Supplementary Material

Table S1. Full table for the best scoring potential neoatigen ranking.

Mutation	Non-mutated	Neoantigen	Score
chr7:g.143756443C>T	YRKLTVEENYRIEEE	YRKLTVEKNYRIEEE	0,5809
chr15:g.71728609G>A	NWAIDRPGKYEGGGT	NWAIDRPEKYEGGGT	0,5635
chr7:g.87544253G>A	DESIPPVSFWRIMKL	DESIPPVFFWRIMKL	0,5605
chr5:g.26881525C>T	DNIVTYNDEGGGEED	DNIVTYNNEGGGEED	0,5577
chr19:g.43175439G>A	DLPSIYPSFTYYRSG	DLPSIYPLFTYYRSG	0,556
chrX:g.1309468G>A	RRGLDREGNYLRPRG	RRGLDREENYLRPRG	0,5522
chr7:g.82952797C>T	KPQYKEDGKLQLVGD	KPQYKEDEKLQLVGD	0,551
chr5:g.26885776C>T	PILIFDNDYPIQSST	PILIFDNNYPIQSST	0,5495
chr14:g.19827570G>A	FYFIILPGNFLIIFT	FYFIILPENFLIIFT	0,545
chr19:g.43184859C>T	NVTREDAGSYTLHII	NVTREDAESYTLHII	0,5416
chrX:g.151700035G>A	DAHSVLKRFPRANEF	DAHSVLKQFPRANEF	0,5402
chrX:g.50194060G>A	ECSIDDLSFYVNRLS	ECSIDDLFFYVNRLS	0,5329
chr2:g.154259080G>A	RNYFEEIGTYDAGMD	RNYFEEIETYDAGMD	0,5298
chr12:g.101677299G>A	TITELVIGNEYYFRV	TITELVIENEYYFRV	0,5292
chr17:g.40770092C>T	VLQYTAGGNVNVEMN	VLQYTAGRNVNVEMN	0,5258
chrX:g.3317733G>A	GTPAPQISWIFPDRR	GTPAPQIFWIFPDRR	0,5255
chr18:g.31391183G>A	IKVLDVNDNFPTLEK	IKVLDVNNNFPTLEK	0,523
chr3:g.36832438C>T	GRGSRIKGIEGKFGM	GRGSRIKEIEGKFGM	0,5219
chr18:g.31334141G>A	FFISGNEGNWFEIEM	FFISGNEENWFEIEM	0,5197
chr22:g.38488052T>C	NSSEDYVHRIGRTAR	NSSEDYVRRIGRTAR	0,5188
chr2:g.197402759C>T	DNMDEYVRNTTARAF	DNMDEYVHNTTARAF	0,5177
chrX:g.123404754G>A	KNHEQLEGNERYEGY	KNHEQLEENERYEGY	0,5161
chr7:g.148415509G>A	KGTYHTNEAKGAESA	KGTYHTNKAKGAESA	0,5155
chr1:g.175393814G>A	QWEPFSFSFDGWEIS	QWEPFSFFFDGWEIS	0,5118
chr16:g.69931192C>T	GAYDRSFRWKYHQFR	GAYDRSFWWKYHQFR	0,5113
chr7:g.142751821G>A	HNIEVLEGNEQFINA	HNIEVLEENEQFINA	0,5109
chr1:g.233160330G>A	HHPWMWISHPILKNK	HHPWMWILHPILKNK	0,5109
chr2:g.191836347C>T	NHQKISSGKSSPFKV	NHQKISSEKSSPFKV	0,5102
chr6:g.69324972G>A	QSYMAVTGKIRTRLI	QSYMAVTEKIRTRLI	0,5102
chr18:g.31522149C>T	NTLNSKISYRIVSLE	NTLNSKIFYRIVSLE	0,5078
chr8:g.24485306G>A	WLYSHVQGISYPGGM	WLYSHVQEISYPGGM	0,5035
chrX:g.71291940C>T	KAGEVFIHKDKGFGF	KAGEVFIYKDKGFGF	0,5034
chr3:g.98149867G>A	LHALIHEGFLFRLTF	LHALIHEEFLFRLTF	0,5021
chr10:g.24524613C>T	NLPHVASSPAVPQEA	NLPHVASFPAVPQEA	0,5004
chrX:g.106036667C>T	KELELQIGNALFIGK	KELELQIENALFIGK	0,5004
chr1:g.47067629C>T	IRALHLFPAPPAHWF	IRALHLFSAPPAHWF	0,5001
chr6:g.152539997C>T	EQEIVQKRTFTKWIN	EQEIVQKQTFTKWIN	0,4988
chr8:g.86229637C>T	LIQAIFQGYFAYSGG	LIQAIFQEYFAYSGG	0,498
chr18:g.72858855C>T	DGELESMGFSARYNF	DGELESMEFSARYNF	0,4975

chr1:g.182665995G>A	EATRWADSFDVLLSH	EATRWADFFDVLLSH	0,4972
chr1:g.118016053C>T	WFTTTPEGNRIGTKG	WFTTTPEENRIGTKG	0,4968
chr2:g.27232614C>T	RTPHVLVLGSGVYRI	RTPHVLVFGSGVYRI	0,4966
chr5:g.96410946C>T	SIFVWASGNGGRQGD	SIFVWASENGGRQGD	0,4965
chr2:g.50531346G>A	HTEAEDVSLRFRSQR	HTEAEDVFLRFRSQR	0,4957
chr2:g.140716021G>A	SFRYVIISQGLDQPR	SFRYVIIFQGLDQPR	0,4951
chr2:g.184933637G>A	LKQREFARNVASKSR	LKQREFAQNVASKSR	0,4951
chr3:g.147396359C>T	SPSRPLNGLLRLGLP	SPSRPLNRLLRLGLP	0,4941
chr8:g.14554847C>T	NAQLYPVGIYGWRKR	NAQLYPVEIYGWRKR	0,4926
chr8:g.123980648C>T	RAQESKFSKALKELK	RAQESKFFKALKELK	0,4924
chrX:g.3317665C>T	EGRITLHENRTLSIK	EGRITLHKNRTLSIK	0,4921
chr13:g.28712799C>T	SFLTSFLGIWLFSYC	SFLTSFLEIWLFSYC	0,4917
chr5:g.24487811C>T	LATYAYEGNDSIAES	LATYAYEENDSIAES	0,4916
chr11:g.92798561C>T	TIAHFHFHVHVRDSG	TIAHFHFYVHVRDSG	0,4914
chr5:g.41018960G>A	NILEENIRRLLPLPP	NILEENIWRLLPLPP	0,4913
chrX:g.3330248C>T	LRLLHLEGNLLHQLH	LRLLHLEENLLHQLH	0,4904
chr16:g.77320027G>A	EIQELQVSSSYLAVR	EIQELQVFSSYLAVR	0,4899
chr16:g.21201993C>T	DKVVYENEIHALWTD	DKVVYENKIHALWTD	0,4896
chr6:g.55255187C>T	LSCIALDRWYAICHP	LSCIALDWWYAICHP	0,4885
chr15:g.57438828C>T	KTRPDVLPFRRQDSA	KTRPDVLSFRRQDSA	0,4882
chr1:g.233666883C>T	DDWNFLESFYFCFIS	DDWNFLEFFYFCFIS	0,488
chr1:g.97699379C>T	YSDITIFEKQEYVGG	YSDITIFKKQEYVGG	0,4879
chr12:g.96742482C>T	SEFLDPISLNAREYF	SEFLDPIFLNAREYF	0,4869
chr8:g.130780658C>T	KGISEQEGKIKTYFL	KGISEQEEKIKTYFL	0,4867
chr4:g.154584191G>A	ENGVVWVSFRGADYS	ENGVVWVFFRGADYS	0,4865
chr20:g.1571020C>T	QLTWLENGNVSRTET	QLTWLENENVSRTET	0,4846
chr9:g.14863876C>T	DCHFLPNEVKYVHNG	DCHFLPNKVKYVHNG	0,4843
chr8:g.109408124G>A	DITEQTKGKPNLETF	DITEQTKEKPNLETF	0,4842
chrX:g.152255974G>A	YTIDVFFRQTWHDER	YTIDVFFWQTWHDER	0,4832
chr8:g.3367061G>A	FISDFSISYEGFNIT	FISDFSILYEGFNIT	0,4816
chr2:g.230037495G>A	ITQKYDFSFYICGLL	ITQKYDFFFYICGLL	0,4807
chr4:g.74449137G>A	KKKGGKNGKNRRNRK	KKKGGKNEKNRRNRK	0,4805
chr1:g.247605707G>A	FYLLTLVGNFTIIII	FYLLTLVENFTIIII	0,4798
chr14:g.33560158G>A	VFALNQEGKFLYISE	VFALNQEEKFLYISE	0,4795
chr3:g.169093015C>T	DAYFTEIRNFIGNSN	DAYFTEIQNFIGNSN	0,4784
chr13:g.91693300G>A	SVQEFFTDVGLYLFG	SVQEFFTNVGLYLFG	0,477
chr4:g.54728055A>G	EALMSELKVLSYLGN	EALMSELEVLSYLGN	0,4768
chr7:g.142752910G>A	VCNGQLQGVVSWGDG	VCNGQLQRVVSWGDG	0,4765
chr11:g.58834539G>A	KEIPFYFHVADNNEK	KEIPFYFYVADNNEK	0,4762
chr20:g.42161391C>T	LLQHITQMKRGQGYG	LLQHITQIKRGQGYG	0,4756
chr17:g.10497154C>T	TEQIAEGGKRIHELE	TEQIAEGEKRIHELE	0,4753
chr4:g.1728651C>T	MDDPNFIPFGGDTKS	MDDPNFISFGGDTKS	0,4752
chr2:g.135808524C>T	PIYITENGVGLTNPN	PIYITENRVGLTNPN	0,475

chr1:g.158355902G>A	QLVCHVSGFYPKPVW	QLVCHVSEFYPKPVW	0,4749
chr7:g.87545921C>T	DGVIVEKGNHDELMK	DGVIVEKENHDELMK	0,4748
chr17:g.10492520C>T	KFRRIQHELEEAEER	KFRRIQHKLEEAEER	0,4747
chr5:g.179158774C>T	TGHDEYHDHAIFLTR	TGHDEYHNHAIFLTR	0,4743
chr5:g.39134887C>T	RITDNPEGKWLGRTA	RITDNPEEKWLGRTA	0,4734
chrX:g.141897520G>A	REHFIYGDPRKLLTI	REHFIYGNPRKLLTI	0,4718
chr19:g.56516312C>T	KDVAIDFSQEEWQWM	KDVAIDFFQEEWQWM	0,4717
chr17:g.4937836G>A	SLWKGFTPYYARLGP	SLWKGFTSYYARLGP	0,4711
chr20:g.1636379C>T	TLKWFKNGNELSDFQ	TLKWFKNENELSDFQ	0,4708
chr11:g.76351127G>A	LPDIKFFPNVYALLK	LPDIKFFSNVYALLK	0,4704
chr8:g.105802180G>A	NITFSRHETYMVHKQ	NITFSRHKTYMVHKQ	0,4695
chr19:g.22757311G>A	LRKHEIIHTGKKPYK	LRKHEIIYTGKKPYK	0,4695
chr5:g.94953325C>T	YVKFKIGGKEVFRSK	YVKFKIGEKEVFRSK	0,4685
chr10:g.60263938C>T	LLENDTKGKVRLPAL	LLENDTKEKVRLPAL	0,4682
chr1:g.217683288C>T	RWRGYRVRKYLFNYY	RWRGYRVWKYLFNYY	0,4669
chr17:g.11822463G>A	TLCFSPVGNKLRVRS	TLCFSPVENKLRVRS	0,466
chr19:g.44428742C>T	KHQRVHTGKKPYTCD	KHQRVHTEKKPYTCD	0,4658
chr4:g.128842980C>T	STTWSQNSRSQHRRS	STTWSQNFRSQHRRS	0,4655
chr4:g.99342826G>A	TDGGVDFSFEVIGRL	TDGGVDFLFEVIGRL	0,465
chr14:g.18601616G>A	VILCWVCGFLWFLIP	VILCWVCEFLWFLIP	0,4649
chr11:g.4804110G>A	MLAIFWFHAHEIQYH	MLAIFWFYAHEIQYH	0,4648
chr14:g.88186062C>T	RLSVEIHDKLQRAAT	RLSVEIHNKLQRAAT	0,4648
chr2:g.218584683C>T	HTVSKTRPFEYLRLT	HTVSKTRLFEYLRLT	0,4647
chr14:g.19920797G>A	SPMYFLLGNLSFVDI	SPMYFLLENLSFVDI	0,4646
chr7:g.140781603C>T	RIGSGSFGTVYKGKW	RIGSGSFRTVYKGKW	0,4642
chr22:g.15528394G>A	TPMYMFLGNFSFLEI	TPMYMFLENFSFLEI	0,4639
chr8:g.54622262G>A	SQRVYPKGNAKSESR	SQRVYPKENAKSESR	0,4624
chr14:g.41887592C>T	PAIHWISPEGKLISN	PAIHWISSEGKLISN	0,4623
chr7:g.142055649G>A	KYLYGFGETEHRSYR	KYLYGFGKTEHRSYR	0,462
chr19:g.52438334C>T	LAQHRKIHTGEKPYK	LAQHRKIYTGEKPYK	0,462
chr7:g.140753336A>T	GDFGLATVKSRWSGS	GDFGLATEKSRWSGS	0,4618
chr3:g.7579262G>A	GVPENFNEAKPIGFT	GVPENFNKAKPIGFT	0,4617
chr6:g.130440906G>A	TKIIHMRDIYSTVID	TKIIHMRNIYSTVID	0,4614
chr2:g.178782877C>T	REAFAEDSGRFTCSA	REAFAEDNGRFTCSA	0,4599
chr8:g.72567790C>T	KTSRSTLSLPPEPVD	KTSRSTLFLPPEPVD	0,4597
chr1:g.159307820G>A	ILFAVDTGLFISTQQ	ILFAVDTELFISTQQ	0,4596
chr1:g.152760577C>T	PKCRIEISSPCCPRQ	PKCRIEIFSPCCPRQ	0,4594
chr16:g.26135994G>A	GEMAKVQDFLGLKRV	GEMAKVQNFLGLKRV	0,4592
chr9:g.101370989C>T	YVAPGVTRIKVREGR	YVAPGVTQIKVREGR	0,4582
chr6:g.56179883C>T	ESILYLGGNTKTGKA	ESILYLGENTKTGKA	0,4577
chr2:g.233682500C>T	AQCPAPLSYVPRLLL	AQCPAPLFYVPRLLL	0,4574
chr15:g.40382906C>T	WLSTECDSHPLPPSY	WLSTECDFHPLPPSY	0,4572
chr18:g.31089522G>A	PGVDQEPRNLFYVER	PGVDQEPWNLFYVER	0,4572

