO21	693647
F-box protein 4	FBXO4	697007
F-box protein 44	FBXO44	714585
F-box protein 5	FBXO5	703219
F-box protein 7	FBXO7	717317
FCH and double SH3 domains 2	FCHSD2	717996
Feline leukemia virus subgroup C cellular receptor 1	FLVCR1	710008
Fem-1 homolog b (C. Elegans)	FEM1B	693955
FERM domain containing 3	FRMD3	713394
Ferritin mitochondrial	FTMT	699743
Fetal and adult testis expressed 1	FATE1	704368
Fibrillarin	FBL	700286
Fibroblast activation protein alpha	FAP	701541
Fibroblast growth factor 13	FGF13	695460
Fibroblast growth factor 16	FGF16	705612
Fibroblast growth factor receptor substrate 3	FRS3	694462
Fibronectin type III domain containing 3A	FNDC3A	705570
Fibronectin type III domain containing 4	FNDC4	702098
FIG4 phosphoinositide 5-phosphatase	FIG4	699914
Filamin B, beta	FLNB	702732
Filamin binding LIM protein 1	FBLIM1	695727
Finkel-Biskis-Reilly murine sarcoma virus (FBR-musv) ubiquitously expressed	FAU	716761
FK506 binding protein 11	FKBP11	708598
FK506 binding protein 7	FKBP7	703299

FK506 binding protein 8	FKBP8	720232
FK506 binding protein 9	FKBP9	708827
Flavin adenine dinucleotide synthetase 1	FLAD1	717133
Flightless I actin binding protein	FLII	700471
FLYWCH-type zinc finger 1	FLYWCH1	700909
Folate receptor 1 (adult)	FOLR1	718388
Follistatin like 1	FSTL1	713367
Formin homology 2 domain containing 1	FHOD1	697346
Forty-two-three domain containing 1	FYTTD1	714705
Four and a half LIM domains 2	FHL2	713222
Fragile X mental retardation, autosomal homolog 1	FXR1	710170
FRAS1 related extracellular matrix 1	FREM1	713874
Frataxin	FXN	699469
Frizzled class receptor 10	FZD10	717812
Frizzled class receptor 6	FZD6	694625
Fructosamine 3 kinase related protein	FN3KRP	716431
Ftsj RNA methyltransferase homolog 1 (E. Coli)	FTSJ1	710243
Fucosyltransferase 10 (alpha (1,3) fucosyltransferase)	FUT10	697659
Fumarylacetoacetate hydrolase (fumarylacetoacetase)	FAH	712716
FUN14 domain containing 1	FUNDC1	709370
Fuzzy planar cell polarity protein	FUZ	719442
FXYP domain containing ion transport regulator 7	FXYP7	718457
FYN proto-oncogene, Src family tyrosine kinase	FYN	574214
FYVE, rhogef and PH domain containing 2	FGD2	719329
FYVE, rhogef and PH domain containing 6	FGD6	712132
G elongation factor, mitochondrial 2	GFM2	704247
G kinase anchoring protein 1	GKAP1	708816
G protein pathway suppressor 1	GPS1	719343
G protein-coupled bile acid receptor 1	GPBAR1	697937
G protein-coupled receptor 135	GPR135	701843
G protein-coupled receptor 151	GPR151	708020
G protein-coupled receptor 31	GPR31	717158
G protein-coupled receptor 68	GPR68	696529
G protein-coupled receptor 89A	GPR89A	696579
G protein-coupled receptor kinase interacting arfgap 2	GIT2	708092
G2/M-phase specific E3 ubiquitin protein ligase	G2E3	717021
GA binding protein transcription factor, beta subunit 1	GABPB1	715334
GABA(A) receptor-associated protein like 2	GABARAPL2	714413
Galactosidase alpha	GLA	703129
Gametogenetin binding protein 2	GGNBP2	713750
Gamma-glutamyl hydrolase (conjugase, folylpolyglutamyldihydrolase)	GGH	700747
Gamma-glutamylcyclotransferase	GGCT	695547
Gap junction protein alpha 1	GJA1	714344
Gastric inhibitory polypeptide	GIP	698335
GATA binding protein 2	GATA2	705551
GCN1, eif2 alpha kinase activator homolog	GCN1	698528
GC-rich promoter binding protein 1	GPBP1	708322

GC-rich promoter binding protein 1-like 1	GPBP1L1	706690
GDP-mannose 4,6-dehydratase	GMDS	707051
GDP-mannose pyrophosphorylase B	GMPPB	705454
Geminin, DNA replication inhibitor	GMNN	708416
General transcription factor IIA 2	GTF2A2	702984
General transcription factor IIB	GTF2B	694770
General transcription factor IIE subunit 2	GTF2E2	694622
General transcription factor IIH subunit 4	GTF2H4	714285
General transcription factor IIH subunit 5	GTF2H5	700107
General transcription factor IIIA	GTF3A	710492
General transcription factor IIIC subunit 3	GTF3C3	696338
General transcription factor IIIC subunit 4	GTF3C4	714849
General transcription factor IIIC subunit 6	GTF3C6	696512
Geranylgeranyl diphosphate synthase 1	GGPS1	100425248
Germ cell-less, spermatogenesis associated 1	GMCL1	701545
GID complex subunit 8	GID8	698189
GIN5 complex subunit 2 (Psf2 homolog)	GIN52	693426
GLE1, RNA export mediator	GLE1	717474
GLI family zinc finger 1	GLI1	714843
Glucokinase (hexokinase 4) regulator	GCKR	701431
Glucose-fructose oxidoreductase domain containing 1	GFOD1	700607
Glucosidase, beta (bile acid) 2	GBA2	696062
Glutamate-cysteine ligase, catalytic subunit	GCLC	710508
Glutamic-oxaloacetic transaminase 2	GOT2	707896
Glutamine--fructose-6-phosphate transaminase 1	GFPT1	574376
Glutaminyl-trna synthetase	QARS	708111
Glutaredoxin 5	GLRX5	702989
Glutathione peroxidase 1	GPX1	706732
Glutathione peroxidase 8 (putative)	GPX8	705965
Glutathione S-transferase alpha 4	GSTA4	709666
Glutathione S-transferase kappa 1	GSTK1	704240
Glutathione S-transferase omega 1	GSTO1	716078
Glutathione S-transferase omega 2	GSTO2	715291
Glutathione S-transferase zeta 1	GSTZ1	705723
Glutathione S-transferase, C-terminal domain containing	GSTCD	694220
Glycerol-3-phosphate acyltransferase, mitochondrial	GPAM	696042
Glycophorin C (Gerbich blood group)	GYPC	712092
Glycosylphosphatidylinositol anchor attachment 1	GPAA1	699887
Glycosyltransferase 8 domain containing 1	GLT8D1	695999
Glycosyltransferase like domain containing 1	GTDC1	100424583
Glyoxalase I	GLO1	719518
Golgi reassembly stacking protein 2	GORASP2	694170
Golgi SNAP receptor complex member 2	GOSR2	716841
Golgi-associated, gamma adaptin ear containing, ARF binding protein 3	GGA3	705751
Golgin A4	GOLGA4	697455
Golgin A7	GOLGA7	709911
Golgin B1	GOLGB1	713993

GRAM domain containing 3	GRAMD3	702639
Grancalcin	GCA	702138
Granulysin	GNLY	696059
GRB2-related adaptor protein	GRAP	702473
Gremlin 2, DAN family BMP antagonist	GREM2	708280
G-rich RNA sequence binding factor 1	GRSF1	706301
Growth arrest and DNA damage inducible beta	GADD45B	711257
Growth arrest and DNA damage inducible gamma	GADD45G	697835
Growth arrest specific 6	GAS6	716066
Growth differentiation factor 7	GDF7	702462
Growth factor receptor bound protein 10	GRB10	694786
Growth hormone inducible transmembrane protein	GHITM	702691
Growth hormone secretagogue receptor	GHSR	694587
GRP1 (general receptor for phosphoinositides 1)-associated scaffold protein	GRASP	696547
Grpe-like 1, mitochondrial (E. Coli)	GRPEL1	709772
Gse1 coiled-coil protein	GSE1	693298
GTP binding protein 4	GTPBP4	709873
Gtpase activating protein (SH3 domain) binding protein 1	G3BP1	713884
Gtpase, IMAP family member 4	GIMAP4	713506
Guanidinoacetate N-methyltransferase	GAMT	721263
Guanine nucleotide binding protein (G protein), beta polypeptide 1	GNB1	703399
Guanine nucleotide binding protein (G protein), beta polypeptide 2-like 1	GNB2L1	708526
Guanine nucleotide binding protein (G protein), gamma 10	GNG10	708193
Guanine nucleotide binding protein (G protein), gamma 11	GNG11	700606
Guanine nucleotide binding protein-like 2 (nucleolar)	GNL2	713862
Guanosine monophosphate reductase 2	GMPR2	715719
Guanylate kinase 1	GUK1	695272
H2A histone family, member X	H2AFX	703073
H2A histone family, member Y	H2AFY	711836
H2A histone family, member Y2	H2AFY2	711117
H2A histone family, member Z	H2AFZ	709326
Haloacid dehalogenase like hydrolase domain containing 2	HDHD2	697216
Haloacid dehalogenase like hydrolase domain containing 3	HDHD3	705447
HAUS augmin like complex subunit 8	HAUS8	718874
HCLS1 associated protein X-1	HAX1	716495
Hdc homolog, cell cycle regulator	HECA	702628
Heat shock factor binding protein 1	HSBP1	714498
Heat shock protein 90kda alpha (cytosolic), class A member 1	HSP90AA1	708431
Heat shock protein 90kda alpha family class B member 1	HSP90AB1	702293
Heat shock protein 90kda beta family member 1	HSP90B1	699568
Heat shock protein family A (Hsp70) member 8	HSPA8	707989
Heat shock protein family B (small) member 11	HSPB11	714791
Heat shock protein family B (small) member 6	HSPB6	710760
Heat shock protein family D (Hsp60) member 1	HSPD1	698024
Heat shock protein family H (Hsp110) member 1	HSPH1	721956
Heat shock transcription factor 2	HSF2	713938

HECT domain containing E3 ubiquitin protein ligase 1	HECTD1	717177
HECT domain containing E3 ubiquitin protein ligase 3	HECTD3	705051
Helicase (DNA) B	HELB	717860
Helicase, lymphoid-specific	HELLS	701598
Hematological and neurological expressed 1	HN1	664729
Hematopoietic prostaglandin D synthase	HPGDS	705227
Heparan sulfate 6-O-sulfotransferase 2	HS6ST2	706326
Hepatocyte growth factor-regulated tyrosine kinase substrate	HGS	714385
Hes family bhlh transcription factor 7	HES7	721942
Hes-related family bhlh transcription factor with YRPW motif 2	HEY2	712988
Heterogeneous nuclear ribonucleoprotein A/B	HNRNPAB	702509
Heterogeneous nuclear ribonucleoprotein A1	HNRNPA1	702977
Heterogeneous nuclear ribonucleoprotein A2/B1	HNRNPA2B1	701821
Heterogeneous nuclear ribonucleoprotein C (C1/C2)	HNRNPC	706423
Heterogeneous nuclear ribonucleoprotein D	HNRNPD	694867
Heterogeneous nuclear ribonucleoprotein D like	HNRNPDL	694603
Heterogeneous nuclear ribonucleoprotein F	HNRNPF	717668
Heterogeneous nuclear ribonucleoprotein H2 (H')	HNRNPH2	703254
Heterogeneous nuclear ribonucleoprotein H3 (2H9)	HNRNPH3	694760
Heterogeneous nuclear ribonucleoprotein L	HNRNPL	694448
Heterogeneous nuclear ribonucleoprotein L-like	HNRNPLL	710841
Heterogeneous nuclear ribonucleoprotein R	HNRNPR	718721
Hexamethylene bis-acetamide inducible 1	HEXIM1	716006
Hexamethylene bis-acetamide inducible 2	HEXIM2	716047
Hexokinase 1	HK1	711922
High mobility group 20A	HMG20A	714893
High mobility group box 1	HMGB1	712849
High mobility group box 3	HMGB3	703598
High mobility group nucleosomal binding domain 4	HMGN4	698039
Hippocalcin	HPCA	710249
HIRA interacting protein 3	HIRIP3	708004
Histidine triad nucleotide binding protein 1	HINT1	706083
Histidine triad nucleotide binding protein 2	HINT2	695521
Histidyl-trna synthetase 2	HARS2	697009
Histone acetyltransferase 1	HAT1	695933
Histone cluster 2, h3d	HIST2H3D	696204
Histone cluster 2, h3d	HIST2H3D	696204
Histone deacetylase 6	HDAC6	711363
Histone H4 transcription factor	HINFP	703763
HIV-1 Tat specific factor 1	HTATSF1	693589
HMG-box transcription factor 1	HBP1	699237
HNF1 homeobox B	HNF1B	714540
Holliday junction recognition protein	HJURP	718180
Homeodomain interacting protein kinase 1	HIPK1	707856
Homocysteine-inducible, endoplasmic reticulum stress-inducible, ubiquitin-like domain member 1	HERPUD1	703210
Htra serine peptidase 1	HTRA1	705855
Hyaluronan and proteoglycan link protein 3	HAPLN3	698880

Hyaluronan binding protein 4	HABP4	710213
Hyaluronoglucosaminidase 2	HYAL2	702484
Hydroxyacyl-coa dehydrogenase	HADH	696181
Hydroxyacyl-coa dehydrogenase/3-ketoacyl-coa thiolase/enoyl-coa hydratase (trifunctional protein), alpha subunit	HADHA	695975
Hydroxymethylbilane synthase	HMBS	702943
Hydroxysteroid (17-beta) dehydrogenase 10	HSD17B10	700018
Hydroxysteroid (17-beta) dehydrogenase 8	HSD17B8	718119
Hydroxysteroid dehydrogenase like 2	HSDL2	707233
Hyperpolarization activated cyclic nucleotide gated potassium channel 3	HCN3	717719
Hypocretin (orexin) neuropeptide precursor	HCRT	709564
Hypoxia up-regulated 1	HYOU1	707715
IGF like family receptor 1	IGFLR1	710396
IK cytokine, down-regulator of HLA II	IK	696887
IKAROS family zinc finger 5	IKZF5	716950
ILK associated serine/threonine phosphatase	ILKAP	706334
Immunoglobulin superfamily member 10	IGSF10	709661
IMP (inosine 5'-monophosphate) dehydrogenase 1	IMPDH1	701039
IMP (inosine 5'-monophosphate) dehydrogenase 2	IMPDH2	708307
IMP3, U3 small nucleolar ribonucleoprotein	IMP3	706202
Importin 8	IPO8	693514
Increased sodium tolerance 1 homolog (yeast)	IST1	707245
Indoleamine 2,3-dioxygenase 1	IDO1	574370
Inhibin alpha	INHA	574379
Inhibitor of DNA binding 1, dominant negative helix-loop-helix protein	ID1	713160
Inhibitor of growth family member 1	ING1	694955
Inhibitor of growth family member 2	ING2	701839
Inhibitor of growth family member 4	ING4	722073
Inhibitor of kappa light polypeptide gene enhancer in B-cells, kinase beta	IKBKB	704683
INO80 complex subunit C	INO80C	708819
Inosine triphosphatase	ITPA	717257
Inositol hexakisphosphate kinase 1	IP6K1	705576
Inositol monophosphatase domain containing 1	IMPAD1	696893
Inositol polyphosphate multikinase	IPMK	703630
Inositol polyphosphate-1-phosphatase	INPP1	703301
Inositol(myo)-1(or 4)-monophosphatase 2	IMPA2	704320
Insulin induced gene 2	INSIG2	693654
Insulin like 3	INSL3	100533194
Insulin like growth factor binding protein 3	IGFBP3	696868
Insulin like growth factor binding protein 5	IGFBP5	696339
Insulin like growth factor binding protein 7	IGFBP7	693564
Insulin-degrading enzyme	IDE	698640
Integral membrane protein 2C	ITM2C	711245
Integrator complex subunit 10	INTS10	705240
Integrator complex subunit 12	INTS12	694344

Integrator complex subunit 2	INTS2	712351
Integrator complex subunit 4	INTS4	699466
Integrator complex subunit 7	INTS7	711152
Integrator complex subunit 8	INTS8	700255
Integrin alpha FG-GAP repeat containing 1	ITFG1	716435
Integrin linked kinase	ILK	709944
Integrin subunit alpha 4	ITGA4	704745
Integrin subunit alpha V	ITGAV	707756
Integrin subunit beta 6	ITGB6	700454
Integrin subunit beta 7	ITGB7	699405
Interferon gamma receptor 1	IFNGR1	100423877
Interferon induced protein with tetratricopeptide repeats 2	IFIT2	695452
Interferon induced, with helicase C domain 1	IFIH1	702024
Interferon regulatory factor 2	IRF2	694347
Interferon, lambda receptor 1	IFNLR1	711625
Interferon-related developmental regulator 2	IFRD2	702959
Interleukin 17 receptor A	IL17RA	709005
Interleukin 20 receptor subunit beta	IL20RB	716769
Interleukin enhancer binding factor 3	ILF3	713427
Intraflagellar transport 20	IFT20	715773
Intraflagellar transport 22	IFT22	714551
Intraflagellar transport 27	IFT27	697032
Intraflagellar transport 46	IFT46	700582
Intraflagellar transport 57	IFT57	705088
Intraflagellar transport 74	IFT74	707561
Intraflagellar transport 80	IFT80	705146
Intraflagellar transport 81	IFT81	710434
IQ motif and Sec7 domain 1	IQSEC1	693922
IQ motif containing B1	IQCB1	715032
IQ motif containing K	IQCK	695417
IQ motif containing with AAA domain 1	IQCA1	694173
Iron-sulfur cluster assembly 2	ISCA2	700004
Iron-sulfur cluster assembly enzyme	ISCU	705669
Iroquois homeobox 6	IRX6	698232
Isocitrate dehydrogenase 3 (NAD+) alpha	IDH3A	677715
Isocitrate dehydrogenase 3 (NAD+) gamma	IDH3G	698558
Isoleucyl-trna synthetase	IARS	677705
IWS1 homolog (S. Cerevisiae)	IWS1	699205
Izumo sperm-egg fusion 1	IZUMO1	718234
Jagunal homolog 1	JAGN1	699718
JNK1/MAPK8-associated membrane protein	JKAMP	702307
Jumonji domain containing 1C	JMJD1C	697630
Kallikrein related peptidase 8	KLK8	719488
Karyopherin alpha 4 (importin alpha 3)	KPNA4	702486
KDEL endoplasmic reticulum protein retention receptor 2	KDELR2	704335
KDEL endoplasmic reticulum protein retention receptor 3	KDELR3	700810
KDEL motif containing 1	KDELC1	702156
Kelch domain containing 4	KLHDC4	695768

Kelch domain containing 9	KLHDC9	719863
Kelch like family member 2	KLHL2	704790
Kelch like family member 21	KLHL21	704734
Kelch like family member 3	KLHL3	713123
Kelch like family member 32	KLHL32	709276
Kelch like family member 5	KLHL5	698740
Kelch repeat and BTB (POZ) domain containing 4	KBTBD4	711452
Keratin associated protein 12-4	KRTAP12-4	712284
Keratin associated protein 19-3	KRTAP19-3	703677
Keratinocyte differentiation factor 1	KDF1	715312
KIAA0040 ortholog	KIAA0040	100423509
KIAA0226-like ortholog	KIAA0226L	703875
KIAA0355 ortholog	KIAA0355	705202
KIAA0556 ortholog	KIAA0556	706125
KIAA0907 ortholog	KIAA0907	718005
KIAA0922 ortholog	KIAA0922	696761
KIAA1024 ortholog	KIAA1024	712078
KIAA1033 ortholog	KIAA1033	701501
KIAA1143 ortholog	KIAA1143	714979
KIAA1958 ortholog	KIAA1958	707028
KIAA2013 ortholog	KIAA2013	722762
Killer cell lectin-like receptor subfamily F, member 1	KLRF1	574389
Kin17 DNA and RNA binding protein	KIN	713634
Kinase D-interacting substrate 220kda	KIDINS220	693522
Kinesin family member 1C	KIF1C	721601
Kinesin family member 2C	KIF2C	705381
Kinesin family member C3	KIFC3	705951
Kinesin heavy chain member 2A	KIF2A	696561
Kinesin light chain 4	KLC4	698356
Kininogen 1	KNG1	707466
Kizuna centrosomal protein	KIZ	700808
KN motif and ankyrin repeat domains 1	KANK1	697569
KN motif and ankyrin repeat domains 3	KANK3	711290
Kruppel-like factor 10	KLF10	693458
Kruppel-like factor 11	KLF11	702323
KTI12 chromatin associated homolog	KTI12	712824
Kxd1 motif containing 1	KXD1	720235
L-2-hydroxyglutarate dehydrogenase	L2HGDH	705721
La ribonucleoprotein domain family member 7	LARP7	703731
Lactate dehydrogenase B	LDHB	706110
Lamin B receptor	LBR	700801
Laminin subunit gamma 2	LAMC2	715212
Late cornified envelope 4A	LCE4A	100423933
Late endosomal/lysosomal adaptor, MAPK and MTOR activator 1	LAMTOR1	718249
Late endosomal/lysosomal adaptor, MAPK and MTOR activator 2	LAMTOR2	718110
Late endosomal/lysosomal adaptor, MAPK and MTOR activator 3	LAMTOR3	709133
Latexin	LXN	703996
LCK proto-oncogene, Src family tyrosine kinase	LCK	717704

LDL receptor related protein 1	LRP1	710965
LDL receptor related protein 10	LRP10	712506
LDL receptor related protein associated protein 1	LRPAP1	699677
Lectin, galactoside-binding, soluble, 14	LGALS14	698227
Lectin, mannose-binding, 1	LMAN1	697449
LETM1 domain containing 1	LETMD1	694422
Leucine carboxyl methyltransferase 1	LCMT1	702050
Leucine rich repeat and coiled-coil centrosomal protein 1	LRRCC1	707964
Leucine rich repeat containing 1	LRRC1	710867
Leucine rich repeat containing 14	LRRC14	703587
Leucine rich repeat containing 17	LRRC17	695422
Leucine rich repeat containing 20	LRRC20	710594
Leucine rich repeat containing 40	LRRC40	702565
Leucine rich repeat containing 42	LRRC42	714839
Leucine rich repeat protein 1	LRR1	706658
Leucine zipper, down-regulated in cancer 1	LDOC1	696902
Leucine zipper, down-regulated in cancer 1-like	LDOC1L	712760
Leucine-rich repeat containing 8 family member D	LRRC8D	100423127
Leucine-rich repeat LGI family member 4	LGI4	718426
Leucine-rich repeats and WD repeat domain containing 1	LRWD1	715187
Leukocyte immunoglobulin-like receptor, subfamily B (with TM and ITIM domains), member 1	LILRB1	692340
Leukocyte receptor cluster (LRC) member 1	LENG1	693417
Leukocyte-associated immunoglobulin-like receptor 1	LAIR1	695533
Leupaxin	LPXN	702033
Ligand dependent nuclear receptor interacting factor 1	LRIF1	702445
Ligase III, DNA, ATP-dependent	LIG3	715181
Ligase III, DNA, ATP-dependent	LIG3	715181
LIM and cysteine-rich domains 1	LMCD1	702382
LIM domain containing 2	LIMD2	717889
Limb bud and heart development	LBH	704749
Lin-9 DREAM muvb core complex component	LIN9	699056
Lipase A, lysosomal acid, cholesterol esterase	LIPA	695240
Lipid droplet associated hydrolase	LDAH	717510
Lipocalin 1	LCN1	711974
Lipocalin 2	LCN2	697208
Lipocalin 6	LCN6	574148
Lipoma HMGIC fusion partner-like 4	LHFPL4	700973
Lipoyltransferase 1	LIPT1	708812
Lipoyltransferase 1	LIPT1	708812
LSM10, U7 small nuclear RNA associated	LSM10	713277
LSM12 homolog	LSM12	714219
LSM14A mrna processing body assembly factor	LSM14A	705085
LSM4 homolog, U6 small nuclear RNA and mrna degradation associated	LSM4	720192
LSM6 homolog, U6 small nuclear RNA and mrna degradation associated	LSM6	703226
LUC7-like 3 pre-mrna splicing factor	LUC7L3	703662

Lymphocyte antigen 6 complex, locus G6C	LY6G6C	716220
Lymphoid enhancer-binding factor 1	LEF1	695776
Lymphotoxin alpha	LTA	715425
Lysine (K)-specific demethylase 1A	KDM1A	718609
Lysine (K)-specific methyltransferase 5B	KMT5B	710481
Lysine-rich nucleolar protein 1	KNOP1	695144
Lysophosphatidic acid receptor 6	LPAR6	705081
Lysosomal protein transmembrane 4 alpha	LAPTM4A	701298
Lysyl oxidase like 3	LOXL3	709834
Lysyl-trna synthetase	KARS	714516
Mab-21 domain containing 2	MB21D2	706284
MACRO domain containing 1	MACROD1	717961
Macrophage erythroblast attacher	MAEA	702015
MAD2L1 binding protein	MAD2L1BP	701099
MAGE family member D1	MAGED1	696658
MAGE family member F1	MAGEF1	701676
MAGE family member H1	MAGEH1	703812
Major facilitator superfamily domain containing 14B	MFSD14B	708498
Major facilitator superfamily domain containing 5	MFSD5	702021
Major histocompatibility complex, class II, DM beta	MAMU-DMB	100429857
MAK16 homolog	MAK16	696648
Makorin ring finger protein 1	MKRN1	716752
Malate dehydrogenase 1	MDH1	694703
Male-enhanced antigen 1	MEA1	699300
Male-specific lethal 3 homolog (Drosophila)	MSL3	720836
Malonyl-coa-acyl carrier protein transacylase	MCAT	711556
Mannose phosphate isomerase	MPI	722129
Mannose-P-dolichol utilization defect 1	MPDU1	715962
Mannosidase, alpha, class 2B, member 1	MAN2B1	716173
Mannosyl (alpha-1,3-)-glycoprotein beta-1,4-N-acetylglucosaminyl transferase, isozyme B	MGAT4B	705006
Mannosyl (alpha-1,6-)-glycoprotein beta-1,2-N-acetylglucosaminyl transferase	MGAT2	706426
Mannosyl-oligosaccharide glucosidase	MOGS	708913
MANSC domain containing 1	MANSC1	696667
MAP kinase interacting serine/threonine kinase 1	MKNK1	710061
MARCKS-like 1	MARCKSL1	100428619
Mastermind like transcriptional coactivator 1	MAML1	715047
Matrin 3	MATR3	100568450
Mckusick-Kaufman syndrome	MKKS	718547
Mdm1 nuclear protein	MDM1	718062
MDM2 binding protein	MTBP	703121
Mediator complex subunit 11	MED11	709561
Mediator complex subunit 13-like	MED13L	713867
Mediator complex subunit 19	MED19	704421
Mediator complex subunit 21	MED21	710699
Mediator complex subunit 23	MED23	714629
Mediator complex subunit 6	MED6	693320

Mediator complex subunit 8	MED8	700676
Meiosis 1 associated protein	M1AP	710210
Meiosis specific nuclear structural 1	MNS1	699377
Membrane frizzled-related protein	MFRP	704965
Membrane protein, palmitoylated 1	MPP1	702092
Meningioma expressed antigen 5 (hyaluronidase)	MGEA5	712370
Mercaptopyruvate sulfurtransferase	MPST	695842
Mesoderm development candidate 1	MESDC1	713059
Mesoderm induction early response 1, family member 2	MIER2	701450
Mesoderm specific transcript	MEST	703327
MET proto-oncogene, receptor tyrosine kinase	MET	704562
Metadherin	MTDH	702410
Metal response element binding transcription factor 2	MTF2	707104
Metallo-beta-lactamase domain containing 2	MBLAC2	695437
Metastasis associated 1 family member 2	MTA2	718772
Metastasis associated 1 family member 3	MTA3	712967
Metaxin 1	MTX1	717595
Methionine sulfoxide reductase A	MSRA	698628
Methionine sulfoxide reductase B1	MSRB1	693358
Methionine sulfoxide reductase B3	MSRB3	717617
Methionyl aminopeptidase 1	METAP1	710537
Methionyl-trna synthetase	MARS	714744
Methyl-cpg binding domain 4 DNA glycosylase	MBD4	720557
Methylcrotonoyl-coa carboxylase 1	MCCC1	708258
Methylenetetrahydrofolate dehydrogenase (NADP+ dependent) 1, methenyltetrahydrofolate cyclohydrolase, formyltetrahydrofolate synthetase	MTHFD1	707059
Methylmalonic aciduria (cobalamin deficiency) cblb type	MMAB	708973
Methyltransferase like 1	METTL1	715796
Methyltransferase like 13	METTL13	704943
Methyltransferase like 18	METTL18	701890
Methyltransferase like 3	METTL3	706852
Mevalonate kinase	MVK	707645
Mex-3 RNA binding family member B	MEX3B	713441
Microfibrillar associated protein 1	MFAP1	711111
Microfibrillar associated protein 3 like	MFAP3L	694985
Microsomal glutathione S-transferase 1	MGST1	701652
Microsomal glutathione S-transferase 1	MGST1	701652
Microsomal glutathione S-transferase 2	MGST2	697983
Microtubule associated protein 1 light chain 3 alpha	MAP1LC3A	707439
Microtubule associated protein 1S	MAP1S	719196
Microtubule associated protein 4	MAP4	100423619
Microtubule associated protein RP/EB family member 1	MAPRE1	711404
Midline 1	MID1	709683
MIF4G domain containing	MIF4GD	706005
Minichromosome maintenance complex component 3	MCM3	708320
Minichromosome maintenance complex component 3 associated protein	MCM3AP	721810

Minichromosome maintenance complex component 5	MCM5	717548
MIS12 kinetochore complex component	MIS12	712202
Mitochondrial assembly of ribosomal large subunit 1	MALSU1	704884
Mitochondrial carrier 1	MTCH1	719313
Mitochondrial E3 ubiquitin protein ligase 1	MUL1	705429
Mitochondrial fission regulator 1	MTFR1	711143
Mitochondrial fission regulator 1-like	MTFR1L	713213
Mitochondrial genome maintenance exonuclease 1	MGME1	696467
Mitochondrial intermediate peptidase	MIPEP	707131
Mitochondrial nucleoid factor 1	C6orf125	100425666
Mitochondrial poly(A) polymerase	MTPAP	694491
Mitochondrial pyruvate carrier 1	MPC1	716864
Mitochondrial ribosomal protein L11	MRPL11	714094
Mitochondrial ribosomal protein L13	MRPL13	702994
Mitochondrial ribosomal protein L16	MRPL16	698831
Mitochondrial ribosomal protein L18	MRPL18	702629
Mitochondrial ribosomal protein L19	MRPL19	711081
Mitochondrial ribosomal protein L20	MRPL20	701533
Mitochondrial ribosomal protein L22	MRPL22	714920
Mitochondrial ribosomal protein L24	MRPL24	718640
Mitochondrial ribosomal protein L28	MRPL28	695310
Mitochondrial ribosomal protein L36	MRPL36	100430880
Mitochondrial ribosomal protein L39	MRPL39	708631
Mitochondrial ribosomal protein L41	MRPL41	702768
Mitochondrial ribosomal protein L42	MRPL42	715676
Mitochondrial ribosomal protein L46	MRPL46	697872
Mitochondrial ribosomal protein L47	MRPL47	709030
Mitochondrial ribosomal protein L48	MRPL48	718240
Mitochondrial ribosomal protein L50	MRPL50	713923
Mitochondrial ribosomal protein L51	MRPL51	713036
Mitochondrial ribosomal protein L55	MRPL55	695962
Mitochondrial ribosomal protein L9	MRPL9	711235
Mitochondrial ribosomal protein S11	MRPS11	697743
Mitochondrial ribosomal protein S17	MRPS17	703678
Mitochondrial ribosomal protein S21	MRPS21	706805
Mitochondrial ribosomal protein S22	MRPS22	715845
Mitochondrial ribosomal protein S23	MRPS23	708818
Mitochondrial ribosomal protein S28	MRPS28	699755
Mitochondrial ribosomal protein S33	MRPS33	693681
Mitochondrial ribosomal protein S6	MRPS6	106997260
Mitochondrial ribosomal protein S7	MRPS7	701800
Mitochondrial ribosomal protein S9	MRPS9	712968
Mitochondrial transcription termination factor 2	MTERF2	703925
Mitochondrial transcription termination factor 3	MTERF3	701366
Mitochondrial translational initiation factor 2	MTIF2	717042
Mitochondrial translational initiation factor 3	MTIF3	710571
Mitochondrial trna translation optimization 1	MTO1	717688
Mitogen-activated protein kinase 1	MAPK1	698569

Mitogen-activated protein kinase 7	MAPK7	702837
Mitogen-activated protein kinase associated protein 1	MAPKAP1	702599
Mitogen-activated protein kinase kinase 1	MAP2K1	710415
Mitogen-activated protein kinase kinase 4	MAP2K4	718155
Mitogen-activated protein kinase kinase 5	MAP2K5	711672
Mitogen-activated protein kinase kinase 5	MAP2K5	711672
Mitogen-activated protein kinase kinase kinase 14	MAP3K14	716258
Mitogen-activated protein kinase kinase kinase 3	MAP3K3	717866
Mitogen-activated protein kinase kinase kinase 4	MAP3K4	710360
Mitogen-activated protein kinase kinase kinase 6	MAP3K6	715911
Mitogen-activated protein kinase kinase kinase 9	MAP3K9	693835
Mitogen-activated protein kinase kinase kinase kinase 1	MAP4K1	694259
Mitogen-activated protein kinase kinase kinase kinase 5	MAP4K5	706204
Mitogen-activated protein kinase-activated protein kinase 2	MAPKAPK2	695044
Mitogen-activated protein kinase-activated protein kinase 3	MAPKAPK3	701320
Mitogen-activated protein kinase-activated protein kinase 5	MAPKAPK5	713521
Mitotic spindle organizing protein 2B	MZT2B	701787
MNAT CDK-activating kinase assembly factor 1	MNAT1	703905
Molybdenum cofactor synthesis 2	MOCS2	703689
MON1 homolog B, secretory trafficking associated	MON1B	715104
Monoacylglycerol O-acyltransferase 1	MOGAT1	705924
Monoamine oxidase B	MAOB	708468
Monocyte to macrophage differentiation-associated	MMD	706723
MORC family CW-type zinc finger 4	MORC4	701136
Morf4 family associated protein 1	MRFAP1	710771
Morf4 family associated protein 1-like 1	MRFAP1L1	710411
MORN repeat containing 2	MORN2	106992909
Mortality factor 4 like 1	MORF4L1	711357
Motilin	MLN	574099
Mov10 RISC complex RNA helicase	MOV10	705910
M-phase phosphoprotein 6	MPHOSPH6	714335
M-phase specific PLK1 interacting protein	MPLKIP	703092
MRT4 homolog, ribosome maturation factor	MRTO4	702926
Msh homeobox 2	MSX2	694227
MUS81 structure-specific endonuclease subunit	MUS81	715558
Muscleblind like splicing regulator 1	MBNL1	708735
Mutl homolog 1	MLH1	698782
Muty DNA glycosylase	MUTYH	705651
Myb/SANT-like DNA-binding domain containing 2	MSANTD2	712347
MYC associated factor X	MAX	708228
Myelin protein zero-like 2	MPZL2	699330
Myeloid cell leukemia 1	MCL1	707539
Myeloid/lymphoid or mixed-lineage leukemia; translocated to, 6	MLLT6	694045
Myocyte enhancer factor 2C	MEF2C	694992
Myoferlin	MYOF	700922
Myomesin 1	MYOM1	695301
Myoneurin	MYNN	698094
Myosin IF	MYO1F	712101

Myosin light chain 4	MYL4	717354
Myosin light chain kinase 3	MYLK3	716132
Myosin X	MYO10	718002
Myosin, light chain 12A, regulatory, non-sarcomeric	MYL12A	695077
Myosin, light chain 12A, regulatory, non-sarcomeric	MYL12A	695077
Myotrophin	MTPN	708941
Myotubularin 1	MTM1	703131
Myotubularin related protein 2	MTMR2	699703
Myotubularin related protein 4	MTMR4	714621
Myotubularin related protein 6	MTMR6	709118
Myotubularin related protein 8	MTMR8	708037
Myristoylated alanine-rich protein kinase C substrate	MARCKS	694077
MYST/Esa1-associated factor 6	MEAF6	713666
N(alpha)-acetyltransferase 35, natc auxiliary subunit	NAA35	710122
N(alpha)-acetyltransferase 50, nate catalytic subunit	NAA50	709764
N(alpha)-acetyltransferase 60, natf catalytic subunit	NAA60	703207
N-acetylglucosamine kinase	NAGK	703976
N-acetylglucosamine-1-phosphate transferase, gamma subunit	GNPTG	722441
NAD(P) dependent steroid dehydrogenase-like	NSDHL	693333
NAD(P)H dehydrogenase, quinone 2	NQO2	707675
NADH dehydrogenase subunit 1	ND1	2846627
NADH dehydrogenase subunit 1	ND1	2846627
NADH:ubiquinone oxidoreductase complex assembly factor 1	NDUFAF1	710275
NADH:ubiquinone oxidoreductase complex assembly factor 2	NDUFAF2	693441
NADH:ubiquinone oxidoreductase complex assembly factor 4	NDUFAF4	705102
NADH:ubiquinone oxidoreductase complex assembly factor 6	NDUFAF6	700515
NADH:ubiquinone oxidoreductase complex assembly factor 7	NDUFAF7	709473
NADH:ubiquinone oxidoreductase core subunit S2	NDUFS2	719935
NADH:ubiquinone oxidoreductase core subunit S3	NDUFS3	713040
NADH:ubiquinone oxidoreductase subunit A1	NDUFA1	694635
NADH:ubiquinone oxidoreductase subunit A12	NDUFA12	711970
NADH:ubiquinone oxidoreductase subunit A8	NDUFA8	698706
NADH:ubiquinone oxidoreductase subunit AB1	NDUFAB1	700718
NADH:ubiquinone oxidoreductase subunit B10	NDUFB10	693482
NADH:ubiquinone oxidoreductase subunit B2	NDUFB2	693431
NADH:ubiquinone oxidoreductase subunit B4	NDUFB4	713428
NADH:ubiquinone oxidoreductase subunit B8	NDUFB8	710521
NADH:ubiquinone oxidoreductase subunit B9	NDUFB9	711387
NADH:ubiquinone oxidoreductase subunit C1	NDUFC1	697242
NADH:ubiquinone oxidoreductase subunit S4	NDUFS4	704137
NADH:ubiquinone oxidoreductase subunit S6	NDUFS6	709426
Nascent polypeptide-associated complex alpha subunit	NACA	713416
Natural killer cell granule protein 7	NKG7	719624
NCK adaptor protein 2	NCK2	713287
NCK interacting protein with SH3 domain	NCKIPSD	709410
NCK-associated protein 1	NCKAP1	711124
NECAP endocytosis associated 2	NECAP2	698687
NEDD4 binding protein 2	N4BP2	700365

NEDD8 activating enzyme E1 subunit 1	NAE1	696429
Negative elongation factor complex member C/D	NELFCD	696053
Negative elongation factor complex member E	NELFE	716913
Negative regulator of ubiquitin-like proteins 1	NUB1	715231
Nerve growth factor receptor (TNFRSF16) associated protein 1	NGFRAP1	103266060
Neugrin, neurite outgrowth associated	NGRN	702187
Neural precursor cell expressed, developmentally down-regulated 1	NEDD1	713673
Neural precursor cell expressed, developmentally down-regulated 8	NEDD8	715763
Neural precursor cell expressed, developmentally down-regulated 9	NEDD9	699359
Neurexophilin and PC-esterase domain family member 3	NXPE3	702612
Neurologin 2	NLGN2	574368
Neuronal PAS domain protein 2	NPAS2	710480
Neuronal pentraxin I	NPTX1	718259
Neuron-derived neurotrophic factor	NDNF	706304
Neuropeptide FF-amide peptide precursor	NPFF	703412
Neuropilin 1	NRP1	697755
Neuroplastin	NPTN	699627
NFKB activating protein	NKAP	694891
NGFI-A binding protein 1	NAB1	693274
NGFI-A binding protein 2 (EGR1 binding protein 2)	NAB2	714209
N-glycanase 1	NGLY1	700842
NHL repeat containing 2	NHLRC2	698009
NHP2 ribonucleoprotein	NHP2	701950
Nicotinamide nucleotide transhydrogenase	NNT	701110
Niemann-Pick disease, type C2	NPC2	699881
NIMA-related kinase 1	NEK1	694345
NIN1/RPN12 binding protein 1 homolog	NOB1	705344
Ninein	NIN	709532
Ninjurin 1	NINJ1	717218
Nitric oxide associated 1	NOA1	693437
NLR family member X1	NLRX1	703981
NLR family member X1	NLRX1	703981
NMD3 ribosome export adaptor	NMD3	701677
NME/NM23 nucleoside diphosphate kinase 2	NME2	100533957
N-myc and STAT interactor	NMI	694554
Non-POU domain containing, octamer-binding	NONO	697263
Non-SMC condensin II complex subunit D3	NCAPD3	700276
Non-SMC condensin II complex subunit H2	NCAPH2	716120
NOP16 nucleolar protein	NOP16	696768
NOP2/Sun RNA methyltransferase family member 5	NSUN5	716219
NOP58 ribonucleoprotein	NOP58	703859
NOP9 nucleolar protein	NOP9	715969
NPR2-like, GATOR1 complex subunit	NPRL2	701924
NRDE-2, necessary for RNA interference, domain containing	NRDE2	695676
NSA2, ribosome biogenesis homolog	NSA2	704670
NSE1 homolog, SMC5-SMC6 complex component	NSMCE1	703436
NSE3 homolog, SMC5-SMC6 complex component	NSMCE3	712714
NSE4 homolog A, SMC5-SMC6 complex component	NSMCE4A	705375

NSFL1 (p97) cofactor (p47)	NSFL1C	715743
NSL1, MIS12 kinetochore complex component	NSL1	710371
N-terminal Xaa-Pro-Lys N-methyltransferase 1	NTMT1	716763
Nth-like DNA glycosylase 1	NTHL1	694848
Nuclear casein kinase and cyclin-dependent kinase substrate 1	NUCKS1	697298
Nuclear envelope integral membrane protein 1	NEMP1	710700
Nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 3	NFATC3	702390
Nuclear factor of kappa light polypeptide gene enhancer in B-cells 1	NFKB1	710324
Nuclear factor, erythroid 2 like 1	NFE2L1	695404
Nuclear factor, erythroid 2 like 2	NFE2L2	707606
Nuclear fragile X mental retardation protein interacting protein 2	NUFIP2	711330
Nuclear protein, ataxia-telangiectasia locus	NPAT	707873
Nuclear receptor coactivator 4	NCOA4	709509
Nuclear receptor coactivator 6	NCOA6	706903
Nuclear receptor subfamily 1 group I member 2	NR1I2	574226
Nuclear receptor subfamily 2 group F member 2	NR2F2	707483
Nuclear RNA export factor 1	NXF1	718420
Nuclear RNA export factor 3	NXF3	695351
Nuclear transcription factor Y subunit gamma	NFYC	696290
Nuclear transport factor 2-like export factor 1	NXT1	711846
Nuclear transport factor 2-like export factor 2	NXT2	704593
Nucleic acid binding protein 2	NABP2	709344
Nucleobindin 2	NUCB2	697084
Nucleolar protein 10	NOL10	695849
Nucleolar protein 8	NOL8	705799
Nucleolar protein interacting with the FHA domain of MKI67	NIFK	697198
Nucleolin	NCL	720965
Nucleophosmin/nucleoplasmin 3	NPM3	712300
Nucleoporin 107kda	NUP107	718214
Nucleoporin 205kda	NUP205	708216
Nucleoporin 35kda	NUP35	706497
Nucleoporin 37kda	NUP37	697933
Nucleoporin 50kda	NUP50	713282
Nucleoporin 85kda	NUP85	705628
Nucleoporin 88kda	NUP88	711734
Nucleoside-triphosphatase, cancer-related	NTPCR	712959
Nucleosome assembly protein 1-like 5	NAP1L5	703223
Nudc nuclear distribution protein	NUDC	719986
Nude neurodevelopment protein 1	NDE1	717754
Nude neurodevelopment protein 1-like 1	NDEL1	721973
Nudix hydrolase 1	NUDT1	713078
Nudix hydrolase 13	NUDT13	707796
Nudix hydrolase 2	NUDT2	701795
Nudix hydrolase 22	NUDT22	717864
Nudix hydrolase 5	NUDT5	694368
Nudix hydrolase 6	NUDT6	708421
Nudix hydrolase 9	NUDT9	701344

Numb homolog (<i>Drosophila</i>)	NUMB	696528
O-6-methylguanine-DNA methyltransferase	MGMT	698134
O-acyl-ADP-ribose deacylase 1	OARD1	719685
Oculocerebrorenal syndrome of Lowe	OCRL	702345
Olfactomedin 2	OLFM2	711336
Olfactomedin like 2B	OLFML2B	720062
Olfactomedin like 3	OLFML3	707969
Olfactory receptor, family 2, subfamily AG, member 2	OR2AG2	709556
Oligonucleotide/oligosaccharide-binding fold containing 1	OBFC1	714968
Optic atrophy 3 (autosomal recessive, with chorea and spastic paraplegia)	OPA3	714806
Oral-facial-digital syndrome 1	OFD1	711677
Origin recognition complex subunit 1	ORC1	713271
Origin recognition complex subunit 3	ORC3	700773
Origin recognition complex subunit 5	ORC5	696683
ORMDL sphingolipid biosynthesis regulator 2	ORMDL2	710296
ORMDL sphingolipid biosynthesis regulator 3	ORMDL3	699154
Ornithine aminotransferase	OAT	693970
Ornithine decarboxylase antizyme 1	OAZ1	721477
O-sialoglycoprotein endopeptidase	OSGEP	702512
Oxoglutarate (alpha-ketoglutarate) dehydrogenase (lipoamide)	OGDH	698854
Oxysterol binding protein	OSBP	699325
Oxysterol binding protein like 8	OSBPL8	693338
P21 protein (Cdc42/Rac)-activated kinase 1	PAK1	698585
P450 (cytochrome) oxidoreductase	POR	715888
PAK1 interacting protein 1	PAK1IP1	697856
Palmitoyl-protein thioesterase 1	PPT1	693377
PAN2 poly(A) specific ribonuclease subunit	PAN2	712478
Pancreatic polypeptide	PPY	713988
Pantothenate kinase 1	PANK1	696041
Pantothenate kinase 4	PANK4	694804
PAP associated domain containing 7	PAPD7	713853
Par-3 family cell polarity regulator	PARD3	706472
Paraneoplastic Ma antigen 1	PNMA1	697618
Paraoxonase 2	PON2	699107
Paraspeckle component 1	PSPC1	705080
Parkinson protein 7	PARK7	708377
Partner of NOB1 homolog	PNO1	100337566
Paternally expressed 3	PEG3	707825
PAX3 and PAX7 binding protein 1	PAXBP1	700489
PAXIP1 associated glutamate-rich protein 1	PAGR1	706839
PC-esterase domain containing 1A	PCED1A	716956
PDZ and LIM domain 1	PDLIM1	702998
PDZ domain containing 4	PDZD4	697387
PDZ domain containing ring finger 3	PDZRN3	709901
Pecanex-like 4 (<i>Drosophila</i>)	PCNXL4	702758
Peptidase (mitochondrial processing) alpha	PMPCA	721742
Peptide deformylase (mitochondrial)	PDF	100427223

Peptidoglycan recognition protein 1	PGLYRP1	718480
Peptidylprolyl isomerase B (cyclophilin B)	PPIB	706757
Peptidylprolyl isomerase domain and WD repeat containing 1	PPWD1	696267
Peptidylprolyl isomerase E (cyclophilin E)	PPIE	716340
Peptidylprolyl isomerase F	PPIF	574137
Peptidylprolyl isomerase G (cyclophilin G)	PPIG	706262
Peptidylprolyl isomerase H (cyclophilin H)	PPIH	697669
Peptidylprolyl isomerase like 3	PPIL3	700456
Periaxin	PRX	702329
Peroxiredoxin 2	PRDX2	716665
Peroxiredoxin 3	PRDX3	702882
Peroxiredoxin 4	PRDX4	697635
Peroxiredoxin 6	PRDX6	706486
Peroxisomal biogenesis factor 11 beta	PEX11B	698184
Peroxisomal membrane protein 2	PXMP2	693648
Peroxisome proliferator-activated receptor delta	PPARD	718861
PEST proteolytic signal containing nuclear protein	PCNP	702162
PHD finger protein 1	PHF1	718337
PHD finger protein 2	PHF2	717585
PHD finger protein 23	PHF23	714538
PHD finger protein 6	PHF6	707390
PHD finger protein 7	PHF7	697103
Phenylalanyl-trna synthetase 2, mitochondrial	FARS2	710945
Phosphatase, orphan 1	PHOSPHO1	698959
Phosphatase, orphan 2	PHOSPHO2	100429653
Phosphate cytidylyltransferase 1, choline, alpha	PCYT1A	722105
Phosphatidylglycerophosphate synthase 1	PGS1	710125
Phosphatidylinositol 3-kinase catalytic subunit type 3	PIK3C3	693918
Phosphatidylinositol 4-kinase, catalytic, alpha	PI4KA	698020
Phosphatidylinositol 4-kinase, catalytic, beta	PI4KB	710104
Phosphatidylinositol glycan anchor biosynthesis class A	PIGA	712514
Phosphatidylinositol glycan anchor biosynthesis class B	PIGB	698122
Phosphatidylinositol glycan anchor biosynthesis class C	PIGC	705657
Phosphatidylinositol glycan anchor biosynthesis class F	PIGF	714844
Phosphatidylinositol glycan anchor biosynthesis class G	PIGG	714088
Phosphatidylinositol glycan anchor biosynthesis class H	PIGH	710780
Phosphatidylinositol glycan anchor biosynthesis class S	PIGS	709115
Phosphatidylinositol transfer protein beta	PITPNB	713414
Phosphatidylserine synthase 1	PTDSS1	701486
Phosphodiesterase 12	PDE12	703552
Phosphodiesterase 5A	PDE5A	705592
Phosphodiesterase 6D	PDE6D	712629
Phosphodiesterase 8A	PDE8A	694750
Phosphoenolpyruvate carboxykinase 2 (mitochondrial)	PCK2	714922
Phosphoglucomutase 1	PGM1	699401
Phosphoglucomutase 3	PGM3	694464
Phosphohistidine phosphatase 1	PHPT1	721674
Phosphoinositide-3-kinase regulatory subunit 4	PIK3R4	718012

Phospholipase A2 group XVI	PLA2G16	722178
Phospholipase B domain containing 1	PLBD1	698939
Phospholipase C delta 1	PLCD1	696860
Phospholipase D family member 3	PLD3	701083
Phospholipid phosphatase 2	PLPP2	721004
Phospholipid phosphatase 6	PLPP6	695188
Phosphopantothenoylcysteine decarboxylase	PPCDC	704015
Phosphopantothenoylcysteine synthetase	PPCS	697064
Phosphoribosyl pyrophosphate synthetase 1	PRPS1	702529
Phosphoribosyl pyrophosphate synthetase-associated protein 1	PRPSAP1	706625
Phosphoribosylglycinamide formyltransferase, phosphoribosyl glycinamide synthetase, phosphoribosylaminoimidazole synthetase	GART	704926
Phosphorylase kinase, alpha 2 (liver)	PHKA2	694376
Phosphorylase, glycogen, liver	PYGL	706853
PIGY upstream reading frame	PYURF	702862
PIH1 domain containing 1	PIH1D1	718787
PIN2/TERF1 interacting, telomerase inhibitor 1	PINX1	701523
Pinin, desmosome associated protein	PNN	700296
Pirin	PIR	720959
PITH (C-terminal proteasome-interacting domain of thioredoxin-like) domain containing 1	PITHD1	710737
Pituitary tumor-transforming 1	PTTG1	696143
Pituitary tumor-transforming 1 interacting protein	PTTG1IP	722061
Plakophilin 2	PKP2	100429378
Plasminogen receptor, C-terminal lysine transmembrane protein	PLGRKT	693286
Plastin 1	PLS1	714391
Plastin 3	PLS3	709055
Platelet derived growth factor C	PDGFC	700236
Platelet derived growth factor D	PDGFD	704310
Platelet-derived growth factor beta polypeptide	PDGFB	703173
Pleckstrin homology domain containing A1	PLEKHA1	705731
Pleckstrin homology domain containing A3	PLEKHA3	703417
Pleckstrin homology domain containing J1	PLEKHJ1	710129
Pleckstrin homology domain containing O2	PLEKHO2	712677
Pleckstrin homology domain interacting protein	PHIP	716810
Pleckstrin homology-like domain, family A, member 3	PHLDA3	709782
Plexin B3	PLXNB3	696903
Pogo transposable element with ZNF domain	POGZ	710634
Poliovirus receptor-related 2 (herpesvirus entry mediator B)	PVRL2	713229
Polo-like kinase 3	PLK3	704071
Poly(A) binding protein interacting protein 1	PAIP1	700869
Poly(A) binding protein interacting protein 2	PAIP2	693317
Poly(A) binding protein, cytoplasmic 1	PABPC1	705847
Poly(A) binding protein, cytoplasmic 3	PABPC3	708617
Poly(A) polymerase gamma	PAPOLG	717781
Poly(ADP-ribose) glycohydrolase	PARG	709432
Poly(ADP-ribose) polymerase 1	PARP1	698806
Poly(ADP-ribose) polymerase 2	PARP2	701955

Poly(rc) binding protein 2	PCBP2	703175
Polycomb group ring finger 2	PCGF2	694187
Polycomb group ring finger 6	PCGF6	714508
Polyglutamine binding protein 1	PQBP1	711678
Polyhomeotic homolog 2 (Drosophila)	PHC2	710201
Polymerase (DNA directed), beta	POLB	704801
Polymerase (DNA directed), gamma	POLG	699750
Polymerase (RNA) I polypeptide C	POLR1C	700727
Polymerase (RNA) II (DNA directed) polypeptide C, 33kda	POLR2C	704555
Polymerase (RNA) II (DNA directed) polypeptide F	POLR2F	699566
Polymerase (RNA) II (DNA directed) polypeptide G	POLR2G	718548
Polymerase (RNA) II (DNA directed) polypeptide H	POLR2H	100429040
Polymerase (RNA) II (DNA directed) polypeptide I, 14.5kda	POLR2I	712412
Polymerase (RNA) III (DNA directed) polypeptide B	POLR3B	702711
Polymerase (RNA) III (DNA directed) polypeptide C (62kd)	POLR3C	696943
Polymerase (RNA) III (DNA directed) polypeptide D, 44kda	POLR3D	707923
Polymerase (RNA) III (DNA directed) polypeptide E (80kd)	POLR3E	697901
Polymerase (RNA) III (DNA directed) polypeptide G (32kd)-like	POLR3GL	698563
Polypeptide N-acetylgalactosaminyltransferase 1	GALNT1	708930
Polypeptide N-acetylgalactosaminyltransferase 12	GALNT12	715128
Polypeptide N-acetylgalactosaminyltransferase 4	GALNT4	100430612
Polysaccharide biosynthesis domain containing 1	PBDC1	705125
POP4 homolog, ribonuclease P/MRP subunit	POP4	700209
POP5 homolog, ribonuclease P/MRP subunit	POP5	697559
Post-GPI attachment to proteins 3	PGAP3	697699
Potassium channel tetramerization domain containing 2	KCTD2	700474
Potassium channel tetramerization domain containing 3	KCTD3	708471
Potassium channel tetramerization domain containing 6	KCTD6	701810
Potassium channel tetramerization domain containing 9	KCTD9	711515
Potassium channel, voltage gated eag related subfamily H, member 3	KCNH3	710838
Potassium channel, voltage gated Shaw related subfamily C, member 2	KCNC2	100430906
Potassium voltage-gated channel, modifier subfamily S, member 1	KCNS1	711715
POZ (BTB) and AT hook containing zinc finger 1	PATZ1	718381
PR domain containing 1, with ZNF domain	PRDM1	696757
PR domain containing 14	PRDM14	693324
PR domain containing 2, with ZNF domain	PRDM2	716295
PR domain containing 4	PRDM4	704529
Praja ring finger 1, E3 ubiquitin protein ligase	PJA1	695038
Pre-B-cell leukemia homeobox 4	PBX4	106994668
Prefoldin subunit 2	PFDN2	719886
Prefoldin subunit 5	PFDN5	702355
Premelanosome protein	PMEL	710921
Pre-mrna processing factor 3	PRPF3	706898
Pre-mrna processing factor 40 homolog A	PRPF40A	696668
Presenilin 1	PSEN1	696274
Presenilin enhancer gamma secretase subunit	PSENEN	100429005

Presequence translocase-associated motor 16 homolog (<i>S. Cerevisiae</i>)	PAM16	704987
Prickle homolog 1	PRICKLE1	701864
Prion protein	PRNP	717859
Progesterone receptor membrane component 1	PGRMC1	711792
Programmed cell death 10	PDCD10	699597
Programmed cell death 2	PDCD2	696380
Programmed cell death 2-like	PDCD2L	705688
Programmed cell death 5	PDCD5	702277
Programmed cell death 6	PDCD6	723043
Programmed cell death 7	PDCD7	708758
Prohibitin	PHB	699334
Prohibitin 2	PHB2	714693
Proliferating cell nuclear antigen	PCNA	718006
Proline and serine rich 1	PROSER1	696606
Proline and serine rich 2	PROSER2	693705
Proline rich 15	PRR15	696869
Proline rich 3	PRR3	711699
Proline rich Gla (G-carboxyglutamic acid) 1	PRRG1	696938
Proline rich nuclear receptor coactivator 2	PNRC2	719213
Proline/serine-rich coiled-coil 1	PSRC1	698060
Proline-rich coiled-coil 1	PRRC1	704248
Prolyl 4-hydroxylase, alpha polypeptide II	P4HA2	707157
Prolylcarboxypeptidase	PRCP	701305
Prominin 1	PROM1	714610
Propionyl-coa carboxylase beta subunit	PCCB	716964
Prostaglandin D2 receptor 2	PTGDR2	695853
Prostaglandin D2 synthase	PTGDS	707990
Prostaglandin E synthase 3	PTGES3	713353
Protease, serine 16	PRSS16	702060
Proteasomal ATPase associated factor 1	PAAF1	718755
Proteasome (prosome, macropain) assembly chaperone 1	PSMG1	715758
Proteasome (prosome, macropain) assembly chaperone 2	PSMG2	717110
Proteasome (prosome, macropain) assembly chaperone 3	PSMG3	697590
Proteasome 26S subunit, ATPase 3	PSMC3	713356
Proteasome 26S subunit, ATPase 4	PSMC4	699847
Proteasome 26S subunit, non-ATPase 1	PSMD1	711724
Proteasome 26S subunit, non-ATPase 10	PSMD10	703596
Proteasome 26S subunit, non-ATPase 12	PSMD12	718756
Proteasome 26S subunit, non-ATPase 14	PSMD14	701063
Proteasome 26S subunit, non-ATPase 6	PSMD6	698601
Proteasome 26S subunit, non-ATPase 7	PSMD7	705581
Proteasome activator subunit 1	PSME1	714364
Proteasome activator subunit 2	PSME2	715288
Proteasome subunit alpha 2	PSMA2	701683
Proteasome subunit alpha 3	PSMA3	700251
Proteasome subunit alpha 4	PSMA4	710417
Proteasome subunit alpha 5	PSMA5	698435

Proteasome subunit alpha 6	PSMA6	695113
Proteasome subunit beta 1	PSMB1	696133
Proteasome subunit beta 10	PSMB10	701088
Proteasome subunit beta 2	PSMB2	712193
Proteasome subunit beta 4	PSMB4	710734
Proteasome subunit beta 6	PSMB6	710028
Proteasome subunit beta 7	PSMB7	694567
Proteasome subunit beta 9	PSMB9	716980
Protection of telomeres 1	POT1	696751
Protein C receptor	PROCR	706040
Protein disulfide isomerase family A member 5	PDIA5	715226
Protein disulfide isomerase family A member 6	PDIA6	706781
Protein inhibitor of activated STAT 3	PIAS3	706775
Protein kinase, AMP-activated, alpha 2 catalytic subunit	PRKAA2	717703
Protein kinase, AMP-activated, beta 1 non-catalytic subunit	PRKAB1	695737
Protein kinase, interferon-inducible double stranded RNA dependent activator	PRKRA	703063
Protein odr-4 homolog	C1H1orf27	713801
Protein O-glucosyltransferase 1	POGLUT1	712357
Protein phosphatase 1 regulatory subunit 12C	PPP1R12C	698538
Protein phosphatase 1 regulatory subunit 15A	PPP1R15A	718350
Protein phosphatase 1 regulatory subunit 21	PPP1R21	715917
Protein phosphatase 1 regulatory subunit 35	PPP1R35	712067
Protein phosphatase 1, catalytic subunit, gamma isozyme	PPP1CC	709935
Protein phosphatase 2 regulatory subunit B', gamma	PPP2R5C	718894
Protein phosphatase 2 regulatory subunit B'', gamma	PPP2R3C	694616
Protein phosphatase 2, catalytic subunit, beta isozyme	PPP2CB	695118
Protein phosphatase 3, catalytic subunit, beta isozyme	PPP3CB	706955
Protein phosphatase 3, catalytic subunit, gamma isozyme	PPP3CC	708233
Protein phosphatase 4 regulatory subunit 3B	PPP4R3B	718961
Protein phosphatase, Mg ²⁺ /Mn ²⁺ dependent 1A	PPM1A	702987
Protein phosphatase, Mg ²⁺ /Mn ²⁺ dependent 1B	PPM1B	713918
Protein phosphatase, Mg ²⁺ /Mn ²⁺ dependent 1F	PPM1F	698441
Protein phosphatase, Mg ²⁺ /Mn ²⁺ dependent 1G	PPM1G	700695
Protein phosphatase, Mg ²⁺ /Mn ²⁺ dependent 1M	PPM1M	697788
Protein tyrosine phosphatase type IVA, member 2	PTP4A2	706489
Protein tyrosine phosphatase, non-receptor type 1	PTPN1	702016
Protein tyrosine phosphatase, non-receptor type 12	PTPN12	721538
Protein tyrosine phosphatase, non-receptor type 4 (megakaryocyte)	PTPN4	695516
Protein-L-isoaspartate (D-aspartate) O-methyltransferase	PCMT1	695893
Protoporphyrinogen oxidase	PPOX	719910
Pterin-4 alpha-carbinolamine dehydratase/dimerization cofactor of hepatocyte nuclear factor 1 alpha	PCBD1	709875
Pumilio RNA binding family member 1	PUM1	704848
Pumilio RNA binding family member 2	PUM2	701782
Putative homeodomain transcription factor 1	PHTF1	707208
PWP2 periodic tryptophan protein homolog (yeast)	PWP2	722216
Pyruvate dehydrogenase (lipoamide) alpha 1	PDHA1	100423990

Pyruvate dehydrogenase (lipoamide) beta	PDHB	574227
R3H domain and coiled-coil containing 1 like	R3HCC1L	707600
Rab geranylgeranyltransferase, beta subunit	RABGGTB	705421
Rab interacting lysosomal protein-like 2	RILPL2	704853
RAB, member of RAS oncogene family-like 2B	RABL2B	716615
RAB18, member RAS oncogene family	RAB18	708843
RAB23, member RAS oncogene family	RAB23	712860
RAB28, member RAS oncogene family	RAB28	713566
RAB2A, member RAS oncogene family	RAB2A	699383
RAB30, member RAS oncogene family	RAB30	701550
RAB3A interacting protein	RAB3IP	717215
RAB4A, member RAS oncogene family	RAB4A	694288
RAB5A, member RAS oncogene family	RAB5A	697712
RAB5B, member RAS oncogene family	RAB5B	708347
RAB5C, member RAS oncogene family	RAB5C	709308
RAB6A, member RAS oncogene family	RAB6A	718717
RAB6A, member RAS oncogene family	RAB6A	718717
RAB9A, member RAS oncogene family	RAB9A	720906
Rac gtpase activating protein 1	RACGAP1	711887
RAD17 checkpoint clamp loader component	RAD17	700116
RAD21 cohesin complex component	RAD21	700633
RAD50 interactor 1	RINT1	698414
RAD51 associated protein 1	RAD51AP1	710918
RAD51 paralog C	RAD51C	714828
RAD52 motif containing 1	RDM1	716624
RAD9 checkpoint clamp component A	RAD9A	712345
RAD9-HUS1-RAD1 interacting nuclear orphan 1	RHNO1	709008
Radial spoke 3 homolog (Chlamydomonas)	RSPH3	704059
Radixin	RDX	709018
Raf-1 proto-oncogene, serine/threonine kinase	RAF1	694725
Raftlin, lipid raft linker 1	RFTN1	695142
Ral GEF with PH domain and SH3 binding motif 1	RALGPS1	708253
Ral gtpase activating protein, alpha subunit 1 (catalytic)	RALGAPA1	695674
Ral guanine nucleotide dissociation stimulator-like 1	RGL1	717554
RALBP1 associated Eps domain containing 2	REPS2	721024
RALY heterogeneous nuclear ribonucleoprotein	RALY	713317
RAN binding protein 10	RANBP10	700911
RAN binding protein 6	RANBP6	715799
RAN guanine nucleotide release factor	RANGRF	717206
RAN, member RAS oncogene family	RAN	709200
Rap guanine nucleotide exchange factor 2	RAPGEF2	704717
RAS and EF-hand domain containing	RASEF	708296
Ras and Rab interactor 2	RIN2	702775
Ras association (ralgds/AF-6) domain family (N-terminal) member 8	RASSF8	708284
Ras association (ralgds/AF-6) domain family member 4	RASSF4	706096
Ras homolog family member C	RHOC	706034
Ras homolog family member D	RHOD	712969
Ras homolog family member J	RHOJ	705603

RAS p21 protein activator (gtpase activating protein) 1	RASA1	694085
RAS protein activator like 2	RASAL2	718958
RAS-like family 10 member A	RASL10A	714587
Ras-like without CAAX 1	RIT1	717985
Ras-related GTP binding C	RRAGC	715549
RB1 inducible coiled-coil 1	RB1CC1	710330
Rearranged L-myc fusion	RLF	693503
Receptor (G protein-coupled) activity modifying protein 1	RAMP1	574329
Receptor interacting serine/threonine kinase 2	RIPK2	695567
Receptor interacting serine/threonine kinase 4	RIPK4	715077
Recq helicase-like	RECQL	705871
Regucalcin	RGN	705733
Regulation of nuclear pre-mrna domain containing 1A	RPRD1A	709217
Regulator of calcineurin 1	RCAN1	697108
Regulator of chromosome condensation (RCC1) and BTB (POZ) domain containing protein 1	RCBTB1	706627
Regulator of G-protein signaling 16	RGS16	715599
Regulator of G-protein signaling 7	RGS7	707747
Regulator of microtubule dynamics 1	RMDN1	694237
Related RAS viral (r-ras) oncogene homolog 2	RRAS2	699700
REM2 and RAB-like small gtpase 1	RSG1	697922
Renin	REN	574299
Replication protein A1	RPA1	721272
Replication protein A2	RPA2	716612
Replication protein A3	RPA3	696248
Replication timing regulatory factor 1	RIF1	694817
Required for meiotic nuclear division 1 homolog	RMND1	704665
REST corepressor 3	RCOR3	712037
Retbindin	RTBDN	716766
Reticulon 4	RTN4	619181
Reticulon 4 interacting protein 1	RTN4IP1	697236
Retinoblastoma binding protein 4	RBBP4	708710
Retinoblastoma binding protein 7	RBBP7	713843
Retinoblastoma binding protein 8	RBBP8	677718
Retinoic acid induced 1	RAI1	699215
Retinoic acid induced 14	RAI14	698620
Retinol dehydrogenase 5 (11-cis/9-cis)	RDH5	709644
Reversion-inducing-cysteine-rich protein with kazal motifs	RECK	694043
RFT1 homolog	RFT1	694586
Rho family gtpase 3	RND3	694168
Rho gtpase activating protein 10	ARHGAP10	708458
Rho gtpase activating protein 15	ARHGAP15	705311
Rho gtpase activating protein 21	ARHGAP21	706428
Rho guanine nucleotide exchange factor 1	ARHGEF1	722198
Rho guanine nucleotide exchange factor 10	ARHGEF10	722745
Rho guanine nucleotide exchange factor 5	ARHGEF5	705891
Rhomboid 5 homolog 2 (Drosophila)	RHBDF2	707033
Rhomboid domain containing 3	RHBDD3	714479

Ribonuclease P/MRP 21kda subunit	RPP21	713056
Ribonuclease P/MRP 40kda subunit	RPP40	710505
Ribonuclease, rnase A family, 4	RNASE4	703903
Ribonucleotide reductase M1	RRM1	717990
Ribophorin II	RPN2	708971
Ribosomal protein l10a	RPL10A	718783
Ribosomal protein L17	RPL17	698967
Ribosomal protein L22	RPL22	703050
Ribosomal protein L23	RPL23	694719
Ribosomal protein l23a	RPL23A	710490
Ribosomal protein L24	RPL24	702381
Ribosomal protein L26	RPL26	717378
Ribosomal protein L26 like 1	RPL26L1	703230
Ribosomal protein L27	RPL27	712352
Ribosomal protein l27a	RPL27A	708863
Ribosomal protein L3	RPL3	707176
Ribosomal protein L35	RPL35	693604
Ribosomal protein l35a	RPL35A	714858
Ribosomal protein L4	RPL4	710590
Ribosomal protein L7 like 1	RPL7L1	698786
Ribosomal protein l7a	RPL7A	722215
Ribosomal protein L8	RPL8	708535
Ribosomal protein S10	RPS10	718606
Ribosomal protein S11	RPS11	718844
Ribosomal protein S13	RPS13	697513
Ribosomal protein S14	RPS14	710901
Ribosomal protein S16	RPS16	697219
Ribosomal protein S17-like	RPS17L	100425105
Ribosomal protein S19 binding protein 1	RPS19BP1	704079
Ribosomal protein S2	RPS2	693615
Ribosomal protein S21	RPS21	699565
Ribosomal protein S27	RPS27	106992521
Ribosomal protein S27 like	RPS27L	705483
Ribosomal protein s27a	RPS27A	718909
Ribosomal protein S28	RPS28	707133
Ribosomal protein S4, X-linked	RPS4X	699397
Ribosomal protein S5	RPS5	711259
Ribosomal protein S6 kinase, 90kda, polypeptide 1	RPS6KA1	714794
Ribosomal protein S7	RPS7	721900
Ribosomal protein S8	RPS8	703957
Ribosomal protein, large, P0	RPLP0	574363
Ribosomal protein, large, P1	RPLP1	695442
Ribosomal protein, large, P2	RPLP2	700698
Ribosomal RNA adenine dimethylase domain containing 1	RRNAD1	718599
Ribosomal RNA processing 12 homolog	RRP12	705854
Ribosomal RNA processing 8, methyltransferase, homolog (yeast)	RRP8	712011
Ribosome production factor 1 homolog	RPF1	710286
Ribulose-5-phosphate-3-epimerase	RPE	711322

Ring finger and WD repeat domain 2, E3 ubiquitin protein ligase	RFWD2	708802
Ring finger protein (C3H2C3 type) 6	RNF6	721550
Ring finger protein 112	RNF112	703312
Ring finger protein 115	RNF115	697067
Ring finger protein 121	RNF121	718216
Ring finger protein 130	RNF130	715356
Ring finger protein 14	RNF14	705363
Ring finger protein 146	RNF146	712152
Ring finger protein 167	RNF167	710656
Ring finger protein 181	RNF181	695977
Ring finger protein 185	RNF185	718351
Ring finger protein 219	RNF219	697577
Ring finger protein 34, E3 ubiquitin protein ligase	RNF34	700062
Ring finger protein 38	RNF38	693346
Ring finger protein 41, E3 ubiquitin protein ligase	RNF41	711969
Ring finger protein, transmembrane 1	RNFT1	712052
RNA 2',3'-cyclic phosphate and 5'-OH ligase	RTCB	717258
RNA binding motif (RNP1, RRM) protein 3	RBM3	710689
RNA binding motif protein 10	RBM10	711791
RNA binding motif protein 15	RBM15	701414
RNA binding motif protein 17	RBM17	712996
RNA binding motif protein 18	RBM18	698457
RNA binding motif protein 22	RBM22	712713
RNA binding motif protein 39	RBM39	704198
RNA binding motif protein 45	RBM45	702714
RNA binding motif protein 5	RBM5	704114
RNA binding motif protein 7	RBM7	695401
RNA exonuclease 2	REXO2	695292
RNA polymerase II associated protein 3	RPAP3	703749
RNA pseudouridylate synthase domain containing 3	RPUSD3	700349
Runt-related transcription factor 1; translocated to, 1 (cyclin D-related)	RUNX1T1	696934
Ruvb-like AAA ATPase 1	RUVBL1	706044
Ruvb-like AAA ATPase 2	RUVBL2	100428794
RWD domain containing 2A	RWDD2A	694598
RWD domain containing 3	RWDD3	709817
RWD domain containing 4	RWDD4	708882
SAC1 suppressor of actin mutations 1-like (yeast)	SACM1L	714107
SAGA complex associated factor 29	SGF29	709124
Sarcoglycan epsilon	SGCE	700104
Sarcolemma associated protein	SLMAP	703086
SCY1-like, kinase-like 2	SCYL2	695284
SCY1-like, kinase-like 3	SCYL3	701768
SEC11 homolog A, signal peptidase complex subunit	SEC11A	695951
SEC13 homolog, nuclear pore and COPII coat complex component	SEC13	697339
SEC22 homolog A, vesicle trafficking protein	SEC22A	715277
SEC22 homolog C, vesicle trafficking protein	SEC22C	716351
Sec23 homolog B, COPII coat complex component	SEC23B	698440

SEC23 interacting protein	SEC23IP	704155
SEC24 homolog C, COPII coat complex component	SEC24C	714688
SEC31 homolog A, COPII coat complex component	SEC31A	693687
Sec61 translocon alpha 1 subunit	SEC61A1	709787
Sec61 translocon alpha 2 subunit	SEC61A2	100427731
Sec61 translocon beta subunit	SEC61B	717815
Sec61 translocon gamma subunit	SEC61G	716898
SECIS binding protein 2	SECISBP2	697442
Secreted frizzled-related protein 1	SFRP1	702876
Secretion associated, Ras related gtpase 1A	SAR1A	711277
Sel-1 suppressor of lin-12-like 3 (C. Elegans)	SEL1L3	695033
Selenophosphate synthetase 1	SEPHS1	696038
Selenoprotein K	SELK	693421
Selenoprotein M	SELM	718290
Sema domain, immunoglobulin domain (Ig), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 4D	SEMA4D	697697
Serglycin	SRGN	712299
Serine carboxypeptidase 1	SCPEP1	708197
Serine dehydratase-like	SDSL	714721
Serine incorporator 1	SERINC1	713999
Serine palmitoyltransferase small subunit A	SPTSSA	717580
Serine peptidase inhibitor, Kunitz type, 2	SPINT2	714755
Serine/arginine-rich splicing factor 1	SRSF1	713958
Serine/arginine-rich splicing factor 11	SRSF11	702698
Serine/arginine-rich splicing factor 12	SRSF12	700497
Serine/arginine-rich splicing factor 3	SRSF3	719123
Serine/arginine-rich splicing factor 4	SRSF4	717401
Serine/arginine-rich splicing factor 7	SRSF7	713388
Serine/arginine-rich splicing factor 8	SRSF8	699079
Serine/threonine kinase 3	STK3	707425
Serine/threonine kinase 38 like	STK38L	711047
Serine/threonine protein kinase 26	STK26	707739
Serine/threonine/tyrosine kinase 1	STYK1	717844
Serologically defined colon cancer antigen 3	SDCCAG3	721750
Serpin peptidase inhibitor, clade G (C1 inhibitor), member 1	SERPING1	703928
Serpin peptidase inhibitor, clade I (neuroserpin), member 1	SERPINI1	699483
SERPINE1 mrna binding protein 1	SERBP1	700797
Serum amyloid A like 1	SAAL1	695747
Sestrin 1	SESN1	700232
SET and MYND domain containing 2	SMYD2	709375
SET and MYND domain containing 3	SMYD3	703402
SET domain containing 2	SETD2	711825
SET domain containing 4	SETD4	696003
SET domain containing 5	SETD5	704174
SET domain containing 9	SETD9	708019
SFI1 centrin binding protein	SFI1	716833
SFT2 domain containing 3	SFT2D3	699830
SGT1 homolog, MIS12 kinetochore complex assembly cochaperone	SUGT1	694046

SH2B adaptor protein 2	SH2B2	714861
SH3 and multiple ankyrin repeat domains 2	SHANK2	708192
SH3 domain binding glutamate-rich protein	SH3BGR	722581
SH3 domain containing ring finger 1	SH3RF1	694082
SH3-domain binding protein 1	SH3BP1	700647
SH3-domain binding protein 4	SH3BP4	693393
SH3-domain GRB2-like endophilin B1	SH3GLB1	712393
SHC (Src homology 2 domain containing) transforming protein 1	SHC1	718982
Shootin 1	SHTN1	700636
Shroom family member 3	SHROOM3	699613
Siah E3 ubiquitin protein ligase 1	SIAH1	716629
Sialic acid binding Ig-like lectin 10	SIGLEC10	719648
Sialic acid binding Ig-like lectin 5	SIGLEC5	719730
Sideroflexin 1	SFXN1	695107
Sideroflexin 2	SFXN2	713841
Sideroflexin 4	SFXN4	702765
Sigma non-opioid intracellular receptor 1	SIGMAR1	700469
Signal peptidase complex subunit 1	SPCS1	696426
Signal peptidase complex subunit 2	SPCS2	694179
Signal peptide, CUB domain, EGF-like 2	SCUBE2	708152
Signal recognition particle 68kda	SRP68	705568
Signal sequence receptor, alpha	SSR1	693818
Signal sequence receptor, beta (translocon-associated protein beta)	SSR2	719383
Signal sequence receptor, delta	SSR4	697266
Sin3A associated protein 18kda	SAP18	703078
Sin3A associated protein 25kda	SAP25	106997575
Sin3A associated protein 30kda	SAP30	696519
Single-stranded DNA binding protein 1, mitochondrial	SSBP1	694459
SIVA1, apoptosis-inducing factor	SIVA1	706688
Sjogren syndrome nuclear autoantigen 1	SSNA1	706507
SKI-like proto-oncogene	SKIL	696680
SLIT and NTRK like family member 1	SLITRK1	699217
SMAD family member 4	SMAD4	701803
Smad nuclear interacting protein 1	SNIP1	713733
Small integral membrane protein 15	SMIM15	693623
Small integral membrane protein 19	SMIM19	705371
Small nuclear ribonucleoprotein D1 polypeptide	SNRPD1	698965
Small nuclear ribonucleoprotein D2 polypeptide	SNRPD2	715183
Small nuclear ribonucleoprotein polypeptide B	SNRPB2	695387
Small nuclear ribonucleoprotein polypeptide E	SNRPE	701418
Small nuclear ribonucleoprotein polypeptide G	SNRPG	702586
Small nuclear ribonucleoprotein polypeptides B and B1	SNRPB	716578
Small nuclear ribonucleoprotein, U11/U12 35kda subunit	SNRNP35	702933
Small nuclear ribonucleoprotein, U4/U6.U5 27kda subunit	SNRNP27	708670
Small ubiquitin-like modifier 1	SUMO1	703644
Small ubiquitin-like modifier 1	SUMO1	703644
SMG7 nonsense mediated mrna decay factor	SMG7	717603
SMG8 nonsense mediated mrna decay factor	SMG8	711172

Smoothelin	SMTN	716424
SMYD family member 5	SMYD5	705926
SNAP-associated protein	SNAPIN	715546
SNRPN upstream reading frame	SNURF	711028
Sodium channel modifier 1	SCNM1	709922
Sodium channel, non voltage gated 1 beta subunit	SCNN1B	700093
Solute carrier family 16 member 11	SLC16A11	721775
Solute carrier family 18 (vesicular monoamine transporter), member 2	SLC18A2	701133
Solute carrier family 2 (facilitated glucose transporter), member 13	SLC2A13	697822
Solute carrier family 2 (facilitated glucose transporter), member 3	SLC2A3	715915
Solute carrier family 20 (phosphate transporter), member 1	SLC20A1	699462
Solute carrier family 22 (organic anion transporter), member 6	SLC22A6	718377
Solute carrier family 22 (organic cation/carnitine transporter), member 5	SLC22A5	707590
Solute carrier family 22 member 17	SLC22A17	713765
Solute carrier family 22 member 18	SLC22A18	721230
Solute carrier family 25 (aspartate/glutamate carrier), member 12	SLC25A12	695173
Solute carrier family 25 (carnitine/acylcarnitine translocase), member 20	SLC25A20	709029
Solute carrier family 25 (mitochondrial carrier; adenine nucleotide translocator), member 5	SLC25A5	693502
Solute carrier family 25 (mitochondrial carrier; phosphate carrier), member 24	SLC25A24	694803
Solute carrier family 25 (mitochondrial carrier; phosphate carrier), member 24	SLC25A24	694803
Solute carrier family 25 (mitochondrial carrier; phosphate carrier), member 25	SLC25A25	698216
Solute carrier family 25 (mitochondrial iron transporter), member 28	SLC25A28	710002
Solute carrier family 25 (S-adenosylmethionine carrier), member 26	SLC25A26	697960
Solute carrier family 25 member 41	SLC25A41	702790
Solute carrier family 25 member 46	SLC25A46	705968
Solute carrier family 26 (anion exchanger), member 8	SLC26A8	719049
Solute carrier family 35 (adenosine 3'-phospho 5'-phosphosulfate transporter), member B3	SLC35B3	698416
Solute carrier family 35 (UDP-galactose transporter), member A2	SLC35A2	711587
Solute carrier family 35 (UDP-glca/UDP-galnac transporter), member D1	SLC35D1	700175
Solute carrier family 35 member A5	SLC35A5	708401
Solute carrier family 35 member B1	SLC35B1	699953
Solute carrier family 37 (glucose-6-phosphate transporter), member 4	SLC37A4	702269
Solute carrier family 38 member 1	SLC38A1	702135
Solute carrier family 38 member 6	SLC38A6	704017
Solute carrier family 39 (zinc transporter), member 13	SLC39A13	713420
Solute carrier family 4 (anion exchanger), member 1,	SLC4A1AP	701783

adaptor protein		
Solute carrier family 4 (anion exchanger), member 2	SLC4A2	713966
Solute carrier family 4, sodium borate transporter, member 11	SLC4A11	718393
Solute carrier family 41 member 3	SLC41A3	716921
Solute carrier family 44 member 3	SLC44A3	714768
Solute carrier family 44 member 4	SLC44A4	715779
Solute carrier family 46 member 3	SLC46A3	712056
Solute carrier family 50 (sugar efflux transporter), member 1	SLC50A1	717424
Solute carrier family 6 (neurotransmitter transporter), member 8	SLC6A8	698307
Solute carrier family 7 (amino acid transporter light chain, L system), member 8	SLC7A8	713511
Solute carrier family 9, subfamily A (NHE3, cation proton antiporter 3), member 3 regulator 2	SLC9A3R2	694658
Solute carrier family 9, subfamily A (NHE6, cation proton antiporter 6), member 6	SLC9A6	710429
Solute carrier organic anion transporter family member 2B1	SLCO2B1	694829
SON DNA binding protein	SON	704712
Sorting nexin 1	SNX1	706544
Sorting nexin 11	SNX11	696913
Sorting nexin 13	SNX13	714019
Sorting nexin 14	SNX14	696632
Sorting nexin 2	SNX2	700507
Sorting nexin 3	SNX3	700989
Sorting nexin 33	SNX33	706309
Sorting nexin 4	SNX4	716049
SOS Ras/Rho guanine nucleotide exchange factor 2	SOS2	705601
SP110 nuclear body protein	SP110	714244
Sp2 transcription factor	SP2	694834
Sp3 transcription factor	SP3	699901
SPARC like 1	SPARCL1	701468
SPARC related modular calcium binding 1	SMOC1	712994
Spastic paraplegia 11 (autosomal recessive)	SPG11	712221
Spastic paraplegia 21 (autosomal recessive, Mast syndrome)	SPG21	712815
Spectrin, beta, non-erythrocytic 1	SPTBN1	716794
Spen family transcriptional repressor	SPEN	696205
Sperm acrosome associated 1	SPACA1	699611
Sperm antigen with calponin homology and coiled-coil domains 1-like	SPECC1L	707641
Sperm associated antigen 5	SPAG5	709400
Sperm flagellar 1	SPEF1	717547
Spermatid perinuclear RNA binding protein	STRBP	695402
Spermatogenesis associated 2-like	SPATA2L	699974
Spermatogenesis associated 5-like 1	SPATA5L1	713376
Spermatogenesis associated 7	SPATA7	693836
Spermatogenesis associated, serine rich 2 like	SPATS2L	699458
Spermidine/spermine N1-acetyltransferase 1	SAT1	697884
Spermine synthase	SMS	698179
S-phase kinase-associated protein 1	SKP1	100423634

Sphingomyelin phosphodiesterase 2	SMPD2	698865
Spindle and kinetochore associated complex subunit 2	SKA2	711092
Splicing factor 3a subunit 2	SF3A2	721469
Splicing factor 3b subunit 5	SF3B5	699863
Splicing factor 3b, subunit 1, 155kda	SF3B1	697773
Splicing factor 3b, subunit 4, 49kda	SF3B4	705655
Split hand/foot malformation (ectrodactyly) type 1	SHFM1	698349
SPRY domain containing 4	SPRYD4	713037
SPT4 homolog, DSIF elongation factor subunit	SUPT4H1	710214
Squamous cell carcinoma antigen recognized by T-cells 3	SART3	705552
Src-like-adaptor	SLA	697377
Src-related kinase lacking C-terminal regulatory tyrosine and N-terminal myristylation sites	SRMS	719587
SRP receptor alpha subunit	SRPRA	714215
SR-related CTD-associated factor 11	SCAF11	701894
SRSF protein kinase 1	SRPK1	719039
SRY-box 11	SOX11	707983
SRY-box 13	SOX13	700802
SRY-box 21	SOX21	695074
SSU72 homolog, RNA polymerase II CTD phosphatase	SSU72	702348
ST3 beta-galactoside alpha-2,3-sialyltransferase 4	ST3GAL4	717792
ST3 beta-galactoside alpha-2,3-sialyltransferase 5	ST3GAL5	696842
Staphylococcal nuclease and tudor domain containing 1	SND1	699542
Star related lipid transfer domain containing 13	STARD13	714104
Star related lipid transfer domain containing 3	STARD3	697212
Star related lipid transfer domain containing 5	STARD5	713308
STARD3 N-terminal like	STARD3NL	705212
Stathmin 1	STMN1	719733
Staufen double-stranded RNA binding protein 1	STAU1	704197
STE20-related kinase adaptor alpha	STRADA	717927
STE20-related kinase adaptor beta	STRADB	641449
STIP1 homology and U-box containing protein 1, E3 ubiquitin protein ligase	STUB1	697105
Stomatin like 1	STOML1	700510
Stomatin like 2	STOML2	698458
Stonin 1	STON1	106992942
Storkhead box 2	STOX2	693692
Stratifin	SFN	715055
Strawberry notch homolog 2 (Drosophila)	SBNO2	721186
Striatin interacting protein 1	STRIP1	700799
Stromal cell derived factor 4	SDF4	699804
Stromal cell-derived factor 2	SDF2	716189
Structural maintenance of chromosomes 4	SMC4	702615
Structure specific recognition protein 1	SSRP1	706614
STT3A, subunit of the oligosaccharyltransferase complex (catalytic)	STT3A	717056
SUB1 homolog, transcriptional regulator	SUB1	701045
Succinate dehydrogenase complex assembly factor 2	SDHAF2	693401
Succinate dehydrogenase complex subunit A, flavoprotein (Fp)	SDHA	708018

