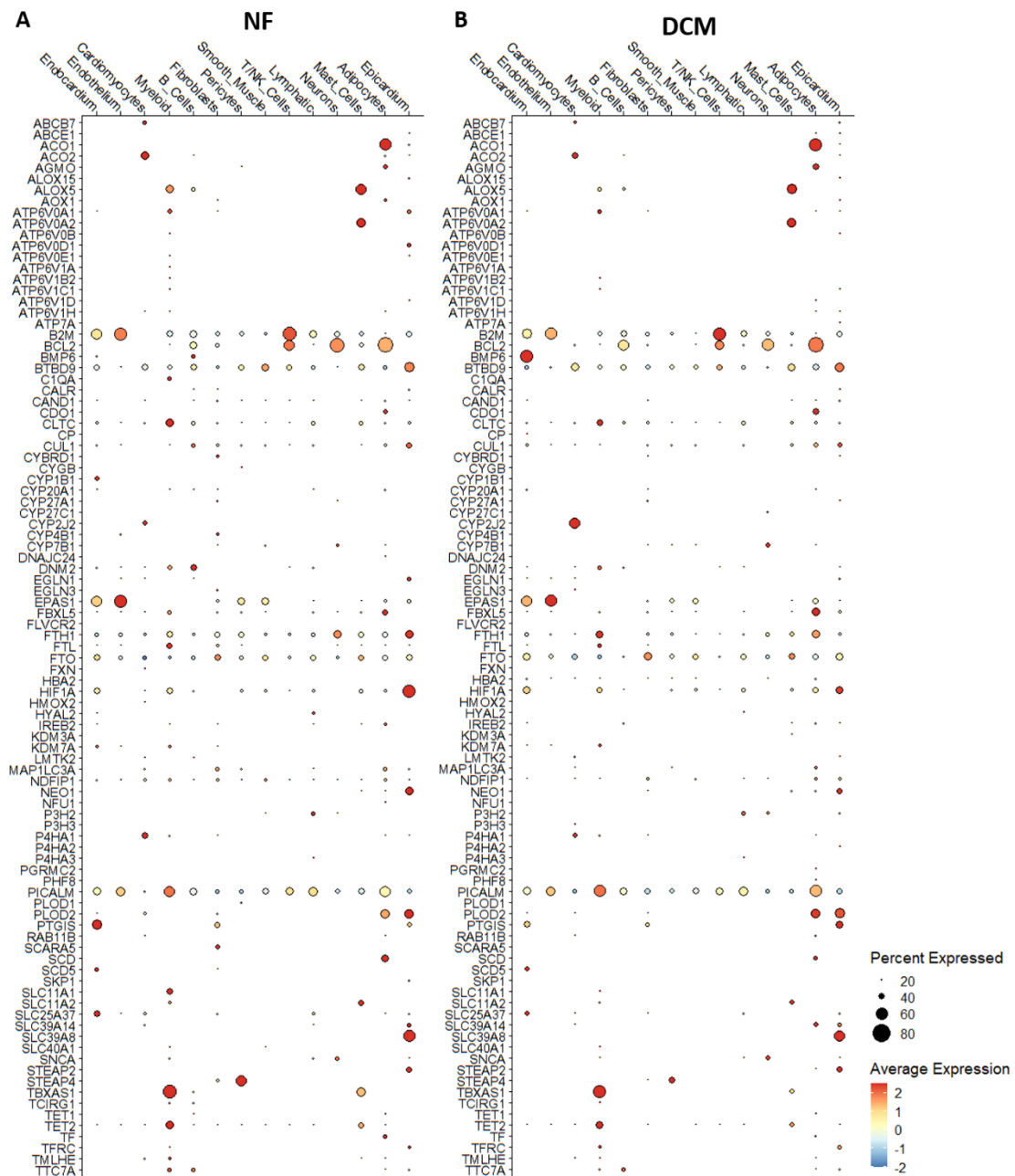
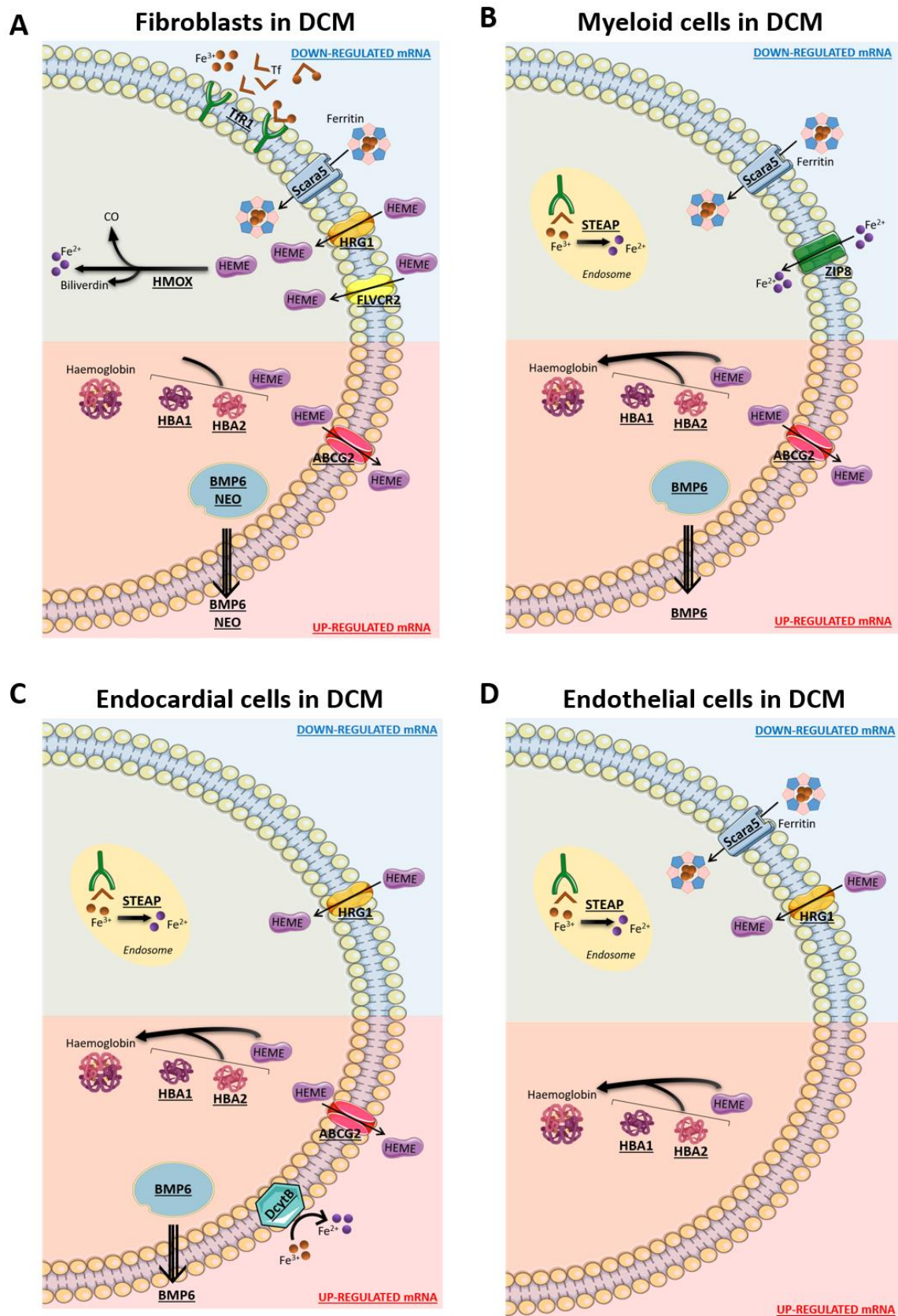


Supplementary Materials

Supplementary Figures



Supplementary Figure S1. Dotplot representations of the gene expression iron linked-genes across each cell type. The size of the dots encodes the percentage of cells expressing a gene ($\geq 20\%$), while the color encodes the average expression level across all cells within a class. **(A)** Expression levels of iron linked-genes for the cell types in donor (NF). **(B)** Expression levels of iron linked-genes for the cell types in dilated cardiomyopathy (DCM) group. Among the 272 total iron linked-genes, just those with a percentage of expression $\geq 20\%$ in at least one cell type of CTRL or DCM group were represented.



Supplementary Figure S2. Iron-linked affected genes in dilated cardiomyopathy (DCM) for four cell types. (A) Up- and down-regulated proteins/genes in DCM fibroblasts. (B) Up- and down-regulated proteins/genes in DCM myeloid cells. (C) Up- and down-regulated proteins/genes in DCM endocardial cells. (D) Up- and down-regulated proteins/genes in DCM endothelial cells.

Supplementary Tables

Table S1. Differentially expressed genes obtained from the comparison of DCM and NF bulk RNA-seq data. pValue was adjusted using Benjamini-Hochberg method.

Gene name	logFC	Average Expression	pValue	adj pValue
HBA2	3.68	1.83	2.54E-44	1.94E-42
SEZ6L	3.55	-0.45	3.39E-100	1.42E-96
SFRP4	3.54	2.56	8.42E-94	2.01E-90
HBA1	3.53	0.78	8.02E-44	6.05E-42
HBB	3.49	3.94	1.13E-54	1.84E-52
PENK	3.35	0.72	9.42E-74	4.38E-71
COL22A1	3.34	-1.09	8.59E-78	6.25E-75
FNDC1	3.07	1.91	1.54E-112	1.29E-108
NPPA	3.00	8.06	7.78E-38	3.82E-36
HAPLN1	2.85	1.03	2.62E-54	4.07E-52
LEFTY2	2.84	-0.33	3.36E-83	3.75E-80
TNMD	2.72	-0.77	5.06E-49	5.51E-47
MXRA5	2.71	3.99	9.31E-68	3.32E-65
APCDD1L	2.70	-1.27	4.37E-69	1.59E-66
FCER1A	2.68	-0.53	5.52E-61	1.29E-58
CRISPLD1	2.64	0.56	3.71E-62	9.70E-60
LYPD1	2.55	-1.90	1.70E-50	2.04E-48
FHAD1	2.50	-0.70	1.32E-97	3.68E-94
GZMH	2.45	-1.86	3.27E-60	7.41E-58
CXCL10	2.43	-0.78	7.37E-37	3.28E-35
KIAA1211	2.40	-2.28	2.79E-46	2.39E-44
LAMP5	2.38	-2.59	2.85E-71	1.22E-68
ARMS2	2.38	-2.42	2.26E-77	1.58E-74
CENPA	2.38	0.70	6.58E-37	2.95E-35
NPPB	2.37	6.09	5.66E-21	7.78E-20
FRZB	2.30	2.99	5.27E-99	1.76E-95
ASPN	2.29	5.31	2.43E-70	9.71E-68
DNAAF3	2.28	3.51	3.58E-78	2.72E-75
LUM	2.27	7.30	1.82E-79	1.69E-76
AQP10	2.23	-2.20	3.03E-74	1.49E-71
CMA1	2.21	-1.70	3.62E-45	2.88E-43
WNT9A	2.21	2.73	1.07E-47	1.07E-45
ZCCHC5	2.18	-1.13	1.06E-61	2.57E-59
ESM1	2.17	-1.74	1.42E-37	6.68E-36
NKG7	2.15	-0.91	2.13E-47	2.03E-45
COMP	2.13	1.31	8.46E-26	1.70E-24
AGTR2	2.13	-2.01	1.02E-40	6.17E-39
SCUBE2	2.12	1.65	2.10E-79	1.85E-76
CD1C	2.12	-0.75	1.06E-45	8.75E-44
PI16	2.10	4.29	6.96E-62	1.71E-59
ANKRD34C	2.07	-0.06	1.83E-53	2.73E-51
PLD4	2.06	-2.49	1.06E-63	3.05E-61
ACE	2.06	2.50	2.47E-69	9.21E-67
SSC5D	2.06	2.22	5.44E-87	9.11E-84
OGN	2.04	4.68	1.40E-58	2.97E-56
CX3CR1	2.04	-0.34	2.82E-45	2.28E-43
HNRNPA1P66	2.04	-2.35	2.47E-41	1.52E-39
TRIL	2.04	1.95	4.01E-77	2.59E-74
TNNI1	2.00	3.24	3.28E-26	6.72E-25
GLIS1	2.00	-2.55	1.79E-47	1.73E-45
SLC16A9	1.99	1.93	4.34E-72	1.96E-69
SMOC2	1.99	5.55	1.18E-113	1.98E-109
GDF6	1.98	-0.42	9.27E-50	1.06E-47
MDK	1.98	1.32	1.14E-57	2.35E-55
TRBC1	1.97	-1.10	3.02E-45	2.42E-43
CTSG	1.96	-0.96	9.75E-41	5.89E-39
APOA1	1.96	4.27	1.94E-40	1.14E-38
SAMD11	1.95	-0.80	7.77E-36	3.22E-34
OGDHL	1.93	1.80	1.85E-57	3.69E-55
XG	1.92	-0.48	1.58E-35	6.38E-34
RGS4	1.91	1.30	5.63E-45	4.45E-43
CHRNA3	1.89	-1.23	2.29E-42	1.54E-40
FREM1	1.89	2.73	4.10E-92	8.57E-89
SYTL5	1.86	-0.61	6.67E-25	1.25E-23
ISLR	1.86	3.71	4.51E-63	1.26E-60
CXCL11	1.85	-2.46	1.12E-25	2.23E-24
COL14A1	1.84	4.88	1.67E-54	2.66E-52
SLC1A7	1.82	0.19	2.75E-52	3.68E-50
NRG1	1.82	-0.78	5.45E-34	1.98E-32
FMOD	1.82	5.15	1.59E-48	1.70E-46
CCL5	1.82	0.94	1.26E-54	2.03E-52
CXCL9	1.82	0.44	9.94E-23	1.58E-21

ATRN1	1.81	1.39	2.76E-33	9.44E-32
GZMB	1.80	-1.88	2.11E-39	1.15E-37
STAT4	1.79	2.37	1.06E-42	7.30E-41
AEBP1	1.79	5.59	6.24E-52	8.22E-50
COL9A1	1.76	0.03	2.01E-54	3.18E-52
CYS1	1.75	1.43	2.50E-84	2.99E-81
ATP1B4	1.75	0.04	1.16E-27	2.65E-26
FATE1	1.75	-2.55	1.41E-40	8.43E-39
FAP	1.75	2.21	5.51E-40	3.15E-38
GZMA	1.75	-0.77	2.23E-41	1.38E-39
PRSS35	1.74	-2.08	1.35E-35	5.48E-34
GAP43	1.74	0.17	1.26E-27	2.88E-26
NRXN2	1.74	-0.72	2.83E-47	2.62E-45
APLNR	1.74	3.54	4.26E-47	3.88E-45
VGLL2	1.73	-0.87	3.34E-19	3.95E-18
MFAP4	1.73	5.74	1.98E-81	2.07E-78
LSP1	1.73	3.80	5.58E-62	1.42E-59
FCGR3B	1.72	0.53	1.33E-30	3.74E-29
C1QTNF7	1.72	1.86	5.42E-72	2.39E-69
PRF1	1.72	-0.31	6.23E-47	5.61E-45
MKRN2OS	1.71	0.27	3.98E-34	1.46E-32
NRK	1.71	2.89	1.01E-64	3.14E-62
RP11-481H12.1	1.70	-2.49	2.33E-39	1.26E-37
LTB	1.68	-2.35	5.90E-24	1.02E-22
OXER1	1.68	-1.11	4.25E-57	8.38E-55
MYOC	1.68	2.82	8.29E-36	3.42E-34
LRRC15	1.68	-1.45	1.75E-30	4.90E-29
PRKAG3	1.67	-2.41	8.60E-48	8.63E-46
C16orf89	1.67	2.05	1.95E-51	2.49E-49
PHLDA1	1.66	5.01	2.04E-66	6.69E-64
SHISA2	1.65	-1.52	1.23E-42	8.41E-41
PTN	1.65	4.87	2.75E-70	1.07E-67
NTM	1.65	0.82	3.47E-65	1.12E-62
GSTM5	1.64	1.17	5.07E-50	5.94E-48
TLL2	1.64	3.32	2.37E-89	4.41E-86
MYL1	1.64	-2.05	6.51E-27	1.40E-25
OASL	1.64	-0.54	2.21E-47	2.09E-45
CERS1	1.63	-1.23	8.15E-46	6.79E-44
RASL11B	1.63	3.08	1.28E-55	2.25E-53
C1QTNF2	1.62	0.79	2.53E-76	1.37E-73
LRRC17	1.62	2.19	2.72E-55	4.65E-53
P3H2	1.61	2.83	1.01E-43	7.48E-42
TMEM119	1.61	1.16	1.96E-34	7.37E-33
C2orf40	1.60	0.54	5.19E-52	6.90E-50
TMEM200A	1.60	-2.39	1.71E-24	3.09E-23
TMEM30B	1.60	0.18	1.78E-43	1.28E-41
ITGBL1	1.60	2.55	9.40E-32	2.83E-30
SIGLEC17P	1.59	-1.73	1.59E-36	6.95E-35
CYP11A1	1.59	-0.11	1.47E-62	4.03E-60
THY1	1.59	1.84	1.74E-23	2.92E-22
HRK	1.58	-0.89	3.06E-42	2.02E-40
ZAP70	1.57	-0.73	1.62E-39	8.91E-38
CA3	1.56	3.15	1.04E-23	1.77E-22
ABCG2	1.56	1.94	2.41E-55	4.16E-53
CD3D	1.56	-1.62	8.50E-32	2.57E-30
PROM1	1.56	2.74	4.63E-55	7.76E-53
HDC	1.56	-0.47	1.17E-32	3.79E-31
ADAMTS14	1.55	-0.57	8.75E-35	3.37E-33
SCG2	1.55	-1.06	3.71E-19	4.37E-18
CD3E	1.55	-0.60	4.01E-36	1.70E-34
KLRB1	1.55	-1.30	3.19E-34	1.17E-32
OPCML	1.55	-1.70	1.62E-34	6.11E-33
EGR2	1.55	0.85	1.89E-26	3.94E-25
SCG5	1.54	-2.35	6.59E-28	1.54E-26
KCNK17	1.54	-2.24	8.32E-29	2.06E-27
COL10A1	1.53	-1.79	1.39E-25	2.76E-24
COL16A1	1.53	4.66	1.70E-56	3.28E-54
SLAMF7	1.53	-0.76	2.54E-33	8.73E-32
LCN12	1.53	0.90	4.60E-42	3.02E-40
CHRD1	1.52	2.45	2.61E-24	4.63E-23
SDSL	1.52	2.43	1.42E-47	1.41E-45
LHCGR	1.51	-1.95	4.84E-22	7.27E-21
CXCL14	1.50	1.05	5.57E-26	1.13E-24
CD1E	1.50	-2.37	2.66E-26	5.48E-25
COL8A2	1.50	0.79	1.00E-48	1.09E-46
CTSW	1.49	-1.09	3.06E-35	1.21E-33
GFRA3	1.49	-0.57	6.06E-39	3.18E-37
IL34	1.49	-0.09	7.30E-48	7.41E-46
CD2	1.49	-0.46	1.01E-31	3.02E-30
DIO2	1.48	4.07	2.48E-56	4.71E-54
MYOZ1	1.48	0.89	6.52E-36	2.71E-34
LRRC55	1.48	-1.36	2.49E-33	8.59E-32
ITIH5	1.48	4.82	8.34E-86	1.27E-82

TGFB2	1.47	2.83	2.81E-32	8.85E-31
MOXD1	1.47	2.52	5.38E-51	6.67E-49
ARMC4	1.47	-1.75	2.70E-39	1.44E-37
BEX1	1.47	1.78	2.77E-27	6.19E-26
TBX21	1.46	-2.38	5.55E-32	1.69E-30
EFCC1	1.46	1.28	1.94E-58	4.06E-56
MATN2	1.46	5.04	9.73E-77	5.82E-74
CPXM2	1.45	3.21	1.58E-42	1.07E-40
ITGAL	1.45	0.89	4.48E-45	3.55E-43
GABRD	1.44	-2.17	2.26E-29	5.87E-28
ARMCX7P	1.44	-0.78	8.95E-07	3.01E-06
SCARA3	1.44	2.06	9.04E-61	2.07E-58
TNFRSF4	1.43	-0.62	3.36E-18	3.65E-17
IGHG1	1.43	2.99	1.22E-11	7.20E-11
S1PR5	1.43	-2.56	7.58E-31	2.17E-29
COL1A1	1.43	6.03	4.93E-25	9.32E-24
KIAA1755	1.43	2.44	2.07E-55	3.60E-53
FAM180B	1.42	-1.73	3.94E-37	1.80E-35
GSG1L	1.42	0.24	7.39E-19	8.48E-18
DACT2	1.41	-1.02	9.39E-21	1.27E-19
CRHBP	1.41	0.66	9.20E-43	6.42E-41
TRGC2	1.41	-2.46	4.55E-27	9.98E-26
RP11-1094M14.8	1.41	-2.65	7.31E-33	2.41E-31
BPI	1.40	-2.50	3.78E-31	1.10E-29
THBS4	1.40	7.51	5.63E-38	2.81E-36
SARDH	1.40	-1.06	4.32E-47	3.91E-45
SCN2B	1.40	4.40	1.50E-63	4.25E-61
UCHL1	1.40	3.07	8.95E-30	2.39E-28
P2RX6	1.40	1.02	1.74E-34	6.57E-33
LTBP2	1.40	6.56	7.99E-40	4.51E-38
DPT	1.40	6.22	5.07E-51	6.34E-49
ANKRD24	1.39	-1.44	3.67E-33	1.24E-31
SOX8	1.39	0.69	1.33E-49	1.51E-47
LEF1	1.39	-0.95	1.71E-31	5.06E-30
AZIN2	1.39	1.71	3.74E-64	1.12E-61
NGEF	1.38	-2.26	5.28E-24	9.20E-23
LTC4S	1.38	-1.36	1.12E-19	1.39E-18
EXOC3L4	1.38	-1.76	7.80E-29	1.93E-27
CRABP2	1.38	-0.65	8.45E-29	2.09E-27
IRX6	1.37	3.53	5.89E-36	2.48E-34
FAM133A	1.37	-1.22	1.10E-21	1.61E-20
CTHRC1	1.37	0.99	8.88E-26	1.78E-24
PRRT2	1.37	1.07	6.17E-48	6.38E-46
CRYM	1.37	6.49	1.10E-67	3.85E-65
IL2RB	1.36	-0.85	2.69E-34	9.99E-33
SERPINE2	1.36	5.10	3.03E-34	1.12E-32
CD247	1.36	-0.83	2.48E-39	1.33E-37
PTPRCAP	1.35	-2.05	8.54E-11	4.62E-10
PLEKHH2	1.35	2.82	1.62E-36	7.07E-35
FERMT1	1.35	-0.42	8.55E-32	2.58E-30
PADI4	1.34	-1.62	2.44E-21	3.48E-20
MAP3K7CL	1.34	2.42	2.38E-23	3.96E-22
HAAO	1.34	0.92	1.40E-57	2.86E-55
IFI44L	1.34	4.18	1.95E-44	1.51E-42
IL31RA	1.34	-2.35	3.50E-19	4.13E-18
FOXS1	1.34	0.61	7.18E-22	1.06E-20
EIF1AY	1.34	3.57	0.001530151	0.003181323
ADAMTSL1	1.33	0.65	1.62E-30	4.55E-29
METTL21EP	1.33	1.87	1.52E-36	6.67E-35
PALM3	1.33	-2.53	8.59E-32	2.59E-30
MRC2	1.33	4.82	3.07E-40	1.78E-38
TENM4	1.33	0.65	2.06E-46	1.79E-44
HAPLN4	1.33	-2.71	2.09E-33	7.22E-32
CD83	1.33	0.99	1.96E-47	1.89E-45
SPNS3	1.32	-1.62	2.94E-30	8.09E-29
CCDC80	1.32	7.42	8.13E-34	2.93E-32
ZMYND15	1.32	-0.97	6.08E-40	3.45E-38
DMC1	1.32	0.02	2.80E-54	4.31E-52
IGHG2	1.32	1.03	6.18E-11	3.40E-10
RPS4Y1	1.32	3.13	0.003717404	0.00718018
NT5E	1.32	2.76	2.21E-52	2.99E-50
COL9A2	1.32	-0.59	1.57E-37	7.35E-36
WNT10B	1.32	-2.08	3.02E-27	6.74E-26
TMEM233	1.32	-0.03	8.68E-37	3.84E-35
IGLC1	1.32	0.18	1.11E-10	5.96E-10
SLC6A1	1.31	1.93	5.60E-42	3.64E-40
ETV4	1.31	0.09	8.66E-38	4.24E-36
LMX1A	1.31	-2.60	1.00E-27	2.32E-26
MALRD1	1.31	-1.96	6.21E-22	9.26E-21
NUP62CL	1.31	-0.32	9.01E-41	5.47E-39
FAM212A	1.30	-0.26	2.52E-29	6.50E-28
UBD	1.30	-2.87	3.54E-14	2.67E-13
MSS51	1.30	2.86	4.18E-53	5.98E-51