chr11:g.55968222C>T	MDIWTQKGNISLFAC	MDIWTQKENISLFAC	0,457
chr2:g.166038050C>T	GNSVGALGNLTLVLA	GNSVGALENLTLVLA	0,4569
chr1:g.247574356G>A	CSCTHEHDYEVVFPH	CSCTHEHNYEVVFPH	0,4564
chr8:g.109459717G>A	ITVTLPDGTLFEARA	ITVTLPDETLFEARA	0,4556
chr20:g.45207407C>T	GRLPSEFSQFPHGQK	GRLPSEFFQFPHGQK	0,4555
chr10:g.105147641G>A	MHIISTDENQVFAAV	MHIISTDKNQVFAAV	0,4555
chr19:g.22180978G>A	LTKHKIIHTGEKPYK	LTKHKIIYTGEKPYK	0,4554
chr1:g.43603456C>T	LTPETTYSVTVAAYT	LTPETTYFVTVAAYT	0,4553
chr7:g.82915294G>A	TSSIGGISSRARLLQ	TSSIGGIFSRARLLQ	0,4549
chr3:g.193321794G>A	TLCQFPFSSSLQRMS	TLCQFPFFSSLQRMS	0,4549
chr5:g.38418229G>A	DMRPWPLGKALSGAD	DMRPWPLEKALSGAD	0,4547
chrX:g.66256246G>A	NKSWYLEENVATHGS	NKSWYLEKNVATHGS	0,4542
chr14:g.91669852G>A	SPVGMVFHPRSHFLY	SPVGMVFYPRSHFLY	0,4542
chr6:g.73077787G>A	LITAWYIGFLVLIFS	LITAWYIEFLVLIFS	0,454
chr11:g.100340557G>A	VILTGLEGNTLYHFT	VILTGLEENTLYHFT	0,4536
chr4:g.188147302C>T	EALRPIFSPCLPNEG	EALRPIFFPCLPNEG	0,4535
chr8:g.39645363G>A	PDAIGLEGFSVIIAQ	PDAIGLEEFSVIIAQ	0,453
chr8:g.113019096C>T	FVTDSNHRYRGFSAP	FVTDSNHQYRGFSAP	0,4527
chr8:g.51408643C>T	ALNPHWEGNTVYQEA	ALNPHWEENTVYQEA	0,4519
chr4:g.176221220C>T	DQEIPHLGTPLYVAC	DQEIPHLETPLYVAC	0,4519
chr1:g.74636410C>T	PRPYTAPGNMQPPIR	PRPYTAPENMQPPIR	0,4516
chr1:g.13342691G>A	APEESLNSLVRVDWE	APEESLNFLVRVDWE	0,4512
chr3:g.98168746G>A	LTEFVLTGFLYQPQW	LTEFVLTEFLYQPQW	0,4512
chr4:g.54727444T>C	MYEVQWKVVEEINGN	MYEVQWKAVEEINGN	0,4511
chr6:g.7583897G>A	KRSMSFQGIRQPVTV	KRSMSFQEIRQPVTV	0,4507
chr14:g.94288397C>T	VLKLPYQGNATMLVV	VLKLPYQENATMLVV	0,45
chr9:g.74763034C>T	SQVGHLQDLSALTVD	SQVGHLQNLSALTVD	0,4496
chr3:g.131542612C>T	GILRSPKGEPVLRDI	GILRSPKEEPVLRDI	0,4495
chr17:g.10526642C>T	AQWRTKYETDAIQRT	AQWRTKYKTDAIQRT	0,4494
chr17:g.75729303C>T	PNSDPPFSFKNVISL	PNSDPPFFFKNVISL	0,4494
chr2:g.227059518C>T	PGVNGQKGIPGDPAF	PGVNGQKEIPGDPAF	0,4493
chr11:g.65605976G>A	CWAWGPSSPKPGEAQ	CWAWGPSFPKPGEAQ	0,449
chr1:g.172042115C>T	AKINRIFHERFPFEI	AKINRIFYERFPFEI	0,4487
chr2:g.102665135G>A	LFKSFCQMKTIETID	LFKSFCQIKTIETID	0,4483
chr8:g.85129207C>T	IIFRERNSKGQLEVM	IIFRERNFKGQLEVM	0,4476
chr10:g.49107660C>T	HYVCRVQEISRHRNK	HYVCRVQKISRHRNK	0,4474
chr1:g.216519284C>T	ADDYIMDEDQSKLAG	ADDYIMDKDQSKLAG	0,4469
chr2:g.227051095C>T	PGRYGPPGFHRGEPG	PGRYGPPEFHRGEPG	0,4466
chr13:g.57724776G>A	NVETETYETVNPTGK	NVETETYKTVNPTGK	0,446
chr4:g.99345053C>T	NPRGTLQDGTRRFTC	NPRGTLQNGTRRFTC	0,4457
chr1:g.158717916G>A	YNFISIFSFLEIWYT	YNFISIFFFLEIWYT	0,4455
chr1:g.239908220G>A	LYWRIYKETEKRTKE	LYWRIYKKTEKRTKE	0,4453
chr19:g.55858466G>A	LKQEMQKGKDLALTC	LKQEMQKEKDLALTC	0,4452

chr10:g.71570862G>A	ITDVQDMDPIFINLP	ITDVQDMNPIFINLP	0,445
chr11:g.124117765C>T	YENEEKVPLEAFFVF	YENEEKVSLEAFFVF	0,4449
chr3:g.38614022C>T	LGNLSALRTFRVLRA	LGNLSALQTFRVLRA	0,4449
chr4:g.68818106C>T	NSWNFKFPHPFLPNV	NSWNFKFSHPFLPNV	0,4448
chr16:g.28903404G>A	LPVIGLDEILKFVAR	LPVIGLDKILKFVAR	0,4448
chr3:g.161497145G>A	SPVPGQKGEPGETGQ	SPVPGQKEEPGETGQ	0,4447
chr7:g.150572210G>A	GAGKSATGNSILGRK	GAGKSATENSILGRK	0,4442
chr12:g.18701736C>T	LVKNKKIGTLKETHE	LVKNKKIETLKETHE	0,4438
chr10:g.28089731C>T	TADVPTYEEVTPYRR	TADVPTYKEVTPYRR	0,4437
chr2:g.178774374C>T	VSPENIEGKWYHNDV	VSPENIEEKWYHNDV	0,4436
chr1:g.107760822G>A	LRDLLVVPMQRVLKY	LRDLLVVSMQRVLKY	0,4429
chr9:g.116188053G>A	LTGHDGGDCRHLRHP	LTGHDGGNCRHLRHP	0,4429
chr11:g.4488989C>T	EHLHAWISIPFCFAY	EHLHAWIFIPFCFAY	0,4428
chr1:g.151366370G>A	SLKDGLIPLEIRFLH	SLKDGLISLEIRFLH	0,4428
chr3:g.26709910C>T	SNQITSIPNEIFKDL	SNQITSISNEIFKDL	0,4425
chr3:g.35792478G>A	NVINNQQGTPVQSVM	NVINNQQETPVQSVM	0,4421
chr2:g.187496934C>T	FIYGGCEGNQNRFES	FIYGGCEENQNRFES	0,4421
chr8:g.92011064G>A	TLTIEEFHSKLQEAT	TLTIEEFYSKLQEAT	0,4419
chr7:g.140753336A>C	GDFGLATVKSRWSGS	GDFGLATGKSRWSGS	0,4415
chr1:g.117442270C>T	VQLAEKLLPAFNTPT	VQLAEKLFPAFNTPT	0,4415
chr4:g.166003417G>A	CSYVGRRGNGPQAIS	CSYVGRRENGPQAIS	0,4415
chr1:g.118885415G>A	SCSPPTFHLAPNTFN	SCSPPTFYLAPNTFN	0,4415
chr1:g.56881485G>A	EDAQSVYDASYYGGQ	EDAQSVYNASYYGGQ	0,4415
chr3:g.57109588G>A	FVKVVPFPSIKNESN	FVKVVPFSSIKNESN	0,4412
chr11:g.19056263C>T	IALVGLVGNGFVLWL	IALVGLVENGFVLWL	0,4412
chr1:g.157524435G>A	PILYWFYHEDVTLGK	PILYWFYYEDVTLGK	0,4411
chr5:g.31299560G>A	DMGGQMGGLSGTTTV	DMGGQMGELSGTTTV	0,4409
chr10:g.45789214C>T	STGTGSQSVERTKPK	STGTGSQFVERTKPK	0,4406
chr3:g.98007862C>T	LMLYWKHGNKSLNTE	LMLYWKHENKSLNTE	0,4406
chr20:g.42315779G>A	NGYWNPPLSPLKSYS	NGYWNPPFSPLKSYS	0,4405
chr16:g.51141996C>T	QLVLIVNENPASPPE	QLVLIVNKNPASPPE	0,4405
chr1:g.176594599G>A	IRSGKDKGKRDARFF	IRSGKDKEKRDARFF	0,4404
chr17:g.62737146C>T	ALSQAFQGKNSPQVL	ALSQAFQEKNSPQVL	0,4402
chr6:g.167340735C>T	VYQEGLVRFATEKFD	VYQEGLVWFATEKFD	0,4401
chr7:g.140781611C>T	VGQRIGSGSFGTVYK	VGQRIGSESFGTVYK	0,4397
chr3:g.169381284C>T	NMPGAGLGIWTKRKI	NMPGAGLEIWTKRKI	0,4396
chr1:g.159440635C>T	VTYTVITPLLNPVVY	VTYTVITSLLNPVVY	0,4395
chr14:g.19781178C>T	VIFPLLNPIIYTLRN	VIFPLLNSIIYTLRN	0,4389
chr5:g.146000175G>A	DENWYQGEINGISGN	DENWYQGKINGISGN	0,4387
chr1:g.248626488G>A	PISIISTSYSLILLT	PISIISTFYSLILLT	0,4386
chr4:g.23828505C>T	LKYLTTNDDPPHTKP	LKYLTTNNDPPHTKP	0,4386
chr8:g.2949322C>T	DIHGKDFGKFKLERQ	DIHGKDFEKFKLERQ	0,4376
chr3:g.123733717C>T	PQSQEVKENQTVKFR	PQSQEVKKNQTVKFR	0,4375

