

<b>Gene</b>	<b>Chromosomal location</b>	<b>Q-value</b>	<b>Alteration Frequency</b>
MEGF10	05q33	1.83E-04	4.4%
LRRTM2	05q31	1.83E-04	4.8%
CXXC5	05q31.3	1.83E-04	4.8%
SLC25A2	05q31.3	1.83E-04	4.6%
TAF7	05q31	1.83E-04	4.6%
DIAPH1	05q31	1.83E-04	4.6%
HDAC3	05q31.1-q31.2	1.83E-04	4.6%
RELL2	05q31.3	1.83E-04	4.6%
FCHSD1	05q31.3	1.83E-04	4.6%
ARAP3	05q31.3	1.83E-04	4.6%
PCDH1	05q31.3	1.83E-04	4.7%
KIAA0141	05q31	1.83E-04	4.6%
PCDH12	05q31.3	1.83E-04	4.6%
RNF14	05q23.3-q31.1	1.83E-04	4.6%
GNPDA1	05q21	1.83E-04	4.6%
NDFIP1	05q31.3	1.83E-04	4.6%
SPRY4	05q31.3	1.83E-04	4.6%
FGF1	05q31.3-q33.2	1.83E-04	4.8%
ARHGAP26	05q31	1.83E-04	4.8%
HMHB1	05q31.3	1.83E-04	4.5%
YIPF5	05q31.3	1.83E-04	4.5%
PLAC8L1	05q32	1.83E-04	4.5%
LARS	05q32	1.83E-04	4.5%
RBM27	05q32	1.83E-04	4.5%
POU4F3	05q32	1.83E-04	4.5%
TCERG1	05q31	1.83E-04	4.5%
GPR151	05q32	1.83E-04	4.5%
HMGXB3	05q33.1	1.83E-04	4.5%
CSF1R	05q32	1.83E-04	4.5%
PDGFRB	05q33.1	1.83E-04	4.5%
CDX1	05q32	1.83E-04	4.5%
SLC6A7	05q32	1.83E-04	4.5%
CAMK2A	05q32	1.83E-04	4.5%
MYOZ3	05q33.2	1.83E-04	4.5%
RBM22	05q33.1	1.83E-04	4.5%

DCTN4	05q33.1	1.83E-04	4.5%
SMIM3	05q33.1	1.83E-04	4.5%
IRGM	05q33.1	1.83E-04	4.5%
ZNF300	05q33.1	1.83E-04	4.5%
NMUR2	05q33.1	1.83E-04	4.5%
FAM114A2	05q33.2	1.83E-04	4.5%
GALNT10	05q34	1.83E-04	4.6%
SAP30L	05q33.2	1.83E-04	4.6%
HAND1	05q33	1.83E-04	4.6%
KIF4B	05q33.2	1.83E-04	4.5%
HAVCR1	05q33.2	1.83E-04	4.6%
HAVCR2	05q34	1.83E-04	4.6%
MED7	05q33.3	1.83E-04	4.6%
ITK	05q31-q32	1.83E-04	4.6%
FAM71B	05q33.3	1.83E-04	4.6%
CYFIP2	05q34	1.83E-04	4.6%
FNDC9	05q33.3	1.83E-04	4.6%
ADAM19	05q33.3	1.83E-04	4.8%
NIPAL4	05q33.3	1.83E-04	4.6%
C5orf52	05q33.3	1.83E-04	4.6%
THG1L	05q33.3	1.83E-04	4.6%
LSM11	05q33.3	1.83E-04	4.6%
UBLCP1	05q33.3	1.83E-04	4.7%
IL12B	05q31.1-q33.1	1.83E-04	4.7%
ADRA1B	05q33.3	1.83E-04	4.8%
TTC1	05q32-q33.2	1.83E-04	4.8%
PWWP2A	05q33.3	1.83E-04	4.8%
FABP6	05q23-q35	1.83E-04	4.8%
CCNJL	05q33.3	1.83E-04	4.8%
C1QTNF2	05q33.3	1.83E-04	4.8%
SLU7	05q33.3	1.83E-04	4.8%
PTTG1	05q35.1	1.83E-04	4.8%
ATP10B	05q34	1.83E-04	5.0%
GABRB2	05q34	1.83E-04	5.0%
GABRA6	05q34	1.83E-04	5.0%
GABRA1	05q34	1.83E-04	5.0%