Succinate dehydrogenase complex subunit B, iron sulfur (Ip)	SDHB	699810
Succinate dehydrogenase complex, subunit D, integral membrane protein	SDHD	711326
Succinate-coa ligase, GDP-forming, beta subunit	SUCLG2	697454
Sulfatase 2	SULF2	715937
Sulfiredoxin 1	SRXN1	714997
SUMO1/sentrin specific peptidase 5	SEN5	710223
SUMO1/sentrin specific peptidase 6	SEN6	716554
SUMO1/sentrin specific peptidase 7	SEN7	701453
SUN domain containing ossification factor	SUCO	705776
Superkiller viralicidic activity 2-like 2 (S. Cerevisiae)	SKIV2L2	706419
Superoxide dismutase 1, soluble	SOD1	574096
Supervillin	SVIL	695267
Suppression of tumorigenicity 13 (colon carcinoma) (Hsp70 interacting protein)	ST13	705664
Suppression of tumorigenicity 5	ST5	705444
Suppression of tumorigenicity 7	ST7	704776
Suppressor of cytokine signaling 6	SOCS6	704108
Suppressor of fused homolog (Drosophila)	SUFU	713576
Surfactant associated 2	SFTA2	714397
Surfeit 4	SURF4	100429963
SURP and G-patch domain containing 1	SUGP1	719772
Survival motor neuron domain containing 1	SMNDC1	694761
Survival of motor neuron 1, telomeric	SMN1	677703
SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 2	SMARCA2	696973
SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 5	SMARCA5	700614
SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily b, member 1	SMARCB1	699190
SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily e, member 1	SMARCE1	701310
SWIM-type zinc finger 7 associated protein 1	SWSAP1	716529
SWT1, RNA endoribonuclease homolog	SWT1	714083
SYF2 pre-mrna-splicing factor	SYF2	719564
Synaptogyrin 1	SYNGR1	100427479
Synaptophysin-like 1	SYPL1	698350
Synaptosome associated protein 47kda	SNAP47	696700
Synaptotagmin binding, cytoplasmic RNA interacting protein	SYNCRIP	696756
Synaptotagmin VII	SYT7	722368
Syndecan binding protein	SDCBP	698381
Synemin	SYNM	717194
Synovial sarcoma translocation gene on chromosome 18-like 2	SS18L2	716387
Syntaxin 18	STX18	712216
Syntaxin 1B	STX1B	714251
Syntaxin binding protein 3	STXBP3	699144
Syntaxin binding protein 6 (amisyn)	STXBP6	715357
Syntrophin, beta 2 (dystrophin-associated protein A1, 59kda, basic	SNTB2	704333

component 2)		
Synuclein beta	SNCB	697484
Tafazzin	TAZ	574297
TAM41, mitochondrial translocator assembly and maintenance protein, homolog (S. Cerevisiae)	C3orf31	695998
TANK-binding kinase 1	TBK1	717427
TAO kinase 2	TAOK2	707777
TAR (HIV-1) RNA binding protein 1	TARBP1	712397
TAR (HIV-1) RNA binding protein 2	TARBP2	703294
Target of EGR1, member 1 (nuclear)	TOE1	705770
Taspase 1	TASP1	694028
Taste 1 receptor member 1	TAS1R1	720987
Taste 2 receptor member 16	TAS2R16	695211
TATA-box binding protein associated factor 1	TAF1	698800
TATA-box binding protein associated factor 10	TAF10	710022
TATA-box binding protein associated factor 12	TAF12	717135
TATA-box binding protein associated factor 2	TAF2	702411
TATA-box binding protein associated factor 5	TAF5	714558
TATA-box binding protein associated factor 5 like	TAF5L	693770
TATA-box binding protein associated factor 7	TAF7	574347
TATA-box binding protein associated factor 9	TAF9	700239
TATA-box binding protein associated factor, RNA polymerase I, D	TAF1D	696602
Tatd dnase domain containing 1	TATDN1	706095
Tax1 (human T-cell leukemia virus type I) binding protein 1	TAX1BP1	698103
TBC1 domain family member 15	TBC1D15	718743
TBC1 domain family member 19	TBC1D19	694865
TBC1 domain family member 25	TBC1D25	710596
TBC1 domain family member 9	TBC1D9	702230
T-box 21	TBX21	694044
T-cell acute lymphocytic leukemia 2	TAL2	712138
TCF3 (E2A) fusion partner (in childhood Leukemia)	TFPT	720296
Teashirt zinc finger homeobox 1	TSHZ1	703018
TELO2 interacting protein 1	TTI1	699930
TELO2 interacting protein 2	TTI2	696776
Telomeric repeat binding factor 2, interacting protein	TERF2IP	712149
Tensin 4	TNS4	701075
TERF1 (TRF1)-interacting nuclear factor 2	TINF2	715812
Testin LIM domain protein	TES	706879
Testis expressed 10	TEX10	714536
Testis expressed 28	TEX28	699141
Testis expressed 30	TEX30	701917
Tetraspanin 3	TSPAN3	708428
Tetraspanin 8	TSPAN8	718622
Tetratricopeptide repeat domain 1	TTC1	695225
Tetratricopeptide repeat domain 14	TTC14	710895
Tetratricopeptide repeat domain 27	TTC27	707021
Tetratricopeptide repeat domain 7B	TTC7B	696029
Tetratricopeptide repeat domain 9C	TTC9C	718583

TGF-beta activated kinase 1/MAP3K7 binding protein 1	TAB1	703409
TGF-beta activated kinase 1/MAP3K7 binding protein 2	TAB2	696875
THAP domain containing 7	THAP7	696208
Thiopurine S-methyltransferase	TPMT	704564
Thioredoxin domain containing 11	TXNDC11	711826
Thioredoxin domain containing 12 (endoplasmic reticulum)	TXNDC12	712891
Thioredoxin domain containing 9	TXNDC9	709303
Thioredoxin like 1	TXNL1	695194
Thioredoxin like 4A	TXNL4A	698969
Thioredoxin-related transmembrane protein 1	TMX1	707057
Thiosulfate sulfurtransferase (rhodanese)	TST	698021
THO complex 1	THOC1	697954
THO complex 3	THOC3	695561
THO complex 6	THOC6	700217
Thrombospondin 3	THBS3	717572
THUMP domain containing 2	THUMPD2	712045
Thymosin beta 4, X-linked	TMSB4X	710959
Thyroid hormone receptor interactor 11	TRIP11	697489
Thyroid hormone receptor interactor 12	TRIP12	710560
Thyroid hormone receptor interactor 4	TRIP4	707263
TIA1 cytotoxic granule-associated RNA binding protein	TIA1	702366
Tigger transposable element derived 2	TIGD2	100427994
TIMELESS interacting protein	TIPIN	710328
Titin-cap	TCAP	697327
TM2 domain containing 2	TM2D2	701007
TNF receptor associated factor 2	TRAF2	708391
TNF receptor associated factor 7	TRAF7	695415
TNF receptor-associated protein 1	TRAP1	706234
Tocopherol (alpha) transfer protein-like	TTPAL	712620
Topoisomerase (DNA) I	TOP1	697300
Topoisomerase (DNA) II alpha	TOP2A	700707
Topoisomerase (DNA) II beta	TOP2B	677709
Topoisomerase (DNA) II binding protein 1	TOPBP1	719054
Topoisomerase I binding, arginine/serine-rich, E3 ubiquitin protein ligase	TOPORS	703930
Torsin A interacting protein 2	TOR1AIP2	716691
Torsin family 1, member A (torsin A)	TOR1A	722520
Torsin family 2, member A	TOR2A	700203
TP53 induced glycolysis regulatory phosphatase	TIGAR	721886
TPX2, microtubule-associated	TPX2	712961
TRAF family member associated NFKB activator	TANK	700942
TRAF3 interacting protein 2	TRAF3IP2	697530
Trafficking protein particle complex 11	TRAPPC11	702066
Trafficking protein particle complex 3	TRAPPC3	713705
Trafficking protein particle complex 4	TRAPPC4	702469
Trans-2,3-enoyl-coa reductase	TECR	718928
Transaldolase 1	TALDO1	720828
Transcription elongation factor A (SII)-like 1	TCEAL1	696826

Transcription elongation factor A (SII)-like 2	TCEAL2	705419
Transcription elongation factor A (SII)-like 7	TCEAL7	695831
Transcription elongation factor A (SII)-like 8	TCEAL8	695496
Transcription elongation factor B (SIII), polypeptide 1 (15kda, elongin C)	TCEB1	698922
Transcription elongation regulator 1	TCERG1	707912
Transcription factor A, mitochondrial	TFAM	701368
Transcription factor B1, mitochondrial	TFB1M	701830
Transcription factor CP2	TFCP2	574399
Transcription factor Dp-2 (E2F dimerization partner 2)	TFDP2	714655
Transcription factor EC	TFEC	704124
Transducin (beta)-like 1 X-linked receptor 1	TBL1XR1	712740
Transducin (beta)-like 2	TBL2	716515
Transducin (beta)-like 3	TBL3	693864
Transducin like enhancer of split 1	TLE1	707336
Transferrin receptor	TFRC	711568
Transformer 2 alpha homolog (Drosophila)	TRA2A	574247
Transformer 2 beta homolog (Drosophila)	TRA2B	574337
Transforming growth factor beta regulator 4	TBRG4	697717
Transforming, acidic coiled-coil containing protein 2	TACC2	705497
Transforming, acidic coiled-coil containing protein 3	TACC3	712898
Transglutaminase 7	TGM7	712676
Transient receptor potential cation channel, subfamily M, member 5	TRPM5	705070
Transient receptor potential cation channel, subfamily V, member 4	TRPV4	709605
Translation machinery associated 7 homolog	TMA7	710220
Translational activator of mitochondrially encoded cytochrome c oxidase I	TACO1	717828
Translocase of inner mitochondrial membrane 10 homolog (yeast)	TIMM10	705930
Translocase of inner mitochondrial membrane 17 homolog A (yeast)	TIMM17A	707001
Translocase of inner mitochondrial membrane 17 homolog B (yeast)	TIMM17B	714895
Translocase of inner mitochondrial membrane 21 homolog (yeast)	TIMM21	694581
Translocase of inner mitochondrial membrane 23 homolog (yeast)	TIMM23	709594
Translocase of inner mitochondrial membrane 44 homolog (yeast)	TIMM44	709800
Translocase of inner mitochondrial membrane 8 homolog B (yeast)	TIMM8B	711249
Translocase of inner mitochondrial membrane domain containing 1	TIMMDC1	712414
Translocase of outer mitochondrial membrane 22 homolog (yeast)	TOMM22	701286
Translocase of outer mitochondrial membrane 40 homolog (yeast)	TOMM40	713297
Translocase of outer mitochondrial membrane 6 homolog (yeast)	TOMM6	100423260
Translocase of outer mitochondrial membrane 70 homolog A (S. Cerevisiae)	TOMM70A	700347
Translocated promoter region, nuclear basket protein	TPR	713910
Transmembrane 4 L six family member 5	TM4SF5	709844
Transmembrane 6 superfamily member 2	TM6SF2	719756
Transmembrane 9 superfamily member 1	TM9SF1	715472
Transmembrane and coiled-coil domains 4	TMCO4	703851
Transmembrane and ubiquitin-like domain containing 2	TMUB2	714541
Transmembrane BAX inhibitor motif containing 6	TMBIM6	677702
Transmembrane p24 trafficking protein 1	TMED1	713618

Transmembrane p24 trafficking protein 3	TMED3	711993
Transmembrane p24 trafficking protein 4	TMED4	699105
Transmembrane p24 trafficking protein 7	TMED7	100533189
Transmembrane phosphoinositide 3-phosphatase and tensin homolog 2	TPTE2	704870
Transmembrane protease, serine 13	TMPRSS13	698586
Transmembrane protein 104	TMEM104	698592
Transmembrane protein 106C	TMEM106C	704741
Transmembrane protein 115	TMEM115	702164
Transmembrane protein 123	TMEM123	702833
Transmembrane protein 125	TMEM125	699920
Transmembrane protein 126A	TMEM126A	702831
Transmembrane protein 126B	TMEM126B	702719
Transmembrane protein 132A	TMEM132A	695291
Transmembrane protein 135	TMEM135	704963
Transmembrane protein 138	TMEM138	693905
Transmembrane protein 141	TMEM141	721687
Transmembrane protein 14A	TMEM14A	708829
Transmembrane protein 14C	TMEM14C	697976
Transmembrane protein 165	TMEM165	696262
Transmembrane protein 167A	TMEM167A	712218
Transmembrane protein 168	TMEM168	702972
Transmembrane protein 179B	TMEM179B	718518
Transmembrane protein 183A	TMEM183A	704195
Transmembrane protein 204	TMEM204	701926
Transmembrane protein 205	TMEM205	714330
Transmembrane protein 208	TMEM208	697228
Transmembrane protein 216	TMEM216	693655
Transmembrane protein 218	TMEM218	100430362
Transmembrane protein 243	TMEM243	706405
Transmembrane protein 245	TMEM245	710299
Transmembrane protein 254	TMEM254	701130
Transmembrane protein 261	TMEM261	716818
Transmembrane protein 30A	TMEM30A	717907
Transmembrane protein 33	TMEM33	702063
Transmembrane protein 39B	TMEM39B	706700
Transmembrane protein 42	TMEM42	714654
Transmembrane protein 45B	TMEM45B	718735
Transmembrane protein 47	TMEM47	693975
Transmembrane protein 5	TMEM5	717102
Transmembrane protein 50A	TMEM50A	100424313
Transmembrane protein 59	TMEM59	714942
Transmembrane protein 60	TMEM60	693679
Transmembrane protein 94	TMEM94	702374
Transmembrane protein with EGF-like and two follistatin-like domains 1	TMEFF1	714325
Transmembrane protein, adipocyte associated 1	TPRA1	707221
Transporter 1, ATP-binding cassette, sub-family B (MDR/TAP)	TAP1	717726

Tribbles pseudokinase 2	TRIB2	710966
Trinucleotide repeat containing 6A	TNRC6A	701680
Triokinase/FMN cyclase	TKFC	694117
Tripartite motif containing 11	TRIM11	694150
Tripartite motif containing 24	TRIM24	710229
Tripartite motif containing 27	TRIM27	706129
Tripartite motif containing 37	TRIM37	710934
Tripartite motif containing 41	TRIM41	708426
Tripartite motif containing 8	TRIM8	713701
TRK-fused gene	TFG	700972
Trna 5-methylaminomethyl-2-thiouridylate methyltransferase	TRMU	714268
Trna isopentenyltransferase 1	TRIT1	716422
Trna methyltransferase 11 homolog	TRMT11	712712
Trna methyltransferase 11-2 homolog (S. Cerevisiae)	TRMT112	717676
Trna methyltransferase 6	TRMT6	718229
Trna methyltransferase O	TRMO	715609
Trna phosphotransferase 1	TRPT1	717911
Trna splicing endonuclease subunit 15	TSEN15	717481
Tropomodulin 4	TMOD4	709732
Tropomyosin 2 (beta)	TPM2	696604
Tropomyosin 3	TPM3	716336
Trub pseudouridine (psi) synthase family member 2	TRUB2	717619
Tryptase gamma 1	TPSG1	100425751
TSC22 domain family member 1	TSC22D1	701076
TSPY-like 4	TSPYL4	716137
TSSK6 activating co-chaperone	TSACC	719490
Tu translation elongation factor, mitochondrial	TUFM	705462
Tubulin alpha 1a	TUBA1A	574194
Tubulin alpha 4a	TUBA4A	702583
Tubulin folding cofactor C	TBCC	696997
Tubulin folding cofactor E	TBCE	711476
Tubulin gamma 1	TUBG1	710756
Tubulin, alpha 1b	TUBA1B	709643
Tudor domain containing 3	TDRD3	696228
Tudor domain containing 7	TDRD7	641450
Tumor necrosis factor (ligand) superfamily, member 12	TNFSF12	100551506
Tumor protein D52-like 1	TPD52L1	716568
Tumor protein p53 binding protein 1	TP53BP1	710237
Tumor protein, translationally-controlled 1	TPT1	702155
Tumor suppressing subtransferable candidate 1	TSSC1	707650
Tumor suppressing subtransferable candidate 4	TSSC4	705185
Tumor suppressor candidate 3	TUSC3	701123
Twist family bhlh transcription factor 1	TWIST1	574278
Twist family bhlh transcription factor 2	TWIST2	697078
TWIST neighbor	TWISTNB	707781
Twisted gastrulation homolog 1 (Drosophila)	TWSG1	705804
Tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, beta	YWHAB	717788

Tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, eta	YWHAH	717016
Tyrosine hydroxylase	TH	721137
Tyrosine kinase, non-receptor, 1	TNK1	715180
Tyrosyl-DNA phosphodiesterase 2	TDP2	715162
UBA domain containing 2	UBAC2	703484
Ubiquilin 1	UBQLN1	713525
Ubiquinol-cytochrome c reductase core protein II	UQCRC2	697967
Ubiquinol-cytochrome c reductase, 6.4kda subunit	UQCR	708396
Ubiquinol-cytochrome c reductase, complex III subunit VII, 9.5kda	UQCRCQ	708950
Ubiquitin A-52 residue ribosomal protein fusion product 1	UBA52	720243
Ubiquitin B	UBB	696110
Ubiquitin conjugating enzyme E2 variant 1	UBE2V1	100425552
Ubiquitin conjugating enzyme E2A	UBE2A	693716
Ubiquitin conjugating enzyme E2D 3	UBE2D3	710772
Ubiquitin conjugating enzyme E2D 4 (putative)	UBE2D4	707831
Ubiquitin conjugating enzyme E2E 3	UBE2E3	704530
Ubiquitin conjugating enzyme E2F (putative)	UBE2F	695394
Ubiquitin conjugating enzyme E2I	UBE2I	722434
Ubiquitin conjugating enzyme E2L 3	UBE2L3	697675
Ubiquitin conjugating enzyme E2O	UBE2O	710529
Ubiquitin conjugating enzyme E2Q family member 1	UBE2Q1	718733
Ubiquitin C-terminal hydrolase L3	UCHL3	697276
Ubiquitin fusion degradation 1 like (yeast)	UFD1L	711716
Ubiquitin like 5	UBL5	711015
Ubiquitin like 7	UBL7	702305
Ubiquitin like domain containing CTD phosphatase 1	UBLCP1	694476
Ubiquitin protein ligase E3 component n-recogin 7 (putative)	UBR7	698882
Ubiquitin protein ligase E3B	UBE3B	707324
Ubiquitin protein ligase E3D	UBE3D	694910
Ubiquitin related modifier 1	URM1	722618
Ubiquitin specific peptidase 10	USP10	718471
Ubiquitin specific peptidase 10	USP10	718471
Ubiquitin specific peptidase 13 (isopeptidase T-3)	USP13	708624
Ubiquitin specific peptidase 16	USP16	706403
Ubiquitin specific peptidase 21	USP21	719894
Ubiquitin specific peptidase 25	USP25	716923
Ubiquitin specific peptidase 3	USP3	705973
Ubiquitin specific peptidase 38	USP38	700235
Ubiquitin specific peptidase 39	USP39	696217
Ubiquitin specific peptidase 47	USP47	701660
Ubiquitin specific peptidase 51	USP51	705861
Ubiquitin specific peptidase 7 (herpes virus-associated)	USP7	714625
Ubiquitin specific peptidase 8	USP8	715523
Ubiquitination factor E4B	UBE4B	713348
Ubiquitin-like modifier activating enzyme 2	UBA2	705808
Ubiquitin-like modifier activating enzyme 3	UBA3	696493
Ubiquitin-like with PHD and ring finger domains 1	UHRF1	695531

U-box domain containing 5	UBOX5	717166
UBX domain protein 11	UBXN11	719826
UDP-Gal:betaglcnac beta 1,4- galactosyltransferase, polypeptide 3	B4GALT3	719920
UDP-galactose-4-epimerase	GALE	710553
UDP-glcnac:betagal beta-1,3-N-acetylglucosaminyltransferase 2	B3GNT2	693396
UDP-glucose pyrophosphorylase 2	UGP2	695178
UDP-N-acetylglucosamine pyrophosphorylase 1	UAP1	720116
UHRF1 binding protein 1-like	UHRF1BP1L	694816
Unconventional SNARE in the ER 1 homolog (S. Cerevisiae)	USE1	718905
UPF3 regulator of nonsense transcripts homolog B (yeast)	UPF3B	694247
Up-regulated during skeletal muscle growth 5 homolog (mouse)	USMG5	100428450
Upstream binding protein 1 (LBP-1a)	UBP1	706283
Uridine monophosphate synthetase	UMPS	715664
Uronyl-2-sulfotransferase	UST	697355
Usher syndrome 1C	USH1C	696911
USP6 N-terminal like	USP6NL	694275
USP6 N-terminal like	USP6NL	694275
UTP14, U3 small nucleolar ribonucleoprotein, homolog C (yeast)	UTP14C	709657
UTP6 small subunit processome component	UTP6	713361
UV radiation resistance associated	UVRAG	696601
Vac14 homolog (S. Cerevisiae)	VAC14	708741
Vaccinia related kinase 1	VRK1	704798
Vacuolar protein sorting 13 homolog C (S. Cerevisiae)	VPS13C	709080
Vacuolar protein sorting 36 homolog (S. Cerevisiae)	VPS36	693290
Vacuolar protein sorting 4 homolog A (S. Cerevisiae)	VPS4A	705277
Vacuolar protein sorting 45 homolog (S. Cerevisiae)	VPS45	706035
Vacuolar protein sorting 72 homolog (S. Cerevisiae)	VPS72	709818
V-akt murine thymoma viral oncogene homolog 3	AKT3	714717
Valosin containing protein lysine (K) methyltransferase	VCPKMT	705487
Valyl-trna synthetase	VARS	715537
Vascular endothelial growth factor A	VEGFA	574209
Vav guanine nucleotide exchange factor 1	VAV1	100424246
Vav guanine nucleotide exchange factor 3	VAV3	694685
VCP-interacting membrane selenoprotein	VIMP	694752
V-crk avian sarcoma virus CT10 oncogene homolog	CRK	701185
Very low density lipoprotein receptor	VLDLR	574284
Vesicle associated membrane protein 7	VAMP7	704160
Vesicle transport through interaction with t-snares 1B	VTI1B	711113
Vitamin K epoxide reductase complex subunit 1 like 1	VKORC1L1	697591
Vitronectin	VTN	708499
V-myc avian myelocytomatosis viral oncogene neuroblastoma derived homolog	MYCN	698699
Voltage-dependent anion channel 1	VDAC1	710045
Voltage-dependent anion channel 2	VDAC2	704257
VPS11, CORVET/HOPS core subunit	VPS11	702834
VPS26 retromer complex component A	VPS26A	717371
VPS26 retromer complex component B	VPS26B	694566
VPS29 retromer complex component	VPS29	709646

VPS33B interacting protein, apical-basolateral polarity regulator, spe-39 homolog	VIPAS39	706315
VPS54 GARP complex subunit	VPS54	695397
VPS8, CORVET complex subunit	VPS8	701567
V-ral simian leukemia viral oncogene homolog A (ras related)	RALA	703440
V-ral simian leukemia viral oncogene homolog B	RALB	695852
WD repeat containing, antisense to TP53	WRAP53	716125
WD repeat containing, antisense to TP73	WRAP73	695276
WD repeat domain 11	WDR11	714990
WD repeat domain 12	WDR12	705623
WD repeat domain 19	WDR19	698866
WD repeat domain 20	WDR20	708533
WD repeat domain 26	WDR26	704911
WD repeat domain 3	WDR3	711960
WD repeat domain 35	WDR35	716638
WD repeat domain 37	WDR37	709975
WD repeat domain 4	WDR4	714230
WD repeat domain 41	WDR41	708223
WD repeat domain 47	WDR47	696942
WD repeat domain 53	WDR53	709710
WD repeat domain 6	WDR6	708505
WD repeat domain 61	WDR61	709971
WD repeat domain 70	WDR70	706130
WD repeat domain 74	WDR74	718460
WD repeat domain 75	WDR75	709104
WD repeat domain 77	WDR77	677686
WD repeat domain 83 opposite strand	WDR83OS	716302
WD repeat, sterile alpha motif and U-box domain containing 1	WDSUB1	699456
WDYHV motif containing 1	WDYHV1	704686
WEE1 G2 checkpoint kinase	WEE1	703760
Werner helicase interacting protein 1	WRNIP1	707250
Williams Beuren syndrome chromosome region 22	WBSCR22	720121
Wilms tumor 1 associated protein	WTAP	702295
Wilms tumor 1 associated protein	WTAP	702295
Wingless-type MMTV integration site family member 11	WNT11	696845
Wiskott-Aldrich syndrome-like	WASL	696556
WSC domain containing 1	WSCD1	712488
WW domain binding protein 1	WBP1	709202
WW domain binding protein 11	WBP11	699451
WW domain binding protein 2	WBP2	704545
WW domain binding protein 5	WBP5	696661
WW domain containing adaptor with coiled-coil	WAC	715828
WW domain containing E3 ubiquitin protein ligase 2	WWP2	705464
X-box binding protein 1	XBP1	713863
Xeroderma pigmentosum, complementation group A	XPA	715705
X-prolyl aminopeptidase (aminopeptidase P) 1, soluble	XPNPEP1	696570
X-ray repair complementing defective repair in Chinese hamster cells 5	XRCC5	574279

X-ray repair complementing defective repair in Chinese hamster cells 6	XRCC6	707975
XRCC6 binding protein 1	XRCC6BP1	712932
Yae1 domain containing 1	YAE1D1	703786
YEATS domain containing 4	YEATS4	718376
Yip1 domain family member 1	YIPF1	714632
Yip1 domain family member 2	YIPF2	713753
Yip1 domain family member 3	YIPF3	700228
Yip1 domain family member 4	YIPF4	706819
Yip1 interacting factor homolog A (<i>S. Cerevisiae</i>)	YIF1A	714486
Yippee like 3	YPEL3	708740
Yippee like 5	YPEL5	704532
YKT6 v-SNARE homolog (<i>S. Cerevisiae</i>)	YKT6	699606
YTH domain containing 1	YTHDC1	709717
YTH N(6)-methyladenosine RNA binding protein 1	YTHDF1	697816
YTH N(6)-methyladenosine RNA binding protein 2	YTHDF2	717225
Zinc finger (CCCH type), RNA binding motif and serine/arginine rich 2	ZRSR2	720986
Zinc finger and BTB domain containing 26	ZBTB26	698776
Zinc finger and BTB domain containing 33	ZBTB33	695801
Zinc finger and BTB domain containing 39	ZBTB39	713914
Zinc finger and BTB domain containing 49	ZBTB49	712422
Zinc finger and BTB domain containing 5	ZBTB5	718482
Zinc finger and SCAN domain containing 21	ZSCAN21	710501
Zinc finger and SCAN domain containing 29	ZSCAN29	710414
Zinc finger and SCAN domain containing 32	ZSCAN32	702733
Zinc finger CCCH-type containing 11A	ZC3H11A	701537
Zinc finger CCCH-type containing 12A	ZC3H12A	713604
Zinc finger CCCH-type containing 15	ZC3H15	707648
Zinc finger CCCH-type containing 3	ZC3H3	708584
Zinc finger CCCH-type containing 7A	ZC3H7A	711984
Zinc finger homeobox 3	ZFHX3	706074
Zinc finger protein 140	ZNF140	695171
Zinc finger protein 143	ZNF143	703978
Zinc finger protein 177	ZNF177	709851
Zinc finger protein 180	ZNF180	712493
Zinc finger protein 181	ZNF181	106992423
Zinc finger protein 207	ZNF207	100689489
Zinc finger protein 211	ZNF211	100429294
Zinc finger protein 215	ZNF215	708494
Zinc finger protein 22	ZNF22	706208
Zinc finger protein 221	ZNF221	100423743
Zinc finger protein 239	ZNF239	717737
Zinc finger protein 25	ZNF25	701129
Zinc finger protein 263	ZNF263	702166
Zinc finger protein 280D	ZNF280D	699509
Zinc finger protein 281	ZNF281	709466
Zinc finger protein 311	ZNF311	708417

Zinc finger protein 322	ZNF322	701098
Zinc finger protein 385A	ZNF385A	705436
Zinc finger protein 408	ZNF408	714213
Zinc finger protein 410	ZNF410	698124
Zinc finger protein 436	ZNF436	709638
Zinc finger protein 460	ZNF460	710080
Zinc finger protein 462	ZNF462	711489
Zinc finger protein 474	ZNF474	700119
Zinc finger protein 484	ZNF484	711976
Zinc finger protein 496	ZNF496	709694
Zinc finger protein 521	ZNF521	709169
Zinc finger protein 593	ZNF593	714086
Zinc finger protein 595	ZNF595	716693
Zinc finger protein 608	ZNF608	702182
Zinc finger protein 620	ZNF620	100423711
Zinc finger protein 622	ZNF622	100429385
Zinc finger protein 627	ZNF627	716820
Zinc finger protein 638	ZNF638	704418
Zinc finger protein 646	ZNF646	712774
Zinc finger protein 653	ZNF653	714754
Zinc finger protein 664	ZNF664	710703
Zinc finger protein 684	ZNF684	695691
Zinc finger protein 687	ZNF687	716590
Zinc finger protein 7	ZNF7	715735
Zinc finger protein 777	ZNF777	711987
Zinc finger protein 804B	ZNF804B	704561
Zinc finger protein 830	ZNF830	715130
Zinc finger protein 835	ZNF835	705945
Zinc finger protein 92	ZNF92	708683
Zinc finger RNA binding protein	ZFR	696882
Zinc finger with UFM1-specific peptidase domain	ZUFSP	718059
Zinc finger, AN1-type domain 2A	ZFAND2A	100426344
Zinc finger, AN1-type domain 2B	ZFAND2B	702027
Zinc finger, AN1-type domain 3	ZFAND3	719346
Zinc finger, AN1-type domain 4	ZFAND4	708136
Zinc finger, AN1-type domain 6	ZFAND6	717543
Zinc finger, C3H1-type containing	ZFC3H1	718671
Zinc finger, CCCH-type with G-patch domain	ZGPAT	719499
Zinc finger, CCHC domain containing 11	ZCCHC11	713406
Zinc finger, CCHC domain containing 14	ZCCHC14	703833
Zinc finger, CCHC domain containing 17	ZCCHC17	705172
Zinc finger, CCHC domain containing 3	ZCCHC3	714477
Zinc finger, CCHC domain containing 6	ZCCHC6	693660
Zinc finger, CCHC domain containing 7	ZCCHC7	716658
Zinc finger, CCHC domain containing 8	ZCCHC8	702359
Zinc finger, DHHC-type containing 12	ZDHHC12	722606
Zinc finger, DHHC-type containing 16	ZDHHC16	705982
Zinc finger, DHHC-type containing 24	ZDHHC24	713870

Zinc finger, DHHC-type containing 5	ZDHHC5	704863
Zinc finger, DHHC-type containing 6	ZDHHC6	696538
Zinc finger, FYVE domain containing 16	ZFYVE16	710872
Zinc finger, FYVE domain containing 27	ZFYVE27	707273
Zinc finger, matrin-type 2	ZMAT2	697247
Zinc finger, matrin-type 5	ZMAT5	715058
Zinc finger, MYM-type 2	ZMYM2	721255
Zinc finger, MYM-type 3	ZMYM3	697147
Zinc finger, MYM-type 4	ZMYM4	712793
Zinc finger, MYND-type containing 11	ZMYND11	708761
Zinc finger, RAN-binding domain containing 2	ZRANB2	703513
Zinc metallopeptidase STE24	ZMPSTE24	693765
Zona pellucida glycoprotein 3 (sperm receptor)	ZP3	719925
Zyxin	ZYX	706407

Table S5: List of expressed genes in the endometrium

(1) Expressed in both groups 1 and 2

Gene Name	Gene Symbol	Entrez Gene ID
1-acylglycerol-3-phosphate O-acyltransferase 1	AGPAT1	717174
5-phosphohydroxy-L-lysine phospho-lyase	PHYKPL	702302
8-oxoguanine DNA glycosylase	OGG1	700481
Abhydrolase domain containing 8	ABHD8	718980
Actin like 7B	ACTL7B	710750
ADAM metalloproteinase with thrombospondin type 1 motif 14	ADAMTS14	710154
Adaptor related protein complex 1 associated regulatory protein	AP1AR	700734
Adenylate cyclase 4	ADCY4	714684
Aladin WD repeat nucleoporin	AAAS	719095
Alkb homolog 4, lysine demethylase	ALKBH4	715078
Aminoacylase 3	ACY3	711083
Anaphase promoting complex subunit 2	ANAPC2	706384
Ancient ubiquitous protein 1	AUP1	710020
Ankyrin repeat and IBR domain containing 1	ANKIB1	703273
Ankyrin repeat domain 2 (stretch responsive muscle)	ANKRD2	707097
Ankyrin repeat domain 6	ANKRD6	701339
Apolipoprotein B mRNA editing enzyme, catalytic polypeptide-like 3H	APOBEC3H	723811
Apoptosis inducing factor, mitochondria associated 1	AIFM1	702773
Artemin	ARTN	701641
Ataxin 2-like	ATXN2L	708359
ATP synthase F0 subunit 6	ATP6	2846629
ATPase, H ⁺ transporting, lysosomal 14kda, V1 subunit F	ATP6V1F	702112
ATPase, H ⁺ /K ⁺ exchanging, alpha polypeptide	ATP4A	100426216
Autophagy related 2A	ATG2A	717290
Autophagy related 7	ATG7	696238
B9 protein domain 2	B9D2	704873
BCL2-associated X protein	BAX	718948
BCS1-like (S. Cerevisiae)	BCS1L	699690
Beta-2-microglobulin	B2M	712428
Bloom syndrome, recq helicase-like	BLM	703460
Bone morphogenetic protein 1	BMP1	707596
BPI fold containing family A member 2	BPIFA2	710376
Bromodomain adjacent to zinc finger domain 1B	BAZ1B	716436
Bromodomain containing 2	BRD2	717893
Cadherin 11, type 2, OB-cadherin (osteoblast)	CDH11	708826
Cadherin related family member 2	CDHR2	697249
Calcium/calmodulin-dependent protein kinase II delta	CAMK2D	702504
Calreticulin	CALR	716910
Carboxypeptidase N subunit 2	CPN2	106997192

Casein kinase 2, beta polypeptide	CSNK2B	715807
Catalase	CAT	717406
Cathepsin C	CTSC	705320
Cbl proto-oncogene B, E3 ubiquitin protein ligase	CBLB	703879
CD19 molecule	CD19	705211
CD1c molecule	CD1C	717148
CD63 molecule	CD63	709828
Cell death-inducing DFFA-like effector b	CIDEB	100425328
Cell growth regulator with ring finger domain 1	CGRRF1	695231
Centrosomal protein 41kda	CEP41	703215
Centrosomal protein 57kda-like 1	CEP57L1	700109
Chromosome 1 open reading frame, human c1orf198	C1H1orf198	714084
Chromosome 1 open reading frame, human c1orf54	C1H1orf54	107000832
Chromosome 3 open reading frame, human c21orf91	C3H21orf91	710406
Chromosome 7 open reading frame, human c14orf166	C7H14orf166	710094
Chromosome 8 open reading frame, human c8orf59	C8H8orf59	703464
Cilia and flagella associated protein 65	CFAP65	701296
Ciliary neurotrophic factor	CNTF	701907
Cleavage and polyadenylation specific factor 4	CPSF4	708119
Cleft lip and palate associated transmembrane protein 1	CLPTM1	718306
Cofilin 1 (non-muscle)	CFL1	721882
Cofilin 2 (muscle)	CFL2	693875
Coiled-coil domain containing 92	CCDC92	705922
Collagen, type III, alpha 1	COL3A1	574131
Complement factor properdin	CFP	707386
Cornichon family AMPA receptor auxiliary protein 1	CNIH1	695002
C-src tyrosine kinase	CSK	702868
CUE domain containing 2	CUEDC2	713243
Cyclin D3	CCND3	695215
Cyclin-dependent kinase 4	CDK4	715650
Cystatin C	CST3	574313
Cytochrome P450, family 2, subfamily D, polypeptide 6	CYP2D6	678691
Cytochrome P450c17	CYP17A1	678693
Dachsous cadherin-related 1	DCHS1	711938
DDB1 and CUL4 associated factor 11	DCAF11	714867
DEAD (Asp-Glu-Ala-Asp) box polypeptide 41	DDX41	700742
DEAH (Asp-Glu-Ala-His) box polypeptide 38	DHX38	709173
Dedicator of cytokinesis 5	DOCK5	711359
Dehydrogenase/reductase (SDR family) member 3	DHRS3	715548
Denticleless E3 ubiquitin protein ligase homolog (Drosophila)	DTL	711236
Deoxyhypusine synthase	DHPS	716213
Dnaj heat shock protein family (Hsp40) member C27	DNAJC27	694037
Dnaj heat shock protein family (Hsp40) member C3	DNAJC3	695757
Docking protein 5	DOK5	698689
DR1-associated protein 1 (negative cofactor 2 alpha)	DRAP1	715271
Drosha, ribonuclease type III	DROSHA	692081
DTW domain containing 1	DTWD1	715084
E1A binding protein p300	EP300	706258

E74-like factor 2 (ets domain transcription factor)	ELF2	696760
Ectodysplasin A receptor	EDAR	695059
EGF-like-domain, multiple 7	EGFL7	709840
EGF-like-domain, multiple 8	EGFL8	717145
ELOVL fatty acid elongase 4	ELOVL4	692070
Enhancer of rudimentary homolog (Drosophila)	ERH	712507
ERGIC and golgi 3	ERGIC3	704736
Eukaryotic translation elongation factor 1 beta 2	EEF1B2	707019
Eukaryotic translation elongation factor 1 gamma	EEF1G	722274
Eukaryotic translation initiation factor 3 subunit L	EIF3L	699189
Eukaryotic translation initiation factor 4H	EIF4H	693429
EWS RNA binding protein 1	EWSR1	714432
Exocyst complex component 2	EXOC2	706296
Exostosin glycosyltransferase 1	EXT1	701488
Family with sequence similarity 178 member B	FAM178B	710890
Family with sequence similarity 181 member B	FAM181B	701184
Fem-1 homolog b (C. Elegans)	FEM1B	693955
Filamin binding LIM protein 1	FBLIM1	695727
Follistatin like 1	FSTL1	713367
Fuzzy planar cell polarity protein	FUZ	719442
FXYP domain containing ion transport regulator 7	FXYP7	718457
FYN proto-oncogene, Src family tyrosine kinase	FYN	574214
G protein pathway suppressor 1	GPS1	719343
G protein-coupled bile acid receptor 1	GPBAR1	697937
G protein-coupled receptor 31	GPR31	717158
G2/M-phase specific E3 ubiquitin protein ligase	G2E3	717021
Gamma-glutamylcyclotransferase	GGCT	695547
General transcription factor IIH subunit 5	GTF2H5	700107
GLE1, RNA export mediator	GLE1	717474
Glucose-fructose oxidoreductase domain containing 1	GFOD1	700607
Glucosidase, beta (bile acid) 2	GBA2	696062
Glutathione S-transferase alpha 4	GSTA4	709666
Golgi-associated, gamma adaptin ear containing, ARF binding protein 3	GGA3	705751
GRB2-related adaptor protein	GRAP	702473
Guanidinoacetate N-methyltransferase	GAMT	721263
Guanine nucleotide binding protein (G protein), beta polypeptide 2-like 1	GNB2L1	708526
Guanylate kinase 1	GUK1	695272
H2A histone family, member Z	H2AFZ	709326
HAUS augmin like complex subunit 8	HAUS8	718874
Heat shock factor binding protein 1	HSBP1	714498
Heat shock protein 90kda alpha family class B member 1	HSP90AB1	702293
Heat shock protein family B (small) member 11	HSPB11	714791
Heat shock transcription factor 2	HSF2	713938
Hematopoietic prostaglandin D synthase	HPGDS	705227
Homeodomain interacting protein kinase 1	HIPK1	707856
Hyaluronan and proteoglycan link protein 3	HAPLN3	698880

Hyperpolarization activated cyclic nucleotide gated potassium channel 3	HCN3	717719
IMP3, U3 small nucleolar ribonucleoprotein	IMP3	706202
Inhibin alpha	INHA	574379
Insulin like 3	INSL3	100533192
Integrin linked kinase	ILK	709944
Interferon regulatory factor 2	IRF2	694347
Intraflagellar transport 20	IFT20	715773
Intraflagellar transport 57	IFT57	705088
IQ motif containing K	IQCK	695417
IQ motif containing with AAA domain 1	IQCA1	694173
KDEL motif containing 1	KDELC1	702156
Keratin associated protein 12-4	KRTAP12-4	712284
LCK proto-oncogene, Src family tyrosine kinase	LCK	717704
Leucine rich repeat and coiled-coil centrosomal protein 1	LRRCC1	707964
Leucine rich repeat containing 42	LRRC42	714839
Leucine-rich repeats and WD repeat domain containing 1	LRWD1	715187
Leukocyte immunoglobulin-like receptor, subfamily B (with TM and ITIM domains), member 1	LILRB1	692340
Leukocyte-associated immunoglobulin-like receptor 1	LAIR1	695533
Leupaxin	LPXN	702033
Lipocalin 1	LCN1	711974
LSM14A mrna processing body assembly factor	LSM14A	705085
Lymphocyte antigen 6 complex, locus G6C	LY6G6C	716220
Lysine-rich nucleolar protein 1	KNOP1	695144
MAD2L1 binding protein	MAD2L1BP	701099
Matrin 3	MATR3	100568448
MDM2 binding protein	MTBP	703121
Mediator complex subunit 6	MED6	693320
Meiosis 1 associated protein	M1AP	710210
Microtubule associated protein 1S	MAP1S	719196
Midline 1	MID1	709683
Mitochondrial E3 ubiquitin protein ligase 1	MUL1	705429
Mitochondrial ribosomal protein L11	MRPL11	714094
Mitochondrial ribosomal protein L42	MRPL42	715676
Mitochondrial ribosomal protein S21	MRPS21	706805
Mitogen-activated protein kinase kinase kinase 6	MAP3K6	715911
Msh homeobox 2	MSX2	694227
Myeloid/lymphoid or mixed-lineage leukemia; translocated to, 6	MLLT6	694045
Myotubularin 1	MTM1	703131
Myotubularin related protein 2	MTMR2	699703
NAD(P)H dehydrogenase, quinone 2	NQO2	707675
NADH:ubiquinone oxidoreductase complex assembly factor 4	NDUFAF4	705102
NADH:ubiquinone oxidoreductase subunit A12	NDUFA12	711970
Negative elongation factor complex member E	NELFE	716913
N-glycanase 1	NGLY1	700842
Nicotinamide nucleotide transhydrogenase	NNT	701110
N-terminal Xaa-Pro-Lys N-methyltransferase 1	NTMT1	716763

Nuclear casein kinase and cyclin-dependent kinase substrate 1	NUCKS1	697298
Nuclear factor of kappa light polypeptide gene enhancer in B-cells 1	NFKB1	710324
Nuclear receptor subfamily 1 group I member 2	NR1I2	574226
Nucleoporin 50kda	NUP50	713282
Nudix hydrolase 1	NUDT1	713078
Olfactory receptor, family 2, subfamily AG, member 2	OR2AG2	709556
Origin recognition complex subunit 5	ORC5	696683
ORMDL sphingolipid biosynthesis regulator 2	ORMDL2	710296
P450 (cytochrome) oxidoreductase	POR	715888
Pancreatic polypeptide	PPY	713988
PAP associated domain containing 7	PAPD7	713853
Par-3 family cell polarity regulator	PARD3	706472
PDZ domain containing 4	PDZD4	697387
Peroxiredoxin 2	PRDX2	716665
PHD finger protein 1	PHF1	718337
Phosphatase, orphan 1	PHOSPHO1	698959
Phosphate cytidylyltransferase 1, choline, alpha	PCYT1A	722105
Phosphatidylinositol 4-kinase, catalytic, beta	PI4KB	710104
Phosphatidylinositol glycan anchor biosynthesis class H	PIGH	710780
Phosphatidylinositol glycan anchor biosynthesis class S	PIGS	709115
Phospholipase B domain containing 1	PLBD1	698939
Phospholipase D family member 3	PLD3	701083
Platelet-derived growth factor beta polypeptide	PDGFB	703173
Poliovirus receptor-related 2 (herpesvirus entry mediator B)	PVRL2	713229
Poly(A) binding protein, cytoplasmic 1	PABPC1	705847
Poly(ADP-ribose) glycohydrolase	PARG	709432
Poly(rc) binding protein 2	PCBP2	703175
Polycomb group ring finger 2	PCGF2	694187
Polyglutamine binding protein 1	PQBP1	711678
Polyhomeotic homolog 2 (Drosophila)	PHC2	710201
Polymerase (RNA) II (DNA directed) polypeptide I, 14.5kda	POLR2I	712412
Potassium channel tetramerization domain containing 9	KCTD9	711515
Potassium voltage-gated channel, modifier subfamily S, member 1	KCNS1	711715
Presenilin enhancer gamma secretase subunit	PSENEN	100429008
Proline rich 3	PRR3	711699
Proteasomal ATPase associated factor 1	PAAF1	718755
Proteasome subunit alpha 4	PSMA4	710417
Proteasome subunit beta 2	PSMB2	712193
Protein phosphatase 1 regulatory subunit 15A	PPP1R15A	718350
Protein phosphatase 3, catalytic subunit, gamma isozyme	PPP3CC	708233
Protein tyrosine phosphatase type IVA, member 2	PTP4A2	706489
RAB, member of RAS oncogene family-like 2B	RABL2B	716615
RAB5B, member RAS oncogene family	RAB5B	708347
RAB6A, member RAS oncogene family	RAB6A	718717
RAD9 checkpoint clamp component A	RAD9A	712345
Ral gtpase activating protein, alpha subunit 1 (catalytic)	RALGAPA1	695674
RALY heterogeneous nuclear ribonucleoprotein	RALY	713317

RAN binding protein 10	RANBP10	700911
Rap guanine nucleotide exchange factor 2	RAPGEF2	704717
Ras homolog family member C	RHOC	706034
Ras homolog family member J	RHOJ	705603
Recq helicase-like	RECQL	705871
Replication protein A3	RPA3	696248
Retinol dehydrogenase 5 (11-cis/9-cis)	RDH5	709644
RFT1 homolog	RFT1	694586
Rho guanine nucleotide exchange factor 1	ARHGEF1	722198
Ribonuclease P/MRP 21kda subunit	RPP21	713056
Ribophorin II	RPN2	708971
Ribosomal protein l10a	RPL10A	718783
Ribosomal protein L23	RPL23	694719
Ribosomal protein l23a	RPL23A	710490
Ribosomal protein L24	RPL24	702381
Ribosomal protein L4	RPL4	710590
Ribosomal protein l7a	RPL7A	722215
Ribosomal protein L8	RPL8	708535
Ribosomal protein S10	RPS10	718606
Ribosomal protein S13	RPS13	697513
Ribosomal protein S14	RPS14	710901
Ribosomal protein S16	RPS16	697219
Ribosomal protein S2	RPS2	693615
Ribosomal protein S27	RPS27	106992520
Ribosomal protein S28	RPS28	707133
Ribosomal protein S4, X-linked	RPS4X	699397
Ribosomal protein S5	RPS5	711259
Ribosomal protein S7	RPS7	721900
Ribosomal protein S8	RPS8	703957
Ribosomal protein, large, P0	RPLP0	574363
Ribosomal protein, large, P1	RPLP1	695442
Ribosomal protein, large, P2	RPLP2	700698
Ribosomal RNA processing 8, methyltransferase, homolog (yeast)	RRP8	712011
Ring finger protein 38	RNF38	693346
RNA binding motif protein 45	RBM45	702714
RNA pseudouridylate synthase domain containing 3	RPUSD3	700349
SEC31 homolog A, COPII coat complex component	SEC31A	693687
Sec61 translocon alpha 2 subunit	SEC61A2	100427728
Selenoprotein M	SELM	718290
SFI1 centrin binding protein	SFI1	716833
Siah E3 ubiquitin protein ligase 1	SIAH1	716629
Signal peptide, CUB domain, EGF-like 2	SCUBE2	708152
Signal recognition particle 68kda	SRP68	705568
Signal sequence receptor, delta	SSR4	697266
Sin3A associated protein 25kda	SAP25	106997576
SKI-like proto-oncogene	SKIL	696680
SLIT and NTRK like family member 1	SLITRK1	699217
Small nuclear ribonucleoprotein polypeptides B and B1	SNRPB	716578

Small ubiquitin-like modifier 1	SUMO1	703644
SMYD family member 5	SMYD5	705926
Sodium channel, non voltage gated 1 beta subunit	SCNN1B	700093
Solute carrier family 25 (aspartate/glutamate carrier), member 12	SLC25A12	695173
Solute carrier family 25 (S-adenosylmethionine carrier), member 26	SLC25A26	697960
Solute carrier family 26 (anion exchanger), member 8	SLC26A8	719049
Solute carrier family 35 (UDP-galactose transporter), member A2	SLC35A2	711587
Solute carrier family 35 (UDP-gluc/UDP-galnac transporter), member D1	SLC35D1	700175
Solute carrier family 4 (anion exchanger), member 2	SLC4A2	713966
Solute carrier family 4, sodium borate transporter, member 11	SLC4A11	718393
Solute carrier family 44 member 4	SLC44A4	715779
Solute carrier organic anion transporter family member 2B1	SLCO2B1	694829
Sorting nexin 13	SNX13	714019
Sorting nexin 33	SNX33	706309
Sp2 transcription factor	SP2	694834
SPARC like 1	SPARCL1	701468
Spectrin, beta, non-erythrocytic 1	SPTBN1	716794
Src-related kinase lacking C-terminal regulatory tyrosine and N-terminal myristylation sites	SRMS	719587
ST3 beta-galactoside alpha-2,3-sialyltransferase 4	ST3GAL4	717792
Star related lipid transfer domain containing 3	STARD3	697212
Star related lipid transfer domain containing 5	STARD5	713308
Stomatin like 2	STOML2	698458
Storkhead box 2	STOX2	693692
Sulfiredoxin 1	SRXN1	714997
SUMO1/sentrin specific peptidase 5	SEN5	710223
SURP and G-patch domain containing 1	SUGP1	719772
Synovial sarcoma translocation gene on chromosome 18-like 2	SS18L2	716387
TATA-box binding protein associated factor 5	TAF5	714558
T-box 21	TBX21	694044
TCF3 (E2A) fusion partner (in childhood Leukemia)	TFPT	720296
Teashirt zinc finger homeobox 1	TSHZ1	703018
Telomeric repeat binding factor 2, interacting protein	TERF2IP	712149
TERF1 (TRF1)-interacting nuclear factor 2	TINF2	715812
Testis expressed 30	TEX30	701917
Tetratricopeptide repeat domain 7B	TTC7B	696029
TGF-beta activated kinase 1/MAP3K7 binding protein 1	TAB1	703409
THAP domain containing 7	THAP7	696208
Thioredoxin domain containing 9	TXNDC9	709303
THO complex 6	THOC6	700217
Transducin (beta)-like 1 X-linked receptor 1	TBL1XR1	712740
Transforming, acidic coiled-coil containing protein 3	TACC3	712898
Translocase of inner mitochondrial membrane 17 homolog B (yeast)	TIMM17B	714895
Transmembrane 4 L six family member 5	TM4SF5	709844
Transmembrane phosphoinositide 3-phosphatase and tensin	TPTE2	704870

homolog 2		
Transmembrane protease, serine 13	TMPRSS13	698586
Transmembrane protein 104	TMEM104	698592
Transmembrane protein 115	TMEM115	702164
Transmembrane protein 135	TMEM135	704963
Transmembrane protein 138	TMEM138	693905
Transmembrane protein 5	TMEM5	717102
TRK-fused gene	TFG	700972
Tropomyosin 2 (beta)	TPM2	696604
Tryptase gamma 1	TPSG1	100425752
TSSK6 activating co-chaperone	TSACC	719490
Tumor protein, translationally-controlled 1	TPT1	702155
Twist family bhlh transcription factor 2	TWIST2	697078
Tyrosine kinase, non-receptor, 1	TNK1	715180
Ubiquitin A-52 residue ribosomal protein fusion product 1	UBA52	720243
Ubiquitin B	UBB	696110
Ubiquitin conjugating enzyme E2 variant 1	UBE2V1	100425552
Ubiquitin conjugating enzyme E2O	UBE2O	710529
Ubiquitin like 5	UBL5	711015
Ubiquitin like 7	UBL7	702305
Ubiquitin related modifier 1	URM1	722618
Ubiquitin specific peptidase 21	USP21	719894
Ubiquitination factor E4B	UBE4B	713348
UBX domain protein 11	UBXN11	719826
USP6 N-terminal like	USP6NL	694275
V-akt murine thymoma viral oncogene homolog 3	AKT3	714717
Valyl-trna synthetase	VAR5	715537
Vitronectin	VTN	708499
WD repeat domain 74	WDR74	718460
WW domain binding protein 1	WBP1	709202
WW domain containing E3 ubiquitin protein ligase 2	WWP2	705464
X-ray repair complementing defective repair in Chinese hamster cells 6	XRCC6	707975
YEATS domain containing 4	YEATS4	718376
Yip1 domain family member 4	YIPF4	706819
Yippee like 3	YPEL3	708740
Zinc finger and BTB domain containing 39	ZBTB39	713914
Zinc finger CCCH-type containing 12A	ZC3H12A	713604
Zinc finger CCCH-type containing 3	ZC3H3	708584
Zinc finger protein 22	ZNF22	706208
Zinc finger protein 385A	ZNF385A	705436
Zinc finger protein 436	ZNF436	709638
Zinc finger protein 496	ZNF496	709694
Zinc finger protein 7	ZNF7	715735
Zinc finger, DHHC-type containing 12	ZDHHC12	722606
Zinc finger, DHHC-type containing 16	ZDHHC16	705982
Zinc finger, matrin-type 5	ZMAT5	715058
Zinc finger, MYND-type containing 11	ZMYND11	708761

Zona pellucida glycoprotein 3 (sperm receptor)	ZP3	719925
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(2) Expressed in both groups 1a and 2a

1-acylglycerol-3-phosphate O-acyltransferase 1	AGPAT1	717174
1-acylglycerol-3-phosphate O-acyltransferase 5	AGPAT5	716847
1-aminocyclopropane-1-carboxylate synthase homolog (inactive)	ACCS	715798
2-aminoethanethiol (cysteamine) dioxygenase	ADO	698259
2-oxoglutarate and iron-dependent oxygenase domain containing 2	OGFOD2	703753
2-phosphoxylose phosphatase 1	PXYLP1	715229
3-hydroxy-3-methylglutaryl-coa synthase 1	HMGCS1	702553
3-hydroxyacyl-coa dehydratase 1	HACD1	700635
3-hydroxyanthranilate 3,4-dioxygenase	HAAO	713101
3-hydroxybutyrate dehydrogenase, type 2	BDH2	711108
3-oxoacyl-ACP synthase, mitochondrial	OXSM	703382
3'-phosphoadenosine 5'-phosphosulfate synthase 1	PAPSS1	695099
3'-phosphoadenosine 5'-phosphosulfate synthase 2	PAPSS2	704688
5'-3' exoribonuclease 2	XRN2	700934
5-aminoimidazole-4-carboxamide ribonucleotide formyltransferase /IMP cyclohydrolase	ATIC	694819
5-hydroxymethylcytosine (hmc) binding, ES cell-specific	HMCEs	703524
5-hydroxytryptamine (serotonin) receptor 2B, G protein-coupled	HTR2B	711808
5'-nucleotidase, cytosolic IIIA	NT5C3A	708743
5-phosphohydroxy-L-lysine phospho-lyase	PHYKPL	702302
8-oxoguanine DNA glycosylase	OGG1	700481
Aarf domain containing kinase 1	ADCK1	707060
Aarf domain containing kinase 2	ADCK2	693303
Aarf domain containing kinase 3	ADCK3	697920
Aarf domain containing kinase 4	ADCK4	702379
Aarf domain containing kinase 5	ADCK5	100425840
Abhydrolase domain containing 12	ABHD12	705915
Abhydrolase domain containing 15	ABHD15	711493
Abhydrolase domain containing 16A	ABHD16A	716051
Abhydrolase domain containing 17A	ABHD17A	709119
Abhydrolase domain containing 6	ABHD6	702384
Abhydrolase domain containing 8	ABHD8	718980
ABI family member 3	ABI3	698710
Abl-interactor 2	ABI2	704956
Abnormal spindle microtubule assembly	ASPM	711153
Acetoacetyl-coa synthetase	AACS	707015
Acetyl-coa acetyltransferase 1	ACAT1	707653
Acetyl-coa acyltransferase 1	ACAA1	696743
Acetyl-coa acyltransferase 2	ACAA2	709350
Acetyl-coa carboxylase alpha	ACACA	714218
Acid phosphatase 6, lysophosphatidic	ACP6	710431
Acid sensing ion channel subunit 1	ASIC1	713320
Acidic nuclear phosphoprotein 32 family member B	ANP32B	715508

Acidic nuclear phosphoprotein 32 family member E	ANP32E	706251
Acidic residue methyltransferase 1	ARMT1	704570
Aconitase 1	ACO1	705075
Aconitase 2	ACO2	707441
Actin binding LIM protein 1	ABLIM1	698641
Actin like 6A	ACTL6A	708935
Actin like 7B	ACTL7B	710750
Actin related protein 2/3 complex subunit 1A	ARPC1A	718635
Actin related protein 2/3 complex subunit 2	ARPC2	700536
Actin related protein 2/3 complex subunit 3	ARPC3	709199
Activating signal cointegrator 1 complex subunit 1	ASCC1	709049
Activating signal cointegrator 1 complex subunit 2	ASCC2	715117
Activating transcription factor 4	ATF4	703965
Activating transcription factor 6	ATF6	720056
Activator of basal transcription 1	ABT1	700856
Activin A receptor type I	ACVR1	697935
Activin A receptor type IIB	ACVR2B	696071
Activity-dependent neuroprotector homeobox	ADNP	701422
Acylaminoacyl-peptide hydrolase	APEH	705948
Acyl-coa binding domain containing 4	ACBD4	715963
Acyl-coa binding domain containing 6	ACBD6	716418
Acyl-coa dehydrogenase family member 9	ACAD9	704527
Acyl-coa dehydrogenase, C-2 to C-3 short chain	ACADS	698196
Acyl-coa oxidase 1, palmitoyl	ACOX1	705197
Acyl-coa synthetase long-chain family member 4	ACSL4	704908
Acyl-coa synthetase short-chain family member 2	ACSS2	706703
Acyl-coa thioesterase 13	ACOT13	100335136
Acyl-coa thioesterase 8	ACOT8	717238
Acylglycerol kinase	AGK	694070
ADAM metallopeptidase domain 10	ADAM10	701355
ADAM metallopeptidase domain 19	ADAM19	715164
ADAM metallopeptidase domain 32	ADAM32	706797
ADAM metallopeptidase with thrombospondin type 1 motif 14	ADAMTS14	710154
ADAM metallopeptidase with thrombospondin type 1 motif 3	ADAMTS3	705473
ADAM metallopeptidase with thrombospondin type 1 motif 6	ADAMTS6	696021
ADAM metallopeptidase with thrombospondin type 1 motif 9	ADAMTS9	698341
ADAMTS like 2	ADAMTSL2	713492
Adaptor related protein complex 1 associated regulatory protein	AP1AR	700734
Adaptor related protein complex 1 sigma 1 subunit	AP1S1	719569
Adaptor related protein complex 2 sigma 1 subunit	AP2S1	716911
Adaptor related protein complex 2, mu 1 subunit	AP2M1	703554
Adaptor related protein complex 3, sigma 1 subunit	AP3S1	696644
Adaptor related protein complex 4, beta 1 subunit	AP4B1	707634
Adaptor related protein complex 4, mu 1 subunit	AP4M1	710944
Adaptor related protein complex 5, mu 1 subunit	AP5M1	701050
Adaptor related protein complex 5, sigma 1 subunit	AP5S1	718611
Additional sex combs like 2, transcriptional regulator	ASXL2	695057
Adducin 1	ADD1	700805

Adenine phosphoribosyltransferase	APRT	697715
Adenomatosis polyposis coli down-regulated 1	APCDD1	722280
Adenosine deaminase domain containing 1	ADAD1	707910
Adenosine deaminase domain containing 2	ADAD2	715076
Adenosine deaminase, RNA-specific	ADAR	718759
Adenosine deaminase, trna-specific 3	ADAT3	106992296
Adenosine monophosphate deaminase 2	AMPD2	699561
Adenylate cyclase 4	ADCY4	714684
Adenylate cyclase 6	ADCY6	707978
Adenylate kinase 2	AK2	709737
Adenylosuccinate synthase	ADSS	713580
Adhesion G protein-coupled receptor A3	ADGRA3	715618
Adhesion G protein-coupled receptor E5	ADGRE5	100426360
Adhesion molecule with Ig-like domain 1	AMIGO1	698932
Adipocyte plasma membrane associated protein	APMAP	704948
Adiponectin receptor 1	ADIPOR1	704626
Adiponectin receptor 2	ADIPOR2	707547
ADNP homeobox 2	ADNP2	718342
ADP ribosylation factor 4	ARF4	703432
ADP ribosylation factor gtpase activating protein 3	ARFGAP3	711160
ADP ribosylation factor guanine nucleotide exchange factor 1	ARFGEF1	704359
ADP ribosylation factor interacting protein 1	ARFIP1	697533
ADP ribosylation factor like gtpase 2 binding protein	ARL2BP	703999
ADP ribosylation factor like gtpase 4A	ARL4A	693302
ADP ribosylation factor like gtpase 6 interacting protein 6	ARL6IP6	695619
ADP ribosylation factor like gtpase 8B	ARL8B	703201
ADP ribosylation factor like gtpase 9	ARL9	695486
ADP-ribose/CDP-alcohol diphosphatase, manganese-dependent	ADPRM	717991
ADP-ribosylarginine hydrolase	ADPRH	712562
ADP-ribosylhydrolase like 2	ADPRHL2	712758
ADP-ribosyltransferase 5	ART5	574238
AFG3 ATPase family gene 3-like 2 (S. Cerevisiae)	AFG3L2	703079
AHA1, activator of heat shock 90kda protein ATPase homolog 1 (yeast)	AHSA1	706547
Ajuba LIM protein	AJUBA	712865
A-kinase anchoring protein 1	AKAP1	708500
A-kinase anchoring protein 10	AKAP10	710970
A-kinase anchoring protein 12	AKAP12	641446
A-kinase anchoring protein 14	AKAP14	694769
A-kinase anchoring protein 17A	AKAP17A	693468
A-kinase anchoring protein 2	AKAP2	709841
A-kinase anchoring protein 8 like	AKAP8L	719202
A-kinase anchoring protein 9	AKAP9	702970
Aladin WD repeat nucleoporin	AAAS	719095
Aldehyde dehydrogenase 1 family member A1	ALDH1A1	702598
Aldehyde dehydrogenase 1 family member A3	ALDH1A3	694231
Aldehyde dehydrogenase 18 family member A1	ALDH18A1	703357
Aldehyde dehydrogenase 6 family member A1	ALDH6A1	698755
Aldo-keto reductase family 1, member A1 (aldehyde reductase)	AKR1A1	693380

Aldo-keto reductase family 1, member B1 (aldose reductase)	AKR1B1	705957
Aldo-keto reductase family 1, member C1 (dihydrodiol dehydrogenase 1; 20-alpha (3-alpha)-hydroxysteroid dehydrogenase)	AKR1C1	711198
Aldo-keto reductase family 1, member E2	AKR1E2	711035
ALG14, UDP-N-acetylglucosaminyltransferase subunit	ALG14	709630
ALG2, alpha-1,3/1,6-mannosyltransferase	ALG2	714850
ALG5, dolichyl-phosphate beta-glucosyltransferase	ALG5	694836
Alkb homolog 2, alpha-ketoglutarate-dependent dioxygenase	ALKBH2	706708
Alkb homolog 3, alpha-ketoglutarate-dependent dioxygenase	ALKBH3	715921
Alkb homolog 4, lysine demethylase	ALKBH4	715078
Alkb homolog 5, RNA demethylase	ALKBH5	700205
Alkb homolog 7	ALKBH7	699343
Allograft inflammatory factor 1	AIF1	574115
All-trans retinoic acid induced differentiation factor	ATRAID	699201
Alpha 1,4-galactosyltransferase	A4GALT	710998
Alpha- and gamma-adaptin binding protein	AAGAB	711436
Alpha thalassemia/mental retardation syndrome X-linked	ATRX	705735
Alpha-2-HS-glycoprotein	AHSG	699348
Amidohydrolase domain containing 2	AMDHD2	697051
Aminoacylase 3	ACY3	711083
Aminoadipate-semialdehyde dehydrogenase-phosphopantetheinyl transferase	AASDHPPT	100328984
Aminomethyltransferase	AMT	706515
Aminopeptidase puromycin sensitive	NPEPPS	693995
Amino-terminal enhancer of split	AES	712353
Amphiphysin	AMPH	704559
Amylase, alpha 2B (pancreatic)	AMY2B	712893
Amyloid beta (A4) precursor protein-binding, family B, member 1 (Fe65)	APBB1	712585
Amyloid beta (A4) precursor protein-binding, family B, member 3	APBB3	698296
Amyloid beta (A4) precursor-like protein 2	APLP2	718819
Anaphase promoting complex subunit 13	ANAPC13	717294
Anaphase promoting complex subunit 15	ANAPC15	718333
Anaphase promoting complex subunit 2	ANAPC2	706384
Anaphase promoting complex subunit 4	ANAPC4	694006
Anaphase promoting complex subunit 7	ANAPC7	709012
Ancient ubiquitous protein 1	AUP1	710020
Androgen-induced 1	AIG1	700988
Angiopoietin 2	ANGPT2	716811
Angiotensin II receptor-associated protein	AGTRAP	722746
Anillin actin binding protein	ANLN	706404
Ankyrin 2, neuronal	ANK2	702180
Ankyrin 3, node of Ranvier (ankyrin G)	ANK3	699518
Ankyrin repeat and IBR domain containing 1	ANKIB1	703273
Ankyrin repeat and SOCS box containing 12	ASB12	707931
Ankyrin repeat and SOCS box containing 3	ASB3	716503
Ankyrin repeat and sterile alpha motif domain containing 6	ANKS6	715178
Ankyrin repeat domain 10	ANKRD10	695300
Ankyrin repeat domain 13 family member D	ANKRD13D	721749

Ankyrin repeat domain 13C	ANKRD13C	702811
Ankyrin repeat domain 2 (stretch responsive muscle)	ANKRD2	707097
Ankyrin repeat domain 27	ANKRD27	716232
Ankyrin repeat domain 35	ANKRD35	706961
Ankyrin repeat domain 37	ANKRD37	100426384
Ankyrin repeat domain 49	ANKRD49	697693
Ankyrin repeat domain 6	ANKRD6	701339
Ankyrin repeat, family A (RFXANK-like), 2	ANKRA2	703691
Annexin A11	ANXA11	707628
Annexin A2	ANXA2	706240
Anoctamin 10	ANO10	715666
Anoctamin 4	ANO4	695973
Anterior gradient 3, protein disulphide isomerase family member	AGR3	714517
Anti-Mullerian hormone receptor, type II	AMHR2	702822
Anti-silencing function 1A histone chaperone	ASF1A	714761
Antizyme inhibitor 1	AZIN1	693581
Antizyme inhibitor 2	AZIN2	709823
APEX nuclease (apurinic/aprimidinic endonuclease) 2	APEX2	702084
APEX nuclease (multifunctional DNA repair enzyme) 1	APEX1	702757
Aph-1 homolog A, gamma secretase subunit	APH1A	706483
Aph-1 homolog B, gamma secretase subunit	APH1B	705718
Apolipoprotein B mRNA editing enzyme, catalytic polypeptide-like 3C	APOBEC3C	705870
Apolipoprotein B mRNA editing enzyme, catalytic polypeptide-like 3G	APOBEC3G	574398
Apolipoprotein B mRNA editing enzyme, catalytic polypeptide-like 3H	APOBEC3H	723811
Apolipoprotein B receptor	APOBR	705950
Apolipoprotein M	APOM	715848
Apolipoprotein O	APOO	698137
Apolipoprotein O-like	APOOL	693763
Apoptosis inducing factor, mitochondria associated 1	AIFM1	702773
Apoptosis inducing factor, mitochondria associated 3	AIFM3	100430576
Apoptosis inhibitor 5	API5	716346
Apoptotic chromatin condensation inducer 1	ACIN1	713310
Aprataxin	APTX	702671
Arachidonate 12-lipoxygenase, 12R type	ALOX12B	721936
Arachidonate 5-lipoxygenase-activating protein	ALOX5AP	713170
Arachidonate lipoxygenase 3	ALOXE3	716840
Aralkylamine N-acetyltransferase	AANAT	706924
Arfgap with gtpase domain, ankyrin repeat and PH domain 1	AGAP1	693652
Arfgap with rhogap domain, ankyrin repeat and PH domain 2	ARAP2	702115
Arfgap with rhogap domain, ankyrin repeat and PH domain 3	ARAP3	701400
Arginine and glutamate rich 1	ARGLU1	702840
Arginine/serine-rich coiled-coil 1	RSRC1	704232
Arginine/serine-rich coiled-coil 2	RSRC2	706564
Arginine/serine-rich protein 1	RSRP1	712757
Arginine-glutamic acid dipeptide (RE) repeats	RERE	708902
Argininosuccinate lyase	ASL	697109
Arginyl aminopeptidase (aminopeptidase B)	RNPEP	706696
Arginyltransferase 1	ATE1	705248

Arginyl-trna synthetase	RARS	698998
Arginyl-trna synthetase 2, mitochondrial	RARS2	699240
Armadillo repeat containing 1	ARMC1	702079
Armadillo repeat containing 3	ARMC3	705015
Armadillo repeat containing 5	ARMC5	715103
Armadillo repeat containing 8	ARMC8	716388
Armadillo repeat containing 9	ARMC9	711891
Armadillo repeat containing, X-linked 1	ARMCX1	704620
Armadillo repeat containing, X-linked 3	ARMCX3	704035
Armadillo repeat containing, X-linked 5	ARMCX5	100427776
ARP1 actin-related protein 1 homolog A, centractin alpha (yeast)	ACTR1A	713513
ARP1 actin-related protein 1 homolog B, centractin beta (yeast)	ACTR1B	707328
ARP2 actin-related protein 2 homolog (yeast)	ACTR2	697080
ARP3 actin-related protein 3 homolog B (yeast)	ACTR3B	715965
ARP5 actin-related protein 5 homolog (yeast)	ACTR5	698191
Arrestin, beta 1	ARRB1	695250
Arrestin, beta 2	ARRB2	709399
Arsa arsenite transporter, ATP-binding, homolog 1 (bacterial)	ASNA1	717734
Artemin	ARTN	701641
ARV1 homolog, fatty acid homeostasis modulator	ARV1	713975
Aryl hydrocarbon receptor nuclear translocator 2	ARNT2	712786
Aryl hydrocarbon receptor nuclear translocator like	ARNTL	700464
Arylsulfatase A	ARSA	716500
Arylsulfatase E (chondrodysplasia punctata 1)	ARSE	720575
Ash2 (absent, small, or homeotic)-like (Drosophila)	ASH2L	699382
Asparaginase like 1	ASRGL1	718871
Asparagine synthetase (glutamine-hydrolyzing)	ASNS	697232
Asparaginyl-trna synthetase 2, mitochondrial (putative)	NARS2	700326
Aspartate beta-hydroxylase domain containing 1	ASPHD1	707467
Aspartate dehydrogenase domain containing	ASPDH	719609
Aspartyl aminopeptidase	DNPEP	703180
Asteroid homolog 1 (Drosophila)	ASTE1	719271
Ataxin 10	ATXN10	713805
Ataxin 2-like	ATXN2L	708359
AT-hook containing transcription factor 1	AHCTF1	702705
Atlastin gtpase 1	ATL1	706313
Atlastin gtpase 2	ATL2	710647
ATP binding cassette subfamily A member 4	ABCA4	714054
ATP binding cassette subfamily A member 5	ABCA5	693795
ATP binding cassette subfamily A member 7	ABCA7	704976
ATP binding cassette subfamily B member 10	ABCB10	574117
ATP binding cassette subfamily B member 7	ABCB7	704034
ATP binding cassette subfamily C member 5	ABCC5	704326
ATP binding cassette subfamily C member 8	ABCC8	654490
ATP binding cassette subfamily E member 1	ABCE1	701945
ATP binding cassette subfamily F member 1	ABCF1	711864
ATP binding cassette subfamily F member 3	ABCF3	703319
ATP binding cassette subfamily G member 2 (Junior blood group)	ABCG2	574307

ATP binding cassette subfamily G member 8	ABCG8	713676
ATP citrate lyase	ACLY	708501
ATP synthase F0 subunit 6	ATP6	2846629
ATP synthase, H ⁺ transporting, mitochondrial F1 complex, alpha subunit 1, cardiac muscle	ATP5A1	701389
ATP synthase, H ⁺ transporting, mitochondrial F1 complex, beta polypeptide	ATP5B	713284
ATP synthase, H ⁺ transporting, mitochondrial F1 complex, delta subunit	ATP5D	705944
ATP synthase, H ⁺ transporting, mitochondrial F1 complex, gamma polypeptide 1	ATP5C1	713768
ATP synthase, H ⁺ transporting, mitochondrial F1 complex, O subunit	ATP5O	698480
ATP synthase, H ⁺ transporting, mitochondrial Fo complex subunit C1 (subunit 9)	ATP5G1	697950
ATP synthase, H ⁺ transporting, mitochondrial Fo complex subunit C2 (subunit 9)	ATP5G2	703751
ATP synthase, H ⁺ transporting, mitochondrial Fo complex subunit D	ATP5H	700338
ATP synthase, H ⁺ transporting, mitochondrial Fo complex subunit F6	ATP5J	708411
ATPase family, AAA domain containing 1	ATAD1	704809
ATPase family, AAA domain containing 2	ATAD2	704478
ATPase inhibitory factor 1	ATPIF1	716870
ATPase type 13A1	ATP13A1	100427504
ATPase type 13A2	ATP13A2	699678
ATPase, aminophospholipid transporter (APLT), class I, type 8A, member 1	ATP8A1	702630
ATPase, Ca ⁺⁺ transporting, plasma membrane 1	ATP2B1	709102
ATPase, H ⁺ transporting V0 subunit e2	ATP6V0E2	712644
ATPase, H ⁺ transporting, lysosomal 13kda, V1 subunit G1	ATP6V1G1	703655
ATPase, H ⁺ transporting, lysosomal 14kda, V1 subunit F	ATP6V1F	702112
ATPase, H ⁺ transporting, lysosomal 21kda, V0 subunit b	ATP6V0B	702243
ATPase, H ⁺ transporting, lysosomal 31kda, V1 subunit E1	ATP6V1E1	709739
ATPase, H ⁺ transporting, lysosomal 56/58kda, V1 subunit B2	ATP6V1B2	705605
ATPase, H ⁺ transporting, lysosomal 9kda, V0 subunit e1	ATP6V0E1	703342
ATPase, H ⁺ transporting, lysosomal accessory protein 2	ATP6AP2	705048
ATPase, H ⁺ /K ⁺ exchanging, alpha polypeptide	ATP4A	100426216
ATPase, Na ⁺ /K ⁺ transporting, alpha 1 polypeptide	ATP1A1	710368
ATPase, Na ⁺ /K ⁺ transporting, beta 3 polypeptide	ATP1B3	716682
ATR interacting protein	ATRIP	710035
ATR serine/threonine kinase	ATR	714443
AT-rich interaction domain 3A	ARID3A	704435
AT-rich interaction domain 4B	ARID4B	718320
Atypical chemokine receptor 4	ACKR4	717701
AU RNA binding protein/enoyl-coa hydratase	AUH	704542
Aurora kinase A interacting protein 1	AURKAIP1	706329
Aurora kinase B	AURKB	721955
Aurora kinase C	AURKC	709801
Autocrine motility factor receptor, E3 ubiquitin protein ligase	AMFR	699972
Autophagy related 101	ATG101	696954

Autophagy related 16 like 1	ATG16L1	714092
Autophagy related 16 like 2	ATG16L2	717952
Autophagy related 2A	ATG2A	717290
Autophagy related 3	ATG3	708305
Autophagy related 4A, cysteine peptidase	ATG4A	703367
Autophagy related 4D, cysteine peptidase	ATG4D	713111
Autophagy related 5	ATG5	696874
Autophagy related 7	ATG7	696238
Autophagy related 9A	ATG9A	702263
Autophagy/beclin-1 regulator 1	AMBRA1	714434
B9 protein domain 1	B9D1	702949
B9 protein domain 2	B9D2	704873
Baculoviral IAP repeat containing 2	BIRC2	702592
Baculoviral IAP repeat containing 3	BIRC3	702468
BAI1-associated protein 2-like 2	BAIAP2L2	700058
Bardet-Biedl syndrome 10	BBS10	693270
Bardet-Biedl syndrome 2	BBS2	700353
Bardet-Biedl syndrome 4	BBS4	704508
Bardet-Biedl syndrome 5	BBS5	709701
Bardet-Biedl syndrome 9	BBS9	708412
Basic leucine zipper and W2 domains 1	BZW1	701731
Basic leucine zipper and W2 domains 2	BZW2	714627
Basic transcription factor 3	BTF3	703339
Basic transcription factor 3-like 4	BTF3L4	712955
B-cell CLL/lymphoma 2	BCL2	707407
B-cell CLL/lymphoma 6	BCL6	708736
B-cell CLL/lymphoma 7B	BCL7B	716470
B-cell CLL/lymphoma 7C	BCL7C	712065
B-cell CLL/lymphoma 9	BCL9	700800
B-cell receptor-associated protein 31	BCAP31	696663
B-cell translocation gene 1, anti-proliferative	BTG1	710112
BCL2 associated athanogene 2	BAG2	712778
BCL2/adenovirus E1B 19kda interacting protein 1	BNIP1	703576
BCL2-antagonist/killer 1	BAK1	706534
BCL2-associated X protein	BAX	718948
BCL2-like 1	BCL2L1	713035
BCL2-like 13 (apoptosis facilitator)	BCL2L13	709825
BCL2-like 14 (apoptosis facilitator)	BCL2L14	695971
BCS1-like (S. Cerevisiae)	BCS1L	699690
Beclin 1, autophagy related	BECN1	711649
BEN domain containing 6	BEND6	712498
Bestrophin 1	BEST1	718993
Beta 3-glucosyltransferase	B3GLCT	713498
Beta-1,3-galactosyltransferase 4	B3GALT4	718178
Beta-1,3-glucuronyltransferase 3	B3GAT3	718744
Beta-1,3-N-acetylgalactosaminyltransferase 1 (globoside blood group)	B3GALNT1	703939
Beta-1,4-glucuronyltransferase 1	B4GAT1	714270
Beta-1,4-N-acetyl-galactosaminyl transferase 1	B4GALNT1	715317

Beta-2-microglobulin	B2M	712428
Beta-site APP-cleaving enzyme 1	BACE1	697694
Bicaudal D homolog 2 (Drosophila)	BICD2	706621
Bifunctional apoptosis regulator	BFAR	713053
Biliverdin reductase A	BLVRA	700980
Bisphosphoglycerate mutase	BPGM	706741
Bladder cancer associated protein	BLCAP	708044
BLOC-1 related complex subunit 5	BORCS5	696469
Bloom syndrome, recq helicase-like	BLM	703460
BMP and activin membrane-bound inhibitor	BAMBI	710152
Bola family member 1	BOLA1	705297
Bola family member 3	BOLA3	707871
Bone morphogenetic protein 1	BMP1	707596
Bone morphogenetic protein 4	BMP4	694618
Bone morphogenetic protein 7	BMP7	696948
Bone morphogenetic protein receptor type IA	BMPR1A	696898
Bone morphogenetic protein/retinoic acid inducible neural-specific 1	BRINP1	701794
Bora, aurora kinase A activator	BORA	693798
BPI fold containing family A member 2	BPIFA2	710376
Brain and reproductive organ-expressed (TNFRSF1A modulator)	BRE	702365
Brain protein I3	BRI3	706525
Brain-derived neurotrophic factor	BDNF	701245
Branched chain amino-acid transaminase 2, mitochondrial	BCAT2	718305
Branched chain keto acid dehydrogenase E1, beta polypeptide	BCKDHB	718472
Branched chain ketoacid dehydrogenase kinase	BCKDK	712985
BRCA1 associated RING domain 1	BARD1	694301
BRCA2 and CDKN1A interacting protein	BCCIP	699437
Breast cancer metastasis suppressor 1	BRMS1	714212
Breast cancer metastasis-suppressor 1-like	BRMS1L	695909
Breast carcinoma amplified sequence 3	BCAS3	712846
BRF1, RNA polymerase III transcription initiation factor 90 kda subunit	BRF1	709533
BRISC and BRCA1 A complex member 1	BABAM1	718969
Bromo adjacent homology domain containing 1	BAHD1	702982
Bromodomain adjacent to zinc finger domain 1B	BAZ1B	716436
Bromodomain and PHD finger containing 3	BRPF3	718997
Bromodomain containing 1	BRD1	715059
Bromodomain containing 2	BRD2	717893
Bromodomain containing 3	BRD3	713107
Bromodomain containing 7	BRD7	694850
Bromodomain containing 9	BRD9	709235
BRX1, biogenesis of ribosomes	BRX1	698745
BSD domain containing 1	BSDC1	708083
BTB (POZ) domain containing 1	BTBD1	718696
BTB (POZ) domain containing 10	BTBD10	700325
BTB (POZ) domain containing 11	BTBD11	704916
BTB and CNC homology 1, basic leucine zipper transcription factor 1	BACH1	705817
BTG family member 3	BTG3	710579
BTG3 associated nuclear protein	BANP	696125

BUB1, mitotic checkpoint serine/threonine kinase	BUB1	696598
BUB3 mitotic checkpoint protein	BUB3	708033
BUD31 homolog	BUD31	718694
Butyrophilin subfamily 2 member A2	BTN2A2	699861
Bystin like	BYSL	694976
C1GALT1 specific chaperone 1	C1GALT1C1	696662
C2CD2-like	C2CD2L	703424
C3 and PZP-like, alpha-2-macroglobulin domain containing 8	CPAMD8	719660
Cache domain containing 1	CACHD1	701608
Cadherin 11, type 2, OB-cadherin (osteoblast)	CDH11	708826
Cadherin 13	CDH13	718038
Cadherin 2, type 1, N-cadherin (neuronal)	CDH2	711526
Cadherin 24, type 2	CDH24	713241
Cadherin 5, type 2 (vascular endothelium)	CDH5	693297
Cadherin related family member 2	CDHR2	697249
Calcitonin-related polypeptide alpha	CALCA	700649
Calcium activated nucleotidase 1	CANT1	710935
Calcium and integrin binding 1	CIB1	701842
Calcium and integrin binding family member 2	CIB2	709429
Calcium binding protein 39	CAB39	711166
Calcium binding protein 39 like	CAB39L	706066
Calcium binding protein 5	CABP5	718484
Calcium homeostasis endoplasmic reticulum protein	CHERP	718689
Calcium regulated heat stable protein 1	CARHSP1	709224
Calcium release activated channel regulator 2B	CRACR2B	700951
Calcium/calmodulin-dependent protein kinase II delta	CAMK2D	702504
Calcium/calmodulin-dependent protein kinase II gamma	CAMK2G	705980
Calcium/calmodulin-dependent protein kinase II inhibitor 1	CAMK2N1	705302
Calcium/calmodulin-dependent protein kinase kinase 2, beta	CAMKK2	699685
Calcium/calmodulin-dependent serine protein kinase (MAGUK family)	CASK	707428
Calcyclin binding protein	CACYBP	709343
Calcyon neuron-specific vesicular protein	CALY	702415
Calcyphosine-like	CAPSL	699995
Calmegin	CLGN	698361
Calmin (calponin-like, transmembrane)	CLMN	709910
Calmodulin like 6	CALML6	703514
Calmodulin regulated spectrin associated protein family member 2	CAMSAP2	709092
Calnexin	CANX	704794
Calpain 1, (mu/I) large subunit	CAPN1	716618
Calpain 10	CAPN10	716360
Calpain 15	CAPN15	695881
Calpain 3	CAPN3	707913
Calpain 6	CAPN6	706434
Calponin 3, acidic	CNN3	709538
Calreticulin	CALR	716910
Calumenin	CALU	699730
Camp responsive element binding protein 3	CREB3	696350
Camp responsive element binding protein 3-like 4	CREB3L4	715951

Cancer susceptibility candidate 1	CASC1	707753
Cancer susceptibility candidate 3	CASC3	699712
Cannabinoid receptor interacting protein 1	CNRIP1	698827
Canopy FGF signaling regulator 3	CNPY3	100424672
Canopy FGF signaling regulator 4	CNPY4	719080
CAP, adenylate cyclase-associated protein 1 (yeast)	CAP1	693719
CAP, adenylate cyclase-associated protein, 2 (yeast)	CAP2	703445
CAP-Gly domain containing linker protein 3	CLIP3	712058
Capping protein (actin filament) muscle Z-line, alpha 1	CAPZA1	705653
Capping protein (actin filament) muscle Z-line, alpha 2	CAPZA2	704662
Capping protein (actin filament), gelsolin-like	CAPG	695288
Caprin family member 2	CAPRIN2	693594
Carbamoyl-phosphate synthetase 2, aspartate transcarbamylase, and dihydroorotase	CAD	699460
Carbohydrate (chondroitin 4) sulfotransferase 13	CHST13	716548
Carbohydrate (N-acetylgalactosamine 4-O) sulfotransferase 14	CHST14	703115
Carbohydrate sulfotransferase 10	CHST10	709939
Carbonic anhydrase II	CA2	574263
Carbonic anhydrase IX	CA9	696729
Carbonyl reductase 3	CBR3	695769
Carboxypeptidase E	CPE	708881
Carboxypeptidase N subunit 2	CPN2	106997192
Carboxypeptidase Q	CPQ	701711
Carboxypeptidase X (M14 family), member 2	CPXM2	693465
Carboxypeptidase, vitellogenic-like	CPVL	697111
Cardiotrophin 1	CTF1	713850
Cardiotrophin-like cytokine factor 1	CLCF1	712554
Carnitine O-acetyltransferase	CRAT	716908
Carnitine palmitoyltransferase 1A (liver)	CPT1A	709837
Carnitine palmitoyltransferase 2	CPT2	714150
Cartilage acidic protein 1	CRTAC1	707486
CAS1 domain containing 1	CASD1	700222
Casein kinase 1, alpha 1	CSNK1A1	710775
Casein kinase 1, alpha 1-like	CSNK1A1L	695190
Casein kinase 1, gamma 3	CSNK1G3	701702
Casein kinase 2, alpha 1 polypeptide	CSNK2A1	714841
Casein kinase 2, beta polypeptide	CSNK2B	715807
Caseinolytic mitochondrial matrix peptidase chaperone subunit	CLPX	708954
CASK interacting protein 2	CASKIN2	702477
Caspase 1	CASP1	706568
Caspase 4	CASP4	704864
Caspase 8 associated protein 2	CASP8AP2	702294
Caspase 9	CASP9	694544
Caspase recruitment domain family member 9	CARD9	710485
Cat eye syndrome chromosome region, candidate 5	CECR5	709197
Catalase	CAT	717406
Catechol-O-methyltransferase	COMT	712548
Catechol-O-methyltransferase domain containing 1	COMTD1	704152

Catenin alpha 1	CTNNA1	574385
Catenin alpha 2	CTNNA2	712135
Catenin alpha-like 1	CTNNAL1	710389
Catenin beta 1	CTNNB1	574265
Catenin beta interacting protein 1	CTNNBIP1	712257
Catenin beta like 1	CTNNBL1	700310
Cathelicidin antimicrobial peptide	CAMP	619186
Cathepsin B	CTSB	100424760
Cathepsin C	CTSC	705320
Catsper channel auxiliary subunit gamma	CATSPERG	714958
Caveolin 2	CAV2	706980
Cbl proto-oncogene B, E3 ubiquitin protein ligase	CBLB	703879
Cbl proto-oncogene-like 1, E3 ubiquitin protein ligase	CBL1	699980
Cbp/p300-interacting transactivator, with Glu/Asp rich carboxy-terminal domain, 1	CITED1	703165
CCAAT/enhancer binding protein (C/EBP), zeta	CEBPZ	712090
CCR4-NOT transcription complex subunit 1	CNOT1	712880
CCR4-NOT transcription complex subunit 10	CNOT10	704986
CCR4-NOT transcription complex subunit 3	CNOT3	693292
CCR4-NOT transcription complex subunit 7	CNOT7	702192
CCR4-NOT transcription complex subunit 8	CNOT8	714813
CD14 molecule	CD14	697482
CD19 molecule	CD19	705211
CD1c molecule	CD1C	717148
CD2 (cytoplasmic tail) binding protein 2	CD2BP2	709961
CD200 molecule	CD200	708110
CD248 molecule, endosialin	CD248	714375
CD2-associated protein	CD2AP	705221
CD3e molecule, epsilon associated protein	CD3EAP	714440
CD4 molecule	CD4	713807
CD40 molecule, TNF receptor superfamily member 5	CD40	707749
CD44 molecule (Indian blood group)	CD44	717204
CD52 molecule	CD52	714429
CD53 molecule	CD53	702350
CD58 molecule	CD58	710732
CD63 molecule	CD63	709828
CD79b molecule	CD79B	718218
CD81 molecule	CD81	704961
CD83 molecule	CD83	701825
CD9 molecule	CD9	712262
CDC like kinase 1	CLK1	700320
CDC like kinase 3	CLK3	702511
CDC28 protein kinase regulatory subunit 1B	CKS1B	717164
CDC28 protein kinase regulatory subunit 2	CKS2	697324
CDC42 small effector 1	CDC42SE1	100427784
CDGSH iron sulfur domain 1	CISD1	701716
CDKN2A interacting protein	CDKN2AIP	701583
CDKN2A interacting protein N-terminal like	CDKN2AIPNL	710774