GDF10	1.30	-0.81	3.36E-26	6.88E-25
CLEC4F	1.29	-1.38	7.24E-21	9.88E-20
NAP1L3	1.29	2.65	1.13E-35	4.62E-34
RHCG	1.29	-1.99	5.81E-16	5.16E-15
IGKV3-15	1.29	-1.91	1.48E-09	7.00E-09
PPDPF	1.29	5.41	1.04E-25	2.07E-24
IGHM	1.29	0.28	1.12E-12	7.40E-12
SKAP1	1.29	-1.60	8.69E-30	2.33E-28
AK5	1.28	-0.69	4.34E-46	3.69E-44
SULF1	1.28	4.22	4.91E-42	3.21E-40
DLGAP1	1.28	-0.72	1.12E-27	2.57E-26
GNLY	1.28	0.51	3.45E-36	1.48E-34
IGHA1	1.27	1.90	1.97E-10	1.03E-09
DUOX2	1.27	-0.41	6.17E-30	1.66E-28
MME	1.27	3.42	1.03E-37	4.94E-36
ECM2	1.27	4.15	6.00E-36	2.52E-34
IGKC	1.27	3.86	1.64E-11	9.54E-11
PHF21B	1.26	-2.06	2.90E-32	9.11E-31
FBLN7	1.26	-0.91	1.08E-39	6.03E-38
PIK3R6	1.26	0.53	2.17E-45	1.78E-43
CHD5	1.26	-1.56	6.65E-29	1.65E-27
F2RL2	1.26	0.60	8.41E-26	1.69E-24
EIF4EBP3	1.26	3.09	4.48E-31	1.29E-29
SH2D1A	1.26	-2.35	4.10E-22	6.20E-21
CLEC11A	1.26	0.99	3.20E-28	7.64E-27
PRPH	1.25	-2.16	4.14E-26	8.45E-25
RXRG	1.25	2.01	4.00E-35	1.56E-33
CCL4	1.24	-0.84	1.36E-21	1.97E-20
LINC01330	1.24	2.67	7.20E-37	3.21E-35
IGLC2	1.24	1.80	1.65E-10	8.68E-10
FCER2	1.24	-1.80	1.01E-20	1.36E-19
CARD11	1.24	-1.63	3.15E-28	7.55E-27
DUSP15	1.24	0.17	6.61E-42	4.24E-40
C1QTNF9	1.24	0.94	2.34E-34	8.73E-33
KCNN3	1.24	2.35	8.22E-56	1.48E-53
CTSK	1.23	3.63	4.85E-53	6.88E-51
IGHG4	1.23	-2.03	5.32E-07	1.84E-06
ANKRD33B	1.23	3.53	2.09E-43	1.49E-41
GPA33	1.23	0.15	1.83E-25	3.59E-24
FMO1	1.22	-1.08	4.43E-21	6.15E-20
IGLL5	1.22	-0.52	8.19E-10	4.01E-09
PODXL2	1.22	0.39	3.25E-53	4.70E-51
CCL3	1.22	-1.80	9.86E-14	7.12E-13
CEMP1	1.22	-0.79	1.01E-08	4.36E-08
C6orf223	1.21	-2.42	4.99E-34	1.82E-32
GLI2	1.21	0.22	1.03E-37	4.95E-36
HTR2A	1.21	-2.20	2.23E-20	2.91E-19
LTBP4	1.21	5.99	8.53E-33	2.78E-31
IDO1	1.21	-0.42	1.66E-14	1.30E-13
SYTL2	1.21	3.11	4.86E-37	2.20E-35
LCK	1.20	-0.66	7.95E-31	2.27E-29
TCEAL5	1.20	-2.07	3.58E-25	6.81E-24
SFRP1	1.20	5.46	8.08E-30	2.17E-28
HSH2D	1.20	-0.83	4.73E-38	2.39E-36
OLFML1	1.20	2.74	1.99E-61	4.69E-59
GZMK	1.20	-1.00	2.25E-21	3.22E-20
BCL11B	1.20	-1.92	2.79E-23	4.61E-22
KRT16P6	1.20	-2.35	6.03E-18	6.42E-17
ADAMTSL2	1.20	2.00	6.13E-25	1.15E-23
GNA14	1.20	0.77	2.25E-42	1.52E-40
HBG2	1.20	-1.63	2.55E-17	2.58E-16
ATP1B2	1.20	1.99	2.23E-62	6.03E-60
DDX3Y	1.19	1.94	0.005904222	0.010918052
CARNS1	1.19	3.32	6.98E-45	5.49E-43
FCRL6	1.19	-2.24	3.77E-23	6.18E-22
HMCN2	1.19	3.04	3.03E-28	7.28E-27
ITGB7	1.18	-1.29	3.11E-33	1.05E-31
CCDC168	1.18	0.03	7.88E-27	1.69E-25
FCN1	1.18	1.61	7.74E-25	1.44E-23
USP9Y	1.18	2.09	0.003259527	0.006356628
IGKV3-20	1.18	-0.71	5.13E-09	2.30E-08
PDIA2	1.18	0.10	5.03E-23	8.17E-22
LGALS2	1.18	-1.82	1.37E-23	2.31E-22
KCNIP1	1.17	-1.41	1.98E-30	5.53E-29
IGKV1-5	1.17	-1.41	6.40E-09	2.84E-08
PDCL3P4	1.17	-0.50	1.15E-26	2.42E-25
KAZALD1	1.17	2.34	7.91E-51	9.74E-49
TP63	1.16	-0.47	3.30E-32	1.03E-30
SLITRK4	1.16	1.51	1.83E-20	2.42E-19
CREB5	1.16	4.37	2.81E-45	2.28E-43
IGHA2	1.16	-0.35	9.36E-08	3.58E-07
BRSK1	1.16	1.17	2.90E-45	2.33E-43
COLQ	1.16	3.71	1.58E-25	3.12E-24

GUCA1C	1.16	2.30	1.35E-15	1.16E-14
PRRX2	1.16	-1.74	2.56E-14	1.96E-13
GATM	1.16	4.78	9.51E-30	2.54E-28
MEF2B	1.15	-1.65	2.97E-16	2.71E-15
SNCAIP	1.15	0.89	2.63E-47	2.46E-45
SERTAD4	1.15	1.85	4.43E-24	7.75E-23
TM6SF2	1.15	-1.36	1.27E-41	7.94E-40
FSCN1	1.15	2.55	1.12E-25	2.23E-24
PTP4A2P2	1.15	-2.62	8.30E-26	1.67E-24
PDE4C	1.15	2.30	5.92E-42	3.82E-40
RPS12P21	1.15	-1.83	4.07E-10	2.06E-09
SFRP2	1.15	-0.85	5.86E-09	2.61E-08
C1QTNF3	1.15	0.86	1.68E-39	9.21E-38
KCNJ4	1.14	3.74	1.68E-24	3.05E-23
IER3	1.14	4.20	2.09E-25	4.06E-24
EGR1	1.14	4.63	1.39E-17	1.45E-16
IGHV3-7	1.14	-2.51	5.03E-10	2.51E-09
CCDC3	1.14	3.63	5.06E-50	5.94E-48
TBC1D10C	1.13	-0.12	2.07E-28	5.02E-27
PDE5A	1.13	4.32	2.39E-38	1.22E-36
C11orf80	1.13	1.14	1.59E-52	2.18E-50
ZMYND12	1.13	0.92	4.99E-49	5.46E-47
RMI2	1.13	-0.36	1.98E-25	3.86E-24
GLYATL2	1.13	-2.03	2.30E-29	5.95E-28
IGLC3	1.13	0.52	4.47E-08	1.79E-07
ADAM19	1.12	4.35	1.14E-28	2.80E-27
NTNG2	1.12	0.45	4.63E-35	1.81E-33
TIGIT	1.12	-2.06	2.46E-21	3.51E-20
COL1A2	1.12	7.84	3.22E-27	7.17E-26
SYT17	1.12	0.16	2.18E-48	2.32E-46
BRINP1	1.12	-0.98	5.37E-20	6.81E-19
MMP16	1.12	1.16	2.01E-26	4.20E-25
RGS11	1.12	3.31	2.97E-40	1.73E-38
OR7E47P	1.12	-1.30	6.37E-19	7.36E-18
PODN	1.12	4.59	1.12E-41	7.06E-40
CD244	1.11	-2.12	3.63E-22	5.54E-21
IGHG3	1.11	0.26	5.27E-08	2.09E-07
RPL3P4	1.11	0.60	0.001758614	0.00361167
C12orf75	1.11	-0.17	1.99E-24	3.57E-23
BGN	1.11	6.26	1.06E-26	2.24E-25
JAML	1.11	2.19	3.83E-31	1.11E-29
SEMA5B	1.10	2.51	1.22E-46	1.08E-44
BOC	1.10	2.75	7.16E-45	5.60E-43
CLDN5	1.10	3.31	6.19E-15	5.04E-14
MXRA8	1.10	4.33	4.61E-30	1.26E-28
ALOX15	1.10	-2.63	3.17E-16	2.89E-15
TSPAN32	1.10	2.66	1.66E-31	4.92E-30
CD48	1.10	0.32	2.22E-25	4.28E-24
CTD-2510F5.6	1.09	-2.30	4.88E-07	1.70E-06
SELL	1.09	1.24	2.91E-25	5.58E-24
NELL2	1.09	-2.25	5.89E-20	7.45E-19
IGLV2-11	1.09	-2.39	2.37E-09	1.10E-08
IGSF10	1.09	3.07	5.59E-24	9.70E-23
HTRA1	1.08	5.94	7.30E-74	3.50E-71
ATP1A4	1.08	-0.82	3.58E-27	7.92E-26
KIT	1.08	1.62	1.46E-23	2.46E-22
SMPD3	1.08	0.54	1.08E-30	3.07E-29
TLR7	1.08	-0.12	2.66E-22	4.10E-21
CERCAM	1.08	3.28	3.80E-30	1.04E-28
RP3-395C13.1	1.08	-2.48	3.07E-26	6.31E-25
KCNA5	1.08	1.58	2.98E-42	1.98E-40
LOXL1	1.08	3.74	1.22E-23	2.08E-22
FBLN1	1.07	6.27	1.25E-36	5.50E-35
FZD2	1.07	-0.32	5.78E-21	7.93E-20
RARRES2	1.07	2.19	1.95E-15	1.66E-14
MNS1	1.07	0.72	1.32E-38	6.88E-37
ODF3B	1.07	1.58	1.67E-17	1.72E-16
LUZP2	1.07	-2.47	2.34E-18	2.57E-17
DPYSL3	1.07	5.61	5.87E-50	6.78E-48
GNB3	1.07	2.73	2.68E-42	1.79E-40
PTGDR2	1.07	1.85	1.60E-31	4.77E-30
RPL41P2	1.07	1.35	1.32E-09	6.31E-09
TFF3	1.07	-0.34	4.34E-14	3.25E-13
MRAP2	1.07	-0.65	1.50E-24	2.73E-23
SEZ6L2	1.06	-1.18	2.41E-20	3.15E-19
CD8B	1.06	-2.32	8.66E-18	9.15E-17
DPEP2	1.06	0.87	2.45E-31	7.17E-30
ST8SIA2	1.06	1.95	3.16E-29	8.09E-28
HMGN2	1.06	6.57	7.54E-60	1.68E-57
KLHDC9	1.06	1.36	8.61E-40	4.84E-38
GPAA1P1	1.06	-2.75	8.35E-14	6.08E-13
SLC22A7	1.06	-0.69	6.90E-14	5.06E-13
DTX4	1.06	1.96	7.81E-46	6.54E-44

NPR3	1.06	5.91	3.42E-32	1.06E-30
EMILIN3	1.06	2.29	2.30E-26	4.76E-25
WFIKN2	1.06	-1.74	3.22E-25	6.15E-24
SNCA	1.06	2.70	1.54E-34	5.82E-33
CHRNE	1.05	-0.75	1.58E-16	1.49E-15
IGHEP2	1.05	-2.46	1.01E-15	8.80E-15
CD96	1.05	-0.76	9.88E-20	1.23E-18
IGLV3-21	1.05	-2.35	3.79E-08	1.53E-07
IGKV3-11	1.05	-1.79	3.38E-07	1.20E-06
CXCR1	1.05	-0.66	2.35E-13	1.63E-12
RAB7B	1.05	1.13	8.58E-37	3.80E-35
DACT1	1.05	1.54	1.53E-27	3.48E-26
VAT1L	1.05	3.81	3.26E-21	4.60E-20
GALNT5	1.04	-1.12	5.56E-16	4.94E-15
CYP4F3	1.04	-0.89	5.83E-27	1.26E-25
SRCIN1	1.04	0.00	2.14E-30	5.98E-29
TNNT1	1.04	6.28	2.42E-23	4.02E-22
HSD17B14	1.04	0.11	4.65E-26	9.45E-25
SNAP47	1.04	4.75	4.04E-55	6.83E-53
GLI1	1.04	-0.41	4.45E-29	1.12E-27
P2RY13	1.04	0.55	7.48E-28	1.74E-26
P2RX1	1.04	-0.07	1.24E-23	2.10E-22
NXPH4	1.04	-0.27	4.05E-19	4.75E-18
CETP	1.04	-1.45	4.30E-16	3.86E-15
C17orf107	1.03	-1.04	1.12E-23	1.90E-22
RP11-693N9.2	1.03	1.35	2.75E-47	2.56E-45
KLRK1	1.03	0.57	5.09E-29	1.28E-27
IGLV2-14	1.03	-1.40	1.15E-07	4.36E-07
HPGDS	1.03	0.04	7.87E-23	1.26E-21
MDFI	1.03	-1.15	1.73E-10	9.11E-10
GLT8D2	1.03	3.27	7.68E-56	1.40E-53
TAGLN3	1.03	-2.66	2.86E-21	4.05E-20
LFNG	1.03	1.71	7.70E-23	1.24E-21
P3H3	1.03	3.76	2.97E-34	1.10E-32
HLA-DPB1	1.03	5.12	3.50E-39	1.85E-37
BACH2	1.03	1.75	2.77E-53	4.03E-51
SOD3	1.02	4.04	1.52E-21	2.20E-20
PLPPR4	1.02	-0.44	5.16E-16	4.59E-15
PRR5L	1.02	0.52	5.85E-30	1.58E-28
COLEC11	1.02	2.07	4.18E-29	1.06E-27
RLN2	1.02	-2.23	1.07E-21	1.57E-20
C14orf132	1.02	2.81	3.81E-21	5.35E-20
ANTXR1	1.02	5.45	1.61E-41	1.00E-39
ESPNL	1.02	-1.92	2.41E-10	1.25E-09
RP11-420K14.2	1.02	-2.46	3.38E-10	1.72E-09
CPZ	1.02	-1.48	2.81E-14	2.14E-13
FRMD7	1.02	-2.05	3.20E-10	1.63E-09
ARHGAP33	1.01	1.56	9.54E-34	3.41E-32
SCAMP5	1.01	2.06	2.10E-32	6.66E-31
C9orf24	1.01	1.59	2.71E-30	7.48E-29
MSTN	1.01	-1.71	1.16E-13	8.32E-13
CCL8	1.01	-1.01	6.95E-13	4.64E-12
ARID5A	1.01	4.15	5.44E-25	1.03E-23
FGF17	1.01	-2.53	9.75E-22	1.43E-20
IGKV4-1	1.00	-0.84	4.86E-08	1.93E-07
TRAF3IP3	1.00	0.59	1.64E-31	4.88E-30
IGLV1-40	1.00	-2.32	1.70E-07	6.30E-07
LIPH	1.00	-0.35	4.18E-33	1.40E-31
CTF1	1.00	2.98	1.98E-47	1.90E-45
TNNI3	1.00	11.46	7.37E-20	9.27E-19
CYP4F24P	1.00	-2.70	3.27E-07	1.17E-06
PHF24	0.99	-1.64	3.74E-24	6.57E-23
BEGAIN	0.99	-0.43	2.08E-29	5.40E-28
CD5	0.99	-1.80	2.30E-19	2.75E-18
LAMP3	0.99	-2.30	1.18E-15	1.02E-14
CCL21	0.99	2.43	1.85E-11	1.07E-10
KCNMB2	0.99	1.26	5.09E-24	8.88E-23
TMEM221	0.99	-2.42	1.12E-21	1.63E-20
SLC44A5	0.99	0.68	1.29E-09	6.18E-09
TSPAN11	0.99	1.40	1.48E-29	3.88E-28
HTR2B	0.99	0.09	2.86E-16	2.62E-15
NHLRC4	0.99	-1.57	3.23E-18	3.52E-17
PLCE1	0.99	5.13	7.11E-37	3.18E-35
WBSCR27	0.99	-2.27	3.47E-14	2.62E-13
POSTN	0.99	6.13	3.45E-11	1.95E-10
HSD11B2	0.98	-1.55	8.60E-18	9.09E-17
MMP9	0.98	-0.69	9.11E-09	3.95E-08
IDSP1	0.98	-2.76	4.43E-13	3.01E-12
GPC6	0.98	1.98	8.36E-22	1.23E-20
NTF3	0.98	-0.46	1.89E-38	9.72E-37
BTN3A1	0.98	3.66	1.56E-38	8.11E-37
RP11-153M3.1	0.98	-2.36	1.95E-20	2.56E-19
KIF1A	0.98	0.19	2.79E-14	2.13E-13

CNTNAP3P1	0.98	-1.97	2.82E-17	2.84E-16
POU6F2	0.98	-1.26	6.40E-19	7.39E-18
IGHV3-23	0.98	-1.86	4.13E-07	1.45E-06
CTC-575D19.1	0.98	-0.29	0.000846629	0.001831939
RP11-113C12.4	0.97	-2.53	3.27E-18	3.56E-17
CHST6	0.97	0.72	1.81E-29	4.71E-28
C11orf65	0.97	-0.85	9.04E-38	4.40E-36
LRRN4CL	0.97	1.63	6.82E-46	5.74E-44
LMX1B	0.97	-0.57	3.06E-34	1.13E-32
AL589743.1	0.97	-0.28	5.15E-18	5.50E-17
ISG15	0.97	1.75	1.24E-10	6.65E-10
QPCT	0.97	1.48	5.31E-27	1.15E-25
CSPG5	0.97	-2.04	1.04E-24	1.91E-23
BCL6B	0.97	3.93	1.16E-35	4.71E-34
GJC2	0.97	-0.74	8.81E-17	8.47E-16
LPAR2	0.97	-0.40	1.18E-18	1.34E-17
ARSI	0.97	-2.07	9.14E-14	6.63E-13
B3GALT5	0.97	-1.13	3.40E-19	4.02E-18
REM1	0.96	1.09	3.86E-33	1.29E-31
GRM2	0.96	-1.29	9.01E-21	1.22E-19
CLU	0.96	6.83	4.65E-40	2.68E-38
SAP25	0.96	-0.49	1.15E-12	7.54E-12
CILP	0.96	4.96	4.69E-16	4.20E-15
COL15A1	0.96	6.38	1.60E-40	9.47E-39
NUPR2	0.96	-1.55	2.57E-20	3.35E-19
FAM216B	0.96	-1.09	6.73E-14	4.94E-13
IFI6	0.96	3.69	4.23E-23	6.90E-22
RSAD2	0.96	2.80	1.84E-28	4.47E-27
P2RY8	0.96	2.31	3.19E-35	1.26E-33
THEMIS	0.96	-2.60	6.36E-12	3.86E-11
CCER2	0.96	-2.47	6.52E-14	4.80E-13
IGLV1-44	0.96	-2.22	4.14E-07	1.45E-06
ZNF541	0.96	0.54	2.97E-23	4.91E-22
RTN4R	0.96	-2.23	2.36E-11	1.35E-10
PDZD4	0.95	1.79	4.87E-27	1.06E-25
CD74	0.95	7.52	5.75E-34	2.08E-32
STAB2	0.95	-1.68	2.63E-16	2.42E-15
SALL3	0.95	-2.52	3.35E-09	1.53E-08
PGPEP1L	0.95	-0.07	1.45E-22	2.28E-21
LRRC10	0.95	4.78	3.99E-23	6.53E-22
ANGPTL7	0.95	0.08	1.36E-12	8.89E-12
CD6	0.95	-0.44	2.38E-30	6.60E-29
DOK5	0.94	2.95	1.18E-28	2.88E-27
GADD45G	0.94	2.90	9.18E-10	4.46E-09
IL17D	0.94	2.01	5.92E-42	3.82E-40
EIF4HP2	0.94	-0.66	4.62E-30	1.26E-28
TSPAN9	0.94	7.15	9.89E-65	3.13E-62
GDF15	0.94	-1.88	4.25E-16	3.82E-15
REEP2	0.94	1.77	3.10E-23	5.12E-22
BMP4	0.94	2.70	1.58E-40	9.39E-39
CD163L1	0.94	1.45	7.51E-21	1.02E-19
PTPRT	0.94	-1.21	5.37E-15	4.40E-14
ANKDD1B	0.94	-1.77	2.33E-20	3.05E-19
SSXP10	0.94	-1.55	1.50E-09	7.12E-09
MX1	0.94	4.16	8.09E-44	6.08E-42
COL12A1	0.94	5.48	1.59E-24	2.88E-23
AGRN	0.94	3.50	7.89E-23	1.26E-21
COL6A4P2	0.94	-2.22	4.82E-16	4.31E-15
SOX15	0.93	-0.38	4.28E-27	9.41E-26
STAC	0.93	-0.85	3.06E-29	7.84E-28
ROR2	0.93	-0.47	4.01E-25	7.61E-24
UTY	0.93	0.62	0.010662731	0.018641138
C1orf204	0.93	1.75	1.12E-32	3.64E-31
UBA7	0.93	4.19	1.73E-57	3.49E-55
CX3CL1	0.93	4.46	5.55E-37	2.49E-35
IGKV2-28	0.93	-2.27	1.97E-06	6.33E-06
ALDH1A2	0.93	3.38	1.07E-37	5.11E-36
ARHGAP22	0.93	1.73	7.35E-38	3.63E-36
SLC6A4	0.93	-0.87	1.86E-18	2.06E-17
SEPT1	0.93	0.24	3.26E-25	6.20E-24
FBXL16	0.93	-2.51	1.56E-19	1.90E-18
RP11-54D18.2	0.93	-2.14	6.50E-13	4.36E-12
TSKS	0.93	-1.33	2.04E-18	2.26E-17
MAFK	0.93	5.53	8.76E-27	1.87E-25
DBP	0.92	1.44	2.54E-23	4.22E-22
PAPLN	0.92	2.33	6.89E-31	1.98E-29
SLCO4C1	0.92	-1.46	8.32E-16	7.28E-15
ACTA1	0.92	11.14	5.34E-13	3.60E-12
TMEM71	0.92	5.17	3.90E-37	1.79E-35
PNMAL2	0.92	0.28	1.03E-24	1.89E-23
RTP4	0.92	0.60	1.19E-35	4.84E-34
CXCR2	0.92	-0.16	7.78E-13	5.18E-12
CST7	0.92	-0.75	2.50E-16	2.31E-15

HYAL4	0.92	-1.85	3.60E-20	4.61E-19
EMID1	0.92	-1.29	1.22E-15	1.06E-14
PRKCQ	0.92	-1.73	1.14E-17	1.20E-16
CYP2J2	0.92	6.70	2.50E-45	2.04E-43
PTCH2	0.92	0.09	2.71E-21	3.85E-20
PPP2R2B	0.92	0.69	1.70E-32	5.44E-31
BGLAP	0.92	-1.80	6.06E-10	3.00E-09
DGKI	0.92	0.75	5.51E-21	7.58E-20
VTCN1	0.92	-1.24	4.95E-22	7.42E-21
EXT1	0.91	4.46	7.15E-67	2.40E-64
KLRF1	0.91	-1.77	4.36E-18	4.68E-17
GVQW2	0.91	-1.60	3.54E-26	7.24E-25
KIRREL3	0.91	-0.31	1.19E-30	3.36E-29
SKP1P1	0.91	-2.47	1.18E-21	1.72E-20
LIMD2	0.91	1.32	7.75E-17	7.48E-16
IGLV1-47	0.91	-2.61	2.95E-07	1.06E-06
IFIT2	0.90	3.09	9.74E-33	3.17E-31
MAGED4B	0.90	-0.38	1.94E-16	1.81E-15
LTBP3	0.90	5.55	8.54E-44	6.39E-42
COLGALT2	0.90	3.63	2.34E-51	2.97E-49
TNNT3	0.90	5.42	2.24E-23	3.74E-22
KIF21B	0.90	0.31	6.93E-32	2.11E-30
CCDC113	0.90	2.48	1.61E-51	2.07E-49
RASGRP1	0.90	-0.19	5.20E-17	5.12E-16
THEM5	0.90	-2.04	8.16E-23	1.30E-21
IGLV3-1	0.90	-2.36	1.73E-06	5.60E-06
MYCN	0.90	-1.65	5.87E-15	4.78E-14
IGSF1	0.90	2.39	1.88E-20	2.47E-19
FLRT2	0.90	2.38	2.83E-29	7.28E-28
GPRASP1	0.90	4.40	1.19E-33	4.22E-32
CD7	0.90	-2.60	1.65E-10	8.70E-10
IGKV1D-39	0.90	-1.58	3.53E-06	1.10E-05
KCNS3	0.90	1.95	1.27E-39	7.04E-38
AC004754.3	0.90	-0.11	4.24E-21	5.90E-20
HLA-DOA	0.89	1.89	3.19E-26	6.56E-25
PTPRH	0.89	0.59	2.45E-14	1.88E-13
SLC30A2	0.89	2.75	4.53E-19	5.28E-18
OMD	0.89	3.53	7.19E-17	6.99E-16
ZNF536	0.89	1.28	6.43E-30	1.73E-28
CPA3	0.89	1.37	7.71E-19	8.84E-18
APOBEC3A	0.89	-0.71	2.33E-14	1.80E-13
VSX1	0.89	-1.66	5.88E-23	9.51E-22
COL24A1	0.89	1.00	2.21E-14	1.71E-13
TCEAL2	0.89	-1.04	5.01E-17	4.94E-16
TNFRSF12A	0.89	4.83	1.21E-14	9.64E-14
MYADM12	0.89	1.33	4.96E-16	4.42E-15
CD8A	0.89	-0.39	1.92E-15	1.63E-14
TNXB	0.89	6.35	3.48E-22	5.31E-21
IFIT3	0.88	3.51	1.29E-27	2.94E-26
RSPO3	0.88	-1.11	4.26E-13	2.90E-12
MAPK10	0.88	1.77	3.49E-29	8.88E-28
CD300LF	0.88	-1.49	1.03E-14	8.23E-14
C3orf80	0.88	-2.42	1.55E-12	1.01E-11
CCDC74A	0.88	-0.20	3.76E-28	8.93E-27
PEX11G	0.88	-0.94	3.14E-18	3.43E-17
IGLV2-23	0.88	-2.21	3.94E-06	1.22E-05
DDAH2	0.88	4.36	2.16E-26	4.50E-25
CCDC74B	0.88	-1.17	1.63E-23	2.75E-22
LRRTM1	0.87	-2.39	1.14E-15	9.91E-15
IQA1	0.87	-1.66	1.52E-17	1.57E-16
PYHIN1	0.87	-1.86	3.09E-15	2.58E-14
EPHX2	0.87	4.79	8.46E-50	9.71E-48
CH507-9B2.1	0.87	0.50	1.04E-06	3.47E-06
RUNDC3A	0.87	-1.07	2.41E-27	5.42E-26
HLA-DPA1	0.87	5.72	9.21E-35	3.54E-33
TSPAN8	0.87	-1.06	1.07E-11	6.37E-11
PCOLCE	0.87	4.33	3.72E-18	4.02E-17
IGLV3-19	0.87	-2.36	2.58E-06	8.17E-06
APLP1	0.87	2.58	2.96E-33	1.01E-31
TNNC2	0.87	-1.99	1.64E-14	1.29E-13
CACNA1G	0.87	-1.39	2.81E-20	3.64E-19
BDNF	0.87	3.13	4.27E-14	3.21E-13
EPHB3	0.87	0.40	1.07E-18	1.21E-17
CRIP1	0.87	3.76	1.78E-11	1.03E-10
CDH23	0.87	2.65	7.59E-28	1.77E-26
PCED1B	0.87	0.35	1.42E-34	5.41E-33
ZNF831	0.87	-1.98	6.27E-13	4.21E-12
SCARF2	0.86	1.12	6.58E-14	4.85E-13
ACHE	0.86	-0.81	5.46E-20	6.92E-19
ADAMTS7P4	0.86	-1.78	2.40E-19	2.87E-18
PHOSPHO1	0.86	-0.96	2.50E-27	5.59E-26
CRTAM	0.86	-2.47	1.31E-15	1.13E-14
PGAM1P5	0.86	-0.66	1.45E-29	3.80E-28