GABRG2	05q34	1.83E-04	5.0%
HMMR	05q34	1.83E-04	5.1%
MAT2B	05q34	1.83E-04	5.1%
TENM2	05q35	1.83E-04	5.2%
WWC1	05q34	1.83E-04	5.3%
RARS	05q35.1	1.83E-04	5.2%
PANK3	05q35.1	1.83E-04	5.2%
SPDL1	05q35.1	1.83E-04	5.1%
SOX30	05q33	1.84E-04	4.4%
GABRP	05q35.1	1.88E-04	5.4%
RANBP17	05q34	2.12E-04	5.6%
CTNNA1	05q31.2	2.24E-04	4.7%
EBF1	05q34	2.24E-04	4.7%
RNF145	05q33.3	2.24E-04	4.7%
CCNG1	05q32-q34	2.50E-04	5.0%
NUDCD2	05q34	2.53E-04	5.0%
LCP2	05q35.1	2.69E-04	5.2%
SLC26A2	05q31-q34	2.69E-04	4.3%
TIGD6	05q33.1	2.69E-04	4.3%
GPX3	05q33.1	2.69E-04	4.3%
TNIP1	05q32-q33.1	2.69E-04	4.3%
ANXA6	05q33.1	2.69E-04	4.3%
CCDC69	05q33.1	2.69E-04	4.3%
GM2A	05q33.1	2.69E-04	4.3%
KCNIP1	05q35	2.69E-04	5.2%
KCNMB1	05q34	2.69E-04	5.2%
TLX3	05q35.1	2.97E-04	5.5%
NPM1	05q35.1	2.98E-04	5.5%
FGF18	05q34	2.98E-04	5.5%
STK32A	05q32	3.08E-04	4.6%
PRELID2	05q32	3.13E-04	4.6%
SCGB3A2	05q32	3.13E-04	4.6%
C5orf46	05q33.1	3.13E-04	4.6%
SPINK14	05q32	3.13E-04	4.6%
GRIA1	05q33	3.13E-04	4.6%
MFAP3	05q32-q33.2	3.13E-04	4.6%

CLINT1	05q33.3	3.13E-04	4.6%
SPINK13	05q32	3.17E-04	4.6%
H2AFY	05q31.1	3.28E-04	4.2%
TIFAB	05q31.1	3.28E-04	4.2%
NEUROG1	05q23-q31	3.28E-04	4.2%
CXCL14	05q31	3.28E-04	4.2%
SLC25A48	05q31.1	3.28E-04	4.2%
IL9	05q31-q35	3.28E-04	4.2%
LECT2	05q31.1	3.28E-04	4.2%
FBXL21	05q31	3.28E-04	4.2%
PPP2R2B	05q32	3.28E-04	4.8%
SGCD	05q33-q34	3.28E-04	4.6%
TIMD4	05q33.3	3.28E-04	4.6%
DOCK2	05q35.1	3.28E-04	5.1%
FAM196B	05q35.1	3.28E-04	5.1%
FOXI1	05q34	3.28E-04	5.1%
SLIT3	05q35	3.40E-04	5.1%
LMNB1	05q23.2	3.41E-04	4.2%
KCTD16	05q32	4.39E-04	4.5%
GRXCR2	05q32	4.45E-04	4.5%
SH3RF2	05q32	4.45E-04	4.5%
SPINK6	05q32	4.45E-04	4.5%
SPINK9	05q32	4.45E-04	4.5%
ARSI	05q32	4.45E-04	4.5%
GLRA1	05q33.1	4.45E-04	4.5%
SPINK7	05q32	4.47E-04	4.5%
SYNPO	05q33.1	4.47E-04	4.5%
TCOF1	05q32	4.52E-04	4.5%
LARP1	05q33.2	4.52E-04	4.5%
CNOT8	05q31-q33	4.52E-04	4.5%
MRPL22	05q33.2	4.52E-04	4.5%
FAXDC2	05q31-q32	4.57E-04	4.5%
MATR3	05q31.3	5.09E-04	4.7%
PAIP2	05q32	5.09E-04	4.7%
SLC23A1	05q31.2	5.09E-04	4.7%
MZB1	05q31.2	5.09E-04	4.7%

