

Table S1 Genes are correlated with RUNX2 in LUAD

Correlated Gene	Cytoband	Spearman's Correlation	p-Value	q-Value
DPYSL3	5q32	0.572521431	2.35E-46	4.72E-42
COL1A2	7q21.3	0.558710844	8.92E-44	8.97E-40
ALPK2	18q21.31-q21.32	0.54582034	1.78E-41	9.93E-38
VCAN	5q14.2-q14.3	0.545570822	1.97E-41	9.93E-38
SERPINF1	17p13.3	0.544201382	3.42E-41	1.37E-37
COL3A1	2q32.2	0.542772806	6.04E-41	1.88E-37
ALDH1L2	12q23.3	0.542577388	6.53E-41	1.88E-37
ANTXR1	2p13.3	0.537945552	4.06E-40	9.32E-37
SULF1	8q13.2-q13.3	0.537882334	4.16E-40	9.32E-37
COL6A3	2q37.3	0.53567942	9.84E-40	1.98E-36
ADAM12	10q26.2	0.53432674	1.66E-39	3.04E-36
NUAK1	12q23.3	0.532535874	3.32E-39	5.57E-36
COL5A2	2q32.2	0.532178621	3.81E-39	5.89E-36
TENM4	11q14.1	0.530175783	8.19E-39	1.15E-35
SFRP2	4q31.3	0.530059854	8.57E-39	1.15E-35
THBS2	6q27	0.529191037	1.19E-38	1.50E-35
CCN4	8q24.22	0.519692144	4.18E-37	4.95E-34
COL1A1	17q21.33	0.517731596	8.59E-37	9.61E-34
XYLT1	16p12.3	0.516078456	1.57E-36	1.66E-33
ANGPTL2	9q33.3	0.515099615	2.24E-36	2.26E-33
CTHRC1	8q22.3	0.514591752	2.70E-36	2.58E-33
COL11A1	1p21.1	0.51126197	8.95E-36	8.19E-33
CSMD2	1p35.1	0.51106221	9.62E-36	8.42E-33
LRRC15	3q29	0.509993089	1.41E-35	1.18E-32
LEF1	4q25	0.509025885	1.99E-35	1.60E-32
PLPP4	10q26.12	0.508924155	2.06E-35	1.60E-32
PRRX1	1q24.2	0.506419694	5.01E-35	3.63E-32
DIO2	14q31.1	0.506399461	5.04E-35	3.63E-32
FBN1	15q21.1	0.506258783	5.30E-35	3.68E-32
MMP2	16q12.2	0.503664836	1.32E-34	8.84E-32
GLT8D2	12q23.3	0.502908301	1.72E-34	1.09E-31
HTRA3	4p16.1	0.502887634	1.73E-34	1.09E-31
TSHZ3	19q12	0.502555217	1.94E-34	1.18E-31
COL5A1	9q34.3	0.502481057	1.99E-34	1.18E-31
ITGA11	15q23	0.500040119	4.64E-34	2.67E-31
COL12A1	6q13-q14.1	0.497712593	1.03E-33	5.66E-31
TGFB3	14q24.3	0.497691806	1.04E-33	5.66E-31
GAS1	9q21.33	0.496275159	1.69E-33	8.95E-31
OLFML2B	1q23.3	0.491893961	7.45E-33	3.85E-30
MXRA5	Xp22.33	0.488934816	2.00E-32	1.01E-29
APCDD1L	20q13.32	0.488134827	2.62E-32	1.28E-29
FAP	2q24.2	0.487591764	3.13E-32	1.50E-29
BNC2	9p22.3-p22.2	0.486757422	4.13E-32	1.90E-29
BMP8A	1p34.3	0.486738144	4.15E-32	1.90E-29
TENM3	4q34.3-q35.1	0.486437857	4.59E-32	2.05E-29
PDGFRA	4q12	0.483520785	1.20E-31	5.24E-29
GREM1	15q13.3	0.481233118	2.52E-31	1.08E-28
NLGN2	17p13.1	0.480702188	2.99E-31	1.26E-28
NTNG2	9q34.13	0.479467879	4.46E-31	1.83E-28
RASGRF2	5q14.1	0.475436108	1.63E-30	6.54E-28
KCND2	7q31.31	0.466559672	2.63E-29	1.04E-26
THY1	11q23.3	0.46643596	2.74E-29	1.06E-26
MAGEL2	15q11.2	0.464835471	4.48E-29	1.70E-26
SULF2	20q13.12	0.462703825	8.62E-29	3.21E-26
CHSY1	15q26.3	0.462526588	9.09E-29	3.33E-26
CILP	15q22.31	0.462390739	9.48E-29	3.41E-26

ISLR	15q24.1	0.461750774	1.15E-28	4.07E-26
POSTN	13q13.3	0.460716617	1.58E-28	5.47E-26
FNDC1	6q25.3	0.460212521	1.84E-28	6.17E-26
FN1	2q35	0.460210176	1.84E-28	6.17E-26
ZNF469	16q24.2	0.459877499	2.03E-28	6.71E-26
CERCAM	9q34.11	0.458651863	2.94E-28	9.56E-26
NOX4	11q14.3	0.458111131	3.47E-28	1.11E-25
ADAMTS12	5p13.3-p13.2	0.457305783	4.41E-28	1.39E-25
SEPTIN11	4q21.1	0.456614637	5.43E-28	1.68E-25
SV2A	1q21.2	0.456463191	5.68E-28	1.73E-25
CCDC80	3q13.2	0.455576225	7.40E-28	2.22E-25
LPAR4	Xq21.1	0.455110538	8.51E-28	2.52E-25
CPZ	4p16.1	0.454229276	1.11E-27	3.22E-25
INHBA	7p14.1	0.453711373	1.29E-27	3.71E-25
GASK1B	4q32.1	0.452858013	1.66E-27	4.70E-25
DACT1	14q23.1	0.452541487	1.82E-27	5.09E-25
CRISPLD2	16q24.1	0.451976778	2.15E-27	5.93E-25
LOX	5q23.1	0.4518262	2.25E-27	6.12E-25
NID2	14q22.1	0.451222501	2.69E-27	7.21E-25
EPYC	12q21.33	0.451113567	2.77E-27	7.35E-25
LAMA4	6q21	0.450271361	3.55E-27	9.29E-25
SH3PXD2B	5q35.1	0.449745555	4.14E-27	1.07E-24
HTRA1	10q26.13	0.448414411	6.11E-27	1.56E-24
COL5A3	19p13.2	0.448127932	6.64E-27	1.67E-24
CDH11	16q21	0.445938825	1.25E-26	3.11E-24
MN1	22q12.1	0.444295758	2.01E-26	4.94E-24
AEBP1	7p13	0.444099764	2.13E-26	5.16E-24
SGIP1	1p31.3	0.443618656	2.44E-26	5.82E-24
CLSTN2	3q23	0.443598562	2.46E-26	5.82E-24
COL6A2	21q22.3	0.441526225	4.44E-26	1.04E-23
CDH2	18q12.1	0.440129778	6.60E-26	1.53E-23
NETO1	18q22.3	0.439267298	8.43E-26	1.93E-23
ADAMTS2	5q35.3	0.438776664	9.68E-26	2.19E-23
MEIS3	19q13.32	0.438445028	1.06E-25	2.38E-23
P4HA3	11q13.4	0.43807984	1.18E-25	2.61E-23
PRDM1	6q21	0.43760111	1.35E-25	2.95E-23
LOXL2	8p21.3	0.437447257	1.41E-25	3.05E-23
ADAMTS18	16q23.1	0.435801706	2.23E-25	4.78E-23
CPXM1	20p13	0.435445808	2.46E-25	5.22E-23
IGFBP5	2q35	0.434440047	3.26E-25	6.84E-23
KIF26B	1q44	0.433376017	4.38E-25	9.09E-23
COL16A1	1p35.2	0.432834581	5.09E-25	1.05E-22
TNFAIP6	2q23.3	0.432622348	5.40E-25	1.10E-22
PDPN	1p36.21	0.432539765	5.52E-25	1.11E-22
SNAI2	8q11.21	0.431937541	6.52E-25	1.30E-22
SYNDIG1	20p11.21	0.431778627	6.81E-25	1.34E-22
RPLP0P2	11q12.2	0.431250737	7.88E-25	1.54E-22
SPARC	5q33.1	0.430034654	1.10E-24	2.13E-22
FRMD6	14q22.1	0.429602286	1.24E-24	2.37E-22
LOXL1	15q24.1	0.42866669	1.60E-24	3.04E-22
MFAP2	1p36.13	0.428576465	1.64E-24	3.08E-22
SPR	2p13.2	-0.428320032	1.76E-24	3.28E-22
CNPY4	7q22.1	0.428264204	1.78E-24	3.30E-22
ROR2	9q22.31	0.427946627	1.95E-24	3.56E-22
GFPT2	5q35.3	0.426602423	2.80E-24	5.08E-22
LUM	12q21.33	0.425224507	4.07E-24	7.31E-22
TNFSF4	1q25.1	0.424294088	5.22E-24	9.31E-22
PCOLCE	7q22.1	0.423723594	6.09E-24	1.08E-21

CHN1	2q31.1	0.422699163	8.01E-24	1.40E-21
RFX8	2q11.2	0.422050422	9.53E-24	1.65E-21
NAV1	1q32.1	0.421818797	1.01E-23	1.74E-21
SLC24A3	20p11.23	0.421755839	1.03E-23	1.76E-21
COL15A1	9q22.33	0.421532057	1.09E-23	1.85E-21
PXDN	2p25.3	0.42133997	1.15E-23	1.93E-21
UBE2QL1	5p15.31	0.421282259	1.17E-23	1.94E-21
TENM3-AS1	4q34.3	0.418741673	2.29E-23	3.78E-21
BLVRB	19q13.2	-0.41791611	2.85E-23	4.66E-21
WT1-AS	11p13	0.417561514	3.13E-23	5.08E-21
VCAM1	1p21.2	0.417428948	3.24E-23	5.21E-21
P3H3	12p13.31	0.416948211	3.67E-23	5.87E-21
GPC6	13q31.3-q32.1	0.416761682	3.86E-23	6.11E-21
ADAMTS14	10q22.1	0.416604592	4.02E-23	6.32E-21
SPOCK1	5q31.2	0.416566209	4.06E-23	6.34E-21
COL10A1	6q22.1	0.41575844	5.02E-23	7.77E-21
FIBIN	11p14.2	0.415291041	5.67E-23	8.65E-21
AKT3	1q43-q44	0.415289252	5.67E-23	8.65E-21
CLMP	11q24.1	0.414886323	6.30E-23	9.53E-21
TMEM158	3p21.31	0.414155578	7.61E-23	1.14E-20
WNT2	7q31.2	0.414114851	7.70E-23	1.15E-20
C5ORF46	5q32	0.413405586	9.25E-23	1.37E-20
ISM1	20p12.1	0.413059592	1.01E-22	1.49E-20
ADAMTS6	5q12.3	0.411744479	1.42E-22	2.07E-20
EMILIN1	2p23.3	0.41165177	1.46E-22	2.11E-20
TWIST1	7p21.1	0.411277109	1.60E-22	2.30E-20
BOC	3q13.2	0.410538677	1.94E-22	2.77E-20
SEPTIN8	5q31.1	0.40856328	3.21E-22	4.55E-20
ADAMTS5	21q21.3	0.408082803	3.63E-22	5.11E-20
FSTL1	3q13.33	0.40801368	3.69E-22	5.16E-20
CTSK	1q21.3	0.407921458	3.78E-22	5.25E-20
ARMH4	14q23.1	0.40681341	5.01E-22	6.91E-20
GALNT15	3p25.1	0.405314712	7.32E-22	1.00E-19
MEDAG	13q12.3	0.405206164	7.52E-22	1.02E-19
PRR16	5q23.1	0.404474586	9.04E-22	1.22E-19
LTBP1	2p22.3	0.404363398	9.30E-22	1.25E-19
CALHM5	6q22.1	0.403381118	1.19E-21	1.59E-19
PCYT2	17q25.3	-0.40291801	1.34E-21	1.77E-19
MMP14	14q11.2	0.402283482	1.57E-21	2.06E-19
POGLUT2	13q33.1	0.402173371	1.61E-21	2.10E-19
MAP4K5	14q22.1	0.401327132	1.99E-21	2.58E-19
EHD3	2p23.1	0.401171171	2.07E-21	2.67E-19
IL1R1	2q11.2-q12.1	0.400373214	2.52E-21	3.23E-19
INSYN2B	5q35.1	0.399084989	3.46E-21	4.41E-19
HS3ST3A1	17p12	0.398425101	4.08E-21	5.16E-19
FGF1	5q31.3	0.398368778	4.13E-21	5.20E-19
CILP2	19p13.11	0.398335119	4.17E-21	5.21E-19
MEX3B	15q25.2	0.3973176	5.35E-21	6.65E-19
FBLN2	3p25.1	0.396437442	6.64E-21	8.20E-19
ZFPM2	8q23.1	0.395932825	7.51E-21	9.22E-19
ENOX1	13q14.11	0.395295657	8.78E-21	1.07E-18
GLI3	7p14.1	0.395048029	9.32E-21	1.13E-18
ACTA2	10q23.31	0.394758771	1.00E-20	1.21E-18
NKX3-2	4p15.33	0.394442241	1.08E-20	1.29E-18
BGN	Xq28	0.394273258	1.13E-20	1.33E-18
REEP2	5q31.2	0.394258417	1.13E-20	1.33E-18
WT1	11p13	0.394246677	1.13E-20	1.33E-18
NPTX2	7q22.1	0.393094081	1.50E-20	1.75E-18

AFAP1	4p16.1	0.39306308	1.51E-20	1.76E-18
ADGRA2	8p11.23	0.392735092	1.63E-20	1.89E-18
ZNF521	18q11.2	0.392685768	1.65E-20	1.90E-18
GUCA1A	6p21.1	0.392307772	1.81E-20	2.07E-18
MSC	8q13.3	0.391264919	2.33E-20	2.65E-18
RNF144A	2p25.1	0.390488151	2.81E-20	3.17E-18
MRGPRF	11q13.3	0.390178833	3.02E-20	3.40E-18
PTHLH	12p11.22	0.389991436	3.16E-20	3.54E-18
SLC4A7	3p24.1	0.389932733	3.21E-20	3.57E-18
CEP128	14q31.1	0.389432805	3.61E-20	4.00E-18
C1QTNF1	17q25.3	0.389257305	3.77E-20	4.14E-18
TMEM45A	3q12.2	0.389171075	3.85E-20	4.21E-18
RASD2	22q12.3	0.388888034	4.11E-20	4.48E-18
IGDCC4	15q22.31	0.388655828	4.35E-20	4.71E-18
PDZRN3	3p13	0.388596205	4.41E-20	4.75E-18
CDH13	16q23.3	0.387970535	5.12E-20	5.48E-18
MARCKS	6q21	0.387673548	5.49E-20	5.82E-18
GXYLT2	3p13	0.387661912	5.51E-20	5.82E-18
ADAM19	5q33.3	0.387650971	5.52E-20	5.82E-18
NID1	1q42.3	0.387533131	5.68E-20	5.95E-18
SLC2A5	1p36.23	0.387169721	6.19E-20	6.44E-18
PLA2G5	1p36.13	0.387159466	6.21E-20	6.44E-18
KRTCAP3	2p23.3	-0.387010538	6.43E-20	6.64E-18
SH3PXD2A	10q24.33	0.386529107	7.21E-20	7.40E-18
CCND3	6p21.1	-0.386468233	7.31E-20	7.47E-18
NEXN	1p31.1	0.386191653	7.80E-20	7.93E-18
PDLIM3	4q35.1	0.385951372	8.26E-20	8.35E-18
COL6A1	21q22.3	0.385691638	8.78E-20	8.84E-18
SQSTM1	5q35.3	-0.385585001	9.00E-20	9.02E-18
THBS1	15q14	0.385523606	9.14E-20	9.10E-18
TCF4	18q21.2	0.385155238	9.96E-20	9.88E-18
GPR161	1q24.2	0.3850843	1.01E-19	1.00E-17
GLIS1	1p32.3	0.384838326	1.07E-19	1.05E-17
MRVI1	11p15.4	0.384106753	1.27E-19	1.25E-17
CALD1	7q33	0.384071583	1.29E-19	1.25E-17
ACADS	12q24.31	-0.383618808	1.43E-19	1.38E-17
STON1	2p16.3	0.383261903	1.55E-19	1.50E-17
BHLHE22	8q12.3	0.383120183	1.61E-19	1.54E-17
DERL3	22q11.23	0.383034213	1.64E-19	1.56E-17
NACAD	7p13	0.382373113	1.91E-19	1.82E-17
AAMP	2q35	-0.382086634	2.04E-19	1.93E-17
SFRP4	7p14.1	0.381937619	2.12E-19	1.99E-17
LOXL3	2p13.1	0.381912176	2.13E-19	1.99E-17
COL8A2	1p34.3	0.381863112	2.15E-19	2.01E-17
UNC5C	4q22.3	0.380579675	2.90E-19	2.69E-17
KIAA1755	20q11.23	0.380285572	3.11E-19	2.87E-17
TRAM2	6p12.2	0.380129907	3.22E-19	2.96E-17
ARL4C	2q37.1	0.380062433	3.27E-19	2.99E-17
PDGFRB	5q32	0.380053923	3.28E-19	2.99E-17
PLPP7	9q34.13	0.379843113	3.44E-19	3.12E-17
SLC38A5	Xp11.23	0.379543661	3.69E-19	3.33E-17
CPN2	3q29	0.379369674	3.84E-19	3.45E-17
CHST1	11p11.2	0.379208466	3.98E-19	3.56E-17
OR51E1	11p15.4	0.378996508	4.18E-19	3.73E-17
SGCD	5q33.2-q33.3	0.378374036	4.83E-19	4.28E-17
SMOC2	6q27	0.378034325	5.22E-19	4.59E-17
FKBP14	7p14.3	0.378034151	5.22E-19	4.59E-17
CCL11	17q12	0.377901453	5.38E-19	4.71E-17

SCT	11p15.5	0.377204629	6.31E-19	5.50E-17
WDR86	7q36.1	0.377071723	6.51E-19	5.65E-17
RARRES2	7q36.1	0.376818936	6.90E-19	5.96E-17
GNB3	12p13.31	0.375778543	8.75E-19	7.50E-17
FKBP10	17q21.2	0.375775661	8.75E-19	7.50E-17
HEG1	3q21.2	0.375601811	9.11E-19	7.77E-17
SLC16A5	17q25.1	-0.375419016	9.49E-19	8.06E-17
SOD1	21q22.11	-0.374359503	1.21E-18	1.02E-16
TMEM132A	11q12.2	0.374321554	1.22E-18	1.02E-16
OLFML1	11p15.4	0.374308189	1.22E-18	1.02E-16
PRPH2	6p21.1	0.374006174	1.31E-18	1.09E-16
IRS1	2q36.3	0.373778033	1.38E-18	1.15E-16
DZIP1	13q32.1	0.373655765	1.42E-18	1.17E-16
SCARF2	22q11.21	0.373506924	1.47E-18	1.21E-16
DRP2	Xq22.1	0.373488219	1.47E-18	1.21E-16
CD248	11q13.2	0.373039126	1.63E-18	1.33E-16
HEPH	Xq12	0.372917032	1.67E-18	1.36E-16
LGI2	4p15.2	0.372720951	1.75E-18	1.42E-16
MFAP5	12p13.31	0.372672614	1.77E-18	1.43E-16
FLRT2	14q31.3	0.372349544	1.90E-18	1.53E-16
UNC5B	10q22.1	0.371969547	2.07E-18	1.66E-16
TMEM200A	6q23.1	0.371793952	2.16E-18	1.72E-16
TGFB1I1	16p11.2	0.371548721	2.28E-18	1.81E-16
KIF5C	2q23.1-q23.2	0.371144887	2.49E-18	1.98E-16
DCHS1	11p15.4	0.371007892	2.57E-18	2.03E-16
MYLK	3q21.1	0.370058489	3.18E-18	2.50E-16
MRC2	17q23.2	0.369967569	3.25E-18	2.54E-16
MMP3	11q22.2	0.369622296	3.51E-18	2.74E-16
FMO1	1q24.3	0.369565595	3.55E-18	2.76E-16
TM6SF2	19p13.11	0.369455205	3.64E-18	2.82E-16
ARHGEF25	12q13.3	0.369269476	3.79E-18	2.93E-16
CXCL12	10q11.21	0.369116033	3.93E-18	3.02E-16
FGFR4	5q35.2	-0.368882612	4.13E-18	3.16E-16
CORIN	4p12	0.368746015	4.26E-18	3.25E-16
NTM	11q25	0.368701554	4.30E-18	3.27E-16
ACOT13	6p22.3	-0.368659958	4.34E-18	3.29E-16
RECK	9p13.3	0.368578852	4.42E-18	3.33E-16
SLC24A2	9p22.1-p21.3	0.368407015	4.60E-18	3.45E-16
POU2F2	19q13.2	0.368321376	4.68E-18	3.51E-16
ASAP1	8q24.21-q24.22	0.36828308	4.72E-18	3.52E-16
ALDH1A3	15q26.3	0.367850105	5.20E-18	3.86E-16
ACTN1	14q24.1 14q22-q24	0.367841247	5.21E-18	3.86E-16
SEMA4G	10q24.31	-0.36758273	5.52E-18	4.07E-16
SLC1A4	2p14	0.366683606	6.73E-18	4.95E-16
SSTR2	17q25.1	0.366172701	7.54E-18	5.52E-16
SPON1	11p15.2	0.365956509	7.90E-18	5.76E-16
CPT1C	19q13.33	0.365569652	8.61E-18	6.25E-16
FCRL5	1q23.1	0.365464136	8.81E-18	6.38E-16
PLXNA4	7q32.3	0.365031125	9.69E-18	6.99E-16
PIANP	12p13.31	0.36500653	9.74E-18	7.00E-16
TRPS1	8q23.3	0.364945972	9.87E-18	7.07E-16
MMP16	8q21.3	0.363679167	1.30E-17	9.30E-16
FBXL7	5p15.1	0.362921598	1.54E-17	1.09E-15
ZNF365	10q21.2	0.362719533	1.61E-17	1.14E-15
INSRR	1q23.1	0.362501857	1.68E-17	1.19E-15
CLIP3	19q13.12	0.362359407	1.74E-17	1.22E-15
TAGLN	11q23.3	0.362252248	1.78E-17	1.25E-15
FBLN1	22q13.31	0.362212476	1.79E-17	1.25E-15

C1R	12p13.31	0.361934507	1.90E-17	1.33E-15
SEMA5B	3q21.1	0.361340115	2.17E-17	1.50E-15
ASPEN	9q22.31	0.360927878	2.37E-17	1.64E-15
CLEC11A	19q13.33	0.360627678	2.53E-17	1.74E-15
RAB31	18p11.22	0.360592855	2.55E-17	1.75E-15
HNF1B	17q12	-0.360525382	2.58E-17	1.77E-15
WIPF1	2q31.1	0.360095185	2.84E-17	1.94E-15
CD200	3q13.2	0.359907267	2.95E-17	2.01E-15
DNAJB5	9p13.3	0.35966768	3.11E-17	2.11E-15
SYT11	1q22	0.358492758	4.00E-17	2.70E-15
TNFRSF19	13q12.12	0.358422419	4.06E-17	2.74E-15
CLIC4	1p36.11	0.357137647	5.35E-17	3.59E-15
IL11	19q13.42	0.356351472	6.33E-17	4.23E-15
CRYZ	1p31.1	-0.355588365	7.44E-17	4.96E-15
CDK5R1	17q11.2	0.355275842	7.95E-17	5.28E-15
ROBO1	3p12.3	0.355170586	8.13E-17	5.39E-15
SEMA3A	7q21.11	0.355105284	8.25E-17	5.44E-15
SMAD1	4q31.21	0.354920318	8.58E-17	5.64E-15
HIC1	17p13.3	0.354906163	8.60E-17	5.64E-15
GPR176	15q14-q15.1	0.354737437	8.91E-17	5.83E-15
ELMO3	16q22.1	-0.354453215	9.47E-17	6.17E-15
PIM2	Xp11.23	0.354282057	9.82E-17	6.37E-15
MAF	16q23.2	0.353693033	1.11E-16	7.20E-15
PDP1	8q22.1	0.353642058	1.12E-16	7.25E-15
IGF1	12q23.2	0.35356703	1.14E-16	7.34E-15
MICAL2	11p15.3	0.353366868	1.19E-16	7.63E-15
ZNF275	Xq28	0.353329188	1.20E-16	7.67E-15
PLXDC2	10p12.31	0.353223758	1.23E-16	7.80E-15
TSHZ2	20q13.2	0.353203525	1.23E-16	7.80E-15
SYNJ2	6q25.3	0.353201615	1.23E-16	7.80E-15
FBXO32	8q24.13	0.353146125	1.25E-16	7.87E-15
DDR2	1q23.3	0.353122513	1.25E-16	7.89E-15
ARSI	5q32	0.352672473	1.38E-16	8.64E-15
DYRK2	12q15	0.352456542	1.44E-16	9.02E-15
ARL10	5q35.2	0.352238846	1.51E-16	9.41E-15
CRYGN	7q36.1	0.352112756	1.55E-16	9.63E-15
PDE10A	6q27	0.35188723	1.63E-16	1.01E-14
LINC00626	1q24.2	0.351780942	1.66E-16	1.03E-14
RGS4	1q23.3	0.351759404	1.67E-16	1.03E-14
RFLNB	17p13.3	0.350898837	2.00E-16	1.23E-14
C1QTNF6	22q12.3	0.350864362	2.01E-16	1.23E-14
STN1	10q24.33	-0.350815646	2.03E-16	1.24E-14
P3H1	1p34.2	0.350691815	2.09E-16	1.27E-14
EGFLAM	5p13.2-p13.1	0.350030288	2.40E-16	1.45E-14
SLC35A1	6q15	-0.349647063	2.59E-16	1.57E-14
AVPR1A	12q14.2	0.349534405	2.66E-16	1.60E-14
TIMP3	22q12.3	0.349336703	2.77E-16	1.66E-14
RIC1	9p24.1	0.349313517	2.78E-16	1.67E-14
OMD	9q22.31	0.349277827	2.80E-16	1.67E-14
FGFR1	8p11.23	0.349253252	2.82E-16	1.68E-14
MMD	17q22	0.349149827	2.88E-16	1.71E-14
BCL2	18q21.33	0.349000726	2.97E-16	1.76E-14
SHANK1	19q13.33	0.348950834	3.00E-16	1.77E-14
NUDT10	Xp11.22	0.348791544	3.10E-16	1.82E-14
SPHK1	17q25.1	0.348788319	3.10E-16	1.82E-14
TNC	9q33.1	0.348727012	3.14E-16	1.84E-14
IDH1	2q34	-0.34849194	3.30E-16	1.92E-14
FBLN7	2q13-q14.1	0.34841422	3.35E-16	1.95E-14

MINAR1	15q25.1	0.348383827	3.37E-16	1.96E-14
DIRC3	2q35	0.347819208	3.79E-16	2.19E-14
PLLP	16q13	-0.34727933	4.24E-16	2.44E-14
ST6GALNAC5	1p31.1	0.347210989	4.30E-16	2.47E-14
ETV6	12p13.2	0.34720635	4.30E-16	2.47E-14
INPP4B	4q31.21	0.346868897	4.61E-16	2.64E-14
TLR9	3p21.2	0.346787218	4.69E-16	2.67E-14
GSTP1	11q13.2	-0.346425102	5.05E-16	2.87E-14
PCBD1	10q22.1	-0.346356847	5.12E-16	2.90E-14
TNFSF11	13q14.11	0.346186178	5.30E-16	3.00E-14
BDKRB1	14q32.2	0.345987267	5.52E-16	3.12E-14
TALDO1	11p15.5	-0.34590421	5.62E-16	3.16E-14
EFNB3	17p13.1	0.345621552	5.95E-16	3.34E-14
NREP	5q22.1	0.345511824	6.09E-16	3.41E-14
KLK4	19q13.41	0.345490391	6.12E-16	3.41E-14
RAB17	2q37.3	-0.34547431	6.14E-16	3.41E-14
EFEMP2	11q13.1	0.34546771	6.15E-16	3.41E-14
BICC1	10q21.1	0.345366196	6.27E-16	3.47E-14
FAM225B	9q32	0.345351607	6.29E-16	3.47E-14
CYP26A1	10q23.33	0.34532661	6.33E-16	3.48E-14
SPSB2	12p13.31	-0.345260782	6.41E-16	3.52E-14
GPR1	2q33.3	0.345033627	6.72E-16	3.67E-14
TOB1	17q21.33	-0.344976987	6.79E-16	3.71E-14
CHP1	15q15.1	-0.344918024	6.88E-16	3.74E-14
TXNDC2	18p11.22	0.344607268	7.33E-16	3.98E-14
PLN	6q22.31	0.344568326	7.39E-16	4.00E-14
ERMN	2q24.1	0.344074882	8.17E-16	4.41E-14
PRDX1	1p34.1	-0.343477811	9.22E-16	4.96E-14
SSPN	12p12.1	0.343032157	1.01E-15	5.42E-14
NHEJ1	2q35	-0.342966818	1.02E-15	5.48E-14
GPR21	9q33.2	0.342904648	1.04E-15	5.53E-14
PAX9	14q13.3	0.342878026	1.04E-15	5.55E-14
KLF12	13q22.1	0.342863256	1.05E-15	5.55E-14
TMEM150C	4q21.22	0.342742985	1.07E-15	5.67E-14
OSGIN1	16q23.3	-0.342389206	1.15E-15	6.08E-14
DCN	12q21.33	0.341827276	1.29E-15	6.79E-14
PGF	14q24.3	0.341612785	1.35E-15	7.08E-14
RCN3	19q13.33	0.341534457	1.37E-15	7.17E-14
MMP13	11q22.2	0.341296376	1.43E-15	7.50E-14
MPDZ	9p23	0.341199174	1.46E-15	7.63E-14
NBL1	1p36.13	0.34112432	1.49E-15	7.73E-14
GPR88	1p21.2	0.341072426	1.50E-15	7.78E-14
SUGCT	7p14.1	0.341066015	1.50E-15	7.78E-14
SSH1	12q24.11	0.341019245	1.52E-15	7.83E-14
RHOH	4p14	0.340976868	1.53E-15	7.88E-14
SCN3A	2q24.3	0.340857757	1.57E-15	8.05E-14
SPSB4	3q23	0.340771382	1.60E-15	8.17E-14
GPR68	14q32.11	0.340695425	1.62E-15	8.28E-14
FGF7	15q21.2	0.340481369	1.69E-15	8.62E-14
VGLL3	3p12.1	0.34021877	1.78E-15	9.06E-14
APBA2	15q13.1	0.339885224	1.91E-15	9.67E-14
CYP4F11	19p13.12	-0.339827267	1.93E-15	9.75E-14
SACS	13q12.12	0.339176103	2.20E-15	1.11E-13
EXTL1	1p36.11	0.339128828	2.22E-15	1.12E-13
GJA5	1q21.2	0.338967864	2.29E-15	1.15E-13
TMEM200C	18p11.31	0.338530145	2.50E-15	1.25E-13
ENTPD1	10q24.1	0.338393429	2.57E-15	1.28E-13
AKR1C3	10p15.1	-0.338356349	2.59E-15	1.29E-13

HOXB2	17q21.32	0.338302387	2.62E-15	1.30E-13
GNA12	7p22.3-p22.2	0.338214282	2.66E-15	1.32E-13
TWSG1	18p11.22	0.338074298	2.74E-15	1.35E-13
COA3	17q21.2	-0.338012383	2.77E-15	1.37E-13
ADAM22	7q21.12	0.337486702	3.08E-15	1.52E-13
PRR15L	17q21.32	-0.33662436	3.65E-15	1.79E-13
CRB3	19p13.3	-0.336576251	3.69E-15	1.81E-13
NUDT12	5q21.2	-0.336543687	3.71E-15	1.81E-13
ANKH	5p15.2	0.336474216	3.76E-15	1.84E-13
TMEM65	8q24.13	0.336366624	3.85E-15	1.87E-13
DPT	1q24.2	0.336105067	4.05E-15	1.96E-13
MLLT11	1q21.3	0.336094046	4.06E-15	1.96E-13
ADAMTS7	15q25.1	0.335833437	4.27E-15	2.06E-13
NUDT11	Xp11.22	0.335730034	4.36E-15	2.10E-13
TRPA1	8q21.11	0.335679743	4.41E-15	2.12E-13
RAP2A	13q32.1	0.335085759	4.95E-15	2.37E-13
RFLNA	12q24.31	0.334980287	5.06E-15	2.42E-13
ATP5MC2	12q13.13	-0.334883947	5.16E-15	2.46E-13
JAM3	11q25	0.334223455	5.87E-15	2.79E-13
DLG2	11q14.1	0.334173783	5.93E-15	2.82E-13
ADAMTS4	1q23.3	0.333872368	6.29E-15	2.98E-13
ANKRD36BP2	2p11.2	0.333833638	6.34E-15	3.00E-13
PLA2R1	2q24.2	0.332874299	7.65E-15	3.61E-13
TPM2	9p13.3	0.332790536	7.78E-15	3.66E-13
FOLH1	11p11.12	0.332731493	7.87E-15	3.69E-13
CREB3L2	7q33	0.332722368	7.88E-15	3.69E-13
GAS7	17p13.1	0.332641087	8.01E-15	3.74E-13
ECM2	9q22.31	0.332068215	8.96E-15	4.17E-13
FAM98C	19q13.2	-0.332050674	8.99E-15	4.18E-13
TUBB2B	6p25.2	0.331914019	9.23E-15	4.28E-13
ADAMTS16	5p15.32	0.331676517	9.67E-15	4.47E-13
FHOD3	18q12.2	0.331556094	9.90E-15	4.56E-13
ELFN1	7p22.3	0.331550015	9.91E-15	4.56E-13
DUSP10	1q41	0.331501682	1.00E-14	4.60E-13
EDNRA	4q31.22-q31.23	0.331148945	1.07E-14	4.91E-13
RILP	17p13.3	-0.331094671	1.08E-14	4.94E-13
TMEM74	8q23.1	0.331093579	1.08E-14	4.94E-13
CEMIP	15q25.1	0.330931415	1.12E-14	5.09E-13
ECI1	16p13.3	-0.330640941	1.18E-14	5.37E-13
FAH	15q25.1	-0.330488106	1.22E-14	5.52E-13
SIX4	14q23.1	0.330448247	1.23E-14	5.55E-13
ALDH5A1	6p22.3	-0.330357675	1.25E-14	5.64E-13
VOPP1	7p11.2	0.33001614	1.33E-14	6.01E-13
BTBD19	1p34.1	0.329910342	1.36E-14	6.12E-13
C1QTNF3	5p13.2	0.32989995	1.37E-14	6.12E-13
CNTNAP1	17q21.2	0.329875078	1.37E-14	6.14E-13
SLC12A8	3q21.2	0.329775952	1.40E-14	6.24E-13
FAM180A	7q33	0.329602137	1.45E-14	6.44E-13
NIT1	1q23.3	-0.328664762	1.73E-14	7.70E-13
KLKP1	19q13.33	0.328586912	1.76E-14	7.80E-13
MEG3	14q32.2	0.328235231	1.88E-14	8.33E-13
RAB25	1q22	-0.328148248	1.91E-14	8.45E-13
TP53INP1	8q22.1	0.327952862	1.99E-14	8.75E-13
RUNX1T1	8q21.3	0.327909906	2.00E-14	8.81E-13
LOC93429	19q13.32	0.327722597	2.08E-14	9.11E-13
COL24A1	1p22.3	0.327524105	2.16E-14	9.44E-13
DLGAP4	20q11.23	0.327301401	2.25E-14	9.83E-13
TIMP2	17q25.3	0.327242004	2.28E-14	9.92E-13

MMP11	22q11.23	0.327217168	2.29E-14	9.95E-13
ASXL3	18q12.1	0.327158908	2.31E-14	1.00E-12
NQO1	16q22.1	-0.327116783	2.33E-14	1.01E-12
SH3RF3	2q13	0.327091173	2.34E-14	1.01E-12
CASP9	1p36.21	-0.326792616	2.48E-14	1.07E-12
SEMA3D	7q21.11	0.326730353	2.51E-14	1.08E-12
COPZ2	17q21.32	0.326571612	2.59E-14	1.11E-12
CPNE5	6p21.2	0.326438583	2.66E-14	1.14E-12
PTRHD1	2p23.3	-0.326225048	2.77E-14	1.18E-12
NIN	14q22.1	0.326006729	2.88E-14	1.23E-12
ALDH1B1	9p13.1	0.325955668	2.91E-14	1.24E-12
INHBA-AS1	7p14.1	0.325813904	2.99E-14	1.27E-12
PRKD3	2p22.2	0.325615089	3.11E-14	1.32E-12
EGLN3	14q13.1	0.325299952	3.30E-14	1.40E-12
FOLR1	11q13.4	-0.325143817	3.40E-14	1.44E-12
RASSF7	11p15.5	-0.325039264	3.47E-14	1.46E-12
ITGB3	17q21.32	0.32501191	3.49E-14	1.47E-12
ITGBL1	13q33.1	0.32486854	3.58E-14	1.50E-12
PPP1R18	6p21.33	0.324797853	3.63E-14	1.52E-12
ETFB	19q13.41	-0.324763639	3.66E-14	1.53E-12
LRRN4CL	11q12.3	0.324603683	3.77E-14	1.57E-12
PMEPA1	20q13.31	0.32423601	4.04E-14	1.68E-12
PXYLP1	3q23	0.324067457	4.17E-14	1.73E-12
CSGALNACT2	10q11.21	0.323933205	4.28E-14	1.77E-12
DIRC1	2q32.2	0.323574487	4.58E-14	1.89E-12
MXRA8	1p36.33	0.323555111	4.60E-14	1.90E-12
COL4A1	13q34	0.323317348	4.81E-14	1.98E-12
COL13A1	10q22.1	0.323196953	4.92E-14	2.02E-12
KCNN3	1q21.3	0.322829765	5.27E-14	2.16E-12
SEL1L	14q31.1	0.322800399	5.30E-14	2.17E-12
HAPLN4	19p13.11	0.322791043	5.31E-14	2.17E-12
ENPEP	4q25	0.322702185	5.40E-14	2.20E-12
UHRF2	9p24.1	0.322587385	5.52E-14	2.24E-12
SENP8	15q23	-0.322534862	5.57E-14	2.26E-12
BMS1P20	22q11.22	0.322452699	5.66E-14	2.29E-12
MIAT	22q12.1	0.322428992	5.68E-14	2.30E-12
ABCC3	17q21.33	-0.322407195	5.71E-14	2.30E-12
GAL3ST4	7q22.1	0.322318447	5.80E-14	2.34E-12
PTPRD	9p24.1-p23	0.322217541	5.92E-14	2.38E-12
STAB1	3p21.1	0.322061753	6.09E-14	2.44E-12
KLC4	6p21.1	-0.321991848	6.17E-14	2.47E-12
SLC16A2	Xq13.2	0.321893026	6.29E-14	2.51E-12
BACE1	11q23.3	0.321584193	6.66E-14	2.66E-12
CA4	17q23.1	-0.321380615	6.92E-14	2.75E-12
TSPAN11	12p11.21	0.321188948	7.18E-14	2.85E-12
SULT1A1	16p11.2	-0.321032545	7.39E-14	2.93E-12
FMOD	1q32.1	0.320964291	7.48E-14	2.96E-12
HOXB3	17q21.32	0.320674772	7.90E-14	3.12E-12
MCAM	11q23.3	0.320268716	8.52E-14	3.36E-12
ADAM6	14q32.33	0.320157389	8.70E-14	3.42E-12
LAX1	1q32.1	0.320140636	8.73E-14	3.43E-12
MTHFS	15q25.1	-0.32010043	8.80E-14	3.44E-12
HDDC2	6q22.31	-0.319979023	9.00E-14	3.52E-12
KERA	12q21.33	0.319883792	9.16E-14	3.57E-12
ABCB4	7q21.12	0.319852404	9.21E-14	3.59E-12
CSDC2	22q13.2	0.319388356	1.00E-13	3.90E-12
KIF3C	2p23.3	0.318915341	1.10E-13	4.25E-12
LIAS	4p14	-0.318898234	1.10E-13	4.26E-12

CBLB	3q13.11	0.318803146	1.12E-13	4.33E-12
CLYBL	13q32.3	-0.318676036	1.15E-13	4.42E-12
CEBPA	19q13.11	-0.318569898	1.17E-13	4.50E-12
DNM1	9q34.11	0.318508677	1.18E-13	4.54E-12
PMF1	1q22	-0.318477589	1.19E-13	4.56E-12
MRPL24	1q23.1	-0.318183815	1.26E-13	4.81E-12
LAMB1	7q31.1	0.31811504	1.27E-13	4.86E-12
ARHGAP28	18p11.31	0.318014568	1.30E-13	4.94E-12
ANXA4	2p13.3	-0.317922432	1.32E-13	5.02E-12
SMIM3	5q33.1	0.317721488	1.37E-13	5.20E-12
TIAM2	6q25.2-q25.3	0.317359112	1.46E-13	5.55E-12
MGST2	4q31.1	-0.317205235	1.51E-13	5.70E-12
STRA6	15q24.1	0.317159471	1.52E-13	5.74E-12
PIR	Xp22.2	-0.316898783	1.59E-13	6.01E-12
PLXDC1	17q12	0.316843467	1.61E-13	6.06E-12
TXN2	22q12.3	-0.316632276	1.67E-13	6.29E-12
ALDH2	12q24.12	-0.316611348	1.68E-13	6.30E-12
LRRC17	7q22.1	0.316518134	1.71E-13	6.40E-12
ORAI2	7q22.1	0.316488819	1.72E-13	6.42E-12
CYSTEM1	5q31.3	-0.316365769	1.76E-13	6.55E-12
ZNF532	18q21.32	0.316078161	1.85E-13	6.90E-12
HECA	6q24.1	0.315812609	1.95E-13	7.23E-12
VEGFC	4q34.3	0.315779003	1.96E-13	7.26E-12
ELOVL4	6q14.1	0.315771455	1.96E-13	7.26E-12
TMEM26	10q21.2	0.315761461	1.96E-13	7.26E-12
KCTD12	13q22.3	0.315531427	2.05E-13	7.56E-12
SERPINE2	2q36.1	0.315424963	2.09E-13	7.69E-12
PCSK1	5q15	0.315405184	2.10E-13	7.70E-12
NALCN	13q32.3-q33.1	0.315288367	2.14E-13	7.86E-12
CHRNA9	4p14	0.315033271	2.25E-13	8.22E-12
NXPH4	12q13.3	0.314990685	2.26E-13	8.26E-12
IL1RAP	3q28	0.314984867	2.27E-13	8.26E-12
RUBCNL	13q14.13	0.314976363	2.27E-13	8.26E-12
MOV10L1	22q13.33	0.314830104	2.33E-13	8.47E-12
MRPL46	15q25.3	-0.314713063	2.38E-13	8.64E-12
OLFML3	1p13.2	0.314525232	2.46E-13	8.92E-12
SOX11	2p25.2	0.31429997	2.57E-13	9.28E-12
NEURL1B	5q35.1	0.314123865	2.65E-13	9.56E-12
MLX	17q21.2	-0.314115529	2.66E-13	9.56E-12
EML2	19q13.32	-0.313839383	2.79E-13	1.00E-11
HAPLN3	15q26.1	0.313771041	2.83E-13	1.01E-11
FBXW7	4q31.3	0.313313236	3.07E-13	1.10E-11
PALM2-AKAP2	9q31.3	0.31300834	3.25E-13	1.16E-11
CYP27C1	2q14.3	0.312099491	3.83E-13	1.37E-11
IMP3	15q24.2	-0.312094715	3.83E-13	1.37E-11
ATXN1	6p22.3	0.312064408	3.86E-13	1.37E-11
MEIS1	2p14	0.312057461	3.86E-13	1.37E-11
METTL7B	12q13.2	-0.311551715	4.23E-13	1.50E-11
LRP1	12q13.3	0.311533479	4.24E-13	1.50E-11
FST	5q11.2	0.311348678	4.39E-13	1.55E-11
PDGFRL	8p22	0.311287466	4.44E-13	1.56E-11
OSBPL8	12q21.2	0.311128726	4.57E-13	1.61E-11
FBN2	5q23.3	0.311019684	4.66E-13	1.63E-11
APOM	6p21.33	-0.311019657	4.66E-13	1.63E-11
CISD3	17q12	-0.311004113	4.67E-13	1.64E-11
UQCR10	22q12.2	-0.310883494	4.77E-13	1.67E-11
CPXM2	10q26.13	0.310699745	4.93E-13	1.72E-11
TRPC1	3q23	0.310669178	4.96E-13	1.73E-11

MYH9	22q12.3	0.310532581	5.08E-13	1.77E-11
ASL	7q11.21	-0.310527457	5.09E-13	1.77E-11
SDK1	7p22.2	0.310509395	5.11E-13	1.77E-11
PKD2	4q22.1	0.310335632	5.27E-13	1.82E-11
ZNF423	16q12.1	0.310187312	5.41E-13	1.87E-11
NOSTRIN	2q24.3	-0.310186617	5.41E-13	1.87E-11
SEC23A	14q21.1	0.310110113	5.49E-13	1.89E-11
MRPL14	6p21.1	-0.310073727	5.52E-13	1.90E-11
CCDC71L	7q22.3	0.31005285	5.54E-13	1.90E-11
WNT5B	12p13.33	0.309983068	5.61E-13	1.92E-11
FMNL3	12q13.12	0.309958319	5.64E-13	1.93E-11
ACSM3	16p12.3	-0.309932876	5.66E-13	1.93E-11
PRICKLE2	3p14.1	0.309778043	5.82E-13	1.98E-11
GSR	8p12	-0.309686255	5.92E-13	2.01E-11
SERPING1	11q12.1	0.309622168	5.99E-13	2.03E-11
TRIB2	2p24.3	0.309617616	5.99E-13	2.03E-11
TMEM37	2q14.2	-0.30957215	6.04E-13	2.04E-11
SYNGR3	16p13.3	0.309539759	6.08E-13	2.05E-11
ANKRD35	1q21.1	0.309430169	6.20E-13	2.09E-11
RNF150	4q31.21	0.309369816	6.27E-13	2.11E-11
PNOC	8p21.1	0.309259124	6.39E-13	2.15E-11
MAFB	20q12	0.30913709	6.53E-13	2.19E-11
CALU	7q32.1	0.309016124	6.68E-13	2.24E-11
PLAU	10q22.2	0.308991462	6.71E-13	2.24E-11
TPTE2	13q12.11	0.308853944	6.87E-13	2.29E-11
SHH	7q36.3	-0.308746335	7.01E-13	2.34E-11
OLFML2A	9q33.3	0.308443339	7.40E-13	2.46E-11
STC1	8p21.2	0.308400875	7.45E-13	2.48E-11
DGKI	7q33	0.308171195	7.77E-13	2.58E-11
PRR13	12q13.13	-0.308012273	7.99E-13	2.64E-11
IL17RD	3p14.3	0.307917185	8.13E-13	2.69E-11
GALE	1p36.11	-0.307638869	8.54E-13	2.82E-11
ZBP1	20q13.31	0.307623498	8.56E-13	2.82E-11
STK16	2q35	-0.307582945	8.62E-13	2.84E-11
LZTS1	8p21.3	0.307554896	8.67E-13	2.85E-11
GDNF	5p13.2	0.30754133	8.69E-13	2.85E-11
MEX3D	19p13.3	0.307364026	8.97E-13	2.93E-11
GGT5	22q11.23	0.307279185	9.10E-13	2.97E-11
NRP2	2q33.3	0.307243147	9.16E-13	2.99E-11
MGARP	4q31.1	0.307168811	9.28E-13	3.02E-11
STAT6	12q13.3	-0.30701702	9.54E-13	3.10E-11
RNF5	6p21.32	-0.3069934	9.58E-13	3.11E-11
MCHR1	22q13.2	0.30698191	9.60E-13	3.11E-11
DNPB1	6p21.1	-0.306922627	9.70E-13	3.14E-11
EPB41L2	6q23.1-q23.2	0.306883028	9.77E-13	3.16E-11
XIRP1	3p22.2	0.306759356	9.98E-13	3.22E-11
NPR2	9p13.3	0.306407943	1.06E-12	3.42E-11
FCRL2	1q23.1	0.30626319	1.09E-12	3.51E-11
AMPH	7p14.1	0.305781077	1.19E-12	3.81E-11
ELL3	15q15.3	-0.3053743	1.28E-12	4.09E-11
TMC4	19q13.42	-0.305279386	1.30E-12	4.15E-11
PCP4	21q22.2	0.30518902	1.32E-12	4.21E-11
FBXO10	9p13.2	0.305134279	1.33E-12	4.24E-11
MSRB3	12q14.3	0.305129329	1.33E-12	4.24E-11
PLXNC1	12q22	0.305024435	1.36E-12	4.32E-11
IGF2-AS	11p15.5	0.304867515	1.40E-12	4.43E-11
PI15	8q21.13	0.304823398	1.41E-12	4.46E-11
FKBP9	7p14.3	0.304372447	1.52E-12	4.82E-11

SYDE1	19p13.12	0.304197467	1.57E-12	4.96E-11
PODN	1p32.3	0.304179926	1.57E-12	4.97E-11
MOB3A	19p13.3	0.303894315	1.66E-12	5.22E-11
PLA2G10	16p13.12	-0.303779587	1.69E-12	5.31E-11
PARD6G	18q23	0.303777604	1.69E-12	5.31E-11
C1ORF53	1q31.3	-0.303709089	1.71E-12	5.36E-11
TTYH3	7p22.3	0.303590989	1.75E-12	5.47E-11
MB	22q12.3	0.303307983	1.84E-12	5.74E-11
ITGA5	12q13.13	0.303191012	1.87E-12	5.85E-11
CCN2	6q23.2	0.303078122	1.91E-12	5.94E-11
ANKIB1	7q21.2	0.303075169	1.91E-12	5.94E-11
PHTF2	7q11.23-q21.11	0.303074562	1.91E-12	5.94E-11
COL8A1	3q12.1	0.302993194	1.94E-12	6.01E-11
HOXC4	12q13.13	0.302960786	1.95E-12	6.04E-11
PODNL1	19p13.12	0.302955159	1.95E-12	6.04E-11
CHRM1	11q12.3	-0.302879029	1.98E-12	6.11E-11
PTGIS	20q13.13	0.302711057	2.04E-12	6.28E-11
EIF4E2	2q37.1	-0.3025003	2.11E-12	6.51E-11
SLC38A2	12q13.11	0.302478417	2.12E-12	6.52E-11
FNDC3B	3q26.31	0.301982596	2.31E-12	7.09E-11
LYPLAL1	1q41	-0.301979878	2.31E-12	7.09E-11
PRSS23	11q14.2	0.301966071	2.32E-12	7.10E-11
JAKMIP2	5q32	0.301927912	2.34E-12	7.13E-11
MRPS36	5q13.2	-0.301610121	2.47E-12	7.53E-11
CALHM2	10q24.33	0.301474827	2.53E-12	7.70E-11
PEX7	6q23.3	-0.301403098	2.56E-12	7.78E-11
AMN	14q32.32	-0.301310247	2.60E-12	7.90E-11
TMEM47	Xp21.1	0.301237237	2.63E-12	7.98E-11
CEP170	1q43	0.301210057	2.65E-12	8.01E-11
CHCHD5	2q14.1	-0.301158308	2.67E-12	8.07E-11
ZFX4	8q21.13	0.301124434	2.69E-12	8.11E-11
ANXA9	1q21.3	-0.301061737	2.72E-12	8.18E-11
SLITRK4	Xq27.3	0.300998162	2.75E-12	8.26E-11
GPR84	12q13.13	0.300983669	2.75E-12	8.27E-11
TKT	3p21.1	-0.300692414	2.90E-12	8.69E-11
RAP1GAP	1p36.12	-0.300618514	2.93E-12	8.78E-11
YPEL4	11q12.1	0.300509185	2.99E-12	8.94E-11
TST	22q12.3	-0.300395514	3.05E-12	9.10E-11
TGIF2	20q11.23	0.300269338	3.12E-12	9.29E-11
NDUFB4	3q13.33	-0.300251449	3.12E-12	9.31E-11
SSC5D	19q13.42	0.300149327	3.18E-12	9.46E-11
ZMAT4	8p11.21	0.300053175	3.23E-12	9.60E-11
COL4A2	13q34	0.299972959	3.28E-12	9.72E-11
SLC45A1	1p36.23	0.299953947	3.29E-12	9.74E-11
YBEY	21q22.3	-0.299908785	3.32E-12	9.80E-11
HIVEP2	6q24.2	0.299841399	3.35E-12	9.90E-11
HTR1F	3p11.2-p11.1	0.299818448	3.37E-12	9.93E-11
LINC00467	1q32.3	-0.299706973	3.43E-12	1.01E-10
PCDH18	4q28.3	0.299659733	3.46E-12	1.02E-10
TMEM219	16p11.2	-0.299600596	3.50E-12	1.03E-10
ITPR1PL2	16p12.3	0.299386626	3.63E-12	1.06E-10
PDZRN4	12q12	0.299279468	3.70E-12	1.08E-10
NAV3	12q21.2	0.299276652	3.70E-12	1.08E-10
TOMM6	6p21.1	-0.299260711	3.71E-12	1.08E-10
BBS4	15q24.1	-0.29926019	3.71E-12	1.08E-10
PRKG1	10q11.23-q21.1	0.299152691	3.78E-12	1.10E-10
ECH1	19q13.2	-0.298962248	3.90E-12	1.13E-10
KLF7	2q33.3	0.298915796	3.94E-12	1.14E-10

CHSY3	5q23.3	0.298901895	3.95E-12	1.14E-10
PCDHB10	5q31.3	0.298701907	4.08E-12	1.18E-10
SKIL	3q26.2	0.298609858	4.15E-12	1.20E-10
PIGP	21q22.13	-0.298597266	4.16E-12	1.20E-10
FAM225A	9q32	0.298476437	4.24E-12	1.22E-10
BICD2	9q22.31	0.298291596	4.38E-12	1.26E-10
ALDH9A1	1q24.1	-0.298181224	4.47E-12	1.28E-10
CCND2	12p13.32	0.298115314	4.52E-12	1.29E-10
AKR1C1	10p15.1	-0.298109062	4.52E-12	1.29E-10
ZEB1	10p11.22	0.298039678	4.58E-12	1.31E-10
CPD	17q11.2	0.297588987	4.94E-12	1.41E-10
PRDX6	1q25.1	-0.297582387	4.95E-12	1.41E-10
BLOC1S1	12q13.2	-0.297402719	5.10E-12	1.45E-10
KCNMB4	12q15	0.297344798	5.15E-12	1.47E-10
STK32B	4p16.2	0.297287311	5.21E-12	1.48E-10
PIGB	15q21.3	-0.29724806	5.24E-12	1.49E-10
ATP6V1G2	6p21.33	0.297202656	5.28E-12	1.50E-10
P3H4	17q21.2	0.297099306	5.38E-12	1.52E-10
SEPTIN7	7p14.2	0.296988414	5.48E-12	1.55E-10
CMTM3	16q22.1	0.29692233	5.54E-12	1.56E-10
SLC25A4	4q35.1	-0.296867535	5.59E-12	1.57E-10
EYA2	20q13.12	0.296809092	5.65E-12	1.59E-10
C1ORF210	1p34.2	-0.296800756	5.66E-12	1.59E-10
PLEKHO1	1q21.2	0.296686303	5.77E-12	1.62E-10
DACT3	19q13.32	0.296654954	5.80E-12	1.62E-10
MGAT4A	2q11.2	0.296565077	5.89E-12	1.65E-10
ALDH4A1	1p36.13	-0.296525218	5.93E-12	1.66E-10
SMO	7q32.1	0.296483796	5.97E-12	1.67E-10
PGM2L1	11q13.4	0.296405815	6.05E-12	1.68E-10
SLC6A17	1p13.3	0.296077284	6.40E-12	1.78E-10
CCDC3	10p13	0.296072704	6.41E-12	1.78E-10
NXPH2	2q22.1	0.296070583	6.41E-12	1.78E-10
EIF2D	1q32.1	-0.29592091	6.57E-12	1.82E-10
MZB1	5q31.2	0.295905106	6.59E-12	1.82E-10
POU2AF1	11q23.1	0.295404223	7.18E-12	1.98E-10
AVP11	10q24.2	-0.295361498	7.23E-12	1.99E-10
STEAP1B	7p15.3	0.295356635	7.24E-12	1.99E-10
SLFNL1	1p34.2	-0.295350346	7.24E-12	1.99E-10
ST6GAL2	2q12.3	0.295013238	7.67E-12	2.11E-10
PTPRN	2q35	0.294988251	7.70E-12	2.11E-10
GRM8	7q31.33	0.294906397	7.81E-12	2.14E-10
TRIM46	1q22	0.294857055	7.88E-12	2.15E-10
CYP2C18	10q23.33	-0.294802832	7.95E-12	2.17E-10
KBTBD2	7p14.3	0.29479757	7.96E-12	2.17E-10
HMGCL	1p36.11	-0.294796007	7.96E-12	2.17E-10
PLA2G4F	15q15.1	-0.294740524	8.03E-12	2.19E-10
ETS1	11q24.3	0.294723758	8.06E-12	2.19E-10
NR2F1-AS1	5q15	0.29459515	8.23E-12	2.23E-10
MMP9	20q13.12	0.294532106	8.32E-12	2.25E-10
PRDM6	5q23.2	0.294485126	8.39E-12	2.27E-10
TJP3	19p13.3	-0.294316139	8.63E-12	2.33E-10
PURB	7p13	0.294313621	8.64E-12	2.33E-10
GAL3ST1	22q12.2	-0.29430485	8.65E-12	2.33E-10
TRO	Xp11.21	0.294303908	8.65E-12	2.33E-10
SFTA2	6p21.33	-0.294074815	8.99E-12	2.42E-10
PEBP4	8p21.3	-0.294032019	9.06E-12	2.43E-10
TEAD1	11p15.3	0.293174302	1.05E-11	2.81E-10
GIT2	12q24.11	0.293162579	1.05E-11	2.81E-10

ADPRHL1	13q34	-0.293108826	1.06E-11	2.83E-10
AKAP2	9q31.3	0.293073917	1.06E-11	2.84E-10
SLPI	20q13.12	-0.29301287	1.08E-11	2.87E-10
OBP2A	9q34.3	0.292965624	1.08E-11	2.89E-10
NUDT7	16q23.1	-0.29294201	1.09E-11	2.89E-10
NPAS1	19q13.32	-0.292665754	1.14E-11	3.03E-10
FJX1	11p13	0.292643113	1.14E-11	3.04E-10
WASF1	6q21	0.292627308	1.15E-11	3.04E-10
ENAH	1q42.12	0.292317382	1.21E-11	3.20E-10
CCDC184	12q13.11	0.292265503	1.22E-11	3.22E-10
C3ORF33	3q25.31	-0.292248346	1.22E-11	3.23E-10
TSTD1	1q23.3	-0.292228199	1.23E-11	3.23E-10
SFTPD	10q22.3	-0.292219776	1.23E-11	3.23E-10
B4GALNT4	11p15.5	0.292121079	1.25E-11	3.28E-10
MRPL43	10q24.31	-0.292117356	1.25E-11	3.28E-10
ARMC7	17q25.1	-0.291934599	1.29E-11	3.38E-10
GPX4	19p13.3	-0.291559023	1.37E-11	3.59E-10
INHBE	12q13.3	0.291457383	1.40E-11	3.65E-10
TMEM185A	Xq28	0.291349396	1.42E-11	3.71E-10
PNKD	2q35	-0.291307279	1.43E-11	3.73E-10
USP31	16p12.2	0.291215491	1.45E-11	3.79E-10
PXDNL	8q11.22-q11.23	0.29115229	1.47E-11	3.82E-10
PTGFRN	1p13.1	0.291045288	1.50E-11	3.89E-10
TLL2	10q24.1	0.290904499	1.53E-11	3.97E-10
EBF1	5q33.3	0.29063489	1.60E-11	4.15E-10
HOXB4	17q21.32	0.290436725	1.66E-11	4.28E-10
A4GALT	22q13.2	0.290417621	1.66E-11	4.29E-10
PCDHB18P	5q31.3	0.290375549	1.67E-11	4.32E-10
GHDC	17q21.2	-0.290322186	1.69E-11	4.34E-10
IP6K3	6p21.31	0.290322107	1.69E-11	4.34E-10
CCDC36	3p21.31	0.290290905	1.70E-11	4.36E-10
SNUPN	15q24.2	-0.289979956	1.79E-11	4.59E-10
IGFL2	19q13.32	0.289894852	1.81E-11	4.65E-10
SPIRE2	16q24.3	-0.289798985	1.84E-11	4.72E-10
ALDH3A1	17p11.2	-0.28972815	1.86E-11	4.77E-10
CACNA1C	12p13.33	0.289714194	1.87E-11	4.77E-10
TSPAN2	1p13.2	0.289591441	1.91E-11	4.86E-10
GJB1	Xq13.1	-0.289585153	1.91E-11	4.86E-10
ZCCHC24	10q22.3	0.289424712	1.96E-11	4.99E-10
ST3GAL2	16q22.1	0.289310172	2.00E-11	5.08E-10
FAM163A	1q25.2	0.289079502	2.07E-11	5.27E-10
ACAA1	3p22.2	-0.288974629	2.11E-11	5.35E-10
SLC48A1	12q13.11	-0.288937289	2.12E-11	5.38E-10
NUGGC	8p21.1	0.288794583	2.18E-11	5.50E-10
HAGH	16p13.3	-0.288749544	2.19E-11	5.53E-10
IGFBP3	7p12.3	0.288615987	2.24E-11	5.65E-10
BDKRB2	14q32.2	0.2884338	2.31E-11	5.82E-10
FHL2	2q12.2	0.288397502	2.32E-11	5.84E-10
PPP2R5A	1q32.3	-0.288382132	2.33E-11	5.85E-10
GUCY1A1	4q32.1	0.288368411	2.33E-11	5.86E-10
ARID5B	10q21.2	0.288242409	2.38E-11	5.97E-10
C11ORF52	11q23.1	-0.288140026	2.42E-11	6.07E-10
HAS2-AS1	8q24.13	0.288038418	2.46E-11	6.16E-10
ECI2	6p25.2	-0.288017411	2.47E-11	6.18E-10
TLCD1	17q11.2	-0.287978941	2.49E-11	6.21E-10
CDK14	7q21.13	0.287733884	2.59E-11	6.46E-10
PCNX4	14q23.1	0.287685862	2.61E-11	6.50E-10
COMP	19p13.11	0.287568203	2.66E-11	6.62E-10

PALLD	4q32.3	0.28752443	2.68E-11	6.66E-10
COL7A1	3p21.31	0.287446362	2.72E-11	6.74E-10
AGER	6p21.32	-0.287358916	2.76E-11	6.83E-10
TSPYL4	6q22.1	0.287329217	2.77E-11	6.85E-10
ENPP1	6q23.2	0.287320012	2.77E-11	6.85E-10
NRIP1	21q11.2-q21.1	0.287196702	2.83E-11	6.99E-10
BMP1	8p21.3	0.286934971	2.96E-11	7.28E-10
UMODL1	21q22.3	0.286877065	2.98E-11	7.34E-10
CACNA2D1	7q21.11	0.286761389	3.04E-11	7.48E-10
TATDN3	1q32.3	-0.286699032	3.07E-11	7.54E-10
AP1M2	19p13.2	-0.286648839	3.10E-11	7.60E-10
COCH	14q12	0.286401958	3.23E-11	7.90E-10
CPA4	7q32.2	0.28639661	3.23E-11	7.90E-10
GJD3	17q21.2	0.286385633	3.24E-11	7.90E-10
MED11	17p13.2	-0.286189725	3.34E-11	8.15E-10
GDF11	12q13.2	0.286020912	3.43E-11	8.37E-10
PCSK5	9q21.13	0.285921742	3.49E-11	8.50E-10
ZEB2	2q22.3	0.285872592	3.52E-11	8.55E-10
TNNC1	3p21.1	-0.285728701	3.60E-11	8.75E-10
GCHFR	15q15.1	-0.285666004	3.64E-11	8.83E-10
TMEM268	9q32	0.285604268	3.68E-11	8.91E-10
LOC553137	6q21	-0.285394376	3.80E-11	9.20E-10
RECQL	12p12.1	0.285390032	3.81E-11	9.20E-10
GDF6	8q22.1	0.28538606	3.81E-11	9.20E-10
TMEM215	9p21.1	0.285321936	3.85E-11	9.28E-10
RIN2	20p11.23	0.285202114	3.93E-11	9.45E-10
HYPK	15q15.3	-0.284975379	4.07E-11	9.80E-10
PARD6B	20q13.13	-0.284855976	4.15E-11	9.98E-10
NRP1	10p11.22	0.284694196	4.27E-11	1.02E-09
TINAG	6p12.1	-0.284687898	4.27E-11	1.02E-09
ALDH3B1	11q13.2	-0.28468261	4.27E-11	1.02E-09
MFSD13A	10q24.32	-0.284680048	4.28E-11	1.02E-09
SRPX2	Xq22.1	0.284460254	4.43E-11	1.06E-09
CDK17	12q23.1	0.284231261	4.60E-11	1.10E-09
DLG4	17p13.1	0.284134176	4.67E-11	1.11E-09
CYSLTR2	13q14.2	0.284109781	4.69E-11	1.12E-09
TCAIM	3p21.31	-0.283869493	4.88E-11	1.16E-09
RYBP	3p13	0.283702509	5.01E-11	1.19E-09
DSE	6q22.1	0.283543155	5.14E-11	1.22E-09
NFIB	9p23-p22.3	0.283502341	5.18E-11	1.23E-09
VEPH1	3q25.31-q25.32	-0.283333322	5.32E-11	1.26E-09
UBL7	15q24.1	-0.28322689	5.41E-11	1.28E-09
HEY2	6q22.31	0.283191286	5.44E-11	1.28E-09
PCDHGA9	5q31.3	0.283175742	5.46E-11	1.29E-09
TOM1L1	17q22	-0.283092638	5.53E-11	1.30E-09
PPP1R7	2q37.3	-0.282941626	5.67E-11	1.33E-09
TSHR	14q31.1	0.282898023	5.71E-11	1.34E-09
SGK2	20q13.12	-0.282779524	5.82E-11	1.37E-09
SUSD6	14q24.1	0.282683195	5.91E-11	1.39E-09
GCNT1	9q21.13	0.28262458	5.97E-11	1.40E-09
ST8SIA4	5q21.1	0.282598441	5.99E-11	1.40E-09
PIP4K2A	10p12.2	0.28256254	6.03E-11	1.41E-09
BCL2L11	2q13	0.282445525	6.14E-11	1.43E-09
BDH1	3q29	-0.282402273	6.19E-11	1.44E-09
ASF1A	6q22.31	-0.282350257	6.24E-11	1.45E-09
ADGRG3	16q21	0.282349128	6.24E-11	1.45E-09
ITGA4	2q31.3	0.282030866	6.57E-11	1.52E-09
CHRNA1	2q31.1	0.281815364	6.80E-11	1.58E-09

RFTN2	2q33.1	0.281626559	7.01E-11	1.62E-09
TRIO	5p15.2	0.281562113	7.08E-11	1.64E-09
MEF2B	19p13.11	0.281449508	7.21E-11	1.67E-09
KREMEN1	22q12.1	0.281436632	7.23E-11	1.67E-09
CNIH3	1q42.12	0.28134823	7.33E-11	1.69E-09
TFAP2D	6p12.3	0.281300897	7.39E-11	1.70E-09
CYTIP	2q24.1	0.281215281	7.49E-11	1.72E-09
SMIM4	3p21.1	-0.281102131	7.63E-11	1.75E-09
GCAT	22q13.1	-0.281048204	7.69E-11	1.77E-09
SCAMP2	15q24.1	-0.28086211	7.93E-11	1.82E-09
LGALS1	22q13.1	0.280861415	7.93E-11	1.82E-09
SLC22A18	11p15.4	-0.280844308	7.95E-11	1.82E-09
VPS52	6p21.32	-0.280710056	8.12E-11	1.86E-09
KCNMB1	5q35.1	0.280603505	8.26E-11	1.89E-09
USP42	7p22.1	0.280588135	8.28E-11	1.89E-09
ENTPD7	10q24.2	0.280586224	8.28E-11	1.89E-09
MOXD1	6q23.2	0.280580146	8.29E-11	1.89E-09
CLDN14	21q22.13	0.280549101	8.33E-11	1.89E-09
SPRYD7	13q14.2	-0.280538811	8.35E-11	1.89E-09
HSBP1L1	18q23	-0.280419061	8.51E-11	1.93E-09
SEC14L1	17q25.2-q25.3	0.280383457	8.56E-11	1.94E-09
APBB2	4p14-p13	0.28033917	8.62E-11	1.95E-09
RASAL2	1q25.2	0.28033118	8.63E-11	1.95E-09
SIX1	14q23.1	0.28031581	8.65E-11	1.95E-09
MYO5A	15q21.2	0.280308689	8.66E-11	1.95E-09
AXL	19q13.2	0.280242779	8.75E-11	1.97E-09
KDM7A	7q34	0.280225672	8.78E-11	1.97E-09
LIMS3	2q13	0.280153006	8.88E-11	1.99E-09
C2ORF27A	2q21.2	0.28012043	8.93E-11	2.00E-09
ZNF436	1p36.12	0.280058769	9.01E-11	2.02E-09
SMC6	2p24.2	0.280024033	9.06E-11	2.03E-09
BACH2	6q15	0.280017917	9.07E-11	2.03E-09
TCP11L1	11p13	0.28000215	9.10E-11	2.03E-09
UACA	15q23	0.279911627	9.23E-11	2.06E-09
ATP11C	Xq27.1	0.279899768	9.25E-11	2.06E-09
TCF12	15q21.3	0.279550331	9.78E-11	2.18E-09
WHAMMP2	15q13.1	0.279484693	9.88E-11	2.20E-09
C11ORF54	11q21	-0.279431536	9.96E-11	2.21E-09
SERPINE1	7q22.1	0.279266804	1.02E-10	2.27E-09
RIPOR3	20q13.13	0.279161996	1.04E-10	2.30E-09
RAB30	11q14.1	0.279161816	1.04E-10	2.30E-09
IL17RE	3p25.3	-0.279136372	1.04E-10	2.31E-09
SLC35D2	9q22.32	-0.278999776	1.07E-10	2.36E-09
FTL	19q13.33	-0.278961827	1.07E-10	2.37E-09
SLC44A3	1p21.3	-0.278937513	1.08E-10	2.38E-09
MRPL10	17q21.32	-0.278790849	1.10E-10	2.43E-09
HEXA	15q23	-0.278680471	1.12E-10	2.47E-09
TAF5A	22q13.32	0.278605096	1.14E-10	2.50E-09
CNN1	19p13.2	0.278491251	1.16E-10	2.54E-09
ACTG2	2p13.1	0.278417265	1.17E-10	2.57E-09
STXBP5	6q24.3	0.278232907	1.21E-10	2.64E-09
OR51E2	11p15.4	0.27776231	1.30E-10	2.84E-09
PAM16	16p13.3	-0.277668458	1.32E-10	2.88E-09
PGD	1p36.22	-0.277661771	1.32E-10	2.88E-09
KANK4	1p31.3	0.277579151	1.34E-10	2.91E-09
MPC2	1q24.2	-0.277576757	1.34E-10	2.91E-09
HS3ST3B1	17p12	0.277546056	1.34E-10	2.93E-09
KLHDC7B	22q13.33	0.277472551	1.36E-10	2.96E-09

ZSWIM4	19p13.13-p13.12	0.277452231	1.36E-10	2.96E-09
TGM2	20q11.23	0.2774234	1.37E-10	2.97E-09
PLEKHS1	10q25.3	0.277326687	1.39E-10	3.02E-09
CYB5B	16q22.1	-0.276968628	1.47E-10	3.19E-09
PMVK	1q21.3	-0.276967413	1.47E-10	3.19E-09
SELENBP1	1q21.3	-0.276848878	1.50E-10	3.24E-09
S1PR3	9q22.1	0.276790529	1.51E-10	3.27E-09
TMEM200B	1p35.3	0.276611723	1.56E-10	3.36E-09
SNAPC5	15q22.31	-0.276504999	1.58E-10	3.41E-09
CCIN	9p13.3	0.276478443	1.59E-10	3.42E-09
ABHD14B	3p21.2	-0.276440478	1.60E-10	3.44E-09
ZNF697	1p12	0.276380392	1.62E-10	3.47E-09
SHISAL1	22q13.31	0.276349124	1.62E-10	3.48E-09
GSTO2	10q25.1	-0.276246915	1.65E-10	3.53E-09
DAAM1	14q23.1	0.276147051	1.68E-10	3.59E-09
CCDC115	2q21.1	-0.276096859	1.69E-10	3.61E-09
WBP2	17q25.1	-0.275967991	1.72E-10	3.68E-09
GATD3A	21q22.3	-0.275864827	1.75E-10	3.74E-09
ACKR3	2q37.3	0.275859269	1.75E-10	3.74E-09
DSCAM	21q22.2	0.2757575	1.78E-10	3.79E-09
ADAM33	20p13	0.275748519	1.79E-10	3.79E-09
RPS6KA1	1p36.11	-0.275697142	1.80E-10	3.82E-09
QPCT	2p22.2	0.27565946	1.81E-10	3.84E-09
IGSF8	1q23.2	-0.275629848	1.82E-10	3.85E-09
NDE1	16p13.11	0.27541266	1.88E-10	3.98E-09
SOS1	2p22.1	0.275390342	1.89E-10	3.99E-09
SEMA6B	19p13.3	0.275381051	1.89E-10	3.99E-09
SLITRK6	13q31.1	0.275376992	1.89E-10	3.99E-09
AMPD1	1p13.2	0.275374443	1.89E-10	3.99E-09
ITGB8	7p21.1	0.275365941	1.90E-10	3.99E-09
ANGPT2	8p23.1	0.275365941	1.90E-10	3.99E-09
NAP1L3	Xq21.32	0.275297562	1.92E-10	4.03E-09
PDGFC	4q32.1	0.275221057	1.94E-10	4.07E-09
FKBP7	2q31.2	0.275184536	1.95E-10	4.09E-09
HOXB5	17q21.32	0.275161437	1.96E-10	4.10E-09
CXCL16	17p13.2	-0.27512071	1.97E-10	4.12E-09
SQOR	15q21.1	-0.275007125	2.01E-10	4.19E-09
LTBP2	14q24.3	0.274833188	2.06E-10	4.30E-09
SAP30	4q34.1	0.274702757	2.10E-10	4.39E-09
EIF5A2	3q26.2	0.274688255	2.11E-10	4.39E-09
NT5DC1	6q22.1	-0.274527865	2.16E-10	4.50E-09
ARHGAP22	10q11.22-q11.23	0.274508598	2.17E-10	4.51E-09
TMOD2	15q21.2	0.274337602	2.23E-10	4.63E-09
PLOD2	3q24	0.274307903	2.24E-10	4.64E-09
HS3ST1	4p15.33	0.274215247	2.27E-10	4.71E-09
XRN1	3q23	0.274008311	2.34E-10	4.86E-09
TXLNB	6q24.1	0.273869196	2.40E-10	4.96E-09
SLC26A2	5q32	0.273813967	2.42E-10	4.99E-09
FZD5	2q33.3	-0.273739633	2.44E-10	5.05E-09
PRR5L	11p13-p12	0.273629783	2.49E-10	5.13E-09
JAK3	19p13.11	0.273388025	2.58E-10	5.32E-09
HDHD3	9q32	-0.273382468	2.58E-10	5.32E-09
IL17C	16q24.2	0.273373194	2.59E-10	5.32E-09
PGBD1	6p22.1	0.272926219	2.77E-10	5.70E-09
ITGAV	2q32.1	0.272904249	2.78E-10	5.71E-09
P3H2	3q28	-0.272684896	2.88E-10	5.90E-09
KDF1	1p36.11	-0.27265676	2.89E-10	5.92E-09
GLIS2	16p13.3	0.272530286	2.95E-10	6.04E-09

C15ORF40	15q25.2	-0.272493851	2.97E-10	6.06E-09
GCNT2	6p24.3-p24.2	-0.272470752	2.98E-10	6.08E-09
EFS	14q11.2	0.272391122	3.01E-10	6.15E-09
H19	11p15.5	0.272383219	3.02E-10	6.15E-09
PNPLA4	Xp22.31	-0.272247057	3.08E-10	6.27E-09
MAP3K12	12q13.13	0.272197386	3.11E-10	6.32E-09
PCDH7	4p15.1	0.272182889	3.11E-10	6.32E-09
RAB11A	15q22.31	-0.272102558	3.15E-10	6.40E-09
DCAF8	1q23.2	-0.272062352	3.17E-10	6.43E-09
RMND1	6q25.1	-0.27196758	3.22E-10	6.52E-09
CDK6	7q21.2	0.271904306	3.25E-10	6.58E-09
NAV2	11p15.1	0.271889978	3.26E-10	6.58E-09
RPSAP52	12q14.3	0.271876895	3.26E-10	6.59E-09
BHLHE41	12p12.1	0.271876524	3.26E-10	6.59E-09
PKIG	20q13.12	0.271862363	3.27E-10	6.59E-09
SCLT1	4q28.2	0.271840312	3.28E-10	6.61E-09
TBCEL	11q23.3	0.271696502	3.36E-10	6.75E-09
NFATC4	14q12	0.271562511	3.43E-10	6.89E-09
DECR2	16p13.3	-0.271506066	3.46E-10	6.94E-09
TKFC	11q12.2	-0.271499032	3.46E-10	6.94E-09
UFC1	1q23.3	-0.271495298	3.46E-10	6.94E-09
SHC4	15q21.1	0.271463631	3.48E-10	6.96E-09
VIM	10p13	0.271420617	3.50E-10	7.00E-09
CCDC51	3p21.31	-0.271377855	3.53E-10	7.04E-09
KIAA1210	Xq24	0.271365834	3.53E-10	7.05E-09
TMEM119	12q23.3	0.27132249	3.56E-10	7.08E-09
UBE2J1	6q15	0.271320753	3.56E-10	7.08E-09
PGAP2	11p15.4	-0.271289318	3.57E-10	7.11E-09
ZNF853	7p22.1	0.271207305	3.62E-10	7.19E-09
PPA2	4q24	-0.271146642	3.65E-10	7.26E-09
C10ORF55	10q22.2	0.27105558	3.71E-10	7.35E-09
TCF3	19p13.3	0.271043652	3.71E-10	7.35E-09
PPP1R12A	12q21.2-q21.31	0.271043478	3.71E-10	7.35E-09
NPAS3	14q13.1	0.270964901	3.76E-10	7.43E-09
RBKS	2p23.2	-0.270959853	3.76E-10	7.43E-09
DLL1	6q27	0.270786003	3.86E-10	7.62E-09
EXD1	15q15.1	-0.270730131	3.90E-10	7.68E-09
CCDC8	19q13.32	0.270606942	3.97E-10	7.82E-09
MRPS18B	6p21.33	-0.27036944	4.12E-10	8.11E-09
MPPE1	18p11.21	-0.270273657	4.18E-10	8.21E-09
SMIM13	6p24.2	0.270271139	4.18E-10	8.21E-09
SERPINH1	11q13.5	0.270173272	4.25E-10	8.33E-09
ZNF92	7q11.21	0.269943671	4.40E-10	8.62E-09
PMP22	17p12	0.269839205	4.47E-10	8.75E-09
PRDX5	11q13.1	-0.269834255	4.47E-10	8.75E-09
SORL1	11q24.1	0.269824877	4.48E-10	8.75E-09
GPX2	14q23.3	-0.269807596	4.49E-10	8.77E-09
TMEM101	17q21.31	-0.26976409	4.52E-10	8.82E-09
IRF4	6p25.3	0.269600573	4.64E-10	9.03E-09
IL12RB2	1p31.3	0.269414335	4.77E-10	9.29E-09
ARHGEF16	1p36.32	-0.269237416	4.90E-10	9.53E-09
PDE4C	19p13.11	-0.26902558	5.06E-10	9.83E-09
TAS1R3	1p36.33	0.269021883	5.06E-10	9.83E-09
TCEA3	1p36.12	-0.268912293	5.15E-10	9.99E-09
CEP41	7q32.2	0.268696593	5.32E-10	1.03E-08
SAP18	13q12.11	-0.26863771	5.37E-10	1.04E-08
C19ORF33	19q13.2	-0.268592821	5.41E-10	1.05E-08
CBL	11q23.3	0.268563811	5.43E-10	1.05E-08

NAPA	19q13.32-q13.33	-0.268525342	5.46E-10	1.05E-08
VEGFD	Xp22.2	-0.268514	5.47E-10	1.06E-08
MED18	1p35.3	-0.268474107	5.51E-10	1.06E-08
SLFN11	17q12	0.267989897	5.93E-10	1.14E-08
PROX1	1q32.3	0.26786682	6.04E-10	1.16E-08
ADARB1	21q22.3	0.267750831	6.15E-10	1.18E-08
MUC1	1q22	-0.267659304	6.23E-10	1.20E-08
ATP8B2	1q21.3	0.267650012	6.24E-10	1.20E-08
ADAMTSL1	9p22.2-p22.1	0.267582067	6.31E-10	1.21E-08
FAM30A	14q32.33	0.267483543	6.40E-10	1.23E-08
IL21R	16p12.1	0.267471733	6.41E-10	1.23E-08
WDFY1	2q36.1	0.267236835	6.65E-10	1.27E-08
PAFAH2	1p36.11	-0.267214958	6.67E-10	1.27E-08
MKX	10p12.1	0.267213412	6.67E-10	1.27E-08
TRIL	7p14.3	0.267149476	6.74E-10	1.28E-08
COX14	12q13.12	-0.267126116	6.76E-10	1.29E-08
TXN	9q31.3	-0.267030855	6.86E-10	1.30E-08
ACAT2	6q25.3	-0.266895561	7.00E-10	1.33E-08
SPOCD1	1p35.2	0.266894519	7.00E-10	1.33E-08
LINC00242	6q27	0.266869781	7.03E-10	1.33E-08
CD79A	19q13.2	0.266851794	7.05E-10	1.33E-08
AGTRAP	1p36.22	-0.266832603	7.07E-10	1.34E-08
SDC2	8q22.1	0.266808201	7.09E-10	1.34E-08
RAI14	5p13.2	0.266795002	7.11E-10	1.34E-08
NDUFA7	19p13.2	-0.266777895	7.13E-10	1.34E-08
C4ORF46	4q32.1	0.26670304	7.21E-10	1.36E-08
AP3S2	15q26.1	-0.266696093	7.21E-10	1.36E-08
AIM2	1q23.1-q23.2	0.266679247	7.23E-10	1.36E-08
TGFBI	5q31.1	0.266609342	7.31E-10	1.37E-08
TMEM54	1p35.1	-0.26660366	7.32E-10	1.37E-08
SLC26A4	7q22.3	0.266587991	7.33E-10	1.38E-08
THRB	3p24.2	-0.266575909	7.35E-10	1.38E-08
FAM43B	1p36.12	0.266520196	7.41E-10	1.39E-08
FILIP1L	3q12.1	0.266311052	7.65E-10	1.43E-08
IL2RA	10p15.1	0.266300979	7.66E-10	1.43E-08
SERF2	15q15.3	-0.266278662	7.69E-10	1.44E-08
CYB5A	18q22.3	-0.266269457	7.70E-10	1.44E-08
NIT2	3q12.2	-0.26611445	7.88E-10	1.47E-08
SUSD5	3p22.3	0.266046803	7.96E-10	1.48E-08
SLC22A5	5q31.1	-0.266013631	8.00E-10	1.49E-08
POLR2L	11p15.5	-0.265883634	8.16E-10	1.52E-08
CLN3	16p12.1	-0.265851417	8.20E-10	1.52E-08
NIBAN1	1q25.3	0.265842473	8.21E-10	1.52E-08
KLHL5	4p14	0.265824671	8.23E-10	1.52E-08
NTF3	12p13.31	0.265822426	8.23E-10	1.52E-08
MEGF10	5q23.2	0.265707191	8.38E-10	1.55E-08
PCNX1	14q24.2	0.265666191	8.43E-10	1.56E-08
DNAJC19	3q26.33	-0.265619906	8.49E-10	1.57E-08
EXOC5	14q22.3	0.265590989	8.53E-10	1.57E-08
CLDN7	17p13.1	-0.265458127	8.70E-10	1.60E-08
WDFY4	10q11.23	0.265431294	8.73E-10	1.61E-08
DBI	2q14.2	-0.265368249	8.82E-10	1.62E-08
SIGLEC10	19q13.41	0.265031056	9.28E-10	1.70E-08
BRSK1	19q13.42	0.265026682	9.28E-10	1.70E-08
KCNIP3	2q11.1	0.265025064	9.28E-10	1.70E-08
CYP4F3	19p13.12	-0.264487756	1.01E-09	1.85E-08
VSNL1	2p24.2	0.264474523	1.01E-09	1.85E-08
ARSB	5q14.1	0.264447069	1.01E-09	1.85E-08

ARHGAP5	14q12	0.26441572	1.02E-09	1.86E-08
NKX1-2	10q26.13	0.264376553	1.02E-09	1.87E-08
SMIM1	1p36.32	-0.264326586	1.03E-09	1.88E-08
STX2	12q24.33	0.264247427	1.04E-09	1.90E-08
MPST	22q12.3	-0.264239612	1.04E-09	1.90E-08
LPAR6	13q14.2	0.264194716	1.05E-09	1.91E-08
ABL2	1q25.2	0.264079222	1.07E-09	1.95E-08
PCDHB7	5q31.3	0.264021648	1.08E-09	1.96E-08
FLT1	13q12.3	0.263814191	1.11E-09	2.02E-08
PAMR1	11p13	0.263811586	1.11E-09	2.02E-08
DOK3	5q35.3	0.263756791	1.12E-09	2.03E-08
TMEM125	1p34.2	-0.263684889	1.14E-09	2.05E-08
ORM2	9q32	-0.263653188	1.14E-09	2.06E-08
LIPH	3q27.2	-0.263624623	1.15E-09	2.07E-08
KDR	4q12	0.263477172	1.17E-09	2.11E-08
GPAT3	4q21.23	-0.263447392	1.18E-09	2.12E-08
OBP2B	9q34.2	0.263418926	1.18E-09	2.13E-08
WDR61	15q25.1	-0.263401188	1.18E-09	2.13E-08
CXCL6	4q13.3	0.26325923	1.21E-09	2.18E-08
LINC01096	4p15.33	0.263113608	1.24E-09	2.22E-08
PPFIA4	1q32.1	0.263057048	1.25E-09	2.24E-08
GABRB2	5q34	0.262750082	1.31E-09	2.34E-08
FAM83D	20q11.23	0.262739741	1.31E-09	2.34E-08
PRDM8	4q21.21	0.262718379	1.31E-09	2.35E-08
IFFO1	12p13.31	0.26259611	1.34E-09	2.39E-08
LSM11	5q33.3	0.2625302	1.35E-09	2.41E-08
ADGRL4	1p31.1	0.262465772	1.36E-09	2.43E-08
MEI1	22q13.2	0.262398814	1.38E-09	2.45E-08
LRRC4C	11p12	0.262303836	1.39E-09	2.49E-08
ZNF286A	17p12	0.262282972	1.40E-09	2.49E-08
PHB	17q21.33	-0.262128399	1.43E-09	2.55E-08
COMMD4	15q24.2	-0.2621159	1.43E-09	2.55E-08
NRN1L	16q22.1	-0.26206478	1.45E-09	2.57E-08
NAA30	14q22.3	0.262027493	1.45E-09	2.58E-08
CD180	5q12.3	0.26199875	1.46E-09	2.59E-08
GRIP2	3p25.1	0.261805478	1.50E-09	2.66E-08
RTL8B	Xq26.3	0.26170515	1.52E-09	2.70E-08
ARSJ	4q26	0.261696118	1.53E-09	2.70E-08
CCDC88A	2p16.1	0.261676232	1.53E-09	2.71E-08
NOTCH2	1p12	0.261663815	1.53E-09	2.71E-08
TMBIM4	12q14.3	-0.261630382	1.54E-09	2.72E-08
GRM2	3p21.2	0.261494775	1.57E-09	2.77E-08
CEBPA-DT	19q13.11	-0.261372559	1.60E-09	2.82E-08
FCGR2B	1q23.3	0.261366741	1.60E-09	2.82E-08
PEX11A	15q26.1	-0.26133079	1.61E-09	2.83E-08
GJC1	17q21.31	0.261242475	1.63E-09	2.87E-08
SLC9B2	4q24	0.261230405	1.64E-09	2.87E-08
PAQR5	15q23	-0.261229412	1.64E-09	2.87E-08
PCDHB12	5q31.3	0.26098691	1.70E-09	2.97E-08
NDUFA2	5q31.3	-0.260940799	1.71E-09	2.99E-08
HHIPL1	14q32.2	0.260866688	1.73E-09	3.02E-08
CPE	4q32.3	0.260836854	1.73E-09	3.03E-08
SMIM10	Xq26.3	0.260671948	1.78E-09	3.10E-08
NLGN4X	Xp22.32-p22.31	0.260533159	1.81E-09	3.16E-08
SLC30A3	2p23.3	-0.260499258	1.82E-09	3.18E-08
GTF2H5	6q25.3	-0.260449126	1.84E-09	3.20E-08
FSD1	19p13.3	0.260437666	1.84E-09	3.20E-08
TPBG	6q14.1	0.260423764	1.84E-09	3.20E-08

QSER1	11p13	0.260336752	1.87E-09	3.24E-08
VDR	12q13.11	0.260158212	1.92E-09	3.33E-08
TICAM2	5q22.3	0.260143386	1.92E-09	3.33E-08
COL18A1	21q22.3	0.260129816	1.92E-09	3.33E-08
SAMD4A	14q22.2	0.260081013	1.94E-09	3.35E-08
TLN1	9p13.3	0.260074934	1.94E-09	3.35E-08
PTGS2	1q31.1	0.260014842	1.96E-09	3.38E-08
OXSM	3p24.2	-0.25999348	1.96E-09	3.39E-08
CLN6	15q23	-0.259811467	2.02E-09	3.48E-08
DGAT1	8q24.3	-0.259774995	2.03E-09	3.49E-08
APEH	3p21.31	-0.259720895	2.04E-09	3.52E-08
HGD	3q13.33	-0.259658211	2.06E-09	3.55E-08
CALY	10q26.3	0.25962628	2.07E-09	3.56E-08
LMCD1	3p25.3	0.25961391	2.08E-09	3.57E-08
LAYN	11q23.1	0.259508662	2.11E-09	3.62E-08
NDUFV3	21q22.3	-0.259388304	2.15E-09	3.68E-08
CHST15	10q26.13	0.259329862	2.16E-09	3.71E-08
PCED1B-AS1	12q13.11	0.259279979	2.18E-09	3.73E-08
MMAB	12q24.11	-0.2592478	2.19E-09	3.75E-08
LLGL2	17q25.1	-0.259212717	2.20E-09	3.76E-08
HOXD10	2q31.1	0.259000163	2.27E-09	3.88E-08
SMAP2	1p34.2	0.258962623	2.28E-09	3.90E-08
ORM1	9q32	-0.25881841	2.33E-09	3.98E-08
GNG2	14q22.1	0.258761766	2.35E-09	4.01E-08
SHISA2	13q12.13	0.258626912	2.40E-09	4.08E-08
ZC3H12D	6q25.1	0.258575721	2.42E-09	4.11E-08
HIGD2A	5q35.2	-0.258505854	2.44E-09	4.15E-08
LINC00922	16q21	0.258499948	2.44E-09	4.15E-08
CEND1	11p15.5	0.258492266	2.45E-09	4.15E-08
SOX2	3q26.33	0.258414505	2.48E-09	4.19E-08
LAMA1	18p11.31	0.258387319	2.48E-09	4.21E-08
HAPLN1	5q14.3	0.258323787	2.51E-09	4.24E-08
P2RY8	Xp22.33 and Yp11	0.258290408	2.52E-09	4.26E-08
RAB4B	19q13.2	-0.258262619	2.53E-09	4.27E-08
KCNK2	1q41	0.258184604	2.56E-09	4.32E-08
UCN2	3p21.31	0.257941823	2.65E-09	4.47E-08
PPM1K	4q22.1	0.257913095	2.66E-09	4.49E-08
HSDL2	9q32	-0.25790858	2.67E-09	4.49E-08
NDUFS2	1q23.3	-0.257853524	2.69E-09	4.52E-08
PABPC4L	4q28.3	0.257822002	2.70E-09	4.53E-08
LGI3	8p21.3	-0.257808434	2.70E-09	4.54E-08
PROB1	5q31.2	0.257794822	2.71E-09	4.55E-08
NXPE4	11q23.2	0.25767186	2.76E-09	4.62E-08
AK1	9q34.11	-0.257663088	2.76E-09	4.63E-08
CAT	11p13	-0.257637123	2.77E-09	4.64E-08
LBH	2p23.1	0.257518763	2.82E-09	4.72E-08
ZNF219	14q11.2	-0.257425846	2.86E-09	4.78E-08
OVGP1	1p13.2	-0.257408999	2.87E-09	4.78E-08
ECHDC1	6q22.33	-0.257367751	2.88E-09	4.81E-08
CHCHD6	3q21.3	-0.257306617	2.91E-09	4.85E-08
ATP5PO	21q22.11	-0.257291767	2.92E-09	4.85E-08
POGLUT3	11q22.3	0.257183659	2.96E-09	4.93E-08
CNKSRI	1p36.11	-0.257156039	2.97E-09	4.94E-08
IRF2BPL	14q24.3	0.257152653	2.98E-09	4.94E-08
ARF6	14q21.3	0.25707884	3.01E-09	4.99E-08
C1S	12p13.31	0.256977934	3.05E-09	5.06E-08
C1ORF116	1q32.1	-0.256920447	3.08E-09	5.10E-08
SULT1A2	16p11.2	-0.256915063	3.08E-09	5.10E-08

COL23A1	5q35.3	0.256912089	3.08E-09	5.10E-08
HDAC11	3p25.1	-0.256820149	3.12E-09	5.16E-08
CYP1B1	2p22.2	0.256741907	3.16E-09	5.22E-08
SNAI1	20q13.13	0.25670969	3.17E-09	5.24E-08
TMED3	15q25.1	-0.256623547	3.21E-09	5.30E-08
CDK13	7p14.1	0.256580996	3.23E-09	5.33E-08
B3GNT4	12q24.31	0.256520759	3.26E-09	5.37E-08
ADI1	2p25.3	-0.256435281	3.30E-09	5.43E-08
SEMA5A	5p15.31	0.256334202	3.35E-09	5.51E-08
LINC02085	3q12.3	0.256295868	3.37E-09	5.53E-08
VAMP8	2p11.2	-0.256258566	3.39E-09	5.56E-08
FDX1	11q22.3	-0.256244324	3.39E-09	5.57E-08
PMM1	22q13.2	-0.256186886	3.42E-09	5.61E-08
EPS8	12p12.3	-0.256173551	3.43E-09	5.61E-08
SPAG7	17p13.2	-0.256160959	3.44E-09	5.62E-08
GPC2	7q22.1	0.256090154	3.47E-09	5.67E-08
MFGE8	15q26.1	0.255994403	3.52E-09	5.75E-08
ADAM28	8p21.2	0.255936395	3.55E-09	5.79E-08
IGF2	11p15.5	0.255927798	3.55E-09	5.79E-08
KIF5A	12q13.3	0.255881636	3.58E-09	5.82E-08
CXCL8	4q13.3	0.255880819	3.58E-09	5.82E-08
TNS3	7p12.3	0.255857112	3.59E-09	5.84E-08
PPCS	1p34.2	-0.255834187	3.60E-09	5.85E-08
AP1S1	7q22.1	-0.255741791	3.65E-09	5.93E-08
TMEM35A	Xq22.1	0.255682393	3.68E-09	5.97E-08
SOCS4	14q22.3	0.255538155	3.76E-09	6.09E-08
ZNF385D	3p24.3	0.255509104	3.78E-09	6.12E-08
CYP2B6	19q13.2	-0.255408719	3.83E-09	6.20E-08
KIAA1614	1q25.3	0.255357966	3.86E-09	6.24E-08
SYNGR2	17q25.3	-0.255304647	3.89E-09	6.28E-08
MYL9	20q11.23	0.255277293	3.90E-09	6.30E-08
TTC22	1p32.3	-0.255165358	3.97E-09	6.40E-08
LSAMP	3q13.31	0.255120202	3.99E-09	6.44E-08
GPD1	12q13.12	-0.255068024	4.02E-09	6.48E-08
GMPR	6p22.3	-0.254972404	4.08E-09	6.57E-08
LAMTOR5	1p13.3	-0.254843449	4.16E-09	6.68E-08
TMEM53	1p34.1	-0.254756611	4.21E-09	6.76E-08
PRICKLE1	12q12	0.254724828	4.23E-09	6.79E-08
SLF1	5q15	0.254604557	4.30E-09	6.90E-08
GJB2	13q12.11	0.254584323	4.31E-09	6.92E-08
TDP2	6p22.3	-0.254553843	4.33E-09	6.94E-08
KLHL28	14q21.2	0.254488801	4.37E-09	7.00E-08
MGAT2	14q21.3	0.254312693	4.49E-09	7.17E-08
MAGED4B	Xp11.22	0.25425373	4.52E-09	7.23E-08
PLA2G1B	12q24.31	-0.254210152	4.55E-09	7.27E-08
TMEM99	17q21.2	-0.254141448	4.60E-09	7.33E-08
OSBPL3	7p15.3	0.254077622	4.64E-09	7.40E-08
LIPC	15q21.3	0.254058737	4.65E-09	7.41E-08
THBS3	1q22	0.254042452	4.66E-09	7.42E-08
FGGY	1p32.1	-0.253915321	4.75E-09	7.55E-08
SRXN1	20p13	-0.25382527	4.81E-09	7.65E-08
GRM4	6p21.31	0.25379887	4.83E-09	7.67E-08
RAB23	6p12.1-p11.2	0.25361955	4.96E-09	7.86E-08
HCLS1	3q13.33	0.253591675	4.98E-09	7.89E-08
TMEM87A	15q15.1	-0.253442313	5.08E-09	8.05E-08
PHLDB1	11q23.3	0.253253613	5.22E-09	8.27E-08
ELOB	16p13.3	-0.253178064	5.28E-09	8.35E-08
TNFRSF17	16p13.13	0.253067503	5.36E-09	8.47E-08

ATP5MC1	17q21.32	-0.25302575	5.40E-09	8.52E-08
SBSN	19q13.12	0.252979309	5.43E-09	8.57E-08
MFRP	11q23.3	0.252951156	5.45E-09	8.60E-08
SUCLG1	2p11.2	-0.252908344	5.49E-09	8.64E-08
BMP8B	1p34.2	0.252745696	5.62E-09	8.84E-08
NR5A1	9q33.3	0.252727909	5.63E-09	8.85E-08
NDUFC1	4q31.1	-0.252717306	5.64E-09	8.86E-08
RGS17	6q25.2	0.252550469	5.77E-09	9.07E-08
COX7C	5q14.3	-0.252527211	5.79E-09	9.09E-08
AKR1C2	10p15.1	-0.252403814	5.90E-09	9.24E-08
GPRC5B	16p12.3	0.252386881	5.91E-09	9.26E-08
CHST6	16q23.1	0.252310897	5.98E-09	9.35E-08
DNMT1	19p13.2	0.252295874	5.99E-09	9.37E-08
DCLK1	13q13.3	0.25223309	6.04E-09	9.44E-08
SEC24D	4q26	0.252097709	6.16E-09	9.62E-08
INSR	19p13.2	0.25208147	6.17E-09	9.63E-08
TIMM17B	Xp11.23	-0.25195651	6.28E-09	9.80E-08
ETFA	15q24.2-q24.3	-0.251780402	6.44E-09	1.00E-07
RPL19	17q12	-0.251655442	6.56E-09	1.02E-07
FDXR	17q25.1	-0.2515231	6.68E-09	1.04E-07
AADAC	3q25.1	-0.251463037	6.74E-09	1.05E-07
ADAMTS3	4q13.3	0.251449293	6.75E-09	1.05E-07
ATP5PD	17q25.1	-0.251441733	6.76E-09	1.05E-07
ZFAND2B	2q35	-0.251376691	6.82E-09	1.06E-07
GARS	7p14.3	0.251375909	6.83E-09	1.06E-07
SPRED3	19q13.2	0.251352562	6.85E-09	1.06E-07
CPB2	13q14.13	-0.251239513	6.96E-09	1.08E-07
SLC6A1	3p25.3	0.251199807	7.00E-09	1.08E-07
FAM126A	7p15.3	0.251183823	7.01E-09	1.08E-07
ZMAT5	22q12.2	-0.251142401	7.06E-09	1.09E-07
HOXD8	2q31.1	0.251107688	7.09E-09	1.09E-07
TPM1	15q22.2	0.25106911	7.13E-09	1.10E-07
SYTL4	Xq22.1	0.251006895	7.19E-09	1.11E-07
ADH5	4q23	-0.250982966	7.22E-09	1.11E-07
SCG5	15q13.3	0.250926	7.27E-09	1.12E-07
GNG4	1q42.3	0.250915829	7.29E-09	1.12E-07
KLF10	8q22.3	0.250902033	7.30E-09	1.12E-07
ATP5IF1	1p35.3	-0.250840638	7.36E-09	1.13E-07
LOXL4	10q24.2	0.250793137	7.41E-09	1.14E-07
CLDN18	3q22.3	-0.250747309	7.46E-09	1.14E-07
CLIC3	9q34.3	-0.250718543	7.49E-09	1.15E-07
GPR4	19q13.32	0.250622153	7.59E-09	1.16E-07
TMEM163	2q21.3	-0.250599662	7.62E-09	1.16E-07
VPS37C	11q12.2	0.2503797	7.86E-09	1.20E-07
NUDT13	10q22.2	-0.250325426	7.92E-09	1.21E-07
TRIM69	15q21.1	0.25028788	7.96E-09	1.21E-07
FAT3	11q14.3	0.250197807	8.06E-09	1.23E-07
TRPM8	2q37.1	0.250179932	8.08E-09	1.23E-07
CAMSAP1	9q34.3	0.250166426	8.10E-09	1.23E-07
RNF38	9p13.2	0.250156179	8.11E-09	1.23E-07
CAVIN4	9q31.1	0.250125584	8.15E-09	1.24E-07
KLHL6	3q27.1	0.250031739	8.26E-09	1.25E-07
GPX8	5q11.2	0.249964266	8.33E-09	1.26E-07
CHIAP2	1p13.2	-0.249941484	8.36E-09	1.27E-07
NPAS4	11q13.2	0.249917651	8.39E-09	1.27E-07
RP9P	7p14.3	0.249688381	8.67E-09	1.31E-07
MRPS18A	6p21.1	-0.249596593	8.78E-09	1.33E-07
PPP2R5B	11q13.1	0.249554563	8.83E-09	1.33E-07

SLC35D3	6q23.3	0.249551518	8.83E-09	1.33E-07
SDHB	1p36.13	-0.249361869	9.07E-09	1.37E-07
OTULIN	5p15.2	0.249297782	9.16E-09	1.38E-07
GPR173	Xp11.22	0.249264105	9.20E-09	1.39E-07
CREB5	7p15.1	0.249186108	9.30E-09	1.40E-07
TEN1	17q25.1	-0.249182027	9.31E-09	1.40E-07
SP4	7p15.3	0.249129055	9.37E-09	1.41E-07
GLIPR1	12q21.2	0.249115509	9.39E-09	1.41E-07
TMEM131L	4q31.3	0.249111601	9.40E-09	1.41E-07
LACTB2	8q13.3	-0.24910943	9.40E-09	1.41E-07
RBFOX2	22q12.3	0.249000882	9.55E-09	1.43E-07
SLFN5	17q12	0.248990809	9.56E-09	1.43E-07
NECAB3	20q11.22	-0.248800459	9.82E-09	1.47E-07
ASS1	9q34.11	-0.248625828	1.01E-08	1.50E-07
MPPED2	11p14.1	0.248610343	1.01E-08	1.51E-07
TMTC3	12q21.32	0.248563912	1.01E-08	1.52E-07
NFYB	12q23.3	0.248543727	1.02E-08	1.52E-07
NPAT	11q22.3	0.248539255	1.02E-08	1.52E-07
PLS1	3q23	-0.248516932	1.02E-08	1.52E-07
SLC39A13	11p11.2	0.248404737	1.04E-08	1.55E-07
CAVIN1	17q21.2	0.248371391	1.04E-08	1.55E-07
SLC26A9	1q32.1	-0.2483621	1.04E-08	1.55E-07
RNF181	2p11.2	-0.248354197	1.05E-08	1.55E-07
SCUBE3	6p21.31	0.248340824	1.05E-08	1.55E-07
PEG3	19q13.43	0.248257427	1.06E-08	1.57E-07
PACSIN1	6p21.31	0.24821162	1.07E-08	1.58E-07
ING1	13q34	0.248177395	1.07E-08	1.59E-07
PHF21A	11p11.2	0.24794076	1.11E-08	1.64E-07
PIGV	1p36.11	-0.247886226	1.12E-08	1.65E-07
POMGNT1	1p34.1	-0.247828478	1.12E-08	1.66E-07
HTR2A	13q14.2	0.247783677	1.13E-08	1.67E-07
PRELP	1q32.1	0.247719236	1.14E-08	1.69E-07
COX5A	15q24.2	-0.24771637	1.14E-08	1.69E-07
TARS	5p13.3	0.247711247	1.14E-08	1.69E-07
PTMS	12p13.31	0.247692403	1.15E-08	1.69E-07
EBPL	13q14.2	-0.247671735	1.15E-08	1.69E-07
KIAA1217	10p12.2-p12.1	0.247540523	1.17E-08	1.72E-07
RAMAC	15q25.2	-0.24753071	1.17E-08	1.72E-07
IL24	1q32.1	0.247518072	1.17E-08	1.73E-07
ZCCHC18	Xq22.2	0.247492289	1.18E-08	1.73E-07
UBXN8	8p12	-0.247448908	1.19E-08	1.74E-07
COQ8A	1q42.13	-0.247267243	1.22E-08	1.78E-07
TPMT	6p22.3	-0.247157305	1.24E-08	1.81E-07
LRRC32	11q13.5	0.247087661	1.25E-08	1.83E-07
ASPHD2	22q12.1	0.247049278	1.25E-08	1.83E-07
JPH1	8q21.11	-0.246953148	1.27E-08	1.86E-07
RESF1	12p11.21	0.246922321	1.28E-08	1.86E-07
CD209	19p13.2	0.246904259	1.28E-08	1.87E-07
MIS18BP1	14q21.2	0.246880378	1.28E-08	1.87E-07
CNKSR3	6q25.2	0.246866098	1.29E-08	1.87E-07
XXYLT1	3q29	0.246865268	1.29E-08	1.87E-07
PMEL	12q13.2	-0.246772004	1.30E-08	1.90E-07
RALA	7p14.1	0.24673805	1.31E-08	1.90E-07
PPFIA2	12q21.31	0.246722902	1.31E-08	1.91E-07
EDN3	20q13.32	-0.246697001	1.32E-08	1.91E-07
PRX	19q13.2	-0.246648172	1.33E-08	1.92E-07
GPRC5A	12p13.1	-0.246561768	1.34E-08	1.95E-07
HTATIP2	11p15.1	-0.246487522	1.36E-08	1.96E-07

FKBP9P1	7p11.2	0.246474116	1.36E-08	1.97E-07
RAB3IL1	11q12.2-q12.3	0.246469893	1.36E-08	1.97E-07
SLC25A38	3p22.1	-0.246334426	1.39E-08	2.00E-07
LGALS1	2p14	-0.246251631	1.40E-08	2.02E-07
PLA2G12A	4q25	-0.24623022	1.41E-08	2.03E-07
HAS2	8q24.13	0.246217802	1.41E-08	2.03E-07
MCCC2	5q13.2	-0.246103696	1.43E-08	2.06E-07
EN1	2q14.2	0.246090983	1.43E-08	2.06E-07
FAM3C	7q31.31	0.246072782	1.44E-08	2.07E-07
PHLDB2	3q13.2	0.246042215	1.44E-08	2.07E-07
MMP12	11q22.2	0.246040739	1.44E-08	2.07E-07
EVPL1	17p11.2	-0.245974129	1.46E-08	2.09E-07
NADK	1p36.33	-0.245770498	1.50E-08	2.15E-07
SLC50A1	1q22	-0.245699204	1.51E-08	2.17E-07
PPEF1	Xp22.13	0.245693037	1.51E-08	2.17E-07
ST8SIA2	15q26.1	0.245623892	1.53E-08	2.19E-07
COL6A4P2	3q22.1	0.245590739	1.54E-08	2.20E-07
CDX1	5q32	0.245495215	1.56E-08	2.23E-07
GSTZ1	14q24.3	-0.245464132	1.56E-08	2.23E-07
GNB4	3q26.33	0.24545128	1.57E-08	2.24E-07
KLB	4p14	-0.245444702	1.57E-08	2.24E-07
TMEM254	10q22.3	-0.245409858	1.57E-08	2.25E-07
TBATA	10q22.1	0.245291424	1.60E-08	2.28E-07
AARD	8q24.11	-0.245265538	1.61E-08	2.29E-07
SRP14	15q15.1	-0.245261978	1.61E-08	2.29E-07
RS1	Xp22.13	-0.245247985	1.61E-08	2.29E-07
PDLIM7	5q35.3	0.24515742	1.63E-08	2.32E-07
PIK3CG	7q22.3	0.245144133	1.63E-08	2.32E-07
SMIM6	17q25.1	-0.245141895	1.63E-08	2.32E-07
SOBP	6q21	0.245072893	1.65E-08	2.34E-07
SIPA1L2	1q42.2	0.245023081	1.66E-08	2.35E-07
HOXD9	2q31.1	0.244925228	1.68E-08	2.38E-07
THEMIS2	1p35.3	0.244915228	1.69E-08	2.39E-07
FBXL15	10q24.32	-0.244882403	1.69E-08	2.39E-07
ADAL	15q15.3	-0.244724531	1.73E-08	2.45E-07
ZNF107	7q11.21	0.244689188	1.74E-08	2.45E-07
CYB5D2	17p13.2	-0.244687103	1.74E-08	2.45E-07
CHST3	10q22.1	0.244660097	1.75E-08	2.46E-07
PCDHGA12	5q31.3	0.244653323	1.75E-08	2.46E-07
KNG1	3q27.3	-0.244467086	1.79E-08	2.52E-07
SPON2	4p16.3	0.244460282	1.80E-08	2.53E-07
NAA38	17p13.1	-0.244442046	1.80E-08	2.53E-07
FCRLA	1q23.3	0.244340846	1.83E-08	2.56E-07
EVC	4p16.2	0.244268282	1.84E-08	2.59E-07
HOXA1	7p15.2	0.24420686	1.86E-08	2.61E-07
LOC401463	8q12.3	0.244194981	1.86E-08	2.61E-07
ENO2	12p13.31	0.244089048	1.89E-08	2.65E-07
SLC5A9	1p33	-0.244065805	1.90E-08	2.65E-07
WNT16	7q31.31	0.243866735	1.95E-08	2.73E-07
GALNT12	9q22.33	-0.243748034	1.98E-08	2.77E-07
HIVEP1	6p24.1	0.243706525	1.99E-08	2.78E-07
KCTD17	22q12.3	0.243648257	2.01E-08	2.80E-07
KIAA1211	4q12	0.243612306	2.02E-08	2.81E-07
VAT1L	16q23.1	0.243604045	2.02E-08	2.81E-07
TM4SF4	3q25.1	-0.243602345	2.02E-08	2.81E-07
CCM2	7p13	0.243483872	2.05E-08	2.86E-07
FZD6	8q22.3	0.243479617	2.05E-08	2.86E-07
DDX28	16q22.1	-0.243457039	2.06E-08	2.86E-07

PDE3A	12p12.2	0.243412752	2.07E-08	2.88E-07
SDHC	1q23.3	-0.243377843	2.08E-08	2.89E-07
SOST	17q21.31	0.243369935	2.09E-08	2.89E-07
TNFAIP8L1	19p13.3	0.24321311	2.13E-08	2.95E-07
MRPS9	2q12.1	-0.243208595	2.13E-08	2.95E-07
FOXP3	Xp11.23	0.243165089	2.14E-08	2.97E-07
PNCK	Xq28	0.243158421	2.15E-08	2.97E-07
TPST1	7q11.21	0.243141208	2.15E-08	2.98E-07
PNPLA2	11p15.5	-0.243114462	2.16E-08	2.98E-07
PCCB	3q22.3	-0.242894674	2.23E-08	3.07E-07
ADGRG5	16q21	0.242891944	2.23E-08	3.07E-07
SFTA1P	10p14	-0.242807798	2.25E-08	3.10E-07
LPIN1	2p25.1	0.24280497	2.25E-08	3.10E-07
PLCG1	20q12	0.242784216	2.26E-08	3.11E-07
IVD	15q15.1	-0.242705541	2.28E-08	3.14E-07
DYNC2LI1	2p21	-0.242675929	2.29E-08	3.15E-07
FCHSD2	11q13.4	0.242583967	2.32E-08	3.19E-07
RTL3	Xq21.1	0.242529085	2.34E-08	3.21E-07
MVK	12q24.11	-0.242438687	2.37E-08	3.25E-07
SNED1	2q37.3	0.242420972	2.37E-08	3.26E-07
ANTXR2	4q21.21	0.242414719	2.38E-08	3.26E-07
EPHB2	1p36.12	0.242359403	2.39E-08	3.28E-07
NDUFB8	10q24.31	-0.242328402	2.40E-08	3.29E-07
PSEN2	1q42.13	-0.24230209	2.41E-08	3.30E-07
NT5C	17q25.1	-0.242221851	2.44E-08	3.33E-07
PEX19	1q23.2	-0.242197537	2.45E-08	3.34E-07
RAB3B	1p32.3	0.242183258	2.45E-08	3.35E-07
BLOC1S2	10q24.31	-0.242173048	2.46E-08	3.35E-07
DHRS12	13q14.3	-0.242053819	2.50E-08	3.40E-07
POU3F2	6q16.1	0.242052237	2.50E-08	3.40E-07
SLC51B	15q22.31	-0.242050423	2.50E-08	3.40E-07
MUCL3	6p21.33	-0.241992862	2.52E-08	3.42E-07
ZNF699	19p13.2	0.241904718	2.55E-08	3.46E-07
ZSWIM7	17p12	-0.241845928	2.57E-08	3.49E-07
DNAJC18	5q31.2	0.241821879	2.58E-08	3.50E-07
TSPAN7	Xp11.4	-0.24179122	2.59E-08	3.51E-07
FCGR2C	1q23.3	0.241693706	2.62E-08	3.55E-07
SOSTDC1	7p21.2	-0.241600216	2.66E-08	3.60E-07
TEX264	3p21.2	-0.241589755	2.66E-08	3.60E-07
HIF1A	14q23.2	0.241577424	2.66E-08	3.60E-07
IDI1	10p15.3	-0.241562228	2.67E-08	3.61E-07
FBXL22	15q22.31	0.241486244	2.70E-08	3.64E-07
G2E3	14q12	0.241469224	2.70E-08	3.65E-07
HS2ST1	1p22.3	0.241442044	2.71E-08	3.66E-07
PAPPA	9q33.1	0.241433881	2.72E-08	3.66E-07
LMOD1	1q32.1	0.241414217	2.72E-08	3.67E-07
ANP32A	15q23	-0.241362326	2.74E-08	3.69E-07
GPX3	5q33.1	-0.241335753	2.75E-08	3.70E-07
CBR1	21q22.12	-0.241280959	2.77E-08	3.73E-07
TUBBP5	9q34.3	-0.241095056	2.84E-08	3.82E-07
AIFM2	10q22.1	-0.241089306	2.85E-08	3.82E-07
KIAA2026	9p24.1	0.241026957	2.87E-08	3.85E-07
SEMA7A	15q24.1	0.241008026	2.88E-08	3.86E-07
LOC154761	7q35	0.240868737	2.93E-08	3.93E-07
PHF6	Xq26.2	0.240755153	2.98E-08	3.99E-07
ASXL1	20q11.21	0.240753763	2.98E-08	3.99E-07
TMEM143	19q13.33	-0.240728499	2.99E-08	4.00E-07
CEP135	4q12	0.240685036	3.01E-08	4.02E-07

KLF5	13q22.1	-0.24059181	3.05E-08	4.07E-07
CD27	12p13.31	0.240544396	3.06E-08	4.09E-07
GANC	15q15.1	-0.240529807	3.07E-08	4.10E-07
BCO1	16q23.2	-0.240495152	3.09E-08	4.11E-07
MT2A	16q13	0.240438888	3.11E-08	4.14E-07
PURG	8p12	0.240387815	3.13E-08	4.17E-07
KIAA1549L	11p13	0.240375568	3.14E-08	4.17E-07
UBR5	8q22.3	0.240359517	3.14E-08	4.18E-07
DNAJA3	16p13.3	-0.240355523	3.14E-08	4.18E-07
TUFM	16p11.2	-0.240348489	3.15E-08	4.18E-07
GUCY1B1	4q32.1	0.2402831	3.18E-08	4.21E-07
ECE1	1p36.12	0.240259219	3.19E-08	4.22E-07
CCL20	2q36.3	0.240242894	3.19E-08	4.23E-07
TSPAN18	11p11.2	0.240232609	3.20E-08	4.23E-07
SCG2	2q36.1	0.240227263	3.20E-08	4.23E-07
PTGR1	9q31.3	-0.240185754	3.22E-08	4.26E-07
ZNF805	19q13.43	0.240178981	3.22E-08	4.26E-07
BNIP1	5q35.1	-0.240072517	3.27E-08	4.32E-07
SLC20A1	2q14.1	0.240049071	3.28E-08	4.33E-07
RMDN3	15q15.1	-0.240026579	3.29E-08	4.34E-07
PACS1	11q13.1-q13.2	0.239967269	3.31E-08	4.37E-07
TG	8q24.22	0.239960021	3.32E-08	4.37E-07
AQP4	18q11.2	-0.239869324	3.36E-08	4.42E-07
TNFRSF18	1p36.33	0.239862976	3.36E-08	4.42E-07
MIR205HG	1q32.2	0.239765617	3.41E-08	4.48E-07
SEMA6C	1q21.3	0.239725164	3.42E-08	4.50E-07
DDT	22q11.23	-0.239675058	3.45E-08	4.53E-07
LOC283731	15q24.1	0.239625412	3.47E-08	4.55E-07
TENT4A	5p15.31	0.239623042	3.47E-08	4.55E-07
PRSS53	16p11.2	0.239583357	3.49E-08	4.57E-07
AMPD3	11p15.4	0.239553745	3.50E-08	4.59E-07
C20ORF197	20q13.33	0.239542645	3.51E-08	4.59E-07
TRMT10A	4q23	-0.239519183	3.52E-08	4.60E-07
PLVAP	19p13.11	0.239481148	3.54E-08	4.63E-07
DNAJC17	15q15.1	-0.239444681	3.56E-08	4.64E-07
SYNPO2	4q26	0.239438212	3.56E-08	4.65E-07
HKDC1	10q22.1	-0.239427048	3.56E-08	4.65E-07
FLNC	7q32.1	0.239387797	3.58E-08	4.67E-07
SEPTIN3	22q13.2	0.23929462	3.63E-08	4.73E-07
TMEM92	17q21.33	-0.239142739	3.70E-08	4.82E-07
MYBL1	8q13.1	0.239072227	3.74E-08	4.86E-07
KIAA0319	6p22.3	-0.239050571	3.75E-08	4.88E-07
PECR	2q35	-0.238972102	3.79E-08	4.92E-07
FDPS	1q22	-0.238956211	3.80E-08	4.93E-07
AREL1	14q24.3	0.238938805	3.81E-08	4.94E-07
CDKN2D	19p13.2	0.238933199	3.81E-08	4.94E-07
MRPL18	6q25.3	-0.23889499	3.83E-08	4.96E-07
BAIAP2	17q25.3	-0.238887869	3.83E-08	4.96E-07
GJA1	6q22.31	0.238795213	3.88E-08	5.02E-07
GUCY2EP	11q13.5	-0.238762636	3.90E-08	5.04E-07
OMA1	1p32.2-p32.1	-0.238759956	3.90E-08	5.04E-07
ANKDD1A	15q22.31	0.238712282	3.92E-08	5.07E-07
DOCK11	Xq24	0.238689791	3.94E-08	5.08E-07
THEM4	1q21.3	-0.238678328	3.94E-08	5.09E-07
CA9	9p13.3	0.238664185	3.95E-08	5.09E-07
HCFC2	12q23.3	0.238481645	4.05E-08	5.22E-07
PRKD1	14q12	0.238357548	4.12E-08	5.30E-07
DIPK1C	18q22.3	0.23829569	4.15E-08	5.34E-07

NDST1	5q33.1	0.238283822	4.16E-08	5.35E-07
PALM2	9q31.3	0.238256294	4.17E-08	5.36E-07
KIF2A	5q12.1	0.23824075	4.18E-08	5.37E-07
FAM184A	6q22.31	-0.238227464	4.19E-08	5.38E-07
FOXP2	7q31.1	0.238202715	4.20E-08	5.39E-07
PITPNC1	17q24.2	0.238162161	4.22E-08	5.42E-07
SFN	1p36.11	-0.238128121	4.24E-08	5.44E-07
MRPL57	13q12.11	-0.238104761	4.26E-08	5.45E-07
PCSK9	1p32.3	-0.23810398	4.26E-08	5.45E-07
MGST1	12p12.3	-0.23806525	4.28E-08	5.47E-07
ULK3	15q24.1	-0.237997777	4.32E-08	5.52E-07
PPT2	6p21.32	0.237987877	4.32E-08	5.52E-07
EGFL6	Xp22.2	0.237848936	4.41E-08	5.62E-07
SMCHD1	18p11.32	0.237842336	4.41E-08	5.62E-07
PNMA1	14q24.3	0.237813679	4.43E-08	5.64E-07
BPIFA1	20q11.21	0.237751174	4.46E-08	5.69E-07
SEPTIN6	Xq24	0.237696535	4.50E-08	5.72E-07
ADIPOR1	1q32.1	-0.237655807	4.52E-08	5.75E-07
GAP43	3q13.31	0.237596834	4.56E-08	5.79E-07
BFAR	16p13.12	-0.237578956	4.57E-08	5.80E-07
MCEE	2p13.3	-0.237578174	4.57E-08	5.80E-07
NLRP6	11p15.5	0.237567938	4.57E-08	5.81E-07
GALNT6	12q13.13	0.237553599	4.58E-08	5.81E-07
LGR5	12q21.1	0.237467407	4.64E-08	5.88E-07
RSPO3	6q22.33	0.237443884	4.65E-08	5.89E-07
RHOD	11q13.2	-0.237367765	4.70E-08	5.95E-07
PLEKHG1	6q25.1	0.237345534	4.71E-08	5.96E-07
KLHL4	Xq21.31	0.237273854	4.76E-08	6.02E-07
FOXI3	2p11.2	0.237100679	4.87E-08	6.15E-07
TLE3	15q23	0.236989497	4.94E-08	6.24E-07
TTC39A	1p32.3	-0.236939131	4.97E-08	6.28E-07
MRPS23	17q22	-0.236911391	4.99E-08	6.30E-07
ARV1	1q42.2	-0.236839788	5.04E-08	6.35E-07
RARRES1	3q25.32	0.236801145	5.07E-08	6.38E-07
AZIN2	1p35.1	0.236772749	5.09E-08	6.40E-07
STRN3	14q12	0.236705449	5.13E-08	6.46E-07
KCNQ5	6q13	0.236685438	5.15E-08	6.47E-07
IL6R	1q21.3	-0.236677232	5.15E-08	6.47E-07
ZNF593	1p36.11	-0.236674014	5.15E-08	6.47E-07
ANXA6	5q33.1	0.23664666	5.17E-08	6.49E-07
FGD1	Xp11.22	0.236568939	5.23E-08	6.55E-07
ADGRB2	1p35.2	0.236529862	5.25E-08	6.58E-07
PKHD1	6p12.3-p12.2	-0.236528557	5.25E-08	6.58E-07
LTA4H	12q23.1	-0.236487485	5.28E-08	6.61E-07
FNBP1	9q34.11	0.236468989	5.30E-08	6.63E-07
GPR137C	14q22.1	0.23644971	5.31E-08	6.64E-07
SCRN2	17q21.32	-0.23640881	5.34E-08	6.67E-07
PCBD2	5q31.1	-0.236346894	5.38E-08	6.72E-07
GLT8D1	3p21.1	0.236322058	5.40E-08	6.74E-07
LRRK2	12q12	-0.236244685	5.46E-08	6.80E-07
CCL26	7q11.23	0.236187511	5.50E-08	6.85E-07
JMY	5q14.1	0.23614239	5.53E-08	6.89E-07
CALCOCO2	17q21.32	-0.236124935	5.54E-08	6.90E-07
ZMIZ2	7p13	0.236114341	5.55E-08	6.91E-07
BTD	3p25.1	-0.23607509	5.58E-08	6.94E-07
TMEM255B	13q34	0.236062856	5.59E-08	6.95E-07
BICD1	12p11.21	0.236053738	5.60E-08	6.95E-07
FAAH	1p33	-0.235951867	5.67E-08	7.04E-07

MYCN	2p24.3	0.235928995	5.69E-08	7.06E-07
ERG28	14q24.3	-0.23586607	5.74E-08	7.11E-07
EMC3	3p25.3	-0.235863899	5.74E-08	7.11E-07
NOP10	15q14	-0.235784269	5.80E-08	7.18E-07
SEC14L2	22q12.2	0.235783574	5.80E-08	7.18E-07
RNF183	9q32	0.235715905	5.85E-08	7.24E-07
SPRYD4	12q13.3	-0.235693349	5.87E-08	7.25E-07
DENND1A	9q33.3	0.235598087	5.94E-08	7.34E-07
TMEM191A	22q11.21	-0.235536225	5.99E-08	7.40E-07
GATB	4q31.3	-0.235501523	6.02E-08	7.43E-07
PGAP3	17q12	-0.235498397	6.02E-08	7.43E-07
MRPL27	17q21.33	-0.235408519	6.10E-08	7.51E-07
PTGER3	1p31.1	0.23534904	6.14E-08	7.56E-07
NHP2	5q35.3	-0.235331581	6.16E-08	7.58E-07
FHL3	1p34.3	0.235295109	6.19E-08	7.61E-07
SFTPC	8p21.3	-0.23524606	6.23E-08	7.65E-07
DCLK2	4q31.23-q31.3	0.235181182	6.28E-08	7.72E-07
GLOD4	17p13.3	-0.235114746	6.34E-08	7.78E-07
RASA3	13q34	0.235099201	6.35E-08	7.79E-07
ME1	6q14.2	-0.235067679	6.38E-08	7.82E-07
FAM71E2	19q13.42	0.235031462	6.41E-08	7.85E-07
MAPK4	18q21.1-q21.2	-0.234971858	6.46E-08	7.91E-07
RET	10q11.21	0.234926403	6.50E-08	7.95E-07
NUDT16P1	3q22.1	-0.23487512	6.54E-08	8.00E-07
SLC1A6	19p13.12	0.234852076	6.56E-08	8.02E-07
SAA2	11p15.1	0.23481075	6.60E-08	8.06E-07
RORC	1q21.3	-0.234776163	6.63E-08	8.09E-07
BEND6	6p12.1	0.234753373	6.65E-08	8.11E-07
TRIM16L	17p11.2	-0.234751761	6.65E-08	8.11E-07
SOS2	14q21.3	0.234722323	6.67E-08	8.13E-07
COQ6	14q24.3	-0.234659539	6.73E-08	8.20E-07
CREG1	1q24.2	-0.234533103	6.84E-08	8.33E-07
RPS17	15q25.2	-0.234499496	6.87E-08	8.36E-07
DCHS2	4q31.3	0.234410526	6.95E-08	8.45E-07
COQ4	9q34.11	-0.234345792	7.01E-08	8.52E-07
POLR2C	16q21	-0.234327991	7.03E-08	8.54E-07
FGF5	4q21.21	0.234300549	7.06E-08	8.56E-07
MIEN1	17q12	-0.234284485	7.07E-08	8.57E-07
PRKAR2B	7q22.3	0.23428379	7.07E-08	8.57E-07
MAP4K4	2q11.2	0.234273196	7.08E-08	8.58E-07
PHF20L1	8q24.22	0.234253657	7.10E-08	8.59E-07
MEOX2	7p21.2	0.234227876	7.12E-08	8.62E-07
EMP2	16p13.13	-0.234190612	7.16E-08	8.65E-07
NHS	Xp22.2-p22.13	0.234180713	7.17E-08	8.66E-07
PTGIR	19q13.32	0.234122097	7.22E-08	8.72E-07
L3MBTL3	6q23.1	0.234113071	7.23E-08	8.73E-07
MRPL38	17q25.1	-0.23410855	7.24E-08	8.73E-07
MTSS1	8q24.13	0.234052626	7.29E-08	8.79E-07
PLOD1	1p36.22	0.233902917	7.43E-08	8.96E-07
NXPE3	3q12.3	0.233818684	7.52E-08	9.05E-07
TENM1	Xq25	0.233814217	7.52E-08	9.05E-07
PSIP1	9p22.3	0.233748519	7.59E-08	9.12E-07
SLC26A1	4p16.3	-0.233732372	7.60E-08	9.14E-07
MMP23B	1p36.33	0.233706402	7.63E-08	9.16E-07
IL7R	5p13.2	0.233665936	7.67E-08	9.21E-07
CYP4B1	1p33	-0.233565811	7.77E-08	9.32E-07
TMEM63B	6p21.1	-0.233564769	7.77E-08	9.32E-07
TPPA	8q12.3	-0.233559666	7.78E-08	9.32E-07

ACMSD	2q21.3	-0.233506527	7.83E-08	9.38E-07
CDC42EP4	17q25.1	-0.233360004	7.98E-08	9.55E-07
COX4I1	16q24.1	-0.233233481	8.12E-08	9.71E-07
RETREG1	5p15.1	-0.233223234	8.13E-08	9.72E-07
BTN2A3P	6p22.2	0.233155385	8.20E-08	9.79E-07
CENPX	17q25.3	-0.233154719	8.20E-08	9.79E-07
BCKDHA	19q13.2	-0.233078561	8.28E-08	9.88E-07
TMEM240	1p36.33	0.233010499	8.36E-08	9.97E-07
PTER	10p13	-0.232995457	8.37E-08	9.98E-07
RCBTB2	13q14.2	0.232988163	8.38E-08	9.98E-07
FBXO22	15q24.2	-0.232972184	8.40E-08	1.00E-06
NHSL2	Xq13.1	0.2329682	8.40E-08	1.00E-06
TBX18	6q14.3	0.232912136	8.47E-08	1.00665E-06
SLCO5A1	8q13.3	0.232898341	8.48E-08	1.00787E-06
FAM131B	7q34	0.232818915	8.57E-08	1.0178E-06
CLDN11	3q26.2	0.23271936	8.68E-08	1.03053E-06
TUSC3	8p22	0.232627089	8.79E-08	1.04242E-06
RUNX1	21q22.12	0.232617016	8.80E-08	1.04318E-06
UQCRQ	5q31.1	-0.23260069	8.82E-08	1.04479E-06
SGPL1	10q22.1	0.23253478	8.89E-08	1.05321E-06
CSRP2	12q21.2	0.232526878	8.90E-08	1.05367E-06
TBX15	1p12	0.232461228	8.98E-08	1.06212E-06
LAMTOR2	1q22	-0.2323829	9.07E-08	1.07241E-06
ITPRIPL1	2q11.2	0.232365798	9.09E-08	1.07418E-06
SDSL	12q24.13	-0.232353944	9.11E-08	1.07521E-06
CNPPD1	2q35	-0.232337136	9.13E-08	1.07694E-06
FYB1	5p13.1	0.232308132	9.16E-08	1.08039E-06
ZPLD1	3q12.3	0.232301063	9.17E-08	1.08076E-06
EDIL3	5q14.3	0.232126987	9.38E-08	1.10493E-06
IL2RB	22q12.3	0.232079226	9.44E-08	1.11118E-06
CASP6	4q25	-0.232036155	9.49E-08	1.11679E-06
STMN3	20q13.33	0.232014011	9.52E-08	1.11936E-06
IGSF21	1p36.13	0.231983764	9.56E-08	1.12312E-06
APOL6	22q12.3	0.231965381	9.58E-08	1.12516E-06
SERPINI1	3q26.1	0.231942418	9.61E-08	1.12787E-06
TMEM121	14q32.33	0.231918363	9.64E-08	1.13075E-06
TCAF2	7q35	0.231719108	9.89E-08	1.1598E-06
HPD	12q24.31	-0.231692826	9.93E-08	1.1631E-06
TWISTNB	7p21.1	0.231430544	1.03E-07	1.20276E-06
PTPN7	1q32.1	0.231345839	1.04E-07	1.21536E-06
GRB10	7p12.1	0.23133702	1.04E-07	1.21605E-06
MIR100HG	11q24.1	0.231298729	1.04E-07	1.22141E-06
LPAR3	1p22.3	0.23128301	1.05E-07	1.22319E-06
LILRP2	19q13.42	0.231245101	1.05E-07	1.22852E-06
ACYP2	2p16.2	-0.231224911	1.05E-07	1.23103E-06
FOXA2	20p11.21	-0.231216927	1.06E-07	1.23159E-06
ATP6V0A1	17q21.2	-0.231163864	1.06E-07	1.23939E-06
ITGB7	12q13.13	0.231153443	1.06E-07	1.24035E-06
TTBK1	6p21.1	0.231143478	1.07E-07	1.24123E-06
TET1	10q21.3	0.23107772	1.08E-07	1.25115E-06
CCDC12	3p21.31	-0.231051669	1.08E-07	1.25466E-06
JPH3	16q24.2	0.231016858	1.08E-07	1.25961E-06
UQCC2	6p21.31	-0.230959534	1.09E-07	1.26828E-06
CHIA	1p13.2	-0.230916236	1.10E-07	1.27469E-06
MEX3A	1q22	0.230825021	1.11E-07	1.28911E-06
HSD17B7	1q23.3	-0.230787681	1.12E-07	1.29462E-06
KIR3DX1	19q13.42	0.230771166	1.12E-07	1.29665E-06
PYM1	12q13.2	-0.230677879	1.13E-07	1.31166E-06

WDR82	3p21.2	0.230645439	1.14E-07	1.31642E-06
S100A2	1q21.3	0.230611659	1.14E-07	1.32122E-06
OPN4	10q23.2	0.230608464	1.14E-07	1.32122E-06
SMPD2	6q21	-0.230486699	1.16E-07	1.34145E-06
CLTCL1	22q11.21	0.230373081	1.18E-07	1.36028E-06
FZD1	7q21.13	0.230370075	1.18E-07	1.36028E-06
ABCG4	11q23.3	0.230349367	1.18E-07	1.36315E-06
PEX14	1p36.22	-0.230267693	1.19E-07	1.37683E-06
IL6	7p15.3	0.229995889	1.24E-07	1.42523E-06
SLC4A8	12q13.13	0.229900632	1.25E-07	1.44204E-06
ZNF12	7p22.1	0.229895504	1.25E-07	1.44217E-06
TBCE	1q42.3	-0.229869279	1.26E-07	1.44624E-06
PLAT	8p11.21	0.229828031	1.26E-07	1.45312E-06
LIF	22q12.2	0.229687266	1.29E-07	1.47844E-06
POLDIP2	17q11.2	-0.229685269	1.29E-07	1.47844E-06
ACP2	11p11.2 11p12-p1	0.229673637	1.29E-07	1.47982E-06
MAP2K5	15q23	-0.229602164	1.30E-07	1.49267E-06
CLU	8p21.1	-0.229587749	1.30E-07	1.49459E-06
ATP5PB	1p13.2	-0.229557529	1.31E-07	1.49957E-06
CD93	20p11.21	0.229514892	1.32E-07	1.50697E-06
TBX5	12q24.21	0.229466185	1.32E-07	1.51559E-06
NDUFAF1	15q15.1	-0.229461834	1.33E-07	1.51559E-06
SNU13	22q13.2	-0.229413986	1.33E-07	1.52409E-06
TMEM220	17p13.1	-0.229404742	1.33E-07	1.52504E-06
CEP78	9q21.2	0.229392624	1.34E-07	1.52656E-06
ARHGAP4	Xq28	0.229300401	1.35E-07	1.54392E-06
GBP5	1p22.2	0.229280168	1.36E-07	1.54706E-06
SDHAF4	6q13	-0.229227207	1.37E-07	1.55676E-06
CYTH4	22q13.1	0.229219294	1.37E-07	1.55747E-06
SFT2D1	6q27	-0.229177004	1.37E-07	1.56508E-06
MEGF9	9q33.2	-0.229116651	1.39E-07	1.57639E-06
DDHD1	14q22.1	0.229067935	1.39E-07	1.5854E-06
IKZF3	17q12-q21.1	0.228978062	1.41E-07	1.60292E-06
MYBPHL	1p13.3	-0.228963614	1.41E-07	1.60424E-06
BVES	6q21	0.228962861	1.41E-07	1.60424E-06
KCTD11	17p13.1	0.228950703	1.42E-07	1.60584E-06
INPP5D	2q37.1	0.228933944	1.42E-07	1.6084E-06
LAD1	1q32.1	-0.22886456	1.43E-07	1.62189E-06
L1CAM	Xq28	0.22882076	1.44E-07	1.63012E-06
DEPDC7	11p13	0.228751154	1.45E-07	1.64383E-06
ELK3	12q23.1	0.228721016	1.46E-07	1.64928E-06
LDHD	16q23.1	-0.228698009	1.46E-07	1.65323E-06
DLX5	7q21.3	0.228659117	1.47E-07	1.66057E-06
TRUB2	9q34.11	-0.228614813	1.48E-07	1.6691E-06
NMNAT3	3q23	-0.22852798	1.49E-07	1.68685E-06
SIX2	2p21	0.228513564	1.50E-07	1.68903E-06
MDFI	6p21.1	0.228495497	1.50E-07	1.692E-06
ADAM23	2q33.3	0.228455288	1.51E-07	1.69979E-06
EPHX2	8p21.2-p21.1	-0.228417082	1.52E-07	1.70719E-06
GOLGA2P6	10p11.23	0.228374454	1.52E-07	1.71558E-06
CSF1	1p13.3	0.228290211	1.54E-07	1.73323E-06
ATP6V1E1	22q11.21	-0.228263292	1.55E-07	1.73825E-06
RC3H2	9q33.2	0.228240453	1.55E-07	1.74237E-06
DHCR24	1p32.3	-0.228231943	1.55E-07	1.7433E-06
XPNPEP2	Xq26.1	0.228151634	1.57E-07	1.76034E-06
MRPS34	16p13.3	-0.228108546	1.58E-07	1.76909E-06
ISL2	15q24.3	0.228070711	1.58E-07	1.77669E-06
WIPI1	17q24.2	0.227979591	1.60E-07	1.79559E-06

HSD17B8	6p21.32	-0.22797933	1.60E-07	1.79559E-06
GRIN2D	19q13.33	0.227963786	1.61E-07	1.79816E-06
DIS3L	15q22.31	-0.22795571	1.61E-07	1.79902E-06
EMSY	11q13.5	0.22794555	1.61E-07	1.80036E-06
LCMT2	15q15.3	-0.227933219	1.61E-07	1.8022E-06
HACD3	15q22.31	-0.227915417	1.62E-07	1.80531E-06
NTAN1	16p13.11	0.227885198	1.62E-07	1.81129E-06
NTPCR	1q42.2	-0.227880508	1.62E-07	1.81138E-06
OSBPL10	3p23	0.227855152	1.63E-07	1.81625E-06
COX7A2	6q14.1	-0.227760932	1.65E-07	1.83725E-06
ACAN	15q26.1	0.227743786	1.65E-07	1.84026E-06
SBF2	11p15.4	0.227678088	1.67E-07	1.85475E-06
PACSIN3	11p11.2	-0.227640227	1.67E-07	1.86271E-06
RASAL2-AS1	1q25.2	0.227612444	1.68E-07	1.8683E-06
FAIM2	12q13.12	0.227543016	1.69E-07	1.8839E-06
PLAC1	Xq26.3	0.227480274	1.71E-07	1.898E-06
GEMIN4	17p13.3	-0.227408021	1.72E-07	1.91453E-06
ZNF623	8q24.3	0.227355397	1.74E-07	1.92637E-06
TMEM129	4p16.3	-0.227309547	1.75E-07	1.9366E-06
GGTLC2	22q11.22	-0.227301123	1.75E-07	1.93762E-06
CCN1	1p22.3	0.227245373	1.76E-07	1.95037E-06
XRCC6	22q13.2	-0.227211593	1.77E-07	1.95771E-06
RNF122	8p12	0.227146773	1.78E-07	1.97206E-06
CHCHD10	22q11.23	-0.227145683	1.78E-07	1.97206E-06
RNPEP	1q32.1	-0.227139344	1.78E-07	1.97257E-06
MOGAT1	2q36.1	-0.227110051	1.79E-07	1.97858E-06
RBAK	7p22.1	0.227106866	1.79E-07	1.97858E-06
RBL1	20q11.23	0.227099832	1.79E-07	1.97927E-06
LRRN1	3p26.2	0.226980951	1.82E-07	2.00837E-06
AGO3	1p34.3	0.226937271	1.83E-07	2.01847E-06
MRPL45	17q12	-0.226922335	1.83E-07	2.02041E-06
SHMT1	17p11.2	-0.226921119	1.83E-07	2.02041E-06
ARHGAP21	10p12.1 10p12.3	0.226911741	1.84E-07	2.02172E-06
SIRT7	17q25.3	-0.226858644	1.85E-07	2.03432E-06
MRPL54	19p13.3	-0.226828636	1.86E-07	2.04099E-06
UQCRC2	16p12.2	-0.226734156	1.88E-07	2.06455E-06
ICE1	5p15.32	0.226686482	1.89E-07	2.07597E-06
VAR52	6p21.33	-0.226681011	1.89E-07	2.07629E-06
GSC	14q32.13	0.226623608	1.91E-07	2.09036E-06
SCD5	4q21.22	0.226482238	1.94E-07	2.1271E-06
CCR8	3p22.1	0.226419959	1.96E-07	2.14284E-06
PRSS8	16p11.2	-0.226391319	1.96E-07	2.14948E-06
HTR2B	2q37.1	0.22636518	1.97E-07	2.15545E-06
ATP5ME	4p16.3	-0.226352328	1.97E-07	2.1578E-06
FXVD3	19q13.12	-0.226307086	1.98E-07	2.16905E-06
STON1-GTF2A1I	2p16.3	0.226179097	2.02E-07	2.20338E-06
DHODH	16q22.2	-0.226126211	2.03E-07	2.21701E-06
AIMP1	4q24	-0.226092161	2.04E-07	2.2254E-06
OXTR	3p25.3	0.226070799	2.04E-07	2.22988E-06
CXCR4	2q22.1	0.226063591	2.05E-07	2.22988E-06
FADS2	11q12.2	0.226063504	2.05E-07	2.22988E-06
TTPAL	20q13.12	0.226036845	2.05E-07	2.23622E-06
SHOX2	3q25.32	0.226028527	2.06E-07	2.23737E-06
TUBB2A	6p25.2	0.225965551	2.07E-07	2.25324E-06
FSCN1	7p22.1	0.225964248	2.07E-07	2.25324E-06
IL18	11q23.1	-0.225959298	2.07E-07	2.25344E-06
UQCRC1	3p21.31	-0.22587932	2.09E-07	2.27517E-06
FAM78B	1q24.1	0.225829712	2.11E-07	2.28828E-06

LRFN5	14q21.1	0.225794607	2.12E-07	2.29724E-06
ZBTB33	Xq24	0.225697741	2.14E-07	2.32434E-06
LFNG	7p22.3	0.225672124	2.15E-07	2.33064E-06
CD300LG	17q21.31	-0.225629704	2.16E-07	2.34192E-06
MTX2	2q31.1	-0.225594143	2.17E-07	2.35122E-06
CYP26B1	2p13.2	0.225589454	2.17E-07	2.35135E-06
EMX2	10q26.11	0.22556301	2.18E-07	2.35797E-06
COMT	22q11.21	-0.225508781	2.19E-07	2.37112E-06
SFMBT2	10p14	0.225505568	2.20E-07	2.37112E-06
MYO5C	15q21.2	-0.225502442	2.20E-07	2.37112E-06
COL14A1	8q24.12	0.225501053	2.20E-07	2.37112E-06
CPT2	1p32.3	-0.22549784	2.20E-07	2.37112E-06
FUT8	14q23.3	0.225453205	2.21E-07	2.38327E-06
PSORS1C1	6p21.33	-0.22542824	2.22E-07	2.38952E-06
KLK2	19q13.33	0.225419578	2.22E-07	2.39086E-06
LYRM9	17q11.2	-0.225399973	2.23E-07	2.39552E-06
JAGN1	3p25.3	-0.225379132	2.23E-07	2.40017E-06
RNLS	10q23.31	-0.225372098	2.23E-07	2.40017E-06
C10ORF12	10q24.1	0.225371924	2.23E-07	2.40017E-06
RPL24	3q12.3	-0.225366627	2.23E-07	2.4005E-06
MFAP1	15q15.3	-0.225343012	2.24E-07	2.40639E-06
CARMN	5q32	0.225299675	2.25E-07	2.41832E-06
POFUT1	20q11.21	0.22526381	2.26E-07	2.42801E-06
FAM168A	11q13.4	0.225231077	2.27E-07	2.43678E-06
SELENOP	5p12	-0.225204847	2.28E-07	2.44356E-06
DUOXA1	15q21.1	-0.225190712	2.28E-07	2.44663E-06
CCDC28B	1p35.2	0.225180532	2.29E-07	2.44848E-06
PDE7A	8q13.1	0.225021358	2.33E-07	2.49686E-06
SCTR	2q14.2	-0.225006948	2.34E-07	2.50007E-06
LINC00294	11p13	0.224926096	2.36E-07	2.52437E-06
ADH1C	4q23	-0.224789825	2.40E-07	2.56677E-06
OSR2	8q22.2	0.224776561	2.41E-07	2.5697E-06
COX15	10q24.2	-0.224746341	2.42E-07	2.57814E-06
DCDC2	6p22.3	-0.224737069	2.42E-07	2.57979E-06
SLAMF1	1q23.3	0.224721939	2.42E-07	2.58335E-06
PRKCH	14q23.1	0.224636404	2.45E-07	2.60996E-06
RNF5P1	8p11.22	-0.224554351	2.48E-07	2.63569E-06
VPS13B	8q22.2	0.224520176	2.49E-07	2.64566E-06
DOCK10	2q36.2	0.224501978	2.49E-07	2.65032E-06
CDKL2	4q21.1	-0.224412274	2.52E-07	2.67901E-06
MMADHC	2q23.2	-0.224392128	2.53E-07	2.68439E-06
SIPA1L1	14q24.2	0.224369463	2.53E-07	2.69064E-06
GGN	19q13.2	0.224356775	2.54E-07	2.69245E-06
EGLN2	19q13.2	-0.224355742	2.54E-07	2.69245E-06
ITGA1	5q11.2	0.224345235	2.54E-07	2.69459E-06
P2RX1	17p13.2	0.224305116	2.55E-07	2.7068E-06
FYN	6q21	0.224253013	2.57E-07	2.72317E-06
CLEC2B	12p13.31	0.224235037	2.58E-07	2.7279E-06
NRXN3	14q24.3-q31.1	0.224210201	2.59E-07	2.73499E-06
ANK2	4q25-q26	0.224123971	2.61E-07	2.76322E-06
GLTPD2	17p13.2	-0.224120163	2.61E-07	2.76322E-06
CHST11	12q23.3	0.224110598	2.62E-07	2.76509E-06
RPUSD2	15q15.1	-0.224070565	2.63E-07	2.77758E-06
PEF1	1p35.2	-0.224042604	2.64E-07	2.7859E-06
PEAK1	15q24.3	0.224037133	2.64E-07	2.78636E-06
SGCB	4q12	0.223941871	2.67E-07	2.81842E-06
PHGDH	1p12	0.223918512	2.68E-07	2.82522E-06
CFAP298	21q22.11	-0.223872748	2.70E-07	2.84002E-06