CDP-diacylglycerol--inositol 3-phosphatidyltransferase	CDIPT	707141
Cell cycle and apoptosis regulator 2	CCAR2	716288
Cell death-inducing DFFA-like effector b	CIDEB	100425328
Cell division cycle 123	CDC123	694239
Cell division cycle 16	CDC16	699089
Cell division cycle 20	CDC20	702317
Cell division cycle 23	CDC23	714000
Cell division cycle 25C	CDC25C	714115
Cell division cycle 26	CDC26	706165
Cell division cycle 37	CDC37	715390
Cell division cycle 37-like 1	CDC37L1	694831
Cell division cycle 5 like	CDC5L	703099
Cell division cycle 7	CDC7	704730
Cell division cycle and apoptosis regulator 1	CCAR1	693585
Cell division cycle associated 3	CDCA3	722088
Cell division cycle associated 5	CDCA5	721998
Cell division cycle associated 7	CDCA7	696474
Cell division cycle associated 8	CDCA8	719808
Cell growth regulator with ring finger domain 1	CGRRF1	695231
Cell wall biogenesis 43 C-terminal homolog	CWH43	706415
Centrin 2	CETN2	693376
Centrin 3	CETN3	695223
Centriolin	CNTRL	700200
Centrobin, centrosomal BRCA2 interacting protein	CNTROB	716660
Centromere protein A	CENPA	697312
Centromere protein C	CENPC	710620
Centromere protein F	CENPF	709000
Centromere protein J	CENPJ	721498
Centromere protein M	CENPM	709006
Centromere protein O	CENPO	693599
Centromere protein Q	CENPQ	721027
Centromere protein W	CENPW	712570
Centrosomal protein 112kda	CEP112	718585
Centrosomal protein 170kda	CEP170	705427
Centrosomal protein 192kda	CEP192	722121
Centrosomal protein 290kda	CEP290	708286
Centrosomal protein 350kda	CEP350	716537
Centrosomal protein 41kda	CEP41	703215
Centrosomal protein 55kda	CEP55	699890
Centrosomal protein 57kda-like 1	CEP57L1	700109
Centrosomal protein 63kda	CEP63	717266
Centrosomal protein 70kda	CEP70	716263
Centrosomal protein 72kda	CEP72	708753
Centrosomal protein 83kda	CEP83	711408
Centrosomal protein 85kda	CEP85	714264
Centrosomal protein 95kda	CEP95	718348
Centrosomal protein 97kda	CEP97	702482
Ceramide synthase 2	CERS2	716180

Ceramide synthase 4	CERS4	706728
Ceramide synthase 5	CERS5	713449
Ceramide synthase 6	CERS6	704953
Cerebellar degeneration related protein 2	CDR2	698974
Cerebellin 4 precursor	CBLN4	698567
Cerebral cavernous malformation 2	CCM2	705037
Ceroid-lipofuscinosis, neuronal 6, late infantile, variant	CLN6	693873
CGG triplet repeat binding protein 1	CGGBP1	693920
Chaperonin containing TCP1, subunit 2 (beta)	CCT2	717182
Chaperonin containing TCP1, subunit 3 (gamma)	CCT3	718374
Chaperonin containing TCP1, subunit 8 (theta)	CCT8	706184
Charged multivesicular body protein 1B	CHMP1B	100425080
Charged multivesicular body protein 2A	CHMP2A	712059
Charged multivesicular body protein 4B	CHMP4B	709004
Charged multivesicular body protein 6	CHMP6	718353
Checkpoint kinase 2	CHEK2	713668
Checkpoint with forkhead and ring finger domains, E3 ubiquitin protein ligase	CHFR	694297
Chemokine (C-C motif) ligand 25	CCL25	574219
Chemokine (C-C motif) ligand 27	CCL27	574220
Chemokine (C-X-C motif) receptor 4	CXCR4	707329
Chemokine-like factor	CKLF	693673
Chitinase 1	CHIT1	703286
Chitobiase, di-N-acetyl-	CTBS	710366
Chloride channel, voltage-sensitive 2	CLCN2	704709
Chloride channel, voltage-sensitive 6	CLCN6	714793
Chloride intracellular channel 4	CLIC4	712337
Choline kinase beta	CHKB	716377
Choline/ethanolamine phosphotransferase 1	CEPT1	702700
Cholinergic receptor, nicotinic alpha 7	CHRNA7	574230
Chondroitin polymerizing factor	CHPF	703860
Chondroitin sulfate N-acetylgalactosaminyltransferase 2	CSGALNACT2	703703
Chordin	CHRD	702281
Chromatin accessibility complex 1	CHRA1	700384
Chromatin target of PRMT1	CHTOP	715501
Chromobox 1	CBX1	696673
Chromobox 5	CBX5	703477
Chromobox 7	CBX7	703056
Chromodomain helicase DNA binding protein 1	CHD1	702070
Chromodomain helicase DNA binding protein 3	CHD3	716508
Chromodomain helicase DNA binding protein 4	CHD4	713162
Chromodomain helicase DNA binding protein 9	CHD9	696367
Chromodomain protein, Y-like	CDYL	722957
Chromosome 1 open reading frame, human c1orf123	C1H1orf123	714201
Chromosome 1 open reading frame, human c1orf131	C1H1orf131	719141
Chromosome 1 open reading frame, human c1orf198	C1H1orf198	714084
Chromosome 1 open reading frame, human c1orf35	C1H1orf35	695723
Chromosome 1 open reading frame, human c1orf50	C1H1orf50	698058

Chromosome 1 open reading frame, human c1orf52	C1H1orf52	711232
Chromosome 1 open reading frame, human c1orf54	C1H1orf54	107000832
Chromosome 1 open reading frame, human c1orf74	C1H1orf74	713029
Chromosome 1 open reading frame, human c1orf87	C1H1orf87	693884
Chromosome 10 open reading frame, human c20orf27	C10H20orf27	717525
Chromosome 10 open reading frame, human c20orf85	C10H20orf85	695728
Chromosome 10 open reading frame, human c22orf15	C10H22orf15	698813
Chromosome 10 open reading frame, human c22orf23	C10H22orf23	699449
Chromosome 11 open reading frame, human c12orf10	C11H12orf10	702255
Chromosome 11 open reading frame, human c12orf4	C11H12orf4	710836
Chromosome 11 open reading frame, human c12orf45	C11H12orf45	701291
Chromosome 11 open reading frame, human c12orf57	C11H12orf57	714482
Chromosome 12 open reading frame, human c2orf47	C12H2orf47	699322
Chromosome 13 open reading frame, human c2orf44	C13H2orf44	703861
Chromosome 13 open reading frame, human c2orf49	C13H2orf49	713165
Chromosome 14 open reading frame, human c11orf49	C14H11orf49	713981
Chromosome 14 open reading frame, human c11orf52	C14H11orf52	100423640
Chromosome 14 open reading frame, human c11orf68	C14H11orf68	715318
Chromosome 14 open reading frame, human c11orf73	C14H11orf73	704098
Chromosome 14 open reading frame, human c11orf74	C14H11orf74	716798
Chromosome 15 open reading frame, human c9orf135	C15H9orf135	700202
Chromosome 15 open reading frame, human c9orf142	C15H9orf142	707874
Chromosome 15 open reading frame, human c9orf16	C15H9orf16	722628
Chromosome 15 open reading frame, human c9orf24	C15H9orf24	701552
Chromosome 15 open reading frame, human c9orf72	C15H9orf72	706828
Chromosome 15 open reading frame, human c9orf9	C15H9orf9	714749
Chromosome 16 open reading frame, human c17orf49	C16H17orf49	713820
Chromosome 16 open reading frame, human c17orf53	C16H17orf53	711524
Chromosome 16 open reading frame, human c17orf62	C16H17orf62	716212
Chromosome 18 open reading frame, human c18orf21	C18H18orf21	715440
Chromosome 19 open reading frame, human c19orf24	C19H19orf24	706393
Chromosome 19 open reading frame, human c19orf43	C19H19orf43	716466
Chromosome 19 open reading frame, human c19orf47	C19H19orf47	701191
Chromosome 19 open reading frame, human c19orf52	C19H19orf52	713825
Chromosome 19 open reading frame, human c19orf53	C19H19orf53	720745
Chromosome 19 open reading frame, human c19orf66	C19H19orf66	714622
Chromosome 2 open reading frame, human c3orf14	C2H3orf14	699965
Chromosome 2 open reading frame, human c3orf18	C2H3orf18	701675
Chromosome 2 open reading frame, human c3orf52	C2H3orf52	100430016
Chromosome 20 open reading frame 24 ortholog	C10H20orf24	709696
Chromosome 20 open reading frame, human c16orf13	C20H16orf13	696495
Chromosome 20 open reading frame, human c16orf62	C20H16orf62	695027
Chromosome 20 open reading frame, human c16orf87	C20H16orf87	716218
Chromosome 3 open reading frame, human c21orf59	C3H21orf59	700721
Chromosome 3 open reading frame, human c21orf91	C3H21orf91	710406
Chromosome 3 open reading frame, human c7orf25	C3H7orf25	708455
Chromosome 3 open reading frame, human c7orf50	C3H7orf50	696867
Chromosome 4 open reading frame, human c6orf1	C4H6orf1	718551

Chromosome 4 open reading frame, human c6orf136	C4H6orf136	712108
Chromosome 4 open reading frame, human c6orf203	C4H6orf203	698108
Chromosome 4 open reading frame, human c6orf89	C4H6orf89	719165
Chromosome 5 open reading frame, human c4orf27	C5H4orf27	694607
Chromosome 6 open reading frame, human c5orf15	C6H5orf15	709969
Chromosome 6 open reading frame, human c5orf22	C6H5orf22	695901
Chromosome 6 open reading frame, human c5orf28	C6H5orf28	100430288
Chromosome 6 open reading frame, human c5orf30	C6H5orf30	703692
Chromosome 6 open reading frame, human c5orf34	C6H5orf34	700618
Chromosome 7 open reading frame, human c14orf142	C7H14orf142	704509
Chromosome 7 open reading frame, human c14orf166	C7H14orf166	710094
Chromosome 7 open reading frame, human c14orf80	C7H14orf80	699883
Chromosome 7 open reading frame, human c15orf52	C7H15orf52	702304
Chromosome 7 open reading frame, human c15orf57	C7H15orf57	703343
Chromosome 8 open reading frame, human c8orf46	C8H8orf46	703243
Chromosome 8 open reading frame, human c8orf48	C8H8orf48	700746
Chromosome 8 open reading frame, human c8orf59	C8H8orf59	703464
Chromosome 8 open reading frame, human c8orf76	C8H8orf76	704150
Chromosome 9 open reading frame, human c10orf107	C9H10orf107	700172
Chromosome 9 open reading frame, human c10orf2	C9H10orf2	710958
Chromosome 9 open reading frame, human c10orf88	C9H10orf88	707385
Chromosome alignment maintaining phosphoprotein 1	CHAMP1	699474
Chromosome X open reading frame, human cxorf38	CXHXorf38	699271
Chromosome X open reading frame, human cxorf40a	CXHXorf40A	702659
Chromosome X open reading frame, human cxorf57	CXHXorf57	700757
Chymotrypsinogen B2	CTRB2	711100
Cilia and flagella associated protein 100	CFAP100	716433
Cilia and flagella associated protein 161	CFAP161	713184
Cilia and flagella associated protein 20	CFAP20	706737
Cilia and flagella associated protein 43	CFAP43	716031
Cilia and flagella associated protein 45	CFAP45	720125
Cilia and flagella associated protein 52	CFAP52	722040
Cilia and flagella associated protein 53	CFAP53	700084
Cilia and flagella associated protein 65	CFAP65	701296
Cilia and flagella associated protein 70	CFAP70	707271
Ciliary neurotrophic factor	CNTF	701907
Ciliogenesis associated TTC17 interacting protein	CATIP	698579
Circadian associated repressor of transcription	CIART	706693
Citrate lyase beta like	CLYBL	699339
CKLF-like MARVEL transmembrane domain containing 3	CMTM3	695592
CKLF-like MARVEL transmembrane domain containing 6	CMTM6	704441
CKLF-like MARVEL transmembrane domain containing 7	CMTM7	704329
CKLF-like MARVEL transmembrane domain containing 8	CMTM8	704234
Clathrin, light chain A	CLTA	693659
Claudin 15	CLDN15	719637
Claudin 16	CLDN16	704442
Claudin 3	CLDN3	716771
Claudin 4	CLDN4	716808

Claudin domain containing 1	CLDND1	698472
Cleavage and polyadenylation factor I subunit 1	CLP1	705071
Cleavage and polyadenylation specific factor 1	CPSF1	702082
Cleavage and polyadenylation specific factor 4	CPSF4	708119
Cleavage stimulation factor, 3' pre-RNA, subunit 2	CSTF2	701235
Cleavage stimulation factor, 3' pre-RNA, subunit 3	CSTF3	694040
Cleft lip and palate associated transmembrane protein 1	CLPTM1	718306
Clpb homolog, mitochondrial AAA ATPase chaperonin	CLPB	718461
CLPTM1-like	CLPTM1L	709968
Clusterin associated protein 1	CLUAP1	703676
Cms1 ribosomal small subunit homolog (yeast)	CMSS1	699717
Coa synthase	COASY	710491
Coagulation factor XII (Hageman factor)	F12	699875
Coatomer protein complex subunit beta 1	COPB1	699327
Coatomer protein complex subunit epsilon	COPE	719631
Coatomer protein complex subunit zeta 1	COPZ1	705176
Coatomer protein complex subunit zeta 2	COPZ2	696299
Codanin 1	CDAN1	708838
Coenzyme Q10A	COQ10A	712341
Coenzyme Q3 methyltransferase	COQ3	694215
Cofilin 1 (non-muscle)	CFL1	721882
Cofilin 2 (muscle)	CFL2	693875
Coiled-coil domain containing 106	CCDC106	702611
Coiled-coil domain containing 117	CCDC117	713804
Coiled-coil domain containing 12	CCDC12	712061
Coiled-coil domain containing 134	CCDC134	708713
Coiled-coil domain containing 136	CCDC136	701874
Coiled-coil domain containing 142	CCDC142	709014
Coiled-coil domain containing 146	CCDC146	694907
Coiled-coil domain containing 148	CCDC148	698322
Coiled-coil domain containing 17	CCDC17	706591
Coiled-coil domain containing 174	CCDC174	701654
Coiled-coil domain containing 181	CCDC181	700803
Coiled-coil domain containing 186	CCDC186	722518
Coiled-coil domain containing 191	CCDC191	710219
Coiled-coil domain containing 24	CCDC24	702564
Coiled-coil domain containing 28A	CCDC28A	703104
Coiled-coil domain containing 36	CCDC36	707136
Coiled-coil domain containing 42	CCDC42	717532
Coiled-coil domain containing 43	CCDC43	715325
Coiled-coil domain containing 59	CCDC59	698443
Coiled-coil domain containing 82	CCDC82	700198
Coiled-coil domain containing 85B	CCDC85B	715413
Coiled-coil domain containing 90B	CCDC90B	702035
Coiled-coil domain containing 92	CCDC92	705922
Coiled-coil domain containing 96	CCDC96	722716
Coiled-coil domain containing 97	CCDC97	706342
Coiled-coil-helix-coiled-coil-helix domain containing 1	CHCHD1	706322

Coiled-coil-helix-coiled-coil-helix domain containing 10	CHCHD10	720205
Coiled-coil-helix-coiled-coil-helix domain containing 2	CHCHD2	702967
Coiled-coil-helix-coiled-coil-helix domain containing 5	CHCHD5	699323
Coiled-coil-helix-coiled-coil-helix domain containing 6	CHCHD6	716767
Coilin	COIL	708103
Cold inducible RNA binding protein	CIRBP	706175
Cold shock domain containing E1, RNA binding	CSDE1	708897
Collagen triple helix repeat containing 1	CTHRC1	694882
Collagen, type I, alpha 2	COL1A2	700359
Collagen, type III, alpha 1	COL3A1	574131
Collagen, type IX, alpha 1	COL9A1	714809
Collagen, type VI, alpha 1	COL6A1	721855
Collagen, type XII, alpha 1	COL12A1	717820
Collagen, type XXIV, alpha 1	COL24A1	711713
Colony stimulating factor 1 (macrophage)	CSF1	702532
Colony stimulating factor 3	CSF3	698961
Colony stimulating factor 3 receptor	CSF3R	713485
COMM domain containing 2	COMMD2	711498
COMM domain containing 6	COMMD6	695191
COMM domain containing 7	COMMD7	711628
COMM domain containing 8	COMMD8	704346
COMM domain containing 9	COMMD9	716992
Complement component 1, q subcomponent binding protein	C1QBP	711817
Complement component 1, q subcomponent, C chain	C1QC	708589
Complement component 1, s subcomponent	C1S	714589
Complement factor properdin	CFP	707386
Complexin 1	CPLX1	703519
Component of oligomeric golgi complex 1	COG1	695754
Component of oligomeric golgi complex 2	COG2	714263
Component of oligomeric golgi complex 3	COG3	702375
Component of oligomeric golgi complex 4	COG4	712103
Component of oligomeric golgi complex 6	COG6	697092
Component of oligomeric golgi complex 7	COG7	700218
Connector enhancer of kinase suppressor of Ras 1	CNKSRI	714154
Conserved helix-loop-helix ubiquitous kinase	CHUK	709511
Coordinator of PRMT5, differentiation stimulator	COPRS	713293
COP9 signalosome subunit 2	COPS2	714814
COP9 signalosome subunit 3	COPS3	698461
COP9 signalosome subunit 4	COPS4	693435
COP9 signalosome subunit 5	COPS5	704584
COP9 signalosome subunit 6	COPS6	710667
Copine I	CPNE1	100329144
Copine II	CPNE2	703557
Copine III	CPNE3	694013
Copine V	CPNE5	719255
Copine VIII	CPNE8	696586
Copper chaperone for superoxide dismutase	CCS	721802
Coproporphyrinogen oxidase	CPOX	698849

Core-binding factor, beta subunit	CBFB	695767
Core-binding factor, runt domain, alpha subunit 2; translocated to, 3	CBFA2T3	698233
Corepressor interacting with RBPJ, 1	CIR1	698068
Cornichon family AMPA receptor auxiliary protein 1	CNIH1	695002
Cornichon family AMPA receptor auxiliary protein 4	CNIH4	701767
Coronin, actin binding protein, 1B	CORO1B	721725
Cortactin	CTTN	708291
Cortactin binding protein 2	CTTNBP2	705351
COX19 cytochrome c oxidase assembly homolog (S. Cerevisiae)	COX19	696368
Craniofacial development protein 1	CFDP1	711343
Creatine kinase, brain	CKB	711167
CREB regulated transcription coactivator 2	CRTC2	715908
Crumbs family member 3	CRB3	700086
Cryptochrome circadian clock 1	CRY1	703752
Crystallin lambda 1	CRYL1	703988
CSE1 chromosome segregation 1-like (yeast)	CSE1L	704301
C-src tyrosine kinase	CSK	702868
CTD phosphatase subunit 1	CTDP1	698467
CTD small phosphatase 2	CTDSP2	715956
CTD small phosphatase like 2	CTDSPL2	711917
C-terminal binding protein 1	CTBP1	694507
C-terminal binding protein 2	CTBP2	695124
CTP synthase 1	CTPS1	695498
CTP synthase 2	CTPS2	721014
CTR9 homolog, Paf1/RNA polymerase II complex component	CTR9	705748
CTS telomere maintenance complex component 1	CTC1	717075
C-type lectin domain family 1, member A	CLEC1A	717526
CUE domain containing 2	CUEDC2	713243
CUGBP, Elav-like family member 1	CELF1	713167
Cullin 2	CUL2	698384
Cullin 4A	CUL4A	714302
Cullin 5	CUL5	707559
Cullin 7	CUL7	699545
Cullin-associated and neddylation-dissociated 1	CAND1	716184
Cutc copper transporter	CUTC	709050
Cut-like homeobox 2	CUX2	107001016
CWC15 spliceosome-associated protein	CWC15	698332
CWC22 homolog, spliceosome-associated protein	CWC22	704087
CWF19-like 2, cell cycle control (S. Pombe)	CWF19L2	706825
C-x(9)-C motif containing 1	CMC1	705147
C-x(9)-C motif containing 4	CMC4	100423504
CXXC finger protein 1	CXXC1	700341
Cyclin A2	CCNA2	707259
Cyclin B1	CCNB1	699504
Cyclin B2	CCNB2	702184
Cyclin D binding myb-like transcription factor 1	DMTF1	706292
Cyclin D2	CCND2	710379
Cyclin D3	CCND3	695215

Cyclin E1	CCNE1	700589
Cyclin G1	CCNG1	697738
Cyclin H	CCNH	694224
Cyclin I	CCNI	677687
Cyclin O	CCNO	706193
Cyclin Pas1/PHO80 domain containing 1	CNPPD1	704271
Cyclin T2	CCNT2	708813
Cyclin Y	CCNY	698889
Cyclin-dependent kinase 1	CDK1	699269
Cyclin-dependent kinase 12	CDK12	696733
Cyclin-dependent kinase 14	CDK14	703442
Cyclin-dependent kinase 19	CDK19	698292
Cyclin-dependent kinase 2	CDK2	711002
Cyclin-dependent kinase 2 associated protein 2	CDK2AP2	711640
Cyclin-dependent kinase 2 interacting protein	CINP	709044
Cyclin-dependent kinase 4	CDK4	715650
Cyclin-dependent kinase 5, regulatory subunit 1 (p35)	CDK5R1	714274
Cyclin-dependent kinase 8	CDK8	709761
Cyclin-dependent kinase 9	CDK9	699840
Cyclin-dependent kinase inhibitor 2C (p18, inhibits CDK4)	CDKN2C	711877
Cyclin-dependent kinase inhibitor 2D (p19, inhibits CDK4)	CDKN2D	713172
Cyclin-dependent kinase inhibitor 3	CDKN3	694877
Cyclin-dependent kinase-like 2 (CDC2-related kinase)	CDKL2	701467
Cystatin B	CSTB	713504
Cystatin C	CST3	574313
Cysteine and glycine rich protein 1	CSRP1	709693
Cysteine rich hydrophobic domain 2	CHIC2	697359
Cysteine sulfinic acid decarboxylase	CSAD	701290
Cysteine/histidine-rich 1	CYHR1	702522
Cysteine-rich transmembrane module containing 1	CYSTM1	697656
Cysteine-serine-rich nuclear protein 1	CSRNP1	694328
Cysteine-serine-rich nuclear protein 2	CSRNP2	694549
CysteinyI-trna synthetase	CARS	706502
CysteinyI-trna synthetase 2, mitochondrial (putative)	CARS2	694840
Cystinosin, lysosomal cystine transporter	CTNS	706721
Cytidine deaminase	CDA	705913
Cytidine monophosphate (UMP-CMP) kinase 1, cytosolic	CMPK1	710196
Cytidine monophosphate N-acetylneuraminic acid synthetase	CMAS	706604
Cytochrome b reductase 1	CYBRD1	694818
Cytochrome b-245 heavy chain	CYBB	696542
Cytochrome b5 reductase 1	CYB5R1	704519
Cytochrome b5 reductase 4	CYB5R4	695553
Cytochrome b5 type B (outer mitochondrial membrane)	CYB5B	705093
Cytochrome b-561 domain containing 2	CYB561D2	702280
Cytochrome c oxidase subunit 5A	COX5A	692061
Cytochrome c oxidase subunit 6C	COX6C	100428416
Cytochrome c oxidase subunit 7AH	COX7AH	692060
Cytochrome c oxidase subunit III	COX3	2846633

Cytochrome c oxidase subunit IV isoform 1	COX4I1	693811
Cytochrome c oxidase subunit viia polypeptide 2 like	COX7A2L	712764
Cytochrome c oxidase subunit viib	COX7B	706099
Cytochrome c oxidase subunit viic	COX7C	100429280
Cytochrome c oxidase subunit VIIIA (ubiquitous)	COX8A	718007
Cytochrome c-1	CYC1	700518
Cytochrome P450, family 2, subfamily D, polypeptide 6	CYP2D6	678691
Cytochrome P450, family 4, subfamily F, polypeptide 8	CYP4F8	718335
Cytochrome P450c17	CYP17A1	678693
Cytokine induced apoptosis inhibitor 1	CIAPIN1	704770
Cytokine inducible SH2-containing protein	CISH	701456
Cytokine like 1	CYTL1	711664
Cytoplasmic FMR1 interacting protein 2	CYFIP2	714984
Cytoplasmic polyadenylation element binding protein 2	CPEB2	722844
Cytoskeleton associated protein 2 like	CKAP2L	704381
Cytoskeleton associated protein 5	CKAP5	714095
Cytosolic thiouridylase subunit 1	CTU1	719536
Dab, mitogen-responsive phosphoprotein, homolog 2 (Drosophila)	DAB2	694349
Dachsous cadherin-related 1	DCHS1	711938
DALR anticodon binding domain containing 3	DALRD3	708403
Damage-specific DNA binding protein 2	DDB2	713813
D-amino-acid oxidase	DAO	706373
DAZ associated protein 1	DAZAP1	707132
DAZ associated protein 2	DAZAP2	695282
DAZ interacting zinc finger protein 1-like	DZIP1L	716551
Dcmp deaminase	DCTD	700995
DCN1, defective in cullin neddylation 1, domain containing 1	DCUN1D1	708357
DCN1, defective in cullin neddylation 1, domain containing 4	DCUN1D4	702908
DCN1, defective in cullin neddylation 1, domain containing 5	DCUN1D5	704099
Dctp pyrophosphatase 1	DCTPP1	710500
DDB1 and CUL4 associated factor 10	DCAF10	716256
DDB1 and CUL4 associated factor 11	DCAF11	714867
DDB1 and CUL4 associated factor 12	DCAF12	702148
DDB1 and CUL4 associated factor 4	DCAF4	695337
DDB1 and CUL4 associated factor 6	DCAF6	698686
D-dopachrome tautomerase	DDT	699933
DDRGK domain containing 1	DDRGK1	717226
DEAD (Asp-Glu-Ala-Asp) box helicase 24	DDX24	700253
DEAD (Asp-Glu-Ala-Asp) box helicase 3, Y-linked	DDX3Y	100270696
DEAD (Asp-Glu-Ala-Asp) box helicase 42	DDX42	717964
DEAD (Asp-Glu-Ala-Asp) box helicase 56	DDX56	698980
DEAD (Asp-Glu-Ala-Asp) box polypeptide 19B	DDX19B	709576
DEAD (Asp-Glu-Ala-Asp) box polypeptide 27	DDX27	703852
DEAD (Asp-Glu-Ala-Asp) box polypeptide 39A	DDX39A	718822
DEAD (Asp-Glu-Ala-Asp) box polypeptide 41	DDX41	700742
DEAD (Asp-Glu-Ala-Asp) box polypeptide 47	DDX47	697304
DEAD (Asp-Glu-Ala-Asp) box polypeptide 50	DDX50	712511
DEAD (Asp-Glu-Ala-Asp) box polypeptide 54	DDX54	712763

DEAD/H (Asp-Glu-Ala-Asp/His) box helicase 11	DDX11	717040
DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 26B	DDX26B	709688
Deafness, autosomal dominant 5	DFNA5	703441
Deafness, autosomal recessive 31	DFNB31	708051
DEAH (Asp-Glu-Ala-Asp/His) box polypeptide 57	DHX57	713523
DEAH (Asp-Glu-Ala-His) box helicase 30	DHX30	711178
DEAH (Asp-Glu-Ala-His) box helicase 9	DHX9	715453
DEAH (Asp-Glu-Ala-His) box polypeptide 29	DHX29	706306
DEAH (Asp-Glu-Ala-His) box polypeptide 32	DHX32	695919
DEAH (Asp-Glu-Ala-His) box polypeptide 35	DHX35	697673
DEAH (Asp-Glu-Ala-His) box polypeptide 36	DHX36	708112
DEAH (Asp-Glu-Ala-His) box polypeptide 38	DHX38	709173
DEAH (Asp-Glu-Ala-His) box polypeptide 40	DHX40	715202
Death associated protein 3	DAP3	719314
Death effector domain containing	DEDD	719875
Death inducer-obliterators 1	DIDO1	698313
Death-associated protein	DAP	697362
Debranching RNA lariats 1	DBR1	716467
Decapping exoribonuclease	DXO	716027
Decapping mrna 1B	DCP1B	708089
Decorin	DCN	709933
Dedicator of cytokinesis 5	DOCK5	711359
De-etiolated homolog 1 (Arabidopsis)	DET1	697994
Defender against cell death 1	DAD1	711840
Defensin beta 118	DEFB118	641438
Dehydrodolichyl diphosphate synthase subunit	DHDDS	714635
Dehydrogenase/reductase (SDR family) member 1	DHRS1	715933
Dehydrogenase/reductase (SDR family) member 11	DHRS11	713823
Dehydrogenase/reductase (SDR family) member 3	DHRS3	715548
Dehydrogenase/reductase (SDR family) member 7	DHRS7	702872
Deiodinase, iodothyronine, type II	DIO2	707484
DEK proto-oncogene	DEK	712460
Deleted in lung and esophageal cancer 1	DLEC1	697163
Deleted in primary ciliary dyskinesia homolog (mouse)	DPCD	712082
Delta(4)-desaturase, sphingolipid 1	DEGS1	702128
Delta(4)-desaturase, sphingolipid 2	DEGS2	717222
Delta-like 1 homolog (Drosophila)	DLK1	707595
Delta-like 2 homolog (Drosophila)	DLK2	700106
Deltex 3, E3 ubiquitin ligase	DTX3	715175
DENN/MADD domain containing 2D	DENND2D	702568
DENN/MADD domain containing 4A	DENND4A	709675
DENN/MADD domain containing 5A	DENND5A	707945
DENN/MADD domain containing 6A	DENND6A	707616
Denticless E3 ubiquitin protein ligase homolog (Drosophila)	DTL	711236
Deoxyguanosine kinase	DGUOK	707554
Deoxyhypusine synthase	DHPS	716213
Deoxythymidylate kinase	DTYMK	701781
DEP domain containing 1B	DEPDC1B	709670

Dephospho-coa kinase domain containing	DCAKD	715841
Derlin 1	DERL1	703803
Derlin 2	DERL2	712051
Dermatan sulfate epimerase	DSE	716054
Desmoplakin	DSP	694860
Destrin (actin depolymerizing factor)	DSTN	695969
Desumoylating isopeptidase 2	DESI2	713515
Developmentally regulated GTP binding protein 1	DRG1	716791
Dexi homolog (mouse)	DEXI	100430904
Diacylglycerol kinase alpha	DGKA	710559
Diacylglycerol kinase, delta 130kda	DGKD	714210
Diacylglycerol O-acyltransferase 1	DGAT1	701489
Diaphanous related formin 2	DIAPH2	699140
Dicarbonyl/L-xylulose reductase	DCXR	715513
Dickkopf WNT signaling pathway inhibitor 1	DKK1	702997
Digeorge syndrome critical region gene 6	DGCR6	693512
Dihydrolipoamide S-acetyltransferase	DLAT	710930
Dihydrolipoamide S-succinyltransferase (E2 component of 2-oxo-glutarate complex)	DLST	701006
Dihydropyrimidinase like 3	DPYSL3	708425
Dihydropyrimidine dehydrogenase	DPYD	715672
Dihydrouridine synthase 1-like	DUS1L	715662
Dihydrouridine synthase 2	DUS2	702051
Dihydrouridine synthase 3-like	DUS3L	719524
Dimethylarginine dimethylaminohydrolase 1	DDAH1	711395
Dipeptidase 2	DPEP2	701570
Dipeptidyl-peptidase 3	DPP3	721809
Dipeptidyl-peptidase 8	DPP8	709428
Diphthamide biosynthesis 1	DPH1	721275
Diphthamide biosynthesis 3	DPH3	695309
Diphthamide biosynthesis 5	DPH5	712253
DIS3 like exosome 3'-5' exoribonuclease	DIS3L	710238
Discoidin domain receptor tyrosine kinase 1	DDR1	714233
Discoidin domain receptor tyrosine kinase 2	DDR2	720124
Discs, large (Drosophila) homolog-associated protein 4	DLGAP4	702928
Discs, large homolog 1 (Drosophila)	DLG1	709572
Discs, large homolog 4 (Drosophila)	DLG4	714273
Discs, large homolog 5 (Drosophila)	DLG5	703123
Dishevelled associated activator of morphogenesis 1	DAAM1	701706
Dishevelled segment polarity protein 1	DVL1	705864
Dishevelled segment polarity protein 2	DVL2	714381
Dishevelled-binding antagonist of beta-catenin 1	DACT1	701218
Dispatched homolog 1 (Drosophila)	DISP1	703960
Distal-less homeobox 5	DLX5	697853
DNA (cytosine-5-)-methyltransferase 1	DNMT1	574321
DNA cross-link repair 1A	DCLRE1A	697882
DNA damage inducible transcript 4	DDIT4	715307
DNA methyltransferase 1 associated protein 1	DMAP1	702919

Dnaj heat shock protein family (Hsp40) member A1	DNAJA1	703765
Dnaj heat shock protein family (Hsp40) member B1	DNAJB1	718890
Dnaj heat shock protein family (Hsp40) member B2	DNAJB2	702936
Dnaj heat shock protein family (Hsp40) member B4	DNAJB4	707206
Dnaj heat shock protein family (Hsp40) member B6	DNAJB6	693305
Dnaj heat shock protein family (Hsp40) member C1	DNAJC1	704151
Dnaj heat shock protein family (Hsp40) member C13	DNAJC13	717741
Dnaj heat shock protein family (Hsp40) member C15	DNAJC15	700339
Dnaj heat shock protein family (Hsp40) member C17	DNAJC17	704013
Dnaj heat shock protein family (Hsp40) member C27	DNAJC27	694037
Dnaj heat shock protein family (Hsp40) member C3	DNAJC3	695757
Dnaj heat shock protein family (Hsp40) member C30	DNAJC30	716630
Dnaj heat shock protein family (Hsp40) member C6	DNAJC6	698682
Dnaj heat shock protein family (Hsp40) member C8	DNAJC8	720231
Dnaj heat shock protein family (Hsp40) member C9	DNAJC9	707599
Docking protein 5	DOK5	698689
Dolichyl-phosphate (UDP-N-acetylglucosamine) N-acetylglucosamine phosphotransferase 1 (glcnac-1-P transferase)	DPAGT1	703538
Dolichyl-phosphate mannosyltransferase polypeptide 2, regulatory subunit	DPM2	698709
Dolichyl-phosphate mannosyltransferase polypeptide 3	DPM3	717446
Dopey family member 1	DOPEY1	694339
Double C2-like domains, alpha	DOC2A	707895
Double zinc ribbon and ankyrin repeat domains 1	DZANK1	700143
Down-regulator of transcription 1	DR1	707632
Dpy-30, histone methyltransferase complex regulatory subunit	DPY30	706155
DR1-associated protein 1 (negative cofactor 2 alpha)	DRAP1	715271
Drebrin 1	DBN1	700375
Drosha, ribonuclease type III	DROSHA	692081
DTW domain containing 1	DTWD1	715084
D-tyrosyl-trna deacylase 1	DTD1	700895
Dual serine/threonine and tyrosine protein kinase	DSTYK	664732
Dual specificity phosphatase 1	DUSP1	702981
Dual specificity phosphatase 10	DUSP10	705056
Dual specificity phosphatase 11	DUSP11	707123
Dual specificity phosphatase 12	DUSP12	720034
Dual specificity phosphatase 14	DUSP14	714383
Dual specificity phosphatase 22	DUSP22	705824
Dual specificity phosphatase 23	DUSP23	719474
Dual specificity tyrosine-(Y)-phosphorylation regulated kinase 1B	DYRK1B	698848
Dual specificity tyrosine-(Y)-phosphorylation regulated kinase 2	DYRK2	717941
Dual specificity tyrosine-(Y)-phosphorylation regulated kinase 3	DYRK3	695163
Dynactin subunit 1	DCTN1	708290
Dynactin subunit 2	DCTN2	714948
Dynactin subunit 4	DCTN4	712783
Dynactin subunit 6	DCTN6	694273
Dynamin 1-like	DNM1L	695388
Dynamin 2	DNM2	713558

Dynein regulatory complex subunit 3	DRC3	699590
Dynein, axonemal, assembly factor 2	DNAAF2	719026
Dynein, axonemal, heavy chain 7	DNAH7	695393
Dynein, axonemal, intermediate chain 1	DNAI1	701307
Dynein, axonemal, light chain 4	DNAL4	702019
Dynein, cytoplasmic 1, intermediate chain 1	DYNC1I1	574351
Dynein, light chain, LC8-type 1	DYNLL1	702360
Dynein, light chain, LC8-type 2	DYNLL2	100423736
Dynein, light chain, roadblock-type 2	DYNLRB2	713503
Dyskeratosis congenita 1, dyskerin	DKC1	702563
Dystrobrevin beta	DTNB	696167
Dystrophia myotonica protein kinase	DMPK	715328
E1A binding protein p300	EP300	706258
E2F transcription factor 1	E2F1	714126
E2F transcription factor 2	E2F2	710200
E2F transcription factor 3	E2F3	713904
E2F transcription factor 4, p107/p130-binding	E2F4	696864
E2F transcription factor 5, p130-binding	E2F5	703352
E2F transcription factor 6	E2F6	697311
E2F transcription factor 7	E2F7	694423
E2F-associated phosphoprotein	EAPP	714727
E4F transcription factor 1	E4F1	695882
E74-like factor 2 (ets domain transcription factor)	ELF2	696760
Ecdysoless homolog (Drosophila)	ECD	707699
Echinoderm microtubule associated protein like 5	EML5	694095
Ecotropic viral integration site 5-like	EVI5L	706628
ECSIT signalling integrator	ECSIT	714805
Ectodermal-neural cortex 1 (with BTB domain)	ENC1	704577
Ectodysplasin A receptor	EDAR	695059
Ecto-NOX disulfide-thiol exchanger 1	ENOX1	700475
Ectonucleoside triphosphate diphosphohydrolase 4	ENTPD4	717197
Ectonucleoside triphosphate diphosphohydrolase 5	ENTPD5	698503
Ectonucleoside triphosphate diphosphohydrolase 7	ENTPD7	708844
Ectonucleotide pyrophosphatase/phosphodiesterase 4 (putative)	ENPP4	703680
Ectonucleotide pyrophosphatase/phosphodiesterase 6	ENPP6	693950
EF-hand calcium binding domain 11	EFCAB11	695233
EF-hand calcium binding domain 12	EFCAB12	703176
EF-hand calcium binding domain 6	EFCAB6	712043
EF-hand domain (C-terminal) containing 1	EFHC1	708517
EF-hand domain family member D2	EFHD2	694155
EGF-like, fibronectin type III and laminin G domains	EGFLAM	693314
EGF-like-domain, multiple 6	EGFL6	711280
EGF-like-domain, multiple 7	EGFL7	709840
EGF-like-domain, multiple 8	EGFL8	717145
Egl-9 family hypoxia-inducible factor 1	EGLN1	713410
Egl-9 family hypoxia-inducible factor 2	EGLN2	703083
EH domain binding protein 1	EHBP1	693902
Elastin microfibril interfacer 1	EMILIN1	698204

ELAV like neuron-specific RNA binding protein 2	ELAVL2	708195
Electron-transfer-flavoprotein, beta polypeptide	ETFB	719606
Electron-transferring-flavoprotein dehydrogenase	ETFDH	701207
ELK1, member of ETS oncogene family	ELK1	712610
ELL associated factor 2	EAF2	714223
ELMO/CED-12 domain containing 3	ELMOD3	695180
Elongation factor RNA polymerase II-like 3	ELL3	711271
Elongation factor Tu GTP binding domain containing 2	EFTUD2	715512
ELOVL fatty acid elongase 1	ELOVL1	700557
ELOVL fatty acid elongase 4	ELOVL4	692070
Embryonal Fyn-associated substrate	EFS	713838
Embryonic ectoderm development	EED	703866
Emerin	EMD	699400
EMG1 N1-specific pseudouridine methyltransferase	EMG1	722122
Emopamil binding protein (sterol isomerase)	EBP	714315
Empty spiracles homeobox 1	EMX1	705441
Empty spiracles homeobox 2	EMX2	701370
Enah/Vasp-like	EVL	706316
Endonuclease domain containing 1	ENDOD1	699210
Endonuclease G	ENDOG	717171
Endonuclease/exonuclease/phosphatase family domain containing 1	EEPD1	706642
Endoplasmic reticulum lectin 1	ERLEC1	716460
Endoplasmic reticulum protein 27	ERP27	700186
Endosulfine alpha	ENSA	715857
Endothelial differentiation-related factor 1	EDF1	708611
Endothelin 1	EDN1	699982
Endothelin 3	EDN3	693385
Energy homeostasis associated	ENHO	701072
Engulfment and cell motility 1	ELMO1	705818
Engulfment and cell motility 2	ELMO2	707316
Engulfment and cell motility 3	ELMO3	698664
Enhancer of mrna decapping 3	EDC3	709182
Enhancer of polycomb homolog 2 (Drosophila)	EPC2	721916
Enhancer of rudimentary homolog (Drosophila)	ERH	712507
Enhancer of yellow 2 homolog (Drosophila)	ENY2	699048
Enhancer of zeste 1 polycomb repressive complex 2 subunit	EZH1	711173
Enhancer of zeste 2 polycomb repressive complex 2 subunit	EZH2	709075
Enkurin domain containing 1	ENKD1	699487
Enolase 1, (alpha)	ENO1	709378
Enolase 2 (gamma, neuronal)	ENO2	714208
Enolase superfamily member 1	ENOSF1	697333
Enoyl-coa delta isomerase 1	ECI1	696243
Enoyl-coa delta isomerase 2	ECI2	709579
Enoyl-coa hydratase domain containing 3	ECHDC3	693583
Enoyl-coa hydratase, short chain, 1, mitochondrial	ECHS1	722723
Envoplakin	EVPL	705079
EP300 interacting inhibitor of differentiation 3	EID3	701175
Ephrin-A3	EFNA3	717373

Ephrin-B1	EFNB1	694149
Epidermal growth factor receptor pathway substrate 15-like 1	EPS15L1	719502
Epidermal growth factor receptor pathway substrate 8	EPS8	702777
Epididymal protein 3A	EDDM3A	704355
Epilepsy, progressive myoclonus type 2A, Lafora disease (laforin)	EPM2A	699361
Epithelial cell transforming 2	ECT2	694056
Epithelial membrane protein 2	EMP2	710315
Epithelial membrane protein 3	EMP3	717867
EPS8 like 1	EPS8L1	698281
Epsin 1	EPN1	702956
ER lipid raft associated 1	ERLIN1	709596
ER membrane protein complex subunit 2	EMC2	697878
ER membrane protein complex subunit 4	EMC4	695907
ER membrane protein complex subunit 6	EMC6	707030
ER membrane protein complex subunit 8	EMC8	693674
ER membrane protein complex subunit 9	EMC9	715192
ERBB receptor feedback inhibitor 1	ERRFI1	722072
ERGIC and golgi 3	ERGIC3	704736
Erythrocyte membrane protein band 4.1-like 1	EPB41L1	710697
ES cell expressed Ras	ERAS	711442
Esterase D	ESD	708871
Estrogen receptor binding site associated, antigen, 9	EBAG9	699305
Ethanolamine kinase 2	ETNK2	700683
Ethylmalonic encephalopathy 1	ETHE1	718089
Ethylmalonyl-coa decarboxylase 1	ECHDC1	712072
Etoposide induced 2.4	EI24	713226
Eukaryotic elongation factor, selenocysteine-trna-specific	EEFSEC	705784
Eukaryotic translation elongation factor 1 beta 2	EEF1B2	707019
Eukaryotic translation elongation factor 1 epsilon 1	EEF1E1	695426
Eukaryotic translation elongation factor 1 gamma	EEF1G	722274
Eukaryotic translation initiation factor 1	EIF1	704606
Eukaryotic translation initiation factor 2 subunit alpha	EIF2S1	710150
Eukaryotic translation initiation factor 2 subunit beta	EIF2S2	708593
Eukaryotic translation initiation factor 2A, 65kda	EIF2A	710497
Eukaryotic translation initiation factor 2-alpha kinase 3	EIF2AK3	699575
Eukaryotic translation initiation factor 2B subunit beta	EIF2B2	701360
Eukaryotic translation initiation factor 2B subunit epsilon	EIF2B5	703673
Eukaryotic translation initiation factor 2B subunit gamma	EIF2B3	705862
Eukaryotic translation initiation factor 3 subunit B	EIF3B	698481
Eukaryotic translation initiation factor 3 subunit D	EIF3D	695051
Eukaryotic translation initiation factor 3 subunit F	EIF3F	706269
Eukaryotic translation initiation factor 3 subunit G	EIF3G	714726
Eukaryotic translation initiation factor 3 subunit H	EIF3H	700517
Eukaryotic translation initiation factor 3 subunit I	EIF3I	708145
Eukaryotic translation initiation factor 3 subunit K	EIF3K	693536
Eukaryotic translation initiation factor 3 subunit L	EIF3L	699189
Eukaryotic translation initiation factor 3 subunit M	EIF3M	695698
Eukaryotic translation initiation factor 4 gamma, 2	EIF4G2	705510

Eukaryotic translation initiation factor 4E binding protein 1	EIF4EBP1	703628
Eukaryotic translation initiation factor 4E binding protein 2	EIF4EBP2	100424760
Eukaryotic translation initiation factor 4E binding protein 3	EIF4EBP3	100532736
Eukaryotic translation initiation factor 4E family member 2	EIF4E2	713487
Eukaryotic translation initiation factor 4E nuclear import factor 1	EIF4ENIF1	716871
Eukaryotic translation initiation factor 4H	EIF4H	693429
Eukaryotic translation initiation factor 5B	EIF5B	714129
Eukaryotic translation termination factor 1	ETF1	714449
Eva-1 homolog A (C. Elegans)	EVA1A	710843
Eva-1 homolog B (C. Elegans)	EVA1B	713159
EWS RNA binding protein 1	EWSR1	714432
Excision repair cross-complementation group 2	ERCC2	715485
Excision repair cross-complementation group 3	ERCC3	698829
Exocyst complex component 1	EXOC1	695664
Exocyst complex component 2	EXOC2	706296
Exocyst complex component 3	EXOC3	708422
Exocyst complex component 4	EXOC4	712458
Exonuclease 1	EXO1	706902
Exosome component 10	EXOSC10	714153
Exosome component 3	EXOSC3	716347
Exosome component 4	EXOSC4	700012
Exosome component 5	EXOSC5	705203
Exosome component 8	EXOSC8	695071
Exostosin glycosyltransferase 1	EXT1	701488
Exostosin glycosyltransferase 2	EXT2	715975
Exostosin-like glycosyltransferase 2	EXTL2	712189
Exportin 1	XPO1	718063
Exportin 4	XPO4	703548
Exportin 5	XPO5	700664
Exportin 6	XPO6	704332
Exportin, trna	XPOT	717375
Extended synaptotagmin-like protein 1	ESYT1	711720
Extra spindle pole bodies like 1, separase	ESPL1	702136
Extracellular matrix protein 1	ECM1	707209
F11 receptor	F11R	719824
FAD-dependent oxidoreductase domain containing 1	FOXRED1	714271
Failed axon connections homolog	FAXC	693945
Family with sequence similarity 103 member A1	FAM103A1	714660
Family with sequence similarity 104 member A	FAM104A	695865
Family with sequence similarity 107 member B	FAM107B	696896
Family with sequence similarity 110 member A	FAM110A	717055
Family with sequence similarity 110 member B	FAM110B	703840
Family with sequence similarity 117 member A	FAM117A	700079
Family with sequence similarity 127, member A	FAM127A	708766
Family with sequence similarity 129 member B	FAM129B	707403
Family with sequence similarity 13 member B	FAM13B	713567
Family with sequence similarity 134 member A	FAM134A	704378
Family with sequence similarity 136 member A	FAM136A	702718

Family with sequence similarity 151 member B	FAM151B	715256
Family with sequence similarity 156 member B	FAM156B	698392
Family with sequence similarity 160 member A2	FAM160A2	711641
Family with sequence similarity 170 member A	FAM170A	701046
Family with sequence similarity 171 member B	FAM171B	712442
Family with sequence similarity 175 member B	FAM175B	694886
Family with sequence similarity 178 member B	FAM178B	710890
Family with sequence similarity 179 member B	FAM179B	702188
Family with sequence similarity 181 member B	FAM181B	701184
Family with sequence similarity 185 member A	FAM185A	694971
Family with sequence similarity 186 member B	FAM186B	711001
Family with sequence similarity 188 member A	FAM188A	699009
Family with sequence similarity 189 member A2	FAM189A2	701247
Family with sequence similarity 19 (chemokine (C-C motif)-like), member A5	FAM19A5	107000696
Family with sequence similarity 195 member A	FAM195A	696621
Family with sequence similarity 199, X-linked	FAM199X	699523
Family with sequence similarity 20 member C	FAM20C	695088
Family with sequence similarity 206 member A	FAM206A	710486
Family with sequence similarity 210 member A	FAM210A	701669
Family with sequence similarity 212 member A	FAM212A	704983
Family with sequence similarity 214 member B	FAM214B	698214
Family with sequence similarity 219 member A	FAM219A	700651
Family with sequence similarity 220 member A	FAM220A	703785
Family with sequence similarity 222 member B	FAM222B	710302
Family with sequence similarity 3 member A	FAM3A	701159
Family with sequence similarity 35 member A	FAM35A	694102
Family with sequence similarity 43 member A	FAM43A	708207
Family with sequence similarity 45 member A	FAM45A	713269
Family with sequence similarity 49 member B	FAM49B	695449
Family with sequence similarity 58 member A	FAM58A	695925
Family with sequence similarity 63 member B	FAM63B	703159
Family with sequence similarity 64 member A	FAM64A	712701
Family with sequence similarity 73 member B	FAM73B	722577
Family with sequence similarity 8 member A1	FAM8A1	703789
Family with sequence similarity 89 member B	FAM89B	721925
Family with sequence similarity 91 member A1	FAM91A1	705119
Family with sequence similarity 92 member A1	FAM92A1	698794
Fanconi anemia complementation group B	FANCB	712083
Fanconi anemia complementation group E	FANCE	718889
Fanconi anemia complementation group G	FANCG	698837
Fanconi anemia complementation group I	FANCI	699878
Fanconi anemia core complex associated protein 100	FAAP100	713876
Far upstream element (FUSE) binding protein 1	FUBP1	707102
Far upstream element (FUSE) binding protein 3	FUBP3	722470
Farnesyl-diphosphate farnesyltransferase 1	FDFT1	696396
Farnesyltransferase, CAAX box, beta	FNTB	708129
Fas (TNFRSF6) associated factor 1	FAF1	714405

Fas associated via death domain	FADD	708606
Fas-activated serine/threonine kinase	FASTK	714020
Fasciculation and elongation protein zeta 1	FEZ1	713106
Fasciculation and elongation protein zeta 2 (zygin II)	FEZ2	708288
Fat storage-inducing transmembrane protein 1	FITM1	715085
Fatty acid desaturase 2	FADS2	719037
Fatty acid desaturase 3	FADS3	722337
Fatty acyl coa reductase 1	FAR1	699947
F-box and WD repeat domain containing 4	FBXW4	711996
F-box and WD repeat domain containing 5	FBXW5	721653
F-box and WD repeat domain containing 7	FBXW7	695101
F-box and WD repeat domain containing 9	FBXW9	716383
F-box protein 11	FBXO11	715651
F-box protein 15	FBXO15	694446
F-box protein 21	FBXO21	693647
F-box protein 3	FBXO3	693281
F-box protein 30	FBXO30	699241
F-box protein 32	FBXO32	704804
F-box protein 33	FBXO33	699629
F-box protein 34	FBXO34	697537
F-box protein 38	FBXO38	709869
F-box protein 4	FBXO4	697007
F-box protein 5	FBXO5	703219
F-box protein 6	FBXO6	722740
F-box protein 7	FBXO7	717317
F-box protein 8	FBXO8	699302
F-box protein 9	FBXO9	712024
Fc fragment of igg, receptor, transporter, alpha	FCGRT	718859
Fc receptor-like B	FCRLB	720028
FCH and double SH3 domains 2	FCHSD2	717996
Fem-1 homolog b (C. Elegans)	FEM1B	693955
Fer (fps/fes related) tyrosine kinase	FER	711220
FERM domain containing 3	FRMD3	713394
FERM domain containing 6	FRMD6	707266
Ferritin mitochondrial	FTMT	699743
FGFR1 oncogene partner	FGFR1OP	706749
FGFR1 oncogene partner 2	FGFR1OP2	708905
Fibrillarin	FBL	700286
Fibroblast activation protein alpha	FAP	701541
Fibroblast growth factor 13	FGF13	695460
Fibroblast growth factor receptor substrate 3	FRS3	694462
Fibronectin 1	FN1	613269
Fibronectin type III and ankyrin repeat domains 1	FANK1	696281
Fibronectin type III domain containing 4	FNDC4	702098
FIG4 phosphoinositide 5-phosphatase	FIG4	699914
Filamin A interacting protein 1	FILIP1	716439
Filamin B, beta	FLNB	702732
Filamin binding LIM protein 1	FBLIM1	695727

Finkel-Biskis-Reilly murine sarcoma virus (FBR-musv) ubiquitously expressed	FAU	716761
Fission, mitochondrial 1	FIS1	714444
FK506 binding protein 11	FKBP11	708598
FK506 binding protein 1B	FKBP1B	703973
FK506 binding protein 4	FKBP4	708481
FK506 binding protein 6	FKBP6	716306
FK506 binding protein 8	FKBP8	720232
FK506 binding protein 9	FKBP9	708827
Flavin adenine dinucleotide synthetase 1	FLAD1	717133
Flightless I actin binding protein	FLII	700471
Flotillin 2	FLOT2	716527
FLYWCH-type zinc finger 1	FLYWCH1	700909
Fms-related tyrosine kinase 3 ligand	FLT3LG	719239
Folate receptor 1 (adult)	FOLR1	718388
Follicular dendritic cell secreted protein	FDCSP	707784
Follistatin like 1	FSTL1	713367
Forkhead box A3	FOXA3	715663
Forkhead box O3	FOXO3	700731
Formin binding protein 1-like	FNBP1L	713578
Formin homology 2 domain containing 1	FHOD1	697346
Forty-two-three domain containing 1	FYTTD1	714705
Four and a half LIM domains 1	FHL1	710692
Four and a half LIM domains 2	FHL2	713222
Fragile X mental retardation, autosomal homolog 1	FXR1	710170
FRAS1 related extracellular matrix 1	FREM1	713874
Frataxin	FXN	699469
Frizzled class receptor 10	FZD10	717812
Frizzled class receptor 5	FZD5	710796
Frizzled class receptor 6	FZD6	694625
Fructosamine 3 kinase related protein	FN3KRP	716431
Ftsj homolog 3 (E. Coli)	FTSJ3	718009
Ftsj RNA methyltransferase homolog 1 (E. Coli)	FTSJ1	710243
Fucokinase	FUK	709226
Fucosyltransferase 10 (alpha (1,3) fucosyltransferase)	FUT10	697659
Fumarylacetoacetate hydrolase (fumarylacetoacetase)	FAH	712716
FUN14 domain containing 1	FUNDC1	709370
Fuzzy planar cell polarity protein	FUZ	719442
FXYP domain containing ion transport regulator 7	FXYP7	718457
FYN proto-oncogene, Src family tyrosine kinase	FYN	574214
G elongation factor, mitochondrial 1	GFM1	706456
G elongation factor, mitochondrial 2	GFM2	704247
G kinase anchoring protein 1	GKAP1	708816
G protein pathway suppressor 1	GPS1	719343
G protein pathway suppressor 2	GPS2	721816
G protein regulated inducer of neurite outgrowth 2	GPRIN2	694369
G protein-coupled bile acid receptor 1	GPBAR1	697937
G protein-coupled receptor 12	GPR12	710030

G protein-coupled receptor 135	GPR135	701843
G protein-coupled receptor 137	GPR137	717722
G protein-coupled receptor 143	GPR143	709148
G protein-coupled receptor 161	GPR161	698934
G protein-coupled receptor 162	GPR162	100428264
G protein-coupled receptor 173	GPR173	698645
G protein-coupled receptor 19	GPR19	697072
G protein-coupled receptor 3	GPR3	716033
G protein-coupled receptor 31	GPR31	717158
G protein-coupled receptor 87	GPR87	709766
G protein-coupled receptor 89A	GPR89A	696579
G protein-coupled receptor kinase 6	GRK6	700000
G protein-coupled receptor kinase interacting arfgap 2	GIT2	708092
G2/M-phase specific E3 ubiquitin protein ligase	G2E3	717021
GA binding protein transcription factor, beta subunit 1	GABPB1	715334
GABA(A) receptor-associated protein	GABARAP	714597
GABA(A) receptor-associated protein like 2	GABARAPL2	714413
Galactosidase alpha	GLA	703129
Galactosylceramidase	GALC	693322
Galanin receptor 3	GALR3	701727
Galanin/GMAP prepropeptide	GAL	721572
Gametogenetin binding protein 2	GGNBP2	713750
Gamma-aminobutyric acid (GABA) B receptor, 1	GABBR1	708987
Gamma-glutamyl hydrolase (conjugase, folylpolyglutamylyl hydrolase)	GGH	700747
Gamma-glutamylcyclotransferase	GGCT	695547
Ganglioside induced differentiation associated protein 1	GDAP1	697136
Ganglioside induced differentiation associated protein 2	GDAP2	705994
Gap junction protein alpha 1	GJA1	714344
Gap junction protein alpha 4	GJA4	710913
Gap junction protein alpha 9	GJA9	715648
Gap junction protein beta 2	GJB2	704224
Gap junction protein beta 4	GJB4	710994
Gap junction protein gamma 1	GJC1	715463
Gasdermin A	GSDMA	698841
GATA binding protein 2	GATA2	705551
GCN1, eif2 alpha kinase activator homolog	GCN1	698528
GC-rich promoter binding protein 1	GPBP1	708322
GC-rich promoter binding protein 1-like 1	GPBP1L1	706690
GDP dissociation inhibitor 2	GDI2	712510
GDP-mannose 4,6-dehydratase	GMDS	707051
GDP-mannose pyrophosphorylase A	GMPPA	703756
GDP-mannose pyrophosphorylase B	GMPPB	705454
Gelsolin	GSN	699705
Gem nuclear organelle associated protein 4	GEMIN4	699841
Gem nuclear organelle associated protein 5	GEMIN5	714864
Gem nuclear organelle associated protein 6	GEMIN6	711246
Geminin, DNA replication inhibitor	GMNN	708416

General transcription factor IIA 2	GTF2A2	702984
General transcription factor IIB	GTF2B	694770
General transcription factor IIE subunit 2	GTF2E2	694622
General transcription factor IIF subunit 2	GTF2F2	701668
General transcription factor IIH subunit 4	GTF2H4	714285
General transcription factor IIH subunit 5	GTF2H5	700107
General transcription factor iii	GTF2I	574269
General transcription factor IIIA	GTF3A	710492
General transcription factor IIIC subunit 1	GTF3C1	703998
General transcription factor IIIC subunit 3	GTF3C3	696338
General transcription factor IIIC subunit 4	GTF3C4	714849
General transcription factor IIIC subunit 5	GTF3C5	714489
General transcription factor IIIC subunit 6	GTF3C6	696512
Gephyrin	GPHN	709677
Germ cell-less, spermatogenesis associated 1	GMCL1	701545
GID complex subunit 4 homolog	GID4	699842
GID complex subunit 8	GID8	698189
GIN5 complex subunit 2 (Psf2 homolog)	GIN5	693426
GLE1, RNA export mediator	GLE1	717474
GLI family zinc finger 1	GLI1	714843
GLI pathogenesis-related 2	GLIPR2	693734
Glucokinase (hexokinase 4)	GCK	699728
Glucosamine-6-phosphate deaminase 1	GNPDA1	703036
Glucosamine-6-phosphate deaminase 2	GNPDA2	710175
Glucose 6 phosphatase, catalytic, 3	G6PC3	714276
Glucose-6-phosphate dehydrogenase	G6PD	701137
Glucose-fructose oxidoreductase domain containing 1	GFOD1	700607
Glucose-fructose oxidoreductase domain containing 2	GFOD2	699723
Glucosidase, beta (bile acid) 2	GBA2	696062
Glutamate receptor, ionotropic, N-methyl D-aspartate-associated protein 1 (glutamate binding)	GRINA	708234
Glutamate rich 5	ERICH5	703244
Glutamate-ammonia ligase	GLUL	715952
Glutamate-cysteine ligase, modifier subunit	GCLM	713888
Glutamic-oxaloacetic transaminase 2	GOT2	707896
Glutamic-pyruvate transaminase (alanine aminotransferase)	GPT	703122
Glutaminase	GLS	693520
Glutamine and serine rich 1	QSER1	694563
Glutamine-fructose-6-phosphate transaminase 2	GFPT2	715826
Glutaminyl-trna synthetase	QARS	708111
Glutaredoxin	GLRX	698997
Glutaredoxin 2	GLRX2	712396
Glutaredoxin 5	GLRX5	702989
Glutaryl-coa dehydrogenase	GCDH	716935
Glutathione peroxidase 1	GPX1	706732
Glutathione peroxidase 4	GPX4	705333
Glutathione peroxidase 7	GPX7	715474
Glutathione peroxidase 8 (putative)	GPX8	705965

Glutathione S-transferase alpha 2	GSTA2	709037
Glutathione S-transferase alpha 4	GSTA4	709666
Glutathione S-transferase kappa 1	GSTK1	704240
Glutathione S-transferase mu 2 (muscle)	GSTM2	700053
Glutathione S-transferase omega 1	GSTO1	716078
Glutathione S-transferase omega 2	GSTO2	715291
Glutathione S-transferase pi 1	GSTP1	721704
Glutathione S-transferase theta 2	GSTT2	700185
Glutathione S-transferase zeta 1	GSTZ1	705723
Glyceraldehyde-3-phosphate dehydrogenase	GAPDH	574353
Glycerol kinase 2	GK2	696635
Glycerol-3-phosphate acyltransferase 4	GPAT4	710363
Glyceronephosphate O-acyltransferase	GNPAT	713603
Glycerophosphodiester phosphodiesterase domain containing 5	GDPD5	695518
Glycine C-acetyltransferase	GCAT	698811
Glycine receptor beta	GLRB	700368
Glycophorin C (Gerbich blood group)	GYPC	712092
Glycoprotein 2 (zymogen granule membrane)	GP2	695766
Glycoprotein integral membrane 1	GINM1	696511
Glycoprotein M6B	GPM6B	711762
Glycosylphosphatidylinositol anchor attachment 1	GPAA1	699887
Glycosyltransferase 8 domain containing 1	GLT8D1	695999
Glycosyltransferase 8 domain containing 2	GLT8D2	699937
Glycosyltransferase like domain containing 1	GTDC1	100424584
Glyoxalase I	GLO1	719518
Golgi apparatus membrane protein TVP23 homolog B	TVP23B	677707
Golgi phosphoprotein 3-like	GOLPH3L	707858
Golgi reassembly stacking protein 2	GORASP2	694170
Golgi SNAP receptor complex member 2	GOSR2	716841
Golgi-associated, gamma adaptin ear containing, ARF binding protein 1	GGA1	697929
Golgi-associated, gamma adaptin ear containing, ARF binding protein 3	GGA3	705751
Golgin A4	GOLGA4	697455
Golgin A7	GOLGA7	709911
Golgin B1	GOLGB1	713993
Golgin, RAB6-interacting	GORAB	702571
Gonadotropin releasing hormone 1	GNRH1	613033
G-patch domain containing 3	GPATCH3	715116
Grancalcin	GCA	702138
Granulysin	GNLY	696059
GRB2-related adaptor protein	GRAP	702473
Gremlin 2, DAN family BMP antagonist	GREM2	708280
GRIP and coiled-coil domain containing 1	GCC1	697975
Growth arrest and DNA damage inducible beta	GADD45B	711257
Growth arrest and DNA damage inducible gamma	GADD45G	697835
Growth arrest specific 2	GAS2	700952
Growth arrest specific 2 like 1	GAS2L1	714530
Growth arrest specific 6	GAS6	716066
Growth arrest specific 8	GAS8	701458

Growth associated protein 43	GAP43	711260
Growth differentiation factor 15	GDF15	719466
Growth differentiation factor 7	GDF7	702462
Growth factor receptor bound protein 10	GRB10	694786
GRP1 (general receptor for phosphoinositides 1)-associated scaffold protein	GRASP	696547
Grpe-like 1, mitochondrial (E. Coli)	GRPEL1	709772
Gse1 coiled-coil protein	GSE1	693298
GTF2I repeat domain containing 1	GTF2IRD1	693935
GTP binding protein 2	GTPBP2	700913
GTP binding protein 4	GTPBP4	709873
GTP cyclohydrolase I feedback regulator	GCHFR	708886
Gtpase activating protein (SH3 domain) binding protein 1	G3BP1	713884
Guanidinoacetate N-methyltransferase	GAMT	721263
Guanine nucleotide binding protein (G protein), alpha 11 (Gq class)	GNA11	721649
Guanine nucleotide binding protein (G protein), alpha 14	GNA14	705448
Guanine nucleotide binding protein (G protein), beta polypeptide 1	GNB1	703399
Guanine nucleotide binding protein (G protein), beta polypeptide 2-like 1	GNB2L1	708526
Guanine nucleotide binding protein (G protein), beta polypeptide 3	GNB3	713913
Guanine nucleotide binding protein (G protein), gamma 10	GNG10	708193
Guanine nucleotide binding protein (G protein), gamma 11	GNG11	700606
Guanine nucleotide binding protein (G protein), gamma 2	GNG2	710000
Guanine nucleotide binding protein (G protein), gamma 3	GNG3	100169968
Guanine nucleotide binding protein (G protein), gamma 5	GNG5	710548
Guanine nucleotide binding protein-like 3 (nucleolar)	GNL3	695877
Guanosine monophosphate reductase 2	GMPR2	715719
Guanylate cyclase 1, soluble, alpha 2	GUCY1A2	706615
Guanylate cyclase activator 1A	GUCA1A	695552
Guanylate kinase 1	GUK1	695272
H1 histone family, member X	H1FX	703414
H2A histone family, member J	H2AFJ	701863
H2A histone family, member X	H2AFX	703073
H2A histone family, member Y	H2AFY	711836
H2A histone family, member Y2	H2AFY2	711117
H2A histone family, member Z	H2AFZ	709326
Haloacid dehalogenase like hydrolase domain containing 2	HDHD2	697216
Haloacid dehalogenase like hydrolase domain containing 3	HDHD3	705447
Harvey rat sarcoma viral oncogene homolog	HRAS	698830
HAUS augmin like complex subunit 4	HAUS4	717252
HAUS augmin like complex subunit 8	HAUS8	718874
HCLS1 associated protein X-1	HAX1	716495
HCLS1 binding protein 3	HS1BP3	702364
Hdc homolog, cell cycle regulator	HECA	702628
HEAT repeat containing 6	HEATR6	720089
Heat shock factor binding protein 1	HSBP1	714498
Heat shock protein 90kda alpha (cytosolic), class A member 1	HSP90AA1	708431
Heat shock protein 90kda alpha family class B member 1	HSP90AB1	702293

Heat shock protein 90kda beta family member 1	HSP90B1	699568
Heat shock protein family A (Hsp70) member 13	HSPA13	694660
Heat shock protein family A (Hsp70) member 8	HSPA8	707989
Heat shock protein family B (small) member 11	HSPB11	714791
Heat shock protein family B (small) member 6	HSPB6	710760
Heat shock protein family B (small) member 8	HSPB8	574341
Heat shock protein family D (Hsp60) member 1	HSPD1	698024
Heat shock protein family H (Hsp110) member 1	HSPH1	721956
Heat shock transcription factor 2	HSF2	713938
HECT and RLD domain containing E3 ubiquitin protein ligase 3	HERC3	703108
HECT domain containing E3 ubiquitin protein ligase 1	HECTD1	717177
HECT domain containing E3 ubiquitin protein ligase 2	HECTD2	697258
HECT domain containing E3 ubiquitin protein ligase 3	HECTD3	705051
Helicase (DNA) B	HELB	717860
Helicase, lymphoid-specific	HELLS	701598
Hematological and neurological expressed 1	HN1	664729
Hematological and neurological expressed 1-like	HN1L	702283
Hematopoietic prostaglandin D synthase	HPGDS	705227
Heme binding protein 1	HEBP1	697821
Heme binding protein 2	HEBP2	709176
Heme oxygenase 2	HMOX2	705461
Hemogen	HEMGN	715562
Hemoglobin subunit epsilon 1	HBE1	715414
Hemoglobin subunit theta 1	HBQ1	100429488
Hemoglobin, beta	HBB	715559
Hemoglobin, gamma G	HBG2	715368
HEN1 methyltransferase homolog 1 (Arabidopsis)	HENMT1	698896
Heparin-binding EGF-like growth factor	HBEGF	695559
Hepatocyte growth factor (hepatopietin A; scatter factor)	HGF	708316
Hepatocyte growth factor-regulated tyrosine kinase substrate	HGS	714385
Hepcidin antimicrobial peptide	HAMP	708397
Hermansky-Pudlak syndrome 6	HPS6	712574
Hes-related family bhlh transcription factor with YRPW motif 2	HEY2	712988
Heterogeneous nuclear ribonucleoprotein A/B	HNRNPAB	702509
Heterogeneous nuclear ribonucleoprotein A1	HNRNPA1	702977
Heterogeneous nuclear ribonucleoprotein A2/B1	HNRNPA2B1	701821
Heterogeneous nuclear ribonucleoprotein C (C1/C2)	HNRNPC	706423
Heterogeneous nuclear ribonucleoprotein D	HNRNPD	694867
Heterogeneous nuclear ribonucleoprotein D like	HNRNPDL	694603
Heterogeneous nuclear ribonucleoprotein F	HNRNPF	717668
Heterogeneous nuclear ribonucleoprotein H2 (H')	HNRNPH2	703254
Heterogeneous nuclear ribonucleoprotein K	HNRNPK	709112
Heterogeneous nuclear ribonucleoprotein L	HNRNPL	694448
Heterogeneous nuclear ribonucleoprotein L-like	HNRNPLL	710841
Heterogeneous nuclear ribonucleoprotein R	HNRNPR	718721
Hexamethylene bis-acetamide inducible 1	HEXIM1	716006
Hexamethylene bis-acetamide inducible 2	HEXIM2	716047
Hexokinase 1	HK1	711922

HIG1 hypoxia inducible domain family member 1B	HIGD1B	715566
HIG1 hypoxia inducible domain family member 2A	HIGD2A	696888
High mobility group 20A	HMG20A	714893
High mobility group box 1	HMGB1	712849
High mobility group nucleosomal binding domain 4	HMGN4	698039
Highly divergent homeobox	HDX	710427
HIRA interacting protein 3	HIRIP3	708004
Histidine triad nucleotide binding protein 1	HINT1	706083
Histidine triad nucleotide binding protein 2	HINT2	695521
Histidyl-trna synthetase 2	HARS2	697009
Histocompatibility (minor) 13	HM13	713216
Histone acetyltransferase 1	HAT1	695933
Histone cluster 1, h2aj	HIST1H2AJ	704127
Histone cluster 2, h3d	HIST2H3D	696204
Histone deacetylase 3	HDAC3	704467
Histone deacetylase 5	HDAC5	711456
Histone deacetylase 6	HDAC6	711363
Histone H4 transcription factor	HINFP	703763
HIV-1 Tat specific factor 1	HTATSF1	693589
HNF1 homeobox B	HNF1B	714540
Holliday junction recognition protein	HJURP	718180
Homeobox A9	HOXA9	699729
Homeobox D10	HOXD10	700318
Homeodomain interacting protein kinase 1	HIPK1	707856
Homer scaffolding protein 3	HOMER3	719647
Homocysteine-inducible, endoplasmic reticulum stress-inducible, ubiquitin-like domain member 1	HERPUD1	703210
Host cell factor C2	HCFC2	700316
HRAS like suppressor family member 5	HRASLS5	718317
Hscb mitochondrial iron-sulfur cluster co-chaperone	HSCB	713734
Htra serine peptidase 1	HTRA1	705855
HUS1 checkpoint clamp component	HUS1	699541
Hyaluronan and proteoglycan link protein 3	HAPLN3	698880
Hyaluronan binding protein 4	HABP4	710213
Hyaluronan synthase 3	HAS3	704121
Hyaluronoglucosaminidase 2	HYAL2	702484
Hydrogen voltage gated channel 1	HVCN1	709745
Hydroxyacyl-coa dehydrogenase	HADH	696181
Hydroxymethylbilane synthase	HMBS	702943
Hydroxyprostaglandin dehydrogenase 15-(NAD)	HPGD	697864
Hydroxypyruvate isomerase (putative)	HYI	700926
Hydroxysteroid (17-beta) dehydrogenase 10	HSD17B10	700018
Hydroxysteroid (17-beta) dehydrogenase 4	HSD17B4	698369
Hydroxysteroid (17-beta) dehydrogenase 6	HSD17B6	713549
Hydroxysteroid dehydrogenase like 1	HSDL1	714962
Hydroxysteroid dehydrogenase like 2	HSDL2	707233
Hyperpolarization activated cyclic nucleotide gated potassium channel 3	HCN3	717719

Hypocretin (orexin) neuropeptide precursor	HCRT	709564
Hypoxia inducible lipid droplet-associated	HILPDA	701261
Hypoxia up-regulated 1	HYOU1	707715
Iduronidase, alpha-L-	IDUA	106998224
Iga-inducing protein	IGIP	100423856
IGF like family receptor 1	IGFLR1	710396
IK cytokine, down-regulator of HLA II	IK	696887
ILK associated serine/threonine phosphatase	ILKAP	706334
Ilvb (bacterial acetolactate synthase)-like	ILVBL	718086
Immunoglobulin superfamily member 10	IGSF10	709661
Immunoglobulin superfamily member 9	IGSF9	719535
Immunoglobulin superfamily, DCC subclass, member 3	IGDCC3	709239
IMP (inosine 5'-monophosphate) dehydrogenase 1	IMPDH1	701039
IMP (inosine 5'-monophosphate) dehydrogenase 2	IMPDH2	708307
IMP3, U3 small nucleolar ribonucleoprotein	IMP3	706202
IMP4 homolog, U3 small nucleolar ribonucleoprotein	IMP4	702144
Importin 5	IPO5	697448
Importin 9	IPO9	707210
Increased sodium tolerance 1 homolog (yeast)	IST1	707245
Indoleamine 2,3-dioxygenase 1	IDO1	574370
Inhibin alpha	INHA	574379
Inhibitor of DNA binding 1, dominant negative helix-loop-helix protein	ID1	713160
Inhibitor of growth family member 1	ING1	694955
Inhibitor of growth family member 2	ING2	701839
Inhibitor of growth family member 4	ING4	722073
Inhibitor of kappa light polypeptide gene enhancer in B-cells, kinase beta	IKBKB	704683
Inhibitor of kappa light polypeptide gene enhancer in B-cells, kinase gamma	IKBKG	701237
Inner centromere protein	INCENP	722320
INO80 complex subunit C	INO80C	708819
Inosine triphosphatase	ITPA	717257
Inositol hexakisphosphate kinase 1	IP6K1	705576
Inositol monophosphatase domain containing 1	IMPAD1	696893
Inositol polyphosphate phosphatase like 1	INPPL1	718421
Inositol polyphosphate-1-phosphatase	INPP1	703301
Inositol polyphosphate-5-phosphatase K	INPP5K	721222
Inositol(myo)-1(or 4)-monophosphatase 2	IMPA2	704320
Inositol-tetrakisphosphate 1-kinase	ITPK1	698756
Inositol-trisphosphate 3-kinase A	ITPKA	710541
Insulin like 3	INSL3	100533192
Insulin like growth factor binding protein 3	IGFBP3	696868
Insulin like growth factor binding protein 5	IGFBP5	696339
Insulin like growth factor binding protein 7	IGFBP7	693564
Insulin-degrading enzyme	IDE	698640
Integral membrane protein 2C	ITM2C	711245
Integrator complex subunit 10	INTS10	705240
Integrator complex subunit 12	INTS12	694344

Integrator complex subunit 2	INTS2	712351
Integrator complex subunit 4	INTS4	699466
Integrator complex subunit 5	INTS5	719124
Integrator complex subunit 7	INTS7	711152
Integrator complex subunit 8	INTS8	700255
Integrin alpha FG-GAP repeat containing 1	ITFG1	716435
Integrin linked kinase	ILK	709944
Integrin subunit alpha 10	ITGA10	100428480
Integrin subunit alpha V	ITGAV	707756
Interactor of little elongation complex ELL subunit 1	ICE1	710176
Intercellular adhesion molecule 2	ICAM2	574158
Interferon gamma receptor 1	IFNGR1	100423880
Interferon regulatory factor 1	IRF1	707788
Interferon regulatory factor 2	IRF2	694347
Interferon regulatory factor 2 binding protein 1	IRF2BP1	715611
Interferon regulatory factor 2 binding protein-like	IRF2BPL	704474
Interferon regulatory factor 3	IRF3	718970
Interferon regulatory factor 9	IRF9	715335
Interferon stimulated exonuclease gene 20kda like 2	ISG20L2	718621
Interferon, alpha 13	IFNA13	709559
Interferon, gamma-inducible protein 16	IFI16	719253
Interferon-related developmental regulator 1	IFRD1	702624
Interferon-related developmental regulator 2	IFRD2	702959
Interleukin 2 receptor subunit gamma	IL2RG	641338
Interleukin 20 receptor subunit alpha	IL20RA	704890
Interleukin 21 receptor	IL21R	705759
Interleukin 6 signal transducer	IL6ST	574127
Interleukin enhancer binding factor 2	ILF2	715452
Interleukin enhancer binding factor 3	ILF3	713427
Intermediate filament family orphan 1	IFFO1	712900
Intestine-specific homeobox	ISX	717448
Intraflagellar transport 172	IFT172	700948
Intraflagellar transport 20	IFT20	715773
Intraflagellar transport 22	IFT22	714551
Intraflagellar transport 27	IFT27	697032
Intraflagellar transport 46	IFT46	700582
Intraflagellar transport 52	IFT52	694933
Intraflagellar transport 57	IFT57	705088
Intraflagellar transport 74	IFT74	707561
Intraflagellar transport 80	IFT80	705146
Intraflagellar transport 81	IFT81	710434
Inturned planar cell polarity protein	INTU	709967
IQ motif and Sec7 domain 1	IQSEC1	693922
IQ motif and ubiquitin domain containing	IQUB	695424
IQ motif containing B1	IQCB1	715032
IQ motif containing D	IQCD	712904
IQ motif containing gtpase activating protein 3	IQGAP3	719575
IQ motif containing K	IQCK	695417

IQ motif containing with AAA domain 1	IQCA1	694173
Iron-sulfur cluster assembly 2	ISCA2	700004
Iron-sulfur cluster assembly enzyme	ISCU	705669
Iroquois homeobox 6	IRX6	698232
Isocitrate dehydrogenase 2 (NADP+), mitochondrial	IDH2	701480
Isocitrate dehydrogenase 3 (NAD+) alpha	IDH3A	677715
Isocitrate dehydrogenase 3 (NAD+) beta	IDH3B	716726
Isocitrate dehydrogenase 3 (NAD+) gamma	IDH3G	698558
Isoleucyl-trna synthetase	IARS	677705
Isovaleryl-coa dehydrogenase	IVD	702867
IWS1 homolog (S. Cerevisiae)	IWS1	699205
Jade family PHD finger 1	JADE1	693690
Jade family PHD finger 3	JADE3	711390
Jagged 1	JAG1	718580
Jagunal homolog 1	JAGN1	699718
JAZF zinc finger 1	JAZF1	697973
JNK1/MAPK8-associated membrane protein	JKAMP	702307
Jumonji domain containing 1C	JMJD1C	697630
Jumonji domain containing 4	JMJD4	696580
Kallikrein 3	KLK3	719444
Kallikrein related peptidase 8	KLK8	719488
Kaptein (actin binding protein)	KPTN	717322
Karyopherin alpha 1	KPNA1	692082
Karyopherin alpha 2 (RAG cohort 1, importin alpha 1)	KPNA2	100430008
Karyopherin alpha 3 (importin alpha 4)	KPNA3	706925
Karyopherin alpha 4 (importin alpha 3)	KPNA4	702486
Karyopherin alpha 6 (importin alpha 7)	KPNA6	706812
KAT8 regulatory NSL complex subunit 1	KANSL1	717172
Katanin p60 (ATPase containing) subunit A 1	KATNA1	698291
KDEL endoplasmic reticulum protein retention receptor 1	KDELR1	717928
KDEL endoplasmic reticulum protein retention receptor 2	KDELR2	704335
KDEL endoplasmic reticulum protein retention receptor 3	KDELR3	700810
KDEL motif containing 1	KDELC1	702156
Kelch domain containing 10	KLHDC10	702290
Kelch domain containing 4	KLHDC4	695768
Kelch domain containing 8B	KLHDC8B	707348
Kelch like family member 11	KLHL11	708393
Kelch like family member 18	KLHL18	711943
Kelch like family member 2	KLHL2	704790
Kelch like family member 22	KLHL22	694160
Kelch like family member 28	KLHL28	702075
Kelch like family member 5	KLHL5	698740
Kelch like family member 9	KLHL9	710804
Kelch repeat and BTB (POZ) domain containing 2	KBTBD2	709126
Kell blood group, metallo-endopeptidase	KEL	703492
Keratin 2, type II	KRT2	699567
Keratin 7, type II	KRT7	697425
Keratin 80, type II	KRT80	697190

Keratin associated protein 12-4	KRTAP12-4	712284
Keratinocyte associated protein 3	KRTCAP3	701066
Keratinocyte differentiation factor 1	KDF1	715312
KH homology domain containing 1	KHDC1	715576
KIAA0040 ortholog	KIAA0040	100423512
KIAA0100 ortholog	KIAA0100	709307
KIAA0232 ortholog	KIAA0232	710141
KIAA0355 ortholog	KIAA0355	705202
KIAA0556 ortholog	KIAA0556	706125
KIAA0907 ortholog	KIAA0907	718005
KIAA0922 ortholog	KIAA0922	696761
KIAA1524 ortholog	KIAA1524	705690
KIAA1958 ortholog	KIAA1958	707028
KIAA2013 ortholog	KIAA2013	722762
Kin17 DNA and RNA binding protein	KIN	713634
Kinesin family member 15	KIF15	714704
Kinesin family member 1C	KIF1C	721601
Kinesin family member 22	KIF22	706401
Kinesin family member 23	KIF23	695229
Kinesin family member 2C	KIF2C	705381
Kinesin family member C3	KIFC3	705951
Kinesin heavy chain member 2A	KIF2A	696561
Kinesin light chain 1	KLC1	695677
Kinesin light chain 2	KLC2	714643
Kinesin light chain 4	KLC4	698356
Kininogen 1	KNG1	707466
Kizuna centrosomal protein	KIZ	700808
KN motif and ankyrin repeat domains 1	KANK1	697569
KRAB-A domain containing 1	KRBA1	711863
Kruppel-like factor 11	KLF11	702323
Kruppel-like factor 15	KLF15	716386
Kruppel-like factor 4 (gut)	KLF4	711169
KTI12 chromatin associated homolog	KTI12	712824
Kv channel interacting protein 2	KCNIP2	712434
Kv channel interacting protein 3, calsenilin	KCNIP3	704307
Kxd1 motif containing 1	KXD1	720235
L-2-hydroxyglutarate dehydrogenase	L2HGDH	705721
L-3-hydroxyproline dehydratase (trans-)	L3HYPDH	702076
La ribonucleoprotein domain family member 4B	LARP4B	721993
La ribonucleoprotein domain family member 6	LARP6	699664
La ribonucleoprotein domain family member 7	LARP7	703731
Lactate dehydrogenase A	LDHA	694309
Lactate dehydrogenase B	LDHB	706110
Lamin B receptor	LBR	700801
Laminin subunit alpha 2	LAMA2	715394
Laminin subunit gamma 2	LAMC2	715212
Lanc lantibiotic synthetase component C-like 2 (bacterial)	LANCL2	704882
Large tumor suppressor kinase 1	LATS1	696131

Late endosomal/lysosomal adaptor, MAPK and MTOR activator 1	LAMTOR1	718249
Late endosomal/lysosomal adaptor, MAPK and MTOR activator 2	LAMTOR2	718110
Late endosomal/lysosomal adaptor, MAPK and MTOR activator 3	LAMTOR3	709133
Layilin	LAYN	710211
LCK proto-oncogene, Src family tyrosine kinase	LCK	717704
LDL receptor related protein 1	LRP1	710965
LDL receptor related protein 10	LRP10	712506
LDL receptor related protein 3	LRP3	703776
LDL receptor related protein 4	LRP4	714038
LDL receptor related protein 6	LRP6	695843
LDL receptor related protein associated protein 1	LRPAP1	699677
Lectin, galactoside-binding, soluble, 3	LGALS3	697290
Lectin, galactoside-binding, soluble, 7B	LGALS7B	694781
Lectin, mannose-binding, 1	LMAN1	697449
LEM domain containing 2	LEMD2	718463
LETM1 domain containing 1	LETMD1	694422
Leucine aminopeptidase 3	LAP3	715081
Leucine carboxyl methyltransferase 1	LCMT1	702050
Leucine rich repeat (in FLII) interacting protein 1	LRRFIP1	704379
Leucine rich repeat and coiled-coil centrosomal protein 1	LRRCC1	707964
Leucine rich repeat and fibronectin type III domain containing 3	LRFN3	711565
Leucine rich repeat and fibronectin type III domain containing 4	LRFN4	713166
Leucine rich repeat containing 1	LRRC1	710867
Leucine rich repeat containing 17	LRRC17	695422
Leucine rich repeat containing 18	LRRC18	710785
Leucine rich repeat containing 20	LRRC20	710594
Leucine rich repeat containing 28	LRRC28	708649
Leucine rich repeat containing 34	LRRC34	697963
Leucine rich repeat containing 3B	LRRC3B	701323
Leucine rich repeat containing 42	LRRC42	714839
Leucine rich repeat containing 45	LRRC45	715420
Leucine rich repeat containing 49	LRRC49	696391
Leucine rich repeat containing 75B	LRRC75B	708086
Leucine rich repeat protein 1	LRR1	706658
Leucine rich transmembrane and O-methyltransferase domain containing	LRTOMT	718286
Leucine zipper, down-regulated in cancer 1	LDOC1	696902
Leucine zipper, down-regulated in cancer 1-like	LDOC1L	712760
Leucine-rich repeat containing 8 family member D	LRRC8D	100423128
Leucine-rich repeat kinase 1	LRRK1	694358
Leucine-rich repeats and calponin homology (CH) domain containing 2	LRCH2	708436
Leucine-rich repeats and immunoglobulin-like domains 3	LRIG3	716344
Leucine-rich repeats and WD repeat domain containing 1	LRWD1	715187
Leukocyte immunoglobulin-like receptor, subfamily B (with TM and ITIM domains), member 1	LILRB1	692340
Leukocyte receptor cluster (LRC) member 1	LENG1	693417
Leukocyte-associated immunoglobulin-like receptor 1	LAIR1	695533
Leukotriene C4 synthase	LTC4S	705233