PROB1	05q31.2	5.09E-04	4.7%
SPATA24	05q31.2	5.09E-04	4.7%
SH3PXD2B	05q35.2	5.09E-04	5.3%
BNIP1	05q33-q34	5.09E-04	5.3%
ALDH7A1	05q31	5.11E-04	4.1%
PHAX	05q23.2	5.11E-04	4.1%
C5orf63	05q23.2	5.11E-04	4.1%
SIL1	05q31	5.11E-04	4.7%
ANKHD1	05q31.3	5.11E-04	5.0%
UBTD2	05q35.1	5.11E-04	5.2%
KDM3B	05q31	5.34E-04	5.0%
REEP2	05q31	5.34E-04	5.0%
KIF20A	05q31	5.36E-04	4.9%
CDC23	05q31	5.36E-04	4.9%
GFRA3	05q31.1-q31.3	5.36E-04	4.9%
CDC25C	05q31	5.36E-04	4.9%
EGR1	05q23-q31	5.36E-04	5.0%
ETF1	05q31.2	5.36E-04	5.0%
FBN2	05q23-q31	5.89E-04	4.3%
ISOC1	05q22.1-q33.3	5.89E-04	4.3%
SLC27A6	05q23.3	5.95E-04	4.3%
SLC36A1	05q33.1	5.95E-04	4.3%
SPARC	05q31-q33	5.95E-04	4.3%
ATOX1	05q32	5.95E-04	4.3%
G3BP1	05q33.1	5.95E-04	4.3%
SLC36A2	05q33.1	6.03E-04	4.3%
SLC36A3	05q33.1	6.11E-04	4.3%
PDE6A	05q31.2-q34	6.20E-04	4.4%
ZMAT2	05q31	6.72E-04	4.6%
HARS2	05q31.3	6.81E-04	4.6%
DPYSL3	05q32	6.90E-04	4.6%
SPINK1	05q32	6.90E-04	4.6%
KIAA1191	05q35.2	6.90E-04	5.4%
ARL10	05q35.3	6.90E-04	5.4%
NOP16	05q35.2	6.90E-04	5.4%
HIGD2A	05q35.2	6.90E-04	5.4%

CLTB	05q35.2	6.90E-04	5.4%
SPINK5	05q32	7.01E-04	4.6%
DRD1	05q34-q35	7.01E-04	5.1%
CPLX2	05q35.2	7.10E-04	5.4%
HRH2	05q35	7.22E-04	5.4%
SLC4A9	05q31.3	7.37E-04	4.8%
FBXW11	05q35.1	7.55E-04	5.1%
EFCAB9	05q35.1	7.55E-04	5.1%
STK10	05q35.1	7.55E-04	5.1%
FAM53C	05q31	7.64E-04	4.8%
PSD2	05q31.3	7.64E-04	4.8%
BRD8	05q31	7.75E-04	4.8%
HSPA9	05q31.1	7.88E-04	4.8%
ADAMTS19	05q23.3	8.10E-04	4.2%
KIAA1024L	05q23.3	8.10E-04	4.2%
CHSY3	05q13	8.10E-04	4.2%
C5orf24	05q31.1	8.10E-04	4.2%
TXNDC15	05q31.1	8.10E-04	4.2%
SMAD5	05q31	8.10E-04	4.2%
SLC12A2	05q23.3	8.12E-04	4.2%
TCF7	05q31	8.12E-04	4.2%
SKP1	05q31	8.12E-04	4.2%
PPP2CA	05q31.1	8.12E-04	4.2%
PCBD2	05q31.1	8.12E-04	4.2%
TGFBI	05q31	8.12E-04	4.2%
TRPC7	05q31.2	8.12E-04	4.2%
CTXN3	05q23.2	8.38E-04	4.2%
PRRC1	05q23.2	8.49E-04	4.2%
CLK4	05q35	9.63E-04	5.3%
NR3C1	05q31-q32	9.99E-04	4.5%
ATP6V0E1	05q35.2	1.02E-03	5.3%
FBXO38	05q33.1	1.03E-03	4.5%
GEMIN5	05q34	1.04E-03	4.5%
CREBRF	05q35.2	1.04E-03	5.3%
STC2	05q35.2	1.04E-03	5.3%
SFXN1	05q35.3	1.04E-03	5.3%