PAQR6	0.86	-0.04	8.60E-31	2.45E-29
DNAJC22	0.86	-1.29	3.75E-21	5.26E-20
SSUH2	0.86	1.22	5.32E-37	2.39E-35
ATP6V1G2	0.86	0.73	2.49E-26	5.16E-25
RELN	0.86	1.46	1.51E-11	8.81E-11
RP11-777B9.5	0.86	-1.71	0.00010588	0.00026633
CHODL	0.86	-1.27	4.43E-19	5.17E-18
NTRK1	0.86	-0.13	1.93E-14	1.50E-13
EOMES	0.86	-2.14	5.51E-14	4.10E-13
TECRP1	0.85	-0.75	0.002205262	0.004451988
SPON2	0.85	3.01	4.01E-16	3.61E-15
LAMB4	0.85	-1.68	3.53E-14	2.67E-13
GDPD3	0.85	1.28	4.02E-29	1.02E-27
RAB26	0.85	-0.66	7.94E-19	9.10E-18
TNF	0.85	-1.25	9.19E-13	6.10E-12
GAL3ST4	0.85	0.80	1.83E-33	6.39E-32
NREP	0.85	4.95	3.59E-29	9.11E-28
STAMBPL1	0.85	1.97	1.94E-39	1.06E-37
PARP10	0.85	2.73	1.88E-18	2.09E-17
LDHAP4	0.85	-1.87	2.08E-12	1.33E-11
NTN5	0.85	-2.43	8.48E-16	7.42E-15
MS4A2	0.85	0.39	3.84E-17	3.83E-16
STMN3	0.85	2.30	3.21E-22	4.91E-21
HSPA2	0.85	4.41	5.16E-23	8.38E-22
DEFB124	0.85	-2.26	4.08E-17	4.06E-16
HHAT	0.85	1.49	8.77E-44	6.53E-42
FGF14	0.85	2.87	7.72E-38	3.80E-36
RAB37	0.85	1.08	2.21E-46	1.91E-44
TCEAL7	0.85	1.61	3.37E-32	1.05E-30
HLA-DMB	0.85	3.40	2.17E-27	4.89E-26
PMP2	0.85	-0.23	3.10E-13	2.13E-12
TMEM54	0.85	1.65	9.15E-16	7.98E-15
XAF1	0.85	5.62	1.04E-39	5.81E-38
COL21A1	0.84	5.77	5.21E-27	1.13E-25
DUOXA1	0.84	-1.32	6.36E-21	8.71E-20
USP51	0.84	1.25	5.68E-53	7.93E-51
OAS1	0.84	2.57	5.05E-28	1.19E-26
MED12L	0.84	-0.03	4.62E-15	3.81E-14
BEND5	0.84	1.18	2.39E-48	2.54E-46
CHAD	0.84	-1.81	1.31E-13	9.32E-13
MTCO3P22	0.84	-1.12	0.000118476	0.000295793
MID1	0.84	3.36	7.79E-29	1.93E-27
ESR1	0.84	1.54	7.75E-20	9.74E-19
GPR27	0.84	1.97	6.10E-27	1.32E-25
CAPN5	0.84	1.79	9.72E-38	4.70E-36
EDA2R	0.84	1.60	1.16E-15	1.01E-14
ANGPTL5	0.84	0.68	2.20E-12	1.40E-11
GBP5	0.84	0.68	2.60E-15	2.19E-14
TMEM35A	0.84	-1.97	9.32E-17	8.94E-16
COL3A1	0.84	7.88	2.16E-12	1.38E-11
ANKRD1	0.83	11.89	1.74E-18	1.94E-17
CTD-2587H24.4	0.83	-0.79	1.47E-07	5.49E-07
HSPB1P1	0.83	-2.03	7.51E-10	3.69E-09
IGHV3-33	0.83	-2.29	4.64E-05	0.000123225
THBS2	0.83	4.88	3.76E-19	4.42E-18
NLGN3	0.83	-0.44	4.46E-34	1.63E-32
SERPINI1	0.83	2.99	2.54E-37	1.18E-35
LINC00672	0.83	1.05	3.73E-33	1.26E-31
NRIP2	0.83	2.32	1.52E-47	1.50E-45
RAB33A	0.83	-0.52	2.18E-16	2.02E-15
STX1B	0.83	0.05	6.48E-33	2.15E-31
PLXDC1	0.83	4.96	7.73E-47	6.92E-45
OLR1	0.83	-0.98	1.63E-13	1.15E-12
TM7SF2	0.83	4.63	7.26E-19	8.35E-18
ASIC1	0.83	-0.28	1.91E-23	3.20E-22
NCR1	0.83	-1.57	8.58E-16	7.50E-15
ASB18	0.83	2.11	6.37E-21	8.71E-20
RP11-466H18.1	0.83	0.01	0.022740787	0.037103856
AC110615.1	0.83	0.96	3.61E-09	1.65E-08
PIK3IP1	0.83	4.49	2.21E-31	6.49E-30
CTLA4	0.83	-1.39	2.59E-15	2.17E-14
CH25H	0.83	-0.91	9.47E-07	3.17E-06
DEFA1	0.82	-1.99	4.50E-05	0.000119889
ADAM8	0.82	0.23	1.14E-14	9.06E-14
ARVCF	0.82	3.61	1.87E-20	2.47E-19
RP11-588F10.1	0.82	0.36	1.17E-10	6.27E-10
AGER	0.82	1.41	4.16E-22	6.28E-21
RNF165	0.82	1.30	9.96E-28	2.31E-26
HESX1	0.82	-1.03	2.43E-24	4.33E-23
DENND6B	0.82	0.67	4.24E-22	6.39E-21
MATK	0.82	-1.38	1.76E-16	1.65E-15
EPHA3	0.82	3.53	1.90E-14	1.48E-13
ZBTB12	0.82	-0.29	6.33E-23	1.02E-21

CHIT1	0.82	-1.82	1.81E-08	7.62E-08
CTGF	0.82	6.53	3.50E-14	2.64E-13
PRRT1	0.82	-0.04	1.96E-16	1.82E-15
MIA	0.82	-1.50	2.60E-13	1.80E-12
ECT2L	0.82	1.37	3.01E-13	2.07E-12
ANKRD29	0.82	3.05	3.81E-32	1.18E-30
GDNF	0.82	-1.48	1.19E-20	1.59E-19
CETN4P	0.81	-2.05	6.68E-15	5.41E-14
SPACA9	0.81	2.06	1.41E-44	1.09E-42
GSTM1	0.81	0.91	0.024933016	0.040315476
ITGAX	0.81	1.94	4.85E-18	5.20E-17
DRP2	0.81	-2.06	1.19E-12	7.80E-12
AC092651.1	0.81	-2.34	0.000415711	0.000953597
FAM196A	0.81	-1.99	1.62E-20	2.15E-19
ANOS1	0.81	3.18	1.63E-22	2.55E-21
FGF18	0.81	2.79	1.28E-15	1.11E-14
CCDC190	0.81	-1.65	5.26E-12	3.21E-11
TNN	0.81	-2.06	2.04E-12	1.30E-11
DYRK1B	0.81	3.17	1.59E-31	4.73E-30
HPX	0.81	-1.30	1.40E-26	2.94E-25
EPHA5	0.81	-2.24	5.30E-10	2.64E-09
RP11-347C12.3	0.81	-0.42	1.12E-18	1.27E-17
C7orf50	0.81	4.37	3.16E-14	2.40E-13
TIMP2	0.80	7.04	1.10E-50	1.34E-48
TXLNGY	0.80	1.36	0.031332444	0.049628222
GPR68	0.80	0.58	1.11E-19	1.37E-18
MFAP2	0.80	0.78	6.75E-13	4.52E-12
ADAM22	0.80	2.01	7.76E-24	1.34E-22
BFSP1	0.80	-1.16	7.54E-15	6.10E-14
TMEM178A	0.80	1.22	1.92E-31	5.64E-30
COL8A1	0.80	5.37	1.37E-23	2.31E-22
STON2	0.80	1.40	2.36E-35	9.40E-34
PAMR1	0.80	3.47	1.13E-29	3.00E-28
CCR6	0.80	-2.45	1.62E-12	1.05E-11
ZGLP1	0.80	-0.81	9.06E-14	6.57E-13
RP11-79D8.2	0.80	-2.86	4.13E-10	2.08E-09
IL2RG	0.80	1.03	1.72E-22	2.69E-21
HLA-DQB1	0.79	3.92	4.78E-20	6.09E-19
CYTL1	0.79	-1.76	4.90E-13	3.32E-12
RP11-834C11.7	0.79	-1.76	2.15E-20	2.82E-19
SLIT3	0.79	4.27	1.60E-25	3.16E-24
NHLRC1	0.79	-0.89	7.25E-32	2.20E-30
RP11-213G2.1	0.79	-1.85	1.24E-14	9.84E-14
VMO1	0.79	-2.18	3.85E-07	1.36E-06
CAMK4	0.79	-1.18	2.93E-13	2.02E-12
FAM156B	0.79	3.30	7.97E-16	6.99E-15
RP11-248C1.3	0.79	-2.57	1.04E-07	3.96E-07
APBB3	0.79	3.56	6.42E-48	6.60E-46
GDF9	0.79	-1.18	2.80E-21	3.97E-20
EXTL1	0.79	1.81	2.95E-17	2.97E-16
PTK7	0.79	1.57	4.59E-27	1.01E-25
DSCAML1	0.79	-0.36	4.21E-19	4.93E-18
CD52	0.79	1.11	1.01E-13	7.27E-13
HYI	0.79	3.59	1.19E-33	4.22E-32
IGLV2-8	0.79	-2.59	1.04E-05	3.05E-05
TMEM163	0.79	-0.93	1.89E-15	1.61E-14
TNFRSF11B	0.79	2.61	3.91E-08	1.58E-07
LCNL1	0.79	2.01	1.01E-08	4.38E-08
CCDC154	0.79	-0.84	1.11E-13	7.96E-13
TRIM17	0.79	-1.62	3.75E-20	4.80E-19
PRRG3	0.79	1.40	1.75E-22	2.72E-21
GBAP1	0.79	0.57	6.71E-22	9.96E-21
ABC14-864958H18.2	0.79	-1.01	1.31E-17	1.37E-16
SLC25A45	0.79	2.43	1.13E-40	6.78E-39
LRRC36	0.78	-2.10	7.75E-09	3.40E-08
OR7E126P	0.78	-2.44	4.10E-15	3.40E-14
SCRG1	0.78	1.26	2.05E-19	2.46E-18
GPAA1P2	0.78	-0.01	1.55E-19	1.88E-18
COL5A1	0.78	5.06	2.47E-18	2.71E-17
S100B	0.78	1.43	7.99E-11	4.34E-10
LPAR4	0.78	-0.90	2.00E-11	1.16E-10
CTD-3088G3.8	0.78	0.55	2.68E-21	3.82E-20
TMC4	0.78	1.40	9.62E-26	1.92E-24
MMP25	0.78	0.74	3.98E-15	3.30E-14
FGF23	0.78	1.95	2.26E-06	7.22E-06
HERC5	0.78	2.43	1.99E-40	1.17E-38
SVEP1	0.78	4.74	1.28E-24	2.33E-23
MEGF6	0.78	1.59	1.62E-11	9.42E-11
SCML4	0.78	-1.70	2.27E-15	1.92E-14
ABCA4	0.78	-2.01	5.05E-18	5.40E-17
H2BFM	0.77	-2.23	5.81E-19	6.74E-18
JAK2	0.77	5.74	1.13E-13	8.10E-13

AL513523.1	0.77	0.93	0.000182206	0.00044116
AL513523.2	0.77	0.93	0.000182206	0.00044116
RCN3	0.77	2.81	1.42E-10	7.57E-10
ARHGEF4	0.77	0.87	6.81E-24	1.17E-22
SRRM4	0.77	1.23	2.45E-24	4.36E-23
TTC9	0.77	1.78	1.10E-26	2.33E-25
MKX	0.77	-2.02	2.39E-08	9.88E-08
CABLES1	0.77	1.80	1.84E-22	2.86E-21
TESPA1	0.77	0.08	1.21E-32	3.90E-31
TPPP3	0.77	2.65	3.63E-15	3.02E-14
TCEA2	0.77	3.63	2.64E-23	4.38E-22
TMEM200B	0.77	1.57	2.13E-25	4.13E-24
MST1R	0.77	0.30	2.84E-24	5.02E-23
SLC35F1	0.77	3.17	2.56E-18	2.81E-17
CPC3	0.77	2.36	3.36E-18	3.65E-17
CCDC85B	0.77	2.37	8.32E-06	2.47E-05
IL32	0.77	4.29	5.00E-19	5.81E-18
INMT	0.76	5.09	5.52E-23	8.93E-22
LSMEM2	0.76	3.69	4.19E-19	4.91E-18
XKR4	0.76	0.69	2.19E-15	1.84E-14
TTLL3	0.76	4.75	2.04E-45	1.68E-43
MYH10	0.76	5.76	2.13E-34	7.99E-33
DBIL5P	0.76	-1.97	7.84E-18	8.31E-17
CCNI2	0.76	0.17	1.72E-13	1.21E-12
FAM186A	0.76	-0.72	5.60E-21	7.70E-20
MN1	0.76	3.26	3.36E-32	1.05E-30
RPL7P3	0.76	1.33	4.90E-10	2.44E-09
CLDND2	0.76	-1.02	5.39E-11	2.98E-10
RP11-196G11.1	0.76	-2.80	8.71E-07	2.93E-06
CREG2	0.76	-1.15	2.86E-24	5.06E-23
CARMIL2	0.76	-1.99	4.16E-12	2.57E-11
EDIL3	0.76	4.35	4.92E-11	2.74E-10
GFI1	0.76	-2.07	4.56E-13	3.10E-12
PURG	0.76	-1.86	1.18E-17	1.24E-16
KRTCAP3	0.76	-1.81	9.61E-18	1.01E-16
PCOLCE2	0.76	6.18	3.54E-37	1.63E-35
NCF1	0.76	0.64	1.61E-15	1.37E-14
PTGFRN	0.76	6.60	1.67E-52	2.28E-50
LOXHD1	0.76	-0.37	1.98E-15	1.68E-14
TPSAB1	0.75	0.98	5.09E-08	2.02E-07
TRDC	0.75	-1.82	7.71E-08	2.99E-07
KLHL35	0.75	-1.07	2.72E-24	4.82E-23
MYBL1	0.75	2.47	5.00E-25	9.44E-24
PSPHP1	0.75	-1.96	0.009542009	0.016880931
DUOX1	0.75	1.05	1.28E-34	4.87E-33
SMO	0.75	2.57	2.30E-43	1.64E-41
RPS11P6	0.75	-1.55	6.41E-22	9.56E-21
ANKRD23	0.75	2.87	8.33E-13	5.54E-12
CELF6	0.75	1.51	3.41E-18	3.70E-17
B9D1	0.75	1.98	3.50E-36	1.50E-34
ADRA2A	0.75	-0.28	1.26E-09	6.03E-09
THBS3	0.75	3.55	5.03E-32	1.54E-30
LRRRC75B	0.75	1.22	9.49E-23	1.51E-21
FAM150B	0.75	-0.34	4.60E-08	1.84E-07
CHAC1	0.75	0.04	1.68E-09	7.92E-09
TSTD1	0.75	1.81	3.14E-20	4.07E-19
ZMAT1	0.75	4.40	3.85E-19	4.52E-18
GARNL3	0.75	4.07	2.68E-36	1.16E-34
OAS3	0.75	3.52	4.17E-15	3.46E-14
IL23A	0.75	-2.41	2.82E-16	2.59E-15
CDRT4	0.74	1.33	1.48E-08	6.28E-08
SLC28A1	0.74	-0.13	3.43E-20	4.41E-19
GPR173	0.74	1.33	1.24E-23	2.10E-22
HLA-DRA	0.74	6.57	1.33E-22	2.10E-21
FBLN2	0.74	5.69	3.36E-17	3.37E-16
ASPRV1	0.74	-0.09	3.31E-30	9.08E-29
MBL1P	0.74	0.66	2.39E-30	6.63E-29
LYPD3	0.74	-2.24	1.28E-13	9.11E-13
KCNC4	0.74	3.28	4.07E-51	5.13E-49
C2orf27A	0.74	-0.99	6.47E-12	3.91E-11
TRIM45	0.74	3.58	8.96E-31	2.55E-29
SAMD3	0.74	-0.80	9.96E-21	1.34E-19
SFTPD	0.74	-0.81	3.59E-18	3.89E-17
PDE1A	0.74	4.00	1.90E-18	2.10E-17
NTRK2	0.74	3.33	5.88E-17	5.77E-16
KDM5D	0.74	2.52	0.027284614	0.043742084
AMT	0.74	4.50	1.41E-37	6.63E-36
NSUN5P2	0.74	2.63	2.89E-13	2.00E-12
ABHD11	0.74	3.35	2.04E-36	8.84E-35
RP11-134G8.6	0.74	-0.56	4.79E-23	7.81E-22
COL11A2	0.74	1.14	1.48E-16	1.40E-15
TCF21	0.74	2.87	5.93E-22	8.85E-21
RP11-466G12.2	0.74	-2.71	1.14E-11	6.73E-11

EVA1A	0.74	-1.12	1.63E-12	1.05E-11
AC240274.1	0.74	3.37	1.92E-25	3.75E-24
FAT3	0.74	-1.26	7.80E-09	3.42E-08
EVL	0.74	4.90	1.53E-47	1.50E-45
ROBO3	0.74	2.00	5.51E-24	9.56E-23
FAM181B	0.74	-1.52	9.61E-23	1.53E-21
HDAC10	0.74	1.89	1.41E-16	1.34E-15
FGF1	0.74	5.97	1.87E-38	9.68E-37
PCSK2	0.74	0.41	2.73E-15	2.29E-14
KANK4	0.74	-2.39	2.63E-06	8.31E-06
CHSY3	0.74	0.01	1.86E-13	1.30E-12
PTGFR	0.74	0.36	4.09E-07	1.44E-06
CD24	0.74	-0.87	2.34E-09	1.09E-08
C10orf105	0.73	-2.62	1.04E-07	3.95E-07
ADAM12	0.73	-0.29	2.47E-05	6.84E-05
LDOC1	0.73	0.80	2.29E-21	3.27E-20
ARHGAP1	0.73	5.95	1.22E-59	2.69E-57
C2orf16	0.73	-0.51	1.39E-25	2.76E-24
PTGES3P2	0.73	-2.01	3.57E-12	2.22E-11
PPP1R36	0.73	-1.69	8.91E-17	8.56E-16
ADGRA2	0.73	3.82	2.77E-16	2.55E-15
FZD1	0.73	4.50	2.95E-28	7.11E-27
RP11-234B24.6	0.73	1.50	0.00011552	0.000289146
ANO1	0.73	4.16	6.08E-36	2.54E-34
STX19	0.73	-2.56	6.40E-14	4.72E-13
PCDH19	0.73	0.53	1.59E-19	1.93E-18
SLC26A4	0.73	0.25	7.99E-16	7.01E-15
HFE2	0.73	5.42	1.37E-21	1.99E-20
CCNA1	0.73	-2.24	2.99E-09	1.38E-08
AMOT	0.73	2.72	5.53E-42	3.60E-40
RASGEF1C	0.73	-2.35	1.60E-11	9.31E-11
AMPH	0.73	1.77	3.08E-19	3.65E-18
NBL1	0.73	5.01	8.74E-18	9.22E-17
FBF1	0.73	1.63	4.26E-29	1.07E-27
TMEM130	0.73	-0.99	4.41E-12	2.72E-11
MTND4P12	0.73	2.90	0.000472819	0.001073424
SYT9	0.73	-1.90	7.80E-11	4.25E-10
IFT43	0.73	3.94	3.27E-40	1.89E-38
FAM231D	0.73	0.94	5.66E-29	1.41E-27
MAGED4	0.73	-1.31	2.02E-11	1.17E-10
BAIAP2L2	0.72	-1.63	2.80E-12	1.77E-11
C2orf70	0.72	-2.61	7.59E-11	4.14E-10
GDF7	0.72	1.70	3.87E-17	3.86E-16
APOC2	0.72	-2.19	2.16E-11	1.24E-10
STK32A	0.72	0.08	2.42E-21	3.46E-20
CGNL1	0.72	5.02	8.64E-25	1.60E-23
KCNMA1	0.72	1.71	6.12E-16	5.42E-15
HLA-J	0.72	-0.91	2.32E-13	1.61E-12
SCN11A	0.72	-1.75	2.87E-12	1.81E-11
C10orf35	0.72	0.98	1.95E-32	6.21E-31
C6orf25	0.72	-0.81	5.35E-24	9.29E-23
ROBO2	0.72	-2.10	1.16E-12	7.62E-12
GLUD1P7	0.72	-1.76	2.90E-15	2.43E-14
SESN3	0.72	3.90	3.69E-17	3.69E-16
CCND1	0.72	6.36	1.32E-46	1.16E-44
LRFN1	0.72	-2.31	1.08E-11	6.39E-11
ASTN1	0.72	0.03	4.96E-17	4.90E-16
GALNT8	0.72	0.73	3.72E-22	5.67E-21
ST6GALNAC5	0.72	-1.36	2.40E-13	1.67E-12
PSMB10	0.72	3.70	2.22E-12	1.42E-11
ZNF423	0.72	2.19	5.77E-30	1.56E-28
MARCKS	0.72	5.07	6.20E-18	6.60E-17
SLIT2	0.72	3.28	1.38E-24	2.52E-23
MBP	0.72	4.86	7.68E-33	2.52E-31
RP11-281O15.7	0.72	-1.19	5.12E-09	2.30E-08
EEF1A1P13	0.72	-1.63	1.35E-13	9.61E-13
ADGRB1	0.72	-1.44	5.65E-12	3.44E-11
LLNLF-187D8.1	0.72	-2.03	1.65E-09	7.80E-09
CXCR4	0.72	2.71	3.60E-14	2.71E-13
RAMP2	0.72	4.18	5.14E-28	1.21E-26
F2R	0.72	4.78	9.23E-12	5.52E-11
CD22	0.71	-1.41	1.61E-12	1.04E-11
BCL2A1	0.71	-0.92	4.12E-07	1.45E-06
PRRX1	0.71	6.01	3.99E-24	6.99E-23
RP11-96A1.4	0.71	2.42	2.21E-21	3.17E-20
ABHD1	0.71	1.31	3.22E-38	1.64E-36
ABI3BP	0.71	5.27	4.61E-15	3.80E-14
RHBDL1	0.71	-1.01	2.40E-09	1.12E-08
PRG4	0.71	2.04	9.06E-07	3.04E-06
INHBE	0.71	-1.82	1.82E-16	1.71E-15
CACNA2D2	0.71	1.45	6.00E-28	1.40E-26
CYSRT1	0.71	-2.49	1.84E-11	1.07E-10
ADAMTS13	0.71	1.59	6.04E-20	7.63E-19