TFB1M	6q25.3	-0.223833497	2.71E-07	2.85256E-06
C18ORF54	18q21.2	0.223771755	2.73E-07	2.87324E-06
TTC28	22q12.1	0.223748222	2.74E-07	2.87927E-06
ENPP2	8q24.12	0.223746746	2.74E-07	2.87927E-06
MRPS27	5q13.2	-0.223710968	2.75E-07	2.89037E-06
KAT5	11q13.1	-0.223707755	2.75E-07	2.89037E-06
MAP1B	5q13.2	0.223687348	2.76E-07	2.89564E-06
PRKCZ	1p36.33	-0.223684917	2.76E-07	2.89564E-06
SEMA4D	9q22.2	0.223640504	2.78E-07	2.9103E-06
SLC39A8	4q24	-0.223564211	2.80E-07	2.93675E-06
TMEM116	12q24.12-q24.13	-0.223549449	2.81E-07	2.94044E-06
RTL8C	Xq26.3	0.223545889	2.81E-07	2.94044E-06
CFAP221	2q14.2	-0.223515688	2.82E-07	2.95006E-06
GRTP1	13q34	-0.223498128	2.83E-07	2.95503E-06
SRPK3	Xq28	0.223405337	2.86E-07	2.98803E-06
CALML4	15q23	-0.223354584	2.88E-07	3.00553E-06
TENT5C	1p12	0.223342774	2.88E-07	3.00842E-06
MTFMT	15q22.31	-0.223285547	2.90E-07	3.02849E-06
GLI2	2q14.2	0.22325403	2.92E-07	3.03889E-06
EML4	2p21	0.223245862	2.92E-07	3.03909E-06
PARP16	15q22.31	-0.223241955	2.92E-07	3.03909E-06
LDLRAD4	18p11.21	0.223241086	2.92E-07	3.03909E-06
CRYBG3	3q11.2	0.223180213	2.94E-07	3.06075E-06
PRSS16	6p22.1	-0.223170313	2.95E-07	3.06138E-06
RBPJ	4p15.2	0.223170313	2.95E-07	3.06138E-06
SOCS5	2p21	0.223138878	2.96E-07	3.07186E-06
MTSS2	16q22.1	0.223111697	2.97E-07	3.08074E-06
CERK	22q13.31	0.223076007	2.98E-07	3.09293E-06
DMPK	19q13.32	0.223011052	3.01E-07	3.11486E-06
CAMK2B	7p13	0.223010396	3.01E-07	3.11486E-06
DIXDC1	11q23.1	0.223007144	3.01E-07	3.11486E-06
SHTN1	10q25.3	-0.222978227	3.02E-07	3.12454E-06
CYP2U1	4q25	0.22295808	3.03E-07	3.13081E-06
INPP5K	17p13.3	-0.222937152	3.03E-07	3.1374E-06
KLF15	3q21.3	-0.222902591	3.05E-07	3.14936E-06
IL16	15q25.1	0.22284328	3.07E-07	3.17116E-06
ZFP69B	1p34.2	0.222835986	3.07E-07	3.17242E-06
ABCC9	12p12.1	0.222787096	3.09E-07	3.19022E-06
CDH16	16q22.1	-0.222765331	3.10E-07	3.19727E-06
WDR73	15q25.2	-0.222744632	3.11E-07	3.2039E-06
SLAMF7	1q23.3	0.22272023	3.12E-07	3.21204E-06
SMAD7	18q21.1	0.222697131	3.13E-07	3.21967E-06
TBC1D9	4q31.21	0.222619758	3.16E-07	3.24925E-06
ZBTB10	8q21.13	0.222602564	3.16E-07	3.25457E-06
SYNGAP1	6p21.32	0.222574081	3.17E-07	3.26449E-06
ARSE	Xp22.33	-0.222466884	3.22E-07	3.30638E-06
RRNAD1	1q23.1	-0.22246371	3.22E-07	3.30638E-06
CNTNAP4	16q23.1	0.222420983	3.23E-07	3.32235E-06
EOGT	3p14.1	0.222380866	3.25E-07	3.3373E-06
SGTB	5q12.3	0.222357593	3.26E-07	3.3453E-06
SLC25A12	2q31.1	0.222340226	3.27E-07	3.35084E-06
DCP2	5q22.2	0.222274837	3.29E-07	3.37654E-06
GP5	3q29	0.222182795	3.33E-07	3.41374E-06
ITGB5	3q21.2	0.222119483	3.36E-07	3.43902E-06
ALDH1A2	15q21.3	0.2219597	3.43E-07	3.50632E-06
DPH6	15q14	-0.221931999	3.44E-07	3.51664E-06
ELL2	5q15	0.221922794	3.44E-07	3.51888E-06
ZNF883	9q32	0.221837953	3.48E-07	3.55326E-06

LGALS3	14q22.3	-0.221836477	3.48E-07	3.55326E-06
SH2B3	12q24.12	0.22175537	3.51E-07	3.58746E-06
LRRTM2	5q31.2	0.221720072	3.53E-07	3.60141E-06
ACSS2	20q11.22	-0.221600277	3.58E-07	3.65357E-06
SAA1	11p15.1	0.221566246	3.60E-07	3.66719E-06
ZNF70	22q11.23	0.221551956	3.60E-07	3.67184E-06
SEMA4C	2q11.2	0.221532369	3.61E-07	3.67892E-06
STEAP2	7q21.13	0.221468977	3.64E-07	3.70612E-06
HDDC3	15q26.1	-0.221456646	3.65E-07	3.70992E-06
ACBD4	17q21.31	-0.221444576	3.65E-07	3.71272E-06
ARL9	4q12	0.221442428	3.65E-07	3.71272E-06
TRIM71	3p22.3	-0.221435274	3.66E-07	3.71415E-06
NYAP2	2q36.3	0.221394259	3.68E-07	3.73122E-06
CERS2	1q21.3	-0.221371718	3.69E-07	3.73979E-06
LIMS3-LOC4408	2q13	0.221253966	3.74E-07	3.79291E-06
WDSUB1	2q24.2	-0.221184235	3.77E-07	3.82392E-06
ZNF385B	2q31.2-q31.3	-0.221156499	3.79E-07	3.83516E-06
DCLK3	3p22.2	0.221137234	3.79E-07	3.8424E-06
SVEP1	9q31.3	0.22110252	3.81E-07	3.85703E-06
TPM4	19p13.12-p13.11	0.221087063	3.82E-07	3.86058E-06
PRAF2	Xp11.23	0.221086976	3.82E-07	3.86058E-06
FAM241B	10q22.1	-0.221069608	3.83E-07	3.86696E-06
HACD1	10p12.33	-0.22103631	3.84E-07	3.8802E-06
TYSND1	10q22.1	-0.221033917	3.84E-07	3.8802E-06
KLLN	10q23.31	-0.220988646	3.87E-07	3.90007E-06
LRRC8C	1p22.2	0.220929277	3.89E-07	3.92673E-06
CYP3A5	7q22.1	-0.220925543	3.90E-07	3.92673E-06
CHPF2	7q36.1	0.220862238	3.93E-07	3.95565E-06
PHLDA1	12q21.2	0.220840529	3.94E-07	3.96431E-06
ATP5MPL	14q32.33	-0.220835492	3.94E-07	3.96474E-06
MT1L	16q13	0.220831584	3.94E-07	3.96474E-06
KRT27	17q21.2	-0.220760424	3.98E-07	3.99781E-06
OGFOD3	17q25.3	-0.220685609	4.01E-07	4.03297E-06
GNG5	1p22.3	-0.220660339	4.03E-07	4.04358E-06
NMRAL1	16p13.3	-0.220594776	4.06E-07	4.07446E-06
SPATA41	15q26.3	-0.220590265	4.06E-07	4.0747E-06
GRAP	17p11.2	0.220555352	4.08E-07	4.08825E-06
RMDN2	2p22.2	-0.220555352	4.08E-07	4.08825E-06
TSPAN5	4q23	0.220360747	4.18E-07	4.18567E-06
MINDY2	15q21.3-q22.1	0.220334261	4.19E-07	4.19729E-06
PRKAB1	12q24.23	-0.220296313	4.21E-07	4.21491E-06
MGC12916	17p12	0.220284825	4.22E-07	4.21879E-06
ATP5F1C	10p14	-0.220278598	4.22E-07	4.21994E-06
PHF20	20q11.22-q11.23	0.220227103	4.25E-07	4.24474E-06
WNT6	2q35	0.220219834	4.25E-07	4.24645E-06
NCAM1	11q23.2	0.220211433	4.26E-07	4.24874E-06
MAP1A	15q15.3	0.220168926	4.28E-07	4.26897E-06
ZNF841	19q13.41	0.220038842	4.35E-07	4.33588E-06
ATIC	2q35	-0.219984564	4.38E-07	4.35973E-06
RER1	1p36.32	-0.219984564	4.38E-07	4.35973E-06
CCSER2	10q23.1	0.219982306	4.38E-07	4.35973E-06
INPP5F	10q26.11	0.219970062	4.38E-07	4.36416E-06
ZHX3	20q12	0.219930811	4.40E-07	4.38316E-06
KEAP1	19p13.2	-0.219906322	4.42E-07	4.39423E-06
ARHGAP8	22q13.31	-0.219892081	4.43E-07	4.39978E-06
ZP1	11q12.2	0.219741201	4.51E-07	4.48011E-06
TM4SF1	3q25.1	-0.219694958	4.53E-07	4.50347E-06
CALML3	10p15.1	0.219614559	4.58E-07	4.54602E-06

INTS6L	Xq26.3	0.219548635	4.62E-07	4.58079E-06
LRCH1	13q14.13-q14.2	0.219516071	4.64E-07	4.59691E-06
PLEKHG5	1p36.31	0.219511816	4.64E-07	4.59706E-06
QKI	6q26	0.219434617	4.68E-07	4.63858E-06
JAG2	14q32.33	0.219430709	4.68E-07	4.63858E-06
EVL	14q32.2	0.219323116	4.75E-07	4.69803E-06
NEDD1	12q23.1	0.219311741	4.75E-07	4.70229E-06
TRIM59	3q25.33	0.219292984	4.76E-07	4.71083E-06
ZNF81	Xp11.23	0.219253737	4.79E-07	4.73128E-06
MSMO1	4q32.3	-0.219234455	4.80E-07	4.74017E-06
ADHFE1	8q13.1	-0.219224907	4.80E-07	4.74331E-06
G6PC3	17q21.31	-0.219221081	4.81E-07	4.74331E-06
HFE	6p22.2	-0.219179486	4.83E-07	4.76527E-06
DLEU1	13q14.2-q14.3	-0.219143101	4.85E-07	4.78427E-06
POU6F1	12q13.13	0.219114796	4.87E-07	4.79858E-06
MRPS15	1p34.3	-0.219000734	4.94E-07	4.86386E-06
GPR155	2q31.1	0.218847165	5.03E-07	4.95305E-06
STK4	20q13.12	0.218844637	5.03E-07	4.95305E-06
DOCK1	10q26.2	0.218811813	5.05E-07	4.97059E-06
TMEM120A	7q11.23	-0.218784111	5.07E-07	4.98507E-06
PTGDR	14q22.1	0.21870917	5.12E-07	5.02862E-06
PCDHB19P	5q31.3	0.218697242	5.13E-07	5.03352E-06
ADH6	4q23	-0.218678813	5.14E-07	5.04244E-06
AIF1L	9q34.12-q34.13	-0.218627108	5.17E-07	5.07201E-06
OPCML	11q25	0.218602125	5.19E-07	5.08409E-06
CC2D2B	10q24.1	0.218598722	5.19E-07	5.08409E-06
TLN2	15q22.2	0.218595759	5.19E-07	5.08409E-06
CKAP5	11p11.2	0.218581604	5.20E-07	5.09044E-06
NKD2	5p15.33	0.218549735	5.22E-07	5.10786E-06
EXOSC7	3p21.31	-0.21852212	5.24E-07	5.12267E-06
ATP8B5P	9p13.3	-0.218515347	5.24E-07	5.12443E-06
ADGRE2	19p13.12	0.218489903	5.26E-07	5.13718E-06
SPATA20	17q21.33	-0.218487124	5.26E-07	5.13718E-06
ESD	13q14.2	-0.218441968	5.29E-07	5.16315E-06
FECH	18q21.31	-0.218382831	5.33E-07	5.19813E-06
DHX58	17q21.2	-0.218350788	5.35E-07	5.21602E-06
COL22A1	8q24.23-q24.3	0.218308932	5.38E-07	5.24026E-06
ANKRD39	2q11.2	-0.218216536	5.44E-07	5.29724E-06
ANKRD12	18p11.22	0.218198734	5.45E-07	5.30621E-06
TNFRSF9	1p36.23	0.218161751	5.47E-07	5.32768E-06
DUOX1	15q21.1	-0.218151842	5.48E-07	5.33156E-06
HOMER1	5q14.1	0.218127266	5.50E-07	5.34501E-06
EVI2B	17q11.2	0.218066827	5.54E-07	5.38204E-06
HSPA13	21q11.2	0.217997096	5.58E-07	5.42546E-06
MARVELD3	16q22.2	-0.217916857	5.64E-07	5.47624E-06
AFMID	17q25.3	-0.217906176	5.65E-07	5.48074E-06
SLC2A3	12p13.31	0.217876825	5.67E-07	5.49776E-06
GPR37	7q31.33	0.217852857	5.68E-07	5.51121E-06
CDR2	16p12.2	0.217726421	5.77E-07	5.59421E-06
CCDC28A	6q24.1	-0.217698546	5.79E-07	5.61056E-06
PCDH19	Xq22.1	0.217657582	5.82E-07	5.63594E-06
FERMT2	14q22.1	0.217636717	5.84E-07	5.64759E-06
ANKRD34B	5q14.1	0.217625719	5.84E-07	5.65185E-06
ELOVL1	1p34.2	-0.217622649	5.85E-07	5.65185E-06
SNX16	8q21.13	0.217615181	5.85E-07	5.65345E-06
LILRB1	19q13.42	0.21761245	5.85E-07	5.65345E-06
DNAJB12	10q22.1	-0.217582443	5.87E-07	5.66873E-06
KIAA0930	22q13.31	0.217582443	5.87E-07	5.66873E-06

TSPOAP1	17q22	0.217515751	5.92E-07	5.71225E-06
ZNF71	19q13.43	0.21749917	5.93E-07	5.72107E-06
CSNK1G2	19p13.3	0.217480495	5.95E-07	5.73136E-06
TIAM1	21q22.11	0.217461998	5.96E-07	5.74154E-06
SLC26A4-AS1	7q22.3	0.217407511	6.00E-07	5.77701E-06
KRBA1	7q36.1	0.217378725	6.02E-07	5.79453E-06
SLC35B4	7q33	0.217365434	6.03E-07	5.80114E-06
GPX7	1p32.3	0.21734633	6.05E-07	5.81187E-06
TNFRSF11B	8q24.12	0.217200528	6.15E-07	5.91312E-06
SMIM11A	21q22.11-q22.12	-0.21718221	6.17E-07	5.92348E-06
STAP2	19p13.3	-0.217114259	6.22E-07	5.9698E-06
INE2	Xp22.2	-0.217108087	6.22E-07	5.97144E-06
HCG11	6p22.2	0.217017039	6.29E-07	6.03504E-06
KIAA1522	1p35.1	-0.217011915	6.30E-07	6.03593E-06
FRMD4A	10p13	0.217003405	6.30E-07	6.0393E-06
CACNA1A	19p13.13	0.216935782	6.36E-07	6.08625E-06
SAA4	11p15.1	0.216822552	6.44E-07	6.16762E-06
FGF11	17p13.1	0.216813229	6.45E-07	6.17167E-06
YKT6	7p13	0.216754266	6.50E-07	6.21307E-06
TMEM141	9q34.3	-0.216702945	6.54E-07	6.24854E-06
IL13RA1	Xq24	0.216699558	6.54E-07	6.24854E-06
GPR137B	1q42.3	0.216656573	6.57E-07	6.27825E-06
THSD7A	7p21.3	0.216635385	6.59E-07	6.29143E-06
MT1H	16q13	0.21660807	6.61E-07	6.30932E-06
BICDL2	16p13.3	-0.216595005	6.62E-07	6.31634E-06
FOXN3	14q31.3-q32.11	0.216571037	6.64E-07	6.3306E-06
MCRIP2	16p13.3	-0.216568606	6.65E-07	6.3306E-06
ACKR2	3p22.1	0.216544031	6.66E-07	6.3465E-06
MMP19	12q13.2	0.216448509	6.74E-07	6.41741E-06
KCNJ12	17p11.2	0.216428931	6.76E-07	6.42962E-06
ZBTB8B	1p35.1	0.216406178	6.78E-07	6.44434E-06
KCNJ2	17q24.3	0.216396753	6.79E-07	6.44718E-06
SLC39A6	18q12.2	0.216394756	6.79E-07	6.44718E-06
BORCS7	10q24.32	-0.216354636	6.82E-07	6.47555E-06
CLSTN1	1p36.22	0.216343087	6.83E-07	6.48156E-06
RAD51AP2	2p24.2	0.216295505	6.87E-07	6.51597E-06
P4HTM	3p21.31 3p21.3	-0.21628065	6.88E-07	6.52463E-06
PHLPP2	16q22.2	0.216249823	6.91E-07	6.54596E-06
MIB1	18q11.2	0.216207532	6.94E-07	6.57648E-06
LRATD1	2p24.3	0.216128948	7.01E-07	6.63623E-06
CSGALNACT1	8p21.3	0.216081443	7.05E-07	6.67136E-06
OARD1	6p21.1	-0.21606946	7.06E-07	6.67791E-06
DHPS	19p13.13	-0.216056955	7.07E-07	6.68488E-06
NDUFA10	2q37.3	-0.216040716	7.08E-07	6.69489E-06
DPM3	1q22	-0.215943978	7.17E-07	6.77052E-06
CDON	11q24.2	0.215888749	7.22E-07	6.8127E-06
PHF13	1p36.31	0.215881802	7.22E-07	6.81523E-06
SLC51A	3q29	0.215866581	7.23E-07	6.82459E-06
GPRC5C	17q25.1	-0.215814415	7.28E-07	6.86455E-06
C5ORF58	5q35.1	0.215748832	7.34E-07	6.91594E-06
CD1D	1q23.1	0.215666964	7.41E-07	6.98141E-06
CYB561D2	3p21.31	-0.21564291	7.43E-07	6.99845E-06
TRAPPC2L	16q24.3	-0.215630453	7.44E-07	7.00571E-06
CCNE2	8q22.1	0.215622763	7.45E-07	7.00895E-06
VENTX	10q26.3	0.215582644	7.49E-07	7.0397E-06
COPZ1	12q13.13	-0.215527675	7.54E-07	7.08326E-06
BMP2K	4q21.21	0.215517689	7.55E-07	7.0885E-06
DCXR	17q25.3	-0.215498064	7.56E-07	7.102E-06

SCGB3A2	5q32	-0.215450523	7.61E-07	7.13953E-06
MAP3K15	Xp22.12	-0.215437134	7.62E-07	7.14774E-06
C17ORF50	17q12	-0.215425096	7.63E-07	7.1548E-06
SYCE3	22q13.33	-0.215354549	7.70E-07	7.21259E-06
IFRD2	3p21.31	-0.21534106	7.71E-07	7.22096E-06
CYP2C19	10q23.33	-0.215337216	7.71E-07	7.22096E-06
LY75	2q24.2	0.215157571	7.88E-07	7.37335E-06
ALPK3	15q25.3	0.215156268	7.88E-07	7.37335E-06
ABHD4	14q11.2	-0.215100865	7.94E-07	7.41929E-06
MDFIC	7q31.1-q31.2	0.215004822	8.03E-07	7.50213E-06
STK17A	7p13	0.214879428	8.15E-07	7.6127E-06
CAMKMT	2p21	-0.21486302	8.17E-07	7.62421E-06
MCF2	Xq27.1	0.214841498	8.19E-07	7.64043E-06
CCDC32	15q15.1	-0.214796237	8.23E-07	7.67859E-06
ACTR1B	2q11.2	-0.214774527	8.25E-07	7.6951E-06
EPHB1	3q22.2	0.214743439	8.28E-07	7.72036E-06
FAM171B	2q32.1	0.214734495	8.29E-07	7.7249E-06
SACM1L	3p21.31	-0.214730847	8.30E-07	7.7249E-06
FUT11	10q22.2	0.214669935	8.36E-07	7.77809E-06
DDAH1	1p22.3	-0.214624731	8.40E-07	7.81686E-06
RELT	11q13.4	0.214618392	8.41E-07	7.8192E-06
ECHS1	10q26.3	-0.214569502	8.46E-07	7.85735E-06
ARMT1	6q25.1	-0.214568981	8.46E-07	7.85735E-06
KMT2A	11q23.3	0.214566376	8.46E-07	7.85735E-06
MDH1	2p15	-0.214549182	8.48E-07	7.86997E-06
GATA3	10p14	0.214432562	8.60E-07	7.97514E-06
MAGED4	Xp11.22	0.214430999	8.60E-07	7.97514E-06
PTPDC1	9q22.32	0.214416753	8.62E-07	7.98511E-06
DAPK1	9q21.33	-0.214370642	8.66E-07	8.02575E-06
PLD1	3q26.31	0.214347717	8.69E-07	8.04416E-06
KCTD10	12q24.11	0.214335559	8.70E-07	8.05221E-06
MEGF8	19q13.2	0.214295961	8.74E-07	8.08685E-06
BPIFB2	20q11.21	0.2142567	8.78E-07	8.12131E-06
C3ORF70	3q27.2	0.214230485	8.81E-07	8.14315E-06
ZNF343	20p13	0.214149726	8.90E-07	8.21864E-06
UHRF1	19p13.3	0.21412433	8.92E-07	8.23993E-06
PRRG2	19q13.33	-0.21409302	8.96E-07	8.26377E-06
TMEM156	4p14	0.214092586	8.96E-07	8.26377E-06
DPF1	19q13.2	0.2140442	9.01E-07	8.30804E-06
KDM7A-DT	7q34	0.213950692	9.11E-07	8.39781E-06
SPG21	15q22.31	-0.213858296	9.21E-07	8.48738E-06
PLXNA1	3q21.3	0.213798291	9.28E-07	8.54468E-06
NKAIN4	20q13.33	0.213791971	9.29E-07	8.54723E-06
NYNRIN	14q12	0.213776842	9.30E-07	8.55881E-06
CENPF	1q41	0.213754351	9.33E-07	8.57797E-06
THEG	19p13.3	0.213663816	9.43E-07	8.66745E-06
JAZF1	7p15.2-p15.1	0.213625396	9.47E-07	8.70194E-06
RGS7	1q43 1q23.1	0.213622997	9.48E-07	8.70194E-06
INO80C	18q12.2	-0.213542296	9.57E-07	8.78232E-06
VCL	10q22.2	0.213533521	9.58E-07	8.78754E-06
GPR19	12p13.1	0.213475778	9.64E-07	8.84438E-06
CYP4F12	19p13.12	-0.213467721	9.65E-07	8.84887E-06
HLX	1q41	0.213391241	9.74E-07	8.92606E-06
KIRREL1	1q23.1	0.213331796	9.81E-07	8.98115E-06
WWC1	5q34	-0.213329191	9.81E-07	8.98115E-06
YEATS2	3q27.1	0.213328322	9.82E-07	8.98115E-06
SSNA1	9q34.3	-0.21331382	9.83E-07	8.99263E-06
LAMC1	1q25.3	0.213242265	9.92E-07	9.06422E-06

CST5	20p11.21	-0.21323708	9.92E-07	9.06422E-06
TNFAIP3	6q23.3	0.213236018	9.92E-07	9.06422E-06
CNGA3	2q11.2	0.213231441	9.93E-07	9.06506E-06
GRPEL1	4p16.1	-0.213164545	1.00093E-06	9.1336E-06
TMEM42	3p21.31	-0.21306911	1.01239E-06	9.23403E-06
CD63	12q13.2	-0.213055476	1.01404E-06	9.24487E-06
XG	Xp22.33	0.213036856	1.0163E-06	9.26124E-06
CACNG7	19q13.42	0.213010524	1.01949E-06	9.28617E-06
PLXNA3	Xq28	0.212993821	1.02153E-06	9.30047E-06
SP8	7p21.1	0.21298761	1.02228E-06	9.30316E-06
CDKL1	14q21.3	-0.212924785	1.02997E-06	9.36888E-06
BGLAP	1q22	-0.21290212	1.03276E-06	9.38998E-06
GOLGA7B	10q24.2	0.212893783	1.03379E-06	9.39508E-06
BTG3	21q21.1	-0.212866603	1.03714E-06	9.42131E-06
IDO1	8p11.21	0.212839162	1.04054E-06	9.44791E-06
RAPGEFL1	17q21.1	-0.212832476	1.04137E-06	9.45118E-06
KDM2A	11q13.2	0.212817279	1.04325E-06	9.46404E-06
C4ORF50	4p16.1	0.212801308	1.04524E-06	9.4778E-06
HS6ST1	2q14.3	0.212795569	1.04596E-06	9.48001E-06
LIX1	5q15	0.212745799	1.05218E-06	9.5321E-06
ACBD5	10p12.1	-0.212707776	1.05695E-06	9.57106E-06
MGMT	10q26.3	-0.21259341	1.07144E-06	9.69792E-06
KLHL7	7p15.3	0.212586897	1.07227E-06	9.70108E-06
DAZL	3p24.3	0.212539538	1.07834E-06	9.75153E-06
ZBTB47	3p22.1	0.212452124	1.08961E-06	9.84636E-06
C1ORF43	1q21.3	-0.212450648	1.0898E-06	9.84636E-06
DMP1	4q22.1	0.212428264	1.09271E-06	9.86818E-06
IHH	2q35	-0.212407727	1.09538E-06	9.88788E-06
PCDHGA6	5q31.3	0.212368677	1.10048E-06	9.92945E-06
SLC1A3	5p13.2	0.212360075	1.1016E-06	9.93515E-06
SSH3	11q13.2	-0.212349742	1.10296E-06	9.94291E-06
LHX8	1p31.1	0.212343	1.10384E-06	9.94643E-06
ERC1	12p13.33	0.212336976	1.10463E-06	9.9491E-06
GRM5	11q14.2-q14.3	0.212279356	1.11222E-06	1.0013E-05
PCDHB11	5q31.3	0.212259517	1.11485E-06	1.0032E-05
FBXO2	1p36.22	-0.212255869	1.11533E-06	1.0032E-05
	1-Mar 1q41	-0.212148016	1.12972E-06	1.01569E-05
SLAMF6	1q23.2-q23.3	0.212141764	1.13056E-06	1.01599E-05
CCDC24	1p34.1	-0.21208063	1.13879E-06	1.02293E-05
CDPF1	22q13.31	-0.212064391	1.14099E-06	1.02445E-05
TTLL8	22q13.33	0.212035934	1.14485E-06	1.02746E-05
SLC39A14	8p21.3	0.212024185	1.14645E-06	1.02843E-05
NAPSA	19q13.33	-0.211978421	1.1527E-06	1.03358E-05
TTC7B	14q32.11	0.211934307	1.15875E-06	1.03819E-05
AK5	1p31.1	0.211933388	1.15887E-06	1.03819E-05
ANAPC16	10q22.1	-0.2119271	1.15974E-06	1.0385E-05
TTC19	17p12	-0.21191885	1.16087E-06	1.03906E-05
SLC25A53	Xq22.2	0.211893498	1.16437E-06	1.04172E-05
NENF	1q32.3	-0.211845993	1.17095E-06	1.04714E-05
MRPL58	17q25.1	-0.211707659	1.19031E-06	1.06399E-05
ALPG	2q37.1	-0.211688846	1.19297E-06	1.06575E-05
HOXB9	17q21.32	0.211686197	1.19334E-06	1.06575E-05
LMNTD2	11p15.5	-0.211651388	1.19828E-06	1.06968E-05
PTGS1	9q33.2	0.211486829	1.22186E-06	1.09025E-05
FLNA	Xq28	0.211477885	1.22316E-06	1.09092E-05
TOR4A	9q34.3	-0.211464773	1.22506E-06	1.09214E-05
BRMS1L	14q13.2	0.211210336	1.2625E-06	1.12501E-05
SST	3q27.3	0.21113591	1.27365E-06	1.13445E-05

EBP	Xp11.23	-0.211091976	1.28029E-06	1.13986E-05
TSPAN9	12p13.33-p13.32	0.211039699	1.28822E-06	1.14641E-05
MRPL44	2q36.1	-0.211025284	1.29041E-06	1.14786E-05
ALPP	2q37.1	-0.210999816	1.2943E-06	1.15081E-05
TRIP4	15q22.31	-0.210995412	1.29498E-06	1.1509E-05
FMO3	1q24.3	0.210988725	1.296E-06	1.1513E-05
CMTM1	16q21	0.210981865	1.29705E-06	1.15172E-05
CA2	8q21.2	-0.210913002	1.30764E-06	1.16062E-05
DPY19L2	12q14.2	0.210871843	1.31401E-06	1.16576E-05
GDPD5	11q13.4-q13.5	0.210846571	1.31794E-06	1.16872E-05
MME	3q25.2	0.210742104	1.33428E-06	1.1827E-05
CYP8B1	3p22.1	0.210649864	1.34888E-06	1.19511E-05
ERP29	12q24.13	-0.210602121	1.35649E-06	1.20108E-05
NUDT16L1	16p13.3	-0.210600124	1.35681E-06	1.20108E-05
HINT1	5q23.3	-0.210530393	1.36801E-06	1.21046E-05
SLC10A6	4q21.3	0.210483128	1.37565E-06	1.21669E-05
INAVA	1q32.1	-0.210465351	1.37854E-06	1.21871E-05
SLFN12L	17q12	0.210401177	1.389E-06	1.22718E-05
TUSC2	3p21.31	-0.210399093	1.38934E-06	1.22718E-05
GLOD5	Xp11.23	-0.210375736	1.39316E-06	1.23002E-05
PAK3	Xq23	0.210368174	1.39441E-06	1.23057E-05
PEX11G	19p13.2	-0.210181042	1.42546E-06	1.25743E-05
ABCD3	1p21.3	-0.210154209	1.42997E-06	1.26085E-05
DNASE1L3	3p14.3	-0.210134034	1.43337E-06	1.26329E-05
ALG14	1p21.3	-0.210116521	1.43632E-06	1.26535E-05
CHRM4	11p11.2	0.210105088	1.43825E-06	1.26596E-05
BRI3	7q21.3	-0.210103148	1.43858E-06	1.26596E-05
FAM20C	7p22.3	0.210101238	1.43891E-06	1.26596E-05
NXN	17p13.3	0.210089601	1.44088E-06	1.26714E-05
GREM2	1q43	0.210049427	1.4477E-06	1.27258E-05
KCNK12	2p16.3	0.209985056	1.4587E-06	1.28169E-05
NDUFB1	14q32.12	-0.20996247	1.46257E-06	1.28454E-05
COQ8B	19q13.2	-0.209908891	1.47181E-06	1.29209E-05
CRYL1	13q12.11	-0.209876761	1.47738E-06	1.29641E-05
ABCA1	9q31.1	0.209834992	1.48464E-06	1.30222E-05
TBX19	1q24.2	0.209809114	1.48916E-06	1.30561E-05
GPLD1	6p22.3	-0.209784552	1.49347E-06	1.30881E-05
ZMYND15	17p13.2	-0.20977516	1.49511E-06	1.30969E-05
IFI16	1q23.1	0.209761787	1.49746E-06	1.31118E-05
TTL	2q14.1	0.209727052	1.50358E-06	1.31596E-05
ARHGAP27	17q21.31	-0.209682156	1.51153E-06	1.32234E-05
TRPV3	17p13.2	0.209674186	1.51294E-06	1.32271E-05
CUTA	6p21.32	-0.209672344	1.51327E-06	1.32271E-05
PCDHGB6	5q31.3	0.209659144	1.51561E-06	1.3241E-05
TXNRD1	12q23.3	-0.209656018	1.51617E-06	1.3241E-05
PCDHB3	5q31.3	0.209509088	1.54253E-06	1.34654E-05
CCP110	16p12.3	0.209492936	1.54546E-06	1.34851E-05
SPEG	2q35	0.209482515	1.54735E-06	1.34957E-05
MTDH	8q22.1	0.209369886	1.56791E-06	1.36691E-05
SULT1A3	16p11.2	-0.209274277	1.58557E-06	1.38171E-05
SKI	1p36.33-p36.32	0.20924727	1.5906E-06	1.38458E-05
PTP4A3	8q24.3	0.209246923	1.59066E-06	1.38458E-05
UROS	10q26.2	-0.209245533	1.59092E-06	1.38458E-05
B3GNTL1	17q25.3	-0.209195514	1.60027E-06	1.39211E-05
SLC6A3	5p15.33	0.209139268	1.61084E-06	1.4007E-05
RNF19A	8q22.2	0.209108763	1.6166E-06	1.4051E-05
AAK1	2p13.3	0.209052492	1.62728E-06	1.41378E-05
UCN3	10p15.1	-0.209033533	1.6309E-06	1.4158E-05

AKR1B10	7q33	-0.209029788	1.63161E-06	1.4158E-05
SLC37A1	21q22.3	-0.209029219	1.63172E-06	1.4158E-05
KCND1	Xp11.23	0.209020709	1.63334E-06	1.4166E-05
ANO5	11p14.3	-0.208975398	1.64203E-06	1.42351E-05
PDCD1LG2	9p24.1	0.208898354	1.65689E-06	1.43578E-05
DELE1	5q31.3	-0.208885589	1.65936E-06	1.4373E-05
NEK8	17q11.2	-0.208820286	1.67208E-06	1.44728E-05
MTMR9LP	1p35.2	0.208819071	1.67231E-06	1.44728E-05
TACC2	10q26.13	-0.208755292	1.68483E-06	1.45748E-05
TRAF5	1q32.3	0.208676743	1.70036E-06	1.47028E-05
LUZP1	1p36.12	0.20865621	1.70444E-06	1.47318E-05
CKAP4	12q23.3	0.20859442	1.71678E-06	1.48321E-05
ANKRD53	2p13.3	0.208566472	1.72239E-06	1.48742E-05
UPK3B	7q11.2	-0.208550134	1.72568E-06	1.48962E-05
STEAP1	7q21.13	0.208455044	1.74494E-06	1.5056E-05
CNRIP1	2p14	0.208423522	1.75136E-06	1.5105E-05
IMPG2	3q12.3	0.20841022	1.75408E-06	1.51219E-05
GPATCH2L	14q24.3	0.208359609	1.76447E-06	1.52049E-05
SPSB1	1p36.22	0.208287968	1.77927E-06	1.53259E-05
F11	4q35.2	-0.208269328	1.78314E-06	1.53527E-05
GGT1	22q11.23	-0.20820139	1.79731E-06	1.54681E-05
	2-Mar 1q41	-0.208183935	1.80097E-06	1.5493E-05
CLNK	4p16.1	0.208160721	1.80585E-06	1.55283E-05
ABCC13	21q11.2	-0.208087322	1.82136E-06	1.56499E-05
CENPP	9q22.31	0.20808642	1.82155E-06	1.56499E-05
CAPZB	1p36.13	0.208057846	1.82762E-06	1.56954E-05
BAALC	8q22.3	0.208053504	1.82854E-06	1.56966E-05
COX18	4q13.3	-0.208039962	1.83143E-06	1.57147E-05
CHI3L2	1p13.2	-0.208033184	1.83288E-06	1.57204E-05
SUCLG2	3p14.1	-0.208000793	1.8398E-06	1.57731E-05
CERS6	2q24.3	0.207965103	1.84746E-06	1.58275E-05
NOM1	7q36.3	0.207963887	1.84772E-06	1.58275E-05
KIF7	15q26.1	0.207937315	1.85344E-06	1.58698E-05
PCDHB4	5q31.3	0.207911176	1.85909E-06	1.59113E-05
DESI1	22q13.2	-0.207902406	1.86099E-06	1.59208E-05
MRPL23	11p15.5	-0.207848479	1.8727E-06	1.60142E-05
STK38L	12p11.23	0.20780506	1.88218E-06	1.60885E-05
CHST2	3q24	0.207762943	1.89142E-06	1.61606E-05
FAM86EP	4p16.3	-0.207749401	1.8944E-06	1.61792E-05
CD300A	17q25.1	0.207721782	1.9005E-06	1.62243E-05
LRRC14B	5p15.33	0.207697642	1.90584E-06	1.6263E-05
SETBP1	18q12.3	0.207686699	1.90826E-06	1.62768E-05
TRPC4	13q13.3	0.207605905	1.92627E-06	1.64234E-05
RNF216	7p22.1	0.207574938	1.93321E-06	1.64756E-05
CD99	Xp22.33 and Yp11	0.207562173	1.93608E-06	1.64931E-05
COX5B	2q11.2	-0.207557744	1.93707E-06	1.64946E-05
INTS14	15q22.31	-0.207548974	1.93905E-06	1.65038E-05
CCL21	9p13.3	0.207541853	1.94065E-06	1.65038E-05
SNTB2	16q22.1	0.207540116	1.94104E-06	1.65038E-05
GNPTG	16p13.3	-0.207538379	1.94143E-06	1.65038E-05
KLHL13	Xq24	0.207479764	1.9547E-06	1.66096E-05
DCBLD2	3q12.1 3	0.207468648	1.95722E-06	1.6624E-05
EMX2OS	10q26.11	0.207456491	1.95999E-06	1.66404E-05
SURF1	9q34.2	-0.207429137	1.96622E-06	1.66863E-05
MAN1A1	6q22.31	0.207417501	1.96888E-06	1.67019E-05
TRAF4	17q11.2	-0.207395096	1.974E-06	1.67383E-05
FCGR2A	1q23.3	0.207352719	1.98374E-06	1.68137E-05
SLAMF8	1q23.2	0.207332139	1.98848E-06	1.68468E-05

MLPH	2q37.3	-0.207297316	1.99653E-06	1.69079E-05
OSMR	5p13.1	0.207262842	2.00453E-06	1.69685E-05
HIPK1	1p13.2	0.207256155	2.00609E-06	1.69716E-05
CTLA4	2q33.2	0.207250858	2.00732E-06	1.69716E-05
DPF3	14q24.2	0.207250433	2.00742E-06	1.69716E-05
NCS1	9q34.11	0.20722854	2.01252E-06	1.7006E-05
WNT10B	12q13.12	0.207225732	2.01318E-06	1.7006E-05
CCR10	17q21.2	0.207182169	2.02337E-06	1.70849E-05
GADD45A	1p31.3	0.20716098	2.02835E-06	1.71198E-05
FAM92A	8q22.1	0.207157159	2.02925E-06	1.71202E-05
TMEM176A	7q36.1	0.207151428	2.0306E-06	1.71244E-05
MCAT	22q13.2	-0.207142918	2.0326E-06	1.71341E-05
CYTH3	7p22.1	0.207079613	2.04757E-06	1.72531E-05
CLEC5A	7q34	0.207063982	2.05128E-06	1.72771E-05
PTPRVP	1q32.1	0.20698489	2.07016E-06	1.74289E-05
NOB1	16q22.1	-0.206953094	2.0778E-06	1.74859E-05
FOXC2	16q24.1	0.206924258	2.08475E-06	1.7537E-05
HAUS6	9p22.1	0.206911754	2.08777E-06	1.75551E-05
ST7	7q31.2	-0.206864428	2.09925E-06	1.76442E-05
ANKRD29	18q11.2	-0.206836987	2.10592E-06	1.76929E-05
CRYZL1	21q22.11	-0.206790528	2.11728E-06	1.77809E-05
ATP6V0E1	5q35.1	-0.206766213	2.12324E-06	1.78236E-05
SERTAD4	1q32.2	0.206759575	2.12488E-06	1.78298E-05
GIPC1	19p13.12	-0.206699261	2.13975E-06	1.79472E-05
FAM86FP	12p13.31	-0.206669789	2.14706E-06	1.8001E-05
PDK1	2q31.1	0.206647071	2.15271E-06	1.80408E-05
CAVIN2	2q32.3	-0.206633611	2.15606E-06	1.80614E-05
NAXE	1q22	-0.206623538	2.15858E-06	1.80749E-05
ANXA11	10q22.3	-0.206607647	2.16255E-06	1.81006E-05
ASPSCR1	17q25.3	-0.206599658	2.16454E-06	1.81098E-05
RUSC2	9p13.3	0.206572911	2.17125E-06	1.81584E-05
FAM173A	16p13.3	-0.206475653	2.19579E-06	1.8356E-05
FAM91A1	8q24.13	0.206465145	2.19846E-06	1.83707E-05
TMEFF1	9q31.1	0.206418426	2.21036E-06	1.84624E-05
TMEM144	4q32.1	-0.206413476	2.21162E-06	1.84653E-05
CHCHD1	10q22.2	-0.206357552	2.22595E-06	1.85773E-05
FER1L4	20q11.22	0.206342443	2.22984E-06	1.8602E-05
IFITM1	11p15.5	0.206297769	2.24137E-06	1.86905E-05
TMEM41B	11p15.4	-0.206269672	2.24865E-06	1.87434E-05
C9ORF152	9q31.3	-0.206258644	2.25152E-06	1.8756E-05
EXOSC5	19q13.2	-0.206256699	2.25202E-06	1.8756E-05
SERTAD2	2p14	0.206225385	2.26018E-06	1.88161E-05
ATP5MC3	2q31.1	-0.206210448	2.26407E-06	1.88408E-05
TRMO	9q22.33	-0.206191001	2.26916E-06	1.88753E-05
BEST1	11q12.3	0.206185009	2.27073E-06	1.88782E-05
PLCB1	20p12.3	0.206182486	2.27139E-06	1.88782E-05
GRIN1	9q34.3	0.20615396	2.27888E-06	1.89327E-05
SRGAP2	1q32.1	0.206130991	2.28493E-06	1.89751E-05
NPTX1	17q25.3	0.206115552	2.289E-06	1.9001E-05
CAPNS1	19q13.12	-0.206104766	2.29185E-06	1.90169E-05
F7	13q34	0.206093262	2.29489E-06	1.90343E-05
CLPSL2	6p21.31	-0.206072661	2.30035E-06	1.90717E-05
LHPP	10q26.13	-0.205978503	2.32546E-06	1.92719E-05
ESM1	5q11.2	0.205967041	2.32853E-06	1.92894E-05
SLC2A6	9q34.2	0.205929006	2.33876E-06	1.93662E-05
GUCA2A	1p34.2	-0.20589875	2.34693E-06	1.94259E-05
NUBP1	16p13.13	-0.205848246	2.36062E-06	1.95312E-05
ABCB6	2q35	-0.205840604	2.3627E-06	1.95403E-05

RELN	7q22.1	0.205833319	2.36469E-06	1.95487E-05
RCVRN	17p13.1	0.20580204	2.37322E-06	1.96112E-05
CCL25	19p13.2	0.205788796	2.37684E-06	1.96331E-05
GPR162	12p13.31	0.20577782	2.37985E-06	1.96499E-05
DENND5A	11p15.4	0.20571851	2.39616E-06	1.97764E-05
VCPIP1	8q13.1	0.205707655	2.39915E-06	1.9793E-05
NXPH3	17q21.33	0.205696032	2.40236E-06	1.98114E-05
CD28	2q33.2	0.20562136	2.4231E-06	1.99742E-05
ESR2	14q23.2-q23.3	0.205613869	2.42519E-06	1.99832E-05
TBC1D4	13q22.2	0.205587731	2.43249E-06	2.00352E-05
PRRX2	9q34.11	0.205574445	2.43621E-06	2.00576E-05
PRKDC	8q11.21	0.205529984	2.4487E-06	2.01522E-05
PPP2R2B	5q32	0.205512529	2.45362E-06	2.01835E-05
ACADSB	10q26.13	-0.205509403	2.45451E-06	2.01835E-05
GAL	11q13.2	0.205501106	2.45685E-06	2.01945E-05
INHBB	2q14.2	0.205478402	2.46327E-06	2.0239E-05
EMP1	12p13.1	0.205467026	2.4665E-06	2.02513E-05
IGLON5	19q13.41	0.20546602	2.46678E-06	2.02513E-05
ERBB3	12q13.2	-0.205410581	2.48255E-06	2.03725E-05
GTSF1L	20q13.12	0.205375272	2.49265E-06	2.0447E-05
FOXB1	15q22.2	0.205367127	2.49498E-06	2.04569E-05
NRG4	15q24.2	-0.205363993	2.49588E-06	2.04569E-05
KRTAP1-5	17q21.2	0.20534909	2.50016E-06	2.04775E-05
EIF2AK3	2p11.2	0.205348144	2.50043E-06	2.04775E-05
UMOD	16p12.3	0.205339906	2.5028E-06	2.04885E-05
MKI67	10q26.2	0.205285708	2.51843E-06	2.06066E-05
RSF1	11q14.1	0.205281713	2.51959E-06	2.06066E-05
ABI2	2q33.2	0.205279281	2.52029E-06	2.06066E-05
IKZF4	12q13.2	0.205225529	2.5359E-06	2.07258E-05
POP5	12q24.31	-0.205208296	2.54092E-06	2.07569E-05
SCAF11	12q12	0.205205382	2.54177E-06	2.07569E-05
OCIAD1	4p11	-0.205201648	2.54286E-06	2.07574E-05
TNN	1q25.1	0.205176418	2.55024E-06	2.08092E-05
OTC	Xp11.4	-0.205155537	2.55636E-06	2.08507E-05
HERPUD2	7p14.2	0.205129399	2.56404E-06	2.09049E-05
KLK12	19q13.41	0.205005998	2.60061E-06	2.11944E-05
SNAPC1	14q23.2	0.204996883	2.60333E-06	2.1208E-05
RORA	15q22.2	0.204988026	2.60597E-06	2.12085E-05
MYCBP2	13q22.3	0.204987331	2.60618E-06	2.12085E-05
SLC25A21	14q13.3	0.204986118	2.60654E-06	2.12085E-05
SREBF2	22q13.2	-0.204892417	2.6347E-06	2.14289E-05
TMEM145	19q13.2	0.204874943	2.63999E-06	2.14632E-05
TIFA	4q25	0.204864368	2.64319E-06	2.14806E-05
PAEP	9q34.3	0.204779394	2.66906E-06	2.1682E-05
C11ORF1	11q23.1	-0.204730116	2.68417E-06	2.1796E-05
TBX10	11q13.2	0.204726004	2.68543E-06	2.17975E-05
RHOBTB3	5q15	0.204700938	2.69315E-06	2.18514E-05
CDK7	5q13.2	-0.204666116	2.70392E-06	2.19298E-05
DMAC2L	14q21.3	-0.204630569	2.71495E-06	2.20104E-05
ITPKC	19q13.2	-0.204510502	2.75252E-06	2.22954E-05
GPT	8q24.3	-0.204508338	2.7532E-06	2.22954E-05
GANAB	11q12.3	0.204507636	2.75342E-06	2.22954E-05
FCGR3A	1q23.3	0.204445026	2.77322E-06	2.24467E-05
LOC100126784	11p15.1	0.204437389	2.77564E-06	2.24572E-05
CHMP2A	19q13.43	-0.20442488	2.77961E-06	2.24804E-05
MTHFR	1p36.22	-0.204401694	2.787E-06	2.2531E-05
GOLIM4	3q26.2	0.204375121	2.79548E-06	2.25905E-05
ABCD2	12q12	0.204346638	2.8046E-06	2.26551E-05

LSP1	11p15.5	0.204256413	2.83367E-06	2.28808E-05
LRMP	12p12.1	0.204245954	2.83706E-06	2.2899E-05
NKX6-1	4q21.23	0.204228212	2.84282E-06	2.29363E-05
PDLIM5	4q22.3	0.204176435	2.85969E-06	2.30631E-05
CDK10	16q24.3	-0.204164712	2.86352E-06	2.30848E-05
IL10RA	11q23.3	0.204135187	2.8732E-06	2.31527E-05
TMBIM6	12q13.12	-0.204131974	2.87425E-06	2.31527E-05
MYO9B	19p13.11	0.204103404	2.88364E-06	2.32191E-05
TWIST2	2q37.3	0.204091648	2.88752E-06	2.3241E-05
SP140	2q37.1	0.204063198	2.89691E-06	2.33073E-05
PPP2R5E	14q23.2	0.204016305	2.91247E-06	2.34231E-05
CENPS	1p36.22	-0.203958211	2.93184E-06	2.35695E-05
UNC50	2q11.2	-0.203925733	2.94273E-06	2.36475E-05
GKN2	2p13.3	-0.203912991	2.94701E-06	2.36725E-05
EXOC3L2	19q13.32	0.203878754	2.95854E-06	2.37557E-05
SETD7	4q31.1	0.203869722	2.96159E-06	2.37707E-05
PCGF1	2p13.1	-0.203788316	2.98922E-06	2.39828E-05
PIPOX	17q11.2	0.20370638	3.01727E-06	2.41983E-05
DKK3	11p15.3	0.203686407	3.02415E-06	2.42438E-05
WDR83OS	19p13.13	-0.203667915	3.03053E-06	2.4285E-05
RPL26L1	5q35.1	-0.203664489	3.03171E-06	2.4285E-05
ITLN2	1q23.3	-0.203648193	3.03734E-06	2.43205E-05
SLC16A10	6q21	0.203604345	3.05256E-06	2.44326E-05
IFT88	13q12.11	-0.203568828	3.06493E-06	2.45219E-05
S1PR2	19p13.2	0.203520372	3.08189E-06	2.46478E-05
SLC25A52	18q12.1	0.203493058	3.09149E-06	2.47147E-05
FAM219A	9p13.3	0.203464014	3.10173E-06	2.47868E-05
VEGFA	6p21.1	0.203412693	3.1199E-06	2.49221E-05
SLC30A4	15q21.1 15q21.1	0.203379264	3.1318E-06	2.50007E-05
PMPCB	7q22.1	-0.203378044	3.13223E-06	2.50007E-05
ZNF827	4q31.21-q31.22	0.20337266	3.13415E-06	2.50061E-05
ADPRHL2	1p34.3	-0.203354511	3.14063E-06	2.50479E-05
HAP1	17q21.2	0.203340753	3.14555E-06	2.50772E-05
PCDHGB7	5q31.3	0.203321126	3.15258E-06	2.5114E-05
SALL4	20q13.2	0.20331978	3.15306E-06	2.5114E-05
TLR6	4p14	0.203317431	3.15391E-06	2.5114E-05
NAALADL1	11q13.1	0.203291775	3.16312E-06	2.51774E-05
CPM	12q15	-0.203285735	3.1653E-06	2.51848E-05
PARK7	1p36.23	-0.20328174	3.16674E-06	2.51863E-05
SLC25A16	10q21.3	-0.203215396	3.19072E-06	2.5367E-05
ZNF300P1	5q33.1	0.20320143	3.19579E-06	2.53908E-05
RBM38	20q13.31	0.203200204	3.19624E-06	2.53908E-05
COG2	1q42.2	-0.203195684	3.19788E-06	2.53938E-05
LYRM2	6q15	-0.203175277	3.20531E-06	2.54428E-05
LMO7	13q22.2	-0.203154783	3.21278E-06	2.5492E-05
LAMTOR4	7q22.1	-0.203110061	3.22915E-06	2.56119E-05
TRERF1	6p21.1	0.203105546	3.23081E-06	2.56149E-05
MREG	2q35	-0.203073676	3.24253E-06	2.56942E-05
LSS	21q22.3	-0.203071418	3.24337E-06	2.56942E-05
NDUFA6	22q13.2	-0.203060042	3.24756E-06	2.57173E-05
SH3YL1	2p25.3	-0.202975809	3.27878E-06	2.59543E-05
RRN3P2	16p11.2	0.202971055	3.28055E-06	2.5958E-05
CRPPA	7p21.2	0.202967651	3.28182E-06	2.5958E-05
GABARAPL2	16q23.1	-0.202897568	3.30804E-06	2.61551E-05
TNFRSF4	1p36.33	0.202884629	3.3129E-06	2.61832E-05
SCAMP5	15q24.2	0.202868303	3.31905E-06	2.62215E-05
MLST8	16p13.3	-0.202843033	3.32858E-06	2.62865E-05
DOCK2	5q35.1	0.202813335	3.33982E-06	2.63649E-05

SUSD2	22q11.23	-0.202789888	3.34872E-06	2.64248E-05
RXFP3	5p13.2	0.20278149	3.35191E-06	2.64396E-05
TRMT1L	1q25.3	-0.202744298	3.36608E-06	2.65374E-05
MGST3	1q24.1	-0.20274204	3.36694E-06	2.65374E-05
FZD4	11q14.2	0.202728928	3.37195E-06	2.65665E-05
MRM3	17p13.3	-0.202663191	3.39719E-06	2.67548E-05
TMEM176B	7q36.1	0.202644174	3.40452E-06	2.68021E-05
SRPK2	7q22.3	0.202639228	3.40643E-06	2.68067E-05
C12ORF10	12q13.13	-0.202630714	3.40972E-06	2.68221E-05
CAMK2A	5q32	0.202576429	3.43077E-06	2.69771E-05
PRDX3	10q26.11	-0.202542833	3.44385E-06	2.70694E-05
C21ORF91	21q21.1	0.202511224	3.45621E-06	2.71559E-05
MPP3	17q21.31	-0.202469546	3.47257E-06	2.72693E-05
CRABP1	15q25.1	0.202467561	3.47335E-06	2.72693E-05
SPAG4	20q11.22	0.202335985	3.52549E-06	2.76679E-05
CAPRIN2	12p11.21	0.202292565	3.54286E-06	2.77934E-05
RAB1B	11q13.2	-0.202209114	3.57648E-06	2.80461E-05
GOLPH3L	1q21.3	-0.20215128	3.59995E-06	2.82152E-05
VSTM4	10q11.23	0.202149109	3.60083E-06	2.82152E-05
ETV2	19q13.12	-0.202133259	3.6073E-06	2.82479E-05
FCAR	19q13.42	0.202131982	3.60782E-06	2.82479E-05
NR2F1	5q15	0.202072951	3.63198E-06	2.8426E-05
NME4	16p13.3	-0.202065223	3.63515E-06	2.84367E-05
CFD	19p13.3	-0.202062752	3.63617E-06	2.84367E-05
SLC5A3	21q22.11	0.202048637	3.64198E-06	2.84711E-05
RAB39B	Xq28	0.201996534	3.66349E-06	2.86281E-05
FCRLB	1q23.3	0.201911606	3.69881E-06	2.88929E-05
BMP5	6p12.1	0.201900562	3.70343E-06	2.89178E-05
PLEKHF1	19q12	0.201837099	3.73007E-06	2.91145E-05
GPD1L	3p22.3	-0.201827373	3.73417E-06	2.91352E-05
RASGRP3	2p22.3	0.201821815	3.73651E-06	2.91401E-05
ZNHIT3	17q12	-0.201819036	3.73769E-06	2.91401E-05
ACADL	2q34	-0.20181196	3.74067E-06	2.91521E-05
ZNF703	8p11.23	0.201757555	3.76372E-06	2.93203E-05
ERMARD	6q27	-0.201749657	3.76708E-06	2.93351E-05
SNX1	15q22.31	-0.20174149	3.77055E-06	2.93508E-05
CHRD	3q27.1	0.201717783	3.78065E-06	2.94181E-05
ATM	11q22.3	0.201713441	3.78251E-06	2.94211E-05
CLEC18A	16q22.1	0.20165438	3.8078E-06	2.96064E-05
PXK	3p14.3	0.201617754	3.82356E-06	2.97175E-05
SLC16A6	17q24.2	0.201614102	3.82514E-06	2.97183E-05
CAB39L	13q14.2	-0.201610017	3.8269E-06	2.97205E-05
COIL	17q22	-0.201590652	3.83527E-06	2.9774E-05
LGALS4	19q13.2	-0.201575966	3.84163E-06	2.98119E-05
SMTN	22q12.2	0.20156104	3.8481E-06	2.98311E-05
CLSPN	1p34.3	0.201560866	3.84818E-06	2.98311E-05
SLC25A23	19p13.3	-0.201559998	3.84855E-06	2.98311E-05
TREH	11q23.3	-0.201539445	3.85748E-06	2.98888E-05
CFH	1q31.3	0.201497387	3.87582E-06	3.00193E-05
EPB41L1	20q11.23	-0.201484014	3.88167E-06	3.0053E-05
MPI	15q24.1	-0.201464041	3.89041E-06	3.01092E-05
PDK2	17q21.33	-0.201449453	3.89682E-06	3.01472E-05
IL17RC	3p25.3 3p25.3-p24	-0.201353457	3.9392E-06	3.04633E-05
UNC5A	5q35.2	0.201325136	3.95178E-06	3.05489E-05
HSD17B11	4q22.1	-0.201315201	3.95621E-06	3.05714E-05
SLC16A1	1p13.2	0.201245643	3.98732E-06	3.08E-05
IMMP2L	7q31.1	-0.201225757	3.99626E-06	3.08572E-05
PDLIM4	5q31.1	0.2012004	4.00768E-06	3.09335E-05

DERL1	8q24.13	0.201166794	4.02287E-06	3.10388E-05
NCAM2	21q21.1	0.201149387	4.03076E-06	3.10878E-05
DUOXA2	15q21.1	-0.201106335	4.05033E-06	3.12268E-05
LINC00475	9q22.31	0.201043507	4.07906E-06	3.14363E-05
AQP7	9p13.3	-0.201016068	4.09167E-06	3.15214E-05
IMP4	2q21.1	-0.20098756	4.10481E-06	3.16105E-05
HADHB	2p23.3	-0.200972537	4.11175E-06	3.16518E-05
CTIF	18q21.1	0.200952217	4.12115E-06	3.17121E-05
PSMG4	6p25.2	-0.200940064	4.12679E-06	3.17433E-05
INPP4A	2q11.2	0.200867549	4.16056E-06	3.19909E-05
MYH13	17p13.1	0.200839354	4.17376E-06	3.20801E-05
PPFIBP1	12p11.23-p11.22	0.200811191	4.18699E-06	3.21695E-05
LETMD1	12q13.12	-0.200800857	4.19185E-06	3.21946E-05
FBXO44	1p36.22	-0.200776369	4.2034E-06	3.2271E-05
MCCC1	3q27.1	-0.200768814	4.20697E-06	3.22851E-05
CSPG4	15q24.2	0.200765688	4.20845E-06	3.22851E-05
TSACC	1q22	-0.200751498	4.21516E-06	3.23243E-05
RPP21	6p22.1	-0.200710459	4.23463E-06	3.24612E-05
GFAP	17q21.31	0.200668867	4.25445E-06	3.26007E-05
MST1L	1p36.13	-0.200658877	4.25923E-06	3.26249E-05
OGFOD2	12q24.31	-0.200641943	4.26733E-06	3.26746E-05
PEBP1	12q24.23	-0.200597743	4.28856E-06	3.28246E-05
NGF	1p13.2	0.200568218	4.30279E-06	3.2921E-05
NEMF	14q21.3	0.200536695	4.31803E-06	3.30251E-05
APRT	16q24.3	-0.200525493	4.32347E-06	3.30541E-05
STARD13	13q13.1-q13.2	0.200503523	4.33413E-06	3.31231E-05
IDS	Xq28	0.20043796	4.36612E-06	3.33549E-05
VASH1	14q24.3	0.200426411	4.37178E-06	3.33854E-05
KNTC1	12q24.31	0.200382297	4.39346E-06	3.35382E-05
LRRK1	15q26.3	0.200342264	4.41322E-06	3.36724E-05
PTPN12	7q11.23	0.20033992	4.41438E-06	3.36724E-05
GHITM	10q23.1	-0.200285212	4.44152E-06	3.38666E-05
ATP13A3	3q29	0.200279394	4.44442E-06	3.38759E-05
OSBPL5	11p15.4	0.200227772	4.4702E-06	3.40595E-05
CD177	19q13.31	0.200199637	4.48431E-06	3.4154E-05
NRCAM	7q31.1	0.200108843	4.53013E-06	3.449E-05
MAD2L1BP	6p21.1	-0.200096512	4.53639E-06	3.45246E-05
BAZ1B	7q11.23	0.200091823	4.53877E-06	3.45297E-05
GPRASP1	Xq22.1	0.200060782	4.55457E-06	3.46368E-05
RNASE2	14q11.2	0.200048434	4.56087E-06	3.46716E-05
LARP6	15q23	0.200028865	4.57087E-06	3.47345E-05
SF3B5	6q24.2	-0.199982233	4.59478E-06	3.4903E-05
GPR160	3q26.2	-0.199942027	4.6155E-06	3.50471E-05
FOXN1	17q11.2	-0.199934092	4.6196E-06	3.5065E-05
HNMT	2q22.1	-0.199910852	4.63162E-06	3.5143E-05
LMNB2	19p13.3	0.199887492	4.64373E-06	3.52123E-05
PIK3R3	1p34.1	0.199886498	4.64425E-06	3.52123E-05
MFAP3	5q33.2	0.199864828	4.65552E-06	3.52845E-05
ANGPTL4	19p13.2	0.199844334	4.6662E-06	3.53521E-05
TMEM177	2q14.2	-0.199744127	4.71876E-06	3.57369E-05
NDUFS3	11p11.2	-0.199723976	4.7294E-06	3.5804E-05
OTUD4	4q31.21	0.199717984	4.73256E-06	3.58145E-05
SLIT2	4p15.31	0.199693669	4.74544E-06	3.58984E-05
PPARG	3p25.2	-0.199674739	4.75548E-06	3.59609E-05
ACOT1	14q24.3	-0.199558814	4.81745E-06	3.64158E-05
FANCM	14q21.2	0.19952829	4.83389E-06	3.65264E-05
C11ORF74	11p12	-0.199521643	4.83748E-06	3.65398E-05
FAHD2B	2q11.2	-0.199471363	4.8647E-06	3.67316E-05

BBS9	7p14.3	0.199462245	4.86966E-06	3.67552E-05
IBSP	4q22.1	0.199444132	4.87951E-06	3.68158E-05
ENG	9q34.11	0.199422821	4.89113E-06	3.68896E-05
CCNDBP1	15q15.2	-0.199412487	4.89677E-06	3.69183E-05
DOK6	18q22.2	0.199343364	4.93467E-06	3.71901E-05
MCC	5q22.2	0.199304547	4.95608E-06	3.73375E-05
CRACR2A	12p13.32	0.199278152	4.97068E-06	3.74304E-05
MAGI2	7q21.11	0.199275543	4.97213E-06	3.74304E-05
HEPHL1	11q21	0.199269358	4.97556E-06	3.74422E-05
IFT43	14q24.3	-0.199255917	4.98302E-06	3.74844E-05
FLRT3	20p12.1	-0.199199125	5.01466E-06	3.77083E-05
DRD4	11p15.5	0.199133302	5.05158E-06	3.79717E-05
COX20	1q44	-0.199069563	5.08757E-06	3.8228E-05
TENM2	5q34	0.199001335	5.12637E-06	3.85051E-05
SAMSN1	21q11.2	0.198990887	5.13233E-06	3.85356E-05
CD19	16p11.2	0.198924846	5.1702E-06	3.87975E-05
EDEM2	20q11.22	-0.198923327	5.17107E-06	3.87975E-05
F2R	5q13.3	0.19891473	5.17602E-06	3.88202E-05
ITIH2	10p14	-0.198869476	5.20215E-06	3.90016E-05
ANAPC15	11q13.4	-0.198860109	5.20758E-06	3.90278E-05
TRAP1	16p13.3	-0.198841091	5.21861E-06	3.90866E-05
ALS2CL	3p21.31	-0.198839875	5.21931E-06	3.90866E-05
DENND2D	1p13.3-p13.2	-0.198799322	5.24291E-06	3.92487E-05
KCTD16	5q31.3	0.198794176	5.24591E-06	3.92566E-05
ZNF398	7q36.1	0.198790812	5.24787E-06	3.92567E-05
HSPA7	1q23.3	0.198726899	5.2853E-06	3.9522E-05
TSPYL5	8q22.1	0.198699805	5.30125E-06	3.96265E-05
ENOX2	Xq26.1	0.198693726	5.30483E-06	3.96385E-05
NDUFA13	19p13.11	-0.198581618	5.37133E-06	4.01206E-05
TMEM128	4p16.3	-0.198568766	5.37901E-06	4.0163E-05
MRPS11	15q25.3	-0.198556175	5.38654E-06	4.02043E-05
TECR	19p13.12	-0.198472636	5.43674E-06	4.0564E-05
DDRGK1	20p13	-0.198430867	5.46202E-06	4.07374E-05
CSRNP2	12q13.12	0.198427354	5.46415E-06	4.07382E-05
CD3G	11q23.3	0.198373727	5.49677E-06	4.09663E-05
COX6A1	12q24.31 12q24.2	-0.198333434	5.5214E-06	4.11313E-05
HYAL1	3p21.31	-0.198330308	5.52332E-06	4.11313E-05
CNOT6L	4q21.1	0.19832749	5.52504E-06	4.11313E-05
SPATC1	8q24.3	0.198295544	5.54466E-06	4.12479E-05
ACOT4	14q24.3	-0.198295312	5.5448E-06	4.12479E-05
RIT1	1q22	-0.198254068	5.57023E-06	4.14218E-05
SCAMP3	1q22	-0.198184854	5.61315E-06	4.17255E-05
RPL13P5	12p13.31	-0.19815321	5.63287E-06	4.18567E-05
C4ORF33	4q28.2	-0.198125283	5.65034E-06	4.1971E-05
LOC100192426	18p11.23	-0.19811851	5.65458E-06	4.1987E-05
DDTL	22q11.23	-0.198104181	5.66357E-06	4.20382E-05
JPH2	20q13.12	0.198068365	5.68609E-06	4.21899E-05
IL1RAPL2	Xq22.3	0.197967065	5.75026E-06	4.26503E-05
USP13	3q26.33	-0.197947525	5.76272E-06	4.27235E-05
VSTM2L	20q11.23	0.19794492	5.76438E-06	4.27235E-05
RTN4IP1	6q21	-0.197937452	5.76915E-06	4.27431E-05
DNAJC12	10q21.3	0.197905582	5.78955E-06	4.28784E-05
MRPS7	17q25.1	-0.197896725	5.79523E-06	4.29047E-05
AGO2	8q24.3	0.197892556	5.7979E-06	4.29087E-05
NCOA6	20q11.22	0.197876578	5.80817E-06	4.29689E-05
NQO2	6p25.2	-0.197843406	5.82953E-06	4.31111E-05
ZCRB1	12q12	-0.197816573	5.84687E-06	4.32235E-05
FCGRT	19q13.33	-0.19779469	5.86105E-06	4.33124E-05

NDUFA4L2	12q13.3	0.197750754	5.88961E-06	4.35075E-05
ANKRD28	3p25.1	0.197745279	5.89318E-06	4.35179E-05
NDUFB10	16p13.3	-0.19763291	5.96687E-06	4.40459E-05
PCDHGB1	5q31.3	0.197608703	5.98286E-06	4.41477E-05
EDARADD	1q42.3-q43	0.197544248	6.02564E-06	4.44471E-05
WDHD1	14q22.2-q22.3	0.197447423	6.09045E-06	4.49087E-05
CEACAM8	19q13.2	-0.197399283	6.12292E-06	4.51316E-05
EVI2A	17q11.2	0.197351949	6.15501E-06	4.53515E-05
NUDT5	10p14	-0.197327413	6.1717E-06	4.54579E-05
MORC4	Xq22.3	0.197254121	6.22183E-06	4.58103E-05
SAV1	14q22.1	0.197232633	6.2366E-06	4.59023E-05
MRS2	6p22.3	-0.197129943	6.30765E-06	4.64083E-05
RBMS3	3p24.1	0.197116569	6.31696E-06	4.64464E-05
CYTL1	4p16.2	0.197115879	6.31744E-06	4.64464E-05
IKZF1	7p12.2	0.197075755	6.34546E-06	4.66353E-05
LRRC23	12p13.31	-0.197049443	6.36389E-06	4.67537E-05
SARS2	19q13.2	-0.197034073	6.37468E-06	4.68158E-05
PLCD1	3p22.2	-0.197030773	6.377E-06	4.68158E-05
PANX2	22q13.33	-0.196978844	6.4136E-06	4.70674E-05
CLEC3B	3p21.31	-0.196972418	6.41815E-06	4.70836E-05
R3HDM1	2q21.3	0.196950014	6.43401E-06	4.71827E-05
TRAPPC6B	14q21.1	0.196910502	6.46208E-06	4.73713E-05
SETX	9q34.13	0.196901124	6.46876E-06	4.7403E-05
JAK2	9p24.1	0.196894784	6.47328E-06	4.74189E-05
PICALM	11q14.2	0.196887143	6.47873E-06	4.74415E-05
FOXC1	6p25.3	0.196882505	6.48204E-06	4.74485E-05
TNFRSF8	1p36.22	0.196801446	6.54016E-06	4.78566E-05
PCDHB14	5q31.3	0.196789371	6.54886E-06	4.79028E-05
COLGALT1	19p13.11	0.196783197	6.55331E-06	4.7918E-05
GPM6A	4q34.2	-0.196716205	6.60182E-06	4.82551E-05
DCAF5	14q24.1	0.196702525	6.61176E-06	4.82969E-05
MAP3K2	2q14.3	0.196701743	6.61233E-06	4.82969E-05
HSP90B1	12q23.3	0.196485429	6.77153E-06	4.94418E-05
BAZ1A	14q13.1-q13.2	0.196458075	6.79193E-06	4.95727E-05
SEMA3C	7q21.11	0.196408056	6.82936E-06	4.98279E-05
DICER1	14q32.13	0.196403019	6.83314E-06	4.98374E-05
OSBP2	22q12.2	-0.196383876	6.84753E-06	4.99159E-05
CHL1	3p26.3	0.196382091	6.84887E-06	4.99159E-05
LINC01119	2p21	0.196348628	6.8741E-06	5.00725E-05
RFESD	5q15	-0.196346713	6.87554E-06	5.00725E-05
P2RY6	11q13.4	0.196343709	6.87781E-06	5.00725E-05
BFSP2	3q22.1	0.196310926	6.90262E-06	5.02349E-05
ELOA	1p36.11	-0.196287698	6.92025E-06	5.0345E-05
GDI1	Xq28	0.196250097	6.94888E-06	5.05288E-05
RPUSD3	3p25.3	-0.196247926	6.95054E-06	5.05288E-05
SMIM20	4p15.2	-0.196244366	6.95326E-06	5.05304E-05
ZFP90	16q22.1	0.196229951	6.96427E-06	5.05921E-05
ZC3H12B	Xq11.2-q12	0.196207121	6.98175E-06	5.07008E-05
ITCH	20q11.22	0.19616873	7.01123E-06	5.08965E-05
PCDHGC5	5q31.3	0.196114196	7.05331E-06	5.11835E-05
ZNF286B	17p11.2	0.196089715	7.07228E-06	5.13027E-05
PPOX	1q23.3	-0.196045033	7.10703E-06	5.15362E-05
ACTN3	11q13.2	0.196026399	7.12157E-06	5.1623E-05
KIF14	1q32.1	0.196012208	7.13266E-06	5.16848E-05
SLC6A4	17q11.2	-0.195991703	7.14871E-06	5.17825E-05
TSPY26P	20q11.21	0.195972215	7.16401E-06	5.18746E-05
STX10	19p13.13	-0.19591742	7.20717E-06	5.21684E-05
ZFAND6	15q25.1	-0.195897794	7.22269E-06	5.22619E-05

MEX3C	18q21.2	0.195893365	7.22619E-06	5.22685E-05
TBXA2R	19p13.3	0.195885463	7.23245E-06	5.22938E-05
TCEAL7	Xq22.2	0.195880861	7.2361E-06	5.22938E-05
QARS	3p21.31	-0.195879124	7.23748E-06	5.22938E-05
COLQ	3p25.1	0.195813131	7.29E-06	5.26544E-05
TMEM123	11q22.2	0.1957084	7.3741E-06	5.32427E-05
KCNE4	2q36.1	0.195645268	7.42524E-06	5.35927E-05
MAP4	3p21.31	0.19563259	7.43555E-06	5.3644E-05
OXCT1	5p13.1	0.195629985	7.43767E-06	5.3644E-05
MMAA	4q31.21	-0.195602027	7.46047E-06	5.37891E-05
ATP6V0C	16p13.3	-0.19559742	7.46423E-06	5.3797E-05
HPS6	10q24.32	-0.195567248	7.48891E-06	5.39555E-05
HES7	17p13.1	0.195553854	7.49989E-06	5.40153E-05
ANKRD36BP1	1q24.2	0.195485746	7.55598E-06	5.43998E-05
RPL34	4q25	-0.195444846	7.58985E-06	5.46241E-05
CLIP2	7q11.23	0.195413844	7.61562E-06	5.479E-05
MMP1	11q22.2	0.195349324	7.66952E-06	5.51581E-05
MAN1A2	1p12	0.195294663	7.71547E-06	5.54687E-05
SDCBP2	20p13	-0.195243641	7.75859E-06	5.57588E-05
SUN2	22q13.1	0.195212119	7.78535E-06	5.59312E-05
GSAP	7q11.23	-0.195199354	7.79621E-06	5.59892E-05
TIGIT	3q13.31	0.195176689	7.81553E-06	5.60986E-05
CD276	15q24.1	0.195174952	7.81701E-06	5.60986E-05
TAGAP	6q25.3	0.195138484	7.8482E-06	5.62908E-05
TAF2	8q24.12	0.195137091	7.84939E-06	5.62908E-05
MSI1	12q24.31	0.195132486	7.85334E-06	5.62991E-05
PPDPF	20q13.33	-0.195019599	7.9507E-06	5.69767E-05
SMIM7	19p13.11	-0.194997715	7.9697E-06	5.70926E-05
CKM	19q13.32	0.194939732	8.02027E-06	5.74344E-05
EPHX1	1q42.12	-0.194930416	8.02842E-06	5.74723E-05
HMGA2	12q14.3	0.194912843	8.04382E-06	5.75621E-05
FCRL4	1q23.1	0.194875916	8.07627E-06	5.77738E-05
KLK1	19q13.33	0.194855501	8.09427E-06	5.78751E-05
TMED6	16q22.1	-0.194853329	8.09619E-06	5.78751E-05
FIS1	7q22.1	-0.194840712	8.10733E-06	5.79193E-05
ZNF775	7q36.1	0.194839804	8.10813E-06	5.79193E-05
SLC16A4	1p13.3	-0.194793906	8.14879E-06	5.81892E-05
ESRP2	16q22.1	-0.194779143	8.16191E-06	5.82622E-05
MMP28	17q12	-0.194758042	8.1807E-06	5.83607E-05
TMCC2	1q32.1	0.194757134	8.18151E-06	5.83607E-05
POLE4	2p12	-0.194752658	8.1855E-06	5.83685E-05
PIP5K1C	19p13.3	0.194745103	8.19225E-06	5.83959E-05
GCNA	Xq13.1	0.194717228	8.21716E-06	5.85527E-05
BCL2L13	22q11.21	-0.194614193	8.30989E-06	5.91632E-05
TRAPPC6A	19q13.32	-0.19461389	8.31016E-06	5.91632E-05
VPS25	17q21.2	-0.19461224	8.31166E-06	5.91632E-05
NOXA1	9q34.3	-0.194584413	8.33688E-06	5.9319E-05
WHAMMP3	15q11.2	0.19458159	8.33944E-06	5.9319E-05
FPGT	1p31.1	-0.194561006	8.35815E-06	5.94311E-05
ZNF449	Xq26.3	0.194540338	8.37697E-06	5.95439E-05
EGF	4q25	-0.194510166	8.40452E-06	5.97187E-05
LAT2	7q11.23	0.194456973	8.45331E-06	6.00441E-05
IGFBP6	12q13.13	0.19441503	8.49197E-06	6.02974E-05
BPNT1	1q41	-0.194396186	8.50939E-06	6.03999E-05
KIF19	17q25.1	0.194387913	8.51705E-06	6.04329E-05
ARID5A	2q11.2	0.194358325	8.5445E-06	6.06063E-05
CSF1R	5q32	0.194349033	8.55313E-06	6.06462E-05
GALNT14	2p23.1	0.194339481	8.56202E-06	6.06879E-05

PCDHGB5	5q31.3	0.194310303	8.58923E-06	6.08592E-05
LINC01101	2q14.2	0.194304851	8.59432E-06	6.08664E-05
ZNF823	19p13.2	-0.194302748	8.59628E-06	6.08664E-05
CD14	5q31.3	0.194280778	8.61684E-06	6.09905E-05
SLA	8q24.22	0.194272181	8.62489E-06	6.1026E-05
CXADR	21q21.1	-0.19425985	8.63646E-06	6.10864E-05
AP2A2	11p15.5	-0.194246911	8.64861E-06	6.11509E-05
MPV17	2p23.3	-0.194217647	8.67616E-06	6.13241E-05
RPL37A	2q35	-0.19416346	8.72739E-06	6.16482E-05
PSME4	2p16.2	0.194162678	8.72813E-06	6.16482E-05
NR1H2	19q13.33	-0.19415165	8.73859E-06	6.17004E-05
CHTF8	16q22.1	-0.194136453	8.75303E-06	6.17807E-05
ATP9B	18q23	-0.194115525	8.77295E-06	6.18996E-05
TRAPPC1	17p13.1	-0.194104062	8.78388E-06	6.19549E-05
LOC154449	6q27	0.194098541	8.78914E-06	6.19704E-05
MYL12B	18p11.31	-0.194091037	8.79631E-06	6.19992E-05
LIX1L	1q21.1	0.194082787	8.80419E-06	6.2033E-05
GTF2A1L	2p16.3	0.194016226	8.86804E-06	6.24404E-05
CUBN	10p13	0.194016056	8.86821E-06	6.24404E-05
MUC16	19p13.2	0.194010704	8.87336E-06	6.24548E-05
TMEM204	16p13.3	0.19397945	8.90351E-06	6.26451E-05
GPR3	1p36.11	0.193969598	8.91304E-06	6.26882E-05
EIF4EBP3	5q31.3	-0.193966684	8.91586E-06	6.26882E-05
NDUFAF3	3p21.31	-0.193909545	8.97131E-06	6.3056E-05
TECPR2	14q32.31	0.193893653	8.98679E-06	6.31428E-05
CEP120	5q23.2	0.193848932	9.03049E-06	6.34277E-05
DZIP1L	3q22.3	0.193790016	9.08836E-06	6.38119E-05
VPS28	8q24.3	-0.193762701	9.11532E-06	6.39789E-05
FANCB	Xp22.2	0.193653424	9.22391E-06	6.47185E-05
KIF9	3p21.31	-0.193593974	9.28351E-06	6.51139E-05
IGF2BP2	3q27.2	0.193586419	9.29111E-06	6.51446E-05
DENND5B	12p11.21	0.193582338	9.29522E-06	6.51507E-05
NIF3L1	2q33.1	-0.19356471	9.31298E-06	6.52524E-05
TTBK2	15q15.2	0.193550043	9.32778E-06	6.53334E-05
SBNO2	19p13.3	0.193519641	9.35854E-06	6.55261E-05
CYP3A7	7q22.1	-0.193417785	9.46229E-06	6.62295E-05
DMRTA1	9p21.3	-0.19339156	9.48918E-06	6.63946E-05
OVCA2	17p13.3	-0.193357514	9.5242E-06	6.66165E-05
FUT8-AS1	14q23.3	0.193324476	9.5583E-06	6.68317E-05
FMO5	1q21.1	-0.193312358	9.57084E-06	6.68962E-05
KCNQ1OT1	11p15.5	0.193281625	9.6027E-06	6.70956E-05
GLRA3	4q34.1	0.193244277	9.64156E-06	6.73437E-05
HOXB8	17q21.32	0.193180372	9.70839E-06	6.7787E-05
TOX2	20q13.12	0.193157616	9.7323E-06	6.79304E-05
ABCC6	16p13.11	-0.193153531	9.7366E-06	6.79368E-05
CALCB	11p15.2	0.193098472	9.7947E-06	6.83185E-05
MAIP1	2q33.1	-0.19308241	9.81171E-06	6.84007E-05
EMC4	15q14	-0.193080934	9.81327E-06	6.84007E-05
CCDC88C	14q32.11-q32.12	0.193032478	9.86477E-06	6.87358E-05
ITGB1	10p11.22	0.193018931	9.87921E-06	6.88126E-05
DALRD3	3p21.31	-0.192916549	9.98902E-06	6.95534E-05
ESR1	6q25.1-q25.2	0.192897184	1.00099E-05	6.96749E-05
PLK2	5q11.2	0.192816859	1.00971E-05	7.02571E-05
HCN2	19p13.3	0.192800096	1.01153E-05	7.03599E-05
TTC38	22q13.31	-0.192708745	1.02155E-05	7.1032E-05
LRP8	1p32.3	-0.192668799	1.02596E-05	7.13139E-05
CHRNE	17p13.2	0.192624425	1.03088E-05	7.16311E-05
CARS	11p15.4	0.192608532	1.03264E-05	7.17291E-05

C15ORF32	15q26.1	0.192562108	1.03782E-05	7.2064E-05
WRB	21q22.2	-0.192535155	1.04084E-05	7.22486E-05
LMNB1	5q23.2	0.192514314	1.04318E-05	7.2386E-05
SMDT1	22q13.2	-0.192492522	1.04563E-05	7.25062E-05
ZCCHC14	16q24.2	0.192492518	1.04563E-05	7.25062E-05
TMEM109	11q12.2	0.192422613	1.05353E-05	7.30289E-05
POLR3K	16p13.3	-0.192385446	1.05776E-05	7.32964E-05
PGAP1	2q33.1	0.192368426	1.05969E-05	7.34056E-05
RETREG2	2q35	-0.192351319	1.06165E-05	7.35156E-05
PIEZO2	18p11.22-p11.21	0.192339074	1.06305E-05	7.35872E-05
SH2D6	2p11.2	-0.19233234	1.06382E-05	7.36152E-05
POF1B	Xq21.1	-0.192299307	1.06761E-05	7.3852E-05
RHBDF2	17q25.1	0.192286537	1.06907E-05	7.39281E-05
SNHG29	17p11.2	-0.192213854	1.07747E-05	7.44828E-05
CRIP2	14q32.33	0.192164703	1.08318E-05	7.48518E-05
COQ3	6q16.2	-0.192095667	1.09124E-05	7.53835E-05
CEP250	20q11.22	0.192026717	1.09936E-05	7.5914E-05
CYP2B7P	19q13.2	-0.192024025	1.09968E-05	7.5914E-05
MRPL2	6p21.1	-0.192006136	1.10179E-05	7.60339E-05
LIMK2	22q12.2	0.191988074	1.10393E-05	7.61555E-05
NIPBL	5p13.2	0.191917388	1.11235E-05	7.67096E-05
MGAT4B	5q35.3	-0.191911569	1.11304E-05	7.67312E-05
PPCDC	15q24.2	-0.191885913	1.11611E-05	7.69166E-05
KIAA0586	14q23.1	0.191816829	1.12442E-05	7.74626E-05
MASP1	3q27.3	-0.191784178	1.12837E-05	7.77079E-05
TMEM134	11q13.2	-0.19176655	1.1305E-05	7.78284E-05
WDFY3-AS2	4q21.23	-0.19168272	1.14071E-05	7.84921E-05
CRYAB	11q23.1	0.191681018	1.14092E-05	7.84921E-05
USP28	11q23.2	0.191659391	1.14357E-05	7.86475E-05
TMEM169	2q35	0.191635345	1.14653E-05	7.88236E-05
BLMH	17q11.2	0.191598083	1.15111E-05	7.91121E-05
PQBP1	Xp11.23	-0.191516716	1.1612E-05	7.97778E-05
MRPL55	1q42.13	-0.19149983	1.1633E-05	7.98951E-05
TMSB15B	Xq22.2	0.191423673	1.17283E-05	8.05221E-05
C2CD4C	19p13.3	0.191417904	1.17356E-05	8.05444E-05
LAMTOR1	11q13.4	-0.191355197	1.18146E-05	8.10595E-05
SP6	17q21.32	0.19133779	1.18367E-05	8.1183E-05
PANX1	11q21	0.19130457	1.18788E-05	8.14318E-05
HGFAC	4p16.3	0.191302838	1.1881E-05	8.14318E-05
CYP26C1	10q23.33	0.191295605	1.18902E-05	8.14672E-05
TRNAU1AP	1p35.3	-0.191288852	1.18988E-05	8.14983E-05
KAT6A	8p11.21	0.191244217	1.19558E-05	8.18607E-05
CBLN3	14q12	0.191235538	1.19669E-05	8.19089E-05
SSTR1	14q21.1	-0.191223641	1.19822E-05	8.19854E-05
GSTK1	7q34	-0.191200017	1.20125E-05	8.21649E-05
EIF3I	1p35.2	-0.191195067	1.20189E-05	8.21805E-05
LILRB2	19q13.42	0.191151995	1.20744E-05	8.2532E-05
PDE7B	6q23.3	0.191133412	1.20984E-05	8.26682E-05
PABPC5	Xq21.31	0.191093452	1.21502E-05	8.2994E-05
RGS1	1q31.2	0.191061687	1.21915E-05	8.32481E-05
PACSIN2	22q13.2	-0.191021738	1.22437E-05	8.3576E-05
ANKAR	2q32.2	-0.19099777	1.22751E-05	8.3762E-05
PEMT	17p11.2	-0.190946757	1.23422E-05	8.41913E-05
RFX3	9p24.2	0.190894306	1.24116E-05	8.46357E-05
PLCL1	2q33.1	0.190869471	1.24445E-05	8.48317E-05
FAM220A	7p22.1	0.190863952	1.24519E-05	8.4853E-05
RWDD2B	21q21.3	-0.19084424	1.24781E-05	8.50003E-05
IDNK	9q21.32	-0.190841374	1.24819E-05	8.50003E-05

CASP2	7q34	0.190802645	1.25336E-05	8.53194E-05
FIGNL1	7p12.2	0.190799953	1.25372E-05	8.53194E-05
ATRAID	2p23.3	-0.190712072	1.26554E-05	8.60943E-05
TSPO	22q13.2	-0.19069566	1.26776E-05	8.62161E-05
PLAAT2	11q12.3	-0.190674514	1.27062E-05	8.63817E-05
MAN2A1	5q21.3	0.190628707	1.27685E-05	8.67755E-05
DHRS7B	17p11.2	-0.190568442	1.28508E-05	8.73056E-05
SLC16A11	17p13.1	-0.19054843	1.28782E-05	8.7436E-05
SNCAIP	5q23.2	0.190548122	1.28787E-05	8.7436E-05
PATL1	11q12.1	0.190541174	1.28882E-05	8.74712E-05
PLCXD2	3q13.2	0.190525023	1.29104E-05	8.75925E-05
COQ9	16q21	-0.190503834	1.29396E-05	8.77436E-05
MOCS2	5q11.2	-0.190502531	1.29414E-05	8.77436E-05
RAB33A	Xq26.1	0.19044141	1.3026E-05	8.82873E-05
MRPL16	11q12.1	-0.190430282	1.30415E-05	8.83623E-05
STK17B	2q32.3	0.19040581	1.30755E-05	8.85632E-05
MAOA	Xp11.3	-0.190364545	1.31331E-05	8.89235E-05
MTA2	11q12.3	0.190352041	1.31506E-05	8.90102E-05
ZC2HC1C	14q24.3	-0.190349088	1.31548E-05	8.90102E-05
NUDT6	4q28.1	-0.19032816	1.31841E-05	8.91788E-05
SLC36A1	5q33.1	0.190323037	1.31913E-05	8.91975E-05
RSAD1	17q21.33	-0.190247314	1.32981E-05	8.98894E-05
GCDH	19p13.13	-0.190239672	1.33089E-05	8.99324E-05
CDAN1	15q15.2	-0.190235417	1.33149E-05	8.99429E-05
GPR85	7q31.1	0.190209452	1.33518E-05	9.01616E-05
MARVELD1	10q24.2	0.190166641	1.34128E-05	9.05429E-05
ODF2	9q34.11	0.190157089	1.34264E-05	9.06046E-05
ANKRD13B	17q11.2	0.190122353	1.34761E-05	9.09096E-05
EPDR1	7p14.1	-0.190106896	1.34983E-05	9.10288E-05
TMEM260	14q22.3	0.190082369	1.35336E-05	9.1236E-05
GOPC	6q22.1	0.190048107	1.3583E-05	9.15384E-05
ABHD14A	3p21.2	-0.190022576	1.36199E-05	9.17566E-05
PIAS3	1q21.1	0.18996891	1.36978E-05	9.22507E-05
ZNF267	16p11.2	0.18987938	1.38288E-05	9.31015E-05
SCIN	7p21.3	0.189857497	1.3861E-05	9.32739E-05
MANEAL	1p34.3	-0.189855673	1.38637E-05	9.32739E-05
HCN4	15q24.1	-0.189818561	1.39184E-05	9.36111E-05
TDO2	4q32.1	0.189770485	1.39897E-05	9.40589E-05
FCN3	1p36.11	-0.189720861	1.40636E-05	9.45242E-05
RCOR2	11q13.1	0.189703367	1.40897E-05	9.46683E-05
TNPO2	19p13.13	0.189683212	1.41199E-05	9.48394E-05
P2RY10	Xq21.1	0.189668189	1.41424E-05	9.49591E-05
ECSIT	19p13.2	-0.189630762	1.41987E-05	9.53052E-05
C11ORF24	11q13.2	0.189536977	1.43407E-05	9.62262E-05
YWHAE	17p13.3	-0.189522822	1.43623E-05	9.63386E-05
NCF1B	7q11.23	0.189480879	1.44263E-05	9.67358E-05
GSTA4	6p12.2	-0.189454828	1.44662E-05	9.69711E-05
ZSCAN31	6p22.1 6p22.3-p22	-0.18940533	1.45423E-05	9.74209E-05
JCAD	10p11.23	0.189404895	1.4543E-05	9.74209E-05
MIEF2	17p11.2	-0.189278767	1.47386E-05	9.86987E-05
TBCC	6p21.1	-0.189264044	1.47616E-05	9.88199E-05
C2CD4A	15q22.2	0.189231566	1.48125E-05	9.91263E-05
MSL3	Xp22.2	0.189228527	1.48172E-05	9.91263E-05
SBK1	16p12.1	0.189222014	1.48275E-05	9.91618E-05
EGFL7	9q34.3	-0.189191447	1.48755E-05	9.94502E-05
OR4C6	11q11	0.189145618	1.49479E-05	9.99007E-05
NOL8	9q22.31	0.189136565	1.49622E-05	9.99398E-05
LRRC36	16q22.1	-0.189135651	1.49637E-05	9.99398E-05

FGF14	13q33.1	0.189095751	1.5027E-05	0.000100329
TM6SF1	15q25.2	0.189067363	1.50722E-05	0.000100598
C6ORF203	6q21	-0.189055024	1.50919E-05	0.000100696
UBE2D1	10q21.1	0.189041564	1.51134E-05	0.000100806
IFFO2	1p36.13	0.189010871	1.51625E-05	0.0001011
UTP20	12q23.2	0.188993543	1.51903E-05	0.000101252
RPL41	12q13.2	-0.188940658	1.52755E-05	0.000101786
TUBB3	16q24.3	0.188920946	1.53074E-05	0.000101965
OAZ3	1q21.3	-0.188916951	1.53139E-05	0.000101974
NUP155	5p13.2	0.18889446	1.53503E-05	0.000102172
HOXA3	7p15.2	0.188892376	1.53537E-05	0.000102172
STC2	5q35.2	0.188869972	1.53901E-05	0.00010238
AOPEP	9q22.32	0.188850086	1.54225E-05	0.000102562
SCCPDH	1q44	-0.188828289	1.54581E-05	0.000102764
CNNM3	2q11.2	-0.188825076	1.54633E-05	0.000102765
MACF1	1p34.3	0.188789994	1.55207E-05	0.000103113
BMPR2	2q33.1-q33.2	0.188764724	1.55622E-05	0.000103355
USP54	10q22.2	-0.188727904	1.56229E-05	0.000103696
CMBL	5p15.2	-0.188727296	1.56239E-05	0.000103696
NRIP3	11p15.4	0.188652355	1.5748E-05	0.000104485
HERPUD1	16q13	0.188635074	1.57768E-05	0.000104641
SLITRK5	13q31.2	0.188631376	1.57829E-05	0.000104648
SUOX	12q13.2	-0.188628127	1.57883E-05	0.000104649
TNFSF9	19p13.3	-0.188622135	1.57983E-05	0.000104681
ROCK1	18q11.1	0.188571856	1.58824E-05	0.000105203
MTA3	2p21	-0.188539078	1.59374E-05	0.000105533
MCF2L2	3q27.1	0.188520795	1.59682E-05	0.000105702
EOMES	3p24.1	0.188507682	1.59903E-05	0.000105813
ATF5	19q13.33	0.188465479	1.60616E-05	0.000106251
MPDU1	17p13.1	-0.18842206	1.61354E-05	0.000106703
TMPRSS11D	4q13.2	0.188404438	1.61654E-05	0.000106867
GRPR	Xp22.2	0.188324401	1.63023E-05	0.000107737
PNPO	17q21.32	-0.188301181	1.63423E-05	0.000107965
ANKRD36B	2q11.2	0.188221815	1.64795E-05	0.000108836
ASPM	1q31.3	0.188216166	1.64893E-05	0.000108865
ZFHX3	16q22.2-q22.3	0.188205659	1.65076E-05	0.00010895
GALK2	15q21.1-q21.2	-0.188188899	1.65367E-05	0.000109107
PUS10	2p16.1-p15	-0.188149696	1.66052E-05	0.000109522
RANBP6	9p24.1	0.188079309	1.67287E-05	0.000110301
C15ORF61	15q23	-0.188006625	1.68571E-05	0.000111111
ACY1	3p21.2	-0.187986826	1.68923E-05	0.000111306
TNFRSF13C	22q13.2	0.187969654	1.69228E-05	0.000111471
CORO1B	11q13.2	-0.187961035	1.69382E-05	0.000111536
PMAIP1	18q21.32	0.187924737	1.7003E-05	0.000111926
SNX14	6q14.3	-0.187914837	1.70207E-05	0.000112006
ZC2HC1A	8q21.13	0.187854137	1.71297E-05	0.000112686
CBLN4	20q13.2	0.187827221	1.71782E-05	0.000112969
AFAP1L2	10q25.3	0.187812368	1.7205E-05	0.000113108
C14ORF39	14q23.1	0.187791565	1.72427E-05	0.000113311
ZNF317	19p13.2	0.187789096	1.72472E-05	0.000113311
PLEKHG2	19q13.2	0.187764868	1.72911E-05	0.000113563
LCP2	5q35.1	0.187758789	1.73022E-05	0.000113599
MRPL53	2p13.1	-0.187739511	1.73373E-05	0.000113792
MTX1	1q22	-0.187704776	1.74007E-05	0.000114171
CXCL1	4q13.3	0.187653367	1.74949E-05	0.000114751
TNFRSF25	1p36.31	0.18760769	1.7579E-05	0.000115266
FCSK	16q22.1	-0.187596749	1.75992E-05	0.00011536
HIST1H2BK	6p22.1	-0.187587891	1.76156E-05	0.00011543

KAAG1	6p22.3	-0.187563612	1.76605E-05	0.000115687
ZNF496	1q44	0.187495417	1.77874E-05	0.00011648
ZNF358	19p13.2	0.187484206	1.78083E-05	0.000116579
CITED2	6q24.1	-0.187465102	1.78441E-05	0.000116775
AMZ1	7p22.3	0.18743073	1.79085E-05	0.000117159
NACA	12q13.3	-0.187357509	1.80466E-05	0.000118024
TSPO2	6p21.1	-0.18732961	1.80995E-05	0.000118331
HAUS4	14q11.2	-0.187315045	1.81271E-05	0.000118474
RPL4	15q22.31	-0.187309227	1.81382E-05	0.000118508
RUNX3	1p36.11	0.187286128	1.81822E-05	0.000118737
PRMT7	16q22.1	-0.187284565	1.81851E-05	0.000118737
HOXB6	17q21.32	0.187251393	1.82485E-05	0.000119112
FOXD1	5q13.2	0.187242726	1.82651E-05	0.000119182
RAX	18q21.32	0.187238405	1.82733E-05	0.000119197
MRPL22	5q33.2	-0.18717593	1.83933E-05	0.000119941
GPN2	1p36.11	-0.187112886	1.85152E-05	0.000120677
RGS16	1q25.3	0.187111323	1.85182E-05	0.000120677
RBM47	4p14	-0.187093347	1.85531E-05	0.000120866
TMTC1	12p11.22	0.187061651	1.86148E-05	0.000121228
SAPCD2	9q34.3	0.187038165	1.86606E-05	0.000121487
LRRC57	15q15.2	-0.187002427	1.87306E-05	0.000121903
PODXL	7q32.3	0.186966129	1.88019E-05	0.000122328
SHB	9p13.1	0.186962048	1.88099E-05	0.00012234
RPL15	3p24.2	-0.186945288	1.88429E-05	0.000122515
KIF3B	20q11.21	0.186937993	1.88573E-05	0.000122569
ATP5PF	21q21.3	-0.186931133	1.88708E-05	0.000122618
OVOL2	20p11.23	-0.186912207	1.89082E-05	0.000122821
PTP4A1	6q12	-0.186904734	1.8923E-05	0.000122878
RASL11B	4q12	0.186889455	1.89533E-05	0.000123031
NTRK1	1q23.1	0.186886638	1.89589E-05	0.000123031
BMERB1	16p13.11	0.186874688	1.89826E-05	0.000123145
SGCE	7q21.3	0.186870177	1.89916E-05	0.000123164
UGT3A2	5p13.2	0.186818365	1.90947E-05	0.000123793
RNASE6	14q11.2	0.186759675	1.92123E-05	0.000124515
GRP	18q21.32	0.186753553	1.92246E-05	0.000124554
BRWD3	Xq21.1	0.186741565	1.92487E-05	0.00012467
GEMIN8P4	1p22.2	-0.186721379	1.92893E-05	0.000124894
EVA1A	2p12	0.18667991	1.93731E-05	0.000125364
B3GALT5-AS1	21q22.2	0.186679243	1.93745E-05	0.000125364
GTF2A1	14q31.1	0.186658895	1.94157E-05	0.000125591
ZNF284	19q13.31	0.186609311	1.95165E-05	0.000126202
HSD17B1	17q21.2	-0.186574488	1.95876E-05	0.000126621
ALKBH7	19p13.3	-0.186549045	1.96397E-05	0.000126917
PCARE	2p23.2	-0.186531027	1.96767E-05	0.000127116
PIFO	1p13.2	-0.186474932	1.97923E-05	0.000127821
MTG1	10q26.3	-0.186467677	1.98073E-05	0.000127877
PDIA4	7q36.1	0.186440844	1.98628E-05	0.000128194
PIGF	2p21	-0.186411493	1.99238E-05	0.000128547
ABCG1	21q22.3	0.186365034	2.00206E-05	0.00012913
SNHG8	4q26	-0.186341328	2.00701E-05	0.000129408
CGAS	6q13	0.18633412	2.00852E-05	0.000129464
MED7	5q33.3	-0.186251103	2.02598E-05	0.000130548
ATP6V0E2-AS1	7q36.1	0.186193616	2.03816E-05	0.00013129
RLF	1p34.2	0.186163656	2.04454E-05	0.000131659
NDUFA8	9q33.2	-0.186139515	2.04968E-05	0.000131948
LHFPL3-AS2	7q22.2-q22.3	-0.186121521	2.05353E-05	0.000132153
CABLES2	20q13.33	0.186099396	2.05827E-05	0.000132416
MYLK2	20q11.21	0.186077169	2.06304E-05	0.000132681

CENPI	Xq22.1	0.186071608	2.06424E-05	0.000132715
SLC52A3	20p13	-0.186062403	2.06622E-05	0.0001328
AGAP2	12q14.1	0.186031054	2.07297E-05	0.000133192
RPS8	1p34.1	-0.186024107	2.07447E-05	0.000133215
TBC1D31	8q24.13	0.186023239	2.07466E-05	0.000133215
LIPT2	11q13.4	-0.185956808	2.08906E-05	0.000134097
AJM1	9q34.3	0.185951917	2.09012E-05	0.000134122
NCF1C	7q11.23	0.185927421	2.09546E-05	0.000134422
MYO1A	12q13.3	-0.18590483	2.10039E-05	0.000134695
ZNF300	5q33.1	0.185888466	2.10397E-05	0.000134882
MLXIP	12q24.31	0.185874745	2.10698E-05	0.000135032
CLSTN3	12p13.31	0.185838013	2.11504E-05	0.000135505
ZMYND12	1p34.2	-0.185790082	2.12561E-05	0.000136139
SUN1	7p22.3	0.185781742	2.12746E-05	0.000136214
LINC01124	2q31.1	-0.185777266	2.12845E-05	0.000136234
AKR1C4	10p15.1	-0.185770103	2.13004E-05	0.000136292
EBF4	20p13	0.185755043	2.13337E-05	0.000136463
PPP2R3C	14q13.2	0.185688912	2.14809E-05	0.00013736
S100A14	1q21.3	-0.185683962	2.1492E-05	0.000137388
NFYC	1p34.2	-0.185663121	2.15386E-05	0.000137642
ZFP91	11q12.1	0.185652439	2.15625E-05	0.000137751
EBF2	8p21.2	0.185638804	2.15931E-05	0.000137902
IQSEC1	3p25.2-p25.1	0.185618573	2.16385E-05	0.000138149
RNF25	2q35	-0.185599729	2.16809E-05	0.000138376
ZSCAN21	7q22.1	0.185595039	2.16915E-05	0.000138399
FAAP20	1p36.33	-0.185565688	2.17577E-05	0.000138778
AFP	4q13.3	-0.185513752	2.18754E-05	0.000139484
GPR180	13q32.1	0.185481194	2.19495E-05	0.000139912
CP	3q24-q25.1	0.185458443	2.20014E-05	0.000140199
FLI1	11q24.3	0.18543352	2.20584E-05	0.000140518
PPM1F	22q11.22	0.185371604	2.22006E-05	0.000141379
HBBP1	11p15.4	0.185333996	2.22874E-05	0.000141887
BAIAP2L1	7q21.3-q22.1	-0.185298747	2.23691E-05	0.000142361
ZNF146	19q13.12	0.185244821	2.24945E-05	0.000143115
MICAL3	22q11.21	0.18522589	2.25387E-05	0.000143351
NPRL2	3p21.31	-0.185147649	2.27223E-05	0.000144472
SNX6	14q13.1	0.185132018	2.27591E-05	0.000144661
PIKFYVE	2q34	0.185124723	2.27763E-05	0.000144725
ZNF8	19q13.43	0.185117168	2.27942E-05	0.000144792
RPL31	2q11.2	-0.185106227	2.282E-05	0.000144911
ZBTB11-AS1	3q12.3	-0.185096674	2.28426E-05	0.000145009
DYNLRB1	20q11.22	-0.185076962	2.28893E-05	0.000145259
TGFBR1	9q22.33	0.185067063	2.29128E-05	0.000145362
TXNDC5	6p24.3	0.185029201	2.30029E-05	0.000145888
RPL35A	3q29	-0.185005147	2.30603E-05	0.000146206
PLEKHG3	14q23.3	0.184995074	2.30843E-05	0.000146312
ARID4B	1q42.3	0.184991079	2.30939E-05	0.000146327
PARP11	12p13.32	0.184987957	2.31013E-05	0.000146328
TMEM243	7q21.12	-0.184955649	2.31788E-05	0.000146772
NOG	17q22	0.184918671	2.32677E-05	0.000147289
TXNDC15	5q31.1	0.184907888	2.32937E-05	0.000147407
LMBR1	7q36.3	0.184874629	2.3374E-05	0.000147841
CCSAP	1q42.13	0.184871077	2.33826E-05	0.000147841
ADD2	2p13.3	0.184870394	2.33842E-05	0.000147841
NME3	16p13.3	-0.184862385	2.34036E-05	0.000147917
KIR2DL4	19q13.42	0.184851936	2.34289E-05	0.000147991
MTBP	8q24.12	0.184851447	2.34301E-05	0.000147991
ST18	8q11.23	0.184847703	2.34392E-05	0.000148002

GALNT3	2q24.3	-0.184839459	2.34592E-05	0.000148004
SOCS1	16p13.13	0.184838852	2.34607E-05	0.000148004
NMB	15q25.2	-0.184838504	2.34615E-05	0.000148004
SAMD8	10q22.2	0.184824871	2.34946E-05	0.000148166
COA6	1q42.2	-0.18481758	2.35124E-05	0.000148232
CYP2C9	10q23.33	-0.18481259	2.35245E-05	0.000148262
ZKSCAN1	7q22.1	0.184764171	2.36427E-05	0.00014896
PCCA	13q32.3	-0.184685408	2.3836E-05	0.000150131
G6PD	Xq28	-0.184677593	2.38553E-05	0.000150205
ZFP36L1	14q24.1	0.184655883	2.39089E-05	0.000150496
SLC22A3	6q25.3	-0.184641729	2.39439E-05	0.000150669
STAMBP	2p13.1	-0.184611683	2.40184E-05	0.000151091
NRL	14q11.2-q12	-0.184566835	2.41299E-05	0.000151745
AATK	17q25.3	-0.184561316	2.41437E-05	0.000151784
ILVBL	19p13.12	-0.184540562	2.41955E-05	0.000152062
PYGO1	15q21.3	0.184534107	2.42117E-05	0.000152116
CNNM1	10q24.2	-0.184527341	2.42286E-05	0.000152175
KMT2C	7q36.1	0.184524063	2.42368E-05	0.000152179
MT1X	16q13	0.184488806	2.43252E-05	0.000152679
NOTCH4	6p21.32	0.184484551	2.43359E-05	0.000152679
TRAPPC4	11q23.3	-0.184483249	2.43392E-05	0.000152679
SLC15A4	12q24.33	0.184477517	2.43536E-05	0.000152722
SYNE3	14q32.13	0.18442307	2.44909E-05	0.000153536
DEPDC4	12q23.1	-0.184400986	2.45468E-05	0.000153838
RNPEPL1	2q37.3	-0.184382603	2.45935E-05	0.000154082
PCDHGB3	5q31.3	0.184338683	2.47052E-05	0.000154734
N6AMT1	21q21.3	-0.18427897	2.48579E-05	0.000155642
B4GALT1	9p21.1	0.184214745	2.50231E-05	0.000156628
CA8	8q12.1	-0.184202037	2.5056E-05	0.000156762
DUSP16	12p13.2	-0.184198159	2.5066E-05	0.000156762
PLEKHG4B	5p15.33	0.184197425	2.50679E-05	0.000156762
TEC	4p12-p11	-0.184125744	2.52538E-05	0.000157876
PBLD	10q21.3	-0.184089785	2.53476E-05	0.000158413
PLEKH02	15q22.31	0.184063994	2.54151E-05	0.000158785
CAMK1G	1q32.2	0.184053581	2.54424E-05	0.000158894
GNA13	17q24.1	0.184051315	2.54483E-05	0.000158894
LINC00341	14q32.13	0.183982105	2.56304E-05	0.000159981
MAGIX	Xp11.23	-0.183963348	2.568E-05	0.000160222
CINP	14q32.31	-0.183961528	2.56848E-05	0.000160222
ENDOV	17q25.3	-0.183952233	2.57094E-05	0.000160325
KDM4B	19p13.3	0.183918453	2.5799E-05	0.000160834
B3GALT4	6p21.32	-0.18390725	2.58288E-05	0.00016097
ZNF555	19p13.3	0.183877343	2.59084E-05	0.000161416
PCDHB9	5q31.3	0.183849898	2.59817E-05	0.000161823
BEX3	Xq22.2	-0.183833612	2.60253E-05	0.000162044
C3ORF67	3p14.2	0.183822295	2.60556E-05	0.000162183
TMEM14B	6p24.2	-0.183800092	2.61152E-05	0.000162504
RNF167	17p13.2	-0.183765357	2.62088E-05	0.000163035
LINC01588	14q21.3	0.183748982	2.6253E-05	0.00016326
ANKRD13A	12q24.11	0.183742171	2.62714E-05	0.000163324
AUP1	2p13.1	-0.183737308	2.62845E-05	0.000163355
WASHC4	12q23.3	0.183717075	2.63393E-05	0.000163645
TMEM160	19q13.32	-0.18370905	2.6361E-05	0.000163729
PCDHGA3	5q31.3	0.183704015	2.63747E-05	0.000163764
HSPG2	1p36.12	0.183698839	2.63887E-05	0.0001638
AMBP	9q32	-0.183671514	2.6463E-05	0.000164211
NAPRT	8q24.3	-0.183653596	2.65118E-05	0.000164463
KIAA0754	1p34.3	0.183650083	2.65214E-05	0.000164472

BABAM2	2p23.2	-0.183632755	2.65687E-05	0.000164714
LIMS1	2q12.3	0.183620076	2.66033E-05	0.000164878
EFCC1	3q21.3	-0.183555776	2.67797E-05	0.000165921
SLC26A10	12q13.3	0.183551171	2.67924E-05	0.000165948
PLD3	19q13.2	-0.183529504	2.68521E-05	0.000166267
TSSC2	11p15.4	0.18351006	2.69058E-05	0.000166548
UGDH	4p14	-0.183484695	2.6976E-05	0.000166931
CLEC18B	16q23.1	0.183412172	2.71778E-05	0.000168128
CCDC102B	18q22.1-q22.2	0.183400466	2.72104E-05	0.000168278
FXN	9q21.11	-0.183385791	2.72515E-05	0.00016848
EMC7	15q14	-0.183368158	2.73009E-05	0.000168734
CCN5	20q13.12	0.183332902	2.73999E-05	0.000169275
COG5	7q22.3	0.183330992	2.74052E-05	0.000169275
CASR	3q13.33-q21.1	-0.183324858	2.74225E-05	0.00016933
CUZD1	10q26.13	0.183281146	2.75458E-05	0.000170039
DPY30	2p22.3	-0.183275415	2.7562E-05	0.000170087
TPT1	13q14.13	-0.183243719	2.76518E-05	0.000170589
CCDC159	19p13.2	-0.183233993	2.76794E-05	0.000170707
IL19	1q32.1	0.183227505	2.76978E-05	0.000170768
SWSAP1	19p13.2	-0.183210255	2.77469E-05	0.000171018
MRPS22	3q23	-0.183198737	2.77797E-05	0.000171168
ADK	10q22.2 10q11-q24	-0.18317147	2.78575E-05	0.000171595
APOL4	22q12.3	0.183123448	2.7995E-05	0.000172389
TP53I3	2p23.3	-0.183113027	2.8025E-05	0.000172521
BCL6B	17p13.1	0.183084458	2.81072E-05	0.000172974
FPGS	9q34.11	-0.183065353	2.81623E-05	0.00017326
ATG2B	14q32.2	0.183023584	2.82831E-05	0.00017395
COPS7A	12p13.31	-0.182998922	2.83547E-05	0.000174337
ZBTB7B	1q21.3	-0.18297591	2.84216E-05	0.000174695
SNX24	5q23.2	-0.182966973	2.84476E-05	0.000174802
MID2	Xq22.3	0.182960105	2.84677E-05	0.000174871
TNFAIP2	14q32.32	0.182921115	2.85816E-05	0.000175518
TGFB2	1q41	0.182906266	2.86251E-05	0.000175731
C5AR2	19q13.32	-0.182894195	2.86605E-05	0.000175825
GABRR2	6q15	0.182892925	2.86642E-05	0.000175825
CD151	11p15.5	-0.182892111	2.86666E-05	0.000175825
HGF	7q21.11	0.182824124	2.88669E-05	0.000177
MPHOSPH9	12q24.31	0.182817083	2.88877E-05	0.000177073
JSRP1	19p13.3	0.182802249	2.89316E-05	0.000177289
HTR7	10q23.31	0.182766728	2.9037E-05	0.00017788
ADH1A	4q23	-0.182756529	2.90673E-05	0.000178012
FASTKD2	2q33.3	-0.182744138	2.91042E-05	0.000178183
ZNF165	6p22.1	-0.182682136	2.92894E-05	0.000179263
LSM4	19p13.11	-0.182670065	2.93256E-05	0.00017943
C6ORF136	6p21.33	-0.182666639	2.93358E-05	0.000179438
RIMS4	20q13.12	-0.182645259	2.94001E-05	0.000179776
SOCS3	17q25.3	0.182586787	2.95764E-05	0.000180799
PPP1R9B	17q21.33	0.182477284	2.99093E-05	0.000182779
ENSA	1q21.3	-0.182392964	3.01681E-05	0.000184304
H2BFXP	Xq22.2	0.182366592	3.02494E-05	0.000184745
BTNL9	5q35.3	-0.182277904	3.05246E-05	0.000186369
SLC16A13	17p13.1	-0.182231879	3.06683E-05	0.00018719
PIF1	15q22.31	0.182228497	3.06789E-05	0.000187198
ARCN1	11q23.3	0.182210778	3.07344E-05	0.00018748
COX17	3q13.33	-0.182190892	3.07968E-05	0.000187804
KSR1	17q11.2	0.182162496	3.08862E-05	0.000188292
HIBCH	2q32.2	-0.182123158	3.10104E-05	0.000188991
ACE2	Xp22.2	-0.182068935	3.11823E-05	0.000189982

BCL3	19q13.32	0.182053948	3.123E-05	0.000190215
CST3	20p11.21	-0.182049693	3.12435E-05	0.00019024
AKAP12	6q25.1	0.182027723	3.13136E-05	0.000190609
PRDM2	1p36.21	0.182023294	3.13277E-05	0.000190637
PTPRC	1q31.3-q32.1	0.182007142	3.13794E-05	0.000190893
COX8A	11q13.1	-0.181996548	3.14133E-05	0.000191042
HSD17B4	5q23.1	-0.181959555	3.15319E-05	0.000191706
TGFB1	19q13.2	0.181952521	3.15545E-05	0.000191785
LAMP3	3q27.1	-0.181949394	3.15646E-05	0.000191788
HIVEP3	1p34.2	0.181869416	3.18228E-05	0.000193299
ANXA10	4q32.3	-0.181849002	3.1889E-05	0.000193643
SOX2-OT	3q26.33	0.181762644	3.21707E-05	0.000195294
ABCA9	17q24.2	0.181658794	3.25125E-05	0.00019731
ETFDH	4q32.1	-0.181558449	3.2846E-05	0.000199238
ESPN	1p36.31	0.181557233	3.28501E-05	0.000199238
ANKRD34A	1q21.1	0.181546165	3.28871E-05	0.000199403
IRAK3	12q14.3	0.181531268	3.29369E-05	0.000199645
IYD	6q25.1	-0.181528051	3.29477E-05	0.00019965
ABT1	6p22.2	-0.181506953	3.30184E-05	0.000200018
NAA60	16p13.3	-0.181495143	3.30581E-05	0.000200198
ZNF333	19p13.12	0.181477081	3.31188E-05	0.000200506
ATPAF1	1p33	-0.18145485	3.31937E-05	0.000200899
IL17REL	22q13.33	0.181416254	3.33242E-05	0.000201628
SH3BP2	4p16.3	0.181405874	3.33593E-05	0.00020178
CCDC89	11q14.1	0.181380004	3.34471E-05	0.00020225
TMCO1	1q24.1	-0.181350905	3.35461E-05	0.000202788
GRAMD1C	3q13.31	-0.181332148	3.36101E-05	0.000203114
MTRF1	13q14.11	-0.181325375	3.36332E-05	0.000203192
LRAT	4q32.1	-0.181308615	3.36905E-05	0.000203434
SMOX	20p13	0.181307746	3.36935E-05	0.000203434
FBXO22-AS1	15q24.2	-0.181294286	3.37396E-05	0.000203652
GPR141	7p14.1	0.181254435	3.38764E-05	0.000204378
CD53	1p13.3	0.181251475	3.38866E-05	0.000204378
KCNT2	1q31.3	0.181250366	3.38904E-05	0.000204378
FAM43A	3q29	0.181242097	3.39188E-05	0.000204454
HAX1	1q21.3	-0.181240794	3.39233E-05	0.000204454
PSORS1C3	6p21.33	-0.18122554	3.39759E-05	0.00020471
DISP1	1q41	-0.181201677	3.40583E-05	0.000205145
DOCK4	7q31.1	0.181160903	3.41995E-05	0.000205933
RHOJ	14q23.2	0.181118139	3.43482E-05	0.000206767
SUPT16H	14q11.2	0.181114444	3.43611E-05	0.000206783
AGFG2	7q22.1	-0.181110363	3.43753E-05	0.000206807
CSF2RB	22q12.3	0.181092301	3.44383E-05	0.000207124
GAS8	16q24.3	-0.181067204	3.45261E-05	0.000207565
USP40	2q37.1	-0.181063731	3.45383E-05	0.000207565
PAM	5q21.1	0.181060691	3.45489E-05	0.000207565
MYSM1	1p32.1	0.181059563	3.45529E-05	0.000207565
CD79B	17q23.3	0.181056263	3.45644E-05	0.000207572
AKR7A2	1p36.13	-0.181042716	3.46119E-05	0.000207796
SLC44A4	6p21.33	-0.181023438	3.46797E-05	0.00020814
SEC14L4	22q12.2	-0.180993161	3.47863E-05	0.000208718
CA11	19q13.33	0.180934129	3.4995E-05	0.000209908
ITPRID1	7p14.3	0.180911499	3.50754E-05	0.000210327
POLL	10q24.32	-0.180902646	3.51069E-05	0.000210453
RPL10A	6p21.31	-0.180860963	3.52554E-05	0.000211259
NDST2	10q22.2	0.180859053	3.52623E-05	0.000211259
RMND5B	5q35.3	-0.180854103	3.52799E-05	0.000211302
C11ORF87	11q22.3	0.180842578	3.53212E-05	0.000211486

SYN1	Xp11.3-p11.23	0.1807793	3.55482E-05	0.000212782
TRIM32	9q33.1	0.180744947	3.56721E-05	0.00021346
DOK4	16q21	-0.18073635	3.57032E-05	0.000213582
KCNK13	14q32.11	0.180731709	3.57199E-05	0.000213619
TPD52L1	6q22.31	-0.180722196	3.57544E-05	0.000213762
ELMOD1	11q22.3	0.180696952	3.58458E-05	0.000214245
GPRIN3	4q22.1	0.180691633	3.58651E-05	0.000214297
CCNB3	Xp11.22	-0.180665259	3.5961E-05	0.000214779
F5	1q24.2	0.180663146	3.59687E-05	0.000214779
SSRP1	11q12.1	0.180660627	3.59778E-05	0.000214779
SYN2	3p25.2	-0.180648553	3.60218E-05	0.000214978
ARL15	5q11.2	0.180630234	3.60887E-05	0.000215313
AOX1	2q33.1	0.180555987	3.63607E-05	0.000216872
HOMER3	19p13.11	0.180522728	3.64832E-05	0.000217538
SPTB	14q23.3	0.18046277	3.67051E-05	0.000218796
ATP13A4	3q29	-0.180438747	3.67943E-05	0.000219263
PLTP	20q13.12	0.180434153	3.68114E-05	0.0002193
PKD1L2	16q23.2	-0.180428149	3.68337E-05	0.000219368
IL4I1	19q13.33	0.180418175	3.68709E-05	0.000219524
XPO6	16p12.1	0.180403412	3.69259E-05	0.000219787
METTL11B	1q24.2	0.180348986	3.71295E-05	0.000220933
DLL3	19q13.2	0.180345743	3.71417E-05	0.00022094
C12ORF77	12p12.1	0.180304992	3.72949E-05	0.000221786
MYL5	4p16.3	-0.18025518	3.7483E-05	0.000222839
NCKAP5L	12q13.12	0.180220444	3.76147E-05	0.000223507
RPL23	17q12	-0.180219663	3.76176E-05	0.000223507
MSANTD4	11q22.3	0.18019639	3.77061E-05	0.000223967
RHOBTB2	8p21.3	-0.180172857	3.77958E-05	0.000224433
KNL1	15q15.1	0.180147847	3.78913E-05	0.000224934
FBXO8	4q34.1	-0.180133693	3.79455E-05	0.000225189
ZFHX4-AS1	8q21.13	0.180130701	3.79569E-05	0.000225191
INCA1	17p13.2	-0.180094773	3.80948E-05	0.000225942
SLC22A17	14q11.2	0.180074343	3.81734E-05	0.000226342
DSTYK	1q32.1	0.180040515	3.83038E-05	0.000227048
GALNT17	7q11.22	0.18003461	3.83266E-05	0.000227117
KPNA7	7q22.1	-0.180023455	3.83698E-05	0.000227305
HOXA9	7p15.2	0.1799991	3.84641E-05	0.000227797
PSAT1	9q21.2	0.179992581	3.84894E-05	0.00022788
HOXA7	7p15.2	0.179949422	3.86573E-05	0.000228806
CD86	3q13.33	0.179881601	3.89224E-05	0.000230308
ATP8B4	15q21.2	0.179837539	3.90956E-05	0.000231265
POLR1C	6p21.1	-0.17983219	3.91167E-05	0.000231322
DCAF6	1q24.2	-0.179741618	3.94751E-05	0.000233373
PHYHIPL	10q21.1	0.179736677	3.94948E-05	0.00023342
ZDHHC17	12q21.2	0.179703022	3.96288E-05	0.000234144
HDGFL3	15q25.2	0.179699588	3.96425E-05	0.000234156
HOGA1	10q24.2	-0.179671826	3.97535E-05	0.000234743
CD5	11q12.2	0.179598382	4.00484E-05	0.000236415
FOXO3B	17p11.2	0.17958088	4.0119E-05	0.000236762
ZBED1	Xp22.33 and Yp11	0.179499339	4.04494E-05	0.000238642
ZFP37	9q32	0.1794831	4.05155E-05	0.000238962
TBCA	5q14.1	-0.179458351	4.06164E-05	0.000239487
MYMK	9q34.2	0.179416485	4.07877E-05	0.000240426
PFKFB4	3p21.31	0.179386189	4.09121E-05	0.000241089
ZNF131	5p12	0.179363177	4.10068E-05	0.000241577
SMIM14	4p14	-0.179325141	4.11638E-05	0.00024242
BPIFB4	20q11.21	0.179322678	4.1174E-05	0.00024242
DENND6A	3p14.3	0.179272257	4.13831E-05	0.000243579

RP1L1	8p23.1	0.179209314	4.16455E-05	0.000245052
DMKN	19q13.12	-0.17920461	4.16652E-05	0.000245096
CTXN1	19p13.2	0.179183599	4.17531E-05	0.000245542
HMCN1	1q25.3-q31.1	0.179165533	4.18289E-05	0.000245916
CATSPER3	5q31.1	-0.179149818	4.1895E-05	0.000246232
QDPR	4p15.32	-0.179073918	4.22153E-05	0.000248042
LINC00346	13q34	0.179034494	4.23826E-05	0.000248953
EZR	6q25.3	-0.179005924	4.25042E-05	0.000249584
NDUFB11	Xp11.3	-0.179002537	4.25186E-05	0.000249584
MGLL	3q21.3	-0.17900054	4.25271E-05	0.000249584
ZNF660	3p21.31	0.178985707	4.25905E-05	0.000249882
TARBP2	12q13.13	-0.178974315	4.26391E-05	0.000250095
C1ORF94	1p35.1	0.178962584	4.26893E-05	0.000250316
FAM120C	Xp11.22	0.17889286	4.29888E-05	0.000251999
ACPP	3q22.1	-0.17888574	4.30194E-05	0.000252105
ARRDC1	9q34.3	-0.178881311	4.30385E-05	0.000252144
UGT1A8	2q37.1	-0.178849709	4.31751E-05	0.00025287
CES1P1	16q12.2	-0.178846434	4.31892E-05	0.000252879
ACSL5	10q25.2	-0.17879977	4.33916E-05	0.000253991
HCAR1	12q24.31	0.178779701	4.3479E-05	0.000254428
MIR9-3HG	15q26.1	0.178776758	4.34918E-05	0.000254429
DNAJC5G	2p23.3	-0.178770239	4.35202E-05	0.000254521
LINC02209	8p12	0.178741025	4.36477E-05	0.000255193
STRIP2	7q32.1	0.17872561	4.37151E-05	0.000255513
SH2B2	7q22.1	0.178695959	4.38451E-05	0.000256198
ANKLE1	19p13.11	0.17869001	4.38712E-05	0.000256276
GTF2B	1p22.2	-0.178684796	4.38942E-05	0.000256308
EZH2	7q36.1	0.178682972	4.39022E-05	0.000256308
POLR1D	13q12.2	-0.17864129	4.40857E-05	0.000257305
EPS8L2	11p15.5	-0.178611678	4.42166E-05	0.000257994
SNAPIN	1q21.3	-0.178578419	4.4364E-05	0.000258779
IGFL3	19q13.32	0.178542753	4.45226E-05	0.000259629
ACBD6	1q25.2-q25.3	-0.178504346	4.4694E-05	0.000260553
NCF1	7q11.23	0.178497833	4.47231E-05	0.000260647
CD226	18q22.2	0.178485245	4.47794E-05	0.0002609
GSS	20q11.22	-0.178469003	4.48522E-05	0.000261249
RPL14	3p22.1	-0.178430099	4.5027E-05	0.000262191
LAMP5	20p12.2	0.178377388	4.52649E-05	0.0002635
DEPP1	10q11.21	0.178329627	4.54815E-05	0.000264684
PTPN22	1p13.2	0.178322333	4.55147E-05	0.000264801
CENPE	4q24	0.178270577	4.57506E-05	0.000266096
LINC02693	17p11.2	0.178215696	4.60021E-05	0.000267482
SEC24A	5q31.1	0.178208488	4.60352E-05	0.000267597
FAM71E1	19q13.33	-0.17820293	4.60608E-05	0.000267668
FAM214B	9p13.3	0.178153784	4.62873E-05	0.000268907
LAG3	12p13.31	0.178143797	4.63335E-05	0.000269069
DROSHA	5p13.3	0.17814197	4.6342E-05	0.000269069
THRSP	11q14.1	0.178135264	4.6373E-05	0.000269172
PXMP4	20q11.22	-0.178111924	4.64811E-05	0.000269722
MAN2C1	15q24.2	-0.178094382	4.65626E-05	0.000270117
ARHGEF6	Xq26.3	0.17808622	4.66005E-05	0.000270259
TOE1	1p34.1	-0.178046448	4.67858E-05	0.000271227
ARHGAP9	12q13.3	0.178044624	4.67944E-05	0.000271227
C10ORF71	10q11.23	0.177993533	4.70335E-05	0.000272534
NR1H3	11p11.2	-0.177982708	4.70843E-05	0.000272701
PMS2CL	7p22.1	0.177981627	4.70893E-05	0.000272701
KCNA2	1p13.3	0.177971552	4.71367E-05	0.000272897
KIAA1191	5q35.2	-0.177946149	4.72562E-05	0.00027351

S100A6	1q21.3	-0.177911501	4.74198E-05	0.000274378
NOL3	16q22.1	-0.177896565	4.74904E-05	0.000274674
ORMDL2	12q13.2	-0.177894915	4.74983E-05	0.000274674
C2ORF81	2p13.1	0.177875467	4.75904E-05	0.000275128
ENOSF1	18p11.32	-0.177872597	4.7604E-05	0.000275128
FEZ1	11q24.2	0.177858703	4.767E-05	0.00027543
FEN1	11q12.2	0.177825618	4.78274E-05	0.00027626
STAG1	3q22.3	0.177817455	4.78664E-05	0.000276406
CACNA1E	1q25.3	0.177806737	4.79175E-05	0.000276622
WFS1	4p16.1	-0.177770823	4.80893E-05	0.000277507
ZDHHC8	22q11.21	0.177768913	4.80984E-05	0.000277507
SCN4A	17q23.3	0.177758294	4.81493E-05	0.000277721
ICOSLG	21q22.3	0.17775415	4.81692E-05	0.000277756
SUMO1	2q33.1	-0.177735353	4.82595E-05	0.000278145
RNASEK	17p13.1	-0.177734351	4.82643E-05	0.000278145
KCNA3	1p13.3	0.177719154	4.83374E-05	0.000278419
FREM2	13q13.3	-0.177718724	4.83395E-05	0.000278419
GCOM1	15q21.3	-0.177680859	4.85221E-05	0.000279391
ZNF22	10q11.21	0.177657325	4.86359E-05	0.000279966
SLC2A14	12p13.31	0.177645997	4.86908E-05	0.000280202
FAM228A	2p23.3	0.177625999	4.87878E-05	0.00028068
DLGAP5	14q22.3	0.177611214	4.88597E-05	0.000281013
KLK14	19q13.41	0.177577221	4.90253E-05	0.000281885
ASCC3	6q16.3	0.177559893	4.91099E-05	0.000282291
CDH24	14q11.2	0.177524897	4.92812E-05	0.000283194
CSTB	21q22.3	-0.177515518	4.93272E-05	0.000283378
CAV3	3p25.3	-0.17749188	4.94433E-05	0.000283964
RAVER2	1p31.3	-0.177467584	4.95629E-05	0.000284495
CHGB	20p12.3	0.177467373	4.9564E-05	0.000284495
HPCAL1	2p25.1	-0.177436409	4.97168E-05	0.000285291
TXNL1	18q21.31	-0.177412181	4.98368E-05	0.000285897
E2F7	12q21.2	0.177365375	5.00692E-05	0.000287109
HMGB1	13q12.3	-0.177363899	5.00765E-05	0.000287109
NR1H4	12q23.1	-0.177358555	5.01031E-05	0.00028718
GRK3	22q12.1	0.177350226	5.01446E-05	0.000287229
GPR108	19p13.3	-0.17734931	5.01492E-05	0.000287229
CGN	1q21.3	-0.177348007	5.01557E-05	0.000287229
STRADB	2q33.1	-0.177345402	5.01687E-05	0.000287229
CEP85L	6q22.31	0.177332724	5.02319E-05	0.000287509
FZD2	17q21.31	0.177269592	5.0548E-05	0.000289236
IKBIP	12q23.1	0.177263861	5.05768E-05	0.000289296
C11ORF95	11q13.1	0.177261777	5.05873E-05	0.000289296
CNIH4	1q42.11	-0.1772194	5.08007E-05	0.000290434
GVINP1	11p15.4	0.177162694	5.10876E-05	0.000291991
ARF1	1q42.13	-0.177111026	5.13503E-05	0.00029341
ACACA	17q12	-0.177035911	5.17345E-05	0.000295521
PCDHGC3	5q31.3	0.177028356	5.17733E-05	0.000295659
P4HA2	5q31.1	0.176986326	5.19897E-05	0.00029681
SSTR3	22q13.1	0.176963262	5.21087E-05	0.000297405
TUBB7P	4q35.2	-0.176911207	5.23784E-05	0.00029886
BEGAIN	14q32.2	-0.176904406	5.24138E-05	0.000298977
KLHL42	12p11.22	0.176848079	5.27073E-05	0.000300566
CLIC5	6p21.1	-0.176819336	5.28576E-05	0.000301338
LINC00261	20p11.21	-0.176767128	5.31318E-05	0.000302815
PARVA	11p15.3	0.176764107	5.31477E-05	0.00030282
CRTC3	15q26.1	0.176742918	5.32594E-05	0.00030337
TEX29	13q34	0.176717361	5.33944E-05	0.000304048
PKD3	Xp22.11	0.176714696	5.34085E-05	0.000304048

PTGES3	12q13.3 12	-0.176698631	5.34935E-05	0.000304446
COX11	17q22	-0.17668821	5.35488E-05	0.000304674
SPP2	2q37.1	0.176672366	5.36328E-05	0.000305066
TULP3	12p13.33	0.176664416	5.36751E-05	0.00030522
MAPK13	6p21.31	-0.176642012	5.37943E-05	0.000305812
GUCD1	22q11.23	-0.176594685	5.40469E-05	0.000307161
ATP5MF	7q22.1	-0.176577231	5.41404E-05	0.000307605
CRYBG2	1p36.11	-0.176568113	5.41892E-05	0.000307796
MRPL23-AS1	11p15.5	0.176548595	5.4294E-05	0.000308304
ERO1A	14q22.1	0.176527993	5.44048E-05	0.000308846
IER5	1q25.3	0.176498555	5.45635E-05	0.00030962
SYNPO2L	10q22.2	0.176497008	5.45719E-05	0.00030962
DOK5	20q13.2	0.176463907	5.47508E-05	0.000310548
EHMT1-IT1	9q34.3	0.176447615	5.48391E-05	0.000310961
ARHGAP23	17q12	0.176442805	5.48652E-05	0.000311021
UBB	17p11.2	-0.176423614	5.49695E-05	0.000311525
TBC1D16	17q25.3	0.176420227	5.49879E-05	0.000311541
RPL27	17q21.31	-0.176401817	5.50881E-05	0.000312021
LINC01134	1p36.32	-0.176396529	5.51169E-05	0.000312096
ARL6IP4	12q24.31	-0.176353362	5.53526E-05	0.000313343
KIR3DL3	19q13.42	0.176350397	5.53688E-05	0.000313347
RASGEF1A	10q11.21	-0.176311592	5.55816E-05	0.000314463
CDNF	10p13	-0.176212336	5.61294E-05	0.000317472
AGPAT3	21q22.3	-0.176188977	5.6259E-05	0.000318116
CDC42SE1	1q21.3	0.176171435	5.63566E-05	0.000318578
HADH	4q25	-0.176114387	5.66749E-05	0.000320288
MSH6	2p16.3	0.176099012	5.6761E-05	0.000320684
TNFSF13	17p13.1	-0.176067664	5.69369E-05	0.000321588
ZNF559	19p13.2	0.176004098	5.72952E-05	0.000323521
PLB1	2p23.2	0.175991333	5.73674E-05	0.000323838
IL5RA	3p26.2	0.175974248	5.74641E-05	0.000324203
SOGA1	20q11.23	0.175974226	5.74643E-05	0.000324203
ST8SIA5	18q21.1	0.175971095	5.7482E-05	0.000324212
CIAO3	16p13.3	-0.175940098	5.7658E-05	0.000325114
SLC8A1	2p22.1	0.17593072	5.77114E-05	0.000325324
HINT3	6q22.32	-0.175912744	5.78138E-05	0.00032581
CLPX	15q22.31	-0.175816267	5.83663E-05	0.000328831
SH2D4A	8p21.3	-0.175789608	5.85199E-05	0.000329604
ADAM2	8p11.22	0.17576275	5.86749E-05	0.000330385
MAMSTR	19q13.33	0.175754612	5.8722E-05	0.000330558
TSTA3	8q24.3	-0.175658308	5.92817E-05	0.000333615
LOC100240735	12q13.13	0.17562264	5.94903E-05	0.000334695
ERI2	16p12.3	-0.175582064	5.97284E-05	0.000335941
LUZP6	7q33	0.175565825	5.98239E-05	0.000336384
MIIIP	1p36.22	-0.175537516	5.99908E-05	0.000337229
NAMPT	7q22.3	0.175526053	6.00586E-05	0.000337515
GPATCH3	1p36.11	-0.175518846	6.01012E-05	0.00033766
PALD1	10q22.1	0.175448159	6.05206E-05	0.000339922
STOX2	4q35.1	-0.175420635	6.06846E-05	0.000340748
PRKAB2	1q21.1	0.175383552	6.09063E-05	0.000341898
KIF15	3p21.31	0.175377647	6.09417E-05	0.000342001
MAP7D3	Xq26.3	0.175360713	6.10433E-05	0.000342475
B9D2	19q13.2	-0.175346519	6.11285E-05	0.000342858
NDUFS8	11q13.2	-0.175330493	6.12249E-05	0.000343303
MED22	9q34.2	0.175317815	6.13012E-05	0.000343635
NLRP3	1q44	0.175303408	6.13881E-05	0.000344026
LY6H	8q24.3	0.175276708	6.15494E-05	0.000344834
DLL4	15q15.1	0.175249213	6.17159E-05	0.000345645

OMG	17q11.2	0.175247153	6.17284E-05	0.000345645
DHDH	19q13.33	-0.175239506	6.17748E-05	0.000345808
CHRM5	15q14	0.175220661	6.18893E-05	0.000346294
TRAF3	14q32.32	0.175219561	6.1896E-05	0.000346294
SIRT5	6p23	-0.175215002	6.19237E-05	0.000346353
RDH5	12q13.2	-0.175207096	6.19718E-05	0.000346526
CDC25B	20p13	0.175184866	6.21073E-05	0.000347187
KDM5A	12p13.33	0.175169582	6.22006E-05	0.000347612
TTYH1	19q13.42	0.175166292	6.22207E-05	0.000347628
CXORF40B	Xq28	0.175139189	6.23865E-05	0.000348457
PFDN5	12q13.13	-0.175133805	6.24195E-05	0.000348545
WSCD2	12q23.3	0.175078827	6.27573E-05	0.00035024
CD109	6q13	0.175078749	6.27578E-05	0.00035024
GDF15	19p13.11	-0.175074234	6.27856E-05	0.000350298
MIR503HG	Xq26.3	0.175009278	6.31872E-05	0.00035244
EEF1B2	2q33.3	-0.174998077	6.32566E-05	0.00035273
HEXA-AS1	15q23	-0.174984758	6.33394E-05	0.000353094
HIPK2	7q34	0.174968465	6.34407E-05	0.000353561
CA5B	Xp22.2	0.17489856	6.38772E-05	0.000355895
SLC40A1	2q32.2	-0.174892742	6.39136E-05	0.000355999
PKNOX1	21q22.3	0.174851671	6.41715E-05	0.000357337
NSUN3	3q11.2	-0.174829227	6.43129E-05	0.000358025
ACOX1	17q25.1	-0.174816932	6.43904E-05	0.000358358
BORCS8	19p13.11	-0.174775163	6.46546E-05	0.000359728
GFER	16p13.3	-0.174768958	6.46939E-05	0.000359848
COQ10B	2q33.1	-0.174764482	6.47223E-05	0.000359906
NUDT16	3q22.1	-0.174738777	6.48855E-05	0.000360714
KRT75	12q13.13	0.174648521	6.54617E-05	0.000363817
FBXO41	2p13.2	0.174634311	6.55529E-05	0.000364223
UBL3	13q12.3	-0.174611559	6.56991E-05	0.000364934
F13A1	6p25.1	0.174605828	6.57359E-05	0.000365038
ECHDC2	1p32.3	-0.174569182	6.59722E-05	0.000366249
BRD3	9q34.2	0.174558762	6.60395E-05	0.000366522
SUPT20HL1	Xp22.11	0.174519333	6.62949E-05	0.000367838
VPREB3	22q11.23 22q11	0.174493337	6.64637E-05	0.000368673
TMEM229A	7q31.32	0.174480741	6.65457E-05	0.000369026
ATP5F1A	18q21.1	-0.174476699	6.6572E-05	0.00036907
HNF1A-AS1	12q24.31	-0.174473179	6.65949E-05	0.000369096
TASOR2	10p15.1	0.174467234	6.66337E-05	0.000369209
TLCD4	1p21.3	-0.174440662	6.68071E-05	0.000370068
MALT1	18q21.32	0.174397416	6.70903E-05	0.000371534
IFNAR2	21q22.11	0.174383522	6.71815E-05	0.000371937
NCAPD3	11q25	0.174373713	6.7246E-05	0.000372192
SPHAR	1q42.13	-0.174327424	6.7551E-05	0.000373777
PCDHGA4	5q31.3	0.174269849	6.79322E-05	0.000375728
ZNF76	6p21.31	-0.174268548	6.79408E-05	0.000375728
TF	3q22.1	0.174245226	6.80958E-05	0.000376482
SLC31A2	9q32	0.174209672	6.83328E-05	0.000377688
UBTD2	5q35.1	0.174200988	6.83908E-05	0.000377905
RPS9	19q13.42	-0.17417511	6.85639E-05	0.000378695
STYX	14q22.1	0.174173981	6.85715E-05	0.000378695
ATF7IP	12p13.1	0.17413308	6.88459E-05	0.000380053
KISS1R	19p13.3	0.174131702	6.88552E-05	0.000380053
DAO	12q24.11	-0.174112965	6.89813E-05	0.000380645
BIN2	12q13.13	0.174086709	6.91583E-05	0.000381517
FAM13C	10q21.1	0.174079241	6.92088E-05	0.000381691
CDR1	Xq27.1	0.174058524	6.93489E-05	0.000382359
ATAD2	8q24.13	0.174021233	6.96017E-05	0.000383648

FDX2	19p13.2	-0.174014941	6.96445E-05	0.000383779
BNIPL	1q21.3	-0.174009683	6.96802E-05	0.000383871
PCDHGA2	5q31.3	0.173995196	6.97788E-05	0.000384305
MACROD1	11q13.1	-0.173992489	6.97972E-05	0.000384305
CYP4Z2P	1p33	-0.173988837	6.98221E-05	0.000384337
NCAPG2	7q36.3	0.173985195	6.98469E-05	0.000384368
PLIN5	19p13.3	-0.173964614	6.99873E-05	0.000385036
COQ7	16p12.3	-0.173953672	7.00621E-05	0.000385341
SLC43A3	11q12.1	0.173936131	7.01821E-05	0.000385896
CDS1	4q21.23	-0.173830449	7.09091E-05	0.000389787
CCL15	17q12	-0.173805135	7.10843E-05	0.000390643
LAMA2	6q22.33	0.173791893	7.11761E-05	0.000391041
RNF169	11q13.4	0.173755421	7.14295E-05	0.000392327
LYPLA2	1p36.11	-0.173749081	7.14737E-05	0.000392462
GLG1	16q23.1	0.173679003	7.19633E-05	0.000395043
BAAT	9q31.1	-0.173656774	7.21193E-05	0.000395687
YES1	18p11.32	0.173656686	7.21199E-05	0.000395687
ENTPD6	20p11.21	-0.173652257	7.21511E-05	0.00039575
NRM	6p21.33	0.17359147	7.25794E-05	0.000397991
FAM118A	22q13.31	0.173567116	7.27517E-05	0.000398784
PYCR2	1q42.12	-0.173563682	7.2776E-05	0.000398784
CASC15	6p22.3	0.173562619	7.27835E-05	0.000398784
LOC644936	5q14.1	0.173526515	7.30398E-05	0.000400079
MSRB1	16p13.3	-0.173478059	7.3385E-05	0.000401861
TOGARAM1	14q21.2	0.173472502	7.34247E-05	0.000401969
GALNT1	18q12.2	0.173441066	7.36496E-05	0.00040309
FLJ16779	20q13.33	0.173413111	7.38501E-05	0.000404078
TEKT5	16p13.13	-0.173397696	7.39609E-05	0.000404574
ETFBKMT	12p11.21	-0.173392878	7.39956E-05	0.000404654
IL15	4q31.21	0.173345718	7.43357E-05	0.000406403
LHFPL6	13q13.3-q14.11	0.173321841	7.45084E-05	0.000407237
LINC00312	3p25.3	0.173307335	7.46136E-05	0.000407701
ZBTB8OS	1p35.1	-0.173303167	7.46438E-05	0.000407756
VASN	16p13.3	0.173300041	7.46665E-05	0.000407769
MRPS26	20p13	-0.173247938	7.50456E-05	0.000409728
CTSH	15q25.1	-0.173224578	7.52161E-05	0.000410548
ABCA6	17q24.2-q24.3	0.173205647	7.53546E-05	0.000411192
AGPAT4	6q26	0.173193668	7.54423E-05	0.000411559
PFKFB3	10p15.1	0.173179422	7.55468E-05	0.000412018
ZNF208	19p12	0.173174827	7.55805E-05	0.00041209
COPS9	2q37.3	-0.173166791	7.56395E-05	0.0004123
ATRX	Xq21.1	0.17310396	7.61025E-05	0.000414711
NKRF	Xq24	0.173086766	7.62296E-05	0.000415292
FAT1	4q35.2	0.173079471	7.62836E-05	0.00041547
AVL9	7p14.3	0.173076779	7.63036E-05	0.00041547
CHD4	12p13.31	0.173073827	7.63255E-05	0.000415476
ADNP	20q13.13	0.173066272	7.63815E-05	0.000415669
PRELID1	5q35.3	-0.172997149	7.68956E-05	0.000418336
ABCB8	7q36.1	-0.172994804	7.69131E-05	0.000418336
FDFT1	8p23.1	-0.172943656	7.72957E-05	0.000420303
ITPRIP	10q25.1	0.172926028	7.7428E-05	0.000420909
UMPS	3q21.2	-0.172898761	7.76331E-05	0.000421874
TLR1	4p14	0.172896851	7.76475E-05	0.000421874
FAM155A	13q33.3	0.172869761	7.78517E-05	0.00042287
SAMD14	17q21.33	0.172859648	7.79281E-05	0.00042317
MAN1C1	1p36.11	0.172846832	7.8025E-05	0.000423582
SNX4	3q21.2	-0.172816786	7.82526E-05	0.000424704
SAMM50	22q13.31	-0.172788216	7.84696E-05	0.000425767