chr4:g.157152784C>T	AAELPKVSYVKALDV	AAELPKVFYVKALDV	0,437
chr3:g.114295787G>A	LQSLTVNDTGEYFCI	LQSLTVNNTGEYFCI	0,4367
chr2:g.227273055G>A	PPGYGPQGEPGLQGT	PPGYGPQEEPGLQGT	0,4365
chr15:g.91226393G>A	EGHDEEDEIYEGEYQ	EGHDEEDKIYEGEYQ	0,4365
chr15:g.71898605G>A	RSLGGISPSEDRRWS	RSLGGISSSEDRRWS	0,4364
chr19:g.21972399G>A	WPSTLSYHKKIHTGE	WPSTLSYYKKIHTGE	0,4358
chr11:g.100255892C>T	LQARSPFSLGWQTVK	LQARSPFFLGWQTVK	0,4354
chr8:g.3348137C>T	ECGASVKGNEGTLLS	ECGASVKENEGTLLS	0,4353
chr2:g.166305835G>A	VGEFTFLRDPWNWLD	VGEFTFLCDPWNWLD	0,4352
chr1:g.169542001C>T	SQFLIKTRKKKKEKH	SQFLIKTQKKKKEKH	0,435
chr20:g.32995693C>T	KVRHHSGEIQDLRGS	KVRHHSGKIQDLRGS	0,4347
chr4:g.185623379C>T	KHERARHENTEEPRR	KHERARHKNTEEPRR	0,4345
chr7:g.100752054C>T	PSEKPTISTEKPTVP	PSEKPTIFTEKPTVP	0,4344
chr5:g.26881510C>T	YNDEGGGEEDTQAFD	YNDEGGGKEDTQAFD	0,4343
chr6:g.152416597G>A	GSSEQRTSCRATADQ	GSSEQRTFCRATADQ	0,4341
chr8:g.39637607C>T	WSNENQISTSGDADD	WSNENQIFTSGDADD	0,434
chr19:g.21971379G>A	LRYHKKIHTGEKPYK	LRYHKKIYTGEKPYK	0,4338
chr2:g.124914224C>T	YPENLDSSFRNEIDL	YPENLDSFFRNEIDL	0,4336
chr8:g.120283730G>A	QEPFALWEILNKNSD	QEPFALWKILNKNSD	0,4335
chr7:g.11593356C>T	AGTRVRTRTIRQFPI	AGTRVRTQTIRQFPI	0,4334
chr8:g.53234962G>A	VLCKIVISIDYYNMF	VLCKIVIFIDYYNMF	0,4333
chr14:g.99257531C>T	GIQVTPDEDDHLLSP	GIQVTPDKDDHLLSP	0,4333
chr12:g.39607657C>T	TEAFTTARNLLASGA	TEAFTTAQNLLASGA	0,4332
chr1:g.179618645G>A	IAQIGPGGTISSELK	IAQIGPGETISSELK	0,433
chr3:g.99849049C>T	KEGHLQNGKMQTKPN	KEGHLQNEKMQTKPN	0,4329
chr4:g.41263246C>T	VDDKVNFHFILFNNV	VDDKVNFYFILFNNV	0,4329
chr7:g.93132805G>A	DETDTLFSPLMEALQ	DETDTLFFPLMEALQ	0,4329
chr20:g.42678049C>T	DGPIILKEVEYRTTT	DGPIILKKVEYRTTT	0,4328
chr7:g.143052920G>A	CSDTRLLEFWDFLMA	CSDTRLLKFWDFLMA	0,4324
chr1:g.197008576G>A	KLYAKTGDAVEFQCK	KLYAKTGNAVEFQCK	0,4322
chr3:g.96987964G>A	GRCICSTGYEEIEGS	GRCICSTEYEEIEGS	0,4317
chr3:g.38847179C>T	DIFYEVWEKFDPEAT	DIFYEVWKKFDPEAT	0,4316
chr1:g.247876011G>A	DVPNNPERFDTWPCI	DVPNNPEQFDTWPCI	0,4308
chr15:g.24678527C>T	DRRPTTTSSHPLNTG	DRRPTTTFSHPLNTG	0,4308
chr1:g.181796713G>A	SGGRERGRSKERKHL	SGGRERGQSKERKHL	0,4307
chr1:g.179491561G>A	MDELHISMIQWMVNL	MDELHISIIQWMVNL	0,4307
chr2:g.178746747C>T	VPGVKWYRNKSLLEP	VPGVKWYQNKSLLEP	0,4304
chr7:g.140753334T>C	DFGLATVKSRWSGSH	DFGLATVESRWSGSH	0,4304
chr20:g.31259487G>A	WIRRCYYGTGRCRKS	WIRRCYYETGRCRKS	0,4303
chr19:g.37738680G>A	LTQHQKIHTGGKPYE	LTQHQKIYTGGKPYE	0,43
chr2:g.130762122C>T	IKSSLQVSHEKPPDP	IKSSLQVFHEKPPDP	0,43
chr15:g.43456591G>A	GSEVEEIPETPCESQ	GSEVEEISETPCESQ	0,43
chr1:g.171110858C>T	RVWDNGYPWDMLLVT	RVWDNGYSWDMLLVT	0,4296

chr4:g.188091461G>A	GALRPVFSLCIPNGD	GALRPVFFLCIPNGD	0,4296
chr12:g.123875406C>T	EVDPRFISLFSVFNV	EVDPRFILLFSVFNV	0,4294
chr2:g.195787132G>A	LYGLCFFHALVQERR	LYGLCFFYALVQERR	0,4294
chr2:g.229025660G>A	NSSSEEVSQELESDD	NSSSEEVFQELESDD	0,4294
chr7:g.142252327C>T	ICNGMLQGILSFADG	ICNGMLQEILSFADG	0,4292
chr2:g.188994778G>A	KGEDGKDGSPGEPGA	KGEDGKDRSPGEPGA	0,4289
chr20:g.31783880C>T	EDEHFEFHSRPCPTK	EDEHFEFYSRPCPTK	0,4289
chr6:g.93410659G>A	TVTGSEFSSLVEVRG	TVTGSEFFSLVEVRG	0,4289
chr19:g.22391785G>A	LSKHKVIHTGEKPYK	LSKHKVIYTGEKPYK	0,4288
chr14:g.71723862C>T	KPEGTINSVGFMDTR	KPEGTINFVGFMDTR	0,4285
chr9:g.8524996C>T	QSEESDQGKYECVAT	QSEESDQEKYECVAT	0,4283
chr2:g.228017442C>T	RFMVNQMENEGRGFE	RFMVNQMKNEGRGFE	0,4282
chr1:g.172032443G>A	ITKLDLMDEGTDARD	ITKLDLMNEGTDARD	0,4281
chr1:g.116754910G>A	VSIYDTKGKNVLEKI	VSIYDTKEKNVLEKI	0,4277
chr13:g.91693375C>T	RFFDSLFPLVYNHLI	RFFDSLFSLVYNHLI	0,4276
chr3:g.169116616G>A	QMFSTTSSLNKHRRF	QMFSTTSFLNKHRRF	0,4274
chr19:g.21973311G>A	LSYHKKIHTVEKPYK	LSYHKKIYTVEKPYK	0,4272
chr5:g.26881260G>A	GNDSIADSLSSLESL	GNDSIADLLSSLESL	0,4271
chr19:g.57129547G>A	QQGFPNLGNTCYMNA	QQGFPNLENTCYMNA	0,427
chr1:g.159713724G>A	ILGQEQDSFGGNFEG	ILGQEQDFFGGNFEG	0,4265
chr6:g.84055419C>T	YYEIGPVSFEGLKAH	YYEIGPVFFEGLKAH	0,4263
chr6:g.10874815G>A	IPGQPCPSFPKSDVY	IPGQPCPFFPKSDVY	0,4263
chr3:g.108353712G>A	RVSLLDEGIYTCYVG	RVSLLDEEIYTCYVG	0,4263
chr8:g.138141233C>T	SLSGPHLGTLYNNST	SLSGPHLETLYNNST	0,4261
chr1:g.56767888G>A	HNYEATISYLRHSGN	HNYEATILYLRHSGN	0,4255
chr6:g.93258242C>T	SGRLKLPGKRDVAVA	SGRLKLPEKRDVAVA	0,4251
chr3:g.26709859C>T	KEIPRDLPPETVLLY	KEIPRDLSPETVLLY	0,425
chr11:g.56376321G>A	LRMHSAEGRQKAFST	LRMHSAEERQKAFST	0,425
chr19:g.21973863G>A	LSYHKKIHTGEKPYK	LSYHKKIYTGEKPYK	0,4247
chr17:g.42405255G>A	DAAALELSSDEAVEV	DAAALELLSDEAVEV	0,4244
chr13:g.24707050G>A	VVAVTGDGVNDSPAL	VVAVTGDRVNDSPAL	0,4242
chr8:g.39609521C>T	QGYAAEFPNSFVTLS	QGYAAEFSNSFVTLS	0,424
chr2:g.137170884G>A	GICFPDHGKCGLGHR	GICFPDHRKCGLGHR	0,4234
chr12:g.21801129C>T	LVIVMKRGNILEYDT	LVIVMKRENILEYDT	0,4229
chr4:g.44175160G>A	KGSESGTSCNELSTS	KGSESGTFCNELSTS	0,4225
chr7:g.14338598C>T	WGESKKRRSHRRIEK	WGESKKRQSHRRIEK	0,4224
chr7:g.142008671G>A	PVVNELERINCIPDQ	PVVNELEQINCIPDQ	0,4224
chr22:g.41745929C>T	EPSAQENPFTAPSAK	EPSAQENLFTAPSAK	0,4215
chr20:g.44159844C>T	RSSGLRYEGEWLDNL	RSSGLRYKGEWLDNL	0,4215
chr2:g.1923177C>T	NDEYDNYDELVAKSL	NDEYDNYNELVAKSL	0,4215
chr3:g.52364929C>T	GIVSDLFPTIKEEDT	GIVSDLFSTIKEEDT	0,4214
chr2:g.154242088C>T	TSVVIVFHNEAWSTL	TSVVIVFYNEAWSTL	0,4205
chr7:g.77262219G>A	REKERDFRNLRKMEL	REKERDFQNLRKMEL	0,4204

chr12:g.100380865C>T	SGLGFCISFGIRCNL	SGLGFCIFFGIRCNL	0,4201
chr16:g.9764345G>A	DISETSNRATCHREP	DISETSNWATCHREP	0,4201
chr6:g.76034649G>A	IGKNFSNSQEHLDLL	IGKNFSNFQEHLDLL	0,4201
chr16:g.9764087C>T	DFPDPYQDPSENFRK	DFPDPYQNPSENFRK	0,42
chr18:g.53157422G>A	VPVLVSSRFVRLSWR	VPVLVSSQFVRLSWR	0,4197
chr7:g.147395735G>A	EVAQRKPGSFANVSI	EVAQRKPESFANVSI	0,4194
chr1:g.158355405C>T	FLSFQGISWEPSPGA	FLSFQGIFWEPSPGA	0,4193
chr4:g.74446740G>A	YSEEYDNEPQIPGYI	YSEEYDNKPQIPGYI	0,4189
chr8:g.92005144C>T	ELLLDVNENGKRRTP	ELLLDVNKNGKRRTP	0,4188
chr7:g.71335622C>T	GGLPATLSPAEEEKA	GGLPATLFPAEEEKA	0,4187
chr4:g.137531580G>A	DPDVGENSLHTYSLS	DPDVGENFLHTYSLS	0,4186
chr7:g.24650540G>A	VIARILHGGMIDRQG	VIARILHEGMIDRQG	0,4184
chrX:g.151955752G>A	TTMLSWVSFWIKTES	TTMLSWVFFWIKTES	0,418
chr1:g.33743384C>T	PVLGTFSGNQLPSSI	PVLGTFSENQLPSSI	0,4177
chr5:g.122450721G>A	KILRQLLGKEISENV	KILRQLLEKEISENV	0,4176
chr1:g.7663407C>T	SAKHRIISPKVEPRT	SAKHRIILPKVEPRT	0,4176
chr8:g.138143076C>T	ADFDTMTDRLLDEII	ADFDTMTNRLLDEII	0,4176
chr2:g.170236049C>T	DARCDVWSLGITAIE	DARCDVWFLGITAIE	0,4174
chr6:g.55774207C>T	VKSAGLVGRQGPQSK	VKSAGLVERQGPQSK	0,4174
chr1:g.26425451G>A	GSERRPKGKSMQKRR	GSERRPKEKSMQKRR	0,417
chr16:g.7595570G>A	GFGFVTFENSADADR	GFGFVTFKNSADADR	0,4169
chr8:g.64615122C>T	AMAAVRDEIDRLLQS	AMAAVRDKIDRLLQS	0,4167
chr3:g.97448658C>T	PATKYVFHIRVRTAT	PATKYVFYIRVRTAT	0,4166
chr2:g.140274565G>A	HYCVNSESCTIGDDG	HYCVNSELCTIGDDG	0,4163
chr14:g.19781125C>T	ARPFDSFSLDKVVSV	ARPFDSFFLDKVVSV	0,416
chr16:g.61653646C>T	PRFKRLGELYSVGES	PRFKRLGKLYSVGES	0,4158
chr6:g.41198180C>T	LKLQDSGRYWCMRNT	LKLQDSGQYWCMRNT	0,4153
chr1:g.171117206C>T	PWLFLTDPKLAMEVY	PWLFLTDSKLAMEVY	0,4153
chr5:g.13776525C>T	SPVGEKFRNRALKFP	SPVGEKFQNRALKFP	0,4151
chr2:g.227032243C>T	VGPPGPVGIPGLKGE	VGPPGPVEIPGLKGE	0,4149
chrX:g.102717306C>T	EPLISAFREFEELAK	EPLISAFCEFEELAK	0,4148
chr10:g.37219097G>A	KHQYQEKENKYFEDI	KHQYQEKKNKYFEDI	0,4142
chr3:g.151193655C>T	LQYATHFPIPLVSHC	LQYATHFSIPLVSHC	0,4138
chr10:g.24473372C>T	PPSPSRIPYGGTRSM	PPSPSRISYGGTRSM	0,4138
chr11:g.63229372G>A	KCRRFVHPQWKLIHL	KCRRFVHLQWKLIHL	0,4134
chr18:g.31329992C>T	NDNPPVFSMATFAGQ	NDNPPVFLMATFAGQ	0,4131
chr3:g.122550738G>A	EQNITSISFPALGTG	EQNITSIFFPALGTG	0,4127
chr2:g.21002691G>A	NGSEILFSYFQDLVI	NGSEILFFYFQDLVI	0,4126
chr18:g.31458505G>A	RISGVGIDQPPFGIF	RISGVGINQPPFGIF	0,4118
chr19:g.57135184G>A	LIQHKKIHTGEKPYE	LIQHKKIYTGEKPYE	0,4117
chr1:g.115072968G>A	IAFGLWFRFGGAIKE	IAFGLWFWFGGAIKE	0,4115
chr19:g.49748415C>T	DSITSLKEKTNRVNQ	DSITSLKKKTNRVNQ	0,4115
chr6:g.56179820C>T	YLFAKSSRFLTKIAV	YLFAKSSQFLTKIAV	0,4115