Leupaxin	LPXN	702033
LFNG O-fucosylpeptide 3-beta-N-acetylglucosaminyltransferase	LFNG	100428736
Ligand dependent nuclear receptor interacting factor 1	LRIF1	702445
Ligase III, DNA, ATP-dependent	LIG3	715181
Like-glycosyltransferase	LARGE	717403
LIM and cysteine-rich domains 1	LMCD1	702382
LIM and SH3 protein 1	LASP1	694950
LIM domain binding 2	LDB2	714918
LIM domain containing 2	LIMD2	717889
Limb bud and heart development	LBH	704749
Lin-7 homolog B (C. Elegans)	LIN7B	718587
Lin-9 DREAM muvB core complex component	LIN9	699056
Lipase, member H	LIPH	701743
Lipid droplet associated hydrolase	LDAH	717510
Lipocalin 1	LCN1	711974
Lipoma HMGIC fusion partner	LHFP	696978
Lipoma HMGIC fusion partner-like 2	LHFPL2	709040
Lipoprotein lipase	LPL	712887
Lipoyltransferase 1	LIPT1	708812
Listerin E3 ubiquitin protein ligase 1	LTN1	714068
Liver expressed antimicrobial peptide 2	LEAP2	709041
LMBR1 domain containing 1	LMBRD1	714710
LMBR1 domain containing 2	LMBRD2	700369
LON peptidase N-terminal domain and ring finger 1	LONRF1	706469
Low density lipoprotein receptor adaptor protein 1	LDLRAP1	713032
Low density lipoprotein receptor class A domain containing 4	LDLRAD4	701919
LSM family member 14B	LSM14B	700561
LSM10, U7 small nuclear RNA associated	LSM10	713277
LSM12 homolog	LSM12	714219
LSM14A mRNA processing body assembly factor	LSM14A	705085
LSM2 homolog, U6 small nuclear RNA and mRNA degradation associated	LSM2	715592
LSM4 homolog, U6 small nuclear RNA and mRNA degradation associated	LSM4	720192
LSM5 homolog, U6 small nuclear RNA and mRNA degradation associated	LSM5	693550
LSM6 homolog, U6 small nuclear RNA and mRNA degradation associated	LSM6	703226
LUC7-like 3 pre-mRNA splicing factor	LUC7L3	703662
Ly6/neurotoxin 1	LYNX1	100428512
LY6/PLAUR domain containing 6	LYPD6	693649
Lymphocyte antigen 6 complex, locus G6C	LY6G6C	716220
Lymphocyte antigen 86	LY86	711507
Lymphoid enhancer-binding factor 1	LEF1	695776
LYN proto-oncogene, Src family tyrosine kinase	LYN	698553
LYR motif containing 2	LYRM2	701575
Lysine (K)-specific demethylase 1A	KDM1A	718609
Lysine (K)-specific demethylase 3A	KDM3A	697775
Lysine (K)-specific demethylase 4B	KDM4B	695760
Lysine (K)-specific demethylase 8	KDM8	703323
Lysine (K)-specific methyltransferase 5B	KMT5B	710481
Lysine-rich nucleolar protein 1	KNOP1	695144

Lysophosphatidic acid receptor 2	LPAR2	719844
Lysophosphatidic acid receptor 6	LPAR6	705081
Lysophosphatidylcholine acyltransferase 1	LPCAT1	710144
Lysophosphatidylcholine acyltransferase 3	LPCAT3	714639
Lysophospholipase II	LYPLA2	719074
Lysosomal protein transmembrane 4 alpha	LAPTM4A	701298
Lysyl oxidase like 1	LOXL1	706464
Lysyl oxidase like 3	LOXL3	709834
Lysyl-trna synthetase	KARS	714516
Mab-21 domain containing 2	MB21D2	706284
MACRO domain containing 1	MACROD1	717961
Macrophage erythroblast attacher	MAEA	702015
Macrophage stimulating 1	MST1	705811
MAD2 mitotic arrest deficient-like 2 (yeast)	MAD2L2	714527
MAD2L1 binding protein	MAD2L1BP	701099
Maestro heat-like repeat family member 8	MROH8	701423
MAF1 homolog, negative regulator of RNA polymerase III	MAF1	700385
MAGE family member D1	MAGED1	696658
MAGE family member D2	MAGED2	701719
MAGE family member F1	MAGEF1	701676
MAGE family member H1	MAGEH1	703812
Major facilitator superfamily domain containing 1	MFSD1	703674
Major facilitator superfamily domain containing 14A	MFSD14A	711233
Major facilitator superfamily domain containing 14B	MFSD14B	708498
Major facilitator superfamily domain containing 3	MFSD3	703246
Major facilitator superfamily domain containing 5	MFSD5	702021
MAK16 homolog	MAK16	696648
Makorin ring finger protein 1	MKRN1	716752
Malate dehydrogenase 1	MDH1	694703
Male-enhanced antigen 1	MEA1	699300
Male-specific lethal 3 homolog (Drosophila)	MSL3	720836
Malonyl-coa-acyl carrier protein transacylase	MCAT	711556
Mannose phosphate isomerase	MPI	722129
Mannose-6-phosphate receptor (cation dependent)	M6PR	716696
Mannose-P-dolichol utilization defect 1	MPDU1	715962
Mannosidase, alpha, class 1B, member 1	MAN1B1	706918
Mannosidase, alpha, class 2B, member 1	MAN2B1	716173
Mannosidase, alpha, class 2C, member 1	MAN2C1	705599
Mannosidase, beta A, lysosomal-like	MANBAL	701167
Mannosyl (alpha-1,3-)-glycoprotein beta-1,2-N-acetylglucosaminyl transferase	MGAT1	707375
Mannosyl (alpha-1,3-)-glycoprotein beta-1,4-N-acetylglucosaminyl transferase, isozyme B	MGAT4B	705006
Mannosyl (alpha-1,6-)-glycoprotein beta-1,2-N-acetylglucosaminyl transferase	MGAT2	706426
Mannosyl-oligosaccharide glucosidase	MOGS	708913
MAP kinase interacting serine/threonine kinase 1	MKNK1	710061
MAP/microtubule affinity-regulating kinase 2	MARK2	718065

MAP7 domain containing 1	MAP7D1	712899
MAP-kinase activating death domain	MADD	713613
MARCKS-like 1	MARCKSL1	100428616
Mastermind like transcriptional coactivator 1	MAML1	715047
Maternal embryonic leucine zipper kinase	MELK	716875
Matrilin 1, cartilage matrix protein	MATN1	704521
Matrin 3	MATR3	100568448
Matrix metalloproteinase 25	MMP25	700486
Matrix metalloproteinase 28	MMP28	574250
Mckusick-Kaufman syndrome	MKKS	718547
Mdm1 nuclear protein	MDM1	718062
MDM2 binding protein	MTBP	703121
MDM4, p53 regulator	MDM4	699563
Mediator complex subunit 10	MED10	694872
Mediator complex subunit 11	MED11	709561
Mediator complex subunit 13-like	MED13L	713867
Mediator complex subunit 19	MED19	704421
Mediator complex subunit 21	MED21	710699
Mediator complex subunit 23	MED23	714629
Mediator complex subunit 27	MED27	715219
Mediator complex subunit 6	MED6	693320
Mediator complex subunit 8	MED8	700676
Mediator complex subunit 9	MED9	698957
Mediator of cell motility 1	MEMO1	706051
Megakaryoblastic leukemia (translocation) 1	MKL1	100429360
Meiosis 1 associated protein	M1AP	710210
Meiosis specific nuclear structural 1	MNS1	699377
Meiosis specific with OB domains	MEIOB	703322
Meis homeobox 1	MEIS1	697685
Meis homeobox 2	MEIS2	699748
Melanocortin 2 receptor accessory protein 2	MRAP2	695659
Melatonin receptor 1A	MTNR1A	702686
Membrane bound transcription factor peptidase, site 2	MBTPS2	696540
Membrane frizzled-related protein	MFRP	704965
Membrane magnesium transporter 1	MMGT1	710338
Membrane protein, palmitoylated 1	MPP1	702092
Meningioma expressed antigen 5 (hyaluronidase)	MGEA5	712370
Mercaptopyruvate sulfurtransferase	MPST	695842
Mesoderm development candidate 1	MESDC1	713059
Mesoderm induction early response 1, family member 2	MIER2	701450
Mesoderm specific transcript	MEST	703327
Mesothelin	MSLN	698095
Metadherin	MTDH	702410
Metal response element binding transcription factor 2	MTF2	707104
Metallo-beta-lactamase domain containing 2	MBLAC2	695437
Metallophosphoesterase domain containing 2	MPPED2	696968
Metallothionein 3	MT3	700602
Metal-regulatory transcription factor 1	MTF1	714795

Metastasis associated 1 family member 2	MTA2	718772
Metastasis associated 1 family member 3	MTA3	712967
Metaxin 1	MTX1	717595
Methenyltetrahydrofolate synthetase domain containing	MTHFSD	694732
Methionine adenosyltransferase II, alpha	MAT2A	695362
Methionine sulfoxide reductase B1	MSRB1	693358
Methionine sulfoxide reductase B3	MSRB3	717617
Methionyl aminopeptidase 2	METAP2	712400
Methionyl-trna synthetase	MARS	714744
Methyl-cpg binding domain 4 DNA glycosylase	MBD4	720557
Methylcrotonoyl-coa carboxylase 1	MCCC1	708258
Methylenetetrahydrofolate dehydrogenase (NADP+ dependent) 1, methenyltetrahydrofolate cyclohydrolase, formyltetra hydrofolate synthetase	MTHFD1	707059
Methylmalonic aciduria (cobalamin deficiency) cblb type	MMAB	708973
Methylmalonic aciduria (cobalamin deficiency) cbld type, with homocystinuria	MMADHC	693783
Methylmalonyl coa epimerase	MCEE	704094
Methyltransferase like 1	METTL1	715796
Methyltransferase like 13	METTL13	704943
Methyltransferase like 17	METTL17	705009
Methyltransferase like 18	METTL18	701890
Methyltransferase like 21A	METTL21A	710435
Methyltransferase like 22	METTL22	708739
Methyltransferase like 3	METTL3	706852
Methyltransferase like 8	METTL8	695361
Methyltransferase like 9	METTL9	698159
Mevalonate kinase	MVK	707645
Microfibrillar associated protein 2	MFAP2	710885
Microsomal glutathione S-transferase 1	MGST1	701652
Microsomal glutathione S-transferase 2	MGST2	697983
Microsomal glutathione S-transferase 3	MGST3	695275
Microtubule associated monooxygenase, calponin and LIM domain containing 1	MICAL1	698737
Microtubule associated protein 1 light chain 3 alpha	MAP1LC3A	707439
Microtubule associated protein 1B	MAP1B	574272
Microtubule associated protein 1S	MAP1S	719196
Microtubule associated protein 2	MAP2	710840
Microtubule associated protein 4	MAP4	100423616
Microtubule associated protein RP/EB family member 1	MAPRE1	711404
Microtubule-associated protein 7	MAP7	705355
Midline 1	MID1	709683
Migration and invasion enhancer 1	MIEN1	697837
Mindbomb E3 ubiquitin protein ligase 1	MIB1	699340
Minichromosome maintenance complex component 3	MCM3	708320
Minichromosome maintenance complex component 3 associated protein	MCM3AP	721810
Minichromosome maintenance complex component 5	MCM5	717548

Minichromosome maintenance complex component 7	MCM7	710766
MIS12 kinetochore complex component	MIS12	712202
Missing oocyte, meiosis regulator, homolog (Drosophila)	MIOS	696371
Mitochondrial assembly of ribosomal large subunit 1	MALSU1	704884
Mitochondrial carrier 1	MTCH1	719313
Mitochondrial E3 ubiquitin protein ligase 1	MUL1	705429
Mitochondrial elongation factor 2	MIEF2	700705
Mitochondrial fission regulator 1	MTFR1	711143
Mitochondrial fission regulator 1-like	MTFR1L	713213
Mitochondrial genome maintenance exonuclease 1	MGME1	696467
Mitochondrial intermediate peptidase	MIPEP	707131
Mitochondrial nucleoid factor 1	C6orf125	100425664
Mitochondrial poly(A) polymerase	MTPAP	694491
Mitochondrial pyruvate carrier 1	MPC1	716864
Mitochondrial ribosomal protein L10	MRPL10	695136
Mitochondrial ribosomal protein L11	MRPL11	714094
Mitochondrial ribosomal protein L12	MRPL12	714438
Mitochondrial ribosomal protein L13	MRPL13	702994
Mitochondrial ribosomal protein L16	MRPL16	698831
Mitochondrial ribosomal protein L18	MRPL18	702629
Mitochondrial ribosomal protein L19	MRPL19	711081
Mitochondrial ribosomal protein L20	MRPL20	701533
Mitochondrial ribosomal protein L22	MRPL22	714920
Mitochondrial ribosomal protein L23	MRPL23	704210
Mitochondrial ribosomal protein L24	MRPL24	718640
Mitochondrial ribosomal protein L28	MRPL28	695310
Mitochondrial ribosomal protein L33	MRPL33	702783
Mitochondrial ribosomal protein L34	MRPL34	719004
Mitochondrial ribosomal protein L36	MRPL36	100430880
Mitochondrial ribosomal protein L37	MRPL37	715168
Mitochondrial ribosomal protein L39	MRPL39	708631
Mitochondrial ribosomal protein L40	MRPL40	711629
Mitochondrial ribosomal protein L41	MRPL41	702768
Mitochondrial ribosomal protein L42	MRPL42	715676
Mitochondrial ribosomal protein L46	MRPL46	697872
Mitochondrial ribosomal protein L48	MRPL48	718240
Mitochondrial ribosomal protein L49	MRPL49	716796
Mitochondrial ribosomal protein L50	MRPL50	713923
Mitochondrial ribosomal protein L51	MRPL51	713036
Mitochondrial ribosomal protein L53	MRPL53	709302
Mitochondrial ribosomal protein L55	MRPL55	695962
Mitochondrial ribosomal protein L9	MRPL9	711235
Mitochondrial ribosomal protein S11	MRPS11	697743
Mitochondrial ribosomal protein S12	MRPS12	695196
Mitochondrial ribosomal protein S17	MRPS17	703678
Mitochondrial ribosomal protein S18A	MRPS18A	701465
Mitochondrial ribosomal protein S21	MRPS21	706805
Mitochondrial ribosomal protein S22	MRPS22	715845

Mitochondrial ribosomal protein S23	MRPS23	708818
Mitochondrial ribosomal protein S24	MRPS24	700722
Mitochondrial ribosomal protein S26	MRPS26	717038
Mitochondrial ribosomal protein S28	MRPS28	699755
Mitochondrial ribosomal protein S30	MRPS30	701699
Mitochondrial ribosomal protein S33	MRPS33	693681
Mitochondrial ribosomal protein S34	MRPS34	702487
Mitochondrial ribosomal protein S35	MRPS35	710109
Mitochondrial ribosomal protein S6	MRPS6	106997264
Mitochondrial ribosomal protein S7	MRPS7	701800
Mitochondrial ribosomal protein S9	MRPS9	712968
Mitochondrial ribosome recycling factor	MRRF	700902
Mitochondrial trans-2-enoyl-coa reductase	MECR	717425
Mitochondrial transcription termination factor 3	MTERF3	701366
Mitochondrial translational initiation factor 2	MTIF2	717042
Mitochondrial translational initiation factor 3	MTIF3	710571
Mitofusin 1	MFN1	709570
Mitogen-activated protein kinase 1	MAPK1	698569
Mitogen-activated protein kinase 12	MAPK12	715745
Mitogen-activated protein kinase 7	MAPK7	702837
Mitogen-activated protein kinase 8	MAPK8	711115
Mitogen-activated protein kinase 8 interacting protein 1	MAPK8IP1	714950
Mitogen-activated protein kinase associated protein 1	MAPKAP1	702599
Mitogen-activated protein kinase kinase 1	MAP2K1	710415
Mitogen-activated protein kinase kinase 2	MAP2K2	721821
Mitogen-activated protein kinase kinase 4	MAP2K4	718155
Mitogen-activated protein kinase kinase 5	MAP2K5	711672
Mitogen-activated protein kinase kinase kinase 11	MAP3K11	716038
Mitogen-activated protein kinase kinase kinase 13	MAP3K13	701085
Mitogen-activated protein kinase kinase kinase 3	MAP3K3	717866
Mitogen-activated protein kinase kinase kinase 4	MAP3K4	710360
Mitogen-activated protein kinase kinase kinase 6	MAP3K6	715911
Mitogen-activated protein kinase kinase kinase kinase 1	MAP4K1	694259
Mitogen-activated protein kinase kinase kinase kinase 2	MAP4K2	699331
Mitogen-activated protein kinase kinase kinase kinase 4	MAP4K4	716595
Mitogen-activated protein kinase kinase kinase kinase 5	MAP4K5	706204
Mitogen-activated protein kinase-activated protein kinase 2	MAPKAPK2	695044
Mitogen-activated protein kinase-activated protein kinase 3	MAPKAPK3	701320
Mitogen-activated protein kinase-activated protein kinase 5	MAPKAPK5	713521
Mitotic spindle organizing protein 2B	MZT2B	701787
Mixed lineage kinase domain-like	MLKL	710316
MNAT CDK-activating kinase assembly factor 1	MNAT1	703905
MOB family member 4, phocein	MOB4	698149
Molybdenum cofactor synthesis 2	MOCS2	703689
MON1 homolog A, secretory trafficking associated	MON1A	704497
MON1 homolog B, secretory trafficking associated	MON1B	715104
Monoacylglycerol O-acyltransferase 1	MOGAT1	705924
Monocyte to macrophage differentiation-associated	MMD	706723

MORC family CW-type zinc finger 4	MORC4	701136
Morf4 family associated protein 1	MRFAP1	710771
Morf4 family associated protein 1-like 1	MRFAP1L1	710411
MORN repeat containing 2	MORN2	106992912
Mortality factor 4 like 1	MORF4L1	711357
Motile sperm domain containing 2	MOSPD2	712225
Mov10 RISC complex RNA helicase	MOV10	705910
M-phase phosphoprotein 10 (U3 small nucleolar ribonucleoprotein)	MPHOSPH10	704207
M-phase phosphoprotein 6	MPHOSPH6	714335
M-phase specific PLK1 interacting protein	MPLKIP	703092
Mpv17 mitochondrial inner membrane protein	MPV17	701026
MPV17 mitochondrial membrane protein-like 2	MPV17L2	719413
MRS2, magnesium transporter	MRS2	707676
Msh homeobox 2	MSX2	694227
MSS51 mitochondrial translational activator	MSS51	707066
Mucolipin 1	MCOLN1	703775
Multiple C2 domains, transmembrane 2	MCTP2	706949
Multiple inositol-polyphosphate phosphatase 1	MINPP1	704362
Multivesicular body subunit 12A	MVB12A	716261
MUS81 structure-specific endonuclease subunit	MUS81	715558
Musashi RNA binding protein 2	MSI2	100423536
Muscleblind like splicing regulator 1	MBNL1	708735
Mutl homolog 1	MLH1	698782
Muty DNA glycosylase	MUTYH	705651
MYB binding protein (P160) 1a	MYBBP1A	708817
Myb/SANT-like DNA-binding domain containing 2	MSANTD2	712347
Myb/SANT-like DNA-binding domain containing 4 with coiled-coils	MSANTD4	706055
MYC associated factor X	MAX	708228
Myc target 1	MYCT1	711296
MYCBP associated protein	MYCBPAP	705880
Myelin protein zero	MPZ	719969
Myelin protein zero-like 2	MPZL2	699330
Myeloid cell leukemia 1	MCL1	707539
Myeloid cell nuclear differentiation antigen	MNDA	719220
Myeloid differentiation primary response 88	MYD88	696494
Myeloid leukemia factor 1	MLF1	704116
Myeloid zinc finger 1	MZF1	712144
Myeloid/lymphoid or mixed-lineage leukemia; translocated to, 11	MLLT11	709190
Myeloid/lymphoid or mixed-lineage leukemia; translocated to, 6	MLLT6	694045
Myocyte enhancer factor 2A	MEF2A	708956
Myocyte enhancer factor 2B	MEF2B	100568440
Myod family inhibitor	MDFI	694074
Myomesin 1	MYOM1	695301
Myosin IA	MYO1A	714033
Myosin light chain 4	MYL4	717354
Myosin light chain 6	MYL6	711889
Myosin light chain kinase 3	MYLK3	716132
Myosin, light chain 12A, regulatory, non-sarcomeric	MYL12A	695077

Myotrophin	MTPN	708941
Myotubularin 1	MTM1	703131
Myotubularin related protein 11	MTMR11	705542
Myotubularin related protein 2	MTMR2	699703
Myotubularin related protein 4	MTMR4	714621
Myotubularin related protein 6	MTMR6	709118
Myristoylated alanine-rich protein kinase C substrate	MARCKS	694077
MYST/Esa1-associated factor 6	MEAF6	713666
N(alpha)-acetyltransferase 15, nata auxiliary subunit	NAA15	697123
N(alpha)-acetyltransferase 30, natc catalytic subunit	NAA30	699379
N(alpha)-acetyltransferase 35, natc auxiliary subunit	NAA35	710122
N(alpha)-acetyltransferase 50, nate catalytic subunit	NAA50	709764
N(alpha)-acetyltransferase 60, natf catalytic subunit	NAA60	703207
N-6 adenine-specific DNA methyltransferase 2 (putative)	N6AMT2	703665
NACC family member 2, BEN and BTB (POZ) domain containing	NACC2	721794
N-acetylglucosamine kinase	NAGK	703976
N-acetylglucosamine-1-phosphate transferase, gamma subunit	GNPTG	722441
N-acetylglucosamine-1-phosphodiester alpha-N-acetylglucosaminidase	NAGPA	707352
N-acetylglutamate synthase	NAGS	714102
N-acetyltransferase 6 (GCN5-related)	NAT6	703022
NAD(P) dependent steroid dehydrogenase-like	NSDHL	693333
NAD(P)H dehydrogenase, quinone 2	NQO2	707675
NADH dehydrogenase subunit 1	ND1	2846627
NADH:ubiquinone oxidoreductase complex assembly factor 1	NDUFAF1	710275
NADH:ubiquinone oxidoreductase complex assembly factor 2	NDUFAF2	693441
NADH:ubiquinone oxidoreductase complex assembly factor 3	NDUFAF3	708623
NADH:ubiquinone oxidoreductase complex assembly factor 4	NDUFAF4	705102
NADH:ubiquinone oxidoreductase complex assembly factor 6	NDUFAF6	700515
NADH:ubiquinone oxidoreductase complex assembly factor 7	NDUFAF7	709473
NADH:ubiquinone oxidoreductase core subunit S2	NDUFS2	719935
NADH:ubiquinone oxidoreductase core subunit S3	NDUFS3	713040
NADH:ubiquinone oxidoreductase core subunit S8	NDUFS8	710845
NADH:ubiquinone oxidoreductase subunit A1	NDUFA1	694635
NADH:ubiquinone oxidoreductase subunit A12	NDUFA12	711970
NADH:ubiquinone oxidoreductase subunit A2	NDUFA2	697736
NADH:ubiquinone oxidoreductase subunit A8	NDUFA8	698706
NADH:ubiquinone oxidoreductase subunit AB1	NDUFAB1	700718
NADH:ubiquinone oxidoreductase subunit B10	NDUFB10	693482
NADH:ubiquinone oxidoreductase subunit B2	NDUFB2	693431
NADH:ubiquinone oxidoreductase subunit B4	NDUFB4	713428
NADH:ubiquinone oxidoreductase subunit B5	NDUFB5	708821
NADH:ubiquinone oxidoreductase subunit B7	NDUFB7	717849
NADH:ubiquinone oxidoreductase subunit B8	NDUFB8	710521
NADH:ubiquinone oxidoreductase subunit B9	NDUFB9	711387
NADH:ubiquinone oxidoreductase subunit C1	NDUFC1	697242
NADH:ubiquinone oxidoreductase subunit S4	NDUFS4	704137
NADH:ubiquinone oxidoreductase subunit S6	NDUFS6	709426
Nascent polypeptide-associated complex alpha subunit	NACA	713416

Natriuretic peptide receptor 2	NPR2	695750
Natural killer cell granule protein 7	NKG7	719624
NCK adaptor protein 1	NCK1	716807
NCK adaptor protein 2	NCK2	713287
NCK interacting protein with SH3 domain	NCKIPSD	709410
NDC80 kinetochore complex component	NDC80	696232
NECAP endocytosis associated 1	NECAP1	716035
NECAP endocytosis associated 2	NECAP2	698687
NEDD4 binding protein 2	N4BP2	700365
Nedd4 family interacting protein 1	NDFIP1	705716
Nedd4 family interacting protein 2	NDFIP2	698464
NEDD8 activating enzyme E1 subunit 1	NAE1	696429
Negative elongation factor complex member C/D	NELFCD	696053
Negative elongation factor complex member E	NELFE	716913
Negative regulator of ubiquitin-like proteins 1	NUB1	715231
Nei-like DNA glycosylase 3	NEIL3	699618
Nerve growth factor receptor (TNFRSF16) associated protein 1	NGFRAP1	100428976
N-ethylmaleimide-sensitive factor attachment protein, gamma	NAPG	704546
Netrin G2	NTNG2	715127
Neugrin, neurite outgrowth associated	NGRN	702187
Neural precursor cell expressed, developmentally down-regulated 1	NEDD1	713673
Neural precursor cell expressed, developmentally down-regulated 4, E3 ubiquitin protein ligase	NEDD4	699550
Neural precursor cell expressed, developmentally down-regulated 8	NEDD8	715763
Neural precursor cell expressed, developmentally down-regulated 9	NEDD9	699359
Neural proliferation, differentiation and control, 1	NPDC1	707453
Neuralized E3 ubiquitin protein ligase 2	NEURL2	708904
Neurensin 1	NRSN1	707362
Neurexophilin and PC-esterase domain family member 3	NXPE3	702612
Neuroglobin	NGB	641331
Neurologin 2	NLGN2	574368
Neurologin 3	NLGN3	574216
Neurologin 4, Y-linked	NLGN4Y	100270696
Neuromedin U	NMU	697171
Neuron navigator 2	NAV2	702146
Neuronal cell adhesion molecule	NRCAM	574228
Neuronal PAS domain protein 2	NPAS2	710480
Neuronal regeneration related protein	NREP	712463
Neuronal tyrosine-phosphorylated phosphoinositide-3-kinase adaptor 1	NYAP1	719205
Neuropeptide FF-amide peptide precursor	NPFF	703412
Neuropilin 1	NRP1	697755
NFKB activating protein	NKAP	694891
NFKB inhibitor interacting Ras-like 1	NKIRAS1	699598
NFKB repressing factor	NKRF	693851
NGFI-A binding protein 2 (EGR1 binding protein 2)	NAB2	714209
N-glycanase 1	NGLY1	700842
NHL repeat containing 2	NHLRC2	698009
NHL repeat containing 3	NHLRC3	696852

NHP2 ribonucleoprotein	NHP2	701950
Nicastrin	NCSTN	719696
Nicotinamide N-methyltransferase	NNMT	695185
Nicotinamide nucleotide transhydrogenase	NNT	701110
Nidogen 1	NID1	711154
Niemann-Pick disease, type C2	NPC2	699881
NIMA-related kinase 1	NEK1	694345
NIMA-related kinase 2	NEK2	711473
NIMA-related kinase 3	NEK3	710127
NIN1/RPN12 binding protein 1 homolog	NOB1	705344
Ninein	NIN	709532
Ninjurin 1	NINJ1	717218
Nitric oxide associated 1	NOA1	693437
Nitric oxide synthase interacting protein	NOSIP	718888
Nitric oxide synthase trafficking	NOSTRIN	705063
NLR family member X1	NLRX1	703981
NLR family, pyrin domain containing 3	NLRP3	701278
NMD3 ribosome export adaptor	NMD3	701677
NME/NM23 nucleoside diphosphate kinase 2	NME2	100533960
N-methylpurine DNA glycosylase	MPG	722257
NOC2-like nucleolar associated transcriptional repressor	NOC2L	697809
Noggin	NOG	707338
Non imprinted in Prader-Willi/Angelman syndrome 2	NIPA2	710147
Non-POU domain containing, octamer-binding	NONO	697263
Non-SMC condensin II complex subunit D3	NCAPD3	700276
Non-SMC condensin II complex subunit H2	NCAPH2	716120
NOP16 nucleolar protein	NOP16	696768
NOP2 nucleolar protein	NOP2	713097
NOP2/Sun RNA methyltransferase family member 5	NSUN5	716219
NOP58 ribonucleoprotein	NOP58	703859
NOP9 nucleolar protein	NOP9	715969
Norrie disease (pseudoglioma)	NDP	702203
NPL4 homolog, ubiquitin recognition factor	NPLOC4	713927
NPR2-like, GATOR1 complex subunit	NPRL2	701924
NRDE-2, necessary for RNA interference, domain containing	NRDE2	695676
NSA2, ribosome biogenesis homolog	NSA2	704670
NSE1 homolog, SMC5-SMC6 complex component	NSMCE1	703436
NSE3 homolog, SMC5-SMC6 complex component	NSMCE3	712714
NSE4 homolog A, SMC5-SMC6 complex component	NSMCE4A	705375
NSF attachment protein alpha	NAPA	717355
NSFL1 (p97) cofactor (p47)	NSFL1C	715743
NSL1, MIS12 kinetochore complex component	NSL1	710371
N-terminal asparagine amidase	NTAN1	100427568
N-terminal Xaa-Pro-Lys N-methyltransferase 1	NTMT1	716763
Nth-like DNA glycosylase 1	NTHL1	694848
Nuclear assembly factor 1 ribonucleoprotein	NAF1	702745
Nuclear casein kinase and cyclin-dependent kinase substrate 1	NUCKS1	697298
Nuclear envelope integral membrane protein 1	NEMP1	710700

Nuclear factor I/A	NFIA	694022
Nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 3	NFATC3	702390
Nuclear factor of kappa light polypeptide gene enhancer in B-cells 1	NFKB1	710324
Nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, alpha	NFKBIA	695335
Nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, beta	NFKBIB	694844
Nuclear factor related to kappaB binding protein	NFRKB	718750
Nuclear factor, erythroid 2 like 1	NFE2L1	695404
Nuclear factor, erythroid 2 like 2	NFE2L2	707606
Nuclear factor, interleukin 3 regulated	NFIL3	704757
Nuclear fragile X mental retardation protein interacting protein 2	NUFIP2	711330
Nuclear prelamin A recognition factor	NARF	716259
Nuclear prelamin A recognition factor-like	NARFL	722381
Nuclear protein, ataxia-telangiectasia locus	NPAT	707873
Nuclear receptor binding protein 1	NRBP1	700821
Nuclear receptor binding SET domain protein 1	NSD1	706131
Nuclear receptor coactivator 4	NCOA4	709509
Nuclear receptor coactivator 5	NCOA5	717054
Nuclear receptor coactivator 6	NCOA6	706903
Nuclear receptor subfamily 1 group H member 3	NR1H3	713679
Nuclear receptor subfamily 1 group I member 2	NR1I2	574226
Nuclear receptor subfamily 2 group F member 2	NR2F2	707483
Nuclear RNA export factor 1	NXF1	718420
Nuclear RNA export factor 3	NXF3	695351
Nuclear transcription factor Y subunit alpha	NFYA	719697
Nuclear transcription factor Y subunit gamma	NFYC	696290
Nuclear transcription factor, X-box binding 1	NFX1	702945
Nuclear transport factor 2	NUTF2	700488
Nuclear transport factor 2-like export factor 1	NXT1	711846
Nuclear transport factor 2-like export factor 2	NXT2	704593
Nucleic acid binding protein 2	NABP2	709344
Nucleobindin 2	NUCB2	697084
Nucleolar and coiled-body phosphoprotein 1	NOLC1	712789
Nucleolar protein 8	NOL8	705799
Nucleolar protein interacting with the FHA domain of MKI67	NIFK	697198
Nucleolin	NCL	720965
Nucleoporin 107kda	NUP107	718214
Nucleoporin 153kda	NUP153	703888
Nucleoporin 205kda	NUP205	708216
Nucleoporin 210kda	NUP210	693669
Nucleoporin 35kda	NUP35	706497
Nucleoporin 50kda	NUP50	713282
Nucleoporin 85kda	NUP85	705628
Nucleoporin 88kda	NUP88	711734
Nucleoporin like 2	NUPL2	705213
Nucleoside-triphosphatase, cancer-related	NTPCR	712959

Nucleosome assembly protein 1-like 3	NAP1L3	697636
Nucleosome assembly protein 1-like 5	NAP1L5	703223
Nucleotide binding oligomerization domain containing 1	NOD1	695655
Nudc domain containing 3	NUDCD3	699353
Nudc nuclear distribution protein	NUDC	719986
Nude neurodevelopment protein 1	NDE1	717754
Nude neurodevelopment protein 1-like 1	NDEL1	721973
Nudix hydrolase 1	NUDT1	713078
Nudix hydrolase 2	NUDT2	701795
Nudix hydrolase 22	NUDT22	717864
Nudix hydrolase 3	NUDT3	718568
Nudix hydrolase 5	NUDT5	694368
Nudix hydrolase 6	NUDT6	708421
Nudix hydrolase 9	NUDT9	701344
Numb homolog (Drosophila)	NUMB	696528
NUS1 dehydrodolichyl diphosphate synthase subunit	NUS1	715015
O-6-methylguanine-DNA methyltransferase	MGMT	698134
O-acyl-ADP-ribose deacylase 1	OARD1	719685
Occludin/ELL domain containing 1	OCEL1	718921
OCIA domain containing 1	OCIAD1	706191
OCIA domain containing 2	OCIAD2	706300
Oculocerebrorenal syndrome of Lowe	OCRL	702345
Odd-skipped related transcription factor 1	OSR1	106992848
Odd-skipped related transcription factor 2	OSR2	704253
Olfactomedin 1	OLFM1	712348
Olfactomedin 2	OLFM2	711336
Olfactomedin like 2B	OLFML2B	720062
Olfactomedin like 3	OLFML3	707969
Olfactory receptor, family 1, subfamily Q, member 1	OR1Q1	697695
Olfactory receptor, family 10, subfamily A, member 4	OR10A4	100423176
Olfactory receptor, family 2, subfamily AG, member 2	OR2AG2	709556
Olfactory receptor, family 2, subfamily W, member 1	OR2W1	708515
Olfactory receptor, family 4, subfamily E, member 2	OR4E2	708887
Olfactory receptor, family 4, subfamily N, member 2	OR4N2	701881
Olfactory receptor, family 9, subfamily I, member 1	OR9I1	703649
Oligonucleotide/oligosaccharide-binding fold containing 1	OBFC1	714968
Opa interacting protein 5	OIP5	705837
Opsin 3	OPN3	707436
Optic atrophy 1 (autosomal dominant)	OPA1	698540
ORAI calcium release-activated calcium modulator 1	ORAI1	700190
Oral-facial-digital syndrome 1	OFD1	711677
Origin recognition complex subunit 1	ORC1	713271
Origin recognition complex subunit 3	ORC3	700773
Origin recognition complex subunit 5	ORC5	696683
Origin recognition complex subunit 6	ORC6	716175
ORMDL sphingolipid biosynthesis regulator 1	ORMDL1	709832
ORMDL sphingolipid biosynthesis regulator 2	ORMDL2	710296
ORMDL sphingolipid biosynthesis regulator 3	ORMDL3	699154

Ornithine aminotransferase	OAT	693970
Ornithine decarboxylase 1	ODC1	695625
Ornithine decarboxylase antizyme 1	OAZ1	721477
Osteosarcoma amplified 9, endoplasmic reticulum lectin	OS9	715555
OTU deubiquitinase with linear linkage specificity	OTULIN	698991
OTU domain containing 6B	OTUD6B	697015
Outer dense fiber of sperm tails 1	ODF1	707269
Outer dense fiber of sperm tails 2	ODF2	717505
Ovo-like zinc finger 1	OVOL1	715797
Oxidation resistance 1	OXR1	696398
Oxidative stress responsive 1	OXSR1	696362
Oxoeicosanoid (OXE) receptor 1	OXER1	713039
Oxoglutarate (alpha-ketoglutarate) dehydrogenase (lipoamide)	OGDH	698854
Oxysterol binding protein	OSBP	699325
Oxysterol binding protein like 10	OSBPL10	703555
Oxysterol binding protein like 11	OSBPL11	716096
P21 protein (Cdc42/Rac)-activated kinase 1	PAK1	698585
P21 protein (Cdc42/Rac)-activated kinase 2	PAK2	710314
P450 (cytochrome) oxidoreductase	POR	715888
P53 and DNA damage regulated 1	PDRG1	712622
Paired box 2	PAX2	710687
PAK1 interacting protein 1	PAK1IP1	697856
Palmitoyl-protein thioesterase 1	PPT1	693377
Pancreatic polypeptide	PPY	713988
Pancreatic progenitor cell differentiation and proliferation factor	PPDPF	719608
Pantothenate kinase 1	PANK1	696041
Pantothenate kinase 2	PANK2	717639
Pantothenate kinase 4	PANK4	694804
PAP associated domain containing 4	PAPD4	710044
PAP associated domain containing 7	PAPD7	713853
Papillary renal cell carcinoma (translocation-associated)	PRCC	718660
Par-3 family cell polarity regulator	PARD3	706472
Paralemmin 2	PALM2	100532752
Paraneoplastic Ma antigen 1	PNMA1	697618
Paraneoplastic Ma antigen 3	PNMA3	694406
Paraoxonase 2	PON2	699107
Paraoxonase 3	PON3	699236
Paraspeckle component 1	PSPC1	705080
Parathyroid hormone 1 receptor	PTH1R	712147
Parkinson protein 7	PARK7	708377
Partner and localizer of BRCA2	PALB2	700843
Partner of NOB1 homolog	PNO1	100337568
Paternally expressed 3	PEG3	707825
PAXIP1 associated glutamate-rich protein 1	PAGR1	706839
PC-esterase domain containing 1A	PCED1A	716956
PCI domain containing 2	PCID2	714247
PDLIM1 interacting kinase 1 like	PDIK1L	719774
PDZ and LIM domain 1	PDLIM1	702998

PDZ domain containing 1	PDZK1	696698
PDZ domain containing 4	PDZD4	697387
PDZ domain containing ring finger 3	PDZRN3	709901
Pecanex homolog (Drosophila)	PCNX	694094
Pecanex-like 4 (Drosophila)	PCNXL4	702758
Pellino E3 ubiquitin protein ligase 1	PELI1	696416
Peptidase (mitochondrial processing) alpha	PMPCA	721742
Peptide deformylase (mitochondrial)	PDF	100427224
Peptidoglycan recognition protein 3	PGLYRP3	714583
Peptidylprolyl isomerase A (cyclophilin A)	PPIA	574102
Peptidylprolyl isomerase B (cyclophilin B)	PPIB	706757
Peptidylprolyl isomerase domain and WD repeat containing 1	PPWD1	696267
Peptidylprolyl isomerase E (cyclophilin E)	PPIE	716340
Peptidylprolyl isomerase F	PPIF	574137
Peptidylprolyl isomerase G (cyclophilin G)	PPIG	706262
Peptidylprolyl isomerase H (cyclophilin H)	PPIH	697669
Peptidylprolyl isomerase like 3	PPIL3	700456
Peptidylprolyl isomerase like 4	PPIL4	696634
Peptidyl-trna hydrolase 1 homolog	PTRH1	700335
Periaxin	PRX	702329
Period circadian clock 1	PER1	721948
Periostin, osteoblast specific factor	POSTN	695528
Peripheral myelin protein 22	PMP22	693527
Peroxiredoxin 2	PRDX2	716665
Peroxiredoxin 3	PRDX3	702882
Peroxiredoxin 4	PRDX4	697635
Peroxiredoxin 6	PRDX6	706486
Peroxisomal biogenesis factor 11 beta	PEX11B	698184
Peroxisomal biogenesis factor 11 gamma	PEX11G	703198
Peroxisomal biogenesis factor 13	PEX13	717886
Peroxisomal biogenesis factor 16	PEX16	714904
Peroxisomal biogenesis factor 6	PEX6	697597
Peroxisomal membrane protein 2	PXMP2	693648
Peroxisome proliferator-activated receptor delta	PPARD	718861
PEST proteolytic signal containing nuclear protein	PCNP	702162
PH domain and leucine rich repeat protein phosphatase 1	PHLPP1	705882
PHD finger protein 1	PHF1	718337
PHD finger protein 19	PHF19	704050
PHD finger protein 2	PHF2	717585
PHD finger protein 21A	PHF21A	714798
PHD finger protein 23	PHF23	714538
PHD finger protein 6	PHF6	707390
PHD finger protein 7	PHF7	697103
Phenylalanine hydroxylase	PAH	698696
Phenylalanyl-trna synthetase 2, mitochondrial	FARS2	710945
Phenylalanyl-trna synthetase alpha subunit	FARSA	716878
Phenylethanolamine N-methyltransferase	PNMT	697444
Phosphatase and actin regulator 1	PHACTR1	700226

Phosphatase and tensin homolog	PTEN	705121
Phosphatase, orphan 1	PHOSPHO1	698959
Phosphatase, orphan 2	PHOSPHO2	100429656
Phosphate cytidyltransferase 1, choline, alpha	PCYT1A	722105
Phosphatidylethanolamine binding protein 1	PEBP1	694697
Phosphatidylethanolamine N-methyltransferase	PEMT	699083
Phosphatidylglycerophosphate synthase 1	PGS1	710125
Phosphatidylinositol 3-kinase catalytic subunit type 3	PIK3C3	693918
Phosphatidylinositol 4-kinase, catalytic, alpha	PI4KA	698020
Phosphatidylinositol 4-kinase, catalytic, beta	PI4KB	710104
Phosphatidylinositol binding clathrin assembly protein	PICALM	706003
Phosphatidylinositol glycan anchor biosynthesis class A	PIGA	712514
Phosphatidylinositol glycan anchor biosynthesis class C	PIGC	705657
Phosphatidylinositol glycan anchor biosynthesis class F	PIGF	714844
Phosphatidylinositol glycan anchor biosynthesis class G	PIGG	714088
Phosphatidylinositol glycan anchor biosynthesis class H	PIGH	710780
Phosphatidylinositol glycan anchor biosynthesis class O	PIGO	698588
Phosphatidylinositol glycan anchor biosynthesis class S	PIGS	709115
Phosphatidylinositol glycan anchor biosynthesis class U	PIGU	707317
Phosphatidylinositol glycan anchor biosynthesis class V	PIGV	714898
Phosphatidylinositol transfer protein beta	PITPNB	713414
Phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit alpha	PIK3CA	709959
Phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit beta	PIK3CB	716098
Phosphatidylserine synthase 1	PTDSS1	701486
Phosphodiesterase 12	PDE12	703552
Phosphodiesterase 4B	PDE4B	699309
Phosphodiesterase 6A	PDE6A	677688
Phosphodiesterase 6D	PDE6D	712629
Phosphodiesterase 8A	PDE8A	694750
Phosphodiesterase 9A	PDE9A	100301992
Phosphoenolpyruvate carboxykinase 2 (mitochondrial)	PCK2	714922
Phosphoglucomutase 1	PGM1	699401
Phosphoglucomutase 3	PGM3	694464
Phosphoglycerate kinase 1	PGK1	706325
Phosphohistidine phosphatase 1	PHPT1	721674
Phosphoinositide-3-kinase interacting protein 1	PIK3IP1	716694
Phosphoinositide-3-kinase regulatory subunit 4	PIK3R4	718012
Phospholipase A2 group VI	PLA2G6	700184
Phospholipase A2 group XIIB	PLA2G12B	708031
Phospholipase A2 group XV	PLA2G15	702619
Phospholipase A2 group XVI	PLA2G16	722178
Phospholipase A2, group IVB (cytosolic)	PLA2G4B	100533112
Phospholipase B domain containing 1	PLBD1	698939
Phospholipase B domain containing 2	PLBD2	714669
Phospholipase C delta 1	PLCD1	696860
Phospholipase D family member 3	PLD3	701083
Phospholipid phosphatase 1	PLPP1	706539
Phospholipid phosphatase 2	PLPP2	721004

Phospholipid phosphatase 6	PLPP6	695188
Phospholipid phosphatase 7 (inactive)	PLPP7	722411
Phospholipid scramblase 3	PLSCR3	721831
Phosphopantothenoylcysteine synthetase	PPCS	697064
Phosphoribosyl pyrophosphate synthetase 1	PRPS1	702529
Phosphoribosyl pyrophosphate synthetase 1-like 1	PRPS1L1	708413
Phosphoribosyl pyrophosphate synthetase-associated protein 1	PRPSAP1	706625
Phosphoribosyl transferase domain containing 1	PRTFDC1	712819
Phosphoribosylglycinamide formyltransferase, phosphoribosyl glycinamide synthetase, phosphoribosylaminoimidazole synthetase	GART	704926
Phosphorylase kinase, alpha 2 (liver)	PHKA2	694376
Phosphorylase kinase, beta	PHKB	716390
Phosphorylase, glycogen, liver	PYGL	706853
Phytanoyl-coa 2-hydroxylase	PHYH	695915
Phytanoyl-coa dioxygenase domain containing 1	PHYHD1	717104
Piggybac transposable element derived 2	PGBD2	709925
PIGY upstream reading frame	PYURF	702862
PIH1 domain containing 1	PIH1D1	718787
PIH1 domain containing 2	PIH1D2	711087
PILR alpha associated neural protein	PIANP	713548
PIN2/TERF1 interacting, telomerase inhibitor 1	PINX1	701523
Pinin, desmosome associated protein	PNN	700296
PITH (C-terminal proteasome-interacting domain of thioredoxin-like) domain containing 1	PITHD1	710737
Pituitary tumor-transforming 1	PTTG1	696143
Pituitary tumor-transforming 1 interacting protein	PTTG1IP	722061
Placenta specific 9	PLAC9	700881
Plasminogen activator, tissue	PLAT	704475
Plasminogen receptor, C-terminal lysine transmembrane protein	PLGRKT	693286
Plastin 1	PLS1	714391
Plastin 3	PLS3	709055
Platelet activating factor acetylhydrolase 1b catalytic subunit 2	PAFAH1B2	703013
Platelet activating factor acetylhydrolase 1b catalytic subunit 3	PAFAH1B3	707570
Platelet activating factor acetylhydrolase 1b regulatory subunit 1	PAFAH1B1	574255
Platelet derived growth factor C	PDGFC	700236
Platelet derived growth factor D	PDGFD	704310
Platelet-derived growth factor beta polypeptide	PDGFB	703173
Platelet-derived growth factor receptor-like	PDGFRL	703117
Pleckstrin and Sec7 domain containing	PSD	714737
Pleckstrin and Sec7 domain containing 2	PSD2	694873
Pleckstrin homology and FYVE domain containing 1	PLEKHF1	700343
Pleckstrin homology and FYVE domain containing 2	PLEKHF2	701884
Pleckstrin homology and rhogef domain containing G2	PLEKHG2	698408
Pleckstrin homology domain containing A1	PLEKHA1	705731
Pleckstrin homology domain containing A3	PLEKHA3	703417
Pleckstrin homology domain containing A7	PLEKHA7	697646
Pleckstrin homology domain containing A8	PLEKHA8	696127
Pleckstrin homology domain containing J1	PLEKHJ1	710129

Pleckstrin homology domain containing O1	PLEKHO1	706145
Pleckstrin homology domain containing O2	PLEKHO2	712677
Pleckstrin homology domain interacting protein	PHIP	716810
Pleckstrin homology, myth4 and FERM domain containing H3	PLEKHH3	711013
Pleckstrin homology-like domain, family A, member 3	PHLDA3	709782
Pleiotrophin	PTN	709496
Plexin domain containing 2	PLXDC2	702523
PNN-interacting serine/arginine-rich protein	PNISR	694075
POC1 centriolar protein A	POC1A	698157
Pogo transposable element with KRAB domain	POGK	696834
Pogo transposable element with ZNF domain	POGZ	710634
Poliovirus receptor-related 2 (herpesvirus entry mediator B)	PVRL2	713229
Polo-like kinase 1	PLK1	697686
Polo-like kinase 3	PLK3	704071
Polo-like kinase 4	PLK4	710233
Poly(A) binding protein interacting protein 1	PAIP1	700869
Poly(A) binding protein interacting protein 2	PAIP2	693317
Poly(A) binding protein, cytoplasmic 1	PABPC1	705847
Poly(A) binding protein, cytoplasmic 3	PABPC3	708617
Poly(A) binding protein, cytoplasmic 4 (inducible form)	PABPC4	716083
Poly(A) polymerase alpha	PAPOLA	641447
Poly(A)-specific ribonuclease	PARN	712984
Poly(ADP-ribose) glycohydrolase	PARG	709432
Poly(ADP-ribose) polymerase 1	PARP1	698806
Poly(ADP-ribose) polymerase 2	PARP2	701955
Poly(ADP-ribose) polymerase family member 10	PARP10	708132
Poly(ADP-ribose) polymerase family member 16	PARP16	709140
Poly(rc) binding protein 2	PCBP2	703175
Poly(rc) binding protein 4	PCBP4	699225
Polybromo 1	PBRM1	696361
Polycomb group ring finger 2	PCGF2	694187
Polycomb group ring finger 3	PCGF3	697151
Polycomb group ring finger 6	PCGF6	714508
Polyglutamine binding protein 1	PQBP1	711678
Polyhomeotic homolog 2 (Drosophila)	PHC2	710201
Polymerase (DNA directed), alpha 2, accessory subunit	POLA2	716541
Polymerase (DNA directed), beta	POLB	704801
Polymerase (DNA directed), epsilon 3, accessory subunit	POLE3	705074
Polymerase (DNA directed), gamma	POLG	699750
Polymerase (RNA) I polypeptide C	POLR1C	700727
Polymerase (RNA) II (DNA directed) polypeptide C, 33kda	POLR2C	704555
Polymerase (RNA) II (DNA directed) polypeptide F	POLR2F	699566
Polymerase (RNA) II (DNA directed) polypeptide G	POLR2G	718548
Polymerase (RNA) II (DNA directed) polypeptide H	POLR2H	100429040
Polymerase (RNA) II (DNA directed) polypeptide I, 14.5kda	POLR2I	712412
Polymerase (RNA) III (DNA directed) polypeptide B	POLR3B	702711
Polymerase (RNA) III (DNA directed) polypeptide C (62kd)	POLR3C	696943
Polymerase (RNA) III (DNA directed) polypeptide D, 44kda	POLR3D	707923

Polymerase (RNA) III (DNA directed) polypeptide E (80kd)	POLR3E	697901
Polymerase (RNA) III (DNA directed) polypeptide F, 39 kda	POLR3F	697927
Polymerase (RNA) III (DNA directed) polypeptide G (32kd)-like	POLR3GL	698563
Polymerase (RNA) III (DNA directed) polypeptide H (22.9kd)	POLR3H	707546
Polymerase (RNA) mitochondrial (DNA directed)	POLRMT	100426184
Polynucleotide kinase 3'-phosphatase	PNKP	719084
Polypeptide N-acetylgalactosaminyltransferase 1	GALNT1	708930
Polypeptide N-acetylgalactosaminyltransferase 12	GALNT12	715128
Polypyrimidine tract binding protein 2	PTBP2	710101
Polysaccharide biosynthesis domain containing 1	PBDC1	705125
POP4 homolog, ribonuclease P/MRP subunit	POP4	700209
POP5 homolog, ribonuclease P/MRP subunit	POP5	697559
POP7 homolog, ribonuclease P/MRP subunit	POP7	712859
Post-GPI attachment to proteins 2	PGAP2	718085
Post-GPI attachment to proteins 3	PGAP3	697699
Potassium channel modulatory factor 1	KCMF1	694645
Potassium channel subfamily M regulatory beta subunit 4	KCNMB4	717360
Potassium channel tetramerization domain containing 10	KCTD10	707443
Potassium channel tetramerization domain containing 18	KCTD18	699824
Potassium channel tetramerization domain containing 2	KCTD2	700474
Potassium channel tetramerization domain containing 3	KCTD3	708471
Potassium channel tetramerization domain containing 5	KCTD5	698663
Potassium channel tetramerization domain containing 6	KCTD6	701810
Potassium channel tetramerization domain containing 9	KCTD9	711515
Potassium channel, calcium activated intermediate/small conductance subfamily N alpha, member 1	KCNN1	720091
Potassium channel, inwardly rectifying subfamily J, member 12	KCNJ12	705326
Potassium channel, voltage gated eag related subfamily H, member 3	KCNH3	710838
Potassium channel, voltage gated Shab related subfamily B, member 1	KCNB1	703520
Potassium channel, voltage gated Shal related subfamily D, member 1	KCND1	711997
Potassium channel, voltage gated Shaw related subfamily C, member 2	KCNC2	100430904
Potassium voltage-gated channel, Isk-related family, member 4	KCNE4	706263
Potassium voltage-gated channel, modifier subfamily S, member 1	KCNS1	711715
POU class 2 homeobox 1	POU2F1	700530
PQ loop repeat containing 1	PQLC1	698716
PQ loop repeat containing 3	PQLC3	696961
PR domain containing 14	PRDM14	693324
PR domain containing 2, with ZNF domain	PRDM2	716295
PR domain containing 4	PRDM4	704529
PR domain containing 5	PRDM5	708790
PRA1 domain family member 2	PRAF2	712436
Praja ring finger 1, E3 ubiquitin protein ligase	PJA1	695038
Pre-B-cell leukemia homeobox 1	PBX1	694416
Pre-B-cell leukemia homeobox 2	PBX2	716239
Pre-B-cell leukemia homeobox 4	PBX4	106994672
Prefoldin subunit 2	PFDN2	719886
Prefoldin subunit 5	PFDN5	702355
PRELI domain containing 1	PRELID1	699254

Premelanosome protein	PMEL	710921
Pre-mrna processing factor 3	PRPF3	706898
Pre-mrna processing factor 31	PRPF31	720567
Pre-mrna processing factor 40 homolog A	PRPF40A	696668
Prenyl (decaprenyl) diphosphate synthase, subunit 1	PDSS1	707598
Prepronociceptin	PNOC	713633
Presenilin 1	PSEN1	696274
Presenilin enhancer gamma secretase subunit	PSENEN	100429008
Presequence translocase-associated motor 16 homolog (S. Cerevisiae)	PAM16	704987
Prickle homolog 1	PRICKLE1	701864
Prion protein	PRNP	717859
Procollagen-lysine, 2-oxoglutarate 5-dioxygenase 1	PLOD1	722763
Progesterone receptor	PGR	613024
Progesterone receptor membrane component 1	PGRMC1	711792
Progestin and adipoq receptor family member III	PAQR3	697120
Progestin and adipoq receptor family member IV	PAQR4	699484
Programmed cell death 2	PDCD2	696380
Programmed cell death 2-like	PDCD2L	705688
Programmed cell death 4 (neoplastic transformation inhibitor)	PDCD4	695345
Programmed cell death 6	PDCD6	723043
Programmed cell death 7	PDCD7	708758
Prohibitin	PHB	699334
Prohibitin 2	PHB2	714693
Prolactin regulatory element binding	PREB	700408
Proliferating cell nuclear antigen	PCNA	718006
Proline and serine rich 2	PROSER2	693705
Proline rich 15	PRR15	696869
Proline rich 15-like	PRR15L	695068
Proline rich 3	PRR3	711699
Proline rich 7 (synaptic)	PRR7	700123
Proline rich Gla (G-carboxyglutamic acid) 1	PRRG1	696938
Proline rich membrane anchor 1	PRIMA1	100426272
Proline rich nuclear receptor coactivator 2	PNRC2	719213
Proline/serine-rich coiled-coil 1	PSRC1	698060
Proline-rich coiled-coil 1	PRRC1	704248
Proline-rich coiled-coil 2A	PRRC2A	715715
Proline-rich coiled-coil 2C	PRRC2C	704297
Prolyl 4-hydroxylase, alpha polypeptide II	P4HA2	707157
Prolyl 4-hydroxylase, transmembrane (endoplasmic reticulum)	P4HTM	708158
Prolyl endopeptidase	PREP	696633
Prolyl endopeptidase-like	PREPL	713980
Prolylcarboxypeptidase	PRCP	701305
Prominin 1	PROM1	714610
Promyelocytic leukemia	PML	700379
Propionyl-coa carboxylase alpha subunit	PCCA	699844
Propionyl-coa carboxylase beta subunit	PCCB	716964
Proprotein convertase subtilisin/kexin type 4	PCSK4	707567
Prostaglandin D2 receptor 2	PTGDR2	695853

Prostaglandin D2 synthase	PTGDS	707990
Prostaglandin E synthase 3	PTGES3	713353
Prostaglandin F2 receptor inhibitor	PTGFRN	713889
Protease, serine 27	PRSS27	697848
Protease, serine 55	PRSS55	698379
Proteasomal ATPase associated factor 1	PAAF1	718755
Proteasome (prosome, macropain) assembly chaperone 1	PSMG1	715758
Proteasome (prosome, macropain) assembly chaperone 2	PSMG2	717110
Proteasome (prosome, macropain) assembly chaperone 3	PSMG3	697590
Proteasome 26S subunit, ATPase 3	PSMC3	713356
Proteasome 26S subunit, ATPase 4	PSMC4	699847
Proteasome 26S subunit, non-ATPase 1	PSMD1	711724
Proteasome 26S subunit, non-ATPase 10	PSMD10	703596
Proteasome 26S subunit, non-ATPase 12	PSMD12	718756
Proteasome 26S subunit, non-ATPase 14	PSMD14	701063
Proteasome 26S subunit, non-ATPase 4	PSMD4	100192392
Proteasome 26S subunit, non-ATPase 6	PSMD6	698601
Proteasome 26S subunit, non-ATPase 7	PSMD7	705581
Proteasome activator subunit 1	PSME1	714364
Proteasome activator subunit 2	PSME2	715288
Proteasome subunit alpha 1	PSMA1	701029
Proteasome subunit alpha 2	PSMA2	701683
Proteasome subunit alpha 3	PSMA3	700251
Proteasome subunit alpha 4	PSMA4	710417
Proteasome subunit alpha 5	PSMA5	698435
Proteasome subunit alpha 6	PSMA6	695113
Proteasome subunit beta 1	PSMB1	696133
Proteasome subunit beta 10	PSMB10	701088
Proteasome subunit beta 2	PSMB2	712193
Proteasome subunit beta 3	PSMB3	694318
Proteasome subunit beta 4	PSMB4	710734
Proteasome subunit beta 6	PSMB6	710028
Proteasome subunit beta 7	PSMB7	694567
Proteasome subunit beta 9	PSMB9	716980
Protection of telomeres 1	POT1	696751
Protein arginine methyltransferase 2	PRMT2	708006
Protein arginine methyltransferase 5	PRMT5	712718
Protein associated with topoisomerase II homolog 1 (yeast)	PATL1	699207
Protein C receptor	PROCR	706040
Protein disulfide isomerase family A member 5	PDIA5	715226
Protein disulfide isomerase family A member 6	PDIA6	706781
Protein disulfide isomerase-like, testis expressed	PDILT	696000
Protein inhibitor of activated STAT 1	PIAS1	693445
Protein inhibitor of activated STAT 2	PIAS2	696737
Protein inhibitor of activated STAT 3	PIAS3	706775
Protein interacting with PRKCA 1	PICK1	699815
Protein kinase (camp-dependent, catalytic) inhibitor gamma	PKIG	712474
Protein kinase, AMP-activated, beta 1 non-catalytic subunit	PRKAB1	695737

Protein kinase, camp-dependent, regulatory subunit type II beta	PRKAR2B	700770
Protein kinase, interferon-inducible double stranded RNA dependent activator	PRKRA	703063
Protein O-glucosyltransferase 1	POGLUT1	712357
Protein O-linked mannose N-acetylglucosaminyltransferase 1 (beta 1,2-)	POMGNT1	707205
Protein phosphatase 1 regulatory subunit 12C	PPP1R12C	698538
Protein phosphatase 1 regulatory subunit 13B	PPP1R13B	700432
Protein phosphatase 1 regulatory subunit 15A	PPP1R15A	718350
Protein phosphatase 1 regulatory subunit 16A	PPP1R16A	702995
Protein phosphatase 1 regulatory subunit 21	PPP1R21	715917
Protein phosphatase 1 regulatory subunit 35	PPP1R35	712067
Protein phosphatase 1 regulatory subunit 7	PPP1R7	700574
Protein phosphatase 1, catalytic subunit, gamma isozyme	PPP1CC	709935
Protein phosphatase 2 regulatory subunit A, alpha	PPP2R1A	719929
Protein phosphatase 2 regulatory subunit A, beta	PPP2R1B	710387
Protein phosphatase 2 regulatory subunit B', gamma	PPP2R5C	718894
Protein phosphatase 2 regulatory subunit B'', gamma	PPP2R3C	694616
Protein phosphatase 2, catalytic subunit, beta isozyme	PPP2CB	695118
Protein phosphatase 3, catalytic subunit, beta isozyme	PPP3CB	706955
Protein phosphatase 3, catalytic subunit, gamma isozyme	PPP3CC	708233
Protein phosphatase 4 catalytic subunit	PPP4C	708510
Protein phosphatase 4 regulatory subunit 3B	PPP4R3B	718961
Protein phosphatase 4, regulatory subunit 1	PPP4R1	705451
Protein phosphatase 5, catalytic subunit	PPP5C	716214
Protein phosphatase methylesterase 1	PPME1	718858
Protein phosphatase, Mg ²⁺ /Mn ²⁺ dependent 1A	PPM1A	702987
Protein phosphatase, Mg ²⁺ /Mn ²⁺ dependent 1F	PPM1F	698441
Protein phosphatase, Mg ²⁺ /Mn ²⁺ dependent 1G	PPM1G	700695
Protein phosphatase, Mg ²⁺ /Mn ²⁺ dependent 1K	PPM1K	702398
Protein phosphatase, Mg ²⁺ /Mn ²⁺ dependent 1M	PPM1M	697788
Protein S (alpha)	PROS1	694845
Protein serine kinase H2	PSKH2	693701
Protein tyrosine phosphatase domain containing 1	PTPDC1	707878
Protein tyrosine phosphatase type IVA, member 2	PTP4A2	706489
Protein tyrosine phosphatase, mitochondrial 1	PTPMT1	713104
Protein tyrosine phosphatase, non-receptor type 1	PTPN1	702016
Protein tyrosine phosphatase, non-receptor type 12	PTPN12	721538
Protein tyrosine phosphatase, non-receptor type 13 (APO-1/CD95 (Fas)-associated phosphatase)	PTPN13	699866
Protein tyrosine phosphatase, non-receptor type 23	PTPN23	711601
Protein tyrosine phosphatase, receptor type, D	PTPRD	714954
Protein-L-isoaspartate (D-aspartate) O-methyltransferase	PCMT1	695893
Proteolipid protein 2 (colonic epithelium-enriched)	PLP2	712869
Protocadherin alpha 5	PCDHA5	692083
Protoporphyrinogen oxidase	PPOX	719910
Pseudouridylate synthase 3	PUS3	713746
Pterin-4 alpha-carbinolamine dehydratase/dimerization cofactor of hepatocyte nuclear factor 1 alpha	PCBD1	709875

Pumilio RNA binding family member 1	PUM1	704848
Pumilio RNA binding family member 2	PUM2	701782
Purinergic receptor P2Y, G-protein coupled, 11	P2RY11	100533472
Putative homeodomain transcription factor 1	PHTF1	707208
Putative homeodomain transcription factor 2	PHTF2	693552
PWP2 periodic tryptophan protein homolog (yeast)	PWP2	722216
PYM homolog 1, exon junction complex associated factor	PYM1	708148
Pyridine nucleotide-disulphide oxidoreductase domain 2	PYROXD2	707797
Pyrroline-5-carboxylate reductase 1	PYCR1	715182
Pyrroline-5-carboxylate reductase family member 2	PYCR2	699808
Pyruvate dehydrogenase (lipoamide) alpha 1	PDHA1	100423992
Pyruvate dehydrogenase (lipoamide) beta	PDHB	574227
Pyruvate dehydrogenase phosphatase regulatory subunit	PDPR	709861
R3H domain and coiled-coil containing 1 like	R3HCC1L	707600
Rab acceptor 1 (prenylated)	RABAC1	706397
Rab geranylgeranyltransferase, beta subunit	RABGGTB	705421
Rab interacting lysosomal protein-like 2	RILPL2	704853
RAB, member of RAS oncogene family-like 2B	RABL2B	716615
RAB, member of RAS oncogene family-like 3	RABL3	713621
RAB11A, member RAS oncogene family	RAB11A	714144
RAB14, member RAS oncogene family	RAB14	699837
RAB1B, member RAS oncogene family	RAB1B	721852
RAB20, member RAS oncogene family	RAB20	694578
RAB23, member RAS oncogene family	RAB23	712860
RAB25, member RAS oncogene family	RAB25	718131
RAB28, member RAS oncogene family	RAB28	713566
RAB2A, member RAS oncogene family	RAB2A	699383
RAB3 gtpase activating non-catalytic protein subunit 2	RAB3GAP2	706252
RAB30, member RAS oncogene family	RAB30	701550
RAB32, member RAS oncogene family	RAB32	702431
RAB37, member RAS oncogene family	RAB37	698842
RAB3A interacting protein	RAB3IP	717215
RAB4A, member RAS oncogene family	RAB4A	694288
RAB5B, member RAS oncogene family	RAB5B	708347
RAB5C, member RAS oncogene family	RAB5C	709308
RAB6A, member RAS oncogene family	RAB6A	718717
RAB8B, member RAS oncogene family	RAB8B	705597
RAB9A, member RAS oncogene family	RAB9A	720906
Rabphilin 3A-like (without C2 domains)	RPH3AL	106993856
Rac gtpase activating protein 1	RACGAP1	711887
RAD1 checkpoint DNA exonuclease	RAD1	698993
RAD17 checkpoint clamp loader component	RAD17	700116
RAD21 cohesin complex component	RAD21	700633
RAD50 interactor 1	RINT1	698414
RAD51 associated protein 1	RAD51AP1	710918
RAD51 paralog C	RAD51C	714828
RAD52 motif containing 1	RDM1	716624
RAD9 checkpoint clamp component A	RAD9A	712345

RAD9-HUS1-RAD1 interacting nuclear orphan 1	RHNO1	709008
Radial spoke 3 homolog (Chlamydomonas)	RSPH3	704059
Radial spoke head 1 homolog (Chlamydomonas)	RSPH1	714394
Radical S-adenosyl methionine domain containing 1	RSAD1	705626
Radixin	RDX	709018
Raf-1 proto-oncogene, serine/threonine kinase	RAF1	694725
Raftlin family member 2	RFTN2	697562
Raftlin, lipid raft linker 1	RFTN1	695142
Ral GEF with PH domain and SH3 binding motif 1	RALGPS1	708253
Ral gtpase activating protein, alpha subunit 1 (catalytic)	RALGAPA1	695674
Ral gtpase activating protein, beta subunit (non-catalytic)	RALGAPB	705742
Ral guanine nucleotide dissociation stimulator-like 1	RGL1	717554
RALBP1 associated Eps domain containing 2	REPS2	721024
RALY heterogeneous nuclear ribonucleoprotein	RALY	713317
RAN binding protein 1	RANBP1	719448
RAN binding protein 10	RANBP10	700911
RAN binding protein 17	RANBP17	701214
RAN binding protein 2	RANBP2	694823
Ran gtpase activating protein 1	RANGAP1	710698
RAN guanine nucleotide release factor	RANGRF	717206
RAN, member RAS oncogene family	RAN	709200
Ranbp-type and C3HC4-type zinc finger containing 1	RBCK1	714692
Rap guanine nucleotide exchange factor 2	RAPGEF2	704717
RAP1, GTP-GDP dissociation stimulator 1	RAP1GDS1	706303
RAP2A, member of RAS oncogene family	RAP2A	697215
RAR-related orphan receptor B	RORB	703310
Ras and Rab interactor 2	RIN2	702775
Ras association (ralgds/AF-6) and pleckstrin homology domains 1	RAPH1	705065
Ras association (ralgds/AF-6) domain family member 4	RASSF4	706096
Ras homolog family member A	RHOA	706455
Ras homolog family member B	RHOB	702141
Ras homolog family member C	RHOC	706034
Ras homolog family member G	RHOG	718113
Ras homolog family member J	RHOJ	705603
Ras homolog family member U	RHOU	695385
RAS p21 protein activator (gtpase activating protein) 1	RASA1	694085
RAS p21 protein activator 2	RASA2	715074
RAS protein activator like 2	RASAL2	718958
RAS, dexamethasone-induced 1	RASD1	698839
RAS-like family 10 member A	RASL10A	714587
RAS-like family 11 member A	RASL11A	710394
Ras-like without CAAX 1	RIT1	717985
Ras-related C3 botulinum toxin substrate 3 (rho family, small GTP binding protein Rac3)	RAC3	719305
Ras-related GTP binding A	RRAGA	100430224
Ras-related GTP binding C	RRAGC	715549
RB1 inducible coiled-coil 1	RB1CC1	710330
RBPJ interacting and tubulin associated 1	RITA1	712837

Reactive oxygen species modulator 1	ROMO1	711369
Rearranged L-myc fusion	RLF	693503
Receptor (G protein-coupled) activity modifying protein 1	RAMP1	574329
Receptor (G protein-coupled) activity modifying protein 3	RAMP3	697349
Receptor accessory protein 1	REEP1	697390
Receptor accessory protein 4	REEP4	707267
Receptor interacting serine/threonine kinase 4	RIPK4	715077
Receptor tyrosine kinase-like orphan receptor 1	ROR1	700760
Receptor tyrosine kinase-like orphan receptor 2	ROR2	715482
Recq helicase-like	RECQL	705871
Regucalcin	RGN	705733
Regulation of nuclear pre-mrna domain containing 1A	RPRD1A	709217
Regulator of calcineurin 1	RCAN1	697108
Regulator of cell cycle	RGCC	698962
Regulator of chromosome condensation (RCC1) and BTB (POZ) domain containing protein 1	RCBTB1	706627
Regulator of G-protein signaling 10	RGS10	703125
Regulator of G-protein signaling 14	RGS14	699625
Regulator of G-protein signaling 22	RGS22	704685
Regulator of microtubule dynamics 1	RMDN1	694237
Regulatory factor X associated ankyrin containing protein	RFXANK	719706
Related RAS viral (r-ras) oncogene homolog 2	RRAS2	699700
REM2 and RAB-like small gtpase 1	RSG1	697922
Renin	REN	574299
Replication factor C subunit 3	RFC3	714220
Replication factor C subunit 5	RFC5	694166
Replication protein A1	RPA1	721272
Replication protein A2	RPA2	716612
Replication protein A3	RPA3	696248
Replication protein A4	RPA4	699274
Replication termination factor 2 domain containing 1	RTFDC1	697672
Replication timing regulatory factor 1	RIF1	694817
Required for meiotic nuclear division 1 homolog	RMND1	704665
Required for meiotic nuclear division 5 homolog B	RMND5B	701840
REST corepressor 1	RCOR1	694670
Retention in endoplasmic reticulum sorting receptor 1	RER1	694540
Reticulon 4	RTN4	619181
Reticulon 4 interacting protein 1	RTN4IP1	697236
Retinitis pigmentosa 9 (autosomal dominant)	RP9	708632
Retinoblastoma 1	RB1	704871
Retinoblastoma binding protein 4	RBBP4	708710
Retinoblastoma binding protein 6	RBBP6	701569
Retinoblastoma binding protein 7	RBBP7	713843
Retinoblastoma binding protein 8	RBBP8	677718
Retinoic acid induced 1	RAI1	699215
Retinoic acid induced 14	RAI14	698620
Retinoic acid induced 2	RAI2	693329
Retinoic acid receptor responder (tazarotene induced) 2	RARRES2	704993

Retinoic acid receptor, gamma	RARG	699532
Retinol dehydrogenase 5 (11-cis/9-cis)	RDH5	709644
Reversion-inducing-cysteine-rich protein with kazal motifs	RECK	694043
RFT1 homolog	RFT1	694586
Rh family, C glycoprotein	RHCG	664731
Rho family gtpase 3	RND3	694168
Rho gtpase activating protein 10	ARHGAP10	708458
Rho gtpase activating protein 12	ARHGAP12	696402
Rho gtpase activating protein 15	ARHGAP15	705311
Rho gtpase activating protein 18	ARHGAP18	711107
Rho gtpase activating protein 21	ARHGAP21	706428
Rho guanine nucleotide exchange factor (GEF) 3	ARHGEF3	704764
Rho guanine nucleotide exchange factor 1	ARHGEF1	722198
Rho guanine nucleotide exchange factor 10	ARHGEF10	722745
Rho guanine nucleotide exchange factor 17	ARHGEF17	718644
Rho guanine nucleotide exchange factor 5	ARHGEF5	705891
Rho/Rac guanine nucleotide exchange factor 2	ARHGEF2	719369
Rho-associated, coiled-coil containing protein kinase 1	ROCK1	698223
Rhomboid 5 homolog 2 (Drosophila)	RHBDF2	707033
Rhomboid domain containing 1	RHBDD1	707982
Rhomboid domain containing 3	RHBDD3	714479
Rho-related BTB domain containing 1	RHOBTB1	699132
Rho-related BTB domain containing 3	RHOBTB3	702554
Rhotekin	RTKN	708722
Rhox homeobox family, member 1	RHOXF1	695129
Ribonuclease H2 subunit A	RNASEH2A	716701
Ribonuclease H2 subunit B	RNASEH2B	707995
Ribonuclease P/MRP 14kda subunit	RPP14	706788
Ribonuclease P/MRP 21kda subunit	RPP21	713056
Ribonuclease P/MRP 30kda subunit	RPP30	696537
Ribonuclease P/MRP 40kda subunit	RPP40	710505
Ribonuclease, rnase A family, 1 (pancreatic)	RNASE1	704676
Ribonuclease, rnase A family, 4	RNASE4	703903
Ribonuclease, rnase K	RNASEK	100423496
Ribonucleic acid export 1	RAE1	696706
Ribonucleoprotein, PTB-binding 1	RAVER1	715250
Ribonucleotide reductase M1	RRM1	717990
Ribophorin I	RPN1	705437
Ribophorin II	RPN2	708971
Ribosomal protein L10 like	RPL10L	702986
Ribosomal protein l10a	RPL10A	718783
Ribosomal protein L17	RPL17	698967
Ribosomal protein L22	RPL22	703050
Ribosomal protein L23	RPL23	694719
Ribosomal protein l23a	RPL23A	710490
Ribosomal protein L24	RPL24	702381
Ribosomal protein L26	RPL26	717378
Ribosomal protein L26 like 1	RPL26L1	703230

Ribosomal protein L27	RPL27	712352
Ribosomal protein l27a	RPL27A	708863
Ribosomal protein L29	RPL29	698602
Ribosomal protein L3	RPL3	707176
Ribosomal protein L30	RPL30	703120
Ribosomal protein L35	RPL35	693604
Ribosomal protein l35a	RPL35A	714858
Ribosomal protein L4	RPL4	710590
Ribosomal protein L7 like 1	RPL7L1	698786
Ribosomal protein l7a	RPL7A	722215
Ribosomal protein L8	RPL8	708535
Ribosomal protein S10	RPS10	718606
Ribosomal protein S11	RPS11	718844
Ribosomal protein S13	RPS13	697513
Ribosomal protein S14	RPS14	710901
Ribosomal protein S15	RPS15	707241
Ribosomal protein S16	RPS16	697219
Ribosomal protein S17-like	RPS17L	100425104
Ribosomal protein S19 binding protein 1	RPS19BP1	704079
Ribosomal protein S2	RPS2	693615
Ribosomal protein S21	RPS21	699565
Ribosomal protein S27	RPS27	106992520
Ribosomal protein S27 like	RPS27L	705483
Ribosomal protein s27a	RPS27A	718909
Ribosomal protein S28	RPS28	707133
Ribosomal protein S4, X-linked	RPS4X	699397
Ribosomal protein S5	RPS5	711259
Ribosomal protein S6 kinase, 90kda, polypeptide 1	RPS6KA1	714794
Ribosomal protein S6 kinase, 90kda, polypeptide 4	RPS6KA4	717574
Ribosomal protein S7	RPS7	721900
Ribosomal protein S8	RPS8	703957
Ribosomal protein S9	RPS9	694053
Ribosomal protein, large, P0	RPLP0	574363
Ribosomal protein, large, P1	RPLP1	695442
Ribosomal protein, large, P2	RPLP2	700698
Ribosomal RNA adenine dimethylase domain containing 1	RRNAD1	718599
Ribosomal RNA processing 12 homolog	RRP12	705854
Ribosomal RNA processing 8, methyltransferase, homolog (yeast)	RRP8	712011
Ribosomal RNA processing 9, small subunit (SSU) processome component, homolog (yeast)	RRP9	699421
Ribosome production factor 1 homolog	RPF1	710286
Ribosome production factor 2 homolog	RPF2	696378
Ribulose-5-phosphate-3-epimerase	RPE	711322
Ring finger and WD repeat domain 2, E3 ubiquitin protein ligase	RFWD2	708802
Ring finger protein 112	RNF112	703312
Ring finger protein 115	RNF115	697067
Ring finger protein 121	RNF121	718216
Ring finger protein 126	RNF126	702842

Ring finger protein 130	RNF130	715356
Ring finger protein 14	RNF14	705363
Ring finger protein 149	RNF149	710926
Ring finger protein 150	RNF150	702799
Ring finger protein 167	RNF167	710656
Ring finger protein 181	RNF181	695977
Ring finger protein 185	RNF185	718351
Ring finger protein 20	RNF20	713614
Ring finger protein 208	RNF208	705563
Ring finger protein 219	RNF219	697577
Ring finger protein 26	RNF26	704755
Ring finger protein 32	RNF32	716703
Ring finger protein 38	RNF38	693346
Ring finger protein 40, E3 ubiquitin protein ligase	RNF40	713148
Ring finger protein 41, E3 ubiquitin protein ligase	RNF41	711969
Ring finger protein 5, E3 ubiquitin protein ligase	RNF5	717234
Ring finger protein, transmembrane 1	RNFT1	712052
RIO kinase 2	RIOK2	700738
Ripply transcriptional repressor 3	RIPPLY3	100429272
RNA 2',3'-cyclic phosphate and 5'-OH ligase	RTCB	717258
RNA 3'-terminal phosphate cyclase	RTCA	711623
RNA binding motif (RNP1, RRM) protein 3	RBM3	710689
RNA binding motif protein 10	RBM10	711791
RNA binding motif protein 15	RBM15	701414
RNA binding motif protein 17	RBM17	712996
RNA binding motif protein 18	RBM18	698457
RNA binding motif protein 22	RBM22	712713
RNA binding motif protein 23	RBM23	712650
RNA binding motif protein 28	RBM28	698858
RNA binding motif protein 39	RBM39	704198
RNA binding motif protein 41	RBM41	701761
RNA binding motif protein 42	RBM42	709852
RNA binding motif protein 45	RBM45	702714
RNA binding motif protein 5	RBM5	704114
RNA binding motif protein 7	RBM7	695401
RNA binding motif protein, X-linked 2	RBMX2	703472
RNA binding motif, single stranded interacting protein 1	RBMS1	703608
RNA binding motif, single stranded interacting protein 2	RBMS2	713163
RNA binding protein S1, serine-rich domain	RNPS1	695816
RNA binding protein with multiple splicing	RBPM5	694363
RNA binding protein, fox-1 homolog (C. Elegans) 2	RBFOX2	693642
RNA exonuclease 2	REXO2	695292
RNA methyltransferase like 1	RNMTL1	700204
RNA polymerase II associated protein 1	RPAP1	706543
RNA polymerase II associated protein 3	RPAP3	703749
RNA pseudouridylate synthase domain containing 3	RPUSD3	700349
RNA terminal phosphate cyclase-like 1	RCL1	694568
Rotatin	RTTN	703989

Round spermatid basic protein 1-like	RSBN1L	693814
RPTOR independent companion of MTOR, complex 2	RICTOR	694915
RRN3 homolog, RNA polymerase I transcription factor	RRN3	713500
Runt-related transcription factor 1; translocated to, 1 (cyclin D-related)	RUNX1T1	696934
Ruvb-like AAA ATPase 1	RUVBL1	706044
Ruvb-like AAA ATPase 2	RUVBL2	100428792
RWD domain containing 2A	RWDD2A	694598
RWD domain containing 3	RWDD3	709817
RWD domain containing 4	RWDD4	708882
S100 calcium binding protein A10	S100A10	574374
S100 calcium binding protein A4	S100A4	715115
S100 calcium binding protein A6	S100A6	715169
SAC1 suppressor of actin mutations 1-like (yeast)	SACM1L	714107
SAC3 domain containing 1	SAC3D1	717043
SAGA complex associated factor 29	SGF29	709124
SAMM50 sorting and assembly machinery component	SAMM50	715675
SAP30 binding protein	SAP30BP	703077
SAP30-like	SAP30L	714400
Sarcoglycan epsilon	SGCE	700104
Sarcoglycan zeta	SGCZ	100430472
Sarcolemma associated protein	SLMAP	703086
Sarcospan	SSPN	708482
Scaffold attachment factor B	SAFB	696356
Scaffold attachment factor B2	SAFB2	696236
SCAN domain containing 1	SCAND1	711046
Scavenger receptor class F member 2	SCARF2	695466
Schlafen like 1	SLFNL1	695605
SCY1-like, kinase-like 2	SCYL2	695284
SCY1-like, kinase-like 3	SCYL3	701768
SEC11 homolog A, signal peptidase complex subunit	SEC11A	695951
SEC13 homolog, nuclear pore and COPII coat complex component	SEC13	697339
SEC14 and spectrin domain containing 1	SESTD1	703755
SEC16 homolog B, endoplasmic reticulum export factor	SEC16B	709635
SEC22 homolog A, vesicle trafficking protein	SEC22A	715277
SEC22 homolog C, vesicle trafficking protein	SEC22C	716351
Sec23 homolog A, COPII coat complex component	SEC23A	698500
Sec23 homolog B, COPII coat complex component	SEC23B	698440
SEC23 interacting protein	SEC23IP	704155
SEC24 homolog A, COPII coat complex component	SEC24A	711109
SEC24 homolog C, COPII coat complex component	SEC24C	714688
SEC24 homolog D, COPII coat complex component	SEC24D	707521
SEC31 homolog A, COPII coat complex component	SEC31A	693687
Sec61 translocon alpha 1 subunit	SEC61A1	709787
Sec61 translocon alpha 2 subunit	SEC61A2	100427728
Sec61 translocon beta subunit	SEC61B	717815
Sec61 translocon gamma subunit	SEC61G	716898
Secernin 2	SCRN2	694571
SECIS binding protein 2	SECISBP2	697442

Secreted frizzled-related protein 1	SFRP1	702876
Secreted frizzled-related protein 4	SFRP4	574393
Secreted frizzled-related protein 5	SFRP5	707738
Secretion associated, Ras related gtpase 1A	SAR1A	711277
Secretogranin V	SCG5	694088
Secretory carrier membrane protein 2	SCAMP2	709720
Sedoheptulokinase	SHPK	721465
Sel-1 suppressor of lin-12-like 3 (C. Elegans)	SEL1L3	695033
Selenophosphate synthetase 1	SEPHS1	696038
Selenophosphate synthetase 2	SEPHS2	710575
Selenoprotein K	SELK	693421
Selenoprotein M	SELM	718290
Selenoprotein P, plasma, 1	SEPP1	698917
Selenoprotein W, 1	SEPW1	718370
Sema domain, immunoglobulin domain (Ig), short basic domain, secreted, (semaphorin) 3F	SEMA3F	703995
Sema domain, immunoglobulin domain (Ig), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 4D	SEMA4D	697697
Sema domain, transmembrane domain (TM), and cytoplasmic domain, (semaphorin) 6C	SEMA6C	709464
Sema domain, transmembrane domain (TM), and cytoplasmic domain, (semaphorin) 6D	SEMA6D	713885
Serglycin	SRGN	712299
Serine carboxypeptidase 1	SCPEP1	708197
Serine dehydratase-like	SDSL	714721
Serine incorporator 1	SERINC1	713999
Serine palmitoyltransferase small subunit A	SPTSSA	717580
Serine/arginine repetitive matrix 1	SRRM1	712258
Serine/arginine-rich splicing factor 1	SRSF1	713958
Serine/arginine-rich splicing factor 11	SRSF11	702698
Serine/arginine-rich splicing factor 12	SRSF12	700497
Serine/arginine-rich splicing factor 3	SRSF3	719123
Serine/arginine-rich splicing factor 4	SRSF4	717401
Serine/arginine-rich splicing factor 7	SRSF7	713388
Serine/arginine-rich splicing factor 8	SRSF8	699079
Serine/threonine kinase 11 interacting protein	STK11IP	704531
Serine/threonine kinase 24	STK24	697841
Serine/threonine kinase 25	STK25	701297
Serine/threonine kinase 3	STK3	707425
Serine/threonine kinase 31	STK31	703886
Serine/threonine kinase 35	STK35	716423
Serine/threonine kinase 36	STK36	699940
Serologically defined colon cancer antigen 3	SDCCAG3	721750
Serologically defined colon cancer antigen 8	SDCCAG8	705545
Serpin peptidase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin), member 3	SERPINA3	574106
Serpin peptidase inhibitor, clade B (ovalbumin), member 10	SERPINB10	100430160
Serpin peptidase inhibitor, clade B (ovalbumin), member 6	SERPINB6	716411

Serpin peptidase inhibitor, clade B (ovalbumin), member 7	SERPINB7	701671
Serpin peptidase inhibitor, clade C (antithrombin), member 1	SERPINC1	708854
Serpin peptidase inhibitor, clade E (nexin, plasminogen activator inhibitor type 1), member 2	SERPINE2	707121
Serpin peptidase inhibitor, clade F (alpha-2 antiplasmin, pigment epithelium derived factor), member 2	SERPINF2	100427696
Serpin peptidase inhibitor, clade G (C1 inhibitor), member 1	SERPING1	703928
Serpin peptidase inhibitor, clade I (neuroserpin), member 1	SERPINI1	699483
Serrate, RNA effector molecule	SRRT	713235
SERTA domain containing 1	SERTAD1	701562
Serum amyloid A like 1	SAAL1	695747
Serum deprivation response	SDPR	694299
Sestrin 2	SESN2	716904
Sestrin 3	SESN3	699329
SET and MYND domain containing 2	SMYD2	709375
SET and MYND domain containing 3	SMYD3	703402
SET domain containing (lysine methyltransferase) 7	SETD7	700426
SET domain containing 2	SETD2	711825
SET domain containing 3	SETD3	705369
SET domain containing 4	SETD4	696003
SET domain containing 5	SETD5	704174
SET domain containing 9	SETD9	708019
SET domain, bifurcated 1	SETDB1	716141
Sex comb on midleg homolog 1 (Drosophila)	SCMH1	695722
Sex comb on midleg-like 1 (Drosophila)	SCML1	714239
SFI1 centrin binding protein	SFI1	716833
SFT2 domain containing 3	SFT2D3	699830
SGT1 homolog, MIS12 kinetochore complex assembly cochaperone	SUGT1	694046
SH2 domain containing 2A	SH2D2A	718686
SH2 domain containing 3C	SH2D3C	699706
SH2B adaptor protein 2	SH2B2	714861
SH3 domain containing ring finger 1	SH3RF1	694082
SH3-domain binding protein 1	SH3BP1	700647
SH3-domain binding protein 4	SH3BP4	693393
SH3-domain GRB2-like endophilin B1	SH3GLB1	712393
SH3-domain GRB2-like endophilin B2	SH3GLB2	716994
SHANK associated RH domain interactor	SHARPIN	713534
SHC (Src homology 2 domain containing) transforming protein 1	SHC1	718982
SHC SH2-domain binding protein 1	SHCBP1	716009
SHOC2 leucine-rich repeat scaffold protein	SHOC2	695572
Short chain dehydrogenase/reductase family 42E, member 1	SDR42E1	714229
Short coiled-coil protein	SCOC	698242
Shugoshin-like 1 (S. Pombe)	SGOL1	698231
Siah E3 ubiquitin protein ligase 1	SIAH1	716629
Siah E3 ubiquitin protein ligase 2	SIAH2	710222
SID1 transmembrane family member 1	SIDT1	709487
Sideroflexin 2	SFXN2	713841
Sideroflexin 4	SFXN4	702765