MTMR9LP	0.71	3.10	1.44E-29	3.80E-28
ABHD18	0.71	4.82	2.16E-17	2.20E-16
GADD45A	0.71	5.03	5.86E-29	1.46E-27
MEI1	0.71	-1.18	6.01E-14	4.45E-13
RAB39B	0.71	-1.81	1.22E-12	8.00E-12
HSPB6	0.71	8.72	7.54E-16	6.63E-15
GIMAP1-GIMAP5	0.71	0.24	0.014101038	0.024054627
PLEKHB1	0.71	3.05	5.34E-28	1.25E-26
RERGL	0.71	1.41	3.85E-22	5.84E-21
HCAR2	0.71	-2.44	1.68E-05	4.79E-05
GPM6A	0.71	0.04	2.73E-12	1.72E-11
RP11-467J12.4	0.71	-0.38	4.02E-16	3.62E-15
NAT8L	0.71	-1.13	7.29E-09	3.21E-08
TREX2	0.71	-2.44	1.33E-09	6.33E-09
RUNX2	0.71	1.07	3.79E-17	3.79E-16
MSI1	0.71	1.06	1.05E-23	1.79E-22
SLC16A6	0.71	0.13	5.80E-12	3.53E-11
PTPRR	0.71	-0.60	1.02E-12	6.76E-12
GRIN2C	0.71	-0.27	2.77E-21	3.93E-20
MSH5-SAPCD1	0.70	1.77	1.44E-17	1.50E-16
TMSB4Y	0.70	-2.23	0.003790564	0.00730654
TRO	0.70	2.16	1.19E-28	2.91E-27
EVA1B	0.70	0.64	1.03E-05	3.00E-05
FCRL3	0.70	-1.78	1.96E-12	1.26E-11
MEOX1	0.70	4.11	3.15E-19	3.74E-18
CCDC54	0.70	-1.44	9.66E-10	4.68E-09
BAIAP3	0.70	1.01	3.88E-15	3.22E-14
AK8	0.70	-2.48	8.36E-14	6.09E-13
C1QTNF5	0.70	3.13	3.36E-16	3.04E-15
EDNRA	0.70	4.82	2.59E-17	2.62E-16
CPEB1	0.70	0.90	1.46E-23	2.46E-22
KCNA4	0.70	2.03	2.42E-17	2.45E-16
FXVD1	0.70	6.56	1.30E-15	1.12E-14
HLA-DRB3	0.70	3.11	0.003100623	0.006079296
CASP1	0.70	2.86	2.79E-35	1.11E-33
GRIA1	0.70	-0.57	2.91E-15	2.44E-14
OSBP2	0.70	3.05	5.79E-25	1.09E-23
ENPP2	0.70	2.69	1.00E-13	7.22E-13
MDH1B	0.70	0.51	1.90E-27	4.30E-26
SOCS2	0.70	4.47	1.96E-35	7.91E-34
IER2	0.70	4.20	6.79E-17	6.61E-16
IGLV1-51	0.70	-1.53	2.29E-06	7.31E-06
FAM90A1	0.70	-2.19	1.13E-13	8.09E-13
FAM102A	0.70	3.49	1.05E-38	5.50E-37
MYL2	0.70	13.10	4.16E-25	7.89E-24
PYROXD2	0.70	3.38	3.06E-31	8.92E-30
GRM1	0.70	2.48	2.82E-09	1.30E-08
C1orf54	0.70	2.79	1.97E-26	4.12E-25
PIEZO2	0.70	-1.04	7.19E-10	3.54E-09
MTURN	0.70	5.62	4.09E-33	1.37E-31
ACAN	0.70	-0.87	1.30E-09	6.19E-09
FMO4	0.70	2.60	1.90E-27	4.30E-26
C7orf61	0.70	-2.67	1.53E-09	7.23E-09
SLC5A7	0.69	-1.80	1.13E-06	3.75E-06
CD3G	0.69	-0.88	2.08E-11	1.20E-10
ITLN1	0.69	-0.26	0.002923002	0.005754618
HLA-DRB1	0.69	6.01	6.58E-16	5.80E-15
SLC6A9	0.69	-0.72	1.48E-12	9.62E-12
SPN	0.69	1.16	4.10E-22	6.19E-21
RAPSN	0.69	0.20	4.20E-10	2.12E-09
DEF6	0.69	0.70	5.84E-15	4.76E-14
NES	0.69	8.13	1.23E-29	3.25E-28
INHBA	0.69	1.82	2.37E-09	1.10E-08
GSDMB	0.69	2.90	5.05E-32	1.55E-30
CD72	0.69	-0.23	8.22E-09	3.59E-08
ERICH2	0.69	-0.64	1.84E-16	1.72E-15
SPATA18	0.69	1.25	4.72E-18	5.06E-17
CRIP3	0.69	3.12	1.16E-08	4.99E-08
OLFML3	0.69	4.06	1.19E-22	1.87E-21
SYNP02L	0.69	8.25	2.44E-25	4.71E-24
SAMD9L	0.69	3.70	1.07E-14	8.51E-14
LINC01296	0.69	0.93	1.48E-13	1.05E-12
RP11-327P2.7	0.69	0.47	9.34E-19	1.06E-17
ANO9	0.69	-1.46	5.69E-11	3.14E-10
HSPB1	0.69	8.04	8.51E-07	2.87E-06
C1orf106	0.69	-1.30	6.73E-14	4.94E-13
GDPD2	0.69	-0.20	3.06E-20	3.96E-19
TNFRSF25	0.69	2.71	2.51E-25	4.83E-24
ZNF821	0.69	1.39	3.51E-36	1.50E-34
PLAC9	0.69	3.05	6.78E-09	3.00E-08
MAP6	0.69	2.57	1.29E-56	2.52E-54
BEX2	0.69	0.00	7.16E-12	4.32E-11
TMPRSS9	0.69	-1.11	1.48E-16	1.40E-15

GABRE	0.69	5.51	2.61E-20	3.38E-19
TSPY26P	0.68	1.64	8.13E-48	8.20E-46
HLA-DMA	0.68	4.14	2.82E-22	4.34E-21
PSD	0.68	-0.89	2.21E-10	1.15E-09
MTND1P23	0.68	6.69	0.001436217	0.00299958
TRIM74	0.68	-2.18	3.58E-06	1.12E-05
PRR7	0.68	-2.47	9.28E-07	3.11E-06
CCND2	0.68	7.40	2.94E-42	1.95E-40
VILL	0.68	1.62	4.60E-23	7.51E-22
ADAMTSL5	0.68	3.73	1.05E-28	2.57E-27
RIBC1	0.68	-0.92	1.57E-19	1.91E-18
AC002398.9	0.68	-1.31	0.00592403	0.010951054
C4orf47	0.68	-1.84	7.30E-14	5.33E-13
NRP2	0.68	3.31	1.05E-21	1.54E-20
SLC4A8	0.68	0.43	4.96E-15	4.08E-14
SLC16A2	0.68	3.59	2.33E-35	9.33E-34
PFN4	0.68	-0.88	4.61E-26	9.37E-25
CAPN14	0.68	-1.28	2.69E-12	1.70E-11
CIDEA	0.68	-0.43	0.000713909	0.001568259
LRRC53	0.68	-1.07	2.42E-10	1.25E-09
LRRN1	0.68	-2.52	4.53E-09	2.04E-08
RP4-800G7.2	0.68	1.90	4.82E-27	1.05E-25
IKZF3	0.68	1.04	3.68E-19	4.34E-18
F10	0.68	2.01	3.75E-17	3.75E-16
FAM188B	0.68	1.79	1.34E-33	4.73E-32
MANEAL	0.68	-0.02	5.47E-32	1.67E-30
ESRP1	0.68	-2.04	6.48E-07	2.22E-06
APOBEC3H	0.68	-2.67	2.13E-10	1.11E-09
ENC1	0.68	3.59	3.92E-17	3.90E-16
COP22	0.67	4.30	9.42E-29	2.32E-27
KLHL13	0.67	3.38	8.19E-21	1.12E-19
PAFAH2	0.67	3.86	9.96E-42	6.30E-40
S100A2	0.67	-0.55	2.40E-12	1.52E-11
KIF25	0.67	-1.80	6.73E-14	4.94E-13
CCDC191	0.67	1.35	2.80E-22	4.31E-21
HS3ST3A1	0.67	-1.76	5.43E-06	1.65E-05
DNM1	0.67	2.79	2.88E-22	4.42E-21
PER2	0.67	2.91	7.61E-16	6.70E-15
PKP3	0.67	-2.01	4.75E-09	2.14E-08
EFS	0.67	2.00	1.70E-27	3.86E-26
KCNH8	0.67	-1.94	6.72E-11	3.69E-10
INAFM1	0.67	1.70	3.70E-09	1.69E-08
RP11-656G20.1	0.67	-2.26	3.94E-09	1.79E-08
VTN	0.67	4.89	8.01E-13	5.33E-12
ZNF711	0.67	1.72	2.47E-08	1.02E-07
PAPPA2	0.67	-0.38	1.62E-11	9.42E-11
CCDC89	0.67	-1.51	9.04E-14	6.56E-13
LDLRAD2	0.67	2.23	2.32E-07	8.45E-07
ANKRD20A8P	0.67	-0.50	1.25E-15	1.08E-14
RP11-949J7.8	0.67	3.00	1.02E-22	1.62E-21
NDP	0.67	-1.20	2.59E-11	1.48E-10
NEB	0.67	3.39	2.07E-05	5.81E-05
FLG2	0.67	-1.45	7.80E-13	5.20E-12
USP11	0.67	5.00	8.71E-56	1.55E-53
SSPN	0.67	5.75	8.74E-26	1.75E-24
DHX58	0.67	2.01	2.02E-27	4.57E-26
AP3M2	0.66	4.20	8.90E-38	4.34E-36
WDR66	0.66	2.10	2.09E-42	1.41E-40
ZDHHC14	0.66	3.60	6.04E-36	2.53E-34
TMEM45B	0.66	-1.71	2.98E-14	2.27E-13
CYP27A1	0.66	3.34	9.08E-24	1.56E-22
TNFSF13B	0.66	1.07	2.16E-11	1.25E-10
NRGN	0.66	0.98	4.76E-10	2.38E-09
TANC2	0.66	3.11	4.98E-24	8.70E-23
RP11-182J1.14	0.66	-1.64	2.43E-08	1.01E-07
HLA-DQA1	0.66	4.83	3.95E-21	5.54E-20
B4GALNT4	0.66	-2.17	8.08E-08	3.13E-07
LOXL2	0.66	2.96	2.17E-14	1.68E-13
JCHAIN	0.66	1.20	0.00013178	0.000326237
ZC3H12B	0.66	0.25	1.59E-18	1.77E-17
F3	0.66	5.21	1.65E-16	1.55E-15
ENAM	0.66	3.02	9.74E-14	7.04E-13
MPO	0.66	-2.23	2.73E-09	1.26E-08
RP11-231P20.2	0.66	0.91	7.34E-21	1.00E-19
SLC26A11	0.66	1.82	3.53E-34	1.29E-32
CTA-963H5.5	0.66	-1.67	4.07E-12	2.51E-11
FOXD3	0.66	-2.66	3.99E-08	1.61E-07
IPCEF1	0.66	0.09	1.20E-16	1.15E-15
MMP2	0.66	6.90	1.63E-23	2.74E-22
ACBD4	0.66	2.37	2.26E-28	5.46E-27
NDC80	0.66	0.35	1.97E-17	2.01E-16
LRRC43	0.66	-2.13	2.99E-13	2.07E-12
GPR61	0.66	-1.80	1.21E-14	9.64E-14

SLFN13	0.66	1.78	2.08E-19	2.50E-18
DOC2A	0.66	-0.72	2.10E-17	2.14E-16
ZNF467	0.65	0.86	5.41E-14	4.03E-13
MYL12A	0.65	11.09	3.37E-18	3.66E-17
LY9	0.65	-1.20	1.08E-13	7.76E-13
RP11-159D12.5	0.65	3.48	7.42E-22	1.10E-20
RARG	0.65	3.13	5.19E-31	1.50E-29
ZCCHC18	0.65	-0.36	1.70E-24	3.07E-23
PIWIL4	0.65	0.99	8.84E-28	2.05E-26
ST6GAL2	0.65	-0.13	7.58E-09	3.33E-08
TPSB2	0.65	0.99	7.75E-06	2.31E-05
RELB	0.65	1.36	7.49E-12	4.51E-11
LRMP	0.65	1.10	3.42E-17	3.42E-16
RP11-763B22.3	0.65	-1.80	3.96E-10	2.00E-09
KIF7	0.65	2.09	9.72E-21	1.31E-19
NPIPB6	0.65	-1.65	2.50E-05	6.91E-05
CSRP3	0.65	10.18	2.80E-19	3.33E-18
OAS2	0.65	3.60	5.26E-24	9.17E-23
LIME1	0.65	-0.05	6.90E-09	3.05E-08
IFI27L2	0.65	3.64	9.59E-11	5.17E-10
UPK3B	0.65	-1.02	3.01E-09	1.39E-08
SORBS2	0.65	9.78	6.94E-27	1.49E-25
DCHS1	0.65	4.10	1.60E-22	2.51E-21
RRP7BP	0.65	3.04	3.06E-31	8.92E-30
TMEM98	0.65	3.29	3.08E-30	8.45E-29
BST2	0.65	4.66	6.58E-14	4.85E-13
PRELP	0.65	6.40	5.66E-12	3.45E-11
EGFL7	0.65	5.12	5.61E-07	1.94E-06
LYRM9	0.65	2.88	4.09E-32	1.26E-30
RAB40A	0.65	-1.06	6.92E-17	6.74E-16
ADAMTS8	0.65	-0.17	2.73E-10	1.40E-09
KIF26A	0.64	2.27	1.11E-13	7.97E-13
PLAGL1	0.64	4.26	4.05E-13	2.76E-12
DUSP27	0.64	7.18	1.02E-24	1.87E-23
LAMA4	0.64	6.43	4.28E-37	1.95E-35
APOBEC3F	0.64	0.56	1.55E-33	5.44E-32
LAT	0.64	1.12	3.69E-20	4.73E-19
EIF3EP1	0.64	-1.38	2.42E-10	1.25E-09
SH3GL2	0.64	2.29	2.85E-09	1.32E-08
BMP6	0.64	2.08	9.22E-15	7.40E-14
CDC42EP5	0.64	0.66	8.85E-09	3.85E-08
NME3	0.64	2.40	1.33E-05	3.84E-05
NPAS3	0.64	-0.18	9.04E-21	1.23E-19
MTMR11	0.64	2.15	1.13E-21	1.65E-20
IDUA	0.64	1.50	2.88E-12	1.82E-11
ACP5	0.64	0.99	6.80E-07	2.32E-06
NXNL1	0.64	-2.02	5.54E-11	3.06E-10
PCYOX1L	0.64	2.52	1.29E-41	8.06E-40
HMG1	0.64	5.95	3.51E-41	2.14E-39
ADAM33	0.64	4.04	7.24E-18	7.68E-17
TMEM231	0.64	2.89	1.64E-37	7.68E-36
IFI44	0.64	3.89	8.08E-23	1.29E-21
CYP2D7	0.64	-2.11	3.43E-07	1.22E-06
IRF7	0.64	1.84	2.44E-08	1.01E-07
RP4-583P15.15	0.64	0.38	6.31E-10	3.11E-09
TF	0.64	1.38	9.15E-06	2.70E-05
FAM86B1	0.64	0.31	2.94E-21	4.16E-20
NCS1	0.64	2.32	3.04E-16	2.78E-15
CCDC87	0.64	-2.67	4.22E-12	2.61E-11
RPSAP18	0.64	-2.63	7.40E-11	4.04E-10
MYH11	0.64	6.44	2.40E-15	2.02E-14
AFF3	0.64	2.83	2.12E-25	4.12E-24
OSBPL7	0.64	2.34	3.06E-28	7.35E-27
MMP28	0.64	1.11	1.23E-12	8.03E-12
SLC27A3	0.64	3.15	3.16E-21	4.46E-20
GTF2IP13	0.64	1.46	2.42E-20	3.15E-19
SCX	0.64	-0.08	3.20E-05	8.71E-05
IGF2	0.64	5.96	1.17E-17	1.22E-16
FZD7	0.64	4.22	6.30E-25	1.18E-23
ABCA10	0.64	3.88	1.82E-13	1.28E-12
RANBP17	0.64	1.36	2.98E-21	4.21E-20
NEK11	0.63	1.06	3.23E-22	4.94E-21
DLEC1	0.63	-0.83	1.62E-14	1.27E-13
NBEAP3	0.63	-2.27	4.24E-09	1.92E-08
TRBC2	0.63	0.61	8.14E-09	3.55E-08
WBP1	0.63	4.77	1.19E-37	5.61E-36
GAB3	0.63	5.23	7.87E-31	2.25E-29
ST8SIA5	0.63	3.22	8.42E-19	9.64E-18
S1PR4	0.63	-1.89	7.80E-06	2.33E-05
SPATA4	0.63	-1.63	1.06E-10	5.70E-10
PRH1	0.63	-2.18	5.59E-05	0.000146827
RP11-756A22.7	0.63	-1.12	8.58E-07	2.89E-06
AOAH	0.63	0.99	3.97E-11	2.23E-10

GBP1P1	0.63	0.15	4.18E-17	4.15E-16
CHTF18	0.63	0.72	3.65E-10	1.85E-09
FAM155A	0.63	-0.76	3.58E-12	2.23E-11
HEPH	0.63	4.81	2.25E-23	3.76E-22
VCAN	0.63	5.79	3.12E-09	1.43E-08
MSH4	0.63	-0.97	2.17E-07	7.95E-07
BTN3A2	0.63	4.17	4.96E-22	7.43E-21
HES4	0.63	1.63	2.90E-07	1.04E-06
DNAH6	0.63	-1.73	2.75E-10	1.41E-09
RHCE	0.62	-0.88	4.50E-12	2.77E-11
RP11-407P18.1	0.62	-2.30	2.78E-08	1.14E-07
RPL39P40	0.62	-1.17	5.94E-17	5.82E-16
FAM86C2P	0.62	-0.29	1.61E-26	3.38E-25
SLC25A41	0.62	-1.78	8.10E-09	3.54E-08
PHYHIP1	0.62	-1.57	3.56E-05	9.62E-05
DCX	0.62	-2.71	9.26E-11	4.99E-10
TRIP6	0.62	3.57	3.22E-16	2.93E-15
WEE1	0.62	5.87	2.57E-29	6.63E-28
MGP	0.62	8.09	3.79E-14	2.85E-13
PLXNC1	0.62	2.88	4.45E-16	3.99E-15
RFX8	0.62	-1.56	4.97E-09	2.23E-08
NAALADL2	0.62	1.66	1.64E-16	1.54E-15
SCN4B	0.62	4.35	1.03E-20	1.38E-19
PLA2G4C	0.62	5.02	8.01E-31	2.29E-29
OTUD1	0.62	4.94	1.46E-09	6.94E-09
FAR2P2	0.62	1.74	1.07E-27	2.46E-26
LILRA3	0.62	-2.58	2.56E-05	7.07E-05
HYDIN	0.62	0.44	1.83E-17	1.88E-16
SUSD3	0.62	-2.34	3.53E-08	1.43E-07
TNFRSF14	0.62	3.69	1.07E-13	7.73E-13
PRDM8	0.62	0.58	1.67E-20	2.21E-19
SLITRK6	0.62	-1.01	3.35E-06	1.05E-05
LINC00176	0.62	-1.45	3.17E-13	2.17E-12
FBXL22	0.62	2.86	2.02E-13	1.41E-12
PRKG2	0.62	-2.14	8.62E-07	2.90E-06
SH3D21	0.62	0.64	1.32E-18	1.48E-17
CD200	0.62	1.70	2.49E-14	1.92E-13
VWA3B	0.62	-1.63	2.58E-13	1.79E-12
JAM2	0.62	5.16	3.81E-39	2.01E-37
ODC1	0.62	5.83	1.78E-33	6.21E-32
AJAP1	0.62	-1.45	5.89E-09	2.62E-08
TEKT3	0.62	-1.92	6.95E-13	4.64E-12
PCNX2	0.61	1.76	2.24E-06	7.17E-06
ATP2A1	0.61	-0.79	1.79E-18	1.99E-17
SLC22A18	0.61	2.28	2.34E-09	1.09E-08
MLLT11	0.61	5.61	1.31E-12	8.54E-12
ADGRL3	0.61	3.13	1.00E-11	5.96E-11
PRR5	0.61	0.62	1.20E-11	7.08E-11
PLAC8	0.61	-0.83	1.61E-13	1.14E-12
SGCE	0.61	4.24	4.88E-27	1.06E-25
RP11-163E9.2	0.61	0.39	1.71E-22	2.68E-21
PCDH15	0.61	-1.37	2.82E-08	1.16E-07
KLHL33	0.61	0.98	1.04E-18	1.18E-17
RNASET2	0.61	3.38	1.22E-20	1.63E-19
SPAG8	0.61	1.10	1.07E-23	1.82E-22
AC026248.1	0.61	-1.53	1.45E-08	6.17E-08
OTOA	0.61	-2.44	1.13E-08	4.86E-08
RUNX3	0.61	0.46	3.31E-09	1.52E-08
FIBIN	0.61	4.22	1.03E-14	8.25E-14
SNTB1	0.61	2.95	2.03E-23	3.40E-22
STARD5	0.61	1.62	9.69E-20	1.21E-18
PRMT2	0.61	5.44	2.03E-53	3.01E-51
MARVELD1	0.61	3.62	1.37E-22	2.16E-21
NLGN4Y	0.61	-1.36	0.00407974	0.007812466
RP11-266K4.1	0.61	-0.95	4.57E-07	1.59E-06
BSN	0.61	0.02	2.47E-19	2.95E-18
MAMSTR	0.61	0.37	2.50E-12	1.58E-11
HSD17B8	0.61	3.13	5.40E-21	7.45E-20
DHRS11	0.61	3.40	3.39E-48	3.55E-46
FAM35BP	0.61	0.04	9.02E-15	7.25E-14
SCRN2	0.61	4.06	1.59E-16	1.50E-15
SLN	0.61	1.57	1.08E-05	3.16E-05
VSTM5	0.61	-2.48	1.12E-09	5.40E-09
MMP15	0.61	5.15	3.57E-11	2.01E-10
COL4A5	0.61	3.66	5.16E-13	3.49E-12
IL17RD	0.61	2.90	1.95E-19	2.35E-18
SLC22A17	0.61	2.24	6.00E-14	4.44E-13
RAET1G	0.61	-2.10	4.72E-07	1.64E-06
RP11-562I5.1	0.61	-1.04	1.24E-08	5.32E-08
ARSE	0.61	-1.57	1.38E-16	1.30E-15
RNASEK-C17orf49	0.61	-1.92	4.42E-05	0.000118088
GDPD5	0.61	2.05	4.28E-12	2.64E-11
DDAH1	0.61	4.36	4.88E-12	2.99E-11

PARP15	0.61	3.31	1.10E-13	7.90E-13
ARHGDIG	0.61	1.04	5.03E-07	1.75E-06
GFRA2	0.61	0.11	3.09E-13	2.13E-12
NPY5R	0.61	-2.52	1.01E-06	3.36E-06
PMS2P4	0.61	-0.48	4.48E-26	9.12E-25
CRMP1	0.61	2.10	1.14E-29	3.02E-28
ENPP3	0.61	-1.83	1.30E-11	7.63E-11
CTAGE3P	0.61	-2.53	2.86E-08	1.17E-07
CLEC9A	0.61	-2.30	2.85E-08	1.17E-07
FAM65B	0.60	2.68	1.06E-14	8.43E-14
LRP3	0.60	2.94	4.24E-08	1.70E-07
GRID1	0.60	0.45	5.90E-15	4.81E-14
NLRC3	0.60	2.04	3.09E-39	1.65E-37
CXCL12	0.60	6.79	4.11E-19	4.82E-18
DALRD3	0.60	3.07	5.76E-28	1.35E-26
SHANK2	0.60	-2.33	6.56E-11	3.61E-10
TMEM121	0.60	-2.40	4.01E-05	0.000107608
HMGB1P3	0.60	-2.26	3.85E-05	0.000103654
AL358852.1	0.60	-1.76	2.60E-15	2.18E-14
EVC	0.60	2.42	5.04E-08	2.00E-07
SHB	0.60	3.62	1.60E-26	3.35E-25
NDN	0.60	4.74	1.03E-33	3.68E-32
CPE	0.60	5.87	1.17E-21	1.71E-20
HMG2N2P15	0.60	-1.62	9.39E-06	2.77E-05
CLDN1	0.60	-1.32	1.17E-05	3.41E-05
RASAL3	0.60	0.13	4.51E-10	2.26E-09
KIF22	0.60	4.19	1.61E-13	1.14E-12
MEOX2	0.60	3.30	1.62E-19	1.97E-18
SGIP1	0.60	3.12	2.56E-11	1.46E-10
DLK2	0.60	-0.51	4.10E-09	1.86E-08
APBA1	0.60	1.84	2.46E-17	2.49E-16
TAGAP	0.60	0.17	3.49E-12	2.18E-11
ZMYND10	0.60	-1.64	1.90E-14	1.48E-13
CAPN3	0.60	3.58	3.46E-31	1.01E-29
SRPK3	0.60	4.34	2.29E-14	1.77E-13
DNMT3B	0.60	0.58	3.32E-20	4.28E-19
FBXO16	0.60	-0.37	2.24E-16	2.08E-15
MGMT	0.60	2.76	4.43E-10	2.23E-09
EPSTI1	0.60	2.28	4.70E-16	4.20E-15
DHRS1	0.60	2.77	9.38E-33	3.06E-31
ARMC9	0.60	1.27	2.94E-33	9.99E-32
TMEM74B	0.60	1.65	6.76E-17	6.59E-16
FRMPD4	0.60	1.80	4.21E-10	2.12E-09
NBPF25P	0.59	-0.33	2.04E-15	1.72E-14
LINGO1	0.59	-0.12	4.49E-11	2.51E-10
RASSF10	0.59	-2.71	3.09E-07	1.10E-06
LRRC1	0.59	2.78	3.21E-25	6.13E-24
HHIPL1	0.59	0.99	1.16E-24	2.13E-23
HERC6	0.59	4.19	8.00E-27	1.71E-25
SAMD12	0.59	3.38	7.68E-15	6.21E-14
PRCD	0.59	1.09	4.13E-23	6.75E-22
BORCS8-MEF2B	0.59	-0.34	1.69E-07	6.26E-07
SSPO	0.59	-0.79	5.29E-11	2.93E-10
TTLL1	0.59	2.47	5.33E-32	1.63E-30
PLA2G7	0.59	-0.95	1.71E-05	4.86E-05
LMOD2	0.59	9.73	9.03E-17	8.67E-16
PABPC1P4	0.59	-1.00	4.83E-11	2.69E-10
LG11	0.59	-1.51	3.17E-11	1.80E-10
FLT4	0.59	3.23	1.43E-22	2.24E-21
TRANK1	0.59	3.24	2.64E-14	2.02E-13
RCN1P2	0.59	1.65	1.15E-16	1.10E-15
KLRC1	0.59	-2.21	2.62E-07	9.49E-07
PHGDH	0.59	1.95	2.51E-11	1.44E-10
DAPK3	0.59	5.22	6.15E-15	5.01E-14
RP5-1052I5.2	0.59	2.71	2.72E-17	2.74E-16
EGFL8	0.59	2.68	6.80E-25	1.27E-23
ICOSLG	0.59	2.19	2.05E-16	1.91E-15
ABHD14A-ACY1	0.59	-0.64	1.03E-08	4.46E-08
PDLIM7	0.59	4.31	5.39E-09	2.41E-08
RPL32P29	0.59	0.50	1.20E-11	7.06E-11
TMEM176B	0.59	4.87	4.34E-11	2.43E-10
TMEM179	0.59	-2.14	9.70E-07	3.24E-06
SLC16A5	0.59	2.71	2.25E-20	2.94E-19
VWA1	0.59	2.67	1.92E-06	6.20E-06
DUSP8	0.59	3.38	1.37E-14	1.08E-13
BST1	0.59	1.86	6.42E-22	9.56E-21
NOXA1	0.59	0.63	1.33E-05	3.85E-05
CEMIP	0.59	-0.02	5.13E-07	1.78E-06
PSRC1	0.59	0.12	8.28E-14	6.04E-13
AKR7A3	0.59	-2.48	4.57E-10	2.29E-09
MOV10L1	0.59	-2.24	1.33E-07	4.97E-07
CRB1	0.59	-0.95	2.16E-09	1.01E-08
ANKRD35	0.59	0.59	1.49E-12	9.65E-12