chr3:g.51333205C>T	TWRETGISFVTSVTR	TWRETGIFFVTSVTR	0,4113
chr11:g.5254395G>A	HGKKVLTSLGDAIKH	HGKKVLTFLGDAIKH	0,4111
chr6:g.55774138C>T	KASEVLLRSVRAANK	KASEVLLQSVRAANK	0,411
chr9:g.119167845C>T	HTTFISNEIRLDTFF	HTTFISNKIRLDTFF	0,4109
chr12:g.7379214C>T	VNVQGAVGILCANGW	VNVQGAVEILCANGW	0,4106
chr17:g.53823589G>A	NTRNPNYEIMHMIEE	NTRNPNYKIMHMIEE	0,4104
chr1:g.46930174C>T	LVLKSKNGIHLRLRR	LVLKSKNRIHLRLRR	0,4104
chr19:g.43185064C>T	PKVSEGKDVLLLVHN	PKVSEGKNVLLLVHN	0,4096
chr1:g.114713909G>T	DILDTAGQEEYSAMR	DILDTAGKEEYSAMR	0,4096
chr12:g.18738675G>A	VNDHYPKGNCNMLRK	VNDHYPKENCNMLRK	0,4095
chr3:g.124446193C>T	ELLQRENRVLHFWTL	ELLQRENCVLHFWTL	0,4095
chr12:g.21304474G>A	PILPLGISYIEDFAK	PILPLGIFYIEDFAK	0,4091
chr1:g.47116677G>A	NPLRFSRENSEKIHP	NPLRFSRKNSEKIHP	0,4088
chr11:g.10487302G>A	SLHEMLNEMSEFKEL	SLHEMLNKMSEFKEL	0,4087
chr2:g.188984919C>T	DCPNPEIPFGECCAV	DCPNPEILFGECCAV	0,4087
chr7:g.142062634G>A	TAKWWKREIEELYNN	TAKWWKRKIEELYNN	0,4085
chr1:g.237784121G>A	QPFLGRIEIMGSAKR	QPFLGRIKIMGSAKR	0,4085
chr3:g.17011102G>A	VEGDVTDEDEGAEMS	VEGDVTDKDEGAEMS	0,4085
chr4:g.166003528G>A	HEHTRPDRDNHVTII	HEHTRPDQDNHVTII	0,4085
chr3:g.12604200G>A	SLSQRQRSTSTPNVH	SLSQRQRLTSTPNVH	0,4084
chr12:g.110915742C>T	DGFIDKNDLRDTFAA	DGFIDKNNLRDTFAA	0,4083
chr1:g.103754752C>T	VGFMLAHPYGFTRVM	VGFMLAHSYGFTRVM	0,4082
chr3:g.17185183G>A	EELEAQISFLQGQLN	EELEAQIFFLQGQLN	0,4081
chr17:g.11768516C>T	EFKTVKFPSQGTIFD	EFKTVKFSSQGTIFD	0,4078
chr10:g.87894057C>T	NIIAMGFPAERLEGV	NIIAMGFSAERLEGV	0,4077
chr9:g.103005172G>A	SATESEDEKGGAKKD	SATESEDKKGGAKKD	0,4075
chr14:g.96264209G>A	SIPTFLLRSIQAVPD	SIPTFLLQSIQAVPD	0,4074
chr7:g.71670006G>A	DIGDVSERRALRKSL	DIGDVSEKRALRKSL	0,4073
chr7:g.93132622G>A	KMKAPKNSYISDTLG	KMKAPKNFYISDTLG	0,4071
chr8:g.138151257G>A	ITHQPLGSFGVVSTH	ITHQPLGFFGVVSTH	0,4069
chr1:g.248099872C>T	TVFALHIPYCRSRAI	TVFALHILYCRSRAI	0,4067
chr5:g.41313697C>T	GINIVTADFVELGDF	GINIVTANFVELGDF	0,4066
chr10:g.122640257C>T	GNFDVNISFYTSSSF	GNFDVNIFFYTSSSF	0,4065
chrX:g.152189890G>A	LSISARNSLPKVAYA	LSISARNFLPKVAYA	0,4064
chr11:g.56031265C>T	VFYTVVFPMFNPIIY	VFYTVVFSMFNPIIY	0,4063
chr6:g.62047937C>T	NSLKRLQEETGAKMS	NSLKRLQKETGAKMS	0,4063
chr14:g.72474659G>A	NTTEMDIRKCRRLKN	NTTEMDIQKCRRLKN	0,4062
chr9:g.990476G>A	SSVTGAERTSAEPES	SSVTGAEQTSAEPES	0,4062
chr2:g.140850146C>T	IKTQTIKRAFINGTG	IKTQTIKQAFINGTG	0,4061
chr3:g.98264519C>T	HIPMYLFLGSLAFVD	HIPMYLFFGSLAFVD	0,4059
chr5:g.13753438G>A	EMKARKIPFGKNLNL	EMKARKILFGKNLNL	0,4057
chr3:g.189894387G>A	ERVIDAVRFTLRQTI	ERVIDAVQFTLRQTI	0,4055
chr12:g.106239568G>A	HVEDGVLSMQVASAR	HVEDGVLFMQVASAR	0,4054

chr8:g.24476473G>A	PHNKLRNRIWGMVNF	PHNKLRNQIWGMVNF	0,4053
chr19:g.56003835C>T	GDKSLTFSSYGLQWC	GDKSLTFFSYGLQWC	0,4052
chr21:g.40042602C>T	EELARAYEHAKMEEQ	EELARAYKHAKMEEQ	0,4051
chr20:g.42098471C>T	DFWRLVFDYNCSSVV	DFWRLVFNYNCSSVV	0,4048
chr12:g.7369446C>T	LDDMRCKGNESFLWD	LDDMRCKENESFLWD	0,4046
chr5:g.136357258C>T	GTSLTPEEERFLDSA	GTSLTPEKERFLDSA	0,4045
chr2:g.167244724C>T	ESLYEKVSLMTSSEE	ESLYEKVLLMTSSEE	0,4043
chr20:g.8658677G>A	QVLIEKYEPNNSLAR	QVLIEKYKPNNSLAR	0,404
chr5:g.140802174G>A	QVEATDKGNPPMSDH	QVEATDKENPPMSDH	0,4039
chr7:g.121271405G>A	RYKEFLQGKCGCHFH	RYKEFLQEKCGCHFH	0,4033
chr7:g.142031746G>A	CAVWWTKEFELFHNQ	CAVWWTKKFELFHNQ	0,4029
chr21:g.44612219C>T	PSTCTGSSWQVDNCQ	PSTCTGSFWQVDNCQ	0,4026
chr11:g.5199868G>A	HRFGKHLSPVAHVLI	HRFGKHLFPVAHVLI	0,4024
chr14:g.22924345G>A	RGPLVNASLRAAKQA	RGPLVNAFLRAAKQA	0,4023
chr17:g.10496462C>T	EVDRKIAEKDEEIDQ	EVDRKIAKKDEEIDQ	0,4021
chr3:g.124268845G>A	YNHEEWIELRLSLEE	YNHEEWIKLRLSLEE	0,4018
chr8:g.3409579G>A	EKGGCGDPGIPAYGK	EKGGCGDSGIPAYGK	0,4016
chr15:g.51488030G>A	AALKNAFSLLGKQRF	AALKNAFFLLGKQRF	0,4015
chr7:g.117559555C>T	ISFCSQFSWIMPGTI	ISFCSQFFWIMPGTI	0,4013
chr12:g.32878970C>T	NLHLVENDFVGGRSP	NLHLVENNFVGGRSP	0,4012
chr22:g.26311908G>A	EQGPAIIECINVRDP	EQGPAIIKCINVRDP	0,401
chr12:g.3278506C>T	TFSPSFPSLSAANLV	TFSPSFPLLSAANLV	0,4009
chr3:g.189869372G>A	QMTSIKKRRSPDDEL	QMTSIKKQRSPDDEL	0,4009
chr3:g.35792411G>A	PVLSGQQGFQGLIGV	PVLSGQQRFQGLIGV	0,4007
chr9:g.21971018G>A	RDAWGRLPVDLAEEL	RDAWGRLLVDLAEEL	0,4004
chr7:g.142036869C>T	ADSLLLNSSRHYLNI	ADSLLLNFSRHYLNI	0,4003
chr11:g.123939894C>T	LSGNPTISFGGCLTQ	LSGNPTIFFGGCLTQ	0,4002
chr1:g.152314540C>T	KHEDNKQEENKENRK	KHEDNKQKENKENRK	0,4002
chr8:g.138139037C>T	LLQLTFRDNADLRKC	LLQLTFRNNADLRKC	0,4001
chr6:g.110442297G>A	SLGFYSFSLNSVNLG	SLGFYSFFLNSVNLG	0,4001
chr3:g.19882615G>A	SAYSLLYPTIFARKG	SAYSLLYSTIFARKG	0,3999
chr4:g.185623394C>T	FTTMLKHERARHENT	FTTMLKHKRARHENT	0,3995
chr11:g.56989524G>A	MLLVVFVGSNLIFTG	MLLVVFVESNLIFTG	0,3994
chr2:g.140322007C>T	ATCVCPEGKYLINGT	ATCVCPEEKYLINGT	0,3992
chr5:g.90829077C>T	SQSLVYFSVGSRLAV	SQSLVYFFVGSRLAV	0,399
chr4:g.55090053C>T	IHRDLAARNILLSEK	IHRDLAAQNILLSEK	0,3987
chr10:g.123780226C>T	NYYHRRNEMTTTDDL	NYYHRRNKMTTTDDL	0,398
chr10:g.53827519C>T	AECTKTARIQAALPA	AECTKTAQIQAALPA	0,3976
chr7:g.53036234G>A	ALSQCPKGSARFDGP	ALSQCPKESARFDGP	0,3971
chr19:g.54255310C>T	PRWSAPSDPLDILIA	PRWSAPSNPLDILIA	0,3968
chr1:g.197435318G>A	SNPCLHGGNCEDIYS	SNPCLHGENCEDIYS	0,3968
chr1:g.40546948C>T	LATHQKIHNGERPFV	LATHQKIYNGERPFV	0,3967
chr1:g.181776188G>A	LGPHHLDEFVRVWAE	LGPHHLDKFVRVWAE	0,3966

chr20:g.9566078G>A	RVSHEQFRAALQLVV	RVSHEQFWAALQLVV	0,3964
chr19:g.43258283G>A	IPQITRNHSGLYACS	IPQITRNYSGLYACS	0,3964
chr12:g.70552832C>T	ESLGGKCDPTQQKFC	ESLGGKCNPTQQKFC	0,3963
chr12:g.52451682C>T	GFPVCPPGGIQEVTV	GFPVCPPRGIQEVTV	0,3963
chr8:g.68217680C>T	RSHGLPPRYIMQATD	RSHGLPPCYIMQATD	0,3963
chr8:g.2002532C>T	PLPRGAFAVAHEATT	PLPRGAFVVAHEATT	0,3963
chr11:g.48245686G>A	GLLIVANGGTLSVIS	GLLIVANRGTLSVIS	0,396
chr6:g.54940959G>A	TENLLKRRSFPLFDN	TENLLKRQSFPLFDN	0,3956
chr7:g.82952858G>A	SSISITIPPEPLALD	SSISITISPEPLALD	0,3953
chr20:g.9566119G>A	PPPSWGSSSDQQPSR	PPPSWGSFSDQQPSR	0,395
chr14:g.73253816C>T	GGGSQSRSVYCISSD	GGGSQSRFVYCISSD	0,3948
chr21:g.14165304G>A	NCNFISFPCRSYKDY	NCNFISFSCRSYKDY	0,3947
chrX:g.136346323G>A	TMLEVTDESAQRVTA	TMLEVTDKSAQRVTA	0,3945
chr20:g.18526475C>T	DELKIPIRSWHDIEK	DELKIPICSWHDIEK	0,3942
chr20:g.6112599G>A	IRRSEELSLLKPSGD	IRRSEELFLLKPSGD	0,3941
chr12:g.11267992C>T	EGPPPQGGNQSQGPP	EGPPPQGENQSQGPP	0,394
chr4:g.154320457C>T	ITAHDPDEGRNGKVT	ITAHDPDKGRNGKVT	0,394
chr19:g.44429696G>A	GKGFRYKSVLLIHQG	GKGFRYKLVLLIHQG	0,394
chr7:g.34153166G>A	KTCDNWNEIGPCNKP	KTCDNWNKIGPCNKP	0,3935
chr12:g.79296132C>T	DMGGTSDPYVKVFLL	DMGGTSDSYVKVFLL	0,3935
chr7:g.77199535C>T	KEVQNLKEIVNSLKK	KEVQNLKKIVNSLKK	0,3933
chr12:g.45836858C>T	AVILRNLSFEEGNVK	AVILRNLFFEEGNVK	0,3933
chr1:g.192184490G>A	RPTNLRRRSRSFTCN	RPTNLRRQSRSFTCN	0,393
chr7:g.98912179C>T	KLVFGSVSLFAAENE	KLVFGSVFLFAAENE	0,3929
chr10:g.26128459C>T	FENFKKNSFEQLCIN	FENFKKNFFEQLCIN	0,3927
chr8:g.3586237G>A	VGANVQFSCEDNYVL	VGANVQFLCEDNYVL	0,3927
chr17:g.60057151G>A	WLIRLCISIVVLPKE	WLIRLCIFIVVLPKE	0,3926
chr8:g.138826705C>T	FRKTSRKEDWYIWQV	FRKTSRKKDWYIWQV	0,3925
chr7:g.18648517C>T	LATKERISPGIRGTH	LATKERILPGIRGTH	0,3924
chr15:g.66436825C>T	VLHECNSPYIVGFYG	VLHECNSLYIVGFYG	0,3923
chr3:g.96987681C>T	LKLNTEIREVGPIER	LKLNTEICEVGPIER	0,3922
chrX:g.34131147C>T	RGSSLHAEPSKTGVS	RGSSLHAKPSKTGVS	0,3919
chr11:g.100255795G>A	PGIVIVEEITESTAT	PGIVIVEKITESTAT	0,3917
chr5:g.11111006G>A	VCILRNLSYRLAAET	VCILRNLLYRLAAET	0,3916
chr1:g.158399186G>A	LSDTKTISFMACATQ	LSDTKTIFFMACATQ	0,3911
chr9:g.101686843G>A	GVMPPELRWVLGDSQ	GVMPPELCWVLGDSQ	0,3911
chr12:g.113099994G>A	EVLADLDRAHEEFQQ	EVLADLDCAHEEFQQ	0,3911
chr1:g.56693791G>A	SNMMSDGEFLRTSCG	SNMMSDGKFLRTSCG	0,3908
chr20:g.42677928C>T	EIRVLLTRPGEGGTG	EIRVLLTQPGEGGTG	0,3906
chr1:g.37761861C>T	TFNVYYLETEADLGR	TFNVYYLKTEADLGR	0,3904
chr11:g.55968291G>A	YFFLSNFSLLEICYV	YFFLSNFFLLEICYV	0,3901
chr2:g.137657119G>A	SLWNNNERTVWCQRS	SLWNNNEQTVWCQRS	0,3899
chr14:g.91669903G>A	PNSQSKFPIFRFPSS	PNSQSKFSIFRFPSS	0,3895