Sigma non-opioid intracellular receptor 1	SIGMAR1	700469
Signal peptidase complex subunit 1	SPCS1	696426
Signal peptidase complex subunit 2	SPCS2	694179
Signal peptide peptidase like 3	SPPL3	700898
Signal peptide, CUB domain, EGF-like 2	SCUBE2	708152
Signal recognition particle 54kda	SRP54	694360
Signal recognition particle 68kda	SRP68	705568
Signal sequence receptor, alpha	SSR1	693818
Signal sequence receptor, beta (translocon-associated protein beta)	SSR2	719383
Signal sequence receptor, delta	SSR4	697266
Signal transducer and activator of transcription 1	STAT1	693650
Sin3A associated protein 25kda	SAP25	106997576
Sin3A associated protein 30kda	SAP30	696519
Single stranded DNA binding protein 3	SSBP3	715114
Single stranded DNA binding protein 4	SSBP4	719496
Single-pass membrane protein with coiled-coil domains 4	SMCO4	695982
Single-stranded DNA binding protein 1, mitochondrial	SSBP1	694459
Single-strand-selective monofunctional uracil-DNA glycosylase 1	SMUG1	704743
Sirtuin 4	SIRT4	720498
Sirtuin 6	SIRT6	714545
Sirtuin 7	SIRT7	715069
SIVA1, apoptosis-inducing factor	SIVA1	706688
SIX homeobox 5	SIX5	715373
Sjogren syndrome nuclear autoantigen 1	SSNA1	706507
SKI-like proto-oncogene	SKIL	696680
Slingshot protein phosphatase 2	SSH2	711898
SLIT and NTRK like family member 1	SLITRK1	699217
SLU7 homolog, splicing factor	SLU7	696023
SLX1 homolog A, structure-specific endonuclease subunit	SLX1A	709225
SMAD family member 1	SMAD1	574340
SMAD family member 4	SMAD4	701803
Smad nuclear interacting protein 1	SNIP1	713733
Small arfgap2	SMAP2	694502
Small cell adhesion glycoprotein	SMAGP	694774
Small integral membrane protein 11A	SMIM11A	702792
Small integral membrane protein 13	SMIM13	703387
Small integral membrane protein 15	SMIM15	693623
Small integral membrane protein 19	SMIM19	705371
Small nuclear ribonucleoprotein D1 polypeptide	SNRPD1	698965
Small nuclear ribonucleoprotein D2 polypeptide	SNRPD2	715183
Small nuclear ribonucleoprotein polypeptide A	SNRPA	702730
Small nuclear ribonucleoprotein polypeptide A'	SNRPA1	694876
Small nuclear ribonucleoprotein polypeptide B	SNRPB2	695387
Small nuclear ribonucleoprotein polypeptide E	SNRPE	701418
Small nuclear ribonucleoprotein polypeptide G	SNRPG	702586
Small nuclear ribonucleoprotein polypeptides B and B1	SNRPB	716578
Small nuclear ribonucleoprotein, U1 70kda subunit	SNRNP70	719090
Small nuclear ribonucleoprotein, U11/U12 35kda subunit	SNRNP35	702933

Small nuclear ribonucleoprotein, U4/U6.U5 27kda subunit	SNRNP27	708670
Small nuclear ribonucleoprotein, U5 40kda subunit	SNRNP40	705059
Small nuclear RNA activating complex polypeptide 2	SNAPC2	706176
Small nuclear RNA activating complex polypeptide 5	SNAPC5	710777
Small ubiquitin-like modifier 1	SUMO1	703644
Small ubiquitin-like modifier 2	SUMO2	705512
Small ubiquitin-like modifier 3	SUMO3	710764
Small vasohibin binding protein	SVBP	698308
SMG5 nonsense mediated mrna decay factor	SMG5	719446
SMG7 nonsense mediated mrna decay factor	SMG7	717603
SMG8 nonsense mediated mrna decay factor	SMG8	711172
SMG9 nonsense mediated mrna decay factor	SMG9	710940
Smoothelin	SMTN	716424
Smu-1 suppressor of mec-8 and unc-52 homolog (C. Elegans)	SMU1	703656
SMYD family member 5	SMYD5	705926
SNAP-associated protein	SNAPIN	715546
SNF related kinase	SNRK	715803
SNRPN upstream reading frame	SNURF	711028
Sodium channel and clathrin linker 1	SCLT1	693822
Sodium channel modifier 1	SCNM1	709922
Sodium channel, non voltage gated 1 beta subunit	SCNN1B	700093
Solute carrier family 10 member 3	SLC10A3	700759
Solute carrier family 12 (potassium/chloride transporter), member 6	SLC12A6	697536
Solute carrier family 12 (sodium/potassium/chloride transporter), member 2	SLC12A2	704672
Solute carrier family 15 (oligopeptide transporter), member 2	SLC15A2	574375
Solute carrier family 15 (oligopeptide transporter), member 3	SLC15A3	696060
Solute carrier family 16 member 11	SLC16A11	721775
Solute carrier family 16, member 2 (thyroid hormone transporter)	SLC16A2	703252
Solute carrier family 17 (vesicular glutamate transporter), member 8	SLC17A8	695508
Solute carrier family 18, subfamily B, member 1	SLC18B1	708518
Solute carrier family 20 (phosphate transporter), member 1	SLC20A1	699462
Solute carrier family 22 (organic cation/carnitine transporter), member 5	SLC22A5	707590
Solute carrier family 22 member 14	SLC22A14	696120
Solute carrier family 22 member 15	SLC22A15	710102
Solute carrier family 22 member 17	SLC22A17	713765
Solute carrier family 22 member 18	SLC22A18	721230
Solute carrier family 23 (ascorbic acid transporter), member 1	SLC23A1	693491
Solute carrier family 25 (aspartate/glutamate carrier), member 12	SLC25A12	695173
Solute carrier family 25 (carnitine/acylcarnitine translocase), member 20	SLC25A20	709029
Solute carrier family 25 (mitochondrial carrier, brain), member 14	SLC25A14	703255
Solute carrier family 25 (mitochondrial carrier; adenine nucleotide translocator), member 5	SLC25A5	693502
Solute carrier family 25 (mitochondrial carrier; adenine nucleotide translocator), member 6	SLC25A6	719811
Solute carrier family 25 (mitochondrial carrier; citrate transporter), member 1	SLC25A1	719075
Solute carrier family 25 (mitochondrial carrier; oxoglutarate carrier),	SLC25A11	710569

member 11		
Solute carrier family 25 (mitochondrial carrier; phosphate carrier), member 24	SLC25A24	694803
Solute carrier family 25 (mitochondrial carrier; phosphate carrier), member 25	SLC25A25	698216
Solute carrier family 25 (mitochondrial carrier; phosphate carrier), member 3	SLC25A3	693780
Solute carrier family 25 (mitochondrial iron transporter), member 28	SLC25A28	710002
Solute carrier family 25 (mitochondrial iron transporter), member 37	SLC25A37	710518
Solute carrier family 25 (pyrimidine nucleotide carrier), member 33	SLC25A33	722285
Solute carrier family 25 (S-adenosylmethionine carrier), member 26	SLC25A26	697960
Solute carrier family 25 member 30	SLC25A30	702043
Solute carrier family 25 member 46	SLC25A46	705968
Solute carrier family 25, member 44	SLC25A44	719424
Solute carrier family 26 (anion exchanger), member 8	SLC26A8	719049
Solute carrier family 27 (fatty acid transporter), member 4	SLC27A4	722620
Solute carrier family 30 (zinc transporter), member 5	SLC30A5	699371
Solute carrier family 35 (adenosine 3'-phospho 5'-phosphosulfate transporter), member B3	SLC35B3	698416
Solute carrier family 35 (UDP-galactose transporter), member A2	SLC35A2	711587
Solute carrier family 35 (UDP-glca/UDP-galnac transporter), member D1	SLC35D1	700175
Solute carrier family 35 member A5	SLC35A5	708401
Solute carrier family 35 member B1	SLC35B1	699953
Solute carrier family 35 member E1	SLC35E1	719559
Solute carrier family 37 (glucose-6-phosphate transporter), member 4	SLC37A4	702269
Solute carrier family 38 member 1	SLC38A1	702135
Solute carrier family 38 member 11	SLC38A11	703062
Solute carrier family 38 member 6	SLC38A6	704017
Solute carrier family 38 member 9	SLC38A9	706752
Solute carrier family 39 (zinc transporter), member 10	SLC39A10	696669
Solute carrier family 39 (zinc transporter), member 13	SLC39A13	713420
Solute carrier family 39 (zinc transporter), member 2	SLC39A2	705112
Solute carrier family 39 (zinc transporter), member 4	SLC39A4	708333
Solute carrier family 39 (zinc transporter), member 8	SLC39A8	710142
Solute carrier family 4 (anion exchanger), member 1, adaptor protein	SLC4A1AP	701783
Solute carrier family 4 (anion exchanger), member 2	SLC4A2	713966
Solute carrier family 4, sodium bicarbonate cotransporter, member 7	SLC4A7	701925
Solute carrier family 4, sodium borate transporter, member 11	SLC4A11	718393
Solute carrier family 41 member 3	SLC41A3	716921
Solute carrier family 44 (choline transporter), member 2	SLC44A2	715866
Solute carrier family 44 member 3	SLC44A3	714768
Solute carrier family 44 member 4	SLC44A4	715779
Solute carrier family 45 member 3	SLC45A3	697420
Solute carrier family 5 (sodium/inositol cotransporter), member 11	SLC5A11	701816
Solute carrier family 5 (sodium/multivitamin and iodide cotransporter), member 6	SLC5A6	699074
Solute carrier family 50 (sugar efflux transporter), member 1	SLC50A1	717424
Solute carrier family 51 alpha subunit	SLC51A	711340

Solute carrier family 52 (riboflavin transporter), member 1	SLC52A1	711253
Solute carrier family 6 (neurotransmitter transporter), member 8	SLC6A8	698307
Solute carrier family 7 (amino acid transporter light chain, bo,+ system), member 9	SLC7A9	703081
Solute carrier family 7 (anionic amino acid transporter), member 13	SLC7A13	693964
Solute carrier family 9, subfamily A (NHE3, cation proton antiporter 3), member 3 regulator 1	SLC9A3R1	703933
Solute carrier family 9, subfamily A (NHE3, cation proton antiporter 3), member 3 regulator 2	SLC9A3R2	694658
Solute carrier family 9, subfamily A (NHE6, cation proton antiporter 6), member 6	SLC9A6	710429
Solute carrier family 9, subfamily A (NHE9, cation proton antiporter 9), member 9	SLC9A9	713935
Solute carrier organic anion transporter family member 2B1	SLCO2B1	694829
SON DNA binding protein	SON	704712
Sorting nexin 1	SNX1	706544
Sorting nexin 11	SNX11	696913
Sorting nexin 12	SNX12	696408
Sorting nexin 13	SNX13	714019
Sorting nexin 17	SNX17	701614
Sorting nexin 2	SNX2	700507
Sorting nexin 24	SNX24	700621
Sorting nexin 32	SNX32	721888
Sorting nexin 33	SNX33	706309
Sorting nexin 4	SNX4	716049
Sorting nexin 8	SNX8	698347
SOS Ras/Rho guanine nucleotide exchange factor 2	SOS2	705601
SP110 nuclear body protein	SP110	714244
Sp2 transcription factor	SP2	694834
Sp3 transcription factor	SP3	699901
Sp5 transcription factor	SP5	693989
SPARC like 1	SPARCL1	701468
SPARC related modular calcium binding 1	SMOC1	712994
Spastic paraplegia 11 (autosomal recessive)	SPG11	712221
Spastic paraplegia 21 (autosomal recessive, Mast syndrome)	SPG21	712815
Speckle type POZ protein like	SPOPL	704203
Spectrin, beta, non-erythrocytic 1	SPTBN1	716794
Spectrin, beta, non-erythrocytic 2	SPTBN2	713419
Spen family transcriptional repressor	SPEN	696205
Sperm antigen with calponin homology and coiled-coil domains 1-like	SPECC1L	707641
Sperm associated antigen 1	SPAG1	705012
Sperm associated antigen 5	SPAG5	709400
Sperm associated antigen 6	SPAG6	704807
Sperm associated antigen 9	SPAG9	707613
Sperm flagellar 1	SPEF1	717547
Spermatid perinuclear RNA binding protein	STRBP	695402
Spermatogenesis associated 17	SPATA17	707859
Spermatogenesis associated 2	SPATA2	702817

Spermatogenesis associated 25	SPATA25	709097
Spermatogenesis associated 2-like	SPATA2L	699974
Spermatogenesis associated 5-like 1	SPATA5L1	713376
Spermatogenesis associated 7	SPATA7	693836
Spermatogenesis associated, serine rich 2 like	SPATS2L	699458
Spermidine synthase	SRM	714028
Spermidine/spermine N1-acetyltransferase 1	SAT1	697884
Spermidine/spermine N1-acetyltransferase family member 2	SAT2	716044
Spermine synthase	SMS	698179
S-phase kinase-associated protein 1	SKP1	100423632
S-phase kinase-associated protein 2, E3 ubiquitin protein ligase	SKP2	700617
Sphingomyelin phosphodiesterase 2	SMPD2	698865
Sphingomyelin phosphodiesterase acid-like 3A	SMPDL3A	713696
Sphingosine-1-phosphate receptor 4	S1PR4	712637
Spindle and kinetochore associated complex subunit 2	SKA2	711092
Spindle and kinetochore associated complex subunit 3	SKA3	702839
Spinster homolog 1 (Drosophila)	SPNS1	704769
Spla/ryanodine receptor domain and SOCS box containing 3	SPSB3	722489
Spla/ryanodine receptor domain and SOCS box containing 4	SPSB4	715278
Spleen tyrosine kinase	SYK	704102
Splicing factor 3a subunit 2	SF3A2	721469
Splicing factor 3b subunit 5	SF3B5	699863
Splicing factor 3b subunit 6	SF3B6	704090
Splicing factor 3b, subunit 1, 155kda	SF3B1	697773
Splicing factor 3b, subunit 4, 49kda	SF3B4	705655
Splicing factor, suppressor of white-apricot family	SFSWAP	709551
Split hand/foot malformation (ectrodactyly) type 1	SHFM1	698349
Spondin 1, extracellular matrix protein	SPON1	699833
Spondin 2, extracellular matrix protein	SPON2	702450
Sprouty RTK signaling antagonist 1	SPRY1	708752
SPRY domain containing 4	SPRYD4	713037
SPT16 homolog, facilitates chromatin remodeling subunit	SUPT16H	708066
SPT3 homolog, SAGA and STAGA complex component	SUPT3H	703447
SPT4 homolog, DSIF elongation factor subunit	SUPT4H1	710214
Squamous cell carcinoma antigen recognized by T-cells 3	SART3	705552
Src-like-adaptor	SLA	697377
Src-related kinase lacking C-terminal regulatory tyrosine and N-terminal myristylation sites	SRMS	719587
SRSF protein kinase 1	SRPK1	719039
SRSF protein kinase 2	SRPK2	697351
SRSF protein kinase 3	SRPK3	100429808
SRY-box 13	SOX13	700802
SRY-box 17	SOX17	694097
SSU72 homolog, RNA polymerase II CTD phosphatase	SSU72	702348
ST3 beta-galactoside alpha-2,3-sialyltransferase 1	ST3GAL1	698004
ST3 beta-galactoside alpha-2,3-sialyltransferase 4	ST3GAL4	717792
ST3 beta-galactoside alpha-2,3-sialyltransferase 5	ST3GAL5	696842
ST6 (alpha-N-acetyl-neuraminy-2,3-beta-galactosyl-1,3)-	ST6GALNAC1	707339

N-acetylgalactosaminide alpha-2,6-sialyltransferase 1		
STAM binding protein	STAMPB	714562
STAM binding protein like 1	STAMBPL1	694629
Staphylococcal nuclease and tudor domain containing 1	SND1	699542
Star related lipid transfer domain containing 13	STARD13	714104
Star related lipid transfer domain containing 3	STARD3	697212
Star related lipid transfer domain containing 5	STARD5	713308
STARD3 N-terminal like	STARD3NL	705212
Stathmin 1	STMN1	719733
Stathmin 3	STMN3	719538
Stathmin 4	STMN4	712651
Staufen double-stranded RNA binding protein 1	STAU1	704197
STE20-related kinase adaptor alpha	STRADA	717927
STE20-related kinase adaptor beta	STRADB	641449
Stereocilin	STRC	677720
Steroid receptor RNA activator 1	SRA1	698169
STIP1 homology and U-box containing protein 1, E3 ubiquitin protein ligase	STUB1	697105
Stomatin like 1	STOML1	700510
Stomatin like 2	STOML2	698458
Storkhead box 2	STOX2	693692
Strawberry notch homolog 2 (Drosophila)	SBNO2	721186
Stress induced phosphoprotein 1	STIP1	717926
Striatin	STRN	708491
Striatin interacting protein 1	STRIP1	700799
Stromal cell derived factor 4	SDF4	699804
Stromal cell-derived factor 2	SDF2	716189
Stromal interaction molecule 1	STIM1	717963
Structural maintenance of chromosomes 2	SMC2	713359
Structural maintenance of chromosomes 4	SMC4	702615
Structure specific recognition protein 1	SSRP1	706614
STT3A, subunit of the oligosaccharyltransferase complex (catalytic)	STT3A	717056
STT3B, subunit of the oligosaccharyltransferase complex (catalytic)	STT3B	703434
SUB1 homolog, transcriptional regulator	SUB1	701045
Succinate dehydrogenase complex assembly factor 2	SDHAF2	693401
Succinate dehydrogenase complex subunit A, flavoprotein (Fp)	SDHA	708018
Succinate dehydrogenase complex subunit B, iron sulfur (Ip)	SDHB	699810
Succinate dehydrogenase complex, subunit D, integral membrane protein	SDHD	711326
Succinate-coa ligase, GDP-forming, beta subunit	SUCLG2	697454
Sulfatase 2	SULF2	715937
Sulfiredoxin 1	SRXN1	714997
SUMO1/sentrin specific peptidase 5	SEN5	710223
SUMO1/sentrin/SMT3 specific peptidase 3	SEN3	715884
SUMO-interacting motifs containing 1	SIMC1	701880
SUN domain containing ossification factor	SUCO	705776
Superkiller viralicidic activity 2-like 2 (S. Cerevisiae)	SKIV2L2	706419
Superoxide dismutase 1, soluble	SOD1	574096

Supervillin	SVIL	695267
Suppression of tumorigenicity 13 (colon carcinoma) (Hsp70 interacting protein)	ST13	705664
Suppression of tumorigenicity 5	ST5	705444
Suppression of tumorigenicity 7 like	ST7L	705541
Suppressor of cytokine signaling 1	SOCS1	711180
Suppressor of fused homolog (Drosophila)	SUFU	713576
Suppressor of IKBKE 1	SIKE1	708999
Suppressor of variegation 3-9 homolog 1	SUV39H1	711040
Surfeit 2	SURF2	100430368
Surfeit 4	SURF4	100429960
SURP and G-patch domain containing 1	SUGP1	719772
SURP and G-patch domain containing 2	SUGP2	719666
Survival motor neuron domain containing 1	SMNDC1	694761
Survival of motor neuron 1, telomeric	SMN1	677703
Sushi domain containing 1	SUSD1	707656
Sushi domain containing 4	SUSD4	703741
Sushi-repeat containing protein, X-linked	SRPX	697145
SUV3-like helicase	SUPV3L1	712081
SWAP switching B-cell complex 70kda subunit	SWAP70	703651
SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 2	SMARCA2	696973
SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 5	SMARCA5	700614
SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a-like 1	SMARCAL1	695741
SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily b, member 1	SMARCB1	699190
SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily d, member 3	SMARCD3	715080
SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily e, member 1	SMARCE1	701310
SWI/SNF-related, matrix-associated actin-dependent regulator of chromatin, subfamily a, containing DEAD/H box 1	SMARCAD1	708691
SWIM-type zinc finger 7 associated protein 1	SWSAP1	716529
SWT1, RNA endoribonuclease homolog	SWT1	714083
SYF2 pre-mrna-splicing factor	SYF2	719564
Symplekin	SYMPK	722436
Synaptogyrin 1	SYNGR1	100427480
Synaptogyrin 4	SYNGR4	717913
Synaptophysin-like 1	SYPL1	698350
Synaptosome associated protein 47kda	SNAP47	696700
Synaptotagmin 6	SYT6	708175
Synaptotagmin binding, cytoplasmic RNA interacting protein	SYNCRIP	696756
Synaptotagmin like 1	SYTL1	715833
Synaptotagmin like 2	SYTL2	703187
Synaptotagmin like 3	SYTL3	699497
Syndecan 1	SDC1	701544

Syndecan binding protein	SDCBP	698381
Synergisin, gamma	SYNRG	717750
Synovial sarcoma translocation gene on chromosome 18-like 2	SS18L2	716387
Syntaxin 12	STX12	716455
Syntaxin 18	STX18	712216
Syntaxin 1B	STX1B	714251
Syntaxin 5	STX5	718435
Syntaxin 8	STX8	717678
Syntaxin binding protein 6 (amisyn)	STXBP6	715357
Syntrophin, beta 2 (dystrophin-associated protein A1, 59kda, basic component 2)	SNTB2	704333
Syntrophin, gamma 1	SNTG1	709244
Syntrophin, gamma 2	SNTG2	706376
Tafazzin	TAZ	574297
TAM41, mitochondrial translocator assembly and maintenance protein, homolog (S. Cerevisiae)	C3orf31	695998
TANK-binding kinase 1	TBK1	717427
Tankyrase, TRF1-interacting ankyrin-related ADP-ribose polymerase 2	TNKS2	698050
TAO kinase 2	TAOK2	707777
TAR (HIV-1) RNA binding protein 1	TARBP1	712397
TAR (HIV-1) RNA binding protein 2	TARBP2	703294
Target of EGR1, member 1 (nuclear)	TOE1	705770
TATA-box binding protein associated factor 1	TAF1	698800
TATA-box binding protein associated factor 10	TAF10	710022
TATA-box binding protein associated factor 11	TAF11	718732
TATA-box binding protein associated factor 12	TAF12	717135
TATA-box binding protein associated factor 2	TAF2	702411
TATA-box binding protein associated factor 5	TAF5	714558
TATA-box binding protein associated factor 5 like	TAF5L	693770
TATA-box binding protein associated factor 6 like	TAF6L	722233
TATA-box binding protein associated factor 7	TAF7	574347
TATA-box binding protein associated factor 9	TAF9	700239
TATA-box binding protein associated factor, RNA polymerase I, D	TAF1D	696602
Tatd dnase domain containing 1	TATDN1	706095
Tax1 (human T-cell leukemia virus type I) binding protein 1	TAX1BP1	698103
Tax1 (human T-cell leukemia virus type I) binding protein 3	TAX1BP3	706829
TBC1 domain family member 25	TBC1D25	710596
TBC1 domain family member 4	TBC1D4	696915
TBC1 domain family member 9	TBC1D9	702230
T-box 2	TBX2	716277
T-box 21	TBX21	694044
T-box 3	TBX3	713740
TCDD-inducible poly(ADP-ribose) polymerase	TIPARP	706180
T-cell leukemia/lymphoma 1B	TCL1B	703241
TCF3 (E2A) fusion partner (in childhood Leukemia)	TFPT	720296
Tctex1 domain containing 2	TCTEX1D2	711098
TEA domain family member 4	TEAD4	721772
Teashirt zinc finger homeobox 1	TSHZ1	703018

Tectonic family member 3	TCTN3	703844
Tektin 1	TEKT1	713555
Tektin 3	TEKT3	693793
TELO2 interacting protein 1	TTI1	699930
TELO2 interacting protein 2	TTI2	696776
Telomeric repeat binding factor 2, interacting protein	TERF2IP	712149
Tensin 2	TNS2	700813
TERF1 (TRF1)-interacting nuclear factor 2	TINF2	715812
Testin LIM domain protein	TES	706879
Testis expressed 10	TEX10	714536
Testis expressed 26	TEX26	713363
Testis expressed 261	TEX261	703863
Testis expressed 264	TEX264	700350
Testis expressed 30	TEX30	701917
Testis-specific kinase 1	TESK1	697206
Testis-specific kinase 2	TESK2	705907
Tetraspanin 15	TSPAN15	711675
Tetraspanin 3	TSPAN3	708428
Tetraspanin 5	TSPAN5	706537
Tetraspanin 7	TSPAN7	698011
Tetraspanin 8	TSPAN8	718622
Tetratricopeptide repeat domain 1	TTC1	695225
Tetratricopeptide repeat domain 13	TTC13	714027
Tetratricopeptide repeat domain 14	TTC14	710895
Tetratricopeptide repeat domain 16	TTC16	706784
Tetratricopeptide repeat domain 21A	TTC21A	694904
Tetratricopeptide repeat domain 23	TTC23	708530
Tetratricopeptide repeat domain 26	TTC26	715688
Tetratricopeptide repeat domain 31	TTC31	708810
Tetratricopeptide repeat domain 32	TTC32	700947
Tetratricopeptide repeat domain 39C	TTC39C	701560
Tetratricopeptide repeat domain 7A	TTC7A	715122
Tetratricopeptide repeat domain 7B	TTC7B	696029
Tetratricopeptide repeat domain 8	TTC8	694362
Tetratricopeptide repeat domain 9C	TTC9C	718583
Tetratricopeptide repeat, ankyrin repeat and coiled-coil containing 1	TANC1	699196
TGF-beta activated kinase 1/MAP3K7 binding protein 1	TAB1	703409
TGF-beta activated kinase 1/MAP3K7 binding protein 2	TAB2	696875
THAP domain containing 10	THAP10	696770
THAP domain containing 11	THAP11	700354
THAP domain containing 4	THAP4	701543
THAP domain containing 6	THAP6	701834
THAP domain containing 7	THAP7	696208
Thiamine triphosphatase	THTPA	714403
Thiopurine S-methyltransferase	TPMT	704564
Thioredoxin	TXN	712587
Thioredoxin domain containing 11	TXNDC11	711826
Thioredoxin domain containing 12 (endoplasmic reticulum)	TXNDC12	712891

Thioredoxin domain containing 9	TXNDC9	709303
Thioredoxin like 1	TXNL1	695194
Thioredoxin like 4A	TXNL4A	698969
Thioredoxin reductase 1	TXNRD1	701062
Thioredoxin reductase 2	TXNRD2	712475
Thioredoxin-related transmembrane protein 1	TMX1	707057
Thiosulfate sulfurtransferase (rhodanese)	TST	698021
THO complex 1	THOC1	697954
THO complex 3	THOC3	695561
THO complex 6	THOC6	700217
Thrombospondin 3	THBS3	717572
THUMP domain containing 2	THUMPD2	712045
Thymocyte nuclear protein 1	THYN1	700413
Thymocyte selection associated high mobility group box	TOX	698759
Thymopoietin	TMPO	693387
Thymosin beta 10	TMSB10	694305
Thymosin beta 4, X-linked	TMSB4X	710959
Thyroid adenoma associated	THADA	716361
Thyroid hormone receptor associated protein 3	THRAP3	713033
Thyroid hormone receptor interactor 11	TRIP11	697489
Thyroid hormone receptor interactor 12	TRIP12	710560
Thyroid hormone receptor interactor 13	TRIP13	709328
Thyroid hormone receptor interactor 4	TRIP4	707263
TIA1 cytotoxic granule-associated RNA binding protein	TIA1	702366
Tigger transposable element derived 2	TIGD2	100427992
TIMELESS interacting protein	TIPIN	710328
TIMP metalloproteinase inhibitor 1	TIMP1	574348
Tissue specific transplantation antigen P35B	TSTA3	698005
Titin-cap	TCAP	697327
TLC domain containing 1	TLCD1	710391
TM2 domain containing 2	TM2D2	701007
TMEM9 domain family member B	TMEM9B	708447
TNF receptor associated factor 2	TRAF2	708391
TNF receptor associated factor 6	TRAF6	716907
TNF receptor associated factor 7	TRAF7	695415
TNF receptor-associated protein 1	TRAP1	706234
TNFRSF1A-associated via death domain	TRADD	698160
Tocopherol (alpha) transfer protein-like	TTPAL	712620
Toll-like receptor 9	TLR9	574395
Topoisomerase (DNA) I	TOP1	697300
Topoisomerase (DNA) II alpha	TOP2A	700707
Topoisomerase (DNA) II beta	TOP2B	677709
Topoisomerase (DNA) II binding protein 1	TOPBP1	719054
Topoisomerase (DNA) III beta	TOP3B	698317
Topoisomerase I binding, arginine/serine-rich, E3 ubiquitin protein ligase	TOPORS	703930
Torsin family 1, member A (torsin A)	TOR1A	722520
Torsin family 2, member A	TOR2A	700203

Torsin family 3, member A	TOR3A	717100
TP53 induced glycolysis regulatory phosphatase	TIGAR	721886
TPX2, microtubule-associated	TPX2	712961
TRAF family member associated NFkB activator	TANK	700942
TRAF2 and NCK interacting kinase	TNIK	695414
TRAF3 interacting protein 2	TRAF3IP2	697530
Trafficking protein particle complex 1	TRAPPC1	716622
Trafficking protein particle complex 11	TRAPPC11	702066
Trafficking protein particle complex 3	TRAPPC3	713705
Trafficking protein particle complex 4	TRAPPC4	702469
Trafficking protein particle complex 6A	TRAPPC6A	713880
Trafficking protein, kinesin binding 2	TRAK2	701779
TRAF-type zinc finger domain containing 1	TRAFD1	711635
Trans-2,3-enoyl-coa reductase	TECR	718928
Transaldolase 1	TALDO1	720828
Transcription elongation factor A (SII), 2	TCEA2	694026
Transcription elongation factor A (SII)-like 1	TCEAL1	696826
Transcription elongation factor A (SII)-like 2	TCEAL2	705419
Transcription elongation factor A (SII)-like 4	TCEAL4	696453
Transcription elongation factor A (SII)-like 7	TCEAL7	695831
Transcription elongation factor A (SII)-like 8	TCEAL8	695496
Transcription elongation factor B (SIII), polypeptide 1 (15kda, elongin C)	TCEB1	698922
Transcription elongation regulator 1	TCERG1	707912
Transcription factor 4	TCF4	695814
Transcription factor 7-like 1 (T-cell specific, HMG-box)	TCF7L1	694560
Transcription factor A, mitochondrial	TFAM	701368
Transcription factor B1, mitochondrial	TFB1M	701830
Transcription factor CP2	TFCP2	574399
Transcription factor Dp family member 3	TFDP3	706557
Transcription factor Dp-2 (E2F dimerization partner 2)	TFDP2	714655
Transcription factor EC	TFEC	704124
Transcriptional adaptor 3	TADA3	700090
Transducer of ERBB2, 1	TOB1	706873
Transducin (beta)-like 1 X-linked receptor 1	TBL1XR1	712740
Transducin (beta)-like 2	TBL2	716515
Transducin (beta)-like 3	TBL3	693864
Transducin like enhancer of split 1	TLE1	707336
Transferrin receptor	TFRC	711568
Transformer 2 alpha homolog (Drosophila)	TRA2A	574247
Transformer 2 beta homolog (Drosophila)	TRA2B	574337
Transforming growth factor beta 1 induced transcript 1	TGFB1I1	714172
Transforming growth factor beta 2	TGFB2	707540
Transforming growth factor beta receptor II	TGFBR2	703088
Transforming growth factor beta regulator 4	TBRG4	697717
Transforming growth factor, beta receptor 1	TGFBR1	714952
Transforming, acidic coiled-coil containing protein 2	TACC2	705497
Transforming, acidic coiled-coil containing protein 3	TACC3	712898

Transgelin 2	TAGLN2	719527
Transglutaminase 2	TGM2	706777
Transglutaminase 7	TGM7	712676
Transient receptor potential cation channel, subfamily V, member 4	TRPV4	709605
Translation machinery associated 7 homolog	TMA7	710220
Translational activator of mitochondrially encoded cytochrome c oxidase I	TACO1	717828
Translin-associated factor X interacting protein 1	TSNAXIP1	700095
Translocase of inner mitochondrial membrane 10 homolog (yeast)	TIMM10	705930
Translocase of inner mitochondrial membrane 17 homolog A (yeast)	TIMM17A	707001
Translocase of inner mitochondrial membrane 17 homolog B (yeast)	TIMM17B	714895
Translocase of inner mitochondrial membrane 21 homolog (yeast)	TIMM21	694581
Translocase of inner mitochondrial membrane 23 homolog (yeast)	TIMM23	709594
Translocase of inner mitochondrial membrane 44 homolog (yeast)	TIMM44	709800
Translocase of inner mitochondrial membrane 8 homolog B (yeast)	TIMM8B	711249
Translocase of inner mitochondrial membrane domain containing 1	TIMMDC1	712414
Translocase of outer mitochondrial membrane 22 homolog (yeast)	TOMM22	701286
Translocase of outer mitochondrial membrane 40 homolog (yeast)	TOMM40	713297
Translocase of outer mitochondrial membrane 6 homolog (yeast)	TOMM6	100423264
Translocase of outer mitochondrial membrane 70 homolog A (S. Cerevisiae)	TOMM70A	700347
Translocated promoter region, nuclear basket protein	TPR	713910
Translocator protein	TSPO	711717
Translocator protein 2	TSPO2	719669
Transmembrane 4 L six family member 1	TM4SF1	711908
Transmembrane 4 L six family member 5	TM4SF5	709844
Transmembrane 7 superfamily member 3	TM7SF3	710602
Transmembrane 9 superfamily member 1	TM9SF1	715472
Transmembrane 9 superfamily protein member 4	TM9SF4	712260
Transmembrane and coiled-coil domain family 1	TMCC1	702576
Transmembrane and coiled-coil domain family 3	TMCC3	716185
Transmembrane and coiled-coil domains 4	TMCO4	703851
Transmembrane and ubiquitin-like domain containing 1	TMUB1	714606
Transmembrane and ubiquitin-like domain containing 2	TMUB2	714541
Transmembrane BAX inhibitor motif containing 6	TMBIM6	677702
Transmembrane p24 trafficking protein 1	TMED1	713618
Transmembrane p24 trafficking protein 3	TMED3	711993
Transmembrane p24 trafficking protein 7	TMED7	100533192
Transmembrane phosphoinositide 3-phosphatase and tensin homolog 2	TPTE2	704870
Transmembrane protease, serine 13	TMPRSS13	698586
Transmembrane protein 101	TMEM101	714166
Transmembrane protein 104	TMEM104	698592
Transmembrane protein 106C	TMEM106C	704741
Transmembrane protein 115	TMEM115	702164
Transmembrane protein 121	TMEM121	700005
Transmembrane protein 123	TMEM123	702833
Transmembrane protein 126A	TMEM126A	702831

Transmembrane protein 126B	TMEM126B	702719
Transmembrane protein 132A	TMEM132A	695291
Transmembrane protein 135	TMEM135	704963
Transmembrane protein 138	TMEM138	693905
Transmembrane protein 139	TMEM139	704563
Transmembrane protein 147	TMEM147	709568
Transmembrane protein 14A	TMEM14A	708829
Transmembrane protein 14C	TMEM14C	697976
Transmembrane protein 150A	TMEM150A	696101
Transmembrane protein 160	TMEM160	716996
Transmembrane protein 165	TMEM165	696262
Transmembrane protein 167A	TMEM167A	712218
Transmembrane protein 168	TMEM168	702972
Transmembrane protein 170A	TMEM170A	100427224
Transmembrane protein 171	TMEM171	702863
Transmembrane protein 177	TMEM177	695399
Transmembrane protein 179B	TMEM179B	718518
Transmembrane protein 183A	TMEM183A	704195
Transmembrane protein 185A	TMEM185A	705538
Transmembrane protein 187	TMEM187	698397
Transmembrane protein 189	TMEM189	702250
Transmembrane protein 192	TMEM192	708459
Transmembrane protein 199	TMEM199	708298
Transmembrane protein 203	TMEM203	706164
Transmembrane protein 204	TMEM204	701926
Transmembrane protein 205	TMEM205	714330
Transmembrane protein 208	TMEM208	697228
Transmembrane protein 216	TMEM216	693655
Transmembrane protein 218	TMEM218	100430360
Transmembrane protein 237	TMEM237	702262
Transmembrane protein 246	TMEM246	713682
Transmembrane protein 248	TMEM248	695654
Transmembrane protein 25	TMEM25	700466
Transmembrane protein 254	TMEM254	701130
Transmembrane protein 256	TMEM256	715274
Transmembrane protein 261	TMEM261	716818
Transmembrane protein 30A	TMEM30A	717907
Transmembrane protein 31	TMEM31	100429776
Transmembrane protein 39A	TMEM39A	712208
Transmembrane protein 39B	TMEM39B	706700
Transmembrane protein 41A	TMEM41A	700975
Transmembrane protein 42	TMEM42	714654
Transmembrane protein 45A	TMEM45A	700594
Transmembrane protein 5	TMEM5	717102
Transmembrane protein 50A	TMEM50A	100424312
Transmembrane protein 53	TMEM53	705023
Transmembrane protein 54	TMEM54	710342
Transmembrane protein 55A	TMEM55A	696779

Transmembrane protein 57	TMEM57	654415
Transmembrane protein 60	TMEM60	693679
Transmembrane protein 61	TMEM61	717082
Transmembrane protein 62	TMEM62	709505
Transmembrane protein 65	TMEM65	705727
Transmembrane protein 79	TMEM79	718329
Transmembrane protein 81	TMEM81	699180
Transmembrane protein 94	TMEM94	702374
Transmembrane protein with EGF-like and two follistatin-like domains 1	TMEFF1	714325
Transmembrane protein with EGF-like and two follistatin-like domains 2	TMEFF2	694555
Transmembrane protein, adipocyte associated 1	TPRA1	707221
Transporter 1, ATP-binding cassette, sub-family B (MDR/TAP)	TAP1	717726
Transportin 2	TNPO2	717710
Tribbles pseudokinase 2	TRIB2	710966
Tribbles pseudokinase 3	TRIB3	714636
Trinucleotide repeat containing 6A	TNRC6A	701680
Triokinase/FMN cyclase	TKFC	694117
Triosephosphate isomerase 1	TPI1	714090
Tripartite motif containing 11	TRIM11	694150
Tripartite motif containing 22	TRIM22	713814
Tripartite motif containing 24	TRIM24	710229
Tripartite motif containing 27	TRIM27	706129
Tripartite motif containing 32	TRIM32	702595
Tripartite motif containing 33	TRIM33	710600
Tripartite motif containing 37	TRIM37	710934
Tripartite motif containing 41	TRIM41	708426
Tripartite motif containing 46	TRIM46	717498
Tripartite motif containing 47	TRIM47	704642
Tripartite motif containing 5	TRIM5	574288
Tripartite motif containing 6	TRIM6	100428128
Tripartite motif containing 8	TRIM8	713701
Tripartite motif family like 1	TRIML1	698114
TRK-fused gene	TFG	700972
Trna 5-methylaminomethyl-2-thiouridylate methyltransferase	TRMU	714268
Trna isopentenyltransferase 1	TRIT1	716422
Trna methyltransferase 1	TRMT1	718227
Trna methyltransferase 11 homolog	TRMT11	712712
Trna methyltransferase 11-2 homolog (S. Cerevisiae)	TRMT112	717676
Trna methyltransferase 6	TRMT6	718229
Trna methyltransferase 61B	TRMT61B	703419
Trna methyltransferase O	TRMO	715609
Trna phosphotransferase 1	TRPT1	717911
Trna splicing endonuclease subunit 15	TSEN15	717481
Trna splicing endonuclease subunit 34	TSEN34	693919
Trna splicing endonuclease subunit 54	TSEN54	702604
Tropomodulin 3	TMOD3	694478
Tropomodulin 4	TMOD4	709732
Tropomyosin 1 (alpha)	TPM1	705236

Tropomyosin 2 (beta)	TPM2	696604
Tropomyosin 3	TPM3	716336
Troponin C type 2 (fast)	TNNC2	717270
TRPM8 channel-associated factor 1	TCAF1	705151
Trub pseudouridine (psi) synthase family member 2	TRUB2	717619
Tryptase gamma 1	TPSG1	100425752
Tryptophanyl-trna synthetase	WARS	706855
TSC22 domain family member 1	TSC22D1	701076
TSC22 domain family member 3	TSC22D3	702656
TSC22 domain family member 4	TSC22D4	719183
TSPY-like 4	TSPYL4	716137
TSR1, 20S rRNA accumulation, homolog (S. Cerevisiae)	TSR1	703311
TSR3, 20S rRNA accumulation, homolog (S. Cerevisiae)	TSR3	677691
TSSK6 activating co-chaperone	TSACC	719490
Tu translation elongation factor, mitochondrial	TUFM	705462
Tuberous sclerosis 2	TSC2	694965
Tubulin alpha 1a	TUBA1A	574194
Tubulin alpha 3c	TUBA3C	707215
Tubulin alpha 4a	TUBA4A	702583
Tubulin beta 4B class ivb	TUBB4B	100425864
Tubulin beta class I	TUBB	574113
Tubulin folding cofactor C	TBCC	696997
Tubulin folding cofactor E	TBCE	711476
Tubulin gamma 1	TUBG1	710756
Tubulin polyglutamylase complex subunit 2	TPGS2	709953
Tubulin polymerization-promoting protein family member 3	TPPP3	100429880
Tubulin tyrosine ligase like 12	TTLL12	714871
Tubulin, alpha 1b	TUBA1B	709643
Tudor domain containing 3	TDRD3	696228
Tudor domain containing 6	TDRD6	704453
Tuftelin interacting protein 11	TFIP11	712691
Tumor necrosis factor (ligand) superfamily, member 12	TNFSF12	100551504
Tumor necrosis factor receptor superfamily member 25	TNFRSF25	703744
Tumor necrosis factor receptor superfamily, member 14	TNFRSF14	695042
Tumor necrosis factor superfamily member 13	TNFSF13	100551504
Tumor necrosis factor superfamily member 13b	TNFSF13B	693917
Tumor necrosis factor superfamily member 4	TNFSF4	706255
Tumor protein D52-like 1	TPD52L1	716568
Tumor protein p53	TP53	716170
Tumor protein p53 binding protein 1	TP53BP1	710237
Tumor protein p53 binding protein 2	TP53BP2	705383
Tumor protein p53 inducible protein 3	TP53I3	704206
Tumor protein p63	TP63	703997
Tumor protein, translationally-controlled 1	TPT1	702155
Tumor suppressing subtransferable candidate 1	TSSC1	707650
Tumor suppressing subtransferable candidate 4	TSSC4	705185
Tumor suppressor candidate 1	TUSC1	708101
Tumor suppressor candidate 2	TUSC2	702614

Tumor suppressor candidate 3	TUSC3	701123
Twist family bhlh transcription factor 1	TWIST1	574278
Twist family bhlh transcription factor 2	TWIST2	697078
TWIST neighbor	TWISTNB	707781
Twisted gastrulation homolog 1 (Drosophila)	TWSG1	705804
TYRO3 protein tyrosine kinase	TYRO3	710902
Tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, beta	YWHAB	717788
Tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, eta	YWHAH	717016
Tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, gamma	YWHAG	715517
Tyrosine hydroxylase	TH	721137
Tyrosine kinase, non-receptor, 1	TNK1	715180
Tyrosine kinase, non-receptor, 2	TNK2	711655
Tyrosyl-DNA phosphodiesterase 2	TDP2	715162
Tyrosylprotein sulfotransferase 1	TPST1	696626
Tyrosyl-trna synthetase	YARS	709003
U2AF homology motif (UHM) kinase 1	UHMK1	720105
UBA domain containing 2	UBAC2	703484
Ubiquilin 1	UBQLN1	713525
Ubiquinol-cytochrome c reductase core protein I	UQCRC1	677864
Ubiquinol-cytochrome c reductase core protein II	UQCRC2	697967
Ubiquinol-cytochrome c reductase, 6.4kda subunit	UQCR	708396
Ubiquinol-cytochrome c reductase, complex III subunit VII, 9.5kda	UQCRQ	708950
Ubiquitin A-52 residue ribosomal protein fusion product 1	UBA52	720243
Ubiquitin B	UBB	696110
Ubiquitin conjugating enzyme E2 variant 1	UBE2V1	100425552
Ubiquitin conjugating enzyme E2A	UBE2A	693716
Ubiquitin conjugating enzyme E2D 1	UBE2D1	701491
Ubiquitin conjugating enzyme E2D 3	UBE2D3	710772
Ubiquitin conjugating enzyme E2D 4 (putative)	UBE2D4	707831
Ubiquitin conjugating enzyme E2E 3	UBE2E3	704530
Ubiquitin conjugating enzyme E2F (putative)	UBE2F	695394
Ubiquitin conjugating enzyme E2G 2	UBE2G2	710862
Ubiquitin conjugating enzyme E2H	UBE2H	702056
Ubiquitin conjugating enzyme E2I	UBE2I	722434
Ubiquitin conjugating enzyme E2L 3	UBE2L3	697675
Ubiquitin conjugating enzyme E2O	UBE2O	710529
Ubiquitin conjugating enzyme E2Q family member 1	UBE2Q1	718733
Ubiquitin conjugating enzyme E2S	UBE2S	700592
Ubiquitin conjugating enzyme E2T	UBE2T	705911
Ubiquitin C-terminal hydrolase L1	UCHL1	701579
Ubiquitin C-terminal hydrolase L3	UCHL3	697276
Ubiquitin domain containing 2	UBTD2	709455
Ubiquitin fusion degradation 1 like (yeast)	UFD1L	711716
Ubiquitin like 4A	UBL4A	700643
Ubiquitin like 5	UBL5	711015

Ubiquitin like 7	UBL7	702305
Ubiquitin like domain containing CTD phosphatase 1	UBLCP1	694476
Ubiquitin protein ligase E3 component n-recognin 4	UBR4	702449
Ubiquitin protein ligase E3 component n-recognin 7 (putative)	UBR7	698882
Ubiquitin protein ligase E3B	UBE3B	707324
Ubiquitin protein ligase E3D	UBE3D	694910
Ubiquitin related modifier 1	URM1	722618
Ubiquitin specific peptidase 10	USP10	718471
Ubiquitin specific peptidase 11	USP11	706555
Ubiquitin specific peptidase 13 (isopeptidase T-3)	USP13	708624
Ubiquitin specific peptidase 14 (trna-guanine transglycosylase)	USP14	698087
Ubiquitin specific peptidase 15	USP15	716793
Ubiquitin specific peptidase 16	USP16	706403
Ubiquitin specific peptidase 18	USP18	718792
Ubiquitin specific peptidase 20	USP20	716505
Ubiquitin specific peptidase 21	USP21	719894
Ubiquitin specific peptidase 30	USP30	706607
Ubiquitin specific peptidase 38	USP38	700235
Ubiquitin specific peptidase 39	USP39	696217
Ubiquitin specific peptidase 47	USP47	701660
Ubiquitin specific peptidase 48	USP48	707110
Ubiquitin specific peptidase 7 (herpes virus-associated)	USP7	714625
Ubiquitin specific peptidase 8	USP8	715523
Ubiquitin specific peptidase 9, Y-linked	USP9Y	100270704
Ubiquitination factor E4B	UBE4B	713348
Ubiquitin-conjugating enzyme E2E 2	UBE2E2	699101
Ubiquitin-fold modifier conjugating enzyme 1	UFC1	720277
Ubiquitin-like modifier activating enzyme 1	UBA1	706324
Ubiquitin-like modifier activating enzyme 2	UBA2	705808
Ubiquitin-like modifier activating enzyme 3	UBA3	696493
Ubiquitin-like modifier activating enzyme 7	UBA7	704875
Ubiquitin-like with PHD and ring finger domains 1	UHRF1	695531
U-box domain containing 5	UBOX5	717166
UBX domain protein 1	UBXN1	718643
UBX domain protein 10	UBXN10	705058
UBX domain protein 11	UBXN11	719826
UBX domain protein 6	UBXN6	715070
UDP-Gal:betaglcnaac beta 1,4- galactosyltransferase, polypeptide 1	B4GALT1	703541
UDP-Gal:betaglcnaac beta 1,4- galactosyltransferase, polypeptide 3	B4GALT3	719920
UDP-galactose-4-epimerase	GALE	710553
UDP-glcnaac:betagal beta-1,3-N-acetylglucosaminyltransferase 2	B3GNT2	693396
UDP-glcnaac:betagal beta-1,3-N-acetylglucosaminyltransferase 4	B3GNT4	702023
UDP-glcnaac:betagal beta-1,3-N-acetylglucosaminyltransferase 9	B3GNT9	698037
UDP-glucose ceramide glucosyltransferase	UGCG	707875
UDP-N-acetylglucosamine pyrophosphorylase 1	UAP1	720116
UHRF1 binding protein 1-like	UHRF1BP1L	694816
Unc-5 family C-terminal like	UNC5CL	719655
Unc-51 like kinase 3	ULK3	709530

Unconventional SNARE in the ER 1 homolog (<i>S. Cerevisiae</i>)	USE1	718905
UPF3 regulator of nonsense transcripts homolog B (yeast)	UPF3B	694247
Up-regulated during skeletal muscle growth 5 homolog (mouse)	USMG5	100428448
Upstream binding protein 1 (LBP-1a)	UBP1	706283
Uracil DNA glycosylase	UNG	706816
Uracil phosphoribosyltransferase homolog	UPRT	704157
Uridine monophosphate synthetase	UMPS	715664
Uridine-cytidine kinase 1	UCK1	715417
Uridine-cytidine kinase 1-like 1	UCKL1	694692
Uridine-cytidine kinase 2	UCK2	695725
Urocortin	UCN	699942
Uronyl-2-sulfotransferase	UST	697355
Uroporphyrinogen III synthase	UROS	696043
Usher syndrome 1C	USH1C	696911
USP6 N-terminal like	USP6NL	694275
UTP14, U3 small nucleolar ribonucleoprotein, homolog C (yeast)	UTP14C	709657
UTP20 small subunit processome component	UTP20	696472
UTP23, small subunit processome component	UTP23	702915
UTP6 small subunit processome component	UTP6	713361
UV radiation resistance associated	UVRAG	696601
Vac14 homolog (<i>S. Cerevisiae</i>)	VAC14	708741
Vaccinia related kinase 1	VRK1	704798
Vacuolar protein sorting 28 homolog (<i>S. Cerevisiae</i>)	VPS28	702412
Vacuolar protein sorting 36 homolog (<i>S. Cerevisiae</i>)	VPS36	693290
Vacuolar protein sorting 37 homolog C (<i>S. Cerevisiae</i>)	VPS37C	694898
Vacuolar protein sorting 4 homolog A (<i>S. Cerevisiae</i>)	VPS4A	705277
Vacuolar protein sorting 45 homolog (<i>S. Cerevisiae</i>)	VPS45	706035
Vacuolar protein sorting 72 homolog (<i>S. Cerevisiae</i>)	VPS72	709818
V-akt murine thymoma viral oncogene homolog 3	AKT3	714717
Valosin containing protein lysine (K) methyltransferase	VCPKMT	705487
Valyl-trna synthetase	VARS	715537
Vascular endothelial growth factor A	VEGFA	574209
Vav guanine nucleotide exchange factor 1	VAV1	100424248
VCP-interacting membrane selenoprotein	VIMP	694752
V-crk avian sarcoma virus CT10 oncogene homolog	CRK	701185
Ventral anterior homeobox 2	VAX2	703531
Versican	VCAN	712365
Very low density lipoprotein receptor	VLDLR	574284
Vesicle (multivesicular body) trafficking 1	VTA1	701578
Vesicle associated membrane protein 1	VAMP1	722049
Vesicle associated membrane protein 2	VAMP2	574134
Vesicle associated membrane protein 3	VAMP3	707972
Vesicle associated membrane protein 5	VAMP5	695471
Vesicle associated membrane protein 8	VAMP8	695851
Vesicle transport through interaction with t-snares 1B	VTI1B	711113
Vestigial like family member 4	VGLL4	699034
Vezatin, adherens junctions transmembrane protein	VEZT	716675
Vitamin K epoxide reductase complex subunit 1	VKORC1	714412

Vitamin K epoxide reductase complex subunit 1 like 1	VKORC1L1	697591
Vitelline membrane outer layer 1 homolog (chicken)	VMO1	709950
Vitrin	VIT	708384
Vitronectin	VTN	708499
V-kit Hardy-Zuckerman 4 feline sarcoma viral oncogene homolog	KIT	696759
V-myc avian myelocytomatosis viral oncogene homolog	MYC	694626
V-myc avian myelocytomatosis viral oncogene neuroblastoma derived homolog	MYCN	698699
Voltage-dependent anion channel 1	VDAC1	710045
Voltage-dependent anion channel 2	VDAC2	704257
Von Willebrand factor A domain containing 5B1	VWA5B1	717269
Von Willebrand factor C and EGF domains	VWCE	694385
VPS11, CORVET/HOPS core subunit	VPS11	702834
VPS16, CORVET/HOPS core subunit	VPS16	100426688
VPS26 retromer complex component A	VPS26A	717371
VPS26 retromer complex component B	VPS26B	694566
VPS33B interacting protein, apical-basolateral polarity regulator, spe-39 homolog	VIPAS39	706315
VPS39 HOPS complex subunit	VPS39	707791
VPS52 GARP complex subunit	VPS52	100430904
VPS54 GARP complex subunit	VPS54	695397
VPS8, CORVET complex subunit	VPS8	701567
V-ral simian leukemia viral oncogene homolog A (ras related)	RALA	703440
V-ral simian leukemia viral oncogene homolog B	RALB	695852
V-set and immunoglobulin domain containing 2	VSIG2	712047
V-set and immunoglobulin domain containing 4	VSIG4	709685
WAP four-disulfide core domain 2	WFDC2	710469
WAP four-disulfide core domain 3	WFDC3	709542
WD repeat containing, antisense to TP53	WRAP53	716125
WD repeat domain 11	WDR11	714990
WD repeat domain 12	WDR12	705623
WD repeat domain 18	WDR18	704547
WD repeat domain 19	WDR19	698866
WD repeat domain 20	WDR20	708533
WD repeat domain 26	WDR26	704911
WD repeat domain 3	WDR3	711960
WD repeat domain 35	WDR35	716638
WD repeat domain 37	WDR37	709975
WD repeat domain 4	WDR4	714230
WD repeat domain 41	WDR41	708223
WD repeat domain 44	WDR44	710598
WD repeat domain 45	WDR45	715262
WD repeat domain 47	WDR47	696942
WD repeat domain 48	WDR48	695026
WD repeat domain 53	WDR53	709710
WD repeat domain 59	WDR59	710576
WD repeat domain 6	WDR6	708505
WD repeat domain 61	WDR61	709971

WD repeat domain 74	WDR74	718460
WD repeat domain 75	WDR75	709104
WD repeat domain 83 opposite strand	WDR83OS	716302
WDYHV motif containing 1	WDYHV1	704686
WEE1 G2 checkpoint kinase	WEE1	703760
Werner helicase interacting protein 1	WRNIP1	707250
Williams-Beuren syndrome chromosome region 17	WBSCR17	695207
Wilms tumor 1 associated protein	WTAP	702295
Wingless-type MMTV integration site family member 4	WNT4	707864
Wiskott-Aldrich syndrome-like	WASL	696556
WNK lysine deficient protein kinase 3	WNK3	701015
WSC domain containing 1	WSCD1	712488
WW domain binding protein 1	WBP1	709202
WW domain binding protein 11	WBP11	699451
WW domain binding protein 2	WBP2	704545
WW domain binding protein 4	WBP4	698220
WW domain binding protein 5	WBP5	696661
WW domain containing adaptor with coiled-coil	WAC	715828
WW domain containing E3 ubiquitin protein ligase 2	WWP2	705464
X-box binding protein 1	XBP1	713863
Xeroderma pigmentosum, complementation group A	XPA	715705
Xeroderma pigmentosum, complementation group C	XPC	700938
X-prolyl aminopeptidase (aminopeptidase P) 1, soluble	XPNPEP1	696570
X-ray repair complementing defective repair in Chinese hamster cells 5	XRCC5	574279
X-ray repair complementing defective repair in Chinese hamster cells 6	XRCC6	707975
Xylosylprotein beta 1,4-galactosyltransferase, polypeptide 7	B4GALT7	701000
Yae1 domain containing 1	YAE1D1	703786
Y-box binding protein 3	YBX3	722347
YEATS domain containing 4	YEATS4	718376
Yip1 domain family member 1	YIPF1	714632
Yip1 domain family member 2	YIPF2	713753
Yip1 domain family member 3	YIPF3	700228
Yip1 domain family member 4	YIPF4	706819
Yip1 interacting factor homolog A (S. Cerevisiae)	YIF1A	714486
Yippee like 3	YPEL3	708740
Yippee like 4	YPEL4	705186
Yippee like 5	YPEL5	704532
YKT6 v-SNARE homolog (S. Cerevisiae)	YKT6	699606
YTH domain containing 1	YTHDC1	709717
YTH N(6)-methyladenosine RNA binding protein 1	YTHDF1	697816
YTH N(6)-methyladenosine RNA binding protein 2	YTHDF2	717225
ZFP69 zinc finger protein	ZFP69	694407
Zinc binding alcohol dehydrogenase domain containing 2	ZADH2	701079
Zinc finger (CCCH type), RNA binding motif and serine/arginine rich 2	ZRSR2	720986
Zinc finger and AT-hook domain containing	ZFAT	698512
Zinc finger and BTB domain containing 2	ZBTB2	704782
Zinc finger and BTB domain containing 20	ZBTB20	712238
Zinc finger and BTB domain containing 33	ZBTB33	695801

Zinc finger and BTB domain containing 39	ZBTB39	713914
Zinc finger and BTB domain containing 40	ZBTB40	708181
Zinc finger and BTB domain containing 43	ZBTB43	701797
Zinc finger and BTB domain containing 48	ZBTB48	704628
Zinc finger and BTB domain containing 49	ZBTB49	712422
Zinc finger and BTB domain containing 5	ZBTB5	718482
Zinc finger and BTB domain containing 7B	ZBTB7B	719006
Zinc finger and BTB domain containing 8 opposite strand	ZBTB8OS	708590
Zinc finger and SCAN domain containing 2	ZSCAN2	695673
Zinc finger and SCAN domain containing 21	ZSCAN21	710501
Zinc finger and SCAN domain containing 29	ZSCAN29	710414
Zinc finger and SCAN domain containing 5A	ZSCAN5A	705629
Zinc finger and SCAN domain containing 9	ZSCAN9	703493
Zinc finger CCCH-type containing 11A	ZC3H11A	701537
Zinc finger CCCH-type containing 12A	ZC3H12A	713604
Zinc finger CCCH-type containing 15	ZC3H15	707648
Zinc finger CCCH-type containing 3	ZC3H3	708584
Zinc finger CCCH-type containing 7A	ZC3H7A	711984
Zinc finger E-box binding homeobox 2	ZEB2	705439
Zinc finger homeobox 3	ZFHX3	706074
Zinc finger protein 112	ZNF112	713527
Zinc finger protein 140	ZNF140	695171
Zinc finger protein 143	ZNF143	703978
Zinc finger protein 155	ZNF155	712736
Zinc finger protein 17	ZNF17	707664
Zinc finger protein 174	ZNF174	702964
Zinc finger protein 177	ZNF177	709851
Zinc finger protein 180	ZNF180	712493
Zinc finger protein 181	ZNF181	106992424
Zinc finger protein 195	ZNF195	706915
Zinc finger protein 202	ZNF202	708814
Zinc finger protein 207	ZNF207	100689488
Zinc finger protein 217	ZNF217	699314
Zinc finger protein 22	ZNF22	706208
Zinc finger protein 23	ZNF23	710814
Zinc finger protein 239	ZNF239	717737
Zinc finger protein 250	ZNF250	704805
Zinc finger protein 263	ZNF263	702166
Zinc finger protein 274	ZNF274	712237
Zinc finger protein 280D	ZNF280D	699509
Zinc finger protein 285	ZNF285	106994792
Zinc finger protein 296	ZNF296	713620
Zinc finger protein 304	ZNF304	100428176
Zinc finger protein 32	ZNF32	705373
Zinc finger protein 322	ZNF322	701098
Zinc finger protein 330	ZNF330	699364
Zinc finger protein 335	ZNF335	708282
Zinc finger protein 354B	ZNF354B	712885

Zinc finger protein 383	ZNF383	100425344
Zinc finger protein 385A	ZNF385A	705436
Zinc finger protein 385B	ZNF385B	704204
Zinc finger protein 408	ZNF408	714213
Zinc finger protein 41	ZNF41	706770
Zinc finger protein 410	ZNF410	698124
Zinc finger protein 423	ZNF423	693808
Zinc finger protein 436	ZNF436	709638
Zinc finger protein 462	ZNF462	711489
Zinc finger protein 467	ZNF467	712106
Zinc finger protein 484	ZNF484	711976
Zinc finger protein 496	ZNF496	709694
Zinc finger protein 513	ZNF513	700577
Zinc finger protein 521	ZNF521	709169
Zinc finger protein 524	ZNF524	701807
Zinc finger protein 532	ZNF532	701146
Zinc finger protein 543	ZNF543	100428080
Zinc finger protein 549	ZNF549	708201
Zinc finger protein 575	ZNF575	718118
Zinc finger protein 576	ZNF576	710398
Zinc finger protein 581	ZNF581	100428424
Zinc finger protein 593	ZNF593	714086
Zinc finger protein 599	ZNF599	706512
Zinc finger protein 608	ZNF608	702182
Zinc finger protein 613	ZNF613	719851
Zinc finger protein 620	ZNF620	100423712
Zinc finger protein 622	ZNF622	100429384
Zinc finger protein 627	ZNF627	716820
Zinc finger protein 646	ZNF646	712774
Zinc finger protein 653	ZNF653	714754
Zinc finger protein 664	ZNF664	710703
Zinc finger protein 671	ZNF671	708932
Zinc finger protein 684	ZNF684	695691
Zinc finger protein 687	ZNF687	716590
Zinc finger protein 688	ZNF688	100430424
Zinc finger protein 692	ZNF692	710010
Zinc finger protein 7	ZNF7	715735
Zinc finger protein 777	ZNF777	711987
Zinc finger protein 79	ZNF79	700961
Zinc finger protein 821	ZNF821	707355
Zinc finger protein 830	ZNF830	715130
Zinc finger protein 84	ZNF84	694939
Zinc finger protein 92	ZNF92	708683
Zinc finger protein interacting with K protein 1	ZIK1	708621
Zinc finger RNA binding protein	ZFR	696882
Zinc finger with UFM1-specific peptidase domain	ZUFSP	718059
Zinc finger, AN1-type domain 2A	ZFAND2A	100426344
Zinc finger, AN1-type domain 2B	ZFAND2B	702027

Zinc finger, AN1-type domain 3	ZFAND3	719346
Zinc finger, AN1-type domain 4	ZFAND4	708136
Zinc finger, AN1-type domain 6	ZFAND6	717543
Zinc finger, B-box domain containing	ZBBX	700091
Zinc finger, BED-type containing 2	ZBED2	706929
Zinc finger, BED-type containing 4	ZBED4	715118
Zinc finger, BED-type containing 9	ZBED9	708122
Zinc finger, C2HC-type containing 1A	ZC2HC1A	698760
Zinc finger, C2HC-type containing 1C	ZC2HC1C	701845
Zinc finger, C3H1-type containing	ZFC3H1	718671
Zinc finger, C3HC-type containing 1	ZC3HC1	702173
Zinc finger, C4H2 domain containing	ZC4H2	708764
Zinc finger, CCCH-type with G-patch domain	ZGPAT	719499
Zinc finger, CCHC domain containing 10	ZCCHC10	709423
Zinc finger, CCHC domain containing 11	ZCCHC11	713406
Zinc finger, CCHC domain containing 14	ZCCHC14	703833
Zinc finger, CCHC domain containing 17	ZCCHC17	705172
Zinc finger, CCHC domain containing 3	ZCCHC3	714477
Zinc finger, CCHC domain containing 7	ZCCHC7	716658
Zinc finger, CCHC domain containing 8	ZCCHC8	702359
Zinc finger, DHHC-type containing 12	ZDHHC12	722606
Zinc finger, DHHC-type containing 15	ZDHHC15	704366
Zinc finger, DHHC-type containing 16	ZDHHC16	705982
Zinc finger, DHHC-type containing 17	ZDHHC17	693595
Zinc finger, DHHC-type containing 2	ZDHHC2	710001
Zinc finger, DHHC-type containing 24	ZDHHC24	713870
Zinc finger, DHHC-type containing 5	ZDHHC5	704863
Zinc finger, DHHC-type containing 6	ZDHHC6	696538
Zinc finger, FYVE domain containing 16	ZFYVE16	710872
Zinc finger, FYVE domain containing 27	ZFYVE27	707273
Zinc finger, HIT-type containing 1	ZNHIT1	714339
Zinc finger, HIT-type containing 2	ZNHIT2	716729
Zinc finger, matrin-type 2	ZMAT2	697247
Zinc finger, matrin-type 5	ZMAT5	715058
Zinc finger, MYM-type 2	ZMYM2	721255
Zinc finger, MYM-type 3	ZMYM3	697147
Zinc finger, MYM-type 4	ZMYM4	712793
Zinc finger, MYND-type containing 11	ZMYND11	708761
Zinc finger, RAN-binding domain containing 2	ZRANB2	703513
Zinc finger, SWIM-type containing 3	ZSWIM3	708804
Zinc finger, ZZ-type containing 3	ZZZ3	706357
Zinc finger, ZZ-type with EF-hand domain 1	ZZEF1	721518
Zinc metalloproteinase STE24	ZMPSTE24	693765
Zinc ribbon domain containing 1	ZNRD1	712151
Zona pellucida glycoprotein 3 (sperm receptor)	ZP3	719925
Zyg-11 related, cell cycle regulator	ZER1	717262
Zyxin	ZYX	706407

(3) Expressed in both groups 1b and 2b

Alpha-2-macroglobulin	A2M	716834
Alpha 1,4-galactosyltransferase	A4GALT	710998
Aladin WD repeat nucleoporin	AAAS	719095
ATP binding cassette subfamily A member 1	ABCA1	716146
ATP binding cassette subfamily A member 5	ABCA5	693795
ATP binding cassette subfamily B member 7	ABCB7	704034
ATP binding cassette subfamily E member 1	ABCE1	701945
ATP binding cassette subfamily G member 2 (Junior blood group)	ABCG2	574307
Abhydrolase domain containing 1	ABHD1	698700
Abhydrolase domain containing 8	ABHD8	718980
Abl-interactor 1	ABI1	707698
Abl-interactor 2	ABI2	704956
Actin binding LIM protein 1	ABLIM1	698641
Acetyl-coa acyltransferase 2	ACAA2	709350
Acetyl-coa carboxylase alpha	ACACA	714218
Acyl-coa dehydrogenase, C-4 to C-12 straight chain	ACADM	705168
Acetyl-coa acetyltransferase 1	ACAT1	707653
Acyl-coa binding domain containing 3	ACBD3	699311
Acyl-coa binding domain containing 6	ACBD6	716418
ATP citrate lyase	ACLY	708501
Aconitase 1	ACO1	705075
Aconitase 2	ACO2	707441
Acyl-coa oxidase 1, palmitoyl	ACOX1	705197
Acrosin binding protein	ACRBP	713219
Acrosomal vesicle protein 1	ACRV1	713422
Actin like 6B	ACTL6B	712643
Actin like 7B	ACTL7B	710750
ARP2 actin-related protein 2 homolog (yeast)	ACTR2	697080
ARP5 actin-related protein 5 homolog (yeast)	ACTR5	698191
Actin related protein T2	ACTRT2	711475
Activin A receptor type I	ACVR1	697935
Activin A receptor type IB	ACVR1B	696587
Activin A receptor type IL	ACVRL1	696471
Aminoacylase 3	ACY3	711083
ADAM metalloproteinase domain 19	ADAM19	715164
ADAM metalloproteinase domain 21	ADAM21	715640
ADAM metalloproteinase with thrombospondin type 1 motif 14	ADAMTS14	710154
ADAM metalloproteinase with thrombospondin type 1 motif 16	ADAMTS16	694474
ADAM metalloproteinase with thrombospondin type 1 motif 17	ADAMTS17	693447
ADAM metalloproteinase with thrombospondin type 1 motif 6	ADAMTS6	696021
ADAM metalloproteinase with thrombospondin type 1 motif 9	ADAMTS9	698341
ADAMTS like 2	ADAMTSL2	713492
Adenosine deaminase, RNA-specific, B1	ADARB1	722016
Adenosine deaminase, trna-specific 1	ADAT1	712066
Aarf domain containing kinase 1	ADCK1	707060

Aarf domain containing kinase 3	ADCK3	697920
Adenylate cyclase 4	ADCY4	714684
Adenylate cyclase 6	ADCY6	707978
Adducin 1	ADD1	700805
Adducin 3	ADD3	677712
Adhesion G protein-coupled receptor A3	ADGRA3	715618
Adiponectin receptor 2	ADIPOR2	707547
Adenosine A3 receptor	ADORA3	704295
ADP-ribosylhydrolase like 2	ADPRHL2	712758
Adenylosuccinate synthase	ADSS	713580
Amino-terminal enhancer of split	AES	712353
Aftiphilin	AFTPH	696100
1-acylglycerol-3-phosphate O-acyltransferase 1	AGPAT1	717174
1-acylglycerol-3-phosphate O-acyltransferase 5	AGPAT5	716847
Angiotensin II receptor-associated protein	AGTRAP	722746
AT-hook containing transcription factor 1	AHCTF1	702705
AHA1, activator of heat shock 90kda protein ATPase homolog 1 (yeast)	AHSA1	706547
Alpha hemoglobin stabilizing protein	AHSP	714392
Apoptosis inducing factor, mitochondria associated 1	AIFM1	702773
Apoptosis inducing factor, mitochondria associated 3	AIFM3	100430576
Androgen-induced 1	AIG1	700988
Ajuba LIM protein	AJUBA	712865
Adenylate kinase 2	AK2	709737
Adenylate kinase 3	AK3	694714
Adenylate kinase 8	AK8	714698
A-kinase anchoring protein 9	AKAP9	702970
Aldo-keto reductase family 1, member B1 (aldose reductase)	AKR1B1	705957
Aldo-keto reductase family 1, member C1 (dihydrodiol dehydrogenase 1; 20-alpha (3-alpha)-hydroxysteroid dehydrogenase)	AKR1C1	711198
V-akt murine thymoma viral oncogene homolog 3	AKT3	714717
Aldehyde dehydrogenase 18 family member A1	ALDH18A1	703357
ALG2, alpha-1,3/1,6-mannosyltransferase	ALG2	714850
ALG5, dolichyl-phosphate beta-glucosyltransferase	ALG5	694836
Alkb homolog 4, lysine demethylase	ALKBH4	715078
Alkb homolog 7	ALKBH7	699343
Arachidonate 5-lipoxygenase-activating protein	ALOX5AP	713170
Alpha kinase 1	ALPK1	700993
Alpha-methylacyl-coa racemase	AMACR	698365
Autophagy/beclin-1 regulator 1	AMBRA1	714434
Adhesion molecule with Ig-like domain 2	AMIGO2	705386
Adhesion molecule with Ig-like domain 3	AMIGO3	705693
Adenosine monophosphate deaminase 2	AMPD2	699561
Amylase, alpha 2B (pancreatic)	AMY2B	712893
Anaphase promoting complex subunit 15	ANAPC15	718333
Anaphase promoting complex subunit 2	ANAPC2	706384
Anaphase promoting complex subunit 4	ANAPC4	694006

Angiopoietin like 5	ANGPTL5	702036
Ankyrin 3, node of Ranvier (ankyrin G)	ANK3	699518
Ankyrin repeat and IBR domain containing 1	ANKIB1	703273
Ankyrin repeat and MYND domain containing 2	ANKMY2	709414
Ankyrin repeat domain 2 (stretch responsive muscle)	ANKRD2	707097
Ankyrin repeat domain 27	ANKRD27	716232
Ankyrin repeat domain 46	ANKRD46	705491
Ankyrin repeat domain 50	ANKRD50	709327
Ankyrin repeat domain 6	ANKRD6	701339
Anoctamin 3	ANO3	700072
Acidic nuclear phosphoprotein 32 family member B	ANP32B	715508
Annexin A1	ANXA1	702946
Annexin A11	ANXA11	707628
Annexin A3	ANXA3	697239
Annexin A7	ANXA7	707166
Acyloxyacyl hydrolase	AOAH	706291
Adaptor related protein complex 1 associated regulatory protein	AP1AR	700734
Adaptor related protein complex 3, beta 2 subunit	AP3B2	694091
Adaptor related protein complex 3, mu 1 subunit	AP3M1	705729
Adaptor related protein complex 3, sigma 1 subunit	AP3S1	696644
Adaptor related protein complex 4, beta 1 subunit	AP4B1	707634
Adaptor related protein complex 5, beta 1 subunit	AP5B1	721904
Amyloid beta (A4) precursor protein-binding, family B, member 1 (Fe65)	APBB1	712585
Amyloid beta (A4) precursor protein-binding, family B, member 3	APBB3	698296
APEX nuclease (multifunctional DNA repair enzyme) 1	APEX1	702757
Apoptosis inhibitor 5	API5	716346
Apelin receptor	APLNR	706823
Apolipoprotein A-II	APOA2	719946
Apolipoprotein B mrna editing enzyme, catalytic poly peptide-like 3G	APOBEC3G	574398
Apolipoprotein B mrna editing enzyme, catalytic poly peptide-like 3H	APOBEC3H	723811
Apolipoprotein L4	APOL4	694250
Apolipoprotein O	APOO	698137
Arfgap with rhogap domain, ankyrin repeat and PH domain 2	ARAP2	702115
ADP ribosylation factor 3	ARF3	708716
ADP ribosylation factor 4	ARF4	703432
ADP ribosylation factor guanine nucleotide exchange factor 1	ARFGEF1	704359
Arginine and glutamate rich 1	ARGLU1	702840
Rho gtpase activating protein 18	ARHGAP18	711107
Rho gtpase activating protein 25	ARHGAP25	699828
Rho gtpase activating protein 29	ARHGAP29	708896
Rho gtpase activating protein 30	ARHGAP30	718236
Rho gtpase activating protein 6	ARHGAP6	709978
Rho gtpase activating protein 9	ARHGAP9	711684
Rho guanine nucleotide exchange factor 1	ARHGEF1	722198
Rho guanine nucleotide exchange factor 10	ARHGEF10	722745

Rho guanine nucleotide exchange factor (GEF) 3	ARHGEF3	704764
AT-rich interaction domain 4B	ARID4B	718320
ADP ribosylation factor like gtpase 6 interacting protein 5	ARL6IP5	696360
Armadillo repeat containing 2	ARMC2	700364
Armadillo repeat containing 9	ARMC9	711891
Armadillo repeat containing, X-linked 2	ARMCX2	704263
Acidic residue methyltransferase 1	ARMT1	704570
Aryl hydrocarbon receptor nuclear translocator like	ARNTL	700464
Actin related protein 2/3 complex subunit 1A	ARPC1A	718635
Actin related protein 2/3 complex subunit 2	ARPC2	700536
Actin related protein 2/3 complex subunit 3	ARPC3	709199
Arrestin, beta 2	ARRB2	709399
Arrestin domain containing 3	ARRDC3	695903
Arrestin domain containing 4	ARRDC4	708023
Artemin	ARTN	701641
ARV1 homolog, fatty acid homeostasis modulator	ARV1	713975
Armadillo repeat gene deleted in velocardiofacial syndrome	ARVCF	712399
Arfgap with SH3 domain, ankyrin repeat and PH domain 1	ASAP1	695681
Activating signal cointegrator 1 complex subunit 2	ASCC2	715117
Acid sensing ion channel subunit 3	ASIC3	714396
Aspartate beta-hydroxylase domain containing 2	ASPHD2	712623
Asteroid homolog 1 (Drosophila)	ASTE1	719271
Additional sex combs like 2, transcriptional regulator	ASXL2	695057
Arginyltransferase 1	ATE1	705248
Activating transcription factor 4	ATF4	703965
Activating transcription factor 6	ATF6	720056
Autophagy related 16 like 1	ATG16L1	714092
Autophagy related 2A	ATG2A	717290
Autophagy related 3	ATG3	708305
Autophagy related 4A, cysteine peptidase	ATG4A	703367
Autophagy related 4D, cysteine peptidase	ATG4D	713111
Autophagy related 5	ATG5	696874
Autophagy related 7	ATG7	696238
5-aminoimidazole-4-carboxamide ribonucleotide formyl transferase/IMP cyclohydrolase	ATIC	694819
ATPase type 13A1	ATP13A1	100427504
ATPase type 13A2	ATP13A2	699678
ATPase, Na ⁺ /K ⁺ transporting, alpha 1 polypeptide	ATP1A1	710368
ATPase, Na ⁺ /K ⁺ transporting, alpha 3 polypeptide	ATP1A3	706513
ATPase, Ca ⁺⁺ transporting, plasma membrane 1	ATP2B1	709102
ATPase, Ca ⁺⁺ transporting, type 2C, member 1	ATP2C1	719281
ATPase, H ⁺ /K ⁺ exchanging, alpha polypeptide	ATP4A	100426216
ATP synthase, H ⁺ transporting, mitochondrial F1 complex, alpha subunit 1, cardiac muscle	ATP5A1	701389
ATP synthase, H ⁺ transporting, mitochondrial F1 complex, beta polypeptide	ATP5B	713284
ATP synthase, H ⁺ transporting, mitochondrial F1 complex, gamma polypeptide 1	ATP5C1	713768

ATP synthase, H ⁺ transporting, mitochondrial Fo complex subunit D	ATP5H	700338
ATP synthase, H ⁺ transporting, mitochondrial Fo complex subunit F6	ATP5J	708411
ATP synthase, H ⁺ transporting, mitochondrial F1 complex, O subunit	ATP5O	698480
ATP synthase F0 subunit 6	ATP6	2846629
ATPase, H ⁺ transporting, lysosomal accessory protein 2	ATP6AP2	705048
ATPase, H ⁺ transporting, lysosomal 9kda, V0 subunit e1	ATP6V0E1	703342
ATPase, H ⁺ transporting, lysosomal 31kda, V1 subunit E1	ATP6V1E1	709739
ATPase, H ⁺ transporting, lysosomal 14kda, V1 subunit F	ATP6V1F	702112
ATPase, class II, type 9A	ATP9A	710250
ATPase inhibitory factor 1	ATPIF1	716870
ATR serine/threonine kinase	ATR	714443
All-trans retinoic acid induced differentiation factor	ATRAID	699201
Alpha thalassemia/mental retardation syndrome X-linked	ATRX	705735
Ataxin 2-like	ATXN2L	708359
AU RNA binding protein/enoyl-coa hydratase	AUH	704542
Ancient ubiquitous protein 1	AUP1	710020
Aurora kinase B	AURKB	721955
Apoptosis, caspase activation inhibitor	AVEN	695227
Alpha-2-glycoprotein 1, zinc-binding	AZGP1	710136
Beta-2-microglobulin	B2M	712428
Beta-1,3-N-acetylgalactosaminyltransferase 1 (globoside blood group)	B3GALNT1	703939
Beta-1,3-glucuronyltransferase 2	B3GAT2	717157
Beta 3-glucosyltransferase	B3GLCT	713498
UDP-glcna:betagal beta-1,3-N-acetylglucosaminyltransferase 2	B3GNT2	693396
Beta-1,4-N-acetyl-galactosaminyl transferase 3	B4GALNT3	706259
UDP-Gal:betaglcna beta 1,4- galactosyltransferase, poly peptide 1	B4GALT1	703541
UDP-Gal:betaglcna beta 1,4- galactosyltransferase, poly peptide 6	B4GALT6	706068
B9 protein domain 2	B9D2	704873
BRISC and BRCA1 A complex member 1	BABAM1	718969
Beta-site APP-cleaving enzyme 1	BACE1	697694
BTB and CNC homology 1, basic leucine zipper transcription factor 1	BACH1	705817
BCL2 associated athanogene 2	BAG2	712778
BCL2 associated athanogene 4	BAG4	703953
Bromo adjacent homology domain containing 1	BAHD1	702982
BAI1-associated protein 2-like 2	BAIAP2L2	700058
B-cell scaffold protein with ankyrin repeats 1	BANK1	710040
BTG3 associated nuclear protein	BANP	696125
BRCA1 associated RING domain 1	BARD1	694301
Barh-like homeobox 2	BARHL2	696831
BCL2-associated X protein	BAX	718948
Bromodomain adjacent to zinc finger domain 1B	BAZ1B	716436

Bardet-Biedl syndrome 4	BBS4	704508
Bardet-Biedl syndrome 5	BBS5	709701
Breast cancer anti-estrogen resistance 1	BCAR1	713965
Branched chain amino-acid transaminase 2, mitochondrial	BCAT2	718305
Branched chain keto acid dehydrogenase E1, beta polypeptide	BCKDHB	718472
B-cell CLL/lymphoma 11B (zinc finger protein)	BCL11B	705238
B-cell CLL/lymphoma 6	BCL6	708736
B-cell CLL/lymphoma 9	BCL9	700800
Beta-carotene oxygenase 2	BCO2	712095
BCS1-like (S. Cerevisiae)	BCS1L	699690
Beclin 1, autophagy related	BECN1	711649
BEN domain containing 6	BEND6	712498
Bicaudal D homolog 2 (Drosophila)	BICD2	706621
Bloom syndrome, recq helicase-like	BLM	703460
Bone morphogenetic protein 1	BMP1	707596
Bone morphogenetic protein receptor type IA	BMPR1A	696898
BCL2/adenovirus E1B 19kda interacting protein 1	BNIP1	703576
BCL2/adenovirus E1B 19kda interacting protein 2	BNIP2	703234
Bola family member 1	BOLA1	705297
BLOC-1 related complex subunit 5	BORCS5	696469
Bisphosphoglycerate mutase	BPGM	706741
BPI fold containing family A member 2	BPIFA2	710376
Bromodomain containing 1	BRD1	715059
Bromodomain containing 2	BRD2	717893
Bromodomain containing 7	BRD7	694850
Brain protein I3	BRI3	706525
BRICHOS domain containing 5	BRICD5	695765
BTB (POZ) domain containing 1	BTBD1	718696
BTB (POZ) domain containing 16	BTBD16	705610
BTB (POZ) domain containing 9	BTBD9	719457
Basic transcription factor 3	BTF3	703339
B-cell translocation gene 1, anti-proliferative	BTG1	710112
BUB3 mitotic checkpoint protein	BUB3	708033
BUD31 homolog	BUD31	718694
Bystin like	BYSL	694976
Basic leucine zipper and W2 domains 2	BZW2	714627
Chromosome 20 open reading frame 24 ortholog	C10H20orf24	709696
Chromosome 11 open reading frame, human c12orf4	C11H12orf4	710836
Chromosome 11 open reading frame, human c12orf57	C11H12orf57	714482
Chromosome 12 open reading frame, human c2orf47	C12H2orf47	699322
Chromosome 13 open reading frame, human c2orf49	C13H2orf49	713165
Chromosome 14 open reading frame, human c11orf58	C14H11orf58	697690
Chromosome 14 open reading frame, human c11orf73	C14H11orf73	704098
Chromosome 14 open reading frame, human c11orf74	C14H11orf74	716798
Chromosome 14 open reading frame, human c11orf87	C14H11orf87	708608
Chromosome 15 open reading frame, human c9orf135	C15H9orf135	700202
Chromosome 15 open reading frame, human c9orf16	C15H9orf16	722628
Chromosome 18 open reading frame, human c18orf21	C18H18orf21	715440

Chromosome 19 open reading frame, human c19orf24	C19H19orf24	706393
Chromosome 19 open reading frame, human c19orf53	C19H19orf53	720745
C1GALT1 specific chaperone 1	C1GALT1C1	696662
Chromosome 1 open reading frame, human c1orf123	C1H1orf123	714201
Chromosome 1 open reading frame, human c1orf198	C1H1orf198	714084
Protein odr-4 homolog	C1H1orf27	713801
Chromosome 1 open reading frame, human c1orf50	C1H1orf50	698058
Chromosome 1 open reading frame, human c1orf52	C1H1orf52	711232
Chromosome 1 open reading frame, human c1orf54	C1H1orf54	107000832
Complement component 1, q subcomponent binding protein	C1QBP	711817
Complement component 1, q subcomponent, C chain	C1QC	708589
Complement component 1, q subcomponent-like 1	C1QL1	715801
Complement component 1, q subcomponent-like 2	C1QL2	697776
Complement component 1, s subcomponent	C1S	714589
Chromosome 20 open reading frame, human c16orf78	C20H16orf78	693672
C2CD2-like	C2CD2L	703424
Chromosome 2 open reading frame, human c3orf14	C2H3orf14	699965
Chromosome 2 open reading frame, human c3orf58	C2H3orf58	713830
Chromosome 3 open reading frame, human c21orf91	C3H21orf91	710406
Chromosome 3 open reading frame, human c7orf25	C3H7orf25	708455
TAM41, mitochondrial translocator assembly and maintenance protein, homolog (S. Cerevisiae)	C3orf31	695998
Chromosome 4 open reading frame, human c6orf136	C4H6orf136	712108
Chromosome 4 open reading frame, human c6orf203	C4H6orf203	698108
Chromosome 4 open reading frame, human c6orf62	C4H6orf62	708218
Chromosome 4 open reading frame, human c6orf89	C4H6orf89	719165
Chromosome 5 open reading frame, human c4orf27	C5H4orf27	694607
Chromosome 6 open reading frame, human c5orf15	C6H5orf15	709969
Chromosome 6 open reading frame, human c5orf30	C6H5orf30	703692
Complement component 7	C7	696926
Chromosome 7 open reading frame, human c14orf142	C7H14orf142	704509
Chromosome 7 open reading frame, human c14orf166	C7H14orf166	710094
Chromosome 7 open reading frame, human c14orf169	C7H14orf169	696773
Chromosome 7 open reading frame, human c15orf57	C7H15orf57	703343
Chromosome 8 open reading frame, human c8orf59	C8H8orf59	703464
Chromosome 8 open reading frame, human c8orf76	C8H8orf76	704150
Complement component 9	C9	694223
Chromosome 9 open reading frame, human c10orf107	C9H10orf107	700172
Chromosome 9 open reading frame, human c10orf2	C9H10orf2	710958
Chromosome 9 open reading frame, human c10orf62	C9H10orf62	706769
Carbonic anhydrase VI	CA6	709540
Carbonic anhydrase VII	CA7	696681
Caspase activity and apoptosis inhibitor 1	CAAP1	707992
Calcium binding protein 39	CAB39	711166
Calcium binding protein 4	CABP4	711973
Calcium binding tyrosine-(Y)-phosphorylation regulated	CABYR	701670
Calcyclin binding protein	CACYBP	709343
Carbamoyl-phosphate synthetase 2, aspartate transcarbamylase,	CAD	699460

and dihydroorotase		
Calreticulin	CALR	716910
Calcium/calmodulin-dependent protein kinase I	CAMK1	700212
Calcium/calmodulin-dependent protein kinase II delta	CAMK2D	702504
Calcium/calmodulin-dependent protein kinase II gamma	CAMK2G	705980
Calcium/calmodulin-dependent protein kinase kinase 1, alpha	CAMKK1	707562
Calcium/calmodulin-dependent protein kinase kinase 2, beta	CAMKK2	699685
Calmodulin regulated spectrin associated protein family member 2	CAMSAP2	709092
Calnexin	CANX	704794
CAP, adenylate cyclase-associated protein 1 (yeast)	CAP1	693719
Calpain 10	CAPN10	716360
Calpain 15	CAPN15	695881
Calpain 2, (m/II) large subunit	CAPN2	703047
Calpain 3	CAPN3	707913
Caprin family member 2	CAPRIN2	693594
Capping protein (actin filament) muscle Z-line, alpha 1	CAPZA1	705653
Capping protein (actin filament) muscle Z-line, alpha 2	CAPZA2	704662
Caspase recruitment domain family member 11	CARD11	714728
Calcium regulated heat stable protein 1	CARHSP1	709224
CysteinyI-trna synthetase	CARS	706502
CysteinyI-trna synthetase 2, mitochondrial (putative)	CARS2	694840
CASK interacting protein 2	CASKIN2	702477
Caspase 1	CASP1	706568
Caspase 4	CASP4	704864
Caspase 9	CASP9	694544
Catalase	CAT	717406
Cation channel, sperm associated 2	CATSPER2	710876
Catsper channel auxiliary subunit beta	CATSPERB	697012
Core-binding factor, beta subunit	CBFB	695767
Cbl proto-oncogene B, E3 ubiquitin protein ligase	CBLB	703879
Chromobox 1	CBX1	696673
Chromobox 7	CBX7	703056
Cell division cycle and apoptosis regulator 1	CCAR1	693585
Cell cycle and apoptosis regulator 2	CCAR2	716288
Coiled-coil domain containing 12	CCDC12	712061
Coiled-coil domain containing 134	CCDC134	708713
Coiled-coil domain containing 151	CCDC151	714600
Coiled-coil domain containing 17	CCDC17	706591
Coiled-coil domain containing 174	CCDC174	701654
Coiled-coil domain containing 181	CCDC181	700803
Coiled-coil domain containing 186	CCDC186	722518
Coiled-coil domain containing 191	CCDC191	710219
Coiled-coil domain containing 27	CCDC27	695384
Coiled-coil domain containing 28A	CCDC28A	703104
Coiled-coil domain containing 3	CCDC3	694884
Coiled-coil domain containing 43	CCDC43	715325
Coiled-coil domain containing 59	CCDC59	698443
Coiled-coil domain containing 69	CCDC69	713304