FAM86C2P	11q13.2	-0.172741414	7.88264E-05	0.000427587
NDUFAB1	16p12.2	-0.172726995	7.89366E-05	0.000428069
TMEM164	Xq23	-0.172712145	7.90502E-05	0.00042857
PYGB	20p11.21	-0.172693736	7.91913E-05	0.00042922
NTF4	19q13.33	-0.172673829	7.93442E-05	0.000429932
FAM49B	8q24.21	0.172669855	7.93748E-05	0.000429982
LOC440173	9q21.33	0.172659156	7.94571E-05	0.000430312
NPR3	5p13.3	0.172620448	7.97555E-05	0.000431812
FGFR1OP2	12p11.23	0.172532477	8.04376E-05	0.000435388
SLC38A1	12q13.11	0.172497308	8.07119E-05	0.000436677
PSMA8	18q11.2	0.172496378	8.07191E-05	0.000436677
TAPT1	4p15.32	-0.172467439	8.09455E-05	0.000437784
PTPRA	20p13	0.172459272	8.10095E-05	0.000438013
NDUFB2	7q34	-0.172434002	8.12078E-05	0.000438967
PDE1B	12q13.2	0.172430232	8.12374E-05	0.000438996
SLA2	20q11.23	0.172427754	8.12569E-05	0.000438996
STUB1	16p13.3	-0.172420977	8.13101E-05	0.000439166
ITIH4	3p21.1	0.172413643	8.13678E-05	0.00043936
TAB2	6q25.1	0.172408211	8.14106E-05	0.000439473
ELK4	1q32.1	0.172376602	8.16599E-05	0.000440701
ISOC1	5q23.3	-0.172357411	8.18115E-05	0.000441397
CYP27A1	2q35	-0.172354719	8.18328E-05	0.000441397
LINC00452	13q34	0.1723282	8.20429E-05	0.000442296
C1ORF35	1q42.13	-0.172328147	8.20434E-05	0.000442296
OTX2	14q22.3	0.172304137	8.2234E-05	0.000443205
TSPAN3	15q24.3	-0.17228082	8.24196E-05	0.000444086
BRD4	19p13.12	0.172275696	8.24604E-05	0.000444187
RPL11	1p36.11	-0.172270833	8.24991E-05	0.00044421
SLC6A8	Xq28	0.172269618	8.25088E-05	0.00044421
EVPL	17q25.1	-0.172263278	8.25594E-05	0.000444364
AGR3	7p21.1	-0.172225758	8.28593E-05	0.000445859
SFTPB	2p11.2	-0.172181129	8.32173E-05	0.000447666
NLRP1	17p13.2	0.172168798	8.33165E-05	0.000448079
PLXNB3	Xq28	0.172153341	8.3441E-05	0.000448521
LACC1	13q14.11	0.172153081	8.34431E-05	0.000448521
EIPR1	2p25.3	-0.172137797	8.35663E-05	0.000449063
NRBP1	2p23.3	0.17213415	8.35958E-05	0.000449076
NNMT	11q23.2	0.172131979	8.36133E-05	0.000449076
OSGEPL1	2q32.2	-0.172117911	8.3727E-05	0.000449566
DNAJC10	2q32.1	0.172098894	8.38809E-05	0.000450273
SPIN1	9q22.1	0.172087344	8.39745E-05	0.000450655
RBFox1	16p13.3	0.17207321	8.40891E-05	0.00045115
RPS6KB1	17q23.1	0.171986525	8.47956E-05	0.000454819
DSTN	20p12.1	-0.171936072	8.52094E-05	0.000456917
GLRB	4q32.1	0.17193199	8.5243E-05	0.000456975
ODAM	4q13.3	-0.171926325	8.52896E-05	0.000457103
PSMB3	17q12	-0.171912539	8.54031E-05	0.000457589
LOC100128164	3q26.2	0.17187649	8.57005E-05	0.000459061
SPATA24	5q31.2	-0.171871084	8.57452E-05	0.000459178
IQCF6	3p21.2	-0.171853564	8.58902E-05	0.000459832
SAMD7	3q26.2	0.171846412	8.59494E-05	0.000460003
SSH2	17q11.2	0.171844197	8.59678E-05	0.000460003
KRTCAP2	1q22	-0.171741728	8.68211E-05	0.000464304
TBXAS1	7q34	0.17174138	8.6824E-05	0.000464304
PSMA4	15q25.1	-0.171739383	8.68407E-05	0.000464304
CEP170P1	4q26	0.171711791	8.70719E-05	0.000465416
TREM1	6p21.1	0.171698048	8.71873E-05	0.000465909
CDH19	18q22.1	-0.171677998	8.73558E-05	0.000466686

BAHD1	15q15.1	-0.171653934	8.75585E-05	0.000467645
METTL5	2q31.1	-0.171643514	8.76465E-05	0.00046799
TRAPPC3	1p34.3	-0.171625017	8.78027E-05	0.0004687
SLC10A5	8q21.13	-0.171609477	8.79342E-05	0.000469278
HDHD2	18q21.1	-0.171589847	8.81006E-05	0.000470041
TMEM256	17p13.1	-0.171575519	8.82222E-05	0.000470347
BNIP2	15q22.2	0.171575172	8.82252E-05	0.000470347
HOXC12	12q13.13	0.171574842	8.8228E-05	0.000470347
PLSCR3	17p13.1	0.171559715	8.83565E-05	0.000470907
FAM86B2	8p23.1	-0.171546366	8.84701E-05	0.000471288
SLC38A4	12q13.11	0.171545829	8.84747E-05	0.000471288
TMEM150A	2p11.2	-0.171540697	8.85184E-05	0.000471396
HOXD3	2q31.1	0.171510627	8.8775E-05	0.000472637
ZYX	7q34	0.171493544	8.89211E-05	0.000473289
CYLD	16q12.1	0.171438662	8.93918E-05	0.000475669
AP3B2	15q25.2	-0.171432735	8.94428E-05	0.000475795
RALGAPB	20q11.23	0.17142746	8.94882E-05	0.000475795
FOXK1	7p22.1	0.171426331	8.94979E-05	0.000475795
PLAGL2	20q11.21	0.171424942	8.95099E-05	0.000475795
ANAPC13	3q22.2	-0.171385691	8.98485E-05	0.000477468
MYT1	20q13.33	0.171354158	9.01213E-05	0.000478792
EGR2	10q21.3	0.171341316	9.02327E-05	0.000479257
WNT9A	1q42.13	0.17130767	9.0525E-05	0.000480683
SPIN2A	Xp11.21	0.171179087	9.16505E-05	0.000486531
TSG101	11p15.1	-0.171156003	9.18539E-05	0.000487477
F11R	1q23.3	-0.17115088	9.18992E-05	0.000487477
B9D1	17p11.2	-0.171150619	9.19015E-05	0.000487477
ADM	11p15.4	0.171130039	9.20833E-05	0.000488298
HAS1	19q13.41	0.171125634	9.21222E-05	0.000488298
DYNLT1	6q25.3	-0.171124876	9.2129E-05	0.000488298
NAB2	12q13.3	-0.171111369	9.22485E-05	0.000488803
CACNG5	17q24.2	0.17109899	9.23582E-05	0.000489256
CCL7	17q12	0.171048525	9.28068E-05	0.000491502
SIRT3	11p15.5	-0.171026875	9.29999E-05	0.000492395
PLCL2	3p24.3	0.170997697	9.32606E-05	0.000493646
LYPD1	2q21.2	0.170956275	9.3632E-05	0.000495442
ADRA2A	10q25.2	0.170954365	9.36492E-05	0.000495442
RPS27L	15q22.2	-0.170911554	9.40346E-05	0.000497351
TNFAIP8	5q23.1	0.170845036	9.46364E-05	0.000500402
SCP2	1p32.3	-0.170835483	9.47231E-05	0.000500516
CDC42EP5	19q13.42	0.170834528	9.47318E-05	0.000500516
VIRMA	8q22.1	0.170834441	9.47325E-05	0.000500516
PTGDR2	11q12.2	-0.170789713	9.51396E-05	0.000502486
FBXO36	2q36.3	-0.170787983	9.51554E-05	0.000502486
EXT2	11p11.2	0.170766534	9.53512E-05	0.000503388
RPL13	16q24.3 17p11.2	-0.170761758	9.53949E-05	0.000503487
CYP4V2	4q35.1-q35.2	-0.170743695	9.55601E-05	0.000504227
ELL	19p13.11	0.170731364	9.56731E-05	0.000504691
LOC399815	10q26.13	0.170719644	9.57806E-05	0.000505125
CCDC136	7q32.1	0.170712654	9.58448E-05	0.000505331
ZNF33B	10q11.21	-0.170626985	9.66345E-05	0.000509341
RPP38	10p13	-0.170624687	9.66558E-05	0.000509341
RPGRIP1L	16q12.2	0.170584047	9.70326E-05	0.000511193
RALGPS1	9q33.3	-0.17056585	9.72018E-05	0.00051195
PDE5A	4q26	0.170547614	9.73717E-05	0.00051271
TTLL7	1p31.1	0.170536167	9.74784E-05	0.000513138
INO80E	16p11.2	-0.170532852	9.75093E-05	0.000513167
SIDT1	3q13.2	0.170515658	9.76699E-05	0.000513778

NOL12	22q13.1	-0.170514963	9.76764E-05	0.000513778
CDKN2C	1p32.3	0.170509406	9.77284E-05	0.000513917
C3AR1	12p13.31	0.17046121	9.81801E-05	0.00051613
C16ORF89	16p13.3	-0.170459039	9.82005E-05	0.00051613
SFRP1	8p11.21	0.170442674	9.83544E-05	0.000516803
DUSP7	3p21.2	0.170398079	9.87748E-05	0.000518877
CC2D2A	4p15.32	-0.170385144	9.88971E-05	0.000519384
RGS2	1q31.2	0.170377498	9.89694E-05	0.000519628
WBP1	2p13.1	-0.170364216	9.90952E-05	0.000520153
EFNA1	1q22	-0.170350405	9.92262E-05	0.000520705
SEMA6D	15q21.1	0.170300212	9.97035E-05	0.000523073
SDC4	20q13.12	-0.170290139	9.97995E-05	0.00052344
GCNT3	15q22.2	-0.170256446	0.000100121	0.000524982
TMEM117	12q12	0.170253927	0.000100146	0.000524982
BASP1-AS1	5p15.1	0.170203899	0.000100625	0.000527292
HNF4A	20q13.12	-0.170202526	0.000100639	0.000527292
ANKRD36	2q11.2	0.170193054	0.00010073	0.000527632
PHACTR1	6p24.1	-0.170150763	0.000101137	0.00052963
MRTFA	22q13.1-q13.2	0.170120196	0.000101433	0.00053104
NUDT4	12q22	0.170113597	0.000101497	0.000531236
AHCYL1	1p13.3	-0.17005307	0.000102085	0.000534176
WDR54	2p13.1	0.170050031	0.000102115	0.000534192
MCM8	20p12.3	0.17003796	0.000102233	0.000534669
TIMP1	Xp11.3	0.170033532	0.000102276	0.000534756
PPP2R2C	4p16.1	-0.170029618	0.000102314	0.000534817
RTL1	14q32.2	0.170008072	0.000102525	0.000535779
CCBE1	18q21.32	0.16998308	0.000102769	0.000536919
RND1	12q13.12	-0.169979866	0.000102801	0.000536944
TMED1	19p13.2	-0.169968837	0.000102909	0.00053737
LBX1	10q24.32	0.169902314	0.000103564	0.000540651
FAM76B	11q21	0.169887557	0.00010371	0.000541272
STAMBPL1	10q23.31	0.169878439	0.0001038	0.000541602
ST8SIA1	12p12.1	0.169872794	0.000103856	0.000541753
PSMB6	17p13.2	-0.169862113	0.000103962	0.000542165
RPL29	3p21.2	-0.169857076	0.000104012	0.000542285
HOXC8	12q13.13	0.169849781	0.000104084	0.000542404
DCAF10	9p13.2	0.169849348	0.000104089	0.000542404
AMN1	12p11.21	-0.169798287	0.000104597	0.000544909
LPCAT3	12p13.31	-0.169745315	0.000105126	0.000547526
SNRNP35	12q24.31	-0.169721782	0.000105362	0.000548613
SLC35F4	14q22.3-q23.1	0.169706471	0.000105516	0.000549272
TMEM18	2p25.3	-0.169691389	0.000105668	0.000549919
NFKBIZ	3q12.3	0.169647883	0.000106106	0.00055206
NUDT17	1q21.1	-0.169643418	0.000106151	0.000552152
CIAO2B	16q22.1	-0.169639463	0.000106191	0.000552217
SLC4A11	20p13	0.169635552	0.000106231	0.000552281
NLRP8	19q13.43	0.169621155	0.000106377	0.000552895
NCKAP5	2q21.2	0.169610542	0.000106484	0.000553312
TOP3A	17p11.2	0.169604724	0.000106543	0.000553475
PJA1	Xq13.1	0.169576068	0.000106834	0.000554844
GRIA3	Xq25	0.169536163	0.000107241	0.000556812
GRK4	4p16.3	0.16951971	0.000107409	0.000557541
ADAMTS9	3p14.1	0.169504777	0.000107562	0.00055819
LOC388955	2p15	-0.169472383	0.000107894	0.000559769
PTK6	20q13.33	-0.169463265	0.000107987	0.00056011
EDEM3	1q25.3	0.169376426	0.000108883	0.00056461
DDC	7p12.2-p12.1	-0.169373366	0.000108915	0.000564629
ENTHD1	22q13.1	0.169368176	0.000108969	0.000564763

DNAJB2	2q35	-0.169311732	0.000109555	0.000567655
ADAMDEC1	8p21.2	0.16922307	0.000110482	0.000572311
PYROXD2	10q24.2	-0.169207786	0.000110642	0.000572995
ZFYVE1	14q24.2	0.169201447	0.000110709	0.000573193
VGLL4	3p25.3-p25.2	0.169171141	0.000111028	0.000574597
AZU1	19p13.3	-0.169170274	0.000111037	0.000574597
BAALC-AS2	8q22.3	0.169166593	0.000111076	0.000574651
CCNY	10p11.21	0.169111743	0.000111656	0.000577503
BCKDHB	6q14.1	-0.16910853	0.00011169	0.000577531
HIST1H2BF	6p22.2	0.16903122	0.000112513	0.000581636
NUDT8	11q13.2	-0.168985567	0.000113002	0.000584011
KIAA1841	2p15	0.168947445	0.000113411	0.000585977
FBXO40	3q13.33	0.168939737	0.000113494	0.000586255
HECW1	7p14.1-p13	0.16893263	0.000113571	0.0005865
ABHD11-AS1	7q11.23	-0.168886056	0.000114073	0.000588945
XPR1	1q25.3	0.168841503	0.000114556	0.000591287
GAS6	13q34	0.168834816	0.000114629	0.00059151
RNH1	11p15.5	-0.168816754	0.000114825	0.000592372
IDUA	4p16.3	-0.168798952	0.000115019	0.00059322
FBXO5	6q25.2	0.168786968	0.00011515	0.000593742
POLD4	11q13.2	-0.168775853	0.000115271	0.000594216
CPED1	7q31.31	0.168702127	0.000116079	0.000598228
OSGEP	14q11.2	-0.168696743	0.000116139	0.00059838
NUDT14	14q32.33	-0.168678854	0.000116336	0.000599241
TM4SF5	17p13.2	-0.168646852	0.000116689	0.000600907
LCOR	10q24.1	0.168636912	0.000116799	0.000601319
SLC25A32	8q22.3	0.16861746	0.000117014	0.000602273
AHRR	5p15.33	0.1686106	0.00011709	0.000602511
NRF1	7q32.2	0.168561102	0.00011764	0.000605186
C5ORF34	5p12	0.168522513	0.00011807	0.000607245
ABTB1	3q21.3	-0.168516167	0.000118141	0.000607455
KCNH4	17q21.2	0.168485768	0.000118482	0.000608968
MEPE	4q22.1	0.168484481	0.000118496	0.000608968
PEX12	17q12	-0.168463582	0.000118731	0.000610017
JARID2	6p22.3	0.168459414	0.000118777	0.000610102
ZNF19	16q22.2	-0.168454725	0.00011883	0.000610217
ACSM1	16p12.3	-0.168398456	0.000119464	0.000613317
DYSF	2p13.2	0.168389249	0.000119568	0.000613695
MBOAT2	2p25.1	0.168362068	0.000119876	0.000615117
SFXN4	10q26.11	-0.168318128	0.000120375	0.00061752
APP	21q21.3	0.168248397	0.000121171	0.000621445
AVIL	12q14.1	0.168221872	0.000121475	0.000622846
C14ORF132	14q32.2	0.168189047	0.000121852	0.000624621
PEPD	19q13.11	-0.168150878	0.000122292	0.000626717
MDGA1	6p21.2	0.168146279	0.000122345	0.00062683
CD4	12p13.31	0.168138547	0.000122435	0.000627128
CHCHD4	3p25.1	-0.168133163	0.000122497	0.000627287
GDPD4	11q13.5	0.168117556	0.000122678	0.000627946
EEF1A1P9	4q24	-0.168116663	0.000122688	0.000627946
LOC284788	20p11.21	-0.168108715	0.00012278	0.000628257
HYI	1p34.2	-0.168085923	0.000123045	0.000629311
KCTD6	3p14.3	0.168085575	0.000123049	0.000629311
CES1	16q12.2	-0.168034775	0.00012364	0.000632176
CHPF	2q35	0.168010287	0.000123926	0.000633477
ZBTB32	19q13.12	0.167993465	0.000124123	0.000634323
UTS2R	17q25.3	0.167933871	0.000124823	0.000637737
PSMD4	1q21.3	-0.167889668	0.000125344	0.000640238
WIZ	19p13.12	0.167849683	0.000125818	0.000642494

ABCB1	7q21.12	0.167820198	0.000126168	0.000644119
TUBB6	18p11.21	0.167795883	0.000126457	0.000645433
C10ORF95	10q24.32	-0.167652773	0.000128174	0.000654028
ZNF417	19q13.43	0.167623122	0.000128532	0.000655569
HSPB2	11q23.1	0.167570885	0.000129166	0.000658756
PRINS	10p12.1	0.167561553	0.000129279	0.000659167
ZNF154	19q13.43	0.167536584	0.000129583	0.000660551
SPTA1	1q23.1	0.167521856	0.000129763	0.0006613
IKZF2	2q34	0.167479531	0.000130281	0.00066377
RMDN1	8q21.3	-0.1674606	0.000130513	0.000664785
MRPS18C	4q21.23	-0.167456085	0.000130569	0.000664899
CT62	15q23	-0.167443839	0.000130719	0.000665497
ZNF649	19q13.41	0.167440848	0.000130756	0.000665516
MSLN	16p13.3	-0.167433033	0.000130852	0.000665837
AKAP11	13q14.11	0.167406066	0.000131184	0.000667359
TREML2	6p21.1	0.16740096	0.000131247	0.000667511
FAU	11q13.1	-0.167374891	0.000131569	0.000668926
DIS3L2	2q37.1	-0.167373067	0.000131592	0.000668926
HMG3	6q14.1	-0.167349881	0.000131879	0.000670217
LIMD2	17q23.3	0.167327911	0.000132152	0.000671433
ATG10	5q14.1-q14.2	-0.16731393	0.000132326	0.000672146
CLEC4D	12p13.31	0.167284577	0.000132691	0.000673729
ACTB	7p22.1	0.167283537	0.000132704	0.000673729
TRIM61	4q32.3	0.16727538	0.000132806	0.000674075
CDV3	3q22.1	0.167224834	0.000133438	0.000677113
NFKBIL1	6p21.33	-0.167214066	0.000133573	0.000677331
CATSPER2P1	15q15.3	-0.167213372	0.000133582	0.000677331
SPAG1	8q22.2	0.16721259	0.000133592	0.000677331
NACA4P	8q22.3	-0.16721068	0.000133616	0.000677331
SEPTIN1	16p11.2	0.167197133	0.000133786	0.000678023
MYADM	19q13.42	0.167191141	0.000133861	0.000678234
TMEM139	7q34	-0.167174381	0.000134072	0.000679131
CBR4	4q32.3	-0.16716891	0.000134141	0.00067931
LOC100130987	11q13.2	-0.167165444	0.000134185	0.00067936
SMG1P1	16p12.2	0.167156232	0.000134301	0.000679777
F2RL1	5q13.3	-0.167128704	0.000134648	0.000681365
CDKAL1	6p22.3	0.167113468	0.000134841	0.000682169
MUC4	3q29	0.167085893	0.000135191	0.000683644
MANSC1	12p13.2	-0.167083461	0.000135221	0.000683644
MRPL20	1p36.33	-0.167082419	0.000135235	0.000683644
KLF9	9q21.12	0.167011038	0.000136144	0.000688067
GTPBP6	Xp22.33 and Yp11	-0.16700661	0.0001362	0.00068818
POU5F1	6p21.33	-0.166990071	0.000136412	0.000689076
TRAF7	16p13.3	-0.166983945	0.00013649	0.000689299
CYP51A1	7q21.2	-0.166972395	0.000136638	0.000689873
LINC01555	1p22.3	-0.166969619	0.000136674	0.00068988
BICDL1	12q24.23	-0.166906572	0.000137484	0.000693797
WARS2	1p12	-0.166840922	0.000138333	0.000697906
FZD10	12q24.33	0.166726314	0.000139827	0.000705264
GRK5	10q26.11	0.166715615	0.000139967	0.000705795
KLHDC2	14q21.3	-0.166691473	0.000140284	0.000707215
PLEKHB2	2q21.1	-0.166669851	0.000140568	0.000708471
RASSF6	4q13.3	0.166655609	0.000140756	0.000709137
MARK1	1q41	0.16665448	0.00014077	0.000709137
C9ORF64	9q21.32	-0.166630252	0.00014109	0.000710543
ACADVL	17p13.1	-0.166625737	0.00014115	0.000710543
SRP54	14q13.2	0.166625303	0.000141156	0.000710543
MTMR14	3p25.3	-0.166613232	0.000141315	0.000711169

C1QBP	17p13.2	-0.16658197	0.000141729	0.000713075
RPL13AP17	7q21.11	-0.166566382	0.000141936	0.000713937
GPR142	17q25.1	0.166523803	0.000142503	0.000716609
PLPP1	5q11.2	0.1665125	0.000142654	0.000717188
SFTPA1	10q22.3	-0.166500429	0.000142815	0.000717819
FAM83A	8q24.13	0.166488011	0.000142981	0.000718474
ANKRD40CL	17q21.33	-0.166429415	0.000143767	0.000722242
SV2B	15q26.1	0.166410986	0.000144015	0.000723307
SKP1	5q31.1	-0.166382937	0.000144393	0.000725026
FANCL	2p16.1	-0.166359143	0.000144714	0.000726459
PUDP	Xp22.31	-0.166347681	0.00014487	0.000727057
SLC66A1L	3q25.32	-0.166340397	0.000144968	0.00072737
FAM86JP	3q21.2	-0.166337694	0.000145005	0.000727373
FAM122B	Xq26.3	0.166296012	0.000145571	0.00073003
SND1-IT1	7q32.1	0.166285875	0.000145709	0.00073054
GLS2	12q13.3	-0.166260756	0.000146051	0.000731999
MAP3K21	1q42.2	-0.166259192	0.000146072	0.000731999
AMDHD1	12q23.1	-0.166240866	0.000146323	0.000733071
RNGTT	6q15	0.166172181	0.000147264	0.000737605
PRR11	17q22	0.166166105	0.000147348	0.00073784
GPR174	Xq21.1	0.166156379	0.000147482	0.000738326
EEF2KMT	16p13.3	-0.16613154	0.000147824	0.000739857
CDKN2AIP	4q35.1	-0.166098368	0.000148283	0.000741967
LXN	3q25.32	0.166054428	0.000148892	0.000744831
SPATA8	15q26.2	0.166044724	0.000149027	0.00074532
RACK1	5q35.3	-0.166038363	0.000149115	0.000745577
IL36RN	2q14.1	0.166017431	0.000149407	0.00074685
HEMK1	3p21.31	-0.166012138	0.000149481	0.000747033
TUBA1A	12q13.12	0.165974102	0.000150012	0.000749502
CNBP	3q21.3	-0.165927731	0.000150662	0.000752564
RBM12B-AS1	8q22.1	0.165924264	0.000150711	0.00075262
COX7B	Xq21.1	-0.165918613	0.00015079	0.00075283
TRAF3IP3	1q32.2	0.16590355	0.000151002	0.000753701
RPS12	6q23.2	-0.165892735	0.000151155	0.000754275
FNIP1	5q31.1	0.165874238	0.000151416	0.000755389
LYPLA2P1	6p21.32	-0.1658666	0.000151523	0.00075574
NIPSNAP3B	9q31.1	0.165848968	0.000151773	0.000756796
CUTC	10q24.2	-0.165807373	0.000152362	0.000759547
MICA	6p21.33	-0.16577559	0.000152814	0.000761611
FMR1	Xq27.3	0.165737642	0.000153355	0.000764119
RPS14	5q33.1	-0.165726613	0.000153513	0.000764715
MYCL	1p34.2	0.165715151	0.000153677	0.000765342
ZDHHC12	9q34.11	-0.165701604	0.000153871	0.000766119
STAM2	2q23.3	-0.165668084	0.000154352	0.000768324
LRFN2	6p21.2-p21.1	0.165663157	0.000154423	0.000768487
C1ORF54	1q21.2	0.165638993	0.00015477	0.000770027
SLC37A3	7q34	0.165599308	0.000155343	0.000772686
ATP2A3	17p13.2	0.16558689	0.000155523	0.000773388
PCDHGA11	5q31.3	0.16558168	0.000155598	0.000773572
LYST	1q42.3	0.165564573	0.000155846	0.000774614
SLC6A13	12p13.33	-0.165557146	0.000155954	0.000774958
LAPTM5	1p35.2	0.165532269	0.000156315	0.000776562
LONRF3	Xq24	-0.165526798	0.000156395	0.000776766
B4GAT1	11q13.2	-0.16552098	0.00015648	0.000776812
KIF21B	1q32.1	0.165518722	0.000156513	0.000776812
DHRS4	14q11.2	-0.165518201	0.00015652	0.000776812
FCGR3B	1q23.3	0.165499271	0.000156796	0.000777989
SLC25A20	3p21.31	-0.165493105	0.000156886	0.000778244

PIP4P2	8q21.3	0.165461843	0.000157343	0.000780318
CTNNA2	2p12	0.16539747	0.000158287	0.000784627
MAP6D1	3q27.1	0.165397322	0.00015829	0.000784627
ZBTB1	14q23.3	0.165392025	0.000158368	0.00078482
PTGER2	14q22.1	0.16536554	0.000158758	0.000786561
NIPSNAP3A	9q31.1	-0.165335667	0.000159199	0.000788554
HPN	19q13.11	-0.165296851	0.000159775	0.000791208
EEF1A1	6q13	-0.16525595	0.000160383	0.000794012
LINC01300	8q24.3	-0.165253482	0.00016042	0.000794012
HSPA6	1q23.3	0.165245008	0.000160546	0.000794442
MTRR	5p15.31	-0.165170327	0.000161663	0.000799774
SLC25A3	12q23.1	-0.165166727	0.000161717	0.000799845
TXNRD2	22q11.21	-0.165105372	0.000162641	0.000804216
PCNX2	1q42.2	0.16509747	0.00016276	0.000804608
PEAK3	19p13.3	0.165075608	0.000163091	0.000806044
NUP210	3p25.1	0.165071766	0.000163149	0.000806134
KIAA0408	6q22.33	-0.165009016	0.000164102	0.000810642
FGD5	3p25.1	0.164992396	0.000164355	0.000811693
GZMB	14q12	0.164984493	0.000164475	0.000812089
FGF16	Xq21.1	0.16496673	0.000164746	0.000813228
SLN	11q22.3	0.164958873	0.000164867	0.000813622
LURAP1	1p34.1	0.164952537	0.000164963	0.0008139
RETSAT	2p11.2	-0.164936559	0.000165208	0.000814763
FLVCR1-DT	1q32.3	-0.164935824	0.000165219	0.000814763
FARS2	6p25.1	-0.164922454	0.000165424	0.000815574
GPR15	3q11.2	0.164884573	0.000166006	0.000818243
CMC1	3p24.1	-0.164877769	0.000166111	0.000818559
SCGB2A1	11q12.3	-0.16485232	0.000166503	0.000820291
SUFU	10q24.32	0.164842947	0.000166648	0.000820803
CYMP	1p13.3	-0.164821204	0.000166984	0.000822257
KCNJ6	21q22.13	0.164809895	0.000167159	0.000822918
MIR4435-2HG	2q13	0.164798316	0.000167338	0.0008236
MAML2	11q21	0.164782424	0.000167585	0.000824457
ACOT11	1p32.3	-0.164781813	0.000167594	0.000824457
GPRC5D	12p13.1	-0.164770411	0.000167772	0.000825126
RAB5B	12q13.2	-0.164756716	0.000167985	0.000825972
GTF2A2	15q22.2	-0.164725194	0.000168476	0.000828184
DDHD2	8p11.23	0.164719723	0.000168561	0.000828402
COX6B1	19q13.12	-0.164658937	0.000169512	0.000832874
MECR	1p35.3	-0.164652424	0.000169615	0.000833173
STK10	5q35.1	0.164633927	0.000169905	0.000834397
EFHD1	2q37.1	0.164625504	0.000170038	0.000834844
RPAP1	15q15.1	-0.164592505	0.000170558	0.000837193
TPRA1	3q21.3	-0.164572185	0.000170879	0.000838565
STX19	3q11.2	-0.164555773	0.000171139	0.000839634
WHAMM	15q25.2	-0.164495246	0.000172099	0.00084412
SAMD9L	7q21.2	0.164492902	0.000172137	0.00084412
SIRPG	20p13	0.16448031	0.000172337	0.000844835
GTF2H2C	5q13.2	-0.164478487	0.000172366	0.000844835
NCBP1	9q22.33	0.16446685	0.000172552	0.000845538
MAPK3	16p11.2	-0.164426384	0.000173199	0.000848501
KDM3A	2p11.2	0.164419697	0.000173306	0.000848819
NEK6	9q33.3	0.164403198	0.00017357	0.000849908
CIAO2A	15q22.31	-0.164397988	0.000173654	0.000850111
SLC35F1	6q22.2-q22.31	0.164379792	0.000173946	0.000851138
IL18R1	2q12.1	0.164379665	0.000173948	0.000851138
TADA2B	4p16.1	-0.164361515	0.00017424	0.000852228
NPM1	5q35.1	-0.16436056	0.000174256	0.000852228

PSD3	8p22	0.164329212	0.000174761	0.000854492
CT55	Xq26.3	0.164205857	0.000176764	0.000864074
ID2	2p25.1	0.164187839	0.000177058	0.000865303
ZDHHC7	16q24.1	-0.164174379	0.000177278	0.000866168
UROD	1p34.1	-0.164169516	0.000177358	0.000866347
KCNMA1	10q22.3	0.164130265	0.000178002	0.00086928
LOC100129034	9q33.3	0.16412601	0.000178072	0.000869411
FBLN5	14q32.12	0.164110987	0.000178319	0.000870406
CCDC181	1q24.2	0.164105467	0.000178409	0.000870638
AOC3	17q21.31	0.164056974	0.00017921	0.00087428
PIK3R1	5q13.1	0.164054976	0.000179243	0.00087428
DNAH5	5p15.2	0.164048898	0.000179343	0.000874558
CHD7	8q12.2	0.164017028	0.000179871	0.00087692
MAK	6p24.2	0.164001791	0.000180124	0.000877941
LHX2	9q33.3	0.163986797	0.000180373	0.000878828
GLYR1	16p13.3	-0.163985592	0.000180393	0.000878828
MIXL1	1q42.12	0.163973257	0.000180599	0.000879615
CDH23	10q22.1	0.163943389	0.000181097	0.000881828
OTOF	2p23.3	0.163939854	0.000181156	0.000881902
XAGE2	Xp11.22	-0.163904518	0.000181747	0.000884565
SYTL2	11q14.1	0.163861066	0.000182476	0.0008879
TFAP2A	6p24.3	0.163841267	0.000182809	0.000889262
C5ORF30	5q21.1	-0.163839183	0.000182844	0.000889262
PLA2G4A	1q31.1	0.16382911	0.000183014	0.000889873
ANKLE2	12q24.33	0.163764763	0.000184102	0.000894947
GABRD	1p36.33	0.16368418	0.000185473	0.000901394
RBM12B	8q22.1	0.163668546	0.00018574	0.000902474
EMP3	19q13.33	0.163636155	0.000186295	0.000904848
RCN1	11p13	0.163634766	0.000186319	0.000904848
LRRC25	19p13.11	0.163566858	0.000187486	0.0009103
FAM162A	3q21.1	-0.163557827	0.000187642	0.000910836
GUCA2B	1p34.2	-0.163534514	0.000188045	0.000912572
TMA7	3p21.31	-0.163529691	0.000188128	0.000912756
HIBADH	7p15.2	-0.163512063	0.000188434	0.000914017
KLF17	1p34.1	0.163499705	0.000188648	0.00091473
PHKB	16q12.1	-0.163498343	0.000188672	0.00091473
WHRN	9q32	0.163484188	0.000188917	0.000915701
XPA	9q22.33	-0.163472812	0.000189115	0.000916439
FGFR3	4p16.3	-0.163345855	0.000191335	0.000926972
KCNK9	8q24.3	0.163338287	0.000191468	0.000927393
SLC12A2	5q23.3	0.163325708	0.000191689	0.000928242
TMEM184B	22q13.1	0.163292883	0.000192268	0.000930821
RNF152	18q21.33	0.163269231	0.000192686	0.00093261
SH3BP4	2q37.2	0.163266745	0.00019273	0.00093261
TRIM13	13q14.2	-0.163251375	0.000193002	0.000933703
KRT4	12q13.13	-0.163233508	0.000193319	0.000935011
POLDIP3	22q13.2	-0.163215597	0.000193637	0.000936325
AGRP	16q22.1	-0.163186108	0.000194162	0.000938637
CNIH2	11q13.2	0.163182222	0.000194232	0.000938747
SERPINB9	6p25.2	0.163159066	0.000194645	0.000940518
ADH1B	4q23	-0.16314916	0.000194822	0.000941148
C16ORF54	16p11.2	0.163068841	0.000196263	0.000947775
KBTD8	3p14.1	0.163067451	0.000196288	0.000947775
TMEM59	1p32.3	-0.16305512	0.00019651	0.00094862
UNC93B1	11q13.2	-0.163049563	0.00019661	0.000948876
FAHD2A	2q11.1	-0.163041487	0.000196756	0.000949352
TMEM147	19q13.12	-0.163031587	0.000196935	0.000949986
DHRS11	17q12	-0.162982697	0.000197819	0.000954026

DMAC2	19q13.2	-0.162967848	0.000198089	0.000955097
PIGZ	3q29	-0.162947705	0.000198455	0.000956633
ESRRA	11q13.1	-0.162916877	0.000199017	0.00095911
RAD23A	19p13.13	-0.162891951	0.000199472	0.000961073
KLC1	14q32.33	0.162887175	0.000199559	0.000961264
HIST1H1D	6p22.2	0.162873901	0.000199802	0.000962204
RPS16	19q13.2	-0.162863902	0.000199985	0.000962855
DCAF11	14q12	-0.162842627	0.000200375	0.000964503
CAMK4	5q22.1	0.162803217	0.0002011	0.00096776
PLK4	4q28.1	0.16279365	0.000201276	0.000968376
WFDC12	20q13.12	-0.162775409	0.000201613	0.000969764
UNC45A	15q26.1	-0.162743284	0.000202206	0.000972388
HOXA2	7p15.2	0.16272927	0.000202466	0.000973404
SYF2	1p36.11	-0.162708896	0.000202844	0.000974988
NUP35	2q32.1	-0.16269092	0.000203178	0.00097636
FAM8A1	6p22.3	-0.162681716	0.000203349	0.00097695
GLYATL2	11q12.1	0.162673099	0.00020351	0.000977488
PLPPR5	1p21.3	0.162667434	0.000203615	0.000977761
LINC00239	14q32.31	-0.162664095	0.000203677	0.000977827
S100A10	1q21.3	-0.162661135	0.000203733	0.000977858
SOX4	6p22.3	0.162645244	0.000204029	0.000979048
SERPINA5	14q32.13	0.16262937	0.000204326	0.000980237
CLINT1	5q33.3	-0.162622579	0.000204453	0.000980613
VSIG10	12q24.23	-0.162592533	0.000205015	0.000983078
FBXO43	8q22.2	0.162581468	0.000205223	0.000983839
LMBRD1	6q13	-0.162546508	0.00020588	0.000986755
NPC2	14q24.3	-0.162529922	0.000206193	0.000988017
ZSCAN22	19q13.43	0.162493277	0.000206885	0.000991097
HINT2	9p13.3	-0.162489629	0.000206954	0.000991192
GCH1	14q22.2	0.162459804	0.000207519	0.000993662
GIN1	5q21.1	-0.162431448	0.000208057	0.000996003
ZBTB21	21q22.3	0.162416772	0.000208337	0.000997103
HNRNPUL2	11q12.3	0.162403225	0.000208595	0.000998101
RARB	3p24.2	0.162400446	0.000208648	0.000998117
VAMP1	12p13.31	0.162353727	0.00020954	0.001001918
SMAD6	15q22.31	-0.162353641	0.000209542	0.001001918
SPRR2F	1q21.3	0.16233467	0.000209905	0.001003417
ANO1	11q13.3	0.162312266	0.000210335	0.001005234
VSIG2	11q24.2	-0.162257004	0.000211399	0.00101008
NLRP13	19q13.43	0.162241219	0.000211704	0.001011296
ZNF37A	10p11.1	0.162214526	0.00021222	0.001013314
VRK3	19q13.33	-0.162214178	0.000212227	0.001013314
ACAP1	17p13.1	0.16219629	0.000212574	0.00101473
ABL1	9q34.12	0.162168675	0.00021311	0.001017049
MYH14	19q13.33	-0.162136111	0.000213745	0.001019724
PSG5	19q13.31	0.162134691	0.000213772	0.001019724
NAA40	11q13.1	0.162126732	0.000213927	0.001020223
FUT10	8p12	-0.162117618	0.000214105	0.001020829
PHF19	9q33.2	0.162114141	0.000214173	0.001020912
CDK15	2q33.1	0.16204101	0.000215607	0.0010275
SUMO1P3	1q23.2	-0.162032733	0.000215769	0.001028032
RPL22	1p36.31	-0.162000209	0.00021641	0.001030841
SRC	20q11.23	-0.161951579	0.000217371	0.001035176
HOOK3	8p11.21	0.161938033	0.00021764	0.001036209
CRB2	9q33.3	0.161928329	0.000217833	0.001036881
FUNDC1	Xp11.3	-0.16190156	0.000218364	0.001038759
GLDC	9p24.1	0.161900565	0.000218384	0.001038759
GAS5	1q25.1	-0.16189939	0.000218408	0.001038759

ELF2	4q31.1	0.161898087	0.000218434	0.001038759
MGC27382	1p31.1	-0.161866279	0.000219067	0.001041528
RBCK1	20p13	-0.161856231	0.000219268	0.001042235
KCNAB3	17p13.1	0.161834441	0.000219704	0.001043995
CYC1	8q24.3	-0.161832524	0.000219742	0.001043995
DNPEP	2q35	-0.161826619	0.00021986	0.00104431
AURKAIP1	1p36.33	-0.161817939	0.000220034	0.001044889
RASAL3	19p13.12	0.161803607	0.000220321	0.001046007
NDUFA4	7p21.3	-0.161785805	0.000220679	0.001047457
BBIP1	10q25.2	-0.16173761	0.000221649	0.001051815
DPP7	9q34.3	-0.161703395	0.00022234	0.001054846
PCED1B	12q13.11	0.161684117	0.000222731	0.001056376
TMEM9	1q32.1	-0.161682294	0.000222768	0.001056376
GFI1	1p22.1	0.1616552	0.000223318	0.001058734
IFNLR1	1p36.11	-0.161646777	0.000223489	0.001059296
LPA	6q25.3-q26	-0.16164008	0.000223625	0.001059692
MST1P2	1p36.13	-0.161622509	0.000223983	0.001061137
TIMMDC1	3q13.33	-0.161585733	0.000224733	0.001064442
ZNF662	3p22.1	0.161557334	0.000225314	0.001066944
BSDC1	1p35.1	-0.161518777	0.000226106	0.001070438
DVL3	3q27.1	0.16148135	0.000226876	0.001073834
RPS10	6p21.31	-0.161461898	0.000227277	0.001075385
MRPL41	9q34.3	-0.161459814	0.000227321	0.001075385
HTR6	1p36.13	0.161457104	0.000227377	0.001075385
SLC5A2	16p11.2	-0.16145512	0.000227418	0.001075385
ATP5MD	10q24.33	-0.161440883	0.000227712	0.001076524
CXCL13	4q21.1	0.161435152	0.000227831	0.001076832
GSTA3	6p12.2	-0.161430818	0.00022792	0.001077003
C15ORF54	15q14	0.161418845	0.000228168	0.001077923
SYS1	20q13.12	-0.161402848	0.0002285	0.00107919
BMPR1B	4q22.3	0.161399118	0.000228578	0.00107919
VPS36	13q14.3	-0.161398159	0.000228598	0.00107919
NCR3LG1	11p15.1	0.161376974	0.000229038	0.001081016
THAP4	2q37.3	-0.161360992	0.000229371	0.001082332
CIAO1	2q11.2	-0.161352135	0.000229555	0.001082949
ZBTB2	6q25.1	0.161332943	0.000229956	0.001084584
TLR3	4q35.1	-0.161280667	0.00023105	0.001089489
AUTS2	7q11.22	0.161264602	0.000231387	0.001090823
CHMP6	17q25.3	-0.161259131	0.000231502	0.00109111
NMT1	17q21.31	-0.161253834	0.000231613	0.001091253
ZNF337	20p11.21	0.161252531	0.00023164	0.001091253
WIF1	12q14.3	-0.161233051	0.00023205	0.001092928
NRK	Xq22.3	0.161215799	0.000232414	0.001094174
CLTB	5q35.2	-0.16121493	0.000232432	0.001094174
SLC25A11	17p13.2	-0.161212759	0.000232478	0.001094174
NMUR1	2q37.1	-0.161207382	0.000232592	0.001094452
CYP24A1	20q13.2	0.161185973	0.000233044	0.001096324
RGL1	1q25.3	0.16116413	0.000233506	0.001098242
ZFP57	6p22.1	0.16109898	0.00023489	0.001104493
PFDN6	6p21.32	-0.161086583	0.000235154	0.001105477
METAP1D	2q31.1	-0.161078945	0.000235317	0.001105985
SNRPC	6p21.31	-0.161054627	0.000235837	0.001108167
C2CD4B	15q22.2	0.161039651	0.000236157	0.001109414
MDC1	6p21.33	0.161009818	0.000236796	0.001112159
EFR3A	8q24.22	0.160996184	0.000237089	0.001113274
AGPAT2	9q34.3	-0.160977341	0.000237494	0.001114823
LIMK1	7q11.23	0.160975691	0.00023753	0.001114823
MELK	9p13.2	0.160932405	0.000238463	0.001118943

RAMP3	7p13	-0.160929059	0.000238536	0.001119022
NDUFB3	2q33.1	-0.160919159	0.00023875	0.001119765
C22ORF34	22q13.33	0.160897735	0.000239213	0.001121679
NAIP	5q13.2	0.160857764	0.000240081	0.001125484
C1GALT1C1L	2p21	0.160837927	0.000240513	0.001127245
HMGB3	Xq28	0.160828934	0.000240709	0.001127901
TP53TG1	7q21.12	-0.160797763	0.000241389	0.001130731
PON2	7q21.3	-0.160796109	0.000241425	0.001130731
TPX2	20q11.21	0.160782389	0.000241725	0.001131873
C2ORF88	2q32.2	0.160760986	0.000242194	0.001133804
SLC2A9	4p16.1	0.160733372	0.0002428	0.001136377
RPL23A	17q11.2	-0.160693814	0.00024367	0.001140186
LLGL1	17p11.2	0.160682358	0.000243923	0.00114109
PPP1R3B	8p23.1	0.160679919	0.000243977	0.00114109
C19ORF12	19q12	0.160670544	0.000244184	0.001141793
CCNG1	5q34	-0.160665938	0.000244285	0.001142003
AKAP1	17q22	-0.160654823	0.000244531	0.001142887
MTMR9	8p23.1	0.160597684	0.000245798	0.001148541
TAF4B	18q11.2	0.160572587	0.000246356	0.00115076
SMU1	9p21.1	0.160571201	0.000246387	0.00115076
CXORF49B	Xq13.1	0.16056419	0.000246543	0.001151222
TOPBP1	3q22.1	0.160560604	0.000246623	0.001151329
INCENP	11q12.3	0.16054862	0.000246891	0.001152309
ARSG	17q24.2	0.160509369	0.000247768	0.001156136
ATPAF2	17p11.2	-0.160479584	0.000248436	0.001158984
RUFY1	5q35.3	-0.160458829	0.000248902	0.00116089
MT1G	16q13	0.16043717	0.00024939	0.001162894
EPCAM	2p21	-0.160422361	0.000249724	0.001164181
SFXN2	10q24.32	-0.160407768	0.000250053	0.001165447
SYT15	10q11.22	-0.160400474	0.000250218	0.001165945
GRK2	11q13.2	0.160392658	0.000250394	0.001166498
SLC27A3	1q21.3	-0.160360528	0.000251122	0.001169438
GSDME	7p15.3	0.16035966	0.000251142	0.001169438
PNMA8B	19q13.32	0.1603396	0.000251597	0.001171287
SEC11A	15q25.2-q25.3	-0.16033465	0.000251709	0.00117154
MANBAL	20q11.23	-0.160325706	0.000251913	0.001172201
CCDC50	3q28	0.160323275	0.000251968	0.001172201
LRMDA	10q22.2-q22.3	-0.160291665	0.000252688	0.001175279
LSM3	3p25.1	-0.160272387	0.000253128	0.001177054
C1ORF50	1p34.2	-0.160265788	0.000253279	0.001177483
CD163	12p13.31	0.160204393	0.000254686	0.00118375
MMP15	16q21	-0.160185462	0.000255121	0.00118531
YPEL5	2p23.1	-0.160184681	0.000255139	0.00118531
TRIM41	5q35.3	-0.160156806	0.000255781	0.001188019
SNAP25	20p12.2	0.160152684	0.000255876	0.001188187
SLCO2A1	3q22.1-q22.2	0.160145082	0.000256052	0.001188727
FAM53C	5q31.2	0.160111563	0.000256827	0.001192051
ZNF318	6p21.1	0.16009324	0.000257251	0.001193746
RPL38	17q25.1	-0.160081864	0.000257515	0.001194696
ZFYVE19	15q15.1	-0.160078999	0.000257582	0.001194729
NDNF	4q27	-0.160054163	0.000258159	0.001197131
TMEM14C	6p24.2	-0.16002073	0.000258938	0.001200467
PTPRZ1	7q31.32	0.160011798	0.000259147	0.001201157
C8ORF34	8q13.2	-0.160001428	0.000259389	0.001202003
ANLN	7p14.2	0.159992073	0.000259608	0.001202739
CHFR	12q24.33	0.159982608	0.000259829	0.001203489
WNK3	Xp11.22	0.15997152	0.000260089	0.001204414
TNFSF8	9q32-q33.1	0.159956557	0.00026044	0.001205761

PLEKHA4	19q13.33	0.159919477	0.000261311	0.001209517
GRB7	17q12	-0.159905582	0.000261638	0.001210753
B3GNT5	3q27.1	0.159892904	0.000261937	0.001211857
RHOT1	17q11.2	-0.159878749	0.000262271	0.001213124
FPR3	19q13.41	0.159854695	0.00026284	0.001215475
MYF6	12q21.31	0.159832774	0.000263359	0.001217596
CD274	9p24.1	0.159819573	0.000263672	0.001218764
WNK2	9q22.31	0.159771605	0.000264813	0.001223755
SUMO4	6q25.1	0.159693741	0.000266674	0.001232075
TLL1	4q32.3	0.159665695	0.000267348	0.001234903
C10ORF67	10p12.2	-0.159635055	0.000268085	0.001238026
NKAPL	6p22.1	0.15963234	0.000268151	0.001238044
SORD	15q21.1	-0.159519199	0.000270891	0.001250411
SKAP1	17q21.32	0.159507476	0.000271177	0.001251442
LOC728392	17p13.2	0.159496748	0.000271438	0.001252361
SIVA1	14q32.33	-0.15947773	0.000271902	0.001254215
HOXD4	2q31.1	0.159471404	0.000272057	0.001254641
FAM178B	2q11.2	0.159468853	0.000272119	0.001254641
RAB11FIP3	16p13.3	0.159463662	0.000272246	0.001254938
SPRY3	Xq28 and Yq12	0.159456368	0.000272425	0.001255473
CYB5R1	1q32.1	-0.159444992	0.000272703	0.001256469
ODC1	2p25.1	-0.15944039	0.000272816	0.001256701
ASPH	8q12.3	-0.159398534	0.000273843	0.001261144
ZNF654	3p11.1	0.159392802	0.000273984	0.001261505
ALG5	13q13.3	-0.15937969	0.000274307	0.001262702
PGR	11q22.1	0.159369059	0.000274569	0.001263619
CPAMD8	19p13.11	-0.159315777	0.000275885	0.001269386
WWC2-AS2	4q35.1	-0.159282922	0.000276699	0.001272843
STPG1	1p36.11	-0.15927201	0.000276971	0.001273799
ASCL1	12q23.2	0.15925595	0.00027737	0.001275222
FPR1	19q13.41	0.159254469	0.000277407	0.001275222
PLAA	9p21.2	0.159236493	0.000277854	0.001276988
STK32C	10q26.3	-0.159219994	0.000278266	0.001278588
MRTFB	16p13.12	0.159178572	0.000279301	0.001283053
CLUH	17p13.3	-0.159133764	0.000280426	0.001287924
LGALS8	1q43	0.159123083	0.000280694	0.001288864
SH3GLB2	9q34.11	-0.159116182	0.000280868	0.001289367
SLC46A1	17q11.2	-0.159095555	0.000281388	0.001291459
OR7A5	19p13.12	0.159087446	0.000281592	0.001292103
HIST2H2BF	1q21.2	0.159024174	0.000283193	0.001299153
DAB2	5p13.1	0.159009932	0.000283555	0.001300515
CEP97	3q12.3	0.159000293	0.0002838	0.001301342
RPLP1	15q23	-0.15898857	0.000284098	0.001302307
FCRL3	1q23.1	0.158986938	0.00028414	0.001302307
TLR4	9q33.1	0.158942546	0.000285271	0.001307197
ASNS	7q21.3	0.158891485	0.000286579	0.001312887
ZBTB22	6p21.32	-0.158850497	0.000287632	0.001317413
CR1L	1q32.2	0.158828046	0.00028821	0.001319762
MAST2	1p34.1	0.158814025	0.000288572	0.001321118
ERMAP	1p34.2	-0.158789844	0.000289197	0.001323679
ZNF460	19q13.43	0.15878424	0.000289342	0.001324041
SLC25A2	5q31.3	0.158763985	0.000289867	0.001326141
UGT1A9	2q37.1	-0.158750981	0.000290204	0.001327383
MAEA	4p16.3	-0.158723019	0.000290931	0.001330404
ECHDC3	10p14	-0.158709559	0.000291281	0.001331704
NUBP2	16p13.3	-0.158692886	0.000291716	0.001333388
ICE2	15q22.2	-0.158678992	0.000292078	0.001334468
C19ORF24	19p13.3	-0.158678384	0.000292094	0.001334468

ACP6	1q21.2	-0.158676213	0.000292151	0.001334468
MFF	2q36.3	-0.158652419	0.000292773	0.001337006
CYSLTR1	Xq21.1	0.158631144	0.00029333	0.001339248
ADPGK	15q24.1	-0.158618986	0.000293649	0.001340376
CES4A	16q22.1	-0.158616645	0.000293711	0.001340376
ZMIZ1	10q22.3	0.158594238	0.0002943	0.001342758
ZNF367	9q22.32 9q22.32	0.158583904	0.000294571	0.001343694
ZSCAN20	1p35.1	0.158530672	0.000295976	0.001349794
C3P1	19p13.2	-0.15851621	0.000296358	0.001351233
NUP62	19q13.33	0.158436366	0.000298479	0.001360593
LMAN2	5q35.3	-0.15836099	0.000300494	0.001369468
PCDHGA5	5q31.3	0.158352356	0.000300725	0.001370213
PGLS	19p13.11	-0.158342493	0.00030099	0.001371109
NCK2	2q12.2	0.158337243	0.000301131	0.001371232
RRP9	3p21.2	-0.158336415	0.000301153	0.001371232
HILPDA	7q32.1	0.158322781	0.00030152	0.001372591
FBXW2	9q33.2	0.158304806	0.000302004	0.001374483
MIPOL1	14q13.3-q21.1	0.15828197	0.00030262	0.001376974
SERPINB7	18q21.33	0.158273215	0.000302856	0.001377738
DCC	18q21.2	0.158266195	0.000303046	0.00137829
ST13	22q13.2	-0.158150494	0.000306188	0.001392267
SMURF2	17q23.3-q24.1	0.158135471	0.000306598	0.001393817
ECEL1	2q37.1	0.158096715	0.000307659	0.001398323
MPO	17q22	0.158011581	0.000310001	0.001408649
RHOQ	2p21	0.15800834	0.00031009	0.001408738
PRDM5	4q27	-0.157957543	0.000311496	0.001414601
ADAM29	4q34.1	0.157956629	0.000311521	0.001414601
ATOH1	4q22.2	-0.157912602	0.000312745	0.001419835
SUMF2	7p11.2	-0.157906131	0.000312925	0.001420333
AKR1D1	7q33	0.157894958	0.000313236	0.001421393
ACCS	11p11.2	-0.157892674	0.0003133	0.001421393
RSL24D1	15q21.3	-0.157843434	0.000314675	0.001427313
ZSWIM3	20q13.12	0.157816253	0.000315437	0.001430446
MAB21L3	1p13.1	-0.157779018	0.000316484	0.001434625
GLIPR2	9p13.3	0.157778392	0.000316501	0.001434625
BTF3	5q13.2	-0.157770837	0.000316714	0.001435266
CIB1	15q26.1	-0.157764671	0.000316888	0.00143573
CYGB	17q25.1	0.157760243	0.000317012	0.001435972
WAS	Xp11.23	0.157754077	0.000317186	0.001436436
WDR77	1p13.2	-0.157718821	0.000318182	0.001440622
SUMF1	3p26.1	-0.157711526	0.000318388	0.001441232
DNAL4	22q13.1	-0.157703885	0.000318605	0.001441887
RABGGTA	14q12	-0.157687646	0.000319065	0.001443645
RBM3	Xp11.23	-0.15767271	0.000319489	0.001445238
FNDC4	2p23.3	0.157664113	0.000319733	0.001446018
TADA1	1q24.1	-0.15765595	0.000319965	0.001446742
LRIG1	3p14.1	0.157649697	0.000320143	0.001446971
MESP1	15q26.1	-0.157647179	0.000320214	0.001446971
TMEM62	15q15.2	-0.157644227	0.000320299	0.001446971
HDAC8	Xq13.1	-0.1576411	0.000320388	0.001446971
CD6	11q12.2	0.157639798	0.000320425	0.001446971
PAK4	19q13.2	-0.157639016	0.000320447	0.001446971
RCCD1	15q26.1	-0.157617394	0.000321063	0.00144917
CTDSP2	12q14.1	0.157615223	0.000321125	0.00144917
LPCAT2	16q12.2	0.157614354	0.00032115	0.00144917
SDF2	17q11.2	-0.1575969	0.000321648	0.001451093
DUSP14	17q12	0.157587087	0.000321929	0.001452033
VSIG10L	19q13.41	-0.157574325	0.000322294	0.001453354

PPP1R16B	20q11.23	0.15757024	0.000322411	0.001453556
UQCRH	1p33	-0.15755982	0.000322709	0.001454576
KRT14	17q21.2	0.157554172	0.000322871	0.00145498
ROMO1	20q11.22	-0.157547536	0.000323062	0.001455512
RPS19BP1	22q13.1	-0.157543928	0.000323165	0.001455653
CIC	19q13.2	0.157518919	0.000323884	0.001458563
PRKCB	16p12.2-p12.1	0.157499901	0.000324431	0.001460701
KCNG2	18q23	0.157490441	0.000324704	0.001461601
PPIL3	2q33.1	-0.157468292	0.000325343	0.001464027
ISCU	12q23.3	-0.157466729	0.000325388	0.001464027
GNPAT	1q42.2	-0.157430778	0.000326428	0.001468377
APOLD1	12p13.1	0.157426957	0.000326538	0.001468513
GUK1	1q42.13	-0.157424699	0.000326604	0.001468513
RPL5	1p22.1	-0.157394046	0.000327493	0.001472185
BEX1	Xq22.1 Xq22	-0.157389979	0.000327612	0.001472387
PCDHB13	5q31.3	0.157355924	0.000328603	0.001476513
	3-Mar 5q23.2	0.15731533	0.000329788	0.001481508
PPP3CC	8p21.3	0.157299305	0.000330257	0.001483158
CEP350	1q25.2	0.157297742	0.000330303	0.001483158
SERPINB4	18q21.33	0.157287999	0.000330588	0.001484109
C19ORF53	19p13.13	-0.157268217	0.000331169	0.001486383
FMC1	7q34	-0.157241644	0.00033195	0.001489507
FAM83A-AS1	8q24.13	0.157239507	0.000332013	0.001489507
GPKOW	Xp11.23	-0.157234871	0.000332149	0.001489787
EPB41L5	2q14.2	-0.15721429	0.000332756	0.001492175
FAM81B	5q15	-0.15720051	0.000333162	0.001493666
EID2B	19q13.2	0.157172401	0.000333993	0.001497058
SLIT3	5q34-q35.1	0.157150377	0.000334646	0.001499648
ICAM3	19p13.2	0.157140912	0.000334926	0.001500572
KIF4A	Xq13.1	0.157044782	0.00033779	0.001513066
DNAAF4	15q21.3	-0.157031062	0.000338201	0.001514568
MED31	17p13.1	-0.157024983	0.000338383	0.001515046
PRICKLE4	6p21.1	-0.157020728	0.00033851	0.00151528
TM7SF3	12p11.23	-0.157017254	0.000338615	0.001515409
TOMM20	1q42.3	-0.15694761	0.000340708	0.001524395
HNRNPC	14q11.2	-0.156945439	0.000340774	0.001524395
CRLF1	19p13.11	0.156898459	0.000342193	0.001530404
RPS18	6p21.32	-0.156892294	0.00034238	0.001530618
CCDC152	5p12	-0.15689186	0.000342393	0.001530618
NBPF14	1q21.2	0.156839844	0.000343972	0.001537335
TCF25	16q24.3	-0.156805716	0.000345012	0.001541639
TMEM82	1p36.21	-0.15679927	0.000345208	0.001542175
GIN54	8p11.21	0.156764468	0.000346272	0.001546584
PDE6A	5q32	0.156756223	0.000346524	0.001547369
HRH2	5q35.2	0.156742845	0.000346934	0.001548856
LINGO2	9p21.2-p21.1	0.156687797	0.000348626	0.001556064
NDUFV2	18p11.22	-0.156683708	0.000348752	0.001556281
OCLN	5q13.2	-0.156659133	0.00034951	0.001559135
THPO	3q27.1	0.156657953	0.000349547	0.001559135
CLEC17A	19p13.12	0.156649592	0.000349805	0.001559941
ARFGAP2	11p11.2	-0.156631171	0.000350375	0.001562135
DDN	12q13.12	0.156611137	0.000350995	0.001564555
PEX16	11p11.2	-0.156582802	0.000351875	0.001568128
MSL2	3q22.3	0.156561701	0.000352531	0.001570368
TAF7L	Xq22.1	0.156561618	0.000352533	0.001570368
DLK2	6p21.1	0.156523229	0.00035373	0.001575351
NOL4L	20q11.21	0.156493706	0.000354653	0.001579112
CCDC68	18q21.2	-0.156488149	0.000354827	0.001579537

COX6B2	19q13.42	0.156461862	0.000355651	0.001582836
PLCG2	16q23.3	0.156459492	0.000355725	0.001582836
EXOG	3p22.2	0.156447077	0.000356115	0.001583958
KY	3q22.2	-0.156446453	0.000356135	0.001583958
TOM1	22q12.3	-0.15641642	0.00035708	0.00158781
JCHAIN	4q13.3	0.156407997	0.000357345	0.001588639
PLPPR1	9q31.1	-0.156391142	0.000357877	0.001590651
WDR47	1p13.3	0.156326629	0.000359919	0.001599373
ACOX3	4p16.1	-0.156312996	0.000360351	0.001600943
RAB4A	1q42.13	-0.15630822	0.000360503	0.001601264
C1ORF122	1p34.3	-0.156301967	0.000360702	0.001601793
RPS7	2p25.3	-0.156298494	0.000360812	0.00160193
KHDRBS3	8q24.23	0.1562714	0.000361675	0.001605407
ORC4	2q23.1	-0.156249864	0.000362362	0.001608102
FUCA1	1p36.11	-0.156227894	0.000363064	0.001610863
FLT4	5q35.3	0.156221555	0.000363267	0.001611408
TTL6	17q21.32	-0.156203296	0.000363852	0.001613647
C9ORF47	9q22.1	0.156197493	0.000364038	0.001614116
MAFG	17q25.3	-0.156170581	0.000364902	0.001617591
DNM1L	12p11.21	0.156092948	0.000367406	0.00162833
UBR7	14q32.12	0.156078185	0.000367883	0.001630031
CLIC1	6p21.33	-0.156074451	0.000368004	0.001630031
NSMCE1	16p12.1	-0.156073583	0.000368032	0.001630031
ZDHHC3	3p21.31	-0.156054912	0.000368638	0.001632353
XKR8	1p35.3	-0.156027992	0.000369512	0.001635866
AHSG	3q27.3	-0.156014149	0.000369963	0.001637185
DMWD	19q13.32	0.156013838	0.000369973	0.001637185
C1QTNF4	11p11.2	0.155992622	0.000370664	0.001639884
PLPPR4	1p21.3-p21.2	0.15596434	0.000371588	0.001643608
GLS	2q32.2	0.155937854	0.000372454	0.00164708
NAP1L2	Xq13.2	-0.155892177	0.000373954	0.001653347
BBX	3q13.12	0.15580734	0.000376753	0.001665359
SLC9A6	Xq26.3	0.155801518	0.000376946	0.001665845
APOA1	11q23.3	-0.15574384	0.000378862	0.001673943
RBP1	3q23	0.155736911	0.000379092	0.001674594
KCNJ1	11q24.3	0.155723091	0.000379553	0.001676261
CPB1	3q24	0.155613565	0.000383221	0.001692091
MAPRE3	2p23.3	-0.15558642	0.000384135	0.001695681
MPC1	6q27	-0.155584423	0.000384203	0.001695681
SLC30A7	1p21.2	0.155549861	0.00038537	0.00170046
CXCL10	4q21.1	0.155536448	0.000385824	0.00170209
FBXW4	10q24.32	-0.155517297	0.000386473	0.001704579
ZNF101	19p13.11	0.155488553	0.000387449	0.001708508
RNF128	Xq22.3	-0.155484819	0.000387576	0.001708694
ZNF524	19q13.42	-0.155451734	0.000388702	0.001713285
TMEM86A	11p15.1	0.15542299	0.000389683	0.001717233
OST4	2p23.3	-0.155417172	0.000389882	0.001717511
PNLIPRP3	10q25.3	-0.155416153	0.000389917	0.001717511
USF1	1q23.3	-0.155380179	0.000391149	0.00172256
RNF138	18q12.1	0.15536915	0.000391527	0.001723849
SLC7A5	16q24.2	0.155335978	0.000392667	0.001728132
CPLX2	5q35.2	-0.155333877	0.000392739	0.001728132
MAP3K1	5q11.2	0.155332595	0.000392783	0.001728132
FAM47E	4q21.1	-0.155330858	0.000392843	0.001728132
SCN2B	11q23.3	0.155321188	0.000393176	0.00172922
RBFA	18q23	-0.155292993	0.000394149	0.001733119
ARHGEF10	8p23.3	0.155282573	0.000394509	0.001733958
FOXA1	14q21.1	0.155282486	0.000394512	0.001733958

TULP1	6p21.31	0.155268911	0.000394981	0.001735642
HELLS	10q23.33	0.15524914	0.000395666	0.001738272
ITK	5q33.3	0.155225954	0.000396471	0.001741425
ANAPC11	17q25.3	-0.15520546	0.000397183	0.001744173
CELF1	11p11.2	0.155201726	0.000397313	0.001744363
CORO1A	16p11.2	0.155170291	0.000398408	0.00174879
CDCA2	8p21.2	0.155131735	0.000399755	0.001754321
LPP	3q27.3-q28	0.155126875	0.000399925	0.001754647
GPR55	2q37.1	0.155124634	0.000400004	0.001754647
PHF10	6q27	0.155072858	0.00040182	0.001762232
LPAR1	9q31.3	0.154972346	0.000405369	0.001777285
FARP1	13q32.2	0.15497065	0.000405429	0.001777285
LINC00494	20q13.13	0.154958351	0.000405866	0.00177881
CHORDC1	11q14.3	0.154939996	0.000406518	0.001781279
AGBL5	2p23.3	-0.154921586	0.000407172	0.001783607
RNF148	7q31.32	-0.154920082	0.000407226	0.001783607
NADSYN1	11q13.4	-0.154900745	0.000407915	0.001786236
B3GALNT2	1q42.3	0.154888674	0.000408346	0.001787733
TMEM61	1p32.3	0.154885127	0.000408472	0.001787898
SLC49A3	4p16.3	-0.15487313	0.000408901	0.001789385
PCDHGA7	5q31.3	0.154807233	0.000411262	0.001799328
FRMD7	Xq26.2	0.154788468	0.000411937	0.001801888
CREB1	2q33.3	0.154773266	0.000412484	0.001803891
SERPINB6	6p25.2	-0.154766753	0.000412719	0.001804525
STAT2	12q13.3	0.154755117	0.000413139	0.001805968
ARHGEF28	5q13.2	-0.154726981	0.000414155	0.001810018
MPG	16p13.3	-0.1547097	0.000414781	0.001812358
TMEM91	19q13.2	-0.154700843	0.000415102	0.001813367
ENTPD4	8p21.3	0.154698325	0.000415193	0.001813372
FAM207A	21q22.3	-0.15467757	0.000415946	0.001816267
PSMB1	6q27	-0.154659338	0.000416608	0.001818765
GAL3ST3	11q13.1	0.154652253	0.000416866	0.001819496
HASPIN	17p13.2	0.154645788	0.000417101	0.001820128
MED13L	12q24.21	0.154623123	0.000417927	0.001823337
NAB1	2q32.2	0.154614786	0.000418231	0.001824268
KIF20A	5q31.2	0.154608013	0.000418479	0.001824952
SLC25A6	Xp22.33 and Yp11	-0.154602976	0.000418663	0.001825358
TMEM67	8q22.1	0.154566508	0.000419997	0.001830779
APLNR	11q12.1	0.154543018	0.000420859	0.001834138
KMT2E	7q22.3	0.154530987	0.0004213	0.001835666
GPANK1	6p21.33	-0.154525256	0.000421511	0.001836186
LRRC28	15q26.3	-0.154472545	0.000423453	0.001844247
NTRK3	15q25.3	0.154468672	0.000423596	0.001844471
RIMS1	6q13	0.154444562	0.000424487	0.001847953
MVB12B	9q33.3	0.154398345	0.000426201	0.001855011
CKMT1B	15q15.3	-0.154394741	0.000426335	0.001855193
HESX1	3p14.3	-0.154376849	0.000427	0.001857686
BASP1	5p15.1	0.1543673	0.000427356	0.001858831
ZCCHC4	4p15.2	-0.154359051	0.000427663	0.001859765
B3GNT2	2p15	0.15434689	0.000428116	0.001861335
RAD54L	1p34.1	0.154324489	0.000428953	0.001864568
CHKB	22q13.33	-0.154309636	0.000429508	0.001866579
SENP1	12q13.11	0.154304343	0.000429706	0.001867037
WWTR1	3q25.1	0.1542947	0.000430067	0.001868203
SCN1B	19q13.11	0.154285061	0.000430428	0.001869064
DPP9	19p13.3	0.154284453	0.000430451	0.001869064
UBL4B	1p13.3	0.154221119	0.000432832	0.001878995
TINCR	19p13.3	-0.154199091	0.000433662	0.001882196

BCAT2	19q13.33	-0.154169132	0.000434795	0.001886575
STX3	11q12.1	-0.154167442	0.000434859	0.001886575
C18ORF32	18q21.1	-0.154159406	0.000435163	0.001887366
PABPC1	8q22.3	0.154157669	0.000435229	0.001887366
ZFYVE27	10q24.2	-0.154144123	0.000435742	0.001888972
CD3D	11q23.3	0.15414282	0.000435792	0.001888972
SELENOH	11q12.1	-0.154140476	0.00043588	0.001888972
TSNAX	1q42.2	-0.154094451	0.000437629	0.001896143
UGT1A6	2q37.1	-0.154039531	0.000439725	0.001904812
MXRA7	17q25.1	0.154025762	0.000440252	0.001906375
HPF1	4q33	-0.154025154	0.000440275	0.001906375
DNAH17	17q25.3	0.15401812	0.000440544	0.001907131
TMEM179B	11q12.3	-0.15400944	0.000440877	0.001908161
BRCA2	13q13.1	0.153997586	0.000441332	0.001909718
LINC00623	1p11.2	0.153988161	0.000441693	0.001910873
HOXA4	7p15.2	0.153953386	0.000443031	0.001916246
KLHL15	Xp22.11	0.153950213	0.000443153	0.001916363
MRPL39	21q21.3	-0.153942832	0.000443437	0.001917181
EFNB2	13q33.3	0.153937969	0.000443625	0.001917385
LPXN	11q12.1	0.153936666	0.000443675	0.001917385
TMEM17	2p15	-0.153933453	0.000443799	0.001917509
IGFL4	19q13.32	0.153865824	0.000446415	0.001928396
NLRP5	19q13.43	0.153862724	0.000446535	0.001928502
RGS10	10q26.11	0.153860162	0.000446634	0.001928517
PNMA3	Xq28	0.153857283	0.000446746	0.001928586
RAB22A	20q13.32	0.153822474	0.000448099	0.001934011
MRPL40	22q11.21	-0.153813182	0.000448461	0.001935158
FBP1	9q22.32	-0.153802935	0.00044886	0.001936465
FAM117B	2q33.2	-0.153754526	0.00045075	0.001944206
DRAXIN	1p36.22	0.153749323	0.000450954	0.001944667
CCDC58	3q21.1	-0.15371762	0.000452197	0.001949552
INTS11	1p36.33	-0.153715489	0.000452281	0.001949552
ELANE	19p13.3	-0.153698377	0.000452953	0.001952032
PSMA5	1p13.3	-0.153694387	0.00045311	0.001952289
TMPRSS7	3q13.2	-0.153690495	0.000453263	0.001952531
FOPNL	16p13.11	-0.153662083	0.000454382	0.001956932
C11ORF86	11q13.2	-0.153613563	0.000456298	0.001964767
NR3C2	4q31.23	-0.153594263	0.000457063	0.001967638
SPDYE5	7q11.23	0.153590228	0.000457223	0.001967906
MAP2K3	17p11.2	-0.153586187	0.000457383	0.001968175
HOXC6	12q13.13	0.153576755	0.000457757	0.001969364
FANCE	6p21.31	-0.153550413	0.000458804	0.001973446
CHIC2	4q12	0.153508206	0.000460486	0.001980258
TMEM245	9q31.3	-0.153492488	0.000461114	0.001982534
SNRK	3p22.1	0.15345949	0.000462435	0.001987788
FAM86B1	8p23.1	-0.153454673	0.000462628	0.001988193
OXLD1	17q25.3	-0.153447767	0.000462905	0.001988959
C11ORF49	11p11.2	-0.153439343	0.000463243	0.001989986
YWHAH	22q12.3	0.153421889	0.000463944	0.001992573
OAT	10q26.13	0.153414768	0.00046423	0.001993377
TDP1	14q32.11	0.153406174	0.000464576	0.001994437
PGC	6p21.1	-0.153397256	0.000464935	0.001995553
DYNLRB2	16q23.2	-0.153392501	0.000465127	0.001995949
NT5C2	10q24.32-q24.33	-0.153384461	0.000465451	0.001996871
HS3ST4	16p12.1	0.153382249	0.00046554	0.001996871
CCDC196	14q23.3	0.153367693	0.000466127	0.001998964
SLC17A1	6p22.2	-0.153361134	0.000466392	0.001999674
HMHB1	5q31.3	0.153344047	0.000467083	0.002002209

GASK1A	3p22.1	0.153338223	0.000467318	0.002002793
AMIGO2	12q13.11	0.153333922	0.000467492	0.002003113
MTHFD2	2p13.1	0.153328364	0.000467718	0.00200365
COX7A1	19q13.12	0.153283388	0.000469542	0.00201104
TOPORS	9p21.1	0.153247431	0.000471006	0.00201688
MIPEP	13q12.12	-0.15323536	0.000471498	0.002018242
PGLYRP4	1q21.3	0.153234718	0.000471525	0.002018242
IGFBP7	4q12	0.153231973	0.000471637	0.002018292
SIGLEC14	19q13.41	0.153226734	0.000471851	0.002018778
CNDP2	18q22.3	-0.153219555	0.000472144	0.002019604
DPM2	9q34.11	-0.153211219	0.000472484	0.002020632
B4GALT6	18q12.1	0.1532018	0.00047287	0.00202185
PSMD3	17q21.1	-0.153199062	0.000472982	0.002021899
ZNHIT6	1p22.3	0.153182653	0.000473654	0.002024342
MAP7D1	1p34.3	0.15309173	0.000477393	0.002039892
LRRC10B	11q12.2	0.153062034	0.000478621	0.002044702
CRB1	1q31.3	-0.153027509	0.000480051	0.002050378
MMRN2	10q23.2	0.152987871	0.000481699	0.002056978
FAM9C	Xp22.2	0.152939553	0.000483714	0.002065145
IPCEF1	6q25.2	0.152925955	0.000484282	0.002067134
OR13A1	10q11.21	0.152920896	0.000484494	0.002067355
AGPAT5	8p23.1	0.152918661	0.000484588	0.002067355
LDLRAD1	1p32.3	-0.152917358	0.000484642	0.002067355
IL1B	2q14.1	0.152882797	0.000486091	0.002073096
DPH5	1p21.2	-0.152870552	0.000486605	0.00207485
MGAT5	2q21.2-q21.3	0.152854053	0.000487299	0.002077368
DET1	15q26.1	-0.15279839	0.000489646	0.002086933
MARVELD2	5q13.2	-0.152789966	0.000490003	0.002088008
HYOU1	11q23.3	0.152784583	0.00049023	0.002088537
STRADA	17q23.3	-0.152769994	0.000490848	0.002090726
RASA2	3q23	0.152733261	0.000492406	0.002096727
EVA1C	21q22.11	-0.152731872	0.000492465	0.002096727
MECOM	3q26.2	-0.15271268	0.000493281	0.002099758
TRRAP	7q22.1	0.152622455	0.000497135	0.002115714
SIK3	11q23.3	0.152598401	0.000498167	0.002119448
C12ORF57	12p13.31	-0.152597099	0.000498223	0.002119448
SPPL2A	15q21.2	-0.152579297	0.000498988	0.002122172
TANC2	17q23.2-q23.3	0.1525773	0.000499074	0.002122172
NCALD	8q22.3	0.152567139	0.000499511	0.002123583
TSTD2	9q22.33	0.152552811	0.000500129	0.002125758
BATF	14q24.3	0.152548907	0.000500297	0.002126024
ZNF217	20q13.2	0.152519899	0.000501549	0.002130896
RUNX1-IT1	21q22.12	0.152484274	0.000503091	0.002136996
PI16	6p21.2	-0.152453338	0.000504434	0.002142219
CHEK1	11q24.2	0.152451037	0.000504534	0.002142219
SURF2	9q34.2	-0.152426375	0.000505606	0.002146076
POM121L9P	22q11.23	0.152425252	0.000505655	0.002146076
MMP10	11q22.2	0.152406002	0.000506494	0.002149184
ATP5MG	11q23.3	-0.152381653	0.000507557	0.002153241
C16ORF86	16q22.1	0.152346617	0.00050909	0.00215929
OIP5-AS1	15q15.1	-0.152340538	0.000509357	0.002159965
ENC1	5q13.3	0.152310098	0.000510693	0.002165175
ELAC2	17p12	-0.152258082	0.000512984	0.00217443
IL21	4q27	0.152219379	0.000514695	0.002181223
DPYSL5	2p23.3	0.152196641	0.000515702	0.002185032
CEP162	6q14.2-q14.3	0.15219278	0.000515874	0.002185298
TNKS	8p23.1	0.152188698	0.000516055	0.002185586
ARMH3	10q24.32	-0.152186354	0.000516159	0.002185586

SPPL2B	19p13.3	0.152172807	0.00051676	0.002187674
TOLLIP	11p15.5	-0.152163168	0.000517189	0.002189027
USE1	19p13.11	-0.152122314	0.000519009	0.002196072
POU3F1	1p34.3	0.152120908	0.000519071	0.002196072
TMPRSS2	21q22.3	-0.152102815	0.000519879	0.002199027
RAPGEF1	9q34.13	0.152089268	0.000520485	0.002201127
AOC4P	17q21.31	0.152049443	0.000522269	0.002208209
NECTIN1	11q23.3	0.15198567	0.000525139	0.002219874
COA4	11q13.4	-0.151955798	0.000526488	0.002225109
GPX1	3p21.31	-0.151951022	0.000526704	0.002225555
GIMAP4	7q36.1	0.151940601	0.000527175	0.00222708
VNN2	6q23.2	0.151936433	0.000527364	0.002227409
VAV1	19p13.3	0.151909339	0.000528592	0.002232129
HSD11B1	1q32.2	0.151903394	0.000528862	0.0022328
SETD5	3p25.3	0.151887543	0.000529582	0.002234565
CHD8	14q11.2	0.151886675	0.000529621	0.002234565
SYBU	8q23.2	-0.15188598	0.000529653	0.002234565
PCDHB8	5q31.3	0.15188442	0.000529724	0.002234565
IL1RL2	2q12.1	0.151876521	0.000530083	0.002235409
ISLR2	15q24.1	0.151875138	0.000530146	0.002235409
SSR2	1q22	-0.151809736	0.00053313	0.00224752
ANO6	12q12	0.151791153	0.000533981	0.002250583
DLGAP1-AS1	18p11.31	-0.151788982	0.00053408	0.002250583
COASY	17q21.2	-0.151720987	0.000537204	0.002263273
TAS2R1	5p15.31	0.151713278	0.000537559	0.002264296
ARMCX3	Xq22.1	0.151708482	0.00053778	0.002264753
TP53INP2	20q11.22	0.151700062	0.000538169	0.002265915
POLR3A	10q22.3	0.151642312	0.00054084	0.002276685
ADCY4	14q12	0.151626901	0.000541555	0.002279217
IRGQ	19q13.31	0.151613134	0.000542194	0.002281431
NEDD4L	18q21.31	-0.151593422	0.000543111	0.00228481
BCL2L14	12p13.2	-0.151590603	0.000543242	0.002284885
ALAS1	3p21.2	-0.151566505	0.000544365	0.002289129
FAM162B	6q22.1	-0.151508367	0.000547082	0.002300077
CD7	17q25.3	0.151477887	0.000548512	0.002305606
FAM111B	11q12.1	0.151447149	0.000549958	0.002311199
RBP4	10q23.33	-0.151443068	0.00055015	0.002311525
P2RX5	17p13.2	0.151425303	0.000550987	0.002314559
E2F2	1p36.12	0.151412711	0.000551581	0.002316572
GGTLC1	20p11.21	-0.151389529	0.000552677	0.002320689
CCDC126	7p15.3	0.151382492	0.00055301	0.002321602
RPSA	3p22.1	-0.15135809	0.000554166	0.00232597
MICALCL	11p15.3	0.151340769	0.000554987	0.002328934
COL6A5	3q22.1	0.151322446	0.000555858	0.002332101
RANBP3L	5p13.2	0.15129147	0.000557333	0.002337802
TBC1D20	20p13	0.151273423	0.000558194	0.002340925
ODF2L	1p22.3	0.151269081	0.000558401	0.002340958
ZNF776	19q13.43	0.151268386	0.000558434	0.002340958
IQSEC3	12p13.33	0.151241155	0.000559736	0.002345812
ZNF501	3p21.31	0.151239295	0.000559825	0.002345812
COA5	2q11.2	-0.151234606	0.00056005	0.002346264
MVP	16p11.2	-0.151204473	0.000561494	0.002351827
MRFAP1	4p16.1	-0.151199784	0.000561719	0.00235228
DDR1	6p21.33	-0.151168262	0.000563235	0.002358136
PARN	16p13.12	-0.15115376	0.000563933	0.002360368
KLRC3	12p13.2	0.151152324	0.000564002	0.002360368
LOC730668	22q13.31	0.151148764	0.000564174	0.002360595
AK2	1p35.1	-0.151130834	0.000565039	0.002363724

ADIRF	10q23.2	-0.151125798	0.000565282	0.00236425
AXDND1	1q25.2	-0.151121108	0.000565509	0.002364706
C6ORF226	6p21.1	-0.151118156	0.000565652	0.002364811
SGF29	16p11.2	-0.151111382	0.000565979	0.002365689
PSMB7	9q33.3	-0.151067269	0.000568116	0.002374128
GON7	14q32.12	-0.151039654	0.000569457	0.002379239
MADD	11p11.2	0.151032273	0.000569816	0.002380246
NECAP1	12p13.31	-0.151011953	0.000570806	0.002383885
SPTY2D1	11p15.1	0.151006134	0.00057109	0.002384574
ADAMTS10	19p13.2	0.151001709	0.000571305	0.002384964
MMEL1	1p36.32	-0.150999362	0.00057142	0.002384964
ELAVL1	19p13.2	0.150983383	0.0005722	0.002387725
CCDC71	3p21.31	-0.150977912	0.000572467	0.002388345
DHX33	17p13.2	0.150950211	0.000573822	0.002393503
MRPL28	16p13.3	-0.150929283	0.000574848	0.002397285
SCUBE2	11p15.4	0.150873706	0.000577581	0.002408182
ACVR1	2q24.1	0.150836626	0.000579411	0.002415311
UGT3A1	5p13.2	0.150824083	0.000580031	0.002417395
MTMR1	Xq28	0.150819345	0.000580265	0.002417872
RPL32	3p25.2	-0.150811443	0.000580656	0.002418715
CASP7	10q25.3	0.150810401	0.000580708	0.002418715
CCR5	3p21.31	0.150793207	0.00058156	0.002421763
TMEM25	11q23.3	0.150764554	0.000582983	0.002427185
FZD7	2q33.1	0.15075257	0.000583578	0.00242868
PMPCA	9q34.3	-0.15075248	0.000583583	0.00242868
OPRD1	1p35.3	0.150723991	0.000585002	0.002434082
HSD17B6	12q13.3	-0.150704545	0.000585972	0.002437615
RAB27A	15q21.3	-0.150700985	0.00058615	0.002437851
CCNG2	4q21.1	0.150653745	0.000588514	0.002446963
KIF18B	17q21.31	0.150652355	0.000588584	0.002446963
CASC2	10q26.11	-0.150641895	0.000589109	0.002448639
SH3GL1	19p13.3	0.150609283	0.000590747	0.002454943
BPIFA4P	20q11.21	0.150599767	0.000591226	0.002456427
NDRG4	16q21	0.150534082	0.000594543	0.002469222
FZD8	10p11.21	0.150533908	0.000594551	0.002469222
GAS2	11p14.3	-0.150517111	0.000595402	0.002472245
LMX1A	1q23.3	0.150501197	0.000596209	0.00247491
GPR183	13q32.3	0.15049961	0.00059629	0.00247491
NCAPD2	12p13.31	0.150471732	0.000597706	0.002480278
SERPINA4	14q32.13	-0.150447795	0.000598925	0.002484823
MRGPRG-AS1	11p15.4	0.150435535	0.00059955	0.002486903
SEPSECS	4p15.2	-0.150413466	0.000600677	0.002491064
PDS5B	13q13.1	0.150405173	0.000601101	0.00249186
CHMP1B	18p11.21	-0.150404866	0.000601116	0.00249186
PCID2	13q34	-0.150384199	0.000602174	0.002495731
ESYT3	3q22.3	-0.150377859	0.000602499	0.002496563
C16ORF58	16p11.2	-0.150375428	0.000602623	0.002496565
RGS7BP	5q12.3	0.150346584	0.000604104	0.002502182
MCTS2P	20q11.21	0.150328592	0.000605028	0.002505497
LINGO1	15q24.3	0.150323158	0.000605308	0.00250614
TMEM71	8q24.22	0.150295971	0.000606709	0.002511423
PAPLN	14q24.2	0.15026028	0.000608552	0.002518535
NME8	7p14.1	0.150239981	0.000609603	0.002522365
NDUFB7	19p13.12	-0.150230669	0.000610086	0.002523049
TMEM208	16q22.1	-0.150230321	0.000610104	0.002523049
SH3GLB1	1p22.3	0.15022954	0.000610144	0.002523049
MIOS	7p21.3	0.150206097	0.000611361	0.002527508
ZHX1	8q24.13	0.150203922	0.000611474	0.002527508

CACFD1	9q34.2	-0.150199233	0.000611717	0.002527996
WNT5A	3p14.3	0.150196628	0.000611853	0.002528037
ADAP1	7p22.3	-0.150192373	0.000612074	0.002528156
NGRN	15q26.1	-0.150191244	0.000612133	0.002528156
OSBPL9	1p32.3	-0.150187076	0.000612349	0.002528532
CHD6	20q12	0.150182821	0.000612571	0.002528928
ING5	2q37.3	-0.150117518	0.000615978	0.002542472
LILRB4	19q13.42	0.150088254	0.00061751	0.002548275
KLHL12	1q32.1	-0.150070191	0.000618458	0.002551662
HAND2	4q34.1	0.150059812	0.000619003	0.002553388
PPP1R17	7p14.3	0.15004045	0.000620021	0.002557064
DCLRE1B	1p13.2	0.150021475	0.000621021	0.002560661
GOLGA2P10	15q25.2	-0.149987521	0.000622813	0.002567524
ATP1A2	1q23.2	-0.149959082	0.000624317	0.002573199
TMPRSS11E	4q13.2	0.14994044	0.000625305	0.002576744
CAMK2G	10q22.2	-0.149935853	0.000625549	0.00257722
RBX1	22q13.2	-0.149932466	0.000625728	0.002577432
CEP68	2p14	0.149887921	0.000628097	0.002586659
LEXM	1p32.3	-0.149877378	0.000628659	0.002588443
RGL2	6p21.32	-0.149872287	0.00062893	0.002589031
PELI2	14q22.3	0.149845888	0.000630339	0.002594301
SMC5	9q21.12	0.149818274	0.000631816	0.002599759
TNFRSF21	6p12.3	0.149816276	0.000631923	0.002599759
TECTA	11q23.3	0.149811774	0.000632165	0.002600208
SIL1	5q31.2	-0.149809416	0.000632291	0.002600208
ATP6V0A2	12q24.31	0.149800993	0.000632743	0.002601533
ZNF785	16p11.2	0.149791267	0.000633264	0.002602999
FKBP8	19p13.11	-0.14978953	0.000633358	0.002602999
LIPT1	2q11.2	-0.149773552	0.000634216	0.002605994
TRPM1	15q13.3	-0.149735159	0.000636282	0.002613951
APMAP	20p11.21	0.149690013	0.00063872	0.002623431
MAPKAPK3	3p21.2	-0.149643815	0.000641224	0.002633177
EDC3	15q24.1	-0.149636695	0.00064161	0.002634228
CCDC116	22q11.21	0.149629935	0.000641978	0.002635198
GGACT	13q32.3	-0.149622019	0.000642408	0.002636427
PLA2G12B	10q22.1	-0.149611199	0.000642997	0.002638306
SPP1	4q22.1	0.14959067	0.000644115	0.002642356
FH	1q43	-0.149581292	0.000644627	0.002643915
MZT2B	2q21.1	-0.149563403	0.000645603	0.002647382
LIPG	18q21.1	0.149554285	0.000646102	0.002648886
CLIC6	21q22.12	0.149548861	0.000646398	0.002649562
MAX	14q23.3	0.149539696	0.0006469	0.002650096
MAPRE1	20q11.21	0.149539262	0.000646924	0.002650096
ZNF17	19q13.43	0.149539262	0.000646924	0.002650096
PIGG	4p16.3	-0.149531707	0.000647337	0.002651251
ANKRD26	10p12.1	0.149505746	0.000648761	0.002656541
FOXO3	6q21	0.14946076	0.000651234	0.002666126
SLAIN1	13q22.3	-0.149450734	0.000651787	0.002667846
FZR1	19p13.3	0.149321906	0.000658924	0.002696511
RPS21	20q13.33	-0.149313135	0.000659412	0.002697962
RNF180	5q12.3	0.14929377	0.000660492	0.002701831
CNTF	11q12.1	0.149291291	0.000660631	0.002701848
MRPS21	1q21.2	-0.149265548	0.000662069	0.00270718
ZNF611	19q13.41	0.149262381	0.000662246	0.002707354
XPOT	12q14.2	0.149240886	0.00066345	0.002711724
ATP4B	13q34	0.149221974	0.00066451	0.002715507
SEC14L3	22q12.2	-0.149202132	0.000665624	0.002719509
SFTPA2	10q22.3	-0.149196859	0.000665921	0.002720168

ZNF648	1q25.3	0.149194198	0.000666071	0.002720227
NSUN4	1p33	-0.149180363	0.000666849	0.002722854
LINC00910	17q21.31	-0.149163426	0.000667803	0.002725725
PMS2	7p22.1	0.149163079	0.000667823	0.002725725
SIRPA	20p13	0.1491603	0.00066798	0.002725811
PBX3	9q33.3	0.149136767	0.000669308	0.002730678
EIF3K	19q13.2	-0.149105071	0.000671101	0.002737438
SMIM26	20p11.23	-0.149056268	0.00067387	0.002748177
RASSF5	1q32.1	0.149052968	0.000674058	0.002748385
MRPS35	12p11.22	-0.149032387	0.000675229	0.002752604
BOLA1	1q21.2	-0.149001432	0.000676994	0.002759241
ATP6V0B	1p34.1	-0.148934781	0.00068081	0.00277423
ZNF69	19p13.2	-0.148930225	0.000681071	0.002774734
CARD8	19q13.33	0.14888207	0.000683841	0.002785455
HTR1B	6q14.1	0.148837744	0.0006864	0.002795313
CKAP2L	2q14.1	0.148822673	0.000687272	0.002797937
CTSD	11p15.5	-0.148821804	0.000687322	0.002797937
BCAS1	20q13.2	-0.148808651	0.000688084	0.002800473
TM9SF4	20q11.21	0.148772654	0.000690174	0.002808409
ABCA3	16p13.3	-0.148754678	0.000691219	0.002811609
CLDN23	8p23.1	-0.148754331	0.00069124	0.002811609
SPRY1	4q28.1	0.148743997	0.000691841	0.002813488
CCL2	17q12	0.148727411	0.000692808	0.002816713
COL2A1	12q13.11	0.148725595	0.000692914	0.002816713
PORCN	Xp11.23	0.148660245	0.000696736	0.002831345
SLC44A1	9q31.1-q31.2	0.148659243	0.000696795	0.002831345
PIK3CA	3q26.32	0.148618516	0.000699187	0.002840492
ZNF385A	12q13.13	0.148607748	0.000699821	0.002842493
ACP1	2p25.3	-0.148587862	0.000700993	0.002846678
LILRA3	19q13.4	0.148563966	0.000702403	0.002851501
FLT3	13q12.2	0.148562942	0.000702464	0.002851501
LOC606724	16p11.2	0.148543317	0.000703624	0.002855635
BIRC2	11q22.2	0.148535412	0.000704092	0.002856958
GCSH	16q23.2	-0.148524817	0.000704719	0.002858929
SRRM2-AS1	16p13.3	-0.148492346	0.000706646	0.002866167
MPEG1	11q12.1	0.148414793	0.000711267	0.00288433
ZNF550	19q13.43	0.148405936	0.000711797	0.002885896
GSTM5	1p13.3	0.148396991	0.000712332	0.002887484
CWF19L1	10q24.31	-0.148391607	0.000712655	0.002888209
ARL17A	17q21.31	-0.148385529	0.000713019	0.002889103
ZNF207	17q11.2	-0.148364166	0.000714299	0.00289371
STARD10	11q13.4	-0.148351401	0.000715066	0.002896232
SCN10A	3p22.2	-0.148341504	0.00071566	0.002898058
CLK3	15q24.1	-0.148323179	0.000716763	0.002901938
CDCA5	11q13.1	0.148314495	0.000717286	0.002903471
PRMT2	21q22.3	-0.148269686	0.00071999	0.00291383
IL18RAP	2q12.1	0.148247502	0.000721332	0.002918675
ZNF799	19p13.2	-0.1482208	0.00072295	0.002924636
GNMT	6p21.1	-0.148195556	0.000724484	0.00293025
FBLIM1	1p36.21	0.148183803	0.000725198	0.002932552
ZKSCAN8	6p22.1	0.148173817	0.000725806	0.002934421
PCGF6	10q24.33	0.148118414	0.000729188	0.0029475
ASB9	Xp22.2	-0.148101741	0.000730208	0.00295102
SLC4A2	7q36.1	-0.148099396	0.000730352	0.00295102
FAM161A	2p15	0.148067874	0.000732285	0.002958237
DAPK3	19p13.3	0.148041823	0.000733886	0.002964111
RPP40	6p25.1	-0.147989025	0.000737141	0.002976661
MYADML	2p22.3	0.147982329	0.000737555	0.002977735

SUPT20H	13q13.3	-0.14797296	0.000738135	0.002979476
AMIGO1	1p13.3	-0.147970268	0.000738301	0.002979551
EPOP	17q12	0.147880697	0.000743862	0.003001358
ATP5F1B	12q13.3	-0.147878219	0.000744017	0.003001358
SETD4	21q22.12	-0.147876048	0.000744152	0.003001358
RIF1	2q23.3	0.147870143	0.00074452	0.003002241
MID1IP1	Xp11.4	-0.147867365	0.000744693	0.003002339
SMCO2	12p11.23	0.147857671	0.000745298	0.003004175
HHAT	1q32.2	-0.147842616	0.000746238	0.003006761
TMEM205	19p13.2	-0.147842616	0.000746238	0.003006761
ZNF765	19q13.42	0.147837579	0.000746553	0.003007427
CARMIL2	16q22.1	0.147811444	0.000748188	0.003013412
BTNL8	5q35.3	-0.147803389	0.000748693	0.003014842
SEPTIN5	22q11.21	0.147778442	0.000750258	0.003020485
PUSL1	1p36.33	-0.147776271	0.000750395	0.003020485
PSMD8	19q13.2	-0.147730594	0.000753269	0.003031447
PRKAA2	1p32.2	0.147688217	0.000755944	0.003041285
KIDINS220	2p25.1	0.147687088	0.000756015	0.003041285
APBA3	19p13.3	0.147684573	0.000756175	0.003041317
SLC37A4	11q23.3	-0.147672673	0.000756928	0.003043738
CEP164	11q23.3	0.147641064	0.000758931	0.003051186
MKS1	17q22	-0.147626302	0.000759869	0.003054345
ARMCX2	Xq22.1	0.147609889	0.000760912	0.003057929
CNTN4	3p26.3-p26.2	0.147594826	0.000761871	0.003061172
GPCPD1	20p12.3	0.147585401	0.000762472	0.003062974
HCN1	5p12	-0.147582585	0.000762652	0.003063084
INS-IGF2	11p15.5	0.147552949	0.000764543	0.003070069
BMP6	6p24.3	0.147548321	0.000764839	0.003070644
GRB14	2q24.3	-0.14752796	0.000766142	0.00307526
CHRNA6	8p11.21	0.147487127	0.00076876	0.003085156
BEX2	Xq22.2	-0.147455577	0.000770789	0.003092425
MTHFD1L	6q25.1	0.147454188	0.000770879	0.003092425
RASL10B	17q12	0.147443901	0.000771541	0.003093884
DYNC1I1	7q21.3	0.147443771	0.00077155	0.003093884
ZNF786	7q36.1	0.147433086	0.000772239	0.003096029
NXNL2	9q22.1	-0.147386059	0.000775277	0.003107593
TMEM218	11q24.2	-0.147371518	0.000776219	0.003110749
PDGFD	11q22.3	0.147355453	0.000777261	0.003114304
ZNF518B	4p16.1	0.147346682	0.00077783	0.00311548
ATP2B4	1q32.1	0.147346161	0.000777864	0.00311548
CENPV	17p11.2	-0.147339127	0.000778321	0.00311669
CYBC1	17q25.3	0.147329749	0.00077893	0.00311851
GRHPR	9p13.2	-0.147251942	0.000784004	0.0031382
CNTFR	9p13.3	-0.147240617	0.000784746	0.003140542
NGLY1	3p24.2	-0.147221375	0.000786006	0.003144962
CNTN6	3p26.3	-0.147213916	0.000786495	0.003146294
KCNJ8	12p12.1	0.147188376	0.000788172	0.003152377
NLRP11	19q13.42-q13.43	0.147184593	0.000788421	0.003152745
RAI1	17p11.2	0.147118211	0.000792797	0.003169613
ZNF525	19q13.42	0.14710093	0.00079394	0.003173515
SMTNL1	11q12.1	0.147098687	0.000794088	0.003173515
TEX11	Xq13.1	0.147076669	0.000795547	0.003178713
SELENOM	22q12.2	0.147068192	0.000796109	0.003180328
PSORS1C2	6p21.33	-0.14702602	0.000798911	0.00319089
BPI	20q11.23	0.147018181	0.000799433	0.003192341
SMC2	9q31.1	0.146990037	0.00080131	0.003198889
IPO8	12p11.21	0.146988822	0.000801391	0.003198889
MRAS	3q22.3	0.146975796	0.000802261	0.003200612

PRDM4	12q23.3	0.146975362	0.00080229	0.003200612
MAFA	8q24.3	0.146975216	0.000802299	0.003200612
ATG14	14q22.3	0.14694749	0.000804154	0.003207375
TRIM16	17p12	-0.146909017	0.000806734	0.003217028
KTN1	14q22.3	0.146858651	0.000810123	0.003229903
JMJD7-PLA2G4B	15q15.1	-0.146840762	0.00081133	0.003233691
PWWP2B	10q26.3	-0.146839807	0.000811395	0.003233691
NKIRAS1	3p24.2	-0.146820619	0.000812691	0.003238218
AP3M2	8p11.21	0.146755921	0.000817077	0.003255049
LINC01142	1q24.2	0.146726395	0.000819086	0.003262325
DVL1	1p36.33	-0.146724312	0.000819228	0.003262325
CCDC160	Xq26.2	0.146714481	0.000819898	0.003264348
ANKFN1	17q22	-0.146697345	0.000821067	0.003268356
C17ORF82	17q23.2	-0.146686648	0.000821797	0.003270617
OAF	11q23.3	0.146681067	0.000822179	0.003271488
C2ORF83	2q36.3	0.146671788	0.000822813	0.003273365
GALNT10	5q33.2	0.146648589	0.000824401	0.003279035
MICOS13	19p13.3	-0.146635042	0.00082533	0.003282081
DCTD	4q35.1	-0.146614722	0.000826725	0.003286979
LEPR	1p31.3	0.146597268	0.000827925	0.003291099
ACTL9	19p13.2	0.146562826	0.000830297	0.003299879
FOXJ3	1p34.2	0.146535439	0.000832188	0.003306279
LIMD1	3p21.31	-0.146534744	0.000832236	0.003306279
FGFRL1	4p16.3	-0.146455635	0.000837721	0.003327413
EIF6	20q11.22	-0.146453029	0.000837902	0.003327476
ISL1	5q11.1	0.14644483	0.000838473	0.003329085
CEACAM21	19q13.2	0.146427332	0.000839692	0.003333266
PPP1R16A	8q24.3	-0.146413344	0.000840667	0.00333648
ZNF282	7q36.1	0.14640084	0.00084154	0.003339286
APOL3	22q12.3	0.146395195	0.000841934	0.003340193
NTN3	16p13.3	0.14638998	0.000842299	0.003340644
LOC148709	1q32.1	0.146388819	0.00084238	0.003340644
CD84	1q23.3	0.146377133	0.000843197	0.003343226
NCMAP	1p36.11	-0.14637253	0.000843519	0.003343844
ODAPH	4q21.1	0.146363395	0.000844159	0.003345721
FGD4	12p11.21	-0.146349692	0.000845119	0.003348867
KIAA1211L	2q11.2	0.146326246	0.000846764	0.003354139
TRAF1	9q33.2	0.146325985	0.000846783	0.003354139
HIST3H2BB	1q42.13	0.146320113	0.000847195	0.003355113
CLN5	13q22.3	-0.146305404	0.000848229	0.003358548
ZNF25	10p11.21	0.146301456	0.000848507	0.003358987
ZNF594	17p13.2	0.146287606	0.000849482	0.003362187
PKD1	16p13.3	0.146269801	0.000850738	0.003366493
SPTBN4	19q13.2	-0.146262386	0.000851261	0.003367901
CALHM6	6q22.1	0.146256862	0.000851651	0.003368782
BDNF-AS	11p14.1	-0.146245052	0.000852485	0.00337142
C1ORF21	1q25.3	-0.146196162	0.000855947	0.003384446
TRABD2A	2p11.2	0.14614319	0.000859713	0.003398667
EMG1	12p13.31	-0.14611271	0.000861886	0.003406591
EIF3D	22q12.3	-0.146082577	0.00086404	0.003414434
SCARA5	8p21.1	-0.146079401	0.000864268	0.003414662
PRTFDC1	10p12.1	0.146048537	0.000866479	0.003421749
KRT40	17q21.2	0.146045396	0.000866705	0.003421749
AGA	4q34.3	-0.146044976	0.000866735	0.003421749
PREX1	20q13.13	0.146044889	0.000866741	0.003421749
FCHO2	5q13.2	-0.14599956	0.00087	0.003433941
CCKAR	4p15.2	0.145996427	0.000870226	0.003434158
MSX1	4p16.2	0.145956014	0.000873141	0.003444989

SMPDL3B	1p35.3	-0.145951104	0.000873496	0.003445633
MRPL1	4q21.1	-0.14594902	0.000873647	0.003445633
ZFP92	Xq28	0.145943138	0.000874072	0.003446537
NES	1q23.1	0.145941118	0.000874218	0.003446537
ZNF577	19q13.41	0.145916021	0.000876036	0.003453025
CAMK2N2	3q27.1	0.14590392	0.000876913	0.003455807
INO80B	2p13.1	-0.145894833	0.000877573	0.003457729
RRP1	21q22.3	-0.145890494	0.000877888	0.003458293
FAM53A	4p16.3	-0.145882421	0.000878474	0.003459926
PCDH12	5q31.3	0.145836611	0.000881809	0.003472381
ENPP7	17q25.3	0.145831081	0.000882212	0.00347329
UGGT2	13q32.1	0.145805653	0.000884069	0.00347992
ARHGAP30	1q23.3	0.145801048	0.000884406	0.003480564
FXVD4	10q11.21	-0.145797117	0.000884693	0.003481015
HOXA5	7p15.2	0.14578221	0.000885784	0.003484627
FTO	16q12.2	0.145722285	0.000890182	0.003500681
EIF2B5	3q27.1	-0.145720201	0.000890336	0.003500681
SP7	12q13.13	0.145719504	0.000890387	0.003500681
BRD3OS	9q34.2	0.145713862	0.000890802	0.003501298
CXORF21	Xp21.2	0.145712646	0.000890892	0.003501298
TMEM59L	19p13.11	0.145690379	0.000892532	0.003507061
TRIM47	17q25.1	0.145680256	0.000893279	0.00350931
AACSP1	5q35.3	-0.145670445	0.000894003	0.00351147
GPA33	1q24.1	-0.145660116	0.000894766	0.003513337
DGKA	12q13.2	0.145659287	0.000894828	0.003513337
RFPL1S	22q12.2	0.145642346	0.000896081	0.003517571
CSRNP3	2q24.3	0.145631816	0.00089686	0.003519945
CEP83-DT	12q22	0.145627306	0.000897194	0.00352057
PNMA8A	19q13.32	0.145618166	0.000897872	0.003522542
MCUR1	6p23	-0.145604619	0.000898877	0.003525797
DUSP1	5q35.1	-0.1455744	0.000901123	0.003533681
COL4A3	2q36.3	-0.145570539	0.00090141	0.003533681
NDUFS1	2q33.3	-0.145570492	0.000901413	0.003533681
DLG5-AS1	10q22.3	0.145558487	0.000902307	0.003536496
KLHDC8A	1q32.1	0.145516137	0.000905467	0.003548189
AHCYL2	7q32.1	-0.145490601	0.000907377	0.003554982
RHOF	12q24.31	-0.145449874	0.000910431	0.003566254
LOC388242	16p11.2	-0.145416441	0.000912945	0.003575406
VPREB1	22q11.22	0.145407708	0.000913603	0.003577286
DNMT3A	2p23.3	0.145391171	0.00091485	0.003581472
SEPTIN7P2	7p12.3	0.145364164	0.00091689	0.003588759
FREM1	9p22.3	0.145356526	0.000917467	0.003590321
ATAD5	17q11.2	0.145258395	0.000924918	0.003618775
CELA3B	1p36.12	-0.145214232	0.000928289	0.003631259
OR3A2	17p13.3	0.145192997	0.000929914	0.00363691
NCOA3	20q13.12	0.14518823	0.000930279	0.003637631
LHFPL1	Xq23	0.145166468	0.000931948	0.003643449
ATL1	14q22.1	0.14512423	0.000935195	0.003655432
WDR83	19p13.13	-0.145115462	0.00093587	0.003657361
KIAA0825	5q15	0.145105733	0.00093662	0.003659581
MRPS12	19q13.2	-0.145102607	0.000936861	0.003659813
EPHA10	1p34.3	-0.145076429	0.000938882	0.003666996
ZNF426	19p13.2	0.145066483	0.000939651	0.003669287
LOC100130264	20p11.23	0.145060612	0.000940105	0.003670348
CMTM8	3p22.3	-0.14501438	0.000943688	0.003682987
ERCC4	16p13.12	0.145014119	0.000943708	0.003682987
HIST1H2BN	6p22.1	-0.144993455	0.000945314	0.003688538
IVNS1ABP	1q25.3	0.14498581	0.000945909	0.003690143

ICAM4	19p13.2	-0.144971742	0.000947004	0.0036937
PARP4	13q12.12	-0.144958369	0.000948046	0.003697048
PTPMT1	11p11.2	-0.144931623	0.000950133	0.003704471
SAMD3	6q23.1	0.144870836	0.000954893	0.003721881
NUDT15	13q14.2	-0.144869881	0.000954968	0.003721881
AGTR1	3q24	0.144857897	0.00095591	0.003724768
RGS11	16p13.3	0.144854597	0.000956169	0.003724768
TTC30B	2q31.2	-0.144853381	0.000956264	0.003724768
TMEM223	11q12.3	-0.144813523	0.000959402	0.003736266
ABHD16A	6p21.33	-0.144789341	0.00096131	0.003742972
LAMA3	18q11.2	-0.144757512	0.000963827	0.003752046
CBX5	12q13.13	0.144733458	0.000965733	0.003758739
PLPP6	9p24.1	0.144725559	0.000966359	0.003760451
ESF1	20p12.1	0.144695683	0.000968733	0.003768958
CHST13	3q21.3	-0.144677864	0.000970151	0.003773747
ADCY5	3q21.1	0.144673589	0.000970492	0.003774342
METRN	16p13.3	-0.14465231	0.000972188	0.003780211
MSRA	8p23.1	-0.144646012	0.000972691	0.003781435
POLR3D	8p21.3	0.144639846	0.000973183	0.003782619
LARP4B	10p15.3	-0.144628904	0.000974058	0.003785286
BAG6	6p21.33	-0.144624041	0.000974447	0.003786066
OCEL1	19p13.11	-0.144619526	0.000974808	0.003786739
DUT	15q21.1	-0.14460459	0.000976003	0.003790244
MTFR1L	1p36.11	-0.144603548	0.000976087	0.003790244
RBP2	3q23	-0.144598596	0.000976484	0.003791054
DGKH	13q14.11	0.144589052	0.000977248	0.003793292
CLU10S	12q22	0.144534375	0.000981642	0.00380961
MEGF11	15q22.31	-0.144529045	0.000982071	0.003810542
BST1	4p15.32	0.144519749	0.00098282	0.003812713
KCNG1	20q13.13	0.144493052	0.000984974	0.003820334
HIGD1B	17q21.31	-0.144472512	0.000986635	0.003826036
SIRPB2	20p13	0.144420976	0.000990812	0.003841494
SPG11	15q21.1	-0.144385757	0.000993676	0.003851856
SLC22A25	11q12.3	-0.144381112	0.000994054	0.003852156
MOGAT3	7q22.1	-0.144380108	0.000994136	0.003852156
NUP205	7q33	0.144323755	0.000998736	0.003869238
SEMA3F	3p21.31	0.144317502	0.000999248	0.003870475
HECTD2	10q23.32	0.144279728	0.001002344	0.003881721
FOXM1	12p13.33	0.144251418	0.00100467	0.003889981
PTPRG	3p14.2	0.144193931	0.001009409	0.003907579
RYR2	1q43	0.144186814	0.001009998	0.003909104
ALKBH3	11p11.2	-0.144143699	0.001013567	0.003922167
UBIAD1	1p36.22	-0.144138876	0.001013967	0.003922961
KCNJ16	17q24.3	-0.144132364	0.001014508	0.003924297
CKB	14q32.33	-0.1441242	0.001015186	0.003926165
PSG6	19q13.31	0.144112507	0.001016157	0.003929167
BLM	15q26.1	0.144083126	0.001018602	0.003937865
RAB27B	18q21.2	-0.144074529	0.001019319	0.003939878
FABP5	8q21.13	-0.144060554	0.001020484	0.003943627
ASIC2	17q11.2-q12	0.144054311	0.001021005	0.003944883
CHST14	15q15.1	0.144047435	0.00102158	0.003946344
HAVCR1	5q33.3	-0.144042514	0.001021991	0.003947175
A2M-AS1	12p13.31	0.14402972	0.001023061	0.003950238
GMEB1	1p35.3	0.144028337	0.001023176	0.003950238
DBF4	7q21.12	0.144018171	0.001024027	0.003952764
LYRM4	6p25.1	-0.144000803	0.001025482	0.003957622
ADORA1	1q32.1	0.143995596	0.001025919	0.003958548
NORAD	20q11.23	0.143981004	0.001027143	0.003962513

BEND4	4p13	0.143978399	0.001027362	0.003962541
ELOVL6	4q25	0.143976228	0.001027544	0.003962541
CRYBA4	22q12.1	0.143949461	0.001029794	0.003969804
ALG1	16p13.3	-0.143949134	0.001029822	0.003969804
LGR4	11p14.1	-0.143933243	0.00103116	0.003974201
PROX2	14q24.3	0.143921714	0.001032132	0.003977185
MORC2	22q12.2	0.143911012	0.001033035	0.003979903
JPH4	14q11.2	-0.143905287	0.001033518	0.003980821
PCDHB15	5q31.3	0.143903504	0.001033669	0.003980821
SNX20	16q12.1	0.143900331	0.001033937	0.003981091
H2AFV	7p13	0.143894166	0.001034458	0.003982335
ZNF831	20q13.32	0.14388609	0.00103514	0.00398371
LIPK	10q23.31	0.143885258	0.001035211	0.00398371
STRN	2p22.2	0.143864774	0.001036944	0.003989619
BACH1	21q21.3	0.14385231	0.001038	0.003992241
ARL8B	3p26.1	-0.143852049	0.001038022	0.003992241
EHHADH	3q27.2	-0.143844407	0.00103867	0.003993971
DIAPH2	Xq21.33	-0.143841368	0.001038928	0.003994199
TBX1	22q11.21	0.143815757	0.001041103	0.004001797
PRKAG1	12q13.12	-0.143805156	0.001042005	0.004004497
EIF5A	17p13.1	-0.143791523	0.001043165	0.004008192
NDUFB5	3q26.33	-0.143768771	0.001045105	0.004014877
NUP88	17p13.2	-0.143756961	0.001046113	0.004017982
P4HA1	10q22.1	0.143751317	0.001046595	0.004019067
SERINC2	1p35.2	-0.143726568	0.001048711	0.004026425
ZBTB26	9q33.2	0.143696829	0.001051259	0.00403494
LINC00839	10q11.21	0.143696004	0.001051329	0.00403494
TMEM253	14q11.2	-0.143680054	0.001052698	0.004038295
RGMB	5q15	0.143679501	0.001052746	0.004038295
TNFRSF6B	20q13.33	0.143678807	0.001052805	0.004038295
COX4I2	20q11.21	-0.14366882	0.001053664	0.004040817
SPATA2L	16q24.3	-0.143632348	0.001056803	0.004052084
ADCY3	2p23.3	0.143626443	0.001057312	0.004053209
TMEM263	12q23.3	0.143624272	0.001057499	0.004053209
BCL7B	7q11.23	-0.143599176	0.001059665	0.00406074
	1-Mar 4q32.2-q32.3	0.14359631	0.001059913	0.004060915
TNNI3K	1p31.1	-0.143581788	0.001061169	0.004064522
CLBA1	14q32.33	-0.143578595	0.001061445	0.004064522
ALDH7A1	5q23.2	-0.143578422	0.00106146	0.004064522
TFF3	21q22.3	0.143568522	0.001062317	0.00406703
UBE2C	20q13.12	0.143548248	0.001064074	0.004072983
LINC00598	13q14.11	0.143522828	0.001066281	0.004080654
FAM227A	22q13.1	0.143520066	0.001066521	0.004080797
CYP1B1-AS1	2p22.2	-0.143512237	0.001067202	0.004082626
OXCT2	1p34.2	0.143505723	0.001067769	0.004084018
TET3	2p13.1	0.143492625	0.001068909	0.004087602
ZNF26	12q24.33	0.143480775	0.001069942	0.004090774
RASSF2	20p13	0.143477168	0.001070256	0.004091199
ERAL1	17q11.2	-0.143466013	0.001071229	0.004094142
EPS8L1	19q13.42	-0.143443735	0.001073175	0.0041008
PIK3C2A	11p15.1	0.143438438	0.001073638	0.004101791
SFR1	10q25.1	-0.14343071	0.001074314	0.004103596
PIK3CD	1p36.22	0.143420029	0.001075249	0.004106388
ZBTB38	3q23	0.143410306	0.001076101	0.004108862
MYO10	5p15.1	0.143386335	0.001078204	0.00411611
CGGBP1	3p11.1	0.143381472	0.001078631	0.004116959
NLRC3	16p13.3	0.143354553	0.001080998	0.00412521
CLVS1	8q12.2-q12.3	-0.143304854	0.00108538	0.004141148

GNAZ	22q11.22-q11.23	0.1432909	0.001086613	0.004145068
CCDC34	11p14.1	0.143288555	0.001086821	0.004145073
IL22RA1	1p36.11	-0.143278284	0.001087729	0.004147754
USP35	11q14.1	0.143253386	0.001089935	0.004155378
C7ORF69	7p12.3	0.143212816	0.001093538	0.004168326
POLR3H	22q13.2	-0.143163769	0.001097909	0.004184194
SAAL1	11p15.1	0.143157169	0.001098499	0.004185647
SHARPIN	8q24.3	-0.14315248	0.001098917	0.004186451
ERI1	8p23.1	0.143142146	0.001099841	0.004188799
MYO1C	17p13.3	-0.14314093	0.00109995	0.004188799
POLR2H	3q27.1	-0.14310715	0.001102975	0.004199174
KIAA0355	19q13.11	0.143105848	0.001103091	0.004199174
TMIE	3p21.31	-0.143085363	0.00110493	0.004205207
DNAH11	7p15.3	0.14308353	0.001105094	0.004205207
IMPA2	18p11.21	-0.143079102	0.001105492	0.004205926
MTUS2	13q12.3	0.143074359	0.001105918	0.004206753
MPP1	Xq28	0.14304645	0.001108429	0.004215117
MYEOV	11q13.3	0.143045266	0.001108536	0.004215117
HCAR2	12q24.31	0.143028214	0.001110073	0.004220164
TMEM161B	5q14.3	-0.143020486	0.00111077	0.004222017
ZNF625	19p13.2	0.143016928	0.001111091	0.00422244
GRIK5	19q13.2	0.143003949	0.001112263	0.004226097
PRUNE2	9q21.2	0.142977588	0.001114647	0.004234356
CDC42BPA	1q42.13	-0.142966646	0.001115638	0.004237321
SGSH	17q25.3	-0.142948109	0.001117319	0.004242904
ECRG4	2q12.2	-0.142924022	0.001119507	0.004250409
SERPINA9	14q32.13	0.142904763	0.001121258	0.004256257
COL21A1	6p12.1 6p12.3-p11	0.142901517	0.001121554	0.004256576
UBL5	19p13.2	-0.142897088	0.001121957	0.004257304
PDCD1	2q37.3	0.142891444	0.001122471	0.004258453
LRPAP1	4p16.3	-0.142884497	0.001123105	0.004260052
HMBS	11q23.3	-0.142823363	0.001128691	0.004280434
ZADH2	18q22.3	-0.142805735	0.001130306	0.004285753
TFPI2	7q21.3	0.142773865	0.001133232	0.004296038
CD300E	17q25.1	0.142770949	0.0011335	0.004296245
PEA15	1q23.2	0.142744948	0.001135893	0.004304505
DKK2	4q25	0.142740004	0.001136349	0.00430537
ZDHHC13	11p15.1	0.142737827	0.001136549	0.00430537
MICU2	13q12.11	-0.142733225	0.001136974	0.004306167
CTNNBIP1	1p36.22	-0.142721067	0.001138095	0.004309604
	6-Mar 5p15.2	0.142710212	0.001139097	0.004312475
SPDYE1	7p13	0.142708215	0.001139282	0.004312475
FAM155B	Xq13.1	-0.142667364	0.001143061	0.004325967
KCNA10	1p13.3	-0.142654854	0.001144221	0.004329542
NCKAP1L	12q13.13-q13.2	0.142626764	0.001146829	0.004338493
FFAR3	19q13.12	0.142624733	0.001147017	0.004338493
LRTOMT	11q13.4	-0.142612693	0.001148137	0.004341912
POLN	4p16.3	0.142582244	0.001150973	0.00435182
KDM4C	9p24.1	0.142573963	0.001151746	0.004353166
ANG	14q11.2	-0.14257379	0.001151762	0.004353166
PDGFB	22q13.1	0.142544615	0.001154487	0.004362647
GTSE1	22q13.31	0.142477706	0.001160759	0.004385526
LYRM1	16p12.3	-0.142470886	0.0011614	0.004386702
SLC17A5	6q13	-0.142469757	0.001161506	0.004386702
CLCN3	4q33	-0.142433809	0.001164891	0.004398661
RPS26	12q13.2	-0.142406886	0.001167432	0.004407429
ST13P4	13q14.2	-0.142399679	0.001168113	0.004409174
ATP6V0D1	16q22.1	-0.142359473	0.00117192	0.004422711

EFCAB8	20q11.21	0.142340632	0.001173707	0.004428627
ITSN1	21q22.11	0.142335939	0.001174153	0.004429478
SOX21	13q32.1	0.142308318	0.001176779	0.004438553
LENG1	19q13.42	-0.142278626	0.001179608	0.004448369
EPHA2	1p36.13	-0.142276368	0.001179823	0.004448369
TNK1	17p13.1	-0.142252314	0.00118212	0.004455698
CA14	1q21.2	-0.142251374	0.00118221	0.004455698
PSMC3IP	17q21.2	0.142209636	0.001186205	0.00446992
TSPAN8	12q21.1	-0.142154016	0.001191549	0.004489216
CHRDL2	11q13.4	0.142121179	0.001194714	0.004500298
HIST2H2BA	1p11.2	0.142086602	0.001198055	0.00451204
MSRB2	10p12.2	-0.142043208	0.001202261	0.004527032
SLC2A4RG	20q13.33	-0.142040081	0.001202564	0.004527327
SLC35G1	10q23.33	-0.142027493	0.001203787	0.004531084
CMAHP	6p22.3	0.142020109	0.001204505	0.004532938
DPEP1	16q24.3	0.142016802	0.001204827	0.0045333
SRPX	Xp11.4	0.141991886	0.001207252	0.004541578
SYNPO	5q33.1	0.141976255	0.001208776	0.004546462
PSMC5	17q23.3	-0.141969829	0.001209403	0.00454797
HDAC10	22q13.33	-0.141939349	0.001212381	0.004558318
TMEM41A	3q27.2	-0.141936397	0.00121267	0.004558553
ABCG2	4q22.1	-0.141929449	0.00121335	0.004560257
SMYD5	2p13.2	-0.141922288	0.001214051	0.004562041
RPS13	11p15.1	-0.141917466	0.001214524	0.004562964
AQP3	9p13.3	-0.141907219	0.001215528	0.004565886
CFAP410	21q22.3	-0.141876391	0.001218554	0.004575994
HOMER2	15q25.2	-0.141875176	0.001218674	0.004575994
MFSD6L	17p13.1	-0.141860413	0.001220126	0.00457979
RSPO2	8q23.1	-0.141860271	0.00122014	0.00457979
TTC12	11q23.2	-0.141850774	0.001221075	0.004582444
FFAR2	19q13.12	0.141835494	0.00122258	0.004587239
URM1	9q34.11	-0.141817428	0.001224362	0.004593069
RNF112	17p11.2	0.141792325	0.001226842	0.004601516
TUT7	9q21.33	0.141778003	0.001228259	0.004605646
CBFB	16q22.1	0.141776574	0.001228401	0.004605646
IQCJ	3q25.32	0.141756302	0.00123041	0.004611249
SNRPGP15	19p13.12	-0.141755081	0.001230531	0.004611249
PROSER3	19q13.12	0.141754557	0.001230583	0.004611249
GOLGA3	12q24.33	0.141748305	0.001231203	0.004612714
HOXC9	12q13.13	0.141737107	0.001232314	0.004616019
IL1R2	2q11.2	0.141705019	0.001235505	0.004627108
DNTTIP2	1p22.1	-0.141665287	0.001239465	0.004641078
MYCBP	1p34.3	-0.141644446	0.001241547	0.00464801
LINC01126	2p21	0.141640833	0.001241909	0.004648498
WIPF3	7p14.3	-0.141634632	0.001242529	0.004649956
EEF1AKMT3	12q14.1	0.141620739	0.00124392	0.004654295
NOMO2	16p12.3	0.14159243	0.001246758	0.004664049
PPP3CB	10q22.2	0.141588262	0.001247177	0.004664747
GFRA4	20p13	0.141577138	0.001248294	0.004667842
CEP55	10q23.33	0.14157541	0.001248468	0.004667842
CALML5	10p15.1	0.141542678	0.001251761	0.004679286
MPP4	2q33.1	0.141534385	0.001252597	0.004681541
SPCS1	3p21.1	-0.141511844	0.001254871	0.00468917
BCL2L15	1p13.2	-0.141498384	0.001256231	0.00469338
TMEM199	17q11.2	-0.141487095	0.001257373	0.004696773
HELB	12q14.3 12q	0.141481497	0.001257939	0.004698017
SLC6A18	5p15.33	-0.141462372	0.001259876	0.004704378
HCRTR2	6p12.1	0.141409894	0.001265205	0.004723399

LCE3A	1q21.3	0.141337076	0.001272633	0.004750251
ASIC1	12q13.12	0.141327747	0.001273588	0.004752933
LRRC26	9q34.3	0.141315832	0.001274808	0.004756605
GRK1	13q34	0.141299319	0.001276501	0.004762038
PIK3R6	17p13.1	0.14129549	0.001276893	0.004762121
ACOT2	14q24.3	-0.141294491	0.001276996	0.004762121
SEPHS1P1	7q11.21	0.141260473	0.001280491	0.004774203
GH1	17q23.3	0.141258342	0.00128071	0.004774203
MLH1	3p22.2	-0.141256019	0.001280949	0.00477421
CHMP1A	16q24.3	-0.14121781	0.001284887	0.004787447
RAC2	22q13.1	0.141216941	0.001284976	0.004787447
POU2F3	11q23.3	-0.141212165	0.001285469	0.004788397
SPATS2	12q13.12	0.141187984	0.001287968	0.004796817
TEX37	2p11.2	0.141069053	0.001300322	0.004841933
PDHB	3p14.3	-0.141054814	0.001301809	0.004846571
EVC2	4p16.2	0.141051046	0.001302202	0.00484714
LINC02381	12q13.13	0.141023726	0.00130506	0.004856877
GAL3ST2	2q37.3	0.140982621	0.001309369	0.004871865
CAPN8	1q41	-0.140980701	0.001309571	0.004871865
CEL	9q34.13	0.140947339	0.001313079	0.004884012
ALOX5AP	13q12.3	0.14093984	0.001313868	0.004886047
ASGR1	17p13.1	-0.140923952	0.001315543	0.004891371
AZIN1	8q22.3	0.140898418	0.001318238	0.004900487
FAM106C	17p11.2	0.140875786	0.001320632	0.004908477
MRPS28	8q21.13	-0.140869936	0.001321251	0.004909873
NBPF10	1q21.1	0.140864899	0.001321784	0.004910948
BCAP31	Xq28	-0.140846923	0.001323689	0.004916246
PDE4DIP	1q21.2	0.140846837	0.001323699	0.004916246
TANGO2	22q11.21	-0.14083824	0.001324611	0.004918211
CC2D1B	1p32.3	-0.140837244	0.001324716	0.004918211
EPHA6	3q11.2	0.140818033	0.001326757	0.004924878
SLC25A1	22q11.21	-0.140786484	0.001330114	0.00493643
C2CD3	11q13.4	0.140756091	0.001333356	0.004947548
CLEC18C	16q22.1	0.140753689	0.001333612	0.004947587
MCRS1	12q13.12	-0.140739418	0.001335137	0.004951728
SNTB1	8q24.12	0.140738549	0.00133523	0.004951728
NRIP2	12p13.33	0.140736338	0.001335466	0.004951728
SCO2	22q13.33	-0.140709458	0.001338343	0.004961482
DMRT3	9p24.3	0.140697805	0.001339592	0.004965198
BTN2A2	6p22.2	0.140691657	0.001340252	0.004966728
BCL7C	16p11.2	-0.140676199	0.001341911	0.004971961
ETFRF1	12p12.1	-0.140660568	0.001343591	0.004977201
EXOSC1	10q24.1	-0.1406564	0.001344039	0.004977201
LDLRAP1	1p36.11	-0.14065614	0.001344067	0.004977201
CDC123	10p14-p13	-0.140651277	0.00134459	0.004978223
ERMP1	9p24.1	0.140645806	0.001345179	0.004979487
PROM1	4p15.32	0.140642072	0.001345581	0.004980059
CSRP3	11p15.1	0.140632063	0.001346659	0.004982339
OR2Z1	19p13.2	0.140631758	0.001346692	0.004982339
CTSB	8p23.1	0.140626528	0.001347255	0.004983508
MCTP1	5q15	0.140600389	0.001350076	0.004993023
CCDC168	13q33.1	0.140596598	0.001350485	0.00499362
ITGAX	16p11.2	0.140557578	0.001354707	0.00500793
YLP1	14q24.3	0.140555494	0.001354933	0.00500793
S100A1	1q21.3	-0.140553934	0.001355102	0.00500793
HACL1	3p25.1	-0.140542257	0.001356368	0.005011689
MYO16	13q33.3	0.14052515	0.001358224	0.005017389
COG7	16p12.2	-0.140523451	0.001358409	0.005017389

ZCCHC10	5q31.1	-0.14051959	0.001358828	0.005017778
RITA1	12q24.13	-0.140517893	0.001359013	0.005017778
DNMT3B	20q11.21	0.14049627	0.001361364	0.005025538
LRRC40	1p31.1	0.140492276	0.001361799	0.005026221
RFX4	12q23.3	-0.140479833	0.001363154	0.005030301
PMCH	12q23.2	0.140407235	0.001371086	0.005058644
MVD	16q24.2	-0.140388938	0.001373092	0.005065115
DOCK7	1p31.3	0.140369623	0.001375212	0.005072007
POLR2E	19p13.3	-0.14035759	0.001376534	0.005075569
BCORL1	Xq26.1	0.140356247	0.001376682	0.005075569
MEST	7q32.2	0.14031391	0.001381345	0.005091827
S100BPB	1p35.1	0.140309742	0.001381804	0.005092589
BST2	19p13.11	0.140255641	0.001387785	0.005113696
FAM25BP	10q11.22	-0.140252768	0.001388104	0.005113861
NDUFAF2	5q12.1	-0.140250651	0.001388338	0.005113861
HOXD11	2q31.1	0.140237837	0.001389759	0.005118157
LAMC2	1q25.3	0.140227332	0.001390925	0.005121513
SCRG1	4q34.1	0.1402027	0.001393661	0.005130652
PDXP	22q13.1	0.140188996	0.001395186	0.005135326
TENT5B	1p36.11	-0.140185088	0.001395621	0.005135851
ERCC6L	Xq13.1	0.140183132	0.001395839	0.005135851
RPL35	9q33.3	-0.140156038	0.001398859	0.005146023
CUL4B	Xq24	0.140131029	0.001401653	0.005155357
VHL	3p25.3	0.140128423	0.001401944	0.005155486
ZNF691	1p34.2	-0.140122608	0.001402594	0.005156745
ATG4A	Xq22.3	0.140120782	0.001402799	0.005156745
FAM114A1	4p14	0.140108364	0.001404188	0.005160912
TRIM78P	11p15	0.14010513	0.001404551	0.005161301
ZNF84	12q24.33	0.140096427	0.001405526	0.005163941
DAP3	1q22	-0.140079533	0.00140742	0.005169958
UXT	Xp11.23	-0.140048185	0.001410942	0.005181949
TTC9	14q24.2	0.140015273	0.001414648	0.005194613
ADGRB1	8q24.3	0.140012333	0.00141498	0.005194883
NET1	10p15.1	0.140006853	0.001415598	0.005196204
CBX1	17q21.32	0.140000771	0.001416284	0.005197775
MFHAS1	8p23.1	0.139963431	0.001420504	0.005212313
PLOD3	7q22.1	0.139954834	0.001421477	0.005214934
SYCP2	20q13.33	0.139865998	0.00143157	0.005250665
CMKLR1	12q23.3	0.139864522	0.001431739	0.005250665
IL4R	16p12.1	0.139853407	0.001433006	0.005253843
ARRDC5	19p13.3	0.139852347	0.001433127	0.005253843
RALGPS2	1q25.2	0.139843073	0.001434186	0.005256766
TMEM14A	6p12.2	-0.139832218	0.001435426	0.005260352
STAP1	4q13.2	0.139820495	0.001436766	0.005264305
SYNPR	3p14.2	-0.139810219	0.001437941	0.005267654
MTCH1	6p21.2	-0.139785933	0.001440723	0.005276885
MIA2	14q13.2	-0.139753848	0.001444406	0.005289412
EPHA7	6q16.1	0.139744792	0.001445447	0.005292262
ADORA2A-AS1	22q11.23	0.139741468	0.00144583	0.005292393
DUSP19	2q32.1	-0.139739909	0.001446009	0.005292393
PCBP1	2p13.3	-0.139712902	0.001449119	0.005302811
TMEM121B	22q11.1	0.139693153	0.001451397	0.005310182
ZNF354C	5q35.3	0.139685551	0.001452275	0.005312428
TTC23	15q26.3	-0.139668875	0.001454202	0.005318096
RPS15A	16p12.3	-0.139667573	0.001454353	0.005318096
AKNA	9q32	0.139615904	0.001460339	0.005339017
TCOF1	5q32-q33.1	0.139599926	0.001462195	0.005344832
NDN	15q11.2	0.139589158	0.001463447	0.005348437

AFAP1L1	5q32	0.139571529	0.001465499	0.005354963
GRIK3	1p34.3	0.139562562	0.001466544	0.005357808
RBM11	21q11.2	-0.139558507	0.001467016	0.005358563
ARAF	Xp11.3	-0.139544262	0.001468678	0.005363658
ITPK1	14q32.12	-0.13952976	0.001470371	0.005368868
TATDN2	3p25.3	0.139517432	0.001471812	0.005372022
SEPTIN10	2q13	-0.139517429	0.001471812	0.005372022
ABHD3	18q11.2	-0.139515519	0.001472035	0.005372022
WDR33	2q14.3	-0.139511177	0.001472543	0.005372432
PLAC4	21q22.2	0.139509994	0.001472682	0.005372432
ZBTB39	12q13.3	0.139505446	0.001473214	0.0053734
MAP4K1	19q13.2	0.139487904	0.001475268	0.005379908
GBP1	1p22.2	0.139485646	0.001475533	0.005379908
TMEM229B	14q24.1	0.13948061	0.001476123	0.005381086
GYPC	2q14.3	0.139470496	0.001477309	0.005384435
CASP14	19p13.12	0.13944787	0.001479966	0.005393142
SPATA5L1	15q21.1	-0.139439234	0.001480981	0.005395643
EPHA3	3p11.1	0.13943528	0.001481446	0.005395643
RAB3IP	12q15	-0.139435193	0.001481456	0.005395643
ST6GALNAC3	1p31.1	0.139431509	0.00148189	0.005396245
CDH4	20q13.33	0.139423476	0.001482835	0.005398711
SMC3	10q25.2	0.139417652	0.001483521	0.005400231
EEA1	12q22	0.139400979	0.001485486	0.005406406
DAG1	3p21.31	-0.139391601	0.001486592	0.005409455
DDIAS	11q14.1	0.139381614	0.001487771	0.005412712
FABP7	6q22.31	0.139377457	0.001488262	0.005412712
RGPD1	2p11.2	0.139377185	0.001488294	0.005412712
ZNF80	3q13.31	0.139367348	0.001489457	0.005415962
HSPE1	2q33.1	-0.139331422	0.001493709	0.005430443
MR1	1q25.3	-0.139289479	0.001498688	0.00544756
SEMA3B	3p21.31	-0.13925153	0.001503206	0.005462912
LATS2	13q12.11	0.139249446	0.001503454	0.005462912
FMNL2	2q23.3	0.139211411	0.001507995	0.005478424
RIPK2	8q21.3	0.139198299	0.001509564	0.005483133
CD47	3q13.12	-0.139183276	0.001511363	0.005488676
FRMD5	15q15.3	0.139178242	0.001511966	0.005489876
PDZD3	11q23.3	-0.139137091	0.001516905	0.005506818
ZNF576	19q13.31	-0.139134559	0.00151721	0.00550693
LNPEP	5q15	0.139127091	0.001518108	0.005509196
KCNV1	8q23.2	-0.139095084	0.001521963	0.00552219
SCFD1	14q12	0.139084193	0.001523277	0.005525961
HRG	3q27.3	-0.139077949	0.00152403	0.005527699
SNAP23	15q15.1-q15.2	-0.139071254	0.001524839	0.005529635
LTBP3	11q13.1	0.139063699	0.001525751	0.005531948
MIR155HG	-	0.139027922	0.001530081	0.005546647
SLC35A5	3q13.2	-0.139001697	0.001533262	0.005557177
CLDND1	3q11.2	0.138990495	0.001534622	0.005561106
ACTBL2	5q11.2	0.138955362	0.001538896	0.005574757
PDE3B	11p15.2	0.138954978	0.001538943	0.005574757
KLHL30	2q37.3	-0.138922867	0.001542859	0.005587937
LYSMD2	15q21.2	-0.138915032	0.001543816	0.005589584
PFKP	10p15.2	0.138914598	0.001543869	0.005589584
C21ORF62-AS1	21q22.11	-0.138891191	0.001546731	0.005598939
TRIM31	6p22.1	-0.138883618	0.001547658	0.005601287
KIF6	6p21.2	-0.138847103	0.001552135	0.005616481
PHPT1	9q34.3	-0.138842262	0.00155273	0.005617623
EDNRB	13q22.3	-0.138838528	0.001553189	0.005618272
HYAL3	3p21.31	-0.13882776	0.001554512	0.005622049

STARD5	15q25.1	0.138819991	0.001555467	0.005623814
SORCS3	10q25.1	0.138819249	0.001555559	0.005623814
CYP17A1	10q24.32	-0.138793251	0.00155876	0.005634376
DDX58	9p21.1	0.138770707	0.001561541	0.005643414
SLC28A1	15q25.3	0.138766924	0.001562008	0.005644089
MS4A14	11q12.2	0.138749044	0.001564217	0.005651058
ATRN	20p13	0.138739706	0.001565372	0.005654216
RNMT	18p11.21	0.138702452	0.001569988	0.005669871
SNX22	15q22.31	-0.138689339	0.001571616	0.005674414
KIF24	9p13.3	0.138687776	0.00157181	0.005674414
FCRL6	1q23.2	0.138665639	0.001574562	0.005683329
PPAT	4q12	0.138656514	0.001575697	0.005686408
ATP2B1	12q21.33	0.138646615	0.00157693	0.005689837
ATP6V1H	8q11.23	-0.138600851	0.00158264	0.005708394
QPRT	16p11.2	-0.138600851	0.00158264	0.005708394
FOCAD	9p21.3	0.138589128	0.001584106	0.005712658
DDA1	19p13.11	-0.138571326	0.001586334	0.005719669
SPAG17	1p12	0.138551068	0.001588874	0.005727799
ATP5F1D	19p13.3	-0.138516444	0.001593222	0.005742447
ZNF324B	19q13.43	0.138506284	0.0015945	0.005746025
KCNK3	2p23.3	-0.138499163	0.001595397	0.005748226
MAP3K14-AS1	17q21.31	-0.138489264	0.001596644	0.005751689
FAM104B	Xp11.21	-0.138466252	0.001599546	0.005761112
PNN	14q21.1	0.138446279	0.001602068	0.005769165
LRRC27	10q26.3	-0.138426917	0.001604517	0.005776951
ZNF800	7q31.33	0.13840781	0.001606937	0.005784629
HES2	1p36.31	0.138393137	0.001608798	0.005789691
SCN5A	3p22.2	0.138392187	0.001608919	0.005789691
FA2H	16q23.1	-0.138386534	0.001609636	0.005791237
NRARP	9q34.3	0.138382152	0.001610192	0.005792204
ASAH1	8p22	-0.13836743	0.001612063	0.005797896
C5ORF63	5q23.2	-0.13831333	0.001618953	0.005821316
STXBP2	19p13.2	-0.138311766	0.001619153	0.005821316
ATP8A2	13q12.13	0.138302452	0.001620342	0.005824551
TOP2A	17q21.2	0.138292228	0.001621648	0.005828206
NEGR1	1p31.1	0.13824825	0.001627278	0.005847395
PCDHB17P	5q31.3	0.138239656	0.00162838	0.005850312
ALDH8A1	6q23.3	0.138195627	0.001634038	0.005869591
CTTNBP2	7q31.31	0.138156239	0.001639115	0.005886776
MECP2	Xq28	0.138112215	0.001644806	0.005906163
SLC41A3	3q21.2-q21.3	-0.138090068	0.001647676	0.005915413
CCND1	11q13.3	0.138063583	0.001651114	0.005925978
ITGB1BP2	Xq13.1	0.138062866	0.001651208	0.005925978
CAPN13	2p23.1	0.138010971	0.001657964	0.005948313
CEP83	12q22	0.138010524	0.001658022	0.005948313
PPP4R2	3p13	0.137993852	0.001660198	0.005955059
DSN1	20q11.23	0.137983778	0.001661514	0.005958717
GEN1	2p24.2	0.137975011	0.00166266	0.005961766
CENPA	2p23.3	0.13789208	0.001673538	0.005998347
RSU1	10p13	0.13789208	0.001673538	0.005998347
VASH2	1q32.3	0.1378903	0.001673772	0.005998347
LRRC55	11q12.1	0.137888157	0.001674054	0.005998347
CAD	2p23.3	0.137883654	0.001674647	0.005999402
HEPACAM2	7q21.2	0.137877724	0.001675428	0.006001131
SLC17A7	19q13.33	0.137850847	0.001678971	0.006012752
TH	11p15.5	0.13781585	0.001683594	0.006028238
CRABP2	1q23.1	0.13781262	0.001684022	0.006028696
LTB4R	14q12	0.137786742	0.001687449	0.006039891

ADGRF4	6p12.3	0.137777674	0.001688651	0.00604312
YIPF3	6p21.1	-0.137768506	0.001689868	0.006046399
SETD9	5q11.2	-0.137760781	0.001690894	0.006048994
CTNNB1	3p22.1	0.137692523	0.001699981	0.006080423
ZNF862	7q36.1	0.137687399	0.001700665	0.006081789
TARS2	1q21.2	-0.137684186	0.001701094	0.006082242
NIPAL4	5q33.3	0.137669377	0.001703073	0.006088236
ADO	10q21.3	0.137665429	0.001703601	0.006089041
METAP1	4q23	-0.137642764	0.001706634	0.0060988
DEK	6p22.3	0.137599953	0.001712377	0.006118238
DIPK2B	Xp11.3	0.137592138	0.001713427	0.006120904
AMER1	Xq11.2	0.137574249	0.001715834	0.006128286
CDK2AP2	11q13.2	-0.137572252	0.001716103	0.006128286
NDUFS5	1p34.3	-0.137559446	0.001717827	0.006133357
PLA2G2F	1p36.12	0.13753775	0.001720753	0.006142713
ADORA3	1p13.2	0.137486195	0.001727724	0.006166504
TMCC1	3q22.1	0.137440171	0.001733969	0.006187695
ITM2B	13q14.2	-0.137404046	0.001738885	0.006203987
GPR82	Xp11.4	0.137402095	0.00173915	0.006203987
HIST1H2BG	6p22.2	0.137385196	0.001741455	0.006211107
MPP2	17q21.31	0.137341224	0.001747464	0.006231435
CD3E	11q23.3	0.137332491	0.00174866	0.006234595
PSMB4	1q21.3	-0.137322244	0.001750064	0.006238496
RHEBL1	12q13.12	0.137315037	0.001751052	0.006240913
POP1	8q22.2	0.137280214	0.001755833	0.006256846
ITGA2	5q11.2	0.137253555	0.001759502	0.00626881
EBNA1BP2	1p34.2	-0.137237751	0.00176168	0.006275459
RFX7	15q21.3	0.13723228	0.001762435	0.006277037
INSM1	20p11.23	0.137221454	0.001763929	0.006281246
FAM189A1	15q13.1	0.137210759	0.001765406	0.006285394
IFI35	17q21.31	-0.137177398	0.001770021	0.006300495
TIMM50	19q13.2	-0.137175574	0.001770273	0.006300495
COL4A4	2q36.3	-0.13717323	0.001770598	0.00630051
RGS9BP	19q13.11	-0.137171025	0.001770904	0.00630051
ZMAT3	3q26.32	0.137154907	0.001773138	0.006307346
PRRG3	Xq28	0.137132271	0.001776281	0.006317409
AGAP2-AS1	12q14.1	0.137118001	0.001778265	0.006322402
MCM4	8q11.21	0.137117653	0.001778313	0.006322402
CBFA2T2	20q11.21-q11.22	0.137113398	0.001778905	0.006323132
SYVN1	11q13.1	0.137111661	0.001779146	0.006323132
LINC00488	3q13.13	-0.13708409	0.001782987	0.006335662
RPA4	Xq21.33	-0.13707713	0.001783958	0.006337992
MOB1B	4q13.3	0.137068069	0.001785222	0.006341365
IL32	16p13.3	0.137056085	0.001786895	0.00634619
NOL9	1p36.31	0.137030641	0.001790453	0.006357704
ADCY1	7p12.3	0.13701332	0.001792879	0.006365195
POMT2	14q24.3	0.136967423	0.001799321	0.006386941
ZCWPW1	7q22.1	-0.136960129	0.001800347	0.006389455
PFDN1	5q31.3	-0.13695761	0.001800702	0.006389586
SOHLH1	9q34.3	0.136941654	0.001802948	0.006396429
ACTR2	2p14	0.136895347	0.001809481	0.006418477
SIGLEC12	19q13.41	0.136877749	0.00181197	0.006426172
TRMT10C	3q12.3	-0.13687164	0.001812834	0.006428106
CARM1	19p13.2	0.136866777	0.001813523	0.006429415
SDHAF1	19q13.12	-0.136861914	0.001814212	0.006430724
SHBG	17p13.1	-0.136857516	0.001814835	0.0064318
DUOX2	15q21.1	-0.136854536	0.001815257	0.006432165
C22ORF31	22q12.1	0.13684601	0.001816466	0.006434888

ALOX12P2	17p13.1	-0.136844607	0.001816665	0.006434888
PRDM11	11p11.2	-0.136824186	0.001819564	0.006444021
CCR2	3p21.31	0.136815022	0.001820866	0.006447172
REM2	14q11.2	0.136813418	0.001821094	0.006447172
AGTR2	Xq23	-0.136805257	0.001822254	0.006448645
ADAM8	10q26.3	0.136803733	0.001822471	0.006448645
SYT7	11q12.2	0.136803733	0.001822471	0.006448645
UGT1A1	2q37.1	-0.136790275	0.001824386	0.006454288
LINC00592	12q13.13	-0.136756494	0.001829202	0.006470188
TAOK1	17q11.2	0.136738691	0.001831745	0.006477916
ZNF133	20p11.23	0.136736694	0.001832031	0.006477916
TMX3	18q22.1	0.136730615	0.0018329	0.006479155
PIP5KL1	9q34.11	-0.136728531	0.001833198	0.006479155
SPIN4	Xq11.1	0.136727489	0.001833347	0.006479155
SHCBP1	16q11.2	0.13672115	0.001834254	0.006480533
ST8SIA6	10p12.33	-0.136716831	0.001834872	0.006480533
LMAN1	18q21.32	0.136716808	0.001834875	0.006480533
ZC3HAV1L	7q34	0.136715766	0.001835024	0.006480533
FTH1P3	2p23.3	-0.136696574	0.001837773	0.006489103
USP3	15q22.31	-0.13665906	0.001843158	0.006506975
LIMA1	12q13.12	0.136648987	0.001844606	0.006510022
EMC6	17p13.2	-0.136646729	0.001844931	0.006510022
SLFN12	17q12	0.136645079	0.001845169	0.006510022
CCDC112	5q22.3	0.136643082	0.001845456	0.006510022
SMARCD1	12q13.12	0.136639695	0.001845943	0.006510022
INTS4	11q14.1	0.136639568	0.001845962	0.006510022
EEF1AKMT1	13q12.11	-0.136632314	0.001847006	0.006512564
PC	11q13.2	-0.136598621	0.001851864	0.00652855
SPECC1L	22q11.23	0.136567272	0.001856394	0.006543375
SELPLG	12q24.11	0.136529845	0.001861816	0.006561338
EIF4EBP1	8p11.23	0.136502057	0.001865851	0.006574407
SKP2	5p13.2	0.136489294	0.001867707	0.006579795
SHMT2	12q13.3	0.136437188	0.001875302	0.006605394
DGCR6	22q11.21 22q11	-0.136430068	0.001876342	0.006607902
GRIN3B	19p13.3	0.136415588	0.001878459	0.006614198
PF4V1	4q13.3	0.136395311	0.001881426	0.006622945
CHAF1A	19p13.3	0.13639412	0.001881601	0.006622945
ELOVL3	10q24.32	-0.136390304	0.00188216	0.006623755
APOH	17q24.2	-0.136384721	0.001882978	0.006625476
ARMC6	19p13.11	-0.136374057	0.001884542	0.006629819
AAAS	12q13.13	-0.136368936	0.001885293	0.006631303
FAR1	11p15.3	0.136347487	0.001888443	0.006641221
UBA6	4q13.2	0.136323257	0.001892007	0.006652196
PGBD4	15q14	-0.13632178	0.001892224	0.006652196
TMEM50B	21q22.11	-0.136309362	0.001894053	0.006657463
MARS	12q13.3	0.136306931	0.001894412	0.00665756
TRAPPC13	5q12.3	-0.136301373	0.001895231	0.006659277
DHRS13	17q11.2	-0.136291647	0.001896665	0.00666244
CRSP8P	5q14.1	0.136290782	0.001896793	0.00666244
ZNF93	19p12	0.136285482	0.001897575	0.006664025
PRR34	22q13.31	0.136278301	0.001898636	0.006666586
MPP6	7p15.3	0.136268896	0.001900025	0.006670301
MED9	17p11.2	-0.136243105	0.00190384	0.006682529
TBC1D17	19q13.33	-0.136231208	0.001905602	0.006687548
CCL8	17q12	0.136204722	0.001909531	0.006700167
TUG1	22q12.2	0.136201249	0.001910047	0.006700809
CASP8AP2	6q15	0.136117884	0.001922463	0.006743193
DDX54	12q24.13	-0.1361125	0.001923268	0.00674484