CD74	05q32	1.08E-03	4.5%
UBE2D2	05q31.2	1.10E-03	4.7%
DNAJC18	05q31.2	1.14E-03	4.7%
ECSCR	05q31.2	1.15E-03	4.7%
TMEM173	05q31.2	1.15E-03	4.7%
ACSL6	05q31	1.46E-03	4.3%
FNIP1	05q23.3	1.48E-03	4.3%
CDHR2	05q35.2	1.49E-03	5.4%
GPRIN1	05q35.2	1.49E-03	5.4%
FAF2	05q35.2	1.51E-03	5.4%
RNF44	05q35.3	1.51E-03	5.4%
SIMC1	05q35.2	1.53E-03	5.4%
MSX2	05q35.2	1.54E-03	5.1%
FAT2	05q33.1	1.57E-03	4.3%
ABLIM3	05q33.1	1.62E-03	4.4%
BOD1	05q35.2	1.62E-03	5.1%
HARS	05q31.3	1.64E-03	4.6%
JAKMIP2	05q32	1.64E-03	4.6%
ZNF608	05q23.2	1.66E-03	3.7%
PKD2L2	05q31	1.66E-03	4.6%
SRA1	05q31	1.66E-03	4.6%
EIF4EBP3	05q31.3	1.66E-03	4.6%
APBB3	05q31	1.66E-03	4.6%
SLC35A4	05q31.3	1.66E-03	4.6%
DND1	05q31.3	1.66E-03	4.6%
NME5	05q31.2	1.72E-03	4.6%
SNCAIP	05q23.2	1.72E-03	3.7%
ZNF474	05q23.2	1.77E-03	3.7%
HK3	05q35.2	2.07E-03	5.5%
RAPGEF6	05q31.1	2.08E-03	4.2%
IL3	05q23-q31	2.08E-03	4.2%
CSF2	05q23-q31	2.08E-03	4.2%
ZCCHC10	05q31.1	2.08E-03	4.2%
HSPA4	05q31.1	2.08E-03	4.2%
C5orf15	05q31.1	2.08E-03	4.2%
VDAC1	05q31	2.08E-03	4.2%

CDKL3	05q31.1	2.08E-03	4.2%
UBE2B	05q31.1	2.08E-03	4.2%
SEC24A	05q31.1	2.08E-03	4.2%
CAMLG	05q23	2.08E-03	4.2%
DDX46	05q31.1	2.08E-03	4.2%
CATSPER3	05q31.2	2.08E-03	4.2%
PITX1	05q31.1	2.08E-03	4.2%
C5orf47	05q35.2	2.08E-03	5.2%
FAM153B	05q35.2	2.08E-03	5.3%
ZNF354A	05q35.3	2.08E-03	5.3%
ZNF354B	05q35.3	2.08E-03	5.3%
ZFP2	05q35.3	2.08E-03	5.3%
ZNF454	05q35.3	2.08E-03	5.3%
GRM6	05q35	2.08E-03	5.3%
ZNF879	05q35.3	2.08E-03	5.3%
ZNF354C	05q35	2.08E-03	5.3%
CNOT6	05q35.3	2.08E-03	5.3%
SCGB3A1	05q35.3	2.08E-03	5.3%
FLT4	05q34-q35	2.08E-03	5.3%
MGAT1	05q35.3	2.08E-03	5.3%
OR2Y1	05q35	2.08E-03	5.3%
ZFP62	05q35.3	2.08E-03	5.3%
BTNL8	05q35.3	2.08E-03	5.3%
BTNL3	05q35	2.08E-03	5.0%
BTNL9	05q35.3	2.08E-03	5.0%
GNB2L1	05q35.3	2.08E-03	5.0%
OR2V1	05q35.3	2.08E-03	5.0%
OR2V2	05q35.3	2.08E-03	5.0%
OR4F3	05q35.3	2.08E-03	5.0%
TRIM41	05q35.3	2.08E-03	5.0%
TRIM52	05q35.3	2.08E-03	5.0%
TRIM7	05q35.3	2.08E-03	5.0%
SAR1B	05q31.1	2.15E-03	4.2%
NEURL1B	05q35.1	2.19E-03	5.3%
RPL26L1	05q35.2	2.19E-03	5.3%
ADRB2	05q31-q32	2.21E-03	4.2%