CYP2T1P	0.59	-0.35	1.47E-15	1.26E-14
CD69	0.58	-0.48	9.57E-06	2.82E-05
PRAM1	0.58	-0.48	6.13E-11	3.38E-10
WT1	0.58	1.67	3.52E-18	3.81E-17
PAQR7	0.58	1.52	4.08E-24	7.14E-23
COL6A2	0.58	6.91	2.47E-08	1.02E-07
ZNF441	0.58	3.39	5.21E-13	3.52E-12
ADAM20P1	0.58	-0.24	1.61E-15	1.38E-14
PLXDC2	0.58	5.41	6.56E-17	6.40E-16
GABRA4	0.58	4.58	2.96E-10	1.51E-09
PLCH1	0.58	-0.38	1.66E-06	5.38E-06
LIG1	0.58	1.58	2.76E-27	6.18E-26
TMEM191C	0.58	-0.78	8.53E-13	5.67E-12
METRN	0.58	3.26	1.12E-09	5.40E-09
EFEMP2	0.58	5.32	5.87E-19	6.80E-18
TMEM74	0.58	-0.24	3.80E-07	1.34E-06
ZNF177	0.58	1.74	1.06E-11	6.27E-11
PRDM1	0.58	1.30	3.54E-12	2.21E-11
ISYNA1	0.58	3.55	2.41E-11	1.38E-10
C16orf86	0.58	0.62	4.53E-08	1.81E-07
DNALI1	0.58	1.77	6.95E-25	1.30E-23
MCM2	0.58	2.48	6.08E-33	2.02E-31
NOS2	0.58	-2.26	4.20E-06	1.30E-05
GSN	0.58	9.69	1.59E-17	1.64E-16
MYO1D	0.58	3.84	1.00E-15	8.71E-15
MAGED2	0.58	6.48	8.72E-55	1.43E-52
C1QTNF9B	0.58	0.31	3.08E-12	1.93E-11
SIDT1	0.58	0.39	1.49E-20	1.98E-19
PAGR1	0.58	3.55	3.96E-21	5.54E-20
CLIP3	0.58	2.06	2.49E-20	3.24E-19
CTSF	0.58	5.47	3.19E-22	4.89E-21
INPP4B	0.58	5.42	1.43E-10	7.60E-10
RASIP1	0.58	3.68	6.39E-16	5.64E-15
C19orf66	0.58	3.50	1.92E-33	6.67E-32
ASP4	0.58	1.99	1.70E-16	1.60E-15
ST8SIA1	0.58	1.12	4.44E-20	5.66E-19
UBE2L6	0.58	3.68	8.32E-27	1.78E-25
NR1D1	0.58	3.24	2.32E-09	1.08E-08
GRIA3	0.58	0.92	2.80E-06	8.84E-06
GPRASP2	0.58	4.25	4.77E-35	1.86E-33
EEF1A1P5	0.58	1.07	3.25E-09	1.49E-08
ZNF575	0.58	-0.71	5.21E-13	3.51E-12
GFAP	0.58	1.95	1.43E-17	1.49E-16
FBXL2	0.58	1.73	1.33E-28	3.25E-27
RAB28P5	0.58	-0.07	4.34E-18	4.66E-17
NR0B2	0.57	1.55	5.77E-10	2.86E-09
KCNQ4	0.57	1.35	2.68E-18	2.93E-17
GALNT12	0.57	-0.15	6.39E-12	3.88E-11
SYTL1	0.57	-0.15	3.14E-12	1.96E-11
HCST	0.57	0.21	2.78E-07	1.00E-06
MFSD4A	0.57	0.42	1.27E-14	1.00E-13
LIN7B	0.57	2.15	2.43E-10	1.25E-09
UCN	0.57	-0.37	3.13E-10	1.60E-09
C10orf71	0.57	5.96	1.74E-14	1.36E-13
SYT12	0.57	-1.06	2.72E-08	1.12E-07
FBXO17	0.57	1.75	7.61E-29	1.89E-27
CTC-435M10.3	0.57	3.88	2.21E-08	9.18E-08
HIST1H3H	0.57	-2.04	1.05E-08	4.53E-08
RAD51AP2	0.57	-1.23	2.36E-09	1.10E-08
CNTN4	0.57	0.72	7.75E-08	3.00E-07
IFITM10	0.57	-2.34	3.21E-06	1.01E-05
ORMDL3	0.57	5.56	2.60E-49	2.88E-47
DAND5	0.57	2.12	9.03E-14	6.55E-13
FAM102B	0.57	3.31	2.72E-14	2.08E-13
DNAJC30	0.57	3.37	6.59E-23	1.06E-21
LGALS4	0.57	-0.75	6.85E-09	3.03E-08
AC108938.5	0.57	-0.32	1.80E-07	6.65E-07
TMEM253	0.57	-2.35	1.90E-09	8.95E-09
EFNB3	0.57	-1.00	2.45E-07	8.90E-07
SEMA3B	0.57	3.56	2.10E-13	1.46E-12
BHLHE22	0.57	-1.57	1.85E-07	6.80E-07
GAMT	0.57	4.15	3.70E-08	1.50E-07
JUN	0.57	5.78	5.58E-18	5.95E-17
GALNT13	0.57	-2.27	6.62E-07	2.26E-06
RP11-368J21.3	0.57	-2.07	6.18E-08	2.43E-07
ZNF365	0.57	0.94	1.21E-18	1.37E-17
ZDHHC1	0.57	1.34	1.76E-15	1.50E-14
RHNO1	0.57	2.26	2.25E-36	9.72E-35
CD27	0.57	0.40	1.58E-14	1.24E-13
ATPIF1	0.57	6.77	1.23E-20	1.64E-19
C16orf74	0.56	-1.21	8.40E-10	4.11E-09
NAALADL1	0.56	0.87	3.18E-15	2.65E-14
ZBP1	0.56	-0.88	7.29E-14	5.33E-13

BLNK	0.56	-0.33	5.39E-09	2.41E-08
GRIN2B	0.56	-2.67	1.17E-09	5.61E-09
FLT3LG	0.56	0.96	2.80E-18	3.06E-17
ZNF843	0.56	0.82	2.21E-23	3.68E-22
PHLDB2	0.56	7.12	1.22E-12	8.01E-12
GBP4	0.56	4.40	2.84E-16	2.60E-15
FAM161B	0.56	2.80	4.79E-17	4.74E-16
PDE6B	0.56	0.89	2.47E-23	4.10E-22
ENO2	0.56	3.91	1.90E-22	2.95E-21
JMJD4	0.56	3.04	5.07E-17	5.00E-16
LRRC38	0.56	-1.39	0.000512392	0.001156558
IL12A	0.56	-1.13	8.03E-10	3.94E-09
CES1P1	0.56	1.31	0.001847058	0.003779868
COL6A6	0.56	2.22	2.28E-07	8.31E-07
HBEGF	0.56	5.11	2.11E-15	1.78E-14
CDKL2	0.56	-2.69	1.97E-06	6.34E-06
HLA-DOB	0.56	-1.26	3.14E-06	9.86E-06
FSIP1	0.56	-0.45	5.20E-08	2.06E-07
FMNL3	0.56	4.75	1.35E-26	2.84E-25
CCDC61	0.56	1.39	1.10E-10	5.92E-10
ADAMTS16	0.56	-1.96	9.36E-07	3.13E-06
LRRC4B	0.56	-1.71	3.85E-05	0.000103657
MAB21L1	0.56	-0.53	9.47E-14	6.85E-13
CHRNA1	0.56	-1.14	3.65E-07	1.29E-06
CYP21A2	0.56	-1.41	5.28E-06	1.61E-05
ST3GAL6	0.56	5.93	2.54E-26	5.25E-25
PPIAP16	0.56	-1.99	5.29E-07	1.83E-06
TRAF1	0.56	2.78	6.83E-19	7.87E-18
DACT3	0.56	3.55	1.55E-21	2.25E-20
B3GNT5	0.56	2.26	3.21E-09	1.47E-08
HID1	0.56	3.16	3.12E-23	5.14E-22
TAS2R19	0.56	-2.61	2.91E-06	9.16E-06
ATP2A3	0.56	2.66	1.90E-16	1.78E-15
AOC3	0.56	4.24	4.66E-11	2.60E-10
TENM3	0.56	1.93	8.17E-16	7.16E-15
SEPT6	0.56	4.00	5.33E-23	8.64E-22
C14orf79	0.56	1.51	2.69E-26	5.55E-25
ASMTL	0.56	4.28	7.94E-24	1.36E-22
NT5C1A	0.56	1.08	5.84E-09	2.60E-08
ZFP2	0.56	0.71	3.18E-25	6.09E-24
NXPH3	0.56	1.98	1.93E-17	1.97E-16
CMKLR1	0.56	3.78	3.76E-15	3.13E-14
PGBD4P3	0.56	-2.23	2.79E-09	1.29E-08
PLD5	0.56	-1.15	1.08E-07	4.07E-07
KLK14	0.56	-1.27	5.79E-08	2.28E-07
ZSCAN18	0.56	5.47	4.02E-37	1.83E-35
RHBDL2	0.56	0.81	2.58E-14	1.98E-13
BTN3A3	0.55	3.60	1.32E-19	1.62E-18
PNMAL1	0.55	3.41	3.90E-17	3.88E-16
BICC1	0.55	3.70	3.20E-14	2.42E-13
FAM43B	0.55	0.34	8.91E-07	2.99E-06
PLGLB2	0.55	-1.07	0.00203526	0.004133196
BSC12	0.55	2.23	1.41E-05	4.06E-05
ACAP1	0.55	1.81	1.81E-15	1.54E-14
IQSEC3	0.55	1.17	4.92E-16	4.39E-15
NOX4	0.55	2.08	3.13E-08	1.28E-07
WTIP	0.55	3.99	7.30E-32	2.22E-30
CADPS	0.55	3.94	2.01E-12	1.29E-11
GPCPD1	0.55	5.03	2.57E-22	3.96E-21
AGAP10P	0.55	-0.82	8.68E-08	3.34E-07
RP11-1223D19.1	0.55	-1.45	2.54E-07	9.21E-07
MYOM2	0.55	10.02	6.87E-20	8.66E-19
TNFSF15	0.55	-2.08	3.60E-08	1.46E-07
TMEM8B	0.55	3.40	1.70E-32	5.44E-31
ABCC11	0.55	-2.59	3.54E-09	1.62E-08
S100A14	0.55	0.72	1.08E-09	5.20E-09
CXCR6	0.55	0.02	1.72E-07	6.38E-07
PADI2	0.55	-0.69	9.97E-08	3.79E-07
OPRL1	0.55	-1.18	9.55E-08	3.65E-07
ANKRD65	0.55	0.23	1.78E-07	6.56E-07
CPXM1	0.55	-0.11	0.001029433	0.002195442
CBLN3	0.55	0.24	1.25E-12	8.19E-12
LAG3	0.55	-1.93	1.68E-07	6.22E-07
RP11-104G3.2	0.55	-0.04	7.26E-08	2.83E-07
REC8	0.55	1.71	3.78E-18	4.08E-17
PATZ1	0.55	3.58	5.00E-53	7.04E-51
NFASC	0.55	4.68	1.33E-16	1.26E-15
KLHL34	0.55	1.67	4.71E-14	3.52E-13
TPTE2P2	0.55	-1.12	1.10E-09	5.30E-09
POU2F2	0.55	0.28	2.93E-11	1.67E-10
ALKBH7	0.55	4.39	1.56E-05	4.47E-05
MIEF2	0.55	4.06	3.30E-21	4.65E-20
CMTM3	0.55	3.58	7.22E-17	7.01E-16

NUP210	0.55	2.10	7.10E-22	1.05E-20
UNC5B	0.55	3.92	3.60E-14	2.71E-13
SLC5A4	0.55	-2.20	0.000495318	0.001120552
ANKRD36B	0.55	2.35	4.92E-24	8.61E-23
HHIP	0.55	-0.82	1.98E-08	8.29E-08
TSPAN4	0.54	3.62	6.55E-08	2.57E-07
SLC43A2	0.54	2.00	6.68E-13	4.47E-12
PPFIA4	0.54	5.15	2.03E-15	1.72E-14
IL33	0.54	4.49	3.20E-08	1.30E-07
ROBO1	0.54	3.26	9.03E-15	7.25E-14
ADAMTS10	0.54	2.47	1.57E-14	1.24E-13
RP4-669L17.8	0.54	-1.54	0.001948568	0.003974006
MYCL	0.54	-0.87	4.69E-10	2.34E-09
HLA-F	0.54	4.47	1.53E-18	1.71E-17
RUNX1	0.54	2.74	9.98E-08	3.80E-07
TPTE2P1	0.54	-2.03	3.11E-11	1.77E-10
PRRT3	0.54	-0.29	6.51E-16	5.74E-15
RGS13	0.54	-1.82	2.19E-07	8.01E-07
MEGF10	0.54	-1.78	4.00E-07	1.41E-06
FADS2	0.54	3.65	2.39E-11	1.37E-10
HNRNPA1L2	0.54	2.09	4.29E-27	9.41E-26
EGR3	0.54	1.48	0.00012582	0.000312777
ZNF610	0.54	1.48	8.68E-20	1.09E-18
HCN2	0.54	2.13	3.33E-05	9.03E-05
BCAS4	0.54	1.48	7.34E-27	1.58E-25
CNKSR2	0.54	1.61	3.75E-11	2.11E-10
FGFBP3	0.54	-0.54	1.39E-15	1.20E-14
MTCO2P22	0.54	-1.65	0.003750637	0.007235191
SLC24A3	0.54	0.41	5.33E-12	3.26E-11
M1AP	0.54	-1.91	9.22E-08	3.53E-07
UBBP4	0.54	-1.98	5.08E-09	2.28E-08
TRAIP	0.54	-0.45	7.70E-17	7.44E-16
RP11-7F17.1	0.54	-2.06	0.009235738	0.016399725
VEGFC	0.54	2.76	1.06E-16	1.01E-15
APOBEC3G	0.54	1.83	4.59E-25	8.69E-24
C16orf58	0.54	4.61	1.25E-29	3.29E-28
AF186192.5	0.54	0.59	1.13E-12	7.41E-12
SLC7A9	0.54	-2.52	6.01E-09	2.67E-08
CFAP53	0.54	-2.06	1.42E-10	7.54E-10
CFAP70	0.54	2.58	9.43E-18	9.93E-17
CHCHD6	0.54	2.04	8.45E-15	6.81E-14
CSF1R	0.54	4.51	2.13E-13	1.49E-12
BBC3	0.54	0.29	2.37E-09	1.10E-08
NME5	0.54	1.32	2.78E-17	2.80E-16
AC098614.2	0.54	-0.26	7.55E-13	5.03E-12
TEX22	0.54	-2.37	2.33E-07	8.50E-07
DCST2	0.54	-1.21	1.89E-10	9.91E-10
CTC-359D24.3	0.54	0.30	1.02E-16	9.72E-16
STK38L	0.54	6.29	1.59E-10	8.38E-10
DNASE1L2	0.54	-2.22	3.45E-06	1.08E-05
ANKRD18B	0.54	-1.06	1.18E-10	6.33E-10
FAM173A	0.54	1.15	0.00024104	0.000573172
HAS3	0.54	-0.27	2.35E-10	1.22E-09
ALDH4A1	0.53	5.12	4.37E-22	6.58E-21
MORN4	0.53	3.20	1.13E-33	4.02E-32
TMEM240	0.53	-0.71	2.67E-06	8.45E-06
C6orf1	0.53	3.11	3.96E-12	2.45E-11
C9orf43	0.53	-1.82	1.53E-11	8.93E-11
DNPH1	0.53	2.41	1.02E-08	4.39E-08
ZNF775	0.53	1.60	4.79E-15	3.94E-14
GABRB1	0.53	-0.09	1.20E-08	5.13E-08
POLR1E	0.53	3.58	9.29E-34	3.33E-32
RNF112	0.53	1.05	2.82E-13	1.95E-12
NYNRIN	0.53	3.78	1.40E-27	3.20E-26
MTRNR2L11	0.53	7.98	3.01E-07	1.08E-06
PXDNL	0.53	6.03	4.01E-18	4.32E-17
TMEM232	0.53	-0.74	1.32E-10	7.05E-10
OLFML2B	0.53	1.69	2.73E-07	9.84E-07
CRY2	0.53	6.27	2.46E-37	1.14E-35
GAPT	0.53	-0.63	5.73E-07	1.98E-06
NUDT17	0.53	1.20	1.91E-21	2.75E-20
MX2	0.53	3.64	2.31E-22	3.58E-21
MYO10	0.53	3.62	1.20E-21	1.75E-20
JAM3	0.53	5.44	2.28E-50	2.71E-48
BRF2	0.53	3.67	9.76E-29	2.40E-27
PSMB9	0.53	2.87	5.51E-16	4.90E-15
ATP13A4	0.53	-2.50	4.37E-08	1.75E-07
PTPRVP	0.53	-2.14	9.05E-10	4.40E-09
ISM1	0.53	0.05	3.96E-09	1.80E-08
COL9A3	0.53	0.18	9.73E-06	2.86E-05
C19orf60	0.53	3.31	8.28E-07	2.80E-06
MIB2	0.53	4.02	1.51E-06	4.91E-06
GPX8	0.53	3.09	5.57E-12	3.40E-11

KMT5C	0.53	1.42	6.08E-12	3.70E-11
MAATS1	0.53	0.22	8.14E-14	5.93E-13
MYO15B	0.53	5.01	2.10E-13	1.47E-12
TRIM73	0.53	0.88	3.92E-21	5.49E-20
TMEM156	0.53	-1.68	4.68E-09	2.11E-08
SLC16A8	0.53	-1.70	1.33E-06	4.36E-06
TTLL7	0.53	3.07	1.87E-08	7.83E-08
UPK3BL	0.53	2.79	0.001881494	0.00384658
ABHD16B	0.52	-1.07	0.000426973	0.000977022
CLEC3B	0.52	4.83	1.22E-05	3.52E-05
PPIEL	0.52	-0.17	1.96E-17	2.00E-16
SHF	0.52	1.65	7.04E-24	1.21E-22
ITGA8	0.52	3.15	5.00E-08	1.99E-07
SPATA20	0.52	5.45	1.41E-17	1.46E-16
FBXO44	0.52	3.59	3.99E-18	4.30E-17
PACS1	0.52	5.55	1.10E-29	2.93E-28
FST	0.52	1.59	1.58E-08	6.67E-08
NANOS3	0.52	-2.25	5.61E-06	1.70E-05
AC073333.1	0.52	0.56	2.78E-08	1.14E-07
TCTEX1D2	0.52	0.92	6.14E-15	5.00E-14
TMEM42	0.52	2.97	1.29E-32	4.16E-31
C4BPA	0.52	-2.62	7.51E-09	3.30E-08
C5orf56	0.52	3.30	1.57E-30	4.41E-29
UNC13D	0.52	2.08	4.67E-09	2.11E-08
SLC2A4RG	0.52	4.38	3.69E-09	1.68E-08
TRAF5	0.52	3.06	2.72E-16	2.51E-15
AGBL2	0.52	-1.98	2.85E-09	1.31E-08
KIF13A	0.52	6.83	6.44E-23	1.04E-21
SOHLH2	0.52	-0.75	4.30E-05	0.000114926
SLC16A11	0.52	-1.94	1.04E-05	3.05E-05
SLAMF6	0.52	-0.38	1.06E-07	4.02E-07
TSPOAP1	0.52	3.61	1.37E-12	8.92E-12
SELP	0.52	2.72	1.16E-13	8.32E-13
FXVD6	0.52	5.20	3.65E-27	8.06E-26
TKFC	0.52	2.91	6.76E-23	1.09E-21
DYNC2LI1	0.52	3.53	7.85E-36	3.25E-34
D2HGDH	0.52	3.25	2.73E-10	1.40E-09
KRTAP5-1	0.52	-2.65	0.000100807	0.000254525
ELOVL4	0.52	-0.95	2.39E-07	8.69E-07
GSDMD	0.52	3.54	1.76E-08	7.43E-08
WHRN	0.52	-0.87	1.01E-09	4.88E-09
SPEF2	0.52	2.05	2.03E-11	1.17E-10
NFKB2	0.52	3.17	7.33E-17	7.11E-16
CFH	0.52	6.35	1.47E-09	6.98E-09
LRRC49	0.52	5.91	1.73E-20	2.29E-19
LENG9	0.52	0.23	0.00052786	0.001188075
RPS28P7	0.52	2.11	3.41E-06	1.07E-05
TMEM59L	0.52	0.17	2.63E-05	7.24E-05
PPP1R3C	0.52	6.81	1.14E-14	9.06E-14
RPS2P32	0.52	0.51	1.38E-12	9.00E-12
EID3	0.52	-0.53	2.66E-12	1.68E-11
GLIPR1L2	0.52	1.42	3.13E-13	2.15E-12
DUSP26	0.52	5.62	1.26E-15	1.09E-14
ARMC5	0.52	2.21	1.02E-09	4.93E-09
WIPF3	0.52	3.00	2.21E-24	3.95E-23
KRT80	0.52	-1.80	1.01E-05	2.97E-05
TTC23L	0.52	-2.35	5.02E-09	2.26E-08
CERKL	0.52	0.71	2.11E-10	1.10E-09
LINC00521	0.52	-0.89	2.90E-05	7.93E-05
C21orf33	0.52	4.24	0.005043505	0.009470706
AP006285.1	0.52	-0.82	5.93E-17	5.82E-16
AP006285.2	0.52	-0.82	5.93E-17	5.82E-16
XPO4	0.51	5.79	5.14E-12	3.14E-11
TMEM200C	0.51	-0.74	8.90E-09	3.87E-08
TIAM1	0.51	1.00	1.01E-11	6.04E-11
FBXO24	0.51	0.12	6.58E-22	9.78E-21
NRIP3	0.51	0.12	5.51E-13	3.71E-12
ACKR4	0.51	1.82	1.95E-06	6.28E-06
IL1B	0.51	-1.35	0.005451698	0.010159763
MASP1	0.51	6.93	3.75E-19	4.41E-18
OMG	0.51	-1.23	1.59E-07	5.90E-07
RP11-75L1.2	0.51	-0.54	2.39E-05	6.64E-05
FAM9A	0.51	-2.47	2.78E-07	1.00E-06
MMP23B	0.51	2.54	0.000330476	0.000768709
NEK5	0.51	0.73	1.33E-16	1.26E-15
VPS37D	0.51	-0.44	1.15E-06	3.79E-06
NOTCH2NL	0.51	3.26	3.88E-14	2.92E-13
HSF4	0.51	3.77	5.69E-11	3.14E-10
ZNF135	0.51	2.50	3.40E-33	1.15E-31
ARHGAP39	0.51	-0.30	6.42E-09	2.85E-08
FANCG	0.51	1.58	4.69E-21	6.49E-20
NEURL1	0.51	-2.12	4.42E-10	2.22E-09
RET	0.51	-0.21	1.26E-06	4.15E-06

FCHSD1	0.51	2.39	1.34E-20	1.79E-19
ALS2CR12	0.51	2.13	3.00E-15	2.51E-14
ZNF618	0.51	2.01	7.12E-17	6.93E-16
RP3-454G6.2	0.51	-2.11	2.65E-09	1.23E-08
BAALC	0.51	1.31	1.35E-16	1.28E-15
AVPR2	0.51	1.09	4.69E-06	1.44E-05
CATSPER2	0.51	1.91	1.16E-14	9.20E-14
CFAP221	0.51	-0.10	7.30E-17	7.08E-16
SEMA4C	0.51	4.23	6.65E-19	7.68E-18
TPTE2P6	0.51	-2.01	6.82E-08	2.67E-07
SOX4	0.51	2.90	2.60E-11	1.49E-10
IL7R	0.51	1.47	3.25E-05	8.84E-05
KDELR3	0.51	3.05	4.58E-14	3.43E-13
TNFRSF10C	0.51	-0.21	1.70E-11	9.88E-11
EPS8L2	0.51	0.19	1.47E-05	4.21E-05
PRSS30P	0.51	-2.60	7.20E-05	0.000185999
NHSL1	0.51	4.73	4.34E-32	1.34E-30
PDE8B	0.51	2.70	1.84E-06	5.94E-06
UBE2H	0.51	7.45	3.25E-27	7.22E-26
PTPRF	0.51	1.91	2.80E-06	8.82E-06
RHEBL1	0.50	-1.21	1.70E-11	9.88E-11
TBXA2R	0.50	0.50	9.84E-12	5.87E-11
ZNF853	0.50	3.48	2.08E-25	4.06E-24
PPP1R15A	0.50	6.11	5.31E-29	1.33E-27
NLRCS	0.50	3.48	1.94E-16	1.81E-15
CPED1	0.50	4.79	1.57E-08	6.64E-08
RABGAP1L	0.50	6.98	5.29E-24	9.20E-23
DDX60	0.50	3.58	3.61E-10	1.83E-09
RPL4P5	0.50	-1.29	1.25E-06	4.12E-06
ZNF114	0.50	-1.04	1.05E-14	8.40E-14
CISH	0.50	3.50	3.28E-09	1.50E-08
ZNF251	0.50	4.06	6.38E-20	8.04E-19
AC008810.1	0.50	-0.06	4.95E-06	1.51E-05
AL135745.1	0.50	-0.06	4.95E-06	1.51E-05
CATSPERG	0.50	0.03	2.00E-20	2.62E-19
PER3	0.50	4.15	1.22E-08	5.20E-08
C1orf35	0.50	2.36	2.02E-15	1.71E-14
MAMDC4	0.50	2.48	1.66E-06	5.40E-06
DKK2	0.50	0.23	0.000133553	0.000330381
SV2C	0.50	-1.43	1.34E-05	3.88E-05
MMP17	0.50	-0.99	1.34E-06	4.40E-06
HSFX2	0.50	-2.14	0.017566317	0.029328877
DGKB	0.50	-0.97	9.90E-08	3.77E-07
PELP1	0.50	4.45	2.74E-16	2.52E-15
TRPC6	0.50	0.01	4.75E-08	1.89E-07
TSHZ2	0.50	2.37	6.80E-14	4.99E-13
PCSK4	0.50	-1.86	2.00E-05	5.61E-05
PTPRN2	0.50	1.73	1.01E-22	1.60E-21
PROS1	0.50	6.92	4.53E-10	2.27E-09
PLA2G4B	0.50	1.99	2.36E-07	8.60E-07
ITPK1	-0.50	5.72	3.48E-23	5.72E-22
SLC41A1	-0.50	8.27	4.38E-20	5.59E-19
ITGA11	-0.50	4.04	3.69E-14	2.77E-13
FAM83D	-0.50	-0.73	2.47E-05	6.84E-05
LIPG	-0.50	0.37	1.46E-06	4.76E-06
CDKN1A	-0.50	6.17	2.65E-11	1.51E-10
GPATCH4	-0.50	4.22	6.09E-33	2.02E-31
ATP6V1C2	-0.50	1.13	1.27E-14	1.00E-13
NOD2	-0.50	-0.03	4.54E-10	2.28E-09
CCT8P1	-0.50	-0.71	2.22E-06	7.11E-06
FABP5P7	-0.50	3.32	0.027500515	0.044062906
SLC7A7	-0.50	2.34	5.51E-12	3.36E-11
FURIN	-0.51	5.35	1.16E-16	1.11E-15
FCAR	-0.51	-0.23	4.43E-06	1.36E-05
MS4A6A	-0.51	4.74	5.76E-10	2.85E-09
ASB15	-0.51	5.58	2.30E-06	7.34E-06
LARP1B	-0.51	4.27	4.56E-18	4.89E-17
G0S2	-0.51	4.34	1.70E-05	4.83E-05
AK9	-0.51	2.98	5.55E-17	5.45E-16
KLHL23	-0.51	3.84	4.63E-13	3.14E-12
ZNF367	-0.51	2.18	6.31E-09	2.81E-08
KLHL2	-0.51	3.59	2.83E-12	1.78E-11
FOXF1	-0.51	-1.94	1.15E-05	3.35E-05
SLC39A14	-0.51	7.14	8.33E-20	1.04E-18
NR4A2	-0.51	1.93	0.00100809	0.00215349
BATF	-0.51	-1.57	0.000111952	0.000280843
DLGAP5	-0.51	-2.14	0.000119492	0.000298195
LOC100421166	-0.51	-2.26	0.002270427	0.004568674
MAOA	-0.51	7.15	1.48E-19	1.81E-18
SUN2	-0.51	6.38	2.62E-24	4.65E-23
STK26	-0.51	0.93	1.12E-06	3.71E-06
H2AFZ	-0.51	5.29	2.61E-24	4.63E-23
SRCAP	-0.51	4.39	1.63E-05	4.65E-05