chr9:g.21974685G>A	PNSYGRRPIQVGRGS	PNSYGRRLIQVGRGS	0,3895
chr6:g.83857331C>T	FPIQATISFYEDSDS	FPIQATILFYEDSDS	0,3891
chr1:g.213997055C>T	ARVENIIRGMSHSPS	ARVENIIWGMSHSPS	0,3889
chr1:g.223003063C>T	VFHFEFFPFMNLTAL	VFHFEFFSFMNLTAL	0,3888
chr2:g.228017733C>T	SVNLFANEVAAKIMN	SVNLFANKVAAKIMN	0,3886
chr7:g.82915855C>T	DIDHHTPRNYVLIDD	DIDHHTPQNYVLIDD	0,3882
chr12:g.119505202C>T	MISVNPGSDEPPSVN	MISVNPGLDEPPSVN	0,3879
chr2:g.228017993C>T	ICLDNSSGKQPWFCA	ICLDNSSEKQPWFCA	0,3878
chr13:g.24825661G>A	FLLKTIEEFYKSEDG	FLLKTIEKFYKSEDG	0,3876
chr18:g.63804321C>T	KYVEVFFPQFKIEKN	KYVEVFFSQFKIEKN	0,3871
chr7:g.77241866G>A	NEYNAVKEREFHNQY	NEYNAVKKREFHNQY	0,387
chr14:g.56801997G>A	FGGMDCGSYLTPMHH	FGGMDCGLYLTPMHH	0,3864
chr8:g.3359247G>A	VGDSLTFSCFLGYRL	VGDSLTFFCFLGYRL	0,3858
chr2:g.214014012C>T	VNSIEFFPFSNTLLT	VNSIEFFSFSNTLLT	0,3857
chr3:g.38605998C>T	IAETEEKEKRFQEAM	IAETEEKKKRFQEAM	0,3856
chr1:g.240206904C>T	AELERQYPALDTEVA	AELERQYSALDTEVA	0,3854
chr2:g.112019498G>A	SNRNFLHRDLAARNC	SNRNFLHQDLAARNC	0,3854
chr19:g.9467172C>T	SYLTKHLRRHSGEKP	SYLTKHLQRHSGEKP	0,3853
chr6:g.130441582C>T	RQFGSNTSLHLLSSH	RQFGSNTFLHLLSSH	0,3852
chr14:g.21325861G>A	ESWEPQNELWIEITK	ESWEPQNKLWIEITK	0,3851
chr5:g.32091075G>A	GNRACPGGSGPKTSA	GNRACPGRSGPKTSA	0,385
chr16:g.71184966C>T	TPSEFLKEMSLTTEQ	TPSEFLKKMSLTTEQ	0,3847
chr10:g.71288667G>A	MAPPPQNGGRDCSGT	MAPPPQNEGRDCSGT	0,3847
chr8:g.3230208C>T	SIAATCNDPGMPQNG	SIAATCNNPGMPQNG	0,3846
chr4:g.157136613G>A	PDLFFANEKSANFHD	PDLFFANKKSANFHD	0,3841
chr20:g.44054333G>A	KRPSADPGKKAKNPK	KRPSADPEKKAKNPK	0,3839
chr1:g.97740427C>T	KSCPTNLDIKSFITS	KSCPTNLNIKSFITS	0,3838
chr16:g.78030575G>A	VIPRNSDEINALQDY	VIPRNSDKINALQDY	0,3837
chr1:g.94188873C>T	ESTGGSSESRSLDSE	ESTGGSSKSRSLDSE	0,3837
chr14:g.19828286C>T	LFHTVIFPLLNPVIY	LFHTVIFSLLNPVIY	0,3837
chr17:g.10455041C>T	GLLGTLEEMRDEKLA	GLLGTLEKMRDEKLA	0,3832
chrX:g.111912725C>T	AAHTNNYEIIKLLVQ	AAHTNNYKIIKLLVQ	0,3826
chr10:g.27995079C>T	GHGTGILEITPLNEA	GHGTGILKITPLNEA	0,3826
chr1:g.206116373G>A	LPQVFIFSLREVIQG	LPQVFIFFLREVIQG	0,3822
chr12:g.111308493C>T	FFPTQKFLLEKPSLL	FFPTQKFFLEKPSLL	0,3819
chr16:g.53645651G>A	KVNVPLISLAHDRCI	KVNVPLILLAHDRCI	0,3817
chr3:g.131685919G>A	DPFLEIFRMNDDATQ	DPFLEIFCMNDDATQ	0,3817
chr7:g.88131435C>T	SDAVHLFSYVTSVMM	SDAVHLFLYVTSVMM	0,3816
chr16:g.84486777G>A	HRWCLLFSSELHGHS	HRWCLLFLSELHGHS	0,3815
chr4:g.20732755C>T	DIMKAIYDMMGKCTY	DIMKAIYNMMGKCTY	0,3813
chr14:g.88740535C>T	GNALTPKRGVFGKTG	GNALTPKQGVFGKTG	0,3808
chr6:g.76034743G>A	AYRIFLDRIPDTGEY	AYRIFLDCIPDTGEY	0,3807
chr1:g.81943106C>T	FMPWTPYRTDTLIEY	FMPWTPYCTDTLIEY	0,3796

chr1:g.47099244G>A	HQQRCRDEIRELLGD	HQQRCRDKIRELLGD	0,3795
chr2:g.108010263G>A	KEIVWVMRITVFVFG	KEIVWVMQITVFVFG	0,3794
chr11:g.56030590C>T	INSSLQIPMYYFLSN	INSSLQISMYYFLSN	0,3793
chr2:g.186839020C>T	QKEIDSEDICSICQE	QKEIDSENICSICQE	0,3792
chr12:g.43432345C>T	VTRENCNEFSCPSWA	VTRENCNKFSCPSWA	0,3779
chr4:g.157136847C>T	PLDLTLFPMDTQRCK	PLDLTLFSMDTQRCK	0,3773
chr17:g.12752558C>T	DITTVTFPVTPNTLP	DITTVTFSVTPNTLP	0,3772
chr7:g.81752150C>T	SNPEVRYEVCDIPQC	SNPEVRYKVCDIPQC	0,3771
chrX:g.105767263G>A	FWKHLVYEMPIKKKE	FWKHLVYKMPIKKKE	0,3769
chr5:g.147661112C>T	ERLKLLQEIADLKTA	ERLKLLQKIADLKTA	0,3769
chr17:g.76018975C>T	DVAPLPQRRNPPQQP	DVAPLPQQRNPPQQP	0,3768
chr11:g.56105320C>T	LLTSNYISFTGCFAQ	LLTSNYIFFTGCFAQ	0,3768
chr16:g.51140199G>A	EQFKAKFPFGGLLDS	EQFKAKFSFGGLLDS	0,3767
chr1:g.171208906C>T	CSLLFKDPKLAVRLY	CSLLFKDSKLAVRLY	0,3765
chr2:g.30751126G>A	KAEDAKFPLDFQVIL	KAEDAKFSLDFQVIL	0,3764
chr17:g.63880884G>A	LIQSWLEPVQLLRSV	LIQSWLELVQLLRSV	0,3763
chr2:g.48669854G>A	TRDADENEFLGNIDG	TRDADENKFLGNIDG	0,376
chr3:g.36857219C>T	DFDNMTWEIECTSEM	DFDNMTWKIECTSEM	0,3759
chr10:g.105158934C>T	HLQLSENPYSSGRIS	HLQLSENSYSSGRIS	0,3759
chr7:g.142065390C>T	VITRSTFPSSGRWAG	VITRSTFSSSGRWAG	0,3758
chr6:g.32070316G>A	LRLSWTVPEGQFDSF	LRLSWTVSEGQFDSF	0,3757
chr10:g.1217054C>T	RTKIESGEGTVPVRG	RTKIESGKGTVPVRG	0,3757
chr8:g.124082425G>A	NRFYSKHRAICGLQS	NRFYSKHQAICGLQS	0,3757
chr4:g.106924058C>T	KKGSHGLEIFQRCDC	KKGSHGLKIFQRCDC	0,3746
chr2:g.182240168C>T	MTKKKPEEKPKFRSI	MTKKKPEKKPKFRSI	0,3744
chr6:g.29440793C>T	TALFIYIRPKASYDP	TALFIYICPKASYDP	0,3744
chr12:g.57751653T>A	GAYGTVYKARDPHSG	GAYGTVYMARDPHSG	0,3743
chr3:g.38894601C>T	LAPLAEEEDDVEFSG	LAPLAEEKDDVEFSG	0,3743
chr10:g.37217759G>A	ILNEKIREELGRIEE	ILNEKIRKELGRIEE	0,3743
chr1:g.97699420G>A	PASISCASFLARLGY	PASISCAFFLARLGY	0,3741
chr11:g.7960552G>A	LYKACQVPGICWVVC	LYKACQVSGICWVVC	0,3741
chr19:g.53634561G>A	QMHSHRKRTMFTKKQ	QMHSHRKQTMFTKKQ	0,3738
chr5:g.42718080C>T	MLILPPVPVPKIKGI	MLILPPVSVPKIKGI	0,3737
chr11:g.56361096C>T	VFYTLVIPMLNPLIY	VFYTLVISMLNPLIY	0,3736
chr8:g.132140119C>T	YGNDFPIEDMIPTLK	YGNDFPIKDMIPTLK	0,3734
chr18:g.31392189C>T	IEENCLSSELIRLQA	IEENCLSLELIRLQA	0,3734
chr10:g.122598872G>A	GSWGTVCDDSWDTND	GSWGTVCNDSWDTND	0,3732
chr4:g.46064480G>A	YLQLHNFPMDEHSCP	YLQLHNFSMDEHSCP	0,373
chr12:g.18738513G>A	HNVMGDYRFFDHQSK	HNVMGDYQFFDHQSK	0,373
chr2:g.40428861C>T	KPGDTQKEIRVGIID	KPGDTQKKIRVGIID	0,373
chr12:g.41572467G>A	GRTDESLRNDESSEQ	GRTDESLQNDESSEQ	0,3727
chr11:g.5488993C>T	WLHAGEISFGGCLAQ	WLHAGEIFFGGCLAQ	0,3721
chrX:g.70204342G>A	SYSFGENEVFNQETF	SYSFGENKVFNQETF	0,372