Coiled-coil domain containing 92	CCDC92	705922
Coiled-coil domain containing 97	CCDC97	706342
Calicin	CCIN	693791
Chemokine (C-C motif) ligand 27	CCL27	574220
Chemokine (C-C motif) ligand 7	CCL7	714751
Cyclin D3	CCND3	695215
Cyclin D-type binding-protein 1	CCNDBP1	709589
Cyclin G1	CCNG1	697738
Cyclin H	CCNH	694224
Cyclin I	CCNI	677687
Cyclin T2	CCNT2	708813
Chemokine (C-C motif) receptor 6	CCR6	574335
Coiled-coil serine rich protein 2	CCSER2	698006
Chaperonin containing TCP1, subunit 2 (beta)	CCT2	717182
Chaperonin containing TCP1, subunit 5 (epsilon)	CCT5	696640
Chaperonin containing TCP1, subunit 8 (theta)	CCT8	706184
CD19 molecule	CD19	705211
CD1c molecule	CD1C	717148
CD1d molecule	CD1D	613268
CD2 molecule	CD2	677855
CD200 molecule	CD200	708110
CD274 molecule	CD274	716043
CD3e molecule, epsilon (CD3-TCR complex)	CD3E	699467
CD3g molecule, gamma (CD3-TCR complex)	CD3G	705270
CD40 ligand	CD40LG	574160
CD53 molecule	CD53	702350
CD63 molecule	CD63	709828
CD79b molecule	CD79B	718218
CD86 molecule	CD86	714390
CD8b molecule	CD8B	699409
CD9 molecule	CD9	712262
Cytidine deaminase	CDA	705913
Cytidine and dcmp deaminase domain containing 1	CDADC1	705941
Cell division cycle 16	CDC16	699089
Cell division cycle 26	CDC26	706165
Cell division cycle 37	CDC37	715390
CDC42 effector protein (Rho gtpase binding) 4	CDC42EP4	696227
Cell division cycle 5 like	CDC5L	703099
Cell division cycle associated 7	CDCA7	696474
Cadherin 11, type 2, OB-cadherin (osteoblast)	CDH11	708826
Cadherin 13	CDH13	718038
Cadherin 5, type 2 (vascular endothelium)	CDH5	693297
Cadherin related family member 2	CDHR2	697249
Cyclin-dependent kinase 12	CDK12	696733
Cyclin-dependent kinase 17	CDK17	717183
Cyclin-dependent kinase 2	CDK2	711002
Cyclin-dependent kinase 4	CDK4	715650
Cyclin-dependent kinase 9	CDK9	699840

CDKN2A interacting protein	CDKN2AIP	701583
Cyclin-dependent kinase inhibitor 2C (p18, inhibits CDK4)	CDKN2C	711877
Cerebellar degeneration related protein 2	CDR2	698974
Cerebellar degeneration-related protein 2-like	CDR2L	700082
Caudal type homeobox 4	CDX4	701374
Chromodomain protein, Y-like	CDYL	722957
CCAAT/enhancer binding protein (C/EBP), zeta	CEBPZ	712090
Cat eye syndrome chromosome region, candidate 5	CECR5	709197
CUGBP, Elav-like family member 3	CELF3	716884
Centromere protein C	CENPC	710620
Centromere protein I	CENPI	702316
Centromere protein M	CENPM	709006
Centrosomal protein 170kda	CEP170	705427
Centrosomal protein 192kda	CEP192	722121
Centrosomal protein 290kda	CEP290	708286
Centrosomal protein 41kda	CEP41	703215
Centrosomal protein 57kda-like 1	CEP57L1	700109
Centrosomal protein 72kda	CEP72	708753
Centrosomal protein 83kda	CEP83	711408
Choline/ethanolamine phosphotransferase 1	CEPT1	702700
Ceramide synthase 2	CERS2	716180
Ceramide synthase 4	CERS4	706728
Centrin 3	CETN3	695223
Cilia and flagella associated protein 53	CFAP53	700084
Cilia and flagella associated protein 65	CFAP65	701296
Cofilin 1 (non-muscle)	CFL1	721882
Cofilin 2 (muscle)	CFL2	693875
Complement factor properdin	CFP	707386
CGG triplet repeat binding protein 1	CGGBP1	693920
Cell growth regulator with ring finger domain 1	CGRRF1	695231
Chromodomain helicase DNA binding protein 4	CHD4	713162
Checkpoint kinase 2	CHEK2	713668
Calcium homeostasis endoplasmic reticulum protein	CHERP	718689
Cysteine rich hydrophobic domain 2	CHIC2	697359
Chitinase domain containing 1	CHID1	701435
Choline kinase beta	CHKB	716377
Charged multivesicular body protein 4B	CHMP4B	709004
Charged multivesicular body protein 5	CHMP5	703191
Charged multivesicular body protein 6	CHMP6	718353
Chondroitin polymerizing factor	CHPF	703860
Chromatin accessibility complex 1	CHRA1	700384
Carbohydrate (keratan sulfate Gal-6) sulfotransferase 1	CHST1	715176
Carbohydrate (N-acetylgalactosamine 4-O) sulfotransferase 14	CHST14	703115
Carbohydrate (N-acetylgalactosamine 4-sulfate 6-O) sulfotransferase 15	CHST15	693845
Carbohydrate (N-acetylglucosamine 6-O) sulfotransferase 4	CHST4	708116
Carbohydrate (N-acetylglucosamine 6-O) sulfotransferase 7	CHST7	704906
Chromatin target of PRMT1	CHTOP	715501

Conserved helix-loop-helix ubiquitous kinase	CHUK	709511
Circadian associated repressor of transcription	CIART	706693
Cell death-inducing DFFA-like effector b	CIDEB	100425328
CLOCK-interacting pacemaker	CIPC	704679
Cold inducible RNA binding protein	CIRBP	706175
Cytokine inducible SH2-containing protein	CISH	701456
CDKN1A interacting zinc finger protein 1	CIZ1	717725
Cytoskeleton associated protein 5	CKAP5	714095
Creatine kinase, brain	CKB	711167
CDC28 protein kinase regulatory subunit 1B	CKS1B	717164
Claudin 15	CLDN15	719637
Claudin 16	CLDN16	704442
Claudin 3	CLDN3	716771
Claudin 9	CLDN9	699721
C-type lectin domain family 1, member A	CLEC1A	717526
C-type lectin domain family 9 member A	CLEC9A	717472
Chloride intracellular channel 4	CLIC4	712337
CAP-Gly domain containing linker protein family member 4	CLIP4	704092
CDC like kinase 1	CLK1	700320
CDC like kinase 3	CLK3	702511
Calmin (calponin-like, transmembrane)	CLMN	709910
Cleavage and polyadenylation factor I subunit 1	CLP1	705071
Cleft lip and palate associated transmembrane protein 1	CLPTM1	718306
Clathrin, light chain A	CLTA	693659
Cytidine monophosphate N-acetylneuraminic acid synthetase	CMAS	706604
C-x(9)-C motif containing 4	CMC4	100423504
Cytidine monophosphate (UMP-CMP) kinase 1, cytosolic	CMPK1	710196
CKLF-like MARVEL transmembrane domain containing 2	CMTM2	693810
Cap methyltransferase 2	CMTR2	711529
Cyclic nucleotide binding domain containing 2	CNBD2	703290
Carnosine dipeptidase 1 (metallopeptidase M20 family)	CNDP1	695195
Cornichon family AMPA receptor auxiliary protein 1	CNIH1	695002
Cornichon family AMPA receptor auxiliary protein 4	CNIH4	701767
CNKSR family member 3	CNKSR3	702627
Cyclin and CBS domain divalent metal cation transport mediator 2	CNNM2	714238
CCR4-NOT transcription complex subunit 10	CNOT10	704986
CCR4-NOT transcription complex subunit 3	CNOT3	693292
CCR4-NOT transcription complex subunit 7	CNOT7	702192
CCR4-NOT transcription complex subunit 8	CNOT8	714813
Ciliary neurotrophic factor	CNTF	701907
Contactin 1	CNTN1	574365
Centriolin	CNTRL	700200
Centrobin, centrosomal BRCA2 interacting protein	CNTROB	716660
Component of oligomeric golgi complex 1	COG1	695754
Component of oligomeric golgi complex 2	COG2	714263
Collagen, type I, alpha 2	COL1A2	700359
Collagen, type III, alpha 1	COL3A1	574131
Collagen, type VI, alpha 3	COL6A3	694701

Collagen, type VIII, alpha 2	COL8A2	713447
COMM domain containing 2	COMMD2	711498
COMM domain containing 5	COMMD5	704586
COMM domain containing 6	COMMD6	695191
COMM domain containing 8	COMMD8	704346
Catechol-O-methyltransferase	COMT	712548
Coatomer protein complex subunit beta 1	COPB1	699327
COP9 signalosome subunit 2	COPS2	714814
COP9 signalosome subunit 3	COPS3	698461
COP9 signalosome subunit 5	COPS5	704584
COP9 signalosome subunit 6	COPS6	710667
Coatomer protein complex subunit zeta 1	COPZ1	705176
Coenzyme Q10A	COQ10A	712341
Coenzyme Q2 4-hydroxybenzoate polyprenyltransferase	COQ2	707681
COX10 homolog, cytochrome c oxidase assembly protein, heme A: farnesyltransferase (yeast)	COX10	718301
Cytochrome c oxidase subunit 5A	COX5A	692061
Cytochrome c oxidase subunit 6C	COX6C	100428416
Carboxypeptidase A5	CPA5	702974
Carboxypeptidase A6	CPA6	705117
Carboxypeptidase B1	CPB1	712639
Carboxypeptidase E	CPE	708881
Cytoplasmic polyadenylation element binding protein 4	CPEB4	704141
Carboxypeptidase N subunit 2	CPN2	106997192
Copine I	CPNE1	100329144
Copine II	CPNE2	703557
Copine VIII	CPNE8	696586
Carboxypeptidase Q	CPQ	701711
Cleavage and polyadenylation specific factor 1	CPSF1	702082
Cleavage and polyadenylation specific factor 4	CPSF4	708119
Carnitine palmitoyltransferase 1B	CPT1B	720697
Carboxypeptidase, vitellogenic-like	CPVL	697111
CASP2 and RIPK1 domain containing adaptor with death domain	CRADD	711165
Camp responsive element binding protein 3	CREB3	696350
Camp responsive element binding protein 3-like 4	CREB3L4	715951
Camp responsive element modulator	CREM	698636
Cytotoxic and regulatory T-cell molecule	CRTAM	707560
Cryptochrome circadian clock 1	CRY1	703752
Crystallin beta B3	CRYBB3	711554
Crystallin, gamma C	CRYGC	709553
Cold shock domain containing E1, RNA binding	CSDE1	708897
CSE1 chromosome segregation 1-like (yeast)	CSE1L	704301
Colony stimulating factor 3	CSF3	698961
Colony stimulating factor 3 receptor	CSF3R	713485
C-src tyrosine kinase	CSK	702868
Casein kinase 1, alpha 1	CSNK1A1	710775
Casein kinase 2, alpha 1 polypeptide	CSNK2A1	714841
Casein kinase 2, beta polypeptide	CSNK2B	715807

Cysteine-serine-rich nuclear protein 2	CSRNP2	694549
Cystatin C	CST3	574313
Cleavage stimulation factor, 3' pre-RNA, subunit 3	CSTF3	694040
CTS telomere maintenance complex component 1	CTC1	717075
CTD phosphatase subunit 1	CTDP1	698467
CTD small phosphatase 1	CTDSP1	698824
CTD small phosphatase like 2	CTDSPL2	711917
Catenin alpha 1	CTNNA1	574385
Catenin alpha-like 1	CTNNAL1	710389
Catenin beta like 1	CTNNBL1	700310
Catenin delta 1	CTNND1	704212
Cystinosin, lysosomal cystine transporter	CTNS	706721
CTP synthase 1	CTPS1	695498
CTR9 homolog, Paf1/RNA polymerase II complex component	CTR9	705748
Chymotrypsin-like	CTRL	701625
Cathepsin A	CTSA	708592
Cathepsin B	CTSB	100424760
Cathepsin C	CTSC	705320
Cathepsin H	CTSH	711437
Cathepsin L	CTSL	694569
CUE domain containing 2	CUEDC2	713243
Cullin 4A	CUL4A	714302
Cullin 5	CUL5	707559
Cullin 7	CUL7	699545
Cute copper transporter	CUTC	709050
CWC15 spliceosome-associated protein	CWC15	698332
CWF19-like 2, cell cycle control (S. Pombe)	CWF19L2	706825
Chemokine (C-X-C motif) ligand 17	CXCL17	708108
Chemokine (C-X-C motif) receptor 3	CXCR3	699438
Chemokine (C-X-C motif) receptor 4	CXCR4	707329
Chemokine (C-X-C motif) receptor 6	CXCR6	713829
Chromosome X open reading frame, human cxorf23	CXHXorf23	696449
Cytochrome b-245 heavy chain	CYBB	696542
Cytochrome b reductase 1	CYBRD1	694818
Cytochrome P450c17	CYP17A1	678693
Cytochrome P450, family 27, subfamily B, polypeptide 1	CYP27B1	715747
Cytochrome P450, family 2, subfamily D, polypeptide 6	CYP2D6	678691
Cytochrome P450, family 7, subfamily A, polypeptide 1	CYP7A1	698127
Dachshund family transcription factor 1	DACH1	693532
Defender against cell death 1	DAD1	711840
Dystroglycan 1	DAG1	706179
DALR anticodon binding domain containing 3	DALRD3	708403
Death-associated protein	DAP	697362
Death associated protein 3	DAP3	719314
Death-associated protein kinase 1	DAPK1	694315
DAZ associated protein 1	DAZAP1	707132
Drebrin 1	DBN1	700375
DDB1 and CUL4 associated factor 11	DCAF11	714867

DDB1 and CUL4 associated factor 4	DCAF4	695337
DDB1 and CUL4 associated factor 5	DCAF5	714522
DDB1 and CUL4 associated factor 6	DCAF6	698686
Dachsous cadherin-related 1	DCHS1	711938
Decorin	DCN	709933
Decapping mrna 1A	DCP1A	694198
Decapping mrna 1B	DCP1B	708089
DC-STAMP domain containing 2	DCST2	717224
Dynactin subunit 1	DCTN1	708290
Dynactin subunit 2	DCTN2	714948
DCN1, defective in cullin neddylation 1, domain containing 1	DCUN1D1	708357
DCN1, defective in cullin neddylation 1, domain containing 4	DCUN1D4	702908
DCN1, defective in cullin neddylation 1, domain containing 5	DCUN1D5	704099
Discoidin domain receptor tyrosine kinase 1	DDR1	714233
DDR GK domain containing 1	DDR GK1	717226
DEAD (Asp-Glu-Ala-Asp) box helicase 1	DDX1	698327
DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 26B	DDX26B	709688
DEAD (Asp-Glu-Ala-Asp) box polypeptide 27	DDX27	703852
DEAD (Asp-Glu-Ala-Asp) box polypeptide 39A	DDX39A	718822
DEAD (Asp-Glu-Ala-Asp) box helicase 3, Y-linked	DDX3Y	100270696
DEAD (Asp-Glu-Ala-Asp) box polypeptide 41	DDX41	700742
DEAD (Asp-Glu-Ala-Asp) box polypeptide 47	DDX47	697304
DEAD (Asp-Glu-Ala-Asp) box helicase 5	DDX5	677694
DEAD (Asp-Glu-Ala-Asp) box helicase 56	DDX56	698980
2,4-dienoyl-coa reductase 1, mitochondrial	DECR1	696035
Death effector domain containing	DEDD	719875
Defensin, alpha 4, corticostatin	DEFA4	574311
Defensin alpha 6	DEFA6	717000
Defensin beta 108B	DEFB108B	696933
Defensin beta 121	DEFB121	619507
DEK proto-oncogene	DEK	712460
DENN/MADD domain containing 4A	DENND4A	709675
DENN/MADD domain containing 5A	DENND5A	707945
DENN/MADD domain containing 6A	DENND6A	707616
Derlin 1	DERL1	703803
Derlin 2	DERL2	712051
Desumoylating isopeptidase 2	DESI2	713515
Dexi homolog (mouse)	DEXI	100430904
Digeorge syndrome critical region gene 6	DGCR6	693512
Deoxyguanosine kinase	DGUOK	707554
Dehydrodolichyl diphosphate synthase subunit	DHDDS	714635
Deoxyhypusine synthase	DHPS	716213
Dehydrogenase/reductase (SDR family) member 1	DHRS1	715933
Dehydrogenase/reductase (SDR family) member 11	DHRS11	713823
Dehydrogenase/reductase (SDR family) member 3	DHRS3	715548
DEAH (Asp-Glu-Ala-His) box helicase 15	DHX15	715852
DEAH (Asp-Glu-Ala-His) box polypeptide 29	DHX29	706306
DEAH (Asp-Glu-Ala-His) box helicase 30	DHX30	711178

DEAH (Asp-Glu-Ala-His) box polypeptide 38	DHX38	709173
DEAH (Asp-Glu-Ala-Asp/His) box polypeptide 57	DHX57	713523
DEAH (Asp-Glu-Ala-His) box helicase 9	DHX9	715453
Dicer 1, ribonuclease type III	DICER1	702516
Death inducer-obliterator 1	DIDO1	698313
DIS3 like exosome 3'-5' exoribonuclease	DIS3L	710238
Discs, large homolog 1 (Drosophila)	DLG1	709572
Discs, large homolog 4 (Drosophila)	DLG4	714273
Discs, large homolog 5 (Drosophila)	DLG5	703123
Delta-like 4 (Drosophila)	DLL4	704898
Distal-less homeobox 3	DLX3	700831
Distal-less homeobox 5	DLX5	697853
DNA methyltransferase 1 associated protein 1	DMAP1	702919
DMRT like family B with proline rich C-terminal 1	DMRTB1	714424
Dmx-like 1	DMXL1	698117
Dynein, axonemal, assembly factor 2	DNAAF2	719026
Dnaj heat shock protein family (Hsp40) member A1	DNAJA1	703765
Dnaj heat shock protein family (Hsp40) member B4	DNAJB4	707206
Dnaj heat shock protein family (Hsp40) member C22	DNAJC22	710205
Dnaj heat shock protein family (Hsp40) member C27	DNAJC27	694037
Dnaj heat shock protein family (Hsp40) member C3	DNAJC3	695757
Dnaj heat shock protein family (Hsp40) member C6	DNAJC6	698682
Dnaj heat shock protein family (Hsp40) member C8	DNAJC8	720231
Dnaj heat shock protein family (Hsp40) member C9	DNAJC9	707599
Dynamin 1-like	DNM1L	695388
Dynamin 2	DNM2	713558
DNA (cytosine-5-)-methyltransferase 1	DNMT1	574321
Aspartyl aminopeptidase	DNPEP	703180
Dedicator of cytokinesis 11	DOCK11	710690
Dedicator of cytokinesis 5	DOCK5	711359
Docking protein 4	DOK4	704443
Docking protein 5	DOK5	698689
Dipeptidase 3	DPEP3	701327
Dipeptidyl-peptidase 3	DPP3	721809
Dihydropyrimidine dehydrogenase	DPYD	715672
DR1-associated protein 1 (negative cofactor 2 alpha)	DRAP1	715271
Developmentally regulated GTP binding protein 1	DRG1	716791
Drosha, ribonuclease type III	DROSHA	692081
Dystrophin related protein 2	DRP2	702655
Desmoplakin	DSP	694860
Dual serine/threonine and tyrosine protein kinase	DSTYK	664732
Denticleless E3 ubiquitin protein ligase homolog (Drosophila)	DTL	711236
DTW domain containing 1	DTWD1	715084
Deltex 3, E3 ubiquitin ligase	DTX3	715175
Dihydrouridine synthase 1-like	DUS1L	715662
Dual specificity phosphatase 11	DUSP11	707123
Dual specificity phosphatase 12	DUSP12	720034
Dual specificity phosphatase 23	DUSP23	719474

Dual specificity phosphatase 6	DUSP6	708907
Dishevelled segment polarity protein 1	DVL1	705864
Dishevelled segment polarity protein 2	DVL2	714381
Dynein, cytoplasmic 1, intermediate chain 2	DYNC1I2	695696
Dynein, light chain, LC8-type 1	DYNLL1	702360
Dynein, light chain, roadblock-type 2	DYNLRB2	713503
Dual specificity tyrosine-(Y)-phosphorylation regulated kinase 1B	DYRK1B	698848
Dual specificity tyrosine-(Y)-phosphorylation regulated kinase 2	DYRK2	717941
E2F transcription factor 3	E2F3	713904
E2F transcription factor 4, p107/p130-binding	E2F4	696864
E2F transcription factor 5, p130-binding	E2F5	703352
E2F-associated phosphoprotein	EAPP	714727
Endogenous Bornavirus-like nucleoprotein 2	EBLN2	693420
Emopamil binding protein (sterol isomerase)	EBP	714315
Ecdysoneless homolog (Drosophila)	ECD	707699
Enoyl-coa delta isomerase 2	ECI2	709579
Epithelial cell transforming 2	ECT2	694056
Ectodysplasin A receptor	EDAR	695059
ER degradation enhancer, mannosidase alpha-like 3	EDEM3	714475
Endothelin receptor type A	EDNRA	704135
Embryonic ectoderm development	EED	703866
Eukaryotic translation elongation factor 1 beta 2	EEF1B2	707019
Eukaryotic translation elongation factor 1 epsilon 1	EEF1E1	695426
Eukaryotic translation elongation factor 1 gamma	EEF1G	722274
EF-hand domain (C-terminal) containing 1	EFHC1	708517
Ephrin-B1	EFNB1	694149
Elongation factor Tu GTP binding domain containing 2	EFTUD2	715512
EGF-like-domain, multiple 7	EGFL7	709840
EGF-like-domain, multiple 8	EGFL8	717145
Eukaryotic translation initiation factor 2A, 65kda	EIF2A	710497
Eukaryotic translation initiation factor 2-alpha kinase 3	EIF2AK3	699575
Eukaryotic translation initiation factor 2D	EIF2D	695274
Eukaryotic translation initiation factor 2 subunit beta	EIF2S2	708593
Eukaryotic translation initiation factor 3 subunit D	EIF3D	695051
Eukaryotic translation initiation factor 3 subunit F	EIF3F	706269
Eukaryotic translation initiation factor 3 subunit G	EIF3G	714726
Eukaryotic translation initiation factor 3 subunit H	EIF3H	700517
Eukaryotic translation initiation factor 3 subunit K	EIF3K	693536
Eukaryotic translation initiation factor 3 subunit L	EIF3L	699189
Eukaryotic translation initiation factor 3 subunit M	EIF3M	695698
Eukaryotic translation initiation factor 4A2	EIF4A2	707775
Eukaryotic translation initiation factor 4E family member 2	EIF4E2	713487
Eukaryotic translation initiation factor 4E family member 3	EIF4E3	696303
Eukaryotic translation initiation factor 4E binding protein 2	EIF4EBP2	100424760
Eukaryotic translation initiation factor 4E binding protein 3	EIF4EBP3	100532736
Eukaryotic translation initiation factor 4H	EIF4H	693429
E74-like factor 2 (ets domain transcription factor)	ELF2	696760
Engulfment and cell motility 2	ELMO2	707316

ELOVL fatty acid elongase 2	ELOVL2	703030
ELOVL fatty acid elongase 4	ELOVL4	692070
ER membrane protein complex subunit 1	EMC1	702573
ER membrane protein complex subunit 4	EMC4	695907
Endonuclease domain containing 1	ENDOD1	699210
Enolase superfamily member 1	ENOSF1	697333
Ecto-NOX disulfide-thiol exchanger 2	ENOX2	703816
Ectonucleotide pyrophosphatase/phosphodiesterase 1	ENPP1	710140
Ectonucleotide pyrophosphatase/phosphodiesterase 2	ENPP2	705287
Ectonucleotide pyrophosphatase/phosphodiesterase 4 (putative)	ENPP4	703680
Eomesodermin	EOMES	704711
E1A binding protein p300	EP300	706258
Erythrocyte membrane protein band 4.1-like 1	EPB41L1	710697
Enhancer of polycomb homolog 2 (Drosophila)	EPC2	721916
EPH receptor B6	EPHB6	704886
Epidermal growth factor receptor pathway substrate 15-like 1	EPS15L1	719502
EPS8 like 1	EPS8L1	698281
Excision repair cross-complementation group 3	ERCC3	698829
Excision repair cross-complementation group 6	ERCC6	710153
ERGIC and golgi 3	ERGIC3	704736
Enhancer of rudimentary homolog (Drosophila)	ERH	712507
Endoplasmic reticulum lectin 1	ERLEC1	716460
Endothelial cell adhesion molecule	ESAM	712200
Esterase D	ESD	708871
ESF1 nucleolar pre-rRNA processing protein homolog	ESF1	694159
Extended synaptotagmin-like protein 1	ESYT1	711720
Eukaryotic translation termination factor 1	ETF1	714449
Electron-transferring-flavoprotein dehydrogenase	ETFDH	701207
V-ets avian erythroblastosis virus E26 oncogene homolog 1	ETS1	714697
Even-skipped homeobox 1	EVX1	699106
EWS RNA binding protein 1	EWSR1	714432
Exonuclease 3'-5' domain containing 2	EXD2	712296
Exocyst complex component 1	EXOC1	695664
Exocyst complex component 2	EXOC2	706296
Exocyst complex component 3-like 2	EXOC3L2	713992
Exocyst complex component 4	EXOC4	712458
Exocyst complex component 7	EXOC7	705801
Exosome component 10	EXOSC10	714153
Exostosin glycosyltransferase 1	EXT1	701488
Exostosin glycosyltransferase 2	EXT2	715975
F11 receptor	F11R	719824
Coagulation factor XII (Hageman factor)	F12	699875
Coagulation factor II (thrombin)	F2	712729
Coagulation factor II (thrombin) receptor	F2R	707370
Fas (TNFRSF6) associated factor 1	FAF1	714405
Fumarylacetoacetate hydrolase (fumarylacetoacetase)	FAH	712716
Fas apoptotic inhibitory molecule	FAIM	716216
Family with sequence similarity 104 member A	FAM104A	695865

Family with sequence similarity 109 member B	FAM109B	709545
Family with sequence similarity 110 member A	FAM110A	717055
Family with sequence similarity 122A	FAM122A	698955
Family with sequence similarity 126 member A	FAM126A	705467
Family with sequence similarity 127, member A	FAM127A	708766
Family with sequence similarity 134 member A	FAM134A	704378
Family with sequence similarity 156 member B	FAM156B	698392
Family with sequence similarity 175 member B	FAM175B	694886
Family with sequence similarity 178 member B	FAM178B	710890
Family with sequence similarity 179 member B	FAM179B	702188
Family with sequence similarity 181 member B	FAM181B	701184
Family with sequence similarity 188 member A	FAM188A	699009
Family with sequence similarity 199, X-linked	FAM199X	699523
Family with sequence similarity 219 member A	FAM219A	700651
Family with sequence similarity 220 member A	FAM220A	703785
Family with sequence similarity 222 member B	FAM222B	710302
Family with sequence similarity 234 member A	FAM234A	694729
Family with sequence similarity 35 member A	FAM35A	694102
Family with sequence similarity 3 member A	FAM3A	701159
Family with sequence similarity 3 member B	FAM3B	722516
Family with sequence similarity 43 member B	FAM43B	705659
Family with sequence similarity 53 member C	FAM53C	714176
Family with sequence similarity 58 member A	FAM58A	695925
Family with sequence similarity 76 member A	FAM76A	716420
Family with sequence similarity 76 member B	FAM76B	699581
Family with sequence similarity 83 member A	FAM83A	704023
Family with sequence similarity 83 member F	FAM83F	704523
Family with sequence similarity 89 member B	FAM89B	721925
Family with sequence similarity 8 member A1	FAM8A1	703789
Family with sequence similarity 92 member A1	FAM92A1	698794
FANCD2 opposite strand	FANCD2OS	715980
Fanconi anemia complementation group E	FANCE	718889
Fanconi anemia complementation group G	FANCG	698837
Fatty acyl coa reductase 1	FAR1	699947
Phenylalanyl-trna synthetase 2, mitochondrial	FARS2	710945
FAST kinase domains 1	FASTKD1	706154
Finkel-Biskis-Reilly murine sarcoma virus (FBR-musv) ubiquitously expressed	FAU	716761
Failed axon connections homolog	FAXC	693945
Fibrillarin	FBL	700286
Filamin binding LIM protein 1	FBLIM1	695727
F-box and leucine-rich repeat protein 6	FBXL6	701594
F-box protein 11	FBXO11	715651
F-box protein 30	FBXO30	699241
F-box protein 4	FBXO4	697007
F-box protein 40	FBXO40	713933
F-box and WD repeat domain containing 11	FBXW11	708990
F-box and WD repeat domain containing 7	FBXW7	695101

F-box and WD repeat domain containing 9	FBXW9	716383
Fc fragment of ige, high affinity I, receptor for; alpha polypeptide	FCER1A	719324
FCF1 rRNA-processing protein	FCF1	700044
Fc fragment of igg, receptor, transporter, alpha	FCGRT	718859
FCH and double SH3 domains 2	FCHSD2	717996
Fc receptor-like B	FCRLB	720028
Fem-1 homolog a (C. Elegans)	FEM1A	694843
Fem-1 homolog b (C. Elegans)	FEM1B	693955
Fermitin family member 3	FERMT3	722120
FEV (ETS oncogene family)	FEV	701065
Fibroblast growth factor 10	FGF10	701584
Fibroblast growth factor 16	FGF16	705612
Fibroblast growth factor receptor 1	FGFR1	700126
Four and a half LIM domains 2	FHL2	713222
Four and a half LIM domains 3	FHL3	715313
FIC domain containing	FICD	706780
FIG4 phosphoinositide 5-phosphatase	FIG4	699914
FK506 binding protein 11	FKBP11	708598
FK506 binding protein 7	FKBP7	703299
FK506 binding protein 9	FKBP9	708827
Flightless I actin binding protein	FLII	700471
Filamin B, beta	FLNB	702732
Feline leukemia virus subgroup C cellular receptor 1	FLVCR1	710008
Flavin containing monooxygenase 3	FMO3	574244
Farnesyltransferase, CAAX box, beta	FNTB	708129
FBJ murine osteosarcoma viral oncogene homolog	FOS	702077
Forkhead box A1	FOXA1	697909
Forkhead box O3	FOXO3	700731
Forkhead box P2	FOXP2	613237
FRAS1 related extracellular matrix 1	FREM1	713874
Fascin actin-bundling protein 2, retinal	FSCN2	713824
Fibronectin type III and SPRY domain containing 2	FSD2	693575
Follicle stimulating hormone, beta polypeptide	FSHB	697317
Follistatin	FST	707420
Follistatin like 1	FSTL1	713367
Ftsj RNA methyltransferase homolog 1 (E. Coli)	FTSJ1	710243
Fucosidase, alpha-L- 2, plasma	FUCA2	700611
Fucokinase	FUK	709226
FUN14 domain containing 1	FUNDC1	709370
Fucosyltransferase 8 (alpha (1,6) fucosyltransferase)	FUT8	708839
Fuzzy planar cell polarity protein	FUZ	719442
FXRD domain containing ion transport regulator 7	FXRD7	718457
FYN proto-oncogene, Src family tyrosine kinase	FYN	574214
Frizzled class receptor 6	FZD6	694625
G2/M-phase specific E3 ubiquitin protein ligase	G2E3	717021
Gtpase activating protein (SH3 domain) binding protein 1	G3BP1	713884
Glucose 6 phosphatase, catalytic, 3	G6PC3	714276
Glucose-6-phosphate dehydrogenase	G6PD	701137

GABA(A) receptor-associated protein like 2	GABARAPL2	714413
Gamma-aminobutyric acid (GABA) B receptor, 1	GABBR1	708987
GA binding protein transcription factor, beta subunit 1	GABPB1	715334
Growth arrest and DNA damage inducible gamma	GADD45G	697835
Galactose-3-O-sulfotransferase 1	GAL3ST1	715998
Galactosylceramidase	GALC	693322
Galactokinase 2	GALK2	714866
Polypeptide N-acetylgalactosaminyltransferase 1	GALNT1	708930
Polypeptide N-acetylgalactosaminyltransferase 14	GALNT14	705068
Guanidinoacetate N-methyltransferase	GAMT	721263
Gigaxonin	GAN	713996
Growth associated protein 43	GAP43	711260
Glyceraldehyde-3-phosphate dehydrogenase	GAPDH	574353
Phosphoribosylglycinamide formyltransferase, phosphoribosylglycinamide synthetase, phosphoribosylaminoimidazole synthetase	GART	704926
Gastrin	GAST	707564
Glucosidase, beta (bile acid) 2	GBA2	696062
Glucan (1,4-alpha-), branching enzyme 1	GBE1	722884
Gastrulation brain homeobox 2	GBX2	693901
Grancalcin	GCA	702138
Glutaryl-coa dehydrogenase	GCDH	716935
Glutamate-cysteine ligase, catalytic subunit	GCLC	710508
Glial cells missing homolog 1 (Drosophila)	GCM1	709965
Ganglioside induced differentiation associated protein 2	GDAP2	705994
GDP dissociation inhibitor 2	GDI2	712510
G elongation factor, mitochondrial 1	GFM1	706456
G elongation factor, mitochondrial 2	GFM2	704247
Glucose-fructose oxidoreductase domain containing 1	GFOD1	700607
Glutamine--fructose-6-phosphate transaminase 1	GFPT1	574376
Golgi-associated, gamma adaptin ear containing, ARF binding protein 1	GGA1	697929
Golgi-associated, gamma adaptin ear containing, ARF binding protein 3	GGA3	705751
Gamma-glutamylcyclotransferase	GGCT	695547
Gametogenetin	GGN	715072
Gametogenetin binding protein 2	GGNBP2	713750
Gamma-glutamyltransferase 5	GGT5	720345
Growth hormone inducible transmembrane protein	GHITM	702691
GID complex subunit 4 homolog	GID4	699842
GID complex subunit 8	GID8	698189
Gtpase, IMAP family member 1	GIMAP1	100424488
Gtpase, IMAP family member 2	GIMAP2	713463
Gtpase, IMAP family member 4	GIMAP4	713506
Gtpase, IMAP family member 6	GIMAP6	713565
Gtpase, IMAP family member 8	GIMAP8	713236
GINS complex subunit 2 (Psf2 homolog)	GINS2	693426
G protein-coupled receptor kinase interacting arfgap 2	GIT2	708092

Gap junction protein delta 4	GJD4	699010
G kinase anchoring protein 1	GKAP1	708816
Galactosidase alpha	GLA	703129
Glycine dehydrogenase (decarboxylating)	GLDC	715563
GLE1, RNA export mediator	GLE1	717474
Glycosylated lysosomal membrane protein	GLMP	719468
Glutaredoxin	GLRX	698997
Glutaredoxin 5	GLRX5	702989
Glutaminase	GLS	693520
Glycosyltransferase 8 domain containing 1	GLT8D1	695999
GDP-mannose 4,6-dehydratase	GMDS	707051
GEM interacting protein	GMIP	720380
Guanosine monophosphate reductase 2	GMPR2	715719
Guanine nucleotide binding protein (G protein), alpha 11 (Gq class)	GNA11	721649
Guanine nucleotide binding protein (G protein), beta polypeptide 2-like 1	GNB2L1	708526
Guanine nucleotide binding protein (G protein), gamma 10	GNG10	708193
Guanine nucleotide binding protein (G protein), gamma 11	GNG11	700606
Golgin A7	GOLGA7	709911
Golgin B1	GOLGB1	713993
Golgi reassembly stacking protein 2	GORASP2	694170
Glutamic-oxaloacetic transaminase 2	GOT2	707896
Glycoprotein IX (platelet)	GP9	704202
Glycosylphosphatidylinositol anchor attachment 1	GPAA1	699887
Glycerol-3-phosphate acyltransferase, mitochondrial	GPAM	696042
G protein-coupled bile acid receptor 1	GPBAR1	697937
GC-rich promoter binding protein 1	GPBP1	708322
GC-rich promoter binding protein 1-like 1	GPBP1L1	706690
Glycoprotein hormone beta 5	GPHB5	705722
G protein-coupled receptor 137	GPR137	717722
G protein-coupled receptor 158	GPR158	707065
G protein-coupled receptor 171	GPR171	709960
G protein-coupled receptor 18	GPR18	698714
G protein-coupled receptor 183	GPR183	698844
G protein-coupled receptor 19	GPR19	697072
G protein-coupled receptor 31	GPR31	717158
G protein-coupled receptor 34	GPR34	700887
G protein-coupled receptor 37 (endothelin receptor type B-like)	GPR37	696628
G protein-coupled receptor 63	GPR63	704888
G protein-coupled receptor 89A	GPR89A	696579
G protein-coupled receptor, class C, group 5, member B	GPRC5B	695204
G protein-coupled receptor, class C, group 5, member C	GPRC5C	697446
G protein pathway suppressor 1	GPS1	719343
G-protein signaling modulator 1	GPSM1	710652
Glutathione peroxidase 6	GPX6	100286832
GRB2-related adaptor protein	GRAP	702473
GRP1 (general receptor for phosphoinositides 1)-associated	GRASP	696547

scaffold protein		
Growth factor receptor bound protein 10	GRB10	694786
Glutamate receptor, ionotropic, N-methyl D-aspartate-associated protein 1 (glutamate binding)	GRINA	708234
Glutamate receptor, metabotropic 8	GRM8	697465
Glycogen synthase kinase 3 alpha	GSK3A	707037
Glutathione S-transferase alpha 4	GSTA4	709666
Glutathione S-transferase omega 1	GSTO1	716078
Glutathione S-transferase pi 1	GSTP1	721704
GS homeobox 2	GSX2	697240
Glycosyltransferase like domain containing 1	GTDC1	100424584
General transcription factor IIA 2	GTF2A2	702984
General transcription factor IIB	GTF2B	694770
General transcription factor IIE subunit 2	GTF2E2	694622
General transcription factor IIH subunit 5	GTF2H5	700107
GTF2I repeat domain containing 1	GTF2IRD1	693935
General transcription factor IIIA	GTF3A	710492
General transcription factor IIIC subunit 4	GTF3C4	714849
General transcription factor IIIC subunit 6	GTF3C6	696512
Guanylate kinase 1	GUK1	695272
Glycophorin C (Gerbich blood group)	GYPE	712092
Granzyme K	GZMK	705477
H2A histone family, member X	H2AFX	703073
H2A histone family, member Y	H2AFY	711836
H2A histone family, member Z	H2AFZ	709326
3-hydroxyanthranilate 3,4-dioxygenase	HAAO	713101
3-hydroxyacyl-coa dehydratase 1	HACD1	700635
Hydroxyacyl-coa dehydrogenase/3-ketoacyl-coa thiolase/enoyl-coa hydratase (trifunctional protein), alpha subunit	HADHA	695975
Hydroxyacylglutathione hydrolase-like	HAGHL	697846
Hepcidin antimicrobial peptide	HAMP	708397
Hyaluronan and proteoglycan link protein 3	HAPLN3	698880
Histidyl-trna synthetase 2	HARS2	697009
HAUS augmin like complex subunit 8	HAUS8	718874
Hemoglobin subunit alpha 1	HBA1	701930
Hemoglobin, beta	HBB	715559
Hemoglobin subunit epsilon 1	HBE1	715414
HMG-box transcription factor 1	HBP1	699237
Hematopoietic cell-specific Lyn substrate 1	HCLS1	714044
Hyperpolarization activated cyclic nucleotide gated potassium channel 3	HCN3	717719
Histone deacetylase 11	HDAC11	693537
Histone deacetylase 3	HDAC3	704467
Histone deacetylase 5	HDAC5	711456
Haloacid dehalogenase like hydrolase domain containing 2	HDHD2	697216
HEAT repeat containing 6	HEATR6	720089
HEAT repeat containing 9	HEATR9	716382
Heme binding protein 2	HEBP2	709176

Hdc homolog, cell cycle regulator	HECA	702628
HECT domain containing E3 ubiquitin protein ligase 1	HECTD1	717177
HECT domain containing E3 ubiquitin protein ligase 2	HECTD2	697258
HECT domain containing E3 ubiquitin protein ligase 3	HECTD3	705051
Helicase, lymphoid-specific	HELLS	701598
HEN1 methyltransferase homolog 1 (Arabidopsis)	HENMT1	698896
HECT and RLD domain containing E3 ubiquitin protein ligase 3	HERC3	703108
HECT and RLD domain containing E3 ubiquitin protein ligase 4	HERC4	695571
Homocysteine-inducible, endoplasmic reticulum stress-inducible, ubiquitin-like domain member 1	HERPUD1	703210
Hes-related family bhlh transcription factor with YRPW motif 2	HEY2	712988
Hepatocyte growth factor-regulated tyrosine kinase substrate	HGS	714385
HIG1 hypoxia inducible domain family member 2A	HIGD2A	696888
Hypoxia inducible lipid droplet-associated	HILPDA	701261
Histone H4 transcription factor	HINFP	703763
Homeodomain interacting protein kinase 1	HIPK1	707856
HIRA interacting protein 3	HIRIP3	708004
Human immunodeficiency virus type I enhancer binding protein 3	HIVEP3	696084
H2.0-like homeobox	HLX	705298
Histocompatibility (minor) 13	HM13	713216
5-hydroxymethylcytosine (hmc) binding, ES cell-specific	HMCES	703524
High mobility group box 3	HMGB3	703598
Heme oxygenase 1	HMOX1	719266
Heme oxygenase 2	HMOX2	705461
Hematological and neurological expressed 1	HN1	664729
Hematological and neurological expressed 1-like	HN1L	702283
Heterogeneous nuclear ribonucleoprotein A2/B1	HNRNPA2B1	701821
Heterogeneous nuclear ribonucleoprotein A/B	HNRNPAB	702509
Heterogeneous nuclear ribonucleoprotein C (C1/C2)	HNRNPC	706423
Heterogeneous nuclear ribonucleoprotein H2 (H')	HNRNPH2	703254
Heterogeneous nuclear ribonucleoprotein L	HNRNPL	694448
Heterogeneous nuclear ribonucleoprotein L-like	HNRNPLL	710841
Hook microtubule-tethering protein 1	HOOK1	693504
Homeobox B7	HOXB7	697089
Homeobox C4	HOXC4	100430432
Hematopoietic prostaglandin D synthase	HPGDS	705227
Hermansky-Pudlak syndrome 6	HPS6	712574
HRAS like suppressor family member 5	HRASLS5	718317
Heat shock factor binding protein 1	HSBP1	714498
Hydroxysteroid (17-beta) dehydrogenase 10	HSD17B10	700018
Hydroxysteroid (17-beta) dehydrogenase 3	HSD17B3	709843
Hydroxysteroid (17-beta) dehydrogenase 8	HSD17B8	718119
Heat shock transcription factor 2	HSF2	713938
Heat shock protein 90kda alpha (cytosolic), class A member 1	HSP90AA1	708431
Heat shock protein 90kda alpha family class B member 1	HSP90AB1	702293
Heat shock protein family A (Hsp70) member 8	HSPA8	707989
Heat shock protein family B (small) member 11	HSPB11	714791
Heat shock protein family D (Hsp60) member 1	HSPD1	698024

Heat shock protein family H (Hsp110) member 1	HSPH1	721956
Hyaluronoglucosaminidase 2	HYAL2	702484
Isoleucyl-trna synthetase	IARS	677705
Interactor of little elongation complex ELL subunit 2	ICE2	706347
Inhibitor of DNA binding 1, dominant negative helix-loop-helix protein	ID1	713160
Isocitrate dehydrogenase 2 (NADP+), mitochondrial	IDH2	701480
Isocitrate dehydrogenase 3 (NAD+) alpha	IDH3A	677715
Isocitrate dehydrogenase 3 (NAD+) gamma	IDH3G	698558
Interferon induced, with helicase C domain 1	IFIH1	702024
Interferon induced protein with tetratricopeptide repeats 2	IFIT2	695452
Interferon (alpha, beta and omega) receptor 2	IFNAR2	699726
Interferon, lambda receptor 1	IFNLR1	711625
Intraflagellar transport 172	IFT172	700948
Intraflagellar transport 20	IFT20	715773
Intraflagellar transport 22	IFT22	714551
Intraflagellar transport 27	IFT27	697032
Intraflagellar transport 46	IFT46	700582
Intraflagellar transport 57	IFT57	705088
Intraflagellar transport 74	IFT74	707561
Intraflagellar transport 80	IFT80	705146
Insulin like growth factor binding protein acid labile subunit	IGFALS	722493
Insulin like growth factor binding protein 3	IGFBP3	696868
Immunoglobulin superfamily member 21	IGSF21	701539
Inhibitor of kappa light polypeptide gene enhancer in B-cells, kinase beta	IKBKB	704683
IKAROS family zinc finger 5	IKZF5	716950
Interleukin 20 receptor subunit beta	IL20RB	716769
Interleukin 27 receptor subunit alpha	IL27RA	717549
Interleukin enhancer binding factor 3	ILF3	713427
Integrin linked kinase	ILK	709944
IMP3, U3 small nucleolar ribonucleoprotein	IMP3	706202
Inositol monophosphatase domain containing 1	IMPAD1	696893
IMP (inosine 5'-monophosphate) dehydrogenase 1	IMPDH1	701039
Internexin neuronal intermediate filament protein alpha	INA	714455
Inhibitor of growth family member 2	ING2	701839
Inhibitor of growth family member 4	ING4	722073
Inhibin alpha	INHA	574379
INO80 complex subunit C	INO80C	708819
Inositol polyphosphate-1-phosphatase	INPP1	703301
Inositol polyphosphate-4-phosphatase type II B	INPP4B	699738
Insulin like 3	INSL3	100533192
Insulin like 4	INSL4	693911
Insulin like 5	INSL5	699803
Integrator complex subunit 12	INTS12	694344
Integrator complex subunit 2	INTS2	712351
Integrator complex subunit 8	INTS8	700255
Inturned planar cell polarity protein	INTU	709967

Inositol polyphosphate multikinase	IPMK	703630
Importin 13	IPO13	702007
Importin 8	IPO8	693514
IQ motif containing with AAA domain 1	IQCA1	694173
IQ motif containing B1	IQCB1	715032
IQ motif containing K	IQCK	695417
IQ motif and Sec7 domain 1	IQSEC1	693922
Interleukin 1 receptor associated kinase 1 binding protein 1	IRAK1BP1	716772
Interferon regulatory factor 1	IRF1	707788
Interferon regulatory factor 2	IRF2	694347
Interferon regulatory factor 2 binding protein 1	IRF2BP1	715611
Iroquois homeobox 5	IRX5	697968
Iron-sulfur cluster assembly enzyme	ISCU	705669
Increased sodium tolerance 1 homolog (yeast)	IST1	707245
Inositol-3-phosphate synthase 1	ISYNA1	719487
Integrin alpha FG-GAP repeat containing 1	ITFG1	716435
Integrin subunit alpha 10	ITGA10	100428480
Integrin subunit alpha 4	ITGA4	704745
Integrin subunit beta 7	ITGB7	699405
IL2-inducible T-cell kinase	ITK	715471
Integral membrane protein 2B	ITM2B	709896
IWS1 homolog (S. Cerevisiae)	IWS1	699205
Izumo sperm-egg fusion 1	IZUMO1	718234
Janus kinase 1	JAK1	677689
Janus kinase and microtubule interacting protein 1	JAKMIP1	722750
Junction adhesion molecule like	JAML	704919
JNK1/MAPK8-associated membrane protein	JKAMP	702307
Junctophilin 1	JPH1	697014
Junction plakoglobin	JUP	707769
KAT8 regulatory NSL complex subunit 1	KANSL1	717172
KAT8 regulatory NSL complex subunit 3	KANSL3	706159
Lysyl-trna synthetase	KARS	714516
Katanin p60 (ATPase containing) subunit A 1	KATNA1	698291
Kelch repeat and BTB (POZ) domain containing 4	KBTBD4	711452
Kelch repeat and BTB (POZ) domain containing 8	KBTBD8	699158
Kv channel interacting protein 2	KCNIP2	712434
Potassium channel, inwardly rectifying subfamily J, member 5	KCNJ5	714799
Potassium channel, inwardly rectifying subfamily J, member 8	KCNJ8	706369
Potassium channel, two pore domain subfamily K, member 16	KCNK16	719585
Potassium channel, subfamily K, member 4	KCNK4	717696
Potassium voltage-gated channel, modifier subfamily S, member 1	KCNS1	711715
Potassium channel tetramerization domain containing 11	KCTD11	715066
Potassium channel tetramerization domain containing 17	KCTD17	696210
Potassium channel tetramerization domain containing 2	KCTD2	700474
Potassium channel tetramerization domain containing 6	KCTD6	701810
Potassium channel tetramerization domain containing 9	KCTD9	711515
KDEL motif containing 1	KDELC1	702156
KDEL endoplasmic reticulum protein retention receptor 1	KDELR1	717928

KDEL endoplasmic reticulum protein retention receptor 2	KDELR2	704335
KDEL endoplasmic reticulum protein retention receptor 3	KDELR3	700810
Lysine (K)-specific demethylase 1A	KDM1A	718609
Lysine (K)-specific demethylase 3A	KDM3A	697775
Kell blood group, metallo-endopeptidase	KEL	703492
KH homology domain containing 1	KHDC1	715576
KIAA0100 ortholog	KIAA0100	709307
KIAA0141 ortholog	KIAA0141	702802
KIAA0895 ortholog	KIAA0895	706527
KIAA0907 ortholog	KIAA0907	718005
KIAA1033 ortholog	KIAA1033	701501
Mixed lineage kinase 4	KIAA1804	712755
KIAA1958 ortholog	KIAA1958	707028
Kinase D-interacting substrate 220kda	KIDINS220	693522
Kinesin family member 16B	KIF16B	695167
Kinesin family member 5A	KIF5A	711936
Kinesin family member C3	KIFC3	705951
Killer-cell Ig-like receptor KIR3DL12	KIR3DL12	100125560
V-kit Hardy-Zuckerman 4 feline sarcoma viral oncogene homolog	KIT	696759
Kizuna centrosomal protein	KIZ	700808
Kinesin light chain 3	KLC3	714331
Kinesin light chain 4	KLC4	698356
Kruppel-like factor 10	KLF10	693458
Kelch domain containing 1	KLHDC1	704472
Kelch domain containing 10	KLHDC10	702290
Kelch domain containing 4	KLHDC4	695768
Kelch domain containing 9	KLHDC9	719863
Kelch like family member 11	KLHL11	708393
Kelch like family member 26	KLHL26	719583
Kelch like family member 28	KLHL28	702075
Kelch like family member 32	KLHL32	709276
Kelch like family member 36	KLHL36	715423
Kelch like family member 5	KLHL5	698740
Kelch like family member 7	KLHL7	705349
Kallikrein related peptidase 8	KLK8	719488
Kallikrein B1	KLKB1	696639
Killer cell lectin-like receptor subfamily F, member 1	KLRF1	574389
Lysine (K)-specific methyltransferase 5B	KMT5B	710481
Lysine-rich nucleolar protein 1	KNOP1	695144
Karyopherin alpha 4 (importin alpha 3)	KPNA4	702486
Keratin 14, type I	KRT14	100426176
Keratin 17, type I	KRT17	100426328
Keratin 222, type II	KRT222	701557
Keratin 4, type II	KRT4	700060
Keratin 79, type II	KRT79	700188
Keratin 80, type II	KRT80	697190
Keratin associated protein 12-4	KRTAP12-4	712284
Keratinocyte associated protein 3	KRTCAP3	701066

Kxdl motif containing 1	KXD1	720235
L-2-hydroxyglutarate dehydrogenase	L2HGDH	705721
Lacritin	LACRT	654418
Leukocyte-associated immunoglobulin-like receptor 1	LAIR1	695533
Laminin subunit alpha 2	LAMA2	715394
Late endosomal/lysosomal adaptor, MAPK and MTOR activator 1	LAMTOR1	718249
Late endosomal/lysosomal adaptor, MAPK and MTOR activator 3	LAMTOR3	709133
Lysosomal protein transmembrane 4 alpha	LAPTM4A	701298
Like-glycosyltransferase	LARGE	717403
La ribonucleoprotein domain family member 6	LARP6	699664
La ribonucleoprotein domain family member 7	LARP7	703731
LIM and SH3 protein 1	LASP1	694950
Lamin B receptor	LBR	700801
Late cornified envelope 4A	LCE4A	100423936
LCK proto-oncogene, Src family tyrosine kinase	LCK	717704
Lipocalin 1	LCN1	711974
Lipocalin 6	LCN6	574148
Lymphocyte cytosolic protein 2	LCP2	700374
Lipid droplet associated hydrolase	LDAH	717510
Lactate dehydrogenase B	LDHB	706110
Leucine zipper, down-regulated in cancer 1-like	LDLOC1L	712760
Lymphoid enhancer-binding factor 1	LEF1	695776
Leucine, glutamate and lysine rich 1	LEKR1	705456
LEM domain containing 2	LEMD2	718463
Lectin, galactoside-binding, soluble, 14	LGALS14	698227
LIM homeobox 5	LHX5	713417
LIM homeobox 6	LHX6	698587
Ligase III, DNA, ATP-dependent	LIG3	715181
Ligase IV, DNA, ATP-dependent	LIG4	695475
Leukocyte immunoglobulin-like receptor, subfamily B (with TM and ITIM domains), member 1	LILRB1	692340
LIM and senescent cell antigen-like domains 2	LIMS2	699463
Lin-9 DREAM muvb core complex component	LIN9	699056
Leucine rich repeat and Ig domain containing 2	LINGO2	706386
Lines homolog 1	LINS1	693833
Lipase A, lysosomal acid, cholesterol esterase	LIPA	695240
Lipase, family member J	LIPJ	693463
Lectin, mannose-binding, 1	LMAN1	697449
Lamin A/C	LMNA	719414
Leucyl/cystinyl aminopeptidase	LNPEP	703949
Ligand of numb-protein X 1, E3 ubiquitin protein ligase	LNK1	697862
Lysyl oxidase like 1	LOXL1	706464
Lysyl oxidase like 3	LOXL3	709834
Lysophosphatidic acid receptor 6	LPAR6	705081
Lysophosphatidylcholine acyltransferase 4	LPCAT4	696388
Lactoperoxidase	LPO	709848
Leupaxin	LPXN	702033
Leucine rich repeat and fibronectin type III domain containing 4	LRFN4	713166

Leucine rich repeat and fibronectin type III domain containing 5	LRFN5	700512
Ligand dependent nuclear receptor interacting factor 1	LRIF1	702445
Leucine-rich repeat, immunoglobulin-like and transmembrane domains 1	LRIT1	698385
LDL receptor related protein 1	LRP1	710965
LDL receptor related protein 11	LRP11	697652
LDL receptor related protein 2	LRP2	705786
Leucine rich repeat containing 14	LRRC14	703587
Leucine rich repeat containing 20	LRRC20	710594
Leucine rich repeat containing 25	LRRC25	719475
Leucine rich repeat containing 4	LRRC4	698610
Leucine rich repeat containing 40	LRRC40	702565
Leucine rich repeat containing 42	LRRC42	714839
Leucine rich repeat containing 56	LRRC56	698952
Leucine rich repeat containing 57	LRRC57	711785
Leucine-rich repeat containing 8 family member D	LRRC8D	100423128
Leucine rich repeat and coiled-coil centrosomal protein 1	LRRCC1	707964
Leucine-rich repeats and WD repeat domain containing 1	LRWD1	715187
LSM10, U7 small nuclear RNA associated	LSM10	713277
LSM14A mrna processing body assembly factor	LSM14A	705085
LSM family member 14B	LSM14B	700561
LSM2 homolog, U6 small nuclear RNA and mrna degradation associated	LSM2	715592
LSM6 homolog, U6 small nuclear RNA and mrna degradation associated	LSM6	703226
Lymphotoxin alpha	LTA	715425
LUC7-like 3 pre-mrna splicing factor	LUC7L3	703662
Latexin	LXN	703996
Lymphocyte antigen 6 complex, locus D	LY6D	695450
Lymphocyte antigen 6 complex, locus G6C	LY6G6C	716220
Lymphocyte antigen 86	LY86	711507
Ly6/neurotoxin 1	LYNX1	100428512
LY6/PLAUR domain containing 3	LYPD3	718197
LY6/PLAUR domain containing 4	LYPD4	706070
Lysophospholipase II	LYPLA2	719074
Meiosis 1 associated protein	M1AP	710210
MAD2L1 binding protein	MAD2L1BP	701099
MAP-kinase activating death domain	MADD	713613
Macrophage erythroblast attacher	MAEA	702015
MAGE family member D1	MAGED1	696658
MAGE family member F1	MAGEF1	701676
MAGE family member H1	MAGEH1	703812
Mal, T-cell differentiation protein-like	MALL	696102
Mitochondrial assembly of ribosomal large subunit 1	MALSU1	704884
Mastermind like transcriptional coactivator 1	MAML1	715047
Major histocompatibility complex, class II, DM alpha	MAMU-DMA	717870
Major histocompatibility complex, class II, DM beta	MAMU-DMB	100429856
Major histocompatibility complex, class II, DP alpha	MAMU-DPA	717992

Major histocompatibility complex, class II, DP beta	MAMU-DPB	717969
Mannosidase, alpha, class 2C, member 1	MAN2C1	705599
Microtubule associated protein 1S	MAP1S	719196
Mitogen-activated protein kinase kinase 1	MAP2K1	710415
Mitogen-activated protein kinase kinase 4	MAP2K4	718155
Mitogen-activated protein kinase kinase 5	MAP2K5	711672
Mitogen-activated protein kinase kinase kinase 14	MAP3K14	716258
Mitogen-activated protein kinase kinase kinase 3	MAP3K3	717866
Mitogen-activated protein kinase kinase kinase 4	MAP3K4	710360
Mitogen-activated protein kinase kinase kinase 5	MAP3K5	711382
Mitogen-activated protein kinase kinase kinase 6	MAP3K6	715911
Microtubule associated protein 4	MAP4	100423616
Mitogen-activated protein kinase kinase kinase kinase 4	MAP4K4	716595
Mitogen-activated protein kinase kinase kinase kinase 5	MAP4K5	706204
MAP7 domain containing 1	MAP7D1	712899
Mitogen-activated protein kinase 1	MAPK1	698569
Mitogen-activated protein kinase 12	MAPK12	715745
Mitogen-activated protein kinase-activated protein kinase 2	MAPKAPK2	695044
Mitogen-activated protein kinase-activated protein kinase 5	MAPKAPK5	713521
Microtubule associated protein RP/EB family member 1	MAPRE1	711404
Microtubule associated protein RP/EB family member 2	MAPRE2	707996
Myristoylated alanine-rich protein kinase C substrate	MARCKS	694077
MARCKS-like 1	MARCKSL1	100428616
MAP/microtubule affinity-regulating kinase 2	MARK2	718065
Methionyl-trna synthetase	MARS	714744
Microtubule associated serine/threonine kinase like	MASTL	708134
Matrin 3	MATR3	100568448
MYC associated factor X	MAX	708228
Methyl-cpg binding domain 4 DNA glycosylase	MBD4	720557
Methyl-cpg binding domain protein 5	MBD5	721892
Muscleblind like splicing regulator 1	MBNL1	708735
Malonyl-coa-acyl carrier protein transacylase	MCAT	711556
Myeloid cell leukemia 1	MCL1	707539
Minichromosome maintenance complex component 3 associated protein	MCM3AP	721810
Minichromosome maintenance complex binding protein	MCMBP	704028
Multiple C2 domains, transmembrane 2	MCTP2	706949
Malate dehydrogenase 1	MDH1	694703
MDM2 proto-oncogene, E3 ubiquitin protein ligase	MDM2	718284
MYST/Esa1-associated factor 6	MEAF6	713666
Mediator complex subunit 13-like	MED13L	713867
Mediator complex subunit 19	MED19	704421
Mediator complex subunit 21	MED21	710699
Mediator complex subunit 23	MED23	714629
Mediator complex subunit 6	MED6	693320
Myocyte enhancer factor 2C	MEF2C	694992
Meis homeobox 1	MEIS1	697685
Meis homeobox 2	MEIS2	699748

Mediator of cell motility 1	MEMO1	706051
Matrix extracellular phosphoglycoprotein	MEPE	701943
Mesoderm specific transcript	MEST	703327
MET proto-oncogene, receptor tyrosine kinase	MET	704562
Methionyl aminopeptidase 2	METAP2	712400
Methyltransferase like 1	METTL1	715796
Methyltransferase like 13	METTL13	704943
Methyltransferase like 18	METTL18	701890
Methyltransferase like 22	METTL22	708739
Microfibrillar associated protein 1	MFAP1	711111
Membrane frizzled-related protein	MFRP	704965
Major facilitator superfamily domain containing 11	MFSD11	707770
Major facilitator superfamily domain containing 14A	MFSD14A	711233
Major facilitator superfamily domain containing 3	MFSD3	703246
Mannosyl (alpha-1,6-)-glycoprotein beta-1,2-N-acetyl glucosaminyltransferase	MGAT2	706426
Mannosyl (alpha-1,3-)-glycoprotein beta-1,4-N-acetyl glucosaminyltransferase, isozyme B	MGAT4B	705006
Mannosyl (alpha-1,6-)-glycoprotein beta-1,6-N-acetyl-glucosaminyltransferase, isozyme B	MGAT5B	708299
Meningioma expressed antigen 5 (hyaluronidase)	MGEA5	712370
Mitochondrial genome maintenance exonuclease 1	MGME1	696467
O-6-methylguanine-DNA methyltransferase	MGMT	698134
Microsomal glutathione S-transferase 2	MGST2	697983
Midline 1	MID1	709683
Midline 2	MID2	703281
Midnolin	MIDN	721215
Mitochondrial elongation factor 2	MIEF2	700705
MIF4G domain containing	MIF4GD	706005
Missing oocyte, meiosis regulator, homolog (Drosophila)	MIOS	696371
Mitochondrial intermediate peptidase	MIPEP	707131
Mckusick-Kaufman syndrome	MKKS	718547
Myeloid leukemia factor 1	MLF1	704116
Mutl homolog 1	MLH1	698782
Myeloid/lymphoid or mixed-lineage leukemia; translocated to, 6	MLLT6	694045
Methylmalonic aciduria (cobalamin deficiency) cblb type	MMAB	708973
Methylmalonic aciduria (cobalamin deficiency) cbld type, with homocystinuria	MMADHC	693783
Meningioma (disrupted in balanced translocation) 1	MN1	107000624
MNAT CDK-activating kinase assembly factor 1	MNAT1	703905
MOB family member 4, phocein	MOB4	698149
Mannosyl-oligosaccharide glucosidase	MOGS	708913
MON1 homolog B, secretory trafficking associated	MON1B	715104
Mortality factor 4 like 1	MORF4L1	711357
MORN repeat containing 2	MORN2	106992912
M-phase phosphoprotein 6	MPHOSPH6	714335
Mannose phosphate isomerase	MPI	722129
M-phase specific PLK1 interacting protein	MPLKIP	703092

Membrane protein, palmitoylated 1	MPP1	702092
Mpv17 mitochondrial inner membrane protein	MPV17	701026
Myelin protein zero-like 2	MPZL2	699330
Melanocortin 2 receptor accessory protein	MRAP	701330
Muscle RAS oncogene homolog	MRAS	716352
Mannose receptor, C type 1	MRC1	701010
MRE11 homolog A, double strand break repair nuclease	MRE11A	697566
Morf4 family associated protein 1-like 1	MRFAP1L1	710411
Mitochondrial ribosomal protein L10	MRPL10	695136
Mitochondrial ribosomal protein L11	MRPL11	714094
Mitochondrial ribosomal protein L16	MRPL16	698831
Mitochondrial ribosomal protein L17	MRPL17	697086
Mitochondrial ribosomal protein L19	MRPL19	711081
Mitochondrial ribosomal protein L20	MRPL20	701533
Mitochondrial ribosomal protein L22	MRPL22	714920
Mitochondrial ribosomal protein L24	MRPL24	718640
Mitochondrial ribosomal protein L37	MRPL37	715168
Mitochondrial ribosomal protein L39	MRPL39	708631
Mitochondrial ribosomal protein L42	MRPL42	715676
Mitochondrial ribosomal protein L46	MRPL46	697872
Mitochondrial ribosomal protein L50	MRPL50	713923
Mitochondrial ribosomal protein L51	MRPL51	713036
Mitochondrial ribosomal protein L55	MRPL55	695962
Mitochondrial ribosomal protein S11	MRPS11	697743
Mitochondrial ribosomal protein S17	MRPS17	703678
Mitochondrial ribosomal protein S18A	MRPS18A	701465
Mitochondrial ribosomal protein S18C	MRPS18C	707257
Mitochondrial ribosomal protein S21	MRPS21	706805
Mitochondrial ribosomal protein S22	MRPS22	715845
Mitochondrial ribosomal protein S33	MRPS33	693681
Murine retrovirus integration site 1 homolog	MRVI1	702830
Membrane-spanning 4-domains, subfamily A, member 1	MS4A1	696843
Membrane-spanning 4-domains, subfamily A, member 4A	MS4A4A	698027
Membrane-spanning 4-domains, subfamily A, member 7	MS4A7	697200
Myb/SANT-like DNA-binding domain containing 2	MSANTD2	712347
Male-specific lethal 3 homolog (Drosophila)	MSL3	720836
Methionine sulfoxide reductase A	MSRA	698628
MSS51 mitochondrial translational activator	MSS51	707066
Msh homeobox 2	MSX2	694227
Metallothionein 1J	MT1J	708785
Metallothionein-1M	MT1M	708679
Metallothionein 1X	MT1X	709905
Metallothionein 2A	MT2A	700719
Metastasis associated 1 family member 2	MTA2	718772
Metastasis associated 1 family member 3	MTA3	712967
MDM2 binding protein	MTBP	703121
Metadherin	MTDH	702410
Mitochondrial transcription termination factor 3	MTERF3	701366

Metal response element binding transcription factor 2	MTF2	707104
Mitochondrial fission regulator 1	MTFR1	711143
Mitochondrial fission regulator 1-like	MTFR1L	713213
Methylenetetrahydrofolate dehydrogenase (NADP+ dependent) 1, methenyltetrahydrofolate cyclohydrolase, formyltetrahydrofolate synthetase	MTHFD1	707059
Mitochondrial translational initiation factor 2	MTIF2	717042
Myotubularin 1	MTM1	703131
Myotubularin related protein 11	MTMR11	705542
Myotubularin related protein 2	MTMR2	699703
Myotubularin related protein 4	MTMR4	714621
Myotubularin related protein 6	MTMR6	709118
Myotubularin related protein 8	MTMR8	708037
Mitochondrial trna translation optimization 1	MTO1	717688
Mitochondrial poly(A) polymerase	MTPAP	694491
Mitochondrial E3 ubiquitin protein ligase 1	MUL1	705429
Muty DNA glycosylase	MUTYH	705651
MAX dimerization protein 1	MXD1	701784
Myosin binding protein C, slow type	MYBPC1	696955
Myeloid differentiation primary response 88	MYD88	696494
Myoneurin	MYNN	698094
Myosin IF	MYO1F	712101
Myoferlin	MYOF	700922
Myomesin 2	MYOM2	716555
Myozenin 1	MYOZ1	706768
Myelin regulatory factor	MYRF	719083
Mitotic spindle organizing protein 2B	MZT2B	701787
N(alpha)-acetyltransferase 30, natc catalytic subunit	NAA30	699379
N(alpha)-acetyltransferase 50, nate catalytic subunit	NAA50	709764
N(alpha)-acetyltransferase 60, natf catalytic subunit	NAA60	703207
NGFI-A binding protein 1	NAB1	693274
NGFI-A binding protein 2 (EGR1 binding protein 2)	NAB2	714209
Nucleic acid binding protein 1	NABP1	694172
Nascent polypeptide-associated complex alpha subunit	NACA	713416
NACC family member 2, BEN and BTB (POZ) domain containing	NACC2	721794
NEDD8 activating enzyme E1 subunit 1	NAE1	696429
N-acetylglucosamine kinase	NAGK	703976
N-acetylglucosamine-1-phosphodiester alpha-N-acetyl glucosaminidase	NAGPA	707352
Nucleosome assembly protein 1-like 5	NAP1L5	703223
NSF attachment protein alpha	NAPA	717355
N-acetyltransferase 10 (GCN5-related)	NAT10	717452
N-acetyltransferase 8 (GCN5-related, putative)	NAT8	706820
Neuron navigator 3	NAV3	694815
Neural cell adhesion molecule 1	NCAM1	693789
Non-SMC condensin I complex subunit D2	NCAPD2	712834
Non-SMC condensin II complex subunit D3	NCAPD3	700276
Non-SMC condensin I complex subunit G	NCAPG	715235

Neurochondrin	NCDN	712930
Neutrophil cytosolic factor 1	NCF1	694207
Neutrophil cytosolic factor 4	NCF4	695612
NCK adaptor protein 2	NCK2	713287
NCK-associated protein 1	NCKAP1	711124
NCK interacting protein with SH3 domain	NCKIPSD	709410
Nuclear receptor coactivator 2	NCOA2	693455
Nuclear receptor coactivator 4	NCOA4	709509
Nuclear receptor coactivator 6	NCOA6	706903
Nicastrin	NCSTN	719696
NADH:ubiquinone oxidoreductase subunit A1	NDUFA1	694635
NADH:ubiquinone oxidoreductase subunit A12	NDUFA12	711970
NADH:ubiquinone oxidoreductase subunit A8	NDUFA8	698706
NADH:ubiquinone oxidoreductase subunit AB1	NDUFAB1	700718
NADH:ubiquinone oxidoreductase complex assembly factor 1	NDUFAF1	710275
NADH:ubiquinone oxidoreductase complex assembly factor 2	NDUFAF2	693441
NADH:ubiquinone oxidoreductase complex assembly factor 4	NDUFAF4	705102
NADH:ubiquinone oxidoreductase complex assembly factor 6	NDUFAF6	700515
NADH:ubiquinone oxidoreductase complex assembly factor 7	NDUFAF7	709473
NADH:ubiquinone oxidoreductase subunit B2	NDUFB2	693431
NADH:ubiquinone oxidoreductase subunit B4	NDUFB4	713428
NADH:ubiquinone oxidoreductase subunit B8	NDUFB8	710521
NADH:ubiquinone oxidoreductase subunit B9	NDUFB9	711387
NADH:ubiquinone oxidoreductase core subunit S2	NDUFS2	719935
NADH:ubiquinone oxidoreductase core subunit S3	NDUFS3	713040
NADH:ubiquinone oxidoreductase subunit S4	NDUFS4	704137
Nebulette	NEBL	702764
N-terminal EF-hand calcium binding protein 1	NECAB1	696533
NECAP endocytosis associated 2	NECAP2	698687
Neural precursor cell expressed, developmentally down-regulated 1	NEDD1	713673
NIMA-related kinase 1	NEK1	694345
NIMA-related kinase 3	NEK3	710127
NIMA-related kinase 7	NEK7	710464
Negative elongation factor complex member C/D	NELFCD	696053
Negative elongation factor complex member E	NELFE	716913
Nuclear envelope integral membrane protein 1	NEMP1	710700
Neuraminidase 1 (lysosomal sialidase)	NEU1	716740
Neuronal differentiation 2	NEUROD2	696976
Neurofibromin 2 (merlin)	NF2	714945
Nuclear factor, erythroid 2	NFE2	705061
Nuclear factor, erythroid 2 like 1	NFE2L1	695404
Nuclear factor, erythroid 2 like 2	NFE2L2	707606
Nuclear factor I/A	NFIA	694022
Nuclear factor of kappa light polypeptide gene enhancer in B-cells 1	NFKB1	710324
Nuclear transcription factor Y subunit gamma	NFYC	696290
Nerve growth factor receptor	NGFR	574304
Nerve growth factor receptor (TNFRSF16) associated protein 1	NGFRAP1	100428976
N-glycanase 1	NGLY1	700842

Ninein	NIN	709532
Non imprinted in Prader-Willi/Angelman syndrome 2	NIPA2	710147
NK2 homeobox 5	NKX2-5	703795
Neurolysin (metallopeptidase M3 family)	NLN	696884
NLR family, pyrin domain containing 1	NLRP1	721648
NLR family, pyrin domain containing 6	NLRP6	720741
NMD3 ribosome export adaptor	NMD3	701677
NME/NM23 nucleoside diphosphate kinase 2	NME2	100533960
N-myc and STAT interactor	NMI	694554
N-myristoyltransferase 1	NMT1	715885
Nicotinamide nucleotide transhydrogenase	NNT	701110
Nitric oxide associated 1	NOA1	693437
NIN1/RPN12 binding protein 1 homolog	NOB1	705344
Nucleolar protein 8	NOL8	705799
Non-POU domain containing, octamer-binding	NONO	697263
NOP16 nucleolar protein	NOP16	696768
NOP58 ribonucleoprotein	NOP58	703859
Notch 4	NOTCH4	717323
Nuclear pore associated protein 1	NPAP1	719891
Neuronal PAS domain protein 3	NPAS3	717281
Niemann-Pick disease, type C2	NPC2	699881
Natriuretic peptide receptor 2	NPR2	695750
Neuroplastin	NPTN	699627
Neuronal pentraxin I	NPTX1	718259
NAD(P)H dehydrogenase, quinone 2	NQO2	707675
Nuclear receptor subfamily 1 group I member 2	NR1I2	574226
Nuclear receptor subfamily 2 group F member 2	NR2F2	707483
Nuclear receptor subfamily 2 group F member 6	NR2F6	719699
Nuclear receptor subfamily 5 group A member 1	NR5A1	694183
Neuronal cell adhesion molecule	NRCAM	574228
NRDE-2, necessary for RNA interference, domain containing	NRDE2	695676
Neuritin 1	NRN1	722968
Neuropilin 1	NRP1	697755
NSA2, ribosome biogenesis homolog	NSA2	704670
Nuclear receptor binding SET domain protein 1	NSD1	706131
NAD(P) dependent steroid dehydrogenase-like	NSDHL	693333
NSFL1 (p97) cofactor (p47)	NSFL1C	715743
NSE4 homolog A, SMC5-SMC6 complex component	NSMCE4A	705375
5'-nucleotidase, cytosolic IIIA	NT5C3A	708743
N-terminal Xaa-Pro-Lys N-methyltransferase 1	NTMT1	716763
NUAK family, SNF1-like kinase, 1	NUAK1	702256
Negative regulator of ubiquitin-like proteins 1	NUB1	715231
Nucleobindin 2	NUCB2	697084
Nuclear casein kinase and cyclin-dependent kinase substrate 1	NUCKS1	697298
Nudix hydrolase 1	NUDT1	713078
Nudix hydrolase 13	NUDT13	707796
Nudix hydrolase 5	NUDT5	694368
Nuclear fragile X mental retardation protein interacting protein 2	NUFIP2	711330

Nucleoporin 107kda	NUP107	718214
Nucleoporin 205kda	NUP205	708216
Nucleoporin 210kda	NUP210	693669
Nucleoporin 35kda	NUP35	706497
Nucleoporin 50kda	NUP50	713282
Nucleoporin 85kda	NUP85	705628
Nucleoporin 88kda	NUP88	711734
Nuclear RNA export factor 1	NXF1	718420
Neurexophilin and PC-esterase domain family member 3	NXPE3	702612
Nuclear transport factor 2-like export factor 1	NXT1	711846
Nuclear transport factor 2-like export factor 2	NXT2	704593
O-acyl-ADP-ribose deacylase 1	OARD1	719685
Ornithine aminotransferase	OAT	693970
Ornithine decarboxylase antizyme 1	OAZ1	721477
Oligonucleotide/oligosaccharide-binding fold containing 1	OBFC1	714968
Occludin	OCLN	700504
Oculocerebrorenal syndrome of Lowe	OCRL	702345
Outer dense fiber of sperm tails 1	ODF1	707269
Outer dense fiber of sperm tails 2	ODF2	717505
Oral-facial-digital syndrome 1	OFD1	711677
8-oxoguanine DNA glycosylase	OGG1	700481
Olfactomedin like 3	OLFML3	707969
Oligodendrocyte lineage transcription factor 2	OLIG2	700098
Oxidized low density lipoprotein (lectin-like) receptor 1	OLR1	717596
Olfactory marker protein	OMP	698210
Optic atrophy 3 (autosomal recessive, with chorea and spastic paraplegia)	OPA3	714806
Opioid binding protein/cell adhesion molecule-like	OPCML	693404
Olfactory receptor, family 10, subfamily G, member 7	OR10G7	714975
Olfactory receptor, family 2, subfamily AG, member 2	OR2AG2	709556
Olfactory receptor, family 2, subfamily F, member 1	OR2F1	707900
Olfactory receptor, family 2, subfamily H, member 2	OR2H2	710946
Olfactory receptor, family 2, subfamily W, member 1	OR2W1	708515
Olfactory receptor, family 51, subfamily A, member 4	OR51A4	100425536
Olfactory receptor, family 6, subfamily N, member 1	OR6N1	719958
Olfactory receptor, family 7, subfamily D, member 4	OR7D4	721322
ORAI calcium release-activated calcium modulator 1	ORAI1	700190
ORAI calcium release-activated calcium modulator 2	ORAI2	714917
Origin recognition complex subunit 3	ORC3	700773
Origin recognition complex subunit 5	ORC5	696683
ORMDL sphingolipid biosynthesis regulator 2	ORMDL2	710296
ORMDL sphingolipid biosynthesis regulator 3	ORMDL3	699154
Osteosarcoma amplified 9, endoplasmic reticulum lectin	OS9	715555
Oxysterol binding protein like 10	OSBPL10	703555
Oxysterol binding protein like 11	OSBPL11	716096
Oxysterol binding protein like 8	OSBPL8	693338
Oncostatin M	OSM	717994
Otopetrin 1	OTOP1	712780

OTU domain containing 6B	OTUD6B	697015
OTU deubiquitinase with linear linkage specificity	OTULIN	698991
Oviductal glycoprotein 1	OVGP1	703848
3-oxoacyl-ACP synthase, mitochondrial	OXSM	703382
Purinergic receptor P2Y, G-protein coupled, 11	P2RY11	100533472
Purinergic receptor P2Y, G-protein coupled, 13	P2RY13	106997048
Pyrimidinergic receptor P2Y, G-protein coupled, 6	P2RY6	718623
Proteasomal ATPase associated factor 1	PAAF1	718755
Poly(A) binding protein, cytoplasmic 1	PABPC1	705847
Peptidyl arginine deiminase, type IV	PADI4	700806
Poly(A) binding protein interacting protein 1	PAIP1	700869
Poly(A) binding protein interacting protein 2	PAIP2	693317
P21 protein (Cdc42/Rac)-activated kinase 6	PAK6	701589
Partner and localizer of BRCA2	PALB2	700843
Paralemmin 2	PALM2	100532752
Peptidase domain containing associated with muscle regeneration 1	PAMR1	717140
PAN2 poly(A) specific ribonuclease subunit	PAN2	712478
Pantothenate kinase 1	PANK1	696041
PAP associated domain containing 7	PAPD7	713853
3'-phosphoadenosine 5'-phosphosulfate synthase 2	PAPSS2	704688
Progestin and adipoq receptor family member VIII	PAQR8	708418
Par-3 family cell polarity regulator	PARD3	706472
Poly(ADP-ribose) glycohydrolase	PARG	709432
Parkinson protein 7	PARK7	708377
Poly(A)-specific ribonuclease	PARN	712984
Poly(ADP-ribose) polymerase family member 10	PARP10	708132
Poly(ADP-ribose) polymerase family member 11	PARP11	721828
Poly(ADP-ribose) polymerase family member 15	PARP15	715533
Poly(ADP-ribose) polymerase family member 16	PARP16	709140
Poly(ADP-ribose) polymerase 2	PARP2	701955
Poly(ADP-ribose) polymerase family member 8	PARP8	702637
Prostate and testis expressed 1	PATE1	713491
Protein associated with topoisomerase II homolog 1 (yeast)	PATL1	699207
PAX3 and PAX7 binding protein 1	PAXBP1	700489
Polysaccharide biosynthesis domain containing 1	PBDC1	705125
Pre-B-cell leukemia homeobox 1	PBX1	694416
Pre-B-cell leukemia homeobox 4	PBX4	106994672
Poly(rc) binding protein 2	PCBP2	703175
Propionyl-coa carboxylase beta subunit	PCCB	716964
Protocadherin alpha 1	PCDHA1	698493
Protocadherin alpha 7	PCDHA7	698370
Polycomb group ring finger 2	PCGF2	694187
Polycomb group ring finger 3	PCGF3	697151
Polycomb group ring finger 6	PCGF6	714508
PCI domain containing 2	PCID2	714247
Protein-L-isoaspartate (D-aspartate) O-methyltransferase	PCMT1	695893
Proliferating cell nuclear antigen	PCNA	718006
Proprotein convertase subtilisin/kexin type 7	PCSK7	697567

Phosphate cytidyltransferase 1, choline, alpha	PCYT1A	722105
Programmed cell death 2-like	PDCD2L	705688
Programmed cell death 5	PDCD5	702277
Programmed cell death 6	PDCD6	723043
Programmed cell death 7	PDCD7	708758
Phosphodiesterase 12	PDE12	703552
Phosphodiesterase 1A	PDE1A	705555
Phosphodiesterase 8A	PDE8A	694750
Phosphodiesterase 9A	PDE9A	100301992
Peptide deformylase (mitochondrial)	PDF	100427224
Platelet-derived growth factor beta polypeptide	PDGFB	703173
Pyruvate dehydrogenase (lipoamide) alpha 1	PDHA1	100423992
Pyruvate dehydrogenase (lipoamide) beta	PDHB	574227
PDLIM1 interacting kinase 1 like	PDIK1L	719774
Pyruvate dehydrogenase kinase, isozyme 2	PDK2	704169
Pyruvate dehydrogenase phosphatase regulatory subunit	PDPR	709861
P53 and DNA damage regulated 1	PDRG1	712622
PDZ domain containing 3	PDZD3	704100
PDZ domain containing 4	PDZD4	697387
Paternally expressed 3	PEG3	707825
Proline, glutamate and leucine rich protein 1	PELP1	677854
Peroxisomal biogenesis factor 11 beta	PEX11B	698184
Peroxisomal biogenesis factor 16	PEX16	714904
Prefoldin subunit 2	PFDN2	719886
Prefoldin subunit 5	PFDN5	702355
Prefoldin subunit 6	PFDN6	718253
Piggybac transposable element derived 2	PGBD2	709925
Protein geranylgeranyltransferase type I, beta subunit	PGGT1B	696437
Phosphatidylglycerophosphate synthase 1	PGS1	710125
Phosphatase and actin regulator 2	PHACTR2	700363
Polyhomeotic homolog 1 (Drosophila)	PHC1	722268
Polyhomeotic homolog 2 (Drosophila)	PHC2	710201
PHD finger protein 1	PHF1	718337
PHD finger protein 12	PHF12	710851
PHD finger protein 14	PHF14	694855
PHD finger protein 2	PHF2	717585
PHD finger protein 23	PHF23	714538
PHD finger protein 6	PHF6	707390
PHD finger protein 7	PHF7	697103
Pleckstrin homology domain interacting protein	PHIP	716810
Phosphorylase kinase, alpha 2 (liver)	PHKA2	694376
PH domain and leucine rich repeat protein phosphatase 1	PHLPP1	705882
Phosphatase, orphan 1	PHOSPHO1	698959
Phosphatase, orphan 2	PHOSPHO2	100429656
Phosphohistidine phosphatase 1	PHPT1	721674
5-phosphohydroxy-L-lysine phospho-lyase	PHYKPL	702302
Phosphatidylinositol 4-kinase, catalytic, alpha	PI4KA	698020
Phosphatidylinositol 4-kinase, catalytic, beta	PI4KB	710104

Phosphatidylinositol glycan anchor biosynthesis class A	PIGA	712514
Phosphatidylinositol glycan anchor biosynthesis class C	PIGC	705657
Phosphatidylinositol glycan anchor biosynthesis class G	PIGG	714088
Phosphatidylinositol glycan anchor biosynthesis class H	PIGH	710780
Phosphatidylinositol glycan anchor biosynthesis class S	PIGS	709115
PIH1 domain containing 1	PIH1D1	718787
Phosphatidylinositol 3-kinase catalytic subunit type 3	PIK3C3	693918
Phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit beta	PIK3CB	716098
Phosphoinositide-3-kinase interacting protein 1	PIK3IP1	716694
Phosphoinositide-3-kinase regulatory subunit 4	PIK3R4	718012
Pim-2 proto-oncogene, serine/threonine kinase	PIM2	711844
Phosphatidylinositol transfer protein alpha	PITPNA	721228
Phosphatidylinositol transfer protein beta	PITPNB	713414
Phosphatidylinositol transfer protein, membrane associated 2	PITPNM2	703969
Praja ring finger 1, E3 ubiquitin protein ligase	PJA1	695038
Plakophilin 2	PKP2	100429376
Phospholipase A2 group XIIB	PLA2G12B	708031
Phospholipase A2 group XV	PLA2G15	702619
Phospholipase A2, group IVB (cytosolic)	PLA2G4B	100533112
Phospholipase A2 group VI	PLA2G6	700184
PLAG1 like zinc finger 1	PLAGL1	699985
Phospholipase B domain containing 1	PLBD1	698939
Phospholipase B domain containing 2	PLBD2	714669
Phospholipase C beta 1	PLCB1	718387
Phospholipase C beta 2	PLCB2	701951
Phospholipase D family member 3	PLD3	701083
Pleckstrin homology domain containing A3	PLEKHA3	703417
Pleckstrin homology domain containing A7	PLEKHA7	697646
Pleckstrin homology and FYVE domain containing 2	PLEKHF2	701884
Pleckstrin homology and rhogef domain containing G2	PLEKHG2	698408
Pleckstrin homology, myth4 and FERM domain containing H3	PLEKHH3	711013
Pleckstrin homology domain containing O1	PLEKHO1	706145
Pleckstrin homology domain containing O2	PLEKHO2	712677
Plasminogen receptor, C-terminal lysine transmembrane protein	PLGRKT	693286
Proteolipid protein 2 (colonic epithelium-enriched)	PLP2	712869
Phospholipid phosphatase 2	PLPP2	721004
Phospholipid phosphatase 6	PLPP6	695188
Plastin 3	PLS3	709055
Phospholipid scramblase 3	PLSCR3	721831
Plexin A2	PLXNA2	713800
Plexin B3	PLXNB3	696903
Promyelocytic leukemia	PML	700379
Peripheral myelin protein 22	PMP22	693527
PNN-interacting serine/arginine-rich protein	PNISR	694075
Polynucleotide kinase 3'-phosphatase	PNKP	719084
Pogo transposable element with KRAB domain	POGK	696834
Protein O-glucosyltransferase 1	POGLUT1	712357

Pogo transposable element with ZNF domain	POGZ	710634
Polymerase (DNA directed), beta	POLB	704801
Polymerase (DNA directed), gamma	POLG	699750
Polymerase (DNA directed) kappa	POLK	705713
Polymerase (RNA) II (DNA directed) polypeptide B, 140kda	POLR2B	694664
Polymerase (RNA) II (DNA directed) polypeptide F	POLR2F	699566
Polymerase (RNA) II (DNA directed) polypeptide G	POLR2G	718548
Polymerase (RNA) II (DNA directed) polypeptide I, 14.5kda	POLR2I	712412
Polymerase (RNA) III (DNA directed) polypeptide B	POLR3B	702711
Polymerase (RNA) mitochondrial (DNA directed)	POLRMT	100426184
Protein O-linked mannose N-acetylglucosaminyltransferase 1 (beta 1,2-)	POMGNT1	707205
Proteasome maturation protein	POMP	711980
POP5 homolog, ribonuclease P/MRP subunit	POP5	697559
P450 (cytochrome) oxidoreductase	POR	715888
Protection of telomeres 1	POT1	696751
POU class 2 homeobox 1	POU2F1	700530
Peroxisome proliferator-activated receptor delta	PPARD	718861
Peroxisome proliferator-activated receptor gamma	PPARG	574190
Phosphopantothenoylcysteine decarboxylase	PPCDC	704015
Phosphopantothenoylcysteine synthetase	PPCS	697064
Peptidylprolyl isomerase E (cyclophilin E)	PPIE	716340
Peptidylprolyl isomerase G (cyclophilin G)	PPIG	706262
Peptidylprolyl isomerase H (cyclophilin H)	PPIH	697669
Peptidylprolyl isomerase like 3	PPIL3	700456
Diphosphoinositol pentakisphosphate kinase 2	PPIP5K2	703458
Protein phosphatase, Mg ²⁺ /Mn ²⁺ dependent 1A	PPM1A	702987
Protein phosphatase, Mg ²⁺ /Mn ²⁺ dependent 1B	PPM1B	713918
Protein phosphatase, Mg ²⁺ /Mn ²⁺ dependent 1F	PPM1F	698441
Protein phosphatase, Mg ²⁺ /Mn ²⁺ dependent 1G	PPM1G	700695
Protein phosphatase 1 regulatory subunit 15A	PPP1R15A	718350
Protein phosphatase 1 regulatory subunit 16B	PPP1R16B	693349
Protein phosphatase 1, regulatory subunit 17	PPP1R17	694066
Protein phosphatase 1 regulatory subunit 27	PPP1R27	714648
Protein phosphatase 1 regulatory subunit 35	PPP1R35	712067
Protein phosphatase 2 regulatory subunit B", alpha	PPP2R3A	717078
Protein phosphatase 2 regulatory subunit B", gamma	PPP2R3C	694616
Protein phosphatase 2 regulatory subunit B', gamma	PPP2R5C	718894
Protein phosphatase 3, catalytic subunit, gamma isozyme	PPP3CC	708233
Protein phosphatase 4 catalytic subunit	PPP4C	708510
Peptidylprolyl isomerase domain and WD repeat containing 1	PPWD1	696267
Pancreatic polypeptide	PPY	713988
Polyglutamine binding protein 1	PQBP1	711678
Prolylcarboxypeptidase	PRCP	701305
PR domain containing 1, with ZNF domain	PRDM1	696757
PR domain containing 2, with ZNF domain	PRDM2	716295
PR domain containing 4	PRDM4	704529
PR domain containing 5	PRDM5	708790