FAM105A	-0.51	1.53	4.02E-09	1.82E-08
PLCL1	-0.51	6.54	7.79E-12	4.67E-11
TMEM236	-0.51	0.86	3.60E-13	2.46E-12
ABCB6	-0.51	3.74	1.52E-27	3.46E-26
BMS1P10	-0.52	0.52	1.16E-11	6.88E-11
ATP1B3	-0.52	5.14	8.79E-18	9.27E-17
RP11-188C12.2	-0.52	-1.51	6.63E-08	2.59E-07
HADHB	-0.52	9.70	7.57E-33	2.49E-31
KIF24	-0.52	0.45	1.59E-11	9.25E-11
CLSPN	-0.52	-1.40	5.66E-07	1.95E-06
GPR180	-0.52	3.30	1.59E-10	8.38E-10
PHTF2	-0.52	4.97	4.13E-11	2.32E-10
KIAA1456	-0.52	4.38	9.79E-21	1.32E-19
LRRC10B	-0.52	-0.63	1.47E-08	6.24E-08
TGM2	-0.52	9.07	3.19E-19	3.78E-18
MMP19	-0.52	2.45	2.77E-07	9.99E-07
GFOD1	-0.52	5.64	1.44E-25	2.85E-24
MTFR1	-0.52	4.10	3.28E-15	2.73E-14
ERRF11	-0.52	4.13	2.88E-10	1.48E-09
PPP1CC	-0.52	7.16	2.10E-28	5.07E-27
B4GALT6	-0.52	2.07	6.92E-09	3.06E-08
PSME4	-0.52	6.80	4.69E-29	1.18E-27
TMEM38B	-0.52	5.41	6.60E-15	5.35E-14
KAT2B	-0.52	6.16	4.91E-15	4.04E-14
GUCY1A2	-0.52	3.95	5.00E-08	1.99E-07
LILRB3	-0.52	0.65	1.56E-06	5.07E-06
CD300LG	-0.52	4.57	3.64E-13	2.49E-12
SLC25A34	-0.52	3.40	4.08E-08	1.64E-07
SSR3	-0.52	7.26	3.78E-28	8.97E-27
LGR4	-0.52	4.97	5.48E-08	2.16E-07
KLF9	-0.52	6.97	2.02E-15	1.71E-14
EFHC2	-0.53	2.83	2.21E-09	1.03E-08
HOXB6	-0.53	-1.60	2.80E-07	1.01E-06
ITGA5	-0.53	6.18	1.69E-17	1.74E-16
MFSB6	-0.53	4.61	1.07E-27	2.47E-26
NSDHL	-0.53	3.82	1.59E-22	2.50E-21
TPPP	-0.53	3.91	4.10E-12	2.53E-11
ANKRD7	-0.53	-2.55	7.51E-09	3.30E-08
bP-2171C21.2	-0.53	-2.15	3.66E-05	9.88E-05
ZBTB7B	-0.53	4.29	3.66E-22	5.58E-21
MEGF9	-0.53	3.93	2.76E-11	1.58E-10
MAP3K6	-0.53	5.20	1.52E-15	1.30E-14
E2F7	-0.53	-2.54	1.80E-05	5.10E-05
MFAP3	-0.53	3.37	1.90E-05	5.35E-05
TACC1	-0.53	6.93	2.07E-12	1.33E-11
PNP	-0.53	3.43	5.45E-12	3.33E-11
LRRC7	-0.53	0.32	3.43E-07	1.22E-06
FMO2	-0.53	5.95	2.20E-07	8.03E-07
TMEM2	-0.53	3.49	4.54E-10	2.28E-09
UBASH3B	-0.53	1.18	5.90E-09	2.63E-08
TLDC2	-0.53	0.00	1.14E-07	4.31E-07
KIF18B	-0.53	-1.01	1.16E-09	5.56E-09
TLR8	-0.53	0.50	2.65E-07	9.57E-07
FAM213A	-0.53	6.39	1.29E-42	8.79E-41
WISP1	-0.53	0.84	4.57E-06	1.41E-05
GMPR	-0.53	5.87	3.34E-30	9.13E-29
PTH1R	-0.53	2.94	4.24E-10	2.13E-09
SAT1	-0.53	7.00	9.37E-17	8.99E-16
ACSL1	-0.53	8.38	7.99E-17	7.70E-16
CFRA1	-0.53	2.70	9.71E-08	3.70E-07
PALM2	-0.53	0.26	4.29E-07	1.50E-06
SMIM3	-0.54	4.54	3.72E-22	5.67E-21
ZFP92	-0.54	0.38	2.68E-18	2.93E-17
PARVB	-0.54	6.07	1.07E-27	2.46E-26
RP11-62J1.3	-0.54	-0.54	0.000821682	0.001783949
CASKIN1	-0.54	-1.72	0.000274296	0.000646652
SLC7A1	-0.54	4.09	2.92E-14	2.23E-13
VCL	-0.54	8.49	1.62E-16	1.52E-15
NUF2	-0.54	-1.58	2.03E-06	6.52E-06
MOB3B	-0.54	1.87	7.02E-12	4.24E-11
MAN1A1	-0.54	5.11	7.47E-09	3.28E-08
PPM1L	-0.54	5.40	2.95E-21	4.18E-20
JPH1	-0.54	3.93	3.37E-15	2.80E-14
CBLB	-0.54	5.83	2.04E-18	2.26E-17
RP11-644F5.10	-0.54	3.43	7.61E-17	7.36E-16
PLXNB1	-0.54	5.17	3.21E-28	7.65E-27
C4orf26	-0.54	-2.28	1.02E-08	4.41E-08
BHMT2	-0.54	2.52	4.82E-10	2.41E-09
TMEFF2	-0.54	-1.34	8.32E-07	2.81E-06
DSP	-0.54	8.64	6.70E-19	7.73E-18
ACR	-0.54	-1.87	4.50E-06	1.39E-05
FOSL2	-0.54	5.85	3.09E-12	1.94E-11
C6orf106	-0.54	7.11	4.99E-64	1.47E-61

CDC42EP4	-0.55	5.34	1.07E-27	2.46E-26
EPHB6	-0.55	1.34	1.29E-11	7.59E-11
TMEM245	-0.55	7.25	1.59E-22	2.50E-21
GPR82	-0.55	-0.98	4.86E-09	2.19E-08
FAM46C	-0.55	3.70	3.07E-17	3.09E-16
NFKBIZ	-0.55	3.90	9.42E-10	4.57E-09
IP6K3	-0.55	4.95	3.02E-14	2.30E-13
ABHD5	-0.55	3.74	1.09E-12	7.17E-12
LYPD5	-0.55	-0.12	5.50E-12	3.36E-11
SLCO5A1	-0.55	3.77	1.30E-14	1.03E-13
UAP1	-0.55	4.72	1.00E-22	1.59E-21
PPP3CC	-0.55	5.18	3.24E-62	8.60E-60
PDCD6IPP1	-0.55	-0.11	2.67E-06	8.44E-06
MFS2A	-0.55	-1.03	1.89E-06	6.08E-06
NR2E3	-0.55	-2.34	1.36E-10	7.24E-10
KIF14	-0.55	-1.65	4.20E-07	1.47E-06
DHCR24	-0.55	4.22	3.97E-11	2.23E-10
USP53	-0.55	6.21	1.49E-08	6.31E-08
NDUFB5P1	-0.55	-2.55	1.14E-05	3.32E-05
HIST1H2BJ	-0.55	-0.47	1.74E-14	1.36E-13
ESRRG	-0.55	4.66	6.21E-11	3.42E-10
HES6	-0.55	-0.32	2.88E-08	1.18E-07
ACACB	-0.55	7.08	4.26E-21	5.93E-20
IGSF11	-0.55	0.68	6.87E-10	3.38E-09
RAET1E	-0.55	-1.61	1.61E-10	8.48E-10
NANOS1	-0.55	3.06	4.16E-12	2.57E-11
CDH26	-0.55	-0.09	1.49E-14	1.17E-13
SFRP5	-0.55	-0.17	0.000610591	0.0013584
GLUD2	-0.55	-0.83	8.65E-09	3.77E-08
UBN1	-0.56	5.28	9.52E-27	2.03E-25
WWP1	-0.56	6.79	1.67E-21	2.41E-20
ASF1B	-0.56	-1.08	2.92E-09	1.35E-08
CDH22	-0.56	-1.52	8.14E-08	3.15E-07
LILRA5	-0.56	0.10	4.58E-07	1.60E-06
EMB	-0.56	3.67	1.21E-10	6.46E-10
VEPH1	-0.56	-1.99	2.13E-06	6.81E-06
TMED5	-0.56	5.99	1.50E-14	1.18E-13
TBX3	-0.56	4.21	6.26E-25	1.17E-23
ZDHHC9	-0.56	3.93	9.72E-25	1.79E-23
SHISA4	-0.56	5.44	8.20E-21	1.12E-19
BCL2L13	-0.56	6.31	2.16E-44	1.66E-42
PLEKHH1	-0.56	2.48	1.72E-19	2.09E-18
KLK1	-0.56	-2.60	1.49E-05	4.28E-05
RP11-57K17.1	-0.56	-2.66	1.58E-05	4.52E-05
PLCD3	-0.56	4.90	2.10E-22	3.27E-21
NGF	-0.56	1.26	3.76E-17	3.75E-16
SLC2A9	-0.56	1.36	7.54E-26	1.52E-24
FASN	-0.57	3.20	2.01E-05	5.63E-05
SCNN1G	-0.57	-2.54	8.35E-12	5.01E-11
NCOA3	-0.57	5.58	5.33E-21	7.37E-20
CH507-42P11.8	-0.57	3.63	0.001670982	0.003447765
HERC2P9	-0.57	5.47	7.66E-09	3.36E-08
PTPN5	-0.57	2.33	1.93E-08	8.10E-08
SRGN	-0.57	5.78	1.23E-13	8.75E-13
KCNH2	-0.57	5.61	4.38E-20	5.59E-19
ESPL1	-0.57	-1.28	8.40E-08	3.24E-07
HTR1F	-0.57	-2.68	3.18E-06	9.96E-06
PLP2	-0.57	4.85	2.13E-18	2.35E-17
RNF125	-0.57	3.08	1.08E-11	6.43E-11
CLEC4D	-0.57	-2.42	4.59E-05	0.000122067
QRFPR	-0.57	-0.18	5.86E-07	2.02E-06
DLK1	-0.57	1.89	0.001035208	0.002206353
OR6K1P	-0.57	-2.87	8.64E-06	2.56E-05
LGR5	-0.57	-2.29	2.71E-05	7.44E-05
RUNDC3B	-0.57	0.87	2.77E-11	1.58E-10
TRPM7	-0.57	6.04	2.01E-13	1.41E-12
KCNB1	-0.57	3.28	1.38E-15	1.18E-14
PITX3	-0.57	-2.13	0.000131727	0.000326184
HIF1A	-0.57	5.97	1.14E-10	6.13E-10
IMPA2	-0.57	3.79	4.08E-20	5.22E-19
SEMA6B	-0.57	2.36	1.51E-09	7.14E-09
ADRA1A	-0.57	3.17	1.08E-07	4.10E-07
PLS1	-0.57	0.76	2.39E-11	1.37E-10
ZNF749	-0.57	0.51	1.18E-12	7.73E-12
ART5	-0.57	-0.52	7.06E-08	2.75E-07
OPN3	-0.58	2.16	1.71E-24	3.09E-23
BCL9L	-0.58	3.94	5.73E-07	1.98E-06
FAM65C	-0.58	4.04	2.00E-20	2.63E-19
TREM1	-0.58	-0.33	9.00E-07	3.02E-06
PSMC1P1	-0.58	1.17	0.018984246	0.031446412
RCC1	-0.58	2.23	3.45E-23	5.69E-22
CLIC4	-0.58	8.70	7.49E-12	4.51E-11
LIN7A	-0.58	4.17	3.73E-22	5.67E-21

APOD	-0.58	7.89	4.98E-12	3.05E-11
KCNK13	-0.58	-0.93	1.91E-05	5.39E-05
SYN3	-0.58	-1.69	3.08E-13	2.12E-12
TPRKB	-0.58	4.04	1.05E-33	3.72E-32
RPS6KA2	-0.58	6.73	8.31E-35	3.21E-33
SLC25A24	-0.58	4.24	1.57E-11	9.15E-11
RP11-110I1.5	-0.58	-2.53	9.85E-05	0.000249174
RGL3	-0.58	2.68	7.92E-15	6.39E-14
CD300C	-0.58	-1.42	2.43E-07	8.83E-07
LEP	-0.58	0.11	0.017294057	0.028921271
SNAI3	-0.58	-0.14	6.98E-09	3.08E-08
SNTG2	-0.58	-1.35	1.72E-10	9.06E-10
CHPT1	-0.58	6.62	3.04E-35	1.20E-33
LVRN	-0.58	-0.68	7.69E-05	0.000197713
FANCB	-0.58	-2.39	1.88E-09	8.84E-09
ESRP2	-0.58	-1.98	2.31E-11	1.33E-10
UBE2C	-0.59	-2.11	0.000104039	0.00026217
C19orf33	-0.59	0.57	0.000118433	0.00029573
CHGB	-0.59	2.36	8.78E-10	4.28E-09
PTGER3	-0.59	0.52	2.29E-05	6.38E-05
IRAK3	-0.59	4.52	3.37E-11	1.90E-10
SLC22A5	-0.59	4.72	2.13E-17	2.17E-16
GCKR	-0.59	-2.54	1.25E-07	4.68E-07
RP11-449H3.3	-0.59	-2.11	0.000148162	0.000364047
ESR2	-0.59	0.27	5.19E-15	4.25E-14
GPD1	-0.59	3.45	1.54E-05	4.41E-05
JAK1	-0.59	7.26	4.79E-37	2.18E-35
LRP4	-0.59	4.13	7.93E-13	5.28E-12
CYBB	-0.59	4.16	3.60E-12	2.24E-11
C9orf47	-0.59	0.49	7.14E-16	6.28E-15
GNAO1	-0.59	2.68	3.68E-12	2.29E-11
HIVEP3	-0.59	2.11	4.06E-27	8.94E-26
DNA2	-0.59	1.48	1.14E-11	6.74E-11
SEC14L2	-0.59	0.18	1.87E-12	1.20E-11
RGAG1	-0.59	0.26	1.63E-13	1.15E-12
MMP11	-0.59	1.87	5.91E-12	3.59E-11
SUSD4	-0.59	2.03	3.84E-09	1.75E-08
B3GALT1	-0.59	-1.76	2.37E-11	1.36E-10
PHYHD1	-0.59	3.60	2.19E-21	3.14E-20
REV1	-0.59	5.59	1.02E-15	8.89E-15
PHC1P1	-0.59	-0.38	0.004781624	0.00901533
SLC29A2	-0.60	3.84	7.69E-22	1.13E-20
STRBP	-0.60	3.92	4.56E-36	1.93E-34
TWIST2	-0.60	0.06	4.42E-08	1.77E-07
ST3GAL1	-0.60	7.29	5.81E-24	1.01E-22
CTH	-0.60	0.72	1.02E-16	9.72E-16
HPCAL4	-0.60	-0.10	5.06E-07	1.76E-06
FGF7	-0.60	4.46	1.59E-14	1.25E-13
HCLS1	-0.60	4.54	2.58E-18	2.82E-17
ACPP	-0.60	-1.51	6.10E-10	3.02E-09
SULT4A1	-0.60	-2.56	1.11E-07	4.19E-07
TLR4	-0.60	4.00	1.12E-12	7.38E-12
BCL2L1	-0.60	5.66	3.97E-41	2.42E-39
XRCC4	-0.60	3.04	1.98E-13	1.39E-12
KCNH4	-0.60	-2.09	3.23E-10	1.65E-09
DDX21	-0.60	5.31	3.84E-12	2.38E-11
RP11-61N20.3	-0.60	-1.92	0.004211874	0.008041593
TAF4B	-0.60	1.01	2.15E-10	1.12E-09
BIRC3	-0.61	3.46	3.99E-13	2.72E-12
MARVELD2	-0.61	0.08	2.21E-18	2.43E-17
TEAD1	-0.61	6.67	1.18E-13	8.42E-13
IFI30	-0.61	3.37	9.63E-09	4.17E-08
DPP3P2	-0.61	0.85	0.004030704	0.007728285
EGLN1	-0.61	6.84	8.82E-25	1.64E-23
XK	-0.61	3.79	2.54E-14	1.95E-13
MTUS2	-0.61	6.13	1.44E-25	2.84E-24
HTATIP2	-0.61	3.50	1.90E-33	6.62E-32
DAAM2	-0.61	4.88	2.47E-12	1.56E-11
BEND2	-0.61	-2.05	2.72E-10	1.40E-09
CALCB	-0.61	-2.61	1.60E-07	5.93E-07
KIAA0040	-0.61	4.68	1.20E-24	2.20E-23
PAPSS2	-0.62	3.83	7.65E-16	6.72E-15
ATP1B1	-0.62	7.70	7.55E-34	2.73E-32
LPAR3	-0.62	2.88	6.05E-13	4.07E-12
NCAPH	-0.62	-1.66	2.63E-10	1.35E-09
LDHA	-0.62	7.98	2.77E-24	4.90E-23
SLC15A2	-0.62	2.56	4.02E-13	2.74E-12
CHRD12	-0.62	0.69	3.56E-05	9.62E-05
FAM222A	-0.62	2.09	5.02E-12	3.08E-11
PPTC7	-0.62	6.88	2.12E-22	3.30E-21
ARMC12	-0.62	-1.88	2.23E-09	1.04E-08
IL1R1	-0.62	5.51	1.94E-14	1.50E-13
PIP5K1B	-0.62	5.25	1.56E-17	1.61E-16

FAM84A	-0.62	-0.10	4.21E-09	1.91E-08
MAN1A2P1	-0.62	-1.39	3.05E-05	8.32E-05
DDN	-0.62	-0.55	1.96E-10	1.02E-09
PKD4	-0.62	9.72	7.28E-05	0.00018788
CCDC69	-0.62	7.00	3.43E-47	3.14E-45
SRGAP2D	-0.62	-1.88	0.000963132	0.002064029
TCN2	-0.62	4.08	9.25E-23	1.48E-21
RBMS1P1	-0.62	-2.51	2.58E-05	7.12E-05
GCLM	-0.62	3.58	5.34E-17	5.26E-16
SLC17A9	-0.63	0.14	1.16E-09	5.58E-09
SPARCL1	-0.63	9.80	2.21E-24	3.96E-23
ECE2	-0.63	0.26	4.70E-15	3.87E-14
PTPRG	-0.63	5.64	3.11E-16	2.84E-15
SIGLEC10	-0.63	0.83	6.41E-13	4.30E-12
RP4-539M6.19	-0.63	-1.72	0.001153229	0.002443281
CORIN	-0.63	5.58	5.49E-08	2.17E-07
PREX1	-0.63	4.11	9.99E-23	1.59E-21
ABCC2	-0.63	-1.23	5.10E-10	2.54E-09
IL17RB	-0.63	1.33	1.15E-19	1.42E-18
CD53	-0.63	3.38	5.18E-15	4.25E-14
GREB1L	-0.63	3.43	2.39E-17	2.42E-16
CYP1A1	-0.63	-1.77	0.000330848	0.00076936
MAMDC2	-0.63	4.33	1.22E-10	6.53E-10
PRDX6	-0.63	7.93	1.52E-33	5.35E-32
ADGRF2	-0.63	-1.23	8.93E-05	0.000227849
WNT6	-0.64	-1.94	1.97E-05	5.54E-05
TMEM52	-0.64	-1.95	2.66E-08	1.09E-07
PAX9	-0.64	-2.61	8.12E-10	3.98E-09
HEY2	-0.64	4.36	3.76E-20	4.81E-19
CATSPERB	-0.64	-0.60	4.34E-15	3.59E-14
CACNA2D3	-0.64	4.28	7.02E-24	1.21E-22
MS4A4A	-0.64	3.59	3.68E-13	2.51E-12
TTK	-0.64	-2.10	3.84E-07	1.35E-06
CDC45	-0.64	-2.19	2.01E-08	8.40E-08
ENPP4	-0.64	5.10	6.18E-14	4.57E-13
BBS12	-0.64	2.77	5.05E-18	5.40E-17
WNT5A	-0.64	1.45	5.48E-14	4.08E-13
MAP2K6	-0.64	0.15	5.03E-13	3.40E-12
TBX20	-0.64	2.09	0.000908706	0.001956153
CALCOCO2	-0.64	7.54	5.07E-55	8.41E-53
KCNJ1	-0.64	-2.48	7.37E-11	4.03E-10
RASL10B	-0.64	3.47	1.77E-21	2.56E-20
TPST2	-0.64	4.61	4.26E-43	3.00E-41
HMOX1	-0.65	2.58	1.52E-07	5.68E-07
RNF144B	-0.65	4.23	6.36E-31	1.83E-29
MMRN1	-0.65	1.83	2.01E-05	5.63E-05
AZGP1	-0.65	5.99	2.98E-15	2.49E-14
AURKB	-0.65	-2.27	1.07E-07	4.06E-07
FAM131C	-0.65	0.51	1.86E-09	8.74E-09
FLT3	-0.65	-0.95	7.47E-08	2.90E-07
GPD1L	-0.65	8.14	1.24E-24	2.27E-23
TLCD2	-0.65	2.17	6.15E-24	1.06E-22
RP11-385D13.1	-0.65	-1.96	4.42E-07	1.55E-06
CCNG1	-0.65	5.95	2.26E-26	4.69E-25
AC013264.1	-0.65	-0.78	0.002515564	0.005016752
EBLN2	-0.65	-1.04	1.89E-05	5.33E-05
GADD45B	-0.65	4.60	2.74E-13	1.90E-12
SLC1A3	-0.65	6.62	7.21E-17	7.01E-16
NRCAM	-0.65	-1.16	2.99E-08	1.22E-07
CTD-3138B18.4	-0.65	-1.84	0.000737851	0.001618754
TIMP3	-0.66	9.00	1.10E-29	2.93E-28
GPR12	-0.66	-1.79	3.34E-09	1.53E-08
ADH1A	-0.66	-1.50	9.15E-10	4.45E-09
FGR	-0.66	2.62	2.35E-17	2.39E-16
USP31	-0.66	5.42	1.04E-32	3.36E-31
ATP1A1	-0.66	8.08	1.17E-31	3.49E-30
HRCT1	-0.66	0.94	1.34E-07	5.02E-07
TGFA	-0.66	0.00	1.34E-09	6.37E-09
TIFA	-0.66	3.04	6.81E-22	1.01E-20
PCDHGC4	-0.66	0.47	0.000233907	0.000557343
PIK3C2A	-0.66	5.43	2.58E-11	1.47E-10
CPO	-0.67	-1.70	9.68E-12	5.77E-11
KCNJ11	-0.67	2.85	3.82E-19	4.49E-18
SLC7A8	-0.67	3.45	1.06E-18	1.20E-17
ELOVL7	-0.67	0.37	4.90E-09	2.20E-08
GPSM2	-0.67	2.29	4.32E-19	5.05E-18
DOCK9	-0.67	5.87	2.97E-15	2.48E-14
FREM2	-0.67	-1.55	1.11E-07	4.21E-07
ARG2	-0.67	1.22	1.70E-09	8.02E-09
KLF15	-0.67	4.62	2.62E-17	2.65E-16
SMYD1	-0.67	8.45	2.67E-33	9.13E-32
EYA4	-0.67	4.15	7.30E-14	5.34E-13
UHRF1	-0.68	-0.81	4.21E-11	2.36E-10