MYOT	05q31.2	2.30E-03	4.5%
ARHGEF37	05q33.1	2.30E-03	4.5%
CSNK1A1	05q32	2.33E-03	4.5%
HTR4	05q31-q33	2.41E-03	4.5%
PURA	05q31	2.47E-03	4.7%
FTMT	05q23.1	2.60E-03	3.6%
SRFBP1	05q23.1	2.60E-03	3.6%
LOX	05q23.3-q31.2	2.60E-03	3.6%
SNCB	05q35	2.75E-03	5.4%
EIF4E1B	05q35.2	2.75E-03	5.4%
TSPAN17	05q35.3	2.75E-03	5.4%
UNC5A	05q35.3	2.75E-03	5.4%
TMED9	05q35.3	2.75E-03	5.4%
B4GALT7	05q35.1-q35.3	2.75E-03	5.4%
THOC3	05q35.3	2.98E-03	5.4%
PHYKPL	05q35.3	3.00E-03	5.2%
FAM153A	05q35.3	3.02E-03	5.2%
N4BP3	05q35.3	3.02E-03	5.2%
NHP2	05q35.3	3.02E-03	5.2%
HNRNPAB	05q35.3	3.02E-03	5.2%
PROP1	05q35.3	3.04E-03	5.2%
RMND5B	05q35.3	3.04E-03	5.2%
MAPK9	05q35	3.04E-03	5.2%
GFPT2	05q	3.04E-03	5.2%
HINT1	05q31.2	3.06E-03	4.1%
CDC42SE2	05q31.1	3.06E-03	4.1%
LYRM7	05q31.1	3.10E-03	4.1%
GRAMD3	05q23.2	3.20E-03	4.1%
FSTL4	05q31.1	3.30E-03	4.3%
FBXO27	19q13.2	3.41E-03	5.6%
KLHL3	05q31	3.51E-03	4.3%
HNRNPA0	05q31	3.51E-03	4.3%
PPARGC1B	05q33.1	3.51E-03	4.4%
FAM13B	05q31	3.53E-03	4.6%
CD14	05q31.3	3.53E-03	4.6%
NDUFA2	05q31.2	3.53E-03	4.6%

TMCO6	05q31.3	3.53E-03	4.6%
IK	05q31.3	3.53E-03	4.6%
WDR55	05q31.3	3.53E-03	4.6%
GRPEL2	05q33.1	3.53E-03	4.4%
PCYOX1L	05q33.1	3.53E-03	4.4%
AFAP1L1	05q33.1	3.54E-03	4.4%
WNT8A	05q31	3.57E-03	4.6%
IGIP	05q31	3.57E-03	4.6%
IL17B	05q33.1	3.57E-03	4.4%
NDST1	05q33.1	3.83E-03	4.3%
RPS14	05q31-q33	3.89E-03	4.3%
ZNF346	05q35.3	3.89E-03	5.5%
RUFY1	05q35.3	4.10E-03	5.3%
CBY3	05q35.3	4.17E-03	5.3%
CPEB4	05q21	4.41E-03	5.2%
RASGEF1C	05q35.3	4.41E-03	5.3%
CSNK1G3	05q23	4.43E-03	3.7%
SNX2	05q23.2	4.47E-03	3.7%
SNX24	05q23.2	4.47E-03	3.7%
PAK4	19p11-q11	4.61E-03	5.8%
MRPS12	19q13.1-q13.2	4.86E-03	5.5%
FBXO17	19q13.2	4.86E-03	5.5%
P4HA2	05q31	4.88E-03	4.2%
PDLIM4	05q31.1	4.88E-03	4.2%
SLC22A4	05q23.3	4.88E-03	4.2%
IRF1	05q23-q31	4.94E-03	4.2%
IL5	05q23-q31	4.94E-03	4.2%
CDKN2AIPNL	05q31.1	5.10E-03	4.2%
SPOCK1	05q31.2	5.27E-03	4.2%
HBEGF	05q23	5.34E-03	5.0%
DOK3	05q35	5.53E-03	5.4%
DDX41	05q35.3	5.53E-03	5.4%
FAM193B	05q35	5.53E-03	5.4%
SH3TC2	05q32	5.58E-03	4.2%
HNRNPH1	05q35.3	5.85E-03	5.4%
COL23A1	05q35.3	5.96E-03	5.2%