PIGY	4q22.1	-0.13609244	0.001926268	0.006753919
SAMHD1	20q11.23	0.136090704	0.001926528	0.006753919
OSCP1	1p34.3	-0.136077244	0.001928543	0.006759223
PHF14	7p21.3	0.136076115	0.001928712	0.006759223
ASB1	2q37.3	0.136065086	0.001930365	0.006763839
HIST1H2BM	6p22.1	0.136057094	0.001931564	0.006766862
PPP1R11	6p22.1	-0.136053624	0.001932085	0.006767508
MACROD2	20p12.1	-0.136047114	0.001933062	0.006769753
CRACR2B	11p15.5	-0.136016196	0.001937709	0.006784847
CADM4	19q13.31	0.135958362	0.001946429	0.006814195
COG8	16q22.1	-0.135955583	0.001946849	0.006814448
MYH11	16p13.11	0.135948897	0.00194786	0.006816832
MTIF3	13q12.2	-0.135941255	0.001949016	0.006819691
BLOC1S4	4p16.1	-0.135915638	0.001952894	0.006832076
MRPS25	3p25.1	-0.135908951	0.001953908	0.006834434
BATF3	1q32.3	0.135884078	0.001957683	0.00684579
MRPS5	2q11.1	-0.135883076	0.001957835	0.00684579
LRP12	8q22.3	0.13586284	0.001960911	0.006855355
CT45A1	Xq26.3	-0.135824699	0.001966721	0.006874472
ZNF548	19q13.43	0.13582125	0.001967247	0.006875117
WASHC5	8q24.13	0.135799969	0.001970496	0.006884732
ZNF587	19q13.43	0.135798753	0.001970682	0.006884732
GADD45GIP1	19p13.13	-0.135781559	0.001973311	0.006891871
SS18	18q11.2	0.135780911	0.00197341	0.006891871
RNF220	1p34.1	-0.135764018	0.001975996	0.006899706
NME6	3p21.31	-0.135757766	0.001976954	0.006901854
ZDHHC8P1	22q11.23	-0.135732946	0.001980761	0.006913946
RXRG	1q23.3	-0.135723409	0.001982226	0.006917859
CCDC153	11q23.3	-0.135720946	0.001982605	0.00691798
TRIP11	14q32.12	0.135716865	0.001983232	0.00691897
RPAIN	17p13.2	-0.135685429	0.001988069	0.006934643
REST	4q12	0.135682737	0.001988484	0.006934888
NUDC	1p36.11	-0.135667714	0.001990799	0.006941762
FLOT1	6p21.33	-0.13566233	0.00199163	0.006943456
VSIG8	1q23.2	0.135659245	0.001992106	0.006943913
SMIM29	6p21.31	-0.135649999	0.001993534	0.006947685
SNX5	20p11.23	-0.135634976	0.001995855	0.006954571
SASS6	1p21.2	0.135625598	0.001997305	0.006958421
KCTD8	4p13	0.135618638	0.001998382	0.006960968
PHKG2	16p11.2	-0.135609793	0.001999752	0.006964533
ALKAL2	2p25.3	-0.135593854	0.002002222	0.006971233
SNAI3	16q24.2	0.135592909	0.002002368	0.006971233
ACOXL	2q13	-0.135572916	0.00200547	0.006980826
DMTN	8p21.3	-0.135547617	0.002009402	0.006993304
POMP	13q12.3	-0.135498119	0.002017116	0.007018934
CHN2	7p14.3	0.13549543	0.002017535	0.007019182
ENHO	9p13.3	-0.135489786	0.002018417	0.007021035
TAF8	6p21.1	-0.135481707	0.002019679	0.007024212
CCNJ	10q24.1	0.135477625	0.002020317	0.007025217
ZNF836	19q13.41	0.13544676	0.002025147	0.007040798
DNASE2B	1p31.1-p22.3	-0.135376916	0.002036117	0.007077122
THAP12	11q13.5	0.135375764	0.002036299	0.007077122
C16ORF70	16q22.1	0.13534346	0.002041391	0.007093596
SMG1P3	16p12.2	0.135326093	0.002044134	0.007101901
RRM1	11p15.4	0.135265566	0.002053718	0.007133969
ATXN3	14q32.12	0.135262527	0.002054201	0.007134413
MYBL2	20q13.12	0.135259748	0.002054642	0.007134714
TMEM207	3q28	-0.135230337	0.002059316	0.007149712

TRIOBP	22q13.1	-0.135204693	0.002063399	0.007162654
BEND5	1p33	0.135189586	0.002065808	0.00716978
RAP2C	Xq26.2	0.135180552	0.00206725	0.007173547
VPS26A	10q22.1	-0.135175168	0.00206811	0.007175293
GPSM3	6p21.32	0.13515116	0.002071947	0.007187369
GMPR2	14q12	-0.135145643	0.00207283	0.007189193
ADAP2	17q11.2	0.13513948	0.002073817	0.007190515
HAPLN2	1q23.1	-0.135138798	0.002073926	0.007190515
NFATC2	20q13.2	0.135136264	0.002074332	0.007190683
NDUFS4	5q11.2	-0.135111862	0.002078243	0.007203001
MATN3	2p24.1	0.135109344	0.002078647	0.007203162
PTPRE	10q26.2	0.135086679	0.002082287	0.007214532
EDF1	9q34.3	-0.135071483	0.00208473	0.007221477
LINC00426	13q12.3	0.135069752	0.002085009	0.007221477
NR0B1	Xp21.2	-0.135057395	0.002086998	0.007227123
CAPN3	15q15.1	-0.135049686	0.00208824	0.00723018
CFAP53	18q21.1	-0.135046216	0.002088799	0.007230872
LINC00887	3q29	0.135024783	0.002092256	0.007241594
CYP4F2	19p13.12	-0.135017829	0.002093379	0.007244235
TTF1	9q34.13	0.135010134	0.002094622	0.00724729
PCYOX1L	5q32	0.134992199	0.002097521	0.007256076
SRGAP1	12q14.2	0.134986645	0.00209842	0.007257938
HDHD5-AS1	22q11.1	-0.134983175	0.002098982	0.007258634
EFCAB10	7q22.3	-0.134965719	0.002101809	0.00726694
JMJD8	16p13.3	-0.13496389	0.002102106	0.00726694
BCL11B	14q32.2	0.134942441	0.002105586	0.00727772
JTB	1q21.3	-0.134934539	0.002106869	0.007280906
MAP3K5	6q23.3	0.13492021	0.002109198	0.007287702
WBP1L	10q24.32	0.134916737	0.002109763	0.007287982
ZCCHC7	9p13.2	0.134915261	0.002110003	0.007287982
LNPK	2q31.1	0.134900759	0.002112363	0.00729451
THAP3	1p36.31	-0.134899196	0.002112618	0.00729451
AP4S1	14q12	0.134889125	0.002114258	0.007298922
MOSPD1	Xq26.3	0.134851348	0.002120423	0.007318949
DBIL5P	17p13.3	-0.134839109	0.002122423	0.007324599
SYCP2L	6p24.2	0.134808702	0.002127402	0.00734052
GABARAP	17p13.1	-0.134763294	0.002134856	0.007364978
NOP16	5q35.2	-0.13474306	0.002138185	0.007375198
CETN3	5q14.3	-0.134689221	0.002147066	0.007404565
AHCY	20q11.22	-0.134684879	0.002147784	0.007405771
SBNO1	12q24.31	0.134680797	0.002148459	0.00740683
CCN3	8q24.12	0.134639896	0.002155233	0.00742721
FETUB	3q27.3	-0.134638928	0.002155393	0.00742721
CWF19L2	11q22.3	0.13463842	0.002155478	0.00742721
ATP2B1-AS1	12q21.33	0.134634348	0.002156153	0.007428267
HOXA11	7p15.2	0.134622225	0.002158165	0.007433097
GPR20	8q24.3	-0.134619572	0.002158606	0.007433097
SHROOM1	5q31.1	-0.134619229	0.002158663	0.007433097
CCR1	3p21.31	0.134578068	0.002165509	0.007455367
CAMKK2	12q24.31	0.134575897	0.002165871	0.007455367
GPR34	Xp11.4	0.134568081	0.002167173	0.007458574
MRPL4	19p13.2	-0.134527528	0.002173943	0.007480594
RFT1	3p21.1	-0.13446292	0.002184768	0.007515929
PRKCG	19q13.42	0.134461783	0.002184959	0.007515929
PTPRR	12q15	-0.134437578	0.002189027	0.007527461
TMX2	11q12.1	-0.13443739	0.002189059	0.007527461
ZNF503	10q22.2	0.134432961	0.002189804	0.007528737
GZF1	20p11.21	0.134416635	0.002192553	0.007536901

ZFP28	19q13.43	0.134402133	0.002194997	0.007544016
SCML4	6q21	0.134384551	0.002197964	0.007552923
TOMM22	22q13.1	-0.134369395	0.002200525	0.007560431
H1FO	22q13.1	0.134364793	0.002201303	0.007561814
MXD1	2p13.3	0.134337439	0.002205933	0.007576425
TGFBRAP1	2q12.1-q12.2	0.134320853	0.002208744	0.007584787
SLFN13	17q12	0.134307653	0.002210984	0.007590085
PCYT1B	Xp22.11	0.134307317	0.002211041	0.007590085
ASB3	2p16.2	-0.134303659	0.002211662	0.007590923
MISP	19p13.3	-0.134278996	0.002215854	0.007603298
LANCL1	2q34	-0.134278001	0.002216023	0.007603298
DSC3	18q12.1	0.134270553	0.002217291	0.007606351
PUS7L	12q12	0.134258676	0.002219313	0.007611991
SRSF3	6p21.31-p21.2	-0.134242177	0.002222125	0.007620338
FTH1	11q12.3	-0.134238617	0.002222733	0.007621123
PPP5C	19q13.32	-0.134191203	0.002230835	0.007647599
PTRH2	17q23.1	-0.134185301	0.002231845	0.00764976
MVB12A	19p13.11	-0.134178698	0.002232976	0.007652333
HTR7P1	12p13.1	0.134174356	0.00223372	0.00765358
EHD1	11q13.1	0.13416767	0.002234866	0.007656203
HMBOX1	8p21.1-p12	0.134156036	0.002236861	0.007661735
LINC00926	15q21.3	0.134138666	0.002239844	0.007670645
DOCK8	9p24.3	0.134128072	0.002241664	0.007675574
LETM2	8p11.23	-0.134115219	0.002243875	0.007681836
RPS2	16p13.3	-0.134109922	0.002244786	0.007683651
NDUFA12	12q22	-0.134090734	0.002248092	0.007693656
DISC1	1q42.2	0.134080397	0.002249874	0.007698447
UQCRHL	1p36.21	-0.134065027	0.002252527	0.007706214
ZW10	11q23.2	0.134052175	0.002254747	0.007712187
POPDC2	3q13.33	0.134050487	0.002255039	0.007712187
STUM	1q42.12	0.134045197	0.002255953	0.007714004
MRPL49	11q13.1	-0.134026731	0.002259149	0.007723618
NFU1	2p13.3	-0.134019223	0.002260449	0.007726751
WDR44	Xq24	0.134003372	0.002263196	0.007734829
BMF	15q15.1	0.133999204	0.002263919	0.007735987
LCA5L	21q22.2	-0.133980232	0.002267213	0.007745925
VWA5B2	3q27.1	0.133974495	0.00226821	0.007747035
BCS1L	2q35	-0.133973934	0.002268307	0.007747035
WWP2	16q22.1	-0.133962297	0.00227033	0.007752629
PCDHAC2	5q31.3	-0.133959866	0.002270753	0.007752758
CRIM1	2p22.2	0.133950227	0.00227243	0.007757169
ING2	4q35.1	-0.133906941	0.002279977	0.007781161
GPR132	14q32.33	0.133885966	0.002283642	0.007791527
APPL1	3p14.3	0.13388588	0.002283657	0.007791527
SLC6A16	19q13.33	-0.133860876	0.002288033	0.007805135
NLRP14	11p15.4	0.133835862	0.002292418	0.00781877
GATA1	Xp11.23	-0.13376922	0.002304139	0.007857415
NPNT	4q24	-0.133763611	0.002305128	0.007859456
PHF8	Xp11.22	0.133747894	0.002307902	0.00786758
RPL3	22q13.1	-0.133727226	0.002311553	0.007878694
NIPSNAP1	22q12.2	-0.133717674	0.002313243	0.007883118
LGALS9C	17p11.2	-0.133708996	0.002314779	0.007887016
FAM171A1	10p13	0.133678423	0.002320197	0.00790414
ADAMTSL2	9q34.2	0.133674258	0.002320936	0.00790532
CCDC70	13q14.3	0.133667637	0.002322111	0.007907424
KRT8	12q13.13	-0.133666352	0.002322339	0.007907424
DLX4	17q21.33	-0.133654629	0.002324422	0.007913176
PPP1CA	11q13.2	-0.13364004	0.002327015	0.007920667

DSCC1	8q24.12	0.133632051	0.002328437	0.007924165
TSPAN4	11p15.5	-0.133615465	0.002331391	0.007932877
RAB8B	15q22.2	0.133602005	0.002333791	0.0079397
TLR10	4p14	0.133566228	0.00234018	0.007960091
DHX35	20q11.23-q12	0.133502578	0.002351586	0.007997538
STT3A	11q24.2	0.133497191	0.002352554	0.007999478
AARSD1	17q21.31	-0.133489376	0.002353958	0.008002902
SMG1	16p12.3	0.13346428	0.002358474	0.00801625
EPGN	4q13.3	0.133463129	0.002358681	0.00801625
HMGB2	4q34.1	0.133424855	0.002365583	0.008038351
ERICH5	8q22.2	-0.133416938	0.002367013	0.008041853
HLF	17q22	-0.133412831	0.002367756	0.008043017
PTDSS1	8q22.1	0.133391683	0.00237158	0.008053399
COPS2	15q21.1	-0.133391509	0.002371612	0.008053399
ZNF430	19p12	0.133384649	0.002372854	0.008056257
ARL4D	17q21.31	-0.133380481	0.002373609	0.008057461
SGO2	2q33.1	0.133355732	0.002378096	0.008071331
CD36	7q21.11	-0.133331243	0.002382543	0.008085062
IQCF1	3p21.2	-0.133317851	0.002384978	0.008091962
ZNF713	7p11.2	0.133290215	0.002390011	0.00810767
SASH3	Xq26.1	0.133270717	0.002393567	0.008118367
CAB39	2q37.1	0.133190652	0.002408222	0.008166697
LAIR1	19q13.42	0.133187005	0.002408892	0.008167591
ADAMTS1	21q21.3	0.133178408	0.00241047	0.008171568
EIF1	17q21.2	-0.133175542	0.002410997	0.008171976
GSTM3	1p13.3	-0.133145496	0.002416523	0.008189329
TTLL11	9q33.2	0.13313925	0.002417674	0.008191849
PPP6R2	22q13.33	-0.133133599	0.002418715	0.008193997
FBXO6	1p36.22	-0.133127694	0.002419803	0.008196305
LY9	1q23.3	0.13311849	0.002421501	0.008199729
ID3	1p36.12	0.133117795	0.002421629	0.008199729
ORMDL3	17q21.1	-0.133110066	0.002423055	0.008203178
MDM2	12q15	-0.133086967	0.002427322	0.008216242
FAM171A2	17q21.31	0.133069472	0.002430558	0.008225814
NKD1	16q12.1	0.133050238	0.002434121	0.008235376
PON3	7q21.3	-0.133049801	0.002434202	0.008235376
CZIB	1p32.3	-0.133035385	0.002436875	0.008243035
ZNF280C	Xq26.1	0.133030916	0.002437705	0.008244455
NOS1	12q24.22	-0.133004911	0.002442536	0.008259405
ZGRF1	4q25	0.132997353	0.002443941	0.008261931
FAM83H	8q24.3	-0.132996482	0.002444103	0.008261931
CYBB	Xp21.1-p11.4	0.132966436	0.002449699	0.008279456
ACSS1	20p11.21	-0.13292649	0.002457156	0.008303266
TRADD	16q22.1	-0.132884634	0.002464993	0.008328348
FAM83E	19q13.33	-0.132869698	0.002467794	0.008336118
RPL36	19p13.3	-0.132867961	0.00246812	0.008336118
NETO2	16q12.1	0.132856846	0.002470208	0.008341768
CARMIL1	6p22.2	-0.132831188	0.002475032	0.008356657
ABCC2	10q24.2	-0.132828537	0.002475531	0.00835694
ABHD10	3q13.2	-0.132783207	0.002484076	0.008384382
TNNI1	1q32.1	-0.132734407	0.002493306	0.008414124
DOLPP1	9q34.11	-0.132698239	0.002500167	0.008435863
RPL17	18q21.1	-0.13269385	0.002501001	0.008437262
SLC12A5	20q13.12	0.132691519	0.002501444	0.008437342
KIF11	10q23.33	0.132682301	0.002503196	0.008440479
RRAS	19q13.33	-0.132682214	0.002503212	0.008440479
TREX1	3p21.31	-0.132672708	0.00250502	0.008445161
CNNM4	2q11.2	-0.132620819	0.002514911	0.008477085

SUGP2	19p13.11	0.132525558	0.002533161	0.008536082
SCFD2	4q12	0.132525037	0.002533261	0.008536082
GOLGA2P7	15q25.2	-0.132516874	0.002534831	0.008539131
RGL3	19p13.2	-0.132515919	0.002535015	0.008539131
TMEM213	7q34	-0.132492396	0.002539543	0.008552952
LRRC34	3q26.2	0.132487222	0.00254054	0.008554879
UNC93A	6q27	0.132477512	0.002542412	0.008559751
PCDHB2	5q31.3	0.132471631	0.002543546	0.00856098
TFAP2B	6p12.3	0.13247121	0.002543627	0.00856098
IL22RA2	6q23.3	0.132460714	0.002545653	0.008566366
UBE2D3	4q24	-0.132416142	0.002554273	0.008593934
RPL13A	19q13.33	-0.132410239	0.002555416	0.008596344
PAK6	15q15.1	-0.132404245	0.002556578	0.008598815
SCLY	2q37.3	-0.132382361	0.002560823	0.008611654
USP1	1p31.3	0.132378454	0.002561581	0.008612766
CARMIL3	14q11.2	0.132364344	0.002564322	0.008620543
NUDCD2	5q34	-0.132316712	0.002573596	0.008650274
FHAD1	1p36.21	0.132284197	0.002579944	0.008670162
TFB2M	1q44	-0.132271208	0.002582484	0.008677249
NPR1	1q21.3	-0.132249065	0.002586819	0.008690364
FZD3	8p21.1	0.132244896	0.002587636	0.008691658
PRR14	16p11.2	0.132235778	0.002589423	0.008695332
DHRS1	14q12	-0.13223491	0.002589593	0.008695332
PPM1A	14q23.1	0.132226226	0.002591297	0.008699601
SLC14A2	18q12.3	0.132203643	0.002595732	0.008713038
CAPN6	Xq23	-0.132198783	0.002596687	0.008714791
RCSD1	1q24.2	0.132186888	0.002599027	0.008720565
CTSE	1q32.1	-0.132185632	0.002599274	0.008720565
HMGCS2	1p12	-0.132179896	0.002600403	0.008722899
SCD	10q24.31	-0.132176034	0.002601164	0.008723996
HMGN1	21q22.2	-0.132166481	0.002603045	0.008728852
ABCG8	2p21	-0.132149199	0.002606453	0.008738822
BCRP3	22q11.23	-0.132134748	0.002609305	0.008746929
PWWP3A	19p13.3	0.132124104	0.002611408	0.00875252
TBC1D2B	15q24.3-q25.1	0.132119763	0.002612266	0.008753939
PITPNB	22q12.1	0.132097792	0.002616612	0.008767044
ASNA1	19p13.13	-0.132090237	0.002618108	0.008770597
CHMP3	2p11.2	-0.132086503	0.002618848	0.008771616
LRR1	14q21.3	0.132066531	0.002622808	0.008783418
ABLIM1	10q25.3	-0.132060973	0.002623911	0.00878565
AMMECR1	Xq23	0.132055635	0.002624971	0.008787736
RP9	7p14.3	0.132042824	0.002627515	0.008794793
ADORA2B	17p12	-0.132028411	0.002630381	0.0088025
LNX2	13q12.2	-0.132026846	0.002630693	0.0088025
C7ORF26	7p22.1	0.131980995	0.002639829	0.008831604
BRAF	7q34	0.1319754	0.002640946	0.008833872
PACC1	1q32.3	0.131913869	0.002653257	0.008873578
NME2	17q21.33	-0.131911264	0.00265378	0.008873851
EIF5AL1	10q22.3	-0.131879828	0.002660091	0.008893477
PKD2L1	10q24.31	-0.131808561	0.002674449	0.008939996
CDH3	16q22.1	0.131783611	0.002679492	0.008955367
GDPGP1	15q26.1	-0.131771761	0.002681891	0.008961895
RASSF4	10q11.21	0.13176277	0.002683712	0.008966492
MON1A	3p21.31	-0.131738328	0.002688668	0.00898156
RBM28	7q32.1	0.131719959	0.002692398	0.008992529
TMEM131	2q11.2	0.13171718	0.002692963	0.008992923
GALM	2p22.1	-0.13171388	0.002693633	0.008993671
PSD2	5q31.2	0.131700306	0.002696394	0.009001396

ELOVL2	6p24.2	0.131673894	0.002701773	0.009016407
SLC7A3	Xq13.1	0.131673827	0.002701787	0.009016407
GLRX	5q15	-0.13165457	0.002705715	0.00902802
MYO3B	2q31.1	0.13163493	0.002709726	0.009039906
VLDLR	9p24.2	0.131600209	0.002716832	0.009060844
POLR3F	20p11.23	0.131599862	0.002716903	0.009060844
UQCR11	19p13.3	-0.131575113	0.002721978	0.009076265
EXD3	9q34.3	-0.131539555	0.002729284	0.009098545
ITLN1	1q23.3	-0.13153736	0.002729736	0.009098545
SIX6	14q23.1	0.131536001	0.002730016	0.009098545
EPB41L3	18p11.31	0.131522836	0.002732726	0.009106071
SLC25A26	3p14.1	-0.13149479	0.002738508	0.009123828
PRPS1	Xq22.3	0.131478462	0.00274188	0.009133549
INSYN2A	10q26.2	0.131471086	0.002743404	0.009137114
SPDL1	5q35.1	0.131363662	0.002765691	0.009208838
ATOH8	2p11.2	-0.13136288	0.002765854	0.009208838
FAM83B	6p12.1	-0.131360206	0.002766411	0.009209169
CXCR3	Xq13.1	0.131356975	0.002767084	0.009209887
SRGAP3	3p25.3	0.131334571	0.002771755	0.009223908
TAF3	10p14	0.131331491	0.002772397	0.009224522
OTUD3	1p36.13	0.131328538	0.002773014	0.009225048
NBPF1	1p36.13	0.131303616	0.00277822	0.009240132
LCA5	6q14.1	0.131302441	0.002778466	0.009240132
NUDCD1	8q23.1	0.131281426	0.002782864	0.009253228
ORC3	6q15	-0.131259021	0.002787559	0.009267309
UCP2	11q13.4	0.13124973	0.002789508	0.009272259
C2CD2	21q22.3	0.131232102	0.00279321	0.009283031
ZNF41	Xp11.3	0.13122142	0.002795455	0.009288451
SPDYE7P	7q11.23	0.131219953	0.002795764	0.009288451
CCDC57	17q25.3	-0.131208134	0.00279825	0.009295177
LOC374443	12p13.31	0.131186251	0.002802859	0.009308952
RPL7A	9q34.2	-0.131182517	0.002803646	0.00931003
IL23A	12q13.3	0.131172704	0.002805716	0.009315366
SFTA3	14q13.3	-0.1311583	0.002808756	0.009323922
ADA2	22q11.1	0.131152992	0.002809878	0.009326106
ZFAS1	20q13.13	-0.131115217	0.002817868	0.00935046
MON2	12q14.1	0.131113915	0.002818144	0.00935046
XKR5	8p23.1	0.131095694	0.002822006	0.009361731
RPL26	17p13.1	-0.131084563	0.002824368	0.009368021
C6ORF132	6p21.1	-0.131075879	0.002826211	0.009372592
SEMA3E	7q21.11	0.131059154	0.002829766	0.009382833
ALMS1	2p13.1	0.131051738	0.002831343	0.009386516
NR1D1	17q21.1	0.131021432	0.002837796	0.009406363
TMEM132C	12q24.32-q24.33	-0.131001034	0.002842148	0.009419235
ZNF658	9q21.11	-0.130986786	0.002845191	0.009427767
POU4F1	13q31.1	0.130979955	0.002846651	0.009430876
WASH2P	2q14.1	-0.130978013	0.002847066	0.009430876
RTN1	14q23.1	0.130975755	0.002847549	0.009430924
TXNDC17	17p13.1	-0.130959777	0.002850967	0.009440693
AKR1A1	1p34.1	-0.130950311	0.002852994	0.009445851
PHB2	12p13.31	-0.130940846	0.002855022	0.009449948
ZSWIM6	5q12.1	0.130940154	0.002855171	0.009449948
TNKS2	10q23.32	0.130908455	0.002861973	0.009470905
FCGR1CP	1q21.1	0.130891522	0.002865613	0.009481391
ATP6V1G1	9q32	-0.130880667	0.002867948	0.009487559
XPO5	6p21.1	0.130861823	0.002872007	0.009499424
ODR4	1q31.1	-0.130848537	0.002874871	0.009507336
VTI1A	10q25.2	0.130841156	0.002876464	0.009511041

FOXF2	6p25.3	0.130836125	0.00287755	0.009513069
CATSPERG	19q13.2	-0.130818667	0.002881321	0.009522796
HSD3B2	1p12	0.130818124	0.002881438	0.009522796
ISM2	14q24.3	0.130790484	0.002887418	0.009540936
PCOLCE2	3q23	-0.130787316	0.002888104	0.009540936
C1ORF56	1q21.3	-0.130786187	0.002888349	0.009540936
OR5B21	11q12.1	0.130765679	0.002892795	0.009554053
FPR2	19q13.41	0.130761143	0.002893779	0.009555736
FAT2	5q33.1	0.130754937	0.002895126	0.009558616
LRIF1	1p13.3	0.13072375	0.002901903	0.009579421
PAXIP1	7q36.2	0.130721232	0.002902451	0.009579659
IFT57	3q13.12-q13.13	-0.130647854	0.002918457	0.009630909
SENP7	3q12.3	0.130640559	0.002920053	0.009634595
DIP2C	10p15.3	0.130622063	0.002924102	0.009646286
PAK1IP1	6p24.2	0.130618502	0.002924882	0.009646286
CD80	3q13.33	0.13061781	0.002925034	0.009646286
BHLHA15	7q21.3	0.130612959	0.002926097	0.009648212
LAMP2	Xq24	0.13060895	0.002926976	0.009648326
CTTN	11q13.3	-0.130608429	0.00292709	0.009648326
TUBA3D	2q21.1	0.130600708	0.002928784	0.009652327
HYKK	15q25.1	-0.130531056	0.0029441	0.009700826
EPS15	1p32.3	0.130527322	0.002944924	0.009700826
PRPSAP2	17p11.2	-0.130525585	0.002945306	0.009700826
IL12RB1	19p13.11	0.130523935	0.00294567	0.009700826
C12ORF73	12q23.3	-0.130522853	0.002945909	0.009700826
GCLM	1p22.1	-0.130516901	0.002947222	0.009703562
SH2D2A	1q23.1	0.130511083	0.002948506	0.009706202
EGR3	8p21.3	0.130506788	0.002949454	0.009707736
SYT6	1p13.2	0.130501043	0.002950723	0.009710324
C2ORF69	2q33.1	0.130442134	0.002963761	0.009751635
CATSPERZ	11q13.1	-0.130423463	0.002967904	0.009763671
ASCL2	11p15.5	0.130381526	0.002977229	0.009791343
KLHL9	9p21.3	0.13038126	0.002977288	0.009791343
USP5	12p13.31	-0.130370579	0.002979668	0.009797568
TRDMT1	10p13	0.130365282	0.002980848	0.009799849
PLAUR	19q13.31	0.130355903	0.00298294	0.009805124
TMEM9B	11p15.4	-0.130349738	0.002984315	0.009808044
LINC01634	22q11.21	0.130335781	0.002987431	0.009816054
PTAFR	1p35.3	0.130334454	0.002987728	0.009816054
BCL6	3q27.3	0.130328549	0.002989047	0.009818786
RPL13AP20	12p13.1	-0.130312096	0.002992726	0.009829268
USP39	2p11.2	-0.130308605	0.002993508	0.00983023
TMEM97	17q11.2	-0.130296072	0.002996314	0.009837839
HIST1H2BC	6p22.2	-0.130288864	0.002997928	0.009841536
SPRED1	15q14	0.130284783	0.002998843	0.009842934
DNAJA1	9p21.1	0.130274362	0.00300118	0.009848997
WRN	8p12	0.130266199	0.003003011	0.009853401
KCNC1	11p15.1	0.130217803	0.003013891	0.009887488
ZNF347	19q13.42	0.130194124	0.003019227	0.00990338
TESC	12q24.22	-0.130158086	0.003027365	0.009928455
ME3	11q14.2	0.130130818	0.003033536	0.009946727
PCDHAC1	5q31.3	-0.130128589	0.003034041	0.009946727
TPCN2	11q13.3	0.130125695	0.003034696	0.009946727
RHBDL1	16p13.3	-0.13012474	0.003034913	0.009946727
ALPI	2q37.1	-0.13010346	0.003039738	0.00996092
MAT2A	2p11.2	-0.130095388	0.003041571	0.009963028
GGCX	2p11.2	-0.130095215	0.00304161	0.009963028
RAPGEF6	5q31.1	0.130094086	0.003041866	0.009963028

ARHGAP11B	15q13.2	0.130060965	0.003049396	0.009986064
WASH3P	15q26.3	-0.130057787	0.003050119	0.009986808
KIRREL3	11q24.2	0.130024382	0.003057732	0.010010106
CDR2L	17q25.1	-0.13000994	0.003061028	0.010019269
SCOC	4q31.1	-0.130005337	0.00306208	0.01002108
FAM72A	1q32.1	0.129990708	0.003065423	0.01002978
POU5F1B	8q24.21	-0.129989347	0.003065735	0.01002978
ELP6	3p21.31	-0.129960963	0.003072232	0.010049404
MYOG	1q32.1	0.129945423	0.003075795	0.010059423
KIR3DP1	19q13.42	0.129941585	0.003076675	0.010060668
HADHA	2p23.3	-0.129916588	0.003082415	0.010077801
DPH1	17p13.3	-0.12991251	0.003083353	0.010079229
WNK1	12p13.33	0.129890887	0.003088327	0.010092865
DTWD2	5q23.1	-0.129890019	0.003088527	0.010092865
SYK	9q22.2	0.129873777	0.003092269	0.010103452
IDO2	8p11.21	0.129851896	0.003097316	0.010118301
KIF23	15q23	0.129829229	0.003102552	0.010133762
TNFAIP8L3	15q21.2	0.129812081	0.003106519	0.010145072
FLT3LG	19q13.33	0.129804309	0.003108318	0.010149302
ARHGAP25	2p13.3	0.12977895	0.003114196	0.010166845
HOXB1	17q21.32	0.129773998	0.003115345	0.010168947
ANKRD13C	1p31.1	0.129768008	0.003116735	0.010171835
CALHM1	10q24.33	0.129760911	0.003118383	0.010175564
JPT2	16p13.3	-0.129719205	0.003128084	0.010205563
KLRD1	12p13.2	0.12967787	0.003137725	0.010235359
FANCG	9p13.3	0.12966441	0.00314087	0.010243959
ADCYAP1	18p11.32	0.129658501	0.003142252	0.010246806
PCDHB16	5q31.3	0.129653382	0.003143449	0.01024905
C1ORF226	1q23.3	-0.129645219	0.00314536	0.010253618
PLGLB2	2p11.2	0.129639314	0.003146742	0.010255169
DPY19L2P4	7q21.13	0.129638835	0.003146854	0.010255169
MOSMO	16p12.2	0.129606839	0.003154356	0.010277951
RAG2	11p12	0.1296003	0.003155891	0.010281288
CDC14A	1p21.2	0.129561072	0.003165114	0.010309666
CEP70	3q22.3	-0.12954822	0.003168141	0.010317856
GRIP1	12q14.3	-0.129543187	0.003169327	0.01032005
HCAR3	12q24.31	0.129536763	0.003170841	0.010323311
TCTA	3p21.31	-0.129529203	0.003172624	0.010327447
PAF1	19q13.2	-0.129520258	0.003174735	0.010332647
ANO10	3p22.1-p21.33	-0.129509404	0.003177299	0.010339319
S100A13	1q21.3	-0.129502804	0.003178858	0.010342722
COQ5	12q24.31	-0.129475192	0.003185391	0.0103623
SNRPD2	19q13.32	-0.129467721	0.00318716	0.010366381
ANGPTL5	11q22.1	-0.129457498	0.003189583	0.010372586
SIT1	9p13.3	0.129422131	0.003197978	0.010396929
RSL1D1	16p13.13	-0.12942161	0.003198101	0.010396929
USP38	4q31.21	0.12937272	0.003209739	0.010433079
DHRS4L2	14q11.2	-0.129357263	0.003213427	0.010443378
SLC26A11	17q25.3	-0.12933929	0.003217719	0.010455641
UBE2R2	9p13.3	0.129281019	0.003231672	0.010499284
BTBD17	17q25.1	0.129258555	0.003237066	0.01051511
FCER1G	1q23.3	0.129233432	0.003243108	0.010533036
EBF3	10q26.3	0.129229838	0.003243973	0.010534146
HHLA2	3q13.13	-0.129221814	0.003245905	0.010537919
CHTOP	1q21.3	-0.129220666	0.003246182	0.010537919
SEC61G	7p11.2	0.129213809	0.003247834	0.010541583
LEKR1	3q25.31	-0.129199182	0.003251361	0.010551329
BRCA1	17q21.31	0.12918046	0.00325588	0.010564292

DEUP1	11q21	0.12913693	0.003266411	0.010596752
FN3K	17q25.3	-0.12912115	0.003270235	0.010607451
WASH5P	19p13.3	-0.129114897	0.003271752	0.01061066
SH3GL3	15q25.2	-0.129104218	0.003274344	0.010617355
ARHGEF1	19q13.2	-0.129097009	0.003276095	0.010621322
DMRTA2	1p32.3	0.129083807	0.003279303	0.010630011
PSMD9	12q24.31	-0.129075125	0.003281414	0.010633499
ASXL2	2p23.3	0.129073869	0.00328172	0.010633499
NDRG1	8q24.22	0.129072868	0.003281964	0.010633499
KLHL1	13q21.33	0.129043268	0.003289173	0.01065503
KIF4B	5q33.2	0.129041237	0.003289668	0.01065503
LRRC19	9p21.2	-0.129014557	0.003296179	0.010674402
CDIPT	16p11.2	-0.129003397	0.003298906	0.010681515
SMARCC1	3p21.31	0.128999663	0.003299819	0.010682752
ATXN10	22q13.31	-0.128990719	0.003302007	0.010688116
KATNBL1	15q14	-0.128987853	0.003302708	0.010688667
GPS1	17q25.3	-0.128944697	0.003313283	0.010721045
RGS6	14q24.2	-0.128942684	0.003313777	0.010721045
GSTM4	1p13.3	-0.128934361	0.003315821	0.010725933
LILRA6	19q13.42	0.128924027	0.00331836	0.01073242
RGPD3	2q12.2	0.128905009	0.003323036	0.010745819
ZNF221	19q13.31	0.128894877	0.003325531	0.010752157
SCN2A	2q24.3	0.128889626	0.003326824	0.010753973
FCRL1	1q23.1	0.128888259	0.003327161	0.010753973
RNF13	3q25.1	-0.128880087	0.003329174	0.010758754
YJU2	19p13.3	-0.128876439	0.003330073	0.010759447
OLIG1	21q22.11	-0.12887488	0.003330458	0.010759447
PDE4B	1p31.3	0.128848738	0.003336909	0.01077856
ZNRF2P1	7p14.3	0.128844269	0.003338014	0.010780397
FGF23	12p13.32	0.128824244	0.003342965	0.010794654
KLF3-AS1	4p14	0.128802716	0.003348295	0.010810131
C16ORF91	16p13.3	-0.128782828	0.003353226	0.010824316
BECN1	17q21.31	-0.128779354	0.003354088	0.01082467
ICOS	2q33.2	0.128778052	0.003354411	0.01082467
SLC6A10P	16p11.2	0.128756879	0.003359669	0.0108399
PPFIBP2	11p15.4	-0.12874701	0.003362123	0.010846079
TMBIM1	2q35	-0.12872647	0.003367235	0.010860829
VPS26C	21q22.13	-0.128724215	0.003367796	0.0108609
C17ORF47	17q22	0.128673647	0.003380413	0.010899842
ZEB1-AS1	10p11.22	0.128664728	0.003382643	0.010904799
PEX3	6q24.2	-0.128663165	0.003383034	0.010904799
HABP4	9q22.32	0.128656217	0.003384772	0.010907048
LCK	1p35.2	0.128656044	0.003384815	0.010907048
PLEKHA5	12p12.3	0.128630166	0.003391296	0.010926182
B4GALT5	20q13.13	0.128626779	0.003392145	0.010927169
RAB40B	17q25.3	-0.128607328	0.003397025	0.010941138
LYSMD4	15q26.3	-0.128545759	0.003412513	0.010989264
NDUFA1	Xq24	-0.128502166	0.003423518	0.011022939
LOC441204	7p15.2	0.128499825	0.00342411	0.011023082
OTUB1	11q13.1	-0.128491051	0.003426329	0.011028463
KCNA1	12p13.32	0.128439569	0.003439377	0.01106869
PALM3	19p13.12	-0.128427401	0.003442467	0.011076865
LMNA	1q22	-0.12842297	0.003443593	0.011078717
IER3IP1	18q21.1	-0.128415675	0.003445448	0.011082912
BUD23	7q11.23	-0.128412202	0.003446331	0.011083983
KLK11	19q13.41	0.12838978	0.003452038	0.011100564
DNM2	19p13.2	-0.128359231	0.003459828	0.011122628
ZNF277	7q31.1	-0.128358539	0.003460005	0.011122628

FCGR1B	1p11.2	0.128347421	0.003462844	0.011129977
GRIA1	5q33.2	-0.128320285	0.003469782	0.011150497
LRRC37A4P	17q21.31	0.128286721	0.003478381	0.011176347
PMS2P4	7q11.21	-0.128280474	0.003479984	0.011178434
TTC3	21q22.13	0.12827986	0.003480141	0.011178434
TRPM2	21q22.3	0.128255546	0.003486386	0.011196705
AP1G1	16q22.2	-0.128223502	0.003494631	0.011221393
SLC7A5P2	16p12.2	0.12821485	0.00349686	0.011226761
CHADL	22q13.2	-0.128204053	0.003499643	0.011233906
NDFIP2	13q31.1	-0.128200056	0.003500675	0.011234389
HELT	4q35.1	-0.128199143	0.00350091	0.011234389
IRAK1	Xq28	0.128189027	0.003503521	0.01124019
DEPDC1	1p31.3	0.128187812	0.003503835	0.01124019
NODAL	10q22.1	0.128181795	0.003505389	0.011243383
ATP11B	3q26.33	0.128177391	0.003506526	0.01124524
URB1-AS1	21q22.11	-0.128169836	0.003508479	0.011249709
WDR13	Xp11.23	-0.128159589	0.003511128	0.011256166
TMEM102	17p13.1	-0.128157725	0.003511611	0.011256166
ZYG11A	1p32.3	0.128153962	0.003512584	0.011257495
GBX2	2q37.2	0.128142475	0.003515558	0.011265231
WFDC1	16q24.1	0.128126764	0.003519629	0.011276481
COLEC12	18p11.32	0.128123551	0.003520462	0.011277355
EVI5	1p22.1	0.128110268	0.003523908	0.011286598
VWA7	6p21.33	-0.128104621	0.003525374	0.011289497
ADAD2	16q24.1	0.128083592	0.003530837	0.011305194
EREG	4q13.3	0.128058347	0.003537407	0.011324427
SOX1	13q34	0.128029047	0.003545045	0.011347075
IRX1	5p15.33	-0.128017313	0.003548108	0.011355074
MTLN	2q13	-0.128010925	0.003549777	0.011358609
HSD17B2	16q23.3	-0.127990171	0.003555203	0.011374162
GSTT1	22q11.23	-0.12796135	0.00356275	0.011396498
SCYL3	1q24.2	-0.12794562	0.003566876	0.011406143
EARS2	16p12.2	-0.127945533	0.003566899	0.011406143
SPA17	11q24.2	-0.127927036	0.003571755	0.011419859
DSCAML1	11q23.3	0.127914208	0.003575127	0.011428824
KRT39	17q21.2	0.127908932	0.003576515	0.011431445
UBE3C	7q36.3	0.127900638	0.003578697	0.011436605
PROSER2	10p14	-0.127890043	0.003581486	0.011443702
TAS1R1	1p36.31	0.127878778	0.003584455	0.011451368
PLCD4	2q35	0.12786156	0.003588995	0.011464055
TRIB1	8q24.13	0.127854526	0.003590852	0.011468166
LILRB3	19q13.42	0.127841848	0.003594201	0.011474437
ZNF37BP	10q11.21	0.127841153	0.003594384	0.011474437
PCOTH	13q12.12	-0.127839993	0.003594691	0.011474437
FCGR1A	1q21.2	0.127838461	0.003595095	0.011474437
FEZF1	7q31.32	0.127809656	0.003602716	0.011495207
BRIP1	17q23.2	0.127809544	0.003602745	0.011495207
DYNLT3	Xp11.4	0.127798255	0.003605736	0.011502925
CBR3	21q22.12	-0.127789311	0.003608107	0.011508665
NLRC5	16q13	0.127782451	0.003609926	0.011512644
ARHGAP5-AS1	14q12	0.127756315	0.003616865	0.011532947
HEBP2	6q24.1	-0.12775362	0.003617581	0.011533404
COX7A2L	2p21	-0.12775006	0.003618528	0.011534594
LRRC49	15q23	0.12774511	0.003619844	0.011536963
STAG3	7q22.1	0.127742158	0.003620629	0.011537639
ZG16B	16p13.3	0.127723608	0.003625566	0.011551543
C5ORF51	5p13.1	0.127720361	0.003626431	0.01155247
CCDC142	2p13.1	0.12771793	0.003627079	0.011552705

RPS20	8q12.1	-0.12770282	0.003631106	0.011563703
ADAMTS8	11q24.3	-0.127688318	0.003634976	0.011574195
CLCC1	1p13.3	-0.127670516	0.003639731	0.011586843
AGMO	7p21.2	0.127669137	0.003640099	0.011586843
RIC8B	12q23.3	0.127662006	0.003642006	0.011591079
WDR7	18q21.31	0.127646899	0.003646047	0.011602108
FLOT2	17q11.2	-0.127642554	0.003647211	0.011603975
C12ORF4	12p13.32	0.127637737	0.003648501	0.011606245
NPEPL1	20q13.32	-0.127626489	0.003651514	0.011613997
LOC100130238	12q24.33	0.127618026	0.003653784	0.011618488
CD72	9p13.3	0.127616202	0.003654273	0.011618488
ZNF696	8q24.3	0.127614766	0.003654658	0.011618488
PABPC3	13q12.13	0.127608514	0.003656336	0.011620595
PTPRCAP	11q13.2	0.127607993	0.003656475	0.011620595
MLYCD	16q23.3	-0.127605827	0.003657057	0.011620608
HSPA4	5q31.1	-0.127602522	0.003657944	0.011621593
DDX41	5q35.3	-0.127567005	0.003667491	0.011650084
LRRCC1	8q21.2	0.127562837	0.003668612	0.011651809
SLCO6A1	5q21.1	0.127550415	0.003671957	0.011660594
GIPC3	19p13.3	0.127541127	0.00367446	0.011666702
S100P	4p16.1	-0.127538956	0.003675046	0.01166672
DNAJB11	3q27.3	0.127532617	0.003676755	0.011670306
RPRD1B	20q11.23	0.127526712	0.003678348	0.011672872
LRG1	19p13.3	-0.127525322	0.003678723	0.011672872
NIPAL3	1p36.11	-0.12751551	0.003681372	0.011679083
UBXN7	3q29	0.127513773	0.003681841	0.011679083
ALG3	3q27.1	-0.12751082	0.003682638	0.011679772
DHRS4-AS1	14q11.2	0.127504394	0.003684375	0.011683438
RHBDL3	17q11.2	0.127487346	0.003688984	0.011695017
SPTLC2	14q24.3	0.127486593	0.003689188	0.011695017
KLC3	19q13.32	0.127479909	0.003690997	0.011698908
IPPK	9q22.31	0.127464188	0.003695254	0.011710558
AMY2A	1p21.1	-0.127441957	0.003701282	0.011727816
C17ORF75	17q11.2	-0.127417643	0.003707885	0.011746889
CACNA1S	1q32.1	-0.127411878	0.003709452	0.011749473
HIST1H1C	6p22.2	-0.127410349	0.003709868	0.011749473
NADK2	5p13.2	0.127392634	0.003714688	0.011762888
HOPX	4q12	-0.127378566	0.00371852	0.011773169
PYROXD1	12p12.1	-0.12737379	0.003719822	0.011775438
SPATS2L	2q33.1	0.127366582	0.003721787	0.011779807
NIBAN2	9q34.11	-0.127346262	0.003727332	0.011795504
MRPL50	9q31.1	-0.127277747	0.003746086	0.011852855
C15ORF56	15q15.1	-0.127275752	0.003746633	0.011852855
SLC29A4	7p22.1	0.127273144	0.003747348	0.011853256
CARD9	9q34.3	0.127266417	0.003749195	0.011857233
VDAC2	10q22.2	-0.127251695	0.003753238	0.011868157
NUP42	7p15.3	0.127248482	0.003754121	0.011869085
PARP15	3q21.1	0.127220781	0.003761743	0.011891312
THG1L	5q33.3	-0.127198596	0.003767856	0.011907718
PARP1	1q42.12	0.1271969	0.003768324	0.011907718
GPR146	7p22.3	-0.127195511	0.003768707	0.011907718
ARHGEF35	7q35	-0.127183093	0.003772134	0.011916675
DDX12P	12p13.31	0.127180317	0.0037729	0.011917226
GSTM2	1p13.3	-0.127173627	0.003774747	0.011919926
SESTD1	2q31.2	0.127172933	0.003774939	0.011919926
RAB20	13q34	-0.127093823	0.00379685	0.011986724
CCZ1B	7p22.1	0.12709226	0.003797284	0.011986724
C8ORF82	8q24.3	-0.127084792	0.003799359	0.011991392

MTTP	4q23	-0.127066751	0.003804375	0.012005341
PAPOLA	14q32.2	0.127060303	0.003806169	0.01200912
RASSF1	3p21.31	0.127048754	0.003809385	0.012017382
SNX32	11q13.1	0.127043042	0.003810976	0.012020518
C2ORF76	2q14.2	-0.127019316	0.003817592	0.0120395
IL3RA	Xp22.33 and Yp110	0.127009156	0.003820428	0.012046557
RXRA	9q34.2	-0.127003164	0.003822102	0.012049947
CXORF51A	Xq27.3	0.126982741	0.003827811	0.012066058
UBE4A	11q23.3	0.126971555	0.003830942	0.012074035
BTK	Xq22.1	0.126968041	0.003831926	0.012075245
SRSF7	2p22.1	-0.126948803	0.003837316	0.012090339
RAB7A	3q21.3	-0.126936385	0.003840799	0.012099419
GEMIN8	Xp22.2	-0.126932478	0.003841896	0.01210098
CDK5	7q36.1	-0.12692718	0.003843383	0.01210377
GATAD1	7q21.2	-0.126874383	0.003858233	0.012148637
FMNL1	17q21.31	0.12686648	0.00386046	0.012152
PLEKHA2	8p11.22	0.126866309	0.003860509	0.012152
RPL8	8q24.3	-0.126858839	0.003862615	0.01215673
CXCL9	4q21.1	0.126853281	0.003864183	0.012159586
KIF2C	1p34.1	0.126850936	0.003864845	0.012159586
SNX17	2p23.3	-0.1268492	0.003865335	0.012159586
ZNF702P	19q13.41	-0.126844771	0.003866585	0.012161618
SH2D1A	Xq25	0.126838391	0.003868387	0.012165384
FAM72B	1p11.2	0.126805173	0.003877779	0.012193016
TRAK1	3p22.1	-0.126798399	0.003879696	0.01219714
ST5	11p15.4	0.126784592	0.003883608	0.012207532
SLC16A3	17q25.3	0.126778426	0.003885356	0.0122096
HNRNPR	1p36.12	0.126777992	0.003885479	0.0122096
BOLA2	16p11.2	-0.12676488	0.003889199	0.012219382
ZNHIT1	7q22.1	-0.126758454	0.003891023	0.012223205
UXT-AS1	Xp11.23	-0.126722334	0.003901291	0.012253547
MRPL33	2p23.2	-0.126710779	0.003904581	0.012261967
XRCC2	7q36.1	0.126698796	0.003907995	0.012269831
NDUFAF4	6q16.1	-0.126697713	0.003908304	0.012269831
LOC285074	2p11.2	0.126690286	0.003910422	0.012274566
PPM1E	17q22	0.126681257	0.003912998	0.012280736
EPSTI1	13q14.11	0.126678302	0.003913841	0.012281468
CAP2	6p22.3	-0.126674655	0.003914882	0.012282821
NBPF15	1q21.1	0.126651816	0.003921408	0.012299968
DSG3	18q12.1	0.12665125	0.003921569	0.012299968
DNAJC13	3q22.1	0.126641135	0.003924463	0.012307125
KLHL3	5q31.2	0.126598758	0.003936606	0.012343282
GNAI2	3p21.31	0.126560636	0.003947558	0.012375696
FGFBP2	4p15.32	-0.126551453	0.0039502	0.012382052
OVCH2	11p15.4	-0.126528841	0.003956714	0.012400537
PSMD14	2q24.2	-0.126522514	0.003958538	0.012403099
YPEL2	17q22	0.126521732	0.003958764	0.012403099
EP300	22q13.2	0.126519127	0.003959515	0.012403522
ANKRD50	4q28.1	0.126508967	0.003962447	0.012410775
SYT1	12q21.2	0.126464072	0.003975425	0.012448967
MFSD5	12q13.13	-0.126462509	0.003975877	0.012448967
NEUROD1	2q31.3	0.126460214	0.003976542	0.012449111
NEB	2q23.3	0.126457258	0.003977398	0.012449855
TSSK4	14q12	0.126427307	0.003986081	0.012475095
PTPRQ	12q21.31	-0.126423226	0.003987266	0.012476862
DGAT2	11q13.5	-0.126415182	0.003989601	0.012482231
KIF12	9q32	-0.126396175	0.003995125	0.01249757
RTL5	Xq13.1	0.12637897	0.004000131	0.012511285

METTL27	7q11.23	-0.126369071	0.004003014	0.012518358
THSD7B	2q22.1	0.126359069	0.004005928	0.012525346
PITPNM3	17p13.2-p13.1	-0.126357133	0.004006493	0.012525346
FAM89B	11q13.1	0.126348751	0.004008937	0.012531042
CACNA1G	17q21.33	0.126343914	0.004010348	0.012533327
ZNF202	11q24.1	0.126341977	0.004010914	0.012533327
LETM1	4p16.3	-0.126317662	0.004018015	0.01255357
SLC9A2	2q12.1	-0.126259076	0.004035174	0.012603293
GZMK	5q11.2	0.126259047	0.004035182	0.012603293
HIST1H2BA	6p22.2	0.126243985	0.004039604	0.012615146
ZNF766	19q13.41	0.126240116	0.004040741	0.012616738
KLHL18	3p21.31	0.12621884	0.004046996	0.012633547
CSPP1	8q13.1-q13.2	0.126217538	0.004047379	0.012633547
SAYSD1	6p21.2	-0.126199041	0.004052825	0.012647581
SERPINB1	6p25.2	-0.126197999	0.004053132	0.012647581
GAB3	Xq28	0.126190705	0.004055282	0.012652327
TRAPPC5	19p13.2	-0.126158488	0.004064788	0.012677533
GCK	7p13	0.126156979	0.004065233	0.012677533
POLR2I	19q13.12	-0.126156925	0.00406525	0.012677533
TRPM4	19q13.33	-0.126127793	0.004073864	0.012702428
ESYT2	7q36.3	0.126118195	0.004076706	0.012707944
TFDP3	Xq26.2	0.126116114	0.004077322	0.012707944
PRTN3	19p13.3	-0.126115423	0.004077527	0.012707944
HIST1H3C	6p22.2	0.126049762	0.004097019	0.012766717
CRADD	12q22	-0.126021718	0.00410537	0.01279076
EP400P1	12q24.33	0.126010087	0.004108838	0.012799583
STIL	1p33	0.126000963	0.00411156	0.012806081
RNF34	12q24.31	0.125967791	0.004121471	0.012834966
ERN2	16p12.2	-0.125962427	0.004123076	0.012837977
CTH	1p31.1	-0.125953463	0.004125759	0.012844345
KIAA0319L	1p34.3	-0.125936442	0.004130858	0.012858229
ZNF480	19q13.41	0.125931753	0.004132263	0.012860616
SNX29P2	16p11.2	0.125924024	0.004134581	0.01286584
FOXQ1	6p25.3	-0.125919077	0.004136065	0.01286847
AGBL2	11p11.2	-0.125916483	0.004136844	0.012868903
UAP1L1	9q34.3	0.125912128	0.004138151	0.012870981
FBXO33	14q21.1	0.125894546	0.004143433	0.012885416
NMRK1	9q21.13	-0.125856464	0.004154892	0.012919058
FAM107A	3p14.3-p14.2	-0.12585269	0.00415603	0.012920599
SERINC3	20q13.12	0.125833018	0.004161962	0.012937044
ZNF264	19q13.43	0.125818863	0.004166236	0.012948328
DDX6	11q23.3	0.12581209	0.004168282	0.012952688
PAXX	9q34.3	-0.125790554	0.004174794	0.012970923
RNASE10	14q11.2	0.1257739	0.004179837	0.012984585
ADAM10	15q21.3	0.125765458	0.004182395	0.012990528
VSTM5	11q21	0.125750603	0.0041869	0.013002514
GALR1	18q23	0.125744092	0.004188876	0.013006643
TRANK1	3p22.2	0.125695987	0.0042035	0.013050039
FMO6P	1q24.3	0.125693003	0.004204409	0.013050847
DOCK8-AS1	9p24.3	-0.125686701	0.004206328	0.013054794
SRA1	5q31.3	-0.125676014	0.004209585	0.013062888
ZNF510	9q22.33	0.125667417	0.004212207	0.01306901
ZDHHC1	16q22.1	-0.125662644	0.004213664	0.013071514
NNT	5p12	0.125648489	0.004217985	0.013082903
PIAS1	15q23	-0.125640063	0.004220559	0.013088871
THOC1	18p11.32	0.125578859	0.004239302	0.01314497
SKA2	17q22	0.125559738	0.004245172	0.013161145
POTEA	8p11.1	-0.125552251	0.004247473	0.013164164

TMTC2	12q21.31	0.125551488	0.004247707	0.013164164
NEIL1	15q24.2	-0.125550186	0.004248108	0.013164164
SLC66A1	1p36.13	-0.125547236	0.004249015	0.013164948
CYP7B1	8q12.3	0.12553253	0.004253538	0.013175865
BPIFB6	20q11.21	0.125531527	0.004253847	0.013175865
SNAP29	22q11.21	-0.12552062	0.004257205	0.013184238
CLEC4G	19p13.2	0.125499875	0.004263599	0.013202008
NUP160	11p11.2	0.125489149	0.004266909	0.013210223
PIGQ	16p13.3	-0.125480889	0.004269459	0.013216086
RNF7	3q23	-0.12544598	0.004280251	0.013247457
MINDY3	10p13	-0.12543608	0.004283316	0.013254905
PA2G4	12q13.2	-0.125404818	0.004293008	0.013282856
NSMCE4A	10q26.13	-0.125399695	0.004294599	0.013285734
DNAJC30	7q11.23	-0.125352108	0.004309395	0.01332946
LY96	8q21.11	0.125346724	0.004311072	0.013332599
GEMIN2	14q21.1	0.125333785	0.004315105	0.01334302
ORAI1	12q24.31	-0.125239565	0.004344572	0.013432075
MZT2A	2q21.1	-0.125228189	0.004348142	0.013441048
ELAC1	18q21.2	-0.125196059	0.00435824	0.013470194
GLB1	3p22.3	-0.125193193	0.004359142	0.013470913
YY2	Xp22.12	0.12516137	0.004369166	0.013499818
SLC45A2	5p13.2	0.125142579	0.004375095	0.013516062
CD96	3q13.13-q13.2	0.125119555	0.004382369	0.013536457
HIGD1A	3p22.1	-0.125112521	0.004384594	0.013541251
ESPL1	12q13.13	0.125099148	0.004388826	0.013550248
BOD1L1	4p15.33	0.125099061	0.004388853	0.013550248
ATP5F1E	20q13.32	-0.125089335	0.004391934	0.013556194
FOXL1	16q24.1	0.125088727	0.004392126	0.013556194
ADNP2	18q23	0.125086296	0.004392897	0.013556494
SUGT1P3	13q14.11	-0.125061894	0.004400635	0.013578292
CAP1	1p34.2	0.125052342	0.004403667	0.013585567
RPL18	19q13.33	-0.125025422	0.004412224	0.013609878
E2F3	6p22.3	0.125021167	0.004413578	0.013611968
ARHGAP44	17p12	-0.124986345	0.004424671	0.013644092
MYO7A	11q13.5	0.124980005	0.004426693	0.013648237
EFR3B	2p23.3	0.12496229	0.004432349	0.013663581
COP1	1q25.1-q25.2	-0.124955604	0.004434485	0.013668074
ZNF845	19q13.42	0.124944795	0.004437941	0.01367663
C2ORF70	2p23.3	0.124908473	0.004449571	0.013710371
ACVR2B	3p22.2	0.124839501	0.00447173	0.013776541
PRCP	11q14.1	0.12481736	0.004478864	0.01379641
ZKSCAN5	7q22.1	0.124799729	0.004484553	0.013811819
ERG	21q22.2	0.124779322	0.004491145	0.013829921
SORCS2	4p16.1	0.124777284	0.004491804	0.013829921
PFKL	21q22.3	-0.124768207	0.00449474	0.013836843
STAT5A	17q21.2	0.124757613	0.004498168	0.013843506
ZBED4	22q13.33	0.124757268	0.00449828	0.013843506
DUSP3	17q21.31	-0.124751447	0.004500165	0.01384719
TCF19	6p21.33	0.124743374	0.00450278	0.013853119
HEATR5A	14q12	0.124716278	0.004511567	0.013876
MEF2C	5q14.3	0.124716191	0.004511596	0.013876
FAM199X	Xq22.2	0.124698389	0.004517377	0.01389166
TICRR	15q26.1	0.124686926	0.004521104	0.013900995
TRIM63	1p36.11	-0.124669455	0.004526789	0.013916349
MEIG1	10p13	-0.124655958	0.004531185	0.013927738
PPIL6	6q21	-0.124651844	0.004532526	0.013929733
APOO	Xp22.11	-0.124618932	0.004543265	0.013960606
KPNA2	17q24.2	0.124569868	0.004559317	0.014006355

PLXND1	3q22.1	0.124569174	0.004559545	0.014006355
GFOD1	6p23	0.124560202	0.004562486	0.01401325
PHOSPHO2	2q31.1	-0.124556495	0.004563702	0.014014846
ADAMTS17	15q26.3	0.124551852	0.004565225	0.014017384
USP26	Xq26.2	0.124508916	0.004579331	0.014058552
CPSF7	11q12.2	0.124505434	0.004580476	0.014059925
RAB5IF	20q11.23	-0.124489977	0.004585565	0.0140734
PIWIL1	12q24.33	0.12448488	0.004587245	0.014076408
KDM2B	12q24.31	0.12447947	0.004589028	0.014079732
CIP2A	3q13.13	0.124458542	0.004595931	0.014098763
CSAG1	Xq28	0.124440743	0.004601809	0.014114644
ACO2	22q13.2	-0.124423806	0.004607409	0.014129667
CATSPERD	19p13.3	-0.124418618	0.004609125	0.014132778
CCNF	16p13.3	0.124410954	0.004611662	0.014138403
C9ORF139	9q34.3	0.124398957	0.004615636	0.014148431
OCLM	1q31.1	0.124395787	0.004616686	0.014149136
SPIN3	Xp11.21	0.124394021	0.004617271	0.014149136
PCDHB6	5q31.3	0.12437722	0.004622843	0.014164053
CCDC85B	11q13.1	0.12436849	0.004625741	0.014170774
LAIR2	19q13.42	0.124353361	0.004630766	0.014184011
LTA	6p21.33	0.124339315	0.004635436	0.014196155
ERC2-IT1	3p14.3	0.12431906	0.004642178	0.014214639
ARHGEF11	1q23.1	-0.124316821	0.004642923	0.01421476
RNASEH2B	13q14.3	-0.124307269	0.004646106	0.014222342
SASH1	6q24.3-q25.1	0.124297717	0.004649291	0.014229928
ARHGAP11A	15q13.3	0.124294244	0.00465045	0.01423131
HOXB7	17q21.32	0.124281218	0.004654797	0.014241349
SPECC1	17p11.2	0.124280176	0.004655145	0.014241349
KREMEN2	16p13.3	0.124266873	0.004659589	0.014252777
KLK13	19q13.41	0.124241919	0.004667935	0.014274636
SLC10A2	13q33.1	-0.124241267	0.004668154	0.014274636
ADARB2	10p15.3	0.124229506	0.004672092	0.014284509
IFRD1	7q31.1	0.124194466	0.004683844	0.014318265
MYRF	11q12.2	-0.124168675	0.004692511	0.014342581
WNT3A	1q42.13	-0.124149326	0.004699022	0.014360303
SYT12	11q13.2	0.124109625	0.004712409	0.014399026
FMO2	1q24.3	0.124090781	0.004718774	0.014414889
KIR2DS4	19q13.42	0.124090018	0.004719032	0.014414889
PRSS27	16p13.3	0.124082358	0.004721622	0.014420613
FOXR2	Xp11.21	0.124047899	0.00473329	0.014454053
IGF2BP1	17q21.32	0.124013885	0.004744832	0.014487102
ATP2C1	3q22.1	0.123994738	0.00475134	0.014504774
PML	15q24.1	0.123982494	0.004755506	0.014515291
C1ORF216	1p34.3	0.123974418	0.004758256	0.014521482
EMCN	4q24	-0.123969555	0.004759913	0.014524335
KLHL14	18q12.1	0.123964865	0.004761511	0.01452701
PLAAT3	11q12.3-q13.1	-0.123956877	0.004764234	0.014533115
PRY2	Yq11.223	-0.123868287	0.004794526	0.014623304
NDC80	18p11.32	0.123845203	0.004802448	0.014645247
RAB9A	Xp22.2	-0.123836568	0.004805414	0.014652073
U2AF1	21q22.3	-0.123818717	0.004811551	0.014668564
LTB4R2	14q12	0.123816372	0.004812358	0.014668802
ZNF618	9q32	0.123756628	0.004832954	0.014729351
BORCS5	12p13.2	-0.123752549	0.004834363	0.014731415
LOC90246	3q21.3	0.123744297	0.004837215	0.014737874
FBXO15	18q22.3	-0.12373469	0.004840537	0.014745763
SLC45A4	8q24.3	-0.123727016	0.004843192	0.014751618
ZNF395	8p21.1	0.123706869	0.004850168	0.014770632

RPSAP58	19p12	-0.123702006	0.004851853	0.01477353
JAM2	21q21.3	0.12368186	0.004858841	0.014790756
DRAM2	1p13.3	-0.123680123	0.004859444	0.014790756
ARHGEF39	9p13.3	0.123679342	0.004859715	0.014790756
CORO7	16p13.3	0.123675	0.004861222	0.014793107
TIE1	1p34.2	0.123666055	0.004864329	0.014800323
TNFRSF1B	1p36.22	0.12366015	0.004866381	0.014804329
GPR26	10q26.13	0.123638957	0.004873751	0.014824511
TYMS	18p11.32	0.123634446	0.004875321	0.014827047
SH3BGRL2	6q14.1	-0.12361786	0.004881099	0.014842374
SNX19	11q24.3-q25	0.123608568	0.004884338	0.01484998
TBC1D1	4p14	0.123584948	0.00489258	0.014872794
LAMTOR3	4q23	-0.123579738	0.0048944	0.01487608
REC114	15q24.1	-0.123577146	0.004895306	0.014876586
TDRD3	13q21.2	-0.123568797	0.004898224	0.014883208
GOLGA6L6	15q11.2	0.123553043	0.004903734	0.014897702
SELENOW	19q13.33	-0.123549258	0.004905059	0.014899478
TSC22D2	3q25.1	0.1235404	0.004908161	0.014906649
FOXN2	2p16.3	0.123511136	0.00491842	0.014935555
SLC25A43	Xq24	0.123503757	0.00492101	0.014941165
GRIN3A	9q31.1	0.123435587	0.004944995	0.015011724
BCR	22q11.23	0.123404585	0.004955937	0.015042673
S100A5	1q21.3	0.123394859	0.004959374	0.015050838
PARVG	22q13.31	0.12338991	0.004961124	0.015053879
PPP1R35	7q22.1	-0.123380097	0.004964596	0.015062142
C17ORF97	17p13.3	-0.123367899	0.004968914	0.015072971
KRTAP3-1	17q21.2	0.12336423	0.004970213	0.015073996
ADAM21	14q24.2	0.123362717	0.004970749	0.015073996
TMEM248	7q11.21	0.123317313	0.004986858	0.015120568
RPF1	1p22.3	-0.123311582	0.004988895	0.015124465
NAA20	20p11.23	-0.123303766	0.004991673	0.01513061
FADS1	11q12.2	0.123296037	0.004994422	0.015136664
C9ORF40	9q21.13	0.123277367	0.005001069	0.015154526
ACTR3C	7q36.1	-0.123271983	0.005002987	0.015156901
DSP	6p24.3	0.123270941	0.005003358	0.015156901
FBH1	10p15.1	0.123264822	0.00500554	0.015159933
HSD17B10	Xp11.22	-0.123263907	0.005005866	0.015159933
SPANXN2	Xq27.3	0.123242619	0.005013461	0.01518065
ALDH6A1	14q24.3	-0.123200689	0.00502845	0.015223748
OTOP3	17q25.1	-0.123191794	0.005031635	0.015231099
SCARB1	12q24.31	-0.123184277	0.005034328	0.015236961
NELFA	4p16.3	-0.123174985	0.005037659	0.015242587
OTUD7A	15q13.3	-0.123174866	0.005037701	0.015242587
PLEKHM2	1p36.21	0.123167864	0.005040213	0.015246165
KIFC1	6p21.32	0.123167346	0.005040399	0.015246165
LILRA2	19q13.42	0.123149107	0.005046945	0.015262368
DLD	7q31.1	-0.123148198	0.005047272	0.015262368
SLC18B1	6q23.2	-0.123134171	0.005052312	0.015275315
RPL12	9q33.3	-0.123055843	0.005080542	0.01535836
ARHGEF2	1q22	-0.123050893	0.005082331	0.01536146
BEAN1	16q21	0.123034654	0.005088203	0.0153769
PGGHG	11p15.5	0.123025536	0.005091503	0.015384563
CHPT1	12q23.2	-0.122979251	0.005108284	0.015432951
CYP2J2	1p32.1	-0.122971957	0.005110933	0.015438637
IGSF9	1q23.2	0.1229433	0.005121352	0.01546779
TXNDC16	14q22.1	0.122931015	0.005125825	0.015478976
LHFPL2	5q14.1	0.122915512	0.005131474	0.015493711
MGC16275	17q25.1	-0.122893284	0.005139584	0.015515869

NFS1	20q11.22	-0.122858546	0.00515228	0.015551867
NOTCH1	9q34.3	0.122852033	0.005154664	0.015556729
GPATCH8	17q21.31	0.122825461	0.005164399	0.015583774
GRAP2	22q13.1	0.122820164	0.005166342	0.0155873
YTHDF2	1p35.3	-0.122807051	0.005171154	0.015599479
SNX18	5q11.2	0.122804793	0.005171983	0.015599642
STX18	4p16.3-p16.2	-0.122792549	0.00517648	0.015610868
HULC	6p24.3	-0.122769817	0.005184839	0.015633734
BIRC6	2p22.3	0.122738622	0.00519633	0.015663853
LCTL	15q22.31	0.122738476	0.005196384	0.015663853
HEXIM2	17q21.31	-0.12273376	0.005198123	0.015666749
RALGAPA1	14q13.2	0.122709358	0.00520713	0.015691547
DMAC1	9p24.1	-0.12269668	0.005211816	0.015703316
USP34	2p15	0.122674188	0.005220137	0.015725812
GLRX2	1q31.2	-0.122672278	0.005220845	0.015725812
DPH3P1	20q13.33	0.122657787	0.005226213	0.015739627
SLC25A51	9p13.2-p13.1	0.122636807	0.005233994	0.015760703
NEFH	22q12.2	0.122625608	0.005238152	0.015768948
RBM7	11q23.2	0.122625212	0.005238299	0.015768948
PLA2G4E	15q15.1	-0.122613135	0.005242786	0.015780096
PDF	16q22.1	-0.122572153	0.005258038	0.015823638
SAP30L	5q33.2	0.122542715	0.005269019	0.015854314
LCMT1	16p12.1	-0.122538113	0.005270738	0.015857115
PF4	4q13.3	-0.122525382	0.005275495	0.015868549
LBHD1	11q12.3	-0.122523611	0.005276157	0.015868549
ACBD7	10p13	0.122521614	0.005276903	0.015868549
PIMREG	17p13.2	0.122519269	0.00527778	0.015868814
THNSL1	10p12.1	-0.122510585	0.005281028	0.015876209
ODF3	11p15.5	0.122490152	0.005288678	0.015894722
PIGN	18q21.33	-0.122489918	0.005288766	0.015894722
RNF135	17q11.2	-0.122485663	0.00529036	0.01589714
PTPN14	1q32.3-q41	0.122450059	0.005303717	0.015934898
CFAP54	12q23.1	0.122438476	0.005308068	0.015945593
CDC42EP3	2p22.2	0.122384583	0.00532836	0.01600416
HAVCR2	5q33.3	0.122374162	0.005332291	0.016013579
FAM216A	12q24.11	0.122355712	0.005339258	0.016032111
CRLS1	20p12.3	-0.122281506	0.005367363	0.016114097
UGT1A4	2q37.1	-0.122269344	0.005371982	0.016125559
GPR152	11q13.2	0.122258523	0.005376094	0.016135497
VIPR1	3p22.1	-0.122246336	0.00538073	0.016146281
POP4	19q12	-0.12224486	0.005381291	0.016146281
NOTCH3	19p13.12	0.122237739	0.005384002	0.016152005
SNRPG	2p13.3	-0.122215769	0.005392371	0.016174704
MEA1	6p21.1	-0.122197707	0.005399261	0.016191359
TPH1	11p15.1	0.122196996	0.005399533	0.016191359
MSANTD1	4p16.3	-0.122187208	0.00540327	0.016200152
ISCA2	14q24.3	-0.122148643	0.005418017	0.016241947
VANGL2	1q23.2	0.122114429	0.00543113	0.016278834
ZNF114	19q13.33	-0.122111219	0.005432362	0.016280102
CDH6	5p13.3	0.122107134	0.00543393	0.016282376
URAHP	16q24.3	-0.122085946	0.005442069	0.016304337
PXT1	6p21.31	0.122075422	0.005446115	0.016314033
SCGB1B2P	19q13.11	-0.122063981	0.005450518	0.016324791
SIGLEC5	19q13.41	0.122054684	0.005454097	0.016333082
PSMG2	18p11.21	-0.122051297	0.005455402	0.016334559
PRPF39	14q21.2	0.122033582	0.00546223	0.016352572
ELF3	1q32.1	-0.122027938	0.005464408	0.016356658
NDRG2	14q11.2	-0.122016087	0.005468981	0.016366527

SLC6A2	16q12.2	0.122014898	0.005469441	0.016366527
CLEC9A	12p13.2	-0.122013077	0.005470144	0.016366527
UQCRFS1	19q12	-0.121993724	0.005477622	0.016386466
MAPK8	10q11.22	0.121968541	0.005487367	0.016412246
TCEAL6	Xq22.1	0.121967241	0.00548787	0.016412246
C20ORF141	20p13	0.121951693	0.005493895	0.016427823
AIP	11q13.2	-0.121947352	0.005495578	0.016430415
SERHL	22q13.2	-0.121941534	0.005497835	0.016434721
CCDC14	3q21.1	0.121938842	0.005498879	0.016435403
HIST1H2AC	6p22.2	-0.121919303	0.005506465	0.016455632
FOXG1	14q12	0.121916019	0.005507741	0.016457002
KLHDC3	6p21.1	-0.121891949	0.005517101	0.016482522
TMEM178A	2p22.1	0.121859819	0.005529617	0.016517464
NCAPH2	22q13.33	-0.121853306	0.005532157	0.0165226
PHC1	12p13.31	0.121847662	0.00553436	0.016526726
RAI2	Xp22.13	0.121841108	0.005536918	0.016531912
NELFE	6p21.33	-0.121830641	0.005541005	0.016541664
CLMN	14q32.13	0.121805892	0.005550682	0.016568093
SLC2A13	12q12	-0.12180012	0.005552941	0.016571295
NAGPA	16p13.3	-0.121798945	0.005553401	0.016571295
DPYD	1p21.3	0.121787656	0.005557821	0.016582028
KCNA4	11p14.1	-0.121784894	0.005558904	0.016582799
SOWAHA	5q31.1	0.121781845	0.005560098	0.016583905
FAM192A	16q13	-0.121779059	0.00556119	0.016584705
NEU4	2q37.3	0.121775379	0.005562633	0.01658655
PPP4R1L	20q13.32	0.121766514	0.005566109	0.016594458
DHX57	2p22.1	0.121753008	0.005571409	0.016606628
WFDC10A	20q13.12	-0.121751908	0.005571841	0.016606628
NT5DC2	3p21.1	0.121728693	0.005580963	0.016630909
GSTM1	1p13.3	-0.12172697	0.00558164	0.016630909
FAM72D	1q21.1	0.121706943	0.005589521	0.016651925
VGLL2	6q22.1	0.12169231	0.005595286	0.016666632
ADH4	4q23	-0.121687009	0.005597375	0.016670389
MRE11	11q21	0.121683364	0.005598812	0.016672203
IGBP1	Xq13.1	-0.12167824	0.005600833	0.016674817
LPAR2	19p13.11	-0.121676938	0.005601347	0.016674817
DNASE1L1	Xq28	-0.121670772	0.00560378	0.016679592
UGT2A3	4q13.2	-0.121660454	0.005607853	0.016688944
WAC	10p12.1 10p12.1-p	0.121658615	0.005608579	0.016688944
USP6	17p13.2	0.121655665	0.005609745	0.016689944
SURF6	9q34.2	-0.121589405	0.005635974	0.016765504
WEE2-AS1	7q34	-0.121584976	0.005637732	0.016768253
CTAGE4	7q35	-0.121577855	0.005640558	0.016772523
JRK	8q24.3	0.12157716	0.005640833	0.016772523
MAL2	8q24.12	-0.121571169	0.005643213	0.016777119
ERAP1	5q15	0.121545291	0.005653498	0.016802838
KATNB1	16q21	-0.121545204	0.005653533	0.016802838
CCNI	4q21.1	0.121536781	0.005656885	0.016810317
RACGAP1	12q13.12	0.12153131	0.005659063	0.016814307
ZNF439	19p13.2	0.121512119	0.005666708	0.016834539
RABGEF1	7q11.21	0.121499006	0.005671938	0.016847241
PIM1	6p21.2	0.121495446	0.005673358	0.016847241
SPDYE6	7q22.1	0.121495104	0.005673495	0.016847241
SLC10A3	Xq28	0.121479988	0.00567953	0.016862674
RBM6	3p21.31	0.121456716	0.005688833	0.016887804
WDR5B	3q21.1	-0.121448987	0.005691925	0.016894493
NDST3	4q26	0.121403708	0.005710073	0.016945861
TTR	18q12.1	-0.121384656	0.005717725	0.016966068

PLEKHA8	7p14.3	0.121363017	0.005726427	0.01698923
GPC5	13q31.3	-0.121361049	0.005727219	0.01698923
LRN2	1q32.1	0.121333799	0.005738195	0.017019283
IGIP	5q31.3	0.121325465	0.005741556	0.017026742
WARS	14q32.2	0.12129867	0.005752374	0.017056309
GNL3L	Xp11.22	0.121289685	0.005756005	0.017064563
SPINK1	5q32	-0.121280792	0.005759601	0.01707271
ANKRD7	7q31.31	0.121233318	0.005778834	0.017127197
CKMT1A	15q15.3	-0.121202593	0.005791312	0.017159547
ADCY10	1q24.2	-0.121202244	0.005791454	0.017159547
DBN1	5q35.3	0.121198632	0.005792922	0.017161371
SPANXN3	Xq27.3	0.12119626	0.005793887	0.017161704
CXCL11	4q21.1	0.121169107	0.005804938	0.01719191
ID2B	3p14.2	0.121162445	0.005807653	0.017197419
ZNF292	6q14.3	0.121148353	0.005813399	0.017211901
UGT1A3	2q37.1	-0.121143699	0.005815297	0.01721499
OPRM1	6q25.2	-0.121122441	0.005823977	0.017238149
HCCAT5	16q22.3	0.121109116	0.005829423	0.017250084
PTGER4P2-CDK2	9q13	0.121108383	0.005829723	0.017250084
SNX7	1p21.3	0.121100331	0.005833016	0.017257293
REEP1	2p11.2	-0.121095468	0.005835006	0.017260643
VEZF1	17q22	0.121073064	0.005844182	0.017285246
SYTL3	6q25.3	0.12104076	0.005857435	0.0173219
BRF2	8p11.23	-0.121027735	0.005862787	0.017335179
CAPN9	1q42.2	-0.1209993	0.005874484	0.017367215
TIPIN	15q22.31	-0.120982104	0.005881569	0.017385607
FBXL18	7p22.1	0.120960695	0.005890399	0.017409153
CCL4	17q12	0.120951664	0.005894128	0.017417616
MITF	3p13	0.120932299	0.005902131	0.017438704
C16ORF72	16p13.2	0.120925439	0.005904968	0.017442073
C17ORF67	17q22	0.120925352	0.005905004	0.017442073
LRRC75A	17p11.2	0.120910677	0.005911078	0.017457452
CFAP20	16q21	-0.120895219	0.005917481	0.017473799
ZNF382	19q13.12	0.120885889	0.005921349	0.017482657
MUC12	7q22.1	0.120861264	0.005931569	0.017510264
IFT52	20q13.12	0.120852234	0.005935321	0.017518769
ZNF668	16p11.2	0.12084824	0.005936981	0.0175211
MMP24	20q11.22	-0.120836343	0.005941928	0.01753313
RABL3	3q13.33	-0.120833738	0.005943012	0.017533758
HIST1H2BI	6p22.2	0.120827501	0.005945607	0.017538844
PIPSL	10q23.33	-0.120766612	0.005971	0.017611169
IL17D	13q12.11	0.120749184	0.005978286	0.017630076
NELL1	11p15.1	-0.120714528	0.005992798	0.017670283
SNX29	16p13.13-p13.12	0.120698444	0.005999544	0.017687582
NINJ2	12p13.33	-0.120682552	0.006006215	0.017704659
NTN1	17p13.1	0.120651898	0.006019104	0.017740052
LRIG3	12q14.1	0.120638178	0.00602488	0.017754478
TTC5	14q11.2	-0.120620463	0.006032346	0.017773878
ERGIC1	5q35.1	-0.120613429	0.006035313	0.017780016
FAM133CP	10q21.1	0.120599622	0.00604114	0.01779458
HMGCR	5q13.3	-0.120558941	0.006058339	0.017842629
CCT8	21q21.3	-0.12054118	0.006065862	0.017862171
UBXN1	11q12.3	-0.120537967	0.006067224	0.017863568
ANKRD65	1p36.33	0.12052937	0.006070869	0.017871686
VPS33B	15q26.1	-0.120503058	0.006082037	0.017901945
RGS12	4p16.3	0.120499671	0.006083476	0.017903563
RIPOR1	16q22.1	0.120487253	0.006088754	0.017916477
DOK7	4p16.3	-0.120475582	0.006093719	0.017928465

SCARNA9	11q21	0.12046668	0.006097508	0.017936992
LINC01226	1p35.2	0.120446756	0.006105996	0.017959337
RPL27A	11p15.4	-0.120412485	0.006120622	0.017999725
RBM34	1q42.3	-0.120397202	0.006127154	0.018016304
SSX2IP	1p22.3	0.120393034	0.006128937	0.018017156
MTF1	1p34.3	0.120392339	0.006129234	0.018017156
SSBP1	7q34	-0.120388865	0.00613072	0.018018893
PHF23	17p13.1	-0.120385652	0.006132095	0.018020303
PLSCR4	3q24	0.12037966	0.00613466	0.018025208
ILKAP	2q37.3	-0.120369327	0.006139085	0.018035578
ZNF880	19q13.41	0.12035743	0.006144183	0.018047922
PECAM1	17q23.3	0.120340149	0.006151595	0.018067058
FIRRE	Xq26.2	0.120331212	0.006155432	0.018075688
BTN2A1	6p22.2	0.120325126	0.006158046	0.018080727
REL	2p16.1	0.120321045	0.006159799	0.018083237
AAGAB	15q23	-0.120274933	0.006179641	0.01813884
CLEC2L	7q34	0.120271323	0.006181197	0.018140615
BNC1	15q25.2	0.120269349	0.006182048	0.018140615
PRG4	1q31.1	-0.120222917	0.006202092	0.01819678
PAOX	10q26.3	0.120201989	0.006211145	0.018220688
TAF10	11p15.4	-0.120178456	0.00622134	0.018247935
TRIM50	7q11.23	-0.120133681	0.006240779	0.018300767
ZNF875	19q13.12	-0.120132779	0.006241171	0.018300767
ATG4D	19p13.2	-0.120107336	0.006252242	0.01833056
RPS27A	2p16.1	-0.120105165	0.006253187	0.018330662
MAPKAPK5-AS1	12q24.12	-0.120094484	0.00625784	0.018340456
NCOA1	2p23.3	0.120093314	0.00625835	0.018340456
MCM10	10p13	0.120078766	0.006264694	0.018356373
GOLGA6L1	15q11.2	0.120015303	0.006292434	0.018434972
MARF1	16p13.11	0.120011292	0.00629419	0.018437435
BRINP2	1q25.2	0.120007746	0.006295744	0.018439303
DPYS	8q22.3	-0.119981445	0.006307278	0.018470397
AADAT	4q33	-0.119977252	0.006309119	0.0184731
TRIM40	6p22.1	-0.119955066	0.006318865	0.018496315
SOX13	1q32.1	-0.119955021	0.006318885	0.018496315
S100A7A	1q21.3	0.119949237	0.006321429	0.01850107
EGOT	3p26.1	0.119933953	0.006328153	0.018518058
RPS11	19q13.33	-0.11992072	0.006333981	0.018532418
ULK4	3p22.1	-0.119904655	0.006341062	0.01855044
KDSR	18q21.33	0.119897534	0.006344203	0.018556932
ROR1	1p31.3	0.119895103	0.006345276	0.018557374
TCEAL3	Xq22.2	0.119855418	0.00636281	0.018605949
ILDR2	1q24.1	0.119850231	0.006365104	0.018609957
BTC	4q13.3	-0.119841075	0.006369157	0.018619102
CACNB3	12q13.12	0.119826066	0.006375805	0.01863583
MRM1	17q12	-0.119823461	0.00637696	0.018636156
TBX3	12q24.21	0.119821638	0.006377768	0.018636156
POM121C	7q11.23	0.11980783	0.006383892	0.018651341
LINC00113	21q21.3	-0.119744942	0.006411849	0.018730302
FAM78A	9q34.13	0.119732455	0.006417413	0.018743837
MESTIT1	7q32.2	0.119726248	0.00642018	0.0187492
MIR31HG	9p21.3	0.119719354	0.006423255	0.018755458
RBM17	10p15.1	0.119714132	0.006425586	0.018759541
C3ORF20	3p25.1	0.119707917	0.00642836	0.018764919
DKKL1	19q13.33	-0.119705236	0.006429557	0.018765692
TTC1	5q33.3	-0.11969633	0.006433535	0.01877458
TNRC6B	22q13.1	0.119691166	0.006435842	0.018778592
ADAM15	1q21.3	-0.119685475	0.006438386	0.018783291

LOC100134868	20p11.1	-0.119670094	0.006445266	0.018800638
CGA	6q14.3	0.119661052	0.006449313	0.018809718
ERI3	1p34.1	-0.119652824	0.006452998	0.018817739
RRP7A	22q13.2	-0.119650393	0.006454088	0.01881819
DMBX1	1p33	0.119642958	0.00645742	0.018825178
LY6G6E	6p21.33	-0.119634894	0.006461035	0.018831232
TMEM140	7q33	0.119634154	0.006461367	0.018831232
TSPAN17	5q35.2	-0.119625644	0.006465185	0.018839631
TIGD3	11q13.1	0.119607671	0.006473255	0.018860417
TTYTY1B	Yp11.2	0.119601146	0.006476187	0.018866228
LRCH2	Xq23	0.119590954	0.006480768	0.018876844
CAMK1D	10p13	0.119586306	0.006482859	0.018880202
TMX1	14q22.1	0.119557649	0.006495762	0.018915042
ECD	10q22.2	-0.119555044	0.006496936	0.018915725
ZNF214	11p15.4	-0.119541324	0.006503123	0.018930999
ADAMTS15	11q24.3	0.119538033	0.006504607	0.018932583
LZTR1	22q11.21 22q11.1-	0.119530816	0.006507864	0.018939324
SPINK5	5q32	-0.119526781	0.006509686	0.018941888
YRDC	1p34.3	-0.11952439	0.006510765	0.018942291
TACR1	2p12	0.119514981	0.006515016	0.018951917
WNT3	17q21.31-q21.32	-0.119487484	0.006527451	0.01898413
MANCR	10p15.1	0.119486325	0.006527976	0.01898413
PPP1R3G	6p25.1	0.119477847	0.006531814	0.018992548
AQP6	12q13.12	0.119457438	0.006541063	0.019016694
TRPV6	7q34	-0.119420744	0.006557721	0.019061277
BBS2	16q13	-0.11941949	0.006558291	0.019061277
SMPD1	11p15.4	0.119414627	0.006560502	0.01906495
FCMR	1q32.1	0.119401601	0.006566427	0.019079413
DISC2	1q42.2	0.119391397	0.006571072	0.019090153
FOXL2	3q22.3	0.119387478	0.006572856	0.019092002
FUT5	19p13.3	0.119385835	0.006573605	0.019092002
CFAP36	2p16.1	-0.119360526	0.006585142	0.019122749
C2CD4D-AS1	1q21.3	0.119354343	0.006587963	0.019128183
CPNE9	3p25.3	-0.11932591	0.006600951	0.019163129
PPP4C	16p11.2	-0.119321796	0.006602832	0.019165825
ADCY2	5p15.31	0.119314985	0.006605947	0.019172104
TMEM222	1p36.11	-0.119304429	0.006610778	0.019181632
NOL7	6p23	-0.119303647	0.006611136	0.019181632
OR2A1	7q35	0.119275707	0.006623939	0.019216008
CLEC4E	12p13.31	0.119267091	0.006627891	0.019224704
TAAR8	6q23.2	-0.119251047	0.006635257	0.019240787
PTPRM	18p11.23	-0.11925085	0.006635347	0.019240787
PYHIN1	1q23.1	0.11923435	0.00664293	0.019259999
PDCD2	6q27	-0.119221371	0.0066489	0.019274533
TPTE	21p11.2	0.119217734	0.006650574	0.019276609
TMEM11	17p11.2	-0.119207691	0.006655198	0.019287234
HBB	11p15.4	-0.119202567	0.006657558	0.019291296
MAP3K3	17q23.3	0.119199007	0.006659198	0.019293272
COMTD1	10q22.2	-0.119189281	0.006663681	0.019302561
ZNF204P	6p22.1	-0.119187892	0.006664322	0.019302561
RPS6KA6	Xq21.1	-0.119178091	0.006668842	0.019312875
ACSM5	16p12.3	-0.119172514	0.006671416	0.01931755
TLR7	Xp22.2	0.119157718	0.006678249	0.019334552
SH3GL2	9p22.2	-0.119134243	0.006689101	0.019363188
SPICE1	3q13.2	0.119125021	0.006693369	0.019367079
SRSF6	20q13.11	-0.119125021	0.006693369	0.019367079
CDKN3	14q22.2	0.1191245	0.006693611	0.019367079
FAM222A	12q24.11	0.119123024	0.006694294	0.019367079

EXOC3L1	16q22.1	0.119116163	0.006697471	0.019373486
CNPY1	7q36.3	-0.119113261	0.006698815	0.01937459
LINC00685	Xp22.33 and Yp11	0.119100239	0.00670485	0.01938926
LGALS9B	17p11.2	-0.119092395	0.006708488	0.019396803
VAMP7	Xq28 and Yq12	0.119090459	0.006709386	0.019396803
INSL6	9p24.1	0.119068753	0.006719463	0.019423145
USP47	11p15.3	0.119064842	0.006721279	0.019425607
C12ORF75	12q23.3	0.119059458	0.006723782	0.019430049
ZNF554	19p13.3	0.119032278	0.006736426	0.019462285
PLAGL1	6q24.2	0.119031322	0.006736871	0.019462285
APOL5	22q12.3	0.119017919	0.006743114	0.019477527
CCDC117	22q12.1	0.118992766	0.006754844	0.019508611
S100A7	1q21.3	0.118972492	0.006764313	0.019533155
CHST12	7p22.3	0.118931545	0.006783472	0.019585671
CD2	1p13.1	0.118920476	0.00678866	0.019597838
METAP2	12q22	-0.118902975	0.006796869	0.019618723
FAM110C	2p25.3	-0.118873818	0.006810566	0.01965544
PAX5	9p13.2	0.118867982	0.00681331	0.019660541
CLDN5	22q11.21	-0.118865895	0.006814292	0.019660555
SOX17	8q11.23	0.118844273	0.00682447	0.019686285
APLF	2p13.3	0.118842796	0.006825166	0.019686285
ASB18	2q37.2	0.118810548	0.006840372	0.019727321
WDR59	16q23.1	-0.118797901	0.006846344	0.019741715
IER3	6p21.33	0.118792778	0.006848765	0.019745866
OR6S1	14q11.2	0.118787329	0.00685134	0.019748256
PDXK	21q22.3	-0.118786873	0.006851556	0.019748256
MT3	16q13	0.118769611	0.00685972	0.019768957
TOMM34	20q13.12	-0.118747494	0.006870193	0.019796305
ARHGEF40	14q11.2	0.118726694	0.006880056	0.019819643
FRRS1L	9q31.3	0.11872626	0.006880262	0.019819643
GTSF1	12q13.13	0.118698715	0.006893343	0.019854484
FIGN	2q24.3	0.118679454	0.006902503	0.019878023
KIAA1107	1p22.1	-0.118664824	0.006909468	0.019895235
ANKRD24	19p13.3	-0.118646021	0.006918429	0.019918188
DNAJC22	12q13.12	0.118639467	0.006921554	0.019924337
CATSPERE	1q44	-0.118626689	0.006927652	0.019939039
CPNE1	20q11.22	0.118617104	0.00693223	0.019948209
IMPAD1	8q12.1	0.118615367	0.00693306	0.019948209
SENP5	3q29	0.118612675	0.006934346	0.019948209
ATP6V1B2	8p21.3	0.11861172	0.006934802	0.019948209
EMC1	1p36.13	0.118605728	0.006937666	0.019953596
IL2RG	Xq13.1	0.1185848	0.006947677	0.019979533
CBLL1	7q22.3	0.118560051	0.006959532	0.020010063
BTLA	3q13.2	0.118558488	0.006960281	0.020010063
USP8	15q21.2	-0.118547199	0.006965695	0.020022768
CTTNBP2NL	1p13.2	0.118536257	0.006970946	0.020035001
FOXO1	13q14.11	0.118534	0.00697203	0.020035256
UMODL1-AS1	21q22.3	0.118503914	0.006986489	0.020073941
LSM2	6p21.33	-0.118489104	0.006993617	0.020091552
LOC730101	6p12.2	0.118459145	0.007008055	0.0201292
F2	11p11.2	-0.118457763	0.007008722	0.0201292
SLC11A1	2q35	0.118451677	0.007011658	0.020134762
LINC01547	21q22.3	-0.118420502	0.007026717	0.020175128
TNFRSF10D	8p21.3	0.118411731	0.007030959	0.020184429
FRMPD2	10q11.22	0.118402078	0.007035631	0.020194959
ZNF182	Xp11.23	0.118394885	0.007039114	0.020202076
LYPD8	1q44	-0.118389976	0.007041491	0.020206019
PCDHGA10	5q31.3	0.118379601	0.007046519	0.020217563

C14ORF28	14q21.2	0.118377433	0.00704757	0.020217698
NKX2-4	20p11.22	0.11837506	0.00704872	0.020218117
BAD	11q13.1	-0.118355634	0.007058145	0.020242266
C2ORF68	2p11.2	-0.118352681	0.007059579	0.020243493
KRTAP21-2	21q22.11	0.11834995	0.007060905	0.020244412
MRPS33	7q34	-0.118346255	0.0070627	0.020246349
CALB1	8q21.3	0.118344418	0.007063592	0.020246349
MRPL17	11p15.4	-0.118326369	0.007072365	0.020268608
NR2C2	3p25.1	0.118319422	0.007075744	0.02027473
POLE	12q24.33	0.118317685	0.007076589	0.02027473
LOC646999	7p14.1	0.118315767	0.007077523	0.02027473
ARC	8q24.3	-0.118304624	0.007082947	0.020287383
RRN3P1	16p12.2	0.118296844	0.007086737	0.02029535
SLCO2B1	11q13.4	0.118290939	0.007089614	0.0202983
XRCC4	5q14.2	0.118290592	0.007089784	0.0202983
TLCD3B	16p11.2	0.11828584	0.0070921	0.020302045
ZFYVE26	14q24.1	0.118269664	0.007099991	0.020321742
LCN1	9q34.3	0.118210784	0.007128778	0.020401238
APIP	11p13	-0.118191509	0.007138225	0.020425368
NOXO1	16p13.3	-0.118181089	0.007143336	0.020437089
MYL4	17q21.32	0.118169164	0.00714919	0.02045093
AGBL1	15q25.3	-0.118165126	0.007151173	0.020453696
CR1	1q32.2	0.118153822	0.007156728	0.020466675
MRFAP1L1	4p16.1	-0.118140188	0.007163432	0.020482937
ARL4A	7p21.3	0.118129594	0.007168645	0.020494933
PTRH1	9q34.11	-0.118125949	0.007170439	0.020497152
ITGA9	3p22.2	0.118121605	0.007172579	0.020500356
SEC31A	4q21.22	0.118092079	0.007187133	0.020539038
FBXO45	3q29	0.118059949	0.007203001	0.020581464
HMCE5	3q21.3	-0.117991868	0.007236729	0.020674901
CA5A	16q24.2	0.117984791	0.007240243	0.020682005
CREBBP	16p13.3	0.117976671	0.007244277	0.020690591
MFSD11	17q25.1-q25.2	-0.117969638	0.007247772	0.020697639
TIGAR	12p13.32	0.11796599	0.007249586	0.020699881
RPS24	10q22.3	-0.117956699	0.007254207	0.020710139
PHACTR3	20q13.32-q13.33	0.117943356	0.007260848	0.020726158
EIF3G	19p13.2	-0.117927434	0.00726878	0.020745857
PEX10	1p36.32	-0.117924441	0.007270272	0.020747174
TRPV2	17p11.2	0.117888096	0.007288409	0.020795986
SERTAD1	19q13.2	-0.117875855	0.007294528	0.020808539
NAPG	18p11.22	-0.117875157	0.007294876	0.020808539
ARMCX5	Xq22.1	-0.117872726	0.007296092	0.020809058
TMEM63C	14q24.3	0.117827917	0.007318531	0.020870098
COLCA2	11q23.1	-0.117823187	0.007320903	0.020873906
CHD1	5q15-q21.1	0.117819668	0.007322669	0.020875983
JAKMIP3	10q26.3	-0.117785582	0.007339788	0.020921825
PWWP2A	5q33.3	0.117772341	0.007346447	0.020937843
PRR23A	3q23	0.117769559	0.007347847	0.020938868
C2ORF72	2q37.1	-0.117763052	0.007351123	0.020945237
POLQ	3q13.33	0.117759489	0.007352917	0.020947384
NCAPG	4p15.31	0.117755584	0.007354883	0.020950022
OR4L1	14q11.2	-0.117722466	0.007371581	0.020994613
ASGR2	17p13.1	0.11770687	0.007379456	0.021014069
PIBF1	13q21.33-q22.1	-0.117690626	0.007387667	0.021034474
TMEM270	7q11.23	0.117688081	0.007388954	0.021035163
PIK3R5	17p13.1	0.117683158	0.007391444	0.021039277
DRAM1	12q23.2	-0.117666919	0.007399664	0.021059696
LIPF	10q23.31	-0.117634611	0.007416041	0.021103324

RTF1	15q15.1	-0.117632317	0.007417206	0.021103654
HECTD4	12q24.13	0.117610127	0.007428475	0.02113273
PEX11B	1q21.1	-0.11759328	0.00743704	0.021153506
COBL	7p12.1	-0.11759163	0.00743788	0.021153506
THNSL2	2p11.2	-0.117589025	0.007439205	0.021154287
RPLP2	11p15.5	-0.117569487	0.007449153	0.021179584
ALX3	1p13.3	0.117557858	0.00745508	0.021193441
LOC143666	11p15.5	0.117545047	0.007461613	0.02120902
COL25A1	4q25	0.117541368	0.007463491	0.021211361
POM121	7q11.23	0.117454686	0.007507844	0.021334402
APOL1	22q12.3	0.117443398	0.007513638	0.021347852
HOXC10	12q13.13	0.117435956	0.007517459	0.021355695
BHLHE40	3p26.1	0.117425335	0.007522916	0.021368182
TAB1	22q13.1	-0.117413178	0.007529167	0.021382919
RPS6KC1	1q32.3	0.117402236	0.007534797	0.021395889
CBFA2T3	16q24.3	0.117399892	0.007536003	0.021396297
SPTBN2	11q13.2	0.117385563	0.007543382	0.021414227
RTCB	22q12.3	-0.117365677	0.007553634	0.021439343
UPF3B	Xq24	0.117362377	0.007555336	0.021439343
CEP85	1p36.11	-0.117362206	0.007555425	0.021439343
MEPCE	7q22.1	-0.117348917	0.007562284	0.021455782
TTK	6q14.1	0.117330421	0.00757184	0.021479868
B3GALT5	21q22.2	0.117305449	0.007584759	0.021513484
MYH10	17p13.1	0.11729942	0.007587881	0.021519308
TAF15	17q12	-0.117289086	0.007593235	0.021531458
RAB6B	3q22.1	0.117241325	0.007618024	0.021598706
SLC13A4	7q33	0.117232163	0.007622787	0.021609167
TFEC	7q31.2	0.11722057	0.007628818	0.021623219
MEF2A	15q26.3	0.117207892	0.007635418	0.021636408
ZNF225	19q13.31	0.117207504	0.007635621	0.021636408
UBN2	7q34	0.117194693	0.007642296	0.021652275
MFSD12	19p13.3	0.117165776	0.007657382	0.021691965
CAMK2D	4q26	-0.117148842	0.007666229	0.02171397
HES6	2q37.3	0.11712418	0.007679129	0.02174745
SSU72	1p36.33	-0.117118188	0.007682267	0.021753274
MBD3	19p13.3	0.117100736	0.007691411	0.021776104
AR	Xq12	0.11708866	0.007697744	0.021790969
ACOT8	20q13.12	-0.117076158	0.007704305	0.021804955
CDYL2	16q23.2	0.117075119	0.007704851	0.021804955
DNAJC24	11p13	0.117071469	0.007706767	0.021807313
PLEKHH3	17q21.2	-0.117062351	0.007711557	0.0218178
TMC3	15q25.1	0.117053736	0.007716085	0.021827543
CEP152	15q21.1	0.117030481	0.00772832	0.021859081
ZNRD1	6p22.1	-0.117006254	0.007741085	0.02189211
SNRPE	1q32.1	-0.11700113	0.007743787	0.021896674
TPR	1q31.1	0.116972473	0.007758914	0.021933547
ANKRD6	6q15	-0.1169723	0.007759006	0.021933547
KLK10	19q13.41	0.116969697	0.007760381	0.021934354
SS18L1	20q13.33	0.11696214	0.007764376	0.021942564
ASTL	2q11.2	0.116958692	0.007766199	0.021944635
CD200R1	3q13.2	0.116940739	0.007775697	0.02196839
ENTPD2	9q34.3	-0.116905003	0.007794635	0.022018806
PLPPR2	19p13.2	0.116895448	0.007799706	0.022030038
TGM5	15q15.2	0.116891445	0.007801831	0.022032948
TRPC3	4q27	0.116878401	0.007808759	0.022049422
COL19A1	6q13	0.116873515	0.007811356	0.02205366
GNPDA1	5q31.3	-0.116866316	0.007815183	0.022061372
DTNB	2p23.3	-0.116852463	0.007822553	0.02207908

SLX1B	16p11.2	-0.116834401	0.007832172	0.022103129
APOC1	19q13.32	-0.116821896	0.007838837	0.022118837
SPINDOC	11q13.1	0.116796105	0.007852599	0.022152377
KHSRP	19p13.3	0.116795497	0.007852924	0.022152377
CHEK2	22q12.1	0.116791676	0.007854965	0.022155029
BTN1A1	6p22.2	0.116769629	0.007866675	0.022180664
ZNF707	8q24.3	0.116768925	0.007867127	0.022180664
CTAGE15	7q35	-0.11676849	0.007867359	0.022180664
NEURL1	10q24.33	0.116759909	0.007871951	0.022190502
OR2W5	1q44	0.11675096	0.007876742	0.022198893
FAM124B	2q36.2	0.116749386	0.007877585	0.022198893
RNASSET2	6q27	-0.11674817	0.007878236	0.022198893
STOML1	15q24.1	-0.116727242	0.007889452	0.022227386
GLRX3	10q26.3	-0.116714216	0.00789644	0.022243961
RANBP2	2q13	0.11669928	0.00790446	0.022263437
PSMB8	6p21.32	-0.116695025	0.007906746	0.02226479
GHRLOS	3p25.3	0.116694269	0.007907153	0.02226479
HTATSF1	Xq26.3	0.116663156	0.007923888	0.022308791
SLC52A1	17p13.2	-0.11664753	0.007932304	0.022329364
LINC01551	14q12	0.116643799	0.007934315	0.0223319
NXPH1	7p21.3	0.116640689	0.007935991	0.022333496
CCDC82	11q21	0.116607666	0.007953812	0.022380519
LCNL1	9q34.3	0.116600826	0.007957507	0.022387788
CAPNS2	16q12.2	0.116587719	0.007964593	0.022404593
UTP23	8q24.11	0.11657623	0.007970809	0.022418945
DUSP4	8p12	0.116572323	0.007972924	0.022421761
SHISA7	19q13.42	0.116569207	0.007974611	0.022423371
ALG13	Xq23	-0.116562252	0.007978378	0.02243083
DTNA	18q12.1	0.11654584	0.007987272	0.022452701
ACTR3	2q14.1	0.116539498	0.007990711	0.022458877
SRRM3	7q11.23	0.116537674	0.007991701	0.022458877
PTGR2	14q24.3	-0.11653203	0.007994763	0.022464347
PSPC1	13q12.11	-0.116529511	0.00799613	0.022465052
PPP1R3F	Xp11.23	0.11651883	0.008001929	0.022478207
ASB5	4q34.2	0.116492749	0.008016105	0.022514887
PUM3	9p24.2	0.116479145	0.008023508	0.022532536
NCAPH	2q11.2	0.116466293	0.008030508	0.022548071
SNORD10	17p13.1	-0.116463897	0.008031813	0.022548071
EIF3CL	16p12.1	-0.11646282	0.0080324	0.022548071
DNAJB9	7q31.1 14q24.2-q2	0.116457522	0.008035287	0.022553031
KIF20B	10q23.31	0.116454744	0.008036802	0.022554138
CAV2	7q31.2	-0.116435987	0.008047035	0.022579706
RSPO1	1p34.3	0.116419873	0.008055835	0.022601247
CADM1	11q23.3	0.116411238	0.008060554	0.022611336
SERTAD3	19q13.2	-0.11640238	0.008065397	0.02262177
MPP5	14q23.3	-0.116392046	0.008071051	0.022634474
EIF3C	16p11.2	0.116369036	0.008083653	0.022666658
ANKEF1	20p12.2	-0.11632987	0.008105143	0.022723751
QPCTL	19q13.32	-0.116321186	0.008109915	0.022733963
REP15	12p11.22	0.116310076	0.008116024	0.022747919
N4BP2L2	13q13.1	-0.116303645	0.008119562	0.022754667
KATNAL1	13q12.3	0.116264741	0.008140992	0.02281155
CCDC121	2p23.3	-0.116246766	0.008150912	0.022836166
USF3	3q13.2	0.116220107	0.008165643	0.022874254
FIG4	6q21	-0.116214462	0.008168765	0.022877429
PCDHGC4	5q31.3	0.116213948	0.008169049	0.022877429
NOBOX	7q35	0.116177325	0.008189332	0.022929956
NKX6-3	8p11.21	0.116175969	0.008190084	0.022929956

OR10Q1	11q12.1	0.11616843	0.008194265	0.022938473
IFITM5	11p15.5	0.116164897	0.008196225	0.022940769
ACKR1	1q23.2	-0.116160321	0.008198765	0.022944686
RBM44	2q37.3	0.11615104	0.008203917	0.022955914
CTBP1	4p16.3	-0.116134397	0.008213164	0.022978594
SRD5A2	2p23.1	-0.116121886	0.008220121	0.022994863
AURKB	17p13.1	0.116109388	0.008227077	0.023010151
TSR2	Xp11.22	-0.11610713	0.008228334	0.023010151
AMER2	13q12.13	0.116104425	0.00822984	0.023010151
RPL6	12q24.13	-0.116102441	0.008230945	0.023010151
ACAT1	11q22.3	-0.116101399	0.008231525	0.023010151
ZNF749	19q13.43	0.116099749	0.008232444	0.023010151
SDC3	1p35.2	0.116085855	0.008240187	0.023028595
GID4	17p11.2 17p11.2	0.116060411	0.008254383	0.023065066
NDUFA11	19p13.3	-0.116051814	0.008259185	0.02307528
RXRΒ	6p21.32	-0.116048039	0.008261294	0.02307797
C1QL1	17q21.31	0.116014043	0.00828031	0.023127882
ELK1	Xp11.23	0.115992417	0.008292427	0.023158513
FNDC9	5q33.3	0.115968081	0.008306082	0.023193428
KRT31	17q21.2	0.115963221	0.00830881	0.02319783
CBS	21q22.3	0.115952905	0.008314606	0.023210793
LOC143188	10q25.2	0.115949478	0.008316533	0.023212952
DNAH6	2p11.2	-0.115918398	0.00833402	0.023258536
CLEC4A	12p13.31	0.115900281	0.008344228	0.023283797
ABRAXAS1	4q21.23	-0.115880395	0.008355446	0.023311869
GSTO1	10q25.1	-0.11585087	0.008372127	0.023355171
CELA2A	1p36.21	0.115848255	0.008373606	0.02335606
NSFL1C	20p13	-0.115823996	0.008387336	0.023391115
GUCY1B2	13q14.3	-0.115819027	0.008390151	0.023395724
LOC650293	4p16.1	0.1157623	0.008422345	0.023482164
TRIR	19p13.13	-0.115760298	0.008423483	0.023482164
ZNF621	3p22.1	0.115748575	0.00843015	0.023497498
EDN2	1p34.2	0.115717685	0.008447742	0.02354327
LOC728743	7q36.1	0.115714884	0.008449339	0.023543552
MCTP2	15q26.2	0.115713405	0.008450182	0.023543552
TJP2	9q21.11	-0.115691869	0.008462469	0.023574522
CST4	20p11.21	0.115681271	0.008468521	0.023588119
ELP5	17p13.1	-0.11567728	0.008470801	0.023591205
SAT2	17p13.1	-0.115665036	0.0084778	0.023605938
NPC1L1	7p13	0.115663923	0.008478437	0.023605938
HBD	11p15.4	0.115658051	0.008481796	0.023612024
SLC35B2	6p21.1	-0.115643935	0.008489875	0.023631247
PHF2	9q22.31	0.115627177	0.008499474	0.023654695
KRT80	12q13.13	0.115614323	0.008506844	0.023671934
CACUL1	10q26.11	0.115608505	0.008510182	0.023677726
DERA	12p12.3	-0.115606594	0.008511278	0.023677726
MYO1F	19p13.2	0.115604336	0.008512574	0.023678059
EIF1AD	11q13.1	0.115599647	0.008515265	0.023682273
ALDH3A2	17p11.2	-0.115592874	0.008519155	0.023689817
UGT2B11	4q13.2	0.115586625	0.008522744	0.023696525
MSANTD2	11q24.2	0.115581671	0.00852559	0.023701165
FHL5	6q16.1	-0.115576548	0.008528535	0.023706078
CCNC	6q16.2	-0.115546461	0.008545847	0.023750919
TM2D3	15q26.3	-0.115540035	0.008549549	0.023757927
ADRM1	20q13.33	-0.115537905	0.008550776	0.023758058
BMI1	10p12.2	0.115531653	0.00855438	0.023764789
CDK18	1q32.1	-0.115509943	0.008566902	0.023796293
GAS2L2	17q12	-0.115490355	0.008578215	0.023824429

HNRNPH3	10q21.3	0.115443164	0.008605523	0.023894378
DLG5	10q22.3	0.11544273	0.008605775	0.023894378
CCDC74A	2q21.1	0.115439824	0.008607459	0.023895759
APOBEC2	6p21.1	-0.115402877	0.008628898	0.023951974
NASP	1p34.1	0.115393319	0.008634452	0.023964085
TBC1D14	4p16.1	-0.115389151	0.008636875	0.023967506
IRGM	5q33.1	0.115367833	0.008649276	0.023998612
CX3CL1	16q21	0.115361623	0.008652892	0.024003697
STAB2	12q23.3	0.11536059	0.008653494	0.024003697
CLIP1	12q24.31	0.115350161	0.00865957	0.024017241
CCNH	5q14.3	-0.115341824	0.008664429	0.024027408
ORAI3	16p11.2	-0.115332098	0.008670101	0.024039826
SCARNA18	5q14.2	0.115320753	0.008676722	0.02405487
PPARD	6p21.31	0.115308478	0.00868389	0.024071067
CTDSP1	2q35	-0.115306655	0.008684956	0.024071067
ZNF418	19q13.43	0.115298752	0.008689574	0.024080551
PHYHIP	8p21.3	0.115293455	0.008692671	0.024082924
ZDHHC14	6q25.3	0.115293195	0.008692823	0.024082924
SPINK13	5q32	-0.115280329	0.008700349	0.024097683
GPR171	3q25.1	0.115279995	0.008700544	0.024097683
ANXA7	10q22.2	-0.115268272	0.008707407	0.024113373
CCDC151	19p13.2	0.115202413	0.008746051	0.024215507
DUBR	3q13.12	0.11520132	0.008746694	0.024215507
CABP4	11q13.2	0.115193693	0.008751179	0.024224593
UFL1	6q16.1	-0.115190812	0.008752874	0.024225953
MICU3	8p22	0.115182524	0.008757751	0.02423612
CNPY2	12q13.3	-0.115167974	0.00876632	0.024256498
TMF1	3p14.1	0.115156511	0.008773075	0.024271854
FGL2	7q11.23	0.115141968	0.008781653	0.024292246
ELMO2	20q13.12	0.11513046	0.008788446	0.024307697
PPP1R1C	2q31.3-q32.1	-0.115104985	0.0088035	0.024345988
TDRD12	19q13.11	0.115087729	0.008813709	0.024370874
POLE2	14q21.3	0.115076446	0.008820391	0.024386
CADPS	3p14.2	0.115071878	0.008823098	0.024390134
NR4A1	12q13.13	-0.115067763	0.008825536	0.024393164
KLHDC10	7q32.2	0.115065939	0.008826617	0.024393164
CDK19	6q21	0.115058558	0.008830993	0.024401908
CORT	1p36.22	-0.11505068	0.008835666	0.024411468
KRT222	17q21.2	-0.115041193	0.008841296	0.024423672
MMS22L	6q16.1	0.115034506	0.008845267	0.024429573
RUVBL1	3q21.3	-0.115033027	0.008846145	0.024429573
HJURP	2q37.1	0.115031464	0.008847073	0.024429573
SPATA17	1q41	-0.11501988	0.008853956	0.024442382
NBEAL1	2q33.2	-0.11501957	0.008854141	0.024442382
WDR35	2p24.1	0.115014183	0.008857343	0.024444787
TAT	16q22.2	-0.114997404	0.008867325	0.024472065
IL10	1q32.1	0.114991138	0.008871055	0.024479004
CCDC15	11q24.2	0.114945019	0.008898552	0.024551516
PIGC	1q24.3	-0.114927084	0.008909266	0.024577706
GPR18	13q32.3	0.114915234	0.008916352	0.024593883
KIF3A	5q31.1	0.114865777	0.008945976	0.024672216
CLDN22	4q35.1	-0.114844471	0.008958765	0.024704102
VMO1	17p13.2	0.114825831	0.008969968	0.024731605
GPIHBP1	8q24.3	-0.114814113	0.008977017	0.02474765
IP6K2	3p21.31	-0.114810026	0.008979476	0.02475104
ASB2	14q32.12	0.114787709	0.008992917	0.024784697
HPGD	4q34.1	-0.114765131	0.009006534	0.024818827
ARHGAP20	11q22.3-q23.1	0.114758966	0.009010255	0.024825683

LCN8	9q34.3	0.114726984	0.009029582	0.024875529
CTAGE9	6q23.2	-0.114705039	0.009042865	0.024908346
CDC37	19p13.2	-0.114703215	0.009043969	0.024908346
FMN1	15q13.3	-0.114691492	0.009051073	0.0249245
SLC5A12	11p14.2	0.114687673	0.009053388	0.024927465
BLK	8p23.1	0.114674174	0.009061575	0.024944497
ZNF177	19p13.2	0.114673389	0.009062052	0.024944497
CCDC125	5q13.2	-0.114659015	0.009070778	0.024962561
ACAD9	3q21.3	-0.114658494	0.009071095	0.024962561
CDC7	1p22.1	0.114635655	0.009084975	0.024997341
DCAF12L1	Xq25	0.114631048	0.009087777	0.025001634
ZNF708	19p12	0.114614122	0.00909808	0.025026557
ZBTB42	14q32.33	-0.114599009	0.009107286	0.02504846
LIMS2	2q14.3	0.114588589	0.00911364	0.02506251
LINC00589	8p12	0.114585413	0.009115577	0.025064412
KCNQ3	8q24.22	0.114569224	0.009125457	0.025088152
IGF2BP3	7p15.3	0.114558716	0.009131875	0.025102368
LINC02694	15q14	0.114554371	0.00913453	0.025106239
UBQLN2	Xp11.21	0.114546692	0.009139224	0.025115711
CLEC7A	12p13.2	0.114534923	0.009146422	0.025128631
SLC4A3	2q35	0.114534923	0.009146422	0.025128631
ARHGEF5	7q35	-0.114531797	0.009148335	0.025130457
RTN4RL2	11q12.1	0.114529105	0.009149983	0.025130752
SAMD1	19p13.12	0.114527542	0.009150939	0.025130752
A1BG-AS1	19q13.43	0.114495064	0.009170838	0.025180122
LRR1Q4	3q26.2	0.114494118	0.009171418	0.025180122
FAM3D	3p14.2	-0.114478323	0.009181111	0.025203295
TET2	4q24	0.114455553	0.009195099	0.025238252
RPL23AP53	8p23.3	0.11444101	0.009204043	0.025259357
FBXO17	19q13.2	0.114428893	0.0092115	0.025270885
GIN51	20p11.21	0.114427591	0.009212302	0.025270885
ACAD10	12q24.12	-0.114426375	0.009213051	0.025270885
GDAP1	8q21.11	-0.114426028	0.009213265	0.025270885
FBXW10	17p11.2	-0.114421537	0.00921603	0.025275026
MMP8	11q22.2	0.114415809	0.009219559	0.02528126
CGREF1	2p23.3	0.114408573	0.009224019	0.025287187
MTA1	14q32.33	0.114408226	0.009224233	0.025287187
TIA1	2p13.3	0.114386777	0.009237464	0.025320011
KATNBL1P6	6q24.3	-0.114375452	0.009244457	0.025335728
GOLT1A	1q32.1	-0.114340842	0.009265857	0.025390919
RGP1	9p13.3	0.114338581	0.009267256	0.025391297
PHC2	1p35.1	0.114327379	0.009274192	0.025406845
ARL13B	3q11.1-q11.2	0.114313398	0.009282856	0.025427119
MFS10	4p16.3	-0.114308101	0.009286141	0.025432655
SLC25A5	Xq24	-0.114283613	0.009301338	0.025470812
SNRPD3	22q11.23	-0.11426034	0.009315802	0.025506949
MCUB	4q25	0.114242799	0.009326717	0.025527376
ZNF791	19p13.13	0.114242451	0.009326933	0.025527376
SH3BGR	21q22.2	-0.114242237	0.009327066	0.025527376
OR1N2	9q33.2	0.114205595	0.009349904	0.025586401
PAWR	12q21.2	0.11420268	0.009351723	0.0255879
VPS13C	15q22.2	0.11415761	0.009379886	0.02566147
ZNF74	22q11.21	0.11414754	0.009386189	0.025675161
TAF4	20q13.33	0.11414554	0.009387441	0.025675161
KCNK10	14q31.3	0.114139849	0.009391005	0.025681419
MRPS16	10q22.2	-0.11413729	0.009392608	0.025682314
TMEM126B	11q14.1	-0.114104118	0.00941341	0.025735697
THOC6	16p13.3	-0.114095	0.009419135	0.025747851

SLC7A6	16q22.1	0.114068775	0.009435618	0.025789408
CNTD2	19q13.2	0.114064622	0.009438231	0.025793047
KIR3DL2	19q13.42	0.114059496	0.009441456	0.025796223
MOAP1	14q32.12	-0.114058702	0.009441956	0.025796223
DDX11	12p11.21	0.11403404	0.00945749	0.025835156
TNF	6p21.33	0.113998783	0.009479735	0.025892412
FRS2	12q15	0.113972992	0.009496038	0.025933422
ZC3H10	12q13.2	-0.113958761	0.009505045	0.025954497
GDE1	16p12.3	-0.113955972	0.009506811	0.025955798
IRAK4	12q12	0.113951456	0.009509671	0.025960085
SUPT4H1	17q22	-0.113935131	0.009520016	0.025984804
TCAM1P	17q23.3	0.113917515	0.009531191	0.026011777
ABITRAM	9q31.3	-0.113911947	0.009534725	0.026017896
LINGO3	19p13.3	0.113907493	0.009537554	0.026022087
FLNB	3p14.3	0.113891538	0.009547691	0.026046214
UBE2J2	1p36.33	-0.113888499	0.009549623	0.026047955
RFXANK	19p13.11	-0.113883983	0.009552494	0.026052257
ANXA3	4q21.21	-0.113832401	0.009585347	0.026138315
SPINT2	19q13.2	-0.113823978	0.009590722	0.026149429
HSPA12B	20p13	0.113816423	0.009595545	0.026159035
MACC1	7p21.1	0.113778648	0.00961969	0.026221309
PLPBP	8p11.23	-0.113738575	0.009645364	0.026286226
ERCC6L2	9q22.32	0.1137374	0.009646118	0.026286226
SLC5A7	2q12.3	-0.113732914	0.009648996	0.02629051
FAM71F2	7q32.1	0.113727829	0.009652259	0.026295842
NHLH2	1p13.1	0.113720673	0.009656853	0.026304797
USP32P1	17p11.2	0.113705704	0.009666469	0.026327429
DHDDS	1p36.11	-0.113701015	0.009669483	0.026332075
RPS19	19q13.2	-0.113689726	0.009676743	0.026348281
KDELR2	7p22.1	0.113650475	0.009702022	0.026413539
GATA2	3q21.3	0.113621083	0.00972099	0.0264616
C20ORF203	20q11.21	0.113604276	0.009731851	0.026487583
TMEM196	7p21.1	0.113599374	0.009735021	0.026490862
PCDHA13	5q31.3	-0.113598343	0.009735688	0.026490862
CCN6	6q21	0.113592545	0.009739438	0.026497485
HRH3	20q13.33	0.113584128	0.009744886	0.026508723
INO80	15q15.1	-0.113579181	0.009748088	0.02651311
HIST1H1E	6p22.2	0.113577568	0.009749133	0.02651311
SLC38A11	2q24.3	0.113575124	0.009750715	0.026513832
DUS3L	19p13.3	-0.113564158	0.00975782	0.026529568
PIK3AP1	10q24.1	0.113545748	0.009769758	0.026558436
PPIE	1p34.2	-0.11354158	0.009772462	0.026562202
ALG12	22q13.33	-0.113523865	0.009783964	0.026589875
DGUOK	2p13.1	-0.113500331	0.009799263	0.026627856
ATG4C	1p31.3	0.113454568	0.009829073	0.026704884
LNP1	3q12.2	0.113452744	0.009830263	0.026704884
CCT6A	7p11.2	0.113441889	0.009837346	0.02672052
ZC3H14	14q31.3	-0.113437808	0.009840011	0.026724152
CNTRL	9q33.2	0.113404551	0.009861746	0.026779355
CAMK2N1	1p36.12	0.113402638	0.009862998	0.026779355
PKP3	11p15.5	-0.113376587	0.009880056	0.026822053
MORN1	1p36.32	-0.113372766	0.00988256	0.026825233
ZNF90	19p12	-0.113368771	0.009885178	0.026828723
BTAF1	10q23.32	0.113363822	0.009888424	0.026833913
LSM10	1p34.3	-0.11334628	0.009899933	0.026861524
DIABLO	12q24.31	-0.113336033	0.009906662	0.026876159
TMEM126A	11q14.1	-0.113321445	0.009916248	0.026898542
STXBP6	14q12	-0.11331512	0.009920407	0.026903837

SRD5A1	5p15.31	0.113314411	0.009920874	0.026903837
JAG1	20p12.2	0.11326196	0.009955423	0.026993893
OACYLP	18q21.32	0.113243024	0.009967923	0.027024146
PNLIPRP1	10q25.3	-0.113237442	0.00997161	0.027030503
ASB10	7q36.1	-0.113221451	0.00998218	0.02704873
LRRTM1	2p12	0.113221285	0.00998229	0.02704873
CEACAM18	19q13.41	-0.11322117	0.009982365	0.02704873
PSME3	17q21.31	-0.113217673	0.009984679	0.027051357
STAU2	8q21.11	0.113201955	0.00999508	0.027075893
TACO1	17q23.3	-0.113196658	0.009998587	0.02708175
LINC02610	2q37.3	0.113183533	0.010007283	0.027101656
QSOX2	9q34.3	0.113167656	0.010017811	0.027125166
MMP27	11q22.2	0.113166377	0.010018659	0.027125166
ARPC1A	7q22.1	-0.113148376	0.010030608	0.027147129
SPRR2C	1q21.3	0.113147548	0.010031158	0.027147129
RNF26	11q23.3	0.113147076	0.010031472	0.027147129
GPSM1	9q34.3	0.113146031	0.010032166	0.027147129
TMEM217	6p21.2	-0.113110514	0.010055782	0.027207378
PREPL	2p21	-0.113103307	0.010060581	0.027216703
RASSF8	12p12.1	0.113096273	0.010065266	0.027225718
KPNA4	3q25.33	0.113067616	0.010084372	0.027273735
SVIL	10p11.23	0.113047557	0.010097766	0.027306291
PKN3	9q34.11	-0.113025546	0.010112481	0.02734241
DAPP1	4q23	0.113015948	0.010118904	0.027356101
ATP10D	4p12	0.113011692	0.010121752	0.027360127
DDX50	10q22.1	0.112998927	0.010130302	0.027379561
CBLC	19q13.32	-0.11298373	0.010140488	0.027403413
WDR93	15q26.1	-0.112957867	0.010157845	0.027446634
MAGI3	1p13.2	-0.112911307	0.010189159	0.027527548
SLC15A1	13q32.2-q32.3	-0.112870148	0.010216911	0.027598822
RPL18A	19p13.11	-0.11286181	0.010222542	0.027610327
HCG18	6p22.1	0.112845831	0.010233339	0.027635781
TDG	12q23.3	0.112842792	0.010235394	0.027637623
LINC02035	3q21.1	0.112827595	0.010245674	0.027661671
CCDC198	14q22.3	-0.112812579	0.010255841	0.027685408
AK7	14q32.2	-0.112804583	0.010261259	0.027696317
EP400	12q24.33	0.112774277	0.010281815	0.027748082
KHNYN	14q12	0.112764638	0.010288361	0.027762025
FAM166A	9q34.3	0.112761072	0.010290783	0.02776484
VPS4A	16q22.1	-0.11273546	0.010308198	0.027808097
TNS4	17q21.2	0.112725563	0.010314934	0.027818944
EFCAB3	17q23.2	0.112725491	0.010314983	0.027818944
HS3ST5	6q21-q22.1	0.112712872	0.010323577	0.027838393
DEGS1	1q42.11	0.112707064	0.010327535	0.027844398
SLC2A1	1p34.2	0.112704024	0.010329607	0.027844398
HELZ	17q24.2	0.112703156	0.010330199	0.027844398
PDCL3P4	3q12.3	-0.11270038	0.010332092	0.027844398
SLFN14	17q12	0.112699459	0.01033272	0.027844398
SMIM24	19p13.3	0.112696508	0.010334732	0.027846093
TCEAL5	Xq22.1	0.11269069	0.0103387	0.027853057
NMRK2	19p13.3	-0.11268629	0.010341703	0.027857418
ADA	20q13.12	0.112660953	0.010359006	0.027900293
POLA2	11q13.1	0.112651921	0.01036518	0.027911211
ARMC9	2q37.1	0.112650966	0.010365833	0.027911211
GCGR	17q25.3	0.112615179	0.01039033	0.027973432
MRPS31	13q14.11	-0.11260451	0.010397643	0.027989377
MRPL30	2q11.2	-0.112601382	0.010399789	0.027991409
MYOC	1q24.3	-0.112582884	0.010412481	0.028021824

USP9X	Xp11.4	0.112566473	0.010423754	0.028048411
SERPINA10	14q32.13	-0.112555867	0.010431044	0.028064277
RND3	2q23.3	0.112525745	0.010451775	0.028116294
APOL2	22q12.3	0.112506641	0.010464942	0.028147954
DLX2	2q31.1	0.112504142	0.010466665	0.028148828
PCBP3	21q22.3	0.112487322	0.010478272	0.028176279
MSMP	9p13.3	0.112482326	0.010481722	0.02818179
AP3M1	10q22.2	-0.112455754	0.010500087	0.028227397
FKBP2	11q13.1	-0.112446549	0.010506455	0.028240746
CPEB2	4p15.32	-0.112437781	0.010512525	0.028249987
DGCR9	22q11.21	0.112437527	0.0105127	0.028249987
ZNF784	19q13.42	-0.112433829	0.010515261	0.028253097
GZMA	5q11.2	0.112428055	0.010519261	0.028260072
SIAE	11q24.2	-0.112425881	0.010520767	0.028260346
ENDOG	9q34.11	-0.112421974	0.010523474	0.028263848
SLC6A12	12p13.33	-0.112355415	0.010569692	0.028384191
RUFY2	10q21.3	0.112350378	0.010573196	0.028386898
HOXA11-AS	7p15.2	0.112349913	0.01057352	0.028386898
FLJ37453	1p36.21	0.112343906	0.010577701	0.028393309
TMEM127	2q11.2	0.11234243	0.010578729	0.028393309
CEP19	3q29	0.112326712	0.010589678	0.028418906
PRRC2C	1q24.3	0.112318376	0.010595489	0.02843071
CLCA1	1p22.3	0.112307142	0.010603324	0.028445981
MAP3K8	10p11.23	0.112305958	0.01060415	0.028445981
REM1	20q11.21	0.112304139	0.010605419	0.028445981
ERBB4	2q34	-0.112300519	0.010607945	0.028448966
RUNDC3B	7q21.12	0.112263332	0.010633929	0.028508453
HBP1	7q22.3	-0.11226332	0.010633937	0.028508453
PDZD9	16p12.2	-0.112262693	0.010634375	0.028508453
CCL15-CCL14	17q12	-0.112256601	0.010638638	0.028514478
RNF175	4q31.3	0.112255432	0.010639456	0.028514478
LINC00115	1p36.33	0.112247909	0.010644722	0.028524794
SART3	12q23.3	0.112210088	0.010671229	0.02859202
TMC6	17q25.3	-0.112206441	0.010673789	0.028595072
CADM3	1q23.2	0.112195458	0.010681499	0.028611919
RHCG	15q26.1	-0.112173086	0.01069722	0.028648895
TNFRSF13B	17p11.2	0.112171765	0.010698149	0.028648895
MS4A15	11q12.2	-0.112168309	0.01070058	0.028651592
PHF24	9p13.3	0.112162504	0.010704664	0.028658715
CCDC144NL	17p11.2	0.112145629	0.010716543	0.028686703
SAR1B	5q31.1	-0.112130892	0.010726926	0.028710681
TWF2	3p21.2	0.112105274	0.010744997	0.028755225
GNAI1	7q21.11	-0.112093638	0.010753215	0.028773391
SYAP1	Xp22.2	-0.112067934	0.010771387	0.028818184
C2CD2L	11q23.3	0.112063766	0.010774336	0.028822244
SOD2	6q25.3	0.112039711	0.01079137	0.028863976
CLDND2	19q13.41	-0.112036165	0.010793884	0.028866863
ZNF250	8q24.3	0.112016613	0.01080775	0.028900108
INMT	7p14.3	-0.11201097	0.010811755	0.028906976
E2F6	2p25.1	-0.111988262	0.010827884	0.028946257
SERPINB3	18q21.33	0.111959044	0.01084867	0.028997972
SYN3	22q12.3	0.111943722	0.010859583	0.029020862
KCNH2	7q36.1	0.111942974	0.010860117	0.029020862
CACYBP	1q25.1	-0.111940108	0.010862159	0.029022467
HR	8p21.3	0.111934596	0.010866089	0.029029113
AOAH	7p14.2	0.111928385	0.010870518	0.029037093
ADORA2A	22q11.23	0.111919961	0.010876528	0.02904929
GP2	16p12.3	0.111901917	0.010889411	0.02907984

TMCO4	1p36.13	-0.111899381	0.010891223	0.029080822
CEP295	11q21	0.111884792	0.01090165	0.029102934
IPP	1p34.1	-0.11188375	0.010902396	0.029102934
APOA5	11q23.3	-0.11185147	0.010925501	0.029160744
PDHA1	Xp22.12	-0.111835034	0.010937282	0.02918832
MEG8	14q32.2-q32.31	0.111825994	0.010943767	0.029201753
THAP8	19q13.12	-0.111815061	0.010951614	0.029218819
JPT1	17q25.1	-0.111783712	0.010974142	0.029273996
NRAS	1p13.2	0.111782236	0.010975204	0.029273996
FYB2	1p32.2	0.111775879	0.010979777	0.029278569
STK38	6p21.31	0.11177581	0.010979827	0.029278569
C1ORF87	1p32.1	-0.111773748	0.010981311	0.029278647
PROCA1	17q11.2	0.111754841	0.010994926	0.029311065
PHTF1	1p13.2	0.111752364	0.010996711	0.029311942
SYNRG	17q12	0.111738469	0.011006727	0.029334755
NBPF4	1p13.3	0.111712416	0.01102553	0.02938098
IFT140	16p13.3	-0.111709813	0.01102741	0.0293821
ANKRD16	10p15.1	-0.111699566	0.011034814	0.029397937
SERPINA6	14q32.13	-0.111694281	0.011038635	0.029404224
CCDC96	4p16.1	-0.111686453	0.011044296	0.029415411
MEFV	16p13.3	0.111675999	0.01105186	0.029431664
SFT2D2	1q24.2	0.111664917	0.011059884	0.029449134
PPM1J	1p13.2	-0.111648158	0.011072028	0.029477572
NFAT5	16q22.1	0.111628445	0.011086327	0.029511737
POM121L1P	22q11.22	0.111625451	0.0110885	0.02951362
NANOS3	19p13.12	0.111614406	0.01109652	0.02952906
SLC41A2	12q23.3	0.111613422	0.011097235	0.02952906
PLBD2	12q24.13	0.111610817	0.011099127	0.029529372
CUX2	12q24.11-q24.12	0.111609223	0.011100286	0.029529372
CT45A2	Xq26.3	-0.111592542	0.011112412	0.029557724
USP43	17p13.1	-0.111585721	0.011117374	0.029567015
B3GLCT	13q12.3	0.111560277	0.01111359	0.029612373
C1D	2p14	-0.111556804	0.0111138431	0.029615192
MST1R	3p21.31	-0.111551854	0.0111142039	0.029620873
PITX2	4q25	0.111541698	0.0111149445	0.029636647
RNF145	5q33.3	-0.111518554	0.0111166339	0.029677634
TGFA	2p13.3	0.111513385	0.0111170115	0.029683752
SIN3A	15q24.2	-0.111509043	0.0111173288	0.029688264
TRMT112	11q13.1	-0.111501488	0.0111178811	0.029699018
PTCD3	2p11.2	-0.111482557	0.0111192659	0.029730308
LOC727896	18p11.31	0.111481351	0.0111193542	0.029730308
METTL21A	2q33.3	-0.111439398	0.0111224289	0.029808039
TRIM26	6p22.1	-0.111408918	0.0111246674	0.029863548
HS1BP3	2p24.1	-0.111386514	0.0111263154	0.029903362
NBPF9	1q21.2	0.111376006	0.011127089	0.029917035
CYSRT1	9q34.3	-0.111375482	0.0111271276	0.029917035
BREA2	8q24.3	0.111338032	0.0111298888	0.029983687
HPSE	4q21.23	-0.111336582	0.0111299959	0.029983687
ALG9	11q23.1	0.111335366	0.0111300856	0.029983687
LIPE	19q13.2	0.111324384	0.0111308966	0.03000125
SLC25A39	17q21.31	-0.111316001	0.0111315159	0.030013725
PRAMEF18	1p36.21	-0.111297519	0.0111328826	0.030046016
PARP2	14q11.2	0.111294118	0.0111331342	0.030048731
RANBP17	5q35.1	-0.111253217	0.0111361644	0.030125117
FHIT	3p14.2	-0.1112309	0.0111378208	0.030159854
CXORF56	Xq24	0.111229691	0.0111379105	0.030159854
DYNC1H1	14q32.31	0.11122951	0.011137924	0.030159854
ATR	3q23	0.111227426	0.0111380788	0.030159986

CT45A5	Xq26.3	-0.111222005	0.011384816	0.030165209
JMJD4	1q42.13	-0.11122074	0.011385756	0.030165209
DHCR7	11q13.4	-0.111215703	0.011389499	0.030168963
PRPF4	9q32	0.111214661	0.011390274	0.030168963
INSL3	19p13.11	0.111212785	0.011391669	0.030168963
SLC9A7	Xp11.3 Xp11.3	0.111191649	0.011407392	0.030206629
GOLGA4	3p22.2	0.11114684	0.011440789	0.03029108
LINC00593	15q23	0.11113751	0.011447754	0.030303497
UBE2E1	3p24.2	-0.111134943	0.011449671	0.030303497
SKAP2	7p15.2	0.111134509	0.011449995	0.030303497
CLDN10	13q32.1	0.111123445	0.011458261	0.030317502
AMMECR1L	2q14.3	0.111123394	0.011458299	0.030317502
GLB1L	2q35	-0.111116104	0.011463747	0.030327932
NUP50	22q13.31	0.11110811	0.011469725	0.030339759
SIGLEC9	19q13.41	0.111095866	0.011478887	0.030360004
GPM6B	Xp22.2	0.11109309	0.011480965	0.030361512
ASPG	14q32.33	-0.111089694	0.011483508	0.030364247
TP63	3q28	0.111076241	0.011493585	0.0303869
SNRNP25	16p13.3	-0.111050276	0.011513056	0.030434381
ACER3	11q13.5	0.111034906	0.011524596	0.030460887
OSM	22q12.2	0.111022365	0.011534019	0.030479002
RHBDD3	22q12.2	-0.111021755	0.011534478	0.030479002
SLC25A51P1	6q12	0.111015251	0.011539367	0.03048792
BIN1	2q14.3	-0.110991313	0.011557381	0.030531506
IL36G	2q14.1	0.110984058	0.011562845	0.030541934
SMC1B	22q13.31	0.110929187	0.011604247	0.030644703
CYP4F35P	18p11.21	-0.110927379	0.011605613	0.030644703
MICB	6p21.33	0.110926445	0.01160632	0.030644703
CST7	20p11.21	0.110921669	0.01160993	0.030650215
GALNT2	1q42.13	0.110910814	0.011618139	0.030667866
USP21	1q23.3	-0.110908643	0.011619782	0.03066818
TPST2	22q12.1	0.110903954	0.01162333	0.030673524
BCAT1	12p12.1	0.110891536	0.011632732	0.03069431
HPRT1	Xq26.2-q26.3	0.11088064	0.011640987	0.030712065
ZNF442	19p13.2	-0.110875348	0.011644998	0.030718622
PARP3	3p21.2	-0.11086744	0.011650993	0.030730411
TESPA1	12q13.2	0.110849118	0.011664897	0.030763052
MED29	19q13.2	-0.110804611	0.011698731	0.030848239
B3GALT6	1p36.33	0.110780991	0.011716722	0.030891632
PICK1	22q13.1	-0.110749381	0.011740836	0.030949454
C1QL4	12q13.12	0.110748214	0.011741728	0.030949454
IQCH	15q23	-0.110730798	0.011755034	0.03098047
HAS3	16q22.1	-0.110714733	0.01176732	0.03100879
RRAGA	9p22.1	0.110700926	0.011777888	0.031032577
N4BP3	5q35.3	0.110662109	0.011807644	0.031106906
POLR2F	22q13.1	-0.110656117	0.011812243	0.03111495
EMILIN2	18p11.32-p11.31	0.110629284	0.011832858	0.031165176
TMEM192	4q32.3	-0.110597675	0.011857184	0.031225159
NOD2	16q12.1	0.110553735	0.011891073	0.031310307
ASCC1	10q22.1	-0.110548959	0.011894761	0.031315923
HSPA4L	4q28.1	0.110542361	0.011899858	0.031325245
TM4SF20	2q36.3	-0.11052882	0.011910326	0.031346181
LCN6	9q34.3	-0.110528044	0.011910926	0.031346181
TROAP	12q13.12	0.1105058	0.01192814	0.03138738
SETD6	16q21	-0.110503195	0.011930157	0.031388586
ACADM	1p31.1	-0.11049234	0.011938567	0.031406606
IL18BP	11q13.4	0.110479141	0.011948799	0.031429417
YBX1	1p34.2	-0.110462641	0.011961601	0.03145898

DAGLA	11q12.2	0.110452394	0.011969558	0.031475794
EMID1	22q12.2	0.110435114	0.011982987	0.031506992
MAP7	6q23.3	-0.110422609	0.011992713	0.031528446
LYN	8q12.1	0.110397339	0.012012388	0.031573704
TRIP13	5p15.33	0.110396471	0.012013065	0.031573704
SH2D3A	19p13.3	-0.110370419	0.01203338	0.031622969
NACA2	17q23.2	-0.110363733	0.012038599	0.031632555
NFE2L3	7p15.2	0.110307896	0.01208226	0.031740064
EIF4G2	11p15.4	0.110307375	0.012082668	0.031740064
FAAP100	17q25.3	0.110274984	0.01210806	0.031799016
FLG	1q21.3	0.110274718	0.012108269	0.031799016
SOX5	12p12.1	0.110267645	0.01211382	0.031806277
PPP4R3A	14q32.12	0.110267168	0.012114194	0.031806277
ACTRT3	3q26.2	-0.110230351	0.012143127	0.031878083
CEBPE	14q11.2	0.110211968	0.012157595	0.031908522
PYCARD	16p11.2	-0.110211592	0.012157892	0.031908522
VSIR	10q22.1	0.110196656	0.012169659	0.031935243
CDK20	9q22.1	-0.110171299	0.01218966	0.031983134
PLEKHH2	2p21	0.110169261	0.012191269	0.031983134
SPTAN1	9q34.11	0.110167478	0.012192676	0.031983134
CTNS	17p13.2	0.110156623	0.012201249	0.032001451
KRTAP2-1	17q21.2	0.110151665	0.012205166	0.032007555
CYP46A1	14q32.2	0.11013818	0.012215827	0.03203134
DISP3	1p36.22	0.110121681	0.012228881	0.032061393
HUS1B	6p25.3	0.110116507	0.012232977	0.032067955
ZNF396	18q12.2	-0.110109904	0.012238206	0.032077485
BLVRA	7p13	-0.110106257	0.012241095	0.032080881
NT5E	6q14.3	0.110103567	0.012243226	0.032082289
LINC00652	20p11.23	0.110082097	0.01226025	0.032122716
ST7-AS1	7q31.2	0.110053633	0.012282851	0.03217428
XBP1	22q12.1 22q12	0.110053286	0.012283127	0.03217428
IFT27	22q12.3	-0.110027975	0.012303255	0.032222812
CORO1C	12q24.11	0.110020635	0.012309098	0.032230967
GGT3P	22q11.21	-0.110019332	0.012310135	0.032230967
HPS3	3q24	0.110018029	0.012311173	0.032230967
RRP8	11p15.4	-0.110008998	0.012318366	0.032242861
EXOC6	10q23.33	-0.110008303	0.012318919	0.032242861
SRP68	17q25.1	-0.109993367	0.012330824	0.032269825
BOK	2q37.3	-0.109990936	0.012332763	0.032270704
BEND7	10p13	-0.109985291	0.012337266	0.032278289
TESK1	9p13.3	0.109982947	0.012339136	0.032278988
RFPL4B	6q21	0.109974034	0.012346249	0.032293398
ASAH2B	10q11.23	-0.109936353	0.012376362	0.032367957
SPART	13q13.3	-0.109933102	0.012378963	0.032370555
FBXO27	19q13.2	-0.109921552	0.012388208	0.032390521
CLECL1	12p13.31	0.109794797	0.012490066	0.032652601
PCSK2	20p12.1	-0.109771619	0.012508771	0.032697254
THEMIS	6q22.33	0.109762985	0.012515745	0.032711237
LATS1	6q25.1	0.109706801	0.012561212	0.032825808
NDUFB9	8q24.13	-0.109678057	0.012584529	0.032882472
CABP1	12q24.31	0.109671309	0.012590009	0.032892521
KIF18A	11p14.1	0.109666074	0.012594262	0.032899362
GNB1	1p36.33	0.109647143	0.01260965	0.032935286
ALPL	1p36.12	-0.109591914	0.012654638	0.033048504
F8	Xq28	-0.109564473	0.012677044	0.033102723
CHD1L	1q21.1	-0.109560131	0.012680592	0.033107694
C2ORF73	2p16.2	-0.109506407	0.012724571	0.033218209
DGKQ	4p16.3	-0.109493352	0.012735277	0.033238281

KANSL1L	2q34	-0.109493005	0.012735562	0.033238281
CXCR5	11q23.3	0.109477724	0.012748105	0.033266704
PITHD1	1p36.11	-0.109471124	0.012753526	0.033276536
RELB	19q13.32	0.109465784	0.012757914	0.03328367
ZNF843	16p11.2	0.10944755	0.012772904	0.033318461
TRHR	8q23.1	0.109434393	0.012783731	0.033342383
ZNF467	7q36.1	-0.109413288	0.012801116	0.0333834
GCM1	6p12.1	0.109390402	0.01281999	0.03342829
TDRG1	6p21.2	0.109385403	0.012824116	0.033434718
SNORA67	17p13.1	-0.109375904	0.01283196	0.033450836
HERC1	15q22.31	0.109350677	0.012852811	0.033500853
ZNF484	9q22.31	0.109326365	0.012872934	0.033547809
TAPT1-AS1	4p15.32	-0.109324886	0.012874159	0.033547809
HMGXB3	5q32	0.109315334	0.012882074	0.033560864
CROCCP3	1p36.13	0.109314815	0.012882504	0.033560864
ZNF57	19p13.3	-0.109311339	0.012885385	0.033564026
PRSS22	16p13.3	-0.109302742	0.012892513	0.033578249
C3ORF36	3q22.1	0.109294825	0.012899081	0.033588883
ARPP19	15q21.2	-0.109293798	0.012899933	0.033588883
YWHAG	7q11.23	0.109281728	0.012909953	0.033610033
SLC17A9	20q13.33	0.109279991	0.012911395	0.033610033
PPP2R2D	10q26.3	0.109255329	0.01293189	0.033659031
REPIN1	7q36.1	0.109245171	0.01294034	0.03367667
HOTAIR	12q13.13	0.10923113	0.012952028	0.03370273
WDR55	5q31.3	-0.109225109	0.012957043	0.033711422
SLC3A1	2p21	-0.109223097	0.012958719	0.033711427
PLAG1	8q12.1	0.109215991	0.012964641	0.033720751
GARNL3	9q33.3	0.109214775	0.012965654	0.033720751
TNRC6C	17q25.3	0.109186119	0.012989559	0.03377856
SCRN3	2q31.1	-0.109171662	0.013001634	0.033805591
SORBS2	4q35.1	-0.109160588	0.01301089	0.033825289
SLC25A51P4	11p15.1	0.109157572	0.013013412	0.033827478
CD247	1q24.2	0.109143742	0.013024982	0.033853181
CD70	19p13.3	0.109133592	0.013033478	0.03387089
CCDC150	2q33.1	0.109122468	0.013042796	0.03389073
VCPKMT	14q21.3	0.109112308	0.013051312	0.03390846
FLAD1	1q21.3	-0.109110309	0.013052988	0.03390846
RAB11FIP4	17q11.2	-0.109106575	0.01305612	0.033912217
CASTOR2	7q11.23	0.109099521	0.013062036	0.033918198
RPS15	19p13.3	-0.10909902	0.013062457	0.033918198
TMED5	1p22.1	-0.109097804	0.013063477	0.033918198
OPA1	3q29	0.109094724	0.013066062	0.033920535
FABP3	1p35.2	-0.10907896	0.013079297	0.033950094
DRD2	11q23.2	0.109077146	0.013080821	0.033950094
COX16	14q24.2	-0.10907401	0.013083455	0.033952553
AP3S1	5q22.3-q23.1	0.109069929	0.013086885	0.033957075
NEK9	14q24.3	0.109019129	0.013129639	0.03406362
OR9Q1	11q12.1	0.108991388	0.013153037	0.034119928
ZFYVE21	14q32.33	-0.108980399	0.013162317	0.034139601
FAM126B	2q33.1	0.10897241	0.013169067	0.034152707
ZNF212	7q36.1	0.108966157	0.013174351	0.034162011
METTL24	6q21	0.108959888	0.013179652	0.034171353
NPTXR	22q13.1	0.108951134	0.013187056	0.034186149
VPS11	11q23.3	-0.108936024	0.013199846	0.034214898
CDH17	8q22.1	-0.108931899	0.01320334	0.034219547
TRIM68	11p15.4	0.10891032	0.013221628	0.034262534
MYO1G	7p13	0.10888809	0.013240492	0.034307002
LINC02418	12q24.33	0.108871711	0.013254405	0.034338632