chr14:g.19936109C>T	CVIFVSISWAVGVLH	CVIFVSIFWAVGVLH	0,372
chr8:g.138265726G>A	DAVVFRVHLLLGGER	DAVVFRVYLLLGGER	0,372
chr11:g.121558637C>T	DLKPGIYRSNMDGSA	DLKPGIYWSNMDGSA	0,372
chr11:g.56290788G>A	LLTSNYISFMGCFAQ	LLTSNYIFFMGCFAQ	0,3719
chr16:g.20324229G>A	GNPIEASSYGLDLDC	GNPIEASLYGLDLDC	0,3719
chr11:g.4946794C>T	SNACFAQEFFIHGFS	SNACFAQKFFIHGFS	0,3718
chrX:g.141241615C>T	VKRTSPEELVNDHAR	VKRTSPEKLVNDHAR	0,3716
chr3:g.98470423C>T	ILFTIVVPLLNPFIY	ILFTIVVSLLNPFIY	0,3711
chr3:g.36855737C>T	TFEVFKNEIWPKMTK	TFEVFKNKIWPKMTK	0,3708
chr11:g.92355186C>T	PVSLSSVSFVEVEVV	PVSLSSVFFVEVEVV	0,3703
chr19:g.55818111C>T	LENLSDKEFQSFKKY	LENLSDKKFQSFKKY	0,3702
chr12:g.48864849C>T	TYVPTVFENYTACLE	TYVPTVFKNYTACLE	0,37
chr20:g.21706617G>A	KILARYNETGSILPG	KILARYNKTGSILPG	0,3698
chr19:g.40035544G>A	LIQHQKIHSNEKPFV	LIQHQKIYSNEKPFV	0,3696
chr19:g.54888073C>T	LMPGENISLTCSSAH	LMPGENIFLTCSSAH	0,369
chr8:g.132184297C>T	WAAGCCCRYKGWRGR	WAAGCCCQYKGWRGR	0,369
chrX:g.57378677C>T	VPNKGQFPLAVGAQE	VPNKGQFSLAVGAQE	0,3689
chr5:g.161689297C>T	PMRLVNFPMDGHACP	PMRLVNFSMDGHACP	0,3689
chr11:g.40115752C>T	LRRLDLGELKRLSYI	LRRLDLGKLKRLSYI	0,3686
chr19:g.55732171C>T	IGLFETQEKEFVTKV	IGLFETQKKEFVTKV	0,3686
chr3:g.96987936C>T	ADGDWLVPLGRCICS	ADGDWLVSLGRCICS	0,3685
chr12:g.5045832C>T	KVSGSRGSFCKAGGT	KVSGSRGFFCKAGGT	0,3685
chr5:g.151266845C>T	DVLDMLIPTGEPCPE	DVLDMLISTGEPCPE	0,3684
chr2:g.137572473C>T	LCNQDEIPPETQSCS	LCNQDEISPETQSCS	0,3683
chr7:g.150692381G>A	IILVGKTGTGKSAAG	IILVGKTETGKSAAG	0,368
chr11:g.94104615G>A	RRSDVDYEFALLFLV	RRSDVDYKFALLFLV	0,3678
chr17:g.49042324G>A	NCCRAEQEIMKKVRE	NCCRAEQKIMKKVRE	0,3677
chr3:g.189886417C>T	TSIQSPSSYGNSSPP	TSIQSPSLYGNSSPP	0,3676
chr2:g.60461620G>A	MKTHMHKSSPMTVKS	MKTHMHKLSPMTVKS	0,3675
chr7:g.99710758C>T	VQQKVQKEIDTVLPN	VQQKVQKKIDTVLPN	0,3675
chr20:g.5302303G>A	FYGFTIVRDFFPTVF	FYGFTIVCDFFPTVF	0,3674
chr5:g.41195871C>T	DCGDNSDERDCGRTK	DCGDNSDKRDCGRTK	0,3673
chr5:g.168806477G>A	GKGLMEIPANLPEGI	GKGLMEISANLPEGI	0,3669
chr6:g.69354300C>T	INADSSSSFPNGHAQ	INADSSSLFPNGHAQ	0,3668
chr5:g.42718570G>A	LDIDEPDEKTEESDT	LDIDEPDKKTEESDT	0,3663
chr12:g.34026739C>T	PQKLLEFRYFILPYV	PQKLLEFCYFILPYV	0,3661
chr6:g.7373393C>T	ALDLLKREKEAQEQE	ALDLLKRKKEAQEQE	0,3656
chrX:g.85271394C>T	SVHTKDFPHKCEVCD	SVHTKDFSHKCEVCD	0,3655
chr5:g.140968052G>A	VVSGPLDRERVAVYN	VVSGPLDQERVAVYN	0,3653
chr11:g.5581583C>T	DIMLITVSYIHILQA	DIMLITVFYIHILQA	0,3652
chr1:g.196469026C>T	LRIPFILEIINAVPF	LRIPFILKIINAVPF	0,3652
chr7:g.92062348C>T	EKTDIIDRLEQELLC	EKTDIIDCLEQELLC	0,3651
chr5:g.13794030C>T	IESYVDKRMGTTYGP	IESYVDKQMGTTYGP	0,3651

chr4:g.99313880C>T	PIQEVLKEMTDGGVD	PIQEVLKKMTDGGVD	0,365
chr11:g.5544850G>A	DVILIAVSYAHILCA	DVILIAVFYAHILCA	0,365
chr19:g.49744265G>A	DLSMNLDRSHQGNCA	DLSMNLDWSHQGNCA	0,365
chr2:g.137056548G>A	ESNRPPKERSCFRVC	ESNRPPKKRSCFRVC	0,3646
chr5:g.178981730C>T	PEQNVQKRKRSLKAT	PEQNVQKQKRSLKAT	0,3645
chr8:g.24395753G>A	YKGNILNEKNSVASI	YKGNILNKKNSVASI	0,3644
chr3:g.55734806C>T	EVMALKREKDRLVHQ	EVMALKRKKDRLVHQ	0,3644
chr1:g.18482884G>A	TATVRAKEIFVTGGS	TATVRAKKIFVTGGS	0,3644
chr17:g.7673781C>T	RVCACPGRDRRTEEE	RVCACPGKDRRTEEE	0,3643
chr3:g.172448110G>A	CMPLDLVRLWQYRPW	CMPLDLVCLWQYRPW	0,3639
chr6:g.54870398G>A	QEFLVQERVSDFLAE	QEFLVQEQVSDFLAE	0,3638
chr12:g.33407312G>A	LPRQMQVSSVDFSMG	LPRQMQVFSVDFSMG	0,3638
chrX:g.152135035G>A	IDVKEVDPTGHSFVL	IDVKEVDSTGHSFVL	0,3636
chr1:g.114713908T>A	DILDTAGQEEYSAMR	DILDTAGLEEYSAMR	0,3636
chr12:g.130445244C>T	NPFDGPNENPEAELP	NPFDGPNKNPEAELP	0,3635
chr12:g.101126910C>T	FCIKHLISYLIPDLP	FCIKHLILYLIPDLP	0,3631
chr8:g.11550230C>T	APINKAGSFLIRESE	APINKAGFFLIRESE	0,363
chr14:g.51966649C>T	PVPASENPFREKKFF	PVPASENSFREKKFF	0,3627
chr6:g.38917359G>A	KIDPVTMDPEKSCCK	KIDPVTMNPEKSCCK	0,3625
chrX:g.141908073C>T	DTLLESDSLTDSESL	DTLLESDFLTDSESL	0,3625
chr1:g.56933382G>A	EFQKEVSSCHCAPCQ	EFQKEVSFCHCAPCQ	0,3618
chr11:g.48306763C>T	NFFCDVHPLLKLACA	NFFCDVHSLLKLACA	0,3616
chr14:g.19936252G>A	CMDTYEMEIMTLTNS	CMDTYEMKIMTLTNS	0,3616
chr5:g.76597570G>A	AAAMYQNELFNLQKQ	AAAMYQNKLFNLQKQ	0,3614
chr14:g.62779889C>T	FGDIFWKETTLAHAC	FGDIFWKKTTLAHAC	0,361
chr6:g.38883904G>A	IESYVDKRIGSTYGP	IESYVDKQIGSTYGP	0,3609
chr3:g.108953648C>T	SGLQTLHEFKTLLGL	SGLQTLHKFKTLLGL	0,3607
chr6:g.125076804C>T	SIFGCKYRYLPERPH	SIFGCKYCYLPERPH	0,3607
chr19:g.57131247G>A	QAWFTYNDLCVSEIS	QAWFTYNNLCVSEIS	0,3606
chr14:g.67203164C>T	VTVGICFSSSTHKIP	VTVGICFFSSTHKIP	0,3605
chr12:g.43376112C>T	MYLENPKEYLTLVQG	MYLENPKKYLTLVQG	0,3604
chr19:g.45472903C>T	VNPSYTSSFVLTCPE	VNPSYTSLFVLTCPE	0,3604
chrX:g.74740623C>T	LLDDDQREFQEPSYI	LLDDDQRKFQEPSYI	0,3603
chr3:g.111885242G>A	NFSCGSVEFDEADLE	NFSCGSVKFDEADLE	0,3603
chr12:g.70587078C>T	FTDLVPGRKYMATVT	FTDLVPGQKYMATVT	0,3601
chr7:g.144050762G>A	ILVMMSYDRYMAICH	ILVMMSYNRYMAICH	0,36
chr6:g.127829539G>A	WDSTNPFPKDFYGTL	WDSTNPFSKDFYGTL	0,3593
chr5:g.31323099G>A	FINQRLKENDTDPTA	FINQRLKKNDTDPTA	0,3592
chr19:g.10020765G>A	FALEGFFESLAIQLL	FALEGFFKSLAIQLL	0,3585
chr10:g.122576638G>A	DVRCSGHESYLWSCP	DVRCSGHKSYLWSCP	0,3581
chr12:g.110884164G>A	IEDFLAKEEKNFARF	IEDFLAKKEKNFARF	0,358
chr5:g.136251859C>T	MIWSECKEIWEEGPR	MIWSECKKIWEEGPR	0,3579
chr3:g.121279933G>A	QRQPRSPRKNKQFIA	QRQPRSPQKNKQFIA	0,3578

chr11:g.58724447G>A	MLQMLEKSLRKSLPA	MLQMLEKFLRKSLPA	0,3577
chr4:g.165995102G>A	KQAMRHWEKHTCVTF	KQAMRHWKKHTCVTF	0,3576
chr5:g.122444611G>A	TMQNHAGEKPSQSAE	TMQNHAGKKPSQSAE	0,3576
chr11:g.123943189G>A	SLALTSVSYACILAT	SLALTSVFYACILAT	0,3573
chr11:g.4914921G>A	KALNTCVSHICAVLL	KALNTCVFHICAVLL	0,3572
chr12:g.39720856G>A	RMTIKTKEKMNNFYV	RMTIKTKKKMNNFYV	0,3568
chr12:g.20880934G>A	NCDESQWEPVCGNNG	NCDESQWKPVCGNNG	0,3567
chr19:g.56028442C>T	CPYLRKIRVDVKGIF	CPYLRKIWVDVKGIF	0,3567
chr19:g.51146089C>T	SLGSQHVSLNLSLQQ	SLGSQHVFLNLSLQQ	0,3567
chr17:g.7674241G>A	YNYMCNSSCMGGMNR	YNYMCNSFCMGGMNR	0,3567
chr16:g.51141362G>A	NPLSTLSSHLSQQLA	NPLSTLSFHLSQQLA	0,3561
chr7:g.101042664G>A	MSVSMPMEISTLGTT	MSVSMPMKISTLGTT	0,3561
chr11:g.6846184C>T	TTWLFSFPFCGTNKV	TTWLFSFSFCGTNKV	0,3557
chr3:g.2866802C>T	YPSYQDNRRFVSQET	YPSYQDNCRFVSQET	0,3557
chr7:g.143478446C>T	KLVIWSIPFSVFLVS	KLVIWSISFSVFLVS	0,3551
chr8:g.51408344C>T	SPSRIIKEGGIDPVL	SPSRIIKKGGIDPVL	0,3551
chr7:g.122698111G>A	YKPNDIVRILTCKHF	YKPNDIVCILTCKHF	0,3546
chr18:g.47028921C>T	SAPALQEEAAFPGRR	SAPALQEKAAFPGRR	0,3544
chr2:g.195960849G>A	DGLNPYLRLYETAVE	DGLNPYLCLYETAVE	0,3541
chr8:g.51426735G>A	LAVFTQLPQDTSVEV	LAVFTQLSQDTSVEV	0,3541
chr11:g.5986606C>T	VLLVHAHEIGYIVCL	VLLVHAHKIGYIVCL	0,3539
chr22:g.24225581C>T	ELLDLCERCPRGSGT	ELLDLCEQCPRGSGT	0,3536
chr7:g.140781608G>A	GQRIGSGSFGTVYKG	GQRIGSGLFGTVYKG	0,3536
chr17:g.40798321C>T	GLRRVLDELTLCRTD	GLRRVLDKLTLCRTD	0,3536
chr14:g.99878570C>T	DSRGNRNRTGSTSSS	DSRGNRNCTGSTSSS	0,3531
chr8:g.16110174C>T	EVFCFGRESSIEECK	EVFCFGRKSSIEECK	0,3521
chr2:g.112913064G>A	KMGSEDWEKDEPQCC	KMGSEDWKKDEPQCC	0,352
chr8:g.66444682C>T	PVQVAMDSLVKNGIP	PVQVAMDFLVKNGIP	0,3519
chr4:g.166025369C>T	NLSSPGFPNGYPSYT	NLSSPGFSNGYPSYT	0,3517
chr8:g.66076829G>A	VAEQFGDENVNTYFM	VAEQFGDKNVNTYFM	0,3516
chr9:g.134817057C>T	GPTGEPGPSGPPGKR	GPTGEPGLSGPPGKR	0,3513
chr19:g.55912571C>T	LQQLRKNETLFHSCS	LQQLRKNKTLFHSCS	0,3512
chr11:g.4367640G>A	DVVLIFISYMLILHA	DVVLIFIFYMLILHA	0,3512
chr6:g.83398482C>T	MDLQDRNEKLFYRVL	MDLQDRNKKLFYRVL	0,351
chr12:g.2595957C>T	FILLSSISLAAEDPV	FILLSSIFLAAEDPV	0,3508
chr7:g.140753337C>T	GDFGLATVKSRWSGS	GDFGLATMKSRWSGS	0,3508
chr7:g.143052534C>T	YFFLGNFSLLEILVT	YFFLGNFFLLEILVT	0,3502
chr7:g.82916495G>A	LQGVAEDRDYMSDSE	LQGVAEDCDYMSDSE	0,3495
chr1:g.43403240C>T	YRISRNVRLAWFLSH	YRISRNVCLAWFLSH	0,3494
chr9:g.132499569C>T	KKEPPPLPPNMTFGI	KKEPPPLSPNMTFGI	0,3489
chr11:g.4821846G>A	TTILTNARIAKIGMS	TTILTNAQIAKIGMS	0,3488
chr7:g.88282916G>A	EKKDNTFRMAISIPN	EKKDNTFCMAISIPN	0,3487
chr8:g.76852088C>T	PAFLPHFPMTPEALL	PAFLPHFSMTPEALL	0,3486