HOGA1	-0.68	3.99	9.66E-21	1.30E-19
RP11-651P23.4	-0.68	-1.24	4.41E-08	1.76E-07
PAX8	-0.68	-0.07	9.91E-08	3.78E-07
QSOX1	-0.68	6.25	3.54E-28	8.42E-27
FERP1	-0.68	-2.87	8.35E-05	0.000213641
ZNF682	-0.68	2.96	5.05E-29	1.27E-27
MRO	-0.68	1.37	2.32E-17	2.36E-16
PRRG4	-0.68	0.98	2.19E-12	1.39E-11
RP11-561B11.2	-0.68	0.15	1.56E-05	4.47E-05
MID11P1	-0.68	3.59	9.39E-25	1.74E-23
SGO1	-0.68	-2.12	8.56E-11	4.63E-10
CPNE4	-0.68	4.04	8.64E-09	3.76E-08
BCL2L2-PABPN1	-0.69	-0.31	0.003209413	0.006268386
IGSF21	-0.69	-0.90	2.81E-10	1.44E-09
SLC38A2	-0.69	7.44	1.06E-18	1.20E-17
VWA5B1	-0.69	-2.18	5.60E-10	2.78E-09
VPS13D	-0.69	6.90	2.55E-32	8.03E-31
ALPL	-0.69	3.33	3.75E-22	5.69E-21
C1QB	-0.69	5.27	1.38E-10	7.34E-10
TMED10P2	-0.69	-2.35	1.34E-09	6.38E-09
OSBPL11	-0.69	4.04	5.17E-23	8.39E-22
PPP1R1A	-0.69	5.31	4.74E-16	4.23E-15
MERTK	-0.69	3.49	1.02E-20	1.37E-19
GFPT2	-0.69	3.43	1.03E-17	1.08E-16
PPIP5K2	-0.69	5.20	8.60E-19	9.84E-18
LONRF3	-0.69	-0.01	2.78E-11	1.59E-10
SPECC1L-ADORA2A	-0.69	-0.83	0.000707809	0.001555472
PIM1	-0.69	3.73	3.18E-16	2.90E-15
SLC30A10	-0.69	-1.59	7.31E-12	4.41E-11
CCL2	-0.69	3.44	6.43E-07	2.20E-06
HPSE	-0.70	0.31	3.89E-16	3.51E-15
BMPER	-0.70	0.04	5.99E-11	3.31E-10
KDR	-0.70	5.33	2.12E-16	1.97E-15
LILRA6	-0.70	1.28	8.87E-15	7.13E-14
FAM58A	-0.70	4.11	1.06E-24	1.95E-23
SCN3A	-0.70	1.90	7.86E-11	4.28E-10
CHI3L2	-0.70	0.78	4.59E-06	1.41E-05
MICALCL	-0.70	-2.31	4.54E-08	1.81E-07
SULT1B1	-0.70	2.45	4.35E-15	3.60E-14
P2RY12	-0.70	-0.44	4.69E-07	1.63E-06
NCEH1	-0.70	5.41	3.08E-23	5.08E-22
SEMA4B	-0.70	3.88	2.42E-27	5.44E-26
FAM107A	-0.71	6.69	2.83E-34	1.05E-32
KLHL41	-0.71	7.17	4.95E-30	1.35E-28
SLC36A1	-0.71	2.43	2.02E-24	3.63E-23
ANXA3	-0.71	5.23	2.21E-32	6.98E-31
ADAM9	-0.71	6.55	2.14E-15	1.81E-14
ATP8B5P	-0.71	-1.39	5.30E-16	4.72E-15
PLTP	-0.71	5.31	1.19E-13	8.49E-13
RP5-937E21.8	-0.71	-2.45	6.41E-06	1.93E-05
ECT2	-0.71	2.34	6.19E-14	4.58E-13
TK1	-0.71	-0.27	1.74E-11	1.01E-10
SPP1	-0.71	3.21	2.78E-07	1.00E-06
KCNA7	-0.71	-0.36	1.25E-11	7.35E-11
MTFP1	-0.71	2.80	4.41E-12	2.72E-11
ADCK3	-0.71	7.61	3.75E-33	1.26E-31
CCDC68	-0.72	3.46	3.78E-12	2.35E-11
SLC52A3	-0.72	1.94	1.18E-23	2.01E-22
RP11-100N21.1	-0.72	-1.87	7.23E-09	3.19E-08
TGFBR2	-0.72	7.61	5.38E-27	1.17E-25
PTDSS1	-0.72	6.82	9.88E-47	8.81E-45
CALCRL	-0.72	4.84	5.22E-11	2.90E-10
CD5L	-0.72	-1.71	3.15E-07	1.13E-06
LSAMP	-0.72	2.84	2.03E-13	1.42E-12
GGH	-0.72	1.22	1.80E-19	2.17E-18
TMEM100	-0.72	2.73	1.02E-12	6.73E-12
SLC19A2	-0.72	5.19	8.67E-13	5.75E-12
SPC24	-0.72	0.84	1.60E-29	4.18E-28
SLC4A7	-0.73	4.06	4.07E-10	2.06E-09
MEDAG	-0.73	3.27	1.29E-15	1.11E-14
RASD1	-0.73	3.39	3.40E-05	9.21E-05
PLCXD3	-0.73	7.23	1.84E-27	4.18E-26
HPR	-0.73	6.29	4.74E-09	2.13E-08
GRAP2	-0.73	0.11	3.21E-14	2.43E-13
RP11-697N18.3	-0.73	-2.51	5.38E-10	2.67E-09
EPB41L4B	-0.73	3.90	3.74E-20	4.79E-19
MAP3K8	-0.73	2.95	4.89E-20	6.22E-19
FMO5	-0.73	2.15	2.11E-17	2.16E-16
SCN10A	-0.73	-1.51	4.04E-10	2.04E-09
C1QL1	-0.73	-2.01	9.03E-08	3.47E-07
LRRC8E	-0.73	-0.72	1.18E-14	9.35E-14
PVR	-0.73	4.93	1.03E-35	4.21E-34

CRISPLD2	-0.73	5.29	9.99E-25	1.84E-23
MANEA	-0.73	3.23	1.20E-11	7.06E-11
CADPS2	-0.73	3.88	2.21E-30	6.14E-29
ELL2	-0.74	5.61	1.83E-18	2.03E-17
NCAPG	-0.74	-0.71	1.34E-10	7.12E-10
MLXIPL	-0.74	0.75	1.80E-06	5.81E-06
BANK1	-0.74	-1.49	3.31E-08	1.35E-07
HK2	-0.74	4.10	6.36E-17	6.22E-16
GPR4	-0.74	2.72	2.75E-30	7.59E-29
ARNTL	-0.74	3.65	1.70E-14	1.33E-13
SIRPB2	-0.74	1.10	2.26E-12	1.44E-11
SSTR2	-0.74	1.90	3.97E-36	1.69E-34
AC084219.2	-0.75	-0.87	0.000558995	0.001253603
MYO7B	-0.75	3.07	1.15E-12	7.59E-12
KIF5C	-0.75	0.61	2.29E-16	2.12E-15
C10orf11	-0.75	2.67	1.45E-24	2.63E-23
GPRC5A	-0.75	0.85	8.46E-15	6.82E-14
GPAT2	-0.75	2.75	1.76E-18	1.96E-17
NUDT4	-0.75	8.27	6.47E-40	3.66E-38
C3	-0.76	7.15	6.00E-16	5.31E-15
TUBA1C	-0.76	4.75	3.80E-18	4.10E-17
STAT3	-0.76	6.93	3.72E-33	1.25E-31
FAM209B	-0.76	-2.42	1.94E-12	1.24E-11
ADAM11	-0.76	2.39	2.66E-12	1.68E-11
C8orf88	-0.76	4.20	9.37E-42	5.97E-40
TGFBR3	-0.76	5.34	1.42E-28	3.45E-27
C7orf55-LUC7L2	-0.76	2.03	0.013973653	0.023861625
RP11-3B12.4	-0.76	-2.82	6.68E-08	2.62E-07
BCAT1	-0.76	3.00	2.06E-17	2.10E-16
SLC1A1	-0.77	2.10	1.73E-25	3.39E-24
TBC1D29	-0.77	-1.73	4.49E-13	3.05E-12
MYBL2	-0.77	-2.20	9.35E-08	3.58E-07
RGS9BP	-0.77	-0.04	3.36E-19	3.98E-18
GPR183	-0.77	1.42	2.02E-11	1.17E-10
APOB	-0.77	4.81	1.30E-17	1.36E-16
SOCS3	-0.78	3.42	4.50E-09	2.03E-08
IL15RA	-0.78	2.42	9.68E-38	4.70E-36
GPX3	-0.78	9.33	3.01E-48	3.17E-46
AMD1	-0.78	6.32	3.03E-35	1.20E-33
LCN15	-0.78	-0.58	9.16E-21	1.24E-19
RGR	-0.78	-1.07	5.72E-15	4.67E-14
MKI67	-0.78	0.10	2.03E-07	7.46E-07
AKR1C1	-0.78	4.84	9.54E-20	1.19E-18
AIF1L	-0.79	5.41	1.24E-43	9.18E-42
SLC7A11	-0.79	-0.71	3.54E-14	2.67E-13
ARRDC4	-0.79	4.45	3.23E-20	4.17E-19
HIF3A	-0.80	5.95	3.12E-28	7.48E-27
CNR1	-0.80	0.16	1.41E-09	6.69E-09
EDN1	-0.80	2.30	5.43E-17	5.34E-16
HAS2	-0.80	1.43	2.96E-12	1.86E-11
MINOS1-NBL1	-0.80	-0.34	0.000462417	0.001051803
HK3	-0.80	1.22	4.61E-16	4.13E-15
RPGR	-0.80	3.58	5.17E-26	1.05E-24
EPN3	-0.80	2.03	8.37E-15	6.75E-14
FAM78B	-0.80	1.89	2.60E-44	1.98E-42
AC129778.2	-0.81	0.29	5.69E-20	7.21E-19
LPCAT3	-0.81	4.55	9.70E-37	4.28E-35
FAM83F	-0.81	1.97	5.50E-29	1.37E-27
ADARB2	-0.81	-1.71	6.28E-16	5.55E-15
SLC31A2	-0.81	3.40	9.52E-42	6.04E-40
TMEM132C	-0.81	1.17	3.07E-13	2.11E-12
CHI3L1	-0.81	-0.11	3.34E-06	1.04E-05
SLC36A4	-0.81	3.04	1.95E-33	6.76E-32
MT1M	-0.82	0.93	6.58E-08	2.58E-07
WASF1	-0.82	0.65	9.64E-21	1.30E-19
ANLN	-0.82	0.09	1.79E-08	7.53E-08
SLC38A4	-0.82	-1.99	1.34E-09	6.39E-09
MARK3	-0.82	6.46	1.94E-74	9.84E-72
SIGLEC14	-0.82	-0.40	2.09E-09	9.82E-09
COL25A1	-0.82	-0.62	4.48E-09	2.02E-08
LAPTM5	-0.82	4.87	7.23E-21	9.88E-20
PHACTR3	-0.83	1.54	6.70E-13	4.48E-12
TFRC	-0.83	6.43	5.27E-20	6.70E-19
WNT9B	-0.83	-1.28	3.22E-16	2.93E-15
SERPINB8	-0.83	2.05	6.29E-25	1.18E-23
SLC2A1	-0.83	4.36	5.92E-39	3.12E-37
GATSL2	-0.83	-0.38	4.40E-11	2.46E-10
GGT5	-0.83	4.34	7.66E-20	9.63E-19
ADGRF5	-0.83	6.89	6.70E-33	2.21E-31
KCNK3	-0.83	0.99	1.86E-19	2.24E-18
TTLL6	-0.84	-2.35	1.05E-11	6.24E-11
KLF10	-0.84	5.09	8.20E-24	1.41E-22
MCM10	-0.84	-1.76	5.88E-16	5.22E-15

OLAH	-0.84	-1.48	1.05E-21	1.54E-20
C1orf162	-0.84	3.38	2.34E-30	6.51E-29
GLUL	-0.84	8.32	2.61E-34	9.73E-33
CLEC7A	-0.84	2.07	3.27E-17	3.28E-16
GABRR2	-0.84	-1.49	9.02E-08	3.46E-07
RP11-211G3.2	-0.85	-1.30	2.77E-19	3.30E-18
STON1-GTF2A1L	-0.85	-2.57	1.49E-05	4.27E-05
LGR6	-0.85	0.85	3.52E-21	4.95E-20
PAQR5	-0.85	0.53	2.53E-22	3.91E-21
RP11-381O7.3	-0.85	2.20	5.40E-26	1.09E-24
ABCB1	-0.85	2.51	8.55E-20	1.07E-18
FAM3C2	-0.85	-1.15	0.003018889	0.005926674
FAM212B	-0.85	5.10	1.39E-52	1.92E-50
FCER1G	-0.85	3.63	1.08E-26	2.29E-25
PPM1E	-0.85	0.47	9.28E-12	5.54E-11
PTX3	-0.86	1.57	5.58E-07	1.93E-06
SAMSN1	-0.86	1.25	7.47E-13	4.98E-12
FAM179A	-0.86	3.34	1.13E-15	9.79E-15
ETNK2	-0.86	1.43	2.04E-28	4.94E-27
TOP2A	-0.86	0.18	2.62E-08	1.08E-07
AL022067.1	-0.86	-1.12	7.31E-05	0.00018852
VIT	-0.87	3.86	5.19E-27	1.13E-25
PKHD1L1	-0.87	1.13	5.31E-08	2.10E-07
ZBED6	-0.87	0.60	0.00029615	0.000695139
SLC5A1	-0.87	7.46	1.69E-29	4.40E-28
MSR1	-0.87	3.30	5.23E-19	6.07E-18
GALNT4	-0.87	1.29	7.69E-05	0.000197585
CDRT1	-0.88	-1.09	6.64E-22	9.87E-21
STEAP4	-0.88	6.02	5.33E-28	1.25E-26
SIGLEC7	-0.88	-0.69	8.91E-19	1.02E-17
SEN3-EIF4A1	-0.88	-2.92	5.67E-06	1.72E-05
TXNRD1	-0.88	6.77	2.78E-30	7.65E-29
EHF	-0.88	-2.09	4.71E-11	2.63E-10
MBNL3	-0.88	3.49	2.74E-12	1.73E-11
TFEC	-0.89	1.23	1.33E-13	9.47E-13
PCK1	-0.89	-0.50	0.000118207	0.000295342
THBS1	-0.89	6.54	6.72E-15	5.44E-14
PDE11A	-0.89	0.82	8.30E-19	9.50E-18
HP	-0.89	2.54	4.84E-10	2.41E-09
PCNT	-0.89	5.65	1.96E-43	1.41E-41
RP11-236F9.2	-0.89	0.33	2.74E-22	4.22E-21
LRRN3	-0.89	1.56	7.94E-14	5.79E-13
SAMHD1	-0.89	5.72	3.59E-36	1.54E-34
ADAMTS5	-0.89	3.63	9.18E-19	1.05E-17
ALOX5AP	-0.90	2.73	2.62E-25	5.02E-24
ADGRD1	-0.90	5.26	1.36E-43	9.83E-42
KIAA1549	-0.90	2.33	5.69E-35	2.20E-33
SELE	-0.90	1.00	2.61E-06	8.27E-06
BCL6	-0.90	5.68	1.08E-53	1.64E-51
ZNF366	-0.90	1.44	4.55E-09	2.05E-08
CLEC4G	-0.90	-1.21	5.83E-09	2.60E-08
GCOM1	-0.91	3.81	2.66E-10	1.37E-09
TLR2	-0.91	2.86	4.99E-23	8.12E-22
SLA	-0.91	3.04	1.05E-19	1.30E-18
CBSL	-0.91	-0.37	0.002300425	0.00462404
TATDN2P2	-0.91	-2.19	2.26E-11	1.30E-10
STEAP3	-0.91	3.19	5.48E-50	6.38E-48
DEPDC1B	-0.91	-2.64	6.46E-15	5.25E-14
F8	-0.91	6.52	2.36E-29	6.11E-28
RNF157	-0.91	2.49	8.20E-30	2.20E-28
FOSL1	-0.91	-0.40	2.65E-09	1.23E-08
FP325317.1	-0.91	3.77	2.77E-33	9.46E-32
CTD-2331H12.8	-0.91	-2.12	0.000189889	0.000459034
SLC25A18	-0.91	1.74	5.16E-27	1.12E-25
C1QTNF1	-0.92	5.81	1.25E-19	1.54E-18
TMED7-TICAM2	-0.92	-1.31	7.19E-07	2.45E-06
CSDC2	-0.92	7.06	3.06E-24	5.40E-23
S100A8	-0.92	3.34	4.34E-11	2.43E-10
TMEM252	-0.92	-0.67	6.92E-08	2.70E-07
CR1	-0.92	0.93	2.51E-12	1.59E-11
MPP3	-0.92	5.26	4.94E-33	1.64E-31
STOX1	-0.93	-0.98	4.19E-17	4.16E-16
ADAMTS15	-0.93	4.28	6.06E-38	3.01E-36
GPR17	-0.93	2.82	2.47E-12	1.57E-11
C11orf52	-0.93	0.32	3.58E-27	7.92E-26
CD109	-0.93	4.31	6.24E-36	2.60E-34
RP11-460N11.2	-0.93	-1.84	4.42E-10	2.22E-09
HMOX2	-0.93	5.83	1.26E-69	4.81E-67
ATP2A2	-0.93	10.69	3.13E-43	2.21E-41
ITPKA	-0.93	-0.49	1.58E-13	1.12E-12
TPO	-0.93	2.78	3.10E-32	9.68E-31
ALOX5	-0.93	2.23	9.65E-31	2.74E-29
ADGRF4	-0.93	-1.11	3.61E-08	1.46E-07

OSMR	-0.94	4.63	1.23E-29	3.25E-28
ANGPTL4	-0.94	2.42	2.66E-08	1.10E-07
NID1	-0.94	6.65	1.62E-41	1.00E-39
TRPC4	-0.95	-0.52	1.30E-18	1.46E-17
TUBAL3	-0.95	-1.98	9.18E-15	7.37E-14
WWC1	-0.95	-1.01	9.38E-14	6.79E-13
TC2N	-0.95	2.55	4.74E-20	6.04E-19
CBS	-0.95	1.80	1.99E-11	1.15E-10
RBM22P3	-0.96	-2.21	6.14E-08	2.42E-07
NECTIN1	-0.96	3.16	1.79E-40	1.06E-38
GXYLT1P6	-0.97	-2.40	3.54E-07	1.26E-06
KLHL32	-0.97	-0.87	9.70E-18	1.02E-16
CTB-50L17.14	-0.97	1.64	3.98E-14	2.99E-13
DNER	-0.97	0.04	1.90E-14	1.48E-13
CCR1	-0.98	1.85	1.66E-23	2.80E-22
GRB7	-0.98	-1.46	4.79E-21	6.63E-20
PPL	-0.98	2.88	1.35E-43	9.83E-42
MELK	-0.98	-2.06	2.19E-13	1.52E-12
F5	-0.98	2.80	4.57E-11	2.55E-10
GRB14	-0.98	3.47	1.25E-46	1.10E-44
EIF4EBP1	-0.98	3.16	6.21E-25	1.17E-23
RP11-244H3.4	-0.99	0.06	3.02E-07	1.08E-06
SLCO2A1	-0.99	4.19	1.66E-29	4.33E-28
ANGPT4	-0.99	-1.59	9.49E-15	7.60E-14
SYT13	-0.99	2.37	1.24E-20	1.66E-19
HS6ST2	-0.99	-1.32	2.13E-12	1.36E-11
KCND3	-0.99	4.85	1.01E-53	1.53E-51
AGTR1	-0.99	1.73	9.82E-23	1.56E-21
KCNK1	-0.99	3.34	2.29E-31	6.73E-30
RP11-544M22.13	-1.00	-1.72	4.07E-05	0.000109146
AC006116.27	-1.00	-1.79	2.21E-05	6.16E-05
FMN1	-1.00	1.85	3.18E-24	5.60E-23
HERC2P3	-1.00	3.10	2.95E-13	2.04E-12
NAMPT	-1.01	7.20	1.36E-31	4.04E-30
MATN3	-1.01	-0.95	7.14E-19	8.22E-18
RP11-15E1.6	-1.01	-2.56	2.90E-12	1.83E-11
MOG	-1.02	0.96	4.85E-14	3.62E-13
RP3-509I19.1	-1.02	-0.76	2.71E-07	9.79E-07
PRODH	-1.03	2.42	4.99E-18	5.34E-17
C15orf59	-1.03	4.67	9.95E-43	6.89E-41
CPAMD8	-1.03	4.18	6.18E-38	3.06E-36
AQP7P5	-1.03	-2.09	4.09E-07	1.44E-06
AASS	-1.04	4.69	8.02E-22	1.18E-20
SMTNL2	-1.04	2.68	1.06E-37	5.05E-36
AC008132.13	-1.04	-1.51	1.15E-24	2.11E-23
FPR1	-1.04	2.37	6.51E-23	1.05E-21
PALLD	-1.05	9.29	2.16E-54	3.38E-52
SBK3	-1.05	0.34	6.55E-14	4.82E-13
CPLX3	-1.06	1.50	1.04E-10	5.61E-10
CAMSAP3	-1.06	-2.24	1.30E-15	1.12E-14
LMAN1L	-1.06	1.56	1.81E-12	1.16E-11
KNG1	-1.06	-2.68	8.91E-19	1.02E-17
MRC1	-1.06	5.14	9.24E-28	2.14E-26
SPOCK3	-1.07	-1.98	4.19E-09	1.90E-08
KRT7	-1.07	-2.08	9.83E-10	4.75E-09
ART3	-1.07	5.93	1.58E-47	1.54E-45
BZW1P2	-1.09	-0.40	0.000114326	0.000286371
SERPINF2	-1.09	0.11	4.16E-21	5.81E-20
IL20RA	-1.09	1.24	1.04E-18	1.19E-17
ZBTB16	-1.09	4.01	3.15E-20	4.08E-19
CEP55	-1.09	-1.44	8.50E-15	6.84E-14
TFCP2L1	-1.09	-0.77	9.02E-24	1.55E-22
GXYLT1P4	-1.10	-1.42	3.14E-14	2.39E-13
ADAMTS9	-1.10	4.83	1.28E-43	9.38E-42
ZC3H11B	-1.11	-1.22	1.28E-14	1.02E-13
F13A1	-1.11	6.29	4.93E-28	1.17E-26
ZFP57	-1.11	-0.90	0.003164863	0.00619148
MEI4	-1.12	-1.20	2.87E-19	3.41E-18
PCSK1	-1.12	-1.32	1.32E-18	1.49E-17
VSTM2L	-1.13	2.16	1.26E-16	1.20E-15
RP11-6L6.2	-1.13	-0.96	2.89E-29	7.42E-28
TIMP4	-1.13	4.33	1.32E-32	4.25E-31
CFAP77	-1.14	-0.18	5.85E-38	2.92E-36
NFXL1	-1.14	3.08	2.03E-35	8.13E-34
MT1X	-1.14	3.96	2.58E-17	2.61E-16
OPN4	-1.14	-0.88	7.18E-19	8.26E-18
PLIN2	-1.15	6.32	1.26E-42	8.63E-41
CACNA1E	-1.16	-1.34	6.81E-18	7.24E-17
TMTC1	-1.16	6.12	1.70E-50	2.04E-48
TMEM178B	-1.16	5.70	5.13E-37	2.32E-35
MYOT	-1.16	4.12	2.08E-28	5.04E-27
HS6ST3	-1.16	0.96	4.38E-11	2.45E-10
S100A3	-1.17	-1.78	1.53E-19	1.86E-18

RHAG	-1.17	-1.40	8.23E-20	1.03E-18
BIVM-ERCC5	-1.18	1.76	0.000443223	0.001011579
TMEM63C	-1.18	-0.97	2.33E-13	1.62E-12
TMEM151B	-1.18	-1.58	2.12E-11	1.22E-10
NSG1	-1.19	1.48	2.31E-34	8.65E-33
CHAC2	-1.19	0.84	2.16E-40	1.26E-38
ST6GALNAC3	-1.19	2.94	5.31E-56	9.77E-54
FAM46B	-1.20	3.67	2.58E-34	9.61E-33
CPM	-1.21	3.71	4.82E-35	1.87E-33
CHL1	-1.21	2.51	6.40E-23	1.03E-21
NQO1	-1.21	3.72	1.26E-43	9.28E-42
AZGP1P1	-1.22	-1.23	1.34E-19	1.64E-18
KCNIP2	-1.24	6.44	9.82E-26	1.96E-24
S1PR3	-1.24	4.63	1.85E-64	5.65E-62
SHISA3	-1.24	2.92	2.95E-27	6.58E-26
TMEM132B	-1.25	0.71	1.06E-31	3.17E-30
RP11-438J1.1	-1.25	-1.31	3.50E-07	1.24E-06
CFTR	-1.26	-1.94	1.32E-24	2.41E-23
OVCH1	-1.26	-2.06	1.99E-23	3.34E-22
EDNRB	-1.26	5.36	2.26E-41	1.39E-39
FCGR3A	-1.26	3.53	2.21E-32	7.00E-31
POM121L9P	-1.27	0.51	6.48E-48	6.61E-46
EREG	-1.27	-0.01	1.13E-17	1.18E-16
AC007325.2	-1.29	2.75	9.82E-16	8.54E-15
CD38	-1.29	2.80	6.12E-46	5.18E-44
NUDT4P1	-1.29	1.14	3.83E-09	1.75E-08
NUDT4P2	-1.29	1.14	3.83E-09	1.75E-08
SERPINE1	-1.29	4.33	8.54E-14	6.22E-13
GRIP1	-1.29	-1.34	1.10E-19	1.36E-18
NAMPTP1	-1.29	0.85	2.74E-08	1.13E-07
CA14	-1.29	1.73	2.11E-33	7.28E-32
SCGB1D2	-1.30	-2.19	6.23E-20	7.87E-19
PQLC2L	-1.30	0.08	3.95E-38	2.00E-36
SERTM1	-1.31	-1.14	9.00E-20	1.12E-18
ANPEP	-1.32	2.14	5.33E-35	2.07E-33
CHST9	-1.32	2.24	3.52E-20	4.52E-19
SERPINA5	-1.33	1.10	2.09E-32	6.63E-31
STAC2	-1.33	-1.42	2.65E-33	9.09E-32
RP11-1081M5.3	-1.34	0.64	1.57E-19	1.91E-18
IL18R1	-1.35	2.35	7.03E-42	4.49E-40
TUBB4A	-1.36	-1.06	7.77E-33	2.54E-31
FER1L6	-1.36	-2.54	1.51E-17	1.56E-16
SSTR5	-1.37	-1.21	7.78E-12	4.67E-11
CHDH	-1.37	1.89	1.28E-61	3.06E-59
NPPC	-1.37	-1.94	1.95E-19	2.35E-18
HOOK1	-1.37	1.67	3.43E-39	1.82E-37
MT1A	-1.38	-0.45	9.43E-13	6.25E-12
TDRD9	-1.38	1.40	4.56E-49	5.03E-47
PLA2G4F	-1.39	-0.12	3.40E-29	8.64E-28
SLC11A1	-1.39	2.59	3.55E-37	1.64E-35
ANKRD2	-1.40	6.98	6.43E-26	1.30E-24
BMP7	-1.40	1.08	4.47E-25	8.47E-24
ADORA3	-1.41	0.96	1.07E-34	4.11E-33
S100A9	-1.42	4.15	1.86E-25	3.64E-24
OVOS2	-1.43	-0.81	1.29E-19	1.58E-18
ADH1B	-1.45	6.49	3.57E-35	1.40E-33
FAM155B	-1.46	4.38	5.49E-27	1.19E-25
WNK3	-1.49	0.41	3.25E-47	2.99E-45
SIGLEC9	-1.51	-0.01	4.47E-56	8.32E-54
AQP3	-1.51	3.00	5.53E-48	5.75E-46
AREG	-1.53	1.53	3.74E-22	5.67E-21
TMIGD3	-1.53	-0.37	1.24E-34	4.76E-33
C3orf36	-1.55	-2.40	7.09E-33	2.34E-31
CNTN3	-1.57	1.36	1.02E-27	2.35E-26
ETNPPL	-1.57	2.08	1.99E-35	8.00E-34
MGST1	-1.59	4.16	1.25E-36	5.50E-35
RHBDL3	-1.60	-0.39	1.14E-29	3.02E-28
RP11-443P15.2	-1.63	-1.76	4.36E-36	1.85E-34
ADAMTS4	-1.64	3.78	1.77E-39	9.67E-38
SYN2	-1.64	1.56	1.34E-39	7.41E-38
MARCO	-1.65	1.62	5.18E-17	5.11E-16
IL10	-1.68	-1.08	9.02E-40	5.05E-38
LGI3	-1.73	-2.23	9.54E-32	2.86E-30
LAD1	-1.74	1.96	3.21E-46	2.74E-44
TCF24	-1.76	-0.48	3.45E-27	7.65E-26
LYVE1	-1.77	5.26	3.78E-59	8.23E-57
PPEF1	-1.77	-2.04	2.22E-38	1.14E-36
GMNC	-1.82	-1.84	8.81E-34	3.17E-32
SAA2	-1.84	-1.60	6.81E-21	9.32E-20
HMGCS2	-1.85	3.28	1.92E-17	1.96E-16
BLM	-1.85	2.75	4.45E-77	2.76E-74
FGF10	-1.85	-2.08	5.32E-30	1.44E-28
VSIG4	-1.86	4.84	1.49E-70	6.25E-68