NCCRP1	19q13.2	6.22E-03	5.9%
SYCN	19q13.2	6.22E-03	5.9%
PPIC	05q23.2	7.09E-03	3.6%
PRDM6	05q21-q23	7.18E-03	3.6%
PIK3C2G	12p12	7.96E-03	3.5%
PLCZ1	12p13.31	7.96E-03	3.4%
CAPZA3	12p12.3	7.96E-03	3.4%
CYSTEM1	05q31.3	8.16E-03	4.8%
NRG2	05q31.2	8.45E-03	4.8%
PDLIM7	05q35.3	8.53E-03	5.3%
MAML1	05q35	8.66E-03	5.3%
LTC4S	05q35	8.66E-03	5.3%
CANX	05q35	8.81E-03	5.3%
SQSTM1	05q35	8.96E-03	5.3%
C5orf45	05q35.3	9.12E-03	5.3%
RNF130	05q35.3	9.46E-03	5.3%
ERGIC1	05q35.1	1.00E-02	5.3%
SARS2	19q13.2	1.03E-02	5.5%
SIRT2	19q13	1.04E-02	5.5%
NFKBIB	19q13.1	1.04E-02	5.5%
MXD3	05q35.3	1.08E-02	5.7%
RAB24	05q35.3	1.08E-02	5.7%
PRELID1	05q35.3	1.08E-02	5.7%
LMAN2	05q35	1.08E-02	5.7%
KIF3A	05q31	1.16E-02	4.2%
CCNI2	05q31.1	1.16E-02	4.2%
PRR7	05q35.3	1.16E-02	5.4%
DBN1	05q35.3	1.16E-02	5.4%
IL13	05q31	1.20E-02	4.2%
IL4	05q23-q31	1.20E-02	4.2%
UIMC1	05q35.2	1.20E-02	5.4%
RAD50	05q31.1	1.23E-02	4.2%
AEBP2	12p12.3	1.58E-02	3.8%
FGFR4	05q35.2	1.68E-02	5.5%
SOWAHA	05q23.3	1.82E-02	4.3%
MGAT4B	05q35	1.82E-02	5.3%

PFDN1	05q31	1.84E-02	4.8%
TBC1D9B	05q35.3	1.92E-02	5.3%
CEP120	05q23.2	1.98E-02	3.6%
DUSP1	05q35.1	2.06E-02	5.3%
RINL	19q13.2	2.11E-02	5.5%
NSD1	05q35	2.14E-02	5.7%
IFNL3	19q13.13	2.43E-02	5.9%
IFNL4	19q13.2	2.43E-02	5.9%
IFNL2	19q13.13	2.43E-02	5.9%
IFNL1	19q13.13	2.43E-02	5.9%
LRFN1	19q13.2	2.43E-02	5.9%
ECH1	19q13.1	2.92E-02	5.4%
HNRNPL	19q13.2	2.92E-02	5.4%
LGALS4	19q13.2	2.97E-02	5.4%
SLC22A5	05q23.3	3.03E-02	4.2%
GMFG	19q13.2	3.16E-02	6.0%
SAMD4B	19q13.2	3.16E-02	6.0%
PAF1	19q13.1	3.16E-02	6.0%
MED29	19q13.2	3.16E-02	6.0%
RGS14	05q35.3	3.16E-02	5.5%
SLC34A1	05q35.3	3.16E-02	5.5%
PFN3	05q35.2	3.16E-02	5.5%
RERGL	12p12.3	3.93E-02	3.3%
RYR1	19q13.1	4.01E-02	5.5%
ACTN4	19q13	4.08E-02	5.5%
UQCRQ	05q31.1	4.19E-02	4.3%
LEAP2	05q31.1	4.19E-02	4.3%
AFF4	05q31	4.19E-02	4.3%
CASC1	12p12.1	4.25E-02	5.2%
LYRM5	12p12.1	4.32E-02	5.2%
KRAS	12p12.1	4.48E-02	5.2%