chr1:g.13416463C>T	ELPTELFPPLFMEAF	ELPTELFSPLFMEAF	0,3485
chr1:g.7803123C>T	SYLHPEDRSLMVAIH	SYLHPEDCSLMVAIH	0,3485
chr3:g.180659703C>T	KRKILDNELTETISA	KRKILDNKLTETISA	0,3483
chr6:g.68993796G>A	EHLAKGQRMLAGDGM	EHLAKGQQMLAGDGM	0,3481
chr6:g.55359087G>A	RTITQSEESLCKIFQ	RTITQSEKSLCKIFQ	0,348
chr5:g.161294262C>T	LPRHSFGRNALERHV	LPRHSFGQNALERHV	0,3473
chr8:g.24330030G>A	VAGTMAHEMGHNFGM	VAGTMAHKMGHNFGM	0,3471
chr8:g.72567795C>T	SRSTLSLPPEPVDII	SRSTLSLSPEPVDII	0,3466
chr1:g.56933392C>T	ALEEFQKEVSSCHCA	ALEEFQKKVSSCHCA	0,3465
chr18:g.31459931G>A	AFKIVSQEPAGTPMF	AFKIVSQKPAGTPMF	0,3465
chr2:g.100302983C>T	RSKEVLKEFLYCLAL	RSKEVLKKFLYCLAL	0,3464
chr1:g.115286402C>T	HPIFHRGEFSVCDSV	HPIFHRGKFSVCDSV	0,3461
chr14:g.38254747G>A	GLVKLCFHESPSSQP	GLVKLCFYESPSSQP	0,3457
chr5:g.37337847G>A	CVNHDTFPFQKPMME	CVNHDTFSFQKPMME	0,3456
chr22:g.35082544C>T	RKSKRRVRTTFTTEQ	RKSKRRVCTTFTTEQ	0,3456
chr18:g.61816181G>A	TPVFIKLPSNGCYML	TPVFIKLSSNGCYML	0,3455
chr1:g.181717161G>A	VSYFRHKERLLRISI	VSYFRHKKRLLRISI	0,3455
chr2:g.233636967C>T	FDAVFLDPFDTCGLI	FDAVFLDSFDTCGLI	0,3445
chr9:g.27173335G>A	YGCSCATGWKGLQCN	YGCSCATSWKGLQCN	0,3444
chr3:g.108410685C>T	LLDASQKEVQALSTE	LLDASQKKVQALSTE	0,3442
chr3:g.54503561G>A	NFLELGKEFILAPND	NFLELGKKFILAPND	0,3439
chr21:g.40080182C>T	VGPGRISEIIEAKTL	VGPGRISKIIEAKTL	0,3438
chr3:g.17009803C>T	GSELKKVRSNSRIYH	GSELKKVCSNSRIYH	0,3437
chrX:g.139956051G>A	KSSSRSFRKLDSRNN	KSSSRSFCKLDSRNN	0,3437
chr8:g.100529713G>A	SGFDPNIRDSRGRTG	SGFDPNICDSRGRTG	0,3429
chr10:g.122621356G>A	THNCGHHEDAGVICS	THNCGHHKDAGVICS	0,3429
chr4:g.153636481C>T	YPGFNPFRAYMNLDI	YPGFNPFCAYMNLDI	0,3426
chr11:g.58954809C>T	DSYTNVYRMFSKEPQ	DSYTNVYCMFSKEPQ	0,3426
chr8:g.113098901G>A	IISSPSFPNEYHNNA	IISSPSFSNEYHNNA	0,3426
chrX:g.74742674C>T	FLPPARKRKSKLGNR	FLPPARKQKSKLGNR	0,3424
chr7:g.144050939G>A	EINHFFCEILSVLKL	EINHFFCKILSVLKL	0,3422
chr17:g.11763546G>A	IPADCPKEIYEHYFV	IPADCPKKIYEHYFV	0,3419
chr2:g.21013214G>A	DHFSLRARYHMKADS	DHFSLRACYHMKADS	0,3418
chr10:g.95069350G>A	LSFMLLFSLWRQSCR	LSFMLLFLLWRQSCR	0,3417
chr20:g.33379553G>A	KTKQGGLRFAHLLDQ	KTKQGGLCFAHLLDQ	0,3416
chr4:g.174677184G>A	IVILSWVSFWINMDA	IVILSWVLFWINMDA	0,3412
chr4:g.163325948G>A	YVCFDQFPSDSHRLS	YVCFDQFSSDSHRLS	0,3409
chr3:g.155494221C>T	LNYQSEGRMMQLNRA	LNYQSEGQMMQLNRA	0,3408
chr7:g.6692311G>A	ESLYQKIRILEKPFE	ESLYQKICILEKPFE	0,3404
chr16:g.55823605C>T	GLALAAHENVVVVTI	GLALAAHKNVVVVTI	0,3403
chr7:g.142054866C>T	DVLIKKNPFGIEIRR	DVLIKKNLFGIEIRR	0,3399
chr17:g.10540036C>T	DILGFTNEEKVSIYK	DILGFTNKEKVSIYK	0,3395
chr10:g.24595140G>A	RKEDPLDRLKTLKRL	RKEDPLDCLKTLKRL	0,3393

chr3:g.108353708G>A	RRVSLLDEGIYTCYV	RRVSLLDKGIYTCYV	0,3387
chr11:g.26712676G>A	LRFNKPVRYAATVIY	LRFNKPVCYAATVIY	0,3385
chr3:g.109328939G>A	LLPASNFPPPHLEDN	LLPASNFSPPHLEDN	0,3379
chr15:g.83264083C>T	IKHKCTIEGCNMVFS	IKHKCTIKGCNMVFS	0,3379
chr12:g.31982988C>T	EVLATCLSLWKKQPS	EVLATCLFLWKKQPS	0,3379
chr17:g.64561537G>A	KRLMIKFRGEEGLDY	KRLMIKFCGEEGLDY	0,3377
chr3:g.165065320G>A	EQVHKRFRHDLSWKT	EQVHKRFCHDLSWKT	0,3374
chr19:g.43195196C>T	DVLTFTCEPKSKNYT	DVLTFTCKPKSKNYT	0,3374
chr16:g.81270255G>A	FHHVNAYEEDGCIVF	FHHVNAYKEDGCIVF	0,3373
chrX:g.108695336C>T	GSCLEEFRSAPFIEC	GSCLEEFCSAPFIEC	0,3369
chr3:g.148882526C>T	NRMWRKNRSKNQNSK	NRMWRKNCSKNQNSK	0,3365
chr8:g.72936404C>T	AMGIMIFSSLVFFAE	AMGIMIFFSLVFFAE	0,3365
chr1:g.78946388C>T	NLTQSCGENANCTNT	NLTQSCGKNANCTNT	0,3365
chr1:g.74631757G>A	TWRRRRFRPTTAPNG	TWRRRRFCPTTAPNG	0,3364
chr14:g.78645206G>A	PIQSSSDEITLSFKT	PIQSSSDKITLSFKT	0,3364
chr1:g.201383118C>T	KRHLFEKELAGQSRA	KRHLFEKKLAGQSRA	0,3363
chr15:g.71012885C>T	SSELPQYRLISILGD	SSELPQYCLISILGD	0,3362
chr9:g.116440658C>T	HHYNSHYEKFGDFVW	HHYNSHYKKFGDFVW	0,3362
chr1:g.152358782C>T	LSKGELKELLEKELH	LSKGELKKLLEKELH	0,3361
chr2:g.228017604C>T	RLKASSCESIPEEDS	RLKASSCKSIPEEDS	0,3358
chr2:g.1910298C>T	EKLAKAQEKHQSCDV	EKLAKAQKKHQSCDV	0,3352
chr3:g.77493309C>T	EEEAVEFRCQVQGDP	EEEAVEFCCQVQGDP	0,3351
chr3:g.56434932G>A	PRLPRSPRLGHRRTS	PRLPRSPCLGHRRTS	0,3347
chr7:g.37741192G>A	SKVAFYNEIFLSVTA	SKVAFYNKIFLSVTA	0,3345
chrX:g.106036817G>A	SAALVMLSFGACCST	SAALVMLFFGACCST	0,3344
chr11:g.56360793C>T	HFYCDNVPLLALSCS	HFYCDNVSLLALSCS	0,3342
chr20:g.2602176C>T	IHLTRFLRVLANFLI	IHLTRFLCVLANFLI	0,3328
chr1:g.33725442G>A	VYHGTQVPQFLISTS	VYHGTQVSQFLISTS	0,3328
chr17:g.41467034C>T	AFNGNEKETMQFLND	AFNGNEKKTMQFLND	0,3321
chr7:g.82915589G>A	HQIKQEFRRGTESLD	HQIKQEFCRGTESLD	0,332
chr1:g.158420043G>A	SSQDALISVSYTIIT	SSQDALILVSYTIIT	0,3318
chr8:g.22148519G>A	AQAVKHFRAGRDSYL	AQAVKHFCAGRDSYL	0,3314
chrY:g.5057196C>T	TTGARIDREKLCAGI	TTGARIDCEKLCAGI	0,3311
chr1:g.190226184G>A	CHCGPKFPECNCPSM	CHCGPKFSECNCPSM	0,3307
chr10:g.20859799C>T	YKEKFDNEMKDKKHH	YKEKFDNKMKDKKHH	0,3301
chr1:g.56696086C>T	YIPEYLNRSVATLLM	YIPEYLNCSVATLLM	0,33
chr2:g.165113898C>T	GKIWWNLRKTCYSIV	GKIWWNLQKTCYSIV	0,3296
chr19:g.8090123C>T	EGWGDPCELCPQEGS	EGWGDPCKLCPQEGS	0,3292
chr10:g.54023128G>A	GNFNNLFRITSNGSI	GNFNNLFCITSNGSI	0,3292
chrX:g.87622265G>A	FLLLPANEISKLLCS	FLLLPANKISKLLCS	0,3291
chr7:g.142054883C>T	NPFGIEIRRKSTGTI	NPFGIEICRKSTGTI	0,3287
chr6:g.29396724G>A	LNTTSVTEFLLLGVT	LNTTSVTKFLLLGVT	0,3285
chrX:g.78755275C>T	LTCISVDRFLAIVYP	LTCISVDCFLAIVYP	0,3275