Peroxiredoxin 2	PRDX2	716665
Peroxiredoxin 3	PRDX3	702882
Peroxiredoxin 4	PRDX4	697635
PRELI domain containing 1	PRELID1	699254
Prolyl endopeptidase-like	PREPL	713980
Proteoglycan 3	PRG3	706381
Proline rich membrane anchor 1	PRIMA1	100426272
Protein kinase, AMP-activated, alpha 2 catalytic subunit	PRKAA2	717703
Protein kinase, AMP-activated, beta 1 non-catalytic subunit	PRKAB1	695737
Protein kinase, camp-dependent, beta catalytic subunit	PRKACB	709728
Protein kinase C, beta	PRKCB	701195
Protein kinase C, gamma	PRKCG	720263
Protein kinase, interferon-inducible double stranded RNA dependent activator	PRKRA	703063
Protamine 1	PRM1	716327
Protein arginine methyltransferase 5	PRMT5	712718
Leucine zipper putative tumor suppressor 3	PROSAPIP1	717136
Pre-mrna processing factor 31	PRPF31	720567
Pre-mrna processing factor 40 homolog A	PRPF40A	696668
Phosphoribosyl pyrophosphate synthetase-associated protein 1	PRPSAP1	706625
Proline rich 13	PRR13	702930
Proline rich 3	PRR3	711699
Proline-rich coiled-coil 1	PRRC1	704248
Proline-rich coiled-coil 2A	PRRC2A	715715
Phosphoribosyl transferase domain containing 1	PRTFDC1	712819
Pleckstrin and Sec7 domain containing 4	PSD4	701785
Presenilin enhancer gamma secretase subunit	PSENN	100429008
Proteasome subunit alpha 1	PSMA1	701029
Proteasome subunit alpha 2	PSMA2	701683
Proteasome subunit alpha 3	PSMA3	700251
Proteasome subunit alpha 4	PSMA4	710417
Proteasome subunit alpha 5	PSMA5	698435
Proteasome subunit beta 2	PSMB2	712193
Proteasome subunit beta 4	PSMB4	710734
Proteasome subunit beta 7	PSMB7	694567
Proteasome subunit beta 8	PSMB8	717766
Proteasome subunit beta 9	PSMB9	716980
Proteasome 26S subunit, ATPase 4	PSMC4	699847
Proteasome 26S subunit, non-ATPase 1	PSMD1	711724
Proteasome 26S subunit, non-ATPase 12	PSMD12	718756
Proteasome 26S subunit, non-ATPase 6	PSMD6	698601
Proteasome 26S subunit, non-ATPase 7	PSMD7	705581
Proteasome activator subunit 2	PSME2	715288
Proteasome (prosome, macropain) assembly chaperone 1	PSMG1	715758
Proteasome (prosome, macropain) assembly chaperone 2	PSMG2	717110
Psoriasis susceptibility 1 candidate 2	PSORS1C2	714607
Paraspeckle component 1	PSPC1	705080
Polypyrimidine tract binding protein 2	PTBP2	710101

Prostaglandin D2 receptor (DP)	PTGDR	707918
Protein tyrosine kinase 2 beta	PTK2B	712787
Pleiotrophin	PTN	709496
Protein tyrosine phosphatase type IVA, member 2	PTP4A2	706489
Protein tyrosine phosphatase domain containing 1	PTPDC1	707878
Protein tyrosine phosphatase, non-receptor type 1	PTPN1	702016
Protein tyrosine phosphatase, non-receptor type 12	PTPN12	721538
Protein tyrosine phosphatase, non-receptor type 23	PTPN23	711601
Protein tyrosine phosphatase, non-receptor type 4 (megakaryocyte)	PTPN4	695516
Protein tyrosine phosphatase, receptor type, D	PTPRD	714954
Protein tyrosine phosphatase, receptor type, G	PTPRG	703937
Pumilio RNA binding family member 1	PUM1	704848
Pumilio RNA binding family member 2	PUM2	701782
Poliovirus receptor-related 2 (herpesvirus entry mediator B)	PVRL2	713229
PWP2 periodic tryptophan protein homolog (yeast)	PWP2	722216
Peroxisomal membrane protein 2	PXMP2	693648
2-phosphoxylose phosphatase 1	PXYLP1	715229
Phosphorylase, glycogen, liver	PYGL	706853
PYM homolog 1, exon junction complex associated factor	PYM1	708148
Glutaminyl-trna synthetase	QARS	708111
Quiescin sulfhydryl oxidase 1	QSOX1	718589
RAB11 family interacting protein 4 (class II)	RAB11FIP4	717629
RAB18, member RAS oncogene family	RAB18	708843
RAB23, member RAS oncogene family	RAB23	712860
RAB30, member RAS oncogene family	RAB30	701550
RAB32, member RAS oncogene family	RAB32	702431
RAB33B, member RAS oncogene family	RAB33B	697603
RAB3C, member RAS oncogene family	RAB3C	709039
RAB3 gtpase activating non-catalytic protein subunit 2	RAB3GAP2	706252
RAB3A interacting protein	RAB3IP	717215
RAB5B, member RAS oncogene family	RAB5B	708347
RAB6A, member RAS oncogene family	RAB6A	718717
Rab geranylgeranyltransferase, beta subunit	RABGGTB	705421
RAB, member of RAS oncogene family-like 2B	RABL2B	716615
RAD17 checkpoint clamp loader component	RAD17	700116
RAD51 paralog C	RAD51C	714828
RAD9 checkpoint clamp component A	RAD9A	712345
Raf-1 proto-oncogene, serine/threonine kinase	RAF1	694725
V-ral simian leukemia viral oncogene homolog A (ras related)	RALA	703440
V-ral simian leukemia viral oncogene homolog B	RALB	695852
Ral gtpase activating protein, alpha subunit 1 (catalytic)	RALGAPA1	695674
Ral gtpase activating protein, beta subunit (non-catalytic)	RALGAPB	705742
Ral GEF with PH domain and SH3 binding motif 1	RALGPS1	708253
RALY heterogeneous nuclear ribonucleoprotein	RALY	713317
RAN binding protein 10	RANBP10	700911
RAN binding protein 6	RANBP6	715799
Ran gtpase activating protein 1	RANGAP1	710698
RAN guanine nucleotide release factor	RANGRF	717206

RAP2A, member of RAS oncogene family	RAP2A	697215
Rap guanine nucleotide exchange factor 2	RAPGEF2	704717
Arginyl-trna synthetase	RARS	698998
Arginyl-trna synthetase 2, mitochondrial	RARS2	699240
RAS p21 protein activator (gtpase activating protein) 1	RASA1	694085
RAS, dexamethasone-induced 1	RASD1	698839
RAS and EF-hand domain containing	RASEF	708296
RAS-like family 10 member A	RASL10A	714587
Ribonucleoprotein, PTB-binding 1	RAVER1	715250
RB1 inducible coiled-coil 1	RB1CC1	710330
Retinoblastoma binding protein 4	RBBP4	708710
Retinoblastoma binding protein 8	RBBP8	677718
Ranbp-type and C3HC4-type zinc finger containing 1	RBCK1	714692
RNA binding motif protein 12B	RBM12B	698382
RNA binding motif protein 15	RBM15	701414
RNA binding motif protein 17	RBM17	712996
RNA binding motif protein 22	RBM22	712713
RNA binding motif protein 39	RBM39	704198
RNA binding motif protein 42	RBM42	709852
RNA binding motif protein 45	RBM45	702714
RNA binding motif protein 5	RBM5	704114
RNA binding motif, single stranded interacting protein 1	RBMS1	703608
RNA binding motif, single stranded interacting protein 2	RBMS2	713163
RNA binding motif protein, X-linked 2	RBMX2	703472
REST corepressor 3	RCOR3	712037
Retinol dehydrogenase 5 (11-cis/9-cis)	RDH5	709644
Reversion-inducing-cysteine-rich protein with kazal motifs	RECK	694043
Recq helicase-like	RECQL	705871
Arginine-glutamic acid dipeptide (RE) repeats	RERE	708902
REX1, RNA exonuclease 1 homolog	REXO1	708931
RNA exonuclease 2	REXO2	695292
RFT1 homolog	RFT1	694586
Raftlin, lipid raft linker 1	RFTN1	695142
Raftlin family member 2	RFTN2	697562
Ring finger and WD repeat domain 2, E3 ubiquitin protein ligase	RFWD2	708802
Regulatory factor X associated ankyrin containing protein	RFXANK	719706
Regucalcin	RGN	705733
Retinal G protein coupled receptor	RGR	698258
Regulator of G-protein signaling 10	RGS10	703125
Regulator of G-protein signaling 11	RGS11	694588
Regulator of G-protein signaling like 1	RGSL1	715693
Rhomboid 5 homolog 2 (Drosophila)	RHBDF2	707033
Rh family, C glycoprotein	RHCG	664731
RAD9-HUS1-RAD1 interacting nuclear orphan 1	RHNO1	709008
Rho-related BTB domain containing 1	RHOBTB1	699132
Ras homolog family member C	RHOC	706034
Ras homolog family member D	RHOD	712969
Ras homolog family member J	RHOJ	705603

Ras homolog family member V	RHOV	704675
RPTOR independent companion of MTOR, complex 2	RICTOR	694915
Replication timing regulatory factor 1	RIF1	694817
Ribosomal modification protein rimk-like family member A	RIMKLA	699767
Regulating synaptic membrane exocytosis 4	RIMS4	712194
Ras and Rab interactor 1	RIN1	714321
RAD50 interactor 1	RINT1	698414
RIO kinase 2	RIOK2	700738
Receptor interacting serine/threonine kinase 4	RIPK4	715077
Ras-like without CAAX 1	RIT1	717985
RBPJ interacting and tubulin associated 1	RITA1	712837
Retinaldehyde binding protein 1	RLBP1	699510
Rearranged L-myc fusion	RLF	693503
Regulator of microtubule dynamics 1	RMDN1	694237
Ribonuclease, rnase A family, k6	RNASE6	704579
Ribonuclease H2 subunit B	RNASEH2B	707995
Ribonuclease T2	RNASET2	706533
Rho family gtpase 3	RND3	694168
Ring finger protein 112	RNF112	703312
Ring finger protein 14	RNF14	705363
Ring finger protein 146	RNF146	712152
Ring finger protein 152	RNF152	699091
Ring finger protein 185	RNF185	718351
Ring finger protein 186	RNF186	703962
Ring finger protein 20	RNF20	713614
Ring finger protein 208	RNF208	705563
Ring finger protein 217	RNF217	716647
Ring finger protein 219	RNF219	697577
Ring finger protein 34, E3 ubiquitin protein ligase	RNF34	700062
Ring finger protein 38	RNF38	693346
Ribonuclease/angiogenin inhibitor 1	RNH1	720791
RAR-related orphan receptor C	RORC	717052
Replication protein A3	RPA3	696248
RNA polymerase II associated protein 3	RPAP3	703749
Ribosome production factor 1 homolog	RPF1	710286
RPGRIP1-like	RPGRIP1L	697345
Ribosomal protein l10a	RPL10A	718783
Ribosomal protein L17	RPL17	698967
Ribosomal protein L22	RPL22	703050
Ribosomal protein L23	RPL23	694719
Ribosomal protein l23a	RPL23A	710490
Ribosomal protein L24	RPL24	702381
Ribosomal protein L26 like 1	RPL26L1	703230
Ribosomal protein L27	RPL27	712352
Ribosomal protein L29	RPL29	698602
Ribosomal protein L4	RPL4	710590
Ribosomal protein l7a	RPL7A	722215
Ribosomal protein L8	RPL8	708535

Ribosomal protein, large, P0	RPLP0	574363
Ribosomal protein, large, P1	RPLP1	695442
Ribosomal protein, large, P2	RPLP2	700698
Ribophorin I	RPN1	705437
Ribophorin II	RPN2	708971
Ribonuclease P/MRP 14kda subunit	RPP14	706788
Ribonuclease P/MRP 21kda subunit	RPP21	713056
Ribonuclease P/MRP 30kda subunit	RPP30	696537
Ribonuclease P/MRP 40kda subunit	RPP40	710505
Regulation of nuclear pre-mrna domain containing 1A	RPRD1A	709217
Ribosomal protein S10	RPS10	718606
Ribosomal protein S13	RPS13	697513
Ribosomal protein S14	RPS14	710901
Ribosomal protein S15	RPS15	707241
Ribosomal protein S16	RPS16	697219
Ribosomal protein S17-like	RPS17L	100425104
Ribosomal protein S2	RPS2	693615
Ribosomal protein S27	RPS27	106992520
Ribosomal protein s27a	RPS27A	718909
Ribosomal protein S27 like	RPS27L	705483
Ribosomal protein S28	RPS28	707133
Ribosomal protein S4, X-linked	RPS4X	699397
Ribosomal protein S5	RPS5	711259
Ribosomal protein S6 kinase, 90kda, polypeptide 4	RPS6KA4	717574
Ribosomal protein S7	RPS7	721900
Ribosomal protein S8	RPS8	703957
Ribosomal protein S9	RPS9	694053
RNA pseudouridylate synthase domain containing 3	RPUSD3	700349
Ras-related GTP binding C	RRAGC	715549
RRN3 homolog, RNA polymerase I transcription factor	RRN3	713500
Ribosomal RNA adenine dimethylase domain containing 1	RRNAD1	718599
Ribosomal RNA processing 8, methyltransferase, homolog (yeast)	RRP8	712011
Ribosomal RNA processing 9, small subunit (SSU) processome component, homolog (yeast)	RRP9	699421
Arginine/serine-rich protein 1	RSRP1	712757
Retbindin	RTBDN	716766
RNA 2',3'-cyclic phosphate and 5'-OH ligase	RTCB	717258
Rhotekin	RTKN	708722
Reticulon 4	RTN4	619181
Rotatin	RTTN	703989
Ruvb-like AAA ATPase 2	RUVBL2	100428792
RWD domain containing 3	RWDD3	709817
Relaxin/insulin-like family peptide receptor 3	RXFP3	698115
S100 calcium binding protein P	S100P	710510
Sphingosine-1-phosphate receptor 2	S1PR2	712143
Serum amyloid A like 1	SAAL1	695747
SAC1 suppressor of actin mutations 1-like (yeast)	SACM1L	714107
Sterile alpha motif domain containing 13	SAMD13	713946

Sterile alpha motif domain containing 4A	SAMD4A	695336
Sin3A associated protein 18kda	SAP18	703078
Sin3A associated protein 25kda	SAP25	106997576
Sin3A associated protein 30kda	SAP30	696519
SAP30 binding protein	SAP30BP	703077
Secretion associated, Ras related gtpase 1A	SAR1A	711277
Squamous cell carcinoma antigen recognized by T-cells 3	SART3	705552
SAM and SH3 domain containing 3	SASH3	702089
Spermidine/spermine N1-acetyltransferase 1	SAT1	697884
Strawberry notch homolog 2 (Drosophila)	SBNO2	721186
Sterol-C5-desaturase	SC5D	706827
SR-related CTD-associated factor 11	SCAF11	701894
Secretory carrier membrane protein 2	SCAMP2	709720
Schwannomin interacting protein 1	SCHIP1	703321
Sex comb on midleg-like 1 (Drosophila)	SCML1	714239
Sodium channel modifier 1	SCNM1	709922
Sodium channel, non voltage gated 1 beta subunit	SCNN1B	700093
Serine carboxypeptidase 1	SCPEP1	708197
Secernin 3	SCRN3	698199
Signal peptide, CUB domain, EGF-like 2	SCUBE2	708152
SCY1-like, kinase-like 2	SCYL2	695284
SCY1-like, kinase-like 3	SCYL3	701768
Syndecan 1	SDC1	701544
Syndecan binding protein	SDCBP	698381
Stromal cell-derived factor 2	SDF2	716189
Succinate dehydrogenase complex subunit A, flavoprotein (Fp)	SDHA	708018
Succinate dehydrogenase complex assembly factor 2	SDHAF2	693401
Succinate dehydrogenase complex subunit B, iron sulfur (Ip)	SDHB	699810
Succinate dehydrogenase complex, subunit D, integral membrane protein	SDHD	711326
SEC22 homolog A, vesicle trafficking protein	SEC22A	715277
SEC22 homolog C, vesicle trafficking protein	SEC22C	716351
Sec23 homolog A, COPII coat complex component	SEC23A	698500
Sec23 homolog B, COPII coat complex component	SEC23B	698440
SEC24 homolog C, COPII coat complex component	SEC24C	714688
SEC24 homolog D, COPII coat complex component	SEC24D	707521
SEC31 homolog A, COPII coat complex component	SEC31A	693687
Sec61 translocon alpha 1 subunit	SEC61A1	709787
Sec61 translocon alpha 2 subunit	SEC61A2	100427728
Sec61 translocon beta subunit	SEC61B	717815
Sec61 translocon gamma subunit	SEC61G	716898
SEC62 homolog, preprotein translocation factor	SEC62	696989
SECIS binding protein 2	SECISBP2	697442
SECIS binding protein 2-like	SECISBP2L	714764
Selenoprotein K	SELK	693421
Selenoprotein M	SELM	718290
Semenogelin I pseudogene	SEMG1P	100424776
SUMO1/sentrin specific peptidase 5	SEN5	710223

SUMO1/sentrin specific peptidase 7	SENP7	701453
Selenoprotein W, 1	SEPW1	718370
SERPINE1 mrna binding protein 1	SERBP1	700797
Serine incorporator 1	SERINC1	713999
Serpin peptidase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin), member 6	SERPINA6	701121
Serpin peptidase inhibitor, clade B (ovalbumin), member 7	SERPINB7	701671
Serpin peptidase inhibitor, clade G (C1 inhibitor), member 1	SERPING1	703928
Serpin peptidase inhibitor, clade I (neuroserpin), member 1	SERPINI1	699483
Sestrin 1	SESN1	700232
Sestrin 2	SESN2	716904
Sestrin 3	SESN3	699329
SET domain containing 2	SETD2	711825
SET domain containing 5	SETD5	704174
SET domain, bifurcated 1	SETDB1	716141
Splicing factor 3b, subunit 1, 155kda	SF3B1	697773
Splicing factor 3b subunit 3	SF3B3	708939
Splicing factor 3b, subunit 4, 49kda	SF3B4	705655
Splicing factor 3b subunit 6	SF3B6	704090
SFI1 centrin binding protein	SFI1	716833
Scm-like with four mbt domains 1	SFMBT1	694961
Stratifin	SFN	715055
Secreted frizzled-related protein 1	SFRP1	702876
SFT2 domain containing 3	SFT2D3	699830
Surfactant associated 2	SFTA2	714397
Surfactant protein D	SFTPD	678657
Sideroflexin 4	SFXN4	702765
Sarcoglycan epsilon	SGCE	700104
Serum/glucocorticoid regulated kinase 1	SGK1	713082
Shugoshin-like 1 (S. Pombe)	SGOL1	698231
SH2B adaptor protein 2	SH2B2	714861
SH2 domain containing 1B	SH2D1B	720097
SH2 domain containing 3C	SH2D3C	699706
SH3 domain binding glutamate-rich protein	SH3BGR	722581
SH3-domain binding protein 4	SH3BP4	693393
SH3 domain containing 19	SH3D19	694606
SH3-domain GRB2-like endophilin B1	SH3GLB1	712393
SH3 domain containing ring finger 1	SH3RF1	694082
SH3 domain and tetratricopeptide repeats 2	SH3TC2	709970
SHANK associated RH domain interactor	SHARPIN	713534
SHC (Src homology 2 domain containing) transforming protein 1	SHC1	718982
SHC (Src homology 2 domain containing) transforming protein 3	SHC3	574275
Split hand/foot malformation (ectrodactyly) type 1	SHFM1	698349
Sonic hedgehog	SHH	716553
SHOC2 leucine-rich repeat scaffold protein	SHOC2	695572
Sedoheptulokinase	SHPK	721465
Shroom family member 3	SHROOM3	699613
Siah E3 ubiquitin protein ligase 1	SIAH1	716629

Sialic acid binding Ig-like lectin 1, sialoadhesin	SIGLEC1	717470
Sialic acid binding Ig-like lectin 10	SIGLEC10	719648
Sirtuin 4	SIRT4	720498
Sirtuin 7	SIRT7	715069
Signaling threshold regulating transmembrane adaptor 1	SIT1	697087
SIVA1, apoptosis-inducing factor	SIVA1	706688
SIX homeobox 5	SIX5	715373
SKI-like proto-oncogene	SKIL	696680
Superkiller viralicidic activity 2-like 2 (S. Cerevisiae)	SKIV2L2	706419
Solute carrier family 12 (sodium/potassium/chloride transporter), member 2	SLC12A2	704672
Solute carrier family 16 (aromatic amino acid transporter), member 10	SLC16A10	696132
Solute carrier family 18 (vesicular monoamine transporter), member 2	SLC18A2	701133
Solute carrier family 18, subfamily B, member 1	SLC18B1	708518
Solute carrier family 1 (glial high affinity glutamate transporter), member 3	SLC1A3	701109
Solute carrier family 20 (phosphate transporter), member 1	SLC20A1	699462
Solute carrier family 22 member 14	SLC22A14	696120
Solute carrier family 22 member 15	SLC22A15	710102
Solute carrier family 22 member 17	SLC22A17	713765
Solute carrier family 22 (organic anion transporter), member 6	SLC22A6	718377
Solute carrier family 24 (sodium/potassium/calcium exchanger), member 2	SLC24A2	711896
Solute carrier family 25 (mitochondrial carrier; citrate transporter), member 1	SLC25A1	719075
Solute carrier family 25 (mitochondrial carrier; oxoglutarate carrier), member 11	SLC25A11	710569
Solute carrier family 25 (aspartate/glutamate carrier), member 12	SLC25A12	695173
Solute carrier family 25 (mitochondrial carrier, brain), member 14	SLC25A14	703255
Solute carrier family 25 (carnitine/acylcarnitine translocase), member 20	SLC25A20	709029
Solute carrier family 25 (mitochondrial carrier; phosphate carrier), member 24	SLC25A24	694803
Solute carrier family 25 (mitochondrial carrier; phosphate carrier), member 25	SLC25A25	698216
Solute carrier family 25 (S-adenosylmethionine carrier), member 26	SLC25A26	697960
Solute carrier family 25 (mitochondrial carrier; adenine nucleotide translocator), member 31	SLC25A31	710042
Solute carrier family 25 (pyrimidine nucleotide carrier), member 33	SLC25A33	722285
Solute carrier family 25 (mitochondrial iron transporter), member 37	SLC25A37	710518
Solute carrier family 25 member 40	SLC25A40	705584
Solute carrier family 25 member 46	SLC25A46	705968
Solute carrier family 25 (mitochondrial carrier; adenine		

nucleotide translocator), member 5	SLC25A5	693502
Solute carrier family 26 (anion exchanger), member 8	SLC26A8	719049
Solute carrier family 26 (anion exchanger), member 9	SLC26A9	696461
Solute carrier family 28 (concentrative nucleoside transporter), member 3	SLC28A3	709560
Solute carrier family 29 (equilibrative nucleoside transporter), member 1	SLC29A1	703031
Solute carrier family 2 (facilitated glucose transporter), member 13	SLC2A13	697822
Solute carrier family 30 (zinc transporter), member 5	SLC30A5	699371
Solute carrier family 34 (type II sodium/phosphate cotransporter), member 2	SLC34A2	694217
Solute carrier family 35 (UDP-galactose transporter), member A2	SLC35A2	711587
Solute carrier family 35 member B1	SLC35B1	699953
Solute carrier family 35 (adenosine 3'-phospho 5'-phosphosulfate transporter), member B3	SLC35B3	698416
Solute carrier family 35 (UDP-glca/UDP-galnac transporter), member D1	SLC35D1	700175
Solute carrier family 37 (glucose-6-phosphate transporter), member 2	SLC37A2	712841
Solute carrier family 38 member 1	SLC38A1	702135
Solute carrier family 38 member 6	SLC38A6	704017
Solute carrier family 38 member 7	SLC38A7	707671
Solute carrier family 39 (zinc transporter), member 13	SLC39A13	713420
Solute carrier family 39 (zinc transporter), member 3	SLC39A3	711564
Solute carrier family 39 (zinc transporter), member 8	SLC39A8	710142
Solute carrier family 41 (magnesium transporter), member 1	SLC41A1	696944
Solute carrier family 41 member 3	SLC41A3	716921
Solute carrier family 44 member 3	SLC44A3	714768
Solute carrier family 44 member 4	SLC44A4	715779
Solute carrier family 4, sodium borate transporter, member 11	SLC4A11	718393
Solute carrier family 4 (anion exchanger), member 1, adaptor protein	SLC4A1AP	701783
Solute carrier family 4 (anion exchanger), member 2	SLC4A2	713966
Solute carrier family 4, sodium bicarbonate cotransporter, member 7	SLC4A7	701925
Solute carrier family 5 (sodium/myo-inositol cotransporter), member 3	SLC5A3	698346
Solute carrier family 5 (sodium/multivitamin and iodide cotransporter), member 6	SLC5A6	699074
Solute carrier family 6 (neurotransmitter transporter), member 11	SLC6A11	696741
Solute carrier family 6 member 16	SLC6A16	718690
Solute carrier family 6 (neurotransmitter transporter), member 2	SLC6A2	613238
Solute carrier family 7 (anionic amino acid transporter), member 13	SLC7A13	693964
Solute carrier family 7 (cationic amino acid transporter, y+ system), member 3	SLC7A3	696288
Solute carrier family 7 (amino acid transporter light chain, L system), member 8	SLC7A8	713511

Solute carrier family 9, subfamily A (NHE9, cation proton antiporter 9), member 9	SLC9A9	713935
Solute carrier organic anion transporter family member 1B1	SLCO1B1	705308
Solute carrier organic anion transporter family member 2B1	SLCO2B1	694829
Schlafen like 1	SLFNL1	695605
SLIT and NTRK like family member 1	SLITRK1	699217
STE20 like kinase	SLK	715086
Sarcolemma associated protein	SLMAP	703086
Secretory leukocyte peptidase inhibitor	SLPI	711156
SLU7 homolog, splicing factor	SLU7	696023
SLX4 interacting protein	SLX4IP	718563
SMAD family member 1	SMAD1	574340
SMAD family member 2	SMAD2	697581
Small arfgap2	SMAP2	694502
SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 2	SMARCA2	696973
SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 5	SMARCA5	700614
SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a-like 1	SMARCAL1	695741
SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily b, member 1	SMARCB1	699190
SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily e, member 1	SMARCE1	701310
Structural maintenance of chromosomes 4	SMC4	702615
SMG7 nonsense mediated mrna decay factor	SMG7	717603
SMG8 nonsense mediated mrna decay factor	SMG8	711172
Small integral membrane protein 13	SMIM13	703387
Survival of motor neuron 1, telomeric	SMN1	677703
Survival motor neuron domain containing 1	SMNDC1	694761
Sphingomyelin phosphodiesterase 2	SMPD2	698865
Smu-1 suppressor of mec-8 and unc-52 homolog (C. Elegans)	SMU1	703656
SET and MYND domain containing 2	SMYD2	709375
SMYD family member 5	SMYD5	705926
Synaptosome associated protein 25kda	SNAP25	574204
Synaptosome associated protein 29kda	SNAP29	696708
SNAP-associated protein	SNAPIN	715546
Staphylococcal nuclease and tudor domain containing 1	SND1	699542
Smad nuclear interacting protein 1	SNIP1	713733
SNF related kinase	SNRK	715803
Small nuclear ribonucleoprotein polypeptide A	SNRPA	702730
Small nuclear ribonucleoprotein polypeptides B and B1	SNRPB	716578
Small nuclear ribonucleoprotein D2 polypeptide	SNRPD2	715183
Small nuclear ribonucleoprotein polypeptide G	SNRPG	702586
SNRPN upstream reading frame	SNURF	711028
Sorting nexin 1	SNX1	706544
Sorting nexin 13	SNX13	714019
Sorting nexin 14	SNX14	696632

Sorting nexin 17	SNX17	701614
Sorting nexin 3	SNX3	700989
Sorting nexin 31	SNX31	705726
Sorting nexin 33	SNX33	706309
Suppressor of cytokine signaling 2	SOCS2	715772
Suppressor of cytokine signaling 6	SOCS6	704108
Suppressor of cytokine signaling 7	SOCS7	693737
Superoxide dismutase 1, soluble	SOD1	574096
Superoxide dismutase 3, extracellular	SOD3	715931
SON DNA binding protein	SON	704712
Sorbin and SH3 domain containing 3	SORBS3	716198
SOS Ras/Rho guanine nucleotide exchange factor 2	SOS2	705601
SRY-box 13	SOX13	700802
SRY-box 3	SOX3	696412
SP110 nuclear body protein	SP110	714244
Sp2 transcription factor	SP2	694834
Sp3 transcription factor	SP3	699901
Sperm acrosome associated 1	SPACA1	699611
Sperm acrosome associated 3	SPACA3	714491
Sperm associated antigen 9	SPAG9	707613
SPARC like 1	SPARCL1	701468
Spermatogenesis associated 5-like 1	SPATA5L1	713376
Spermatogenesis associated 6	SPATA6	710827
Spermatogenesis associated 7	SPATA7	693836
Spermatogenesis associated, serine-rich 1	SPATS1	703218
Spermatogenesis associated, serine rich 2 like	SPATS2L	699458
Signal peptidase complex subunit 1	SPCS1	696426
Sperm antigen with calponin homology and coiled-coil domains 1-like	SPECC1L	707641
Spen family transcriptional repressor	SPEN	696205
Spastic paraplegia 11 (autosomal recessive)	SPG11	712221
Spastic paraplegia 21 (autosomal recessive, Mast syndrome)	SPG21	712815
Sphingosine kinase 2	SPHK2	718088
Serine peptidase inhibitor, Kunitz type, 2	SPINT2	714755
Spla/ryanodine receptor domain and SOCS box containing 1	SPSB1	722211
Spectrin, beta, non-erythrocytic 1	SPTBN1	716794
Serine palmitoyltransferase small subunit A	SPTSSA	717580
SRC kinase signaling inhibitor 1	SRCIN1	693662
Serglycin	SRGN	712299
Src-related kinase lacking C-terminal regulatory tyrosine and N-terminal myristylation sites	SRMS	719587
Signal recognition particle 68kda	SRP68	705568
SRSF protein kinase 1	SRPK1	719039
SRP receptor alpha subunit	SRPRA	714215
Serine/arginine repetitive matrix 1	SRRM1	712258
Serine/arginine-rich splicing factor 1	SRSF1	713958
Serine/arginine-rich splicing factor 12	SRSF12	700497
Serine/arginine-rich splicing factor 3	SRSF3	719123

Serine/arginine-rich splicing factor 4	SRSF4	717401
Serine/arginine-rich splicing factor 7	SRSF7	713388
Serine/arginine-rich splicing factor 8	SRSF8	699079
Sulfiredoxin 1	SRXN1	714997
Synovial sarcoma translocation gene on chromosome 18-like 2	SS18L2	716387
Single-stranded DNA binding protein 1, mitochondrial	SSBP1	694459
Single stranded DNA binding protein 4	SSBP4	719496
Slingshot protein phosphatase 2	SSH2	711898
Signal sequence receptor, alpha	SSR1	693818
Signal sequence receptor, beta (translocon-associated protein beta)	SSR2	719383
Signal sequence receptor, delta	SSR4	697266
Structure specific recognition protein 1	SSRP1	706614
Suppression of tumorigenicity 13 (colon carcinoma) (Hsp70 interacting protein)	ST13	705664
ST3 beta-galactoside alpha-2,3-sialyltransferase 4	ST3GAL4	717792
Suppression of tumorigenicity 7	ST7	704776
Suppression of tumorigenicity 7 like	ST7L	705541
STAM binding protein	STAMPB	714562
Signal transducing adaptor family member 1	STAP1	711834
Star related lipid transfer domain containing 3	STARD3	697212
STARD3 N-terminal like	STARD3NL	705212
Star related lipid transfer domain containing 5	STARD5	713308
Signal transducer and activator of transcription 1	STAT1	693650
Signal transducer and activator of transcription 2	STAT2	712694
Signal transducer and activator of transcription 5A	STAT5A	574129
Staufen double-stranded RNA binding protein 1	STAU1	704197
STEAP4 metalloredutase	STEAP4	705096
Stress induced phosphoprotein 1	STIP1	717926
Serine/threonine kinase 11 interacting protein	STK11IP	704531
Serine/threonine kinase 25	STK25	701297
Serine/threonine kinase 3	STK3	707425
Serine/threonine kinase 36	STK36	699940
Serine/threonine kinase 38	STK38	719169
Stomatin like 2	STOML2	698458
Storkhead box 2	STOX2	693692
STE20-related kinase adaptor alpha	STRADA	717927
Spermatid perinuclear RNA binding protein	STRBP	695402
Striatin interacting protein 1	STRIP1	700799
Striatin	STRN	708491
STT3A, subunit of the oligosaccharyltransferase complex (catalytic)	STT3A	717056
STIP1 homology and U-box containing protein 1, E3 ubiquitin protein ligase	STUB1	697105
Syntaxin 11	STX11	699733
Syntaxin 12	STX12	716455
Syntaxin binding protein 1	STXBP1	707185
SUB1 homolog, transcriptional regulator	SUB1	701045
Succinate-coa ligase, GDP-forming, beta subunit	SUCLG2	697454

SUN domain containing ossification factor	SUCO	705776
Suppressor of fused homolog (Drosophila)	SUFU	713576
SURP and G-patch domain containing 1	SUGP1	719772
SURP and G-patch domain containing 2	SUGP2	719666
SGT1 homolog, MIS12 kinetochore complex assembly cochaperone	SUGT1	694046
Small ubiquitin-like modifier 1	SUMO1	703644
SPT4 homolog, DSIF elongation factor subunit	SUPT4H1	710214
SPT5 homolog, DSIF elongation factor subunit	SUPT5H	697337
Small vasohibin binding protein	SVBP	698308
Supervillin	SVIL	695267
SWT1, RNA endoribonuclease homolog	SWT1	714083
Synergism, gamma	SYNRG	717750
Synaptophysin	SYP	715739
Synaptophysin-like 1	SYPL1	698350
Synaptotagmin 14	SYT14	717383
Synaptotagmin VII	SYT7	722368
Synaptotagmin like 1	SYTL1	715833
Synaptotagmin like 2	SYTL2	703187
TGF-beta activated kinase 1/MAP3K7 binding protein 1	TAB1	703409
TGF-beta activated kinase 1/MAP3K7 binding protein 2	TAB2	696875
Transforming, acidic coiled-coil containing protein 3	TACC3	712898
Translational activator of mitochondrially encoded cytochrome c oxidase I	TACO1	717828
Transcriptional adaptor 3	TADA3	700090
TATA-box binding protein associated factor 12	TAF12	717135
TATA-box binding protein associated factor, RNA polymerase I, D	TAF1D	696602
TATA-box binding protein associated factor 5	TAF5	714558
TATA-box binding protein associated factor 5 like	TAF5L	693770
TATA-box binding protein associated factor 9	TAF9	700239
T-cell activation rhoGTPase activating protein	TAGAP	701690
TRAF family member associated NFkB activator	TANK	700942
TAO kinase 2	TAOK2	707777
Transporter 1, ATP-binding cassette, sub-family B (MDR/TAP)	TAP1	717726
TAP binding protein (tapasin)	TAPBP	718235
TAR (HIV-1) RNA binding protein 1	TARBP1	712397
TAR (HIV-1) RNA binding protein 2	TARBP2	703294
Taspase 1	TASP1	694028
Tatd dnase domain containing 1	TATDN1	706095
Tax1 (human T-cell leukemia virus type I) binding protein 1	TAX1BP1	698103
Tafazzin	TAZ	574297
TBC1 domain family member 17	TBC1D17	719093
TBC1 domain family member 25	TBC1D25	710596
TBC1 domain family member 9	TBC1D9	702230
Tubulin folding cofactor E	TBCE	711476
Tubulin folding cofactor E-like	TBCEL	706506
TBK1 binding protein 1	TBKBP1	693913

Transducin (beta)-like 1 X-linked receptor 1	TBL1XR1	712740
T-box 21	TBX21	694044
Transcription elongation factor A (SII), 2	TCEA2	694026
Transcription elongation factor A (SII)-like 3	TCEAL3	696692
Transcription elongation factor A (SII)-like 4	TCEAL4	696453
Transcription elongation factor A (SII)-like 7	TCEAL7	695831
Transcription elongation factor A (SII)-like 8	TCEAL8	695496
Transcription elongation factor B (SIII), polypeptide 1 (15kda, elongin C)	TCEB1	698922
Transcription factor 4	TCF4	695814
T-cell leukemia/lymphoma 1B	TCL1B	703241
T-complex 11, testis-specific	TCP11	718695
T-complex 11, testis-specific-like 1	TCP11L1	694899
Tectonic family member 3	TCTN3	703844
Tyrosyl-DNA phosphodiesterase 2	TDP2	715162
Tudor domain containing 3	TDRD3	696228
Tudor domain containing 7	TDRD7	641450
Trans-2,3-enoyl-coa reductase	TECR	718928
TEK tyrosine kinase, endothelial	TEK	707455
Telomeric repeat binding factor 2, interacting protein	TERF2IP	712149
Testis-specific kinase 1	TESK1	697206
Testis expressed 10	TEX10	714536
Testis expressed 26	TEX26	713363
Testis expressed 28	TEX28	699141
Testis expressed 30	TEX30	701917
Transcription factor A, mitochondrial	TFAM	701368
Transcription factor AP-2 delta (activating enhancer binding protein 2 delta)	TFAP2D	707582
Transcription factor B1, mitochondrial	TFB1M	701830
Transcription factor binding to IGHM enhancer 3	TFE3	712161
TRK-fused gene	TFG	700972
Tuftelin interacting protein 11	TFIP11	712691
TCF3 (E2A) fusion partner (in childhood Leukemia)	TFPT	720296
Transforming growth factor beta 1 induced transcript 1	TGFB1I1	714172
Transforming growth factor beta 2	TGFB2	707540
Transforming growth factor beta receptor associated protein 1	TGFBRAP1	713102
Transglutaminase 5	TGM5	712605
THAP domain containing 7	THAP7	696208
THO complex 1	THOC1	697954
THO complex 6	THOC6	700217
Thyroid hormone receptor associated protein 3	THRAP3	713033
Thrombospondin type 1 domain containing 1	THSD1	100430744
THUMP domain containing 2	THUMPD2	712045
Thy-1 cell surface antigen	THY1	705321
Thymocyte nuclear protein 1	THYN1	700413
Toll-like receptor adaptor molecule 1	TICAM1	574294
Translocase of inner mitochondrial membrane 10 homolog B (yeast)	TIMM10B	711085

Translocase of inner mitochondrial membrane 17 homolog A (yeast)	TIMM17A	707001
Translocase of inner mitochondrial membrane 17 homolog B (yeast)	TIMM17B	714895
Translocase of inner mitochondrial membrane 44 homolog (yeast)	TIMM44	709800
Translocase of inner mitochondrial membrane 8 homolog B (yeast)	TIMM8B	711249
Tubulointerstitial nephritis antigen-like 1	TINAGL1	705660
TERF1 (TRF1)-interacting nuclear factor 2	TINF2	715812
TCDD-inducible poly(ADP-ribose) polymerase	TIPARP	706180
Triokinase/FMN cyclase	TKFC	694117
Transducin like enhancer of split 3	TLE3	698046
TM2 domain containing 2	TM2D2	701007
Transmembrane 4 L six family member 5	TM4SF5	709844
Transmembrane 6 superfamily member 2	TM6SF2	719756
Transmembrane 9 superfamily member 1	TM9SF1	715472
Transmembrane 9 superfamily protein member 4	TM9SF4	712260
Transmembrane p24 trafficking protein 1	TMED1	713618
Transmembrane p24 trafficking protein 3	TMED3	711993
Transmembrane p24 trafficking protein 4	TMED4	699105
Transmembrane p24 trafficking protein 7	TMED7	100533192
Transmembrane protein 104	TMEM104	698592
Transmembrane protein 115	TMEM115	702164
Transmembrane protein 121	TMEM121	700005
Transmembrane protein 125	TMEM125	699920
Transmembrane protein 126A	TMEM126A	702831
Transmembrane protein 126B	TMEM126B	702719
Transmembrane protein 135	TMEM135	704963
Transmembrane protein 138	TMEM138	693905
Transmembrane protein 145	TMEM145	709268
Transmembrane protein 14C	TMEM14C	697976
Transmembrane protein 150A	TMEM150A	696101
Transmembrane protein 156	TMEM156	698617
Transmembrane protein 160	TMEM160	716996
Transmembrane protein 163	TMEM163	709015
Transmembrane protein 164	TMEM164	705380
Transmembrane protein 165	TMEM165	696262
Transmembrane protein 168	TMEM168	702972
Transmembrane protein 19	TMEM19	718700
Transmembrane protein 204	TMEM204	701926
Transmembrane protein 208	TMEM208	697228
Transmembrane protein 216	TMEM216	693655
Transmembrane protein 218	TMEM218	100430360
Transmembrane protein 243	TMEM243	706405
Transmembrane protein 245	TMEM245	710299
Transmembrane protein 248	TMEM248	695654
Transmembrane protein 254	TMEM254	701130

Transmembrane protein 261	TMEM261	716818
Transmembrane protein 266	TMEM266	707482
Transmembrane protein 27	TMEM27	712928
Transmembrane protein 30A	TMEM30A	717907
Transmembrane protein 31	TMEM31	100429776
Transmembrane protein 33	TMEM33	702063
Transmembrane protein 37	TMEM37	695060
Transmembrane protein 38B	TMEM38B	715679
Transmembrane protein 39B	TMEM39B	706700
Transmembrane protein 42	TMEM42	714654
Transmembrane protein 44	TMEM44	708003
Transmembrane protein 45A	TMEM45A	700594
Transmembrane protein 45B	TMEM45B	718735
Transmembrane protein 5	TMEM5	717102
Transmembrane protein 55A	TMEM55A	696779
Transmembrane protein 57	TMEM57	654415
Transmembrane protein 59	TMEM59	714942
Transmembrane protein 94	TMEM94	702374
Transmembrane and immunoglobulin domain containing 3	TMIGD3	104564312
Tropomodulin 4	TMOD4	709732
Transmembrane protease, serine 13	TMPRSS13	698586
TNF alpha induced protein 6	TNFAIP6	694699
Tumor necrosis factor receptor superfamily member 25	TNFRSF25	703744
Tumor necrosis factor (ligand) superfamily, member 12	TNFSF12	100551504
Tumor necrosis factor superfamily member 13	TNFSF13	100551504
Tumor necrosis factor superfamily member 13b	TNFSF13B	693917
Tumor necrosis factor superfamily member 8	TNFSF8	702944
Tyrosine kinase, non-receptor, 1	TNK1	715180
Tyrosine kinase, non-receptor, 2	TNK2	711655
Tankyrase, TRF1-interacting ankyrin-related ADP-ribose polymerase 2	TNKS2	698050
Troponin T type 2 (cardiac)	TNNT2	709882
Transportin 2	TNPO2	717710
Trinucleotide repeat containing 6A	TNRC6A	701680
Transducer of ERBB2, 1	TOB1	706873
Translocase of outer mitochondrial membrane 70 homolog A (S. Cerevisiae)	TOMM70A	700347
Topoisomerase (DNA) II beta	TOP2B	677709
Topoisomerase (DNA) III beta	TOP3B	698317
Topoisomerase (DNA) II binding protein 1	TOPBP1	719054
Torsin family 1, member A (torsin A)	TOR1A	722520
Torsin family 2, member A	TOR2A	700203
Tumor protein p53	TP53	716170
Tumor protein p53 binding protein 1	TP53BP1	710237
Tumor protein p53 inducible nuclear protein 2	TP53INP2	707113
Tumor protein D52-like 1	TPD52L1	716568
Tropomyosin 1 (alpha)	TPM1	705236
Tropomyosin 2 (beta)	TPM2	696604

Translocated promoter region, nuclear basket protein	TPR	713910
Transmembrane protein, adipocyte associated 1	TPRA1	707221
Tryptase gamma 1	TPSG1	100425752
Tumor protein, translationally-controlled 1	TPT1	702155
Transmembrane phosphoinositide 3-phosphatase and tensin homolog 2	TPTE2	704870
Transformer 2 alpha homolog (Drosophila)	TRA2A	574247
Transformer 2 beta homolog (Drosophila)	TRA2B	574337
TRAF3 interacting protein 2	TRAF3IP2	697530
TRAF3 interacting protein 3	TRAF3IP3	712895
TNF receptor associated factor 6	TRAF6	716907
TNF receptor associated factor 7	TRAF7	695415
TRAF-type zinc finger domain containing 1	TRAFD1	711635
Trafficking protein, kinesin binding 2	TRAK2	701779
TNF receptor-associated protein 1	TRAP1	706234
Trafficking protein particle complex 11	TRAPPC11	702066
Tripartite motif containing 11	TRIM11	694150
Tripartite motif containing 14	TRIM14	715418
Tripartite motif containing 23	TRIM23	696386
Tripartite motif containing 24	TRIM24	710229
Tripartite motif containing 27	TRIM27	706129
Tripartite motif containing 32	TRIM32	702595
Tripartite motif containing 33	TRIM33	710600
Tripartite motif containing 37	TRIM37	710934
Tripartite motif containing 41	TRIM41	708426
Tripartite motif containing 46	TRIM46	717498
Tripartite motif containing 62	TRIM62	709927
Tripartite motif containing 7	TRIM7	708324
Tripartite motif containing 8	TRIM8	713701
Thyroid hormone receptor interactor 11	TRIP11	697489
Thyroid hormone receptor interactor 12	TRIP12	710560
Thyroid hormone receptor interactor 4	TRIP4	707263
Trna isopentenyltransferase 1	TRIT1	716422
Trna methyltransferase O	TRMO	715609
Trna methyltransferase 1	TRMT1	718227
Trna methyltransferase 11 homolog	TRMT11	712712
Trna methyltransferase 1 like	TRMT1L	714319
Trna methyltransferase 6	TRMT6	718229
Trna 5-methylaminomethyl-2-thiouridylate methyltransferase	TRMU	714268
Transient receptor potential cation channel, subfamily M, member 5	TRPM5	705070
Transient receptor potential cation channel, subfamily V, member 4	TRPV4	709605
TSSK6 activating co-chaperone	TSACC	719490
TSC22 domain family member 1	TSC22D1	701076
TSC22 domain family member 3	TSC22D3	702656
TSC22 domain family member 4	TSC22D4	719183
Trna splicing endonuclease subunit 15	TSEN15	717481

Teashirt zinc finger homeobox 1	TSHZ1	703018
Testis-specific serine kinase substrate	TSKS	719028
Tetraspanin 15	TSPAN15	711675
Tetraspanin 18	TSPAN18	715506
Tetraspanin 3	TSPAN3	708428
TSPY-like 4	TSPYL4	716137
Testis-specific serine kinase 3	TSSK3	708182
Thiosulfate sulfurtransferase (rhodanese)	TST	698021
Tetratricopeptide repeat domain 16	TTC16	706784
Tetratricopeptide repeat domain 21A	TTC21A	694904
Tetratricopeptide repeat domain 27	TTC27	707021
Tetratricopeptide repeat domain 32	TTC32	700947
Tetratricopeptide repeat domain 7B	TTC7B	696029
TELO2 interacting protein 1	TTI1	699930
Tubulin alpha 1a	TUBA1A	574194
Tubulin, alpha 1b	TUBA1B	709643
Tubulin alpha 3c	TUBA3C	707215
Tubulin alpha 4a	TUBA4A	702583
Tubulin alpha like 3	TUBAL3	722506
Tubulin beta class I	TUBB	574113
Twist family bhlh transcription factor 2	TWIST2	697078
TWIST neighbor	TWISTNB	707781
Twisted gastrulation homolog 1 (Drosophila)	TWSG1	705804
Thioredoxin	TXN	712587
Thioredoxin domain containing 12 (endoplasmic reticulum)	TXNDC12	712891
Thioredoxin domain containing 17	TXNDC17	712910
Thioredoxin domain containing 9	TXNDC9	709303
Thioredoxin like 1	TXNL1	695194
Thioredoxin like 4A	TXNL4A	698969
Thioredoxin reductase 1	TXNRD1	701062
Thymidine phosphorylase	TYMP	716161
UDP-N-acetylglucosamine pyrophosphorylase 1	UAP1	720116
Ubiquitin-like modifier activating enzyme 2	UBA2	705808
Ubiquitin-like modifier activating enzyme 3	UBA3	696493
Ubiquitin A-52 residue ribosomal protein fusion product 1	UBA52	720243
Ubiquitin associated and SH3 domain containing A	UBASH3A	722456
Ubiquitin B	UBB	696110
Ubiquitin conjugating enzyme E2A	UBE2A	693716
Ubiquitin conjugating enzyme E2D 4 (putative)	UBE2D4	707831
Ubiquitin-conjugating enzyme E2E 2	UBE2E2	699101
Ubiquitin conjugating enzyme E2E 3	UBE2E3	704530
Ubiquitin conjugating enzyme E2F (putative)	UBE2F	695394
Ubiquitin conjugating enzyme E2I	UBE2I	722434
Ubiquitin conjugating enzyme E2O	UBE2O	710529
Ubiquitin conjugating enzyme E2 variant 1	UBE2V1	100425552
Ubiquitin protein ligase E3B	UBE3B	707324
Ubiquitination factor E4B	UBE4B	713348
Ubiquitin family domain containing 1	UBFD1	700601

Ubiquitin like 5	UBL5	711015
Ubiquitin like 7	UBL7	702305
U-box domain containing 5	UBOX5	717166
Upstream binding protein 1 (LBP-1a)	UBP1	706283
Ubiquilin 1	UBQLN1	713525
Ubiquitin protein ligase E3 component n-recognin 7 (putative)	UBR7	698882
Ubiquitin domain containing 2	UBTD2	709455
UBX domain protein 1	UBXN1	718643
UBX domain protein 10	UBXN10	705058
UBX domain protein 11	UBXN11	719826
Ubiquitin C-terminal hydrolase L3	UCHL3	697276
Uridine-cytidine kinase 2	UCK2	695725
UFM1-specific ligase 1	UFL1	704454
Ubiquitin interaction motif containing 1	UIMC1	705412
Uracil DNA glycosylase	UNG	706816
UPF3 regulator of nonsense transcripts homolog B (yeast)	UPF3B	694247
Uroplakin 2	UPK2	707184
Uridine phosphorylase 1	UPP1	695317
Uracil phosphoribosyltransferase homolog	UPRT	704157
Ubiquinol-cytochrome c reductase, 6.4kda subunit	UQCR	708396
Ubiquinol-cytochrome c reductase core protein II	UQCRC2	697967
Ubiquinol-cytochrome c reductase, complex III subunit VII, 9.5kda	UQCRQ	708950
Ubiquitin related modifier 1	URM1	722618
Unconventional SNARE in the ER 1 homolog (S. Cerevisiae)	USE1	718905
Usher syndrome 1C	USH1C	696911
Up-regulated during skeletal muscle growth 5 homolog (mouse)	USMG5	100428448
Ubiquitin specific peptidase 10	USP10	718471
Ubiquitin specific peptidase 11	USP11	706555
Ubiquitin specific peptidase 15	USP15	716793
Ubiquitin specific peptidase 16	USP16	706403
Ubiquitin specific peptidase 20	USP20	716505
Ubiquitin specific peptidase 21	USP21	719894
Ubiquitin specific peptidase 3	USP3	705973
Ubiquitin specific peptidase 32	USP32	716857
Ubiquitin specific peptidase 38	USP38	700235
Ubiquitin specific peptidase 39	USP39	696217
Ubiquitin specific peptidase 45	USP45	694340
Ubiquitin specific peptidase 48	USP48	707110
Ubiquitin specific peptidase 51	USP51	705861
USP6 N-terminal like	USP6NL	694275
Ubiquitin specific peptidase 8	USP8	715523
Ubiquitin specific peptidase 9, Y-linked	USP9Y	100270704
UTP14, U3 small nucleolar ribonucleoprotein, homolog C (yeast)	UTP14C	709657
UTP6 small subunit processome component	UTP6	713361
UV radiation resistance associated	UVRAG	696601
Vesicle associated membrane protein 7	VAMP7	704160
Valyl-trna synthetase	VARS	715537

Vav guanine nucleotide exchange factor 3	VAV3	694685
Versican	VCAN	712365
Valosin containing protein lysine (K) methyltransferase	VCPKMT	705487
Voltage-dependent anion channel 1	VDAC1	710045
Voltage-dependent anion channel 2	VDAC2	704257
Vascular endothelial growth factor C	VEGFC	699502
Vezatin, adherens junctions transmembrane protein	VEZT	716675
Villin-like	VILL	696988
VPS33B interacting protein, apical-basolateral polarity regulator, spe-39 homolog	VIPAS39	706315
VPS11, CORVET/HOPS core subunit	VPS11	702834
Vacuolar protein sorting 13 homolog C (S. Cerevisiae)	VPS13C	709080
Vacuolar protein sorting 36 homolog (S. Cerevisiae)	VPS36	693290
Vacuolar protein sorting 45 homolog (S. Cerevisiae)	VPS45	706035
VPS52 GARP complex subunit	VPS52	100430904
Vacuolar protein sorting 72 homolog (S. Cerevisiae)	VPS72	709818
VPS8, CORVET complex subunit	VPS8	701567
Vaccinia related kinase 1	VRK1	704798
Vitronectin	VTN	708499
Von Willebrand factor A domain containing 1	VWA1	701765
WW domain containing adaptor with coiled-coil	WAC	715828
Tryptophanyl trna synthetase 2, mitochondrial	WARS2	712332
Wiskott-Aldrich syndrome-like	WASL	696556
WW domain binding protein 1	WBP1	709202
WW domain binding protein 11	WBP11	699451
WW domain binding protein 5	WBP5	696661
WD repeat domain 11	WDR11	714990
WD repeat domain 12	WDR12	705623
WD repeat domain 18	WDR18	704547
WD repeat domain 19	WDR19	698866
WD repeat domain 20	WDR20	708533
WD repeat domain 26	WDR26	704911
WD repeat domain 3	WDR3	711960
WD repeat domain 4	WDR4	714230
WD repeat domain 44	WDR44	710598
WD repeat domain 47	WDR47	696942
WD repeat domain 59	WDR59	710576
WD repeat domain 6	WDR6	708505
WD repeat domain 61	WDR61	709971
WD repeat domain 70	WDR70	706130
WD repeat domain 74	WDR74	718460
WD repeat domain 75	WDR75	709104
WD repeat domain 77	WDR77	677686
WAP four-disulfide core domain 10A	WFDC10A	717384
WNT1 inducible signaling pathway protein 2	WISP2	717872
Wingless-type MMTV integration site family member 10A	WNT10A	700692
Wingless-type MMTV integration site family member 10B	WNT10B	708906
Wingless-type MMTV integration site family member 3	WNT3	716909

Wingless-type MMTV integration site family member 7B	WNT7B	713864
WD repeat containing, antisense to TP53	WRAP53	716125
Werner helicase interacting protein 1	WRNIP1	707250
Wilms tumor 1 associated protein	WTAP	702295
WW domain containing E3 ubiquitin protein ligase 2	WWP2	705464
XPA binding protein 2	XAB2	704109
X-box binding protein 1	XBP1	713863
X-linked Kx blood group related, X-linked	XKRX	701721
Xeroderma pigmentosum, complementation group A	XPA	715705
Xeroderma pigmentosum, complementation group C	XPC	700938
X-prolyl aminopeptidase (aminopeptidase P) 2, membrane-bound	XPNPEP2	701972
Exportin 1	XPO1	718063
X-ray repair complementing defective repair in Chinese hamster cells 6	XRCC6	707975
5'-3' exoribonuclease 2	XRN2	700934
Yae1 domain containing 1	YAE1D1	703786
Tyrosyl-trna synthetase	YARS	709003
Y-box binding protein 3	YBX3	722347
YEATS domain containing 4	YEATS4	718376
Yip1 domain family member 4	YIPF4	706819
Yippee like 3	YPEL3	708740
Tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, beta	YWHAB	717788
Tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, gamma	YWHAG	715517
Tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, eta	YWHAH	717016
Zinc binding alcohol dehydrogenase domain containing 2	ZADH2	701079
Zinc finger, BED-type containing 8	ZBED8	695905
Zinc finger and BTB domain containing 17	ZBTB17	696327
Zinc finger and BTB domain containing 26	ZBTB26	698776
Zinc finger and BTB domain containing 33	ZBTB33	695801
Zinc finger and BTB domain containing 39	ZBTB39	713914
Zinc finger and BTB domain containing 40	ZBTB40	708181
Zinc finger and BTB domain containing 48	ZBTB48	704628
Zinc finger and BTB domain containing 49	ZBTB49	712422
Zinc finger and BTB domain containing 5	ZBTB5	718482
Zinc finger and BTB domain containing 6	ZBTB6	695858
Zinc finger and BTB domain containing 8 opposite strand	ZBTB8OS	708590
Zinc finger and BTB domain containing 9	ZBTB9	718391
Zinc finger CCCH-type containing 12A	ZC3H12A	713604
Zinc finger CCCH-type containing 3	ZC3H3	708584
Zinc finger CCCH-type containing 7A	ZC3H7A	711984
Zinc finger, CCHC domain containing 11	ZCCHC11	713406
Zinc finger, CCHC domain containing 14	ZCCHC14	703833
Zinc finger, CCHC domain containing 17	ZCCHC17	705172
Zinc finger, CCHC domain containing 6	ZCCHC6	693660
Zinc finger, CCHC domain containing 7	ZCCHC7	716658

Zinc finger, CCHC domain containing 8	ZCCHC8	702359
Zinc finger, DHHC-type containing 12	ZDHHC12	722606
Zinc finger, DHHC-type containing 16	ZDHHC16	705982
Zinc finger E-box binding homeobox 2	ZEB2	705439
Zyg-11 related, cell cycle regulator	ZER1	717262
Zinc finger, AN1-type domain 2A	ZFAND2A	100426344
Zinc finger, C3H1-type containing	ZFC3H1	718671
ZFP36 ring finger protein	ZFP36	722000
Zinc finger RNA binding protein	ZFR	696882
Zinc finger protein, X-linked	ZFX	106992280
Zinc finger, CCCH-type with G-patch domain	ZGPAT	719499
Zinc finger, matrin-type 2	ZMAT2	697247
Zinc finger, matrin-type 5	ZMAT5	715058
Zinc metalloproteinase STE24	ZMPSTE24	693765
Zinc finger, MYM-type 2	ZMYM2	721255
Zinc finger, MYM-type 3	ZMYM3	697147
Zinc finger, MYND-type containing 11	ZMYND11	708761
Zinc finger, MYND-type containing 12	ZMYND12	696941
Zinc finger protein 140	ZNF140	695171
Zinc finger protein 155	ZNF155	712736
Zinc finger protein 17	ZNF17	707664
Zinc finger protein 180	ZNF180	712493
Zinc finger protein 181	ZNF181	106992424
Zinc finger protein 207	ZNF207	100689488
Zinc finger protein 211	ZNF211	100429296
Zinc finger protein 22	ZNF22	706208
Zinc finger protein 25	ZNF25	701129
Zinc finger protein 250	ZNF250	704805
Zinc finger protein 280D	ZNF280D	699509
Zinc finger protein 281	ZNF281	709466
Zinc finger protein 285	ZNF285	106994792
Zinc finger protein 296	ZNF296	713620
Zinc finger protein 319	ZNF319	706286
Zinc finger protein 32	ZNF32	705373
Zinc finger protein 322	ZNF322	701098
Zinc finger protein 334	ZNF334	706702
Zinc finger protein 354B	ZNF354B	712885
Zinc finger protein 362	ZNF362	710013
Zinc finger protein 385A	ZNF385A	705436
Zinc finger protein 41	ZNF41	706770
Zinc finger protein 410	ZNF410	698124
Zinc finger protein 436	ZNF436	709638
Zinc finger protein 460	ZNF460	710080
Zinc finger protein 462	ZNF462	711489
Zinc finger protein 496	ZNF496	709694
Zinc finger protein 503	ZNF503	703912
Zinc finger protein 521	ZNF521	709169
Zinc finger protein 526	ZNF526	707135

Zinc finger protein 532	ZNF532	701146
Zinc finger protein 540	ZNF540	714105
Zinc finger protein 557	ZNF557	100424984
Zinc finger protein 572	ZNF572	712116
Zinc finger protein 573	ZNF573	719389
Zinc finger protein 595	ZNF595	716693
Zinc finger protein 613	ZNF613	719851
Zinc finger protein 620	ZNF620	100423712
Zinc finger protein 622	ZNF622	100429384
Zinc finger protein 627	ZNF627	716820
Zinc finger protein 638	ZNF638	704418
Zinc finger protein 646	ZNF646	712774
Zinc finger protein 653	ZNF653	714754
Zinc finger protein 658	ZNF658	100425456
Zinc finger protein 664	ZNF664	710703
Zinc finger protein 687	ZNF687	716590
Zinc finger protein 7	ZNF7	715735
Zinc finger protein 70	ZNF70	698442
Zinc finger protein 708	ZNF708	693803
Zinc finger protein 777	ZNF777	711987
Zinc finger protein 79	ZNF79	700961
Zinc finger protein 800	ZNF800	697855
Zinc finger protein 821	ZNF821	707355
Zinc finger protein 92	ZNF92	708683
Zinc ribbon domain containing 1	ZNRD1	712151
Zinc and ring finger 2, E3 ubiquitin protein ligase	ZNRF2	698413
Zinc and ring finger 4	ZNRF4	695996
Zona pellucida glycoprotein 3 (sperm receptor)	ZP3	719925
Zinc finger, RAN-binding domain containing 2	ZRANB2	703513
Zinc finger (CCCH type), RNA binding motif and serine/arginine rich 2	ZRSR2	720986
Zinc finger and SCAN domain containing 2	ZSCAN2	695673
Zinc finger and SCAN domain containing 29	ZSCAN29	710414
Zinc finger and SCAN domain containing 32	ZSCAN32	702733
Zinc finger with UFM1-specific peptidase domain	ZUFSP	718059
Zinc finger, ZZ-type with EF-hand domain 1	ZZEF1	721518

(4) Expressed in both groups 1c and 2c

1-acylglycerol-3-phosphate O-acyltransferase 1	AGPAT1	717174
1-acylglycerol-3-phosphate O-acyltransferase 3	AGPAT3	713301
3-hydroxy-3-methylglutaryl-coa synthase 2 (mitochondrial)	HMGCS2	713541
5,10-methenyltetrahydrofolate synthetase (5-formyltetrahydrofolate cyclo-ligase)	MTHFS	717493
5-hydroxytryptamine (serotonin) receptor 5A, G protein-coupled	HTR5A	716134
5-phosphohydroxy-L-lysine phospho-lyase	PHYKPL	702302
8-oxoguanine DNA glycosylase	OGG1	700481

Abhydrolase domain containing 8	ABHD8	718980
ABI family member 3	ABI3	698710
Achaete-scute family bhlh transcription factor 4	ASCL4	704632
Acid sensing ion channel subunit 3	ASIC3	714396
Acrosin binding protein	ACRBP	713219
Actin like 7B	ACTL7B	710750
Activating transcription factor 2	ATF2	699072
Activin A receptor type IB	ACVR1B	696587
Activin A receptor type IL	ACVRL1	696471
ADAM metallopeptidase domain 21	ADAM21	715640
ADAM metallopeptidase domain 29	ADAM29	698113
ADAM metallopeptidase with thrombospondin type 1 motif 14	ADAMTS14	710154
ADAM metallopeptidase with thrombospondin type 1 motif 17	ADAMTS17	693447
ADAMTS like 5	ADAMTSL5	721290
Adaptor related protein complex 1 associated regulatory protein	AP1AR	700734
Adaptor related protein complex 3, beta 2 subunit	AP3B2	694091
Adducin 2	ADD2	702939
Adenylate cyclase 4	ADCY4	714684
Adhesion molecule with Ig-like domain 2	AMIGO2	705386
Adipogenesis associated, Mth938 domain containing	AAMDC	699328
Adipogenesis regulatory factor	ADIRF	699173
ADP ribosylation factor like gtpase 10	ARL10	696524
ADP ribosylation factor like gtpase 6	ARL6	696616
A-kinase anchoring protein 12	AKAP12	641446
A-kinase anchoring protein 2	AKAP2	709841
A-kinase anchoring protein 7	AKAP7	710509
Aladin WD repeat nucleoporin	AAAS	719095
Alanine-glyoxylate aminotransferase	AGXT	699941
Alanine--glyoxylate aminotransferase 2	AGXT2	699250
Alkb homolog 2, alpha-ketoglutarate-dependent dioxygenase	ALKBH2	706708
Alkb homolog 4, lysine demethylase	ALKBH4	715078
Alpha hemoglobin stabilizing protein	AHSP	714392
Alpha-defensin 1A	MNP1A	574196
Aminoacylase 3	ACY3	711083
Aminoadipate-semialdehyde dehydrogenase-phospho pantetheinyl transferase	AASDHPPT	100328984
Aminoadipate-semialdehyde synthase	AASS	694594
Amyloid beta (A4) precursor-like protein 2	APLP2	718819
Anaphase promoting complex subunit 2	ANAPC2	706384
Ancient ubiquitous protein 1	AUP1	710020
Angio associated migratory cell protein	AAMP	700763
Angiopoietin like 2	ANGPTL2	701444
Ankyrin 2, neuronal	ANK2	702180
Ankyrin repeat and IBR domain containing 1	ANKIB1	703273
Ankyrin repeat and SOCS box containing 3	ASB3	716503
Ankyrin repeat domain 13C	ANKRD13C	702811
Ankyrin repeat domain 2 (stretch responsive muscle)	ANKRD2	707097
Ankyrin repeat domain 49	ANKRD49	697693

Ankyrin repeat domain 6	ANKRD6	701339
Annexin A9	ANXA9	708704
Anoctamin 4	ANO4	695973
Anti-silencing function 1A histone chaperone	ASF1A	714761
Apelin receptor	APLNR	706823
Apolipoprotein A-II	APOA2	719946
Apolipoprotein A-V	APOA5	696484
Apolipoprotein B mRNA editing enzyme, catalytic polypeptide-like 3H	APOBEC3H	723811
Apolipoprotein L2	APOL2	694029
Apoptosis inducing factor, mitochondria associated 1	AIFM1	702773
Aprataxin	APTIX	702671
Aquaporin 11	AQP11	698835
ARFGEF family member 3	ARFGEF3	703791
Arginine/serine-rich coiled-coil 2	RSRC2	706564
ARP3 actin-related protein 3 homolog B (yeast)	ACTR3B	715965
Artemin	ARTN	701641
Aspartate beta-hydroxylase domain containing 1	ASPHD1	707467
Aspartate dehydrogenase domain containing	ASPDH	719609
Aspartoacylase	ASPA	706170
Ataxin 2-like	ATXN2L	708359
ATP binding cassette subfamily B member 6 (Langereis blood group)	ABCB6	704599
ATP binding cassette subfamily C member 9	ABCC9	654489
ATP binding cassette subfamily D member 1	ABCD1	696794
ATP synthase F0 subunit 6	ATP6	2846629
ATP synthase mitochondrial F1 complex assembly factor 2	ATPAF2	699709
ATP synthase, H ⁺ transporting, mitochondrial F1 complex, delta subunit	ATP5D	705944
ATPase, Ca ⁺⁺ transporting, ubiquitous	ATP2A3	707768
ATPase, class II, type 9A	ATP9A	710250
ATPase, H ⁺ transporting, lysosomal 14kda, V1 subunit F	ATP6V1F	702112
ATPase, H ⁺ transporting, lysosomal 21kda, V0 subunit b	ATP6V0B	702243
ATPase, H ⁺ /K ⁺ exchanging, alpha polypeptide	ATP4A	100426216
AT-rich interaction domain 2	ARID2	703823
Aurora kinase A interacting protein 1	AURKAIP1	706329
Aurora kinase C	AURKC	709801
Autophagy related 2A	ATG2A	717290
Autophagy related 4C, cysteine peptidase	ATG4C	695606
Autophagy related 7	ATG7	696238
B9 protein domain 2	B9D2	704873
Bardet-Biedl syndrome 12	BBS12	710538
BARX homeobox 2	BARX2	715001
Basonuclin 2	BNC2	713291
B-cell receptor-associated protein 31	BCAP31	696663
BCL2/adenovirus E1B 19kda interacting protein 2	BNIP2	703234
BCL2-associated X protein	BAX	718948
BCL6 corepressor	BCOR	698644

BCS1-like (<i>S. Cerevisiae</i>)	BCS1L	699690
Beclin 1, autophagy related	BECN1	711649
BEN domain containing 5	BEND5	711150
Beta-1,3-galactosyltransferase 2	B3GALT2	712334
Beta-1,3-galactosyltransferase 4	B3GALT4	718178
Beta-1,3-glucuronyltransferase 3	B3GAT3	718744
Beta-1,4-glucuronyltransferase 1	B4GAT1	714270
Beta-1,4-N-acetyl-galactosaminyl transferase 3	B4GALNT3	706259
Beta-2-microglobulin	B2M	712428
Beta-carotene oxygenase 2	BCO2	712095
Bloom syndrome, recq helicase-like	BLM	703460
Bone morphogenetic protein 1	BMP1	707596
BPI fold containing family A member 2	BPIFA2	710376
Brain and reproductive organ-expressed (TNFRSF1A modulator)	BRE	702365
Bromodomain adjacent to zinc finger domain 1B	BAZ1B	716436
Bromodomain containing 2	BRD2	717893
Bruton agammaglobulinemia tyrosine kinase	BTK	703000
BUB3 mitotic checkpoint protein	BUB3	708033
Cadherin 11, type 2, OB-cadherin (osteoblast)	CDH11	708826
Cadherin 8, type 2	CDH8	708408
Cadherin related family member 2	CDHR2	697249
Calbindin	CALB1	677721
Calcitonin-related polypeptide alpha	CALCA	700649
Calcium and integrin binding family member 2	CIB2	709429
Calcium binding protein 4	CABP4	711973
Calcium/calmodulin-dependent protein kinase I	CAMK1	700212
Calcium/calmodulin-dependent protein kinase II delta	CAMK2D	702504
Calcium/calmodulin-dependent protein kinase kinase 1, alpha	CAMKK1	707562
Caldesmon 1	CALD1	707050
Calmodulin like 3	CALML3	722513
Calpain 2, (m/II) large subunit	CAPN2	703047
Calponin 1, basic, smooth muscle	CNN1	716681
Calponin 3, acidic	CNN3	709538
Calreticulin	CALR	716910
Camp responsive element modulator	CREM	698636
Capping protein (actin filament), gelsolin-like	CAPG	695288
Carbohydrate (chondroitin 4) sulfotransferase 13	CHST13	716548
Carbohydrate (keratan sulfate Gal-6) sulfotransferase 1	CHST1	715176
Carbohydrate (N-acetylgalactosamine 4-sulfate 6-O) sulfotransferase 15	CHST15	693845
Carbohydrate (N-acetylglucosamine 6-O) sulfotransferase 7	CHST7	704906
Carbohydrate sulfotransferase 8	CHST8	106992408
Carbonic anhydrase VB, mitochondrial	CA5B	713128
Carbonic anhydrase VII	CA7	696681
Carbonic anhydrase XIV	CA14	706360
Carboxypeptidase A1	CPA1	703095
Carboxypeptidase A5	CPA5	702974
Carboxypeptidase N subunit 2	CPN2	106997192

Carboxypeptidase X (M14 family), member 1	CPXM1	716790
Cardiotrophin 1	CTF1	713850
Carnitine palmitoyltransferase 1A (liver)	CPT1A	709837
Carnosine dipeptidase 1 (metallopeptidase M20 family)	CNDP1	695195
Cartilage acidic protein 1	CRTAC1	707486
Casein kinase 2, beta polypeptide	CSNK2B	715807
Caspase 8 associated protein 2	CASP8AP2	702294
Caspase activity and apoptosis inhibitor 1	CAAP1	707992
Catalase	CAT	717406
Cathepsin C	CTSC	705320
Cathepsin G	CTSG	716440
Cation channel, sperm associated 2	CATSPER2	710876
Caudal type homeobox 4	CDX4	701374
Cbl proto-oncogene B, E3 ubiquitin protein ligase	CBLB	703879
CCR4-NOT transcription complex subunit 1	CNOT1	712880
CD19 molecule	CD19	705211
CD1c molecule	CD1C	717148
CD27 molecule	CD27	712693
CD274 molecule	CD274	716043
CD300 molecule like family member f	CD300LF	703830
CD4 molecule	CD4	713807
CD40 ligand	CD40LG	574160
CD63 molecule	CD63	709828
CD7 molecule	CD7	719501
CD8b molecule	CD8B	699409
CD99 molecule like 2	CD99L2	708996
Cell death-inducing DFFA-like effector b	CIDEB	100425328
Cell division cycle 23	CDC23	714000
Cell division cycle 6	CDC6	700081
Cell growth regulator with ring finger domain 1	CGRRF1	695231
Centromere protein J	CENPJ	721498
Centrosomal protein 41kda	CEP41	703215
Centrosomal protein 57kda-like 1	CEP57L1	700109
Ceramide synthase 5	CERS5	713449
Cerebellar degeneration-related protein 2-like	CDR2L	700082
Cerebellin 2 precursor	CBLN2	694193
Chaperonin containing TCP1, subunit 5 (epsilon)	CCT5	696640
Chemokine (C-C motif) ligand 19	CCL19	574386
Chemokine (C-C motif) ligand 25	CCL25	574219
Chemokine-like factor	CKLF	693673
Chimerin 2	CHN2	697231
Chitinase domain containing 1	CHID1	701435
Chloride intracellular channel 3	CLIC3	721634
Cholinergic receptor, muscarinic 4	CHRM4	574195
Cholinergic receptor, nicotinic alpha 10	CHRNA10	718133
Cholinergic receptor, nicotinic alpha 7	CHRNA7	574230
Cholinergic receptor, nicotinic beta 2	CHRNB2	716830
Cholinergic receptor, nicotinic gamma	CHRNG	713418

Chondroitin sulfate N-acetylgalactosaminyltransferase 1	CSGALNACT1	704901
Chromodomain helicase DNA binding protein 3	CHD3	716508
Chromogranin A	CHGA	574388
Chromogranin B	CHGB	719171
Chromosome 1 open reading frame, human c1orf198	C1H1orf198	714084
Chromosome 1 open reading frame, human c1orf54	C1H1orf54	107000832
Chromosome 10 open reading frame, human c20orf27	C10H20orf27	717525
Chromosome 13 open reading frame, human c2orf73	C13H2orf73	718692
Chromosome 14 open reading frame, human c11orf53	C14H11orf53	710705
Chromosome 14 open reading frame, human c11orf68	C14H11orf68	715318
Chromosome 16 open reading frame, human c17orf49	C16H17orf49	713820
Chromosome 16 open reading frame, human c17orf74	C16H17orf74	721838
Chromosome 16 open reading frame, human c17orf75	C16H17orf75	714040
Chromosome 2 open reading frame, human c3orf18	C2H3orf18	701675
Chromosome 2 open reading frame, human c3orf67	C2H3orf67	705402
Chromosome 20 open reading frame, human c16orf13	C20H16orf13	696495
Chromosome 20 open reading frame, human c16orf46	C20H16orf46	713832
Chromosome 20 open reading frame, human c16orf54	C20H16orf54	706285
Chromosome 20 open reading frame, human c16orf62	C20H16orf62	695027
Chromosome 20 open reading frame, human c16orf78	C20H16orf78	693672
Chromosome 20 open reading frame, human c16orf82	C20H16orf82	702965
Chromosome 3 open reading frame, human c21orf62	C3H21orf62	700356
Chromosome 3 open reading frame, human c21orf91	C3H21orf91	710406
Chromosome 3 open reading frame, human c7orf60	C3H7orf60	704714
Chromosome 4 open reading frame, human c6orf15	C4H6orf15	100141392
Chromosome 6 open reading frame, human c5orf22	C6H5orf22	695901
Chromosome 7 open reading frame, human c14orf166	C7H14orf166	710094
Chromosome 7 open reading frame, human c14orf37	C7H14orf37	699880
Chromosome 8 open reading frame, human c8orf59	C8H8orf59	703464
Chromosome 9 open reading frame, human c10orf62	C9H10orf62	706769
Chromosome 9 open reading frame, human c10orf82	C9H10orf82	707098
Chromosome 9 open reading frame, human c10orf90	C9H10orf90	696655
Chromosome X open reading frame, human cxorf40a	CXHXorf40A	702659
Chymotrypsin-like	CTRL	701625
Cilia and flagella associated protein 65	CFAP65	701296
Ciliary neurotrophic factor	CNTF	701907
Claudin 9	CLDN9	699721
Cleavage and polyadenylation specific factor 4	CPSF4	708119
Cleft lip and palate associated transmembrane protein 1	CLPTM1	718306
Coagulation factor IX	F9	695578
Coatomer protein complex subunit epsilon	COPE	719631
Codanin 1	CDAN1	708838
Cofilin 1 (non-muscle)	CFL1	721882
Cofilin 2 (muscle)	CFL2	693875
Coiled-coil domain containing 142	CCDC142	709014
Coiled-coil domain containing 178	CCDC178	707566
Coiled-coil domain containing 22	CCDC22	713063
Coiled-coil domain containing 27	CCDC27	695384

Coiled-coil domain containing 3	CCDC3	694884
Coiled-coil domain containing 82	CCDC82	700198
Coiled-coil domain containing 86	CCDC86	695978
Coiled-coil domain containing 92	CCDC92	705922
Coiled-coil serine rich protein 2	CCSER2	698006
Coiled-coil-helix-coiled-coil-helix domain containing 10	CHCHD10	720205
Coiled-coil-helix-coiled-coil-helix domain containing 2	CHCHD2	702967
Coiled-coil-helix-coiled-coil-helix domain containing 8	CHCHD8	718275
Collagen, type III, alpha 1	COL3A1	574131
Collagen, type VI, alpha 3	COL6A3	694701
Collagen, type XII, alpha 1	COL12A1	717820
Collagen, type XXI, alpha 1	COL21A1	712070
COMM domain containing 2	COMMD2	711498
Complement component 1, q subcomponent-like 1	C1QL1	715801
Complement component 4 binding protein, beta	C4BPB	693636
Complement component 5a receptor 1	C5AR1	718056
Complement factor properdin	CFP	707386
Contactin 1	CNTN1	574365
Coordinator of PRMT5, differentiation stimulator	COPRS	713293
COP9 signalosome subunit 4	COPS4	693435
Copine III	CPNE3	694013
Core-binding factor, runt domain, alpha subunit 2; translocated to, 3	CBFA2T3	698233
Cornichon family AMPA receptor auxiliary protein 1	CNIH1	695002
Coronin, actin binding protein, 1B	CORO1B	721725
Cortexin 1	CTXN1	706069
COX19 cytochrome c oxidase assembly homolog (S. Cerevisiae)	COX19	696368
Creatine kinase, mitochondrial 2	CKMT2	711434
Crumbs family member 3	CRB3	700086
Cryptochrome circadian clock 2	CRY2	715000
Crystallin beta B3	CRYBB3	711554
C-src tyrosine kinase	CSK	702868
C-type lectin domain family 4 member A	CLEC4A	716122
C-type lectin domain family 9 member A	CLEC9A	717472
CUE domain containing 2	CUEDC2	713243
CUGBP, Elav-like family member 3	CELF3	716884
Cyclic nucleotide binding domain containing 2	CNBD2	703290
Cyclin and CBS domain divalent metal cation transport mediator 2	CNNM2	714238
Cyclin D binding myb-like transcription factor 1	DMTF1	706292
Cyclin D3	CCND3	695215
Cyclin T1	CCNT1	707754
Cyclin-dependent kinase 14	CDK14	703442
Cyclin-dependent kinase 17	CDK17	717183
Cyclin-dependent kinase 2 interacting protein	CINP	709044
Cyclin-dependent kinase 4	CDK4	715650
Cystatin C	CST3	574313
Cysteine conjugate-beta lyase, cytoplasmic	CCBL1	717142
Cytochrome c oxidase subunit via polypeptide 2	COX6A2	713995

Cytochrome c oxidase subunit viia polypeptide 2 like	COX7A2L	712764
Cytochrome P450, family 2, subfamily D, polypeptide 6	CYP2D6	678691
Cytochrome P450, family 2, subfamily F, polypeptide 6	CYP2F1	678696
Cytochrome P450, family 21, subfamily A, polypeptide 2	CYP21A2	717020
Cytochrome P450c17	CYP17A1	678693
Cytoplasmic polyadenylation element binding protein 1	CPEB1	694357
Cytoplasmic polyadenylation element binding protein 2	CPEB2	722844
Cytosolic thiouridylase subunit 1	CTU1	719536
Cytotoxic and regulatory T-cell molecule	CRTAM	707560
Dachshund family transcription factor 1	DACH1	693532
Dachsous cadherin-related 1	DCHS1	711938
DAZ associated protein 2	DAZAP2	695282
DC-STAMP domain containing 2	DCST2	717224
DDB1 and CUL4 associated factor 11	DCAF11	714867
DEAD (Asp-Glu-Ala-Asp) box helicase 42	DDX42	717964
DEAD (Asp-Glu-Ala-Asp) box polypeptide 41	DDX41	700742
DEAD (Asp-Glu-Ala-Asp) box polypeptide 50	DDX50	712511
DEAD (Asp-Glu-Ala-Asp) box polypeptide 54	DDX54	712763
Deafness, autosomal recessive 31	DFNB31	708051
DEAH (Asp-Glu-Ala-His) box polypeptide 38	DHX38	709173
DEAH (Asp-Glu-Ala-His) box polypeptide 40	DHX40	715202
Decapping exoribonuclease	DXO	716027
Dedicator of cytokinesis 2	DOCK2	704061
Dedicator of cytokinesis 5	DOCK5	711359
Defensin beta 108B	DEFB108B	696933
Defensin beta 118	DEFB118	641438
Dehydrogenase/reductase (SDR family) member 13	DHRS13	710755
Dehydrogenase/reductase (SDR family) member 3	DHRS3	715548
Delta-like 4 (Drosophila)	DLL4	704898
Denticleless E3 ubiquitin protein ligase homolog (Drosophila)	DTL	711236
Deoxyhypusine synthase	DHPS	716213
Deoxyribonuclease I	DNASE1	704119
Deoxyribonuclease I-like 3	DNASE1L3	702613
Dickkopf-like 1	DKKL1	718731
Dipeptidase 3	DPEP3	701327
Discoidin domain receptor tyrosine kinase 2	DDR2	720124
DNA cross-link repair 1B	DCLRE1B	707742
Dnaj heat shock protein family (Hsp40) member B2	DNAJB2	702936
Dnaj heat shock protein family (Hsp40) member C15	DNAJC15	700339
Dnaj heat shock protein family (Hsp40) member C22	DNAJC22	710205
Dnaj heat shock protein family (Hsp40) member C27	DNAJC27	694037
Dnaj heat shock protein family (Hsp40) member C3	DNAJC3	695757
Dnaj heat shock protein family (Hsp40) member C5 beta	DNAJC5B	702408
Docking protein 5	DOK5	698689
Dolichyl-phosphate mannosyltransferase polypeptide 2, regulatory subunit	DPM2	698709
Dolichyl-phosphate mannosyltransferase polypeptide 3	DPM3	717446
DR1-associated protein 1 (negative cofactor 2 alpha)	DRAP1	715271

Drosha, ribonuclease type III	DROSHA	692081
DTW domain containing 1	DTWD1	715084
Dual specificity phosphatase 16	DUSP16	696332
Dual specificity phosphatase 26 (putative)	DUSP26	697134
Dynactin subunit 6	DCTN6	694273
Dyskeratosis congenita 1, dyskerin	DKC1	702563
E1A binding protein p300	EP300	706258
E74-like factor 2 (ets domain transcription factor)	ELF2	696760
E74-like factor 5 (ets domain transcription factor)	ELF5	717377
Early growth response 1	EGR1	716786
Ecotropic viral integration site 5-like	EVI5L	706628
Ectodysplasin A receptor	EDAR	695059
Ectonucleoside triphosphate diphosphohydrolase 8	ENTPD8	704424
Ectonucleotide pyrophosphatase/phosphodiesterase 1	ENPP1	710140
Ectonucleotide pyrophosphatase/phosphodiesterase 3	ENPP3	710232
EF-hand calcium binding domain 7	EFCAB7	696830
EF-hand domain family member D2	EFHD2	694155
EGF-like, fibronectin type III and laminin G domains	EGFLAM	693314
EGF-like-domain, multiple 7	EGFL7	709840
EGF-like-domain, multiple 8	EGFL8	717145
Egl-9 family hypoxia-inducible factor 2	EGLN2	703083
EH domain containing 1	EHD1	722036
EH domain containing 4	EHD4	707376
Elastin microfibril interfacer 3	EMILIN3	696465
ELK4, ETS-domain protein (SRF accessory protein 1)	ELK4	699281
ELMO/CED-12 domain containing 3	ELMOD3	695180
ELOVL fatty acid elongase 4	ELOVL4	692070
Embigin	EMB	702068
Endonuclease domain containing 1	ENDOD1	699210
Endothelial cell adhesion molecule	ESAM	712200
Endothelin receptor type B	EDNRB	697329
Enhancer of rudimentary homolog (Drosophila)	ERH	712507
Enhancer of yellow 2 homolog (Drosophila)	ENY2	699048
Enolase 1, (alpha)	ENO1	709378
Eomesodermin	EOMES	704711
EP300 interacting inhibitor of differentiation 3	EID3	701175
EPH receptor B4	EPHB4	719320
EPH receptor B6	EPHB6	704886
Ephrin-A3	EFNA3	717373
Epidermal growth factor receptor	EGFR	613027
Epoxide hydrolase 1, microsomal (xenobiotic)	EPHX1	700180
ER degradation enhancer, mannosidase alpha-like 3	EDEM3	714475
ER lipid raft associated 2	ERLIN2	698126
ER membrane protein complex subunit 10	EMC10	719285
ErbB2 interacting protein	ERBB2IP	700429
ERGIC and golgi 3	ERGIC3	704736
Ethanolamine-phosphate phospho-lyase	ETNPPL	696880
Eukaryotic translation elongation factor 1 beta 2	EEF1B2	707019