PTPN3	9q31.3	-0.108854136	0.013269349	0.034372925
DST	6p12.1	0.108841023	0.013280508	0.034397405
ZYG11B	1p32.3	0.108834424	0.013286128	0.034407534
REEP6	19p13.3	-0.108794133	0.013320482	0.034492063
MAEL	1q24.1	0.108775256	0.013336604	0.034529368
CRHR1	17q21.31	0.108760904	0.013348873	0.034556689
NLRP7	19q13.42	0.108755686	0.013353336	0.034563799
NEK2	1q32.3	0.10870625	0.013395686	0.034668958
TVP23A	16p13.13	-0.108703124	0.013398368	0.034671441
FAM86C1	11q13.4	-0.108694788	0.013405522	0.034685496
NSMAF	8q12.1	0.108665523	0.013430664	0.034746082
ZP4	1q43	0.10865988	0.013435517	0.034754171
RPS3	11q13.4	-0.108639124	0.013453379	0.034795905
TRIM27	6p22.1	-0.108613941	0.01347508	0.034847555
ARG2	14q24.1	0.108604563	0.01348317	0.034863996
MYO1H	12q24.11	0.10860055	0.013486632	0.03486847
C4BPB	1q32.1	0.108584933	0.013500116	0.034898848
PSG10P	19q13.2	0.108572959	0.013510461	0.034921107
TNFSF13B	13q33.3	0.108570001	0.013513018	0.034923233
JAK1	1p31.3	0.108542734	0.013536608	0.034979708
PIN1	19p13.2	-0.108531011	0.013546762	0.034999882
BCAN	1q23.1	-0.108529705	0.013547893	0.034999882
KLHL41	2q31.1	-0.108515119	0.013560536	0.035028049
EGFR	7p11.2	0.10850904	0.013565808	0.035033935
WDR27	6q27	0.108508478	0.013566295	0.035033935
GRN	17q21.31	-0.108501225	0.013572589	0.035045692
CCL1	17q12	0.108460055	0.013608359	0.035133546
CTNNA1	5q31.2	-0.108455809	0.013612053	0.035136607
TMEM167A	5q14.2	0.10845468	0.013613035	0.035136607
SCAND2P	15q25.2	-0.108398843	0.013661696	0.035257272
STX12	1p35.3	-0.108397019	0.013663288	0.035257272
GGPS1	1q42.3	-0.108373705	0.013683652	0.035304008
TMED8	14q24.3	0.10837227	0.013684907	0.035304008
BOLL	2q33.1	0.108364784	0.013691452	0.035316368
GALNT9	12q24.33	0.108360278	0.013695393	0.035322007
UTP11	1p34.3	-0.108356031	0.013699109	0.035325085
ANXA2	15q22.2	-0.108354903	0.013700096	0.035325085
NXPE1	11q23.2	0.108350738	0.013703741	0.035329956
DDX4	5q11.2	-0.108348032	0.013706109	0.035331538
EPB41L4A-AS1	5q22.1	-0.108319733	0.0137309	0.035390912
TM4SF18	3q25.1	0.108299847	0.013748345	0.035431338
RFWD3	16q23.1	0.108297242	0.013750632	0.035432695
FRK	6q22.1	-0.10829125	0.013755893	0.035441676
CORO6	17q11.2	0.108289262	0.013757638	0.035441676
SESN3	11q21	0.108287255	0.013759401	0.035441681
FAM102B	1p13.3	0.108239065	0.013801786	0.035546309
CYP4F8	19p13.12	-0.108223954	0.0138151	0.035576047
TSPAN10	17q25.3	-0.108221914	0.013816898	0.035576127
KRT13	17q21.2	-0.108219141	0.013819343	0.0355764
VANGL1	1p13.1	0.108217785	0.013820539	0.0355764
RPLP0	12q24.23	-0.108174018	0.013859179	0.035671304
SPRR2D	1q21.3	0.108168114	0.013864399	0.035677791
ZBTB46	20q13.33	0.108167158	0.013865244	0.035677791
SPEN	1p36.21-p36.13	0.108160645	0.013871004	0.035688052
CES2	16q22.1	-0.108157693	0.013873616	0.03569021
MIER2	19p13.3	0.108147012	0.013883069	0.035709965
NUTM2A	10q23.2	-0.108094781	0.013929377	0.035824499
LRRC8A	9q34.11	0.108039506	0.013978531	0.035946324

PCDHGB2	5q31.3	0.108037381	0.013980424	0.0359466
SLITRK3	3q26.1	0.108030941	0.013986161	0.035956758
ZNF326	1p22.2	0.108023354	0.013992923	0.035969549
EML1	14q32.2	0.108011718	0.014003299	0.035991626
KIAA0513	16q24.1	-0.10800451	0.01400973	0.036003558
SERINC4	15q15.3	-0.107996943	0.014016484	0.036016318
KDM5B	1q32.1	0.107952494	0.014056217	0.036113803
HES1	3q29	0.107920103	0.014085233	0.036183733
PLEKHJ1	19p13.3	-0.107899262	0.01410393	0.036227143
ZFP1	16q23.1	0.107874342	0.014126316	0.036280014
GPR65	14q31.3	0.10782736	0.014168605	0.03638398
EXTL3	8p21.1	0.107809819	0.014184423	0.036419953
PRODH	22q11.21	-0.107792451	0.014200099	0.036455553
MAPK9	5q35.3	-0.107788977	0.014203236	0.036458202
TRAT1	3q13.13	0.107787298	0.014204753	0.036458202
GUCA1C	3q13.13	0.10777682	0.014214221	0.036475618
NUAK2	1q32.1	0.107775778	0.014215163	0.036475618
FHDC1	4q31.3	-0.107757108	0.014232047	0.03651429
ETNK1	12p12.1	-0.107749379	0.014239042	0.03652758
PSTPIP1	15q24.3	0.107723849	0.01426217	0.036582247
ARHGEF12	11q23.3	0.107711778	0.014273116	0.036605659
DUSP27	1q24.1	-0.107704201	0.014279991	0.036616716
LOC728989	1q21.1	0.107703017	0.014281065	0.036616716
ZNF432	19q13.41	0.107695192	0.014288169	0.036630264
ZNF670	1q44	0.107677217	0.014304498	0.036667458
SMCO4	11q21	-0.107652294	0.014327166	0.036717023
MORF4L1	15q25.1	-0.107651947	0.014327482	0.036717023
BUB1	2q13	0.107647865	0.014331197	0.036721869
LIN54	4q21.22	0.107612088	0.014363801	0.036798499
HIST1H4E	6p22.2	0.107611037	0.014364759	0.036798499
RALGAPA2	20p11.23	0.107591032	0.01438302	0.036840589
HIST1H2BJ	6p22.1	0.107581694	0.01439155	0.036855246
HIST1H2BH	6p22.2	0.10758076	0.014392404	0.036855246
TAC3	12q13.3	-0.10756916	0.014403007	0.036877707
CD163L1	12p13.31	0.107559032	0.014412271	0.036896733
VSX1	20p11.21	0.107541718	0.014428119	0.036932319
TPRG1L	1p36.32	-0.107539838	0.014429841	0.036932319
GP9	3q21.3	-0.107533121	0.014435994	0.036942472
HBA2	16p13.3	-0.107531502	0.014437478	0.036942472
GAS2L3	12q23.1	0.107507621	0.014459374	0.036993799
TTC9C	11q12.3	-0.107500286	0.014466106	0.037006319
TLE6	19p13.3	-0.107455692	0.014507091	0.037104078
RBPM5	8p12	-0.107454696	0.014508008	0.037104078
NDFIP1	5q31.3	-0.107433288	0.01452772	0.037149772
EZH1	17q21.2	-0.107336463	0.014617171	0.037373766
CLEC4GP1	19p13.2	0.107331507	0.014621763	0.037380758
C1QL3	10p13	-0.107325117	0.014627684	0.037391148
WDR45	Xp11.23	-0.107311714	0.014640113	0.03740927
ZNF273	7q11.21	0.107310238	0.014641482	0.03740927
CCDC158	4q21.1	0.107310238	0.014641483	0.03740927
ITPA	20p13	-0.107309456	0.014642207	0.03740927
CIDEC	3p25.3	-0.107307445	0.014644073	0.037409289
THAP7-AS1	22q11.21	-0.107303465	0.014647767	0.037413977
CKS1B	1q21.3	-0.107297299	0.01465349	0.037423846
SLC38A7	16q21	0.107216453	0.014728714	0.03761119
KCNK6	19q13.2	0.10719509	0.014748647	0.037657314
ZNF462	9q31.2	0.107192746	0.014750836	0.037658127
HIST1H4I	6p22.1	0.107184204	0.014758814	0.037671624

GLYATL3	6p12.3	0.107183078	0.014759866	0.037671624
CNTROB	17p13.1	-0.107173468	0.014768847	0.037689769
SPRR1B	1q21.3	0.107163668	0.01477801	0.037708372
VPS18	15q15.1	-0.107148632	0.01479208	0.037739488
GHRHR	7p14.3	-0.107144684	0.014795776	0.037744135
CCZ1	7p22.1	0.107121758	0.014817254	0.037794137
ITGAL	16p11.2	0.107105386	0.014832609	0.037828509
DNAJB6	7q36.3	0.107088192	0.01484875	0.037864878
SOX8	16p13.3	-0.107083243	0.0148534	0.037870665
SOWAHC	2q13	-0.107081072	0.01485544	0.037870665
GCC1	7q32.1	0.107079769	0.014856664	0.037870665
SLC12A4	16q22.1	0.107077424	0.014858867	0.037871485
C10ORF90	10q26.2	0.107067748	0.014867963	0.037889872
NF1	17q11.2	0.107049897	0.014884757	0.037927868
MRPL34	19p13.11	-0.107047552	0.014886964	0.037928691
INTS7	1q32.3	-0.107033313	0.014900373	0.03795805
HYAL2	3p21.31	-0.107030098	0.014903403	0.037960964
GSDMC	8q24.21	0.107027579	0.014905776	0.037962205
AKAP13	15q25.3	-0.107023672	0.014909459	0.037963229
TRIP6	7q22.1	-0.107023151	0.01490995	0.037963229
AP5S1	20p13	-0.107013598	0.014918956	0.037977805
ATP10A	15q12	0.107013077	0.014919448	0.037977805
KIFAP3	1q24.2	0.107008301	0.014923953	0.03798447
N4BP2	4p14	0.107005262	0.014926821	0.037986966
RECQL4	8q24.3	0.106997186	0.014934442	0.038001558
RUVBL2	19q13.33	-0.106991281	0.014940018	0.038010939
PAQR7	1p36.11	-0.106970613	0.014959545	0.038055812
GAB1	4q31.21	0.106939096	0.014989367	0.038126859
SMARCA4	19p13.2	0.106935183	0.014993073	0.038131466
OR52B4	11p15.4	0.106918433	0.015008947	0.038163892
CDCA4	14q32.33	0.106917729	0.015009614	0.038163892
FOXP1	3p13	0.106885601	0.015040104	0.038236586
CHMP5	9p13.3	-0.10686962	0.015055289	0.038270359
SH3RF1	4q32.3-q33	-0.106797851	0.015123656	0.038439292
PMFBP1	16q22.2	0.106737587	0.015181273	0.0385778
BAIAP2L2	22q13.1	-0.106736845	0.015181984	0.0385778
CPNE8	12q12	-0.106723993	0.015194297	0.038604215
INSYN1	15q24.1	-0.106720227	0.015197906	0.038608512
ACSF2	17q21.33	-0.10670263	0.015214782	0.038646507
SLIT1	10q24.1	0.106697987	0.015219238	0.038650724
LRP4	11p11.2	0.106696899	0.015220282	0.038650724
GPR182	12q13.3	0.106673101	0.01524314	0.038703886
ENAM	4q13.3	-0.106670581	0.015245561	0.038705152
RASL10A	22q12.2	0.106660551	0.015255206	0.038724753
IERSL	9q34.11	0.106654956	0.015260587	0.03873353
MED13	17q23.2	0.106648443	0.015266854	0.038744551
AP4E1	15q21.2	0.106636547	0.015278308	0.03876873
CNTN3	3p12.3	0.106620657	0.015293617	0.038802686
SNHG32	6p21.33	-0.106608324	0.015305508	0.038827963
FKBP15	9q32	0.106604115	0.015309569	0.03883337
LINC00310	21q22.11	0.106599819	0.015313714	0.038838991
LINC01257	12q24.33	0.106597521	0.015315931	0.03883972
IFI27L1	14q32.12	-0.106587657	0.015325455	0.038858975
DKC1	Xq28	0.106546756	0.015364995	0.038954327
ZDHHC24	11q13.2	-0.106529735	0.015381476	0.038989488
GIMAP1	7q36.1	0.106528433	0.015382738	0.038989488
CEBPB	20q13.13	0.106506897	0.015403615	0.039037488
MANF	3p21.2	0.106502816	0.015407574	0.039042606

CPS1	2q34	0.106487057	0.01542287	0.039076447
RBM25	14q24.2	0.10647659	0.015433036	0.039097283
KLRC2	12p13.2	0.106466419	0.015442921	0.039117403
KCNJ14	19q13.33	0.106454191	0.015454813	0.0391426
SVIP	11p14.3	-0.106449063	0.015459802	0.039150311
TEX101	19q13.31	0.106440459	0.015468176	0.039166589
PPP2R1A	19q13.41	-0.106434474	0.015474004	0.039176418
RBBP6	16p12.1	0.106429871	0.015478487	0.039182839
SCYL2	12q23.1	0.106403559	0.015504136	0.039242834
TMEM64	8q21.3	-0.106399999	0.01550761	0.039246691
TNXB	6p21.33-p21.32	-0.106372298	0.015534659	0.039306548
PLA1A	3q13.33	-0.106371779	0.015535166	0.039306548
FANCA	16q24.3	0.106366219	0.0155406	0.039315355
NDUFV1	11q13.2	-0.10636344	0.015543317	0.039317287
CKAP2	13q14.3	0.106343554	0.01556277	0.039361548
FKBP6	7q11.23	-0.106323401	0.015582506	0.039406513
TMEM233	12q24.23	0.106321065	0.015584795	0.039407351
LOC145783	15q21.3	0.10630934	0.015596289	0.039431462
INPP5J	22q12.2	0.10629232	0.015612987	0.039468722
PLPP3	1p32.2	0.10628242	0.015622707	0.039488333
PHF1	6p21.32	-0.106268352	0.015636528	0.039518305
ABI3	17q21.32	0.106258539	0.015646174	0.039537722
PRSS3P2	7q34	0.106250271	0.015654307	0.039553307
RNF138P1	5q11.2	0.106244563	0.015659924	0.039562533
GRIK1	21q21.3	0.106232971	0.015671335	0.039586395
RABEPK	9q33.3	-0.106214599	0.015689436	0.039627145
DCK	4q13.3	0.106194105	0.015709649	0.03967322
AQP1	7p14.3	-0.106179256	0.015724309	0.039705262
PHACTR2	6q24.2	0.106168708	0.015734731	0.039725627
OR5H6	3q11.2	0.106166505	0.015736908	0.039725627
RPS29	14q21.3	-0.106165101	0.015738295	0.039725627
CD8A	2p11.2	0.10615607	0.015747224	0.039743182
TSFM	12q14.1	-0.106151034	0.015752205	0.039748392
PCDH15	10q21.1	-0.106148056	0.015755152	0.039748392
DPY19L3	19q13.11	0.106147994	0.015755212	0.039748392
FAHD2CP	2q11.2	-0.106138922	0.01576419	0.039766059
CATSPER1	11q13.1	0.106135292	0.015767784	0.039770139
HS6ST2	Xq26.2	0.106125416	0.015777564	0.039789823
SLURP1	8q24.3	0.106112347	0.015790515	0.039817495
DUSP22	6p25.3	-0.106097368	0.015805371	0.039849964
MYH4	17p13.1	0.106088881	0.015813792	0.039866204
BCL2A1	15q25.1	0.106082345	0.015820282	0.03987757
DGKZ	11p11.2	0.106069145	0.015833393	0.039905622
ZNF572	8q24.13	0.106064109	0.015838398	0.03991324
COMMD6	13q22.2	-0.106052171	0.015850268	0.039938152
COL11A2	6p21.32	0.106049751	0.015852675	0.039939218
RASA4	7q22.1	0.106039794	0.015862582	0.039952249
DNAJC28	21q22.11	-0.106038578	0.015863792	0.039952249
PAK5	20p12.2	-0.106038569	0.015863801	0.039952249
SNTN	3p14.2	-0.106032671	0.015869673	0.039962037
SLC23A2	20p13	0.106012613	0.015889655	0.040003764
KIT	4q12	0.10601105	0.015891213	0.040003764
BRPF1	3p25.3	0.106010054	0.015892206	0.040003764
PMS2P1	7q22.1	-0.106003495	0.015898745	0.040015222
GINS2	16q24.1	0.105998808	0.01590342	0.040021984
NABP1	2q32.3	0.105989601	0.015912607	0.040040097
PRND	20p13	0.105972818	0.015929365	0.040077255
IDI2-AS1	10p15.3	-0.105954779	0.015947394	0.0401176

BTG1	12q21.33	-0.105926557	0.015975637	0.040183627
BAGE2	21p11.2	0.105917841	0.015984368	0.040200566
DNAJC6	1p31.3	0.105912228	0.015989992	0.040209686
CNGA4	11p15.4	-0.105900326	0.016001925	0.040234668
C9ORF16	9q34.11	-0.105890519	0.016011764	0.040254379
SNORA28	14q32.32	0.105871237	0.016031124	0.040298017
PPL	16p13.3	-0.105863859	0.016038536	0.040311616
RPH3AL	17p13.3	-0.105851876	0.016050583	0.040332701
SLIRP	14q24.3	-0.105851528	0.016050932	0.040332701
CR2	1q32.2	0.105847536	0.016054948	0.040337755
ETV1	7p21.2	0.1058405	0.016062026	0.040350504
VPS39	15q15.1	-0.105814101	0.016088609	0.040412242
LINC00265	7p14.1	0.105805591	0.016097187	0.040428743
ESCO2	8p21.1	0.105802031	0.016100777	0.040432714
MCM3AP	21q22.3	-0.105777108	0.016125925	0.040490816
PNMA6A	Xq28	0.1057686	0.016134518	0.040507339
SLC25A33	1p36.22	-0.10574107	0.016162351	0.040572156
ITGB2	21q22.3	0.105738118	0.016165338	0.040574595
HPS5	11p15.1	0.105711371	0.016192423	0.04063751
MRPS14	1q25.1	-0.105692788	0.016211265	0.040679725
TSPAN33	7q32.1	0.105677939	0.016226334	0.040712466
TXNL4B	16q22.2	-0.105666216	0.01623824	0.040735946
GLDN	15q21.2	0.105664739	0.01623974	0.040735946
PRRT3	3p25.3	0.105660311	0.01624424	0.040740402
UBE2F	2q37.3	0.105659008	0.016245564	0.040740402
PSKH1	16q22.1	-0.105655448	0.016249183	0.040744401
RAD51AP1	12p13.32	0.105649716	0.01625501	0.040752402
UBA52	19p13.11	-0.105648327	0.016256423	0.040752402
RPP25	15q24.2	-0.105616023	0.016289302	0.04082974
PNRC2	1p36.11	-0.105599176	0.016306471	0.040867688
SEZ6L2	16p11.2	-0.105591795	0.016313999	0.040881465
ART4	12p12.3	-0.105586044	0.016319866	0.040891077
NFRKB	11q24.3	0.105579551	0.016326493	0.04090259
EPG5	18q12.3-q21.1	0.105574864	0.016331278	0.040908177
TRIM22	11p15.4	0.105573385	0.016332788	0.040908177
SLC5A10	17p11.2	-0.10556999	0.016336255	0.04091177
MT1M	16q13	0.105557629	0.016348884	0.040938304
DBT	1p21.2	-0.105552023	0.016354613	0.040947558
NARF	17q25.3	0.105536826	0.016370155	0.040981374
WDR36	5q22.1	0.105521109	0.016386244	0.041016549
CD99L2	Xq28	0.105514596	0.016392914	0.041028144
CRTAP	3p22.3	-0.105511643	0.016395939	0.04102865
C15ORF48	15q21.1	0.10551008	0.01639754	0.04102865
NPLOC4	17q25.3	-0.10550843	0.016399231	0.04102865
ZNF433	19p13.2	-0.105492932	0.016415119	0.041063297
WDR92	2p14	0.105489152	0.016418996	0.041067892
DDX1	2p24.3	-0.105473348	0.016435216	0.041099489
CATIP	2q35	-0.105472864	0.016435712	0.041099489
NXF1	11q12.3	0.105460322	0.016448594	0.041126593
WNT1	12q13.12	0.105447039	0.016462246	0.041155615
HYDIN	16q22.2	0.105444216	0.016465149	0.041157762
GIMAP8	7q36.1	0.105434791	0.016474843	0.041175788
PHKA2	Xp22.13	-0.105433228	0.016476451	0.041175788
ANK3	10q21.2	-0.1054288	0.016481009	0.041182065
B3GNT8	19q13.2	-0.105415774	0.01649442	0.04121046
ATRNL1	10q25.3	-0.105407834	0.016502599	0.041225778
PRNP	20p13	0.105401098	0.016509541	0.041238002
EXOC1L	4q12	-0.105393983	0.016516877	0.041251208

LOC653653	17q23.1	0.105382908	0.0165283	0.041274617
MGME1	20p11.23	0.105379695	0.016531616	0.041277775
TAF1	Xq13.1	0.105377478	0.016533903	0.041278367
GCLC	6p12.1	-0.105371486	0.016540089	0.041288689
MYL2	12q24.11	0.105359329	0.016552644	0.041314908
IL1RAPL1	Xp21.3-p21.2	0.105355039	0.016557077	0.041320848
UGGT1	2q14.3	0.105349864	0.016562426	0.041329073
PCSK4	19p13.3	-0.105341052	0.016571536	0.041346682
LYNX1	8q24.3	0.105332368	0.016580519	0.041363967
OPRL1	20q13.33	0.105327807	0.016585239	0.041370615
COPS4	4q21.22	-0.105304536	0.016609337	0.041425592
ARSD	Xp22.33	-0.105302537	0.016611409	0.041425627
UBE2E3	2q31.3	0.105291161	0.016623202	0.041449901
TMCO6	5q31.3	-0.105283346	0.016631308	0.041464977
POMC	2p23.3	0.105280875	0.016633871	0.041466231
BOP1	8q24.3	0.105250827	0.016665073	0.041538452
FAM45A	10q26.11	-0.105249003	0.016666969	0.041538452
DIAPH3	13q21.2	0.105241403	0.01667487	0.041553
MUC20	3q29	-0.10523159	0.016685076	0.041571743
NRBF2	10q21.3	0.1052302	0.016686522	0.041571743
MAL	2q11.1	0.105195031	0.016723148	0.041657836
UBTD1	10q24.1-q24.2	-0.105175666	0.016743346	0.041699182
OLA1	2q31.1	-0.105175145	0.016743889	0.041699182
ABCA11P	4p16.3	-0.105169937	0.016749325	0.04170756
HLTF	3q24	0.105154391	0.01676556	0.041742823
TPH2	12q21.1	0.105106192	0.016815982	0.041863185
C5ORF38	5p15.33	-0.105090053	0.016832895	0.041900109
KCNC4	1p13.3	-0.105059435	0.016865022	0.041974887
ZNF652	17q21.32-q21.33	0.10504146	0.016883908	0.042016698
KCNN2	5q22.3	0.105001731	0.016925716	0.042112838
THEM6	8q24.3	-0.105000774	0.016926725	0.042112838
PSG9	19q13.31	0.104960809	0.016968874	0.042212487
RANGRF	17p13.1	-0.104956834	0.016973073	0.042217287
AMY1A	1p21.1	-0.10495501	0.016974999	0.042217287
RGS5	1q23.3	0.104941984	0.016988761	0.042246294
FARSB	2q36.1	-0.104917669	0.017014476	0.042305015
FERMT3	11q13.1	0.104903689	0.017029278	0.042336589
CLPSL1	6p21.31	-0.104880162	0.017054211	0.04239334
CACNA2D2	3p21.31	-0.104864351	0.017070986	0.042429799
OR2M4	1q44	0.104860069	0.017075531	0.042435857
CASP4	11q22.3	-0.10485723	0.017078545	0.042438108
ZNF445	3p21.31	0.104848025	0.017088321	0.042457159
AQP9	15q21.3	0.10480174	0.017137553	0.042574224
NRGN	11q24.2	-0.1047918	0.017148142	0.042595275
APC2	19p13.3	0.104779041	0.017161742	0.042619918
OGDHL	10q11.23	-0.10477852	0.017162298	0.042619918
PILRA	7q22.1	0.104775344	0.017165685	0.042623072
SLC16A14	2q36.3	0.104761968	0.017179956	0.042653245
ZRANB1	10q26.13	0.104757974	0.01718422	0.042658569
IQGAP3	1q22	0.104754414	0.017188021	0.042662744
PTENP1	9p13.3	0.104692324	0.017254428	0.042822296
HNRNPLL	2p22.1	0.10468173	0.017265782	0.042845191
TBC1D12	10q23.33	0.104669054	0.017279375	0.042871826
MAP3K4	6q26	0.104667749	0.017280775	0.042871826
AP1S2	Xp22.2	0.104664536	0.017284222	0.042875094
STX7	6q23.2	-0.104659415	0.017289717	0.042883442
PIP5K1B	9q21.11	-0.104657331	0.017291954	0.042883706
ABCA17P	16p13.3	0.104646983	0.017303064	0.042905973

AGO1	1p34.3	0.104644216	0.017306037	0.042908058
POGLUT1	3q13.33	0.104613388	0.017339178	0.042984933
AASDHPPT	11q22.3	0.104606181	0.017346935	0.042998866
FAM210A	18p11.21	0.104601276	0.017352214	0.043006657
PDPR	16q22.1	0.1045922	0.017361989	0.043025587
TMEM182	2q12.1	-0.104571879	0.01738389	0.043074557
LOC401052	3p25.3	-0.104548435	0.017409188	0.043131932
IMPDH1	7q32.1	0.104544612	0.017413316	0.043136851
MED28	4p15.32	-0.104535931	0.017422694	0.043150863
HMG2	1p36.11	-0.104535407	0.01742326	0.043150863
ZBTB5	9p13.2	0.104532542	0.017426356	0.043153223
AP5M1	14q22.3	0.104524813	0.01743471	0.043163755
ATP6V1F	7q32.1	-0.104524639	0.017434898	0.043163755
SWAP70	11p15.4	0.104519776	0.017440156	0.043171464
MBD2	18q21.2	0.104504493	0.017456691	0.043207081
PPP1CB	2p23.2	0.104500498	0.017461015	0.04321247
HDAC9	7p21.1	0.104496938	0.01746487	0.043216696
GDF2	10q11.22	-0.10448438	0.017478472	0.043245039
RSU1P2	10q11.21	0.104476323	0.017487203	0.043261324
SREBF1	17p11.2	-0.104443272	0.017523062	0.043344709
ZFAND5	9q21.13	-0.104434067	0.01753306	0.043364112
BBOX1	11p14.2	0.104428436	0.017539179	0.043373915
AIF1	6p21.33	0.104410708	0.017558456	0.043416253
ANO3	11p14.3-p14.2	-0.104406177	0.017563384	0.043421296
AOX2P	2q33.1	0.104403605	0.017566183	0.043421296
PRSS57	19p13.3	-0.104402886	0.017566966	0.043421296
SDHD	11q23.1	-0.104380575	0.017591262	0.043473567
RHAG	6p12.3	-0.1043795	0.017592433	0.043473567
SLC26A8	6p21.31	-0.104375028	0.017597307	0.043480274
CCDC120	Xp11.23	-0.104347576	0.01762725	0.043548913
KLHDC8B	3p21.31	-0.104342412	0.017632888	0.043557497
STK35	20p13	0.104335679	0.01764024	0.043570312
PRRC2B	9q34.13	0.104301986	0.017677076	0.043655937
NBDY	Xp11.21	-0.104290437	0.017689718	0.043681483
LOC100130872	4p16.3	0.104288572	0.01769176	0.043681483
PRKACA	19p13.12	0.104269684	0.017712453	0.043727212
SELL	1q24.2	0.104245454	0.017739031	0.043787455
LASP1	17q12	-0.104232515	0.017753238	0.043817151
STK26	Xq26.2	-0.104218882	0.017768218	0.043844315
TMEM8B	9p13.3	0.104218534	0.0177686	0.043844315
CFB	6p21.33	0.104200733	0.017788178	0.043887243
OR2C3	1q44	0.10417616	0.017815232	0.043948605
MRRF	9q33.2	-0.104154708	0.01783888	0.044001549
RTN2	19q13.32	-0.104128744	0.017867539	0.044066841
COTL1	16q24.1	0.104114068	0.017883755	0.044101433
ZSCAN9	6p22.1	0.104111509	0.017886585	0.044103007
FAT4	4q28.1	0.104098698	0.017900753	0.044132537
SLC30A8	8q24.11	-0.104092161	0.017907986	0.044141239
SPDYE3	7q22.1	-0.104091056	0.017909209	0.044141239
HNRNPL	19q13.2	-0.104088972	0.017911516	0.044141239
APH1A	1q21.2	-0.104087582	0.017913054	0.044141239
GSK3B	3q13.33	0.104084543	0.017916419	0.044144127
NPM3	10q24.32	-0.104076467	0.017925363	0.044160758
PPP4R4	14q32.12-q32.13	-0.104053388	0.017950943	0.044218366
ORC2	2q33.1	-0.104035306	0.017971007	0.044262372
OGFRL1	6q13	0.104029835	0.017977081	0.044271916
C20ORF144	20q11.22	0.104013213	0.017995547	0.044311971
SC5D	11q23.3-q24.1	0.103989542	0.018021874	0.044370702

SLF2	10q24.31	0.103987805	0.018023807	0.044370702
ZNF474	5q23.2	0.103980825	0.018031577	0.044383799
GRIK1-AS1	21q21.3	0.103979065	0.018033537	0.044383799
C1ORF141	1p31.3	-0.103961016	0.018053644	0.044427855
ZER1	9q34.11	-0.103949423	0.01806657	0.04445423
LILRA5	19q13.42	0.103937181	0.018080228	0.044482399
TMEM108	3q22.1	0.103918508	0.018101078	0.044528253
REXO1	19p13.3	0.103911735	0.018108646	0.044541428
KCTD5	16p13.3	0.103903746	0.018117576	0.044557949
MAGEC1	Xq27.2	0.103901361	0.018120242	0.044559061
SLC30A10	1q41	0.103896063	0.018126168	0.044568189
SEMA4B	15q26.1	0.103883426	0.018140307	0.044597507
AKR1C8P	10p15.1	-0.103871748	0.018153382	0.044624201
PRIMPOL	4q35.1	-0.103863974	0.018162091	0.044640157
SNX25	4q35.1	-0.103859632	0.018166956	0.044646664
SYTL1	1p36.11	-0.103856071	0.018170947	0.04465102
UNC119	17q11.2	-0.103852164	0.018175327	0.044656333
BCL10	1p22.3	0.103846606	0.018181559	0.044666193
FUBP3	9q34.11-q34.12	0.103824897	0.01820592	0.044720583
CYP4A11	1p33	-0.103820962	0.018210339	0.044723135
SVBP	1p34.2	-0.103818432	0.018213181	0.044723135
NOCT	4q31.1	0.103818036	0.018213624	0.044723135
C9	5p13.1	-0.103815757	0.018216185	0.044723966
BAG1	9p13.3	-0.103811784	0.018220648	0.04472689
BPGM	7q33	0.103810742	0.018221819	0.04472689
PHC3	3q26.2	0.103754818	0.018284753	0.044875894
ELAVL4	1p33-p32.3	0.103735996	0.018305977	0.044921814
ZIC3	Xq26.3	0.103734268	0.018307927	0.044921814
TRIM38	6p22.2	-0.10371687	0.018327566	0.044964523
C19ORF44	19p13.11	-0.103706536	0.01833924	0.04498768
TYR	11q14.3	0.103694681	0.01835264	0.045014007
ITGA8	10p13	0.103693085	0.018354445	0.045014007
RAB2B	14q11.2	0.103626297	0.018430103	0.045194053
CDK2AP1	12q24.31	0.103619784	0.018437496	0.045206674
ENPP3	6q23.2	0.103603121	0.018456422	0.045245469
MKLN1	7q32.3	0.103601896	0.018457814	0.045245469
TNIP2	4p16.3	-0.103595991	0.018464525	0.045256409
AIFM1	Xq26.1	-0.103593993	0.018466796	0.045256464
C7ORF13	7q36.3	0.103542238	0.018525715	0.04539533
HMGB4	1p35.1	0.103535401	0.01853351	0.045408904
TRAF3IP2	6q21	-0.103523654	0.01854691	0.045436206
LINC00523	14q32.2	0.103509155	0.018563463	0.045471222
TAX1BP1	7p15.2	-0.103495866	0.018578644	0.045502872
RPS25	11q23.3	-0.103486054	0.018589861	0.045524807
PRSS41	16p13.3	-0.103461599	0.018617842	0.045587783
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ESRRB	14q24.3	0.103435054	0.018648256	0.045651148
SLC2A10	20q13.12	0.103427611	0.018656791	0.045666489
CRYBB1	22q12.1	0.103406807	0.018680668	0.045719374
IGFBP2	2q35	0.103371948	0.018720734	0.045811862
RAD54B	8q22.1	0.103368127	0.01872513	0.045817051
LOC728024	8p11.23	0.103304054	0.018798986	0.045992171
TAF5	10q24.33	0.103280162	0.01882659	0.046054108
ANTXRL	10q11.22	-0.103274398	0.018833256	0.046064816
IST1	16q22.2	-0.10325845	0.018851706	0.046104343
C12ORF54	12q13.11	0.103248959	0.018862695	0.046122832
LINC02112	5p15.31-p15.2	0.103247963	0.018863849	0.046122832
TRAPPC12	2p25.3	-0.103237957	0.01887544	0.046145569

SERPINC1	1q25.1	-0.103234788	0.018879112	0.046148942
PIM3	22q13.33	-0.103220155	0.018896078	0.04618196
RNF14	5q31.3	-0.103217636	0.018898999	0.04618196
LARP7	4q25	-0.103217202	0.018899503	0.04618196
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TBCK	4q24	-0.10318403	0.018938018	0.046255094
C17ORF100	17p13.1	0.103183598	0.01893852	0.046255094
C2ORF16	2p23.3	-0.103183509	0.018938623	0.046255094
CCDC134	22q13.2	0.103167012	0.018957803	0.046296322
PCSK7	11q23.3	0.103160497	0.018965383	0.046309213
IFNL2	19q13.2	-0.103151681	0.018975642	0.046328645
OR51F2	11p15.4	0.103148674	0.018979144	0.046331575
COG4	16q22.1	-0.103144345	0.018984185	0.046338261
BRD8	5q31.2	-0.103133056	0.018997335	0.046364738
INTS4P1	7q11.21	0.103118817	0.019013934	0.046394888
ATP12A	13q12.12 13q12.1-	0.103118504	0.019014299	0.046394888
C8ORF58	8p21.3	0.10309146	0.019045859	0.046466264
FAM234B	12p13.1	0.103056986	0.019086158	0.046558938
C19ORF54	19q13.2	-0.10305412	0.019089511	0.046561476
BTBD10	11p15.3	0.103050646	0.019093576	0.046565749
TPD52	8q21.13	0.103042049	0.019103641	0.04658465
APOBEC3G	22q13.1	0.103024508	0.01912419	0.046629112
GDPD3	16p11.2	-0.103016953	0.019133047	0.046645056
SLC22A4	5q31.1	0.103009574	0.0191417	0.046660502
FAM227B	15q21.2	-0.102974539	0.019182834	0.04675511
RO60	1q31.2	0.102963982	0.019195245	0.046778131
OGN	9q22.31	0.102962551	0.019196927	0.046778131
RELL2	5q31.3	0.102955906	0.019204743	0.046791512
LMF1	16p13.3	-0.102953086	0.01920806	0.046793931
ZNF615	19q13.41	0.102947875	0.019214191	0.046798781
MINDY4	7p14.3	-0.102946354	0.019215982	0.046798781
PAX7	1p36.13	0.102945467	0.019217026	0.046798781
MLLT1	19p13.3	0.102908318	0.019260793	0.046899693
ZC3H6	2q14.1	0.10290554	0.019264071	0.046902001
PLEKHG7	12q22	0.102876843	0.019297945	0.046978791
ZNF624	17p11.2	0.102874413	0.019300816	0.0469801
RABGAP1L	1q25.1	-0.102858126	0.019320067	0.047021272
MSL1	17q21.1	0.102847184	0.019333009	0.047047083
CNN3	1p21.3	0.102823825	0.019360665	0.047108689
PRSS1	7q34	0.102820625	0.019364455	0.047112217
RNF170	8p11.21	-0.10279291	0.019397318	0.047182723
LINC00271	6q23.3	-0.102792232	0.019398123	0.047182723
EIF4G3	1p36.12	0.102788916	0.019402059	0.047184153
SH3KBP1	Xp22.12	0.102787787	0.019403399	0.047184153
RPSAP9	9q21.13	-0.102770593	0.019423816	0.047228098
BCDIN3D	12q13.12	-0.10276738	0.019427634	0.047231675
TNRC6A	16p12.1	0.10274541	0.019453755	0.047289468
OR4F6	15q26.3	0.102742449	0.019457277	0.047292319
FOXJ2	12p13.31	0.102736292	0.019464604	0.047304417
PRKX	Xp22.33	0.102732041	0.019469664	0.047311002
TMEM68	8q12.1	-0.102728092	0.019474366	0.047316715
STIM1	11p15.4	0.102708677	0.019497496	0.047367196
SHISAL2A	1p32.3	0.102671437	0.019541928	0.047469412
MBD5	2q23.1	0.102657529	0.019558545	0.047504042
CPLANE2	1p36.13	-0.102642205	0.019576868	0.047542811
CCT3	1q22	-0.102617323	0.019606651	0.047609394
ZNF160	19q13.41-q13.42	0.102602995	0.019623819	0.047645336
KIF25	6q27	0.102593179	0.019635589	0.047668163

KCNB2	8q21.11	0.10258731	0.019642628	0.047679501
CLDN9	16p13.3	0.10258172	0.019649336	0.047682076
AHSA1	14q24.3	-0.102581199	0.019649961	0.047682076
OTUD6B	8q21.3	0.102580504	0.019650795	0.047682076
NOMO3	16p13.11	0.102569302	0.019664243	0.047707577
LOC155060	7q36.1	0.102566349	0.019667789	0.047707577
IBTK	6q14.1	-0.102565828	0.019668414	0.047707577
SERTM1	13q13.3	-0.102560636	0.019674651	0.047714296
FGD3	9q22.31	0.102559576	0.019675925	0.047714296
DQX1	2p13.1	0.102546884	0.019691179	0.047745535
PARL	3q27.1	-0.102540037	0.019699412	0.047759745
ACOT7	1p36.31	0.102515636	0.019728779	0.047825183
ATP1A1-AS1	1p13.1	-0.102507039	0.019739134	0.047844524
FGF6	12p13.32	-0.102504784	0.01974185	0.047845346
SLC7A10	19q13.11	-0.102421636	0.019842262	0.048082911
OPTN	10p13	0.102415598	0.019849571	0.048094832
GLIS3	9p24.2	0.10241169	0.019854302	0.048099813
TTC39B	9p22.3	0.102409953	0.019856406	0.048099813
HSP90AB4P	15q21.3	0.102407049	0.019859924	0.048102546
ROGDI	16p13.3	-0.102401356	0.019866819	0.048111608
NOVA2	19q13.32	0.102400015	0.019868445	0.048111608
CXCR6	3p21.31	0.102384423	0.019887345	0.048149764
LINC00173	12q24.22	0.10238307	0.019888986	0.048149764
MRPL37	1p32.3	-0.102380863	0.019891663	0.048150454
SPATA31E1	9q22.1	-0.102376517	0.019896935	0.048157425
INA	10q24.33	0.102367536	0.019907832	0.048178007
OPN1SW	7q32.1	0.102344299	0.019936055	0.048240508
ZFP30	19q13.12	0.102291986	0.019999717	0.048388739
UCN	2p23.3	-0.102282269	0.020011561	0.048411577
NDUFAF8	17q25.3	-0.102263503	0.020034454	0.048459292
CEP89	19q13.11	0.102262155	0.0200361	0.048459292
CCDC144A	17p11.2	0.102259317	0.020039564	0.048461849
PRKACB	1p31.1	0.102251908	0.02004861	0.048477901
GKAP1	9q21.32	-0.102240792	0.020062189	0.048501215
ASIP	20q11.22	0.10224007	0.020063071	0.048501215
PCA3	9q21.2	0.102228302	0.020077457	0.048530164
DIPK1A	1p22.1	0.102209965	0.020099889	0.048578554
PLA2G7	6p12.3	0.102169064	0.020150005	0.048693829
GUSBP1	5p14.3	0.102155691	0.020166414	0.048727633
ST6GAL1	3q27.3	0.102130768	0.020197026	0.048795744
HDAC7	12q13.11	0.102105238	0.020228427	0.048865742
CPA5	7q32.2	0.102092806	0.020243733	0.04889685
ADGRD2	9q33.3	0.102071474	0.020270019	0.048954468
CALCA	11p15.2	0.102066514	0.020276136	0.048963366
RCN2	15q24.3	-0.102047664	0.020299395	0.049013651
CNN2	19p13.3	0.10204558	0.020301968	0.049013985
VAPA	18p11.22	-0.102037157	0.02031237	0.049018334
KRT6A	12q13.13	0.102037123	0.020312412	0.049018334
SMIM12	1p34.3	-0.102036462	0.020313228	0.049018334
CCDC144CP	17p11.2	0.102036234	0.020313509	0.049018334
METTL18	1q24.2	-0.1020184	0.02033555	0.049065639
RNF32	7q36.3	-0.102009631	0.020346394	0.04908592
PDCD2L	19q13.11	-0.10200355	0.020353917	0.049094376
MFAP4	17p11.2	0.102002856	0.020354777	0.049094376
LINC02591	1q21.1	0.101995995	0.020363268	0.04910573
CEACAM7	19q13.2	-0.10199511	0.020364364	0.04910573
SYNCRIP	6q14.3	0.101992696	0.020367353	0.049107057
EFNA3	1q21.3	-0.10198158	0.020381119	0.049134362

CD44	11p13	0.101973331	0.020391341	0.049153119
APCDD1	18p11.22	0.10196647	0.020399845	0.04916773
LINC00339	1p36.12	-0.101959002	0.020409106	0.049184162
LYSMD3	5q14.3	0.101951795	0.020418048	0.04919982
ORIE1	17p13.3	0.10194029	0.020432327	0.049228335
DLEU2L	1p31.3	0.101889111	0.020495954	0.049375725
AADACP1	3q25.1	-0.101885049	0.020501011	0.049378272
UBP1	3p22.3	0.101884321	0.020501917	0.049378272
LCAT	16q22.1	0.101866085	0.020524636	0.049427076
SETD2	3p21.31	0.101845765	0.020549977	0.049482182
ERGIC2	12p11.22	0.101839773	0.020557455	0.049494267
CHID1	11p15.5	-0.101822666	0.020578817	0.049539773
RNASE3	14q11.2	0.101819862	0.02058232	0.049542282
GPX5	6p22.1	-0.101785373	0.020625453	0.049640168
CACNA2D4	12p13.33	0.101763314	0.02065308	0.049700718
UTS2B	3q28	0.10175772	0.020660093	0.049711651
TAS2R19	12p13.2	0.101754711	0.020663864	0.049714782
CHD2	15q26.1	-0.101738086	0.020684718	0.049759008
ASPHD1	16p11.2	-0.101729228	0.020695836	0.049779803
NCOA5	20q13.12	0.101724982	0.020701167	0.049786002
FAHD1	16p13.3	-0.101723236	0.020703359	0.049786002
TAF9	5q13.2	-0.10171351	0.020715577	0.049803483
ZNF543	19q13.43	0.10171351	0.020715577	0.049803483
SLC39A12	10p12.33	0.101700196	0.020732312	0.049830241
MCM6	2q21.3	0.101699879	0.020732711	0.049830241
IFIT5	10q23.31	-0.101698748	0.020734133	0.049830241
ERCC3	2q14.3	-0.101693711	0.020740467	0.049839514
REEP5	5q22.2	-0.101686504	0.020749535	0.049855352
URB2	1q42.13	0.101683985	0.020752704	0.049857015
DAZ3	Yq11.23	-0.101678223	0.020759957	0.049868488
PRR14L	22q12.2	0.101665836	0.020775555	0.049900002
HNRNPM	19p13.2	0.101655416	0.020788685	0.049925581
AGBL3	7q33	-0.101634357	0.020815241	0.049983396
SLC22A1	6q25.3	0.101624275	0.020827965	0.050007984
GSTA1	6p12.2	-0.101605193	0.020852066	0.050059879
CSTF2	Xq22.1	0.10159185	0.020868934	0.0500944
TIAF1	17q11.2	-0.101530282	0.020946918	0.050275601
TAGLN3	3q13.2	0.1015148	0.020966567	0.050313461
MC4R	18q21.32	0.101513915	0.020967691	0.050313461
ZNRD2	11q13.1	-0.101504578	0.020979551	0.050332181
MYCNOS	2p24.3	0.101503836	0.020980493	0.050332181
ZSCAN25	7q22.1	0.101491552	0.020996104	0.05036363
ST20-AS1	15q25.1	-0.10148582	0.021003392	0.050375107
DCTPP1	16p11.2	-0.101482347	0.021007809	0.050379699
HNF1A	12q24.31	-0.101479308	0.021011675	0.050382968
GATAD2B	1q21.3	0.101475747	0.021016205	0.050387827
WDR45B	17q25.3	0.10147019	0.021023277	0.050398781
EPHB6	7q34	0.101454387	0.021043397	0.050436599
CRY1	12q23.3	0.101453864	0.021044063	0.050436599
TASP1	20p12.1	0.101448827	0.02105048	0.050445971
LY6D	8q24.3	0.101438212	0.02106401	0.050472386
GLB1L2	11q25	-0.10143337	0.021070182	0.050481168
A1CF	10q11.23	-0.10142095	0.021086026	0.050513114
ITGAM	16p11.2	0.101404279	0.021107306	0.050558077
CD46	1q32.2	-0.101383091	0.021134382	0.050616907
C1QTNF9	13q12.12	-0.101378643	0.021140069	0.050624505
MAPK1IP1L	14q22.3	0.101376404	0.021142932	0.050625339
DNAL1	14q24.3	0.101368849	0.021152597	0.050642457

ATP2B2	3p25.3	0.101364716	0.021157886	0.050649095
RNF168	3q29	0.101340282	0.021189177	0.05071797
HEBP1	12p13.1	-0.101337894	0.021192237	0.050719264
LRP5L	22q11.23	0.101297468	0.0212441	0.050837344
GAK	4p16.3	-0.101254789	0.021298975	0.0509626
SPG7	16q24.3	-0.101250489	0.021304511	0.050969789
DCAF7	17q23.3	0.101237897	0.021320728	0.051002525
NECTIN4	1q23.3	-0.10123069	0.021330015	0.051018679
PKP2	12p11.21	0.101214798	0.021350505	0.05106162
ARNT2	15q25.1	0.101212193	0.021353865	0.051063591
KCNJ10	1q23.2	0.10119387	0.021377514	0.051114071
ZC3H11A	1q32.1	0.101180323	0.021395014	0.051147497
SDR16C6P	8q12.1	-0.101179114	0.021396576	0.051147497
VXN	8q13.1	-0.101172945	0.02140455	0.051158443
DNAJC21	5p13.2	0.10117164	0.021406238	0.051158443
S100G	Xp22.2	-0.101140919	0.021445986	0.051247352
FAM47C	Xp21.1	-0.101133013	0.021456225	0.05125997
ADPRM	17p13.1	-0.10113291	0.021456359	0.05125997
LEP	7q32.1	0.101113066	0.021482079	0.051315325
HSPB8	12q24.23	-0.101105556	0.02149182	0.05132722
ZNF619	3p22.1	0.101105295	0.021492158	0.05132722
ABCC11	16q12.1	-0.101102616	0.021495633	0.05132943
ABCG5	2p21	-0.101082785	0.021521378	0.051384811
NPY5R	4q32.2	-0.101071559	0.021535963	0.051413537
ZNF260	19q13.12	0.101035998	0.021582221	0.05151786
FAM219B	15q24.1-q24.2	-0.101027922	0.021592739	0.051536855
OXT	20p13	0.101024788	0.021596822	0.051540489
ASIC5	4q32.1	-0.100999981	0.021629161	0.051601001
CTSV	9q22.33	0.100999613	0.021629641	0.051601001
REV3L	6q21	0.100999439	0.021629868	0.051601001
LOC729603	6q25.3	0.100982686	0.021651733	0.051642666
NT5C3A	7p14.3	0.100980856	0.021654122	0.051642666
RABEP1	17p13.2	0.100980161	0.02165503	0.051642666
BEND2	Xp22.13	-0.10097343	0.021663821	0.051657513
FRAS1	4q21.21	0.10096323	0.021677149	0.05168317
COQ2	4q21.22-q21.23	-0.10096097	0.021680103	0.051684092
IL15RA	10p15.1	0.100953808	0.021689467	0.051697941
SCGB1A1	11q12.3	-0.100952598	0.021691048	0.051697941
PIWIL3	22q11.23	0.100946339	0.021699236	0.051711331
CCL23	17q12	-0.100937224	0.021711162	0.051733628
ZCCHC12	Xq24	0.100931179	0.021719075	0.051746357
ACTL10	20q11.22	0.100900878	0.021758776	0.051834813
ZNF597	16p13.3	-0.100884643	0.021780073	0.051879408
UBAP1	9p13.3	-0.100868053	0.021801856	0.051925149
CCR4	3p22.3	0.100852424	0.021822393	0.051967913
GPALPP1	13q14.12	-0.100813084	0.021874162	0.052085035
CASZ1	1p36.22	-0.100803706	0.02188652	0.052104313
HSPA2	14q23.3	0.100803011	0.021887435	0.052104313
PLBD1	12p13.1	-0.100799277	0.021892357	0.052109868
PKIA	8q21.13	0.10079611	0.021896533	0.052113645
C8ORF31	8q24.3	0.100788511	0.021906553	0.05213133
BLZF1	1q24.2	-0.100785991	0.021909878	0.052133079
ZNF227	19q13.31	0.100759505	0.021944841	0.0522101
EFNA5	5q21.3	0.1007503	0.021957004	0.052232863
SP5	2q31.1	-0.100734541	0.02197784	0.052276252
AKAP9	7q21.2	0.100730327	0.021983414	0.052283333
NR0B2	1p36.11	-0.100719638	0.021997561	0.052310798
KIF1BP	10q22.1	0.100706099	0.022015488	0.052347246

RTL4	Xq23	-0.100702527	0.022020221	0.052352315
CCNA2	4q27	0.100693421	0.022032289	0.05236973
RTN4RL1	17p13.3	-0.100693074	0.022032749	0.05236973
ARHGAP33	19q13.12	0.100690382	0.022036318	0.052372029
TASOR	3p14.3	0.100686995	0.022040808	0.052376517
RGMA	15q26.1	0.100681003	0.022048755	0.052388578
ARSF	Xp22.33	0.100679244	0.022051089	0.052388578
DEPDC1B	5q12.1	0.100673969	0.022058087	0.052399018
CEACAM6	19q13.2	-0.100654083	0.022084487	0.052455543
GPR87	3q25.1	0.100648575	0.022091805	0.052466734
TIPARP-AS1	3q25.31	-0.100633116	0.022112353	0.052509338
CLGN	4q31.1	0.100630125	0.022116331	0.052510263
ICAM5	19p13.2	-0.1006289	0.022117959	0.052510263
TNPO3	7q32.1	0.100610751	0.02214211	0.0525614
GSTA5	6p12.2	-0.100607902	0.022145903	0.052564205
KLK3	19q13.33	0.100602677	0.022152861	0.052574521
DNAJA2	16q11.2	-0.100592689	0.022166167	0.0525999
GABARAPL1	12p13.2	-0.100582529	0.02217971	0.052625832
WBP11	12p12.3	0.100577145	0.022186889	0.052636662
CAMKK1	17p13.2	-0.100566464	0.022201137	0.052664259
BAMBI	10p12.1	-0.100548488	0.022225135	0.052714971
LSR	19q13.12	-0.100541367	0.022234647	0.05273132
IDI2	10p15.3	-0.100531602	0.022247697	0.052756055
PSMB2	1p34.3	-0.100518789	0.022264832	0.052790466
ELMSAN1	14q24.3	0.100513666	0.022271686	0.052800499
RTL8A	Xq26.3	0.100508803	0.022278194	0.052809708
IGFBPL1	9p13.1	0.100486964	0.022307438	0.052872805
ZNF681	19p12	0.100480841	0.022315645	0.052886029
C10ORF91	10q26.3	-0.100467497	0.022333537	0.052922201
CCL4L1	17q12	0.10046356	0.022338817	0.052928483
LMO2	11p13	0.100443372	0.022365914	0.052982964
CDC20B	5q11.2	0.100441314	0.022368679	0.052982964
INTS8	8q22.1	0.100440548	0.022369707	0.052982964
LINC01622	6p25.3	-0.100408735	0.022412472	0.053078008
DUS2	16q22.1	-0.100397828	0.022427151	0.053106522
SLC17A8	12q23.1	-0.100350264	0.022491257	0.053252058
PSMC4	19q13.2	-0.100310551	0.022544904	0.0533728
NDUFA3	19q13.42	-0.100304299	0.02255336	0.053386381
CLOCK	4q12	0.100302388	0.022555945	0.053386381
NOMO1	16p13.11	0.100297525	0.022562524	0.053395676
TAFA3	1p13.2	0.100292663	0.022569105	0.053404971
ELFN2	22q13.1	0.100282068	0.022583449	0.053432632
RAB40C	16p13.3	-0.100279202	0.02258733	0.053435534
PRDM10	11q24.3	0.100264874	0.022606745	0.053475179
ENPP6	4q35.1	0.100255391	0.022619602	0.053494356
BUB1B	15q15.1	0.100254975	0.022620167	0.053494356
BMP3	4q21.21	0.100242209	0.022637484	0.053529022
ZNF226	19q13.31	-0.100216332	0.022672626	0.053605821
OR4K13	14q11.2	-0.100207032	0.022685266	0.053629407
TMEM151A	11q13.2	-0.100188905	0.022709922	0.053681392
TATDN1	8q24.13	-0.100178123	0.022724599	0.053709779
ROS1	6q22.1	-0.100160755	0.022748258	0.053759384
NEK3	13q14.3	-0.100155892	0.022754886	0.053768735
GOSR2	17q21.32	0.100147469	0.022766371	0.053789559
SLC39A1	1q21.3	-0.100145124	0.022769569	0.053790801
D2HGDH	2q37.3	-0.100113776	0.022812361	0.053885569
MFS14B	9q22.32	0.100096929	0.022835386	0.053933629
DENR	12q24.31	0.100088158	0.022847381	0.053955629

THAP6	4q21.1	-0.100084424	0.02285249	0.053961363
TAP2	6p21.32	0.100063322	0.022881377	0.054023238
SLC5A1	22q12.3	0.100046964	0.022903793	0.05406982
NAPSB	19q13.33	-0.100025808	0.022932812	0.054131977
APC	5q22.2	0.100020685	0.022939844	0.054142228
SLC36A4	11q21	0.100010091	0.022954391	0.054170211
ANPEP	15q26.1	0.099999757	0.022968589	0.054197362
MED17	11q21	0.099991768	0.02297957	0.054216918
TXNL4A	18q23	-0.099984386	0.02298972	0.054234509
PPP6R1	19q13.42	0.099979697	0.02299617	0.054243368
MLN	6p21.31	-0.099963677	0.023018218	0.054289013
PRKCE	2p21	-0.099958682	0.023025095	0.054298872
PDE2A	11q13.4	0.09995291	0.023033047	0.05431126
BDP1	5q13.2	0.099948435	0.023039211	0.054319433
FBXL5	4p15.32	-0.099944441	0.023044716	0.054326049
MCM2	3q21.3	0.099902585	0.023102464	0.054455808
MARCKSL1	1p35.1	0.099892164	0.023116861	0.054479092
XIRP2	2q24.3	0.099890448	0.023119233	0.054479092
METTL23	17q25.1	-0.099889559	0.023120461	0.054479092
PKDCC	2p21	0.099857255	0.023165146	0.054571891
GNA14	9q21.2	0.099857168	0.023165266	0.054571891
LYG1	2q11.2	0.099843113	0.023184732	0.054611356
GABBR1	6p22.1	0.099839193	0.023190164	0.05461776
ADAM5	8p11.22	0.099828329	0.023205222	0.054646833
ARHGAP26	5q31.3	0.099820523	0.023216048	0.054665931
HS3ST6	16p13.3	-0.099802383	0.02324122	0.054718802
MMS19	10q24.1	-0.099783356	0.02326765	0.054774623
WFDC3	20q13.12	0.099768033	0.023288953	0.054818361
SDAD1	4q21.1	0.09975166	0.023311735	0.054865571
ACTR8	3p21.1	0.099746797	0.023318505	0.054872726
FGF18	5q35.1	0.099743751	0.023322747	0.054872726
DSG4	18q12.1	0.099743603	0.023322953	0.054872726
MEP1A	6p12.3	0.099721969	0.023353096	0.054937225
ZXDC	3q21.3	-0.099698428	0.023385936	0.055008051
TMEM115	3p21.31	-0.099671334	0.023423781	0.055090632
ZNF304	19q13.43	0.099666778	0.023430151	0.055099176
ZNF804A	2q32.1	0.099664068	0.02343394	0.055101648
NUF2	1q23.3	0.099608464	0.023511805	0.05527828
CD101	1p13.1	0.099600214	0.023523376	0.055295433
FBXL8	16q22.1	-0.099599346	0.023524594	0.055295433
TIGD6	5q32	-0.099589144	0.023538911	0.055322624
SMOC1	14q24.2	0.099574254	0.023559821	0.055365305
RPL19P12	7q22.1	-0.099563223	0.023575322	0.055395264
NOA1	4q12	-0.099536822	0.023612457	0.055476045
FBXO11	2p16.3	0.09953439	0.023615879	0.055477611
RWDD4	4q35.1	-0.099521712	0.023633733	0.055507739
TTC4	1p32.3	-0.099521367	0.023634219	0.055507739
SELENOV	19q13.2	0.099479125	0.023693789	0.055641153
RDH13	19q13.42	-0.099462054	0.023717898	0.055691274
SINHCAF	12p11.21	0.099430879	0.023761983	0.05578828
GCM2	6p24.2	0.099365982	0.023853982	0.055992854
MAP3K9	14q24.2	0.09936549	0.02385468	0.055992854
C3ORF62	3p21.31	-0.099357327	0.023866274	0.056013536
BCL2L2	14q11.2	0.099352377	0.023873307	0.056023509
PSMB5	14q11.2	-0.099330668	0.023904173	0.056089404
CRELD1	3p25.3	-0.099313387	0.023928767	0.056140568
SLC19A3	2q36.3	-0.099284298	0.023970215	0.056231258
TTI1	20q11.23	0.099271142	0.023988981	0.056268725

C10ORF62	10q24.2	-0.099265296	0.023997324	0.056281736
TTY4C	Yq11.23	-0.099259142	0.02400611	0.056295782
FBXO4	5p13.1	-0.099237406	0.024037163	0.056356644
STIM2	4p15.2	0.099237056	0.024037662	0.056356644
LINC01018	5p15.31	0.09923454	0.024041259	0.056358513
FBXO31	16q24.2	0.099224638	0.024055419	0.056385139
PLEKHA6	1q32.1	-0.09921856	0.024064115	0.056398955
DND1	5q31.3	-0.099198674	0.024092582	0.056453153
OR2D2	11p15.4	0.099198488	0.024092848	0.056453153
RPL23AP32	2p16.2	-0.099180808	0.024118182	0.056505936
RNF216P1	7p22.1	0.099175575	0.024125685	0.056516937
ANXA2P2	9p13.3	-0.099138929	0.024178283	0.056633562
SUMO3	21q22.3	-0.099100025	0.02423423	0.056758004
SMG6	17p13.3	0.099084225	0.024256984	0.056804687
C2ORF66	2q33.1	0.099071447	0.0242754	0.056841201
TMEM232	5q22.1	-0.099051442	0.024304254	0.056902145
NR1D2	3p24.2	0.099046967	0.024310713	0.056910646
RLN1	9p24.1	0.099040117	0.024320602	0.056927177
FAM177B	1q41	0.099033084	0.024330759	0.056938375
KRTAP4-4	17q21.2	-0.099032888	0.024331043	0.056938375
CDH8	16q21	0.098992967	0.024388767	0.057066823
FASN	17q25.3	-0.098956308	0.02444188	0.057184454
PGLYRP1	19q13.32	-0.098942998	0.024461188	0.057222977
MRGPRX4	11p15.1	0.098939957	0.024465601	0.057226651
TIMM8B	11q23.1	-0.098932949	0.024475776	0.057243798
HTR3D	3q27.1	-0.098916881	0.024499115	0.057290322
FBXO24	7q22.1	-0.098915335	0.02450136	0.057290322
PSENEN	19q13.12	-0.098897258	0.024527643	0.057345117
ZNFX1	20q13.13	0.098890919	0.024536865	0.057351684
ASMTL	Xp22.33 and Yp11	-0.098887619	0.024541667	0.057351684
WDR60	7q36.3	0.098887358	0.024542046	0.057351684
MTR	1q43	0.098886924	0.024542678	0.057351684
CDC20	1p34.2	0.098885537	0.024544697	0.057351684
MSH2	2p21-p16.3	0.098871293	0.024565436	0.05738975
FAM184B	4p15.32-p15.31	0.098870432	0.02456669	0.05738975
LAPTM4A	2p24.1	-0.098835342	0.024617847	0.057502584
SPRY2	13q31.1	-0.098830132	0.024625451	0.057513671
ARL5B	10p12.31	0.098811809	0.024652208	0.057569483
DECR1	8q21.3	-0.098791489	0.02468191	0.05763216
CYP7A1	8q12.1	-0.098782319	0.024695324	0.057656794
NFX1	9p13.3	0.098741385	0.024755279	0.057784565
NICN1	3p21.31	-0.098741036	0.024755792	0.057784565
ZSWIM1	20q13.12	0.098723321	0.024781778	0.057838516
CHRNA4	20q13.33	-0.098710884	0.024800036	0.057874417
ZNF473	19q13.33	0.098689892	0.024830879	0.057939678
FUT7	9q34.3	0.098675473	0.024852085	0.057982438
SPATA9	5q15	0.098668165	0.024862838	0.058000804
KRTAP3-2	17q21.2	0.098647036	0.024893951	0.058066655
HMX2	10q26.13	0.09863573	0.024910614	0.05809879
KIF27	9q21.32	0.098631318	0.024917119	0.058107229
TRIM4	7q22.1	-0.098624846	0.024926663	0.058122753
TTLL5	14q24.3	0.098618073	0.024936655	0.058139318
NFAM1	22q13.2	0.098612081	0.024945498	0.058153198
SHANK3	22q13.33	0.098605829	0.024954727	0.058167978
DCTN6	8p12	-0.098586637	0.024983076	0.058227314
PRKAA1	5p13.1	0.098582122	0.02498975	0.058236127
ZNF667	19q13.43	0.098578435	0.0249952	0.058242085
DONSON	21q22.11	0.098570312	0.025007213	0.058263333

TRIM65	17q25.1	0.098564754	0.025015435	0.058275743
CCDC92	12q24.31	0.09855937	0.025023401	0.058287557
TTC33	5p13.1	0.098552123	0.025034128	0.058305796
KCNJ15	21q22.13-q22.2	0.098538269	0.025054647	0.058341234
OR8D2	11q24.2	0.098537936	0.02505514	0.058341234
CT45A3	Xq26.3	-0.098526269	0.025072431	0.058365982
TBC1D23	3q12.1-q12.2	0.098526024	0.025072793	0.058365982
FICD	12q23.3	0.098524895	0.025074467	0.058365982
HDHD5	22q11.1	-0.098516298	0.025087215	0.058388905
RAP1GDS1	4q23	0.098486339	0.025131684	0.058485642
HACD4	9p21.3	0.098481563	0.02513878	0.058495392
WDR46	6p21.32	-0.098449693	0.025186171	0.058598893
RNF141	11p15.4 11p15	-0.098446133	0.02519147	0.058604448
HECTD3	1p34.1	-0.098439707	0.025201037	0.05861993
LRRC75B	22q11.23	-0.098405406	0.025252156	0.058732051
NNAT	20q11.23	0.098387654	0.025278647	0.058786872
THAP9	4q21.22	-0.098376708	0.025294993	0.058815702
TEX26	13q12.3	0.09837544	0.025296888	0.058815702
ADH7	4q23	-0.098367459	0.025308812	0.058836631
GHR	5p13.1-p12	0.098343317	0.025344915	0.058913758
LINC01138	1q21.2	0.098330743	0.025363736	0.058950699
TRMT11	6q22.32	-0.098325775	0.025371175	0.058961181
RING1	6p21.32	-0.098315528	0.025386525	0.058990044
AMZ2P1	17q24.1	-0.098307887	0.025397978	0.059009846
ZSCAN23	6p22.1	0.098299558	0.025410466	0.059032046
PRLR	5p13.2	0.098226693	0.025519942	0.059279534
ZNF32	10q11.21	-0.098196734	0.025565073	0.059377514
IFT80	3q25.33	-0.098177455	0.025594149	0.05943819
PMP2	8q21.13	-0.098162101	0.025617329	0.059485157
TRHDE	12q21.1	-0.098146145	0.025641435	0.059527068
MRPS17	7p11.2	0.098146107	0.025641493	0.059527068
CREM	10p11.21	0.098144283	0.025644249	0.059527068
SLC35E4	22q12.2	0.098141504	0.02564845	0.059529955
CDK2	12q13.2	0.098139507	0.025651469	0.059530099
C10ORF82	10q25.3	-0.098135173	0.025658023	0.059534656
SEC24C	10q22.2	-0.098134297	0.025659348	0.059534656
CHRNA2	8p21.2	-0.098114934	0.025688646	0.059595763
CSNK2B	6p21.33	-0.098099648	0.025711794	0.059642593
FNBP4	11p11.2	0.098090964	0.025724953	0.059666241
ATP23	12q14.1	-0.098083931	0.025735616	0.059678895
PKP1	1q32.1	0.098082651	0.025737556	0.059678895
KIF1C	17p13.2	-0.098081499	0.025739303	0.059678895
PITRM1	10p15.2	-0.098071947	0.025753791	0.059705611
MRPL12	17q25.3	-0.098061092	0.025770264	0.059735236
LRRC41	1p34.1-p33	-0.098059616	0.025772505	0.059735236
PCDHB5	5q31.3	0.098057275	0.025776058	0.059736594
ATF7IP2	16p13.2-p13.13	-0.09805441	0.025780409	0.0597395
UHRF1BP1L	12q23.1	0.098052541	0.025783248	0.0597395
SIPA1	11q13.1	0.098028701	0.025819473	0.059816548
LINC00319	21q22.3	-0.098017023	0.025837234	0.059850808
CRYBG1	6q21	0.097995703	0.025869688	0.059919091
BTNL3	5q35.3	-0.097984575	0.025886641	0.059951459
C1QC	1p36.12	0.097978509	0.025895886	0.059965971
PAQR3	4q21.21	0.09791147	0.025998251	0.060196088
CDHR1	10q23.1	0.09790432	0.026009189	0.060214489
TRIM55	8q13.1	0.097894966	0.026023505	0.060237145
ZFYVE16	5q14.1	0.097894015	0.02602496	0.060237145
MANEA	6q16.1	0.097873871	0.026055815	0.060301627

WDCP	2p23.3	0.09786284	0.026072723	0.060333822
RINL	19q13.2	-0.097850121	0.026092233	0.060372029
LRRC20	10q22.1	-0.097843562	0.026102297	0.060388374
RFPL4A	19q13.42	0.097839969	0.026107813	0.060392379
RNF213	17q25.3	0.097838526	0.026110028	0.060392379
H6PD	1p36.22	0.097833663	0.026117495	0.060402709
PI4KA	22q11.21	0.097831665	0.026120562	0.060402862
KEL	7q34	0.097810379	0.02615327	0.060467051
SYNDIG1L	14q24.3	-0.097809691	0.026154328	0.060467051
GATM	15q21.1	-0.097795627	0.026175958	0.060510109
DPY19L2P2	7q22.1	0.097776957	0.026204696	0.060564488
HAUS3	4p16.3	0.097776436	0.026205499	0.060564488
STAT1	2q32.2	0.097771139	0.026213657	0.060576389
SFT2D3	2q14.3	-0.097744567	0.026254619	0.060664081
CCK	3p22.1	-0.097712728	0.026303771	0.060768152
LEMD3	12q14.3	0.097711481	0.026305697	0.060768152
GRIA4	11q22.3	0.097694112	0.026332546	0.060822957
KLRG2	7q34	-0.097692225	0.026335464	0.060822957
LDB2	4p15.32	0.097670841	0.026368555	0.060892396
KRTAP4-9	17q21.2	0.097665429	0.026376936	0.060904762
UPK1B	3q13.32	-0.097645061	0.026408496	0.060970642
ADCYAP1R1	7p14.3	0.097638276	0.026419017	0.060984027
MED12L	3q25.1	0.097637415	0.026420353	0.060984027
BTBD9	6p21.2	-0.097632806	0.026427502	0.060992919
GOT2	16q21	-0.097629853	0.026432082	0.060992919
ROBO3	11q24.2	0.097629072	0.026433295	0.060992919
KRTAP20-4	21q22.11	-0.097613062	0.026458144	0.06104326
FRMPD4	Xp22.2	-0.097607296	0.026467101	0.061056926
FAM131A	3q27.1	-0.097596553	0.026483792	0.06108843
ZNRF3	22q12.1	-0.097592686	0.026489801	0.061095291
SNHG28	1q23.2	-0.097587823	0.026497361	0.061105726
AHNAK	11q12.3	0.097573929	0.026518971	0.061148556
FDXACB1	11q23.1	-0.097539107	0.026573199	0.061266578
RAD54L2	3p21.2	0.097516529	0.02660841	0.061340734
PBRM1	3p21.1	0.097494907	0.026642169	0.061411526
IBA57	1q42.13	-0.097483837	0.026659466	0.061444361
BMT2	7q31.1	0.097472415	0.026677323	0.061478478
IGLL3P	22q11.23	0.09746448	0.026689735	0.061500042
PAQR9	3q23	-0.097446628	0.026717678	0.061557384
GMPPA	2q35	-0.097426999	0.026748431	0.061621185
OSTM1	6q21	0.097403032	0.026786022	0.061700724
KCNS2	8q22.2	0.097389994	0.02680649	0.061740807
ANKRD20A9P	13q11	-0.097378806	0.026824065	0.061774217
YEATS4	12q15	-0.097375243	0.026829663	0.061780042
NAT8B	2p13.1	0.097354617	0.026862096	0.06184765
PSG1	19q13.2	0.09732707	0.026905465	0.061940417
GALNT11	7q36.1 7q36.1	-0.097324964	0.026908782	0.06194097
MRPL52	14q11.2	-0.097314242	0.026925681	0.061972782
PXDC1	6p25.2	0.097308899	0.026934104	0.061985082
POTED	21q11.2	-0.097299683	0.02694864	0.062010971
PIK3CD-AS1	1p36.22	0.097297861	0.026951514	0.062010971
ARNTL2	12p11.23	0.097283889	0.026973565	0.062054613
RNASEL	1q25.3	-0.097277377	0.026983849	0.062066926
ECM1	1q21.2	0.097276595	0.026985084	0.062066926
MATN4	20q13.12	-0.097274456	0.026988463	0.062067605
ARFGAP3	22q13.2	0.097259835	0.027011566	0.062113642
KRT16	17q21.2	0.097234247	0.027052041	0.06219961
ZNF48	16p11.2	0.097206343	0.027096238	0.062294115

MEAF6	1p34.3	-0.097195835	0.027112897	0.062325296
ARL6IP6	2q23.3	0.097185241	0.027129702	0.062356806
RAB15	14q23.3	-0.097177599	0.02714183	0.062377559
NEFM	8p21.2	0.097174887	0.027146136	0.062380334
UBE2Q2	15q24.2	0.097150638	0.027184655	0.062461717
KCNU1	8p11.23	0.097139731	0.027201996	0.062494427
UGT2B28	4q13.2	0.097110172	0.027249041	0.062595366
SUMO2	17q25.1	-0.097103266	0.027260042	0.062613491
ZDHHC21	9p22.3	0.097080427	0.02729645	0.062689965
CPNE2	16q13	-0.097066796	0.027318201	0.062732761
NKX6-2	10q26.3	-0.097058678	0.027331161	0.062755364
USPL1	13q12.3	0.097030628	0.027375985	0.062851114
GALT	9p13.3	-0.097002881	0.027420385	0.062945873
HPS1	10q24.2	-0.096976395	0.027462826	0.063036109
MTOR	1p36.22	0.096970579	0.027472153	0.063050329
TMEM50A	1p36.11	-0.09696389	0.027482883	0.063067764
MEIS2	15q14	-0.096957638	0.027492916	0.063083597
MIF4GD	17q25.1	-0.096929763	0.027537686	0.063179121
CDH7	18q22.1	0.096924281	0.027546498	0.063192137
LMO3	12p12.3	-0.096896764	0.027590765	0.063286475
PXMP2	12q24.33	-0.096891294	0.027599574	0.063299466
HIST1H2BE	6p22.2	-0.096862728	0.027645606	0.063397819
SLC22A12	11q13.1	-0.096837451	0.027686394	0.063484122
GATAD2A	19p13.11	0.096824862	0.027706727	0.063521246
PTGFR	1p31.1	0.09682352	0.027708895	0.063521246
PRDM15	21q22.3	0.096812271	0.027727078	0.063555691
HSP90B3P	1p22.1	0.096800161	0.027746662	0.06359334
FSD1L	9q31.2	0.096796338	0.027752847	0.063600274
MCF2L	13q34	0.096787001	0.027767958	0.06362766
EIF4ENIF1	22q12.2	0.096765291	0.02780312	0.063700979
SNTA1	20q11.21	0.096762512	0.027807623	0.063704046
TCHP	12q24.11	0.096752092	0.027824517	0.063735494
PCP4L1	1q23.3	0.096733209	0.027855152	0.063798408
RPS4X	Xq13.1	-0.096729427	0.027861291	0.063805208
PAXIP1-AS2	7q36.2	-0.096698339	0.0279118	0.063913608
LINC00928	15q26.1	0.096691596	0.027922765	0.063931445
MAPKAPK2	1q32.1	0.096669595	0.027958569	0.064006141
PARPBP	12q23.2	0.096662214	0.02797059	0.06402638
RPS23	5q14.2	-0.096653965	0.027984031	0.064049863
BABAM2-AS1	2p23.2	-0.096627524	0.028027146	0.064141251
NRDC	1p32.3	0.096609156	0.028057132	0.064202577
DGCR6L	22q11.21	-0.096600125	0.028071886	0.064229036
ANKRD20A8P	2q11.1	-0.09659632	0.028078103	0.06423596
VAV3	1p13.3	0.09656296	0.028132668	0.064353479
TIMM23	10q11.22	-0.09655879	0.028139496	0.064361783
G0S2	1q32.2	0.096536646	0.028175773	0.064437436
TANK	2q24.2	-0.096505297	0.028227199	0.064547714
YTHDC2	5q22.2	0.096502605	0.028231619	0.064550488
HDAC4	2q37.3	0.096498611	0.028238179	0.064558153
CLTRN	Xp22.2	-0.096490795	0.028251017	0.064579032
PKIB	6q22.31	0.096489145	0.028253727	0.064579032
INF2	14q32.33	-0.096465439	0.028292702	0.064660774
VILL	3p22.2	-0.096462399	0.028297703	0.06466486
ARHGEF33	2p22.1	0.096447815	0.028321706	0.064712366
LINC00635	3q13.12	-0.096444719	0.028326804	0.064714503
SLC22A15	1p13.1	0.096443342	0.028329071	0.064714503
CTSZ	20q13.32	0.09641542	0.028375087	0.064812266
PANK2	20p13	0.096379903	0.028433711	0.064938802

ARHGAP18	6q22.33	0.096372869	0.028445333	0.064957976
IPO9	1q32.1	0.096348554	0.028485541	0.065042417
KCNH3	12q13.12	0.096330875	0.028514806	0.065101855
STMN2	8q21.13	0.096308194	0.02855239	0.065180268
SRRD	22q12.1	0.09629567	0.028573162	0.065220291
SRP9	1q42.12	-0.096287507	0.028586707	0.06524381
TRAF6	11p12	0.096282991	0.028594202	0.065253518
ENPP4	6p21.1	-0.096278563	0.028601555	0.065262899
ZNF512	2p23.3	0.096255811	0.028639354	0.065341742
RALBP1	18p11.22	0.096251643	0.028646283	0.065350145
SLC16A9	10q21.2	0.096240875	0.028664192	0.065383589
NFKBIB	19q13.2	-0.096207095	0.028720434	0.065504456
ODF3L2	19p13.3	0.096199934	0.028732367	0.06552425
FABP6	5q33.3	-0.096196479	0.028738128	0.065529963
FAM27C	9q13	-0.096191121	0.028747063	0.065542912
MUCL1	12q13.2	0.096189081	0.028750465	0.065543245
MRGPRG	11p15.4	0.096184746	0.028757696	0.065552307
SLC15A2	3q13.33	-0.096143008	0.028827395	0.065703744
SIRT1	10q21.3	0.096119909	0.028866032	0.065784356
FAM185A	7q22.1	-0.096117048	0.028870821	0.065787823
OR51B6	11p15.4	0.096103296	0.028893847	0.06583284
FRYL	4p11	0.096065896	0.02895655	0.065968238
CCDC148	2q24.1	0.096044836	0.02899191	0.066034339
C10ORF25	10q11.21	0.096044707	0.028992126	0.066034339
CPEB1	15q25.2	0.096041564	0.028997405	0.066038892
EPS8L3	1p13.3	-0.096037282	0.029004602	0.06604781
PLK1	16p12.2	0.096018482	0.029036209	0.066112306
WDR25	14q32.2	-0.096015618	0.029041026	0.066115795
WDR74	11q12.3	-0.095982316	0.029097098	0.066235958
LRRC66	4q12	-0.095959689	0.029135248	0.066298175
JPX	Xq13.2	-0.095959258	0.029135974	0.066298175
DNMT3L	21q22.3	0.095958015	0.029138072	0.066298175
THAP7	22q11.21	-0.095956827	0.029140077	0.066298175
NYX	Xp11.4	0.095956341	0.029140897	0.066298175
WDR62	19q13.12	0.095946146	0.029158103	0.066329824
TMEM175	4p16.3	-0.095943975	0.029161768	0.066330665
SAMD4B	19q13.2	0.095935204	0.029176579	0.066356856
GUCY1A2	11q22.3	0.095921661	0.02919946	0.066401394
ESPNP	1p36.13	0.095915641	0.029209637	0.066417033
MTX3	5q14.1	0.095908979	0.029220903	0.066433519
ZNF44	19p13.2	-0.095906506	0.029225085	0.066433519
THBS4	5q14.1	0.095903074	0.029230891	0.066433519
CDC37L1	9p24.1	0.095902466	0.02923192	0.066433519
MROH6	8q24.3	-0.095901598	0.029233389	0.066433519
TMED7-TICAM2	5q22.3	0.09588764	0.029257011	0.066479696
MFSD3	8q24.3	-0.095884577	0.029262197	0.066483976
RASSF9	12q21.31	-0.095868599	0.029289264	0.066535314
FABP4	8q21.13	-0.095865624	0.029294306	0.066535314
GBP4	1p22.2	0.095865386	0.029294709	0.066535314
KRTAP13-2	21q22.11	-0.09585216	0.029317132	0.066569199
MS4A1	11q12.2	0.095851405	0.029318414	0.066569199
CDC48	1p34.3	0.095849801	0.029321135	0.066569199
LINC00696	3p21.2	0.095848786	0.029322856	0.066569199
VPS37B	12q24.31	-0.095842113	0.029334177	0.06658739
PIK3C3	18q12.3	0.095827396	0.029359159	0.066636584
SLC6A19	5p15.33	-0.095817157	0.029376551	0.066668542
ATP1B1	1q24.2	-0.095811286	0.029386527	0.066683665
TEX14	17q22	-0.095798006	0.029409103	0.066726913

TRAPPC10	21q22.3	0.095796176	0.029412215	0.066726913
FAM204A	10q26.11	-0.095792355	0.029418714	0.066734136
SLC22A23	6p25.2	0.095771427	0.029454333	0.066807405
MYBPC1	12q23.2	-0.095751984	0.029487457	0.066875001
SLC27A5	19q13.43	-0.095718195	0.029545097	0.066998175
SP3	2q31.1	0.095715764	0.029549249	0.067000042
NAP1L5	4q22.1 4q21-q22	0.095705169	0.029567343	0.06703352
TRA2B	3q27.2	-0.095702738	0.029571498	0.067035388
ANXA2P1	4q31.3	-0.095695793	0.029583366	0.067054742
ST6GALNAC4	9q34.11	-0.095691709	0.029590346	0.067063012
MGC2889	3q29	0.095687553	0.029597453	0.067070456
KLRB1	12p13.31	0.095685891	0.029600294	0.067070456
SIGIRR	11p15.5	-0.09567825	0.029613365	0.067092519
HIRIP3	16p11.2	-0.095668611	0.029629858	0.067122333
STARD7	2q11.2	-0.095665137	0.029635804	0.067128247
PLA2G15	16q22.1	0.095657454	0.029648959	0.067149397
CFAP58	10q25.1	-0.095655787	0.029651812	0.067149397
GAPVD1	9q33.3	0.095653066	0.029656473	0.067152395
LYPLA1	8q11.23	-0.09561946	0.029714083	0.067275278
ADCY8	8q24.22	-0.095616746	0.02971874	0.067278255
EXT1	8q24.11	0.095593669	0.029758361	0.067360374
TMEM211	22q11.23	0.095588219	0.029767726	0.067373254
CNOT4	7q33	0.095586461	0.029770745	0.067373254
C3ORF22	3q21.3	0.095581131	0.029779907	0.067386413
ANKRD9	14q32.31	-0.095574825	0.029790748	0.067403366
DIRAS1	19p13.3	0.095561626	0.029813451	0.067447154
FGF22	19p13.3	-0.095548534	0.029835984	0.067490545
BPIFB1	20q11.21	0.095543595	0.02984449	0.0675022
ARHGEF26	3q25.2	-0.095537572	0.029854864	0.067518078
ARHGEF7	13q34	0.095532882	0.029862943	0.067528762
MBOAT1	6p22.3	0.095528888	0.029869827	0.067536741
MUC15	11p14.2	-0.095507329	0.029907001	0.067613199
ERRFI1	1p36.23	0.095493631	0.02993064	0.067659045
UFM1	13q13.3	-0.095490939	0.029935288	0.067661953
WFDC9	20q13.12	0.095486386	0.029943152	0.067672129
AUH	9q22.31	-0.095479564	0.029954936	0.06769116
TBC1D2	9q22.33	-0.095461328	0.029986455	0.06775478
ACLY	17q21.2	0.095457854	0.029992462	0.067757414
TP73	1p36.32	-0.095454988	0.029997418	0.067757414
HSD17B12	11p11.2	-0.095454815	0.029997718	0.067757414
SMARCA2	9p24.3	0.095439705	0.030023864	0.067808862
YIPF5	5q31.3	0.095420774	0.030056649	0.067875291
UQCRB	8q22.1	-0.095412438	0.030071096	0.067900299
FXVD6	11q23.3	0.095398457	0.030095338	0.067947416
CACTIN	19p13.3	0.095374055	0.030137689	0.068035403
TDRD7	9q22.33	-0.095353433	0.030173521	0.068108654
TIMELESS	12q13.3	0.095341664	0.030193985	0.068147206
PSMB10	16q22.1	-0.095335499	0.030204711	0.068163772
TAB3	Xp21.2	0.095329507	0.030215139	0.068179659
RIPK3	14q12	-0.095315873	0.030238875	0.068225573
MTMR10	15q13.3	-0.095291559	0.030281248	0.068313518
THOP1	19p13.3	0.095277578	0.030305635	0.068360874
ITGB6	2q24.2	-0.095262728	0.030331556	0.068411678
INSL4	9p24.1	-0.095257262	0.030341102	0.068425542
PLEKHF2	8q22.1	0.095246663	0.03035962	0.068459634
KRT34	17q21.2	0.095238161	0.030374482	0.068485475
UPRT	Xq13.3	-0.095228861	0.030390744	0.068514467
OBSCN	1q42.13	-0.095224085	0.030399099	0.068525629

NUP93	16q13	0.095210541	0.030422804	0.068571385
SLC66A3	2p25.1	-0.095194387	0.030451096	0.06862747
B4GALNT1	12q13.3	0.095183358	0.030470424	0.068663343
EIF2B4	2p23.3	-0.095179537	0.030477123	0.068670751
MYH6	14q11.2	0.095169929	0.030493974	0.068701029
EEF1AKNMT	1q24.3	-0.095154007	0.030521916	0.068753056
TXNRD3NB	3q21.3	-0.095152878	0.030523898	0.068753056
EPX	17q22	-0.095145504	0.030536847	0.068774528
ADAM7	8p21.2	-0.095133609	0.030557745	0.068813895
CACNB2	10p12.33-p12.31	0.09510312	0.030611365	0.068919224
DPY19L1	7p14.2	0.09510312	0.030611365	0.068919224
LRRC4B	19q13.33	-0.09508797	0.030638037	0.068971561
PTPRU	1p35.3	-0.095039901	0.030722802	0.06914933
ZBTB6	9q33.2	0.095039293	0.030723875	0.06914933
SDHAF2	11q12.2	-0.094989188	0.030812448	0.069340925
DHRS3	1p36.21	-0.094982067	0.030825053	0.069361537
RBM45	2q31.2	-0.094968868	0.03084843	0.069406382
PCDH10	4q28.3	0.094942632	0.03089494	0.069503256
TRMT5	14q23.1	0.094937519	0.030904012	0.069515897
RIPOR2	6p22.3	0.094934265	0.030909787	0.069521119
TUBB	6p21.33	0.094926751	0.030923124	0.069543345
ASIC3	7q36.1	-0.094922767	0.030930198	0.069551483
ZBED3	5q13.3	-0.094914207	0.0309454	0.069577896
ITM2C	2q37.1	0.094903131	0.030965081	0.069606937
ROCK2	2p25.1	0.094903046	0.030965232	0.069606937
CELSR2	1p13.3	0.094882898	0.031001062	0.069679697
USP49	6p21.1	0.094868272	0.031027093	0.069730421
ACAA2	18q21.1	-0.094842431	0.03107313	0.069826088
GNAI3	1p13.3	0.094834963	0.031086445	0.069848214
ERC2	3p14.3	0.094831837	0.031092021	0.069852944
RAD1	5p13.2	0.094818724	0.031115416	0.069897705
CFAP45	1q23.2	0.094800922	0.031147203	0.069948215
ZNF195	11p15.4	0.094800749	0.031147513	0.069948215
ZBED6CL	7q36.1	0.094798925	0.031150771	0.069948215
SYCN	19q13.2	-0.094798348	0.031151801	0.069948215
STX1B	16p11.2	0.094765666	0.031210237	0.070071611
TERF1	8q21.11	0.094760716	0.031219095	0.070083683
PGA5	11q12.2	0.094714704	0.031301543	0.070260933
HCG26	6p21.33	0.094711566	0.031307174	0.070265738
RASA1	5q14.3	0.094702361	0.031323692	0.070294975
DR1	1p22.1	0.094655121	0.031408586	0.070467531
PSMA1	11p15.2	-0.094654947	0.031408899	0.070467531
CXCL5	4q13.3	0.094653731	0.031411086	0.070467531
FAM160B2	8p21.3	0.094646611	0.0314239	0.070488423
ARID1B	6q25.3	0.094631154	0.031451732	0.070542994
HDX	Xq21.1	0.09462794	0.03145752	0.070548115
RCC1	1p35.3	-0.094619083	0.031473481	0.070569397
ZNF674-AS1	Xp11.3	0.094618783	0.031474021	0.070569397
OR52I1	11p15.4	0.094612431	0.031485471	0.070587207
BARD1	2q35	0.094590168	0.031525632	0.070669374
TMEM246	9q31.1	-0.094571061	0.031560133	0.070738836
APLP2	11q24.3	-0.094541363	0.031613825	0.070851292
RDH11	14q24.1	0.094523995	0.03164526	0.070913847
SLTM	15q22.1	-0.094519306	0.031653752	0.070924981
LINC01587	4p16.2	0.094497177	0.031693853	0.07100212
IFT20	17q11.2	-0.094496294	0.031695454	0.07100212
MYL6	12q13.2	-0.09449447	0.031698761	0.07100212
BTN3A3	6p22.2	0.094488652	0.031709313	0.071017853

CLDN20	6q25.3	0.094459464	0.031762294	0.0711286
ANKMY1	2q37.3	-0.094449401	0.031780577	0.071161626
SPATA6L	9p24.2-p24.1	-0.094440024	0.031797622	0.071186297
SRPRA	11q24.2	0.094437678	0.031801888	0.071186297
PDCD6IP	3p22.3	-0.094437504	0.031802204	0.071186297
KDM1A	1p36.12	0.094412582	0.031847551	0.071279877
PRR23C	3q23	0.09440432	0.031862597	0.071305622
SHROOM2	Xp22.2	0.094400772	0.031869059	0.071312157
MT1IP	16q13	-0.094397058	0.031875826	0.07131937
NUP98	11p15.4	0.094368728	0.031927478	0.071426998
BPIFA2	20q11.21	0.094362492	0.031938858	0.071444517
TUBGCP5	15q11.2	-0.094355529	0.031951568	0.071465008
ALDOA	16p11.2	-0.094339637	0.031980593	0.071521979
HLCS	21q22.13	-0.094328609	0.032000749	0.071559106
ARIH1	15q24.1	-0.094318796	0.032018692	0.071591277
DCAF16	4p15.31	0.094308202	0.032038073	0.071626657
IFNA21	9p21.3	0.094290824	0.032069887	0.071689819
RLIM	Xq13.2	0.094272772	0.032102964	0.071753163
PRXL2A	10q23.1	-0.094271469	0.032105352	0.071753163
FHOD1	16q22.1	-0.094264783	0.032117612	0.071767862
PRDX2	19p13.13	-0.094262264	0.03212223	0.071767862
BRCC3	Xq28	0.094262049	0.032122625	0.071767862
EHMT1	9q34.3	0.094254362	0.032136726	0.071791399
COL9A1	6q13	-0.094242271	0.032158918	0.071833002
GEMIN7	19q13.32	-0.094239862	0.032163339	0.071834908
LMOD3	3p14.1	-0.094223133	0.032194068	0.071895562
SPATA4	4q34.2	-0.094217887	0.03220371	0.07190255
PRELID3B	20q13.32	-0.094217543	0.032204341	0.07190255
HSPA5	9q33.3	0.094205212	0.032227013	0.07194519
IPMK	10q21.1	0.094197223	0.032241709	0.071970016
RBMY1A1	Yq11.223	-0.094157661	0.032314568	0.072124654
PCDHA12	5q31.3	-0.094149373	0.03232985	0.072150762
METTL26	16p13.3	-0.09412671	0.032371667	0.072236077
ZNF436-AS1	1p36.12	0.09410309	0.032415299	0.072325424
RAB6A	11q13.4	0.094097447	0.03242573	0.072340678
SLC22A14	3p22.2	0.094084664	0.032449372	0.072381683
RNF113B	13q32.2	0.094083621	0.032451301	0.072381683
GPR50	Xq28	0.09407351	0.032470012	0.072415394
NANS	9q22.33	-0.094049684	0.032514139	0.072505773
SUZ12	17q11.2	0.094038395	0.032535064	0.0725444
SLCO1A2	12p12.1	-0.094008923	0.032589749	0.072658285
TDRD5	1q25.2	-0.094003346	0.032600107	0.072673328
MYO1E	15q22.2	0.093992197	0.032620819	0.072711448
EIF1B	3p22.1	-0.09398408	0.032635907	0.072737025
VTCN1	1p13.1-p12	0.093976401	0.032650185	0.072753491
C12ORF65	12q24.31	-0.093976219	0.032650524	0.072753491
MCM3	6p12.2	0.093964322	0.032672656	0.072794749
G6PC2	2q31.1	-0.093944557	0.032709453	0.072868669
ZNF567	19q13.12	0.093930935	0.032734835	0.072917143
CREB3L4	1q21.3	-0.093924029	0.032747708	0.072937748
CNTLN	9p22.2	0.093921776	0.032751911	0.072939038
TYW3	1p31.1	-0.093897978	0.032796312	0.073029841
EXPH5	11q22.3	0.093859943	0.032867384	0.073180008
RNF222	17p13.1	0.093856927	0.032873025	0.073184472
DRD5	4p16.1	0.09384281	0.032899441	0.073235182
POLR1A	2p11.2	0.093823297	0.032935985	0.073308422
FBXO16	8p21.1	-0.093817913	0.032946074	0.073317201
CLCF1	11q13.2	-0.093817305	0.032947213	0.073317201

GTPBP8	3q13.2	-0.093812488	0.032956243	0.073329189
SPOCK3	4q32.3	0.093794708	0.032989588	0.07339527
HIST1H2AG	6p22.1	0.093774687	0.03302717	0.073463373
PTBP2	1p21.3	0.093773712	0.033029001	0.073463373
ZRANB2	1p31.1	-0.093770499	0.033035036	0.073463373
TFAP2C	20q13.31	0.093768762	0.033038299	0.073463373
SV2C	5q13.3	0.093768684	0.033038446	0.073463373
RHOBTB1	10q21.2	0.093736893	0.033098216	0.073588147
ZNF321P	19q13.41	-0.093715965	0.033137612	0.073667602
ALDH16A1	19q13.33	-0.093713533	0.033142192	0.073669648
TOMM7	7p15.3	-0.093702592	0.033162808	0.073701093
ZNF771	16p11.2	-0.093699424	0.033168778	0.073701093
NEUROG1	5q31.1	0.09369938	0.033168862	0.073701093
VWDE	7p21.3	0.093698254	0.033170984	0.073701093
WFDC5	20q13.12	-0.093695662	0.03317587	0.073703814
MOGS	2p13.1	0.093693561	0.033179832	0.073704483
SLC23A1	5q31.2	-0.093690116	0.033186327	0.073710777
ACP5	19p13.2	-0.093677148	0.03321079	0.073756973
HTR3C	3q27.1	-0.09367108	0.033222241	0.073774266
IFNAR1	21q22.11	0.093660996	0.03324128	0.073781185
SERPINA1	14q32.13	-0.093660823	0.033241608	0.073781185
NMNAT2	1q25.3	0.093660215	0.033242756	0.073781185
SLC25A30	13q14.13	-0.093660041	0.033243084	0.073781185
DCPS	11q24.2	-0.093657783	0.033247349	0.073781185
SGO1	3p24.3	0.093657783	0.033247349	0.073781185
GART	21q22.11	-0.093642326	0.033276554	0.073837857
SLC25A15	13q14.11	-0.093627042	0.033305454	0.073893837
THRA	17q21.1	-0.093619227	0.03332024	0.073911808
ZNF551	19q13.43	0.09361888	0.033320897	0.073911808
CYP4Z1	1p33	-0.093608133	0.033341238	0.07394878
KCTD7	7q11.21	0.093599167	0.033358217	0.073978287
ALDH1A1	9q21.13	-0.093571553	0.033410558	0.0740862
PSTK	10q26.13	-0.093560917	0.033430735	0.074122777
RABGAP1	9q33.2-q33.3	0.093544112	0.033462638	0.074185342
NBR1	17q21.31	-0.093531868	0.033485899	0.074228736
SNORD97	11p15.4	-0.093514522	0.033518876	0.074293655
C9ORF170	9q21.33	0.093502171	0.033542372	0.074337548
DOT1L	19p13.3	0.093487278	0.033570725	0.074392193
DHX37	12q24.31	0.093469257	0.033605059	0.074460081
MTERF4	2q37.3	-0.09346726	0.033608866	0.074460321
E2F8	11p15.1	0.093450848	0.033640165	0.074518032
CSTF1	20q13.2-q13.31	-0.093449719	0.033642319	0.074518032
IDH3B	20p13	-0.093445116	0.033651101	0.074529283
NBEAL2	3p21.31	-0.093431048	0.033677955	0.074580555
TTC27	2p22.3	-0.093395792	0.033745338	0.074721556
UBXN6	19p13.3	-0.093372867	0.033789216	0.074810483
C7ORF65	7p12.3	0.0933557	0.033822104	0.074875063
ZNF720	16p11.2	0.093341129	0.033850039	0.074928665
ZAP70	2q11.2	0.093337176	0.033857621	0.074937209
HIST1H1B	6p22.1	0.093324447	0.033882047	0.074983026
MFSD1	3q25.32	0.093318332	0.033893786	0.075000759
AEBP2	12p12.3	0.093313817	0.033902457	0.075011701
USP44	12q22	-0.093287339	0.033953338	0.075116023
ZNF45	19q13.31	0.093267011	0.033992447	0.075194281
GOLT1B	12p12.1	0.093262801	0.03400055	0.075203942
8-Mar	10q11.21-q11.22	0.093258286	0.034009245	0.075207578
SLC25A37	8p21.2	0.093258067	0.034009666	0.075207578
PLA2G2A	1p36.13	0.09325436	0.034016805	0.075213243

NOSIP	19q13.33	-0.093252856	0.034019701	0.075213243
OLMALINC	10q24.31	-0.093246604	0.034031745	0.075231609
FAM110A	20p13	0.093218208	0.034086493	0.075344363
HOXC5	12q13.13	0.093169926	0.034179753	0.075542208
PPP1R3D	20q13.33	0.093158376	0.034202095	0.075583289
SPRR2G	1q21.3	0.09314051	0.034236679	0.075651411
ZNF763	19p13.2	-0.093137882	0.034241769	0.075654352
BLID	11q24.1	0.093133221	0.034250799	0.075665998
IGSF5	21q22.2	0.093126548	0.034263727	0.075679613
HMGXB4	22q12.3	0.093126159	0.034264481	0.075679613
HACE1	6q16.3	0.093117649	0.034280976	0.07570774
NEU1	6p21.33	-0.09311296	0.034290068	0.075719512
DYM	18q21.1	0.093087256	0.034339943	0.075821329
CDK5RAP3	17q21.32	-0.093083782	0.034346688	0.075827904
GDA	9q21.13	-0.093069282	0.034374854	0.075881765
RILPL2	12q24.31	-0.093065331	0.034382534	0.075890395
HPDL	1p34.1	0.0930563	0.03440009	0.075920015
SLC13A1	7q31.32	0.093053261	0.034405999	0.075920015
ARHGDI3	16p13.3	0.093052609	0.034407268	0.075920015
HAR1B	20q13.33	0.093046331	0.034419478	0.075938634
RPL23AP64	11q23.3	0.093041633	0.034428619	0.075950476
DHRS7	14q23.1	-0.093014919	0.034480633	0.076056886
ST7-OT3	7q31.2	-0.092970997	0.034566298	0.07623749
ZNF425	7q36.1	0.092966468	0.034575143	0.076248644
CERS5	12q13.12	0.092955958	0.034595672	0.076276692
HEATR1	1q43	0.092955088	0.034597372	0.076276692
KRTAP4-7	17q21.2	0.092954138	0.034599229	0.076276692
PLCH2	1p36.32	0.092921655	0.03466275	0.076408362
F12	5q35.3	-0.092917228	0.034671415	0.076419093
NUMBL	19q13.2	0.09291054	0.03468451	0.076439587
ANAPC1	2q13	0.09289708	0.034710875	0.076486576
PSMA3	14q23.1	-0.092895169	0.034714618	0.076486576
NUP58	13q12.13	-0.092893606	0.034717681	0.076486576
AQP4-AS1	18q11.2	-0.092891886	0.034721052	0.076486576
EXO1	1q43	0.092889959	0.03472483	0.076486576
ZNF3	7q22.1	0.092886486	0.034731638	0.076493204
GPC4	Xq26.2	0.092862518	0.034778651	0.076588365
PWAR5	15q11.2	0.09285378	0.034795804	0.076617757
PVRIG	7q22.1	0.092844241	0.034814539	0.076650626
CRTAC1	10q24.2	-0.09283773	0.034827331	0.076670404
PLCB3	11q13.1	0.092822746	0.034856784	0.076723112
DNAJC3	13q32.1	0.092818578	0.034864982	0.076723112
MAP3K10	19q13.2	0.092818057	0.034866007	0.076723112
PPIP5K1	15q15.3	-0.092817796	0.034866519	0.076723112
TMEM39A	3q13.33	0.092809373	0.03488309	0.076751186
CCL28	5p12	-0.092804686	0.034892314	0.076763091
DCAF8L1	Xp21.3	-0.092797127	0.034907194	0.076787435
ASPA	17p13.2	-0.09279335	0.034914631	0.076795403
ST7L	1p13.2	-0.092780458	0.034940025	0.076842861
RPL28	19q13.42	-0.092772119	0.034956459	0.076870604
GNPNAT1	14q22.1	0.092765172	0.034970155	0.076892323
ARID2	12q12	0.09275397	0.03499225	0.076932502
LAMB2	3p21.31	0.092700825	0.035097234	0.077146843
MNS1	15q21.3	0.092700738	0.035097406	0.077146843
CNOT11	2q11.2	-0.092697873	0.035103075	0.077150878
MRAP	21q22.11	0.092686992	0.035124605	0.077189771
TMEM241	18q11.2	0.09267955	0.035139338	0.077213718
CLUAP1	16p13.3	-0.092671387	0.035155503	0.077240807

KIR2DL3	19q13.42	0.092668303	0.035161612	0.077245799
EIF2A	3q25.1	-0.092632049	0.035233495	0.077395269
ZNF777	7q36.1	0.092629531	0.035238492	0.077397802
SCAND1	20q11.23	-0.092587675	0.035321649	0.077571105
CYP2R1	11p15.2	-0.092585938	0.035325103	0.077571105
SAMD9	7q21.2	0.092582552	0.035331839	0.0775758
CAMSAP3	19p13.2	-0.092580988	0.035334948	0.0775758
ZFAT	8q24.22	0.092555938	0.035384813	0.077676804
RBMS1	2q24.2	0.092549727	0.035397186	0.077695491
TRIM44	11p13	0.092531491	0.035433534	0.077766794
MAN1B1	9q34.3	-0.092529146	0.035438209	0.077768577
ZNF562	19p13.2	0.092524196	0.035448082	0.077781762
LOC100190986	16p12.2	0.092520462	0.035455531	0.077789628
MCM7	7q22.1	0.092513862	0.0354687	0.077810041
FDCSP	4q13.3 4q13	0.092510771	0.035474871	0.077815097
NUDT3	6p21.31	0.092505224	0.035485944	0.077830906
NPHP1	2q13	0.092491371	0.035513611	0.077875672
OR8B2	11q24.2	0.092491131	0.035514092	0.077875672
FKBP5	6p21.31	0.092472788	0.035550756	0.077943657
ARHGAP6	Xp22.2	0.092471746	0.035552839	0.077943657
MORN2	2p22.1	-0.092460285	0.035575765	0.077983977
TCHH	1q21.3	0.092458679	0.035578979	0.077983977
CCR9	3p21.31	0.092446313	0.035603732	0.078029735
GDF10	10q11.22	-0.09243994	0.035616493	0.078045682
HRK	12q24.22	-0.092438807	0.035618762	0.078045682
CLDN4	7q11.23	-0.092432495	0.035631406	0.07806489
PCDHGA1	5q31.3	0.092419238	0.035657976	0.0781146
KBTBD7	13q14.11	-0.092402102	0.035692345	0.078181383
ZBED9	6p22.1	-0.092389114	0.035718412	0.078229968
ERO1B	1q42.3	0.092326726	0.035843856	0.078496172
KIF17	1p36.12	-0.092315007	0.035867461	0.078539322
STAT5B	17q21.2	0.092275144	0.035947854	0.078706798
MBD4	3q21.3	0.092265941	0.035966435	0.078738917
TRIP12	2q36.3	0.092261337	0.035975735	0.078750712
SOHLH2	13q13.3	0.092258161	0.035982151	0.078756191
OR5B12	11q12.1	0.092254401	0.035989747	0.078757541
MED4	13q14.2	-0.092253782	0.035990999	0.078757541
PDP2	16q22.1	-0.092252047	0.035994505	0.078757541
BCL9L	11q23.3	0.092246227	0.036006268	0.078774718
MERTK	2q13	0.092218786	0.036061775	0.078882339
RBAKDN	7p22.1	-0.092218034	0.036063297	0.078882339
DAZAP2	12q13.13	-0.092195079	0.036109787	0.078975447
BRD2	6p21.32	-0.092169635	0.036161377	0.079079687
PIEZO1	16q24.3	0.092127866	0.036246205	0.079256583
EIF2S3	Xp22.11	-0.092111627	0.036279229	0.079320179
SELENOF	1p22.3	-0.092102336	0.036298137	0.079352899
FRMD8	11q13.1	0.092083145	0.036337216	0.079429706
NHLRC1	6p22.3	-0.092076892	0.036349956	0.079448926
MOSPD3	7q22.1	-0.092072377	0.036359159	0.079460413
TP53BP2	1q41	0.092049712	0.036405381	0.079552791
LILRB5	19q13.42	0.092046412	0.036412114	0.079558869
MISP3	19p13.12	-0.091995525	0.036516091	0.079777394
MAPK1	22q11.22	0.091985017	0.036537592	0.079815705
SYDE2	1p22.3	-0.091975812	0.036556436	0.079840195
LINC00473	6q27	0.091975666	0.036556735	0.079840195
RGL4	22q11.23	0.0919621	0.036584524	0.079892218
GFPT1	2p13.3	-0.091955926	0.036597175	0.079911177
POR	7q11.23	-0.091934998	0.036640091	0.079995424

DEFB131A	4p16.1	-0.091933236	0.036643706	0.079995424
UGT1A7	2q37.1	-0.091928477	0.036653472	0.080008067
PRG1	19q13.31	0.091921932	0.036666907	0.080022663
TRH	3q22.1	-0.091921346	0.03666811	0.080022663
SLC14A1	18q12.3	-0.091917804	0.036675381	0.080029857
LCT	2q21.3	-0.091908776	0.036693924	0.080047477
CCDC61	19q13.32	-0.091908645	0.036694193	0.080047477
TTLL2	6q27	0.091908064	0.036695386	0.080047477
MYO7B	2q14.3	-0.091905095	0.036701487	0.080052111
METTL16	17p13.3	-0.091875082	0.036763194	0.080178016
XCL1	1q24.2	0.091862445	0.036789201	0.080226045
MAPRE2	18q12.1-q12.2	0.091858147	0.036798053	0.080236655
SPATA21	1p36.13	0.09183898	0.036837538	0.080314051
MS4A4A	11q12.2	0.09182975	0.036856564	0.080346831
NKTR	3p22.1	0.091812643	0.036891852	0.08041505
SALL1	16q12.1	0.091808612	0.036900171	0.080424475
REG1A	2p12	-0.091799846	0.036918268	0.080455206
RPS6KA5	14q32.11	0.091790241	0.036938107	0.080489726
PFN4	2p23.3	-0.091774126	0.03697141	0.080548944
MS4A6A	11q12.2	0.091773219	0.036973286	0.080548944
EPN3	17q21.33	-0.09175073	0.037019806	0.080641565
SCN8A	12q13.13	0.091740587	0.037040803	0.080678571
PROP1	5q35.3	0.091728094	0.03706668	0.0807262
FAM167B	1p35.2	0.091724331	0.037074478	0.080734449
ATP6AP2	Xp11.4	0.09172181	0.037079701	0.080737089
MAGEH1	Xp11.21	0.091706527	0.037111388	0.080797344
USP46	4q12	0.091701664	0.037121475	0.080810566
LRRC37A16P	17q24.2	0.091683775	0.037158602	0.080882639
NAA80	3p21.31	-0.091661979	0.03720388	0.080967223
ARHGAP29	1p22.1	0.091661197	0.037205505	0.080967223
C17ORF107	17p13.2	0.091641746	0.037245954	0.081046487
IVL	1q21.3	0.091635418	0.03725912	0.081066373
SERPIND1	22q11.21	-0.091627815	0.037274944	0.081092037
CST6	11q13.1	0.09161552	0.037300547	0.081138969
CHRM2	7q33	-0.091612102	0.037307669	0.081145691
ZNF781	19q13.12	0.091609748	0.037312574	0.081147591
RPAP3	12q13.11	0.091607705	0.03731683	0.081148081
SCHIP1	3q25.32-q25.33	0.09159494	0.037343438	0.08119717
TAF7	5q31.3	-0.09157158	0.03739217	0.08129435
GLIPR1L2	12q21.2	-0.091569046	0.03739746	0.08129707
ANP32AP1	15q14	-0.09153928	0.037459643	0.081418627
HCK	20q11.21	0.091538408	0.037461467	0.081418627
CDKN1A	6p21.2	0.091519911	0.037500153	0.081493909
CAVIN3	11p15.4	0.091512704	0.037515237	0.081517889
CDK12	17q12	0.091510012	0.037520872	0.081521334
MYB	6q23.3	0.091498549	0.037544875	0.081564682
CENPK	5q12.3	0.091484916	0.037573441	0.081617692
DACH2	Xq21.2	-0.091483034	0.037577386	0.081617692
SLC19A1	21q22.3	-0.091476234	0.037591642	0.081639847
RCC2	1p36.13	0.091452959	0.037640471	0.081737074
SNORC	2q37.1	-0.091444487	0.037658258	0.081763173
MTIF2	2p16.1	-0.091443365	0.037660613	0.081763173
NR4A2	2q24.1	-0.091430381	0.037687889	0.081813568
NOC2L	1p36.33	-0.091427255	0.037694459	0.081819006
TTY6B	Yq11.223	-0.091404349	0.037742625	0.081914721
KITLG	12q21.32	0.091378452	0.037797145	0.082024205
ABCB9	12q24.31	-0.091372679	0.037809307	0.082041754
RALGDS	9q34.13-q34.2	0.091341459	0.03787514	0.082175745

PLEKHM1	17q21.31	-0.091304726	0.03795272	0.082335193
TMEM33	4p13	-0.091297953	0.03796704	0.082357384
PDHA2	4q22.3	0.091292434	0.037978711	0.082373822
AP3D1	19p13.3	0.091281367	0.038002126	0.082415729
GPR63	6q16.1	0.091272312	0.038021291	0.082435327
CUEDC2	10q24.32	-0.091271641	0.038022713	0.082435327
DDB1	11q12.2	0.091271293	0.038023448	0.082435327
LYPD2	8q24.3	-0.09123963	0.038090536	0.082571881
DPYSL4	10q26.3	0.0912231	0.038125599	0.082638991
GBP2	1p22.2	0.091220146	0.038131869	0.082643683
PFN1P2	1p11.2	0.091208124	0.038157389	0.08269009
PHF21B	22q13.31	0.091205332	0.038163319	0.082694038
PPP2CB	8p12	-0.09120217	0.038170035	0.082699689
SLC39A11	17q24.3-q25.1	-0.091200086	0.038174462	0.08270038
RUBCN	3q29	0.091153193	0.038274188	0.082907501
RNF166	16q24.2-q24.3	0.091150154	0.03828066	0.082912597
MED12	Xq13.1	0.091131831	0.038319692	0.082988209
CRAMP1	16p13.3	0.09110743	0.038371726	0.083091959
CEACAM5	19q13.2	0.091096662	0.038394707	0.083132779
LILRA1	19q13.42	0.091094677	0.038398943	0.08313301
CSRNP1	3p22.2	-0.091082681	0.038424562	0.083179528
CAPN12	19q13.2	-0.091071131	0.03844924	0.083224
ZNF205-AS1	16p13.3	-0.09105941	0.038474298	0.083269286
MXN1	7q36.3	-0.0910544	0.038485013	0.083283521
DCST2	1q21.3	-0.091052313	0.038489478	0.083284229
LOC100130691	2q31.2	-0.091043258	0.038508852	0.083312955
GABRG3	15q12	0.09104224	0.03851103	0.083312955
ICMT	1p36.31	0.091035267	0.038525957	0.083336289
ZCCHC17	1p35.2	-0.091024933	0.038548086	0.083375198
MFAP3L	4q33	0.091013342	0.03857292	0.083419947
CTSC	11q14.2	0.091001661	0.038597962	0.083465138
ECT2	3q26.31	0.090992021	0.038618635	0.083500873
LUC7L2	7q34	0.090979169	0.038646215	0.083551531
RCC1L	7q11.23	-0.090940094	0.038730169	0.083724045
ARHGAP17	16p12.1	0.09093714	0.038736523	0.083728789
C9ORF43	9q32	-0.090927167	0.038757977	0.083766168
HAND2-AS1	4q34.1	0.090921923	0.038769262	0.083781562
IFITM2	11p15.5	0.090919772	0.038773893	0.083782575
TIMM10B	11p15.4	-0.090911436	0.038791841	0.083812361
SNHG11	20q11.23	-0.090898844	0.038818964	0.083861961
WNT10A	2q35	0.090887381	0.038843669	0.083906327
SYNC	1p35.1	0.090876179	0.038867826	0.083949499
LOC642846	12p13.31	0.090869408	0.038882434	0.083972041
KIAA0232	4p16.1	-0.090850128	0.038924053	0.084052906
ID4	6p22.3	0.090831763	0.03896373	0.08412956
BAIAP2-DT	17q25.3	-0.090820342	0.038988424	0.084173849
POLR3E	16p12.2	-0.090814177	0.039001759	0.08419361
SUCLA2	13q14.2	-0.090785433	0.039063982	0.084318888
CAPG	2p11.2	-0.090774057	0.03908863	0.084360501
B3GNT9	16q22.1	0.090772668	0.039091642	0.084360501
FAM71D	14q23.3	-0.090763812	0.03911084	0.084392884
HIPK4	19q13.2	-0.090759323	0.039120577	0.084404846
ADRB1	10q25.3	-0.090748509	0.039144036	0.08444641
REXO1L1P	8q21.2	0.090725738	0.039193475	0.084540467
BTBD6	14q32.33	-0.09072456	0.039196035	0.084540467
TUBB4B	9q34.3	-0.090713531	0.039219999	0.084583092
HPS4	22q12.1	0.090711319	0.039224808	0.084584401
BDH2	4q24	-0.090705542	0.039237367	0.08460242

CALM3	19q13.32	-0.090679838	0.03929329	0.084705456
GPR157	1p36.22	0.09067971	0.039293569	0.084705456
FAM133B	7q21.2	0.090655697	0.039345874	0.084809128
PMS1	2q32.2	0.090653352	0.039350984	0.084811061
SNHG9	16p13.3	-0.090648406	0.039361766	0.084825216
ZNF746	7q36.1	0.090643192	0.039373135	0.084835141
PAX2	10q24.31	-0.090642429	0.0393748	0.084835141
KTI12	1p32.3	-0.090608978	0.039447806	0.084983341
DGCR10	22q11.21	0.090605999	0.039454314	0.084988266
TXNDC8	9q31.3	0.090582318	0.039506074	0.085090655
RBM27	5q32	0.090566776	0.039540074	0.085154776
WWC2	4q35.1	-0.09056304	0.039548251	0.085163275
ZNF598	16p13.3	0.090560262	0.039554334	0.085167264
IARS	9q22.31	0.090551404	0.039573729	0.085199911
TMEM255A	Xq24	0.090528305	0.039624346	0.08529515
NEDD8	14q12	-0.09052735	0.03962644	0.08529515
METTL15	11p14.1	-0.090518405	0.039646055	0.085328247
HIP1R	12q24.31	-0.090513979	0.039655767	0.085340023
ILRUN	6p21.31	-0.090500083	0.039686264	0.085396525
KCTD13	16p11.2	-0.090493222	0.039701327	0.085419807
HIST3H2A	1q42.13	0.090450779	0.03979463	0.085604945
BTBD16	10q26.13	-0.09045021	0.039795881	0.085604945
CDCP2	1p32.3	0.090432607	0.039834631	0.085679146
KCTD18	2q33.1	-0.090418413	0.039865902	0.085737244
LRRC47	1p36.32	-0.090403345	0.039899121	0.08579952
DCLRE1A	10q25.3	-0.090382636	0.039944813	0.085885199
IDH3A	15q25.1	-0.09038142	0.039947497	0.085885199
OR2W1	6p22.1	0.090374952	0.039961779	0.085906729
GJA9	1p34.3	-0.090366056	0.039981428	0.085939791
TMED10P1	8q24.3	0.090332964	0.040054589	0.086087123
WNT11	11q13.5	-0.090331186	0.040058524	0.086087123
DOK1	2p13.1	-0.090312946	0.040098902	0.086164699
IFIT1	10q23.31	-0.090290108	0.040149509	0.086264235
MDK	11p11.2	-0.090286113	0.040158366	0.086274056
PALMD	1p21.2	0.090283334	0.040164528	0.086278087
C16ORF82	16p12.1	0.090278731	0.040174737	0.086290808
OR6C6	12q13.2	-0.090267353	0.040199984	0.086335824
LRCH4	7q22.1	-0.090261711	0.040212506	0.086353503
BBS7	4q27	0.090251857	0.040234387	0.086391276
CD8B	2p11.2	0.090241652	0.040257059	0.086430737
LOC100271832	2p22.3	0.09022734	0.04028887	0.086481921
CCDC178	18q12.1	0.090227061	0.040289491	0.086481921
ANKRD20A3	9q21.11	-0.090223684	0.040297002	0.086488821
APPBP2	17q23.2	-0.09021534	0.040315561	0.086519429
NAF1	4q32.2	-0.090187465	0.040377618	0.086643369
DKFZP434A062	9q34.3	0.090185281	0.040382483	0.086644572
SPATA45	1q32.3	-0.090176446	0.04040217	0.086677574
PDCD4-AS1	10q25.2	0.090165414	0.040426766	0.086721099
EIF4B	12q13.13	-0.090162716	0.040432782	0.086724764
IFNW1	9p21.3	0.090148214	0.040465136	0.086784913
CPSF2	14q32.12	0.090138227	0.040487429	0.086818382
MAPK7	17p11.2	0.090137359	0.040489368	0.086818382
PRR22	19p13.3	-0.090103105	0.040565914	0.08697325
VCP	9p13.3	0.090042358	0.040701965	0.087254709
PDE1A	2q32.1	0.090040621	0.040705861	0.087254709
SNORD116-28	15q11.2	0.090038126	0.040711459	0.087257417
CLDN17	21q21.3	0.090033373	0.040722121	0.087270979
SPAG11B	8p23.1	0.090017632	0.040757452	0.08733447

INE1	Xp11.3	0.090016308	0.040760425	0.08733447
WASHC3	12q23.2	-0.089995292	0.040807641	0.087426332
LDHA	11p15.1	0.089991818	0.040815449	0.087433755
LHFPL3	7q22.2-q22.3	-0.089986188	0.040828109	0.087451568
LSMEM2	3p21.31	-0.089980634	0.0408406	0.087466269
ASB13	10p15.1	0.089979272	0.040843663	0.087466269
DNAJC15	13q14.11	-0.089972279	0.040859394	0.08749065
KIF1A	2q37.3	0.089967216	0.04087079	0.087505743
ASAP2	2p25.1 2p24	-0.089961946	0.040882652	0.087521831
NSD2	4p16.3	0.089914098	0.040990487	0.087743355
GPN3	12q24.11	-0.089901552	0.041018803	0.08779463
NKAIN3	8q12.3	-0.08987477	0.0410793	0.087914769
SLC8B1	12q24.13	-0.089868942	0.041092476	0.087933618
RBM42	19q13.12	-0.089858521	0.041116042	0.087973331
TIMM13	19p13.3	-0.089856871	0.041119775	0.087973331
PGPEP1L	15q26.3	-0.089849602	0.041136223	0.087999168
STS	Xp22.31	0.0898105	0.041224792	0.088179264
ZDHC11	5p15.33	-0.089797387	0.041254528	0.088233495
DPY19L2P1	7p14.2	0.089788105	0.04127559	0.088269162
SCARNA17	18q21.1	0.089778004	0.041298518	0.088308813
BRINP3	1q31.1	0.089772271	0.041311538	0.088327271
CCDC154	16p13.3	0.089747664	0.041367455	0.088437432
RGPD6	2q13	0.089744101	0.041375558	0.088445363
VASP	19q13.32	-0.089734256	0.041397952	0.088483836
POLR2G	11q12.3	-0.08972123	0.041427596	0.088528405
HERC5	4q22.1	0.089719493	0.04143155	0.088528405
FGF20	8p22	0.089719297	0.041431997	0.088528405
CCL3L1	17q21.1	0.089716862	0.041437541	0.088530853
TSEN54	17q25.1	-0.089700434	0.041474961	0.088601398
EML6	2p16.1	0.089696655	0.041483574	0.088610394
SMCR5	-	0.089690404	0.041497822	0.088631422
BMP7	20q13.31	-0.089686635	0.041506417	0.088640374
CRH	8q13.1	-0.089673023	0.041537464	0.088697269
PPP1R3E	14q11.2	0.089660183	0.041566769	0.088750431
PWP2	21q22.3	-0.089656622	0.041574898	0.088758373
RPS3A	4q31.3	-0.08964186	0.041608618	0.088820941
LGI4	19q13.12 19q13.11	0.089638955	0.041615256	0.088825693
TMEM254-AS1	10q22.3	-0.089632481	0.041630052	0.088847852
GRAMD2B	5q23.2	0.089612161	0.041676524	0.088937605
LINC00964	8q24.13	0.089607141	0.041688013	0.088952692
NSUN2	5p15.31	0.089584026	0.041740942	0.089049724
AMPD2	1p13.3	0.089583418	0.041742335	0.089049724
ZNF833P	19p13.2	0.089551771	0.041814894	0.089194355
TGDS	13q32.1	-0.089549985	0.041818993	0.089194355
KLF4	9q31.2	-0.089532444	0.041859261	0.089270783
CRK	17p13.3	-0.089526799	0.041872225	0.089288972
CYP39A1	6p12.3	-0.08952376	0.041879207	0.089294401
HLA-DPB2	6p21.32	0.089519225	0.041889628	0.08930716
ERVFRD-1	6p24.2	-0.089513901	0.041901863	0.089312727
CABIN1	22q11.23	0.089513426	0.041902954	0.089312727
CEP192	18p11.21	0.089512297	0.041905549	0.089312727
FAM92B	16q24.1	0.08950606	0.041919887	0.089333827
TLE4	9q21.31	0.089503005	0.041926913	0.089339341
STMN1	1p36.11	0.089499011	0.0419361	0.089346386
DOLK	9q34.11	-0.089497708	0.041939096	0.089346386
FGFBP1	4p15.32	0.089476371	0.041988202	0.089441534
ZNF414	19p13.2	-0.089454636	0.04203827	0.089538712
CHIT1	1q32.1	-0.089450555	0.042047677	0.089549275

NDUFS7	19p13.3	-0.089438658	0.04207511	0.08959822
ZNF281	1q32.1	0.089429714	0.042095745	0.089632679
BABAM1	19p13.11	-0.089414604	0.042130623	0.089697455
C11ORF71	11q23.2	-0.08940731	0.042147469	0.089723832
SLC9A8	20q13.13	-0.089386468	0.042195633	0.089816865
CABLES1	18q11.2	-0.089378913	0.042213104	0.089844552
HBA1	16p13.3	-0.089351787	0.042275883	0.089968657
THEM5	1q21.3	0.089338986	0.042305538	0.090022249
USP37	2q35	0.089323945	0.042340403	0.090086915
BFSP1	20p12.1	-0.089316913	0.042356711	0.090109822
NEU3	11q13.4	0.089315442	0.042360122	0.090109822
CHDH	3p21.1	-0.089310832	0.042370817	0.09012305
PRC1	15q26.1	0.08929963	0.042396815	0.09016882
TLCD5	11q23.3	-0.089295549	0.04240629	0.090179445
ZNF595	4p16.3	-0.089291728	0.042415163	0.090188784
PNLIPRP2	10q25.3	-0.089288259	0.042423219	0.090196388
NUP188	9q34.11	0.089281655	0.04243856	0.090219476
PHLDA3	1q32.1	-0.089274534	0.042455107	0.090245122
ZNF714	19p12	0.089271929	0.042461162	0.090248463
HSPA9	5q31.2	-0.089254648	0.042501345	0.090324332
HIST1H4D	6p22.2	0.089248741	0.042515088	0.090344
PAK2	3q29	0.089241362	0.042532261	0.090370954
TCERG1	5q32	0.089230159	0.042558342	0.090416827
C9ORF85	9q21.13	-0.089202156	0.0426236	0.090541315
MMP25	16p13.3	0.089201156	0.042625934	0.090541315
HDAC2	6q21	0.08918648	0.042660168	0.090604472
PLEKHA7	11p15.2-p15.1	-0.08915765	0.04272749	0.090737881
PINK1	1p36.12	-0.08914419	0.042758951	0.090787262
TACC1	8p11.22	0.089143842	0.042759763	0.090787262
OAZ2	15q22.31	-0.089138632	0.042771947	0.090803553
TRIM7	5q35.3	-0.089128474	0.042795709	0.090844419
NFIL3	9q22.31	0.089118225	0.042819695	0.090885751
PTH2R	2q34	0.089112154	0.042833909	0.090906336
SMC1A	Xp11.22	0.089110062	0.042838807	0.090907146
REC8	14q12	0.08910711	0.042845722	0.090910797
RPS15AP10	1p34.1	0.089105471	0.04284956	0.090910797
LINC01205	3q13.13	-0.089092762	0.042879337	0.090964386
DHRS4L1	14q11.2	-0.0890374	0.043009252	0.091230373
PRKRA	2q31.2	-0.089033471	0.043018484	0.091231073
DCUN1D4	4q12	-0.089032474	0.043020827	0.091231073
GNPTAB	12q23.2	0.089031473	0.043023178	0.091231073
IFNA10	9p21.3	0.089024535	0.043039488	0.091256045
MAP3K7	6q15	0.089014846	0.043062273	0.091294739
PGAM1	10q24.1	0.089007159	0.043080356	0.09132346
CATSPERB	14q32.12	0.088991807	0.043116491	0.091390434
MFNG	22q13.1	0.088976418	0.043152738	0.091457634
DIO3	14q32.31	0.08894281	0.043231988	0.091607167
ALKBH6	19q13.12	-0.088942638	0.043232394	0.091607167
PELI1	2p14	0.088894877	0.043345229	0.091836591
MTCL1	18p11.22	0.088892185	0.043351596	0.091840415
TEX9	15q21.3	0.088884762	0.043369157	0.091860359
XKR3	22q11.1	-0.088882436	0.043374662	0.091860359
LINC00482	17q25.3	-0.088882419	0.0433747	0.091860359
FBXL2	3p22.3	0.088877596	0.043386116	0.091874869
LCP1	13q14.13	0.088858665	0.043430944	0.091952392
UCP3	11q13.4	0.088858278	0.04343186	0.091952392
LINGO4	1q21.3	-0.088836618	0.043483201	0.092051408
BNIP5	6p21.31	-0.088828677	0.043502035	0.092081594

TBC1D10B	16p11.2	0.088825582	0.043509379	0.092087456
ST3GAL5	2p11.2	-0.088820543	0.043521335	0.092103077
STPG3	9q34.3	0.088813827	0.043537276	0.092119031
CELSR3	3p21.31	0.088813511	0.043538026	0.092119031
CISH	3p21.2	-0.088798226	0.043574325	0.092183388
RIPPLY2	6q14.2	-0.088796847	0.043577602	0.092183388
IARS2	1q41	-0.088766964	0.043648645	0.092323969
CD302	2q24.2	-0.088764012	0.043655669	0.092329126
SEC61A2	10p14	0.088761146	0.043662488	0.092333846
TGFBR3	1p22.1	-0.088758326	0.0436692	0.09233834
C4ORF19	4p14	-0.088729276	0.043738383	0.092474912
GON4L	1q22	0.08871078	0.043782481	0.092554996
RNASE13	14q11.2	-0.088709533	0.043785456	0.092554996
BRS3	Xq26.3	-0.088707054	0.043791368	0.092557773
LINC02731	11q25	0.088697193	0.043814899	0.092597786
DLG3	Xq13.1	-0.088662324	0.043898185	0.092764062
C4A	6p21.33	0.088637488	0.043957588	0.092879841
IFNG	12q15	0.088626946	0.043982823	0.092923408
AHR	7p21.1	0.088620728	0.043997713	0.092940287
TMEM132B	12q24.31-q24.32	0.088619754	0.044000046	0.092940287
ABCB10	1q42.13	-0.088614997	0.044011441	0.092945204
DNTT	10q24.1	0.088613656	0.044014653	0.092945204
ZNF487	10q11.21	-0.088613	0.044016226	0.092945204
FAM160A1	4q31.3	0.088597977	0.044052232	0.093011478
SLC16A7	12q14.1	-0.088577222	0.044102015	0.093106823
AGPS	2q31.2	0.088568712	0.044122442	0.093140179
ZNF813	19q13.42	0.088554731	0.044156017	0.093201282
FAM201A	9p13.1	-0.088548534	0.044170907	0.093222936
FAM214A	15q21.2-q21.3	0.08851522	0.044251021	0.093382225
KBTD13	15q22.31	-0.088512894	0.04425662	0.093384251
MTNR1A	4q35.2	0.088484908	0.044324021	0.09350926
EBLN2	3p13	0.088484438	0.044325155	0.09350926
CRKL	22q11.21	0.088473798	0.044350803	0.093553563
YWHAZ	8q22.3	0.088456604	0.044392277	0.093631238
DNAH2	17p13.1	0.088449657	0.044409044	0.093656789
APPL2	12q23.3	0.088414574	0.044493796	0.093825699
SNORD116-20	15q11.2	0.088390764	0.044551395	0.093937318
LINC02447	4p16.1	-0.088386531	0.04456164	0.093949081
COL6A4P1	3p25.1	0.088338503	0.044678038	0.094184616
WFDC8	20q13.12	0.088336079	0.044683919	0.09418715
SYNJ1	21q22.11	0.088333947	0.044689092	0.094188192
DRD1	5q35.2	0.08832821	0.044703015	0.094207673
ILDR1	3q13.33	-0.088299038	0.044773872	0.09434712
DUSP26	8p12	0.088285346	0.04480716	0.094396902
BMS1	10q11.21	0.088284404	0.044809453	0.094396902
ITPRID2	2q31.3	-0.088283535	0.044811565	0.094396902
RPS6KA3	Xp22.12	0.088252145	0.044887968	0.094547954
WBP4	13q14.11	-0.088233082	0.044934421	0.094635896
AKNAD1	1p13.3	0.088218989	0.044968788	0.094698369
ZNF112	19q13.31	0.088211809	0.044986308	0.094725353
WEE1	11p15.4	0.088200518	0.045013867	0.09477347
TMSB15A	Xq22.1	0.088185539	0.045050451	0.09483267
TEP1	14q11.2	0.088185148	0.045051407	0.09483267
EGFL8	6p21.32	0.088167473	0.045094607	0.094913681
OGT	Xq13.1	0.088154233	0.04512699	0.094968996
UGT1A10	2q37.1	-0.088152871	0.045130324	0.094968996
OR5M11	11q12.1	0.088141157	0.045158993	0.095019392
TPCN1	12q24.13	0.088101609	0.045255897	0.095213336

PIIP5K2	5q21.1	0.088094836	0.045272511	0.095238337
MINDY1	1q21.3	-0.088089629	0.045285285	0.095255256
CTSG	14q12	-0.088087678	0.045290074	0.095255374
ADCY6	12q13.12	-0.08808372	0.045299787	0.095265849
ZNF236	18q23	0.08807521	0.045320679	0.09529983
CD38	4p15.32	0.088064095	0.045347979	0.095347276
MAP3K11	11q13.1	-0.088029273	0.045433595	0.095517313
LRRC61	7q36.1	0.088025105	0.045443852	0.0955289
PPP6R3	11q13.2	0.088023107	0.045448768	0.095529258
PCBP4	3p21.2	0.0880192	0.045458387	0.0955395
SMIM30	7q31.1	-0.08800435	0.045494954	0.095594863
HOXA6	7p15.2	0.088004017	0.045495775	0.095594863
SEMG2	20q13.12	-0.088002718	0.045498976	0.095594863
FAM24B	10q26.13	0.087998534	0.045509284	0.095599186
RXYLT1	12q14.2	-0.087996361	0.045514638	0.095599186
TMEM181	6q25.3	-0.087996101	0.04551528	0.095599186
SLC25A10	17q25.3	-0.087986983	0.045537755	0.095636412
ENPP5	6p21.1	-0.087963797	0.045594946	0.095746533
LIME1	20q13.33	0.087954418	0.045618097	0.095785156
CALR3	19p13.11	-0.087949508	0.04563022	0.095800619
PCDHGB4	5q31.3	0.087933403	0.045670007	0.095874152
NCKIPSD	3p21.31	-0.087930277	0.045677734	0.095880373
TNFAIP1	17q11.2	0.087928106	0.0456831	0.095881639
CD164L2	1p36.11	-0.087899647	0.045753496	0.096019379
OR13C8	9q31.1	-0.08789205	0.045772303	0.096043338
LVRN	5q23.1	0.08789118	0.045774455	0.096043338
RNF41	12q13.3	-0.087888682	0.045780643	0.09604631
NUTF2	16q22.1	-0.087866017	0.045836799	0.096150404
FGF2	4q28.1	0.087864801	0.045839813	0.096150404
PAPOLG	2p16.1	0.087854815	0.045864575	0.096192321
ABCC6P2	16p13.11	-0.087852036	0.045871468	0.096196754
MYH3	17p13.1	0.087847698	0.04588223	0.0962093
NCSTN	1q23.2	-0.087834581	0.045914781	0.096267529
C14ORF177	14q32.2	0.087826164	0.045935681	0.096301319
IL22	12q15	0.087796248	0.046010025	0.096447131
RALY	20q11.22	-0.087769105	0.046077566	0.096578655
ZDHHC23	3q13.31	-0.087745704	0.046135862	0.096690777
KRTAP21-1	21q22.11	0.087703868	0.046240238	0.096899437
RIBC2	22q13.31	0.087697509	0.046256121	0.09691951
WIPI2	7p22.1	0.087695295	0.046261653	0.09691951
BMPR1A	10q23.2	0.087694251	0.046264261	0.09691951
MSANTD3	9q31.1	0.087678272	0.046304194	0.096993073
BPTF	17q24.2	0.087655695	0.046360672	0.097101271
SPARCL1	4q22.1	0.087640498	0.046398718	0.097170847
ASF1B	19p13.12	0.087631032	0.046422428	0.097206794
OR14J1	6p22.1	-0.08762979	0.04642554	0.097206794
NCBP3	17p13.2	0.08761462	0.046463565	0.097276293
COMMD10	5q23.1	-0.087608802	0.046478155	0.09729672
KANK2	19p13.2	0.087599597	0.046501246	0.097334936
GEMIN6	2p22.1	-0.087597339	0.046506911	0.097336673
EXTL2	1p21.2	0.087592997	0.046517807	0.097349357
PVR	19q13.31	0.08758935	0.046526962	0.097358394
SCARB2	4q21.1	0.087560867	0.046598507	0.097497968
H3F3A	1q42.12	-0.087556004	0.046610732	0.097513409
PHYH	10p13	-0.087536639	0.046659437	0.097600961
RNF157	17q25.1	0.08753551	0.046662278	0.097600961
MLXIPL	7q11.23	-0.087518364	0.046705442	0.097671197
EXOSC8	13q13.3	-0.087518316	0.046705561	0.097671197

RFC5	12q24.23	0.087486794	0.046785001	0.09782716
MYOM2	8p23.3	-0.087469947	0.046827503	0.097905861
PSRC1	1p13.3	0.087456661	0.046861045	0.097965816
ANAPC10	4q31.21	-0.087445806	0.046888464	0.098012958
XAGE5	Xp11.22	0.087430864	0.046926231	0.098081718
FGD6	12q22	0.087424097	0.046943342	0.098107297
UBE2S	19q13.42	0.087404385	0.046993218	0.098201338
ABTB2	11p13	0.087402214	0.046998714	0.098202628
DUSP13	10q22.2	-0.087395331	0.04701614	0.098228843
KLHL34	Xp22.12	0.087389376	0.047031222	0.098250156
CA1	8q21.2	-0.087366275	0.047089768	0.098361754
KSR2	12q24.22-q24.23	0.087364443	0.047094416	0.098361754
DAW1	2q36.3	0.08733789	0.047161792	0.098492258
OR1C1	1q44	-0.087310509	0.047231353	0.098627297
TACC3	4p16.3	0.087303305	0.04724967	0.098655311
MARK4	19q13.32	0.087282116	0.047303576	0.098757621
LINC01011	6p25.2	-0.087264186	0.047349233	0.09884269
EBAG9	8q23.2	-0.08725346	0.047376564	0.098882008
C11ORF68	11q13.1	0.087252939	0.047377892	0.098882008
ATXN1L	16q22.2	0.087250941	0.047382983	0.09888238
FAM124A	13q14.3	0.087228539	0.047440114	0.098991343
VAC14	16q22.1-q22.2	0.087220374	0.04746095	0.099024556
PAQR4	16p13.3	0.087208477	0.047491324	0.099077661
DCBLD1	6q22.1	0.087197234	0.047520045	0.099127307
HIST1H4H	6p22.2	-0.087186772	0.047546783	0.099172806
OXA1L	14q11.2	-0.087173918	0.047579652	0.09923108
MBNL2	13q32.1	0.087170442	0.047588542	0.09923934
CD37	19q13.33	0.087156809	0.04762343	0.099301807
BMPER	7p14.3	0.087150972	0.047638373	0.099322677
CLCN5	Xp11.23	-0.087137009	0.047674134	0.099386942
NMD3	3q26.1	0.087119989	0.047717757	0.099467583
SNX9	6q25.3	0.087112955	0.047735795	0.09949488
AQP10	1q21.3	-0.087109107	0.047745667	0.099505153
FMO4	1q24.3	-0.087095935	0.047779466	0.099565284
MPV17L2	19p13.11	-0.087075921	0.047830862	0.099662068
RAB36	22q11.23	0.087072141	0.047840572	0.099671984
MYL12A	18p11.31	-0.087067713	0.047851953	0.099685379
ADM2	22q13.33	0.087063805	0.047861997	0.099692644
IRAK1BP1	6q14.1	-0.087062502	0.047865345	0.099692644
ARPC5	1q25.3	-0.087049824	0.047897946	0.099750223
TNFRSF14-AS1	1p36.32	-0.08704635	0.047906881	0.099758511
OR2S2	9p13.3	0.087044031	0.047912848	0.099760615
HCFC1	Xq28	0.087026204	0.047958732	0.099845825
MYH8	17p13.1	0.086988299	0.048056414	0.100030514
PRRT1	6p21.32	0.086986783	0.048060325	0.100030514
PDCL3	2q11.2	-0.086985998	0.048062351	0.100030514
TNFRSF11A	18q21.33	-0.086982352	0.048071755	0.100039742
DNAJC1	10p12.31	0.086979137	0.04808005	0.100046662
COL18A1-AS1	21q22.3	0.08696463	0.048117496	0.100114231
SLC41A1	1q32.1	-0.08696038	0.048128469	0.100126715
AFM	4q13.3	-0.08692778	0.04821272	0.100283156
NUP107	12q15	0.086926253	0.048216671	0.100283156
FAM222B	17q11.2	-0.086922953	0.048225206	0.100283156
MED1	17q12	0.086921651	0.048228576	0.100283156
RNF121	11q13.4	0.086921651	0.048228576	0.100283156
CCDC110	4q35.1	0.086919306	0.048234642	0.10028541
CYP2A6	19q13.2	-0.086910723	0.048256851	0.100321225
ERLIN2	8p11.23	-0.086898204	0.048289264	0.10037824

DGKE	17q22	0.0868791	0.04833876	0.100464589
GTF2IRD1	7q11.23	0.086878318	0.048340786	0.100464589
DKFZP586I1420	7p14.3	0.086869634	0.048363299	0.100501002
TECTB	10q25.2	-0.086867166	0.0483697	0.100503929
MAGI1	3p14.1	-0.086862079	0.048382892	0.10051527
CTPS2	Xp22.2	-0.086861211	0.048385145	0.10051527
BAIAP3	16p13.3	0.08685383	0.048404295	0.100544677
IFT46	11q23.3	0.086850009	0.048414211	0.100554897
STAM	10p12.33	-0.086846883	0.048422325	0.100561374
FASTKD5	20p13	-0.086844712	0.04842796	0.100562703
CCR7	17q21.2	0.086825607	0.048477576	0.100655348
MAP2	2q34	-0.086814494	0.048506457	0.100704928
SPINT1	15q15.1	-0.086787138	0.048577612	0.100842253
NOP53	19q13.33	-0.086773244	0.048613785	0.100906938
C7ORF71	7p15.2	0.086747091	0.048681935	0.101037979
BORCS8-MEF2B	19p13.11	0.086739211	0.048702484	0.101070207
TTL13P	15q26.1	-0.086736079	0.048710653	0.10107674
NME5	5q31.2	-0.086731735	0.048721986	0.101089835
RIOK2	5q15	-0.086729651	0.048727424	0.101090698
CYP1A2	15q24.1	-0.086725582	0.048738043	0.101102308
ZIK1	19q13.43	0.08671567	0.048763917	0.101145559
RHBDD1	2q36.3	0.086704815	0.048792266	0.101193933
EPHA1	7q34-q35	-0.086674075	0.048872625	0.101350153
TRUB1	10q25.3	-0.086664436	0.048897845	0.101392008
PVALEF	17q25.3	0.08665885	0.048912463	0.101411874
SRF	6p21.1	0.08664455	0.04894991	0.101479062
USP48	1p36.12	0.086629266	0.048989957	0.101551625
PTTG1	5q33.3	0.086619627	0.049015227	0.101593547
PLD6	17p11.2	-0.086610598	0.049038909	0.101618808
SLC38A3	3p21.31	0.086609538	0.04904169	0.101618808
ZBED3-AS1	5q13.3	-0.086609206	0.049042559	0.101618808
DARS2	1q25.1	-0.086604343	0.049055319	0.101634784
KRT6C	12q13.13	0.086580023	0.049119173	0.101756607
CATSPER2	15q15.3	-0.08657647	0.049128506	0.101765468
IL13RA2	Xq23	0.086570784	0.049143447	0.101785945
OR2A7	7q35	-0.086554585	0.049186033	0.101863668
C19ORF25	19p13.3	-0.08654017	0.049223956	0.101931719
RPS2P32	7p15.3	0.086538005	0.049229655	0.101933034
PENK	8q12.1	-0.086526491	0.049259964	0.1019853
PRMT8	12p13.32	0.086523141	0.049268788	0.101993079
CENPH	5q13.2	0.086516771	0.049285566	0.102017321
AGBL4	1p33	-0.08651278	0.049296081	0.102028595
PBXIP1	1q21.3	-0.086505261	0.049315895	0.10205911
INTS1	7p22.3	0.086478862	0.049385516	0.102190232
AFG1L	6q21	-0.086477388	0.049389407	0.102190232
DOCK9	13q32.3	0.086453332	0.049452925	0.10231114
PLEKHB1	11q13.4	-0.086442216	0.049482298	0.102361386
CNTN2	1q32.1	-0.08643748	0.049494819	0.102376767
KLHDC9	1q23.3	-0.086433578	0.049505135	0.102386157
OR1B1	9q33.2	0.086431896	0.049509581	0.102386157
DEFB4A	8p23.1	0.086429992	0.049514617	0.102386157
SLC4A10	2q24.2	0.086408185	0.049572316	0.102494938
PBK	8p21.1	0.08640427	0.049582681	0.102505841
C9ORF24	9p13.3	-0.086372594	0.049666607	0.102668802
SLC43A1	11q12.1	0.086341831	0.049748227	0.102826965
CASS4	20q13.31	0.086301236	0.049856106	0.103039365
CIB2	15q25.1	0.08629151	0.049881981	0.103082259
UTP25	1q32.2	0.086272708	0.049932035	0.103175105