RARRES1	-1.86	2.01	2.61E-38	1.33E-36
METTL7B	-1.86	2.65	1.77E-49	1.97E-47
FCGBP	-1.90	1.95	1.80E-31	5.30E-30
GALNT15	-1.93	4.13	8.99E-59	1.93E-56
CMTM5	-1.94	2.23	1.39E-51	1.80E-49
DHRS7C	-1.94	2.67	3.37E-25	6.41E-24
CD177	-1.95	-2.44	4.46E-26	9.10E-25
HOPX	-1.96	3.26	1.07E-37	5.10E-36
FKBP5	-1.96	7.30	2.13E-53	3.13E-51
MCEMP1	-1.97	-2.19	1.12E-37	5.31E-36
C1orf105	-2.03	1.41	1.67E-49	1.87E-47
SGPP2	-2.10	2.38	1.22E-51	1.60E-49
IL1R2	-2.11	0.44	9.45E-43	6.57E-41
RP11-766F14.2	-2.14	1.25	4.00E-22	6.05E-21
CYP4Z1	-2.15	-0.89	3.42E-56	6.45E-54
SLCO4A1	-2.21	3.22	5.29E-62	1.36E-59
SCGN	-2.24	0.47	5.60E-40	3.19E-38
AQP4	-2.25	2.05	1.14E-35	4.66E-34
CYP4B1	-2.28	4.28	1.65E-50	2.01E-48
CD163	-2.29	6.35	2.08E-75	1.09E-72
FCN3	-2.34	3.40	2.12E-76	1.19E-73
GNMT	-2.35	-0.24	1.14E-67	3.90E-65
AOX1	-2.36	2.61	6.82E-62	1.70E-59
NPTX2	-2.36	1.95	1.74E-70	7.10E-68
SAA1	-2.41	-0.37	1.93E-17	1.98E-16
PII5	-2.51	-0.51	2.33E-39	1.26E-37
PLA2G2A	-2.54	4.20	2.39E-47	2.25E-45
ALOX15B	-2.56	-1.04	1.01E-37	4.88E-36
LCN10	-2.71	3.57	3.03E-77	2.03E-74
LCN6	-2.76	2.50	8.76E-85	1.22E-81
TUBA3D	-2.80	4.57	1.29E-76	7.43E-74
TUBA3E	-2.82	3.50	1.34E-80	1.32E-77
MYH6	-2.93	9.32	1.43E-84	1.85E-81
RP11-216L13.16	-3.02	-1.36	2.37E-43	1.68E-41
RNASE2	-3.06	-1.19	2.43E-79	2.04E-76
SERPINA3	-3.29	4.66	8.84E-112	4.94E-108
IL1RL1	-3.44	2.90	1.60E-78	1.27E-75

Table S2. Differentially expressed iron-linked genes in DCM at single cell level, obtained from the pseudobulk analysis of scRNA-seq data. pValue was adjusted using Benjamini-Hochberg method ($(|\log FC|) > 0.5$ and FDR adjusted pValue (adj pValue) < 0.05).

	Gene name	logFC	pValue	adj pValue
CARDIOMYOCYTES	HBA1	2.54	7.11E-07	2.29E-05
	P3H2	2.04	1.11E-10	2.02E-08
	BMP6	1.70	6.69E-07	2.18E-05
	HBA2	1.68	7.58E-05	9.12E-04
	HPX	1.39	1.64E-04	1.67E-03
	SNCA	1.28	9.98E-07	2.98E-05
	ABCG2	0.94	5.32E-04	4.16E-03
	BCL2	0.90	1.93E-05	3.12E-04
	CYP19A1	0.82	3.63E-03	1.84E-02
	CYP2J2	0.79	1.22E-05	2.19E-04
	AGMO	0.78	9.43E-04	6.50E-03
	CYP2C9	0.77	6.34E-03	2.80E-02
	SCD5	0.73	1.70E-03	1.03E-02
	ARHGAP1	0.70	1.08E-09	1.28E-07
	ALAS2	0.68	8.86E-03	3.58E-02
	CYP26B1	0.63	5.48E-03	2.51E-02
	SLC25A28	0.60	1.62E-07	6.88E-06
	CYP11A1	0.52	1.21E-02	4.54E-02
	SOD1	-0.53	4.13E-06	9.43E-05
	SC5D	-0.53	1.71E-05	2.86E-04
	B2M	-0.56	1.35E-03	8.58E-03
	ATP6V0B	-0.58	2.31E-05	3.58E-04
	NEDD8	-0.59	1.03E-04	1.16E-03
	STEAP4	-0.67	3.63E-03	1.84E-02
	HYAL2	-0.68	8.26E-04	5.86E-03
	SCARA5	-0.71	2.22E-03	1.26E-02
	HMOX2	-0.78	4.20E-13	2.09E-10
	STEAP1	-0.82	4.90E-03	2.30E-02
	SCD	-0.84	4.61E-03	2.21E-02
	CYP4F12	-1.03	5.92E-04	4.54E-03
	STEAP3	-1.14	2.36E-07	9.42E-06
	CYGB	-1.24	3.51E-05	4.94E-04
	C1QA	-1.40	2.04E-06	5.30E-05
	CYP4B1	-1.75	2.57E-06	6.41E-05
FIBROBLASTS	HBA1	3.30	4.70E-09	2.73E-07
	HBA2	2.79	8.90E-09	4.74E-07
	ABCG2	1.52	2.18E-07	6.63E-06
	PAH	1.36	1.53E-04	1.37E-03
	CYP19A1	1.26	6.70E-06	1.09E-04
	PPEF1	1.14	2.17E-05	2.84E-04
	REP15	1.14	6.12E-09	3.47E-07
	NEO1	0.94	6.40E-10	5.14E-08
	BMP6	0.91	8.39E-05	8.46E-04
	HPX	0.66	1.63E-03	9.06E-03
	CCND1	0.65	1.79E-05	2.45E-04
	P3H2	0.63	4.54E-03	2.00E-02
	AGMO	0.55	1.02E-03	6.25E-03
	HEPH	0.53	4.29E-05	4.99E-04
	ADI1	-0.52	7.38E-05	7.63E-04
	SLC48A1	-0.53	6.14E-06	1.01E-04
	PLOD1	-0.54	2.30E-04	1.91E-03
	TFR2	-0.58	3.39E-03	1.59E-02
	CYGB	-0.59	2.85E-05	3.55E-04
	TFRC	-0.61	4.05E-04	3.00E-03
	HMOX1	-0.65	3.11E-03	1.49E-02
	FTH1	-0.66	1.75E-06	3.70E-05
	CYP4A22	-0.68	5.06E-03	2.18E-02
	SCD	-0.69	4.74E-04	3.40E-03
	CYP4X1	-0.71	2.61E-04	2.11E-03
	FLVCR2	-0.72	1.81E-04	1.57E-03
	ALKBH2	-0.78	2.20E-06	4.44E-05
	ISCA2	-0.79	5.65E-07	1.46E-05
	SCD5	-0.85	3.96E-07	1.09E-05
	MAP1LC3A	-0.92	3.32E-08	1.42E-06
	CDO1	-0.97	4.47E-07	1.21E-05
	CYP26B1	-1.03	2.08E-04	1.75E-03
	SCARA5	-1.11	3.04E-09	1.88E-07
	CYP4A11	-1.23	2.49E-04	2.02E-03
	CYP4Z1	-1.34	2.13E-06	4.34E-05
	AOX1	-1.36	8.69E-07	2.08E-05
	C1QA	-1.50	4.37E-08	1.76E-06
	CYP4B1	-2.12	2.24E-10	2.08E-08

MYELOID CELLS	HBA1	3.75	2.32E-08	4.16E-06
	HBA2	2.66	1.17E-07	1.34E-05
	CH25H	1.83	8.73E-07	5.76E-05
	ATP6V0D2	1.38	1.36E-05	4.38E-04
	BMP6	0.82	8.67E-04	8.58E-03
	P3H2	0.79	7.62E-06	2.92E-04
	TF	0.78	6.89E-04	7.33E-03
	CYP2J2	0.60	2.78E-03	1.97E-02
	ABCG2	0.60	4.19E-04	5.09E-03
	CYP27A1	0.57	1.79E-03	1.42E-02
	SLC39A8	-0.52	6.48E-03	3.58E-02
	ISCA2	-0.52	9.63E-04	9.25E-03
	TFR2	-0.65	2.10E-03	1.60E-02
	ALOX5	-0.66	5.76E-10	2.07E-07
	STEAP3	-0.66	4.49E-04	5.38E-03
	SCARA5	-0.68	7.60E-04	7.84E-03
	CYGB	-0.70	1.55E-03	1.29E-02
	ALKBH2	-0.74	4.35E-04	5.25E-03
	CYP1B1	-0.79	1.27E-04	2.20E-03
	SLC11A1	-0.94	4.69E-05	1.09E-03
	CYP4B1	-0.96	3.28E-04	4.25E-03
	CCNB1	-1.48	1.81E-06	1.03E-04
ENDOCARDIAL CELLS	HBA1	4.00	1.99E-12	1.93E-10
	HBA2	3.03	5.22E-08	1.75E-06
	BMP6	2.41	2.42E-16	5.47E-14
	P3H2	2.34	7.11E-13	7.58E-11
	CP	1.49	1.08E-05	1.85E-04
	CYP2D6	1.42	1.81E-04	2.03E-03
	ABCG2	1.26	1.48E-04	1.72E-03
	P3H3	1.20	8.60E-06	1.53E-04
	HAAO	1.16	9.01E-05	1.14E-03
	BCL2	1.00	2.24E-04	2.39E-03
	TF	0.77	2.20E-03	1.46E-02
	CYP27B1	0.76	7.56E-03	3.78E-02
	TET1	0.65	4.04E-04	3.88E-03
	TTC7A	0.59	1.24E-04	1.50E-03
	MYC	0.54	5.63E-03	3.06E-02
	CYBRD1	0.52	5.70E-04	5.05E-03
	MCOLN1	-0.55	1.32E-03	9.89E-03
	SLC48A1	-0.57	4.88E-04	4.49E-03
	KDM7A	-0.62	2.15E-05	3.38E-04
	DNAJC24	-0.65	1.64E-07	4.75E-06
	STEAP4	-0.71	3.40E-03	2.06E-02
	ISCA2	-0.77	7.09E-04	6.03E-03
	NEDD8	-0.81	4.52E-04	4.22E-03
	ATP6V1F	-0.90	1.84E-04	2.05E-03
	C1QA	-1.24	8.08E-05	1.05E-03
	ALOX5	-1.34	5.33E-11	3.79E-09
	CYP4F12	-1.37	7.79E-09	3.31E-07
	HYAL2	-1.45	4.71E-13	5.15E-11
	CYP4B1	-1.71	5.61E-06	1.05E-04
	CYP1B1	-2.38	5.75E-18	1.79E-15
	PPEF1	-2.99	9.60E-17	2.29E-14
ENDOTHELIAL CELLS	HBA1	4.39	4.60E-12	2.31E-09
	HBA2	3.04	3.93E-08	3.73E-06
	BCL2	1.68	2.58E-13	2.63E-10
	P3H3	0.88	7.30E-05	1.21E-03
	CYP46A1	0.60	1.98E-03	1.38E-02
	SLC25A28	0.52	7.98E-06	2.34E-04
	CYGB	-0.51	9.34E-04	8.00E-03
	NOX5	-0.52	6.30E-03	3.20E-02
	ATP6V1F	-0.57	1.68E-04	2.25E-03
	SCD	-0.63	2.04E-03	1.41E-02
	ADI1	-0.70	4.61E-05	8.63E-04
	SCARA5	-0.74	2.39E-04	2.94E-03
	CYP4A11	-1.02	1.78E-04	2.34E-03
	STEAP4	-1.05	1.29E-07	1.00E-05
	C1QA	-1.42	3.83E-08	3.65E-06
	CYP4X1	-1.70	2.98E-10	6.34E-08
	CYP4B1	-2.01	6.18E-12	3.03E-09
	CYP4Z1	-2.24	1.99E-12	1.16E-09

Table S3. GSM number and covariates of selected samples for the bulk RNA-seq dataset.

ID	Study	Diagnosis
GSM3219558	GSE116250	NF
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GSM3219560	GSE116250	NF
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GSM3219570	GSE116250	NF
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GSM4216040	GSE141910	NF
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GSM4216042	GSE141910	NF
GSM4216043	GSE141910	NF
GSM4216044	GSE141910	NF
GSM4216045	GSE141910	NF
GSM4216047	GSE141910	NF
GSM4216048	GSE141910	NF
GSM4216049	GSE141910	NF
GSM4216050	GSE141910	NF
GSM4216052	GSE141910	DCM
GSM4216053	GSE141910	NF
GSM4216054	GSE141910	NF
GSM4216055	GSE141910	DCM
GSM4216056	GSE141910	NF
GSM4216057	GSE141910	DCM
GSM4216058	GSE141910	DCM
GSM4216059	GSE141910	DCM
GSM4216060	GSE141910	DCM
GSM4216061	GSE141910	NF
GSM4216062	GSE141910	DCM
GSM4216063	GSE141910	NF
GSM4216065	GSE141910	DCM
GSM4216066	GSE141910	DCM
GSM4216067	GSE141910	DCM
GSM4216069	GSE141910	NF
GSM4216070	GSE141910	NF
GSM4216071	GSE141910	DCM
GSM4216072	GSE141910	DCM
GSM4216073	GSE141910	DCM
GSM4216074	GSE141910	DCM
GSM4216075	GSE141910	NF
GSM4216076	GSE141910	DCM
GSM4216077	GSE141910	NF
GSM4216080	GSE141910	DCM
GSM4216081	GSE141910	NF
GSM4216082	GSE141910	NF
GSM4216083	GSE141910	NF
GSM4216084	GSE141910	NF
GSM4216085	GSE141910	NF
GSM4216086	GSE141910	NF
GSM4216087	GSE141910	NF
GSM4216089	GSE141910	NF
GSM4216090	GSE141910	NF
GSM4216091	GSE141910	DCM
GSM4216092	GSE141910	DCM
GSM4216093	GSE141910	NF
GSM4216094	GSE141910	NF
GSM4216095	GSE141910	NF
GSM4216096	GSE141910	DCM
GSM4216097	GSE141910	NF
GSM4216098	GSE141910	NF
GSM4216099	GSE141910	NF
GSM4216100	GSE141910	NF
GSM4216101	GSE141910	NF
GSM4216102	GSE141910	NF
GSM4216103	GSE141910	DCM
GSM4216104	GSE141910	NF
GSM4216105	GSE141910	NF
GSM4216106	GSE141910	NF
GSM4216108	GSE141910	NF
GSM4216109	GSE141910	NF
GSM4216110	GSE141910	NF
GSM4216111	GSE141910	NF
GSM4216112	GSE141910	NF
GSM4216113	GSE141910	NF
GSM4216114	GSE141910	NF
GSM4216115	GSE141910	NF
GSM4216116	GSE141910	NF
GSM4216117	GSE141910	DCM
GSM4216118	GSE141910	NF
GSM4216119	GSE141910	NF
GSM4216120	GSE141910	NF
GSM4216121	GSE141910	NF
GSM4216122	GSE141910	NF
GSM4216123	GSE141910	NF
GSM4216124	GSE141910	NF
GSM4216127	GSE141910	DCM

GSM4216128	GSE141910	DCM
GSM4216129	GSE141910	NF
GSM4216130	GSE141910	DCM
GSM4216131	GSE141910	NF
GSM4216132	GSE141910	NF
GSM4216134	GSE141910	NF
GSM4216135	GSE141910	NF
GSM4216136	GSE141910	NF
GSM4216138	GSE141910	NF
GSM4216139	GSE141910	NF
GSM4216140	GSE141910	DCM
GSM4216141	GSE141910	NF
GSM4216142	GSE141910	NF
GSM4216143	GSE141910	DCM
GSM4216144	GSE141910	NF
GSM4216146	GSE141910	NF
GSM4216147	GSE141910	NF
GSM4216148	GSE141910	NF
GSM4216149	GSE141910	NF
GSM4216150	GSE141910	NF
GSM4216151	GSE141910	NF
GSM4216152	GSE141910	NF
GSM4216153	GSE141910	NF
GSM4216154	GSE141910	NF
GSM4216155	GSE141910	DCM
GSM4216156	GSE141910	NF
GSM4216158	GSE141910	DCM
GSM4216160	GSE141910	NF
GSM4216161	GSE141910	NF
GSM4216162	GSE141910	NF
GSM4216163	GSE141910	NF
GSM4216164	GSE141910	NF
GSM4216165	GSE141910	DCM
GSM4216166	GSE141910	DCM
GSM4216167	GSE141910	DCM
GSM4216168	GSE141910	DCM
GSM4216169	GSE141910	NF
GSM4216170	GSE141910	NF
GSM4216171	GSE141910	NF
GSM4216172	GSE141910	NF
GSM4216173	GSE141910	NF
GSM4216174	GSE141910	NF
GSM4216175	GSE141910	NF
GSM4216176	GSE141910	NF
GSM4216177	GSE141910	NF
GSM4216178	GSE141910	NF
GSM4216179	GSE141910	NF
GSM4216180	GSE141910	DCM
GSM4216181	GSE141910	DCM
GSM4216182	GSE141910	DCM
GSM4216183	GSE141910	DCM
GSM4216184	GSE141910	NF
GSM4216185	GSE141910	NF
GSM4216186	GSE141910	NF
GSM4216187	GSE141910	NF
GSM4216188	GSE141910	NF
GSM4216189	GSE141910	DCM
GSM4216190	GSE141910	NF
GSM4216191	GSE141910	DCM
GSM4216192	GSE141910	NF
GSM4216193	GSE141910	DCM
GSM4216194	GSE141910	NF
GSM4216195	GSE141910	NF
GSM4216196	GSE141910	DCM
GSM4216197	GSE141910	DCM
GSM4216198	GSE141910	NF
GSM4216200	GSE141910	NF
GSM4216201	GSE141910	DCM
GSM4216202	GSE141910	DCM
GSM4216203	GSE141910	DCM
GSM4216204	GSE141910	DCM
GSM4216205	GSE141910	NF
GSM4216206	GSE141910	DCM
GSM4216207	GSE141910	DCM
GSM4216208	GSE141910	NF
GSM4216209	GSE141910	DCM
GSM4216210	GSE141910	DCM
GSM4216211	GSE141910	NF

GSM4216212	GSE141910	NF
GSM4216213	GSE141910	NF
GSM4216214	GSE141910	NF
GSM4216215	GSE141910	DCM
GSM4216216	GSE141910	NF
GSM4216217	GSE141910	DCM
GSM4216221	GSE141910	DCM
GSM4216224	GSE141910	NF
GSM4216226	GSE141910	DCM
GSM4216228	GSE141910	DCM
GSM3605111	GSE126569	NF
GSM3605114	GSE126569	NF
GSM3605116	GSE126569	NF
GSM3605120	GSE126569	NF
GSM3605122	GSE126569	NF
GSM3605123	GSE126569	NF
GSM3605126	GSE126569	NF
GSM3605127	GSE126569	NF
GSM3605128	GSE126569	NF
GSM3605129	GSE126569	DCM
GSM3605133	GSE126569	DCM
GSM3605141	GSE126569	DCM
GSM3605142	GSE126569	DCM
GSM3605143	GSE126569	DCM
GSM3605112	GSE126569	NF
GSM3605113	GSE126569	NF
GSM3605115	GSE126569	NF
GSM3605117	GSE126569	NF
GSM3605118	GSE126569	NF
GSM3605119	GSE126569	NF
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GSM3605125	GSE126569	NF
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GSM3605140	GSE126569	DCM
GSM2891378	GSE108157	NF
GSM2891379	GSE108157	NF
GSM2891381	GSE108157	NF
GSM2891385	GSE108157	NF
GSM3518005	GSE123976	NF
GSM3518006	GSE123976	NF
GSM3518007	GSE123976	NF

Table S4. Gene related to the iron metabolism collect from the molecular signatures database (MSigDB).

Iron-linked genes							
ABCB6	ATP6V1A	CYBRD1	CYP2U1	ERFE	HYAL2	P4HA3	SMAD4
ABCB7	ATP6V1B1	CYGB	CYP2W1	ETHE1	IFNG	P4HTM	SNCA
ABCE1	ATP6V1B2	CYP11A1	CYP39A1	FA2H	IREB2	PAH	SOD1
ABCG2	ATP6V1C1	CYP11B1	CYP3A4	FAXDC2	ISCA2	PDX1	SRI
ACO1	ATP6V1C2	CYP11B2	CYP3A43	FBXL5	ISCU	PGRMC2	STEAP1
ACO2	ATP6V1D	CYP17A1	CYP3A5	FDX1	JMJD6	PHF2	STEAP2
ACP5	ATP6V1E1	CYP19A1	CYP3A7	FECH	KDM3A	PHF8	STEAP3
ADI1	ATP6V1E2	CYP1A1	CYP46A1	FLVCR1	KDM7A	PHYH	STEAP4
AGMO	ATP6V1F	CYP1A2	CYP4A11	FLVCR2	LCN2	PICALM	TBXAS1
ALAD	ATP6V1G1	CYP1B1	CYP4A22	FTH1	LMTK2	PLOD1	TCIRG1
ALAS2	ATP6V1G2	CYP20A1	CYP4B1	FTH1P19	LTF	PLOD2	TET1
ALKBH1	ATP6V1G3	CYP21A2	CYP4F11	FTHL17	MAP1LC3A	PLOD3	TET2
ALKBH2	ATP6V1H	CYP24A1	CYP4F12	FTL	MCOLN1	PPEF1	TF
ALKBH3	ATP7A	CYP26A1	CYP4F2	FTMT	MELTF	PPEF2	TFAP2A
ALKBH8	B2M	CYP26B1	CYP4F22	FTO	MIOX	PTGIS	TFF1
ALOX12	BBOX1	CYP26C1	CYP4F3	FXN	MIR210	RAB11B	TFR2
ALOX12B	BCL2	CYP27A1	CYP4F8	G6PD	MMGT1	REP15	TFRC
ALOX15	BDH2	CYP27B1	CYP4V2	GDF2	MSMO1	RIOX1	TH
ALOX15B	BECN1	CYP27C1	CYP4X1	GLRX3	MYC	SC5D	TMEM199
ALOX5	BMP6	CYP2A13	CYP4Z1	HAAO	NCOA4	SCARA5	TMLHE
ALOXE3	BOLA2	CYP2A6	CYP4Z2P	HAMP	NDFIP1	SCD	TMPRSS6
AOX1	BOLA2B	CYP2A7	CYP51A1	HBA1	NECTIN1	SCD5	TPH1
ARHGAP1	BTBD9	CYP2B6	CYP7A1	HBA2	NEDD8	SKP1	TPH2
ASIC3	C1orf194	CYP2C18	CYP7B1	HBQ1	NEO1	SLC11A1	TTC7A
ATP13A2	C1QA	CYP2C19	CYP8B1	HBZ	NFU1	SLC11A2	TTYH1
ATP6AP1	CALR	CYP2C8	DNAJC24	HEPH	NOX5	SLC22A17	TYW5
ATP6V0A1	CAND1	CYP2C9	DNM2	HEPHL1	NUBP1	SLC25A28	XDH
ATP6V0A2	CCDC115	CYP2D6	DOHH	HFE	OGFOD1	SLC25A37	
ATP6V0A4	CCNB1	CYP2D7	DRD2	HIF1A	OGFOD2	SLC39A14	
ATP6V0B	CCND1	CYP2E1	EGLN1	HIF1AN	OGFOD3	SLC39A8	
ATP6V0C	CDO1	CYP2F1	EGLN2	HJV	P3H1	SLC40A1	
ATP6V0D1	CH25H	CYP2G1P	EGLN3	HMOX1	P3H2	SLC46A1	
ATP6V0D2	CLTC	CYP2J2	EIF2AK1	HMOX2	P3H3	SLC48A1	
ATP6V0E1	CP	CYP2R1	EPAS1	HPX	P4HA1	SLC6A3	
ATP6V0E2	CUL1	CYP2S1	EPB42	HRG	P4HA2	SLC6A9	