Eukaryotic translation elongation factor 1 gamma	EEF1G	722274
Eukaryotic translation initiation factor 2B subunit gamma	EIF2B3	705862
Eukaryotic translation initiation factor 3 subunit E	EIF3E	697622
Eukaryotic translation initiation factor 3 subunit I	EIF3I	708145
Eukaryotic translation initiation factor 3 subunit L	EIF3L	699189
Eukaryotic translation initiation factor 4E nuclear import factor 1	EIF4ENIF1	716871
Eukaryotic translation initiation factor 4H	EIF4H	693429
Eva-1 homolog B (C. Elegans)	EVA1B	713159
Even-skipped homeobox 1	EVX1	699106
EWS RNA binding protein 1	EWSR1	714432
Exocyst complex component 2	EXOC2	706296
Exosome component 3	EXOSC3	716347
Exosome component 8	EXOSC8	695071
Exostosin glycosyltransferase 1	EXT1	701488
Exportin 6	XPO6	704332
EYA transcriptional coactivator and phosphatase 2	EYA2	716182
Family with sequence similarity 110 member B	FAM110B	703840
Family with sequence similarity 126 member A	FAM126A	705467
Family with sequence similarity 13 member C	FAM13C	702439
Family with sequence similarity 151 member A	FAM151A	715361
Family with sequence similarity 166 member A	FAM166A	705446
Family with sequence similarity 171 member B	FAM171B	712442
Family with sequence similarity 178 member B	FAM178B	710890
Family with sequence similarity 181 member B	FAM181B	701184
Family with sequence similarity 187, member B	FAM187B	707890
Family with sequence similarity 206 member A	FAM206A	710486
Family with sequence similarity 43 member B	FAM43B	705659
Family with sequence similarity 57 member B	FAM57B	708210
Family with sequence similarity 65 member B	FAM65B	715354
Family with sequence similarity 71 member D	FAM71D	713472
Fanconi anemia complementation group B	FANCB	712083
Fanconi anemia complementation group I	FANCI	699878
Fas ligand (TNF superfamily, member 6)	FASLG	574159
Fascin actin-bundling protein 2, retinal	FSCN2	713824
Fascin actin-bundling protein 3	FSCN3	698236
FAST kinase domains 1	FASTKD1	706154
Fat storage-inducing transmembrane protein 1	FITM1	715085
Fatty acid binding protein 7, brain	FABP7	713762
FBJ murine osteosarcoma viral oncogene homolog	FOS	702077
F-box and leucine-rich repeat protein 6	FBXL6	701594
F-box protein 39	FBXO39	713494
F-box protein 44	FBXO44	714585
F-box protein 7	FBXO7	717317
Feline leukemia virus subgroup C cellular receptor 1	FLVCR1	710008
Fem-1 homolog b (C. Elegans)	FEM1B	693955
Fermitin family member 3	FERMT3	722120
Ferritin mitochondrial	FTMT	699743
Fetal and adult testis expressed 1	FATE1	704368

FEV (ETS oncogene family)	FEV	701065
FGR proto-oncogene, Src family tyrosine kinase	FGR	716296
Fibrinogen-like 2	FGL2	694856
Fibroblast growth factor 16	FGF16	705612
Fibroblast growth factor 17	FGF17	706659
Fibroblast growth factor receptor 1	FGFR1	700126
Fibroblast growth factor receptor substrate 3	FRS3	694462
Fibronectin 1	FN1	613269
Fibulin 5	FBLN5	697372
Ficolin 2	FCN2	712486
Filamin binding LIM protein 1	FBLIM1	695727
Fizzy/cell division cycle 20 related 1	FZR1	721711
FK506 binding protein 7	FKBP7	703299
FK506 binding protein 8	FKBP8	720232
Flavin containing monooxygenase 1	FMO1	703743
FLYWCH-type zinc finger 1	FLYWCH1	700909
Follicle stimulating hormone, beta polypeptide	FSHB	697317
Follistatin like 1	FSTL1	713367
Forkhead box C2	FOXC2	694852
Forty-two-three domain containing 1	FYTTD1	714705
Four and a half LIM domains 3	FHL3	715313
Frataxin	FXN	699469
Free fatty acid receptor 4	FFAR4	700014
Frizzled class receptor 10	FZD10	717812
Frizzled-related protein	FRZB	706048
Fucosyltransferase 10 (alpha (1,3) fucosyltransferase)	FUT10	697659
Fuzzy planar cell polarity protein	FUZ	719442
FXYP domain containing ion transport regulator 7	FXYP7	718457
FYN proto-oncogene, Src family tyrosine kinase	FYN	574214
FYVE, rhogef and PH domain containing 2	FGD2	719329
FYVE, rhogef and PH domain containing 6	FGD6	712132
G protein pathway suppressor 1	GPS1	719343
G protein-coupled bile acid receptor 1	GPBAR1	697937
G protein-coupled receptor 101	GPR101	694636
G protein-coupled receptor 135	GPR135	701843
G protein-coupled receptor 151	GPR151	708020
G protein-coupled receptor 157	GPR157	722176
G protein-coupled receptor 171	GPR171	709960
G protein-coupled receptor 18	GPR18	698714
G protein-coupled receptor 183	GPR183	698844
G protein-coupled receptor 31	GPR31	717158
G protein-coupled receptor 63	GPR63	704888
G protein-coupled receptor 65	GPR65	693449
G protein-coupled receptor 68	GPR68	696529
G protein-coupled receptor 82	GPR82	701014
G protein-coupled receptor, class C, group 5, member D	GPRC5D	698898
G2/M-phase specific E3 ubiquitin protein ligase	G2E3	717021
Galactose-3-O-sulfotransferase 3	GAL3ST3	714845

Gametogenetin	GGN	715072
Gamma-aminobutyric acid (GABA) A receptor, beta 3	GABRB3	711754
Gamma-glutamylcyclotransferase	GGCT	695547
Gamma-glutamyltransferase 5	GGT5	720345
Gap junction protein alpha 3	GJA3	704432
Gap junction protein delta 4	GJD4	699010
Gastric inhibitory polypeptide	GIP	698335
Gastrulation brain homeobox 2	GBX2	693901
GCN1, eif2 alpha kinase activator homolog	GCN1	698528
General transcription factor IIH subunit 4	GTF2H4	714285
General transcription factor IIH subunit 5	GTF2H5	700107
Germ cell-less, spermatogenesis associated 1	GMCL1	701545
Ghrelin/obestatin prepropeptide	GHRL	574280
GLE1, RNA export mediator	GLE1	717474
Glucokinase (hexokinase 4) regulator	GCKR	701431
Glucose-fructose oxidoreductase domain containing 1	GFOD1	700607
Glucosidase, beta (bile acid) 2	GBA2	696062
Glutamate decarboxylase 1	GAD1	613030
Glutamate receptor, ionotropic, kainate 1	GRIK1	705699
Glutaminyl-peptide cyclotransferase	QPCT	712233
Glutathione peroxidase 1	GPX1	706732
Glutathione peroxidase 6	GPX6	100286832
Glutathione peroxidase 8 (putative)	GPX8	705965
Glutathione S-transferase alpha 4	GSTA4	709666
Glutathione S-transferase kappa 1	GSTK1	704240
Glutathione S-transferase omega 2	GSTO2	715291
Glutathione S-transferase, C-terminal domain containing	GSTCD	694220
Glyceraldehyde-3-phosphate dehydrogenase, spermatogenic	GAPDHS	709485
Glycosyltransferase 6 domain containing 1	GLT6D1	711729
Golgi brefeldin A resistant guanine nucleotide exchange factor 1	GBF1	714579
Golgi-associated, gamma adaptin ear containing, ARF binding protein 3	GGA3	705751
G-protein signaling modulator 1	GPSM1	710652
Granulysin	GNLY	696059
Granzyme B	GZMB	716518
GRB2-related adaptor protein	GRAP	702473
G-rich RNA sequence binding factor 1	GRSF1	706301
Group-specific component (vitamin D binding protein)	GC	705708
Growth arrest and DNA damage inducible alpha	GADD45A	701054
Growth differentiation factor 2	GDF2	711516
Growth differentiation factor 7	GDF7	702462
Growth factor independent 1 transcription repressor	GFI1	706481
Growth hormone inducible transmembrane protein	GHITM	702691
Growth hormone secretagogue receptor	GHSR	694587
Gse1 coiled-coil protein	GSE1	693298
GTP binding protein 1	GTPBP1	701651
Gtpase, IMAP family member 4	GIMAP4	713506
Guanidinoacetate N-methyltransferase	GAMT	721263

Guanine nucleotide binding protein (G protein), alpha inhibiting activity polypeptide 2	GNAI2	703780
Guanine nucleotide binding protein (G protein), beta polypeptide 1	GNB1	703399
Guanine nucleotide binding protein (G protein), beta polypeptide 2-like 1	GNB2L1	708526
Guanine nucleotide binding protein-like 2 (nucleolar)	GNL2	713862
Guanylate binding protein 2, interferon-inducible	GBP2	694684
Guanylate cyclase 1, soluble, beta 3	GUCY1B3	100424944
Guanylate kinase 1	GUK1	695272
H2A histone family, member Y2	H2AFY2	711117
H2A histone family, member Z	H2AFZ	709326
Haloacid dehalogenase like hydrolase domain containing 3	HDHD3	705447
HAUS augmin like complex subunit 8	HAUS8	718874
HCLS1 associated protein X-1	HAX1	716495
Heat shock factor binding protein 1	HSBP1	714498
Heat shock protein 90kda alpha family class B member 1	HSP90AB1	702293
Heat shock protein family B (small) member 1	HSPB1	715615
Heat shock protein family B (small) member 11	HSPB11	714791
Heat shock protein family B (small) member 6	HSPB6	710760
Heat shock transcription factor 2	HSF2	713938
Helicase (DNA) B	HELB	717860
Hematopoietic cell-specific Lyn substrate 1	HCLS1	714044
Hematopoietic prostaglandin D synthase	HPGDS	705227
Hemoglobin subunit alpha 1	HBA1	701930
Heparan sulfate-glucosamine 3-sulfotransferase 3A1	HS3ST3A1	718232
Hes family bhlh transcription factor 7	HES7	721942
Hexamethylene bis-acetamide inducible 1	HEXIM1	716006
High mobility group box 3	HMGB3	703598
Hippocalcin	HPCA	710249
Histone cluster 1, h3d	HIST1H3D	695092
Histone cluster 3, h2a	HIST3H2A	693768
Histone deacetylase 10	HDAC10	715698
Histone deacetylase 11	HDAC11	693537
Histone deacetylase 5	HDAC5	711456
Histone deacetylase 6	HDAC6	711363
Homeobox A3	HOXA3	699979
Homeodomain interacting protein kinase 1	HIPK1	707856
HRAS-like suppressor	HRASLS	706638
Htra serine peptidase 3	HTRA3	722638
Hyaluronan and proteoglycan link protein 3	HAPLN3	698880
Hyaluronan synthase 1	HAS1	719773
Hydroxyacyl-coa dehydrogenase/3-ketoacyl-coa thiolase/enoyl-coa hydratase (trifunctional protein), alpha subunit	HADHA	695975
Hydroxysteroid dehydrogenase like 2	HSDL2	707233
Hyperpolarization activated cyclic nucleotide gated potassium channel 3	HCN3	717719
Hypocretin (orexin) neuropeptide precursor	HCRT	709564

IKAROS family zinc finger 5	IKZF5	716950
IL2-inducible T-cell kinase	ITK	715471
ILK associated serine/threonine phosphatase	ILKAP	706334
Immunoglobulin superfamily member 21	IGSF21	701539
Immunoglobulin superfamily member 10	IGSF10	709661
Immunoglobulin superfamily member 8	IGSF8	720186
IMP (inosine 5'-monophosphate) dehydrogenase 2	IMPDH2	708307
IMP3, U3 small nucleolar ribonucleoprotein	IMP3	706202
Importin 13	IPO13	702007
Inhibin alpha	INHA	574379
Inhibitor of growth family member 1	ING1	694955
Inositol polyphosphate multikinase	IPMK	703630
Inositol-3-phosphate synthase 1	ISYNA1	719487
Insulin like 3	INSL3	100533192
Insulin like growth factor 1 receptor	IGF1R	708227
Insulin like growth factor 2 mRNA binding protein 3	IGF2BP3	704774
Insulin like growth factor binding protein 7	IGFBP7	693564
Insulin like growth factor binding protein acid labile subunit	IGFALS	722493
Integrator complex subunit 7	INTS7	711152
Integrin linked kinase	ILK	709944
Integrin subunit alpha 2b	ITGA2B	714955
Integrin subunit alpha 4	ITGA4	704745
Integrin subunit alpha V	ITGAV	707756
Integrin subunit beta 6	ITGB6	700454
Integrin subunit beta 7	ITGB7	699405
Interferon regulatory factor 2	IRF2	694347
Interferon, lambda receptor 1	IFNLR1	711625
Interleukin 1 receptor-like 1	IL1RL1	711893
Interleukin 20 receptor subunit beta	IL20RB	716769
Intracisternal A particle-promoted polypeptide	IPP	706893
Intraflagellar transport 20	IFT20	715773
Intraflagellar transport 57	IFT57	705088
IQ motif containing F1	IQCF1	699719
IQ motif containing K	IQCK	695417
IQ motif containing with AAA domain 1	IQCA1	694173
Iroquois homeobox 6	IRX6	698232
Isocitrate dehydrogenase 3 (NAD+) gamma	IDH3G	698558
Izumo sperm-egg fusion 1	IZUMO1	718234
Jagunal homolog 1	JAGN1	699718
Jumonji domain containing 1C	JMJD1C	697630
Junction adhesion molecule like	JAML	704919
Kallikrein related peptidase 5	KLK5	719467
KDEL motif containing 1	KDEL1	702156
Kelch domain containing 8A	KLHDC8A	698312
Kelch like family member 2	KLHL2	704790
Kelch like family member 21	KLHL21	704734
Kelch like family member 32	KLHL32	709276
Kelch like family member 34	KLHL34	696156

Kelch repeat and BTB (POZ) domain containing 3	KBTBD3	706382
Keratin 14, type I	KRT14	100426176
Keratin 79, type II	KRT79	700188
Keratin associated protein 12-4	KRTAP12-4	712284
Keratin associated protein 19-3	KRTAP19-3	703677
KIAA0040 ortholog	KIAA0040	100423512
KIAA0141 ortholog	KIAA0141	702802
KIAA0355 ortholog	KIAA0355	705202
KIAA1033 ortholog	KIAA1033	701501
KIAA1143 ortholog	KIAA1143	714979
Killer cell lectin-like receptor subfamily B, member 1	KLRB1	100430784
Killer cell lectin-like receptor subfamily F, member 1	KLRF1	574389
Kin17 DNA and RNA binding protein	KIN	713634
Kinesin family member 13A	KIF13A	704126
Kinesin family member 1C	KIF1C	721601
Kinesin family member 5A	KIF5A	711936
Kinesin family member 6	KIF6	719593
Kinesin heavy chain member 2A	KIF2A	696561
Kininogen 1	KNG1	707466
KIT ligand	KITLG	574254
Klotho	KL	714042
KRAB-A domain containing 2	KRBA2	717353
Lactase like	LCTL	710515
Late cornified envelope 4A	LCE4A	100423936
Late endosomal/lysosomal adaptor, MAPK and MTOR activator 2	LAMTOR2	718110
LCK proto-oncogene, Src family tyrosine kinase	LCK	717704
Lectin, galactoside-binding, soluble, 14	LGALS14	698227
Lectin, mannose-binding, 1	LMAN1	697449
LETM1 domain containing 1	LETMD1	694422
Leucine rich repeat and coiled-coil centrosomal protein 1	LRRCC1	707964
Leucine rich repeat and fibronectin type III domain containing 2	LRFN2	719621
Leucine rich repeat containing 14	LRRC14	703587
Leucine rich repeat containing 42	LRRC42	714839
Leucine rich repeat protein 1	LRR1	706658
Leucine zipper, down-regulated in cancer 1	LDOC1	696902
Leucine-rich repeat containing 8 family member E	LRRC8E	706394
Leucine-rich repeat LGI family member 4	LGI4	718426
Leucine-rich repeats and WD repeat domain containing 1	LRWD1	715187
Leukocyte immunoglobulin-like receptor, subfamily A (without TM domain), member 3	LILRA3	692337
Leukocyte immunoglobulin-like receptor, subfamily B (with TM and ITIM domains), member 1	LILRB1	692340
Leukocyte receptor cluster (LRC) member 1	LENG1	693417
Leukocyte specific transcript 1	LST1	100141392
Leukocyte-associated immunoglobulin-like receptor 1	LAIR1	695533
Leupaxin	LPXN	702033
Ligase I, DNA, ATP-dependent	LIG1	718528
Ligase III, DNA, ATP-dependent	LIG3	715181

LIM and cysteine-rich domains 1	LMCD1	702382
LIM homeobox 5	LHX5	713417
Limb development membrane protein 1-like	LMBR1L	709548
Linker for activation of T-cells family member 2	LAT2	693676
Lipocalin 1	LCN1	711974
Lipocalin 2	LCN2	697208
Lipocalin 6	LCN6	574148
Lipoma HMGIC fusion partner-like 3	LHFPL3	697053
Lipopolysaccharide-induced TNF factor	LITAF	711743
LSM12 homolog	LSM12	714219
LSM14A mrna processing body assembly factor	LSM14A	705085
Lymphocyte antigen 6 complex, locus G6C	LY6G6C	716220
Lymphotoxin alpha	LTA	715425
Lysine-rich nucleolar protein 1	KNOP1	695144
Lysophosphatidic acid receptor 1	LPAR1	709208
Lysophosphatidylcholine acyltransferase 4	LPCAT4	696388
MACRO domain containing 1	MACROD1	717961
MAD2L1 binding protein	MAD2L1BP	701099
Major facilitator superfamily domain containing 14B	MFSD14B	708498
Major histocompatibility complex, class II, DM alpha	MAMU-DMA	717870
Major histocompatibility complex, class II, DM beta	MAMU-DMB	100429856
Male-enhanced antigen 1	MEA1	699300
MAM domain containing 2	MAMDC2	700333
Mannose receptor, C type 1	MRC1	701010
Mannosidase, alpha, class 2B, member 1	MAN2B1	716173
Mannosyl (alpha-1,3-)-glycoprotein beta-1,4-N-acetyl glucosaminyltransferase, isozyme A	MGAT4A	708094
MAP kinase interacting serine/threonine kinase 1	MKNK1	710061
MARVEL domain containing 1	MARVELD1	708237
MAS-related GPR, member X1	MRGPRX1	692101
Matrin 3	MATR3	100568448
Matrix metallopeptidase 16	MMP16	695120
Matrix metallopeptidase 8	MMP8	703536
Mdm1 nuclear protein	MDM1	718062
MDM2 binding protein	MTBP	703121
Mediator complex subunit 11	MED11	709561
Mediator complex subunit 4	MED4	704644
Mediator complex subunit 6	MED6	693320
Mediator complex subunit 8	MED8	700676
Meiosis 1 associated protein	M1AP	710210
Melanocortin 2 receptor accessory protein	MRAP	701330
Membrane frizzled-related protein	MFRP	704965
Membrane protein, palmitoylated 4	MPP4	702459
Membrane-spanning 4-domains, subfamily A, member 1	MS4A1	696843
Membrane-spanning 4-domains, subfamily A, member 4A	MS4A4A	698027
Meprin A subunit alpha	MEP1A	704781
Mesoderm induction early response 1, family member 2	MIER2	701450
Metallo-beta-lactamase domain containing 2	MBLAC2	695437

Metaxin 1	MTX1	717595
Methionine sulfoxide reductase B3	MSRB3	717617
Methylphosphate capping enzyme	MEPCE	711829
Methyltransferase like 2A	METTL2A	717533
Microfibrillar associated protein 3 like	MFAP3L	694985
Microtubule associated protein 1 light chain 3 alpha	MAP1LC3A	707439
Microtubule associated protein 1S	MAP1S	719196
Midline 1	MID1	709683
Midnolin	MIDN	721215
Minichromosome maintenance complex binding protein	MCMBP	704028
Mitochondrial carrier 1	MTCH1	719313
Mitochondrial E3 ubiquitin protein ligase 1	MUL1	705429
Mitochondrial ribosomal protein L11	MRPL11	714094
Mitochondrial ribosomal protein L17	MRPL17	697086
Mitochondrial ribosomal protein L18	MRPL18	702629
Mitochondrial ribosomal protein L36	MRPL36	100430880
Mitochondrial ribosomal protein L41	MRPL41	702768
Mitochondrial ribosomal protein L42	MRPL42	715676
Mitochondrial ribosomal protein L44	MRPL44	677716
Mitochondrial ribosomal protein L9	MRPL9	711235
Mitochondrial ribosomal protein S18C	MRPS18C	707257
Mitochondrial ribosomal protein S21	MRPS21	706805
Mitochondrial ribosomal protein S9	MRPS9	712968
Mitogen-activated protein kinase 11	MAPK11	715794
Mitogen-activated protein kinase 7	MAPK7	702837
Mitogen-activated protein kinase 8 interacting protein 3	MAPK8IP3	702388
Mitogen-activated protein kinase associated protein 1	MAPKAP1	702599
Mitogen-activated protein kinase kinase kinase 14	MAP3K14	716258
Mitogen-activated protein kinase kinase kinase 6	MAP3K6	715911
Mitogen-activated protein kinase kinase kinase 9	MAP3K9	693835
Mitogen-activated protein kinase kinase kinase kinase 1	MAP4K1	694259
Molybdenum cofactor synthesis 2	MOCS2	703689
MORC family CW-type zinc finger 4	MORC4	701136
Motilin	MLN	574099
Mov10 RISC complex RNA helicase	MOV10	705910
MRE11 homolog A, double strand break repair nuclease	MRE11A	697566
Msh homeobox 2	MSX2	694227
Muscle RAS oncogene homolog	MRAS	716352
Muscleblind-like splicing regulator 3	MBNL3	706102
Myeloid/lymphoid or mixed-lineage leukemia; translocated to, 6	MLLT6	694045
Myocyte enhancer factor 2C	MEF2C	694992
Myoglobin	MB	693269
Myosin IIIB	MYO3B	693391
Myosin light chain 4	MYL4	717354
Myosin light chain 7	MYL7	707293
Myotubularin 1	MTM1	703131
Myotubularin related protein 2	MTMR2	699703
Myotubularin related protein 8	MTMR8	708037

N(alpha)-acetyltransferase 35, natc auxiliary subunit	NAA35	710122
N-6 adenine-specific DNA methyltransferase 1 (putative)	N6AMT1	706937
N-acetylglucosamine-1-phosphate transferase, gamma subunit	GNPTG	722441
NAD(P)H dehydrogenase, quinone 2	NQO2	707675
NADH dehydrogenase subunit 1	ND1	2846627
NADH:ubiquinone oxidoreductase complex assembly factor 4	NDUFAF4	705102
NADH:ubiquinone oxidoreductase subunit A12	NDUFA12	711970
NADPH oxidase 1	NOX1	701376
Natural killer cell granule protein 7	NKG7	719624
Nebulette	NEBL	702764
Necdin, MAGE family member	NDN	574323
NEDD4 binding protein 2	N4BP2	700365
Negative elongation factor complex member C/D	NELFCD	696053
Negative elongation factor complex member E	NELFE	716913
Nescient helix-loop-helix 2	NHLH2	709920
Neural precursor cell expressed, developmentally down-regulated 1	NEDD1	713673
Neural precursor cell expressed, developmentally down-regulated 8	NEDD8	715763
Neural precursor cell expressed, developmentally down-regulated 9	NEDD9	699359
Neuritin 1	NRN1	722968
Neurofibromin 2 (merlin)	NF2	714945
Neurogranin	NRGN	716063
Neuroigin 2	NLGN2	574368
Neuronal differentiation 2	NEUROD2	696976
Neuronal guanine nucleotide exchange factor	NGEF	713917
Neuronal PAS domain protein 2	NPAS2	710480
Neuronal PAS domain protein 3	NPAS3	717281
Neuronal pentraxin I	NPTX1	718259
Neuropeptide FF-amide peptide precursor	NPFF	703412
Neutrophil cytosolic factor 1	NCF1	694207
NGG1 interacting factor 3 like 1	NIF3L1	700572
N-glycanase 1	NGLY1	700842
NHL repeat containing 2	NHLRC2	698009
Nicotinamide nucleotide transhydrogenase	NNT	701110
Ninjurin 1	NINJ1	717218
NK2 homeobox 5	NKX2-5	703795
NLR family member X1	NLRX1	703981
NLR family, pyrin domain containing 6	NLRP6	720741
N-myristoyltransferase 1	NMT1	715885
Non-SMC condensin I complex subunit G	NCAPG	715235
Non-SMC condensin II complex subunit H2	NCAPH2	716120
N-terminal Xaa-Pro-Lys N-methyltransferase 1	NTMT1	716763
Nth-like DNA glycosylase 1	NTHL1	694848
Nuclear casein kinase and cyclin-dependent kinase substrate 1	NUCKS1	697298
Nuclear factor of kappa light polypeptide gene enhancer in B-cells 1	NFKB1	710324

Nuclear receptor coactivator 2	NCOA2	693455
Nuclear receptor subfamily 1 group I member 2	NR1I2	574226
Nuclear receptor subfamily 1 group I member 3	NR1I3	574249
Nuclear receptor subfamily 5 group A member 1	NR5A1	694183
Nuclear RNA export factor 3	NXF3	695351
Nucleic acid binding protein 2	NABP2	709344
Nucleolar protein 10	NOL10	695849
Nucleoporin 37kda	NUP37	697933
Nucleoporin 50kda	NUP50	713282
Nude neurodevelopment protein 1-like 1	NDEL1	721973
Nudix hydrolase 1	NUDT1	713078
Nudix hydrolase 22	NUDT22	717864
Olfactomedin 2	OLFM2	711336
Olfactory receptor, family 10, subfamily A, member 6	OR10A6	709892
Olfactory receptor, family 2, subfamily AG, member 2	OR2AG2	709556
Olfactory receptor, family 2, subfamily H, member 2	OR2H2	710946
Olfactory receptor, family 5, subfamily F, member 1	OR5F1	709943
Olfactory receptor, family 52, subfamily M, member 1	OR52M1	717723
Olfactory receptor, family 6, subfamily N, member 1	OR6N1	719958
Optic atrophy 3 (autosomal recessive, with chorea and spastic paraplegia)	OPA3	714806
Origin recognition complex subunit 5	ORC5	696683
ORMDL sphingolipid biosynthesis regulator 2	ORMDL2	710296
Oxidized low density lipoprotein (lectin-like) receptor 1	OLR1	717596
P21 protein (Cdc42/Rac)-activated kinase 1	PAK1	698585
P450 (cytochrome) oxidoreductase	POR	715888
Palmitoyl-protein thioesterase 1	PPT1	693377
Pancreatic polypeptide	PPY	713988
Pantothenate kinase 4	PANK4	694804
PAP associated domain containing 7	PAPD7	713853
Par-3 family cell polarity regulator	PARD3	706472
Paraneoplastic Ma antigen 1	PNMA1	697618
PAX3 and PAX7 binding protein 1	PAXBP1	700489
PC-esterase domain containing 1A	PCED1A	716956
PDZ and LIM domain 1	PDLIM1	702998
PDZ and LIM domain 3	PDLIM3	695779
PDZ domain containing 4	PDZD4	697387
Peptidoglycan recognition protein 1	PGLYRP1	718480
Peptidylprolyl isomerase B (cyclophilin B)	PPIB	706757
Peptidylprolyl isomerase F	PPIF	574137
Periaxin	PRX	702329
Peroxiredoxin 2	PRDX2	716665
PHD finger protein 1	PHF1	718337
PHD finger protein 14	PHF14	694855
Phosphatase and actin regulator 2	PHACTR2	700363
Phosphatase, orphan 1	PHOSPHO1	698959
Phosphate cytidylyltransferase 1, choline, alpha	PCYT1A	722105
Phosphatidylinositol 4-kinase, catalytic, beta	PI4KB	710104

Phosphatidylinositol glycan anchor biosynthesis class B	PIGB	698122
Phosphatidylinositol glycan anchor biosynthesis class H	PIGH	710780
Phosphatidylinositol glycan anchor biosynthesis class S	PIGS	709115
Phosphatidylinositol transfer protein alpha	PITPNA	721228
Phosphatidylinositol transfer protein, membrane associated 1	PITPNM1	721716
Phosphatidylinositol transfer protein, membrane associated 2	PITPNM2	703969
Phosphodiesterase 11A	PDE11A	702458
Phosphodiesterase 5A	PDE5A	705592
Phosphodiesterase 6D	PDE6D	712629
Phosphofurin acidic cluster sorting protein 1	PACS1	714696
Phospholipase A2 group XVI	PLA2G16	722178
Phospholipase B domain containing 1	PLBD1	698939
Phospholipase C delta 1	PLCD1	696860
Phospholipase D family member 3	PLD3	701083
Phospholipase D family member 4	PLD4	707527
Phospholipase D family member 5	PLD5	706256
Phospholipid scramblase 4	PLSCR4	713430
Phosphopantothenoylcysteine decarboxylase	PPCDC	704015
Phosphorylase, glycogen, muscle	PYGM	717451
Phytanoyl-coa 2-hydroxylase interacting protein	PHYHIP	715990
Piggybac transposable element derived 1	PGBD1	707252
Pituitary tumor-transforming 1 interacting protein	PTTG1IP	722061
Placenta specific 1	PLAC1	709460
Placental growth factor	PGF	701219
Plastin 1	PLS1	714391
Platelet derived growth factor D	PDGFD	704310
Platelet-derived growth factor beta polypeptide	PDGFB	703173
Pleckstrin homology domain containing J1	PLEKHJ1	710129
Plexin B3	PLXNB3	696903
Poliovirus receptor-related 2 (herpesvirus entry mediator B)	PVRL2	713229
Poly(A) binding protein, cytoplasmic 1	PABPC1	705847
Poly(A) binding protein, cytoplasmic 3	PABPC3	708617
Poly(A) polymerase gamma	PAPOLG	717781
Poly(ADP-ribose) glycohydrolase	PARG	709432
Poly(rc) binding protein 2	PCBP2	703175
Poly(U) binding splicing factor 60kda	PUF60	699008
Polycomb group ring finger 2	PCGF2	694187
Polyglutamine binding protein 1	PQBP1	711678
Polyhomeotic homolog 2 (Drosophila)	PHC2	710201
Polymerase (DNA directed) kappa	POLK	705713
Polymerase (RNA) II (DNA directed) polypeptide H	POLR2H	100429040
Polymerase (RNA) II (DNA directed) polypeptide I, 14.5kda	POLR2I	712412
Polymerase (RNA) III (DNA directed) polypeptide C (62kd)	POLR3C	696943
Polypeptide N-acetylgalactosaminyltransferase 4	GALNT4	100430608
Post-GPI attachment to proteins 3	PGAP3	697699
Potassium channel tetramerization domain containing 3	KCTD3	708471
Potassium channel tetramerization domain containing 9	KCTD9	711515
Potassium channel, inwardly rectifying subfamily J, member 11	KCNJ11	696722

Potassium channel, inwardly rectifying subfamily J, member 5	KCNJ5	714799
Potassium channel, inwardly rectifying subfamily J, member 8	KCNJ8	706369
Potassium channel, two pore domain subfamily K, member 10	KCNK10	694669
Potassium channel, two pore domain subfamily K, member 16	KCNK16	719585
Potassium channel, voltage gated Shaw related subfamily C, member 2	KCNC2	100430904
Potassium voltage-gated channel, modifier subfamily S, member 1	KCNS1	711715
PR domain containing 14	PRDM14	693324
Premelanosome protein	PMEL	710921
Pre-mrna processing factor 3	PRPF3	706898
Presenilin enhancer gamma secretase subunit	PSENEN	100429008
Presequence translocase-associated motor 16 homolog (S. Cerevisiae)	PAM16	704987
Prickle homolog 1	PRICKLE1	701864
Progesterone and adiponectin receptor family member VII	PAQR7	713411
Progesterone and adiponectin receptor family member VIII	PAQR8	708418
Prolactin releasing hormone	PRLH	694941
Proline and serine rich 1	PROSER1	696606
Proline rich 3	PRR3	711699
Proline rich Gla (G-carboxyglutamic acid) 1	PRRG1	696938
Proline, glutamate and leucine rich protein 1	PELP1	677854
Prominin 1	PROM1	714610
Proopiomelanocortin	POMC	694430
Prosaposin	PSAP	709510
Prostaglandin D2 receptor (DP)	PTGDR	707918
Prostaglandin D2 synthase	PTGDS	707990
Prostaglandin E synthase 3	PTGES3	713353
Proteasomal ATPase associated factor 1	PAAF1	718755
Proteasome subunit alpha 4	PSMA4	710417
Proteasome subunit beta 2	PSMB2	712193
Protein inhibitor of activated STAT 3	PIAS3	706775
Protein kinase C, gamma	PRKCG	720263
Protein kinase, AMP-activated, alpha 2 catalytic subunit	PRKAA2	717703
Protein phosphatase 1 regulatory subunit 12C	PPP1R12C	698538
Protein phosphatase 1 regulatory subunit 15A	PPP1R15A	718350
Protein phosphatase 3, catalytic subunit, beta isozyme	PPP3CB	706955
Protein phosphatase 3, catalytic subunit, gamma isozyme	PPP3CC	708233
Protein serine kinase H1	PSKH1	700845
Protein tyrosine kinase 2 beta	PTK2B	712787
Protein tyrosine phosphatase type IVA, member 2	PTP4A2	706489
Proteinase 3	PRTN3	721131
Protein-O-mannosyltransferase 2	POMT2	705604
Proteoglycan 3	PRG3	706381
Protocadherin alpha 5	PCDHA5	692083
Protocadherin alpha 7	PCDHA7	698370
Protoporphyrinogen oxidase	PPOX	719910
PYD and CARD domain containing	PYCARD	713563
RAB, member of RAS oncogene family-like 2B	RABL2B	716615

RAB11B, member RAS oncogene family	RAB11B	707462
RAB38, member RAS oncogene family	RAB38	705189
RAB5B, member RAS oncogene family	RAB5B	708347
RAB6A, member RAS oncogene family	RAB6A	718717
RAD21 cohesin complex component	RAD21	700633
RAD9 checkpoint clamp component A	RAD9A	712345
Ral gtpase activating protein, alpha subunit 1 (catalytic)	RALGAPA1	695674
Ral guanine nucleotide dissociation stimulator	RALGDS	714436
Ral guanine nucleotide dissociation stimulator-like 1	RGL1	717554
RALY heterogeneous nuclear ribonucleoprotein	RALY	713317
RAN binding protein 10	RANBP10	700911
Rap guanine nucleotide exchange factor 2	RAPGEF2	704717
Ras association (ralgds/AF-6) domain family (N-terminal) member 8	RASSF8	708284
Ras homolog family member C	RHOC	706034
Ras homolog family member D	RHOD	712969
Ras homolog family member J	RHOJ	705603
Ras homolog family member V	RHOV	704675
RAS p21 protein activator 2	RASA2	715074
RAS protein activator like 2	RASAL2	718958
Rasgef domain family member 1C	RASGEF1C	706085
RAS-like family 10 member B	RASL10B	716171
Ras-related associated with diabetes	RRAD	695086
Recombination activating gene 1	RAG1	697322
Recq helicase-like	RECQL	705871
Regenerating family member 3 gamma	REG3G	711637
Regulator of G-protein signaling like 1	RGSL1	715693
Relaxin/insulin-like family peptide receptor 4	RXFP4	718025
Renin	REN	574299
Replication protein A1	RPA1	721272
Replication protein A3	RPA3	696248
Repulsive guidance molecule family member a	RGMA	712949
Required for meiotic nuclear division 1 homolog	RMND1	704665
Retbindin	RTBDN	716766
Retinal outer segment membrane protein 1	ROM1	100426296
Retinaldehyde binding protein 1	RLBP1	699510
Retinoic acid induced 14	RAI14	698620
Retinol binding protein 2	RBP2	715755
Retinol dehydrogenase 5 (11-cis/9-cis)	RDH5	709644
REX1, RNA exonuclease 1 homolog	REXO1	708931
RFT1 homolog	RFT1	694586
Rho GDP dissociation inhibitor (GDI) beta	ARHGDIB	702320
Rho guanine nucleotide exchange factor 1	ARHGEF1	722198
Ribonuclease P/MRP 21kda subunit	RPP21	713056
Ribonuclease T2	RNASET2	706533
Ribophorin II	RPN2	708971
Ribosomal modification protein rimk-like family member A	RIMKLA	699767
Ribosomal protein l10a	RPL10A	718783

Ribosomal protein L17	RPL17	698967
Ribosomal protein L23	RPL23	694719
Ribosomal protein l23a	RPL23A	710490
Ribosomal protein L24	RPL24	702381
Ribosomal protein L26	RPL26	717378
Ribosomal protein l27a	RPL27A	708863
Ribosomal protein L3	RPL3	707176
Ribosomal protein l35a	RPL35A	714858
Ribosomal protein L4	RPL4	710590
Ribosomal protein l7a	RPL7A	722215
Ribosomal protein L8	RPL8	708535
Ribosomal protein S10	RPS10	718606
Ribosomal protein S11	RPS11	718844
Ribosomal protein S13	RPS13	697513
Ribosomal protein S14	RPS14	710901
Ribosomal protein S16	RPS16	697219
Ribosomal protein S2	RPS2	693615
Ribosomal protein S21	RPS21	699565
Ribosomal protein S27	RPS27	106992520
Ribosomal protein S28	RPS28	707133
Ribosomal protein S4, X-linked	RPS4X	699397
Ribosomal protein S5	RPS5	711259
Ribosomal protein S7	RPS7	721900
Ribosomal protein S8	RPS8	703957
Ribosomal protein, large, P0	RPLP0	574363
Ribosomal protein, large, P1	RPLP1	695442
Ribosomal protein, large, P2	RPLP2	700698
Ribosomal RNA processing 8, methyltransferase, homolog (yeast)	RRP8	712011
Ribulose-5-phosphate-3-epimerase	RPE	711322
Ring finger protein 10	RNF10	697428
Ring finger protein 152	RNF152	699091
Ring finger protein 167	RNF167	710656
Ring finger protein 181	RNF181	695977
Ring finger protein 38	RNF38	693346
Ring finger protein, transmembrane 1	RNFT1	712052
RNA binding motif protein 18	RBM18	698457
RNA binding motif protein 38	RBM38	696583
RNA binding motif protein 45	RBM45	702714
RNA binding motif protein 7	RBM7	695401
RNA pseudouridylate synthase domain containing 3	RPUSD3	700349
RPTOR independent companion of MTOR, complex 2	RICTOR	694915
R-spondin 3	RSPO3	712288
Runt-related transcription factor 3	RUNX3	719447
SAGA complex associated factor 29	SGF29	709124
Saitohin	STH	106994064
SAM and SH3 domain containing 3	SASH3	702089
SEC11 homolog A, signal peptidase complex subunit	SEC11A	695951

SEC31 homolog A, COPII coat complex component	SEC31A	693687
Sec61 translocon alpha 2 subunit	SEC61A2	100427728
Secernin 3	SCRN3	698199
Secretogranin II	SCG2	706499
Selectin P	SELP	701277
Selenoprotein M	SELM	718290
Sema domain, immunoglobulin domain (Ig), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 4C	SEMA4C	707024
Semenogelin I pseudogene	SEMG1P	100424776
Serine dehydratase-like	SDSL	714721
Serine/threonine kinase 16	STK16	702715
Serine/threonine kinase 19	STK19	716074
Serine/threonine kinase 38 like	STK38L	711047
Serine/threonine/tyrosine kinase 1	STYK1	717844
Serologically defined colon cancer antigen 3	SDCCAG3	721750
Serpin peptidase inhibitor, clade B (ovalbumin), member 11	SERPINB11	701449
SET domain containing 4	SETD4	696003
SET domain containing 9	SETD9	708019
SFI1 centrin binding protein	SFI1	716833
SH3 and cysteine rich domain	STAC	707350
SH3-domain binding protein 1	SH3BP1	700647
Shugoshin-like 1 (S. Pombe)	SGOL1	698231
Siah E3 ubiquitin protein ligase 1	SIAH1	716629
Sialic acid binding Ig-like lectin 1, sialoadhesin	SIGLEC1	717470
Sialic acid binding Ig-like lectin 10	SIGLEC10	719648
Sialic acid binding Ig-like lectin 5	SIGLEC5	719730
Sialic acid binding Ig-like lectin 9	SIGLEC9	719831
Signal peptide, CUB domain, EGF-like 2	SCUBE2	708152
Signal recognition particle 68kda	SRP68	705568
Signal sequence receptor, delta	SSR4	697266
Signal transducing adaptor family member 1	STAP1	711834
Sin3A associated protein 18kda	SAP18	703078
Sin3A associated protein 25kda	SAP25	106997576
SIX homeobox 4	SIX4	703798
SKI-like proto-oncogene	SKIL	696680
SLAM family member 8	SLAMF8	719494
SLIT and NTRK like family member 1	SLITRK1	699217
SMAD family member 2	SMAD2	697581
SMAD family member 4	SMAD4	701803
Small integral membrane protein 19	SMIM19	705371
Small nuclear ribonucleoprotein polypeptide E	SNRPE	701418
Small nuclear ribonucleoprotein polypeptides B and B1	SNRPB	716578
Small nuclear ribonucleoprotein, U4/U6.U5 27kda subunit	SNRNP27	708670
Small ubiquitin-like modifier 1	SUMO1	703644
SMG9 nonsense mediated mrna decay factor	SMG9	710940
Smoothelin	SMTN	716424
SMYD family member 5	SMYD5	705926
Sodium channel, non voltage gated 1 beta subunit	SCNN1B	700093

Solute carrier family 13 (sodium/sulfate symporter), member 4	SLC13A4	708744
Solute carrier family 16 member 11	SLC16A11	721775
Solute carrier family 16 member 13	SLC16A13	713985
Solute carrier family 2 (facilitated glucose transporter), member 13	SLC2A13	697822
Solute carrier family 2 (facilitated glucose transporter), member 4	SLC2A4	714701
Solute carrier family 22 (organic anion transporter), member 6	SLC22A6	718377
Solute carrier family 24 (sodium/potassium/calcium exchanger), member 2	SLC24A2	711896
Solute carrier family 24 (sodium/potassium/calcium exchanger), member 5	SLC24A5	714236
Solute carrier family 25 (aspartate/glutamate carrier), member 12	SLC25A12	695173
Solute carrier family 25 (mitochondrial iron transporter), member 28	SLC25A28	710002
Solute carrier family 25 (mitochondrial oxoadipate carrier), member 21	SLC25A21	697370
Solute carrier family 25 (S-adenosylmethionine carrier), member 26	SLC25A26	697960
Solute carrier family 25 member 40	SLC25A40	705584
Solute carrier family 25 member 41	SLC25A41	702790
Solute carrier family 26 (anion exchanger), member 8	SLC26A8	719049
Solute carrier family 26 (anion exchanger), member 9	SLC26A9	696461
Solute carrier family 27 (fatty acid transporter), member 2	SLC27A2	715237
Solute carrier family 34 (type II sodium/phosphate cotransporter), member 2	SLC34A2	694217
Solute carrier family 35 (UDP-galactose transporter), member A2	SLC35A2	711587
Solute carrier family 35 (UDP-glca/UDP-galnac transporter), member D1	SLC35D1	700175
Solute carrier family 35 member A5	SLC35A5	708401
Solute carrier family 35 member E4	SLC35E4	716119
Solute carrier family 37 (glucose-6-phosphate transporter), member 2	SLC37A2	712841
Solute carrier family 38 member 7	SLC38A7	707671
Solute carrier family 39 (zinc transporter), member 3	SLC39A3	711564
Solute carrier family 4 (anion exchanger), member 2	SLC4A2	713966
Solute carrier family 4, sodium borate transporter, member 11	SLC4A11	718393
Solute carrier family 41 (magnesium transporter), member 1	SLC41A1	696944
Solute carrier family 44 member 4	SLC44A4	715779
Solute carrier family 46 member 2	SLC46A2	719542
Solute carrier family 51 beta subunit	SLC51B	708427
Solute carrier family 6 (neurotransmitter transporter), member 1	SLC6A1	696617
Solute carrier family 6 (neurotransmitter transporter), member 13	SLC6A13	705918
Solute carrier family 6 (neurotransmitter transporter), member 2	SLC6A2	613238
Solute carrier family 6 (neurotransmitter transporter), member 3	SLC6A3	574143
Solute carrier family 6 (neurotransmitter transporter), member 7	SLC6A7	711915
Solute carrier family 6 (neutral amino acid transporter), member 18	SLC6A18	723065
Solute carrier family 9, subfamily A (NHE3, cation proton	SLC9A3R2	694658

antiporter 3), member 3 regulator 2		
Solute carrier family 9, subfamily A (NHE4, cation proton antiporter 4), member 4	SLC9A4	712136
Solute carrier family 9, subfamily B (NHA1, cation proton antiporter 1), member 1	SLC9B1	710949
Solute carrier organic anion transporter family member 2B1	SLCO2B1	694829
Sonic hedgehog	SHH	716553
Sorbin and SH3 domain containing 3	SORBS3	716198
Sorting nexin 11	SNX11	696913
Sorting nexin 13	SNX13	714019
Sorting nexin 14	SNX14	696632
Sorting nexin 33	SNX33	706309
Sorting nexin 4	SNX4	716049
Sp2 transcription factor	SP2	694834
SPARC like 1	SPARCL1	701468
SPARC related modular calcium binding 1	SMOC1	712994
Spectrin, beta, non-erythrocytic 1	SPTBN1	716794
Sperm acrosome associated 1	SPACA1	699611
Sperm flagellar 1	SPEF1	717547
Sperm specific antigen 2	SSFA2	705181
Spermatogenesis associated 2-like	SPATA2L	699974
Sphingosine-1-phosphate phosphatase 2	SGPP2	705674
Spindle and kinetochore associated complex subunit 2	SKA2	711092
Splicing factor 3a subunit 2	SF3A2	721469
SPRY domain containing 4	SPRYD4	713037
Src-related kinase lacking C-terminal regulatory tyrosine and N-terminal myristylation sites	SRMS	719587
SREK1-interacting protein 1	SREK1IP1	695436
SRY-box 21	SOX21	695074
ST3 beta-galactoside alpha-2,3-sialyltransferase 2	ST3GAL2	709319
ST3 beta-galactoside alpha-2,3-sialyltransferase 4	ST3GAL4	717792
Stabilizer of axonemal microtubules 1	SAXO1	712700
Star related lipid transfer domain containing 13	STARD13	714104
Star related lipid transfer domain containing 3	STARD3	697212
Star related lipid transfer domain containing 5	STARD5	713308
Stathmin 2	STMN2	699264
Sterile alpha motif domain containing 15	SAMD15	706090
Steroid-5-alpha-reductase, alpha polypeptide 1 (3-oxo-5 alpha-steroid delta 4-dehydrogenase alpha 1)	SRD5A1	695103
Sterol O-acyltransferase 2	SOAT2	701171
Stomatin like 2	STOML2	698458
Stonin 1	STON1	106992944
Storkhead box 2	STOX2	693692
Stratifin	SFN	715055
Sulfiredoxin 1	SRXN1	714997
SUMO1 activating enzyme subunit 1	SAE1	717918
SUMO1/sentrin specific peptidase 5	SEN5	710223
SUMO1/sentrin specific peptidase 7	SEN7	701453

Superoxide dismutase 3, extracellular	SOD3	715931
Suppression of tumorigenicity 13 (colon carcinoma) (Hsp70 interacting protein)	ST13	705664
Suppression of tumorigenicity 7	ST7	704776
Surfactant associated 2	SFTA2	714397
SURP and G-patch domain containing 1	SUGP1	719772
SWIM-type zinc finger 7 associated protein 1	SWSAP1	716529
Synapse differentiation inducing 1	SYNDIG1	704737
Synaptogyrin 1	SYNGR1	100427480
Synaptophysin	SYP	715739
Synaptopodin	SYNPO	711221
Synaptotagmin VII	SYT7	722368
Synemin	SYNM	717194
Synovial sarcoma translocation gene on chromosome 18-like 2	SS18L2	716387
Syntaxin 17	STX17	714699
Syntaxin 1B	STX1B	714251
Synuclein alpha interacting protein	SNCAIP	700372
Synuclein beta	SNCB	697484
Tankyrase 1 binding protein 1	TNKS1BP1	704825
TAO kinase 2	TAOK2	707777
Target of EGR1, member 1 (nuclear)	TOE1	705770
Taste 1 receptor member 1	TAS1R1	720987
Taste 2 receptor member 16	TAS2R16	695211
TATA-box binding protein associated factor 1	TAF1	698800
TATA-box binding protein associated factor 10	TAF10	710022
TATA-box binding protein associated factor 2	TAF2	702411
TATA-box binding protein associated factor 5	TAF5	714558
TBC1 domain family member 15	TBC1D15	718743
TBC1 domain family member 17	TBC1D17	719093
TBC1 domain family member 19	TBC1D19	694865
TBK1 binding protein 1	TBKBP1	693913
T-box 21	TBX21	694044
T-box 4	TBX4	712702
T-cell acute lymphocytic leukemia 2	TAL2	712138
TCF3 (E2A) fusion partner (in childhood Leukemia)	TFPT	720296
T-complex 11, testis-specific	TCP11	718695
T-complex 11, testis-specific-like 1	TCP11L1	694899
T-complex 11, testis-specific-like 2	TCP11L2	702578
Teashirt zinc finger homeobox 1	TSHZ1	703018
TEK tyrosine kinase, endothelial	TEK	707455
TELO2 interacting protein 2	TTI2	696776
Telomeric repeat binding factor 2, interacting protein	TERF2IP	712149
Tenascin XB	TNXB	716998
TERF1 (TRF1)-interacting nuclear factor 2	TINF2	715812
Testis expressed 19	TEX19	716048
Testis expressed 28	TEX28	699141
Testis expressed 30	TEX30	701917
Testis expressed 43	TEX43	703228

Testis-specific serine kinase 2	TSSK2	711241
Testis-specific serine kinase 3	TSSK3	708182
Tetratricopeptide repeat domain 1	TTC1	695225
Tetratricopeptide repeat domain 12	TTC12	693909
Tetratricopeptide repeat domain 14	TTC14	710895
Tetratricopeptide repeat domain 7B	TTC7B	696029
Tetratricopeptide repeat domain 9C	TTC9C	718583
TGF-beta activated kinase 1/MAP3K7 binding protein 1	TAB1	703409
THAP domain containing 7	THAP7	696208
Thioredoxin domain containing 9	TXNDC9	709303
Thioredoxin-related transmembrane protein 1	TMX1	707057
Thioredoxin-related transmembrane protein 4	TMX4	718375
THO complex 3	THOC3	695561
THO complex 6	THOC6	700217
Thy-1 cell surface antigen	THY1	705321
Thymidine phosphorylase	TYMP	716161
Thymosin beta 4, X-linked	TMSB4X	710959
Thymus, brain and testes associated	TBATA	710055
Thyroid hormone receptor, beta	THRB	699969
TIA1 cytotoxic granule-associated RNA binding protein	TIA1	702366
Titin-cap	TCAP	697327
TNF alpha induced protein 6	TNFAIP6	694699
TNNI3 interacting kinase	TNNI3K	100533984
Tocopherol (alpha) transfer protein-like	TTPAL	712620
Toll-like receptor 6	TLR6	574342
Topoisomerase (DNA) I	TOP1	697300
Torsin A interacting protein 2	TOR1AIP2	716691
TRAF3 interacting protein 3	TRAF3IP3	712895
Trafficking protein particle complex 3	TRAPPC3	713705
Transaldolase 1	TALDO1	720828
Transcobalamin 1	TCN1	698583
Transcription elongation factor A (SII)-like 1	TCEAL1	696826
Transcription factor 19	TCF19	714141
Transcription factor EC	TFEC	704124
Transducin (beta)-like 1 X-linked receptor 1	TBL1XR1	712740
Transducin (beta)-like 3	TBL3	693864
Transforming growth factor beta receptor associated protein 1	TGFBRAP1	713102
Transforming, acidic coiled-coil containing protein 3	TACC3	712898
Transient receptor potential cation channel, subfamily M, member 2	TRPM2	722161
Translocase of inner mitochondrial membrane 10 homolog B (yeast)	TIMM10B	711085
Translocase of inner mitochondrial membrane 17 homolog B (yeast)	TIMM17B	714895
Translocase of inner mitochondrial membrane domain containing 1	TIMMDC1	712414
Translocase of outer mitochondrial membrane 22 homolog (yeast)	TOMM22	701286

Translocase of outer mitochondrial membrane 40 homolog (yeast)	TOMM40	713297
Translocase of outer mitochondrial membrane 6 homolog (yeast)	TOMM6	100423264
Transmembrane 4 L six family member 5	TM4SF5	709844
Transmembrane 6 superfamily member 2	TM6SF2	719756
Transmembrane and immunoglobulin domain containing 1	TMIGD1	712350
Transmembrane and immunoglobulin domain containing 3	TMIGD3	104564312
Transmembrane channel like 8	TMC8	100423640
Transmembrane phosphoinositide 3-phosphatase and tensin homolog 2	TPTE2	704870
Transmembrane protease, serine 13	TMPRSS13	698586
Transmembrane protease, serine 2	TMPRSS2	715138
Transmembrane protein 104	TMEM104	698592
Transmembrane protein 11	TMEM11	704970
Transmembrane protein 115	TMEM115	702164
Transmembrane protein 123	TMEM123	702833
Transmembrane protein 135	TMEM135	704963
Transmembrane protein 136	TMEM136	706163
Transmembrane protein 138	TMEM138	693905
Transmembrane protein 141	TMEM141	721687
Transmembrane protein 145	TMEM145	709268
Transmembrane protein 175	TMEM175	696545
Transmembrane protein 179B	TMEM179B	718518
Transmembrane protein 183A	TMEM183A	704195
Transmembrane protein 198	TMEM198	704089
Transmembrane protein 205	TMEM205	714330
Transmembrane protein 255A	TMEM255A	696050
Transmembrane protein 37	TMEM37	695060
Transmembrane protein 45B	TMEM45B	718735
Transmembrane protein 47	TMEM47	693975
Transmembrane protein 5	TMEM5	717102
Transmembrane protein 55B	TMEM55B	100428000
Transmembrane protein 60	TMEM60	693679
Trinucleotide repeat containing 6A	TNRC6A	701680
Trinucleotide repeat containing 6C	TNRC6C	714829
Tripartite motif containing 14	TRIM14	715418
Tripartite motif containing 3	TRIM3	710846
Tripartite motif containing 56	TRIM56	713833
Tripartite motif containing 62	TRIM62	709927
Tripartite motif containing 72, E3 ubiquitin protein ligase	TRIM72	713623
TRK-fused gene	TFG	700972
Trna methyltransferase 11-2 homolog (S. Cerevisiae)	TRMT112	717676
Tropomodulin 1	TMOD1	715838
Tropomyosin 2 (beta)	TPM2	696604
Tropomyosin 3	TPM3	716336
Troponin T type 2 (cardiac)	TNNT2	709882
Trub pseudouridine (psi) synthase family member 2	TRUB2	717619
Tryptase gamma 1	TPSG1	100425752
TSR2, 20S rRNA accumulation, homolog (S. Cerevisiae)	TSR2	701234

TSSK6 activating co-chaperone	TSACC	719490
Tubulin alpha 4a	TUBA4A	702583
Tubulin alpha like 3	TUBAL3	722506
Tubulin folding cofactor C	TBCC	696997
Tubulin tyrosine ligase like 4	TTLL4	700064
Tumor protein, translationally-controlled 1	TPT1	702155
Tumor suppressing subtransferable candidate 1	TSSC1	707650
Twist family bhlh transcription factor 2	TWIST2	697078
Two pore segment channel 1	TPCN1	712964
Tyrosine hydroxylase	TH	721137
Tyrosine kinase, non-receptor, 1	TNK1	715180
UBA domain containing 2	UBAC2	703484
Ubiquitin A-52 residue ribosomal protein fusion product 1	UBA52	720243
Ubiquitin B	UBB	696110
Ubiquitin conjugating enzyme E2 variant 1	UBE2V1	100425552
Ubiquitin conjugating enzyme E2O	UBE2O	710529
Ubiquitin like 5	UBL5	711015
Ubiquitin like 7	UBL7	702305
Ubiquitin protein ligase E3D	UBE3D	694910
Ubiquitin related modifier 1	URM1	722618
Ubiquitin specific peptidase 10	USP10	718471
Ubiquitin specific peptidase 2	USP2	705191
Ubiquitin specific peptidase 21	USP21	719894
Ubiquitin specific peptidase 47	USP47	701660
Ubiquitin specific peptidase 51	USP51	705861
Ubiquitin specific peptidase 7 (herpes virus-associated)	USP7	714625
Ubiquitination factor E4B	UBE4B	713348
UBX domain protein 11	UBXN11	719826
UDP-Gal:betaglcnaac beta 1,4- galactosyltransferase, polypeptide 3	B4GALT3	719920
UHRF1 binding protein 1-like	UHRF1BP1L	694816
Unc-79 homolog (C. Elegans)	UNC79	699262
Uncoupling protein 3 (mitochondrial, proton carrier)	UCP3	574125
Uridine monophosphate synthetase	UMPS	715664
Uromodulin	UMOD	695883
Urotensin 2	UTS2	574246
Urotensin 2 receptor	UTS2R	574245
Usher syndrome 1C	USH1C	696911
USP6 N-terminal like	USP6NL	694275
Vac14 homolog (S. Cerevisiae)	VAC14	708741
Vacuolar protein sorting 4 homolog A (S. Cerevisiae)	VPS4A	705277
V-akt murine thymoma viral oncogene homolog 3	AKT3	714717
Valyl-trna synthetase	VARS	715537
Vascular endothelial growth factor A	VEGFA	574209
Vasoactive intestinal peptide	VIP	703566
Vasohibin 1	VASH1	703906
V-crkl avian sarcoma virus CT10 oncogene homolog	CRK	701185
VGF nerve growth factor inducible	VGF	719578
Vitronectin	VTN	708499

V-maf avian musculoaponeurotic fibrosarcoma oncogene homolog B	MAFB	712578
Von Willebrand factor	VWF	722019
Von Willebrand factor A domain containing 1	VWA1	701765
VPS26 retromer complex component B	VPS26B	694566
VPS29 retromer complex component	VPS29	709646
VPS54 GARP complex subunit	VPS54	695397
WAP four-disulfide core domain 10A	WFDC10A	717384
WAP four-disulfide core domain 8	WFDC8	710108
WAS protein family member 3	WASF3	709849
WD repeat containing, antisense to TP73	WRAP73	695276
WD repeat domain 70	WDR70	706130
WD repeat domain 72	WDR72	697128
WD repeat domain 74	WDR74	718460
WD repeat domain 77	WDR77	677686
WD repeat domain 83 opposite strand	WDR83OS	716302
WD repeat, sterile alpha motif and U-box domain containing 1	WDSUB1	699456
Williams Beuren syndrome chromosome region 22	WBSCR22	720121
Wilms tumor 1 associated protein	WTAP	702295
Wingless-type MMTV integration site family member 10B	WNT10B	708906
Wingless-type MMTV integration site family member 11	WNT11	696845
Wolfram syndrome 1 (wolframin)	WFS1	710948
WSC domain containing 1	WSCD1	712488
WW domain binding protein 1	WBP1	709202
WW domain containing E3 ubiquitin protein ligase 2	WWP2	705464
X-linked Kx blood group	XK	696407
X-linked Kx blood group related, X-linked	XKRX	701721
XPA binding protein 2	XAB2	704109
X-ray repair complementing defective repair in Chinese hamster cells 6	XRCC6	707975
XRCC6 binding protein 1	XRCC6BP1	712932
Xylosyltransferase II	XYLT2	705139
Ybey metalloproteinase (putative)	YBEY	721807
YEATS domain containing 4	YEATS4	718376
Yip1 domain family member 2	YIPF2	713753
Yip1 domain family member 4	YIPF4	706819
Yippee like 3	YPEL3	708740
YTH N(6)-methyladenosine RNA binding protein 2	YTHDF2	717225
Zinc and ring finger 2, E3 ubiquitin protein ligase	ZNRF2	698413
Zinc finger and BTB domain containing 37	ZBTB37	708769
Zinc finger and BTB domain containing 39	ZBTB39	713914
Zinc finger and BTB domain containing 47	ZBTB47	100428360
Zinc finger and SCAN domain containing 2	ZSCAN2	695673
Zinc finger CCCH-type containing 11A	ZC3H11A	701537
Zinc finger CCCH-type containing 12A	ZC3H12A	713604
Zinc finger CCCH-type containing 3	ZC3H3	708584
Zinc finger homeobox 3	ZFHX3	706074
Zinc finger protein 19	ZNF19	708211

Zinc finger protein 215	ZNF215	708494
Zinc finger protein 22	ZNF22	706208
Zinc finger protein 221	ZNF221	100423744
Zinc finger protein 280D	ZNF280D	699509
Zinc finger protein 287	ZNF287	695524
Zinc finger protein 385A	ZNF385A	705436
Zinc finger protein 397	ZNF397	714878
Zinc finger protein 408	ZNF408	714213
Zinc finger protein 436	ZNF436	709638
Zinc finger protein 460	ZNF460	710080
Zinc finger protein 474	ZNF474	700119
Zinc finger protein 484	ZNF484	711976
Zinc finger protein 496	ZNF496	709694
Zinc finger protein 503	ZNF503	703912
Zinc finger protein 584	ZNF584	711420
Zinc finger protein 595	ZNF595	716693
Zinc finger protein 668	ZNF668	712709
Zinc finger protein 682	ZNF682	719936
Zinc finger protein 7	ZNF7	715735
Zinc finger protein 740	ZNF740	701428
Zinc finger protein 774	ZNF774	702985
Zinc finger protein 804B	ZNF804B	704561
Zinc finger protein 835	ZNF835	705945
Zinc finger, AN1-type domain 2B	ZFAND2B	702027
Zinc finger, AN1-type domain 4	ZFAND4	708136
Zinc finger, CCHC domain containing 3	ZCCHC3	714477
Zinc finger, DHHC-type containing 12	ZDHHC12	722606
Zinc finger, DHHC-type containing 16	ZDHHC16	705982
Zinc finger, DHHC-type containing 5	ZDHHC5	704863
Zinc finger, matrin-type 5	ZMAT5	715058
Zinc finger, MYM-type 4	ZMYM4	712793
Zinc finger, MYND-type containing 11	ZMYND11	708761
Zona pellucida glycoprotein 3 (sperm receptor)	ZP3	719925
Zyxin	ZYX	706407

Table S6: List of input genes in network objects of top-scored GO processes for two groups*

Group number (group description)	GO process**	Input genes in network objects (number of genes involved)
Group 1 (Conception cycle) non-self antigen	Positive regulation of tolerance induction to	HLA-A1, HLA-A2, HLA-A3, HLA-A11, HLA-A23, HLA-A24, HLA-A25, HLA-A26, HLA-A29, HLA-A30, HLA-A31, HLA-A32, HLA-A33, HLA-A34, HLA-A36, HLA-A43, HLA-A66, HLA-A68, HLA-A69, HLA-A74, HLA-A80, HLA-C, HLA-E.1 (23)
Group 2 (Non-fecund cycle)	Metabolic process	A2MR, A2M, AASDHPPT, AASS, AATM, ABBP1, ABCA1, ABHD12, ABI3, ABTAP, ACAA2, ACACA, ACADM, ACAT1, ACON, ACOX1, ACTR5, ACY2, ADAM21, ADAMTS6, ADD3, ADD1, ADDA, ADIPOR2, ADSS, AES (GRG), AGAL, AGT2, AGXT2L1, AJUBA, AK3L1, AKAP2, AKAP350, AKIP, AL1A1, ALDR1, ALDP, ALDR, ALG2, ALG5, ALK-2, ALKBH5, ADDA, ALY, AMPD2, AMPD, AMYC, ANAPC4, ANKRD15, ANXA1, ANT, APA1, APEX, APEX2, APG16L1, APG3, APG5, APM2, APPBP1, ARF4, ARGLU1, ARID4B, ARL6, ARV1, ASPHD1, ASTE1, ATE1, ATF/CREB, ATF-4, ATG16L2, ATG4C, ATG4D, ATP1A1, ATP5A, ATP5B, ATP5C, ATP5D, ATP5J, ATP5O, ATP6AP2, ATPBD3, ATP1, ATR, ATRIP, ATRX, AUF1, AURKB, AURKC, B3GA3, B3GN1, B4GT3, B56G, BAF180/200, BAF200, BAF47, BAHD1, BAIP3, BARD1, BAZ1B, BBS6, BBS12, BC023814, BCKDHB, BCKDK, BCL6, BECN1, BEND6, ARRB2, SNCB, B-FABP, BLIMP1 (PRDI-BF1), BMAL1, BMP4, BRD1, BRD7, BRM, BRP44L, BTBD1, BTF3, BTG1, BUB3, BXDC5, BYSTIN, C11N, C1D, C11orf51, C14orf102, C14orf104, C14orf138, C14orf147, C16orf53, C17orf79, C1orf156, C1orf51, C1orf77, C2orf56, C3orf31, C4orf31, C5orf35, C6orf130, C6orf211, C8orf59, C9orf156,

C20orf12, C20orf72, C21orf66, C1TC, CAC, CAD, CALCB, CALCA, CAPN2, CAPN3, CAPN10, CAMK2G, CAPER, CHST7, CARS2, CSNK2A2, CASP1, CASP4, CASP9, CTSA, CTSB, CTSL, CBF2, CBFA2T3, CCAR1, CCDC59, CDC5L, CD9, CDC7, CDCA5, CDCA8, CDC16, CDC23, CDC25, CDC25C, CDC26, CDC37, CDK1 (p34), CDK2, CDK9, CDX4, CECR5, CENP-F, CETN2, CEP110, CEP290, CEPT1, CGAT2, CGGBP1, CGI-09, CGRP, CHD1, CHERP, CHIP, Chk2, CHMP4B, CHST1, CHST14, CHST7, CHSTD, CLIC4, CLK3, CLP1, CMAS, CNOT3, CNOT7, COQ2, COL12A1, COMMD2, COMMD6, COMT, COP1, COPS3, COPS4, COPS6, COX4, COX4I1, COX5, COX6C, COX7C, CPA5, CPEB2, CPGL2, CPT1B, CPVL, CRAF1, CRAT, SLC6A8, CREB3, CREB4, CRKRS, CRY1, CSTF3, CSTF64, CTBP1, CTBP2, CTDP1, CTDSPL2, CTPS1), CTR9, CUL4, CUL4A, CUL7, CVAK104, CYC1, CCNB3, CCNE1, CCNH, CCNT2, CYP33, CYPG, CYPH, CYHR1, CYP21A2, CYRS, D53, D123, DACH1, DAD-1, DAK, DALRD3, DAP3, DATF1, DBC1, DCLRE1B, DCP1B, DCTN6, DCUN1D4, DCUN1D5, DDAH1, DDR1, DDR2, DDT, DDX1, DDX5, DDX9, DDX27, DDX30, DDX39, DDX48, DDX54, DECR, DEFM, DEK, DERL1, DERL2, DSP, DGUOK, DHDDS, DHRS1, DHX15, DHX29, DICER1, DIO2, DISP1, DJ1, DLG1, DYNLL1, LIG3, POLB, DNAJC8, DNMT1, DNPEP, DOM3Z, DPM2, DPP8, DRG1, DRIP130, DVL3, DSS1, DTX3, DUE-B, DUS3L, DUSP11, DUSP12, DUSP23, DUSP26, DVL-1, DYNLL, DYRK3, E2F1, E2F3, E2F4, E2F5, E2I, EDEM3, EED, EEF1E1, EGFLAM, EGLN2, EHZF, EIF2AK3, EIF2S2, EIF3S3, EIF3S6, EIF3S7, EIF4A, EIF4A2, ELF5, ELOC), ELOVL1, ENC1, ENDOG, SH3GLB1, HSP90B1, ENO, ENO1, ENPP2, ENY2, EPHB6, EPHB, ERF1, ERK1, MAPK7, ETF-QO, ETO, EXTT2, EZH1, FAAA, FABD, FAM152A, FAM175B, FAM176B, FAM54B, FAM76B, FANCE, FARS2, FASTKD1, FABP2, FBX4, FBXO11, FBXW4, FBXW7, FDFT1, FGF13, FGF16, FHL2, FBL, FIP200, FIT1, FKBP7, FKBP9, FKBP11, FLAD1, FLII, FLJ10204, FLJ11588, FLJ11730, FLJ14154, FLJ21820, FXN, FRS3, FNTB), FTSJ1, FUNDC1, G3BP1, GA17, GABP1, GADD45G, GALNT1, CCR10, OXTR, ADORA2A, GANP, GAS6, GATA, GATA-2, GATE-16, GC1QBP, GCKR, GCKR, GMCL1, GCN1L1, GCP16, GCS1,

GDF7, GMDS, GFM2, GFPT1, GGH, GGPS1, GGTB, GINS2, GIT2, NAGK), GLI-1, GLRX5, GLT8D1, GLUT3, GLVR1, PYGL, GMP2, GMPPB, GNPTG, GNT-IV, GOCAP1, CYBB, GPAA1, GPAM, GPBP1, GPR175, GPX1, GPX8, GCA, GSTO1, GSTO2, GTF3C6, HADHA, HAI-2, HBP1, HCD2, HDHD2, HECTD1, HECTD3, HELB, HELLS (Lsh), HERP, HES7, HEXIM2, HEY2, HGFR, HIFPH3, HINT, HISPPD1, HIST2H, HIST2HA, HIST2HAX, HMG4, HNPRNPA1, HNPRNPA2, HNPRNPC, HNPRNPDL, HNPRNPL, HNPRNPHP1, HPK1(MAP4K1, HRS, HSC70, HSD17B8, HSP60, HSP70, HSP90AA1, HSP90, HSPC117, HSPC142, HSPC148, HSPC152, HSPC171, HSPC296, HYAL2, HYPA, HYPB, IBP, IBP3, IBP5, ID1, IDH3A, IDH3G, IGFBP7/8, IHPK1, IKK, IKKA, IKKB, ILERS, IMD1, IMPA2, IMPAD1, ING2, ING4, INO80C, INPP, INTS10, INTS12, INTS2, INTS4, INTS8, IRP, IRP1, ISCA2, IST1, ITPA, IWS1, JAB1, JKAMP, JOSD2, JOSD3, JPO1, ZNF348, KLK8, KARS, KBTBD4, KCNH3, KCY, KIAA0859, KIN17, KLF11, KLF15, KLF5, KLHL3, KLHL32, KLHL5, KNG, KPR1, KTELC1, L2HGDH, LARP7, LASS2, LBH, LBP-1B, LCE4A, LCMR1, LDHB, LEF1, LGTN, LIN9, LIPA, LMAN1, LMNBR, LOXL3, LPP2, LRP16, LRR1, LSD1, LSM10, LSM6, LUC7A, M9, MAGED1, MAGMAS, MAML1, MANA, MAO, MAOB, MAP2K5, MAP3K3, MAPKAPK2, MAPKAPK5, MAP2K1, MAP2K4, MAP3K4, MAPK1, MARS, MAT1, MAX, MBD4, MBNL1, MCCA, MCM3, MCM5, MDA5, MDH1, MED8, METAP1, METTL1, MFAP1, MGAT2, MGAT4B, MGEA5, MGMT, MGST2, MIER2, MIPEP, MIZF, MKI67IP, MKK4/7, MKP-3, MKP6, MLH1, MLSTD2, MMAB, MMD, MO25, MOGAT2, MON1B, MP1, MPG, PMPCA, MPP1, MPP6, VDAC1), MRFAP1L1, MRG15, MRPL13, MRPL16, MRPL19, MRPL20, MRPL22, MRPL24, MRPL39, MRPL41, MRPL46, MRPL50, MRPL51, MRPL55, MRPS11, MRPS17, MRPS21, MRPS22, MRPS33, MRPS6, MRTO4, MSL3L1, MSRA, MST4, MTA2, MTA3, PRDM2, MTCH1, MTERF3, MTERFD3, MTFR1, MTIF2, MTMR4, MTMR6, MTMR8, mtNOS1, MTO1, MUL, MUTYH, MVK, MYNN, MYO1C, MTPN, NAA50, NAB1, NAB2, NACA, NCK2, NCOA4, NCOA6, NGFRAP1, NME9, NR2F1, NR2F2, IMMD, NDPK B, NDUFA1, NDUFA8, NDUFAB1, NDUFAF1,

NDUFAF2, NDUFAF6, NDUFB10, NDUFB2,
 NDUFB4, NDUFB8, NDUFB9, NDUFC1, NDUF52,
 NDUF53, NDUF54, NEK1, NLGN, NLGN2,
 NSMASE, NFAT-90, NFE2L1, NFYC, NIFUN,
 NIK(MAP3K14), NMI, NNTM, NOB1, NOL8,
 NOLA2 (NHP2), NOP58, NP220, NPC2, NPM3,
 NPWBP, NRB54, NRF2, NRIP, NSDHL, NSE4A,
 PRDX6, NSUN5, NT5C3, NTH1, NUB1, NUCB2,
 NUDT5, NUDT13, NUP35, NUP37, NUP107,
 NUP205, NUP88, N-WASP, NXF1, NXF3, NXT1,
 OAT, OAZ1, OBFC1, OCRL, ACP1, ODP2, OGG1,
 ORC1L, ORC3L, ORMDL3, OSBPL3, OSGEP,
 OXSM, CTNND1, RASA1, P15RS, INK4C, INK4D,
 P47, P4HA, P4HA2, TP53, P84), PABPC3, PACT,
 PAF65B, PAIP1, PANK1, PANK4, PAP39, PAPD1,
 PAPOLG, PARP-2, PBX4, PC4, PCCB, PCGF6,
 PCNA, PCNT1, PCTK2, PDCD2, PDCD6, PDE,
 PDE5A, PDE8A, PDHA2, PDHB, DLAT, PDH,
 PDHA1, PDIA5, PDCD7, PECI, PEG3, IKZF5,
 PEO1, PERLD1, PRDX1, PFTAIRES-1, PGCP,
 PGHD, PGRP-S, PGS1, PHF2, PHF6, PHKA2,
 PHKA2, PPP1R8, PHOSPHO2, PHP14, PIK3C3,
 PIK3R4, PI4KB, PI4KA, PIGA, PIGC, PIGF, PIGG,
 PIH1D1, PIMT, PIR51, PIR, PITPNB, PLA2,
 PLCD1, PLCD, PLCE, PLEKHA1, PM/SCL100,
 PMCA1, PMGE, POLG, POLR2C, POLR2G,
 POLR3B, POLR3C, PON2, POP5, POT1, PPP2CB,
 PPP2CB, PPP2R5D, PPMIA, PPM1B), PPM1G,
 PP2C, PP2C-DELTA, PPAP2, PPARD, PPCDC,
 PPCS, PPIL3, PPM1F, PPOX, PPWD1, PJA1,
 PRDM4, PRDX3, PRDX4, PRKAB1, PRKAB1A,
 PRKAB2, PRKAB2A, PSEN, PSEN1, PRNP, PHB,
 PRCP, PRPS, PS1D, PSMA2, PSMA3, PSMA5,
 PSMA6, PSMB4, PSMB7, PSMB9, PSMB10,
 PSMC4, PSMD1, PSMD12, PSMD6, PSMD7,
 PSME2, PSPC1, PTP-1B, PTPLA, PTPN4, PTP-
 PEST, PUR2, PWP2H, PXYLP1, PYCS, PYGL,
 RAB5A, RAB6, RAB6A, RAD17, RAD51C,
 RRAGC, RALA, RALB, RAMP, RAMP1, RARS,
 RARSL, RASAL2, RBBP4, RBBP8, RBM10,
 RBM15, RBM15, RBM17, RBM22, RBM5, RCOR3,
 RDM1, REA, REN, RENT3B, RERE, RFP,
 RHBDP2, RIF1, RIPK4, RIPK5, RKHD3, RLF, RLI,
 RNF130, ARA54, RNF146, RNF167, RNF185,
 RNF34, RNF6, DCUN1D1, RPA16, RPA39, RPB6,
 RPB8, RPL22, RPL26, RPL26L1, RPL27, RPL27A,
 RPL3, RPL35, RPL35A, RPP40, RPS11, RPS17,
 RPS21, RPS27A, RPS27L, RPS30, RRP40,

RTN4IP1, RUVBL2, SAC3, SACM1L, SAE2,
SAP18, SAP30, SAR1, SAR1A, SART2, SAT1,
SBNO2, SBP2, SCNM1, SCPEP1, SCYL3, SDF2,
SDFR1, SDHA, SDHAF2, SDHB, SDHD, SDSL,
SEC618, SEC61A1, PTTG1, SELENOK, PDZRN3,
TSEN15, ESPL1, SENP7, FAP, MSRB1, SRGN,
SERINC1, SESN1, SF3A2, SF3B1, SF3B4, SF3B5,
SFN, SFRP1, SFRS1, SFRS10, SFRS12, SFRS2IP,
SFRS3, SFRS4, SFRS7, SFRS8, SGF29, SH3RF,
SHARP (SPEN), SHC1, SIAH1, SKIV2L2, SKP2,
SLC16A11, SLC25A24, SLC25A25, SLC25A26,
SLC25A41, SLC25A5, SLC35B3, SLC44A3,
SLC7A8, SMAR1, SMARCA5, SMG7, SMG8, SMN,
SMP30, SMYD2, SMYD3, SNAPIN, SND1, SNIP1,
SNRNPG, SNRPD2, SNRPE, SNRPN, SNX1, SNX3,
SOCS6, SOD1, SOLH, SON, SOS, SOX11, SOX13,
SP110, SP192, SP3, SPC12, SPF30, SMPD1, SPSY,
SPT4, SRB7, SRP46, SRPK1, SRRF, SRSF8/12,
SSAT, SSBP1, SSRP1, ST4S6, STK3, STRAD,
STT3, STT3A, STYK1, SUCLG2, SUFU, SUGT1,
SULF2, SUV420H1, SYHH, SYQ, TAB2, TAF12,
TAZ, TAL2, TALDO, TAO2, TARBP1, TARBP2,
TASP1, TATDN1, TBL3, TCEAL7, TCEAL8, LEF1,
TDRD3, TER, TEX10, TFAM, TFB1M, GTF2A2,
TFIIB, TAF10, TAF9, TFIIE, TFIIIA, TFIIC90,
TH1L, THEM2, THRAP2, THUMPD2, THY1,
DTYMK, TIEG, TIEG1, TRIM24, TIGAR, TINP1,
SART3, KLK12, TLE, TLE1, TM6SF2, TMEM14C,
TMEM39B, TMEM59, TMEM165, TNRC4, CDCA3,
TOP2A, TOP2B, TOP2, TOPBP1, TOPORS,
TOR1A, TPR, TRA2A, TRAF2, TRAF7, TRIB2,
TRIM11, TRIM41, TRIM8, TRIP8, TRIP11, TRIP12,
TRIP4, TRIP15, TRIP, TRIT1, TRMT11, TRMU,
TRPT1, TRPV4, TSC22, TST, TTC9C, TTRAP,
TUBA4B, TUSC3, TUSC4, TWIST1, TWISTNB,
TXNDC12, TXNL4A, TY3H, UAP1, UBE1C,
UBE2A, UBE2D4, UBE2E3, UBE2F, UBE3B, FAU,
UBQLN1, UBLCP1, UBP3, UBPY, UBR7, UCHL3,
UGPA2, UHRF1, UIP5, UNR, UQCR11, UQCRC2,
UQCRQPC, USP39, UST, ZRSR2, USE1L, USP10,
USP13, USP16, USP25, USP38, USP51, USP52,
UTP6, UTP14C, UVRAG, VAC14, VAV1, VIPAR,
VLDLR, VPS4A, VPS72, VRK1, WAC, WBSCR22,
WDR3, WDR4, WDR12, WDR21A, WDR61,
WDR75, WDR77, WDR79, WDSUB1, WEE1, WNT,
WNT11, WRNIP1, WTAP, XBP1, XPA, XPB,
XRCC6BP1, XRN2, XTP3B, ZBTB5, ZCCHC6,
ZCCHC11, ZCCHC8, ZFC3H1, ZMAT2,

ZMPSTE24, ZNF25, ZNF92, ZNF140, ZNF180, ZNF181, ZNF198, ZNF221, ZNF239, ZNF263, ZNF265, ZNF280D, ZNF281, ZNF322A, ZNF364, ZNF434, ZNF460, ZNF462, ZNF481, ZNF484, ZNF509, ZNF593, ZNF595, ZNF620, ZNF627, ZNF646, ZNF653, ZNF664, ZNF684, ZNF687, ZNF777, ZSCAN29, YWHAB, YWHAH, YWHAH, PDE12, EIF4EBP2, EIF4E2. (1275)

Groups 1 and 2 Protein targeting to membrane and endoplasmic reticulum

RP40, RPL10A (CsA-19), RPL4, RPL7A, RPL8, RPL23, RPL23A, RPL24, RPLP0, RPLP1, RPLP2, RPS10, RPS13, RPS14, RPS16, RPS2, RPS27, RPS28, RPS4, RPS4Y1, RPS5, RPS7, RPS8, SEC61A1, SRP68. (25)

Metabolic process

APG7, NUP50, PCBP2, RPL7A, RPL23, RPL24, RPLP0, RPLP1, RPS2, RPS5, RPS7, RPS10, RPS13, RPS27, RPS28. (15)

*see Table 4 for the summary. **from top scored ten entries based on analysis on MetaCore portal from Thomson Reuters (<https://portal.genego.com>). 1 orthologous derivatives in the human based on rhesus monkey MHC (Mamu) sequence data (51) and database IPD MHC 2.2 (52).

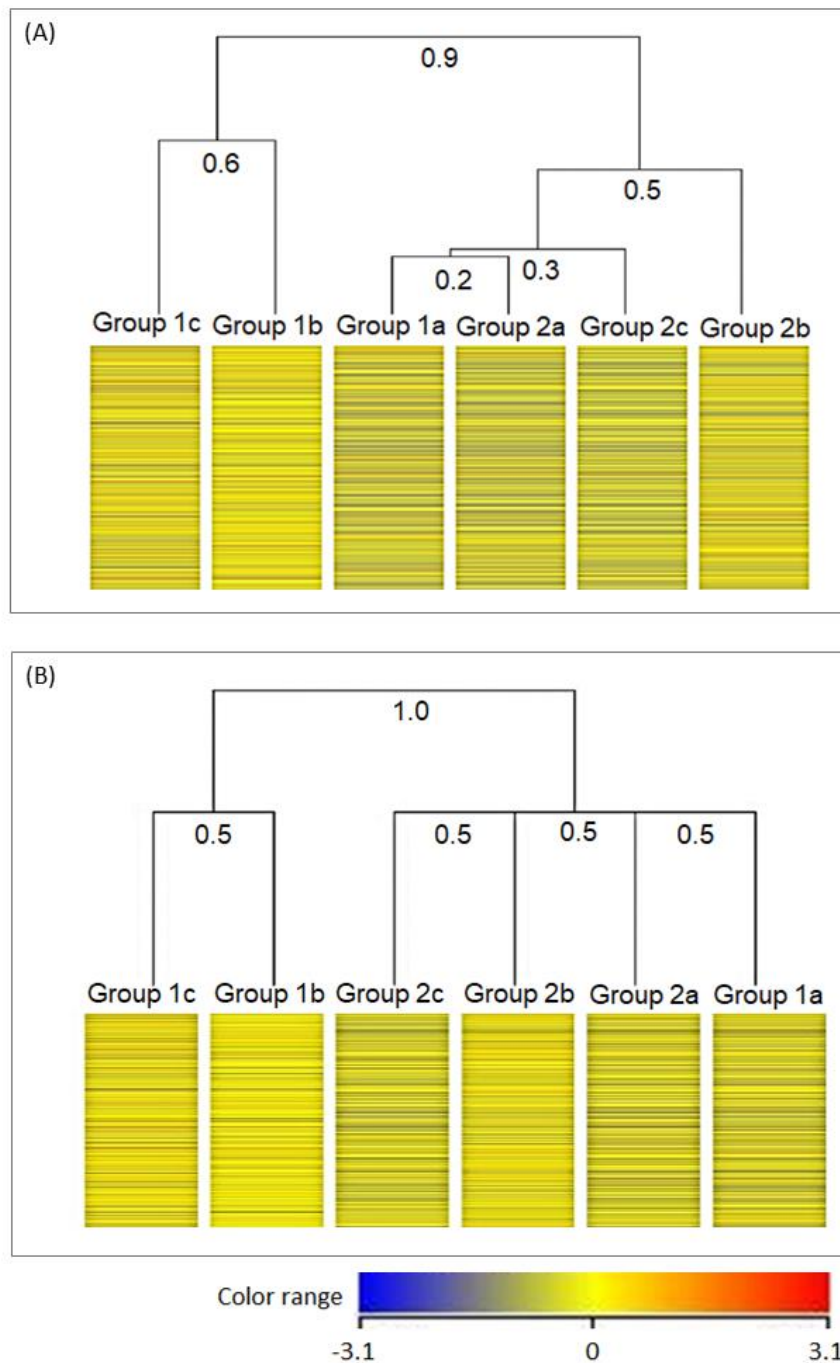
Table S7: Scores^a of immunohistochemical staining in epithelial and stromal compartments of endometrial functionalis of different sub-groups

Compartment		Group							p-value ^b	
Antigen		Group 1			p-value ^b	Group 2			p-value ^b	
		a	b	c		a	b	c		
Epithelium										
ADCY5		1.5 (1-3)	1.5 (0-2)	1.0 (0-1)	0.005	1.5 (1-3)	1.5 (1-3)	2.0 (0-3)	0.6	<0.001
AVEN		2.0 (0-3)	2.0 (1-3)	3.0 (2-4)	0.04	2.0 (0-3)	1.5 (1-3)	1.0 (0-2)	0.01	<0.001
CHRND		0.0 (0-1)	2.0 (1-2)	3.0 (2-4)	0.001	0.0	1.5 (0-1)	1.5 (0-2)	0.05 (0-3)	<0.001
FOXD3		1.0 (1-2)	2.0 (1-3)	3.0 (1-4)	<0.001	1.0 (1-2)	1.0 (1-2)	1.5 (1-3)	0.04	<0.001
GJD4		1.5 (1-3)	2.0 (1-3)	3.0 (1-4)	0.006	1.5 (0-3)	1.5 (0-3)	1.5 (0-3)	0.95	0.003
MKS1		1.0 (0-3)	1.5 (1-3)	3.0 (2-4)	<0.001	1.0 (0-3)	1.0 (0-3)	1.5 (0-3)	0.70	<0.001
NNMT		2.0 (0-3)	1.5 (0-2)	0.5 (0-1)	0.006	1.5 (0-3)	2.0 (1-3)	2.0 (1-3)	0.04	<0.001
TGFBR2		2.0 (1-2)	2.0 (1-3)	1.0 (0-2)	0.007	1.5 (1-2)	2.0 (1-3)	2.5 (1-3)	0.01	<0.001
TOX2		1.5 (1-3)	1.0 (1-3)	1.0 (0-1)	0.01	2.0 (0-3)	1.5 (1-3)	3.0 (1-3)	0.08	<0.001
VWA5B1		1.5 (0-2)	1.5 (0-3)	1.0 (0-1)	0.01	2.0 (1-3)	2.0 (1-3)	2.0 (0-3)	0.80	<0.01
Stroma										
ADCY5		1.5 (0-2)	1.0 (0-2)	0.5 (0-2)	0.77	1.0 (1-2)	1.5 (1-3)	1.5 (1-3)	0.29	0.01
AVEN		2.0 (1-3)	2.0 (1-4)	3.0 (1-4)	0.04	2.0	1.5 (1-3)	1.0 (1-3)	<0.001 (0-2)	<0.001

CHRNA	0.0 (0-1)	1.5 (1-2)	2.5 (1-3)	<0.001	1.0 (0-1)	1.5 (0-2)	1.5 (0-3)	0.15	<0.001
FOXD30.0	1.0 (0-1)	1.5 (0-3)	0.04 (1-3)		0.0 (0-1)	1.0 (0-2)	1.0 (0-2)	0.01	<0.001
GJD4	1.0 (1-2)	1.0 (1-3)	1.0 (1-3)	0.18	1.0 (0-2)	1.0 (0-2)	1.0 (0-2)	0.11	<0.001
MKS1	0.0 (0-1)	1.0 (0-2)	1.5 (1-3)	<0.001	0.0 (0-1)	1.0 (0-1)	1.0 (0-1)	0.03	<0.001
NNMT	1.0 (0-3)	1.0 (0-3)	1.0 (0-2)	<0.001	1.0 (0-3)	2.0 (1-3)	2.0 (1-3)	0.07	<0.001
TGFBR2	2.0 (1-3)	1.0 (1-2)	1.0 (0-2)	<0.001	2.0 (1-2)	2.0 (1-3)	2.0 (1-3)	0.07	<0.001
TOX2	1.0 (0-2)	1.0 (0-2)	1.0 (0-1)	0.08	1.0 (0-2)	1.0 (0-3)	1.5 (1-3)	0.01	<0.001
VWA5B1	1.5 (0-2)	1.5 (0-3)	0.5 (0-1)	0.03	1.5 (0-2)	1.5 (1-3)	1.5 (1-3)	0.19	<0.001

Immunopositive scores in different compartments were estimated using a standardized five scale subjective scoring system: 0 (<5%), 1 (5-25%), 2 (26-50%), 3 (51-75%) and 4 (>75%). ^adata are shown as medians with ranges. ^bnearest approximate values are given.

Figure S1



Legend to Figure S1

Group-wise two-way hierarchical cluster analysis of expression array data yielding highest segregation between peri-implantation stage (groups 1b and 1c) and other (groups 2a-c and group 1a) samples (A), while K-means cluster analysis revealing two distinctive clusters: cluster 1 comprised of groups 1a and 2a-c, while cluster 2 comprised of groups 1b and 1c (B). Note cluster distance (cd) 1.0 denotes complete segregation, while cd=0 denotes complete aggregation. Truncated expression data is shown.