C12ORF42	12q23.2-q23.3	0.086267287	0.049946474	0.103194348
SEC13	3p25.3	-0.086246049	0.050003078	0.103300693
MLANA	9p24.1	0.08623219	0.050040042	0.103366449
LRP6	12p13.2	-0.086224339	0.050060992	0.10339808
CDCA3	12p13.31	0.086222602	0.050065628	0.10339808
SPATA22	17p13.2	0.086206685	0.050108129	0.103475241
UBTF	17q21.31	0.086192122	0.050147041	0.103544972
ZNF215	11p15.4	0.086174494	0.050194176	0.103631668
CDC5L	6p21.1	0.086152003	0.050254368	0.103745301
UQCC1	20q11.22	-0.086137674	0.050292746	0.103813882
DCTN2	12q13.3	-0.086124736	0.050327423	0.103874811
TRPV4	12q24.11	0.086119006	0.050342785	0.103895864
CPSF4L	17q25.1	-0.086110279	0.05036619	0.103933512
SCO1	17p13.1	-0.086105197	0.050379826	0.103950994
S1PR4	19p13.3	-0.086077582	0.050453967	0.104093302
ALOX15B	17p13.1	-0.086061517	0.050497141	0.104171699
RIN3	14q32.12	0.086057957	0.050506713	0.10418077
HIFOO	3q22.1	-0.086049711	0.050528889	0.104215834
TULP4	6q25.3	0.086028866	0.050584984	0.104320841
DOC2B	17p13.3	0.086023729	0.050598817	0.104338679
ZSCAN16	6p22.1	-0.08601315	0.050627311	0.104386742
TOP1	20q12	0.086010283	0.050635037	0.10439198
MTF2	1p22.1	0.086004032	0.050651881	0.104416014
CAND1	12q14.3-q15	0.085996302	0.050672721	0.104448277
RDH10	8q21.11	0.085966429	0.050753316	0.104597815
NOP14-AS1	4p16.3	-0.085965561	0.050755661	0.104597815
ADAM32	8p11.22	0.08595363	0.050787882	0.104653502
MT1E	16q13	0.085947325	0.050804916	0.104677888
MED8	1p34.2	-0.085942462	0.050818058	0.104694249
CYYR1	21q21.3	0.085939944	0.050824864	0.104697556
DLGAP3	1p34.3	0.085932832	0.050844089	0.104726442
TAF4A1	3p14.1	0.085930307	0.050850918	0.104729792
MYPOP	19q13.32	0.085920752	0.05087676	0.104772294
SKA1	18q21.1	0.085916673	0.050887797	0.104778155
TNNC2	20q13.12	0.085915853	0.050890016	0.104778155
ZFR	5p13.3	0.085903472	0.050923527	0.104836429
LEFTY2	1q42.12	-0.085900962	0.050930322	0.104839696
C12ORF66	12q14.2	-0.085864311	0.05102964	0.1050334
FBXO39	17p13.1	0.085847095	0.051076349	0.105118792
C16ORF87	16q11.2	0.085841816	0.051090678	0.105137533
MORN5	9q33.2	-0.085831281	0.051119285	0.105185649
PGM5P2	9p11.2	0.08582788	0.051128524	0.105193908
PDCD7	15q22.31	-0.085825838	0.05113407	0.105194567
DTNBP1	6p22.3	-0.085816633	0.051159082	0.105235268
PRPF6	20q13.33	-0.08581177	0.0511723	0.105251702
WDR66	12q24.31	0.085801176	0.051201106	0.105291377
SOCS6	18q22.2	-0.085800829	0.051202051	0.105291377
TERT	5p15.33	0.085791003	0.05122878	0.105328637
G3BP1	5q33.1	0.085790321	0.051230635	0.105328637
FOXRED2	22q12.3	0.085781116	0.051255686	0.105369379
CBARP	19p13.3	0.085763498	0.051303665	0.105457243
CIZ1	9q34.11	0.085756975	0.051321435	0.105482999
CDC45	22q11.21	0.085743515	0.051358125	0.105547631
SMIM10L2B	Xq26.3	0.085735834	0.051379073	0.105579903
C8G	9q34.3	-0.085724886	0.05140894	0.10563017
RNASE4	14q11.2	-0.085723022	0.051414029	0.10563017
STX1A	7q11.23	0.085699488	0.051478287	0.105751395
GBA2	9p13.3	0.085686897	0.051512696	0.105811283

FXR2	17p13.1	-0.085635662	0.051652903	0.106088126
SPACA6	19q13.41	0.085633797	0.051658014	0.106088126
XRN2	20p11.22	0.085596411	0.051760532	0.106287821
SCARNA8	9p22.1	0.085589816	0.051778635	0.10631415
PEG3-AS1	19q13.43	0.085564395	0.051848462	0.106446664
NPRL3	16p13.3	-0.085561068	0.051857605	0.106454578
MTMR12	5p13.3	-0.085558637	0.051864289	0.106457442
ADGRG1	16q21	0.085553166	0.05187933	0.106477459
DNM3	1q24.3	0.085531283	0.051939532	0.106590149
SAC3D1	11q13.1	-0.085527636	0.051949571	0.106599884
GJB6	13q12.11	0.085513115	0.051989554	0.106671056
PDLIM2	8p21.3	0.085491337	0.052049573	0.106783317
ELOVL5	6p12.1	0.085485866	0.052064659	0.106803382
CLN8	8p23.3	0.085481959	0.052075437	0.106814607
NDP	Xp11.3	0.085472487	0.052101569	0.10685732
RIPK1	6p25.2	0.085467022	0.05211665	0.10687736
TRAPPC2B	19q13.43	-0.085459207	0.052138226	0.106910715
SPTLC3	20p12.1	-0.085443576	0.0521814	0.106988346
COX10	17p12	-0.085432895	0.052210919	0.107037968
PLEK	2p14	0.085418567	0.05225054	0.107108287
TMC5	16p12.3	0.085410491	0.052272883	0.107143177
INTS3	1q21.3	-0.085392602	0.052322402	0.107233756
OR2K2	9q31.3	-0.08537422	0.052373328	0.1073272
CCHCR1	6p21.33	-0.085361948	0.052407348	0.107385986
C5AR1	19q13.32	0.085332423	0.052489275	0.107542912
ZNF773	19q13.43	0.08532096	0.052521111	0.107597187
RAC1	7p22.1	0.085315403	0.052536552	0.107617868
C4ORF48	4p16.3	-0.085306111	0.052562376	0.107654147
WDYHV1	8q24.13	0.085304767	0.052566113	0.107654147
TNFRSF10A	8p21.3	0.085301682	0.052574689	0.107654147
GTF2F2	13q14.12-q14.13	-0.085301335	0.052575654	0.107654147
HPX	11p15.4	0.085275285	0.052648125	0.107791575
GSDMA	17q21.1	0.085256532	0.052700349	0.107887525
LINC00663	19p13.11	-0.085254142	0.052707008	0.107890184
REN	1q32.1	0.085250771	0.052716402	0.107898441
NXF3	Xq22.1	-0.085244971	0.052732566	0.107899169
NWD1	19p13.11	-0.085242469	0.052739541	0.107899169
LOC100270746	6p22.2	-0.085242198	0.052740295	0.107899169
CHAC2	2p16.2	-0.085241896	0.052741137	0.107899169
MMGT1	Xq26.3	0.085241028	0.052743558	0.107899169
NUTM2D	10q23.2	-0.085237248	0.052754095	0.107909759
WEE2	7q34	-0.085234093	0.052762893	0.107916789
LRATD2	8q24.21	0.085218578	0.052806175	0.107994341
TRIM53AP	11q14.3	-0.085190158	0.052885534	0.108145653
BUD13	11q23.3	0.08517629	0.052924294	0.10821392
POLR2J	7q22.1	-0.085159615	0.052970931	0.108292273
CNBD2	20q11.23	-0.085158742	0.052973373	0.108292273
EIF3L	22q13.1	-0.085154231	0.052985996	0.108307078
RBBP8NL	20q13.33	-0.085142862	0.053017819	0.108361122
NAA25	12q24.13	0.085137732	0.053032186	0.108371151
TDRD9	14q32.33	0.085137265	0.053033493	0.108371151
C16ORF71	16p13.3	-0.085133392	0.053044342	0.108382318
TLNRD1	15q25.1	-0.08511142	0.053105917	0.108497118
OR2AG2	11p15.4	-0.085108715	0.0531135	0.108501599
BRD9	5p15.33	0.085102909	0.053129782	0.108523846
NPPC	2q37.1	0.085094514	0.053153334	0.108560938
DHX30	3p21.31	-0.085089102	0.053168521	0.108576871
CRTAM	11q24.1	0.08508789	0.053171922	0.108576871

CARD17	11q22.3	0.085083672	0.053183763	0.108590033
DAZ2	Yq11.223	-0.085073477	0.053212389	0.108637465
FRAT1	10q24.1	-0.085053151	0.053269498	0.108743028
JRKL	11q21	0.085039563	0.053307706	0.108809991
TAF6L	11q12.3	-0.085033354	0.053325172	0.108834606
TMEM98	17q11.2	-0.085027447	0.053341793	0.108857491
ZNF706	8q22.3	0.085011601	0.053386402	0.108937483
CRYGC	2q33.3	0.084999907	0.053421699	0.10899846
CTF1	16p11.2	-0.084991409	0.053443289	0.10903146
PRR5-ARHGAP8	22q13.31	-0.084971107	0.053500538	0.109134887
LINC01312	6q23.2	-0.084969586	0.053504829	0.109134887
TEX261	2p13.3	0.08494139	0.053584428	0.109286174
DLX1	2q31.1	0.084934762	0.053603153	0.109313289
TIMM44	19p13.2	-0.084928538	0.053620743	0.109338083
L2HGDH	14q21.3	0.084919509	0.053646268	0.109379052
USP16	21q21.3	-0.084909521	0.053674517	0.109421931
CLEC1B	12p13.31-p13.2	-0.084906446	0.053683216	0.109421931
UQCRBP1	Xp11.21	-0.084906308	0.053683606	0.109421931
FFAR1	19q13.12	0.084895381	0.053714526	0.109473869
ZFP69	1p34.2	0.084892676	0.053722184	0.109478393
DDOST	1p36.12	-0.084882948	0.053749728	0.109523436
CD5L	1q23.1	-0.084873647	0.053776074	0.1095599
NCOA4	10q11.22	-0.084872788	0.053778508	0.1095599
ARHGAP15	2q22.2-q22.3	0.084857376	0.05382219	0.109626401
CETP	16q13	0.084856115	0.053825765	0.109626401
TARSL2	15q26.3	0.084855507	0.053827489	0.109626401
LINC00574	6q27	0.084851546	0.053838723	0.109638188
BTNL2	6p21.32	0.084845298	0.053856444	0.109663183
FIP1L1	4q12	-0.08483675	0.053880696	0.109701467
CBX6	22q13.1	0.084829021	0.053902632	0.10973503
LINC00189	21q21.3	0.084815243	0.053941758	0.109803578
PCBP2	12q13.13	-0.084797499	0.053992178	0.109895101
MYPN	10q21.3	-0.084789685	0.054014395	0.109929205
CUL1	7q36.1	0.084785342	0.054026747	0.109943228
NRROS	3q29	0.084776919	0.054050709	0.109980872
MICOS10	1p36.13	-0.084764327	0.054086545	0.110042667
TMEM30A	6q14.1	0.084758943	0.054101874	0.110062731
CCR6	6q27	0.084752083	0.054121411	0.110091351
HRH1	3p25.3	0.084748001	0.054133038	0.110103875
SRGN	10q22.1	0.084733934	0.054173127	0.110174283
GATA3-AS1	10p14	0.0847318	0.05417921	0.110175523
MED20	6p21.1	-0.084718999	0.054215713	0.110238617
KIF5B	10p11.22	0.084713179	0.054232317	0.11026124
PKMYT1	16p13.3	0.084693901	0.054287344	0.110348201
SMUG1	12q13.13	-0.084693293	0.05428908	0.110348201
THYN1	11q25	-0.08469147	0.054294288	0.110348201
C4ORF3	4q26	0.084690514	0.054297016	0.110348201
PDE9A	21q22.3	-0.084627904	0.054476079	0.110700936
AUNIP	1p36.11	0.084614837	0.054513513	0.110765823
ADGRE5	19p13.12	-0.084603068	0.054547244	0.110823175
PARD3B	2q33.3	0.084586656	0.054594315	0.110907511
ABCC12	16q12.1	-0.084584753	0.054599773	0.110907511
GIMAP6	7q36.1	0.084576496	0.054623471	0.11093062
WWC3	Xp22.2	0.084576409	0.05462372	0.11093062
MATN1	1p35.2	0.084574135	0.054630247	0.11093062
PURA	5q31.3	0.084573109	0.054633193	0.11093062
MBL2	10q21.1	0.084570092	0.054641854	0.110937016
RHO	3q22.1	0.084545153	0.054713497	0.111071268

DFFA	1p36.22	-0.084541847	0.054722998	0.111079354
CRTC1	19p13.11	0.084525869	0.054768947	0.111153457
BPIFB3	20q11.21	0.084525312	0.054770548	0.111153457
MAP3K7CL	21q21.3	0.084507286	0.054822426	0.111247525
TBCCD1	3q27.3	0.084504943	0.054829172	0.111249998
SPOPL	2q22.1	0.084501209	0.054839924	0.1112606
THOC3	5q35.2	-0.084492436	0.054865192	0.111300646
IGLL1	22q11.23	0.084490058	0.054872043	0.111303329
ATP6AP1	Xq28	0.08448106	0.054897972	0.111344703
ZNF429	19p12	-0.084475069	0.054915245	0.111368514
GTF2H4	6p21.33	-0.084464995	0.054944293	0.1114162
RPL23P8	7p21.1	-0.084459177	0.054961076	0.111439008
NBPF11	1q21.2	0.084452838	0.054979368	0.111464868
OR7E156P	13q21.31	0.084445929	0.05499931	0.11149407
FIBCD1	9q34.12	0.084433795	0.055034347	0.111553862
HMX3	10q26.13	-0.08441956	0.055075473	0.111625983
CCT6B	17q12	-0.084413413	0.055093239	0.111650751
GCSAM	3q13.2	0.084398219	0.05513718	0.111728551
DUSP5P1	1q42.13	0.084393665	0.055150352	0.111743995
HOXA10	7p15.2	0.084384276	0.055177524	0.111787797
DDX59	1q32.1	-0.084377204	0.055197998	0.111818023
ADAMTS19	5q23.3	0.08437416	0.055206812	0.111824626
RELA	11q13.1	0.084363916	0.055236483	0.111873469
PTGER1	19p13.12	0.084348217	0.055281978	0.111954348
ZP2	16p12.3-p12.2	0.084339652	0.055306813	0.111993376
PPP1CC	12q24.11	0.084321799	0.05535861	0.112081991
LIPJ	10q23.31	-0.084320731	0.055361711	0.112081991
FYTTD1	3q29	0.084318065	0.055369448	0.112086384
SMIM21	18q23	0.084272392	0.055502163	0.112343744
ZFP36	19q13.2	-0.084268654	0.055513036	0.112345717
TPD52L2	20q13.33	-0.08426822	0.055514299	0.112345717
TLR8	Xp22.2	0.084258668	0.055542094	0.112390667
PCSK6	15q26.3	-0.084245468	0.055580521	0.112457119
CEBPZ	2p22.2	-0.084219071	0.055657434	0.112601422
SOX9	17q24.3	0.084182858	0.055763094	0.112803847
PTK2	8q24.3	0.084128931	0.055920744	0.113111393
HIST1H3A	6p22.2	0.084110181	0.055975647	0.11321107
SMAD5	5q31.1	0.084085078	0.056049219	0.113348481
SREK1IP1	5q12.3	-0.084074657	0.056079783	0.113394665
OXER1	2p21	0.084073447	0.056083334	0.113394665
CIAPIN1	16q21	-0.084071531	0.056088956	0.113394665
CYTOR	2p11.2	0.08404904	0.05615498	0.113516746
STXBP4	17q22	-0.084021425	0.056236134	0.113669382
SNAPC3	9p22.3	0.084016562	0.056250435	0.113684235
CPTP	1p36.33	-0.084015086	0.056254777	0.113684235
ALOX12	17p13.1	-0.084001071	0.056296014	0.113756149
RILPL1	12q24.31	0.083994158	0.056316362	0.113785844
WDR17	4q34.2	-0.083966294	0.056398445	0.113932964
HMGB3P1	20q11.22	0.083965476	0.056400855	0.113932964
INAFM1	19q13.32	0.083963678	0.056406156	0.113932964
YME1L1	10p12.1	0.08395265	0.056438675	0.113987211
CT47A10	Xq24	0.0839467	0.056456224	0.114011215
FOXI1	5q35.1	0.083938379	0.056480778	0.114049359
E4F1	16p13.3	-0.083915656	0.056547868	0.114169685
SCN4B	11q23.3	-0.083914356	0.056551711	0.114169685
TAF1B	2p25.1	-0.083910012	0.056564544	0.114173719
ZNF674	Xp11.3	0.08390984	0.056565052	0.114173719
SOX18	20q13.33	0.083905324	0.056578396	0.114189203

TEX55	3q13.32	0.083868796	0.056686439	0.114395791
MTAP	9p21.3	0.083863206	0.056702986	0.114417714
PMM2	16p13.2	-0.083844883	0.056757258	0.114515747
ABCC5	3q27.1	0.083793301	0.056910274	0.11481297
THOC2	Xq25	0.0837722	0.05697297	0.114924317
PADI1	1p36.13	0.083770883	0.056976884	0.114924317
CENPB	20p13	0.083750056	0.057038824	0.115037724
CCT7	2p13.2	-0.083741111	0.057065441	0.115079877
PAIP1	5p12	0.083734512	0.057085088	0.115105299
MED21	12p11.23	-0.083733035	0.057089484	0.115105299
BTN3A2	6p22.2	0.083720704	0.057126209	0.115167811
SEC14L5	16p13.3	-0.083683288	0.057237768	0.11538116
RBM15B	3p21.2	0.083671207	0.057273827	0.115431644
PACRG	6q26	-0.083670778	0.057275107	0.115431644
TCP10L	21q22.11	-0.083668837	0.057280903	0.115431644
CCDC74B	2q21.1	0.083667214	0.057285749	0.115431644
PHKG1	7p11.2	0.083664331	0.057294359	0.115437438
FOSB	19q13.32	-0.083650192	0.057336596	0.115510976
TCERG1L	10q26.3	0.083647254	0.057345375	0.115517102
DCUN1D3	16p12.3	0.083643941	0.057355276	0.115525486
PEX2	8q21.13	-0.083640119	0.057366703	0.115527137
YBX3	12p13.2	0.083638555	0.057371376	0.115527137
XKR9	8q13.3	-0.083637908	0.057373313	0.115527137
SCARNA11	12p13.31	0.083609238	0.057459083	0.1156794
TEPP	16q21	-0.08360879	0.057460423	0.1156794
VDAC3	8p11.21	-0.083590187	0.057516137	0.115779984
RASGEF1C	5q35.3	-0.083580828	0.057544181	0.115813382
MYOZ3	5q33.1	0.08358081	0.057544235	0.115813382
NEUROG3	10q22.1	0.083560919	0.057603876	0.115921825
CPSF1	8q24.3	0.083542297	0.057659761	0.116020284
NF2	22q12.2	0.083540776	0.057664329	0.116020284
SLC46A3	13q12.3	0.083537476	0.057674237	0.116028622
ACTR3B	7q36.1-q36.2	0.083532265	0.057689884	0.116048503
CENPO	2p23.3	0.083505085	0.057771568	0.116201205
DMXL1	5q23.1	0.08350274	0.057778618	0.116203775
C9ORF153	9q21.33	-0.083498825	0.057790395	0.116215849
IL7	8q21.13	-0.083494838	0.057802387	0.116228353
FBXO42	1p36.13	0.083483289	0.05783714	0.116286619
SHISA4	1q32.1	-0.083478992	0.057850074	0.116301007
FXVD7	19q13.12	0.083458945	0.057910447	0.116410755
OR52W1	11p15.4	-0.083455593	0.057920548	0.116419435
ARFIP2	11p15.4	-0.083431708	0.05799256	0.116544062
NRN1	6p25.1	0.083431187	0.057994132	0.116544062
TNNT2	1q32.1	-0.083425332	0.058011798	0.116567928
RICTOR	5p13.1	0.0833981	0.058094013	0.11671219
TXNDC9	2q11.2	-0.083397711	0.058095189	0.11671219
CCL17	16q21	-0.083387179	0.058127015	0.116764475
SOWAHB	4q21.1	0.08337613	0.058160414	0.11681991
SGMS2	4q25	-0.083356765	0.058218994	0.116915823
UBASH3A	21q22.3	0.083356505	0.058219782	0.116915823
PPP1R26	9q34.3	-0.083323767	0.058318927	0.117103243
KCNE3	11q13.4	-0.083319425	0.058332087	0.117117985
RHOXF2B	Xq24	0.083314941	0.058345679	0.117133591
PSD	10q24.32	0.083307702	0.058367631	0.117165976
SLAIN2	4p11	0.083303099	0.05838159	0.117182312
METTL4	18p11.32	0.083301019	0.058387901	0.117183295
UBE2G2	21q22.3	-0.083297802	0.058397659	0.117191196
GLO1	6p21.2	-0.083288858	0.058424801	0.117233977

GPNMB	7p15.3	0.083286426	0.058432182	0.117237099
PLEC	8q24.3	0.083276874	0.058461183	0.117283597
ATXN2	12q24.12	-0.08327149	0.058477534	0.117297254
KCNS3	2p24.2	0.083270795	0.058479645	0.117297254
DRG1	22q12.2	-0.083262111	0.058506027	0.117338479
C6ORF15	6p21.33	0.083234505	0.058589962	0.117495113
RPS5	19q13.43	-0.083214785	0.058649982	0.117603759
SIGLEC7	19q13.41	0.083200456	0.058693623	0.117679544
ABCD4	14q24.3	-0.083198372	0.058699973	0.117680555
HIST2H2AB	1q21.2	0.083188521	0.058729994	0.117729016
C4ORF47	4q35.1	0.083156362	0.058828091	0.117913918
GPATCH11	2p22.2	0.083153739	0.058836099	0.117918227
PNPLA6	19p13.2	0.08313802	0.058884104	0.118002689
DSPP	4q22.1	0.083130367	0.058907486	0.118035019
CARNS1	11q13.2	0.083128902	0.058911964	0.118035019
PIP	7q34	0.083126527	0.05891922	0.118037808
USB1	16q21	0.083099943	0.059000519	0.118182215
DTX1	12q24.13	0.083099118	0.059003043	0.118182215
TPT1-AS1	13q14.13	0.083085743	0.059043982	0.118247862
SHLD1	20p12.3	0.083084572	0.059047566	0.118247862
PADI3	1p36.13	0.083076518	0.059072232	0.118285489
EMC10	19q13.33	-0.083073151	0.059082545	0.118294373
ZBTB8A	1p35.1	0.083060692	0.059120723	0.118359042
TBL3	16p13.3	-0.08305726	0.059131243	0.118363781
SERPINB13	18q21.33	0.083056083	0.059134851	0.118363781
ZNF234	19q13.31	0.083052831	0.059144821	0.118371967
GJA8	1q21.2	0.083049165	0.059156062	0.118377206
EIF2AK1	7p22.1	0.083048142	0.0591592	0.118377206
KIAA1257	3q21.3	-0.083033426	0.059204342	0.118451207
TRIP10	19p13.3	0.083032251	0.059207951	0.118451207
MFS2A	1p34.2	-0.083013667	0.059265002	0.118537471
FBXW5	9q34.3	-0.083013233	0.059266335	0.118537471
ZNF680	7q11.21	-0.083012451	0.059268736	0.118537471
ANKRD13D	11q13.2	0.083008936	0.059279533	0.118547287
DRC3	17p11.2	-0.083004983	0.059291677	0.118559794
ZSCAN12	6p22.1	0.082992218	0.059330907	0.118625882
MRPL21	11q13.3	-0.082990394	0.059336513	0.118625882
LINC01000	7q32.1	0.082987704	0.059344784	0.118630635
SPATA16	3q26.31	0.082975841	0.059381268	0.11869178
AP2A1	19q13.33	0.082973287	0.059389125	0.118695699
ZNF639	3q26.33	0.082970682	0.05939714	0.118699933
EXOC8	1q42.2	-0.082960088	0.059429745	0.118753302
NPY6R	5q31.2	-0.082938271	0.059496934	0.11887576
WDR49	3q26.1	0.08292241	0.059545822	0.118961632
CBLN1	16q12.1	0.082918622	0.059557502	0.118973159
FNDC11	20q13.33	0.082913512	0.059573261	0.118992831
LY6E-DT	8q24.3	0.08290779	0.059590915	0.119016283
C5ORF49	5p15.31	-0.082895567	0.059628633	0.119079801
PRSS12	4q26	-0.082888665	0.059649941	0.119110536
F2RL2	5q13.3	-0.082823585	0.05985117	0.119500501
STK3	8q22.2	0.082806558	0.059903912	0.119586372
ZSCAN26	6p22.1	0.082805865	0.059906059	0.119586372
TPPP3	16q22.1	-0.082781548	0.059981448	0.119724991
CRBN	3p26.2	-0.08277738	0.059994378	0.119738928
DBH	9q34.2	0.082758063	0.060054335	0.119837492
SHROOM3	4q21.1	-0.082756626	0.060058796	0.119837492
HMMR	5q34	0.082755716	0.060061622	0.119837492
TRPM3	9q21.12-q21.13	0.082751614	0.060074361	0.119851029

LYPD4	19q13.2	0.08274726	0.060087884	0.119866129
SGK3	8q13.1	0.082736653	0.060120843	0.119916723
PSPH	7p11.2	0.082735264	0.060125161	0.119916723
TBC1D3P1-DHX4	17q23.1	-0.082708272	0.0602091	0.120064382
ARL16	17q25.3	-0.082705739	0.060216984	0.120064382
ARRDC4	15q26.2	-0.08270487	0.060219686	0.120064382
ARRDC3-AS1	5q14.3	-0.082703788	0.060223053	0.120064382
LCN12	9q34.3	-0.082697336	0.060243136	0.120092526
EXOC3-AS1	5p15.33	0.082685245	0.060280788	0.120155685
TGIF1	18p11.31	-0.082679079	0.060299994	0.120178258
CD320	19p13.2	-0.082677777	0.060304053	0.120178258
SNORD22	11q12.3	-0.082674697	0.060313649	0.120185484
HLA-DMA	6p21.32	-0.082651986	0.060384454	0.120314664
NR5A2	1q32.1	0.082609308	0.060517691	0.120568203
CCRL2	3p21.31	-0.082606309	0.060527065	0.120571352
INTS10	8p21.3	-0.082604138	0.06053385	0.120571352
RBM46	4q32.1	-0.082603053	0.06053724	0.120571352
HSPB7	1p36.13	0.082591286	0.06057403	0.120632689
FADD	11q13.3	-0.082578607	0.060613689	0.120699729
FAM98A	2p22.3	0.082564279	0.060658534	0.120777082
DUSP6	12q21.33	0.0825615	0.060667235	0.120782459
GLMN	1p22.1	-0.082542575	0.060726518	0.120888529
PSMG3-AS1	7p22.3	-0.082538488	0.060739326	0.120902069
NLRP10	11p15.4	0.082535117	0.060749893	0.120911147
CRYBA2	2q35	0.082531318	0.060761802	0.120922894
FAF2	5q35.2	-0.082526504	0.060776895	0.120940975
NME1	17q21.33	-0.082516952	0.060806856	0.120988634
LINC00474	9q33.1	0.082506113	0.060840868	0.121044345
ZNF688	16p11.2	-0.082503579	0.060848821	0.121048204
ZNF570	19q13.12	0.08249963	0.060861219	0.121060903
C1RL-AS1	12p13.31	0.082492724	0.060882902	0.121085002
SNCB	5q35.2	0.08249194	0.060885365	0.121085002
TTC30A	2q31.2	-0.082451476	0.061012551	0.121317491
LMBRD2	5p13.2	0.082450913	0.061014321	0.121317491
DHFR2	3q11.2	-0.082448569	0.061021697	0.121320174
MOCS3	20q13.13	-0.08243819	0.06105436	0.121373125
MT1F	16q13	0.082424122	0.061098654	0.121449186
PLCH1	3q25.31	-0.082416567	0.061122453	0.121484496
SNORA75	2q37.1	-0.082411299	0.061139051	0.121505489
NME7	1q24.2	0.082402065	0.061168157	0.121551332
LINC00200	10p15.3	0.082387858	0.06121296	0.121621463
EPHX3	19p13.12	-0.082387042	0.061215532	0.121621463
SERP1	3q25.1	-0.082380963	0.06123471	0.121647559
OIT3	10q22.1	-0.082366882	0.061279155	0.12172384
KCNQ2	20q13.33	-0.082362814	0.061291999	0.121737339
C12ORF60	12p13.1-p12.3	-0.082352526	0.061324496	0.121789868
HAGHL	16p13.3	-0.082320263	0.061426488	0.12198039
DDX19B	16q22.1	-0.082312187	0.061452041	0.122019095
AEN	15q26.1	-0.082291954	0.061516099	0.122130649
NDUFAF7	2p22.2	-0.08229061	0.061520357	0.122130649
CECR2	22q11.1-q11.21	-0.082280057	0.06155379	0.122183017
EYS	6q12	-0.082278453	0.061558875	0.122183017
DEDD2	19q13.2	-0.082276497	0.061565073	0.122183272
CHRNA1	17p13.1	0.082272937	0.061576359	0.122193622
TBX20	7p14.2	0.082238757	0.061684783	0.122396716
HILS1	17q21.33	0.082231699	0.061707193	0.122429114
DOP1A	6q14.1	0.082211976	0.061769847	0.122541345
C17ORF58	17q24.2	-0.082188182	0.061845504	0.122679346

LRFN3	19q13.12	0.082161523	0.061930364	0.122835573
ZNF248	10p11.21	0.082154836	0.061951664	0.122865713
KIAA0087	7p15.2	0.08213252	0.062022795	0.122994667
MUC2	11p15.5	0.082105118	0.062110224	0.123155912
EIF4A1	17p13.1	-0.082097784	0.062133644	0.123190215
CYP11B1	8q24.3	0.082068352	0.062227694	0.123364534
IGF2R	6q25.3	0.082043423	0.062307448	0.12351048
PPP2CA	5q31.1	-0.082038907	0.062321903	0.12352697
CASC10	10p12.31	0.082029835	0.062350956	0.123572387
SH3BP1	22q13.1	0.082020758	0.062380031	0.123607839
MYT1L	2p25.3	0.082018815	0.062386258	0.123607839
KBTBD4	11p11.2	-0.0820185	0.062387265	0.123607839
RMI1	9q21.32	0.081995054	0.062462431	0.123740617
PRSS40A	2q21.1	0.081993762	0.062466575	0.123740617
LINC00323	21q22.2	0.081991553	0.062473661	0.123742478
NTHL1	16p13.3	-0.081987805	0.062485687	0.12375412
ARHGAP1	11p11.2	0.081960232	0.062574205	0.12391724
C5ORF56	5q31.1	0.081947467	0.062615221	0.123986267
PHF11	13q14.2	-0.08194243	0.06263141	0.124006126
CDC16	13q34	-0.081923673	0.062691731	0.12411335
SPACA9	9q34.13	-0.081909866	0.062736165	0.124189104
FAM3A	Xq28	-0.081905003	0.06275182	0.12420788
AFF4	5q31.1	0.081899966	0.062768039	0.124227767
ATP6V0D2	8q21.3	-0.081887896	0.062806921	0.1242925
SGSM2	17p13.3	-0.081877128	0.062841623	0.124348951
USP27X	Xp11.23	0.08187348	0.062853381	0.124359993
STXBP1	9q34.11	-0.081871049	0.062861221	0.12436328
NCF4	22q12.3	0.081865404	0.062879423	0.124374843
TLR5	1q41	-0.081865404	0.062879423	0.124374843
MOB1A	2p13.1	0.081860628	0.062894828	0.124379731
RPP25L	9p13.3	-0.081859586	0.062898189	0.124379731
FUT1	19q13.33	0.081858892	0.062900431	0.124379731
GBX1	7q36.1	0.081853299	0.062918476	0.124391382
POU3F4	Xq21.1	0.081853235	0.062918681	0.124391382
GGTA1P	9q33.2	0.081816949	0.063035859	0.124610806
ZNF235	19q13.31	0.081770577	0.063185867	0.12489508
ZNF767P	7q36.1	0.081748607	0.06325704	0.125023488
PAG1	8q21.13	0.081722034	0.063343212	0.12518151
ADAT2	6q24.2	-0.081672102	0.063505398	0.125489709
FRS3	6p21.1	-0.08166915	0.063514999	0.125496362
BAZ2B	2q24.2	0.081656993	0.063554545	0.125562173
KLF3	4p14	0.081654735	0.063561891	0.125564364
AGT	1q42.2	0.081624341	0.063660853	0.125747519
NAA15	4q31.1	0.081615484	0.063689717	0.12579219
TMEM237	2q33.1	0.081592559	0.063764474	0.125927486
TMX4	20p12.3	0.081564162	0.063857171	0.126098181
IL34	16q22.1	0.081561125	0.063867094	0.126105405
CTNND2	5p15.2	0.081523623	0.063989704	0.126335105
CEP57L1	6q21	0.081515446	0.064016461	0.126369878
CRIP1	2p21	-0.081514404	0.064019872	0.126369878
TAPBPL	12p13.31	0.081472374	0.064157567	0.12662926
DEFA5	8p23.1	0.081469249	0.064167816	0.126637072
GLA	Xq22.1	-0.081453791	0.064218526	0.126704596
KRTAP3-3	17q21.2	0.081452853	0.064221603	0.126704596
NEMP2	2q32.2	0.081452228	0.064223656	0.126704596
TEDDM1	1q25.3	-0.081451146	0.064227208	0.126704596
CAMSAP2	1q32.1	0.081431474	0.064291798	0.126819587
SNORA47	5q13.3	-0.081426939	0.064306693	0.12683654

GNB1L	22q11.21	0.08141949	0.06433117	0.126872387
LRIG2	1p13.2	0.081412414	0.064354426	0.126905819
KIR2DL1	19q13.42	0.081407782	0.064369656	0.126923418
FES	15q26.1	-0.081401775	0.064389409	0.126949932
CREBZF	11q14.1	0.081391094	0.064424545	0.127006766
CXORF40A	Xq28	0.081316152	0.06467151	0.12748115
SAA3P	11p15.1	0.0813134	0.064680594	0.127486571
WDR18	19p13.3	-0.081297829	0.064732011	0.127563951
BSPRY	9q32	-0.081297395	0.064733445	0.127563951
BPY2	Yq11.223	-0.081295558	0.064739514	0.127563951
FBRSL1	12q24.33	0.081291924	0.064751519	0.127563951
FBXW8	12q24.22	0.081290969	0.064754675	0.127563951
FLJ25758	19p13.2	0.081290001	0.064757875	0.127563951
ACVRL1	12q13.13	0.081281938	0.06478452	0.127603953
RAF1	3p25.2	-0.081279072	0.064793993	0.127610124
CDC25A	3p21.31	0.081276467	0.064802606	0.127614601
NPY	7p15.3	0.081270325	0.064822915	0.127638729
ARL14EP	11p14.1	0.081267264	0.064833038	0.127638729
MS4A6E	11q12.2	-0.08126701	0.06483388	0.127638729
B4GALT2	1p34.1	0.081247595	0.064898118	0.127752701
TRIM33	1p13.2	0.08124069	0.064920979	0.127785207
SHLD2	10q23.2	-0.081233395	0.064945136	0.127820256
SPESP1	15q23	0.08121387	0.065009831	0.12792436
LRPPRC	2p21	-0.081213596	0.06501074	0.12792436
CD81	11p15.5	-0.081203349	0.065044715	0.127978703
SYPL2	1p13.3	0.081198844	0.065059656	0.12799559
CNGB1	16q21	0.081196681	0.065066833	0.127997201
AHDC1	1p36.11-p35.3	0.081187545	0.065097145	0.128044315
ANP32C	4q32.3	-0.081165074	0.06517175	0.128178537
CCL5	17q12	0.081152896	0.065212209	0.128245581
SF3B6	2p23.3	-0.08113275	0.06527919	0.128364765
MCL1	1q21.2	0.081128668	0.065292767	0.128378921
ZHX2	8q24.13	0.081119724	0.065322527	0.128424893
P2RY1	3q25.2	0.081115469	0.065336689	0.128440191
VGFB	7q22.1	0.081082997	0.065444848	0.128640248
ZNF878	19p13.2	0.081077302	0.065463832	0.128665001
GLYAT	11q12.1	-0.081045343	0.065570449	0.128861968
ZBTB16	11q23.2	-0.081039288	0.065590664	0.128889113
RCHY1	4q21.1	-0.081023249	0.065644242	0.128981805
DYNLL2	17q22	-0.081017168	0.065664562	0.129009138
PLK3	1p34.1	0.081012263	0.065680956	0.129028754
GNGT1	7q21.3	0.08100663	0.06569979	0.129053158
MED25	19q13.33	-0.080993027	0.065745288	0.129128743
UNC13B	9p13.3	-0.08099129	0.065751099	0.129128743
NAA50	3q13.31	0.080924164	0.06597601	0.129557807
MMP17	12q24.33	0.080895247	0.066073094	0.129735795
CTU1	19q13.41	0.080893163	0.066080095	0.129736888
DSC2	18q12.1	0.080887345	0.066099644	0.129762614
OSBPL7	17q21.32	-0.080877358	0.06613321	0.129815848
HECTD1	14q12	0.080861467	0.066186652	0.129908084
ZMYM4	1p34.3	0.080855996	0.066205059	0.129931543
B3GAT2	6q13	0.080853217	0.06621441	0.129937226
KLRK1	12p13.2	0.080848964	0.066228724	0.129945633
PGA3	11q12.2	0.080846596	0.066236695	0.129945633
PIK3R4	3q22.1	0.080844273	0.066244515	0.129945633
ZNF135	19q13.43	0.080844273	0.066244515	0.129945633
TSPAN31	12q14.1	-0.080814922	0.066343387	0.1301269
DZANK1	20p11.23	0.080804848	0.066377347	0.130180826

GTF3C1	16p12.1	0.080791041	0.066423919	0.130259473
RUFY4	2q35	0.080783584	0.066449082	0.130296125
MDH1B	2q33.3	-0.080779424	0.066463124	0.130310967
LRRC4	7q32.1	0.080745364	0.066578179	0.130523836
GLMP	1q22	-0.080731731	0.06662428	0.130601495
SYT5	19q13.42 11p	0.080729668	0.066631257	0.130602453
SSX8P	Xp11.22	0.080717478	0.066672502	0.130670573
CALB2	16q22.2	0.080705409	0.066713359	0.130737919
TRMT44	4p16.1	-0.080691438	0.066760679	0.130817917
C17ORF53	17q21.31	0.080684577	0.066783925	0.13085073
LMTK3	19q13.33	-0.080681278	0.066795109	0.130859906
GABPA	21q21.3	0.080660436	0.06686578	0.130982099
TFPT	19q13.42	0.080659047	0.066870493	0.130982099
HCG22	6p21.33	0.080643729	0.066922479	0.131071172
GUCY2F	Xq22.3-q23	0.080641185	0.066931115	0.131075333
NAT16	7q22.1	0.080634388	0.066954195	0.131095621
BPHL	6p25.2	-0.080634298	0.0669545	0.131095621
PHYKPL	5q35.3	-0.08061337	0.067025604	0.131222078
NOC2LP2	2q21.1	-0.080609897	0.067037412	0.131232432
TUSC1	9p21.2	0.080602428	0.067062804	0.131256564
ZNF324	19q13.43	0.080601821	0.067064871	0.131256564
STAG2	Xq25	0.080600518	0.067069301	0.131256564
RBM4	11q13.2	-0.080585842	0.067119226	0.131341501
TRMT2A	22q11.21	-0.080578722	0.067143461	0.131376154
CXXC5	5q31.2	-0.080565522	0.067188404	0.131451314
PTGES2-AS1	9q34.11	0.080563179	0.067196385	0.131454153
NEK5	13q14.3	-0.080541106	0.067271604	0.131588513
LINC00852	3p25.3	0.080527928	0.067316543	0.131663623
TMEM201	1p36.22	0.080522798	0.067334045	0.131685061
FGFBP3	10q23.32	0.080500699	0.067409478	0.131819778
ADGRF5	6p12.3	-0.080488497	0.06745116	0.131879692
PLAC9	10q22.3	-0.080487894	0.067453219	0.131879692
PCDH11Y	Yp11.2	0.080480643	0.067477998	0.131915324
C11ORF65	11q22.3	-0.08047831	0.067485974	0.131918107
ESAM	11q24.2	-0.080472866	0.067504585	0.131932836
DCX	Xq23	-0.080472271	0.067506618	0.131932836
BYSL	6p21.1	-0.080467829	0.067521807	0.13194971
XKRX	Xq22.1	0.080460448	0.067547052	0.131986232
CIB4	2p23.3	-0.080451864	0.067576419	0.132030798
ESX1	Xq22.2	-0.080428179	0.067657508	0.132176401
RHEB	7q36.1	0.080423021	0.067675181	0.132186562
UGT1A5	2q37.1	-0.080422827	0.067675842	0.132186562
SECISBP2L	15q21.1	-0.080413382	0.067708211	0.132236955
HYAL6P	7q31.32	-0.08040359	0.067741779	0.132289679
OR2T6	1q44	0.080392904	0.067778428	0.132348409
PHF5A	22q13.2	-0.080368486	0.067862231	0.132499196
BCL11A	2p16.1	0.080363015	0.067881019	0.132523025
OPA3	19q13.32	-0.080353897	0.067912342	0.132571318
CSNK1G2-AS1	19p13.3	0.080329709	0.067995491	0.132720763
PTK7	6p21.1	0.08031152	0.068058073	0.132830038
PSMC1	14q32.11	-0.080308047	0.06807003	0.132840494
ELAVL2	9p21.3	0.080303282	0.068086433	0.132859625
GNRHR	4q13.2	0.080300115	0.06809734	0.132868029
CCDC163	1p34.1	0.080253217	0.068258993	0.13317053
ZBED5	11p15.4	0.080246305	0.068282846	0.133204156
RAD9A	11q13.2	0.080238055	0.068311322	0.133246794
CCNE1	19q12	0.080230675	0.068336804	0.133278826
CBX8	17q25.3	-0.080228765	0.068343402	0.133278826

S100A8	1q21.3	0.080227548	0.068347607	0.133278826
TRIM3	11p15.4	0.080223379	0.068362005	0.13329399
KDM6B	17p13.1	0.08021183	0.068401912	0.133358886
KLK7	19q13.41	-0.080200594	0.068440753	0.133421689
SHCBP1L	1q25.3	0.080197	0.068453183	0.133432998
CHGA	14q32.12	-0.080187513	0.068486	0.133484042
FLVCR1	1q32.3	-0.080173968	0.068532872	0.133562466
TRMU	22q13.31	-0.080163072	0.0685706	0.133623057
HOXC11	12q13.13	0.080155139	0.068598078	0.133663663
ATG16L2	11q13.4	0.080151217	0.068611667	0.133677202
TINF2	14q12	0.080146875	0.068626712	0.133693576
CCNJL	5q33.3	0.080143575	0.068638149	0.133702916
RERE	1p36.23	0.080139841	0.068651092	0.133715189
CALCOCO1	12q13.13	-0.08012091	0.068716741	0.133830109
ANGPTL1	1q25.2	0.080115353	0.068736024	0.133854713
IFI6	1p35.3	-0.080083222	0.068847591	0.134047085
LOC100268168	5q35.1	-0.080083068	0.068848128	0.134047085
NFKB1	4q24	0.080069936	0.068893769	0.134116835
LHFPL5	6p21.31	-0.080068927	0.068897277	0.134116835
TMC8	17q25.3	0.080054479	0.068947524	0.1341981
RYK	3q22.2	0.080053089	0.068952357	0.1341981
RMI2	16p13.13	0.080039108	0.069001011	0.134279809
SEC16A	9q34.3	0.080035288	0.069014312	0.134287379
ADSL	22q13.1	-0.080034159	0.069018243	0.134287379
TOM1L2	17p11.2	-0.080007413	0.069111416	0.134455669
GJA4	1p34.3	0.080000639	0.069135028	0.134488609
ELMO1	7p14.2-p14.1	0.079993258	0.069160767	0.134525678
STK11IP	2q35	-0.079967293	0.06925137	0.134681501
SLC39A5	12q13.3	-0.079966466	0.069254258	0.134681501
DENND4C	9p22.1	0.07996217	0.069269259	0.134697661
ZNF233	19q13.31	-0.079948755	0.069316118	0.13477576
RAB5C	17q21.2	-0.079942718	0.069337213	0.134803758
MPZL3	11q23.3	0.079938336	0.069352529	0.134820512
MIR22HG	17p13.3	-0.079921443	0.069411601	0.134922318
ZSCAN32	16p13.3	-0.079917274	0.069426182	0.134930127
FABP1	2p11.2	-0.079916462	0.069429024	0.134930127
ASB12	Xq11.2	-0.079910929	0.069448385	0.134954724
CLASP1	2q14.2-q14.3	0.079906854	0.069462647	0.13496941
VAX1	10q25.3	-0.079901253	0.069482253	0.134994474
FKBP4	12p13.33	-0.079881671	0.069550835	0.135114679
TIMM22	17p13.3	-0.079879673	0.069557833	0.135115235
ZNF821	16q22.2	0.079877244	0.069566347	0.135118735
SMARCA5	4q31.21	0.079868211	0.069598007	0.135167186
ERAP2	5q15	0.079863176	0.06961566	0.135188426
NAGLU	17q21.2	-0.079859614	0.06962815	0.13519964
DEF6	6p21.31	0.079849673	0.06966302	0.135254302
CYB5RL	1p32.3	-0.079833649	0.069719254	0.135350427
EDRF1	10q26.2	0.079814632	0.069786044	0.135467026
POLA1	Xp22.11-p21.3	0.079774773	0.069926198	0.135726002
INKA1	3p21.31	0.079768913	0.069946822	0.135749063
PPIAL4C	1q21.2	-0.079767565	0.069951566	0.135749063
RRM2B	8q22.3	-0.079763744	0.069965017	0.135762078
PRDM16-DT	1p36.32	-0.079753788	0.070000077	0.135817018
POM121L10P	22q11.23	-0.079735766	0.070063577	0.135927122
SERPINB8	18q22.1	0.079728577	0.070088924	0.135963192
ZMIZ1-AS1	10q22.3	0.079715115	0.070136401	0.136042181
NT5C3B	17q21.2	-0.079707126	0.07016459	0.136083746
OGG1	3p25.3	-0.079692711	0.070215476	0.136169318

PHETA2	22q13.2	0.079671956	0.070288792	0.13629837
LINC00930	15q26.1	0.079667274	0.07030534	0.136312188
PCSK1N	Xp11.23	0.079664709	0.070314409	0.136312188
SNAR-G1	19q13.33	-0.079664193	0.070316232	0.136312188
DNAJC4	11q13.1	-0.079660928	0.070327776	0.136321438
CALR	19p13.13	0.079651636	0.070360635	0.136371999
LCN9	9q34.3	-0.07962723	0.070447002	0.136526248
AWAT2	Xq13.1	0.079624733	0.070455844	0.13653024
SPAG5	17q11.2	0.079613514	0.070495579	0.136594091
GPR45	2q12.1	0.079605967	0.070522319	0.136620253
PIIB	15q22.31	-0.079605872	0.070522655	0.136620253
CFHR3	1q31.3	0.079557703	0.070693523	0.136938089
NFYC-AS1	1p34.2	0.079552727	0.070711191	0.136957305
SHE	1q21.3	0.079551077	0.070717051	0.136957305
SGCG	13q12.12	-0.079536926	0.070767327	0.137041491
NSA2	5q13.3	-0.079496022	0.070912811	0.137310012
PRORP	14q13.2	0.07949003	0.070934143	0.137338107
MYO18B	22q12.1	0.079487627	0.070942698	0.137341461
MIP	12q13.3	-0.079466708	0.071017222	0.137472137
SPNS2	17p13.2	-0.079464847	0.071023856	0.137472137
FAM205A	9p13.3	0.079435361	0.071129017	0.137662447
DSC1	18q12.1	0.079402437	0.071246587	0.137876734
ACVR2B-AS1	3p22.2	0.079393949	0.071276925	0.137912845
PRELID3A	18p11.21	0.079393382	0.071278949	0.137912845
PSD4	2q14.1	-0.079382698	0.071317152	0.137973499
EIF2S1	14q23.3	0.07937523	0.071343864	0.138011914
TRAFD1	12q24.13	0.079363159	0.071387055	0.138082197
ATP11A	13q34	-0.079349178	0.07143711	0.13816574
RBM4B	11q13.2	0.079346966	0.071445034	0.138167791
ZNF394	7q22.1	-0.079343881	0.071456082	0.138175882
PDCD6	5p15.33	-0.079331897	0.071499018	0.138245628
TPGS2	18q12.2	-0.07930272	0.071603646	0.138434633
SPEM1	17p13.1	0.079298834	0.071617589	0.138448292
FBL	19q13.2	-0.079281358	0.071680328	0.138556271
PRUNE1	1q21.3	-0.079271371	0.071716198	0.138593522
NCR1	19q13.42	0.079271351	0.071716271	0.138593522
ABCD1	Xq28	0.079270242	0.071720254	0.138593522
HUS1	7p12.3	0.079264164	0.071742096	0.138622423
MRNIP	5q35.3	-0.079252051	0.071785635	0.138693236
SLC35C2	20q13.12	-0.079218574	0.071906086	0.138912622
ACTN4	19q13.2	-0.079203029	0.071962069	0.139007432
CCDC86	11q12.2	0.079182015	0.072037812	0.139140391
MDGA2	14q21.3	0.079177521	0.072054016	0.139158337
GTF2IRD2	7q11.23	-0.079173418	0.072068816	0.139163835
TBL1XR1	3q26.32	0.079172898	0.07207069	0.139163835
HSFX2	Xq28	0.079168384	0.072086973	0.139181927
PHF7	3p21.1	-0.079164562	0.072100766	0.139195177
RAB2A	8q12.1-q12.2	-0.07916265	0.072107666	0.139195177
ZNF860	3p23-p22.3	0.079153184	0.072141829	0.139247773
RBM43	2q23.3	-0.079150145	0.072152802	0.1392556
ZNF280B	22q11.22	0.079143545	0.072176634	0.139277914
MORC3	21q22.12	0.079143111	0.072178202	0.139277914
LGALS7B	19q13.2	0.079140527	0.072187535	0.139282572
DUSP28	2q37.3	-0.079137251	0.072199367	0.139292052
SALL3	18q23	0.079122037	0.072254345	0.139384759
SCIMP	17p13.2	0.079087277	0.072380077	0.139613927
VKORC1L1	7q11.21	-0.079081282	0.072401781	0.139642412
CASP10	2q33.1	0.079077809	0.072414358	0.139653289

SGPP1	14q23.2	0.079064696	0.072461854	0.139731499
WNT2B	1p13.2	0.079062485	0.072469865	0.139733561
LY6G5B	6p21.33	0.079053669	0.072501814	0.139781776
RIC3	11p15.4	-0.079036998	0.072562264	0.139884923
HIST1H3D	6p22.2	0.079025336	0.072604574	0.139953087
NACC2	9q34.3	0.079022145	0.072616154	0.139962006
NFIA	1p31.3	0.079012333	0.072651776	0.140017257
TAF12	1p35.3	-0.079008991	0.072663909	0.140027235
PRRC1	5q23.2	0.078992273	0.07272464	0.14013085
ZNF780B	19q13.2	0.078988584	0.072738045	0.140143267
PGPEP1	19p13.11	-0.078984676	0.072752249	0.140157218
INPPL1	11q13.4	-0.078959188	0.072844948	0.140315325
ATMIN	16q23.2	0.078958277	0.072848259	0.140315325
LOC391343	2p25.3	0.078930923	0.072947853	0.140493712
AK8	9q34.13	-0.078920503	0.072985822	0.140553392
GTF2IRD2B	7q11.23	-0.07891729	0.072997533	0.140562496
KRT20	17q21.2	-0.078873771	0.073156297	0.140854735
ZC3H13	13q14.13	0.07887096	0.073166563	0.140861029
PTPN6	12p13.31	-0.078867052	0.073180835	0.14087255
CWC25	17q12	-0.078865489	0.073186544	0.14087255
NSG2	5q35.2	0.078860953	0.073203113	0.14089097
NAT8	2p13.1	-0.078840511	0.073277828	0.141021288
PTCHD3P1	10p11.23	0.078834314	0.073300487	0.141051411
CABP2	11q13.2	0.078831523	0.073310697	0.141057573
ARPC1B	7q22.1	-0.078827541	0.073325263	0.141072116
NINJ1	9q22.31	-0.078825457	0.073332888	0.141073302
OR10W1	11q12.1	0.078812159	0.073381552	0.14115343
OXR1	8q23.1	0.078804876	0.073408216	0.141191228
SSBP3	1p32.3	0.078802444	0.07341712	0.141194862
FBXO30	6q24.3	0.078796671	0.073438263	0.141222033
NSD1	5q35.3	0.078792198	0.073454652	0.141240056
ARF3	12q13.12	-0.078786466	0.073475652	0.141266941
XAF1	17p13.1	0.078771009	0.073532311	0.141362375
FGF13	Xq26.3-q27.1	0.078758244	0.07357913	0.141438874
KRT10	17q21.2	-0.078736795	0.073657853	0.141574714
CLUL1	18p11.32	-0.078735158	0.073663863	0.141574714
LOC256880	4q23	0.078727895	0.073690537	0.141612459
KCTD21	11q14.1	-0.078720382	0.073718137	0.141651975
SND1	7q32.1	0.078715172	0.073737283	0.141675241
C9ORF106	9q34.11	0.078705744	0.073771939	0.1417283
OR10G4	11q24.2	-0.078697034	0.073803964	0.141764076
NME2P1	12q24.23	-0.078696849	0.073804646	0.141764076
CISD2	4q24	-0.078689294	0.073832435	0.141803923
SEC61A1	3q21.3	0.078675834	0.073881967	0.141883616
LONRF1	8p23.1	0.078673576	0.073890278	0.141883616
GRAMD4	22q13.31	0.078672274	0.073895073	0.141883616
CNR1	6q15	-0.07866763	0.073912172	0.141902911
SKA3	13q12.11	0.078656122	0.073954556	0.141970742
ROPN1B	3q21.2	-0.078625413	0.074067754	0.142174492
KCTD14	11q14.1	0.078616697	0.074099907	0.142222648
APH1B	15q22.2	-0.078602369	0.074152791	0.142310581
AKR1B15	7q33	-0.078563071	0.074297994	0.142575654
ACSF3	16q24.3	-0.078558603	0.074314517	0.142593769
CD160	1q21.1	0.078555737	0.074325117	0.142600514
PELP1	17p13.2	-0.078469117	0.074646078	0.143202664
CASK	Xp11.4	0.07846638	0.074656238	0.143208508
CLCN1	7q34	-0.078460401	0.074678438	0.143237442
TLE5	19p13.3	-0.078455178	0.074697834	0.143260994

HIST1H3J	6p22.1	0.078448456	0.074722803	0.14329523
PIP4K2C	12q13.3	-0.078443802	0.074740094	0.143314735
GPR39	2q21.2	-0.078435292	0.074771721	0.143353639
PFDN2	1q23.3	-0.078434511	0.074774626	0.143353639
ADAM17	2p25.1	0.078423135	0.074816921	0.143421066
YBX3P1	16p11.2	0.078419576	0.074830156	0.143432778
DNAJB7	22q13.2	0.07840908	0.074869203	0.14349396
SLC5A6	2p23.3	-0.078402988	0.074891873	0.143523744
TRIM49	11q14.3	-0.07837598	0.074992449	0.143702808
TRIM6	11p15.4	0.078373724	0.075000856	0.143705239
PRR32	Xq25	0.078371272	0.075009993	0.143709067
ZNF175	19q13.41	0.078361827	0.075045198	0.143762832
NUDT18	8p21.3	-0.078350972	0.075085674	0.143826684
ZNF566	19q13.12	0.078341854	0.075119688	0.143878147
ALDH1L1	3q21.3	-0.078336758	0.075138706	0.143900881
RNF214	11q23.3	0.078332476	0.075154687	0.143917794
EXOSC4	8q24.3	-0.078315021	0.075219859	0.144020163
SRSF5	14q24.1	-0.078314326	0.075222454	0.144020163
OR6C75	12q13.2	-0.078291282	0.075308571	0.144164847
LRRC29	16q22.1	-0.078290272	0.075312346	0.144164847
UCK2	1q24.1	0.078286799	0.075325334	0.144175998
ARMC10	7q22.1	-0.078279852	0.075351316	0.144212016
MAGEA12	Xq28	0.078273297	0.075375836	0.14424523
CFAP57	1p34.2	-0.078266631	0.075400781	0.144267249
ZFC3H1	12q21.1	0.078266392	0.075401676	0.144267249
TTC24	1q22	0.078248523	0.075468575	0.144381525
SLC37A2	11q24.2	0.078239646	0.075501827	0.144431415
TNKS1BP1	11q12.1	0.078228878	0.075542178	0.144494873
DPEP3	16q22.1	0.078217311	0.075585542	0.144564081
NIFK	2q14.3	-0.078196313	0.075664315	0.144700994
CRLF2	Xp22.33 and Yp11	0.078188105	0.075695126	0.144736096
TREML3P	6p21.1	0.078187593	0.07569705	0.144736096
GTF2E2	8p12	-0.078163315	0.075788244	0.1448967
HIST4H4	12p12.3	0.078156196	0.075815002	0.144934092
ZNF143	11p15.4	0.078151418	0.075832964	0.144954665
GGNBP2	17q12	-0.078147076	0.075849291	0.144972107
SLAMF9	1q23.2	0.078135495	0.075892851	0.145024415
FAAH2	Xp11.21	-0.078134658	0.075896001	0.145024415
ARHGAP27P1	17q24.1	-0.07813379	0.075899268	0.145024415
PIGU	20q11.22	-0.07813214	0.075905476	0.145024415
ACOX2	3p14.3	-0.078126582	0.075926391	0.145050608
EPHA4	2q36.1	0.078121719	0.075944695	0.145071809
ABHD5	3p21.33	0.078118767	0.075955811	0.145079274
COL27A1	9q32	0.078096623	0.076039216	0.1452129
PRMT9	4q31.23	-0.078096362	0.076040197	0.1452129
ANKS6	9q22.33	-0.078087767	0.076072592	0.145260983
OR10A3	11p15.4	-0.078073155	0.076127691	0.145352407
DMTF1	7q21.12	0.07806319	0.076165283	0.145410389
WDFY2	13q14.3	0.078034881	0.076272163	0.145600629
ALX1	12q21.31	0.07803034	0.076289317	0.145607458
CD34	1q32.2	0.078030105	0.076290207	0.145607458
PI4K2A	10q24.2	0.078026979	0.076302019	0.145616197
IQSEC2	Xp11.22	-0.078012824	0.076355522	0.145704489
TIGD1	2q37.1	-0.078009396	0.076368486	0.145715414
MIR924HG	18q12.2-q12.3	0.077999468	0.076406036	0.145773244
IQCK	16p12.3	-0.077993459	0.076428769	0.145802797
COPS3	17p11.2	-0.077990506	0.076439941	0.145810293
SNIP1	1p34.3	0.077977654	0.076488591	0.145889268

DUS1L	17q25.3	-0.077968797	0.076522134	0.145929984
ZNF586	19q13.43	0.077968189	0.076524436	0.145929984
NUDT9	4q22.1	-0.077960113	0.076555031	0.145974498
TTC32	2p24.1	-0.077942659	0.076621189	0.14608681
PLAC8	4q21.22	-0.07793988	0.076631726	0.146093063
CCNB2	15q22.2	0.07793402	0.07665395	0.146120727
IFNE	9p21.3	0.077932226	0.076660755	0.146120727
HEYL	1p34.2	0.077927896	0.07667718	0.146138197
IL31	12q24.31	0.077915914	0.076722651	0.146211016
CTDSPL	3p22.2	-0.077894811	0.076802787	0.146349876
FBF1	17q25.1	0.077883393	0.076846171	0.146418687
PLA2G4C	19q13.33	0.07787688	0.076870928	0.146451995
TACSTD2	1p32.1	-0.0778289	0.077053509	0.14678595
HLA-DOB	6p21.32	0.077819869	0.077087915	0.146837597
TMEM106C	12q13.11	-0.077812054	0.0771177	0.146880433
WFDC10B	20q13.12	0.077795293	0.077181608	0.146988247
RGCC	13q14.11	-0.077784439	0.077223014	0.14705319
BRK1	3p25.3	-0.077781574	0.07723395	0.147060103
LINC01089	12q24.31	0.077772977	0.077266764	0.147108669
DSCR10	21q22.13	0.07776378	0.07730188	0.147161608
CWC15	11q21	-0.077758475	0.077322143	0.147175428
GFM2	5q13.3	-0.077757433	0.077326123	0.147175428
SPPL2C	17q21.31	-0.077756137	0.077331073	0.147175428
RCOR3	1q32.2-q32.3	-0.077731989	0.077423367	0.14733715
TMEM100	17q22	-0.077722176	0.077460897	0.147394636
ZNF692	1q44	-0.077706979	0.077519048	0.147491345
HOXD1	2q31.1	-0.077696298	0.077559941	0.147555204
TMEM242	6q25.3	-0.077690133	0.077583554	0.147586178
BRIX1	5p13.2	0.077681275	0.077617487	0.147636777
CCNT2	2q21.3	-0.077653574	0.077723688	0.147824815
TGIF2LX	Xq21.31	0.077630627	0.077811749	0.147973672
GPAT2	2q11.2	0.077629349	0.077816657	0.147973672
KLHL40	3p22.1	-0.077612606	0.077880969	0.148072545
FAM114A2	5q33.2	-0.077611457	0.07788538	0.148072545
IL6ST	5q11.2	0.077610068	0.077890719	0.148072545
UBXN11	1p36.11	-0.077603816	0.077914748	0.148104237
TBC1D19	4p15.2	0.077595479	0.077946795	0.148151164
GABRA5	15q12	0.077593346	0.077954995	0.148152762
ARNT	1q21.3	0.077584016	0.077990877	0.148206963
LMNTD1	12p12.1	-0.07757785	0.078014601	0.148238051
TRIM64	11q14.3	-0.077567627	0.078053943	0.148298808
LYPD6	2q23.2	0.077563455	0.078070003	0.148315322
OR2AE1	7q22.1	0.07755966	0.078084614	0.148329081
NDUFC2	11q14.1	-0.077543637	0.078146329	0.148432308
CACNA1F	Xp11.23	-0.077525868	0.078214811	0.148548368
SIMC1	5q35.2	-0.077523403	0.078224316	0.148552404
SETMAR	3p26.1	-0.077519061	0.07824106	0.148570186
ZZZ3	1p31.1	0.07751689	0.078249433	0.14857207
NRADDP	3p21.31	-0.077510102	0.078275621	0.148606369
OR2A9P	7q35	0.07750838	0.078282262	0.148606369
ZNF641	12q13.11	0.077502347	0.078305544	0.148636549
ZNF100	19p12	0.07749718	0.078325486	0.148660384
C1ORF131	1q42.2	-0.077478855	0.078396245	0.148780656
POU2F1	1q24.2	0.07746774	0.078439191	0.148848126
ZSWIM2	2q32.1	0.077449108	0.078511224	0.148970774
OR1G1	17p13.3	0.077446548	0.078521123	0.148975515
TMEFF2	2q32.3	-0.077431533	0.078579218	0.149071686
CWH43	4p11	-0.07740636	0.07867669	0.149242534

GDPD1	17q22	-0.077395275	0.078719642	0.149309941
MOB4	2q33.1	-0.077376299	0.078793216	0.14943541
BIRC5	17q25.3	0.077372826	0.07880669	0.149441749
MUTYH	1p34.1	-0.07737161	0.078811406	0.149441749
RAMP2	17q21.2	-0.077367789	0.07882623	0.14945578
ZGLP1	19p13.2	0.077348598	0.078900721	0.149582927
CHP2	16p12.2	-0.077343208	0.078921654	0.149608522
PRXL2B	1p36.32	-0.077328712	0.078977969	0.149701179
DNAJC8	1p35.3	-0.077313342	0.079037718	0.149800326
TEX13A	Xq22.3	0.07730772	0.079059579	0.149801828
LOC641367	19p12	0.077305008	0.079070127	0.149801828
LGALS12	11q12.3	0.077304603	0.079071702	0.149801828
MYORG	9p13.3	-0.077303616	0.079075544	0.149801828
NPFF	12q13.13	0.077303571	0.079075719	0.149801828
CFAP69	7q21.13	0.077296453	0.07910341	0.149840185
INHBC	12q13.3	-0.077289062	0.079132176	0.14988057
NIBAN3	19p13.11	0.077273368	0.079193279	0.149982191
RBMXL1	1p22.2	-0.077253944	0.079268957	0.150111392
LRP1B	2q22.1-q22.2	-0.077247588	0.079293733	0.150136352
MICU1	10q22.1	-0.077246737	0.079297054	0.150136352
NUDCD3	7p13	0.077222943	0.079389865	0.150297938
KRT3	12q13.13	-0.077198453	0.079485482	0.150464807
RPEL1	10q24.33	-0.077191337	0.079513284	0.150503283
SHLD2P1	10q11.22	-0.077179524	0.079559455	0.150576517
C12ORF56	12q14.2	0.077165756	0.07961329	0.150664241
KRT7	12q13.13	-0.07714722	0.079685821	0.150776034
GPR75	2p16.2	0.077146831	0.079687344	0.150776034
AQP2	12q13.12	0.077133366	0.079740065	0.150861607
HES5	1p36.32	0.077128801	0.079757945	0.15088052
BICRA	19q13.33	0.077126987	0.079765052	0.15088052
TCF7L2	10q25.2-q25.3	-0.077117782	0.079801118	0.150934559
ADRA1A	8p21.2	-0.07711235	0.079822405	0.150960637
CREG2	2q11.2	0.077104221	0.079854275	0.151006721
ARHGDI1	12p12.3	0.077101543	0.079864776	0.151012394
TCFL5	20q13.33	0.077093814	0.079895088	0.151055521
POU1F1	3p11.2	-0.077080641	0.079946775	0.151139048
PDE6B	4p16.3	-0.077078532	0.079955052	0.1511405
SCGB3A1	5q35.3	-0.077064643	0.080009582	0.151229378
RPL9	4p14	-0.077060555	0.080025638	0.151245525
PRAMEF17	1p36.21	-0.077054251	0.080050402	0.151259013
OAS1	12q24.13	-0.077053087	0.080054975	0.151259013
TMOD1	9q22.33	-0.077053	0.080055316	0.151259013
IAH1	2p25.1	-0.077050395	0.080065553	0.151264155
NUTM1	15q14	-0.077046897	0.0800793	0.151275929
DTD2	14q12	-0.077021652	0.080178562	0.151449231
CEP63	3q22.2	0.07701757	0.080194619	0.151465348
CBX3	7p15.2	0.077012707	0.080213754	0.151487276
NPHS2	1q25.2	-0.076977099	0.080353982	0.151737866
GPATCH4	1q22-q23.1	-0.076964165	0.080404968	0.151819906
F10	13q34	0.076961261	0.080416419	0.151827286
NOP9	14q12	0.076938721	0.080505341	0.151980916
UBAC2	13q32.3	-0.076928735	0.080544764	0.152041081
BMP2	20p12.3	-0.076925176	0.080558816	0.152042341
FKRP	19q13.32	0.07692474	0.080560537	0.152042341
MIR600HG	9q33.3	0.076890484	0.080695909	0.152283551
CYP4A22	1p33	-0.076882562	0.080727241	0.152328398
CPNE4	3q22.1	-0.07687331	0.080763846	0.152383187
SNRPN	15q11.2	-0.076871335	0.080771663	0.152383653

UBAC1	9q34.3	0.076864735	0.080797785	0.152418649
TRMT12	8q24.13	0.076845023	0.080875846	0.15255161
SIPA1L3	19q13.13-q13.2	0.076833994	0.080919546	0.152607616
RFPL3	22q12.3	0.076833703	0.0809207	0.152607616
LOXHD1	18q21.1	0.076824148	0.080958577	0.152664745
IL33	9p24.1	-0.076821663	0.08096843	0.152669023
HCG27	6p21.33	0.07680052	0.081052304	0.152812857
GGT6	17p13.2	-0.076793499	0.08108017	0.152851078
FAM172A	5q15	0.076786407	0.081108328	0.152889843
ADSSL1	14q32.33	-0.076777462	0.08114385	0.152942482
PDCD4	10q25.2	0.076771557	0.081167309	0.15296015
KRT76	12q13.13	-0.076771277	0.081168422	0.15296015
PABPC4	1p34.3	0.076753235	0.081240135	0.153080931
EML3	11q12.3	0.076750282	0.081251874	0.153080931
CNOT10	3p22.3	-0.076749414	0.081255328	0.153080931
LOC401127	4p14	-0.076739397	0.081295167	0.153141654
KRT36	17q21.2	0.076732897	0.081321032	0.153176042
PCF11	11q14.1	0.076720323	0.081371077	0.153255968
ABCF3	3q27.1	-0.076713028	0.081400122	0.153296329
BMX	Xp22.2	0.076702225	0.081443154	0.153363021
TMEM159	16p12.3	-0.076679248	0.081534737	0.153521116
RSPO4	20p13	-0.076656945	0.081623713	0.153674274
TMC7	16p12.3	-0.076642342	0.081682015	0.153769658
CYHR1	8q24.3	-0.076639216	0.0816945	0.153778781
LIPA	10q23.31	-0.076625061	0.081751049	0.153857091
KRTAP4-3	17q21.2	-0.076624232	0.081754363	0.153857091
SLC1A7	1p32.3	0.076623064	0.081759031	0.153857091
CNOT8	5q33.2	-0.076619417	0.081773609	0.153870138
PTCH2	1p34.1	0.076612951	0.081799458	0.153904392
UXS1	2q12.2	-0.076606131	0.081826729	0.153941314
MT1A	16q13	0.076589436	0.081893516	0.154052562
GLIPR1L1	12q21.2	0.076583385	0.081917737	0.154083727
TEFM	17q11.2	-0.076575824	0.081948005	0.154126258
LINC00304	16q24.3	0.076564296	0.081994173	0.154188367
PPIC	5q23.2	0.076563753	0.081996347	0.154188367
B4GALNT3	12p13.33	0.076557501	0.082021397	0.154221065
NRG2	5q31.2	-0.076546912	0.082063835	0.154286447
SLC22A10	11q12.3	-0.076543433	0.082077784	0.154298263
COPE	19p13.11	-0.076539178	0.082094842	0.154315908
PUM2	2p24.1	0.076537268	0.082102503	0.154315908
PRR4	12p13.2	-0.076531363	0.082126185	0.15434601
TUT4	1p32.3	0.076514777	0.082192735	0.154456661
FAM160A2	11p15.4	-0.076507482	0.082222017	0.154497265
CASP5	11q22.3	0.076498271	0.082259005	0.154552341
MAT2B	5q34	-0.076495151	0.082271536	0.154561458
SLC2A8	9q33.3	-0.076486902	0.082304679	0.154609293
MATN2	8q22.1-q22.2	-0.076459419	0.082415167	0.154797481
ZNF256	19q13.43	0.076458158	0.082420239	0.154797481
RETN	19p13.2	-0.076420816	0.082570565	0.155065349
OTOS	2q37.3	0.076385731	0.082712004	0.155316477
MYO9A	15q23	0.076382696	0.082724252	0.155324987
PRMT3	11p15.1	-0.076368194	0.082782779	0.155407479
SERPINA7	Xq22.3	-0.076367984	0.082783627	0.155407479
CYS1	2p25.1	0.07634935	0.082858879	0.155534245
GLUD1	10q23.2	-0.076341361	0.08289116	0.155580331
PSMC3	11p11.2	-0.076332809	0.082925726	0.15561681
DAPL1	2q24.1	-0.076332727	0.082926057	0.15561681
OR52K1	11p15.4	0.076317046	0.082989467	0.155721288

PGK1	Xq21.1	0.076313572	0.083003521	0.155733141
ARTN	1p34.1	0.07627103	0.083175777	0.156041789
EIF4A2	3q27.3	-0.076241844	0.08329412	0.156249243
DCTN4	5q33.1	-0.076235071	0.083321604	0.156286236
MAP9	4q32.1	0.076220916	0.083379062	0.156379438
OR4C15	11q11	0.0762143	0.08340593	0.156415257
EBI3	19p13.3	0.076196386	0.083478713	0.156537167
RC3H1	1q25.1	0.076187657	0.083514196	0.156589118
MAMLD1	Xq28	0.076181231	0.083540326	0.156615558
TBX21	17q21.32	0.076180362	0.083543858	0.156615558
TRPM7	15q21.2	-0.076158653	0.083632187	0.156766544
TAF6	7q22.1	0.076154703	0.083648264	0.156782081
CRY2	11p11.2	-0.076152748	0.083656225	0.156782405
LOC646813	11p11.12	0.076145295	0.083686574	0.156824682
TUBA3FP	22q11.21	0.076140415	0.083706449	0.156847325
CES5A	16q12.2	-0.076135765	0.083725391	0.156860532
UBE2Q1	1q21.3	-0.076134859	0.083729082	0.156860532
MYCT1	6q25.2	0.076132341	0.083739342	0.156865156
GPR27	3p13	-0.076115251	0.083809001	0.156981036
FAM45BP	Xq26.1	-0.07611315	0.083817569	0.156982476
TYK2	19p13.2	0.07609118	0.083907194	0.157135717
SLC39A7	6p21.32	0.076089095	0.0839157	0.157137027
UBE2Q2P1	15q25.2	0.076081629	0.083946179	0.157173503
ZCCHC9	5q14.1	-0.076080498	0.083950795	0.157173503
BICRAL	6p21.1	0.076073117	0.083980936	0.157215312
PCAT18	18q11.2	0.076067068	0.084005645	0.157246944
SLBP	4p16.3	-0.076054273	0.084057925	0.157330175
CPOX	3q11.2	0.076023098	0.084185418	0.157537483
VEGFB	11q13.1	0.076022317	0.084188617	0.157537483
METTL17	14q11.2	-0.076020319	0.08419679	0.157537483
SYT2	1q32.1	0.076019538	0.084199989	0.157537483
GOLGA8IP	15q11.2	0.076007517	0.084249197	0.157614902
WSB2	12q24.23	-0.07598324	0.084348653	0.1577863
KRT85	12q13.13	0.075962515	0.084433627	0.157930582
TOX4	14q11.2	0.075950936	0.084481134	0.15800476
ZNF558	19p13.2	0.07593791	0.084534602	0.158083387
GMPS	3q25.31	0.075936868	0.08453888	0.158083387
ERGIC3	20q11.22	-0.075930876	0.084563485	0.158114709
ARHGAP27P2	17q24.2	0.075924857	0.084588208	0.158145329
SLC13A3	20q13.12	0.075921758	0.084600939	0.158145329
CDKL5	Xp22.13	0.075921152	0.08460343	0.158145329
SNRNP40	1p35.2	-0.075908993	0.084653397	0.158224037
HIKESHI	11q14.2	0.075892321	0.084721946	0.158337459
FBXL14	12p13.33	0.075876255	0.084788052	0.158446294
DNAJC2	7q22.1	0.075873823	0.084798059	0.158450286
MMP7	11q22.2	0.075849509	0.084898189	0.158622661
SULT1C4	2q12.3	0.075839001	0.084941489	0.158688833
KRAS	12p12.1	0.075831967	0.084970485	0.158728273
ABO	9q34.2	-0.075829943	0.084978831	0.158729133
SLC35A2	Xp11.23	-0.075824933	0.084999489	0.158752989
UGCG	9q31.3	0.075803746	0.0850869	0.158901503
ZNF334	20q13.12	0.07579619	0.085118094	0.158945012
DCDC2B	1p35.2	-0.075777275	0.085196214	0.159076133
ADAM3A	8p11.22	-0.075774373	0.085208205	0.159083767
INPP1	2q32.2	-0.075763886	0.085251549	0.159142542
ZNF224	19q13.31	0.075762931	0.085255498	0.159142542
CCDC81	11q14.2	0.075756645	0.085281487	0.159176295
MAP2K4	17p12	-0.075749558	0.085310797	0.159216238

SNORD116-4	15q11.2	0.075742544	0.085339812	0.159255624
PER1	17p13.1	-0.075734187	0.085374391	0.159305384
SFPQ	1p34.3	0.075705878	0.085491618	0.15950934
TMEM14EP	3q25.2	0.075691284	0.085552103	0.159607399
COPG1	3q21.3	-0.07568495	0.085578363	0.159627207
DPCD	10q24.32	-0.075681563	0.085592408	0.159627207
CHD9	16q12.2	0.075680132	0.085598343	0.159627207
CSPG5	3p21.31	-0.07568	0.08559889	0.159627207
MYRF-AS1	11q12.2	-0.075679161	0.08560237	0.159627207
RNF165	18q21.1	0.075665811	0.085657754	0.159715689
LOC642929	9q21.11	0.075663414	0.085667702	0.159719445
ZIC1	3q24	0.07565814	0.085689592	0.159740247
NFKBIA	14q13.2	0.07565638	0.085696898	0.159740247
PTPN11	12q24.13	0.075654991	0.085702666	0.159740247
TFAMP1	7p22.3	-0.075650286	0.085722199	0.159761861
HSF2BP	21q22.3	0.075645701	0.08574124	0.159782556
SLC34A2	4p15.2	-0.075634236	0.085788862	0.159856502
SMCO1	3q29	0.075626381	0.085821506	0.159902528
PCLO	7q21.11	0.075616869	0.085861047	0.159961395
DDX24	14q32.12	0.075608967	0.085893907	0.160007805
HIF3A	19q13.32	-0.07560584	0.085906909	0.160014523
PAPSS1	4q25	0.075604277	0.085913411	0.160014523
ERBB2	17q12	-0.075576142	0.086030511	0.160217799
POLG2	17q23.3	-0.075569976	0.086056189	0.160250794
LCN10	9q34.3	0.075546667	0.086153323	0.160376831
MFSD4A-AS1	1q32.1	0.075545889	0.086156567	0.160376831
ZNF600	19q13.41	0.075545575	0.086157877	0.160376831
ZP3	7q11.23	-0.075544706	0.086161497	0.160376831
UNQ6494	9q22.2	0.075544176	0.086163707	0.160376831
MRPL20-AS1	1p36.33	-0.075541493	0.086174894	0.160382824
LHFPL4	3p25.3	-0.075533061	0.086210061	0.160433441
RBMS2	12q13.3	-0.075530031	0.086222703	0.160442135
CELA3A	1p36.12	-0.075524398	0.086246202	0.160471027
IL27	16p12.1-p11.2	0.075516409	0.086279546	0.16051495
POGZ	1q21.3	0.075514921	0.086285756	0.16051495
OR4K14	14q11.2	-0.075499187	0.086351453	0.16062232
RTL9	Xq23	0.075491832	0.086382178	0.160664625
HMOX2	16p13.3	-0.075477407	0.086442463	0.160755912
CXORF65	Xq13.1	0.075476266	0.086447231	0.160755912
SNHG7	9q34.3	-0.075472109	0.086464609	0.160773378
SNORA3A	11p15.4	0.075465916	0.086490507	0.160806678
GLI4	8q24.3	-0.075453613	0.086541975	0.160887509
ZIM3	19q13.43	-0.07543161	0.086634078	0.161025011
RAB13	1q21.3	-0.075430689	0.086637935	0.161025011
CHST7	Xp11.3	0.075430212	0.086639935	0.161025011
CARD6	5p13.1	-0.075422004	0.086674315	0.161074037
NLE1	17q12	-0.07540811	0.086732538	0.161167359
FOXO4	Xq13.1	0.075400207	0.086765667	0.161214036
FRRS1	1p21.2	-0.075383013	0.086837784	0.161324344
JUND	19p13.11	-0.075382232	0.086841063	0.161324344
YTHDF1	20q13.33	0.075374503	0.086873496	0.161369703
YIPF2	19p13.2	-0.075363214	0.086920887	0.161442836
MCHR2	6q16.2	-0.075346415	0.086991449	0.161558989
LINC00588	8q12.1	0.075335006	0.087039398	0.161633125
RNF31	14q12	0.07532926	0.087063551	0.161663065
PTX3	3q25.32	0.075320316	0.087101164	0.161717989
LYZ	12q15	-0.075307464	0.087155233	0.161803452
YIPF6	Xq12-q13.1	-0.075297957	0.087195247	0.16186281

CYP2E1	10q26.3	0.075292007	0.087220297	0.161894382
DPP3	11q13.2	-0.075283583	0.08725577	0.161945293
TGM3	20p13	-0.07528	0.087270865	0.161958377
UST	6q25.1	-0.075271039	0.087308621	0.162013509
SDR39U1	14q12	-0.075257966	0.087363722	0.162100814
ASB11	Xp22.2	0.075254138	0.087379862	0.162115819
MAD2L1	4q27	0.075249109	0.087401073	0.162140227
SNRPA	19q13.2	-0.075223926	0.087507338	0.162322402
TAF9B	Xq21.1	0.075217673	0.087533737	0.16235641
TOR1AIP1	1q25.2	-0.075204908	0.087587654	0.162441448
GNAT3	7q21.11	-0.075190651	0.087647905	0.162538215
VWF	12p13.31	0.075188061	0.087658852	0.162543542
MSS51	10q22.2	-0.075182938	0.087680514	0.162568734
FBXL21P	5q31.1	-0.075161655	0.087770545	0.162720673
TAMM41	3p25.2	-0.075155931	0.08779477	0.162750596
RAB37	17q25.1	-0.075153326	0.087805798	0.162756051
NBR2	17q21.31	-0.075137087	0.087874563	0.162868516
GK5	3q23	0.075120935	0.087943004	0.162980359
COL4A6	Xq22.3	0.075116083	0.087963574	0.163003475
PCNAP1	4q23	-0.075103583	0.088016578	0.163086683
TNFSF15	9q32	-0.075100963	0.088027693	0.163092266
CEACAM3	19q13.2	0.075070449	0.088157206	0.163317187
SLCO1B1	12p12.1	-0.075066154	0.088175446	0.163335945
NSD3	8p11.23	0.075056154	0.088217932	0.163399611
TSKU	11q13.5	-0.075045907	0.088261483	0.163465235
LRRC8D	1p22.2	0.075007919	0.088423089	0.163749474
DXO	6p21.33	-0.075000664	0.088453976	0.16377413
SLC7A4	22q11.21	-0.075000321	0.088455437	0.16377413
ZNF415	19q13.42	-0.074999059	0.08846081	0.16377413
ZNF75D	Xq26.3	0.074984078	0.088524629	0.16387721
GALNT18	11p15.4	-0.074981039	0.088537581	0.163886115
TAAR6	6q23.2	-0.074976426	0.088557243	0.163907438
MRPL48	11q13.4	-0.074957464	0.088638095	0.164042001
ANKRD52	12q13.3	0.074945522	0.088689045	0.164121206
PIGL	17p11.2	-0.074942571	0.088701639	0.164129422
C3ORF49	3p14.1	0.074929933	0.088755593	0.164214162
SUN5	20q11.21	-0.074922068	0.088789179	0.164261205
CTRB1	16q23.1	-0.074919784	0.088798938	0.164264163
ESCO1	18q11.2	0.074899585	0.088885257	0.164408732
MIMT1	19q13.43	0.074887073	0.088938756	0.164492573
TMEM104	17q25.1	0.074875791	0.088987024	0.164566724
SCRIB	8q24.3	0.074869365	0.089014525	0.16460246
HUNK	21q22.11	-0.074841229	0.089135013	0.164810123
FOLH1B	11q14.3	0.074827463	0.089194011	0.164904064
LINC00240	6p22.2	-0.074823173	0.089212404	0.164922922
CFHR5	1q31.3	-0.074819454	0.089228354	0.16493726
ZACN	17q25.1	0.074817228	0.089237898	0.164939757
FBXL19	16p11.2	0.074808057	0.089277238	0.164997319
LOC389705	9p22.3	-0.07478521	0.089375301	0.16516339
F3	1p21.3	0.0747827	0.089386077	0.165167081
ELMOD3	2p11.2	-0.074780923	0.089393708	0.165167081
IL26	12q15	0.074778956	0.089402158	0.165167534
HSD17B7P2	10p11.1	-0.07476759	0.089450984	0.165242572
ERLEC1	2p16.2	-0.074746315	0.08954244	0.165396341
FAM149A	4q35.1	-0.074722262	0.089645925	0.165572298
ACTL8	1p36.13	-0.074706174	0.089715197	0.165685037
SPSB3	16p13.3	-0.074703851	0.089725204	0.165688318
ELOVL7	5q12.1	0.074700204	0.089740915	0.165702129

TESMIN	11q13.3	0.074698293	0.089749146	0.165702129
NPY1R	4q32.2	-0.07469057	0.089782425	0.165748369
VRK2	2p16.1	0.074653832	0.089940868	0.166025646
HSD3B7	16p11.2	-0.074644627	0.089980601	0.166083761
UBC	12q24.31	-0.074627347	0.090055233	0.166206275
UNC79	14q32.12	0.074623158	0.090073332	0.166224438
LOC100129534	1p36.32	-0.074595998	0.090190747	0.166425864
TAF1L	9p21.1	0.074572293	0.090293329	0.166599883
EFEMP1	2p16.1	0.074553621	0.090374196	0.166733806
RPA2	1p35.3	-0.074542853	0.090420857	0.166804606
CAPZA3	12p12.3	-0.074534258	0.090458118	0.166852499
PLCB2	15q15.1	0.07453304	0.090463396	0.166852499
RASGRP4	19q13.2	0.074516801	0.090533828	0.166967106
PGM3	6q14.1	0.074511765	0.090555682	0.166982365
ZNF695	1q44	0.074509947	0.090563572	0.166982365
RAB1A	2p14	-0.07450916	0.090566988	0.166982365
SLC7A11	4q28.3	-0.07448936	0.090652947	0.16711467
SPRR3	1q21.3	0.074487198	0.090662339	0.16711467
MORF4	4q34.1	-0.074486896	0.090663652	0.16711467
RASIP1	19q13.33	0.074460878	0.090776722	0.167307765
UBALD1	16p13.3	-0.074450544	0.090821661	0.167375267
SPATA25	20q13.12	0.074446688	0.090838433	0.167390851
KRT18	12q13.13	-0.074443597	0.090851883	0.167400311
METTL6	3p25.1	-0.074439602	0.090869264	0.167417013
TM2D1	1p31.3	-0.074424405	0.090935412	0.16752355
TSEN2	3p25.2	-0.0744185	0.090961125	0.167555587
ANOS1	Xp22.31	0.074396183	0.09105836	0.167719351
TOR2A	9q34.11	-0.074378729	0.091134466	0.167838121
ADAM18	8p11.22	0.07437757	0.091139518	0.167838121
BCL2L10	15q21.2	-0.074366413	0.091188194	0.167912399
FANCI	15q26.1	0.074361361	0.091210243	0.167931778
OR10H2	19p13.12	0.074360179	0.091215403	0.167931778
ZNF502	3p21.31	0.074357714	0.091226163	0.167936228
MIA	19q13.2	0.074339342	0.091306386	0.168068539
MET	7q31.2	-0.074336612	0.091318313	0.168075125
TSHB	1p13.2	-0.074325269	0.09136788	0.168150981
ZBTB7C	18q21.1	-0.074310821	0.091431043	0.168251842
TRMT1	19p13.13	-0.074303179	0.091464466	0.168297961
EPHA5	4q13.1-q13.2	0.074288764	0.091527539	0.168398625
BSG	19p13.3	-0.074260368	0.091651891	0.168612005
CAPN10	2q37.3	-0.074249774	0.091698319	0.168682004
TAC4	17q21.33	0.074229883	0.091785539	0.168827019
TOR1A	9q34.11	0.074225633	0.091804186	0.168845889
N4BP2L2-IT2	13q13.1	0.074223335	0.091814268	0.168849006
HMGB1P1	20q13.31	-0.074217036	0.09184191	0.168884411
TMEM244	6q22.33	0.07419644	0.091932338	0.169035254
KCNA6	12p13.32	0.07417262	0.092037007	0.169212253
EMC9	14q12	-0.074167063	0.092061438	0.169228528
TBC1D8	2q11.2	0.074165106	0.092070044	0.169228528
APOBR	16p12.1	0.074162241	0.092082646	0.169228528
AIFM3	22q11.21	-0.074162069	0.092083403	0.169228528
RAET1G	6q25.1	-0.074161048	0.092087893	0.169228528
CIART	1q21.2	0.074156249	0.092109002	0.169251867
STX16	20q13.32	0.074147478	0.092147591	0.169291144
KRBA2	17p13.1	0.07414661	0.092151412	0.169291144
DPH7	9q34.3	0.074144091	0.092162495	0.169291144
OTUB2	14q32.12	0.074143746	0.092164016	0.169291144
DNAJC9	10q22.2	0.07413315	0.09221066	0.169361366

SF3A2	19p13.3	0.074129763	0.092225572	0.169373302
CLPTM1	19q13.32	-0.074113959	0.092295188	0.16948569
NLRX1	11q23.3	-0.074105362	0.092333074	0.169539795
PSMD7	16q23.1	-0.07409607	0.092374035	0.169599537
CDHR5	11p15.5	-0.074089283	0.092403963	0.169639013
LINC01566	16p11.1	-0.074077992	0.092453772	0.169714977
SEL1L3	4p15.2	0.074067587	0.092499689	0.169783783
TSPYL1	6q22.1	-0.07406255	0.092521923	0.169809109
ZNF644	1p22.2	0.07405734	0.092544927	0.169835846
SLC25A34	1p36.21	0.074044314	0.092602459	0.169925935
SCARNA3	1q25.1	0.074040081	0.092621164	0.169944767
HID1	17q25.1	-0.074013313	0.0927395	0.170146386
KLHL32	6q16.1	-0.074002159	0.092788846	0.170221404
RTL6	22q13.31	0.073995772	0.092817114	0.170257746
EGR1	5q31.2	0.073981791	0.092879011	0.170345179
FAM49A	2p24.2	0.073981183	0.092881703	0.170345179
RPS4Y2	Yq11.223	-0.073963763	0.092958874	0.170469339
MRT04	1p36.13	-0.073962078	0.092966339	0.170469339
GNG3	11q12.3	0.073957913	0.092984802	0.170487665
TMEM186	16p13.2	-0.073950442	0.09301792	0.170532853
CHMP2B	3p11.2	-0.073944235	0.093045445	0.170557521
HGC6.3	6q27	0.073943586	0.093048321	0.170557521
ALDOB	9q31.1	-0.073935329	0.093084945	0.170599212
NUTM2G	9q22.33	0.073932791	0.093096206	0.170599212
ALDH3B2	11q13.2	0.073932727	0.09309649	0.170599212
FOXE3	1p33	0.073924985	0.093130847	0.170646636
CDHR2	5q35.2	-0.073916134	0.093170134	0.170703086
EGLN1	1q42.2	-0.073899989	0.093241831	0.170818898
NDC1	1p32.3	0.073897558	0.093252633	0.170823141
PNPLA5	22q13.31	0.073871443	0.093368709	0.171020211
DEFB126	20p13	-0.073863476	0.093404145	0.171069551
ACOT12	5q14.1	0.073852713	0.093452032	0.171141685
QTRT1	19p13.2	-0.073845368	0.093484727	0.171179617
GMFG	19q13.2	0.073844239	0.093489752	0.171179617
C2ORF74	2p15	-0.073822269	0.093587598	0.171342208
SNORA68	19p13.11	0.07381893	0.093602476	0.171342208
SPATA1	1p22.3	-0.073818568	0.093604086	0.171342208
ZNF530	19q13.43	0.07379587	0.093705276	0.171500498
XIAP	Xq25	0.073795349	0.0937076	0.171500498
NEIL2	8p23.1	0.073793178	0.093717282	0.171502627
METTL25	12q21.31	-0.073787101	0.093744392	0.171536643
PRKAG2	7q36.1	-0.073781889	0.093767646	0.1715636
MGRN1	16p13.3	-0.073773813	0.093803689	0.171613948
XIST	Xq13.2	0.073764433	0.093845567	0.17167496
FAM50B	6p25.2	-0.07375688	0.093879299	0.171721063
LINC01128	1p36.33	0.073742509	0.093943502	0.171794253
OR5D16	11q12.1	0.073742193	0.093944915	0.171794253
PRR20C	13q21.1	0.073742193	0.093944915	0.171794253
SNW1	14q24.3	0.073730047	0.093999212	0.17187793
ZNF254	19p12	0.073725618	0.094019015	0.171898526
FAM151A	-	-0.073720602	0.094041448	0.171923925
RCBTB1	13q14.2	0.07370495	0.094111474	0.172020748
IFNA6	9p21.3	0.073704944	0.0941115	0.172020748
OLAH	10p13	-0.073688092	0.094186943	0.172143015
OOSP2	11q12.1	0.073666697	0.094282796	0.172302559
STOX1	10q22.1	0.073637477	0.09441383	0.172526362
MEIS3P1	17p12	-0.073625927	0.094465663	0.172593813
OLIG2	21q22.11	0.073625431	0.09446789	0.172593813

CSAD	12q13.13	-0.073613249	0.094522588	0.172678074
GPBAR1	2q35	-0.073611213	0.094531731	0.172679107
NOS3	7q36.1	0.073605434	0.094557692	0.172710856
PRRC2A	6p21.33	0.07356653	0.094732589	0.173014609
SAP130	2q14.3	0.073562535	0.094750562	0.173031735
KLF13	15q13.3	0.07354786	0.094816616	0.173136654
TAS2R9	12p13.2	0.073533019	0.09488345	0.173242979
NOTO	2p13.2	-0.073519508	0.09494433	0.173338415
AMD1	6q21	-0.073505222	0.095008733	0.173440264
UTP14A	Xq26.1	0.073492804	0.095064744	0.173526776
R3HDML	20q13.12	-0.07348694	0.095091205	0.173559339
TNK2	3q29	0.073475958	0.095140773	0.173633548
RLN2	9p24.1	0.07347411	0.095149114	0.173633548
GAST	17q21.2	-0.073471349	0.095161578	0.173640552
PFN1	17p13.2	-0.073468403	0.095174884	0.17364909
KAT8	16p11.2	-0.073421944	0.095384864	0.174016431
S100A3	1q21.3	0.073404015	0.095465996	0.174148664
SLC9A9	3q24	0.073395721	0.09550355	0.174201383
LINC00957	7p13	0.073373489	0.095604264	0.174369288
KCNMB2	3q26.32	-0.073363999	0.095647278	0.174431936
MORN4	10q24.2	-0.073356642	0.095680638	0.174476967
EIF3F	11p15.4	-0.073348045	0.09571963	0.174532261
SLC28A2	15q21.1	-0.073345427	0.095731506	0.174538105
TMEM151B	6p21.1	0.073322601	0.095835108	0.174706076
LINC01565	3q21.3	0.073321305	0.095840994	0.174706076
AFF1	4q21.3-q22.1	0.073310097	0.095891902	0.174783048
CFL2	14q13.1	0.073305581	0.095912417	0.174804614
ACHE	7q22.1	0.0733015	0.095930963	0.174822586
MLF2	12p13.31	-0.073299155	0.095941619	0.174826177
MYH16	7q22.1	0.073286708	0.095998202	0.174913451
OPHN1	Xq12	-0.073278663	0.096034787	0.174964274
PANK1	10q23.31	-0.07324523	0.096186945	0.175225629
URB1	21q22.11	-0.073211014	0.096342866	0.175493792
FERD3L	7p21.1	0.073204861	0.096370927	0.175529024
TMEM88	17p13.1	-0.073189698	0.096440103	0.175639127
PTTG1IP	21q22.3	-0.073187741	0.096449035	0.175639503
PTGER4	5p13.1	0.073167769	0.096540224	0.175789661
CNEP1R1	16q12.1	0.073158998	0.096580289	0.175846709
HSD17B14	19q13.33	-0.07315062	0.096618575	0.175900507
ATP8A1	4p13	-0.073125826	0.096731944	0.176090978
MIER1	1p31.3	0.07312123	0.096752971	0.17611333
C18ORF25	18q21.1	0.073109153	0.09680824	0.176198
RIPK4	21q22.3	0.073105592	0.096824539	0.176211732
PRKCD	3p21.1	-0.073097082	0.096863506	0.176266712
MIR1-1HG	20q13.33	-0.073084695	0.096920249	0.176354027
LDLRAD3	11p13	0.07307216	0.096977694	0.176428819
HSPA1A	6p21.33	0.073071465	0.096980879	0.176428819
GLI1	12q13.3	0.073069989	0.096987646	0.176428819
PLCXD1	Xp22.33 and Yp11	-0.073067906	0.096997193	0.176430243
GRM6	5q35.3	0.073048636	0.09708557	0.176575038
SYNE4	19q13.12	-0.073040377	0.09712347	0.17662677
OR2AG1	11p15.4	0.073038614	0.097131562	0.17662677
CDC42EP2	11q13.1	0.073036469	0.097141405	0.176628713
ZNF563	19p13.2	-0.073029609	0.097172898	0.176670018
MYCBPAP	17q21.33	-0.07301611	0.097234889	0.176766758
SNX31	8q22.3	0.073009503	0.097265245	0.176805976
PPM1N	19q13.32	0.072982543	0.097389182	0.177015281
SEC63	6q21	0.072964567	0.097471886	0.177149609

ARHGEF17	11q13.4	0.072937387	0.097597048	0.177354469
EIF4E	4q23	-0.07293591	0.097603849	0.177354469
LDAH	2p24.1	-0.07293435	0.097611037	0.177354469
CTCF	16q22.1	0.072919151	0.097681093	0.177465741
PM20D1	1q32.1	0.072898284	0.097777335	0.17762456
MRO	18q21.2	0.072883005	0.097847853	0.177736625
PPA1	10q22.1	-0.072864356	0.097933978	0.177877017
TCIRG1	11q13.2	-0.072857495	0.097965676	0.177918536
SCN9A	2q24.3	0.072843775	0.098029095	0.178008885
LTBR	12p13.31	-0.072842907	0.09803311	0.178008885
CD59	11p13	-0.072840822	0.098042746	0.178010326
APOBEC3D	22q13.1	0.072835352	0.098068046	0.178040202
HOOK1	1p32.1	0.072815639	0.098159247	0.178189705
MGAM	7q34	0.072807392	0.098197426	0.178242938
GDF7	2p24.1	-0.072776649	0.098339839	0.178485344
JMJD1C	10q21.3	0.072758326	0.098424797	0.178613915
SPRR2E	1q21.3	0.072757544	0.098428423	0.178613915
MTMR2	11q21	0.072746344	0.098480386	0.178677823
SF3B3	16q22.1	0.072746127	0.098481393	0.178677823
TMEM52	1p36.33	-0.072733577	0.098539643	0.178767395
APOBEC3C	22q13.1	0.072724285	0.098582788	0.178829551
TLX1	10q24.31	-0.07271692	0.098617001	0.178875494
AGXT2	5p13.2	-0.072713683	0.098632041	0.178886654
CLRN3	10q26.2	-0.072706795	0.098664046	0.178928581
KCTD20	6p21.31	0.072691721	0.098734117	0.179039525
OR6N1	1q23.1	-0.07267737	0.098800864	0.179144423
NUFIP2	17q11.2	0.072670706	0.098831872	0.179184507
RBM23	14q11.2	0.072660633	0.098878757	0.179253367
RAB6C	2q21.1	0.072642223	0.09896449	0.179392632
SP9	2q31.1	0.072639048	0.098979283	0.179403292
OR56B4	11p15.4	-0.07262601	0.099040045	0.179497264
C5ORF22	5p13.3	0.0726239	0.099049877	0.179498922
ZNF384	12p13.31	0.072616085	0.099086316	0.179540707
PCDHA6	5q31.3	0.072615129	0.099090773	0.179540707
PPEF2	4q21.1	0.072603378	0.099145586	0.179623854
FOLR3	11q13.4	-0.072572468	0.099289872	0.179869072
GADD45B	19p13.3	0.072553214	0.099379834	0.180015843
PDX1	13q12.2	-0.072541097	0.099436482	0.180102247
PLAC9P1	2q21.1	-0.072537216	0.099454632	0.180102899
WDR24	16p13.3	-0.072537194	0.099454736	0.180102899
GRIN2C	17q25.1	0.072519347	0.099538231	0.180237887
SFXN1	5q35.2	0.072504758	0.099606526	0.180339034
TACR2	10q22.1	-0.072503588	0.099612008	0.180339034
ZC3HAV1	7q34	0.072497377	0.099641093	0.180375469
SEPHS2	16p11.2	-0.072492254	0.099665093	0.180402691
C2ORF42	2p13.3	0.072486696	0.099691132	0.180433599
HSD11B2	16q22.1	-0.07248305	0.099708216	0.180448295
PRPF40A	2q23.3	0.072474973	0.099746076	0.180500585
LBR	1q42.12	0.072465507	0.099790455	0.180548481
MBP	18q23	-0.072464986	0.099792899	0.180548481
HPR	16q22.2	-0.072463589	0.099799451	0.180548481
KRT8P41	11p15.4	-0.072459454	0.099818843	0.180567336
SCG3	15q21.2	0.07244913	0.099867277	0.180638718
LTO1	11q13.3	0.072436243	0.099927764	0.180731886
XYLB	3p22.2	-0.072424433	0.099983219	0.180815938
RAPGEF5	7p15.3	0.072416704	0.100019523	0.180865343
SIK2	11q23.1	0.072408628	0.10005747	0.18091771
LSMEM1	7q31.1	0.072391219	0.100139311	0.181045362

GFRA3	5q31.2	0.072389784	0.100146056	0.181045362
NCAN	19p13.11	0.072383025	0.100177849	0.181086576
TRIM8	10q24.32	-0.072371548	0.100231844	0.181167911
LAMC3	9q34.12	-0.072355659	0.100306643	0.181271307
LTN1	21q21.3	0.072355557	0.100307059	0.181271307
XCR1	3p21.31	0.072351216	0.100327561	0.181292083
AATF	17q12	-0.072348321	0.100341199	0.181300452
OR3A1	17p13.3	0.07234377	0.100362634	0.181322906
CPLANE1	5p13.2	0.072337942	0.100390092	0.181356238
SIGLEC15	18q12.3	0.072333594	0.10041058	0.181376972
PI3	20q13.12	0.072322082	0.100464844	0.181458709
CCT6P1	7q11.21	0.072316667	0.100490378	0.181488544
C12ORF50	12q21.32	0.072312593	0.100509591	0.181506958
KCNK17	6p21.2	-0.072302241	0.100558421	0.18157885
MSMB	10q11.22	0.072298692	0.100575167	0.181592799
SLC27A1	19p13.11	-0.072280889	0.100659201	0.181728226
TEX36-AS1	10q26.13	-0.072267349	0.10072315	0.181827371
ZNF653	19p13.2	-0.072238078	0.100861511	0.182060816
MAPK8IP1	11p11.2	0.07223252	0.100887798	0.182075669
FAM71C	12q23.1	-0.072232514	0.10088783	0.182075669
KCNT1	9q34.3	0.072218698	0.100953202	0.182177315
PDE6H	12p12.3	0.072204914	0.101018455	0.182278729
LINC00632	Xq27.1	-0.072194463	0.101067952	0.182351696
ARMC3	10p12.2	0.072187327	0.101101758	0.182396342
MCM5	22q12.3	0.072177249	0.10114952	0.182466157
ABCF2	7q36.1	0.07214108	0.101321085	0.182759268
USP20	9q34.11	0.072122975	0.101407045	0.182897932
MAF1	8q24.3	-0.072103392	0.101500095	0.183049357
ABHD12B	14q22.1	-0.072090462	0.101561569	0.183143812
CFAP74	1p36.33	0.072079023	0.101615977	0.183225513
MS4A12	11q12.2	-0.072063118	0.101691665	0.183345563
TMEM183A	1q32.1	-0.072034227	0.101829272	0.18357722
SNRNP48	6p24.3	0.072027408	0.101861768	0.18361936
CD82	11p11.2	0.072023848	0.10187874	0.18363351
CYP2A13	19q13.2	0.072021104	0.10189182	0.183640643
CYP2F1	19q13.2	-0.072007804	0.101955249	0.183710276
SPRR2A	1q21.3	0.072007652	0.101955973	0.183710276
IRF1	5q31.1	0.072007262	0.101957834	0.183710276
GALNT7	4q34.1	0.072001704	0.101984348	0.183741602
ULK4P2	15q13.2	0.071997302	0.102005354	0.183763001
CCNT1	12q13.11-q13.12	0.071986334	0.102057703	0.183826813
FABP12	8q21.13	-0.071986054	0.102059039	0.183826813
AKAP14	Xq24	-0.071982626	0.102075405	0.18383984
JMJD1C-AS1	10q21.3	-0.071977217	0.102101232	0.183869904
GABRR1	6q15	0.071971603	0.102128043	0.183900484
SPI1	11p11.2	0.071968011	0.102145204	0.183900484
EME1	17q21.33	0.071967924	0.102145619	0.183900484
PCDH20	13q21.2	-0.071960723	0.102180026	0.183945977
UBFD1	16p12.2	0.071950296	0.102229859	0.184013598
RPA1	17p13.3	-0.071949038	0.102235871	0.184013598
SPATA19	11q25	-0.07194423	0.102258859	0.184028901
NDOR1	9q34.3	-0.071943436	0.102262657	0.184028901
ADRA2C	4p16.3	-0.071934543	0.102305186	0.184086404
LOC646214	15q11.2	0.07193293	0.1023129	0.184086404
HMG20A	15q24.3	-0.071928762	0.10233284	0.184105825
GUF1	4p12	-0.071918339	0.10238271	0.184179085
NPY2R	4q32.1	0.071913882	0.102404047	0.184201007
TSPAN13	7p21.1	-0.071910611	0.102419704	0.18421271

UPF2	10p14	0.071906964	0.102437166	0.184227655
TMEM273	10q11.23	0.071898719	0.102476648	0.184282198
LY6G6D	6p21.33	-0.071895622	0.102491478	0.184292403
RTN4R	22q11.21	-0.071888467	0.102525757	0.184337575
SPANXC	Xq27.2	0.071867213	0.102627629	0.184504257
SNHG1	11q12.3	0.071852169	0.102699788	0.184617498
ANK1	8p11.21	0.071830893	0.102801901	0.184784559
HGS	17q25.3	-0.0718038	0.102932056	0.184989973
SMURF1	7q22.1	-0.071803279	0.10293456	0.184989973
CCNB1	5q13.2	0.071785477	0.103020151	0.185127266
MAGEC3	Xq27.2	0.071783041	0.103031866	0.185131792
IRF3	19q13.33	-0.071767675	0.103105798	0.1852481
USH1C	11p15.1	-0.07176254	0.103130514	0.18527597
ATE1	10q26.13	-0.071724864	0.103312	0.185568569
TTL12	22q13.2	-0.071724516	0.103313675	0.185568569
GPR25	1q32.1	0.071722989	0.103321039	0.185568569
SLC35C1	11p11.2	-0.071718351	0.103343398	0.185592168
ACTR1A	10q24.32	-0.071708712	0.103389881	0.185659082
ACTG1	17q25.3	0.071705933	0.103403285	0.185666589
AFTPH	2p14	-0.071687436	0.103492538	0.185799709
OLFM4	13q14.3	0.071685875	0.103500077	0.185799709
FOS	14q24.3	-0.071684831	0.103505114	0.185799709
EAF2	3q13.33	0.071681358	0.103521883	0.185813242
TRMT6	20p12.3	0.071672761	0.103563397	0.185871183
ATXN7L1	7q22.3	-0.071666466	0.1035938	0.185909172
SDCCAG8	1q43-q44	-0.071650791	0.103669548	0.186028526
FBXO48	2p13.3	0.07161788	0.103828718	0.18629754
ANXA1	9q21.13	-0.071613624	0.10384932	0.186317897
HIST2H3D	1q21.2	0.071601053	0.10391018	0.186399322
OTUD1	10p12.2	0.071600424	0.103913223	0.186399322
CYP2S1	19q13.2	-0.071586184	0.103982199	0.186506431
ATP4A	19q13.12	0.071577312	0.104025196	0.186566928
SVOPL	7q34	-0.071535724	0.104226916	0.186912055
RASAL1	12q24.13	-0.071532301	0.104243529	0.186925196
ARL1	12q23.2	-0.071527307	0.10426778	0.186952027
RSAD2	2p25.2	0.071525309	0.104277478	0.186952765
GRAMD1A	19q13.11	-0.071519665	0.104304891	0.186985258
RAD21	8q24.11	0.071515062	0.104327247	0.187008681
ZZEF1	17p13.2	0.07150295	0.1043861	0.187097516
PCGF3	4p16.3	0.071479806	0.104498628	0.187282531
POLR2D	2q14.3	-0.071474683	0.104523552	0.187310523
ZFP91-CNTF	11q12.1	0.071472635	0.104533515	0.187311701
SERINC5	5q14.1	-0.071452799	0.104630059	0.18746801
LPAL2	6q25.3	0.071448383	0.104651564	0.187489852
MUSK	9q31.3	-0.071436064	0.104711567	0.18757176
TMCC3	12q22	0.071435171	0.104715919	0.18757176
DEDD	1q23.3	-0.071425879	0.104761197	0.187636169
ZBTB34	9q33.3	0.071416588	0.104806491	0.187700593
STKLD1	9q34.2	-0.071410728	0.104835065	0.187730497
TCTEX1D1	1p31.3	0.071409338	0.104841841	0.187730497
PLP2	Xp11.23	0.071406254	0.104856883	0.187740733
MTERF3	8q22.1	0.071391665	0.104928057	0.187851458
SNAR-F	19q13.33	-0.071382443	0.104973069	0.187915329
GLT1D1	12q24.33	0.071377689	0.104996279	0.187940165
SLC6A15	12q21.31	0.0713646	0.105060201	0.188037862
HUWE1	Xp11.22	0.071335481	0.10520252	0.188275847
AAR2	20q11.23	-0.071331706	0.105220978	0.188292141
ROM1	11q12.3	-0.071319763	0.105279403	0.188379945

CCDC113	16q21	-0.071306824	0.105342727	0.188476499
CDH15	16q24.3	-0.071290984	0.105420291	0.188598513
GRAPL	17p11.2	0.071242088	0.105660004	0.189010565
DUSP9	Xq28	0.071208961	0.105822651	0.189284696
RNF126	19p13.3	-0.071195108	0.105890727	0.189389635
IL1A	2q14.1	0.071191332	0.105909291	0.189406008
ARFGEF1	8q13.2	0.071183774	0.10594645	0.189455563
NAPEPLD	7q22.1	-0.071176306	0.105983178	0.189504475
TMEM168	7q31.1	-0.071163454	0.10604641	0.189600695
AADACL3	1p36.21	0.071151739	0.106104073	0.189686944
IPO13	1p34.1	0.071141137	0.106156281	0.189763425
TRARG1	17p13.3	0.071138295	0.106170279	0.189771596
NKAPP1	Xq24	-0.071128375	0.10621915	0.189842093
PPP1R12C	19q13.42	0.071109182	0.106313755	0.189994308
TMCO5A	15q14	-0.071104917	0.106334787	0.190015026
MPRIP	17p11.2	0.071099628	0.106360872	0.190044767
C1ORF112	1q24.2	0.07107896	0.106462855	0.190210107
MARK3	14q32.32-q32.33	0.071066456	0.106524597	0.190303527
HDAC5	17q21.31	-0.071062635	0.106543468	0.190320349
VAX2	2p13.3	0.071050144	0.10660518	0.190413688
ERCC2	19q13.32	-0.071024773	0.106730608	0.190620349
ADRA1B	5q33.3	0.071022911	0.10673982	0.190620349
VMA21	Xq28	0.071006061	0.106823193	0.190752317
ABCA8	17q24.2	-0.071000721	0.106849629	0.190780339
AKT1S1	19q13.33	-0.070998984	0.106858227	0.190780339
HBZ	16p13.3	-0.070997148	0.106867318	0.190780339
ATAD2B	2p24.1-p23.3	0.070984133	0.106931771	0.190878474
INTS4P2	7q11.21	0.070981833	0.106943163	0.190881883
HLA-DRB6	6p21.32	-0.070974423	0.106979881	0.190930491
FLG2	1q21.3	0.070969947	0.10700206	0.190953144
SLC27A2	15q21.2	-0.070927775	0.107211231	0.191309465
ANXA2R	5p12	0.070925171	0.107224155	0.191315568
PJKV	2q31.2	-0.070918268	0.107258431	0.191359763
CLDN19	1p34.2	0.070913134	0.107283923	0.191388282
C1ORF127	1p36.22	-0.070906674	0.10731601	0.191428559
HRH4	18q11.2	-0.070901328	0.107342569	0.191458968
MFN2	1p36.22	-0.070881751	0.107439876	0.19161555
NAP1L1	12q21.2	0.070872459	0.107486084	0.191680977
CNOT3	19q13.42	0.070870288	0.107496882	0.191683252
RGS14	5q35.3	-0.070857349	0.107561258	0.19177487
MAB21L2	4q31.3	0.070856132	0.107567315	0.19177487
NARS	18q21.31	-0.070837463	0.107660257	0.191917653
ATP13A5	3q29	-0.070836216	0.107666471	0.191917653
IKBKB	8p11.21	0.07082574	0.107718653	0.191993668
ZNF497	19q13.43	-0.070815927	0.107767552	0.192063818
CYB5D1	17p13.1	-0.07080872	0.10780348	0.19211084
SFMBT1	3p21.1	-0.070803596	0.107829025	0.192139353
RSPH6A	19q13.32	0.070792232	0.107885704	0.192223333
CHST9	18q11.2	-0.070788523	0.107904208	0.192239287
PARD6A	16q22.1	-0.070785926	0.107917162	0.192240316
COL9A2	1p34.2	0.070784579	0.107923885	0.192240316
TUBA4A	2q35	-0.070780584	0.107943819	0.19225881
AMBN	4q13.3	0.070772566	0.107983841	0.192313079
AKR1C6P	10p15.1	-0.07076519	0.108020667	0.192361644
PIK3C2B	1q32.1	-0.070759743	0.108047867	0.192393061
NAGA	22q13.2	0.070752362	0.108084736	0.192441689
FAM136BP	6p25.2	0.070747061	0.108111217	0.192471813
TUBGCP4	15q15.3	-0.070744459	0.108124219	0.19247785

OR10G7	11q24.2	0.070742556	0.108133731	0.19247785
RFNG	17q25.3	-0.070730044	0.108196272	0.192572144
CT47A11	Xq24	0.07072437	0.108224646	0.192599141
PDCL	9q33.2	0.070723184	0.108230575	0.192599141
TTLL1	22q13.2	-0.070718672	0.108253144	0.192622275
DNAJB3	2q37.1	-0.070714443	0.108274297	0.192642352
MB21D2	3q29	0.07071259	0.108283567	0.192642352
NOL6	9p13.3	0.070705469	0.108319196	0.192688164
PLPPR3	19p13.3	-0.070703617	0.108328463	0.192688164
AHCTF1	1q44	0.070695309	0.108370049	0.192745104
TIMM10	11q12.1	-0.070646072	0.108616755	0.193166824
DUX4L2	4q35.2	-0.070634275	0.108675928	0.193254985
TUT1	11q12.3	-0.070631309	0.10869081	0.193264376
PWAR4	15q11.2	0.070627559	0.108709628	0.193268975
ILF3-DT	19p13.2	0.070626967	0.108712598	0.193268975
ST6GALNAC2	17q25.1	-0.070624928	0.108722832	0.1932701
EN2	7q36.3	-0.070613345	0.108780979	0.19335639
EXOSC3	9p13.2	0.070602045	0.10883773	0.193440183
FKBP11	12q13.12	0.070595966	0.108868267	0.193477375
SH3BGR1	Xq21.1	0.070568178	0.109007952	0.193708517
PDE8A	15q25.3	-0.070565052	0.109023675	0.193719356
ZNF366	5q13.2 5q13.2	0.070560452	0.109046812	0.193743364
LGALS13	19q13.2	-0.0705406	0.109146716	0.19390375
ZNF529	19q13.12	0.070531966	0.109190191	0.193963867
SNORD1C	17q25.1	0.070521894	0.10924092	0.194036859
ZNF483	9q31.3	0.070514036	0.109280517	0.194090066
UBE2L6	11q12.1	0.070507825	0.109311816	0.194128528
OR4K17	14q11.2	-0.070496372	0.109369555	0.194213932
B3GNT6	11q13.5	0.070488331	0.109410106	0.19425204
MC2R	18p11.21	0.07048829	0.109410315	0.19425204
FAM187B	19q13.12	-0.070481898	0.109442562	0.194292157
MTPAP	10p11.23	0.070459717	0.109554512	0.194473749
STAC2	17q12	-0.070457624	0.109565079	0.194475359
PRG2	11q12.1	0.070450425	0.109601435	0.194522737
HIST1H2AA	6p22.2	0.070448163	0.109612861	0.194525866
DDX10	11q22.3	0.070415863	0.109776111	0.194789027
CACNB1	17q12	-0.070414995	0.109780502	0.194789027
CIDEB	14q12	0.070394327	0.109885065	0.194945649
CEPT1	1p13.3	-0.07039372	0.109888141	0.194945649
DOCK5	8p21.2	0.070385383	0.109930341	0.195003328
USP15	12q14.1	0.0703602	0.110057896	0.195212393
TXNDC12	1p32.3	-0.070336146	0.110179843	0.195411474
KRT74	12q13.13	0.070329761	0.110212227	0.195451691
MED14	Xp11.4	0.070326941	0.110226536	0.195459846
GALNT5	2q24.1	0.070320689	0.110258261	0.195498882
AKR1E2	10p15.1	-0.070303806	0.110343961	0.195633603
TIMM9	14q23.1	0.07028604	0.110434203	0.195776354
FOSL2	2p23.2	0.070276054	0.110484954	0.195849077
COBLL1	2q24.3	-0.070266501	0.110533515	0.195917906
ETNK2	1q32.1	0.07026242	0.110554269	0.195921728
HELQ	4q21.23	-0.070262249	0.110555137	0.195921728
LRRC10	12q15	0.070255876	0.110587554	0.195961924
AIRE	21q22.3	0.070251753	0.110608528	0.195967048
KLHL20	1q25.1	-0.07025148	0.110609915	0.195967048
WASH7P	1p36.33	-0.070226209	0.110738541	0.196177668
CEP72	5p15.33	0.070223127	0.110754232	0.1961874
KCNA5	12p13.32	0.070221302	0.110763527	0.1961874
ADCK1	14q24.3	-0.070219001	0.110775248	0.196190897

NPHS1	19q13.12	-0.070210398	0.110819071	0.196251244
UBR1	15q15.2	-0.070130947	0.11122446	0.196951828
YIF1A	11q13.2	-0.070124	0.111259962	0.196997364
GABRG1	4p12	-0.070107119	0.111346265	0.197132833
ARID4A	14q23.1	0.07010368	0.111363856	0.197135591
BCAM	19q13.32	-0.070102985	0.111367409	0.197135591
GORASP2	2q31.1	-0.070077194	0.111499388	0.197351817
IPW	15q11.2	0.070075284	0.111509169	0.197351817
IMPACT	18q11.2	-0.070068858	0.111542074	0.197392698
C9ORF72	9p21.2	0.070064387	0.11156497	0.197415863
LHX1	17q12	0.07005757	0.111599892	0.1974603
ZNF646	16p11.2	0.070047322	0.111652405	0.197535851
ADCY10P1	6p21.1	0.070042806	0.11167555	0.197559436
EIF2B3	1p34.1	-0.070036208	0.111709376	0.197601911
MKRN3	15q11.2	0.069990077	0.111946097	0.198003246
PPP1R3A	7q31.1	-0.069979321	0.112001348	0.198083565
SNX27	1q21.3	0.069967083	0.112064236	0.198177376
CDC25C	5q31.2	0.069963002	0.112085216	0.198197065
BLCAP	20q11.23	-0.069952668	0.112138349	0.198273603
C11ORF80	11q13.2	0.069947631	0.112164253	0.198301986
XRCC5	2q35	-0.069935127	0.112228587	0.19837207
FAM122C	Xq26.3	0.069935085	0.112228803	0.19837207
BCAS2	1p13.2	-0.069933477	0.112237078	0.19837207
FBXL20	17q12	-0.069931526	0.112247118	0.19837207
CALCRL	2q32.1	0.06993035	0.112253167	0.19837207
POM121L4P	22q11.21	0.069918764	0.112312811	0.198460049
FOXF1	16q24.1	0.06990152	0.112401628	0.198599559
DDX55	12q24.31	0.069889623	0.112462936	0.198690443
ECE2	3q27.1	-0.069887452	0.112474126	0.198692775
RWDD3	1p21.3	-0.069882503	0.112499644	0.198720413
PDC	1q31.1	0.069874643	0.11254017	0.198774556
GLE1	9q34.11	-0.069862835	0.112601079	0.198864688
HAO2	1p12	0.069844504	0.112695687	0.199014314
PFKFB2	1q32.1	-0.069833613	0.112751928	0.199096168
ACTR5	20q11.23	-0.069814682	0.112849735	0.199239904
AGPAT4-IT1	6q26	0.069814026	0.112853124	0.199239904
TBC1D10C	11q13.2	0.06980704	0.112889235	0.199286179
GREB1	2p25.1	0.069799485	0.112928297	0.199337656
ITM2A	Xq21.1	-0.06978177	0.113019933	0.199481149
LINC00908	18q23	0.069779939	0.113029408	0.199481149
ASRGL1	11q12.3	-0.069775084	0.113054537	0.199498448
CACNA1H	16p13.3	0.069774215	0.113059031	0.199498448
TFDP2	3q23	0.069758411	0.113140856	0.199625334
IL20RA	6q23.3	0.069756327	0.11315165	0.199626881
KLRC1	12p13.2	0.069732129	0.113277026	0.199818889
PDLIM1	10q23.33	0.069731491	0.113280336	0.199818889
ZFX	Xp22.11	0.069719941	0.113340219	0.199907001
KLHDC4	16q24.2	-0.069713689	0.113372647	0.199946678
PAX8-AS1	2q14.1	0.069704397	0.113420852	0.20001417
PRM2	16p13.13	0.069701363	0.113436598	0.200024415
OR2F2	7q35	0.069688888	0.113501347	0.200121058
BTN3A1	6p22.2	0.069686248	0.113515056	0.2001277
PROKR2	20p12.3	0.069681416	0.113540148	0.200154408
FGF17	8p21.3	0.069676418	0.113566105	0.200182635
LGALS7	19q13.2	0.069652769	0.113688993	0.200376463
VWA2	10q25.3	-0.069651426	0.113695974	0.200376463
TXLNA	1p35.2	0.069646737	0.113720354	0.200401885
TOB2	22q13.2	-0.069632843	0.113792616	0.200511674

RBBP7	Xp22.2	-0.06962824	0.113816561	0.200536313
CLEC6A	12p13.31	0.069624535	0.113835839	0.200545791
KCNK1	1q42.2	-0.069623377	0.113841865	0.200545791
GABPB1	15q21.2	0.069600539	0.113960765	0.200737679
PARP6	15q23	-0.069593071	0.113999666	0.200788632
GJD4	10p11.21	0.069588319	0.114024424	0.200814668
LRRC52	1q24.1	-0.069580615	0.11406457	0.200867798
SLC29A1	6p21.1	-0.0695744	0.114096963	0.200907266
MTFP1	22q12.2	-0.069568148	0.114129561	0.200947089
OTOA	16p12.2 16p12.2	-0.06955105	0.114218743	0.201086522
KCTD4	13q14.12-q14.13	0.069539973	0.114276546	0.201170693
CPXCR1	Xq21.31	-0.069534575	0.114304727	0.201202707
BHLHB9	Xq22.1	0.069532544	0.114315328	0.201203773
P2RX7	12q24.31	0.069517089	0.114396044	0.201328235
SFXN3	10q24.31	0.069506232	0.114452766	0.201410454
LRCH3	3q29	0.069481223	0.114583521	0.201622926
PTBP1	19p13.3	0.069475752	0.114612139	0.201655656
FUT2	19q13.33	0.069473581	0.114623497	0.201658014
PDHX	11p13	-0.069465679	0.114664848	0.201713133
EFL1	15q25.2	-0.069442754	0.114784876	0.201906637
UTP15	5q13.2	0.069435721	0.114821715	0.201953789
KRT78	12q13.13	-0.069418029	0.114914434	0.202096991
ABHD11	7q11.23	-0.069416355	0.114923212	0.202096991
CATSPER4	1p36.11	-0.069410181	0.114955581	0.202136255
MSX2P1	17q22	-0.069401259	0.115002377	0.202200878
PHAX	5q23.2	0.069398553	0.115016572	0.202208174
MED27	9q34.13	0.069361994	0.115208488	0.202506954
DNAAF3	19q13.42	-0.069361126	0.115213049	0.202506954
C3ORF52	3q13.2	-0.069360431	0.115216699	0.202506954
CACNG4	17q24.2	0.069342848	0.115309096	0.20265166
OR52A1	11p15.4	0.069336862	0.115340561	0.202673221
TUBB8	10p15.3	-0.069336684	0.115341501	0.202673221
HDGF	1q23.1	-0.069326998	0.115392433	0.202745019
KCNJ3	2q24.1	-0.069322276	0.115417272	0.202770962
FUCA2	6q24.2	-0.069319356	0.115432631	0.202780247
LDLR	19p13.2	-0.069313104	0.115465528	0.202803783
TMEM189-UBE2	20q13.13	0.06931298	0.115466177	0.202803783
SLC2A11	22q11.23	-0.069302683	0.115520372	0.202881268
TMEM135	11q14.2	0.069291915	0.115577066	0.20295506
DENND1B	1q31.3	0.069290873	0.115582554	0.20295506
EXOSC6	16q22.1	-0.069288008	0.115597646	0.202963857
ROPN1	3q21.1	-0.0692801	0.115639299	0.203019199
SPDYA	2p23.2	0.069278195	0.115649337	0.203019199
CEP44	4q34.1	-0.069270727	0.115688689	0.203070572
POU5F2	5q15	0.069256627	0.115763015	0.20318332
OR7E91P	2p13.3	-0.069242218	0.11583901	0.203298978
CCDC155	19q13.33	-0.069234521	0.11587962	0.203352519
RFC4	3q27.3	0.069227047	0.115919064	0.203404007
ZNF605	12q24.33	0.069194701	0.116089894	0.203686007
SYCE2	19p13.13	0.06919059	0.11611162	0.203703253
COPRS	17q11.2	-0.069189012	0.116119962	0.203703253
LINC00661	19p13.12	0.069182747	0.116153081	0.203743596
CLEC2D	12p13.31	0.069172513	0.116207194	0.203820756
NAT2	8p22	-0.069145966	0.116347656	0.204040669
DDIT4	10q22.1	0.069144985	0.116352848	0.204040669
TDRD6	6p12.3	0.06914004	0.11637903	0.204068804
NSG1	4p16.3	-0.069137957	0.116390057	0.204070364
PPIA	7p13	-0.069132828	0.11641722	0.204100213

ZFP36L2	2p21	0.069128312	0.116441137	0.204124366
FRMD4B	3p14.1	-0.069125881	0.116454017	0.204129168
CLDN6	16p13.3	-0.069118319	0.116494077	0.204181608
HSF5	17q22	0.069112521	0.116524806	0.204217686
TAS2R42	12p13.2	0.069101293	0.116584325	0.204304211
ADGRG4	Xq26.3	-0.069080412	0.116695074	0.204480488
PIAS4	19p13.3	0.069070957	0.116745254	0.20455061
MSH3	5q14.1	-0.069065528	0.116774072	0.204583296
CCL3L3	17q12	0.069046252	0.116876441	0.204744823
AMOTL1	11q21	0.069033745	0.116942895	0.204843411
OXGR1	13q32.1	0.069031581	0.116954397	0.204845734
OR10Z1	1q23.1	-0.069022693	0.117001648	0.204910664
HAR1A	20q13.33	0.069012001	0.117058504	0.204978131
LINC01845	5q33.3	-0.069011619	0.117060536	0.204978131
LPCAT1	5p15.33	0.068975043	0.117255214	0.205301161
SNORA40	11q21	-0.06896804	0.117292514	0.20534861
CTRC	1p36.21	0.068947033	0.117404463	0.205526727
ZSCAN30	18q12.2	0.068944649	0.117417173	0.205531104
EFNB1	Xq13.1	0.068932579	0.117481543	0.205625899
PSMD11	17q11.2	-0.068912345	0.117589505	0.205796969
FBXL17	5q21.3	-0.068905138	0.117627983	0.205846413
ARHGEF38	4q24	-0.068899324	0.117659026	0.20588284
ARFRP1	20q13.33	0.068896454	0.117674354	0.205891764
PA2G4P4	3q25.31	-0.068893415	0.117690587	0.20590227
SRP14P1	12p13.31	-0.068885485	0.117732947	0.205958479
OR52N5	11p15.4	0.06885237	0.117909983	0.206250257
STAG3L4	7q11.21	-0.068841659	0.117967287	0.206332565
RPH3A	12q24.13	-0.068831037	0.118024137	0.206401167
HIST1H2AH	6p22.1	0.068830499	0.118027016	0.206401167
SPANXA2	Xq27.2	0.068828485	0.118037802	0.206402098
BAZ2A	12q13.3	0.068826028	0.118050954	0.206407167
EWSAT1	15q23	0.068813539	0.118117836	0.206475932
NLGN1	3q26.31	0.06881338	0.118118688	0.206475932
DNAH12	3p14.3	-0.068812938	0.118121055	0.206475932
ZC3H7A	16p13.13	0.06880675	0.118154208	0.20651595
RB1CC1	8q11.23	0.06878999	0.11824403	0.206655003
MRPL11	11q13.2	-0.068782609	0.118283606	0.206706224
VN1R5	1q44	0.068778962	0.118303162	0.206710948
ZNF778	16q24.3	-0.068776878	0.118314343	0.206710948
PERM1	1p36.33	-0.068774793	0.118325522	0.206710948
TUB	11p15.4	0.068774446	0.118327385	0.206710948
SMTNL2	17p13.2	0.068762121	0.11839351	0.206808518
CYP2W1	7p22.3	-0.068741436	0.118504553	0.206984525
TSGA10IP	11q13.1	0.068714692	0.118648244	0.207217522
UNC13A	19p13.11	0.068709463	0.118676356	0.207248637
SORBS3	8p21.3	0.06864914	0.119001016	0.207797576
CDK11A	1p36.33	-0.068639326	0.119053903	0.207855499
FCF1	14q24.3	0.068639152	0.119054839	0.207855499
TCF23	2p23.3	0.068633907	0.119083109	0.207886825
ZNF185	Xq28	-0.068623608	0.11913864	0.207965732
ALDOC	17q11.2	0.068621263	0.119151284	0.20796977
FAM32A	19p13.11	-0.068606588	0.119230453	0.208089909
FBXO9	6p12.1	-0.06859417	0.119297474	0.20818464
FGD2	6p21.2	0.068591436	0.119312233	0.20818464
AKAP8	19p13.12	-0.068590783	0.119315757	0.20818464
KRTAP12-2	21q22.3	0.068561341	0.119474798	0.20844407
STX8	17p13.1	-0.06855314	0.119519125	0.208503334
BRINP1	9q33.1	0.068548095	0.119546403	0.208531503

LSM14A	19q13.11	0.068546322	0.11955599	0.208531503
ZNF583	19q13.43	0.068536467	0.119609287	0.20860639
GCFC2	2p12	-0.068520444	0.119695986	0.208739513
DUSP8	11p15.5	-0.068510155	0.119751684	0.208818554
CGRRF1	14q22.2	0.0685016	0.119798011	0.208881244
KYAT3	1p22.2	-0.068499516	0.119809299	0.208882832
UTS2	1p36.23	0.068484617	0.119890021	0.209004942
MSR1	8p22	0.068482756	0.119900103	0.209004942
MGAT5B	17q25.2	0.068453415	0.120059201	0.209264155
C8ORF37	8q22.1	0.068433953	0.120164824	0.209423324
OR6X1	11q24.1	-0.068432755	0.120171327	0.209423324
OR13C5	9q31.1	0.068412811	0.120279644	0.209593943
CCDC85C	14q32.2	-0.068406512	0.120313871	0.209635439
CLIC2	Xq28	-0.068403212	0.120331804	0.209648539
CARS2	13q34	-0.068400955	0.120344075	0.209651773
DGCR11	22q11.21	-0.068393969	0.120382051	0.209699782
MGA	15q15.1	0.068379333	0.120461637	0.209820261
TARDBP	1p36.22	0.068375771	0.120481013	0.209835852
VPS45	1q21.2	-0.068369259	0.120516447	0.209879355
SIN3B	19p13.11	0.068367348	0.120526843	0.209879355
LHB	19q13.33	0.068363107	0.120549925	0.209882911
LINC00924	15q26.2	0.068362905	0.120551026	0.209882911
MCPH1	8p23.1	0.068361009	0.120561343	0.209882911
HHIP	4q31.21	-0.06835931	0.120570591	0.209882911
NUFIP1	13q14.12	-0.068347115	0.120636986	0.209962999
CCL14	17q12	-0.068347028	0.120637459	0.209962999
ACOT9	Xp22.11	0.068343468	0.120656848	0.20997859
LARP1B	4q28.2	0.068339431	0.120678834	0.209998696
ASB4	7q21.3	-0.06833282	0.120714851	0.210043216
CLP1	11q12.1	0.06831073	0.120835251	0.210234538
CCL3	17q12	0.068283855	0.120981858	0.21047142
LRRC46	17q21.32	-0.068277905	0.121014334	0.210509726
NFXL1	4p12	0.068259495	0.121114863	0.210666395
FAM71F1	7q32.1	0.068255414	0.121137159	0.210686972
CDK5RAP2	9q33.2	0.068248467	0.121175117	0.210734782
KLHL11	17q21.2	0.068241999	0.121210465	0.210778046
C4ORF45	4q32.1	-0.068236414	0.121240994	0.210806438
PARP12	7q34	0.06823518	0.121247737	0.210806438
WDR81	17p13.3	0.068203484	0.121421117	0.211089653
DNAH9	17p12	-0.068193735	0.121474488	0.211156434
CDH1	16q22.1	-0.068191761	0.121485293	0.211156434
TMEM209	7q32.2	0.068190719	0.121490999	0.211156434
PATJ	1p31.3	-0.068187853	0.121506691	0.211165475
CSNK1E	22q13.1	0.068176912	0.121566621	0.211237041
ANKS4B	16p12.2	-0.068176503	0.121568858	0.211237041
SDHAF3	7q21.3	-0.068162236	0.121647039	0.211354644
OR5M1	11q12.1	0.068159602	0.121661478	0.211361487
TMEM235	17q25.3	0.068154747	0.121688096	0.211389486
GULP1	2q32.1-q32.2	-0.068151729	0.121704642	0.211399987
FSCB	14q21.2	-0.068145776	0.121737283	0.211438439
MNDA	1q23.1	0.068134882	0.121797042	0.211505958
ABCC8	11p15.1	-0.068134859	0.121797171	0.211505958
SLC38A8	16q23.3	0.068115867	0.121901399	0.211668694
AGAP11	10q23.2	-0.068109226	0.121937865	0.211708367
ZNF134	19q13.43	0.068107875	0.121945281	0.211708367
PGLYRP2	19p13.12	0.068096521	0.122007648	0.211798375
IKBKE	1q32.1	0.068085818	0.122066456	0.21188219
CCDC144B	17p11.2	0.068072063	0.122142072	0.211995164

ZBTB25	14q23.3	0.06806298	0.122192022	0.212063575
GSTT2	22q11.23	0.068043702	0.122298092	0.212229362
EMILIN3	20q12	0.068040437	0.122316065	0.212235059
ELF4	Xq26.1	0.068039275	0.122322462	0.212235059
PGAM4	Xq21.1	0.068037189	0.122333943	0.212236687
LINC00052	15q25.3	0.067987511	0.122607669	0.212693241
DIS3	13q21.33	-0.067983697	0.122628707	0.21269474
REV1	2q11.2	-0.067983523	0.122629665	0.21269474
VRK1	14q32.2	0.067976663	0.122667507	0.212742045
RAB12	18p11.22	0.067955127	0.122786364	0.212929833
LINC00882	3q13.12	0.067941626	0.12286092	0.213040772
LEMD1	1q32.1	-0.06793742	0.122884157	0.213062711
APOB	2p24.1	0.06792967	0.122926973	0.213118592
EPB41	1p35.3	-0.067927512	0.122938899	0.213120913
ELF1	13q14.11	-0.067923865	0.122959057	0.213137502
DIMT1	5q12.1	-0.067919436	0.122983537	0.213145829
CNGA1	4p12	-0.067919165	0.122985038	0.213145829
PDYN	20p13	-0.067913437	0.123016702	0.213182353
ERN1	17q23.3	0.067906584	0.123054599	0.21322967
MRPS10	6p21.1	-0.067897772	0.123103344	0.213295775
ZNF814	19q13.43	0.067878796	0.123208355	0.213459351
UBXN2B	8q12.1	0.06786551	0.123281923	0.213568426
ZNF490	19p13.2-p13.13	0.06785726	0.12332762	0.213629204
NIP7	16q22.1	-0.067851095	0.12336178	0.213669991
FOXD4	9p24.3	-0.067847303	0.123382791	0.213670729
TXK	4p12	0.067847187	0.123383435	0.213670729
LINC01184	5q23.3	-0.067838677	0.123430605	0.213734029
HAO1	20p12.3	-0.067828192	0.123488739	0.213816302
FAM120AOS	9q22.31	-0.06779821	0.123655096	0.214085927
GYG1	3q24	0.067770335	0.123809919	0.21433554
LIFR	5p13.1	0.067765819	0.123835013	0.214360548
LGALS9	17q11.2	-0.067745933	0.123945573	0.21453348
MCFD2	2p21	0.067742286	0.123965858	0.214535879
BTBD2	19p13.3	0.067741852	0.123968273	0.214535879
PRKCCQ	10p15.1	-0.067738639	0.123986146	0.214548365
DLST	14q24.3	-0.067714758	0.12411905	0.214759882
TCEAL1	Xq22.2	-0.067709548	0.124148062	0.214791618
SNX11	17q21.32	-0.067691225	0.124250128	0.214949732
STARD8	Xq13.1	0.067681673	0.124303364	0.21502335
MLC1	22q13.33	0.067667406	0.124382911	0.215142465
PES1	22q12.2	-0.067664392	0.124399718	0.215153049
FTMT	5q23.1	0.067648837	0.124486498	0.21528464
SLC35A3	1p21.2	-0.067645722	0.124503885	0.215296212
CDH5	16q21	0.06764303	0.12451891	0.215303698
KIZ	20p11.23	-0.067639862	0.124536594	0.215315781
STRBP	9q33.3	0.067624144	0.124624358	0.215449014
KRTAP10-1	21q22.3	-0.067618558	0.124655559	0.215484449
EYA3	1p35.3	0.067615068	0.124675058	0.21549965
NOS2	17q11.2	0.067588896	0.124821351	0.215733991
ZNF780A	19q13.2	-0.067583504	0.124851506	0.215767584
OR51T1	11p15.4	0.067577313	0.124886135	0.215785478
PKP4	2q24.1	0.067575904	0.124894019	0.215785478
PUF60	8q24.3	-0.067575904	0.124894019	0.215785478
TMEM187	Xq28	-0.067563747	0.12496205	0.215884489
LINC00471	2q37.1	-0.067540859	0.125090202	0.216078704
ERICH6B	13q14.13	0.067539836	0.125095937	0.216078704
ZNF677	19q13.42	0.067529534	0.125153655	0.216159852
AURKA	20q13.2	0.067523454	0.12518773	0.216200155

MUC21	6p21.33	-0.067507418	0.125277634	0.216320839
PFKFB1	Xp11.21	-0.067507156	0.125279103	0.216320839
ZNF721	4p16.3	-0.067500356	0.125317242	0.216368134
SCAP	3p21.31	-0.067483334	0.125412752	0.216495792
TMEM86B	19q13.42	0.067483206	0.125413475	0.216495792
H2AFB1	Xq28	0.067480737	0.125427332	0.216495792
ACSS3	12q21.31	0.067479514	0.125434199	0.216495792
NEXMIF	Xq13.3	-0.067477222	0.125447065	0.216499436
MTG2	20q13.33	-0.067461885	0.125533185	0.216629491
SPEM2	17p13.1	0.067448175	0.125610216	0.216743841
ANKRD1	10q23.31	-0.067438095	0.125666868	0.216823009
KLF6	10p15.2	0.067434531	0.125686903	0.216838992
KRT6B	12q13.13	0.067416234	0.125789809	0.216997932
RD3	1q32.3	0.067410404	0.125822609	0.217035915
APOBEC3A	22q13.1	-0.067379521	0.125996483	0.217317214
GJD2	15q14	-0.067372985	0.126033301	0.217362093
SUPT5H	19q13.2	-0.0673681	0.126060829	0.217390944
PHETA1	12q24.12	0.067352295	0.126149916	0.217525939
TMEM79	1q22	0.067341962	0.126208192	0.217607786
ZNF556	19p13.3	0.067317833	0.126344343	0.217821243
FGF4	11q13.3	-0.067316187	0.126353634	0.217821243
LINC00207	22q13.31	0.0673057	0.12641285	0.217904664
CSHL1	17q23.3	0.06725288	0.126711421	0.218400625
RPS6	9p22.1	-0.067237756	0.126797015	0.218529444
SH3RF2	5q32	-0.067225598	0.12686585	0.218626746
SRCAP	16p11.2	-0.067223948	0.126875194	0.218626746
CPA6	8q13.2	-0.067214831	0.126926839	0.218697018
SEL1L2	20p12.1	-0.067212385	0.126940699	0.218702179
GABRP	5q35.1	0.067208414	0.126963199	0.218722225
RIBC1	Xp11.22	-0.067197984	0.12702231	0.218805332
SLC12A6	15q14	0.067185479	0.12709321	0.218908729
HSP90AB1	6p21.1	-0.067171238	0.127173994	0.219029132
ARHGAP12	10p11.22	-0.06716898	0.127186805	0.219032456
CIR1	2q31.1	-0.067166027	0.127203559	0.21904257
CCAR1	10q21.3	0.067150917	0.127289328	0.219171514
MPP7	10p12.1	-0.067124258	0.127440765	0.219401529
RNF11	1p32.3	0.067123563	0.127444713	0.219401529
TMSB4Y	Yq11.221	-0.06710495	0.127550531	0.219564922
LRRC43	12q24.31	0.067095434	0.127604658	0.219639313
POFUT2	21q22.3	0.067089349	0.127639275	0.219680113
CELF5	19p13.3	-0.06708137	0.12768468	0.219739473
SRI	7q21.12	-0.0670712	0.127742575	0.219820315
ZNF184	6p22.1	0.067068643	0.127757136	0.219826579
TRIM54	2p23.3	-0.067064755	0.127779273	0.219845878
FUT9	6q16.1	0.067037172	0.127936429	0.220097454
TLK2	17q23.2	0.067032991	0.127960261	0.220119643
CD52	1p36.11	-0.067019444	0.12803751	0.220233707
ZNF85	19p12	0.066978109	0.128273441	0.220620673
RARS	5q34	-0.066934169	0.12852461	0.221033781
GLYCTK	3p21.2	-0.066926875	0.128566343	0.221068218
KRTAP10-2	21q22.3	-0.06692683	0.128566599	0.221068218
KIF26A	14q32.33	0.066918844	0.128612303	0.221118019
FEM1B	15q23	0.06691793	0.12861753	0.221118019
RNASEH1	2p25.3	0.066910941	0.128657538	0.221167912
ARPC3	12q24.11	-0.066900476	0.128717465	0.221252034
MAPT	17q21.31	-0.066890361	0.128775406	0.22133273
ZNF252P-AS1	8q24.3	0.066882748	0.128819027	0.221388799
NAGK	2p13.3	0.066875032	0.128863249	0.221445893

ITPKB	1q42.12	0.066864177	0.128925482	0.221526668
HRNR	1q21.3	0.066862995	0.128932262	0.221526668
ZNF580	19q13.42	0.066834131	0.129097865	0.221780633
XCL2	1q24.2	0.066832314	0.1291083	0.221780633
SLC18A2	10q25.3	0.066831473	0.129113127	0.221780633
FAM89A	1q42.2	0.066823363	0.129159687	0.221830462
COA8	14q32.33	-0.066822582	0.129164175	0.221830462
STPG2	4q22.3-q23	-0.066813832	0.129214431	0.221897841
HTT	4p16.3	-0.06679957	0.129296376	0.222019624
RPTN	1q21.3	-0.066786313	0.129372583	0.222131533
P2RY13	3q25.1	0.066766963	0.129483873	0.222298421
FAM200A	7q22.1	-0.066765574	0.129491867	0.222298421
OR8B12	11q24.2	0.066746433	0.12960204	0.222468582
SLC35B1	17q21.33	-0.066738696	0.12964659	0.222526079
GTF2IRD1P1	7q11.21	-0.066728874	0.129703169	0.222604211
NUDT1	7p22.3	0.066725932	0.129720114	0.222614314
SLC12A3	16q13	0.066719796	0.129755473	0.222638178
CFAP46	10q26.3	0.06671968	0.12975614	0.222638178
CIITA	16p13.13	0.066706826	0.129830232	0.22274632
DLC1	8p22	-0.066703874	0.129847256	0.222756542
PAGE2B	Xp11.21	-0.06668511	0.129955487	0.222923216
RMRP	9p13.3	-0.066671007	0.130036875	0.223043821
HSFX1	Xq28	-0.066662943	0.130083434	0.223104671
ADM5	19q13.33	-0.066655857	0.130124354	0.22315584
GALR3	22q13.1	0.066626376	0.130294706	0.223428948
SNORA31	13q14.13	-0.066614358	0.130364205	0.223529084
TMPRSS5	11q23.2	-0.06660915	0.130394331	0.223561696
NTMT1	9q34.11	-0.066599408	0.130450697	0.223639289
SHC3	9q22.1	0.066594458	0.130479342	0.223669349
FAM133A	Xq21.32	0.06658877	0.130512263	0.223706732
MBNL1	3q25.1-q25.2	-0.066581953	0.130551732	0.223755332
GUCY2C	12p12.3	-0.066566106	0.130643518	0.223893582
LINC01003	7q36.1	0.066553037	0.130719244	0.223989431
ERCC1	19q13.32	-0.066551473	0.130728313	0.223989431
SERPINA13P	14q32.13	-0.066550694	0.130732828	0.223989431
TCTE3	6q27	0.066542181	0.130782179	0.224054915
SAMD13	1p31.1	-0.066532024	0.130841082	0.224136752
SLC35G2	3q22.3	0.066528026	0.130864269	0.224157398
TRIM14	9q22.33	0.06651778	0.130923722	0.224240153
CACNA2D3	3p21.1-p14.3	0.066512021	0.130957144	0.224260184
ABCA12	2q35	0.066511925	0.130957698	0.224260184
ILK	11p15.4	0.066505275	0.130996302	0.22430721
ERICH1	8p23.3	0.066499849	0.131027805	0.22434207
TRMT2B	Xq22.1	0.066486431	0.131105735	0.224443311
MAT1A	10q22.3	-0.066485828	0.131109235	0.224443311
H2AFX	11q23.3	0.066465763	0.13122584	0.224623823
VRTN	14q24.3	-0.066455322	0.131286552	0.224708637
DTL	1q32.3	0.066447441	0.131332391	0.224767984
PRSS21	16p13.3	0.06644164	0.131366135	0.224806622
BEX5	Xq22.1	0.066438671	0.131383409	0.224806622
KCNJ5	11q24.3	-0.066437801	0.131388471	0.224806622
NMI	2q23.3	-0.066416439	0.131512821	0.225000262
C2CD5	12p12.1	0.0664035	0.131588183	0.225096921
CRYM	16p12.2	-0.0664029	0.131591682	0.225096921
MFSD14C	9q22.33	-0.066398293	0.131618523	0.225111947
CCDC191	3q13.31	-0.066397553	0.131622832	0.225111947
MFSD4A	1q32.1	0.066392993	0.131649408	0.22513827
RPL30	8q22.2	-0.06638813	0.131677751	0.225167611