chr5:g.13753490G>A	GPFNQEFRDLLLNDW	GPFNQEFCDLLLNDW	0,3271
chr4:g.46303573C>T	TAHFHLKRKIGYFVI	TAHFHLKKKIGYFVI	0,3267
chr12:g.85980131G>A	PEDRVKFRSKQNVDY	PEDRVKFCSKQNVDY	0,3262
chr1:g.176957704G>A	NFRCISDRKLDSTGC	NFRCISDCKLDSTGC	0,3254
chr7:g.87550003C>T	INVRFLREIIGVVSQ	INVRFLRKIIGVVSQ	0,3249
chrX:g.151700043C>T	SVLKRFPRANEFLEE	SVLKRFPCANEFLEE	0,3244
chr11:g.5047178C>T	NLVLIGISYVYILRA	NLVLIGILYVYILRA	0,3243
chr5:g.157211329C>T	LYVFAPDRESRQRWV	LYVFAPDCESRQRWV	0,3239
chr1:g.177280461G>A	QSLLYCGESTFPGTF	QSLLYCGKSTFPGTF	0,3238
chr1:g.220141882C>T	EILDVIVRSFAPILP	EILDVIVCSFAPILP	0,3237
chr10:g.82951508C>T	QRQVLSISCIIFGIV	QRQVLSILCIIFGIV	0,3236
chr1:g.111454296C>T	PEYGGKVRYGLIPEE	PEYGGKVCYGLIPEE	0,3234
chr15:g.71898626G>A	SLELLKVRSLGGISP	SLELLKVCSLGGISP	0,3232
chr1:g.18840330G>A	HFQTPIVRSAGGPMC	HFQTPIVCSAGGPMC	0,3228
chr1:g.241098711G>A	EKNGIPIRTVKSFLS	EKNGIPICTVKSFLS	0,3228
chr2:g.166073486C>T	PDKKDDDENGPKPNS	PDKKDDDKNGPKPNS	0,3227
chr19:g.44086973C>T	FTENSKLRFHQRIHT	FTENSKLCFHQRIHT	0,3217
chr1:g.158579821C>T	INQTILKEFILVGFS	INQTILKKFILVGFS	0,3213
chr22:g.15528438C>T	WYVSSTVPKMLVNFL	WYVSSTVSKMLVNFL	0,321
chr14:g.19876917C>T	CFIVLFNSYVIVLVT	CFIVLFNLYVIVLVT	0,3204
chr11:g.4848629G>A	CLHPDVARLACPEAW	CLHPDVACLACPEAW	0,3193
chr1:g.93589377G>A	RDGDFLVRDSLSSPG	RDGDFLVCDSLSSPG	0,3192
chr10:g.112417867C>T	DSLGGRVRVIVTGAA	DSLGGRVCVIVTGAA	0,3191
chr1:g.222543630G>A	RKFYIYYSCLDKKKV	RKFYIYYLCLDKKKV	0,3176
chr19:g.51769424C>T	SFFICWFPFQLVALL	SFFICWFSFQLVALL	0,3164
chr2:g.166199061G>A	SGEMDSLRSQMEERF	SGEMDSLCSQMEERF	0,3157
chr7:g.137552495G>A	VMLLTYKSIPMQVDG	VMLLTYKFIPMQVDG	0,3148
chr2:g.211623993G>A	APNQAQLRILKETEL	APNQAQLCILKETEL	0,3147
chr6:g.72258226C>T	SRSVSPHRGNDQGKP	SRSVSPHCGNDQGKP	0,3146
chr12:g.32821502C>T	QDVPMPEEKSNPKGV	QDVPMPEKKSNPKGV	0,3142
chr3:g.123700608G>A	SPQQVDFRSVLAKKG	SPQQVDFCSVLAKKG	0,314
chr6:g.55874706C>T	ERREIQREILSILGL	ERREIQRKILSILGL	0,3134
chr16:g.80549576C>T	MKAKSTVRDIDPQND	MKAKSTVCDIDPQND	0,3126
chr10:g.119859121G>A	PNSFVKFRCMIQDMF	PNSFVKFCCMIQDMF	0,3126
chr2:g.211947535G>A	LENLRIIRGTKLYED	LENLRIICGTKLYED	0,3119
chr5:g.26915774G>A	EKSLYILRAKAIDRK	EKSLYILCAKAIDRK	0,3116
chr3:g.98169063C>T	LATMAYDRYVAICKP	LATMAYDCYVAICKP	0,3113
chr15:g.71813596G>A	ALAVDPTEFACMKAL	ALAVDPTKFACMKAL	0,3111
chr17:g.10543769G>A	DQIISANPLLEAFGN	DQIISANLLLEAFGN	0,3111
chr12:g.46776966G>A	MQTVSNISITGMLVM	MQTVSNIFITGMLVM	0,311
chr11:g.67455721C>T	SRQSHRHRPDSLHDA	SRQSHRHCPDSLHDA	0,3106
chr14:g.70167995G>A	LTLMALGSSAPEILL	LTLMALGFSAPEILL	0,3101
chr4:g.69214260G>A	VFADAVFPCGELLAA	VFADAVFSCGELLAA	0,3093

chr7:g.50399977G>A	ASYEKENEMMKSHVM	ASYEKENKMMKSHVM	0,3092
chr2:g.27601392C>T	HHCGKQLRSLAGMKY	HHCGKQLCSLAGMKY	0,3088
chr1:g.247531971C>T	CIDHFFCEMPLIMQL	CIDHFFCKMPLIMQL	0,308
chr20:g.54591666G>A	PNLDVHGECALQITY	PNLDVHGKCALQITY	0,3078
chr4:g.150193204C>T	ACGPEKFRYAQDDFV	ACGPEKFCYAQDDFV	0,3066
chr5:g.41012687C>T	EILMFLEEMLDGLES	EILMFLEKMLDGLES	0,3064
chr7:g.100755252G>A	CPPNARYESCACPAS	CPPNARYKSCACPAS	0,3063
chr6:g.54326863C>T	LEDGFKFRLGTLPPS	LEDGFKFCLGTLPPS	0,3062
chr9:g.117039911G>A	LTLIAVSSCILAMVC	LTLIAVSFCILAMVC	0,3059
chr6:g.136698529G>A	ICLPLVDRFIQLLKV	ICLPLVDCFIQLLKV	0,3055
chr18:g.3126853G>A	ITCLESFRDSMVLGW	ITCLESFCDSMVLGW	0,3055
chr6:g.63280493G>A	AGLLKHSAALSCLMA	AGLLKHSVALSCLMA	0,3049
chr3:g.47428577G>A	LLAVDVFRSPLSRAF	LLAVDVFCSPLSRAF	0,3047
chr3:g.98149606C>T	AFVDALLSSSVTLKM	AFVDALLLSSVTLKM	0,3045
chr2:g.161894712C>T	VAYKAKDRNDLVSGI	VAYKAKDCNDLVSGI	0,3029
chr13:g.37692212G>A	FIIGLLFPVFSVCYL	FIIGLLFSVFSVCYL	0,3027
chr2:g.165313720C>T	WAFLSLFRLMTQDFW	WAFLSLFCLMTQDFW	0,3024
chr10:g.70708725C>T	VVDDSVVRFHGKEHV	VVDDSVVCFHGKEHV	0,3022
chr3:g.50256262C>T	QQDVLRTRVKTTGIV	QQDVLRTCVKTTGIV	0,3019
chr9:g.104598876C>T	IINHFTCEILAVMKL	IINHFTCKILAVMKL	0,3017
chr3:g.39265641G>A	FSHCCLNPLIYAFAG	FSHCCLNLLIYAFAG	0,3014
chr1:g.173517575C>T	LSCLLKREIEYTVIC	LSCLLKRKIEYTVIC	0,3013
chr13:g.23332514G>A	SAEKREFRFQLRGVA	SAEKREFCFQLRGVA	0,3012
chr8:g.107958215G>A	GTCSRNNRTCGFKWG	GTCSRNNCTCGFKWG	0,3011
chr15:g.30913938C>T	SRILLLFSLTDSMED	SRILLLFLLTDSMED	0,3005
chr15:g.50248313G>A	IPLSRRFRSVKLWFV	IPLSRRFCSVKLWFV	0,2991
chr8:g.94668086G>A	CPITGGKEGILFVTY	CPITGGKKGILFVTY	0,2989
chr16:g.70882731G>A	VGRQAKARFKISNVG	VGRQAKACFKISNVG	0,2983
chr4:g.6863707C>T	ISPRTHFRPISASEL	ISPRTHFCPISASEL	0,2976
chr17:g.75812164C>T	TERRYHLRYYKTGIC	TERRYHLCYYKTGIC	0,2969
chr18:g.5291964G>A	VIEIDFLRSDIFEEV	VIEIDFLCSDIFEEV	0,2969
chr11:g.4914799G>A	GFMYLLFPPVMNPIV	GFMYLLFSPVMNPIV	0,2969
chr2:g.137618415G>A	WSTCQLSENAPCGQG	WSTCQLSKNAPCGQG	0,2966
chr4:g.79407213G>A	AIAGAVIRWLRDNLG	AIAGAVICWLRDNLG	0,2958
chr17:g.10445044G>A	TVKDLQLRLDEAEQL	TVKDLQLCLDEAEQL	0,2954
chr10:g.67180358G>A	IAECNAIRQALQDLL	IAECNAICQALQDLL	0,2952
chr1:g.56512053G>A	AFYTGLSRVSDHKHH	AFYTGLSCVSDHKHH	0,2947
chr8:g.3359230G>A	FSCFLGYRLEGATKL	FSCFLGYCLEGATKL	0,2947
chr10:g.17043911G>A	DEKPPLIRSSGDSMF	DEKPPLICSSGDSMF	0,2945
chr9:g.23704942G>A	YGRIITSRILVDQVT	YGRIITSCILVDQVT	0,2935
chr17:g.11923879G>A	VSLGQGQEVVAEAAL	VSLGQGQKVVAEAAL	0,2924
chr6:g.151593221C>T	ARTEQLVRLESNAVI	ARTEQLVCLESNAVI	0,2917
chr8:g.86229754G>A	VSILSFISLTGVVFL	VSILSFIFLTGVVFL	0,2912

chr16:g.20032148G>A	LRRKSNFRLRGYSTG	LRRKSNFCLRGYSTG	0,2912
chr1:g.200120892C>T	QELVAKLRSLQFDQR	QELVAKLCSLQFDQR	0,2902
chr11:g.123940266C>T	CFLVLLGSYTALLVM	CFLVLLGLYTALLVM	0,2901
chr12:g.125644115G>A	SIFVNGKEMKSKVDT	SIFVNGKKMKSKVDT	0,2897
chr12:g.21178635C>T	VFMGNMLRGIGETPI	VFMGNMLCGIGETPI	0,2896
chr3:g.167697033G>A	NFTESLLRMAADDVE	NFTESLLCMAADDVE	0,2888
chr6:g.101818457C>T	ITDSLSNRSLIVTTI	ITDSLSNCSLIVTTI	0,2883
chr8:g.15748437C>T	SFLLSIFRSKYHGYP	SFLLSIFCSKYHGYP	0,2875
chr19:g.51142739C>T	DAGRYFFRMEKGNIK	DAGRYFFCMEKGNIK	0,2862
chr3:g.38847035G>A	LPMVSEDRLHCMDIL	LPMVSEDCLHCMDIL	0,286
chr5:g.116012428C>T	NIYSTIIRENVLALQ	NIYSTIICENVLALQ	0,2852
chr11:g.121574273C>T	CDLDTQFRCQESGTC	CDLDTQFCCQESGTC	0,2848
chr11:g.123943058G>A	SSIFLYIRMSEAQSK	SSIFLYICMSEAQSK	0,2847
chr19:g.51746508G>A	LTLPVIIRVTTVPGK	LTLPVIICVTTVPGK	0,2845
chrX:g.143629380C>T	ELKSLKNEILCPKLL	ELKSLKNKILCPKLL	0,2843
chr6:g.131652568C>T	IWMCNKFRCGETRLE	IWMCNKFCCGETRLE	0,2832
chr9:g.32632918G>A	WVLKSDFRLPTEEEI	WVLKSDFCLPTEEEI	0,2831
chr10:g.37219040G>A	ENCMLKKEIAMLKLE	ENCMLKKKIAMLKLE	0,2827
chr11:g.121570183C>T	TCLRNQYRCSNGNCI	TCLRNQYCCSNGNCI	0,2815
chr7:g.75954096C>T	MTDMILFSLIVGLLT	MTDMILFLLIVGLLT	0,2795
chr4:g.42962946C>T	VIYTTCLRVVRTTFE	VIYTTCLCVVRTTFE	0,2792
chr16:g.70952513G>A	IKPGKSVRGSVVITK	IKPGKSVCGSVVITK	0,278
chr12:g.52792340G>A	VLSMDNNRSLDLDSI	VLSMDNNCSLDLDSI	0,2773
chr1:g.157547108G>A	TLTCKGFRFYSPQKT	TLTCKGFCFYSPQKT	0,2765
chr9:g.125149801G>A	SAPNYCYRCGNIASI	SAPNYCYCCGNIASI	0,2743
chr1:g.81969239C>T	TWVGIVISLVCLAIC	TWVGIVIFLVCLAIC	0,273
chr14:g.94288428G>A	STFDKNFRCHVLKLP	STFDKNFCCHVLKLP	0,2728
chr17:g.49045024C>T	ETPDSKVRMVIITGP	ETPDSKVCMVIITGP	0,2725
chr7:g.143321747C>T	PEMKTILRGVVLKEY	PEMKTILCGVVLKEY	0,2702
chr11:g.24914509C>T	QAQLKELRYGKKDLL	QAQLKELCYGKKDLL	0,2666
chr8:g.24500858C>T	GVLILLVRYRKCIKL	GVLILLVCYRKCIKL	0,2644
chr13:g.37637598G>A	KQDISSFRFEVLGLL	KQDISSFCFEVLGLL	0,2627
chr4:g.122353074C>T	CFHGPNFRSKSWALF	CFHGPNFCSKSWALF	0,2613
chr16:g.14878784C>T	SLSGGLFRSNLLTQD	SLSGGLFCSNLLTQD	0,2598
chr2:g.37037998G>A	GATTSTIRSSCLVGC	GATTSTICSSCLVGC	0,2597
chr3:g.11026264C>T	IIVCCINSCTSMFAG	IIVCCINLCTSMFAG	0,2577
chr12:g.45836908C>T	AANRTCLRFLLLSAH	AANRTCLCFLLLSAH	0,2568
chr2:g.218135765C>T	AFIGQKFRHGLLKIL	AFIGQKFCHGLLKIL	0,2537
chr13:g.85795938G>A	PLTHLDLRGNQLQTL	PLTHLDLCGNQLQTL	0,2529
chr8:g.24442511C>T	VEGQQLVRPKKLPLI	VEGQQLVCPKKLPLI	0,2096