CEP131	17q25.3	0.066382399	0.131711161	0.225205612
TOP3B	22q11.22	0.066350008	0.131900102	0.225509517
LCLAT1	2p23.1	0.06634584	0.131924431	0.225531958
ADGRF2	6p12.3	0.066336756	0.131977462	0.225603456
LITAF	16p13.13	0.066334724	0.131989326	0.22560458
TADA3	3p25.3	-0.066320657	0.132071495	0.225725861
ADAM9	8p11.22	0.066311799	0.13212325	0.225795147
OR7E5P	11q12.1	0.066301917	0.132181013	0.22585551
GLUL	1q25.3	0.066300336	0.132190252	0.22585551
FMN2	1q43	0.066299998	0.132192232	0.22585551
EVA1B	1p34.3	0.066281406	0.132300963	0.226022099
ZNF329	19q13.43	0.066277064	0.132326366	0.226031022
DERL2	17p13.2	-0.066276674	0.132328644	0.226031022
BANF1	11q13.1	-0.066272461	0.132353297	0.22605255
ORC6	16q11.2	0.066270683	0.132363706	0.22605255
AREG	4q13.3	-0.066267685	0.132381248	0.226063329
TGM6	20p13	0.06625735	0.132441753	0.226147466
NBAS	2p24.3	0.06625466	0.132457503	0.226155177
RFK	9q21.13	-0.066250665	0.132480895	0.226165433
HOOK2	19p13.13	-0.066249797	0.13248598	0.226165433
PPFIA1	11q13.3	0.066237118	0.132560246	0.22625818
RABL2A	2q14.1	-0.066236684	0.13256279	0.22625818
FBXW9	19p13.13	-0.066227653	0.132615713	0.226313605
ZNF507	19q13.11	0.066227305	0.132617749	0.226313605
LPAR5	12p13.31	0.066224092	0.132636581	0.226317345
COMMD1	2p15	-0.066223095	0.132642426	0.226317345
PANK3	5q34	0.066212977	0.132701746	0.226399369
OR2L2	1q44	0.066209359	0.132722965	0.226416381
SIGLECL1	19q13.41	0.066204754	0.132749971	0.22644326
WDR5	9q34.2	0.066201862	0.132766937	0.226453011
BARX1	9q22.32	0.066198672	0.132785648	0.226462424
YWHAB	20q13.12	0.066197086	0.132794956	0.226462424
TOMM70	3q12.2	-0.066190226	0.132835209	0.226511882
ZC3H12A	1p34.3	0.066188055	0.13284795	0.226514419
BHMT	5q14.1	-0.066179985	0.132895313	0.226558601
WDR91	7q33	0.066179805	0.132896372	0.226558601
SLC25A14	Xq26.1	0.066168863	0.132960616	0.226648929
ABCA2	9q34.3	0.066132218	0.133175957	0.226989749
KAT2A	17q21.2	-0.066131002	0.133183106	0.226989749
STRC	15q15.3	-0.06611481	0.133278345	0.227132839
KCNG3	2p21	0.066109186	0.133311438	0.227170002
SLCO1C1	12p12.2	0.066104103	0.133341352	0.227201745
ATG16L1	2q37.1	-0.066100695	0.133361407	0.227216684
CFI	4q25	-0.06609149	0.133415598	0.227285279
DGKD	2q37.1	-0.066088191	0.133435029	0.227285279
DSEL	18q22.1	0.066088104	0.13343554	0.227285279
GTF3C4	9q34.13	0.066083067	0.133465203	0.227316569
C1QB	1p36.12	0.066071431	0.133533752	0.22741408
CMTM4	16q21-q22.1	-0.066060055	0.133600793	0.227506322
SRCIN1	17q12	0.066058405	0.133610519	0.227506322
INPP5E	9q34.3	0.066044771	0.133690904	0.227623945
IGDCC3	15q22.31	0.066042435	0.133704684	0.227628154
EXD2	14q24.1	0.066029835	0.133779013	0.227735367
MOK	14q32.31	-0.066027925	0.133790286	0.227735367
MAP3K6	1p36.11	-0.066022975	0.133819496	0.227765829
HNRNPCL1	1p36.21	-0.066019842	0.133837987	0.227778041
RAD9B	12q24.11	0.066016637	0.133856905	0.22779098
COMMD8	4p12	-0.066004478	0.133928695	0.227881997

PIH1D3	Xq22.3	-0.066003744	0.133933031	0.227881997
MITD1	2q11.2	-0.065974606	0.134105199	0.22815565
GK	Xp21.2	-0.065965662	0.134158082	0.228226333
RPL21P44	4q12	0.065961976	0.134179881	0.228244127
ATG5	6q21	-0.065934747	0.134340987	0.228482183
LINC00909	18q22.3	-0.065934487	0.13434253	0.228482183
CD1B	1q23.1	-0.065931561	0.13435985	0.228492336
SUV39H2	10p13	0.065923892	0.134405255	0.228550244
OR5W2	11q12.1	0.065920855	0.134423247	0.22856153
DCTN5	16p12.2	0.065886031	0.134629607	0.228875611
HIST1H3I	6p22.1	0.065885846	0.134630706	0.228875611
ATP1A1	1p13.1	-0.065875003	0.134695012	0.228965596
BID	22q11.21	-0.065870226	0.134723344	0.22899442
IL36A	2q14.1	0.065866573	0.134745021	0.229011928
FXYD2	11q23.3	-0.065861044	0.134777831	0.229048352
PSTPIP2	18q21.1 tdb7990	0.065853032	0.134825379	0.229099195
KRTAP10-3	21q22.3	-0.065852168	0.13483051	0.229099195
PPFIA3	19q13.33	0.065849906	0.134843937	0.229102671
RIPPLY1	Xq22.3	0.065843715	0.134880693	0.229132321
COPS5	8q13.1	-0.065843133	0.134884153	0.229132321
TYW1	7q11.21	0.065838096	0.134914063	0.229163791
RAB6D	2q21.1	0.065835665	0.134928504	0.229168984
OR7G3	19p13.2	0.065811541	0.135071851	0.229393095
CDT1	16q24.3	0.06579798	0.135152479	0.229510664
PRR21	2q37.3	0.065778036	0.135271126	0.229692768
C6ORF52	6p24.2	-0.065774617	0.135291474	0.229698785
TMPO-AS1	12q23.1	0.065773141	0.13530026	0.229698785
ERICH6	3q25.1	-0.065771689	0.135308902	0.229698785
DAPK2	15q22.31	-0.065766374	0.135340547	0.229733132
ORMDL1	2q32.2	-0.065733369	0.135537149	0.230047454
CLEC4M	19p13.2	-0.065727684	0.135571039	0.230085576
HIRA	22q11.21	0.065722862	0.135599786	0.230114963
LAT	16p11.2	0.065709662	0.135678502	0.230229137
MESD	15q25.1	-0.065706536	0.135697151	0.230241373
NR2C2AP	19p13.11	-0.065702021	0.135724091	0.230267674
PDAP1	7q22.1	0.065686477	0.135816859	0.230405645
GTF2IRD2P1	7q11.23	-0.065682482	0.135840707	0.230426682
SIM1	6q16.3	0.065676345	0.135877351	0.23046942
CDHR4	3p21.31	-0.065672377	0.135901049	0.230490194
CTRL	16q22.1	0.065664205	0.13594986	0.230553554
CROCC	1p36.13	0.06565973	0.135976597	0.230579471
ANGEL1	14q24.3	0.065653565	0.13601344	0.23061188
TMEM52B	12p13.2	0.065652698	0.136018621	0.23061188
GABRA2	4p12	-0.065639197	0.136099331	0.230729285
GYPB	4q31.21	-0.065637108	0.136111819	0.230731025
DYNC2H1	11q22.3	0.065624387	0.136187901	0.230831622
XAGE3	Xp11.22	-0.065623091	0.136195658	0.230831622
ALG10	12p11.1	0.065621435	0.136205564	0.230831622
PLA2G2D	1p36.12	0.065606892	0.136292591	0.230959664
TAS2R40	7q34	0.065597624	0.136348073	0.231034235
LINC00937	12p13.31	0.065588048	0.136405421	0.231111954
USP14	18p11.32	0.0655801	0.136453036	0.231173171
LCORL	4p15.31	0.065568029	0.136525367	0.231276247
VN1R2	19q13.42	0.065558879	0.136580215	0.231349692
CAPS	19p13.3	-0.065552832	0.136616474	0.231371103
C1QTNF12	1p36.33	-0.06555186	0.136622304	0.231371103
BBS1	11q13.2	-0.065547883	0.136646158	0.231371103
FAM99B	11p15.5	-0.06554755	0.136648153	0.231371103

SERHL2	22q13.2	-0.065547188	0.136650325	0.231371103
C22ORF39	22q11.21	-0.065535899	0.136718047	0.231466299
ANKRD22	10q23.31	-0.065525739	0.136779019	0.231550051
PIGR	1q32.1	-0.065518358	0.136823328	0.231605584
ARRB1	11q13.4	-0.065508979	0.136879643	0.231678719
SMARCD2	17q23.3	-0.065507329	0.136889552	0.231678719
ENTPD5	14q24.3	-0.065500816	0.136928672	0.231725445
FAM167A-AS1	8p23.1	-0.06549469	0.13696548	0.23175711
SLC35E3	12q15	-0.065493869	0.136970409	0.23175711
OR1A1	17p13.3	0.065483068	0.137035325	0.231837346
SNAPC4	9q34.3	0.065482146	0.137040864	0.231837346
TLX1NB	10q24.31	-0.065475338	0.137081791	0.231887097
TOP1P2	22q11.23	0.065463348	0.137153892	0.23197609
PIGW	17q12	0.065460871	0.137168796	0.23197609
FCER1A	1q23.2	-0.065460842	0.137168972	0.23197609
DDX21	10q22.1	0.065420925	0.137409244	0.232362909
CCDC170	6q25.1	0.065388795	0.137602882	0.232670812
ZNF350	19q13.41	0.065379677	0.137657872	0.232744243
MTMR3	22q12.2	0.065377332	0.137672015	0.232748607
CENPBD1P1	19q13.43	0.065369604	0.137718642	0.232807883
ACVR1B	12q13.13	-0.065361528	0.137767378	0.232870713
TICAM1	19p13.3	-0.065349978	0.137837098	0.232969
RAB26	16p13.3	-0.065336171	0.137920484	0.233090366
LEUTX	19q13.2	0.065332598	0.137942068	0.233107272
SPATA5	4q28.1	0.065316285	0.138040648	0.233254281
SLC15A3	11q12.2	0.065309685	0.138080546	0.233302115
MEN1	11q13.1	0.065304909	0.138109425	0.233318839
RAB3GAP1	2q21.3	-0.065304214	0.138113626	0.233318839
P2RY4	Xq13.1	0.065302292	0.138125254	0.233318903
TAS2R30	12p13.2	0.065288154	0.138210771	0.233443767
PASK	2q37.3	0.065283981	0.138236021	0.233466827
FOXR1	11q23.3	-0.065271644	0.138310695	0.233573347
FRAT2	10q24.1	-0.065261316	0.138373225	0.233659341
SLC26A3	7q22.3-q31.1	-0.065257538	0.138396105	0.233678376
HLA-DQA1	6p21.32	0.065251417	0.138433185	0.23372138
TBC1D15	12q21.1	-0.065225018	0.138593178	0.233971877
OR8B4	11q24.2	0.065207289	0.138700705	0.234133769
ARPC2	2q35	0.065195927	0.138769649	0.234217642
TAS2R46	12p13.2	0.065193459	0.138784627	0.234217642
TSPY1	Yp11.2	0.065193349	0.138785297	0.234217642
FAM186B	12q13.12	-0.065191154	0.138798622	0.234220493
LINC01973	17q25.3	0.065180658	0.138862342	0.234308377
SMARCE1	17q21.2	-0.065175694	0.138892491	0.234339607
CYP27B1	12q14.1	0.065163363	0.138967397	0.234446338
GGA3	17q25.1	-0.065135835	0.139134729	0.234708966
KLK6	19q13.41	0.065125248	0.139199124	0.234797919
BANF2	20p12.1	0.065120308	0.13922918	0.23482894
KPTN	19q13.32	-0.065094413	0.139386809	0.23507325
ZNF614	19q13.41	0.065092676	0.139397386	0.23507325
MAN1B1-DT	9q34.3	0.065084645	0.139446305	0.235136046
PIGT	20q13.12	0.065080085	0.139474089	0.235163197
ASTN2	9q33.1	-0.065067886	0.139548433	0.235263875
SIAH1	16q12.1	0.065066451	0.139557175	0.235263875
IGHMBP2	11q13.3	0.065044221	0.139692735	0.235472681
IGFN1	1q32.1	-0.065040725	0.139714063	0.235488913
PLP1	Xq22.2	-0.065021079	0.139833956	0.235671261
MBIP	14q13.3	-0.065017822	0.139853844	0.235685046
GSX2	4q12	0.065015708	0.139866748	0.235687062

RBIS	8q21.2	-0.065001496	0.139953548	0.235813587
TRIM29	11q23.3	-0.064991857	0.140012442	0.235893074
KBTBD6	13q14.11	0.06498986	0.140024647	0.235893895
FAXDC2	5q33.2	0.064981263	0.140077193	0.23596267
SLC5A5	19p13.11	0.064972827	0.140128767	0.236022443
NKX2-1	14q13.3	-0.064971624	0.140136127	0.236022443
FMR1NB	Xq27.3-q28	0.064950641	0.140264483	0.23621886
COLGALT2	1q25.3	0.064948222	0.140279284	0.236224024
VPS53	17p13.3	-0.064945746	0.140294439	0.236229783
OR51A4	11p15.4	0.064939565	0.140332273	0.236243891
ANKRD45	1q25.1	-0.064938887	0.140336422	0.236243891
MAPK14	6p21.31	-0.064938625	0.140338025	0.236243891
CLCA2	1p22.3	0.064933827	0.140367404	0.236273588
OFD1	Xp22.2	-0.064931244	0.140383217	0.236280448
SLC12A1	15q21.1	0.064926497	0.14041229	0.236309622
RAP1GAP2	17p13.3	0.064921084	0.140445441	0.236345655
ANKRD10	13q34	0.064907711	0.140527374	0.236463767
SALL2	14q11.2	0.064898767	0.140582195	0.23653624
CHAC1	15q15.1	0.064869936	0.140759008	0.23681208
ANKRD37	4q35.1	-0.064868199	0.140769665	0.23681208
MYL6B	12q13.2	0.064862815	0.140802705	0.236847869
CACNG6	19q13.42	-0.064853043	0.14086269	0.236928974
UBAP2	9p13.3	0.064848489	0.140890655	0.23695621
CLIP4	2p23.2	-0.064845969	0.140906127	0.236962434
SEN3	17p13.1	-0.06483303	0.140985599	0.237068999
CERS3	15q26.3	0.064831817	0.140993048	0.237068999
NBPF7	1p12	0.064826572	0.141025279	0.237103388
HAUS7	Xq28	0.064822957	0.141047494	0.237120933
ZNF197	3p21.31	0.064807327	0.14114357	0.237262635
LINC00469	17q25.1	0.06480124	0.141181002	0.237305742
VENTXP1	Xp21.3	0.064798486	0.141197939	0.237314395
CDH12	5p14.3	0.064795442	0.141216662	0.237326048
PLPP5	8p11.23	-0.064792129	0.141237042	0.23733119
SNORA5C	7p13	-0.064791112	0.141243301	0.23733119
DGCR5	22q11.21	0.064787874	0.14126322	0.237344848
GNRH1	8p21.2	0.064771855	0.141361806	0.237490665
RBP7	1p36.22	0.064761128	0.141427855	0.237547544
DUSP5	10q25.2	0.064760694	0.141430529	0.237547544
CLEC12A	12p13.31	-0.064760607	0.141431064	0.237547544
BUD31	7q22.1	-0.064735424	0.141586214	0.237788293
SARNP	12q13.2	-0.064727956	0.141632249	0.237845764
DCAF13	8q22.3	0.064714409	0.141715784	0.237961633
ZNF10	12q24.33	0.064712933	0.141724889	0.237961633
DCAF13P3	15q21.2	0.064697319	0.141821219	0.238088337
TSPAN14	10q23.1	-0.064696868	0.141824006	0.238088337
AGXT	2q37.3	0.06469348	0.141844915	0.23810358
ERCC5	13q33.1	-0.064689486	0.141869565	0.238125101
PPP1R2	3q29	-0.064674637	0.141961251	0.238259128
RNFT1	17q23.1	-0.06466248	0.14203635	0.238365296
LAMB4	7q31.1	0.064657511	0.142067052	0.238395989
PDILT	16p12.3	-0.064655687	0.142078325	0.238395989
DNAJC25	9q31.3	0.064647891	0.142126508	0.238456961
NXT2	Xq23	-0.06464103	0.14216892	0.238508238
NAIF1	9q34.11	0.06462896	0.142243565	0.238613581
EYA4	6q23.2	0.064624016	0.142274149	0.238636706
TCHHL1	1q21.3	0.064622899	0.14228106	0.238636706
OR1S2	11q12.1	-0.064598161	0.142434165	0.238873593
CPLX4	18q21.32	0.064586923	0.142503761	0.238970402

TMEM170A	16q23.1	-0.064538996	0.142800863	0.239448677
CASD1	7q21.3	-0.064534046	0.142831574	0.239480224
PRPS2	Xp22.2	0.064530833	0.142851511	0.239493705
IL20	1q32.1	0.064519975	0.1429189	0.239574885
STAT4	2q32.2-q32.3	0.064519196	0.142923736	0.239574885
MAP6	11q13.5	0.064511556	0.142971173	0.239634447
STARD6	18q21.2	-0.064467661	0.143243943	0.240071649
NOX5	15q23	0.064459256	0.143296216	0.240130913
SLC25A17	22q13.2	-0.064456499	0.143313366	0.240130913
UBE2W	8q21.11	0.064455544	0.143319308	0.240130913
NPPB	1p36.22	0.064454136	0.143328066	0.240130913
FAM25A	10q23.2	-0.064452387	0.143338949	0.240130913
KIF21A	12q12	-0.064441997	0.143403603	0.240219234
TNFAIP8L2	1q21.3	0.064438482	0.143425485	0.240235898
VPS29	12q24.11	-0.064432098	0.143465228	0.240282472
CA10	17q21.33-q22	0.064429799	0.143479537	0.240286446
EFNA4	1q21.3	-0.06442324	0.143520383	0.240322547
RGS22	8q22.2	-0.064422503	0.143524971	0.240322547
SH3D21	1p34.3	-0.064417682	0.143554998	0.240352833
CHTF18	16p13.3	0.064411084	0.143596103	0.240401659
IL11RA	9p13.3	-0.064402399	0.143650223	0.24045861
WASHC2C	10q11.22	-0.064401791	0.143654011	0.24045861
MOCOS	18q12.2	0.064395626	0.14369244	0.240502936
ZNF295-AS1	21q22.3	0.064392659	0.143710935	0.240513895
NOP58	2q33.1	-0.064389199	0.143732501	0.24052999
CFL1P1	10q23.31	-0.064376739	0.143810208	0.240640023
SPATA18	4q12	-0.064360109	0.143913966	0.240793562
TFRC	3q29	-0.064358198	0.143925889	0.240793562
KRTAP4-8	17q21.2	0.064352012	0.143964504	0.24083815
LHX4	1q25.2	0.064349648	0.14397926	0.240842821
ZNF407	18q22.3	0.064345867	0.144002866	0.240862292
PAGE3	Xp11.21	0.06433141	0.144093154	0.240993285
TOR1AIP2	1q25.2	-0.064329455	0.14410537	0.240993694
OR10A7	12q13.2	-0.064303192	0.144269507	0.241228107
OR5M9	11q12.1	-0.064303192	0.144269507	0.241228107
PLEKHM1P1	17q24.1	-0.064285601	0.14437953	0.241392022
PLA2G4D	15q15.1	-0.064249169	0.144607598	0.241753256
LINC00889	Xq26.3	0.064212226	0.144839143	0.242120242
RASGRF1	15q25.1	-0.064208489	0.144862585	0.24213932
	1-Dec 9q33.1	0.064205513	0.144881253	0.242150417
AKIP1	11p15.4	-0.064186693	0.144999347	0.242327676
RPL36AL	14q21.3	-0.064183306	0.145020606	0.242331166
CCDC106	19q13.42	0.064182524	0.145025512	0.242331166
FAM41C	1p36.33	-0.064168632	0.145112746	0.242456805
PPRC1	10q24.32	0.064146313	0.145252973	0.24266456
ONECUT1	15q21.3	0.064145004	0.1452612	0.24266456
PLEKHG4	16q22.1	-0.06413485	0.145325031	0.242743611
NWD2	4p14	-0.06413364	0.145332638	0.242743611
PYGO2	1q21.3	-0.064094991	0.145575811	0.243129601
ULBP1	6q25.1	0.064090088	0.145606686	0.243154341
AGL	1p21.2	-0.064087263	0.145624475	0.243154341
PWAR1	15q11.2	-0.064086884	0.145626862	0.243154341
LIN28A	1p36.11	-0.06406707	0.145751684	0.243332863
RAB38	11q14.2	-0.064066074	0.145757956	0.243332863
VWC2L	2q34-q35	-0.064058314	0.145806869	0.243394334
TSR3	16p13.3	-0.064051312	0.14585101	0.243434906
GAD1	2q31.1	0.064050622	0.14585536	0.243434906
LBP	20q11.23	-0.064046174	0.145883406	0.243461529

LRRIQ1	12q21.31	0.064039963	0.145922578	0.243506714
NKAIN3-IT1	8q12.3	-0.064029485	0.145988673	0.243596816
RAB39A	11q22.3	0.064009201	0.146116702	0.243790237
MMACHC	1p34.1	-0.064003637	0.146151829	0.243828636
ACTR3BP2	2p11.1	0.063987077	0.146256433	0.243982928
NXNL1	19p13.11	-0.063984919	0.146270071	0.24398546
SPINK2	4q12	0.063980134	0.146300309	0.244005944
MRGPRE	11p15.4	0.063979139	0.146306594	0.244005944
TPTE2P1	13q12.13	-0.063974673	0.146334823	0.244032805
UBE2H	7q32.2	0.063964734	0.146397657	0.244117366
KARS	16q23.1	-0.063946324	0.146514097	0.244291292
OR2L3	1q44	0.06393356	0.146594868	0.244405723
CAMLG	5q31.1	-0.063921836	0.146669092	0.24450922
PRKD2	19q13.32	0.063903947	0.146782395	0.244677841
CCDC122	13q14.11	-0.063889011	0.146877048	0.24481535
USP4	3p21.31	0.063882673	0.146917226	0.244862044
SGSM3	22q13.1	-0.063878938	0.146940911	0.244881243
MCMDC2	8q13.1	-0.063835911	0.147213931	0.24531593
RNASE1	14q11.2	-0.063828398	0.147261643	0.245355734
PRPF18	10p13	-0.063828311	0.147262194	0.245355734
BAG2	6p12.1	-0.06381789	0.147328391	0.24544571
TRIM62	1p35.1	0.063815808	0.147341625	0.245447443
DAB1	1p32.2	0.063813517	0.147356179	0.245451377
PRKCI	3q26.2	-0.063800089	0.14744153	0.245573225
DNAH8	6p21.2	0.063788779	0.14751344	0.245660407
UCHL5	1q31.2	-0.063788018	0.147518281	0.245660407
SPATA12	3p14.3	-0.063780827	0.14756402	0.245695991
C4ORF17	4q23	-0.063780821	0.14756406	0.245695991
AMY2B	1p21.1	-0.063768219	0.147644241	0.245797114
H3F3B	17q25.1	-0.063767437	0.147649215	0.245797114
HNRNPA2B1	7p15.2	0.063762574	0.147680166	0.245828309
EXOC2	6p25.3	0.063735178	0.147854625	0.246098363
PEX6	6p21.1	-0.063729013	0.147893908	0.246125276
CELSR1	22q13.31	0.063727752	0.147901941	0.246125276
IRS2	13q34	0.063726884	0.147907475	0.246125276
PEX13	2p15	-0.063723497	0.147929058	0.246140845
CDX4	Xq13.2	-0.063713255	0.147994346	0.246229125
WDR11	10q26.12	-0.063694754	0.148112336	0.246405068
TIGD4	4q31.3	0.063690718	0.14813808	0.24642753
PPP1R9A	7q21.3	-0.06368633	0.148166078	0.24645374
SLC36A3	5q33.1	-0.06368083	0.14820118	0.246491758
CFL1	11q13.1	0.063670699	0.148265846	0.246567789
TOP2B	3p24.2	0.063669831	0.14827139	0.246567789
BRAP	12q24.12	0.063665142	0.148301332	0.24658025
SCGB1D1	11q12.3	-0.063664821	0.148303382	0.24658025
NANOGNB	12p13.31	-0.063630555	0.148522312	0.24690505
PBX4	19p13.11	0.063630407	0.148523262	0.24690505
OLFM3	1p21.1	0.063626252	0.148549822	0.246928813
HIST1H2AL	6p22.1	0.063608482	0.148663471	0.247097323
KRTAP13-4	21q22.11	0.063600231	0.148716265	0.247162272
RXFP1	4q32.1	-0.063598537	0.148727104	0.247162272
PTTG3P	8q13.1	0.063589122	0.148787366	0.247242008
CDC26	9q32	0.063585772	0.148808813	0.247257235
TBC1D8B	Xq22.3	0.063579869	0.148846603	0.247299614
HPGDS	4q22.3	-0.063566233	0.148933942	0.247424301
SSR1	6p24.3	0.063521598	0.149220094	0.247879229
GCN1	12q24.23	0.063515433	0.149259654	0.247924484
KRT26	17q21.2	-0.063497394	0.149375438	0.248096334

EIF5B	2q11.2	0.063474879	0.149520055	0.248316039
RHBDL2	1p34.3	-0.063468279	0.149562465	0.248365982
ABCE1	4q31.21	0.063449088	0.149685843	0.248534945
INTS12	4q24	-0.063448612	0.149688906	0.248534945
GOLGA6L5P	15q25.2	0.06344301	0.149724938	0.248574268
OR5V1	6p22.1	-0.063435556	0.149772887	0.248629234
CTSW	11q13.1	0.063434023	0.149782748	0.248629234
BLOC1S5	6p24.3	-0.063413618	0.149914082	0.248826721
ZNRF4	19p13.3	-0.063400088	0.150001208	0.248950806
TFPI	2q32.1	-0.063379531	0.150133666	0.249150099
LYL1	19p13.13	0.063369371	0.150199164	0.249238246
KCNK5	6p21.2	-0.063353913	0.150298851	0.249383108
C1QA	1p36.12	0.063340367	0.150386259	0.249496685
IRS4	Xq22.3	-0.063339463	0.15039209	0.249496685
RGPD4	2q12.3	0.063332291	0.150438386	0.249552922
CRISP1	6p12.3	-0.06331408	0.150555979	0.249727411
GABPB1-IT1	15q21.2	0.063272806	0.150822755	0.2501493
DCT	13q32.1	-0.063267889	0.150854565	0.250174989
KCNN4	19q13.31	0.063265946	0.150867131	0.250174989
CCDC183	9q34.3	-0.063264648	0.150875528	0.250174989
OTOP2	17q25.1	0.063231835	0.151087931	0.250506552
KDM4E	11q21	-0.063221722	0.151153444	0.250594533
ARFGAP1	20q13.33	0.06321723	0.151182547	0.250622142
SYT16	14q23.2	0.063194375	0.151330694	0.250829963
PDE4A	19p13.2	-0.063194046	0.151332832	0.250829963
CYB561D1	1p13.3	0.063170164	0.151487756	0.251066073
RPN1	3q21.3	-0.063150972	0.151612339	0.251251863
OR4A15	11q11	0.063145147	0.151650173	0.251284322
OAZ1	19p13.3	-0.063144112	0.151656892	0.251284322
USP32	17q23.1-q23.2	0.063139858	0.151684522	0.251309418
MPZL1	1q24.2	0.063129523	0.15175167	0.251384039
OR2T27	1q44	-0.063123317	0.151792002	0.251384039
OR4K15	14q11.2	-0.063123317	0.151792002	0.251384039
OR4K2	14q11.2	-0.063123317	0.151792002	0.251384039
OR8J1	11q12.1	-0.063123317	0.151792002	0.251384039
RNF125	18q12.1	0.063100347	0.151941354	0.251610682
FGB	4q31.3	0.063093096	0.151988525	0.251668093
OR5K2	3q11.2	0.063086442	0.152031815	0.251719069
DUPD1	10q22.2	0.063068312	0.152149828	0.251893744
BCAR3	1p22.1	0.063058229	0.152215492	0.251981731
PGAM2	7p13	0.063051197	0.152261302	0.252021401
ACTL6B	7q22.1	-0.063050706	0.152264495	0.252021401
NEIL3	4q34.3	-0.063045985	0.152295258	0.252051594
MYBPC2	19q13.33	0.063033177	0.15237873	0.252169011
GPSM2	1p13.3	0.062989106	0.152666216	0.252623998
TBC1D22A	22q13.31	-0.062979033	0.152731984	0.252712053
NUB1	7q36.1	0.062976254	0.152750131	0.252721306
OTUD6A	Xq13.1	0.062947077	0.152940762	0.253015905
IFI27L2	14q32.12	-0.062932574	0.153035588	0.253151976
ZNF564	19p13.2	-0.062912341	0.153167955	0.253350119
PACS2	14q32.33	0.062906957	0.153203192	0.253382745
	9-Mar 12q14.1	0.062905481	0.153212855	0.253382745
POT1	7q31.33	0.062899315	0.153253216	0.253428673
TSPEAR	21q22.3	-0.062895689	0.153276955	0.253447109
SDR16C5	8q12.1	-0.062882383	0.1533641	0.253570376
LRRTM3	10q21.3	0.062873319	0.153423484	0.253647728
KIAA1324	1p13.3	0.062867011	0.153464818	0.253695227
GPA1	8q24.3	-0.062864753	0.153479616	0.253698855

TMSB4XP8	4q22.1	0.062853378	0.153554189	0.253801284
ACTR6	12q23.1	-0.062848949	0.153583229	0.253819169
LINC00235	16p13.3	0.062847881	0.153590229	0.253819169
GDF9	5q31.1	-0.062842835	0.153623326	0.253838074
RAB41	Xq13.1	0.062842292	0.153626888	0.253838074
SLC29A2	11q13.2	-0.062833839	0.153682338	0.253908854
TCTEX1D4	1p34.1	-0.062828257	0.153718964	0.253948522
C1ORF61	1q22	0.062821505	0.153763276	0.253981651
PRIMA1	14q32.12	0.062821356	0.153764251	0.253981651
TYMP	22q13.33	0.062804835	0.153872718	0.254139958
ACAD11	3q22.1	0.062775657	0.154064418	0.254435698
KRT25	17q21.2	-0.062765653	0.154130187	0.254502231
ZFP41	8q24.3	0.06276437	0.154138627	0.254502231
NUBPL	14q12	0.06276376	0.154142633	0.254502231
ITPKA	15q15.1	-0.062755777	0.154195138	0.254568041
RPS6KA2	6q27	-0.062752124	0.154219165	0.254586828
C2ORF50	2p25.1	0.06275009	0.154232543	0.254588035
EPM2AIP1	3p22.2	0.062745959	0.154259727	0.254612028
KCNE2	21q22.11	-0.062734165	0.154337338	0.254719243
LCE2A	1q21.3	-0.062719857	0.154431533	0.254853809
EIF3M	11p13	-0.06271461	0.154466089	0.25488994
UPF3A	13q34	-0.062710963	0.154490112	0.254908684
PIH1D2	11q23.1	-0.062696462	0.154585649	0.255045416
SEC1P	19q13.33	0.062688043	0.15464114	0.255100877
ZWILCH	15q22.31	0.062687516	0.15464461	0.255100877
TIGD5	8q24.3	0.062670322	0.154757983	0.255266978
FAM95B1	9p11.2	-0.06266386	0.154800612	0.255316373
CHAD	17q21.33	0.062653564	0.154868545	0.255407488
PGRMC1	Xq24	-0.062650871	0.154886319	0.255415877
RANBP3	19p13.3	0.062647312	0.154909809	0.255433688
SMIM5	17q25.1	0.062636977	0.154978037	0.255525259
HBG1	11p15.4	-0.062629839	0.155025173	0.255582042
KIF22	16p11.2	-0.062599028	0.155228752	0.255896714
GABRQ	Xq28	0.06259145	0.155278853	0.255958345
DPPA4	3q13.13	0.062584393	0.155325522	0.256014309
GRIK2	6q16.3	0.0625775	0.155371117	0.256068494
TRPC6	11q22.1	0.062564901	0.155454485	0.256184919
PROCR	20q11.22	-0.062547533	0.155569457	0.256344737
GLUD2	Xq24	-0.062546404	0.155576933	0.256344737
WDR34	9q34.11	-0.062540239	0.155617765	0.25639103
EED	11q14.2	0.062529992	0.155685645	0.256442921
HMGCS1	5p12	-0.062529992	0.155685645	0.256442921
LRP2	2q31.1	0.062529715	0.155687478	0.256442921
SNORA72	8q22.2	0.062520884	0.155746	0.256518326
SULT1C2	2q12.3	-0.062518616	0.155761029	0.256521758
CRYBB2	22q11.23	0.062516724	0.15577357	0.256521758
A2ML1	12p13.31	0.062508854	0.155825743	0.256586684
ACTL7A	9q31.3	-0.062485409	0.155981238	0.256821717
NUCKS1	1q32.1	0.062478323	0.156028261	0.25687813
VTN	17q11.2	-0.062475593	0.156046379	0.25688695
GSTTP2	22q11.23	0.062466141	0.156109126	0.256969229
SHPRH	6q24.3	0.062443414	0.156260066	0.257196658
KYNU	2q22.2	-0.062438204	0.156294686	0.257232608
KRT19	17q21.2	-0.062425612	0.156378375	0.257349304
IK	5q31.3	-0.062419968	0.156415902	0.257390019
HIST2H3C	1q21.2	0.062404741	0.156517167	0.257535603
CHODL-AS1	21q21.1	0.062399875	0.156549543	0.257567822
ZNF136	19p13.2	0.062369603	0.156751048	0.257878278

DEPDC5	22q12.2-q12.3	0.062360831	0.156809476	0.257953318
MOG	6p22.1	0.062357096	0.156834356	0.257968461
CXADRP2	15q11.2	-0.062355602	0.156844312	0.257968461
DACH1	13q21.33	-0.062318542	0.157091381	0.258353717
MXI1	10q25.2	0.062307859	0.157162653	0.258449816
ACP7	19q13.2	0.062278352	0.157359652	0.258752637
LINC00671	17q21.31	-0.0622727	0.157397403	0.258793574
ACTC1	15q14	0.062244168	0.157588102	0.259085959
SNORA30	16p11.2	0.062238411	0.157626597	0.259106924
SNORA36B	1q41	-0.062238411	0.157626597	0.259106924
HEY1	8q21.13	0.062230487	0.157679602	0.25917289
KRT35	17q21.2	0.062226294	0.157707653	0.259197832
ACSL6	5q31.1	0.062221836	0.157737479	0.259225688
EPPIN	20q13.12	0.062213066	0.157796171	0.259300974
SLC7A7	14q11.2	0.062209732	0.157818485	0.259316473
ZNF830	17q12	-0.062203438	0.157860625	0.259364542
PCDH17	13q21.1	0.062193059	0.157930124	0.259432407
DEFB136	8p23.1	0.062191954	0.157937526	0.259432407
SLC29A3	10q22.1	-0.062191496	0.157940593	0.259432407
CMIP	16q23.2-q23.3	0.06218646	0.157974331	0.259466502
KMT5B	11q13.2	0.062184549	0.157987129	0.259466502
POLD2	7p13	-0.062168745	0.158093037	0.259619256
CKLF	16q21	-0.062165531	0.158114575	0.259633444
NTRK2	9q21.33	-0.062129667	0.158355128	0.259999412
WDR70	5p13.2	0.062128453	0.158363278	0.259999412
TTC31	2p13.1	-0.062119073	0.15842624	0.260070002
IL36B	2q14.1	0.062118198	0.158432113	0.260070002
PLXNA2	1q32.2	-0.062099969	0.158554536	0.260249741
OTOP1	4p16.3	0.062094688	0.158590009	0.260286741
VAMP3	1p36.23	-0.062089809	0.158622799	0.260319333
SLC7A8	14q11.2	0.06208564	0.15865081	0.260344078
DENND4B	1q21.3	0.06208208	0.158674739	0.260362121
KRT5	12q13.13	0.062054686	0.158858945	0.260643129
MICALL1	22q13.1	0.062044305	0.158928792	0.260725774
FLVCR2	14q24.3	0.06204335	0.15893522	0.260725774
HCG9	6p22.1	-0.06203978	0.158959247	0.260743941
UBXN2A	2p23.3	0.062034406	0.158995422	0.260782029
KCNIP2	10q24.32	0.062031193	0.159017052	0.260796256
AASDH	4q12	-0.062028242	0.159036921	0.260807594
CMC2	16q23.2	-0.062015041	0.15912582	0.260932125
EIF2AK2	2p22.2	0.061995849	0.159255129	0.261122888
SUMO1P1	20q13.2	0.061993925	0.159268098	0.261122888
HSD17B13	4q22.1	-0.061985126	0.159327415	0.261198865
CEACAM16	19q13.31-q13.32	-0.061980723	0.159357108	0.26122096
GSDMB	17q21.1	-0.061977527	0.15937866	0.26122096
LINC00653	20p11.23	0.061977354	0.159379823	0.26122096
FARSA	19p13.13	-0.061971795	0.159417315	0.261261138
SNORA37	18q21.2	-0.061951231	0.159556067	0.261451909
CKS2	9q22.2	-0.061950694	0.159559697	0.261451909
NONO	Xq13.1	0.061946438	0.159588419	0.261477689
CBY1	22q13.1	-0.061938189	0.159644117	0.261547658
SEPTIN4	17q22	0.061933023	0.159678999	0.261583517
HCG4	6p22.1	-0.061911276	0.159825922	0.261802898
GTF3C6	6q21	-0.061903759	0.159876729	0.261864813
NDUFS6	5p15.33	-0.061900327	0.159899926	0.261878462
BUB3	10q26.13	0.061898677	0.15991108	0.261878462
RSPH1	21q22.3	-0.061886044	0.159996512	0.261975989
NPSR1	7p14.3	0.061886022	0.159996662	0.261975989

GAD2	10p12.1	-0.061876428	0.160061559	0.262060934
ADAMTSL3	15q25.2	-0.061874189	0.160076708	0.262064422
METRNL	17q25.3	0.061865071	0.160138411	0.262144118
LRRC71	1q23.1	-0.06184725	0.16025906	0.262320285
BACE2	21q22.2-q22.3	0.061842927	0.160288336	0.262346874
TMEM130	7q22.1	0.06180967	0.160513706	0.262674445
RNASE9	14q11.2	0.061809542	0.160514572	0.262674445
OR52N4	11p15.4	0.061795443	0.160610182	0.26280954
CXCR2	2q35	0.061786743	0.160669207	0.262884755
STK39	2q24.3	0.061765207	0.160815379	0.263102534
ZNF665	19q13.42	0.061760738	0.160845728	0.2631308
RFPL3S	22q12.3	0.061758478	0.16086107	0.263134514
KCNB1	20q13.13	-0.061739379	0.160990817	0.263325355
CORO2A	9q22.33	-0.06172283	0.1611033	0.263475212
COMMD3	10p12.2	-0.061722048	0.161108613	0.263475212
NEUROG2	4q25	0.061719971	0.161122737	0.263476905
IGFBP1	7p12.3	-0.061710252	0.161188834	0.26356358
GOLGA8G	15q13.1	0.061707498	0.161207562	0.263572793
TRIM9	14q22.1	0.061687621	0.161342813	0.263772503
SULT1C3	2q12.3	-0.061677534	0.161411478	0.263863331
HSCB	22q12.1	-0.061662651	0.161512837	0.264007586
CEP290	12q21.32	0.061654836	0.161566082	0.264052539
ACAP2	3q29	0.061652925	0.161579099	0.264052539
PDIK1L	1p36.11	-0.061652838	0.161579691	0.264052539
SLC38A6	14q23.1	-0.061650233	0.161597443	0.264060112
JMJD6	17q25.1	0.061623661	0.161778598	0.264334674
ALG8	11q14.1	-0.061598217	0.161952201	0.264596851
ZC2HC1B	6q24.2	0.061588682	0.162017292	0.264681714
SULT6B1	2p22.2	-0.061584301	0.162047208	0.264709104
DCUN1D5	11q22.3	0.061581284	0.162067816	0.264721287
CCDC166	8q24.3	0.061565666	0.162174504	0.264862404
CLTA	9p13.3	-0.061564784	0.162180526	0.264862404
CDS2	20p12.3	-0.061560616	0.16220901	0.264887432
ASB14	3p14.3	0.061543944	0.162322973	0.265052031
PTOV1	19q13.33	-0.061537691	0.162365737	0.265100355
PIGH	14q24.1	-0.06152536	0.162450084	0.265216561
TESK2	1p34.1	0.061512508	0.16253803	0.265338622
MBOAT7	19q13.42	-0.06150795	0.162569227	0.265368029
KCTD15	19q13.11	0.061486196	0.162718194	0.265589657
BAK1	6p21.31	-0.061482375	0.162744369	0.265610843
BAG5	14q32.33	0.061479509	0.162764002	0.265621351
MDH2	7q11.23	-0.061469696	0.162831244	0.265706746
CRCT1	1q21.3	-0.061468021	0.162842728	0.265706746
LEPROT	1p31.3	0.06145971	0.162899698	0.265778159
ID1	20q11.21	-0.06145285	0.162946736	0.265833357
POP7	7q22.1	-0.061447292	0.16298485	0.265873989
LARGE1	22q12.3	-0.061432095	0.163089101	0.266022495
SMIM19	8p11.21	-0.061426625	0.163126644	0.266044506
SNRPA1	15q26.3	-0.061426277	0.163129028	0.266044506
HIGD2B	15q24.1	-0.061424318	0.163142474	0.26604488
HNRNPF	10q11.21	-0.061409083	0.163247064	0.266174184
SCN3B	11q24.1	0.061408916	0.16324821	0.266174184
TUBA1C	12q13.12	-0.061400834	0.163303719	0.266243126
PRH1	12p13.2	-0.061376345	0.163471985	0.266495875
KCNQ1DN	11p15.4 11p15.5	0.061371118	0.163507919	0.26653287
FER	5q21.3	0.061355549	0.163614985	0.266681261
THOC7	3p14.1	-0.061354028	0.163625447	0.266681261
LINC00905	19p13.12	-0.061347811	0.163668213	0.266729367

REXO2	11q23.2	0.061344997	0.163687579	0.266739332
MAGEC2	Xq27.2	0.061338469	0.163732496	0.266790929
SUSD4	1q41	-0.061314777	0.163895612	0.267035101
ADGRA1	10q26.3	-0.061298217	0.164009693	0.267199346
GJA10	6q15	-0.061291503	0.164055962	0.267253097
FAM13B	5q31.2	0.061288117	0.1640793	0.267269486
SOCS2	12q22	0.061277957	0.164149345	0.267361949
CYTH2	19q13.33	-0.061274658	0.1641721	0.267377377
NR6A1	9q33.3	0.061271195	0.164195982	0.267394637
EPHB3	3q27.1	0.061265279	0.164236784	0.267439449
KIN	10p14	-0.061227765	0.164495712	0.267839414
PGP	16p13.3	-0.061214305	0.164588689	0.267948127
PRAMEF12	1p36.21	0.061214245	0.1645891	0.267948127
LOC100129935	19q13.2	-0.061209005	0.164625309	0.267985401
H1FNT	12q13.11	-0.061204883	0.164653796	0.267987766
HBQ1	16p13.3	-0.061204347	0.164657502	0.267987766
GIN3	16q21	0.061203016	0.1646667	0.267987766
DSG1	18q12.1	0.061172382	0.164878535	0.268299118
DCAF17	2q31.1	0.061171495	0.164884669	0.268299118
PRDM13	6q16.2	-0.061159753	0.164965922	0.268409635
ZNF157	Xp11.3	0.061154741	0.165000609	0.268440368
KLHL25	15q25.3	0.061153171	0.165011481	0.268440368
API5	11p12	0.061130766	0.165166629	0.268659251
CHRNA3	15q25.1	0.061129887	0.165172722	0.268659251
PCMTD2	20q13.33	0.061098376	0.165391125	0.268992756
STAT3	17q21.2	0.061090474	0.16544593	0.269052419
PGGT1B	5q22.3	-0.061089172	0.165454955	0.269052419
ASCC2	22q12.2	-0.061087305	0.165467906	0.269052419
DPRX	19q13.42	-0.061083197	0.165496405	0.269070387
ACTG1P4	1p21.1	-0.061081859	0.165505689	0.269070387
DPP4	2q24.2	-0.061065898	0.165616453	0.269214815
DRAP1	11q13.1	0.061065204	0.165621275	0.269214815
OR2T35	1q44	0.061058536	0.165667564	0.269246574
OR4Q3	14q11.2	0.061058536	0.165667564	0.269246574
CFDP1	16q23.1	-0.061055738	0.16568699	0.269256407
PCDHA7	5q31.3	0.061044889	0.165762337	0.269357107
RNF219	13q31.1	0.061039152	0.16580219	0.26940012
SMARCB1	22q11.23 22q11	0.061035852	0.165825116	0.269415625
LINC00689	7q36.3	-0.061025897	0.165894298	0.269503041
LINC01512	6p21.1	0.061024257	0.165905697	0.269503041
POLR3G	5q14.3	0.061012232	0.165989291	0.269617076
ATXN8OS	13q21.33	0.061006917	0.166026251	0.269655352
CPQ	8q22.1	0.060992173	0.166128814	0.269800163
SAPCD1	6p21.33	-0.06098097	0.166206768	0.269904988
CRELD2	22q13.33	0.060968987	0.16629019	0.269999961
RFXAP	13q13.3	0.060965905	0.166311647	0.269999961
GBP1P1	1p22.2	0.060965038	0.166317684	0.269999961
SRSF10	1p36.11	-0.060964863	0.166318903	0.269999961
KCNH8	3p24.3	0.060959994	0.166352813	0.270018447
CRNN	1q21.3	0.060959376	0.166357118	0.270018447
OR2B2	6p22.1	0.060922311	0.166615418	0.270415897
CWC27	5q12.3	0.060911326	0.166692026	0.27051842
GPR158-AS1	10p12.1	0.060906228	0.166727589	0.270554322
PPP1R12B	1q32.1	0.060892569	0.166822901	0.270676166
COG6	13q14.11	-0.060891614	0.166829568	0.270676166
CSMD1	8p23.2	0.060885793	0.166870201	0.270720273
C15ORF41	15q14	-0.060868862	0.166988421	0.270890235
ZNF503-AS2	10q22.2	-0.060834214	0.167230558	0.271261171

KLK9	19q13.41	0.060823864	0.167302937	0.271356709
ANKMY2	7p21.1	-0.060820667	0.167325299	0.271371114
IL12B	5q33.3	-0.060802261	0.167454089	0.271558109
CAPN11	6p21.1	0.060789857	0.167540926	0.27166267
RHBDF1	16p13.3	-0.060788189	0.167552599	0.27166267
RGSL1	1q25.3	-0.060787268	0.167559051	0.27166267
PTP4A2	1p35.2	-0.0607802	0.167608548	0.271721034
AFF3	2q11.2	-0.060776598	0.167633781	0.271736563
FGF9	13q12.11	0.060774978	0.167645125	0.271736563
CCDC18	1p22.1	0.060754583	0.167788044	0.271946322
LOC100134368	16p13.3	-0.060741329	0.167880972	0.272075031
IFT122	3q21.3-q22.1	-0.060731918	0.167946971	0.272160082
MFSD8	4q28.2	-0.060720542	0.168026782	0.272267498
VPS26B	11q25	0.060718545	0.168040798	0.272268292
FAM50A	Xq28	0.06071594	0.16805908	0.272275999
KCTD3	1q41	0.060708559	0.168110888	0.272323447
MPL	1p34.2	-0.060707913	0.168115423	0.272323447
RNF126P1	17q22	0.060696878	0.168192901	0.272427028
CNTFR-AS1	9p13.3	-0.060693723	0.168215055	0.272440989
TNFRSF14	1p36.32	-0.060686675	0.168264555	0.272468237
OR2T5	1q44	0.060686047	0.168268973	0.272468237
PSMG3	7p22.3	-0.060685547	0.168272485	0.272468237
HAUS2	15q15.2	-0.060681292	0.168302378	0.272494721
SDHAP2	3q29	-0.060677992	0.168325563	0.272510341
MCEMP1	19p13.2	-0.060667447	0.168399664	0.272608382
TENT5A	6q14.1	-0.060663663	0.168426262	0.272629516
LYPD6B	2q23.2	0.060646234	0.168548817	0.272805957
C10ORF99	10q23.1	-0.060625202	0.168696789	0.273023505
STX6	1q25.3	0.060620157	0.168732298	0.273059021
ITIH5	10p14	0.06058768	0.168961027	0.273407193
OR2A5	7q35	-0.060582101	0.169000344	0.273448833
RGPD5	2q13	0.060576217	0.169041811	0.273493944
PI4KAP1	22q11.21	0.060552512	0.169208968	0.273742387
NECTIN3	3q13.13	-0.060549384	0.16923103	0.273756078
RUNDC1	17q21.31	-0.060540702	0.169292291	0.273812175
HLA-F	6p22.1	-0.060540613	0.169292913	0.273812175
PI4K2B	4p15.2	-0.060524375	0.169407532	0.273975546
SELE	1q24.2	0.060520859	0.169432355	0.273993678
ZNRF2	7p14.3	0.060504489	0.169547974	0.274158625
SMYD4	17p13.3	-0.060495589	0.169610855	0.274238274
C6ORF141	6p12.3	0.060482155	0.169705804	0.274369756
SUSD3	9q22.31	0.060473835	0.169764634	0.274442827
SHISA6	17p12	0.060458297	0.169874532	0.274598436
SNORA7B	3q21.3	0.060452679	0.169914283	0.274628893
SNHG15	7p13	0.060451778	0.169920659	0.274628893
KHDRBS2	6q11.1	-0.060401699	0.170275302	0.27517998
GOLGA8F	15q13.1	-0.060398326	0.170299208	0.275196521
RRAGD	6q15	0.06039047	0.170354897	0.275252268
ARHGEF15	17p13.1	0.060389602	0.170361054	0.275252268
GIMAP7	7q36.1	0.060382134	0.170414008	0.275300598
HIPK3	11p13	0.060381526	0.170418318	0.275300598
CPEB3	10q23.32	0.0603751	0.170463894	0.275351919
LARP1	5q33.2	0.060373189	0.170477445	0.275351919
AJAP1	1p36.32	0.060335988	0.170741482	0.275735723
CHRAC1	8q24.3	0.06033585	0.170742464	0.275735723
HSPBP1	19q13.42	-0.060332983	0.170762825	0.275746484
PAIP2B	2p13.3	0.060323865	0.170827593	0.275828945
AGTPBP1	9q21.33	0.060321218	0.170846401	0.275837188

FAM131C	1p36.13	0.060305705	0.170956647	0.275993046
OR4F5	1p36.33	-0.060297661	0.17101383	0.276063223
C2ORF48	2p25.1	0.060293853	0.171040911	0.2760848
PRM3	16p13.13	0.060276382	0.171165176	0.276263229
MMUT	6p12.3	-0.060272936	0.1711897	0.276280659
TNFSF10	3q26.31	0.060253266	0.171329708	0.276484449
SLC9C2	1q25.1	-0.060245408	0.171385657	0.276552567
XPO7	8p21.3	0.060220875	0.171560444	0.276812419
DUSP15	20q11.21	-0.060209052	0.171644723	0.276926206
SMPD4	2q21.1	0.060196126	0.1717369	0.277052716
SMAGP	12q13.13	-0.060189353	0.171785216	0.277108454
CXCR1	2q35	0.060176098	0.171879798	0.277226863
LYZL2	10p11.23	-0.060172143	0.171908023	0.277226863
TNRC18	7p22.1	0.060171377	0.171913491	0.277226863
CFAP206	6q15	-0.060171347	0.171913707	0.277226863
RNF43	17q22	-0.060166948	0.171945105	0.277248856
CAPZA2	7q31.2	-0.060165559	0.171955025	0.277248856
BRF1	14q32.33	-0.060163648	0.171968664	0.277248856
METTL14	4q26	-0.060158525	0.172005248	0.277285628
MOB2	11p15.5	-0.060154965	0.172030673	0.277304408
IL17RB	3p21.1	-0.060150362	0.172063545	0.277335187
FOXD2	1p33	-0.06014815	0.172079343	0.277338445
ACO1	9p21.1	0.060138379	0.172149156	0.27742875
FOXD4L1	2q14.1	-0.06013059	0.172204816	0.277496233
TCAF1	7q35	0.060110375	0.172349341	0.277706895
CSNK1G3	5q23.2	0.060102254	0.172407424	0.277778249
SH3D19	4q31.3	0.060094004	0.172466444	0.277851102
APBB1	11p15.4	0.060089841	0.172496233	0.2778616
IL9R	Xq28 and Yq12	0.060089236	0.172500567	0.2778616
TMPRSS12	12q13.12	-0.060084899	0.172531602	0.277889353
SIX5	19q13.32	-0.060078286	0.172578934	0.277925456
RASSF3	12q14.2	-0.06007791	0.172581629	0.277925456
SURF4	9q34.2	0.060069516	0.172641729	0.278
KCNQ4	1p34.2	-0.060059443	0.172713864	0.278093912
MCOLN1	19p13.2	-0.060052843	0.172761148	0.278147797
KLF16	19p13.3	0.060045027	0.172817147	0.278215704
PRCC	1q23.1	-0.060035649	0.172884363	0.278265448
ARVCF	22q11.21	0.06003478	0.172890588	0.278265448
LMOD2	7q31.32	0.060033348	0.172900857	0.278265448
GFRA1	10q25.3	0.060033002	0.17290334	0.278265448
MSI2	17q22	0.060013071	0.17304626	0.278473197
PHKA1	Xq13.1	0.060007166	0.173088621	0.278519101
ZNF181	19q13.11	-0.059977207	0.17330366	0.278842833
BSCL2	11q12.3	-0.059948724	0.173508287	0.279149762
TOX3	16q12.1	0.059942671	0.173551794	0.279192575
	10-Mar 17q23.2	0.059941163	0.173562637	0.279192575
HNRNPA1	12q13.13	-0.059929793	0.173644389	0.279301762
SNORA65	9q33.3	0.059912399	0.173769516	0.279480693
AHNAK2	14q32.33	0.059903481	0.17383369	0.279561571
ZNF148	3q21.2	0.059894234	0.173900254	0.279646279
C2ORF27B	2q21.2	0.059888548	0.173941191	0.279689766
SYNE2	14q23.2	0.05987769	0.174019392	0.27979316
ZRSR2	Xp22.2	0.059871003	0.174067561	0.279848255
E2F1	20q11.22	0.059851899	0.174205242	0.280047238
SNORA53	12q23.1	-0.059845685	0.174250039	0.280096885
ARX	Xp21.3	0.059822074	0.174420344	0.280336265
LRRC7	1p31.1	0.059819862	0.174436303	0.280336265
SIK1	21q22.3	-0.059819248	0.174440738	0.280336265

PGA4	11q12.2	0.059813905	0.174479299	0.280358751
GZMH	14q12	0.059812995	0.17448586	0.280358751
LRIT3	4q25	-0.05981152	0.174496512	0.280358751
RTTN	18q22.2	0.05980618	0.174535056	0.280398298
ARL8A	1q32.1	-0.059789983	0.174652009	0.280563797
NAGS	17q21.31	-0.059786944	0.174673962	0.280576672
GPR61	1p13.3	0.05978346	0.174699132	0.280594712
HSF4	16q22.1	-0.059771313	0.174786895	0.280713276
STPG4	2p21	0.059766762	0.174819787	0.280743703
GUCA1B	6p21.1	0.059763932	0.174840244	0.280754157
TAF1A	1q41	0.059755509	0.174901139	0.280829539
CBWD5	9q21.11	-0.059751241	0.174931994	0.280856679
OR2M1P	1q44	0.059733858	0.175057732	0.28103614
TLK1	2q31.1	0.059701582	0.175291367	0.281388773
FGA	4q31.3	-0.059670954	0.175513288	0.281722549
CARD11	7p22.2	0.059665197	0.175555026	0.281767077
CDC42	1p36.12	-0.059650868	0.175658935	0.281911373
FIGNL2	12q13.13	0.059634456	0.175778014	0.282079991
ELP4	11p13	-0.059628639	0.175820232	0.28211896
CDADC1	13q14.2	-0.059627248	0.175830326	0.28211896
AS3MT	10q24.32	-0.059624122	0.17585302	0.282131638
RNF149	2q11.2	0.059622299	0.175866259	0.282131638
CD1C	1q23.1	-0.059598765	0.17603717	0.282383316
BCAS3	17q23.2	-0.059592774	0.176080706	0.282430646
FBXL6	8q24.3	-0.059584177	0.176143184	0.28249149
KRTAP13-3	21q22.11	-0.059583692	0.176146705	0.28249149
CCT2	12q15	-0.059541365	0.176454559	0.282949242
TMEM267	5p12	0.059540584	0.176460248	0.282949242
RNFT2	12q24.22	0.059531726	0.176524723	0.283023757
HSPB6	19q13.12	0.059530337	0.176534838	0.283023757
GGCT	7p14.3	0.059502896	0.176734704	0.283303196
LINC00602	6q27	0.059502542	0.176737284	0.283303196
OR9G9	11q11	0.059494933	0.176792733	0.283369514
FAM9A	Xp22.31	-0.059488501	0.17683962	0.283422098
HTR1E	6q14.3	-0.059485788	0.176859392	0.28343122
IWS1	2q14.3	-0.05947311	0.176951837	0.283556797
CDK1	10q21.2	0.059468855	0.176982872	0.283583955
NRG1	8p12	-0.059461791	0.177034407	0.283640316
B4GALT3	1q23.3	-0.059456437	0.177073468	0.283640316
AKR7A3	1p36.13	0.059456395	0.177073775	0.283640316
METTL2A	17q23.2	-0.059456309	0.177074409	0.283640316
LINC02716	11p11.2	-0.059440419	0.177190385	0.283803505
KRT81	12q13.13	0.059431081	0.177258566	0.283890122
MIEF1	22q13.1	0.059429083	0.177273152	0.283890895
SEMA3G	3p21.1	0.059415537	0.177372106	0.284026767
CDC6	17q21.2	0.059413192	0.177389236	0.284031604
SIKE1	1p13.2	0.059396953	0.177507916	0.284199025
CMTM6	3p22.3	0.059390527	0.177554896	0.284234546
BIRC7	20q13.33	-0.059390056	0.177558341	0.284234546
HBM	16p13.3	-0.05938779	0.177574908	0.28423685
S100Z	5q13.3	0.059385997	0.177588021	0.28423685
LINC01002	19p13.3	-0.059368904	0.177713047	0.284414345
CITED4	1p34.2 1p35-p34	-0.059364303	0.177746713	0.284445611
TMEM272	13q14.3	0.05936032	0.177775861	0.284469641
GUSBP2	6p22.2	0.059354316	0.17781981	0.284517349
ZNF230	19q13.31	0.059336993	0.177946643	0.284697658
REPS2	Xp22.2	-0.059321838	0.178057656	0.284852627
RNF217	6q22.31	0.059318845	0.178079589	0.284865077

PTCH1	9q22.32	-0.059315065	0.17810729	0.284886749
HDGFL2	19p13.3	0.059311591	0.178132747	0.28490483
GPBP1L1	1p34.1	-0.059304905	0.17818176	0.28496058
MEP1B	18q12.1	0.059298406	0.178229407	0.285014137
COL4A5	Xq22.3	0.059294918	0.17825498	0.285032388
ATOH7	10q21.3 10q21.3-q	0.059268744	0.178446996	0.285316761
TMPRSS4	11q23.3	0.059261312	0.178501544	0.28538131
NUSAP1	15q15.1	0.059252368	0.178567209	0.285463622
RRH	4q25	-0.059250209	0.17858306	0.285466291
NEMP1	12q13.3	0.059239604	0.178660948	0.285568118
DUSP2	2q11.2	0.059222582	0.178786012	0.285722643
LGALS3BP	17q25.3	-0.059222582	0.178786012	0.285722643
SNORA71C	20q11.23	-0.059199332	0.178956939	0.285973104
NAE1	16q22.1	-0.059187586	0.179043342	0.286088465
GPAT4	8p11.21	0.059184373	0.179066982	0.286103527
RFX6	6q22.1	0.05916811	0.179186672	0.28627204
TPM3P9	19q13.42	0.059131229	0.179458321	0.286683278
FAM106A	17p11.2	0.059120108	0.179540296	0.286791475
NKAP	Xq24	0.059113426	0.179589561	0.286847406
ABR	17p13.3	0.059109605	0.179617736	0.286869647
MRPL3	3q22.1	-0.059107521	0.179633106	0.286871434
KIFC3	16q21	0.059104656	0.179654242	0.286882428
KCNQ1	11p15.5-p15.4	-0.059092238	0.17974585	0.287005945
FITM2	20q13.12	-0.059086072	0.179791346	0.287055821
CDH26	20q13.33	0.059075825	0.179866979	0.287153801
SSC4D	7q11.23	0.059067228	0.179930451	0.287232354
TUBA4B	2q35	-0.059039959	0.180131891	0.287531122
C7ORF33	7q36.1	0.059036614	0.180156613	0.287547781
ASAH2	10q11.23	-0.059030348	0.180202931	0.287598906
NRXN2	11q13.1	0.059026893	0.180228473	0.287616867
PTPN5	11p15.1	-0.059007569	0.180371384	0.287822113
HPVC1	7p11.2	0.058990782	0.180495593	0.287997486
PARS2	1p32.3	-0.058987946	0.180516584	0.288008151
MIOX	22q13.33	0.058978312	0.180587906	0.288099109
ZNF506	19p13.11	0.058975614	0.180607884	0.288108147
ISOC2	19q13.42	-0.058962067	0.180708214	0.288245353
PPP1R2C	Xp11.3	0.058958959	0.180731237	0.288259234
ARHGAP32	11q24.3	0.058952428	0.180779628	0.288313573
YBX2	17p13.1	0.058947678	0.18081483	0.28833041
LINC00518	6p24.3	0.058947138	0.180818833	0.28833041
FAM189A2	9q21.12	-0.0589315	0.180934752	0.288492401
GNS	12q14.3	-0.058929155	0.180952137	0.28849727
TUBA1B	12q13.12	0.058918301	0.18103264	0.28860276
OR1M1	19p13.2	0.058903453	0.1811428	0.288755508
TTC17	11p12-p11.2	-0.058901454	0.181157633	0.288756288
OPRPN	4q13.3	-0.058898097	0.181182546	0.288773132
NSMF	9q34.3	0.05886229	0.181448457	0.289174051
TSPYL2	Xp11.22	0.058841622	0.181602068	0.289395949
NAAA	4q21.1	0.05882686	0.18171185	0.289547972
TMEM179	14q32.33	-0.058824705	0.18172788	0.289550595
TRIT1	1p34.2	0.058818872	0.181771272	0.28959681
CTSL3P	9q21.33	-0.058809239	0.18184295	0.289649259
SPOUT1	9q34.11	-0.058809058	0.181844298	0.289649259
GPR137	11q13.1	-0.058807061	0.181859163	0.289649259
AP5Z1	7p22.1	0.058806713	0.181861748	0.289649259
IMPG1	6q14.1	0.058800214	0.181910127	0.289703391
TEKT4	2q11.1	-0.058793621	0.18195921	0.289758634
MROH8	20q11.23	0.05878874	0.181995552	0.289793582

LOC100272217	9q34.11	0.058782662	0.182040822	0.28984274
LOC283922	16q23.1	0.058763555	0.182183175	0.290010014
UPP2	2q24.1	0.058761989	0.182194843	0.290010014
EDN1	6p24.1	-0.058761818	0.182196118	0.290010014
FLJ36000	17p11.2	0.058760826	0.18220351	0.290010014
OR14C36	1q44	-0.058753452	0.182258474	0.290074564
TAX1BP3	17p13.2	-0.058741672	0.182346312	0.290191419
C6ORF62	6p22.3	-0.058729167	0.182439582	0.290316899
CNST	1q44	0.058718833	0.182516685	0.290393683
PRPF38B	1p13.3	0.058718833	0.182516685	0.290393683
LYZL4	3p22.1	0.058691288	0.182722328	0.290697894
GOLGB1	3q13.33	0.058687137	0.18275333	0.29072424
ZNF684	1p34.2	0.058680848	0.182800314	0.290776004
WRAP73	1p36.32	-0.05867003	0.182881148	0.290873019
BTF3L4	1p32.3	-0.058664472	0.182922686	0.290873019
SCRN1	7p14.3	0.058664385	0.182923336	0.290873019
ZNF705D	8p23.1	0.058663978	0.182926384	0.290873019
NEK1	4q33	0.058662301	0.182938914	0.290873019
IGFLR1	19q13.12	0.058661086	0.182948003	0.290873019
LCN15	9q34.3	0.05865392	0.183001578	0.29093522
GPATCH2	1q41	0.058647105	0.18305254	0.290980992
PGLYRP3	1q21.3	0.058646204	0.183059279	0.290980992
MX2	21q22.3	0.058637552	0.183123988	0.291051046
GABRB3	15q12	-0.058635122	0.183142169	0.291051046
UBE3A	15q11.2	-0.058634513	0.183146726	0.291051046
PVT1	8q24.21	0.058629869	0.183181477	0.291083291
TSSK1B	5q22.2	0.058625455	0.183214507	0.291102918
C12ORF49	12q24.22	-0.058624353	0.183222751	0.291102918
GGA1	22q13.1	-0.058611067	0.183322203	0.291237941
KRR1	12q21.2	0.058598909	0.18341324	0.291359574
GAS2L1	22q12.2	0.058596217	0.183433402	0.29136861
ERCC8	5q12.1	0.05858927	0.183485443	0.291428275
PRTG	15q21.3	0.058584494	0.183521227	0.291462114
TRPC2	11p15.4	-0.058581533	0.183543419	0.291474362
SPC25	2q24.3	0.058574768	0.183594112	0.291531867
AKR7L	1p36.13 1p35-p36.	0.05856144	0.183694029	0.291660553
YDJC	22q11.21	-0.058560093	0.183704131	0.291660553
SRD5A3	4q12	-0.05855028	0.183777721	0.291754379
PPBP	4q13.3	-0.058544716	0.183819458	0.291797626
SUPT6H	17q11.2	-0.058537167	0.183876092	0.291841854
CHRNA2	1q21.3	-0.058536625	0.183880161	0.291841854
RPL37	5p13.1	-0.05853352	0.183903461	0.291841854
RHOXF1	Xq24	0.058533274	0.183905311	0.291841854
OR51B2	11p15.4	0.058518982	0.184012581	0.291989063
KISS1	1q32.1	0.058513948	0.184050384	0.292026029
NMT2	10p13	0.058506948	0.184102951	0.292086412
GPS2	17p13.1	-0.058503995	0.184125126	0.292098572
LINC01553	10q21.2	-0.058497973	0.184170365	0.292147316
ZFPM1	16q24.2	-0.058490448	0.184226897	0.292213966
LRRC37BP1	17q11.2	0.058474036	0.184350252	0.292386588
ACOT6	14q24.3	-0.058460899	0.184449033	0.292516554
TMEM216	11q12.2	0.058459273	0.184461259	0.292516554
ZMYM6	1p34.3	0.058427751	0.184698455	0.292869626
CFP	Xp11.23	-0.05842506	0.184718713	0.292878677
YAP1	11q22.1	-0.058417417	0.184776263	0.292946851
RABEP2	16p11.2	-0.058399616	0.184910358	0.293136361
CLK1	2q33.1	0.058391105	0.184974487	0.293214933
FTSJ1	Xp11.23	0.058388849	0.184991495	0.293218802

TSC22D4	7q22.1	-0.05837669	0.185083152	0.293310102
C16ORF74	16q24.1	-0.05837504	0.185095593	0.293310102
CROT	7q21.12	0.05837478	0.185097557	0.293310102
TSEN34	19q13.42	-0.058373477	0.185107379	0.293310102
TNFRSF1A	12p13.31	-0.058365922	0.185164354	0.293377288
ZNF672	1q44	-0.058360191	0.185207585	0.293422689
ALDH18A1	10q24.1	0.058356023	0.185239031	0.293449413
PAGE1	Xp11.23	0.058343799	0.18533127	0.293557045
HIST1H3E	6p22.2	0.058343154	0.185336139	0.293557045
REG3G	2p12	-0.05834024	0.185358135	0.293568785
LRP2BP	4q35.1	-0.058331492	0.185424171	0.293650268
SLC26A7	8q21.3	0.058317497	0.185529858	0.293794528
ACTA1	1q42.13	0.05830124	0.185652678	0.293965893
COX6C	8q22.2	-0.058288723	0.185747289	0.29409257
NPBWR1	8q11.23	0.058272051	0.185873356	0.294269025
ZC3H12C	11q22.3	-0.058256332	0.185992275	0.294429496
NLGN4Y	Yq11.221	0.058254787	0.186003969	0.294429496
EVI5L	19p13.2	0.058251035	0.186032363	0.294451286
ADGB	6q24.3	-0.058220394	0.186264373	0.294772813
IPO4	14q12	0.058220339	0.186264788	0.294772813
SLC35G5	8p23.1	0.058218146	0.1862814	0.294775928
OR4N2	14q11.2	0.058199416	0.186423341	0.29497735
MGC16025	2q37.3	0.058187588	0.186513008	0.295063042
ZNF330	4q31.21	0.058187035	0.186517201	0.295063042
AKAP6	14q12	0.058186472	0.186521471	0.295063042
FAM216B	13q14.11	-0.058170132	0.186645412	0.295235907
PLEKHD1	14q24.1	0.058166064	0.186676276	0.295261526
SGPP2	2q36.1	-0.058160202	0.186720754	0.295308672
FBRS	16p11.2	0.058145353	0.18683347	0.295440515
MYO5B	18q21.1	-0.058145353	0.18683347	0.295440515
RGS18	1q31.2	0.058138667	0.186884242	0.295497588
DTX4	11q12.1	0.058109749	0.18710393	0.295821718
CAV1	7q31.2	-0.05809846	0.187189746	0.295934154
MXD3	5q35.3	-0.058090732	0.187248513	0.296003815
FDPSP2	7q11.23	0.05807494	0.187368636	0.296170447
SNORA27	13q12.2	0.058070768	0.187400381	0.296197367
TPP1	11p15.4	0.058063204	0.187457942	0.296265083
HIST1H3G	6p22.2	0.058055954	0.187513126	0.296329034
GPBP1	5q11.2	0.058039846	0.187635784	0.296499594
NP1PB13	16p11.2	0.05802416	0.187755279	0.296665131
MYH15	3q13.13	-0.058020727	0.187781439	0.296683178
NOC4L	12q24.33	-0.058009712	0.187865399	0.296792535
MAP4K3	2p22.1	0.057998336	0.187952134	0.296896559
MCRIP1	17q25.3	-0.057997207	0.187960743	0.296896559
CYFIP2	5q33.3	-0.05799217	0.187999155	0.296933934
STOM	9q33.2	-0.057988263	0.188028962	0.296957712
ATP1B3	3q23	0.05795318	0.188296715	0.297357251
DYRK3	1q32.1	0.057944496	0.188363034	0.297438648
PTPA	9q34.11	-0.057939286	0.188402834	0.297463206
SNX13	7p21.1	0.057938591	0.188408141	0.297463206
FAM120A	9q22.31	-0.05793147	0.188462545	0.297525765
GRIA2	4q32.1	0.057913638	0.188598841	0.297717587
RNF123	3p21.31	-0.057905419	0.188661682	0.297793434
ABCA7	19p13.3	0.05790238	0.188684925	0.297806769
CTNNA1	9q31.3	-0.057879802	0.188857651	0.298056019
INSC	11p15.2	0.057875821	0.188888115	0.298080728
FLYWCH1	16p13.3	-0.05785896	0.189017194	0.298261042
A1BG	19q13.43	0.057854271	0.189053105	0.298294325

RAB3C	5q11.2	-0.057850623	0.189081048	0.298315032
EPRS	1q41	0.057842635	0.189142238	0.298388186
CDK9	9q34.11	-0.057829088	0.189246045	0.298528554
OR2T12	1q44	-0.057813879	0.189362635	0.298689064
KRI1	19p13.2	0.057806857	0.189416485	0.298750594
ICK	6p12.1	0.057804339	0.189435799	0.298751806
PKN1	19p13.12	0.057802515	0.189449787	0.298751806
MKNK2	19p13.3	-0.057800952	0.189461777	0.298751806
SPINK9	5q32	-0.057791223	0.189536419	0.298846097
TEKT1	17p13.1	-0.057786355	0.189573772	0.298869766
KLF1	19p13.13	0.057785397	0.189581125	0.298869766
CASP8	2q33.1	-0.057778982	0.189630359	0.298916326
CDK16	Xp11.3	-0.05777768	0.189640358	0.298916326
ZNF444	19q13.43	-0.057775781	0.189792382	0.299122087
MOSPD2	Xp22.2	0.057755362	0.189811725	0.299122087
ARRDC2	19p13.11	-0.057754668	0.189817062	0.299122087
CASKIN1	16p13.3	0.05775294	0.189830336	0.299122087
SPATA7	14q31.3	0.057735737	0.189962516	0.299306939
LIN7A	12q21.31	0.057729748	0.190008552	0.299356043
DDO	6q21	-0.057726185	0.190035942	0.299375763
BEST2	19p13.13	-0.057677197	0.190412824	0.299946016
ADCY7	16q12.1	0.057664182	0.190513047	0.300049184
PATZ1	22q12.2	0.057663227	0.190520404	0.300049184
A4GNT	3q22.3	0.057662885	0.190523034	0.300049184
VWA1	1p36.33	-0.057653935	0.190591981	0.300134286
MAP10	1q42.2	0.057606566	0.190957186	0.300685869
MXD4	4p16.3	-0.057602527	0.190988351	0.30071142
PHGR1	15q15.1	-0.057595556	0.191042147	0.300772596
R3HDM4	19p13.3	0.057580991	0.191154578	0.300926069
PIK3CB	3q22.3	-0.057551292	0.191383984	0.301250343
MYOZ1	10q22.2	-0.057548563	0.191405075	0.301250343
LOC100128288	17p13.1	0.057548514	0.191405459	0.301250343
PIP5K1P1	6p24.3	0.057520829	0.191619502	0.301563425
FAM24A	10q26.13	0.057518911	0.191634344	0.301563425
SLC24A1	15q22.31	-0.057516297	0.191654566	0.301571673
YIPF4	2p22.3	-0.057507178	0.191725111	0.301659097
C19ORF57	19p13.12	0.05750171	0.191767428	0.301702097
CEMP1	16p13.3	-0.057496411	0.191808446	0.301743047
ZNF121	19p13.2	0.057491158	0.191849106	0.301783426
CMC4	Xq28	0.057486424	0.191885757	0.301817493
OASL	12q24.31	-0.057422859	0.192378389	0.302568714
PID1	2q36.3	-0.057416477	0.192427896	0.302609979
KMT2B	19q13.12	0.057413827	0.192448456	0.302609979
B4GALNT2	17q21.32	0.057413664	0.192449724	0.302609979
CSMD3	8q23.3	0.057411177	0.192469023	0.302616686
ZNF782	9q22.33	0.057385865	0.192665511	0.302882549
CDK11B	1p36.33	-0.057385518	0.192668209	0.302882549
LMAN2L	2q11.2	-0.057380829	0.192704627	0.302916145
NHEG1	6q23.3	0.057373293	0.192763164	0.302984501
RHOG	11p15.4	0.057366068	0.192819302	0.3030477
TAZ	Xq28	0.057364243	0.192833482	0.3030477
LINC00638	14q32.33	0.057348091	0.192959023	0.303221323
ARHGEF4	2q21.1	0.057344705	0.192985345	0.303239012
ABHD15	17q11.2	-0.057338018	0.193037349	0.303297052
CD58	1p13.1	-0.057322996	0.193154195	0.303456953
NFIC	19p13.3	0.057309535	0.193258946	0.303580332
ARID3B	15q24.1	-0.057308753	0.193265029	0.303580332
SLC17A3	6p22.2	-0.05730709	0.19327797	0.303580332

ELOF1	19p13.2	-0.057297985	0.193348854	0.303667975
ISCA1	9q21.33	-0.057281138	0.193480053	0.303850325
PRPH	12q13.12	-0.057278258	0.193502489	0.303861854
AXIN2	17q24.1	-0.057264857	0.193606909	0.303989573
LIG3	17q12	0.057263944	0.193614024	0.303989573
LOC646762	7p14.3	0.057258387	0.193657343	0.304033872
LINC00112	21q22.3	0.057255353	0.19368099	0.304047284
TMLHE	Xq28	0.057240195	0.193799183	0.304209104
DMC1	22q13.1	0.057236076	0.193831316	0.30423582
NGEF	2q37.1	-0.057225695	0.193912301	0.304327736
MED15	22q11.21	0.057224694	0.193920113	0.304327736
HCCS	Xp22.2	-0.05719951	0.194116683	0.304612475
NDUFA9	12p13.32	-0.057195516	0.194147877	0.304620317
JAKMIP1	4p16.1	0.057194995	0.194151946	0.304620317
DMD	Xp21.2-p21.1	0.05716408	0.194393484	0.304975515
DIP2A	21q22.3	0.057160478	0.194421646	0.304995926
TEX35	1q25.2	-0.057138106	0.194596595	0.305246588
CLDN2	Xq22.3	-0.05713499	0.194620975	0.305261044
PRAMEF16	1p36.21	-0.057107807	0.194833718	0.305570918
CCDC17	1p34.1	-0.057083583	0.195023456	0.305844669
KLHL29	2p24.1	0.057068732	0.195139839	0.306003346
ZNF222	19q13.31	0.057064216	0.195175237	0.306035015
PBX2	6p21.32	-0.057030002	0.195443601	0.30643194
IDH2	15q26.1	0.057027571	0.195462682	0.30643799
TBR1	2q24.2	0.057020695	0.195516649	0.306498726
ZBTB4	17p13.1	-0.057015587	0.195556748	0.306537715
RANGAP1	22q13.2	0.057003343	0.195652893	0.306664544
ITPR1	3p26.1	-0.056999522	0.195682903	0.306680572
ZNF607	19q13.12	0.056998132	0.195693816	0.306680572
RHCE	1p36.11	-0.056996222	0.195708824	0.306680572
MAP1LC3C	1q43	-0.056994152	0.195725088	0.306682184
TCEAL8	Xq22.1	-0.056985628	0.195792057	0.306763241
POPDC3	6q21	-0.056979596	0.195839461	0.306813631
TRIM43	2q11.1	0.056970129	0.195913869	0.306906317
SEC16B	1q25.2	-0.056959316	0.195998891	0.307015615
HTR4	5q32	0.056946188	0.196102147	0.307153455
TTC26	7q34	0.056942905	0.196127977	0.307170013
ACTRT2	1p36.32	-0.05693432	0.196195524	0.307247074
EFCAB7	1p31.3	-0.056932309	0.196211351	0.307247074
SZT2	1p34.2	0.056930833	0.19622297	0.307247074
RAB19	7q34	-0.056887458	0.196564561	0.307758001
CD55	1q32.2	-0.056879598	0.196626509	0.307831049
PACRGL	4p15.31	-0.056867399	0.196722686	0.307947135
LRRFIP1	2q37.3	-0.056866312	0.196731255	0.307947135
TMPO	12q23.1	0.056858931	0.196789464	0.308014301
ZDHHC16	10q24.1	-0.056853678	0.196830894	0.308049143
OR56B1	11p15.4	0.056852228	0.196842331	0.308049143
CHCHD2	7p11.2	-0.056835571	0.196973764	0.308230866
INVS	9q31.1	0.056823848	0.197066303	0.308351705
GPHB5	14q23.2	-0.05682111	0.197087923	0.308361565
NEAT1	11q13.1	-0.056816033	0.197128014	0.308385621
TCTE1	6p21.1	-0.056815282	0.197133938	0.308385621
KC6	-	0.056799429	0.19725916	0.308557534
CDO1	5q22.3	0.056778605	0.197423735	0.308768053
DTX3L	3q21.1	0.056778518	0.197424422	0.308768053
SPAST	2p22.3	0.056774871	0.197453256	0.308789159
OR6K6	1q23.1	-0.056755569	0.197605911	0.309001348
IL2	4q27	0.056753833	0.19761964	0.309001348

PRSS3	9p13.3	0.056744321	0.197694908	0.309083562
IFNB1	9p21.3	0.056743307	0.197702928	0.309083562
C5ORF64	5q12.1	0.056732013	0.197792326	0.309199311
KIF1B	1p36.22	0.05669498	0.198085646	0.309633798
ABHD12	20p11.21	-0.056682128	0.198187516	0.30976898
ZNF596	8p23.3	-0.056676049	0.198235711	0.309820253
SUGT1	13q14.3	-0.056672402	0.198264632	0.309841398
OR52H1	11p15.4	0.05665704	0.198386481	0.309987721
GALNT4	12q21.33	0.056655382	0.198399638	0.309987721
AKAP17A	Xp22.33 and Yp11	0.056654774	0.198404461	0.309987721
SAMD15	14q24.3	0.056651821	0.198427888	0.310000262
SELENON	1p36.11	0.056630372	0.198598136	0.31024216
OR5M8	11q12.1	0.056624555	0.198644327	0.310283612
SH2D1B	1q23.3	-0.056623148	0.198655499	0.310283612
STOML3	13q13.3	-0.056618015	0.198696267	0.310323211
CBWD6	9p11.2	-0.056612223	0.198742275	0.310370985
SNORA16A	1p35.3	-0.056599603	0.198842549	0.310503492
MFS14A	1p21.2	0.056587822	0.19893619	0.310625622
TREX2	Xq28	0.056583996	0.198966601	0.31064901
PRSS30P	16p13.3	-0.056573728	0.199048255	0.310752394
SIAH3	13q14.13	0.056563539	0.199129294	0.310854803
TCP1	6q25.3	-0.056557949	0.199173769	0.310900122
N4BP1	16q12.1	-0.056550134	0.19923596	0.310973085
CXADR3	18p11.21	-0.056547152	0.199259694	0.310986017
SMCR8	17p11.2	0.056537803	0.199334113	0.311067576
BMP15	Xp11.22	0.056536425	0.199345084	0.311067576
YPEL3	16p11.2	-0.056534763	0.199358311	0.311067576
SRY	Yp11.2	-0.056527174	0.19941874	0.311137749
GRM1	6q24.3	-0.056522281	0.199457716	0.311174443
ARHGAP18	19p13.2	0.056499073	0.199642625	0.311438782
HGSNAT	8p11.21-p11.1	-0.056469808	0.199875968	0.311778632
C19ORF38	19p13.2	0.056442194	0.200096338	0.312098194
EDDM3B	14q11.2	0.056425917	0.200226316	0.31227673
SLC22A9	11q12.3	-0.056416199	0.200303945	0.312373599
RHEX	1q32.1	-0.056404247	0.200399447	0.312498324
FNIP2	4q32.1	-0.056383057	0.200568857	0.312718786
ASMT	Xp22.33 and Yp11	0.056381748	0.200579328	0.312718786
TNNI3	19q13.42	-0.056380735	0.20058743	0.312718786
ZNF592	15q25.3	-0.056368815	0.200682772	0.312843197
PPP1R14A	19q13.2	-0.056360739	0.200747391	0.312919697
FSD2	15q25.2	-0.056357447	0.200773736	0.312936531
PPME1	11q13.4	0.056353358	0.200806464	0.31296331
CLPS	6p21.31	-0.056348733	0.200843485	0.312996775
NT5DC3	12q23.3	0.056343459	0.200885711	0.313038347
SNORD115-13	15q11.2	0.056339036	0.200921126	0.313069298
LINC01548	21q22.11	-0.056323336	0.201046865	0.313240975
DNASE1L2	16p13.3	0.056303879	0.201202778	0.313450762
ATP6V1E2	2p21 2p16-p12	-0.056302647	0.201212655	0.313450762
RTP4	3q27.3	-0.056281717	0.20138048	0.313687926
TRPM6	9q21.13	0.056267736	0.201492634	0.313838342
CTBP1-DT	4p16.3	-0.056261831	0.201540024	0.313887868
POU4F2	4q31.22	0.056245269	0.201672967	0.31407062
RXFP2	13q13.1	-0.056237031	0.201739121	0.31414934
LOC286359	9q22.33	-0.056225779	0.201829497	0.314265763
HAND1	5q33.2	-0.056191665	0.202103699	0.314668377
LZTS2	10q24.31	-0.056186802	0.202142801	0.314704917
FAM241A	4q25	-0.056184636	0.202160222	0.314707701
ATL3	11q13.1	0.056166395	0.202306977	0.314911804

KHDRBS1	1p35.2	0.056156496	0.202386655	0.315011471
CSF3	17q21.1	0.056152453	0.202419202	0.315037771
MRPL35	2p11.2	-0.05614868	0.202449574	0.315060682
ADGRB3	6q12-q13	0.056142897	0.202496142	0.315108793
LRBA	4q31.3	-0.056134699	0.202562166	0.315187168
FADS3	11q12.2	-0.056131226	0.202590146	0.315192033
HIST1H3F	6p22.2	0.056128917	0.202608747	0.315192033
LENG9	19q13.42	0.056128447	0.202612532	0.315192033
ARPC4	3p25.3	-0.056126537	0.202627923	0.315192033
NUCB2	11p15.1	0.056104914	0.202802186	0.315438728
OR11A1	6p22.1	-0.056100171	0.202840427	0.315473831
AVEN	15q14	0.056095101	0.202881306	0.315513032
TMEM87B	2q13	-0.056088849	0.202931729	0.315567069
MAPKAP1	9q33.3	0.056079297	0.203008783	0.315647514
SNORD15A	11q13.4	-0.056077674	0.203021874	0.315647514
PFKM	12q13.11	0.056076605	0.203030502	0.315647514
TRIM17	1q42.13	0.056068531	0.20309565	0.315724414
SLC35A4	5q31.3	-0.056054202	0.203211317	0.315859219
MIR99AHG	21q21.1	0.0560539	0.203213748	0.315859219
KRTAP2-4	17q21.2	0.056044067	0.203293152	0.315958241
WSB1	17q11.1	0.056001924	0.203633704	0.316445337
LINC01959	5q31.1	0.056001393	0.203637998	0.316445337
TMEM230	20p13-p12.3	-0.055997582	0.203668814	0.316452676
FAM83C	20q11.22	0.055995943	0.203682067	0.316452676
MTUS1	8p22	-0.055994977	0.203689882	0.316452676
OR51G2	11p15.4	0.055964776	0.203934233	0.316807849
PCNA	20p12.3	0.055955639	0.204008201	0.316898302
PTCD2	5q13.2	-0.055943742	0.204104541	0.317023488
WDR97	8q24.3	0.055941745	0.204120716	0.31702415
FXYD1	19q13.12	-0.055933266	0.204189402	0.317106362
BMP4	14q22.2	0.055928198	0.204230465	0.317145666
BCL7A	12q24.31	-0.055921425	0.204285355	0.317206433
CELF3	1q21.3	0.055911756	0.204363727	0.31730365
TRIM74	7q11.23	-0.055905944	0.204410843	0.317339025
GOLGA5	14q32.12	0.055905057	0.204418039	0.317339025
OR52E6	11p15.4	0.055890216	0.204538398	0.317501385
CYP3A4	7q22.1	-0.055868319	0.204716081	0.317752696
RSPH3	6q25.3	-0.055852562	0.204844008	0.317926744
SMAD2	18q21.1	-0.055829984	0.205027413	0.318186865
HNRNPCL3	1p36.21	-0.055823346	0.20508136	0.318224851
EEF2K	16p12.2	-0.055823081	0.205083507	0.318224851
GET4	7p22.3	-0.055817305	0.205130455	0.318273166
CCDC185	1q41	0.055810142	0.205188691	0.318323773
CMTR2	16q22.2	-0.055809403	0.205194698	0.318323773
FAM111A	11q12.1	0.05580428	0.205236358	0.318363866
CHMP7	8p21.3	0.055786131	0.205383983	0.318568315
FNDC5	1p35.1	0.055756779	0.205622889	0.318914305
SLC4A9	5q31.3	-0.055752323	0.205659174	0.318946007
SNORA8	11q21	0.055742972	0.205735344	0.319039555
DSCR4	21q22.13	0.055732813	0.205818114	0.319127532
GPER1	7p22.3	-0.055732117	0.205823782	0.319127532
EYA1	8q13.3	0.055715473	0.205959446	0.319268412
SMPDL3A	6q22.31	0.055714923	0.205963926	0.319268412
USH2A	1q41	0.05571458	0.20596672	0.319268412
C7ORF50	7p22.3	-0.055713186	0.205978086	0.319268412
ZNF174	16p13.3	-0.055700335	0.20608288	0.31940625
HIST1H4A	6p22.2	0.055697299	0.20610765	0.319420047
SART1	11q13.1	0.055681577	0.206235916	0.319594226

VIP	6q25.2	0.055662459	0.206391972	0.319811438
CASP3	4q35.1	0.055644671	0.20653725	0.320011918
PTAR1	9q21.12	0.055642326	0.206556404	0.320016964
MYDGF	19p13.3	-0.05563755	0.206595426	0.320035853
ARL2BP	16q13	-0.055636942	0.206600393	0.320035853
SPAG16	2q34	-0.055633642	0.206627358	0.320052994
LHCGR	2p16.3	-0.055620599	0.206733966	0.320193486
CDH10	5p14.2-p14.1	-0.055613128	0.206795044	0.320263444
ZKSCAN4	6p22.1	0.055602294	0.206883645	0.320373364
C11ORF58	11p15.2	-0.055600557	0.206897851	0.320373364
LINC-PINT	7q32.3	-0.055597737	0.206920916	0.320384436
CUX1	7q22.1	-0.05559361	0.20695468	0.320412068
KIAA1147	7q34	0.055573203	0.20712168	0.320645961
ATP2C2	16q24.1	-0.055548715	0.20732221	0.32093172
EPPK1	8q24.3	0.055539857	0.207394776	0.320982117
LY6G6F	6p21.33	-0.055539701	0.207396059	0.320982117
BEX4	Xq22.1	-0.055538902	0.207402603	0.320982117
FGF21	19q13.33	0.055526121	0.207507351	0.32111954
JUP	17q21.2	-0.055521013	0.207549219	0.321159642
ASH1L	1q22	0.055510245	0.207637509	0.321271565
SMAD5-AS1	5q31.1	-0.055508276	0.207653656	0.321271854
MTMR7	8p22	0.055500259	0.207719416	0.321348896
SNF8	17q21.32	-0.055495483	0.207758597	0.321384811
KRT83	12q13.13	-0.055491477	0.20779146	0.321410949
CTBS	1p22.3	-0.055489317	0.207809183	0.321413666
A2M	12p13.31	0.055481762	0.207871182	0.321484857
UBE2M	19q13.43	-0.055479418	0.207890426	0.321489919
VPS54	2p15-p14	0.055476813	0.20791181	0.321498289
CBWD3	9q21.11	0.055457187	0.208072949	0.32171216
GGA2	16p12.2	-0.055454495	0.20809506	0.32171216
KRTAP19-6	21q22.11	0.055454129	0.208098064	0.32171216
RTF2	20q13.31	-0.055450674	0.208126445	0.321731327
HP1BP3	1p36.12	-0.055445898	0.208165681	0.321767271
LOC643923	11q22.3	0.055441932	0.208198268	0.321768434
CCDC83	11q14.1-q14.2	0.055441915	0.208198403	0.321768434
MFSD9	2q12.1	0.055438258	0.208228461	0.321790183
RIOK1	6p24.3	0.055420454	0.208374795	0.321991603
PGBD5	1q42.13	0.055385719	0.208660518	0.322408369
ENGASE	17q25.3	-0.055381551	0.208694824	0.322436627
GTPBP4	10p15.3	-0.05537821	0.208722323	0.322454365
FAM102A	9q34.11	0.055368959	0.208798481	0.322547266
PSKH2	8q21.3	-0.055364722	0.208833369	0.322576406
SNORA71E	20q11.23	0.055361107	0.208863145	0.322597644
SPAG11A	8p23.1	0.055340044	0.209036659	0.322840874
SNORA3B	11p15.4	0.055335941	0.209070474	0.322862487
FBXO47	17q12 17q12	-0.055334454	0.209082731	0.322862487
GPR101	Xq26.3	0.055317628	0.209221442	0.3230519
MRPL15	8q11.23	-0.055314251	0.209249285	0.323070111
ZNF443	19p13.2	-0.055302441	0.209346694	0.323195716
MESP2	15q26.1	-0.055298971	0.20937532	0.323215122
TBC1D3G	17q12	-0.055290401	0.209446033	0.323299489
ST3GAL4	11q24.2	0.055275087	0.209572435	0.323469799
XPNPEP3	22q13.2	-0.055258935	0.209705812	0.323650847
MAFG-DT	17q25.3	0.055240786	0.209855756	0.323857433
ACVR2A	2q22.3-q23.1	0.055238226	0.209876916	0.323865261
AP1G2	14q11.2	-0.055221682	0.210013674	0.324027155
VWCE	11q12.2	0.055221639	0.210014023	0.324027155
NCOR1P1	20p11.1	0.055208639	0.210121531	0.324168181

ZNF266	19p13.2	0.05520579	0.210145099	0.324179696
DZIP3	3q13.13	-0.055203619	0.210163058	0.324182556
HBG2	11p15.4	-0.055200128	0.210191942	0.324202267
RPL21	13q12.2	-0.055191976	0.210259396	0.324281462
IQCF5	3p21.2	-0.055186057	0.210308381	0.324332161
DLGAP2	8p23.3	0.055166724	0.21046844	0.324554136
ZNF471	19q13.43	0.055159245	0.210530379	0.324624783
C20ORF202	20p13	-0.055156018	0.210557106	0.324641126
GPX6	6p22.1	-0.055151439	0.210595046	0.324674755
ITGB4	17q25.1	-0.055146045	0.210639731	0.324718776
LINC00906	19q12	-0.05513407	0.210738977	0.324801696
RPRD2	1q21.2	-0.055133801	0.210741205	0.324801696
RFTN1	3p24.3	0.055133714	0.210741925	0.324801696
SLC25A5-AS1	Xq24	0.055131329	0.2107617	0.324807306
ZNF608	5q23.2	0.055115999	0.210888801	0.324978303
TRIM51	11q12.1	-0.055111935	0.210922509	0.325005366
HIST1H2AE	6p22.2	0.05506648	0.211299759	0.325535326
PROZ	13q34	0.055064505	0.211316167	0.325535326
LRRC6	8q24.22	0.055062595	0.211332028	0.325535326
NEK11	3q22.1	-0.055059381	0.211358726	0.325535326
HHLA3	1p31.1	-0.055057384	0.211375317	0.325535326
SNORA21	17q12	-0.05505717	0.211377092	0.325535326
CRNKL1	20p11.23	0.055056863	0.211379645	0.325535326
C2ORF15	2q11.2	-0.055022822	0.211662559	0.325946092
SF3B4	1q21.2	-0.055006583	0.211797617	0.326127537
ETF1	5q31.2	-0.05500476	0.211812788	0.326127537
OR51M1	11p15.4	0.054992813	0.21191219	0.326253174
ZFP62	5q35.3	-0.054990952	0.211927678	0.326253174
CASC1	12p12.1	-0.05498911	0.211943008	0.326253174
NRXN1	2p16.3	-0.054980799	0.212012192	0.326331344
CXORF58	Xp22.11	-0.054979115	0.212026212	0.326331344
RFX1	19p13.12	-0.054974671	0.212063209	0.326363333
KLHL2	4q32.3	0.054966985	0.212127216	0.326436883
SARDH	9q34.2	0.054963122	0.212159391	0.326461438
CFAP73	12q24.13	-0.05495255	0.21224746	0.326571993
GAB4	22q11.1	0.054949098	0.212276223	0.326576363
CCDC30	1p34.2	0.054948315	0.212282747	0.326576363
PTEN	10q23.31	0.054943625	0.212321824	0.326611517
TFAP2E	1p34.3	-0.054929471	0.212439809	0.326768041
OR8D1	11q24.2	0.054920405	0.212515405	0.326859344
UNC13C	15q21.3	-0.054916584	0.212547266	0.326883373
IKBKG	Xq28	-0.054863126	0.212993446	0.327544544
KCNJ11	11p15.1	-0.054857916	0.21303697	0.327571466
CCDC174	3p25.1	-0.054857135	0.213043499	0.327571466
HOXC13	12q13.13	0.054851347	0.213091854	0.327620791
PDZK1IP1	1p33	-0.054847235	0.213126213	0.327648592
DNAH10	12q24.31	-0.054817623	0.213373766	0.328004117
PARG	10q11.23	0.054813281	0.213410082	0.328034892
ZNF599	19q13.11	0.054805639	0.213474008	0.3281081
NHLRC2	10q25.3	0.054794264	0.213569197	0.328229343
ZC3H8	2q14.1	0.054786535	0.213633884	0.328303694
VIL1	2q35	0.0547834	0.21366013	0.328318963
AP1B1	22q12.2	0.054779935	0.213689134	0.328338468
DNAJC7	17q21.2	-0.054776809	0.213715309	0.328353623
RRP36	6p21.1	-0.05477377	0.213740758	0.328367661
AKR1B1	7q33	-0.054756013	0.213889491	0.328571082
SIRPB1	20p13	0.054730003	0.214107476	0.328880847
GNRHR2	1q21.1	-0.054726877	0.214133688	0.328896012

LINC00092	9q22.32	0.054722667	0.214168994	0.328925143
RIOX1	14q24.3	-0.054717151	0.214215249	0.328971084
TMC1	9q21.13	-0.054707701	0.21429452	0.329067716
HSP90AB2P	4p15.33	-0.054702649	0.214336905	0.329107696
PSMA7	20q13.33	-0.054692229	0.214424352	0.329216857
WDR72	15q21.3	-0.054676795	0.214553917	0.329390662
MAGEA1	Xq28	-0.054669744	0.214613127	0.329456435
SPDYE2	7q22.1	0.05466124	0.214684551	0.32954095
CUL4A	13q34	-0.054654975	0.214737188	0.329596614
SNAR-B2	19q13.33	-0.054643313	0.214835187	0.32972189
MMP21	10q26.2	0.054633047	0.214921479	0.329829181
ZNF331	19q13.42	-0.054618242	0.215045969	0.329995072
HSPB1	7q11.23	-0.054614769	0.215075185	0.330014747
LEPROTL1	8p12	-0.054611556	0.215102212	0.330031061
KCNIP1	5q35.1	0.054609039	0.215123388	0.330038396
PPIAL4G	1q21.2	-0.054595104	0.215240642	0.33019312
LINC00472	6q13	-0.054592958	0.2152587	0.330195659
DLEC1	3p22.2	-0.054582379	0.215347748	0.330301947
C2CD6	2q33.1	0.054580828	0.215360807	0.330301947
LCE4A	1q21.3	-0.054569223	0.215458532	0.330376314
OR10G9	11q24.2	-0.054569223	0.215458532	0.330376314
OR11H1	22q11.1	0.054569223	0.215458532	0.330376314
UNC119B	12q24.31	0.054561971	0.215519614	0.330444804
NCF2	1q25.3	0.054555632	0.215573019	0.330501513
SLC9C1	3q13.2	-0.054526067	0.215822216	0.330858367
AMDHD2	16p13.3	-0.054477217	0.216234418	0.331465035
VIPAS39	14q24.3	-0.054450384	0.216461079	0.331787216
CNTNAP2	7q35-q36.1	0.054431302	0.216622369	0.332000473
CALM1	14q32.11	0.054430022	0.216633195	0.332000473
CFAP47	Xp21.1	-0.054423026	0.216692346	0.332065843
SNORA80A	21q22.11	-0.05441377	0.216770632	0.332160526
PYGL	14q22.1	0.054395763	0.216922995	0.332368693
TC2N	14q32.12	0.0543909	0.216964153	0.332406455
LTV1	6q24.2	-0.054382216	0.217037665	0.332493775
SYNGR4	19q13.33	-0.054373653	0.21711017	0.332579538
DBF4B	17q21.31 17q21	0.054348741	0.21732121	0.332877488
RRM2	2p25.1	0.054334194	0.217444507	0.333016004
POTEC	18p11.21	0.054334168	0.217444727	0.333016004
ZNF30	19q13.11	0.054326292	0.217511508	0.333092937
ANKZF1	2q35	-0.054308577	0.217661762	0.333297678
ADGRD1	12q24.33	-0.054292512	0.217798086	0.333460307
ADIG	20q11.23	0.054292157	0.217801098	0.333460307
SLC45A3	1q32.1	0.054285913	0.217854097	0.333516083
CSPG4P2Y	Yq11.23	0.054270079	0.217988546	0.333696535
EIF3B	7p22.3	0.054266721	0.21801707	0.333714821
GXYLT1	12q12	-0.054263682	0.218042886	0.333728961
EFCAB6	22q13.2-q13.31	-0.054258471	0.218087148	0.333756116
FGF7P3	9p12	0.05425769	0.218093788	0.333756116
FAN1	15q13.3	-0.054236154	0.21827681	0.334010808
GRK6	5q35.3	-0.054230249	0.218327012	0.33403292
POLR2J3	7q22.1	0.054229381	0.218334396	0.33403292
RFC3	13q13.2	0.054228599	0.218341041	0.33403292
GRID2IP	7p22.1	-0.054220226	0.218412242	0.334096241
RREB1	6p24.3	-0.054219828	0.218415625	0.334096241
MRPL19	2p12	-0.05421375	0.218467328	0.334149937
TMUB2	17q21.31	-0.054208626	0.218510913	0.334191208
PDZD2	5p13.3	-0.054181793	0.218739281	0.33451506
RABAC1	19q13.2	0.05416156	0.218911595	0.334753145

SERP2	13q14.11	0.054147363	0.219032558	0.334912676
OR2H1	6p22.1	-0.05413637	0.219126253	0.335030493
KPRP	1q21.3	-0.054131828	0.219164974	0.335064246
CTC1	17p13.1	0.054127519	0.219201714	0.335075529
DCAF4L1	4p13	0.054127058	0.219205645	0.335075529
FAM177A1	14q13.2	-0.054116491	0.219295766	0.335187834
THRAP3	1p34.3	-0.054110238	0.2193491	0.335216772
OR1D2	17p13.3	0.054108962	0.219359986	0.335216772
SPCS2P4	1p35.3	0.054108415	0.219364657	0.335216772
RDH14	2p24.2	0.054100773	0.219429858	0.335290955
NTSR2	2p25.1	-0.054092343	0.219501798	0.335375423
SNORD89	2q11.2	-0.05408879	0.219532124	0.335396301
AZI2	3p24.1	0.05408384	0.219574388	0.335410509
RNF39	6p22.1	-0.054083797	0.219574749	0.335410509
RLN3	19p13.12	0.054064867	0.219736401	0.335631971
CTBP2	10q26.13	-0.054020274	0.220117538	0.336188622
FAM86DP	3p12.3	-0.053996741	0.220318866	0.336470584
NIPA2	15q11.2	-0.05398962	0.22037981	0.336538127
AP2S1	19q13.32	-0.053984844	0.220420694	0.336566036
KRTAP12-3	21q22.3	0.053983579	0.220431526	0.336566036
LRRN3	7q31.1	-0.053957056	0.220658673	0.336887303
DMXL2	15q21.2	0.053951411	0.220707035	0.336935584
POLR3GL	1q21.1	-0.053947288	0.220742371	0.336941278
ST14	11q24.3	0.053947069	0.220744241	0.336941278
PDIA2	16p13.3	0.053939064	0.220812856	0.337020455
KRTAP1-3	17q21.2	0.053927005	0.220916231	0.33715267
DDB2	11p11.2	-0.053920497	0.220972043	0.337203267
SCGB1C1	11p15.5	0.053919232	0.220982886	0.337203267
NBN	8q21.3	0.053897919	0.221165732	0.337455571
DTD1	20p11.23	0.053895619	0.22118547	0.337455571
PAXBP1	21q22.11	0.053894098	0.221198522	0.337455571
RIMKLA	1p34.2	-0.053883417	0.221290204	0.337569855
TOR1B	9q34.11	0.053862228	0.221472157	0.337821818
SERPINB12	18q21.33	0.053851164	0.221567212	0.337941201
FOXD4L6	9p11.2	-0.053847506	0.221598649	0.337963543
MUC5B	11p15.5	0.053836785	0.221690792	0.338059677
TMEM8A	16p13.3	-0.053836264	0.22169527	0.338059677
C16ORF92	16p11.2	0.053833649	0.221717749	0.338068345
COMMD9	11p13	-0.053820633	0.221829663	0.33821337
POTEM	14q11.2	0.053803961	0.22197307	0.338406384
ADAM21P1	14q24.2	0.053793376	0.222064157	0.338519613
DYNC1LI1	3p22.3	-0.053791022	0.222084413	0.338524855
FAM138F	19p13.3	-0.053760248	0.222349391	0.3389031
SLC7A9	19q13.11	-0.05375507	0.222393997	0.338945424
CXXC1	18q21.1	-0.053746733	0.222465831	0.339029236
RRBP1	20p12.1	0.053739613	0.222527199	0.339097087
LPCAT4	15q14	-0.053729887	0.222611039	0.339190605
QRSL1	6q21	-0.053728584	0.222622269	0.339190605
C8ORF48	8p22	0.053717601	0.222716973	0.339299554
TULP2	19q13.33	0.053716382	0.222727487	0.339299554
UPK3BL1	7q22.1	0.053709943	0.222783025	0.33935829
RABL2B	22q13.33	-0.053708003	0.22279976	0.33935829
CST1	20p11.21	0.053705009	0.222825591	0.339371957
UBN1	16p13.3	0.05369932	0.222874681	0.339421041
PPIAL4A	1p11.2	0.053684317	0.223004163	0.339592541
TMEM249	8q24.3	0.053672775	0.223103807	0.339712079
NATD1	17p11.2	-0.053671315	0.223116413	0.339712079
IGFBP4	17q21.2	0.053653643	0.22326906	0.339918207

RFC1	4p14	0.053651732	0.223285566	0.339918207
CCDC93	2q14.1	0.053634017	0.223438662	0.340125549
TTY14	Yq11.222	-0.053626415	0.223504385	0.340199869
HEXIM1	17q21.31	-0.053622815	0.223535511	0.340221521
NMNAT1	1p36.22	-0.053607271	0.223669948	0.340400397
PHACTR4	1p35.3	0.053594072	0.223784152	0.340524523
LOR	1q21.3	-0.053593934	0.223785341	0.340524523
AKAP3	12p13.32	-0.053582001	0.223888625	0.340654282
OR4A47	11p11.2	0.053580172	0.223904461	0.340654282
CCDC43	17q21.31	-0.053559295	0.224085243	0.340897841
TBPL1	6q23.2	0.053557774	0.224098417	0.340897841
USP7	16p13.2	0.053552389	0.224145069	0.340943043
RPRD1A	18q12.2	-0.053547526	0.224187203	0.340981367
PCM1	8p22	0.053515396	0.22446573	0.341379204
PIWIL4	11q21	0.053510273	0.224510167	0.341420991
RP2	Xp11.3	-0.053507407	0.224535024	0.341432998
FBXL19-AS1	16p11.2	-0.053498289	0.224614127	0.341527486
RGS20	8q11.23	-0.053490832	0.224678833	0.341600069
FASTKD1	2q31.1	-0.0534837	0.224740735	0.341656327
HMG20B	19p13.3	-0.053482658	0.22474978	0.341656327
ARID1A	1p36.11	0.053478403	0.224786718	0.341675772
LINC01278	Xq11.1	-0.053477274	0.224796519	0.341675772
GPR139	16p12.3	0.053458323	0.224961092	0.341900096
HPCAL4	1p34.2	0.05345603	0.224981005	0.341904547
ALYREF	17q25.3	0.053425605	0.225245408	0.342280521
NOP14	4p16.3	-0.053399901	0.225468959	0.342584063
SNORA2B	12q13.11	-0.053398343	0.22548252	0.342584063
OR8B8	11q24.2	0.053396768	0.225496216	0.342584063
OR5M3	11q12.1	0.053389348	0.225560788	0.342656302
NUP214	9q34.13	0.05336395	0.225781892	0.342966306
GK3P	4q32.3	-0.053357003	0.225842398	0.343028123
SPACA4	19q13.33	-0.053355365	0.225856669	0.343028123
MX1	21q22.3	-0.053351619	0.225889298	0.343051797
RNF151	16p13.3	-0.053333156	0.226050182	0.343270229
S1PR5	19p13.2	0.053324744	0.226123514	0.343355686
NRG3	10q23.1	-0.053315273	0.226206096	0.343455176
ANAPC5	12q24.31	-0.053304553	0.22629959	0.343555108
ZFAT-AS1	8q24.22	-0.053303777	0.226306359	0.343555108
OR4F4	15q26.3	-0.053301856	0.226323114	0.343555108
SLC18A1	8p21.3	0.053284597	0.226473716	0.343757796
ZNF839	14q32.31	-0.053278372	0.226528044	0.343810424
PELI3	11q13.2	0.053276157	0.226547385	0.343810424
ABCB5	7p21.1	-0.053274754	0.226559626	0.343810424
XKR7	20q11.21	-0.053268675	0.226612708	0.343865055
SENP6	6q14.1	0.053252276	0.226755923	0.344056436
RPN2	20q11.23	0.053218496	0.227051144	0.344478409
PSMD6	3p14.1	-0.053215544	0.227076961	0.344484275
VAMP4	1q24.3	0.05321181	0.227109614	0.344484275
UBQLN4	1q22	-0.053210941	0.227117208	0.344484275
NXPE2	11q23.2-q23.3	0.053210226	0.227123462	0.344484275
GUSBP5	4q31.21	0.053206669	0.22715457	0.344505499
CKMT2	5q14.1	0.053198327	0.227227538	0.344590202
SEMG1	20q13.12	-0.053195735	0.227250214	0.344594443
ZNF578	19q13.41	0.053194095	0.227264571	0.344594443
PPP1R13B	14q32.33	-0.053189318	0.227306362	0.34463185
TEX30	13q33.1	0.053176901	0.227415043	0.34477066
TEKT2	1p34.3	0.0531706	0.227470201	0.344828311
GABRA1	5q34	0.053159046	0.227571371	0.3449557

NAP1L6	Xq13.2	-0.053147704	0.227670715	0.34505638
ZDHHC20	13q12.11	0.053147549	0.227672073	0.34505638
PCDHB1	5q31.3	-0.053138367	0.227752523	0.345152322
MYO1B	2q32.3	0.053134437	0.227786967	0.345178534
LZTFL1	3p21.31	-0.05310578	0.228038203	0.345514151
PCYT1A	3q29	-0.053105259	0.228042772	0.345514151
GUSBP3	5q13.2	0.053101352	0.228077037	0.345530084
NPFFR1	10q22.1	0.053100146	0.228087618	0.345530084
WFIKKN1	16p13.3	0.05309775	0.22810864	0.345535926
MASP2	1p36.22	0.053092799	0.228152075	0.345553616
PKDREJ	22q13.31	-0.053092505	0.22815465	0.345553616
ERICH3	1p31.1	-0.053087621	0.228197508	0.345592525
GABRR3	3q11.2	0.05308379	0.228231124	0.345617432
CNR2	1p36.11	0.053065052	0.228395609	0.3458405
TDH	8p23.1	0.053050541	0.228523039	0.34600743
EFCAB12	3q21.3	-0.05304196	0.228598429	0.346095546
FAM122A	9q21.11	0.053038872	0.228625555	0.346107095
RGN	Xp11.3	-0.053037178	0.228640445	0.346107095
SLC3A2	11q12.3	-0.05298933	0.229061157	0.346717881
TTC37	5q15	0.052980907	0.229135278	0.346798511
DACT2	6q27	-0.052979361	0.229148882	0.346798511
ADCY9	16p13.3	0.052969704	0.229233877	0.346874806
GDF5	20q11.22	0.052969677	0.229234118	0.346874806
NFE2L2	2q31.2	-0.052967099	0.229256811	0.346874806
FAM183A	1p34.2	-0.052965278	0.229272848	0.346874806
HEMGN	9q22.33	0.052962142	0.229300454	0.346874806
ATG9A	2q35	-0.052961889	0.229302685	0.346874806
ISCA1P1	5q12.1	-0.052935882	0.229531758	0.347195242
PSMC2	7q22.1	-0.052933319	0.229554341	0.347203312
LRRC1	6p12.1	0.052923593	0.229640055	0.347303452
MAGEB3	Xp21.2	-0.052921892	0.229655055	0.347303452
CD1E	1q23.1	-0.052904599	0.229807521	0.347486059
MAG	19q13.12	-0.05290428	0.229810328	0.347486059
ACSM2B	16p12.3	-0.0528866	0.229966284	0.347676641
TTY8	Yp11.2	-0.052884333	0.229986289	0.347676641
CYP11B2	8q24.3	0.052884118	0.229988185	0.347676641
SNORA71A	20q11.23	-0.052875518	0.230064081	0.347765259
MYO6	6q14.1	-0.052872967	0.230086598	0.34777318
PNLDC1	6q25.3	-0.052860858	0.23019349	0.347908623
RIMS2	8q22.3	0.052852301	0.230269049	0.347996694
RHBDD2	7q11.23	-0.05284596	0.230325057	0.348055205
PRPF38A	1p32.3	-0.052840489	0.230373383	0.348102102
EHBP1	2p15	0.052827724	0.230486173	0.348209192
WASL	7q31.32	0.052827637	0.23048694	0.348209192
RAB11B	19p13.2	-0.052826595	0.230496149	0.348209192
FANCD2	3p25.3	0.052823382	0.230524546	0.348225957
PCMTD1	8q11.23	0.05281713	0.23057981	0.348276882
ZBTB40	1p36.12	0.052815653	0.23059286	0.348276882
SETD1A	16p11.2	0.052808619	0.230655047	0.348344669
OR5B2	11q12.1	0.05279927	0.230737726	0.348432716
NSUN5	7q11.23	-0.052798112	0.230747965	0.348432716
SUPT3H	6p21.1	0.052793944	0.230784832	0.348456925
PNP	14q11.2	0.052792385	0.230798618	0.348456925
CCDC171	9p22.3	0.052769934	0.230997275	0.3487307
TMEM89	3p21.31	0.052756754	0.231113956	0.348880685
PIIH	1p34.2	-0.052752782	0.231149122	0.348907606
PAGE5	Xp11.21	0.052739644	0.231265486	0.349057077
ZNF671	19q13.43	0.052735762	0.231299876	0.349082809

KRT79	12q13.13	-0.052720521	0.23143493	0.34926045
DDX49	19p13.11	-0.052713445	0.231497653	0.349328918
MNAT1	14q23.1	0.052710753	0.231521518	0.349338742
UBE2U	1p31.3	-0.052674336	0.231844527	0.349785399
RRP1B	21q22.3	0.052672936	0.23185695	0.349785399
PTPRO	12p12.3 12p13-p1	0.052671503	0.231869665	0.349785399
MRGPRX2	11p15.1	-0.052662679	0.231947988	0.349877332
MRPL47	3q26.33	-0.052659215	0.231978733	0.34989749
CACNA1B	9q34.3	-0.052651301	0.232049004	0.349956973
CFAP65	2q35	-0.052650857	0.23205294	0.349956973
FCER2	19p13.2	0.052617593	0.232348455	0.350339265
FAXC	6q16.2	-0.05261662	0.232357101	0.350339265
SNX2	5q23.2	-0.052616446	0.232358645	0.350339265
HMGNS	Xq21.1	-0.052612973	0.232389519	0.350359573
NSL1	1q32.3	-0.052576327	0.23271542	0.350811102
SUDS3	12q24.23	0.052573548	0.232740146	0.350811102
DICER1-AS1	14q32.13	-0.052573419	0.232741295	0.350811102
GRB2	17q25.1	0.052554965	0.232905549	0.351032397
STX11	6q24.2	-0.052543589	0.233006841	0.351158771
F2RL3	19p13.11	0.052533603	0.233095787	0.351266522
WDR76	15q15.3	0.052528047	0.233145278	0.351314803
NVL	1q42.11	-0.052504077	0.2333589	0.351610378
IFI44L	1p31.1	0.052490445	0.233480457	0.351767202
LRFN1	19q13.2	-0.052467086	0.23368885	0.352054824
LINC00160	21q22.12	-0.052463446	0.233721334	0.352077412
PAFAH1B2	11q23.3	0.052426097	0.234054836	0.352553415
RANBP1	22q11.21	0.052415416	0.234150273	0.352670781
OR4F15	15q26.3	0.052412172	0.234179264	0.352688059
RPL3L	16p13.3	0.052383187	0.234438402	0.353051921
OAS3	12q24.13	0.052363747	0.234612328	0.353287415
UBE2Q2P2	15q25.2	-0.05234276	0.234800186	0.353543851
ABI1	10p12.1	0.052337348	0.234848652	0.353590379
VARS	6p21.33	-0.052324756	0.234961432	0.353733723
CD40LG	Xq26.3	0.052320372	0.235000709	0.353766397
CTSO	4q32.1	0.052300615	0.235177764	0.35400646
RCOR1	14q32.31-q32.32	-0.052297837	0.235202674	0.354017484
EIF4A3	17q25.3	-0.052279253	0.235369312	0.354241813
SNORA57	11q12.3	-0.052277266	0.235387134	0.354242151
DUX4L6	4q35.2	-0.052273382	0.23542198	0.354268107
GALNT16	14q24.1	0.052270136	0.235451093	0.354272401
FGF12	3q28-q29	-0.05226914	0.235460032	0.354272401
	7-Mar 2q24.2	-0.052262146	0.235522785	0.354324175
TLE2	19p13.3	0.052259541	0.235546163	0.354324175
SNORA61	1p35.3	-0.05225942	0.235547248	0.354324175
HOXD12	2q31.1	0.052247466	0.235654543	0.354459086
HAUS8	19p13.11	-0.052241653	0.235706724	0.354511085
LOC284441	19p12	0.052235747	0.235759756	0.354564355
ARRB2	17p13.2	-0.052229755	0.235813565	0.354618786
MELTF	3q29	0.052203878	0.23604606	0.354941897
PABPC1L2A	Xq13.2	0.05218043	0.236256862	0.355232345
CACNA1I	22q13.1	0.052173194	0.236321941	0.355287659
SDC4P	22q12.2	-0.052172415	0.23632895	0.355287659
TAAR9	6q23.2	-0.052168206	0.236366807	0.355318036
TMEM51	1p36.21	0.052153598	0.236498247	0.355481328
ING4	12p13.31	-0.052152209	0.236510751	0.355481328
DNASE2	19p13.13	-0.05211591	0.236837593	0.355946001
NTSR1	20q13.33	0.052088081	0.237088396	0.356296218
ZNF610	19q13.41	0.052086126	0.237106018	0.356296218

IL9	5q31.1	-0.052073168	0.237222867	0.35642401
TPO	2p25.3	0.052072768	0.237226472	0.35642401
PCDHGA8	5q31.3	0.052064004	0.237305528	0.356516179
SNORA74A	5q31.2	-0.052056059	0.237377203	0.356597246
FASLG	1q24.3	0.052043879	0.237487125	0.356735753
KMT5C	19q13.42	0.05202217	0.237683134	0.356956041
CHAMP1	13q34	0.052022038	0.237684321	0.356956041
STH	17q21.31	-0.052021744	0.237686973	0.356956041
STAU1	20q13.13	0.052017349	0.237726674	0.356989029
CCL24	7q11.23	0.052010965	0.237784337	0.357048986
SRARP	1p36.13	0.052003474	0.237852018	0.357113981
C1ORF174	1p36.32	-0.052001544	0.237869458	0.357113981
SLC35F6	2p23.3	-0.051999026	0.237892215	0.357113981
TMPRSS9	19p13.3	0.051998321	0.237898583	0.357113981
SNX12	Xq13.1	0.051990864	0.23796598	0.357184246
CELP	9q34.13	0.051989216	0.237980879	0.357184246
STIP1	11q13.1	0.051974451	0.238114372	0.35735796
CYP19A1	15q21.2	0.05197008	0.238153897	0.357375388
NAT14	19q13.42	0.05196924	0.238161492	0.357375388
BCKDK	16p11.2	0.051966896	0.238182697	0.357380568
IFI27	14q32.12	-0.051949962	0.23833589	0.357583771
LZIC	1p36.22	-0.051946489	0.238367322	0.357599483
KLK15	19q13.33	0.051944879	0.238381891	0.357599483
CLPP	19p13.3	-0.051889697	0.23888166	0.358317041
BRMS1	11q13.2	-0.051888134	0.238895827	0.358317041
SPINK4	9p13.3	-0.051880642	0.238963733	0.358392188
TPRG1	3q28	0.051873892	0.239024933	0.358457267
HHIPL2	1q41	0.051855273	0.239193795	0.358644497
AGPAT1	6p21.32	0.05185444	0.239201351	0.358644497
AGAP6	10q11.23	0.051853356	0.239211188	0.358644497
TMED2	12q24.31	0.051852269	0.239221046	0.358644497
RHNO1	12p13.33	-0.051848188	0.239258076	0.3586733
NT5C1A	1p34.2	-0.05184597	0.2392782	0.358676757
WFDC6	20q13.12	-0.051833149	0.23939456	0.35882446
MRGPRD	11q13.3	0.051810477	0.239600413	0.359106269
MGAM2	7q34	-0.051803213	0.239666399	0.359178366
ZNF431	19p12	0.051801253	0.239684202	0.359178366
CHD5	1p36.31	-0.051788605	0.239799125	0.359323834
MALL	2q13	-0.051782625	0.239853474	0.359378522
ARFIP1	4q31.3	-0.05177837	0.239892152	0.359407809
AMOT	Xq23	-0.051776546	0.23990873	0.359407809
PCDHA3	5q31.3	0.051772702	0.239943683	0.359433423
UQCC3	11q12.3	-0.051753708	0.240116411	0.359665403
RSBN1	1p13.2	0.051730869	0.240324219	0.35994989
LRRC74A	14q24.3	0.051725918	0.240369293	0.359990616
LINC00575	4q21.22	0.051723798	0.240388588	0.35999273
RSRC1	3q25.32	0.051708554	0.240527387	0.360158876
PSMA2	7p14.1	0.051707684	0.240535317	0.360158876
SMG1P2	16p11.2	0.051700215	0.240603338	0.360233931
MAPK11	22q13.33	0.051694658	0.240653968	0.360282937
TMEM106A	17q21.31	0.051681458	0.240774243	0.360436195
MAP4K2	11q13.1	0.051670214	0.240876738	0.360552017
TEAD4	12p13.33	0.051669041	0.240887435	0.360552017
TIMD4	5q33.3	-0.051638691	0.241164233	0.360928666
ZNF606	19q13.43	0.051637518	0.241174937	0.360928666
CDC23	5q31.2	-0.051615766	0.241373468	0.361198922
ZNF211	19q13.43	0.051611293	0.24141431	0.361233186
NMUR2	5q33.1	-0.051607296	0.24145081	0.361260949

CRIP1	14q32.33	-0.051601046	0.241507885	0.361319488
DNAAF2	14q21.3	0.051595662	0.241557061	0.361366204
PRAMEF13	1p36.21	-0.051570244	0.241789325	0.361686789
SNAPC2	19p13.2	0.051564227	0.24184433	0.361742188
BARX2	11q24.3	0.051536525	0.242097674	0.362094226
CT47B1	Xq24	0.051485239	0.242567203	0.362769524
XDH	2p23.1	0.05147157	0.242692453	0.362870456
DNA2	10q21.3	0.051470877	0.242698809	0.362870456
CA7	16q22.1	-0.051470207	0.242704948	0.362870456
DNAI2	17q25.1	-0.051470005	0.242706797	0.362870456
RASL12	15q22.31	0.051430843	0.243065904	0.363380367
EPHB4	7q22.1	0.051427283	0.24309857	0.363402214
CCDC138	2q13	0.051395326	0.243391908	0.3638137
RBM33	7q36.3	0.051374572	0.24358255	0.364071632
LRRC31	3q26.2	-0.051372007	0.243606122	0.364079831
TEX45	19p13.2	0.051361649	0.243701304	0.364195045
TERB2	15q21.1	-0.051358072	0.243734191	0.364217153
OTX1	2p15	-0.051353036	0.243780483	0.364259287
LOC646471	1p36.11	0.051345134	0.243853139	0.364340807
PCDH1	5q31.3	0.051339576	0.243904247	0.364340814
SIRT4	12q24.23-q24.31	-0.051339317	0.243906633	0.364340814
SCARA3	8p21.1	-0.051339229	0.243907442	0.364340814
EIF3J	15q21.1	-0.051328461	0.244006486	0.364456153
CUEDC1	17q22	0.051326898	0.244020866	0.364456153
SLC7A1	13q12.3	0.051314219	0.244137524	0.364603335
CALCR	7q21.3	0.051302018	0.244249824	0.364743989
FRMD1	6q27	0.051296582	0.244299879	0.364778601
FUT6	19p13.3	0.051294249	0.244321359	0.364778601
ZFYVE28	4p16.3	-0.051293596	0.244327366	0.364778601
MARCO	2q14.2	-0.051288689	0.244372556	0.364819012
ANGEL2	1q32.3	-0.05128565	0.244400547	0.364833741
ZMAT2	5q31.3	-0.051264808	0.244592542	0.36506804
ZNF454	5q35.3	0.051264675	0.244593774	0.36506804
EEF1A2	20q13.33	-0.051259863	0.244638116	0.365107152
DTYMK	2q37.3	-0.051239104	0.244829482	0.365365667
GAREM1	18q12.1	-0.051227468	0.244936799	0.365488791
ANXA2P3	10q21.3	-0.051226221	0.2449483	0.365488791
BSND	1p32.3	0.051217616	0.245027683	0.36558014
VSIG4	Xq12	0.051212879	0.245071391	0.365618254
TBC1D22B	6p21.2	-0.051173889	0.245431358	0.366128149
DEF8	16q24.3	0.051161905	0.245542069	0.366266161
CD300C	17q25.1	0.05115791	0.24557898	0.366294077
OR5T2	11q12.1	0.051150975	0.245643071	0.366321578
HYMAI	6q24.2	0.051150044	0.245651683	0.366321578
GRHL1	2p25.1	0.051150008	0.245652011	0.366321578
BAGE	21p11.1	0.051144358	0.245704242	0.366372325
WAPL	10q23.2	0.051141676	0.24572903	0.366382148
ODF4	17p13.1	0.051133647	0.245803267	0.366465691
ADD1	4p16.3	0.051124912	0.245884046	0.366558976
ZNF669	1q44	0.05111371	0.245987669	0.366686298
LINC01001	11p15.5	-0.051100684	0.246108198	0.366838802
HDAC6	Xp11.23	-0.051090611	0.246201436	0.366950607
VIT	2p22.2	-0.051077487	0.24632295	0.367104537
SH3BP5	3p25.1	0.051071072	0.246382355	0.367165887
ASPDH	19q13.33	-0.051067162	0.246418571	0.367192674
CPT1B	22q13.33	0.051062822	0.246458771	0.367207802
NEK4	3p21.1	0.051062128	0.246465207	0.367207802
RNU6ATAC	9q34.2	-0.051057857	0.246504774	0.367218172

SLCO3A1	15q26.1	0.051057438	0.246508652	0.367218172
ANKRD23	2q11.2	0.051033733	0.24672836	0.367512676
TSC22D3	Xq22.3	0.051032169	0.246742862	0.367512676
PROM2	2q11.1	-0.051026264	0.246797614	0.36756703
NEURL2	20q13.12	0.051015756	0.246895062	0.367684959
RYR3	15q13.3-q14	0.051012417	0.246926032	0.367703878
PRAC1	17q21.32	0.050972408	0.247297363	0.36821734
ZNF560	19p13.2	0.050971325	0.247307423	0.36821734
NFASC	1q32.1	0.050947588	0.247527914	0.368513262
DMBT1	10q26.13	-0.05094533	0.247548894	0.368513262
PPP3R1	2p14	-0.050942638	0.247573911	0.368513262
CHIC1	Xq13.2	0.050941423	0.247585209	0.368513262
GATC	12q24.31	-0.050940078	0.247597708	0.368513262
XAGE1B	Xp11.22	-0.050931592	0.247676582	0.368603401
MRPL9	1q21.3	-0.050923621	0.247750689	0.368685834
PP2D1	3p24.3	0.050921694	0.247768602	0.368685834
NTN5	19q13.33	0.050916172	0.247819955	0.368734992
OR2A12	7q35	0.050914185	0.247838429	0.368735224
VGLL1	Xq26.3	-0.050906976	0.247905481	0.368807725
DRD3	3q13.31	0.050872711	0.248224355	0.369254823
BOD1	5q35.2	-0.050853282	0.248405293	0.369496679
RBMY1J	Yq11.223	-0.050847899	0.248455439	0.369543963
ACSM4	12p13.31	0.050838135	0.24854641	0.369651957
PRAG1	8p23.1	0.050830791	0.248614859	0.369726442
DLX5	17q21.31	-0.050827188	0.24864844	0.369749065
CT45A6	Xq26.3	-0.050814025	0.24877116	0.369899697
MPND	19p13.3	-0.050812381	0.248786488	0.369899697
ST8SIA3	18q21.31	-0.050806464	0.248841662	0.369954406
DENND2A	7q34	0.050798487	0.248916073	0.370037704
GJC3	7q22.1	-0.050783125	0.249059397	0.370223428
GAGE10	Xp11.23	0.050781058	0.249078691	0.370224769
SLC25A24	1p13.3	0.050759149	0.249283217	0.370501415
ZNF804B	7q21.13	0.050755041	0.249321579	0.370506835
LINC00597	15q24.3	0.050754817	0.249323676	0.370506835
DDX11L2	2q14.1	-0.050744874	0.249416538	0.370617473
GIGYF1	7q22.1	0.050733011	0.249527378	0.370754807
WTIP	19q13.11	-0.050726237	0.249590676	0.370821486
NFIX	19p13.13	-0.050723198	0.249619083	0.370836321
RYR1	19q13.2	-0.050709217	0.249749783	0.371003109
C12ORF40	12q12	0.05069776	0.249856922	0.371134876
SLC9A4	2q12.1	-0.050688903	0.249939771	0.371175384
PSG8	19q13.2	0.050687347	0.249954325	0.371175384
PPP1R10	6p21.33	-0.050686813	0.249959326	0.371175384
ZNF829	19q13.12	0.050685949	0.249967409	0.371175384
ZNF253	19p13.11	0.050684989	0.249976387	0.371175384
ABHD6	3p14.3	-0.050653293	0.250273058	0.371588483
TINAGL1	1p35.2	-0.050648083	0.250321849	0.371633514
KNOP1	16p12.3	0.050645825	0.250342994	0.371637497
RAX2	19p13.3	0.050637739	0.250418735	0.371702214
LENG8	19q13.42	0.050637228	0.250423518	0.371702214
SPINK6	5q32	0.050629788	0.250493218	0.371778255
GNPDA2	4p12	-0.050613261	0.250648106	0.371980712
VN1R1	19q13.43	0.05060879	0.250690018	0.372015486
NCR3	6p21.33	0.050601585	0.250757562	0.372088289
TMEM132E	17q12	0.050592828	0.25083968	0.372157443
DTHD1	4p14	0.050592672	0.250841142	0.372157443
DAZ1	Yq11.223	-0.050580364	0.250956595	0.37229703
ATP6V0E2	7q36.1	-0.050578699	0.250972216	0.37229703

BEND3	6q21	0.050565327	0.251097693	0.372443817
NUDT19	19q13.11	-0.050563155	0.251118079	0.372443817
CST9	20p11.21	-0.050562239	0.251126673	0.372443817
TRMT61A	14q32.33	-0.050558379	0.251162909	0.372443886
AGMAT	1p36.21	-0.050558292	0.251163724	0.372443886
ATP9A	20q13.2	-0.050539709	0.251338207	0.372673113
TRIM25	17q22	-0.050537885	0.251355333	0.372673113
OR2H2	6p22.1	0.050532986	0.251401347	0.372713884
IRF8	16q24.1	0.050530331	0.251426285	0.372723405
GABRA6	5q34	0.050520878	0.251515095	0.372827604
DHX34	19q13.32	-0.050517999	0.251542149	0.372840251
ZC3H7B	22q13.2	0.050493945	0.251768251	0.373147908
PVALB	22q12.3	0.050487865	0.251825426	0.373205171
TMEM95	17p13.1	0.050483152	0.251869749	0.373243378
EFCAB5	17q11.2	-0.050477694	0.251921083	0.373291969
OR2AK2	1q44	0.050449468	0.252186691	0.373642522
TAS2R41	7q35	-0.050448609	0.252194781	0.373642522
AKAP5	14q23.3	0.050441929	0.25225767	0.37367257
CBWD2	2q14.1	-0.050440887	0.252267481	0.37367257
FCGBP	19q13.2	0.050440539	0.252270752	0.37367257
SNORA63	3q27.3	-0.050432259	0.252348724	0.373752017
ZNF512B	20q13.33	0.0504309	0.252361521	0.373752017
SAMD10	20q13.33	0.050424908	0.252417957	0.373808098
ZNF420	19q13.12	0.050420567	0.252458858	0.373841166
BBOF1	14q24.3	0.05041744	0.252488309	0.373857276
METTL21EP	13q33.1	-0.050411548	0.252543824	0.373911842
SSX3	Xp11.23	-0.050409586	0.252562311	0.373911842
OR2L1P	1q44	0.050402681	0.252627388	0.373954438
FOXRED1	11q24.2	-0.050402591	0.252628236	0.373954438
RBBP8	18q11.2	0.050383139	0.252811615	0.374190501
RPP38-DT	10p13	-0.050381732	0.252824889	0.374190501
USP17L2	8p23.1	0.050345154	0.253169977	0.374673698
PM20D2	6q15	0.050341544	0.253204059	0.37469659
FASTKD3	5p15.31	-0.050330342	0.253309821	0.374807201
ZNF575	19q13.31	0.050326958	0.253341771	0.374807201
LINC00596	14q11.2	0.050326028	0.253350554	0.374807201
ARNTL	11p15.3	0.050325739	0.253353283	0.374807201
FAM181B	11q14.1	-0.05031226	0.253480596	0.374967989
RPL10L	14q21.2	-0.050304796	0.253551114	0.375044744
IFT172	2p23.3	-0.050275026	0.253832522	0.375433406
FARP2	2q37.3	-0.0502686	0.253893292	0.3754957
EXOC4	7q33	0.050265039	0.253926966	0.37551582
FAM66C	12p13.31	0.050263217	0.253944205	0.37551582
WDR26	1q42.11-q42.12	0.05025514	0.254020614	0.375601217
TRIM36	5q22.3	0.050249497	0.254074	0.375626217
GLTP	12q24.11	-0.050249408	0.254074842	0.375626217
MAML1	5q35.3	0.050237859	0.254184144	0.375760213
KDELR1	19q13.33	-0.050233951	0.254221133	0.375787297
DRG2	17p11.2	-0.050224138	0.254314034	0.375897019
C1ORF189	1q21.3	-0.050220417	0.254349267	0.375901371
TM9SF1	14q12	0.050219883	0.254354326	0.375901371
SNORA18	11q21	0.050215841	0.254392606	0.375930346
SPATA31D5P	9q21.32	0.050205724	0.25448843	0.376044344
OR8K3	11q12.1	0.050197418	0.254567123	0.376105772
GNB2	7q22.1	-0.050197392	0.25456737	0.376105772
TIGD7	16p13.3	0.050191054	0.254627429	0.376155112
CUL7	6p21.1	-0.050189924	0.254638137	0.376155112
CNMD	13q14.3	0.050182274	0.254710646	0.376234613

MEIOB	16p13.3	-0.050177596	0.254754986	0.376272497
LINC00520	14q22.3	0.050171335	0.254814345	0.376332557
C17ORF49	17p13.1	-0.050152497	0.254993005	0.376568791
SH2D4B	10q23.1	-0.050145103	0.255063146	0.37660027
ORIS1	11q12.1	0.050144691	0.255067054	0.37660027
TDRP	8p23.3	-0.050144334	0.255070446	0.37660027
SNORA49	12q24.33	-0.050142326	0.255089497	0.376600775
SPATA31A3	9q21.11	-0.050122611	0.255276611	0.376849382
PRR35	16p13.3	0.050118294	0.255317594	0.376864723
UGT2B4	4q13.3	0.050117573	0.255324446	0.376864723
GSN	9q33.2	0.050107775	0.255417484	0.376974408
PGBD2	1q44	-0.050102218	0.255470258	0.377024655
UTP18	17q21.33	-0.050098919	0.255501603	0.377043271
SNORD17	20p11.23	-0.050093294	0.255555037	0.37709448
SNORA64	16p13.3	0.050083165	0.255651278	0.377207496
DCP1A	3p21.1	0.050081289	0.255669105	0.377207496
IMPDH2	3p21.31	-0.050079205	0.255688912	0.377209072
SLC4A1AP	2p23.3	0.050066614	0.255808602	0.377357991
DPPA2	3q13.13	-0.050059858	0.25587283	0.377425081
WASH8P	12p13.33	-0.050054977	0.255919246	0.377465887
CXCL17	19q13.2	0.050047467	0.255990677	0.37752629
ZFAND3	6p21.2	-0.050046728	0.255997708	0.37752629
HIST2H2BE	1q21.2	0.050042647	0.256036522	0.37755587
PDZD7	10q24.31	0.050034798	0.256111198	0.377638325
LINC00847	5q35.3	-0.050022326	0.256229888	0.377785662
TCF7L1	2p11.2	0.050007737	0.25636877	0.377962746
CD200R1L	3q13.2	0.049997438	0.256466851	0.378079657
TIPRL	1q24.2	-0.049959629	0.256827119	0.378583033
NCBP2AS2	3q29	-0.049954853	0.256872653	0.378613012
GSDMD	8q24.3	-0.04995355	0.256885073	0.378613012
RNF6	13q12.13	-0.049942435	0.25699107	0.378741507
HACD2	3q21.1	-0.049925588	0.25715178	0.37895061
TMEM70	8q21.11	0.049917686	0.257227188	0.379033987
GBGT1	9q34.2	0.04990301	0.257367273	0.3792033
MCCD1	6p21.33	-0.049901702	0.257379766	0.3792033
GMIP	19p13.11	0.049897018	0.257424483	0.379241425
C10ORF53	10q11.23	-0.049893928	0.257453998	0.379257151
POU4F3	5q32	-0.049867862	0.257702988	0.379596161
LRRC73	6p21.1	0.049857378	0.257803189	0.379715973
SUZ12P1	17q11.2	0.049850126	0.257872514	0.379740402
EIF3E	8q23.1	-0.049849952	0.257874174	0.379740402
UNCX	7p22.3	-0.049849723	0.257876368	0.379740402
CSNK2A2	16q21	-0.049844221	0.257928971	0.379790079
DEGS2	14q32.2	-0.049834929	0.258017824	0.379866727
LUZP2	11p14.3	-0.049834831	0.258018766	0.379866727
ZNF192P1	6p22.1	0.049830126	0.25806376	0.379905184
KANK3	19p13.2	-0.049827246	0.258091311	0.379917959
BOLA3	2p13.1	-0.049816954	0.258189779	0.380035117
ABHD8	19p13.11	0.049813827	0.258219693	0.380051357
	4-Mar 2q35	-0.049808617	0.258269555	0.380096955
PIK3R2	19p13.11	0.049803667	0.258316928	0.380138881
FSTL4	5q31.1	0.049788779	0.258459463	0.380320833
USP11	Xp11.3	0.049783781	0.258507315	0.380363442
FNDC8	17q12	0.049778924	0.258553836	0.380404086
EID3	12q23.3	0.04977601	0.25858174	0.380417337
CBX4	17q25.3	0.049765806	0.258679495	0.380506979
GADL1	3p24.1-p23	0.049765703	0.258680477	0.380506979
AZGP1	7q22.1	-0.049760248	0.258732746	0.380556056

APOA4	11q23.3	-0.049755238	0.258780756	0.380598862
KCNC2	12q21.1	0.049745748	0.258871714	0.380698541
OR4N5	14q11.2	-0.049744221	0.258886355	0.380698541
PSG4	19q13.31	0.049735773	0.258967348	0.380767841
GNG8	19q13.32	0.049735359	0.258971312	0.380767841
RNF139	8q24.13	0.049709621	0.259218174	0.381102968
ESRG	3p14.3 3p14.3	-0.049673126	0.259568494	0.38159014
SPTBN1	2p16.2	-0.049651006	0.25978099	0.381874641
NCOR2	12q24.31	0.049639543	0.25989115	0.381982014
MBTD1	17q21.33	0.049639456	0.259891985	0.381982014
HSFY1P1	22q11.1	-0.049627446	0.26000744	0.382123806
SMIM15	5q12.1	-0.049616357	0.260114073	0.382250482
KRT15	17q21.2	0.049614534	0.260131612	0.382250482
ZNF837	19q13.43	-0.049602334	0.260248966	0.382395014
LINC00205	21q22.3	0.049596124	0.260308717	0.382445431
CELF2	10p14	-0.049593432	0.260334621	0.382445431
LOC153910	6q24.2	0.049592844	0.260340275	0.382445431
ULBP3	6q25.1	-0.049589049	0.260376803	0.38247118
DEFB125	20p13	0.049574834	0.260513628	0.382644242
TSLP	5q22.1	-0.049569087	0.260568968	0.382697602
OR51G1	11p15.4	0.049554754	0.260707007	0.382872404
GBA3	4p15.2	0.049534908	0.260898226	0.383125277
OR2T2	1q44	0.049526708	0.260977253	0.383213371
STARD3	17q12	-0.049503988	0.261196325	0.383507077
PUS3	11q24.2	0.049497997	0.261254122	0.383563961
HLA-B	6p21.33	0.049489486	0.261336224	0.383656519
ANGPTL3	1p31.3	-0.049487321	0.261357119	0.383659214
B4GALT7	5q35.3	-0.049483668	0.261392365	0.383682974
GPR150	5q15	0.049475866	0.26146766	0.383765512
CDC40	6q21	-0.049451192	0.261705894	0.384087171
ZNF626	19p12	-0.049441291	0.261801526	0.384199513
TBL1X	Xp22.31-p22.2	0.049433649	0.261875356	0.384279846
TMEM161A	19p13.11	-0.049416976	0.26203649	0.384488267
FRG1	4q35.2	-0.049412721	0.262077623	0.384520595
DIAPH1	5q31.3	-0.049407858	0.262124639	0.384561546
CDC14C	7p12.3	0.049389257	0.262304529	0.384797417
ATF3	1q32.3	-0.04937512	0.262441303	0.384970009
STEAP3	2q14.2	-0.049366697	0.262522822	0.385061527
SLC34A1	5q35.3	-0.049364225	0.262546746	0.38506856
PTMAP11	9q22.33	0.049356411	0.262622388	0.38515144
SNORA38	6p21.33	-0.049342639	0.262755745	0.385318944
TRMT10B	9p13.2	0.049336651	0.262813742	0.385375919
FATE1	Xq28	0.049323274	0.262943336	0.385537865
ARL14	3q25.33	-0.04930868	0.263084768	0.385717144
TDRD10	1q21.3	0.049305042	0.263120035	0.385718835
ZC3HC1	7q32.2	-0.049304608	0.263124244	0.385718835
IQCA1	2q37.2-q37.3	0.049301702	0.263152415	0.385732041
ANGPTL6	19p13.2	0.049283075	0.263333042	0.385951634
RAB9B	Xq22.2	0.049282299	0.263340571	0.385951634
OR4N3P	15q11.2	0.0492633	0.263524895	0.386163754
NLK	17q11.2	0.049261536	0.263542012	0.386163754
TIMM17A	1q32.1	-0.049261449	0.263542854	0.386163754
C9ORF116	9q34.3	-0.049255805	0.263597636	0.386215912
AHI1	6q23.3	-0.049231664	0.263832021	0.386531193
TRIAP1	12q24.31	-0.049222806	0.263918055	0.386629098
OR7C1	19p13.12	0.049198346	0.26415574	0.386913296
ZAR1L	13q13.1	0.049197166	0.264167204	0.386913296
KRTAP5-7	11q13.4	-0.049196908	0.264169714	0.386913296

PLIN2	9p22.1	0.049188071	0.264255627	0.386988389
ASAP1-IT1	8q24.21	0.049187679	0.264259433	0.386988389
TKTL1	Xq28	0.04917893	0.264344512	0.387082305
CARD19	9q22.31	-0.049177129	0.264362023	0.387082305
S100A11	1q21.3	-0.049172006	0.264411854	0.387127109
FAM117A	17q21.33	-0.049163495	0.264494638	0.38722015
LINC00028	20q11.21	0.049151242	0.264613871	0.387366535
DDX43	6q13	0.049135313	0.264768919	0.387565325
DUSP12	1q23.3	-0.049125808	0.264861467	0.387672605
SNHG12	1p35.3	0.049122942	0.264889374	0.387685263
TCP11L2	12q23.3	0.049119729	0.264920666	0.387702872
RBM41	Xq22.3	0.049104619	0.265067857	0.387886928
FAM86B3P	8p23.1	-0.049102842	0.265085171	0.387886928
ATG3	3q13.2	-0.049100885	0.26510424	0.387886928
CPNE3	8q21.3	-0.049052429	0.265576688	0.388549948
NEUROD6	7p14.3	0.049043309	0.265665678	0.388651896
DHX29	5q11.2	0.049041053	0.265687687	0.388655849
ACSL1	4q35.1	0.049037667	0.265720739	0.388675953
MAGEA8	Xq28	0.049031343	0.265782458	0.388720157
SLC6A6	3p25.1	0.049030459	0.265791089	0.388720157
ZNF271P	18q12.2	0.049028636	0.26580889	0.388720157
MS4A7	11q12.2	0.049021862	0.265875017	0.388788616
EML5	14q31.3	-0.0489883	0.26620284	0.389239716
SOX10	22q13.1	0.048982209	0.266262368	0.38929848
ACP4	19q13.33	0.048978733	0.266296345	0.389319879
TTC13	1q42.2	0.048955431	0.266524167	0.38962119
CDC42BPG	11q13.1	-0.048953694	0.266541153	0.38962119
IQGAP2	5q13.3	0.048947355	0.266603157	0.389683529
SNORA24	4q26	0.04893704	0.266704073	0.389802729
CCT4	2p15	-0.048921738	0.266853824	0.389993283
MAGEF1	3q27.1	0.048905065	0.267017057	0.390203511
PLAAT5	11q12.3	0.048897011	0.267095929	0.390290437
CGB7	19q13.33	-0.048881536	0.26724753	0.390483615
SNORA77	1q32.1	-0.048878746	0.267274869	0.390495218
AK4	1p31.3	0.048871111	0.267349686	0.390576179
SCAPER	15q24.3	-0.048868766	0.267372665	0.390581405
BBS12	4q27	-0.048860214	0.2674565	0.390658257
HIST1H4F	6p22.2	-0.04885944	0.267464088	0.390658257
KLHDC7A	1p36.13	-0.048856874	0.267489245	0.390666655
GOSR1	17q11.2	-0.048854178	0.267515681	0.390676919
ARID3A	19p13.3	0.048848794	0.267568473	0.390725671
TEX10	9q31.1	0.048818011	0.267870445	0.391120733
	11-Mar 5p15.1	0.048816915	0.26788121	0.391120733
GIPR	19q13.32	-0.048815275	0.267897301	0.391120733
CA3	8q21.2	-0.048799948	0.268047755	0.391312011
SPCS2	11q13.4	0.048797819	0.268068655	0.391314142
SPIC	12q23.2	-0.048795607	0.268090381	0.391317481
APOC3	11q23.3	-0.048782768	0.268216473	0.391473145
SSUH2	3p25.3	0.048778626	0.268257154	0.391504133
SP110	2q37.1	0.048775763	0.268285286	0.391510195
MYOM1	18p11.31	-0.048774244	0.268300206	0.391510195
HIP1	7q11.23	0.048770465	0.26833733	0.391535985
SLC22A11	11q13.1	-0.048756257	0.268476956	0.391711323
LRRC3B	3p24.1	-0.048754033	0.268498824	0.391714837
ADAMTS13	9q34.2	-0.048735818	0.268677905	0.391935502
ZNF655	7q22.1	0.048734688	0.268689017	0.391935502
DHX36	3q25.2	0.048728175	0.268753072	0.392000532
ZNF709	19p13.2	0.048726091	0.268773572	0.392002029

CDKN1C	11p15.4	0.048721315	0.268820555	0.392038663
DDX3X	Xp11.4	0.048719578	0.268837641	0.392038663
TTC8	14q31.3	-0.048711763	0.268914537	0.392094246
LACRT	12q13.2	-0.048711163	0.268915843	0.392094246
SILC1	2p25.2	-0.048709765	0.26893419	0.392094246
CLCA4	1p22.3	0.048706271	0.268968575	0.392115977
SLCO1B7	12p12.2	-0.048697356	0.269056324	0.392215497
PLD2	17p13.2	-0.048686581	0.269162405	0.392341724
PPHLN1	12q12	-0.048681456	0.269212865	0.392386864
TUBGCP2	10q26.3	-0.048656707	0.269456654	0.392713759
GUSBP11	22q11.23	0.048643074	0.269591016	0.392881137
LINC00313	21q22.3	-0.048629496	0.269724869	0.39304775
SLC35B3	6p24.3	-0.048599741	0.270018369	0.393446961
ZNF638	2p13.3-p13.2	-0.048588626	0.270128065	0.393578311
ZBED2	3q13.13	0.048577424	0.270238649	0.393705531
TIMP4	3p25.2	-0.048575819	0.270254497	0.393705531
ADRB2	5q32	0.048565788	0.270353552	0.393821333
MFSDB2	2p23.3	-0.048563443	0.270376708	0.393826566
CSK	15q24.1	0.048541824	0.270590282	0.394098645
ZBTB48	1p36.31	-0.048537305	0.270634948	0.394098645
VWA5B1	1p36.12	0.048535485	0.270652932	0.394098645
FAM186A	12q13.12	-0.048535136	0.270656382	0.394098645
TMIGD2	19p13.3	0.048534629	0.27066139	0.394098645
GTF2H2	5q13.2	-0.048531747	0.270689878	0.394111619
LOC728554	5q35.3	-0.048519937	0.27080663	0.394253088
FEM1A	19p13.3	-0.048473305	0.271267962	0.394896158
VAMP2	17p13.1	-0.048468616	0.271314382	0.394901839
GIMAP5	7q36.1	0.048468008	0.2713204	0.394901839
ZSWIM8	10q22.2	0.048466966	0.271330717	0.394901839
USP19	3p21.31	-0.048461668	0.271383164	0.394949616
FAM238A	10p12.1	-0.048444217	0.271555999	0.395138024
PLXNB1	3p21.31	-0.04844378	0.27156033	0.395138024
SULT2B1	19q13.33	-0.048442651	0.271571513	0.395138024
TBX6	16p11.2	-0.048438398	0.271613647	0.395170766
TMEM74B	20p13	0.048425544	0.271741018	0.395327506
GPC1	2q37.3	0.048414776	0.271847749	0.395454198
POC1B	12q21.33	0.048404268	0.271951925	0.395564839
GMCL1	2p13.3	0.04840314	0.271963109	0.395564839
CENPW	6q22.32	0.048398884	0.272005315	0.395597644
UPK2	11q23.3	-0.048380359	0.272189074	0.3958363
MIA3	1q41	0.048377088	0.272221531	0.395839063
RPS4Y1	Yp11.2	-0.04837577	0.272234613	0.395839063
SEPTIN9	17q25.3	0.048374222	0.272249967	0.395839063
ZBTB7A	19p13.3	0.048370662	0.272285299	0.395861842
SEC61B	9q22.33	-0.04836237	0.272367598	0.395952895
FAM90A7P	8p23.1	-0.048359461	0.272396475	0.395966279
KRT37	17q21.2	0.048350212	0.272488301	0.396071116
ZNF710	15q26.1	0.04834105	0.272579277	0.396174791
MSN	Xq12	-0.048292768	0.273059074	0.396843488
CDC27	17q21.32	0.048286255	0.273123839	0.396908957
SLX4	16p13.3	0.048276008	0.273225757	0.397028404
NAT9	17q25.1	-0.048262722	0.273357943	0.397191814
RDH8	19p13.2	0.048250164	0.273482927	0.397344736
MAP1LC3B2	12q24.22	-0.048242923	0.273555007	0.397420778
LINC01465	12q14.1	-0.048232157	0.273662202	0.397510764
GRID1	10q23.1-q23.2	0.048230765	0.27367606	0.397510764
SNORD94	2p11.2	-0.048230752	0.273676189	0.397510764
RAB11FIP1	8p11.23	-0.048227031	0.273713247	0.397535907

PPP1R1A	12q13.2	-0.048192977	0.274052555	0.397999996
LANCL2	7p11.2	-0.048176493	0.274216907	0.398209951
RPS26P11	Xq13.1	-0.048163443	0.274347054	0.398370209
SYNM	15q26.3	0.048152872	0.274452526	0.398494615
GDAP2	1p12	0.048149051	0.274490652	0.398521228
SCARNA27	6p24.3	0.048129007	0.274690712	0.398782924
RPL39	Xq24	-0.048093648	0.275043886	0.399266851
COL26A1	7q22.1	-0.048091238	0.275067964	0.399273011
GTPBP2	6p21.1	0.048087309	0.275107235	0.399301222
SAG	2q37.1	-0.048084977	0.27513054	0.399306255
DEFB135	8p23.1	-0.04807991	0.275181184	0.399350965
IREB2	15q25.1	-0.048037768	0.275602647	0.399933771
GPR148	2q21.1	-0.048016675	0.275813768	0.400211285
UBE2V1	20q13.13	0.048000644	0.275974295	0.40041535
TSN	2q14.3	-0.047993957	0.27604127	0.400483659
RHPN1	8q24.3	-0.047987358	0.276107386	0.400550712
AFG3L1P	16q24.3	0.04797824	0.276198747	0.400654377
SNPH	20p13	0.047972074	0.276260537	0.400715132
RNF217-AS1	6q22.31	-0.047969863	0.276282701	0.400718408
CT45A4	Xq26.3	-0.047958971	0.276391889	0.40084789
TSPAN6	Xq22.1	0.047943244	0.276549593	0.401047713
TMEM257	Xq27.3	-0.047940656	0.276575547	0.401056459
MRAP2	6q14.2	-0.047934444	0.276637865	0.40111793
MCOLN3	1p22.3	-0.047930697	0.276675456	0.401143541
TNP2	16p13.13	0.047918859	0.276794239	0.401286859
KLHL24	3q27.1	0.04790738	0.276909459	0.40141567
CMA1	14q12	-0.047906034	0.276922971	0.40141567
TRMT9B	8p22	-0.047903472	0.276948688	0.401424042
ZNF584	19q13.43	0.047898348	0.277000129	0.401469695
SULT4A1	22q13.31	0.047876376	0.277220812	0.401752508
ADAR	1q21.3	0.047874815	0.277236489	0.401752508
ZNF541	19q13.33	-0.047872563	0.27725912	0.401752508
ELOA3	18q21.1	0.047870973	0.277275091	0.401752508
KIAA1324L	7q21.12	-0.047853279	0.277452908	0.401981218
SCMH1	1p34.2	-0.047850761	0.277478223	0.401988962
PIGS	17q11.2	-0.047848503	0.27750092	0.401992914
FRG2C	3p12.3	0.047829585	0.27769115	0.402239537
TMEM69	1p34.1	-0.047824536	0.277741938	0.402284157
TSC1	9q34.13	0.047805432	0.277934155	0.402533603
TBC1D26	17p12	0.04780246	0.277964064	0.402535582
RBMV3AP	Yp11.2	-0.047801322	0.277975516	0.402535582
GORASP1	3p22.2	-0.047792406	0.278065264	0.402636582
TMEM138	11q12.2	0.047781638	0.278173679	0.402764595
ALKBH5	17p11.2 17p11.2	0.047777817	0.278212156	0.402791334
VPS37A	8p22	0.047764444	0.278346853	0.402925608
FKBP3	14q21.2	0.047763749	0.278353852	0.402925608
CCDC172	10q25.3	-0.047762648	0.278364949	0.402925608
RNPC3	1p21.1	-0.047736308	0.278630386	0.403280823
KRTAP26-1	21q22.11	-0.047718304	0.278811921	0.4035092
OPLAH	8q24.3	-0.047716684	0.278828265	0.4035092
UBE2DNL	Xq21.1	0.047714588	0.278849403	0.403510781
ZBTB14	18p11.31	0.047706436	0.278931636	0.403600765
HNF4G	8q21.13	-0.047684554	0.279152449	0.403891238
PKD2L2	5q31.2	0.04766918	0.27930765	0.404086747
GRIK4	11q23.3	0.047649952	0.279501855	0.404338652
OTOL1	3q26.1	0.047636924	0.279633484	0.40447952
CMTM5	14q11.2	-0.047636337	0.279639418	0.40447952
RPL39L	3q27.3	0.047622984	0.279774379	0.404645657

EEF1G	11q12.3	-0.047601448	0.279992141	0.404931518
SGMS1	10q11.23	0.047588249	0.280125664	0.405095519
NR1I2	3q13.33	-0.047582071	0.280188172	0.405156806
NRTN	19p13.3	0.047555778	0.280454324	0.405512537
FGG	4q32.1	-0.047549997	0.280512864	0.40556805
STK40	1p34.3	-0.047535885	0.280655792	0.405745554
CRISP3	6p12.3	-0.047510581	0.280912213	0.406087099
MCM3AP-AS1	21q22.3	0.047506187	0.280956763	0.406122335
HSPD1	2q33.1	-0.047499153	0.281028077	0.406196252
PPARGC1A	4p15.2	-0.047489514	0.281125825	0.406304647
DAXX	6p21.32	-0.047487777	0.281143439	0.406304647
DPP8	15q22.31	0.047475099	0.281272048	0.40646133
RAPGEF4	2q31.1	0.047469672	0.281327105	0.40651171
TTF2	1p13.1	0.04746711	0.28135311	0.406520105
EMC8	16q24.1	-0.047462681	0.281398053	0.406555861
WDFY3	4q21.23	0.047455126	0.281474732	0.406629835
PDZK1P1	1q21.2	-0.047453656	0.281489654	0.406629835
ANXA8L1	10q11.22	0.047439806	0.281630261	0.406803757
TSSK3	1p35.1	-0.047424646	0.281784236	0.406996963
CHMP4C	8q21.13	-0.047416049	0.281871574	0.4070939
PRB4	12p13.2	-0.047405496	0.281978805	0.407182234
C1ORF229	1q44	0.047403885	0.281995177	0.407182234
PLCE1	10q23.33	0.047403457	0.281999525	0.407182234
LYVE1	11p15.4	0.047402068	0.282013647	0.407182234
PCNX3	11q13.1	0.047399636	0.28203836	0.40718871
C3	19p13.3	-0.047394339	0.282092205	0.40723724
FBXO28	1q42.11	0.04738418	0.282195489	0.407357132
PTPRF	1p34.2	-0.047363338	0.282407468	0.407633897
PCDHGB8P	5q31.3	0.047358217	0.282459568	0.407669787
SATL1	Xq21.1	-0.047356913	0.282472836	0.407669787
RASL11A	13q12.2	0.047348315	0.282560328	0.407766822
CNOT9	2q35	0.047322524	0.282822883	0.408116462
GDAP1L1	20q13.12	0.047316818	0.282880996	0.408132159
TCF20	22q13.2 22q13.3	0.047316271	0.282886558	0.408132159
PIK3IP1	22q12.2	0.047315143	0.282898056	0.408132159
NFKB2	10q24.32	-0.047313493	0.282914861	0.408132159
CUL2	10p11.21	0.047309585	0.282954665	0.40816033
LDHAL6A	11p15.1	0.047301032	0.283041797	0.408256762
SET	9q34.11	0.047279192	0.283264383	0.408548544
BEND3P3	10q22.3	0.047260392	0.283456069	0.40879391
LIN9	1q42.12	-0.047258524	0.283475121	0.40879391
ARHGAP42	11q22.1	0.04725401	0.283521158	0.408831011
KCNRG	13q14.2	-0.047248017	0.283582302	0.408889889
LYPD5	19q13.31	0.047241374	0.283650069	0.408958307
FKSG29	13q32.3	0.04721111	0.28395898	0.409374365
BCAR4	16p13.13	0.047202887	0.284042962	0.409466114
NKPD1	19q13.32	0.047199618	0.284076342	0.40948491
GSX1	13q12.2	-0.047195004	0.284123477	0.409510215
TXNDC11	16p13.13	-0.047193916	0.284134584	0.409510215
CRMP1	4p16.2	0.04718558	0.284219751	0.409603636
VWC2	7p12.2	-0.047168429	0.284395022	0.40979324
SPATA48	7p12.2	0.047165849	0.284421394	0.40979324
EIF3H	8q23.3-q24.11	-0.04716526	0.284427419	0.40979324
FAM98B	15q14	-0.047164739	0.284432745	0.40979324
RHOA	3p21.31	-0.047152234	0.284560593	0.409933921
HIST1H1T	6p22.2	-0.047151205	0.284571118	0.409933921
VWA5A	11q24.2	-0.047147024	0.284613874	0.409966174
CEBPD	8q11.21	-0.047142769	0.284657392	0.409999521

DAAM2	6p21.2	0.047137558	0.284710686	0.410046942
KLHDC1	14q21.3	0.047127832	0.284810185	0.410152726
GGH	8q12.3	-0.047126009	0.284828844	0.410152726
ALAD	9q32	-0.047124404	0.284845261	0.410152726
VWA8	13q14.11	-0.047120365	0.284886592	0.410182898
SLC2A4	17p13.1	0.047072131	0.285380485	0.410864624
PPWD1	5q12.3	0.047061662	0.285487759	0.410989672
COMMD2	3q25.1	0.047058709	0.285518017	0.411003839
FBXO3	11p13	-0.047039692	0.285712968	0.411255062
C16ORF96	16p13.3	-0.047031231	0.285799725	0.411350526
REG3A	2p12	-0.047028488	0.285827855	0.411361602
ZNF519	18p11.21	0.047019632	0.285918698	0.411462924
SLC12A9	7q22.1	0.04700157	0.286104029	0.411700201
PHOX2B	4p13	0.046992945	0.28619255	0.411798144
TP53AIP1	11q24.3	0.046988366	0.286239561	0.411836349
PSMG1	21q22.2	-0.046984376	0.286280526	0.41186585
NABP2	12q13.3	-0.046972479	0.28640269	0.412012159
EPHA8	1p36.12	0.046964882	0.286480718	0.412091837
RSC1A1	1p36.21	0.0469631	0.286499019	0.412091837
DRICH1	22q11.23	0.046954223	0.286590224	0.412164261
TKTL2	4q32.2	-0.046954213	0.286590321	0.412164261
LINC00479	21q22.3	0.046951135	0.286621943	0.412180291
DKFZP434L192	7p11.2	0.046938182	0.286755065	0.412342271
NR4A3	9q31.1	-0.046928365	0.286855984	0.412457926
TMEM114	16p13.2	-0.04691928	0.286949398	0.412562772
SH2D3C	9q34.11	0.046912473	0.287019396	0.412607041
SDHAP3	5p15.33	0.0469123	0.287021182	0.412607041
RAD18	3p25.3	0.046908827	0.287056899	0.412627715
C4BPA	1q32.2	-0.046906916	0.28707656	0.412627715
KRTAP2-2	17q21.2	0.046902764	0.287119272	0.412659642
SPATA31D3	9q21.32	0.046900035	0.287147345	0.412670526
COMMD7	20q11.21	0.046883817	0.287314231	0.412880887
ZNF738	19p12	0.046880343	0.287349982	0.41289359
HIST1H2BO	6p22.1	0.046878737	0.287366518	0.41289359
SPINT4	20q13.12	-0.04687698	0.287384605	0.41289359
TTY20	Yp11.2	-0.046873337	0.287422104	0.412917996
INHA	2q35	0.046866427	0.287493241	0.412990719
C6ORF120	6q27	0.04686202	0.28753862	0.413026432
FKBPL	6p21.32	-0.046847084	0.287692453	0.413217915
SCARNA20	17q23.2	0.046843887	0.287725394	0.413235744
SPCS3	4q34.2	0.046834058	0.287826655	0.413351685
OR5H2	3q11.2	0.046816144	0.288011289	0.413587335
PEG10	7q21.3	0.046812088	0.288053104	0.413617875
VAV2	9q34.2	0.046795589	0.288223244	0.41383266
VPS72	1q21.3	-0.046790466	0.28827609	0.413879017
DUSP23	1q23.2	-0.046785516	0.288327151	0.413897273
KRTAP4-11	17q21.2	0.046785238	0.288330017	0.413897273
OR7E24	19p13.2	0.046782059	0.288362819	0.413897273
ULK1	12q24.33	0.046781261	0.288371051	0.413897273
BCL2L1	20q11.21	-0.046772837	0.288457968	0.413992506
KIF16B	20p12.1	-0.04676042	0.288586134	0.414132836
VDAC1	5q31.1	-0.046759378	0.288596891	0.414132836
SNORA10	16p13.3	-0.046732659	0.288872797	0.414476507
ALS2	2q33.1	0.046732197	0.288877565	0.414476507
ATXN7	3p14.1	0.046728463	0.288916139	0.414502307
CLCA3P	1p22.3	0.046725973	0.288941865	0.414509674
GRPEL2	5q32	0.046723253	0.288969968	0.414520448
SIGMAR1	9p13.3	-0.046710835	0.289098287	0.41467497

PPP4R1	18p11.22	0.046708143	0.28912611	0.414685329
RAD23B	9q31.2	-0.046691817	0.289294879	0.414897828
DLX6-AS1	7q21.3	0.04667463	0.289472625	0.41512317
GRWD1	19q13.33	-0.046663684	0.289585871	0.41525599
BCCIP	10q26.2	-0.046659514	0.289629022	0.415265146
SUGP1	19p13.11	-0.046659079	0.289633515	0.415265146
SLC44A5	1p31.1	-0.046656234	0.28966296	0.415277785
HSPBAP1	3q21.1	0.046649701	0.289730573	0.415345139
H1FX	3q21.3	0.04664258	0.289804281	0.415421218
PMS2P3	7q11.23	0.046638499	0.289846533	0.415452201
OR2L13	1q44	0.046618107	0.290057695	0.415725269
NKX2-6	8p21.2	0.046602231	0.290222172	0.415931392
SCP2D1	20p11.23	0.046594699	0.290300226	0.416013637
SPTBN5	15q15.1	0.046587872	0.290370988	0.416085421
RRAD	16q22.1	-0.046583269	0.290418697	0.416124164
WDPCP	2p15	0.046574023	0.290514561	0.416219716
EEFSEC	3q21.3	-0.046572849	0.290526738	0.416219716
KCMF1	2p11.2	-0.046557913	0.290681643	0.416412003
CCDC54	3q13.12	0.046552388	0.290738952	0.416464463
ANAPC4	4p15.2	-0.046530211	0.290969084	0.416764456
GPRC6A	6q22.1	-0.046525525	0.291017735	0.416804482
DMRT2	9p24.3	-0.046517071	0.291105497	0.416900516
AADACL2	3q25.1	-0.046513225	0.291145437	0.416928054
OR4D5	11q24.1	-0.046502169	0.291260259	0.417062812
CCDC78	16p13.3	-0.046493002	0.291355482	0.417169489
HORMAD1	1q21.3	0.046489652	0.291390291	0.417189655
PRAMEF22	1p36.21	-0.046487622	0.291411376	0.417190172
FAM20B	1q25.2	0.046474374	0.291549051	0.417357588
MOB3B	9p21.2	0.046462738	0.291670013	0.417501056
ITIH1	3p21.1	0.046458488	0.291714204	0.417534622
SMYD1	2p11.2	-0.046425839	0.292053806	0.417990978
SHD	19p13.3	0.046423777	0.292075259	0.417991963
TRIM2	4q31.3	-0.046417929	0.292136119	0.418049341
PLK5	19p13.3	-0.046383861	0.292490836	0.418480302
RPS6KB2	11q13.2	-0.046382499	0.292505021	0.418480302
NFE2	12q13.13	-0.046379634	0.292534872	0.418480302
YIPF1	1p32.3	-0.046379286	0.292538491	0.418480302
EMBP1	1p11.2	0.046377115	0.292561107	0.418480302
RPS10P7	1q32.1	-0.046377029	0.292562012	0.418480302
SNRNP27	2p13.3	-0.046369213	0.29264344	0.418567035
RABIF	1q32.1	-0.046361398	0.292724883	0.418653776
GLRA2	Xp22.2	-0.046352922	0.292813222	0.418750367
TAS1R2	1p36.13	0.046341918	0.292927944	0.418884672
DLX3	17q21.33	-0.046335461	0.292995271	0.41894645
RBM12	20q11.22	0.046333783	0.293012771	0.41894645
KRTAP27-1	21q22.11	0.046310097	0.29325985	0.419240167
OR8U1	11q12.1	-0.046310097	0.29325985	0.419240167
DENND4A	15q22.31	0.046290364	0.293465807	0.419504808
BTBD7	14q32.12	0.046281246	0.293561005	0.419611093
ISG20L2	1q23.1	0.046278901	0.293585487	0.419616292
SCNN1D	1p36.33	-0.046260797	0.293774583	0.419856752
FAM110B	8q12.1	0.046257452	0.293809521	0.419876875
SNAR-C4	19q13.33	-0.04622722	0.294125486	0.420284745
DIP2B	12q13.12	0.046226149	0.294136686	0.420284745
TSPAN15	10q22.1	-0.046220546	0.294195272	0.420325654
NUP37	12q23.2	-0.046219417	0.294207077	0.420325654
RNF24	20p13	0.046209344	0.294312426	0.420446323
SNORA71B	20q11.23	-0.046201617	0.294393252	0.420531944

RECQL5	17q25.1	-0.046194842	0.294464137	0.420603354
MLLT10	10p12.31	-0.046192671	0.294486852	0.420605955
CT47A1	Xq24	0.046187787	0.294537961	0.420647519
LRRC37A3	17q24.1	0.046185508	0.294561812	0.420647519
FLJ34503	6q21	0.04618293	0.294588789	0.420647519
STYK1	12p13.2	-0.046181903	0.294599539	0.420647519
FANCD2OS	3p25.3	-0.046179558	0.294624079	0.42065272
RNF4	4p16.3	0.046176345	0.294657711	0.420670903
ZNF616	19q13.41	0.046169747	0.294726791	0.420701824
HIST1H3B	6p22.2	0.046169144	0.294733102	0.420701824
LINC00917	16q24.1	0.046168287	0.294742068	0.420701824
NIPA1	15q11.2	-0.046152466	0.294907747	0.420908462
EPS15L1	19p13.11	-0.046148297	0.294951417	0.420940944
UCMA	10p13	0.046145744	0.294978153	0.420949256
HSPH1	13q12.3	0.046131537	0.295127006	0.421131823
FAM166B	9p13.3	-0.046109708	0.295355807	0.421428437
CFAP52	17p13.1	-0.046100669	0.295450579	0.421533784
NMBR	6q24.1	-0.04609616	0.295497867	0.421542299
ICA1L	2q33.2	0.046096107	0.295498429	0.421542299
DCD	12q13.2	-0.046078092	0.295687404	0.42178199
AAMDC	11q14.1	0.046073313	0.295737551	0.42182363
ZDHHC22	14q24.3	0.046064442	0.295830641	0.421923089
TAPBP	6p21.32	0.046062674	0.2958492	0.421923089
PLEKHN1	1p36.33	-0.046049822	0.295984116	0.422078618
AMELX	Xp22.2	0.046048291	0.296000191	0.422078618
EFCAB13	17q21.32	0.046041746	0.296068915	0.422146711
DNTTIP1	20q13.12	0.04603202	0.296171061	0.422262444
SPAG9	17q21.33	-0.046022989	0.296265931	0.42236779
ZMYND8	20q13.12	0.046016389	0.296335272	0.422417451
PDCD10	3q26.1	-0.046015521	0.296344397	0.422417451
CGB1	19q13.33	-0.046013682	0.296363719	0.422417451
ZBTB12	6p21.33	0.046008965	0.296413283	0.422458184
MTURN	7p14.3	0.04599989	0.296508672	0.422564217
WFDC13	20q13.12	0.045995531	0.296554495	0.42259646
NLRP9	19q13.42	-0.045993744	0.296573283	0.42259646
ALKBH1	14q24.3	-0.045984346	0.296672095	0.422707338
MAN2A2	15q26.1	-0.045963418	0.296892218	0.422991035
DSCR8	21q22.13	0.045949621	0.297037388	0.423167914
PNPLA3	22q13.31	-0.045939336	0.297145642	0.423275105
TMPRSS11A	4q13.2	0.045938477	0.297154684	0.423275105
NSDHL	Xq28	-0.04590871	0.297468156	0.423691642
RIDA	8q22.2	-0.045888303	0.297683181	0.423967909
KRTAP9-9	17q21.2	-0.045871252	0.297862924	0.42415024
NOXRED1	14q24.3	0.045870752	0.297868196	0.42415024
ARHGAP36	Xq26.1	0.045870162	0.297874413	0.42415024
APEX1	14q11.2	-0.045855044	0.298033847	0.424347244
MTFR2	6q23.3	0.045838458	0.298208825	0.424566352
CER1	9p22.3	0.045834362	0.298252042	0.424597851
RSPRY1	16q13	0.045813448	0.298472796	0.424846783
DPPA2P3	3q29	-0.045813223	0.298475174	0.424846783
KHK	2p23.3	0.045811798	0.298490216	0.424846783
CPT1A	11q13.3	0.045793736	0.298680966	0.425088224
HCG4B	6p22.1	-0.045776611	0.298861892	0.425315652
DDX60	4q32.3	0.045766208	0.298971832	0.425436774
RNF8	6p21.2	-0.045764558	0.298989271	0.425436774
CYBA	16q24.2	0.045754572	0.299094841	0.42555691
RAB28	4p15.33	0.045748233	0.299161868	0.425616902
CECR7	22q11.1	0.045746167	0.299183713	0.425616902

PTN	7q33	0.045744585	0.299200436	0.425616902
ZNF557	19p13.2	0.045733557	0.299317078	0.42575274
SELENOT	3q25.1	-0.045720097	0.299459477	0.425896877
NCR2	6p21.1	0.045719979	0.299460725	0.425896877
PATE4	11q24.2	0.045706563	0.299602701	0.426068694
SLC26A6	3p21.31	-0.04569118	0.299765559	0.426270182
C20ORF204	20q13.33	-0.045688881	0.299789905	0.42627469
ILF3	19p13.2	0.04567772	0.2999081	0.426411286
RASGEF1B	4q21.21	0.045675809	0.299928335	0.426411286
MRPL51	12p13.31	-0.04566591	0.300033206	0.426530256
PDE1C	7p14.3	0.045654902	0.300149843	0.426665937
MLF1	3q25.32	-0.045644113	0.30026419	0.426772124
OPRK1	8q11.23	0.045643854	0.300266944	0.426772124
DIPK1B	9q34.3	0.045639337	0.30031482	0.426810035
EMC2	8q23.1	0.04563404	0.30037098	0.426859712
TEX47	7q21.13	0.04562833	0.300431523	0.426915612
GYPA	4q31.21	0.045617134	0.300550264	0.427054198
ZNF34	8q24.3	0.045588884	0.300850003	0.427449926
KRTAP1-1	17q21.2	0.045572209	0.301027021	0.427651518
CBX2	17q25.3	0.045571517	0.301034377	0.427651518
HEPACAM	11q24.2	0.045564306	0.301110942	0.4277287
CENPC	4q13.2	0.045562399	0.301131204	0.4277287
GPR151	5q32	0.045559764	0.301159182	0.427738259
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OR6A2	11p15.4	0.045535718	0.301414653	0.428040703
RAB40AL	Xq22.1	-0.045531019	0.301464586	0.428081413
CUL3	2q36.2	-0.045523061	0.301549179	0.428171332
EIF2S2	20q11.22	0.045509688	0.30169136	0.428343001
GNE	9p13.3	0.045504477	0.301746767	0.428391453
LHX6	9q33.2	0.045502221	0.301770768	0.428395315
MOS	8q12.1	-0.04549667	0.301829804	0.428448908
ANKRD30BL	2q21.2	0.045490047	0.30190026	0.428518702
ZNF826P	19p12	-0.04548572	0.301946288	0.428553817
TFDP1	13q34	0.045476255	0.302047006	0.428666542
MIGA1	1p31.1	0.045449943	0.3023271	0.429028492
MTERF2	12q23.3	-0.045448293	0.302344669	0.429028492
FAM205BP	9p13.3	0.04544335	0.302397307	0.429072939
P2RX4	12q24.31	-0.045440956	0.302422805	0.429078873
LRGUK	7q33	0.04541479	0.302701577	0.429444129
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CLDN3	7q11.23	0.045395669	0.302905396	0.429672723
GOLGA8DP	15q11.2	0.045393329	0.302930349	0.429677842
TSC2	16p13.3	0.045386117	0.303007251	0.429756638
AMTN	4q13.3	0.045365176	0.303230624	0.430043149
GPR143	Xp22.2	0.045354074	0.303349097	0.430180862
PDRG1	20q11.21	-0.045329151	0.303615154	0.430527828
BTG2	1q32.1	0.045315691	0.303758908	0.430701332
SRSF4	1p35.3	0.045280305	0.304137045	0.431207121
RNF133	7q31.32	-0.045276291	0.304179963	0.431237598
LRRIQ3	1p31.1	-0.045271999	0.304225851	0.43127228
OR51D1	11p15.4	0.04525643	0.304392357	0.431477934
FOXH1	8q24.3	-0.045235974	0.304611213	0.431757761
SMPX	Xp22.12	0.045231374	0.304660445	0.431797139
ARMC1	8q13.1	0.045204191	0.304951477	0.432179191
MYH7	14q11.2	0.045198739	0.305009864	0.432231507
EFNA2	19p13.3	0.0451915	0.30508741	0.432310965
ICA1	7p21.3	-0.045188907	0.305115185	0.43231989
POM121L2	6p22.1	-0.04518151	0.305194438	0.432401748

APAF1	12q23.1	0.045160077	0.305424157	0.432696761
PABPC1P2	2q22.3	0.045154587	0.305483013	0.432726491
OR52I2	11p15.4	0.045154109	0.305488135	0.432726491
KCNA7	19q13.33	0.045141605	0.305622226	0.43288597
HDC	15q21.2	0.045136762	0.305674174	0.432929088
BORCS6	17p13.1	0.045123257	0.305819049	0.433103802
PTK2B	8p21.2	0.045111187	0.305948579	0.433256764
MT1B	16q13	0.045102729	0.306039364	0.43335484
LCE1E	1q21.3	-0.045095674	0.306115106	0.4334227
ZG16	16p11.2	0.045094254	0.30613035	0.4334227
SELENOK	3p21.1	0.045086525	0.306213345	0.433487608
GAGE2C	Xp11.23	0.045085632	0.306222935	0.433487608
GEM	8q22.1	0.045082357	0.306258109	0.433487608
POM121L8P	22q11.21	0.045080665	0.306276277	0.433487608
SLC16A8	22q13.1	0.045079958	0.306283867	0.433487608
CXCL14	5q31.1	0.045075149	0.306335524	0.433530237
SLC35D1	1p31.3	0.045063078	0.306465199	0.433683266
EAPP	14q13.1	-0.045057173	0.306528651	0.433742565
MCMBP	10q26.11	0.045050747	0.306597711	0.433809792
ECT2L	6q24.1	-0.045046667	0.306641568	0.433838286
TSPEAR-AS2	21q22.3	-0.045044864	0.306660952	0.433838286
FCHSD1	5q31.3	0.045038243	0.306732127	0.433908483
C11ORF96	11p11.2	-0.045035638	0.306760135	0.433917611
KIFC2	8q24.3	0.045029993	0.306820826	0.433972964
PRMT1	19q13.33	-0.04502157	0.30691141	0.434070588
HIST1H4G	6p22.2	0.045011235	0.307022571	0.4341973
STYXL1	7q11.23	0.04499465	0.307201022	0.434419149
TTLL3	3p25.3	0.044989874	0.307252424	0.434461316
TLR2	4q31.3	0.044981711	0.307340288	0.434535084
ENO1	1p36.23	-0.044981016	0.307347766	0.434535084
GNL1	6p21.33	-0.044974156	0.307421623	0.434608725
RAE1	20q13.31	0.044970683	0.307459023	0.434608725
PRMT5	14q11.2	-0.044970162	0.307464623	0.434608725
ZIC2	13q32.3	0.044963707	0.307534134	0.434676458
RBMX	Xq26.3	-0.04496113	0.307561889	0.434685167
PPP2R5D	6p21.1	0.044951231	0.30766852	0.434792005
GNA11	19p13.3	0.044950102	0.307680681	0.434792005
NR2E3	15q23	0.044929585	0.307901759	0.435073873
METTL2B	7q32.1	0.044904599	0.308171135	0.435353256
DNMBP	10q24.2	-0.044904251	0.308174881	0.435353256
TOGARAM2	2p23.2	-0.044903124	0.308187034	0.435353256
LCE5A	1q21.3	-0.04490207	0.308198399	0.435353256
FAM215A	17q21.31	0.044901216	0.308207613	0.435353256
PCDHA9	5q31.3	-0.044883948	0.308393882	0.435585801
FAM86HP	3q22.1	-0.044878157	0.308456367	0.43564349
MIR17HG	13q31.3	0.044861658	0.308634439	0.435864407
OR2J3	6p22.1	-0.044852564	0.308732621	0.435972477
UBQLN1	9q21.32 9q21.2-q2	-0.044838167	0.308888085	0.436161416
SCARNA14	15q22.31	0.044835253	0.308919557	0.43617526
S100A4	1q21.3	0.044819324	0.309091645	0.436387629
TRIM49D2	11q14.3	-0.044814633	0.309142339	0.436428592
GATD1	11p15.5	-0.044800306	0.309297191	0.436616582
ZNF479	7p11.2	0.044794456	0.309360436	0.436675239
KRTAP5-9	11q13.4	-0.044790687	0.309401184	0.436702133
TARM1	19q13.42	0.04475636	0.309772493	0.437195561
WASF2	1p36.11	0.044750113	0.309840089	0.437258682
CHRNA10	11p15.4	0.044746861	0.309875291	0.437258682
C5ORF15	5q31.1	0.044746206	0.309882382	0.437258682

INIP	9q32	0.044725799	0.31010331	0.437539751
IL23R	1p31.3	0.044704637	0.310332511	0.437832454
VPS51	11q13.1	-0.044697576	0.310409018	0.437909702
HK3	5q35.2	0.044689674	0.310494652	0.437999814
TRPT1	11q13.1	-0.044683074	0.310566183	0.43807002
ELN	7q11.23	0.044676648	0.310635841	0.438137576
TFCP2	12q13.12-q13.13	0.044670483	0.310702685	0.438201153
TEKT3	17p12	0.044664299	0.31076974	0.438240353
MUC17	7q22.1	-0.044663605	0.310777265	0.438240353
FAM224B	Yq11.222	-0.044661896	0.310795792	0.438240353
FER1L5	2q11.2	-0.044643698	0.310993185	0.438487975
TRAF2	9q34.3	0.044636964	0.311066246	0.438555817
TTC39C	18q11.2	0.044634097	0.311097352	0.438555817
MPV17L	16p13.11	0.04463324	0.31110666	0.438555817
TCL6	14q32.13	0.044623563	0.311211682	0.438673144
ASB16	17q21.31	0.044601272	0.311453683	0.438983521
LOC643387	2q37.3	0.044589292	0.311583808	0.439136179
EIF1AX	Xp22.12	-0.044565148	0.311846146	0.439475141
CCDC177	14q24.1	0.044557509	0.311929177	0.439561381
SPOP	17q21.33	-0.044548909	0.312022671	0.439662353
POTEE	2q21.1	0.044544478	0.312067561	0.439694828
GLYCAM1	12q13.2	0.044540285	0.312116449	0.439728174
LYZL6	17q12	-0.044537923	0.312142133	0.439728174
PPIL1	6p21.2	-0.044536578	0.312156761	0.439728174
SBDS	7q11.21	-0.04452746	0.312255937	0.439837101
OR7G2	19p13.2	-0.044525216	0.312280346	0.439840705
CSE1L	20q13.13	0.044520165	0.312335292	0.439887317
SIGLEC1	20p13	0.044513392	0.312408991	0.439960332
C17ORF78	17q12	0.044502343	0.31252924	0.440098887
SEM1	7q21.3	-0.044494201	0.312617866	0.440188728
EPC1	10p11.22	0.044492464	0.312636773	0.440188728
PDCD5	19q13.11	-0.044484041	0.312728484	0.44028706
MGC15885	15q22.2	0.044472403	0.312855227	0.440434696
PTCRA	6p21.1	-0.044442147	0.313184874	0.440867938
PEAR1	1q23.1	0.044428117	0.313337816	0.441052391
ZNF18	17p12	-0.044421865	0.313405989	0.441117505
PSMB11	14q11.2	-0.044403755	0.313603497	0.441324872
ZSCAN2	15q25.2	0.044403107	0.313610565	0.441324872
GYS1	19q13.33	0.044402326	0.313619091	0.441324872
RIMKLB	12p13.31	0.044396508	0.313682566	0.44138334
PSG3	19q13.2	0.044391636	0.313735725	0.441427284
TBC1D3C	17q12	0.0443595	0.31408651	0.441889953
MRGPRX3	11p15.1	0.044356471	0.314119585	0.441905601
SERPINI2	3q26.1	0.044350699	0.31418263	0.441963406
ZDHHC4	7p22.1	-0.044341279	0.314285528	0.442077261
PRO0628	20q12	0.044338841	0.314312158	0.4420806
ULK4P3	15q13.2	0.044336949	0.314332828	0.4420806
NTS	12q21.31	-0.044335031	0.314353786	0.4420806
CYP4F30P	2q21.1	0.044327897	0.314431731	0.442159325
NCEH1	3q26.31	0.044267206	0.31509541	0.443041398
RIPPLY3	21q22.13	0.044266223	0.315106161	0.443041398
CYP11A1	15q24.1	-0.044264499	0.315125024	0.443041398
CT47A9	Xq24	0.044245316	0.315335003	0.443305651
POMGNT2	3p22.1	-0.04423933	0.315400538	0.443366818
KLHL22	22q11.21	0.044234425	0.315454254	0.443411363
SLC35E1	19p13.11	0.044231862	0.315482319	0.443419849
CASTOR1	22q12.2	-0.044205898	0.315766756	0.443788648
KRTAP5-10	11q13.4	-0.04420287	0.315799933	0.443804291

MED26	19p13.11	-0.044180975	0.316039937	0.444110571
ZNF251	8q24.3	0.044144243	0.31644285	0.44463185
LINC00896	22q11.21	0.044143129	0.316455068	0.44463185
ZNF568	19q13.12	0.044138511	0.316505746	0.444672018
CRYM-AS1	16p12.2	0.044133824	0.316557188	0.444713253
GFRAL	6p12.1	-0.044122426	0.316682314	0.444857989
RTP5	2q37.3	0.044120165	0.316707133	0.444861809
NFE2L3P2	17q21.32	0.044109769	0.316821293	0.444991113
TOMM40L	1q23.3	0.044102126	0.316905233	0.445069422
TAS2R50	12p13.2	-0.044099809	0.31693068	0.445069422
SERPINF2	17p13.3	-0.044098653	0.316943376	0.445069422
LGALS2	22q13.1	-0.044082712	0.317118519	0.445284304
ATOX1	5q33.1	-0.044073383	0.31722105	0.445397206
ERBIN	5q12.3	0.044059836	0.317369966	0.445575214
RMND5A	2p11.2	-0.044055668	0.317415796	0.445599776
TRDN	6q22.31	-0.044054218	0.317431733	0.445599776
CHRDL1	Xq23	-0.044033611	0.317658382	0.445886844
KATNA1	6q25.1	0.04401989	0.317809343	0.446067639
DBX1	11p15.1	-0.044006007	0.317962137	0.446235678
ANKRD26P3	13q12.11	0.044002789	0.317997568	0.446235678
ZNF544	19q13.43	-0.044001133	0.318015797	0.446235678
HSD52	1p32.1	0.044000957	0.318017737	0.446235678
LYSMD1	1q21.3	-0.043996965	0.318061687	0.446266241
RBM24	6p22.3	0.043994919	0.318084212	0.44626674
MYADML2	17q25.3	0.043985378	0.318189279	0.446383036
PRAMEF6	1p36.21	0.043979113	0.318258275	0.446448716
ATG2A	11q13.1	0.043969655	0.318362461	0.446563748
SPNS3	17p13.2	-0.043964651	0.318417595	0.446592111
AP1M1	19p13.11	0.043963793	0.318427053	0.446592111
ABHD2	15q26.1	-0.043956498	0.318507431	0.446673721
RHOT2	16p13.3	-0.043944862	0.318635682	0.446822451
SFSWAP	12q24.33	0.043941563	0.318672048	0.446842318
PDCL2	4q12	0.043920409	0.3189053	0.447084656
HIST1H4C	6p22.2	0.043917146	0.318941294	0.447084656
STAR	8p11.23	0.043916305	0.318950568	0.447084656
WDR75	2q32.2	0.043916118	0.318952626	0.447084656
DDX5	17q23.3	-0.043912558	0.318991899	0.447084656
GZMM	19p13.3	0.043911648	0.319001936	0.447084656
UBD	6p22.1	0.043909866	0.319021595	0.447084656
MFSD6	2q32.2	0.043909779	0.319022553	0.447084656
SNX33	15q24.2	-0.043904222	0.319083868	0.447139454
COLCA1	11q23.1	-0.043882772	0.319320576	0.447440011
TMEM236	10p12.33	0.043864582	0.319521415	0.447677022
NFATC1	18q23	0.043862887	0.319540136	0.447677022
SAMD11	1p36.33	0.04386141	0.319556439	0.447677022
LHX9	1q31.3	0.04384397	0.319749083	0.44791573
ZAR1	4p11	-0.043830124	0.319902083	0.448066138
PRL	6p22.3	0.043829332	0.319910834	0.448066138
SLC13A5	17p13.1	0.04382719	0.319934508	0.448066138
PON1	7q21.3	-0.043826197	0.319945488	0.448066138
ILF2	1q21.3	-0.043822941	0.319981472	0.448085359
DNLZ	9q34.3	-0.043814604	0.320073627	0.448180285
RARA	17q21.2	0.043812781	0.320093788	0.448180285
ORC1	1p32.3	0.043803315	0.320198448	0.448292444
CPA1	7q32.2	0.043801394	0.320219697	0.448292444
ATL2	2p22.2-p22.1	-0.043799495	0.320240702	0.448292444
GSTA2	6p12.2	-0.043792048	0.320323064	0.448367378
DNAJC27	2p23.3	0.04378977	0.320348264	0.448367378

SNORA13	5q22.1	-0.043788034	0.32036746	0.448367378
FAM193A	4p16.3	-0.0437866	0.320383327	0.448367378
SLMAP	3p14.3	0.043779174	0.320465479	0.448451171
NCOA7	6q22.31-q22.32	0.043763891	0.32063461	0.448656659
IQCNC	19p13.11	-0.043730892	0.320999976	0.44913104
CORO2B	15q23	0.043729242	0.321018252	0.44913104
GPR31	6q27	0.043710206	0.321229163	0.449394889
IMMP1L	11p13	-0.043703451	0.321304014	0.449468367
IRF2BP1	19q13.32	-0.043700022	0.321342021	0.44947758
ATP11AUN	13q34	-0.043698828	0.321355258	0.44947758
FOXS1	20q11.21	0.043685563	0.321502317	0.449652028
RGS21	1q31.2	-0.043683506	0.321525127	0.449652689
CD300LD	17q25.1	0.043672428	0.321647976	0.449793245
OR10C1	6p22.1	-0.043655378	0.321837102	0.450026456
GJB4	1p34.3	0.043646951	0.321930609	0.45012594
GHRL	3p25.3	0.043642257	0.321982702	0.450167508
C1ORF74	1q32.2	0.043635762	0.322054797	0.450215889
KANSL3	2q11.2	-0.04363511	0.322062037	0.450215889
CCS	11q13.2	-0.043620781	0.322221109	0.450379749
GADD45G	9q22.2	-0.043620521	0.322224001	0.450379749
SSX4	Xp11.23	-0.043604427	0.322402739	0.450598288
BRICD5	16p13.3	0.04359951	0.322457359	0.450643338
RNF44	5q35.2	-0.043593514	0.322523969	0.450705137
RTEL1	20q13.33	0.043585959	0.322607915	0.450765255
SMARCC2	12q13.2	-0.043585612	0.322611775	0.450765255
RPE65	1p31.3	0.043564868	0.322842341	0.451056103
SLC28A3	9q21.32-q21.33	0.043560382	0.322892217	0.451094477
KCTD1	18q11.2	0.043556521	0.322935152	0.451123151
CYP2D6	22q13.2	-0.043543097	0.323084445	0.451300387
HVCN1	12q24.11	0.043540282	0.323115755	0.451312805
MIDN	19p13.3	0.04352248	0.323313818	0.451558118
ZNF664	12q24.31	0.043519615	0.323345709	0.451571328
POLR2J4	7p13	0.043514578	0.323401764	0.45161828
USP27X-AS1	Xp11.23	-0.043494692	0.323623147	0.451896084
SRSF12	6q15	0.043466904	0.323932669	0.452296915
CX3CR1	3p22.2	-0.043459002	0.324020724	0.452388485
HK2	2p12	0.043421488	0.324438956	0.452930596
C22ORF23	22q13.1	0.043419666	0.324459275	0.452930596
MAJIN	11q13.1	0.043416725	0.324492075	0.452930596
FYCO1	3p21.31	0.043416104	0.324499009	0.452930596
C17ORF99	17q25.3	0.043395727	0.32472635	0.453206506
SLC47A2	17p11.2	-0.043394351	0.324741711	0.453206506
TMEM31	Xq22.2	-0.043386978	0.324824002	0.453289925
PRSS48	4q31.3	-0.043382382	0.3248753	0.45329545
ZNF391	6p22.1	0.043381543	0.324884671	0.45329545
FOXN4	12q24.11	0.043380571	0.324895517	0.45329545
SBSPON	8q21.11	0.043372771	0.324982601	0.453385526
PDZD4	Xq28	0.043366866	0.325048537	0.453446088
UTP4	16q22.1	-0.04335384	0.325194016	0.453617597
FOXK2	17q25.3	0.043343767	0.325306548	0.453743128
SPTSSA	14q13.1	0.043333607	0.325420077	0.45387003
APOBEC3B	22q13.1	0.043303823	0.325753036	0.454302938
MMP20	11q22.2	0.043296368	0.32583641	0.454387734
FAM181A-AS1	14q32.12	0.043283221	0.325983473	0.454561327
GATA5	20q13.33	-0.043272592	0.3261024	0.454695665
SLC38A10	17q25.3	-0.043264397	0.32619411	0.454772735
LRRC37B	17q11.2	0.043263616	0.326202858	0.454772735
FLII	17p11.2	-0.043251632	0.326337004	0.454928248

ZNF747	16p11.2	0.043244424	0.326417704	0.455009236
SNN	16p13.13	0.043223757	0.32664918	0.455278004
OR6B1	7q35	-0.043221579	0.326673579	0.455278004
HELZ2	20q13.33	-0.043221152	0.326678365	0.455278004
SAXO2	15q25.2	-0.043215647	0.32674004	0.455313077
KCNK7	11q13.1	-0.043214868	0.326748769	0.455313077
CFAP70	10q22.2	-0.043198313	0.326934294	0.455540066
MAATS1	3q13.33	0.043191028	0.327015957	0.455622316
AGRN	1p36.33	-0.04316983	0.327253657	0.455885078
OR10A2	11p15.4	0.043168759	0.327265671	0.455885078
AP5B1	11q13.1	-0.043166878	0.327286773	0.455885078
OC90	8q24.22	0.043166132	0.327295139	0.455885078
MBD3L2	19p13.2	0.04314817	0.327496651	0.456134199
CDRT1	17p12	-0.043130001	0.327700572	0.456386642
FGF10	5p12	0.043126056	0.327744866	0.456416753
GNAT1	3p21.31	0.043122422	0.32778566	0.456425669
CHRND	2q37.1	-0.043121447	0.327796617	0.456425669
CCNI2	5q31.1	0.043117338	0.327842747	0.456458327
SYT17	16p12.3	-0.043108001	0.327947603	0.45657274
ACY3	11q13.2	0.043101708	0.328018286	0.456639564
PDZD8	10q25.3-q26.11	-0.043094281	0.328101725	0.456724136
EFCAB11	14q32.11	-0.043088508	0.328166586	0.456782837
ITPR3	6p21.31	-0.043079432	0.328268582	0.456893214
TFF1	21q22.3	0.043075519	0.328312557	0.456905756
NELFCD	20q13.32	-0.043074569	0.328323237	0.456905756
CTSS	1q21.3	-0.043072571	0.328345686	0.456905756
ATP6AP1L	5q14.2	-0.043043134	0.328676673	0.457334723
LOC344967	4p14	0.043039001	0.328723158	0.45736779
CHST4	16q22.2	-0.043035571	0.328761746	0.457389865
KRT12	17q21.2	-0.043019829	0.32893886	0.457583414
CFAP126	1q23.3	-0.043019166	0.328946328	0.457583414
SPHKAP	2q36.3	-0.043012619	0.329020002	0.457654273
SIGLEC11	19q13.33	0.043007129	0.329081803	0.457708609
TMPRSS6	22q12.3	0.04299737	0.329191662	0.457829774
FAM92A1P2	4q35.1	0.042957844	0.329636876	0.458417293
MZF1	19q13.43	-0.042954384	0.329675865	0.458439842
FANK1	10q26.2	-0.042942966	0.32980456	0.458587124
ZDBF2	2q33.3	0.042934847	0.329896094	0.458678275
PTBP3	9q32	0.042933109	0.329915686	0.458678275
RSPH14	22q11.22-q11.23	-0.042922097	0.33003986	0.458791882
ZNF788P	19p13.2	0.04292182	0.330042983	0.458791882
AQP11	11q14.1	-0.042912445	0.33014872	0.458907177
ZNF416	19q13.43	0.042907144	0.330208517	0.458945224
SNORA81	3q27.3	-0.042905977	0.330221691	0.458945224
CCDC91	12p11.22	0.042881614	0.330496616	0.459295608
PYGM	11q13.1	-0.042873369	0.330589691	0.459393241
FAM135A	6q13	-0.042861728	0.330721132	0.459531511
UCKL1-AS1	20q13.33	0.042860513	0.33073485	0.459531511
CENPJ	13q12.12-q12.13	0.042856865	0.33077605	0.459536698
FOXL2NB	3q22.3	0.04285614	0.33078424	0.459536698
C20ORF85	20q13.32	-0.042852018	0.330830792	0.459569654
ARL17B	17q21.31	-0.042847106	0.330886283	0.45961502
IRX4	5p15.33	0.042829182	0.33108879	0.459864579
AFDN-DT	6q27	-0.04282074	0.331184199	0.45996536
EIF3IP1	7q31.1	-0.042813585	0.331265083	0.460045955
PPP1R27	17q25.3	0.042810103	0.33130444	0.460068872
APOE	19q13.32	-0.04280181	0.331398214	0.460167349
MAST4	5q12.3	-0.042794428	0.331481685	0.460251505

UHRF1BP1	6p21.31	0.042791215	0.331518023	0.460270213
IGSF9B	11q25	0.042773098	0.331722976	0.460523
LDB1	10q24.32	0.04276942	0.331764593	0.460532377
RNASE11	14q11.2	-0.042768457	0.331775486	0.460532377
ZNF536	19q12	0.042723276	0.332287006	0.461210607
PAN3	13q12.2	0.042718532	0.332340745	0.461253391
UGT2A1	4q13.3	0.042710331	0.332433656	0.461350534
MDM4	1q32.1	0.042704724	0.332497181	0.461395559
SNHG10	14q32.13	0.042703422	0.332511941	0.461395559
TUBA3E	2q21.1	0.042689721	0.332667225	0.461550437
TBK1	12q14.2	0.042689528	0.332669413	0.461550437
IRF2	4q35.1	-0.04268588	0.332710758	0.461575986
CSNK1A1	5q32	0.042679107	0.332787549	0.461650704
CACNB4	2q23.3	-0.042670294	0.332887483	0.461757513
TUBA8	22q11.21	0.042665257	0.332944602	0.461804923
NKAIN2	6q22.31	-0.042661116	0.332991576	0.461838254
SNX3	6q21	-0.042651753	0.333097784	0.46195373
TRIM39	6p22.1	-0.042640724	0.333222915	0.462095432
SNORA46	16q21	-0.042606131	0.333615614	0.462608136
SNORA54	11p15.4	0.042595413	0.333737342	0.462741779
ANKRD44	2q33.1	0.042592747	0.333767628	0.462741779
IRF5	7q32.1	0.042591574	0.333780955	0.462741779
P2RX3	11q12.1	-0.042569493	0.33403185	0.463028192
CERKL	2q31.3	0.042569343	0.334033552	0.463028192
SLC17A6	11p14.3	-0.042561673	0.334120735	0.463117152
BPESC1	3q23	0.042555563	0.334190197	0.463181539
UTF1	10q26.3	0.04254841	0.334271525	0.463257432
ANO2	12p13.31	0.04254609	0.334297901	0.463257432
NAT8L	4p16.3	0.042544675	0.334313995	0.463257432
HDLBP	2q37.3	0.042506559	0.334747605	0.463826355
CCKBR	11p15.4	-0.042482949	0.335016386	0.464166828
RASA4CP	7p13	-0.042479032	0.335060991	0.464196679
THADA	2p21	0.042475037	0.335106482	0.464227754
SPRY4	5q31.3	0.042472171	0.33513912	0.464241019
POLR1E	9p13.2	0.042434571	0.335567542	0.464802492
PPP1R36	14q23.3	-0.042421173	0.335720287	0.464982068
RIN1	11q13.2	-0.042414598	0.335795269	0.465043871
DNHD1	11p15.4	0.042413208	0.335811114	0.465043871
PUS7	7q22.3	0.042407651	0.335874498	0.465099652
PCDHA4	5q31.3	-0.042370059	0.33630343	0.465620086
RGS13	1q31.2	0.042369345	0.336311581	0.465620086
ITGA7	12q13.2	0.042367879	0.336328315	0.465620086
LINC00244	7q36.3	0.042364871	0.336362645	0.465620086
CD69	12p13.31	0.042364579	0.336365985	0.465620086
RFC2	7q11.23	0.042361018	0.336406633	0.465644332
PNMT	17q12	0.042352276	0.336506456	0.465750479
MYH2	17p13.1	-0.042343927	0.3366018	0.465827053
AQP5	12q13.12	0.042343379	0.336608063	0.465827053
ZNF622	5p15.1	-0.042339135	0.336656537	0.465862108
PRR19	19q13.2	0.042335966	0.336692732	0.465880169
TMSB10	2p11.2	-0.042330885	0.336750777	0.465928459
EZH1P	Xp11.22	-0.042299356	0.337111112	0.466394962
ZNF815P	7p22.1	0.042292896	0.337184977	0.466465094
LINC01554	5q15	0.042279449	0.337338753	0.46664576
RGS9	17q24.1	0.042273964	0.337401487	0.46670047
CACHD1	1p31.3	-0.042270012	0.337446696	0.466730933
TMPRSS11F	4q13.2	-0.042266592	0.337485814	0.466752968
PRKACG	9q21.11	0.042261064	0.337549067	0.466808375

GRAMD1B	11q24.1	-0.042258811	0.337574851	0.466811963
RBMX2	Xq26.1	0.042242702	0.337759205	0.467034813
TENT2	5q14.1	0.042237013	0.337824327	0.467092774
ANP32A-IT1	15q23	0.042232301	0.33787828	0.467125735
SSX9P	Xp11.23	0.04223059	0.337897869	0.467125735
ZNF446	19q13.43	-0.04222885	0.337917782	0.467125735
SNHG20	17q25.2	0.04222173	0.337999321	0.467206367
ESPNL	2q37.3	0.04221778	0.338044549	0.467236802
ABCC6P1	16p12.3	-0.042202225	0.338222735	0.467418962
PATE1	11q24.2	-0.042201881	0.338226671	0.467418962
FAM229B	6q21	0.042200194	0.338246002	0.467418962
GPAM	10q25.2	0.042191771	0.338342518	0.467520242
PWRN2	15q11.2	0.042182804	0.338445273	0.46761416
GFRA2	8p21.3	-0.042181786	0.338456945	0.46761416
SSBP2	5q14.1	0.042177269	0.338508725	0.467653602
PDIA3P1	1q21.1	-0.042175098	0.338533611	0.467655887
SLC25A25	9q34.11	-0.042164851	0.338651088	0.46778607
EVX2	2q31.1	0.0421568	0.338743404	0.467881482
HLA-E	6p22.1	-0.042133242	0.339013639	0.46822261
TSGA10	2q11.2	0.042125339	0.339104315	0.468315715
GLCE	15q23	-0.042117784	0.33919102	0.468403323
TAS2R13	12p13.2	0.042114062	0.339233741	0.468406502
HNRNPH1	5q35.3	0.042113529	0.33923986	0.468406502
LDB3	10q23.2	-0.04209347	0.339470168	0.468692351
MAD2L2	1p36.22	0.042079575	0.339629747	0.468880516
HSPB1P1	9q21.13	-0.042060818	0.339845254	0.469120579
MAPK6	15q21.2	0.042060384	0.339850244	0.469120579
SYT3	19q13.33	-0.042055659	0.339904544	0.469163362
RAP1B	12q15	0.042045448	0.340021916	0.469293189
PDXDC1	16p13.11	-0.042024346	0.340264546	0.469595867
CRYBA1	17q11.2	-0.042012246	0.340403728	0.469755744
ZNF676	19p12	0.041988009	0.340682623	0.470083942
TAF A2	12q14.1	-0.041987519	0.340688258	0.470083942
PAH	12q23.2	-0.041981309	0.340759734	0.470118672
PDIA3	15q15.3	-0.041981275	0.340760136	0.470118672
GPR83	11q21	-0.041974823	0.340834405	0.470166284
HAMP	19q13.12	0.041974219	0.340841361	0.470166284
LEFTY1	1q42.12	0.041962631	0.340974794	0.470318117
ERAS	Xp11.23	-0.04195682	0.341041721	0.470378202
FLJ13224	12p11.21	0.041944294	0.341186008	0.470544967
DPH2	1p34.1	-0.041931169	0.341337239	0.470721287
XPNPEP1	10q25.1	-0.04192674	0.341388278	0.470759422
SMIM8	6q15	-0.041910154	0.341579468	0.470990799
LCE3C	1q21.3	-0.041885566	0.341863024	0.471317216
OR4B1	11p11.2	0.041885566	0.341863024	0.471317216
UPK1A	19q13.12	-0.041874827	0.341986912	0.471455727
TSPAN16	19p13.2	-0.041872553	0.342013149	0.47145961
PAFAH1B1	17p13.3	0.041864564	0.342105341	0.471554403
NPSR1-AS1	7p14.3	0.041852473	0.342244898	0.471714467
PLEKHH1	14q24.1	0.0418287	0.34251939	0.472060476
RPP30	10q23.31	-0.041823142	0.342583581	0.472116621
BARHL2	1p22.2	-0.041818993	0.342631513	0.472150353
MAU2	19p13.11	0.041814242	0.342686393	0.472193654
FLJ37201	10q23.31	-0.041809687	0.342739023	0.47223385
TMPRSS3	21q22.3	-0.041798914	0.342863504	0.47237303
GNLY	2p11.2	0.041785541	0.343018076	0.472522691
C6ORF47	6p21.33	-0.041785454	0.34301908	0.472522691
MTMR4	17q22	0.041775815	0.34313052	0.47264386

SLC30A1	1q32.3	0.04177282	0.343165151	0.472659219
TOP1MT	8q24.3	-0.041764353	0.343263073	0.472761745
CSTF3	11p13	0.041750024	0.343428811	0.472957649
ERF	19q13.2	0.041742731	0.343513195	0.473003764
CUTALP	9q33.2	0.041742209	0.343519234	0.473003764
ZXDA	Xp11.21	0.041741037	0.343532789	0.473003764
CCDC25	8p21.1	-0.041722236	0.343750386	0.473260238
RPS28	19p13.2	-0.04172024	0.343773486	0.473260238
MTERF1	7q21.2	-0.041718849	0.343789591	0.473260238
CA12	15q22.2	0.0417073	0.343923312	0.473411944
PRIM2	6p11.2	-0.041694882	0.344067124	0.473577518
CTSF	11q13.2	0.041689324	0.3441315	0.47363374
OR13G1	1q44	0.041678823	0.344253163	0.473768795
PTH1R	3p21.31	0.041671522	0.344337755	0.473852817
CLK2P1	7p15.3	0.04166336	0.344432357	0.473950601
TMCO2	1p34.2	-0.041653361	0.344548257	0.474056161
SARS	1p13.3	-0.041652678	0.344556169	0.474056161
AKAP7	6q23.2	-0.041649813	0.344589392	0.474069469
TCEA1	8q11.23	-0.041642866	0.344669941	0.474147879
PPP3CA	4q24	0.041638958	0.344715255	0.474151614
RSPH9	6p21.1	0.041638569	0.344719765	0.474151614
OR11H12	14q11.2	-0.041631904	0.344797064	0.474193295
OR11H4	14q11.2	0.041631894	0.344797181	0.474193295
OR10T2	1q23.1	0.041590597	0.345276362	0.474787428
OR5L2	11q12.1	0.041590597	0.345276362	0.474787428
DENND3	8q24.3	-0.041584337	0.345349039	0.474854928
DHTKD1	10p14	-0.04157574	0.345448859	0.474959739
CENPBD1	16q24.3	-0.041573048	0.34548012	0.474970278
LINC01816	2p13.3	-0.04156324	0.345594033	0.475094439
NPIB5	16p12.2	0.041560022	0.345631406	0.475113371
TRIM75P	4q32.3	0.041553184	0.34571084	0.47516561
GSG1L	16p12.1	0.041552687	0.345716618	0.47516561
ASB7	15q26.3	-0.041530671	0.34597246	0.475441775
KRT71	12q13.13	-0.041530067	0.345979472	0.475441775
VIPR2	7q36.3	-0.041529299	0.345988404	0.475441775
SLC25A27	6p12.3	0.041522247	0.346070376	0.475521956
ANO8	19p13.11	0.041515127	0.346153163	0.475603248
RNU4ATAC	2q14.2	-0.041512653	0.346181925	0.475610303
DNAJC25-GNG11	9q31.3	0.041488626	0.346461374	0.475939222
C3ORF38	3p11.1	0.041486557	0.346485451	0.475939222
OR13C4	9q31.1	-0.041485971	0.346492265	0.475939222
SLC22A20P	11q13.1	0.041480093	0.346560661	0.475997535
SCARNA21	17p13.1	0.041478258	0.34658201	0.475997535
TBPL2	14q22.3	0.041472806	0.346645457	0.476052193
PDCD11	10q24.33	0.041459855	0.346796196	0.476186055
STIMATE	3p21.1	0.041458682	0.346809854	0.476186055
VEZT	12q22	0.041458334	0.346813897	0.476186055
LINC01106	2q13	0.0414546	0.346857368	0.476209664
OR4D6	11q12.1	0.041449723	0.346914158	0.476209664
ERH	14q24.1	-0.041447393	0.346941287	0.476209664
C9ORF50	9q34.11	0.041447006	0.346945795	0.476209664
SCPEP1	17q22	-0.041446698	0.346949376	0.476209664
ST6GALNAC1	17q25.1	-0.041437841	0.347052524	0.476318764
HFM1	1p22.2	-0.041433578	0.347102171	0.476349589
SHFL	19p13.2	-0.041431849	0.347122311	0.476349589
LALBA	12q13.11	0.041411545	0.347358854	0.476641699
REXO4	9q34.2	0.041408489	0.347394467	0.476658075
MAP1LC3A	20q11.22	-0.04137853	0.347743712	0.477104752

TBX22	Xq21.1	-0.041364503	0.347907309	0.477279951
SMR3A	4q13.3	0.041363515	0.347918828	0.477279951
RFPL1	22q12.2	-0.04135662	0.347999265	0.477357765
RRAGC	1p34.3	0.041352565	0.348046571	0.477390125
ART1	11p15.4	-0.041347484	0.348105855	0.477438908
SLC6A9	1p34.1	0.041332853	0.348276612	0.47757966
ATRIP	3p21.31	0.041332766	0.348277626	0.47757966
EHBPL1	11q13.1	0.041332593	0.348279653	0.47757966
RIOK3	18q11.2	-0.041327903	0.348334391	0.477622184
HAT1	2q31.1	0.041323388	0.348387107	0.47766193
ZC4H2	Xq11.2	0.041318612	0.348442869	0.477691641
ALKBH4	7q22.1	-0.041315833	0.348475316	0.477691641
ACTL7B	9q31.3	-0.041315434	0.348479967	0.477691641
SSR4	Xq28	0.041310188	0.348541228	0.477743083
C12ORF76	12q24.11	-0.041305933	0.348590921	0.477761425
CRAT	9q34.11	0.041304978	0.348602077	0.477761425
OR4M1	14q11.2	0.041295628	0.348711287	0.477846031
OR52J3	11p15.4	0.041295628	0.348711287	0.477846031
LRRC59	17q21.33	0.041270851	0.349000806	0.478210212
PDIA6	2p25.1	0.041266335	0.349053586	0.478236336
SHLD2P3	10q11.22	-0.041264252	0.349077937	0.478236336
AARS	16q22.1	0.041263122	0.349091144	0.478236336
OR56A5	11p15.4	-0.04125285	0.349211236	0.4783683
PGBD3	10q11.23	-0.041228865	0.34949174	0.478719973
PPP1R14D	15q15.1	0.041213004	0.349677316	0.478941578
PTGES2	9q34.11	-0.041206461	0.349753891	0.478987558
RNF187	1q42.13	-0.041206069	0.349758475	0.478987558
PRPF19	11q12.2	0.041188441	0.349964831	0.479213308
NKX3-1	8p21.2	0.04118792	0.349970931	0.479213308
CMTM7	3p22.3	-0.041173505	0.350139734	0.479411838
SNORA62	3p22.1	-0.041116373	0.35080926	0.480295885
CDCP1	3p21.31	0.041109071	0.350894892	0.480380453
TNFSF12	17p13.1	-0.041106552	0.350924427	0.480388216
FAM66E	8p23.1	-0.041102717	0.350969407	0.480411513
PITX1	5q31.1	0.04109971	0.351004684	0.480411513
LSM7	19p13.3	-0.041098998	0.351013042	0.480411513
GPR156	3q13.33	0.041092615	0.351087918	0.480481324
SLC4A4	4q13.3	0.041087622	0.3511465	0.480528827
AP1AR	4q25	-0.041050368	0.351583775	0.481094514
USP51	Xp11.21	-0.041021972	0.351917313	0.481518183
TSG1	6q16.1	0.041015204	0.351996844	0.481570041
OR2M5	1q44	0.041014675	0.352003059	0.481570041
LTB	6p21.33	0.041000002	0.352175509	0.481773224
PER3	1p36.23	0.040997397	0.352206133	0.481782377
NPL	1q25.3	-0.040986281	0.352336814	0.481928387
MDS2	1p36.11	-0.040980828	0.352400944	0.481983354
GRHL3	1p36.11	-0.040971521	0.352510402	0.482098561
ARL5C	17q12	-0.040969593	0.352533076	0.482098561
MPZL2	11q23.3	-0.040951199	0.352749478	0.482361727
PCNT	21q22.3	0.040947899	0.352788308	0.482382057
ASH2L	8p11.23	-0.040942949	0.352846559	0.482428937
SPPL3	12q24.31	0.040940476	0.352875666	0.482435966
SMARCA1	Xq25-q26.1	0.040932442	0.352970235	0.482532484
WBP2NL	22q13.2	0.040929571	0.353004024	0.482545905
TMEM190	19q13.42	-0.040897143	0.353385917	0.48303514
TPRN	9q34.3	0.040890846	0.353460095	0.483103729
HDAC1	1p35.2-p35.1	-0.040885375	0.353524555	0.483141227
ZSCAN1	19q13.43	0.040884444	0.353535533	0.483141227

LINC00515	21q21.3	-0.040873064	0.353669637	0.483291684
VAT1	17q21.31	-0.040855677	0.353874612	0.483537672
DIRAS3	1p31.3	-0.040852161	0.35391607	0.483537672
ARHGAP39	8q24.3	0.040851682	0.353921712	0.483537672
FLJ30679	16q24.1	0.040845865	0.353990309	0.483567168
EXOC3	5p15.33	-0.040845777	0.353991346	0.483567168
IPO11	5q12.1	0.040835183	0.354116298	0.483705034
SLC2A2	3q26.2	-0.040829114	0.354187892	0.483770001
CCDC62	12q24.31	0.040795161	0.354588581	0.484284425
SLITRK1	13q31.1	0.040790286	0.354646135	0.484330169
RIMBP3C	22q11.21	-0.040784102	0.354719151	0.484379249
TRNP1	1p36.11	-0.040783167	0.354730198	0.484379249
PERP	6q23.3	-0.040780301	0.354764039	0.4843926
ARSA	22q13.33	0.040777262	0.354799932	0.484392799
NKX2-2	20p11.22	0.040776214	0.354812311	0.484392799
TMEM81	1q32.1	0.040771054	0.354873254	0.484443144
RTCA	1p21.2	-0.040760241	0.355000978	0.48458464
F13B	1q31.3	-0.040751448	0.355104873	0.484667012
DNM1P46	15q26.3	-0.040751059	0.355109477	0.484667012
TELO2	16p13.3	0.040742961	0.355205174	0.484764756
CAMP	3p21.31	-0.040728777	0.35537283	0.484960685
TTC9B	19q13.2	-0.04072475	0.355420436	0.484992772
IL1RL1	2q12.1	-0.040716093	0.355522798	0.485099568
OSBPL1A	18q11.2	0.04069876	0.355727802	0.48534639
RAMP1	2q37.3	0.040689555	0.3558367	0.485462066
RHPN1-AS1	8q24.3	0.040682347	0.355921985	0.485528027
LDHB	12p12.1	-0.040681392	0.355933288	0.485528027
SERPINB10	18q22.1	-0.040677202	0.355982872	0.48553858
USH1G	17q25.1	0.040676662	0.355989265	0.48553858
IGSF1	Xq26.1	0.0406745	0.356014857	0.485540587
ZDHHC9	Xq26.1	0.040667932	0.356092592	0.485613703
ZNF257	19p12	0.040662031	0.356162452	0.485676071
CD33	19q13.41	0.040650348	0.356300772	0.485831777
KCTD9	8p21.2	-0.040639015	0.356434989	0.48598187
HP	16q22.2	-0.040629376	0.356549168	0.486104622
CABS1	4q13.3	0.040616155	0.356705816	0.486276812
TSIX	Xq13.2	-0.040611213	0.35676438	0.486276812
PRNT	20p13	0.040610852	0.356768661	0.486276812
TAS2R60	7q35	-0.040610562	0.356772093	0.486276812
ZNF77	19p13.3	0.040605582	0.356831112	0.486324325
MSTN	2q32.2	0.04059989	0.356898582	0.486359458
GSE1	16q24.1	0.040597506	0.35692684	0.486359458
SPX	12p12.1	-0.040597293	0.356929373	0.486359458
CYB5R4	6q14.2	-0.040594728	0.356959783	0.486367972
FAM223B	Xq28	-0.040587998	0.357039567	0.486443755
FLJ12825	12q13.13	0.040582961	0.357099296	0.486472608
CSF3R	1p34.3	0.040582136	0.357109077	0.486472608
VAMP5	2p11.2	0.040562511	0.357341849	0.486756761
KCNK18	10q25.3	-0.040558753	0.357386422	0.486784537
UVSSA	4p16.3	0.040555043	0.357430451	0.486811568
ADGRF3	2p23.3	0.040547099	0.357524713	0.486907007
KRTAP11-1	21q22.11	0.040543157	0.357571489	0.486920265
DEFB123	20q11.21	-0.040542202	0.357582826	0.486920265
TRAPPC9	8q24.3	0.040538196	0.357630371	0.486952067
TONSL	8q24.3	0.04050676	0.358003605	0.487397138
CENPU	4q35.1	0.040506587	0.358005667	0.487397138
CYP2D7	22q13.2	0.04050009	0.358082839	0.487469233
FBXL3	13q22.3	0.040489566	0.358207853	0.487606443

HBEGF	5q31.3	-0.04048453	0.358267697	0.487654928
PRPF4B	6p25.2	0.040442934	0.358762166	0.488294956
CABP7	22q12.2	0.04042861	0.358932541	0.488493817
KRTAP9-8	17q21.2	-0.040423244	0.358996387	0.488547679
CASP1	11q22.3	0.040413843	0.359108238	0.488666858
GOLM1	9q21.33	0.040408981	0.35916611	0.488712572
TAOK2	16p11.2	-0.040403683	0.359229155	0.488765318
LINC00114	21q22.2	-0.040398336	0.359292802	0.488778033
DGAT2L6	Xq13.1	-0.040397038	0.359308255	0.488778033
VPS33A	12q24.31	-0.040394826	0.35933459	0.488778033
ARMCX6	Xq22.1	-0.040394739	0.359335624	0.488778033
GGT7	20q11.22	-0.040375028	0.359570328	0.489064237
AIMP2	7p22.1	0.040371814	0.359608605	0.489083253
MICAL1	6q21	0.040363911	0.359702731	0.489178218
RAB9BP1	5q21.2-q21.3	-0.040359675	0.359753197	0.489213799
FAM47A	Xp21.1	0.040356239	0.359794138	0.489236423
RBM5	3p21.31	0.040348281	0.35988896	0.489332304
ANKRD26P1	16q11.2	-0.04034424	0.359937113	0.489364722
KRT2	12q13.13	-0.040327259	0.360139504	0.489606822
EFCAB14	1p33	-0.040303212	0.360426257	0.489963571
ZMYND11	10p15.3	0.040289491	0.360589927	0.490129725
ALOX5	10q11.21	0.040288883	0.36059718	0.490129725
RBM8A	1q21.1	-0.040274034	0.360774371	0.490337457
COLEC10	8q24.12	-0.040267	0.360858322	0.490401822
MAB21L1	13q13.3	0.040265984	0.360870451	0.490401822
NRAP	10q25.3	0.040261387	0.360925322	0.490443278
TPM3	1q21.3	-0.040251282	0.361045962	0.490574095
LINC01591	8q24.22	-0.040246467	0.361103456	0.490606522
CDK5R2	2q35	0.040245201	0.361118571	0.490606522
HAUS5	19q13.12	0.040236086	0.36122744	0.490721309
NCOR1	17p12-p11.2	0.040214376	0.361486792	0.491040498
FGL1	8p22	0.040212158	0.361513294	0.491043361
CDY2B	Yq11.222	-0.04020527	0.361595608	0.491122029
PRSS58	7q34	0.040199807	0.361660905	0.491171336
PCDHA2	5q31.3	0.04019815	0.361680711	0.491171336
PP7080	5p15.33	0.04018789	0.36180336	0.491304752
SSB	2q31.1	-0.040116162	0.362661558	0.492417475
SIGLEC6	19q13.41	0.040115314	0.362671708	0.492417475
SLC46A2	9q32	-0.040108868	0.362748893	0.492467908
HS6ST3	13q32.1	0.040108126	0.362757781	0.492467908
ZNF629	16p11.2	0.040095321	0.362911152	0.49259905
DBNDD1	16q24.3	-0.040095234	0.362912192	0.49259905
SAP30BP	17q25.1	-0.040093931	0.362927795	0.49259905
WDR43	2p23.2	0.040088374	0.362994373	0.49264981
NUP43	6q25.1	-0.040086724	0.36301414	0.49264981
PPP2R5C	14q32.31	-0.040080037	0.363094255	0.492695873
ZIM2	19q13.43	0.040078369	0.363114243	0.492695873
LOC441601	11p11.12	0.040077763	0.363121509	0.492695873
IQCF2	3p21.2	-0.040056714	0.363373783	0.493004937
NCKAP1	2q32.1	-0.040046952	0.363490829	0.49307319
BCHE	3q26.1	0.040046257	0.363499159	0.49307319
C3ORF79	3q25.2	-0.040045724	0.363505548	0.49307319
CCAR2	8p21.3	0.040044347	0.363522067	0.49307319
ANKRD17	4q13.3	0.040041915	0.363551224	0.493079513
RTP2	3q27.3	-0.040031687	0.363673889	0.493198094
ABHD16B	20q13.33	-0.040030539	0.363687655	0.493198094
MROH9	1q24.3	0.040028125	0.36371661	0.493204133
MC1R	16q24.3	0.040019077	0.363825161	0.493318098

CLRN2	4p15.32	0.040011774	0.36391278	0.493403668
PALM	19p13.3	0.040006398	0.363977287	0.493430468
LINC01341	1q44	0.040006041	0.36398157	0.493430468
HEXB	5q13.3	-0.039999191	0.364063788	0.493508691
CCNQP1	1q32.1	-0.039991018	0.364161885	0.493608427
ESRP1	8q22.1	-0.039986512	0.364215977	0.493648507
LARS2	3p21.31	-0.039983039	0.36425768	0.49367179
RPL10	Xq28	-0.039972618	0.364382805	0.493808124
GRID2	4q22.1-q22.2	-0.03996777	0.364441033	0.493820779
GAN	16q23.2	0.039967755	0.364441207	0.493820779
FNTA	8p11.21	-0.039948998	0.364666523	0.494092825
DGLUCY	14q32.11	-0.039932152	0.364868964	0.494333843
TAP1	6p21.32	0.039923207	0.364976474	0.494417113
CPN1	10q24.2	-0.03992101	0.365002884	0.494417113
ABLIM3	5q32	-0.039920689	0.365006747	0.494417113
R3HCC1	8p21.3	0.039918865	0.36502867	0.494417113
C10ORF105	10q22.1	-0.039911993	0.365111292	0.494495749
BTBD11	12q23.3	0.039896982	0.365291811	0.494706953
SAFB	19p13.3	0.039880049	0.365495513	0.494949524
SLC22A18AS	11p15.4	-0.039877964	0.365520589	0.494950185
LINC00293	8q11.1	-0.039864887	0.365677965	0.495129981
RSBN1L	7q11.23	0.039844966	0.365917767	0.495421302
LINC00159	21q22.11	-0.039842925	0.365942342	0.495421302
NKIRAS2	17q21.2	0.039822041	0.366193848	0.495728458
ADIPOR2	12p13.33	0.039809796	0.36634137	0.495894814
BET1	7q21.3	-0.039784353	0.366648019	0.496247417
TMEM44	3q29	-0.039784092	0.366651159	0.496247417
C6ORF223	6p21.1	0.039781487	0.366682566	0.496256559
TTC16	9q34.11	-0.03977247	0.366791287	0.496370327
CASKIN2	17q25.1	-0.039768722	0.366836483	0.496398118
ARMC12	6p21.31	-0.039752489	0.367032266	0.496617846
SCN1A	2q24.3	-0.039751168	0.367048202	0.496617846
STAC3	12q13.3	0.039737807	0.3672094	0.496802555
HSPA8	11q24.1	-0.039730252	0.36730057	0.496892505
PDE6G	17q25.3	-0.039724739	0.367367112	0.496949128
GABPB1-AS1	15q21.2	-0.039720179	0.367422152	0.496990184
GTSE1-DT	22q13.31	0.039713329	0.367504843	0.497068635
SNAP47	1q42.13	-0.039695083	0.367725168	0.497333218
CNTN1	12q12	0.039687544	0.367816225	0.49742295
GSC2	22q11.21	0.039682617	0.367875746	0.497470024
KLF11	2p25.1	0.039669119	0.368038821	0.497626539
RPUSD4	11q24.2	-0.039668945	0.36804093	0.497626539
NCL	2q37.1	0.039661477	0.368131179	0.497715134
GRIN2B	12p13.1	0.039637393	0.368422314	0.498075298
KRT17	17q21.2	0.039620315	0.368628843	0.49832104
BLNK	10q24.1	0.03961441	0.368700272	0.49838413
OR6C76	12q13.2	-0.039601364	0.368858111	0.498564008
KCTD2	17q25.1	-0.039596956	0.368911458	0.498602635
TRABD	22q13.33	-0.039594872	0.368936679	0.498603246
SKOR1	15q23	-0.039592725	0.368962652	0.498604873
UTY	Yq11.221	-0.039582592	0.369085308	0.498737146
EPB42	15q15.2	-0.039580161	0.369114738	0.498743433
NXT1	20p11.21	0.039569689	0.36924152	0.498881254
MILR1	17q23.3	0.039566997	0.369274116	0.498891809
SCEL	13q22.3	-0.039564305	0.369306714	0.498902365
AGAP1	2q37.2	0.039559963	0.369359294	0.498936881
SLC34A3	9q34.3	0.039557992	0.369383163	0.498936881
LYRM7	5q23.3-q31.1	-0.039556055	0.36940662	0.498936881

FAS	10q23.31	0.039541379	0.369584391	0.499143494
GEMIN5	5q33.2	0.039532261	0.369694866	0.499259201
PHOX2A	11q13.4	0.03950268	0.37005342	0.499709891
POC1A	3p21.2	0.039497352	0.370118019	0.499752826
USP32P2	17p11.2	0.039495963	0.370134867	0.499752826
PSMD13	11p15.5	-0.039488234	0.370228594	0.499845848
MIS18A	21q22.11	0.039484371	0.370275452	0.499875585
RNF207	1p36.31	-0.039472951	0.370413983	0.500029069
KIAA1143	3p21.31	-0.039466004	0.37049827	0.500109313
CD300LF	17q25.1	-0.039463746	0.370525666	0.500112757
EID2	19q13.2	-0.039455583	0.370624723	0.500212918
GOLGA8B	15q14	-0.039448549	0.370710094	0.500294596
DIO1	1p32.3	-0.039431574	0.370916172	0.500538283
RNF182	6p23	-0.039429579	0.370940393	0.500538283
MKKS	20p12.2	-0.039427361	0.370967334	0.500541084
MCOLN2	1p22.3	0.039422932	0.371021115	0.500580097
HPCA	1p35.1	0.039390604	0.371413842	0.501076379
STBD1	4q21.1	-0.039386112	0.371468425	0.501115595
TM7SF2	11q13.1	-0.039384115	0.371492699	0.501115595
TOMM40	19q13.32	-0.039368397	0.371683759	0.501339725
SRRM5	19q13.31	0.039355937	0.371835267	0.501510481
SNORA78	16p13.3	0.039350099	0.37190626	0.501572626
C12ORF74	12q22	0.039329773	0.372153525	0.501872477
TMC2	20p13	-0.039323581	0.372228861	0.50188715
ZNF518A	10q24.1	0.039321418	0.372255189	0.50188715
TECPR1	7q21.3	0.03932081	0.372262586	0.50188715
TSPY3	Yp11.2	0.039320683	0.372264135	0.50188715
NKAPD1	11q23.1	0.039318379	0.372292177	0.501891342
WDR89	14q23.2	-0.039313908	0.372346584	0.501931075
KANSL2	12q13.11	-0.039306482	0.372436978	0.502019309
MCM9	6q22.31	-0.03930049	0.37250992	0.502065831
PPDPFL	8q11.21	-0.039299549	0.372521374	0.502065831
ADAM30	1p12	0.039289692	0.372641396	0.502193969
SELENOI	2p23.3	0.039281125	0.372745721	0.502300935
SETD1B	12q24.31	0.039272875	0.372846202	0.502402708
CASC8	8q24.21	-0.039270463	0.37287559	0.502408676
CD40	20q13.12	0.039265233	0.372939295	0.502415007
STRAP	12p12.3	0.039264712	0.372945642	0.502415007
WDR20	14q32.31	-0.039263931	0.372955164	0.502415007
CTSL	9q21.33	-0.03925846	0.37302182	0.502471175
LONP2	16q12.1	-0.039255768	0.373054622	0.502481736
GID8	20q13.33	0.039246303	0.373169972	0.502603475
SCARNA23	Xp22.11	-0.039230847	0.373358372	0.502823579
TSEN15	1q25.3	-0.039225722	0.373420854	0.502874082
KRT28	17q21.2	0.039217181	0.373524996	0.502980679
KRTAP5-1	11p15.5	0.039170504	0.374094487	0.503713848
OR4A5	11q11	0.039153859	0.374297695	0.503953756
PATL2	15q21.1	0.039128897	0.374602559	0.504299621
SSR3	3q25.31	0.039128724	0.374604681	0.504299621
PTCHD4	6p12.3	0.039123778	0.374665101	0.504347231
PIK3C2G	12p12.3	-0.039114421	0.374779439	0.504467409
CCNYL1	2q33.3	-0.039100154	0.374953805	0.504668367
IFNL1	19q13.2	-0.039092444	0.375048055	0.504761472
LINC00999	10p11.1	0.039089389	0.3750854	0.504777985
ITIH6	Xp11.22	0.039084909	0.375140185	0.504787968
GFI1B	9q34.13	-0.039084681	0.375142971	0.504787968
HIST2H2AC	1q21.2	0.039071329	0.375306253	0.504973924
SNORA52	11p15.5	0.039057805	0.375471676	0.505162735

CCDC103	17q21.31	0.039055693	0.375497521	0.505163744
MMD2	7p22.1	-0.039053612	0.375522973	0.505164224
TRAPPC3L	6q22.1	0.039047063	0.375603115	0.505218266
MAOB	Xp11.3	-0.039044838	0.375630338	0.505218266
SYCP3	12q23.2	-0.039044176	0.37563844	0.505218266
CFHR4	1q31.3	-0.039033368	0.37577071	0.505362399
TYMSOS	18p11.32	0.039012795	0.376022582	0.505667351
ZNF704	8q21.13	0.038995166	0.376238477	0.505921907
LINC00698	3p14.2	0.038993235	0.37626214	0.505921907
MBLAC1	7q22.1	0.038986875	0.376340049	0.505992866
LOC100240734	12q13.13	0.038962344	0.376640658	0.506363217
GPATCH1	19q13.11	-0.038925001	0.377098558	0.506938323
ENKD1	16q22.1	-0.038923351	0.377118797	0.506938323
IL13	5q31.1	-0.038912035	0.377257633	0.50709109
RPPH1	14q11.2	-0.038908762	0.377297784	0.507111196
RIMS3	1p34.2	-0.038902163	0.377378771	0.507186184
ZNF540	19q13.12	-0.038892003	0.377503469	0.507319904
ACAP3	1p36.33	0.038884187	0.377599409	0.50741496
OR2F1	7q35	-0.038879444	0.377657634	0.507459327
KAT7	17q21.33	-0.038865256	0.377831857	0.507619348
WASHC2A	10q11.23	-0.038864606	0.377839845	0.507619348
C4ORF51	4q31.21	-0.038863586	0.377852375	0.507619348
IFNGR1	6q23.3	-0.038846152	0.378066526	0.507873152
KIAA1109	4q27	0.03884016	0.378140146	0.507938151
INKA2	1p13.2	-0.038819232	0.378397349	0.508249726
PLEK2	14q23.3-q24.1	0.038810201	0.378508375	0.508364931
GLCCI1	7p21.3	-0.038792052	0.378731554	0.508630741
BTF3P11	13q22.3	-0.038777101	0.378915466	0.508815368
DYTN	2q33.3	-0.038776766	0.378919582	0.508815368
EHD2	19q13.33	0.038771558	0.378983662	0.50886747
KYAT1	9q34.11	-0.038762353	0.37909693	0.508985607
MUC13	3q21.2	-0.038750294	0.379245352	0.509150923
CMPK1	1p33	-0.038747243	0.379282906	0.509167383
INSIG1	7q36.3	-0.038742467	0.379341703	0.509212356
RAB5A	3p24.3	0.038733696	0.379449691	0.50932335
FAM222A-AS1	12q24.11	-0.038717877	0.379644514	0.509522401
IPO5	13q32.2	0.038717544	0.379648609	0.509522401
SNORA26	4q12	-0.03870295	0.379828405	0.509729719
LRRC52-AS1	1q23.3-q24.1	-0.038696513	0.37990771	0.509802161
TK2	16q21	0.038683417	0.380069113	0.509984751
GDF1	19p13.11	0.038673388	0.380192735	0.510116628
TNS2	12q13.13	0.038665268	0.380292855	0.510193711
MARS2	2q33.1	-0.038664617	0.380300876	0.510193711
KCNH1	1q32.2	-0.03865959	0.38036287	0.51023298
TRHDE-AS1	12q21.1	-0.038658132	0.380380841	0.51023298
TSPAN1	1p34.1	0.0386479	0.380507039	0.510347895
PIGM	1q23.2	-0.038643558	0.380560597	0.510347895
DEFB124	20q11.21	0.038643247	0.38056444	0.510347895
NUDT2	9p13.3	0.038640953	0.380592733	0.510347895
TAAR5	6q23.2	-0.038640909	0.380593273	0.510347895
IL25	14q11.2	0.038631179	0.380713315	0.510457305
DNAJC14	12q13.2	0.038630185	0.380725582	0.510457305
PCAT4	4q21.21	0.038624621	0.380794236	0.510515349
PYY2	17q11.2	0.038610957	0.380962883	0.510707435
SNORA5B	7p13	0.03859837	0.381118261	0.510881707
B3GALNT1	3q26.1	0.038590326	0.381217586	0.510948238
FAM83G	17p11.2	-0.038590239	0.381218658	0.510948238
FOXD3	1p31.3	0.03858441	0.381290652	0.511010708

OR6K2	1q23.1	-0.038582046	0.38131985	0.511015816
UBXN4	2q21.3	-0.038571135	0.381454615	0.511162389
KHDC1	6q13	-0.038564449	0.381537221	0.511239051
NUMA1	11q13.4	0.038559369	0.381599978	0.511281687
CCDC114	19q13.33	-0.038557762	0.381619838	0.511281687
RDX	11q22.3	0.038552812	0.381681004	0.511329602
PRAMEF5	1p36.21	-0.038536266	0.381885506	0.511569524
ASNSD1	2q32.2	-0.038528497	0.381981551	0.511664135
GUSBP4	6p11.2	-0.038525024	0.382024498	0.511687613
RABL6	9q34.3	-0.038487857	0.382484217	0.512245909
CIRBP-AS1	19p13.3	-0.038487211	0.382492214	0.512245909
RNF144B	6p22.3	0.038478044	0.382605648	0.512363737
WIPF2	17q21.2	-0.038468145	0.382728177	0.512493728
CCDC38	12q23.1	-0.038440996	0.383064334	0.512909741
CCDC13	3p22.1	-0.03842121	0.383309422	0.513203769
RNF114	20q13.13	-0.038399195	0.383582248	0.513534893
MAP1S	19p13.11	0.038355516	0.384123904	0.514225856
KRT77	12q13.13	0.038331088	0.384427024	0.514515989
LRRC45	17q25.3	-0.038331027	0.384427781	0.514515989
TSC22D1	13q14.11	0.038330506	0.384434248	0.514515989
EFCAB2	1q44	-0.038329811	0.384442871	0.514515989
SNX15	11q13.1	-0.038320086	0.384563603	0.514643353
LCE6A	1q21.3	-0.038296947	0.38485093	0.514993633
FUT4	11q21	0.038264249	0.385257181	0.515502995
CSNK2A3	11p15.4	0.038256433	0.385354321	0.515598703
KDM8	16p12.1	-0.038242887	0.385522722	0.515789738
CDC14B	9q22.32-q22.33	0.038231642	0.38566256	0.515942535
GOLGA2	9q34.11	0.03822769	0.385711709	0.515973997
NHLRC4	16p13.3	0.038223869	0.385759233	0.516003279
RBMY1B	Yq11.223	-0.038221591	0.38578757	0.516006896
FAM136A	2p13.3	-0.038211104	0.385918028	0.516114248
SMCO3	12p12.3	-0.038211017	0.385919109	0.516114248
KANK1	9p24.3	0.038207369	0.385964486	0.516140644
NUPR1	16p11.2	-0.038203635	0.386010948	0.516168486
SEPTIN12	16p13.3	-0.038178713	0.386321136	0.516530929
SNX8	7p22.3	-0.03817576	0.386357896	0.516530929
KLRA1P	12p13.2	0.038175674	0.386358977	0.516530929
TDRD1	10q25.3	-0.038171966	0.386405135	0.516538927
TJP1	15q13.1	-0.038171071	0.386416279	0.516538927
SNAI3-AS1	16q24.2	0.038164473	0.386498437	0.516614445
POLR3B	12q23.3	-0.038154573	0.386621725	0.516744926
ZNF879	5q35.3	-0.038141372	0.386786167	0.516930391
TBX4	17q23.2	-0.038138854	0.386817542	0.516938001
SPN	16p11.2	0.038132602	0.386895444	0.517007786
CA5BP1	Xp22.2	-0.038116668	0.38709402	0.517238807
OR52N1	11p15.4	0.038105851	0.387228863	0.517364684
LINC00174	7q11.21	-0.038104987	0.387239627	0.517364684
OR1L4	9q33.2	-0.038101002	0.387289317	0.517384243
SUPT7L	2p23.3	0.03809969	0.387305671	0.517384243
TMED7	5q22.3	-0.038090832	0.38741612	0.517497446
MGAT1	5q35.3	0.038071902	0.387652243	0.517778492
FTX	Xq13.2	-0.038067216	0.387710704	0.517822218
SSR4P1	21q22.3	0.038064261	0.387747573	0.517837102
RABGGTB	1p31.1	-0.038059225	0.387810408	0.51788666
UGT8	4q26	0.038051757	0.387903604	0.517966327
PPTC7	12q24.11	0.038048369	0.387945893	0.517966327
ZNF582	19q13.43	0.038048196	0.38794805	0.517966327
TPRKB	2p13.1	-0.038046198	0.387972989	0.517966327

FAM3B	21q22.3	-0.038040987	0.388038025	0.518018797
ANO9	11p15.5	0.038033519	0.388131255	0.518106102
PDIA5	3q21.1	0.038029525	0.388181127	0.518106102
LDOC1	Xq27.1	0.038028917	0.388188717	0.518106102
SPO11	20q13.31	0.03802703	0.388212275	0.518106102
USP9Y	Yq11.221	-0.038025441	0.388232114	0.518106102
PHLDB3	19q13.31	-0.038022404	0.38827004	0.518122367
ITGB3BP	1p31.3	-0.038009812	0.388427295	0.518268146
SPANXB1	Xq27.1	0.038009534	0.388430776	0.518268146
TVP23C	17p12	-0.038004168	0.3884978	0.518323219
KCTD19	16q22.1	-0.037996066	0.388599011	0.518423891
ZNF451	6p12.1	0.037986106	0.388723471	0.518555565
ABHD17C	15q25.1	-0.037979245	0.388809204	0.51860592
ZFAND4	10q11.22	0.03797751	0.388830889	0.51860592
UBE2A	Xq24	-0.037976901	0.388838507	0.51860592
UVRAG	11q13.5	0.037968391	0.38894488	0.518713425
TMEM170B	6p24.2	0.037958925	0.389063213	0.518836865
WDR12	2q33.2	-0.037950154	0.38917288	0.518948734
NF1P2	15q11.2	0.037942425	0.389269541	0.519030476
CAMKV	3p21.31	0.037941129	0.389285749	0.519030476
CAPSL	5p13.2	0.037934319	0.389370928	0.519109661
NGDN	14q11.2	-0.037924624	0.389492217	0.519236976
GPR158	10p12.1	0.037892364	0.389895955	0.519740784
CDKN2AIPNL	5q31.1	-0.037882247	0.390022624	0.519875209
LOC90784	2p11.2	-0.037864358	0.390246656	0.520125604
PIAS2	18q21.1	0.037862535	0.390269499	0.520125604
TMEM258	11q12.2	-0.037861058	0.390287991	0.520125604
OR2A4	6q23.2	-0.037851638	0.390406007	0.520248439
CETN1	18p11.32	-0.037834485	0.390620959	0.520500424
EDA	Xq13.1	-0.037827713	0.390705829	0.520557271
OCIAD2	4p11	-0.037825976	0.39072761	0.520557271
TUBBP6	7p11.2	0.037824892	0.390741201	0.520557271
PRSS42P	3p21.31	-0.037820474	0.390796579	0.520596594
VHLL	1q22	-0.037815393	0.39086028	0.520646998
PTGES	9q34.11	0.037789764	0.39118169	0.521040655
BCLAF3	Xp22.12	0.037786985	0.391216548	0.521052608
DEFB1	8p23.1	-0.037771437	0.391411632	0.521277945
CCDC124	19p13.11	-0.037768576	0.391447534	0.521291272
NINL	20p11.21	0.037749558	0.391686234	0.521556663
ARR3	Xq13.1	0.03774857	0.39169864	0.521556663
GOLGA7	8p11.21	0.037743133	0.3917669	0.52161305
RGS19	20q13.33	0.037733319	0.391890125	0.521742606
CCDC73	11p13	-0.037709699	0.392186808	0.522103064
ZNF549	19q13.43	0.03769676	0.392349386	0.522284959
HLA-J	6p22.1	-0.037663198	0.392771289	0.522812011
APLN	Xq26.1	0.037658986	0.392824262	0.52284795
ZNF526	19q13.2	0.037637363	0.393096244	0.523175364
ADGRL3	4q13.1	0.0376281	0.393212795	0.523295885
CPNE7	16q24.3	-0.037614959	0.393378176	0.52348137
DHFR	5q14.1	0.037603843	0.393518095	0.523632949
TSPY2	Yp11.2	0.037586866	0.393731869	0.523861513
OR13C3	9q31.1	-0.037584294	0.393764259	0.523861513
CD3EAP	19q13.32	0.037584002	0.393767936	0.523861513
PCK1	20q13.31	0.037579559	0.393823888	0.523901325
TTY15	Yq11.221	-0.037574748	0.393884484	0.523940264
CAPN15	16p13.3	-0.037573103	0.393905214	0.523940264
INPP5A	10q26.3	0.037561553	0.394050716	0.524099169
PRG3	11q12.1	0.037557878	0.394097023	0.524121593

LIN7B	19q13.33	-0.037556082	0.39411965	0.524121593
FAM153A	5q35.3	-0.037551424	0.394178358	0.524165038
DYRK1B	19q13.2	-0.037547138	0.394232366	0.524172671
LTC4S	5q35.3	0.037546836	0.394236176	0.524172671
SHISA3	4p13	-0.0375428	0.394287039	0.524205673
HIST1H2AD	6p22.2	0.037537093	0.394358978	0.524212782
MYOD1	11p15.1	-0.037536339	0.394368481	0.524212782
TAF4A	3p14.1	-0.037534545	0.3943911	0.524212782
UBQLNL	11p15.4	-0.037534112	0.394396552	0.524212782
NELL2	12q12	0.037528902	0.394462237	0.524265472
GNG11	7q21.3	0.037523431	0.394531214	0.524322529
CCDC141	2q31.2	-0.037503416	0.394783634	0.524623353
RCE1	11q13.2	0.037490433	0.39494742	0.524806361
TMEM45B	11q24.3	0.037483225	0.395038363	0.524892558
SEC22B	1p12	-0.037478796	0.39509425	0.524932167
MND1	4q31.3	0.037461863	0.39530798	0.52518147
NUP153	6p22.3	0.037455958	0.395382528	0.525225478
SGSM1	22q11.23	-0.037451009	0.395445013	0.525225478
PTPN4	2q14.2	-0.037451008	0.395445023	0.525225478
MPLKIP	7p14.1	0.037450618	0.395449947	0.525225478
NECAB2	16q23.3	-0.037448409	0.395477842	0.525225478
ADGRL2	1p31.1	0.03744684	0.395497655	0.525225478
GAGE12J	Xp11.23	-0.037423465	0.395792881	0.525582868
FMO9P	1q24.1	-0.037420799	0.395826566	0.525592927
PCMT1	6q25.1	-0.03740125	0.396073594	0.525860599
DOP1B	21q22.12	0.0373996	0.396094447	0.525860599
MAPK8IP3	16p13.3	0.037398645	0.39610652	0.525860599
CDRT15P1	17p12	0.037391414	0.396197917	0.525947248
SI	3q26.1	-0.037383066	0.396303448	0.526052649
TEX2	17q23.3	-0.03736443	0.396539102	0.526328684
C7ORF25	7p14.1	0.037359828	0.396597314	0.526328684
CRHBP	5q13.3	0.037359074	0.396606848	0.526328684
SPRED2	2p14	0.037358352	0.396615987	0.526328684
P2RY11	19p13.2	0.037333437	0.396931204	0.52671227
CCER1	12q21.33	0.03733031	0.396970773	0.526730054
NEDD4	15q21.3	0.037325614	0.397030218	0.526749698
ARAP3	5q31.3	0.037325006	0.397037912	0.526749698
TGM1	14q12	-0.03731502	0.397164312	0.526882668
ZNF705A	12p13.31	0.037308178	0.397250931	0.526922463
ATP6V0A4	7q34	0.037306816	0.397268182	0.526922463
ALOX12B	17p13.1	0.037306448	0.397272837	0.526922463
PCDHA8	5q31.3	-0.037303943	0.397304556	0.526929814
HSD17B3	9q22.32	-0.03729174	0.397459095	0.527100045
ANXA13	8q24.13	0.037285281	0.397540903	0.527173806
LRRC14	8q24.3	0.037270037	0.397734018	0.527395151
FAM66A	8p23.1	-0.037258904	0.397875096	0.527547469
RNASEH2A	19p13.13	0.037242554	0.398082336	0.52778674
RAB40A	Xq22.2	-0.03724053	0.398107991	0.52778674
UTP6	17q11.2	-0.037231655	0.398220518	0.527901154
DGCR8	22q11.21	0.037205516	0.398552026	0.528305827
AKR7A2P1	1p13.2	0.037198259	0.398644101	0.528366215
GTF3C3	2q33.1	-0.037197788	0.398650078	0.528366215
ZBTB44	11q24.3	0.037186585	0.398792225	0.528519817
TAS2R43	12p13.2	0.037164744	0.399069464	0.528852423
TYW5	2q33.1	-0.037160534	0.399122917	0.528888441
CCDC190	1q23.3	-0.037147691	0.399286004	0.529065089
LOC340357	8p23.1-p22	-0.037145897	0.399308788	0.529065089
CENPT	16q22.1	0.037143687	0.399336851	0.529067449

GOLGA6L9	15q25.2	-0.037136567	0.399427298	0.529148574
CMTR1	6p21.2	0.037133527	0.399465907	0.529148574
LRRC24	8q24.3	0.037132658	0.399476944	0.529148574
C22ORF42	22q12.3	-0.037106586	0.399808245	0.529552571
LLPH	12q14.3	0.037098271	0.399913936	0.529657709
RND2	17q21.31	0.037095276	0.399952011	0.529673288
EIF1AY	Yq11.223	-0.037080729	0.400136963	0.529883367
VPS9D1	16q24.3	0.03707248	0.400241871	0.529987427
DDI2	1p36.21	0.037052768	0.400492614	0.53028457
RBFOX3	17q25.3	0.037049339	0.40053625	0.530307466
DBX2	12q12	-0.037041296	0.400638595	0.530408084
CAPN5	11q13.5	-0.03703375	0.400734629	0.530500335
USP53	4q26	-0.037020725	0.400900427	0.53065486
C12ORF45	12q23.3	0.037018988	0.400922548	0.53065486
TMEM174	5q13.2	0.037018368	0.40093044	0.53065486
CPA2	7q32.2	0.037010936	0.401025064	0.530745203
ATP6V1B1	2p13.3	0.036994499	0.401234387	0.530962652
POTEG	14q11.2	0.036993892	0.401242119	0.530962652
LRRC37A	17q21.31	-0.036978695	0.401435722	0.531183928
CAPN1	11q13.1	-0.036975221	0.40147998	0.531207572
GUCY2GP	10q25.2	-0.03697273	0.401511719	0.531214651
ZNF322P1	9q22.33	0.036966018	0.401597256	0.5312929
PPP4R3B	2p16.1	-0.036955856	0.40172677	0.53141782
CEP104	1p36.32	0.036954467	0.40174448	0.53141782
BIN3-IT1	8p21.3	0.036947003	0.401839628	0.531480204
SPDYE4	17p13.1	0.036945496	0.40185884	0.531480204
PAPOLB	7p22.1	0.036943373	0.401885908	0.531480204
SEMA4A	1q22	-0.036942483	0.401897251	0.531480204
TSHZ1	18q22.3	0.036934668	0.401996904	0.531577066
ACER2	9p22.1	0.03690979	0.402314208	0.531946567
BNIP3L	8p21.2	0.036908616	0.402329184	0.531946567
TMEM51-AS1	1p36.21	-0.036902277	0.402410064	0.53201856
NPBWR2	20q13.33	0.03689953	0.402445119	0.532029963
ZNF263	16p13.3	-0.036897327	0.402473224	0.532032177
CDA	1p36.12	-0.036891856	0.402543038	0.532089524
C3ORF18	3p21.31	-0.036876052	0.402744766	0.532321217
KLRC4	12p13.2	0.036864292	0.402894911	0.53245645
SLC43A2	17p13.3	0.036863894	0.402899982	0.53245645
CD27-AS1	12p13.31	0.036857121	0.402986475	0.532515705
C7ORF61	7q22.1	-0.036855736	0.403004168	0.532515705
APOBEC3F	22q13.1	0.036854168	0.403024181	0.532515705
DCP1B	12p13.33	-0.036850955	0.403065216	0.53253497
SCGB1D2	11q12.3	-0.036846683	0.403119783	0.53257211
STMP1	7q33	0.036843487	0.403160604	0.532591086
SECTM1	17q25.3	0.036835325	0.403264881	0.532693881
AMER3	2q21.1	-0.036819424	0.403468057	0.532889665
PMCHL1	5p14.3	-0.036816881	0.403500551	0.532889665
TNP1	2q35	-0.036816271	0.40350835	0.532889665
HSPA12A	10q25.3	0.036815439	0.403518985	0.532889665
TSSC4	11p15.5	-0.036789821	0.403846465	0.533287152
NDUFA5	7q31.32	-0.036770804	0.40408968	0.533573319
ATP5F1EP2	13q12.2	-0.036766201	0.404148553	0.533604523
PI4KB	1q21.3	-0.036764812	0.404166327	0.533604523
WDR3	1p12	0.036761512	0.404208542	0.53362526
TPP2	13q33.1	0.036755607	0.404284092	0.533689998
CBWD1	9p24.3	-0.036728513	0.40463084	0.534076417
ACYP1	14q24.3	0.036727647	0.404641937	0.534076417
NEBL	10p12.31	-0.036726516	0.404656409	0.534076417

LINC00895	22q11.21	-0.036724086	0.404687517	0.534082457
KRTAP10-7	21q22.3	-0.036708158	0.404891471	0.534316594
MBD1	18q21.1	0.036704112	0.404943288	0.534349943
IFITM3	11p15.5	0.036692041	0.405097897	0.534518921
ASH1L-AS1	1q22	-0.036674153	0.405327094	0.534786288
TNNT3	11p15.5	0.036663055	0.405469319	0.534919232
TPD52L3	9p24.1	0.036662144	0.405481002	0.534919232
KRTAP10-11	21q22.3	0.036641613	0.405744204	0.535231378
TBC1D28	17p11.2	0.036637119	0.405801834	0.535272323
FAM138E	15q26.3	-0.036623583	0.40597543	0.535466218
ONECUT3	19p13.3	-0.036617341	0.406055499	0.535514547
ATG4B	2q37.3	-0.036616579	0.406065278	0.535514547
DOC2A	16p11.2	-0.036603858	0.406228485	0.535622682
SNORA70	Xq28	0.036603708	0.406230412	0.535622682
TCP10L2	6q27	-0.036600192	0.406275536	0.535622682
RBBP5	1q32.1	0.036599993	0.406278086	0.535622682
CDHR3	7q22.3	0.036599819	0.406280314	0.535622682
PPP1R14C	6q25.1	-0.036592612	0.406372812	0.535709542
YWHAQ	2p25.1	0.036587922	0.406432998	0.535753798
IGBP1P1	14q13.2	-0.036580989	0.406521992	0.53583602
ANKS1A	6p21.31	0.036577328	0.406568993	0.535862884
UBE2I	16p13.3	0.036569773	0.40666599	0.535955635
SATB2	2q33.1	0.036562566	0.40675854	0.53601624
RTN4	2p16.1	0.036562044	0.40676523	0.53601624
CNOT6	5q35.3	0.036559657	0.406795887	0.53602155
GNRH2	20p13	0.036556118	0.406841342	0.536046355
FAM27B	9q21.11	-0.036553376	0.406876552	0.536057661
CYP4X1	1p33 1	0.036544329	0.406992758	0.536175669
ASCL3	11p15.4	-0.036523697	0.407257858	0.536489802
LOC100131496	20q13.12	0.036517099	0.407342647	0.536566384
KRTAP10-4	21q22.3	-0.036499893	0.407563827	0.53680731
UGT2B7	4q13.2	-0.036498722	0.407578884	0.53680731
TP53I13	17q11.2	-0.036488666	0.407708177	0.536936752
WWP1	8q21.3	0.036486929	0.407730511	0.536936752
SPEF1	20p13	-0.036483118	0.407779523	0.536966167
LINC01139	1q43	0.036472295	0.407918732	0.537114342
ACBD3	1q42.12	0.036464959	0.408013099	0.537182223
LINC00634	22q13.2	0.036464139	0.408023656	0.537182223
RAB3A	19p13.11	-0.036459923	0.408077899	0.537193666
JKAMP	14q23.1	-0.036459315	0.40808572	0.537193666
UBAP2L	1q21.3	-0.036457231	0.408112535	0.537193836
UBE3B	12q24.11	-0.036452281	0.408176227	0.537225065
ZNF268	12q24.33	-0.036451239	0.408189636	0.537225065
NOTUM	17q25.3	0.036443423	0.408290215	0.537322146
SPACA5	Xp11.23	-0.036440703	0.408325227	0.537322146
RAET1K	6q25.1	-0.036439285	0.408343477	0.537322146
RXFP4	1q22	-0.036430917	0.408451192	0.537428753
KAZALD1	10q24.31	0.036423103	0.40855179	0.537525983
ABRACL	6q24.1	-0.036405822	0.408774319	0.537783611
IRX3	16q12.2	-0.036398702	0.408866035	0.53786912
RPP14	3p14.3	-0.036394707	0.408917491	0.537901659
TENT5D	Xq21.1	-0.036382954	0.409068915	0.538065687
PAX8	2q14.1	-0.036378339	0.409128378	0.538108739
RBBP4	1p35.1	-0.036373258	0.409193852	0.538159692
LRRTM4	2p12	0.036366832	0.409276665	0.538198286
ITSN2	2p23.3	-0.036366832	0.40927667	0.538198286
APOBEC1	12p13.31	-0.036359408	0.409372366	0.538288963
SCGB2B2	19q13.11	-0.036351483	0.409474533	0.538388135

MED16	19p13.3	-0.036349117	0.409505031	0.538393068
CCR3	3p21.31	-0.036346522	0.40953849	0.538401894
TNFSF18	1q25.1	-0.036343517	0.409577234	0.538417667
GNL2	1p34.3	-0.036338089	0.409647235	0.538474522
GPRASP2	Xq22.1	-0.036316379	0.409927249	0.538807413
ARHGEF19	1p36.13	0.036304569	0.410079625	0.538972503
JHY	11q24.1	-0.036298838	0.410153584	0.539034514
DLGAP1	18p11.31	-0.036291877	0.410243413	0.539117373
NEO1	15q24.1	-0.036284857	0.410334032	0.539201258
FILIP1	6q14.1	0.036277562	0.410428198	0.539289793
CAPRN1	11p13	0.036273047	0.410486497	0.539331192
TSSK6	19p13.11	-0.036269747	0.410529104	0.539345481
NCOA2	8q13.3	0.036268054	0.410550959	0.539345481
UBE2Z	17q21.32	0.036251945	0.410759	0.539583573
FAM170A	5q23.1	0.036241402	0.410895195	0.539727262
MYO15A	17p11.2	-0.036232407	0.411011403	0.539834671
AP4M1	7q22.1	-0.036229454	0.411049564	0.539834671
PRKAR1B	7p22.3	-0.036228846	0.411057418	0.539834671
OR12D2	6p22.1	-0.036211258	0.41128473	0.540097959
SEPTIN7P9	10p11.1	0.036195221	0.411492049	0.540328891
TEKT4P2	21p11.2	-0.036193503	0.411514269	0.540328891
TGIF2LY	Yp11.2	0.036189212	0.411569758	0.540366503
PRSS38	1q42.13	0.036172668	0.411783723	0.540612167
PTPRS	19p13.3	0.036159983	0.411947825	0.540792338
NCDN	1p34.3	-0.036156683	0.411990521	0.540805878
OSBPL6	2q31.2	0.036155033	0.41201187	0.540805878
ABCA5	17q24.3	-0.036144179	0.412152341	0.540954986
HTN3	4q13.3	-0.036139661	0.412210818	0.540996464
SLC9B1	4q24	0.0361128	0.412558567	0.54141756
PNKP	19q13.33	-0.036108141	0.412618908	0.541461448
DNAH1	3p21.1	0.036100846	0.412713383	0.541531264
OR10S1	11q24.1	-0.036099879	0.412725914	0.541531264
XKR4	8q12.1	0.036078745	0.412999716	0.541829457
SLC25A36	3q23	-0.036078182	0.413007014	0.541829457
SRSF2	17q25.1	-0.036064635	0.413182576	0.54201571
MED23	6q23.2	0.036063072	0.413202836	0.54201571
MYBPC3	11p11.2	0.036046704	0.413415023	0.542258709
UBE2L3	22q11.21	-0.036032678	0.413596897	0.54246192
GAMT	19p13.3	-0.036029553	0.413637432	0.542479738
FAM9B	Xp22.31	0.036026774	0.413673471	0.542491659
INSM2	14q13.2	0.036023091	0.413721244	0.542518966
GNG10	9q31.3	0.036014963	0.413826681	0.542621879
LOC145474	14q24.2	0.036009602	0.413896241	0.542672368
SLCO1B3	12p12.2	-0.03600784	0.413919103	0.542672368
PTTG2	4p14	0.03599644	0.414067029	0.542803791
DEFA6	8p23.1	-0.035995959	0.414073275	0.542803791
DEFB105A	8p23.1	-0.03598619	0.41420006	0.542934636
PLCB4	20p12.3-p12.2	0.035973628	0.414363136	0.543095988
SULT1E1	4q13.3	-0.035972552	0.414377113	0.543095988
NOVA1	14q12	0.035960655	0.414531597	0.543263089
ZNF761	19q13.42	0.035948271	0.414692425	0.543432972
KRT33A	17q21.2	-0.035945765	0.414724978	0.543432972
ZDHHC19	3q29	-0.035941288	0.414783139	0.543432972
UBE4B	1p36.22	-0.035940717	0.414790565	0.543432972
TNIP1	5q33.1	0.035940282	0.414796205	0.543432972
ARMH1	1p34.1	-0.03593694	0.41483963	0.543454493
CYP20A1	2q33.2	-0.035931772	0.414906771	0.543469084
RPL23AP82	22q13.33	-0.035928733	0.414946263	0.543469084

SRM	1p36.22	0.035927083	0.414967702	0.543469084
SATB1	3p24.3	0.035926041	0.414981243	0.543469084
CHST10	2q11.2	-0.035925694	0.414985757	0.543469084
CCDC105	19p13.12	-0.035920976	0.41504706	0.543514007
ROBO2	3p12.3	-0.035915666	0.415116073	0.54356902
GBA	1q22	-0.035913189	0.41514827	0.543575822
SNX21	20q13.12	0.035907284	0.415225026	0.543640961
HTR5A	7q36.2	0.035898229	0.415342736	0.543759708
SPRTN	1q42.2	0.035882319	0.415549616	0.543995172
CCL16	17q12	-0.035876673	0.415623048	0.544042659
NKG7	19q13.41	0.035872548	0.415676698	0.544042659
MUL1	1p36.12	-0.035872288	0.415680087	0.544042659
TCN1	11q12.1	0.035871219	0.415693996	0.544042659
GRIN2A	16p13.2	0.035840794	0.416089865	0.544525353
KL	13q13.1	0.035826221	0.416279555	0.544738182
ZNF808	19q13.41	0.03581541	0.416420317	0.54488696
LIPI	21q11.2	0.035793062	0.416711372	0.545232364
HIST1H4J	6p22.1	0.035785928	0.416804305	0.545318038
STATH	4q13.3	0.035782059	0.416854719	0.545318038
VLDLR-AS1	9p24.2	0.035781573	0.416861042	0.545318038
GAPT	5q11.2	0.035779718	0.41688521	0.545318038
PSMB9	6p21.32	0.035768343	0.417033449	0.545476499
DGKK	Xp11.22	-0.035760551	0.417135002	0.545541336
C16ORF78	16q12.1	0.035760381	0.41713722	0.545541336
C1QTNF7	4p15.32	0.035750888	0.417260959	0.545667713
NDUFAF5	20p12.1	-0.035747849	0.417300583	0.54568408
LINC02203	15q11.2	0.035744085	0.417349648	0.545712791
OR52E4	11p15.4	0.035737691	0.417433025	0.545786359
BLOC1S6	15q21.1	0.03573161	0.417512324	0.545854587
TTY16	Yp11.2	-0.035723068	0.417623726	0.545964775
GUSB	7q11.21	-0.035708598	0.417812492	0.546176081
CHRNA5	15q25.1	0.035705732	0.417849881	0.546189487
ETNPPL	4q25	0.035691354	0.418037499	0.54639925
ARSK	5q15	0.035652848	0.418540219	0.547020816
CLEC1A	12p13.2	0.035648594	0.418595772	0.547057904
F8A1	Xq28	0.035638433	0.418728496	0.547195834
FKBP1AP1	19q13.43	0.035630538	0.418831644	0.547295098
C10ORF88	10q26.13	0.035616636	0.419013299	0.547496931
PHLPP1	18q21.33	0.03560665	0.41914382	0.547631927
AIDA	1q41	0.035591106	0.419347027	0.547823392
CHD3	17p13.1	0.035590498	0.419354975	0.547823392
NUP85	17q25.1	0.035589195	0.419372006	0.547823392
PPP1R15A	19q13.33	-0.035586721	0.419404356	0.547830101
PKN2	1p22.2	0.03558329	0.419449219	0.547853152
FAM200B	4p15.32	-0.035579643	0.419496914	0.547879899
USP30	12q24.11	-0.035572175	0.419594585	0.547971908
MTHFD1	14q23.3	0.03556957	0.419628659	0.547980857
BCL9	1q21.2	0.035564099	0.419700221	0.548017247
NPAP1	15q11.2	0.035563277	0.419710974	0.548017247
YY1	14q32.2	0.035560191	0.41975134	0.548034407
RETNLB	3q13.13	0.035546776	0.419926865	0.548228017
OGA	10q24.32	0.035539871	0.420017221	0.548310419
MYL7	7p13	0.035520466	0.42027122	0.548606424
CCDC69	5q33.1	0.035502878	0.420501515	0.548866305
MT4	16q13	-0.035500069	0.420538296	0.548866305
C7ORF57	7p12.3	0.035499015	0.420552106	0.548866305
DNAJB13	11q13.4	0.035488861	0.420685099	0.549004281
LEO1	15q21.2	-0.035481776	0.420777913	0.549089808

SCARNA22	4p16.3	0.035472592	0.420898241	0.549211227
ATXN7L3B	12q21.1	0.035454683	0.42113295	0.549474472
RENBP	Xq28	-0.035453033	0.421154577	0.549474472
TMEM185B	2q14.2	0.035449559	0.421200108	0.549498262
MS4A2	11q12.1	0.035443177	0.42128377	0.549567949
HIST1H4L	6p22.1	0.03544132	0.421308127	0.549567949
CPSF6	12q15	0.035439139	0.421336721	0.549569636
SETDB1	1q21.3	-0.035433494	0.42141073	0.549600386
GRM7	3p26.1	-0.035433176	0.421414901	0.549600386
SNORA12	10q24.31	-0.035416053	0.421639467	0.549857451
NTNG1	1p13.3	-0.035413981	0.42166664	0.549857451
ARPIN	15q26.1	-0.035390335	0.421976866	0.550226345
SEC14L1P1	11p11.2	-0.035383563	0.422065747	0.550306593
PTF1A	10p12.2	0.035365341	0.422304934	0.550582793
HTR1D	1p36.12	0.035360045	0.422374469	0.550637786
SIX3	2p21	-0.035355332	0.422436351	0.550682797
HLA-C	6p21.33	0.035353169	0.42246476	0.550684169
POTEF	2q21.1	0.035346139	0.422557072	0.550718018
HNRNPA1P33	10q11.22	-0.035343703	0.422589066	0.550718018
LEMD2	6p21.31	0.035343269	0.422594769	0.550718018
ELMOD2	4q31.1	0.035342271	0.422607875	0.550718018
LRRC69	8q21.3	-0.035340776	0.422627518	0.550718018
KCNF1	2p25.1	0.035333846	0.422718545	0.550800979
ANGPT4	20p13	-0.035295827	0.423218136	0.551416251
EFHB	3p24.3	-0.035285479	0.423354174	0.551493125
GLDR	9p12	-0.035285348	0.423355902	0.551493125
OBSL1	2q35	-0.035285087	0.423359327	0.551493125
RASGRP2	11q13.1	0.035277619	0.423457523	0.551585346
FRA10AC1	10q23.33	-0.0352738	0.423507748	0.551615074
TMEM184A	7p22.3	0.035267546	0.423589994	0.551686502
FURIN	15q26.1	-0.035262075	0.42366195	0.55174452
ALOXE3	17p13.1	0.035256265	0.423738377	0.551757535
CT47A6	Xq24	0.035254749	0.423758327	0.551757535
TMEM252	9q21.11	-0.035253814	0.423770625	0.551757535
SPRR4	1q21.3	0.035252981	0.423781582	0.551757535
FOXA3	19q13.32	-0.035242103	0.423924706	0.551908183
SLC31A1	9q32	0.035217006	0.424254999	0.552302472
ELP1	9q31.3	0.035205196	0.424410483	0.552418547
PDE6D	2q37.1	-0.035204415	0.424420763	0.552418547
DAD1	14q11.2	-0.035203981	0.42442649	0.552418547
KLHL38	8q24.13	0.03519586	0.424533426	0.552522006
SNORA11	Xp11.21	-0.035182785	0.42470563	0.552710391
FIBP	11q13.1	0.035176105	0.424793618	0.55278916
OR4A16	11q11	0.03515902	0.425018726	0.553027356
DNAJC5B	8q13.1	-0.035158043	0.425031606	0.553027356
NAALADL2	3q26.31	-0.035154049	0.425084248	0.553042219
RUNDC3A	17q21.31	0.035152841	0.42510016	0.553042219
ZNF79	9q33.3	0.035150922	0.42512545	0.553042219
SCGN	6p22.2	-0.035143186	0.425227424	0.553136001
TEAD2	19q13.33	0.035139981	0.425269672	0.553136001
KDM4A	1p34.2-p34.1	-0.035139199	0.425279974	0.553136001
NOP56	20p13	0.035135639	0.425326911	0.553161307
FAM167A	8p23.1	0.035133207	0.425358967	0.553167259
MAGEA10	Xq28	0.035128247	0.425424365	0.553216567
GAB2	11q14.1	0.035123829	0.425482623	0.553256586
ATP2A2	12q24.11	0.035113235	0.425622335	0.553402506
STEAP4	7q21.12	0.035105593	0.425723127	0.553497807
OR10H3	19p13.12	-0.035101284	0.425779964	0.553535952

BCLAF1	6q23.3	0.035096475	0.425843409	0.553578207
USP22	17p11.2	0.035094651	0.425867467	0.553578207
SLC23A3	2q35	-0.035083934	0.426008871	0.553726259
TDRKH	1q21.3	0.035070163	0.426190618	0.553926726
DNAJB4	1p31.1	0.035064605	0.426263977	0.553986303
SMR3B	4q13.3	0.035026285	0.426769984	0.55460812
MAPK8IP1P2	17q21.31	0.035019145	0.426864307	0.554694887
TCEANC2	1p32.3	-0.035009897	0.426986496	0.554817852
IL20RB	3q22.3	0.034995569	0.427175844	0.555028061
CFAP300	11q22.1	-0.03499101	0.427236092	0.555070513
UPP1	7p12.3	0.034980632	0.427373278	0.555206052
HECTD2-AS1	10q23.32	0.034978946	0.427395578	0.555206052
PARM1	4q13.3	-0.034969951	0.427514498	0.555324699
HPSE2	10q24.2	0.034954393	0.427720246	0.555556107
KRT18P55	17q11.2	-0.034949771	0.427781385	0.555599669
DOK2	8p21.3	0.034935521	0.427969908	0.555808661
ZBTB24	6q21	0.034915851	0.428230202	0.556110829
RPRM	2q23.3	0.034913634	0.428259551	0.556113067
KPNB1	17q21.32	0.034906473	0.428354343	0.556146444
URGCP	7p13	0.034905865	0.42836239	0.556146444
MAP7D2	Xp22.12	0.034905431	0.428368138	0.556146444
LSM8	7q31.31	0.034896791	0.428482519	0.556247837
ZNF252P	8q24.3	0.034895357	0.428501501	0.556247837
NAXD	13q34	-0.03489106	0.428558407	0.556285835
ZNF345	19q13.12	0.034887455	0.428606138	0.55631192
SLC25A42	19p13.11	0.034884242	0.428648687	0.556331275
RB1	13q14.2	0.034877816	0.428733793	0.556405857
MAGEB2	Xp21.2	0.034868424	0.428858193	0.556508687
KRTAP10-5	21q22.3	-0.03486766	0.428868319	0.556508687
TCL1B	14q32.13	-0.034854637	0.429040847	0.556696678
HIGD1C	12q13.12	-0.034841032	0.429221145	0.556894724
ACCSL	11p11.2	-0.034836382	0.429282779	0.556917568
KHDC1L	6q13	0.034835256	0.429297699	0.556917568
PYCR3	8q24.3	-0.034833442	0.42932175	0.556917568
KCNJ13	2q37.1	0.034826676	0.429411434	0.556998013
POLR2J2	7q22.1	-0.034823109	0.429458728	0.557023467
TMEM266	15q24.2	0.034817116	0.42953818	0.557090624
C10RF158	1p36.21	-0.034813023	0.429592456	0.557125122
PRCD	17q25.1	0.034801487	0.42974544	0.557287619
CAST	5q15	0.034796622	0.429809959	0.557312526
TREML5P	6p21.1	0.034795864	0.429820019	0.557312526
OR8A1	11q24.2	0.034790812	0.429887028	0.557363511
TPK1	7q35	-0.034787678	0.429928605	0.557381518
UBR3	2q31.1	0.034778907	0.430044966	0.557487103
NPB	17q25.3	-0.034777364	0.430065436	0.557487103
MGAT3	22q13.1	0.034772308	0.430132527	0.55753817
COL17A1	10q25.1	-0.034753985	0.430375716	0.557817472
CCDC140	2q36.1	-0.03474923	0.43043883	0.557863357
ABCF1	6p21.33	0.034740177	0.430559016	0.557983197
GAGE2B	Xp11.23	-0.034735736	0.43061798	0.558014358
TUBA3C	13q12.11	0.034734191	0.430638502	0.558014358
GLRX5	14q32.13	-0.034732101	0.430666251	0.558014395
SMN1	5q13.2	-0.034707561	0.4309922	0.558395743
TCEAL2	Xq22.1	-0.034705766	0.431016048	0.558395743
CCL13	17q12	0.034694587	0.431164576	0.558552217
AQR	15q14	-0.034690506	0.431218812	0.55858653
GALNT13	2q23.3-q24.1	0.034687791	0.43125489	0.558597319
FAM180B	11p11.2	-0.034682101	0.431330507	0.558659317

GIMAP2	7q36.1	0.034679998	0.431358458	0.558659575
TBC1D3P2	17q23.2	-0.034673713	0.431442003	0.558707278
LONP1	19p13.3	-0.034673051	0.431450801	0.558707278
LSM6	4q31.22	-0.034665323	0.431553546	0.558799829
WRNIP1	6p25.2	0.034663499	0.431577791	0.558799829
FBXO7	22q12.3	-0.034658983	0.431637831	0.558816022
CYP1A1	15q24.1	0.034657128	0.431662504	0.558816022
SATB2-AS1	2q33.1	0.034655841	0.431679618	0.558816022
HSPA1B	6p21.33	0.034654207	0.431701339	0.558816022
MSTO2P	1q22	0.034643787	0.431839921	0.558959466
MDN1	6q15	0.034637882	0.431918463	0.558990736
HNRNPUL1	19q13.2	0.034637795	0.431919618	0.558990736
SNORA2C	12q13.11	0.034632329	0.431992327	0.559036438
ARL13A	Xq22.1	0.034630965	0.432010473	0.559036438
IL17A	6p12.2	0.034624394	0.432097895	0.559083593
HNRNPDL	4q21.22	0.034623032	0.432116007	0.559083593
COLEC11	2p25.3	-0.03462108	0.432141984	0.559083593
OR10G2	14q11.2	0.034619876	0.432158008	0.559083593
ARG1	6q23.2	-0.034612103	0.432261435	0.559181459
GSTCD	4q24	0.034609572	0.432295114	0.559189091
ZNF701	19q13.41	0.034604754	0.432359246	0.559236112
PDGFA	7p22.3	-0.034601236	0.432406065	0.559260736
RUFY3	4q13.3	-0.034586039	0.432608363	0.559486435
SLC27A4	9q34.11	-0.034573274	0.432778336	0.559670301
TM4SF19	3q29	-0.034559033	0.432968011	0.559879621
LOC391322	22q11.23	-0.03455073	0.433078615	0.559986673
SNRPB	20p13	-0.034540623	0.433213271	0.560119489
ING3	7q31.31	0.034538843	0.433236982	0.560119489
FLJ44635	Xq13.1	-0.034530202	0.433352134	0.560232384
RPE	2q34	-0.034519695	0.433492179	0.560377444
PTPRT	20q12-q13.11	-0.034516052	0.433540734	0.560404224
PRKAG3	2q35	0.034508173	0.433645774	0.560504009
PABPN1	14q11.2	0.034495988	0.433808245	0.560678008
VPS16	20p13	0.034484265	0.43396459	0.560844068
ZFP2	5q35.3	-0.034474323	0.4340972	0.560951681
RINT1	7q22.3	0.034473844	0.434103591	0.560951681
SLC25A13	7q21.3	-0.034438327	0.434577545	0.561528082
TMED4	7p13	-0.034371028	0.435476442	0.562653451
FASTK	7q36.1	-0.034367728	0.435520544	0.562674318
CLNS1A	11q14.1	-0.034350534	0.435750383	0.5629335
SHC1	1q21.3	0.034348537	0.435777085	0.5629335
POLD3	11q13.4	0.034344976	0.435824689	0.56295124
PRR7	5q35.3	0.034343326	0.43584675	0.56295124
SP1	12q13.13	0.034333427	0.435979129	0.563086095
EPOR	19p13.2	-0.03429982	0.436428696	0.563630567
PPY	17q21.31	-0.034294597	0.436498592	0.563684671
PSEN1	14q24.2	0.034278545	0.436713442	0.563925947
WNT8A	5q31.2	0.034268875	0.436842902	0.564056935
SPACA3	17q11.2	0.03426137	0.436943386	0.564122
HTR2C	Xq23	-0.034259534	0.436967972	0.564122
DENND6B	22q13.33	-0.034258833	0.436977364	0.564122
EIF2B1	12q24.31	-0.034253622	0.437047139	0.564175895
FAM151B	5q14.1	0.034247892	0.437123888	0.564238786
DEFB129	20p13	0.034237973	0.437256752	0.564374097
GALP	19q13.43	0.034235539	0.437289355	0.564379991
RAN	12q24.33	-0.034230958	0.437350732	0.564423017
CSN3	4q13.3	-0.034226805	0.437406373	0.564458638
NCCRP1	19q13.2	-0.034203819	0.437714413	0.564819944

NSUN5P1	7q11.23	-0.034196787	0.437808666	0.564874288
PLIN3	19p13.3	0.03419518	0.437830213	0.564874288
SNORA38B	17q24.2	0.034194397	0.437840712	0.564874288
FER1L6	8q24.13	0.034192067	0.437871948	0.564878384
SAMD5	6q24.3	-0.034189536	0.437905886	0.564885966
OR10V1	11q12.1	0.03418672	0.437943635	0.564898461
PROC	2q14.3	-0.034177336	0.438069474	0.565024573
VPS50	7q21.2-q21.3	0.034174166	0.43811198	0.565043193
GAR1	4q25	-0.03416826	0.438191186	0.56510914
ZNF792	19q13.11	0.034162789	0.438264566	0.565167566
FGF19	11q13.3	-0.03415301	0.438395758	0.565300532
CDC73	1q31.2	-0.034143077	0.438529025	0.565436157
MTHFSD	16q24.1	-0.034135956	0.438624579	0.56552314
CLHC1	2p16.1	-0.034133786	0.438653704	0.565524469
CD2AP	6p12.3	-0.034131528	0.438684015	0.565527328
TP53TG3B	16p11.2	0.034124527	0.438777981	0.565612241
TBKBP1	17q21.32	0.03412076	0.438828545	0.565616947
RAPGEF4-AS1	2q31.1	0.034120068	0.438837828	0.565616947
BSX	11q24.1	-0.034101533	0.439086679	0.565898239
TENT4B	16q12.1	0.03409879	0.439123518	0.565898239
P2RY14	3q25.1	0.034097532	0.439140407	0.565898239
SPERT	13q14.13	0.034093907	0.439189085	0.565906391
KCNK16	6p21.2	-0.034092874	0.439202958	0.565906391
IFNA17	9p21.3	-0.034065362	0.43957254	0.56634634
C1ORF146	1p22.1	0.034061818	0.439620165	0.566371451
NPIP3	16p12.2	0.034025238	0.440111861	0.566968627
OR52B2	11p15.4	0.034015233	0.440246402	0.567076564
CBX7	22q13.1	-0.034014817	0.440251989	0.567076564
WBP11P1	18q12.1	0.034006657	0.440361734	0.567181631
EMB	5q11.1	0.033999534	0.440457556	0.567268753
BMS1P2	10q11.22	0.033995886	0.44050662	0.567295647
OR5AN1	11q12.1	0.033988889	0.440600765	0.567380591
TRIM67	1q42.2	0.033978256	0.440743837	0.567528525
ZNF717	3p12.3	-0.033967924	0.44088288	0.567671254
PPM1M	3p21.2	0.033959241	0.440999769	0.567785439
PPP2R3A	3q22.2-q22.3	0.033956549	0.441036008	0.567795781
DBNL	7p13	0.033949688	0.441128366	0.567878366
KRTAP10-10	21q22.3	-0.03394102	0.441245079	0.567969792
SLC4A5	2p13.1	-0.033940223	0.441255816	0.567969792
SLC39A3	19p13.3	-0.033931886	0.441368083	0.568077973
IFNGR2	21q22.11	0.033919555	0.441534174	0.568255413
ZCWPW2	3p24.1	-0.033915564	0.441587946	0.568288285
TNIP3	4q27	0.033912914	0.441623647	0.568297898
B2M	15q21.1	0.033897064	0.441837206	0.56853637
LINC00938	12q12	0.0338876	0.441964763	0.568664153
DISP2	15q15.1	0.033878265	0.442090595	0.568789702
TAF1D	11q21	-0.033858161	0.442361651	0.569102067
AQP8	16p12.1	-0.03384981	0.442474267	0.56921057
POLM	7p13	-0.033840793	0.442595893	0.569300082
TCEANC	Xp22.2	-0.033840143	0.442604658	0.569300082
GTF2I	7q11.23	0.033838362	0.442628692	0.569300082
KRTDAP	19q13.12	0.033824837	0.44281116	0.56949838
CEP170B	14q32.33	-0.033814221	0.442954419	0.569646232
OR52M1	11p15.4	0.033811984	0.442984603	0.569648656
ALLC	2p25.3	0.033806624	0.443056944	0.569705288
SAGE1	Xq26.3	-0.03379589	0.443201846	0.569855209
CFC1B	2q21.1	-0.033788571	0.443300651	0.569945846
TTC21B	2q24.3	-0.033786085	0.443334216	0.569952598

HIF1AN	10q24.31	-0.033767675	0.443582826	0.570235793
POU3F3	2q12.1	0.033762709	0.443649909	0.570285611
DOCK6	19p13.2	0.033753173	0.44377872	0.570414765
LRRC8B	1p22.2	-0.033730726	0.444082033	0.570768186
HCFC1R1	16p13.3	-0.033723388	0.444181221	0.570859221
FAM135B	8q24.23	-0.033720441	0.444221047	0.570873957
LOC285593	5q35.2	0.033710227	0.444359135	0.5710122
FOXD4L3	9q21.11	-0.033708288	0.444385351	0.5710122
C14ORF93	14q11.2	-0.033703849	0.444445365	0.571052862
BET1P1	7q36.1	0.033692134	0.44460378	0.571219945
PSME1	14q12	-0.033683442	0.444721343	0.571334523
ZNF440	19p13.2	-0.033669288	0.444912814	0.57154403
RADIL	7p22.1	-0.033660518	0.445031486	0.571638613
ATAD1	10q23.31	-0.033659649	0.445043236	0.571638613
TREM2	6p21.1	-0.03365687	0.445080849	0.57165045
OR5P2	11p15.4	-0.033641224	0.445292604	0.571885933
C22ORF15	22q11.23	-0.033637365	0.445344842	0.571916534
SPRR1A	1q21.3	0.033631408	0.445425485	0.571967419
COG3	13q14.13	-0.033628039	0.445471088	0.571967419
NSUN7	4p14	-0.033626087	0.445497522	0.571967419
SYMPK	19q13.32	-0.033626043	0.44549812	0.571967419
CD300LB	17q25.1	0.033607545	0.445748605	0.572252514
OR1Q1	9q33.2	0.033593154	0.445943544	0.572466267
CNOT7	8p22	0.033562997	0.44635219	0.572923727
OR2A14	7q35	0.033562656	0.446356821	0.572923727
MAP11	7q22.1	0.033539639	0.446668865	0.573287698
CLASP2	3p22.3	0.033532605	0.446764249	0.573367992
LINC00899	22q13.31	0.033530825	0.446788391	0.573367992
CDYL	6p25.1	0.033524702	0.446871432	0.573438002
FAM174A	5q21.1	-0.033499692	0.447210714	0.573836797
WDR87	19q13.13	0.033494454	0.447281799	0.573891428
DLG1	3q29	0.033479894	0.447479406	0.574108377
DNAJB1	19p13.12	-0.033472946	0.447573718	0.574192783
PAGR1	16p11.2	-0.033456707	0.447794196	0.574425108
S100B	21q22.3	0.033455405	0.447811884	0.574425108
NUS1	6q22.1	0.033451844	0.447860233	0.574444171
UCK1	9q34.13	-0.033450108	0.447883819	0.574444171
CRYBB3	22q11.23	0.033404624	0.448501754	0.575200071
WFDC2	20q13.12	-0.033400002	0.448564579	0.575243994
DCANP1	5q31.1	0.033395527	0.448625407	0.575285351
DNM1P35	15q24.2	-0.033390105	0.448699109	0.575343211
LOC91450	15q24.3	0.033354881	0.449178117	0.575920733
PANX3	11q24.2	0.033349579	0.449250238	0.575952015
CCDC127	5p15.33	-0.033348073	0.449270734	0.575952015
PROK1	1p13.3	-0.033346778	0.44928835	0.575952015
CFAP161	15q25.1	-0.033336644	0.44942623	0.576092079
GHRH	20q11.23	-0.033328198	0.449541165	0.576202716
CIDEA	18p11.21 18	-0.033321335	0.449634566	0.576285738
ELSPBP1	19q13.33	-0.03331494	0.449721615	0.57636061
CALML6	1p36.33	-0.033301404	0.449905892	0.576560072
RPL36A	Xq22.1	0.033279775	0.450200427	0.576900795
OR5J2	11q12.1	-0.03327339	0.450287399	0.576975515
GSG1	12p13.1	-0.033254326	0.450547122	0.577247194
ANKRD30A	10p11.21	0.033253618	0.450556777	0.577247194
CDH18	5p14.3	0.033237365	0.450778272	0.577494216
SPC24	19p13.2	0.033227895	0.450907365	0.577622837
ZC3H3	8q24.3	0.033220941	0.451002164	0.577707513
DES	2q35	-0.033196106	0.451340847	0.57810456

ZNF205	16p13.3	-0.033189332	0.45143324	0.578186113
DHX16	6p21.33	-0.033102191	0.452622854	0.579665623
ALG6	1p31.3	-0.033100497	0.452645998	0.579665623
CSTF2T	10q21.1	-0.03309672	0.452697597	0.579694824
FOXN3-AS2	14q32.11	0.033083436	0.452879109	0.579890368
AP3B1	5q14.1	0.033067759	0.45309339	0.580127842
FOXD2-AS1	1p33	0.033055515	0.453260781	0.580305255
FGR	1p35.3	0.033046744	0.453380707	0.580421879
SNORA56	Xq28	0.033042926	0.453432921	0.580443815
COL9A3	20q13.33	-0.033041274	0.453455511	0.580443815
CYCS	7p15.3	0.033035802	0.453530342	0.580502688
LCE2D	1q21.3	0.033026112	0.453662889	0.580635424
RAC3	17q25.3	0.033022255	0.453715643	0.580666024
TCTN2	12q24.31	0.033008015	0.453910483	0.58087845
CDKL3	5q31.1	-0.032994294	0.454098258	0.581081809
PPARA	22q13.31	-0.032991341	0.454138669	0.581096581
LAPTM4B	8q22.1	0.032977013	0.4543348	0.58131059
HIST1H2AB	6p22.2	0.032973038	0.454389227	0.581343278
THUMPD3	3p25.3	-0.032970152	0.454428736	0.581356877
LINC00628	1q32.1	-0.032966075	0.454484574	0.581391362
CCDC59	12q21.31	-0.032959038	0.454580934	0.581459777
PRKY	Yp11.2	0.03295692	0.454609935	0.581459777
AICDA	12p13.31	0.032955841	0.454624711	0.581459777
IQCC	1p35.2	0.032950962	0.454691541	0.581494032
MOBP	3p22.1	0.03294785	0.454734162	0.581494032
FAM221B	9p13.3	0.032947559	0.454738155	0.581494032
SNRNP200	2q11.2	0.032935591	0.454902102	0.581666729
LELP1	1q21.3	-0.032931089	0.454963784	0.581708649
GPR17	2q14.3	0.032919821	0.455118183	0.581869103
EIF4E1B	5q35.2	-0.032917187	0.455154285	0.581878303
GTF2E1	3q13.33	0.032907368	0.45528885	0.58201337
UHL3	13q22.2	0.032885919	0.455582901	0.582335094
CEP126	11q22.1	0.03288479	0.455598381	0.582335094
FSTL3	19p13.3	0.032881317	0.455646011	0.582358997
MMP26	11p15.4	0.03287431	0.455742103	0.582444831
DMGDH	5q14.1	-0.032866797	0.455845143	0.582507079
TEX12	11q23.1	0.032866539	0.455848685	0.582507079
NR2F6	19p13.11	-0.03285952	0.455944957	0.582569839
ESYT1	12q13.2	0.032858739	0.455955679	0.582569839
TNFRSF12A	16p13.3	-0.032853876	0.456022392	0.582597864
NSMCE2	8q24.13	-0.032852921	0.456035496	0.582597864
LENEP	1q21.3	0.032835587	0.456273346	0.582864732
NPEPPS	17q21.32	0.032827303	0.456387027	0.582972959
LOC645752	15q24.3	-0.032823138	0.456444204	0.583008999
KAZN	1p36.21	0.032804639	0.456698169	0.583296373
UBXN10	1p36.12	-0.032798474	0.45678282	0.583363983
TTN	2q31.2	0.032796563	0.456809064	0.583363983
SDE2	1q42.12	-0.032791787	0.456874655	0.583398092
RHPN2	19q13.11	-0.032790397	0.456893736	0.583398092
MIR4697HG	11q25	0.032784753	0.456971261	0.583442978
KRTAP5-2	11p15.5	-0.032783617	0.456986857	0.583442978
C19ORF18	19q13.43	-0.032777847	0.457066119	0.583507165
SERPINB2	18q21.33-q22.1	0.03276828	0.457197553	0.583637944
CDKN1B	12p13.1	0.032764954	0.457243251	0.583659267
PITX3	10q24.32	0.03276025	0.457307881	0.583686151
C11ORF88	11q23.1	-0.0327592	0.457322303	0.583686151
SLC17A2	6p22.2	-0.032740476	0.457579631	0.583946811
VPS41	7p14.1	0.032740119	0.45758455	0.583946811

FKBP1A	20p13	0.032736818	0.45762992	0.583967688
SLC6A7	5q32	0.03273431	0.457664402	0.583974672
INTS13	12p11.23	0.032724053	0.457805413	0.584047358
RAPH1	2q33.2	0.032720058	0.457860337	0.584047358
PINX1	8p23.1	-0.032717887	0.457890189	0.584047358
RAB3GAP2	1q41	0.032717453	0.457896159	0.584047358
LINC00410	13q31.3	-0.032715931	0.457917083	0.584047358
ZDHHC5	11q12.1	0.032715369	0.457924818	0.584047358
DCLRE1C	10p13	0.032714327	0.457939147	0.584047358
SIRT2	19q13.2	-0.032713285	0.457953477	0.584047358
ATG9B	7q36.1	0.032696525	0.458183986	0.584280175
SPAG8	9p13.3	0.032695791	0.458194081	0.584280175
MTMR8	Xq11.2	-0.032690531	0.458266442	0.58430952
PTCHD3	10p12.1	-0.032689898	0.458275147	0.58430952
TMEM234	1p35.2	0.032684715	0.458346455	0.584363427
TTC29	4q31.22	-0.032676887	0.458454156	0.584463721
LCE1B	1q21.3	0.032667169	0.458587894	0.584597196
GTF3C2	2p23.3	-0.032649459	0.458831667	0.584870913
CYP4F22	19p13.12	0.032616001	0.459292394	0.585421129
ADAMTSL4	1q21.2	0.032602132	0.459483449	0.585627569
LRRC39	1p21.2	-0.032597429	0.459548243	0.585673069
TCP11	6p21.31	0.032592886	0.459610841	0.585715765
CCDC9B	15q15.1	0.032588846	0.459666519	0.585749638
SCARNA7	3q25.33	-0.032578029	0.459815586	0.585902503
KLHL23	2q31.1	0.032575212	0.459854418	0.585914895
TFG	3q12.2	-0.032567049	0.459966938	0.586021168
AURKC	19q13.43	0.032562013	0.460036363	0.586041127
MBD3L1	19p13.2	-0.032561689	0.460040829	0.586041127
MIF	22q11.23	-0.032557584	0.460097433	0.586076145
PLIN4	19p13.3	-0.032552113	0.460172866	0.586135143
C1QTNF9B	13q12.12	-0.032537607	0.460372906	0.586352838
ATP8B3	19p13.3	0.032534658	0.46041358	0.586367541
PWRN1	15q11.2	0.032526954	0.460519849	0.586465779
SLC16A12	10q23.31	-0.032521388	0.460596642	0.586519734
TREML4	6p21.1	-0.032519389	0.460624211	0.586519734
SDHAP1	3q29	-0.032516249	0.460667543	0.586519734
LINC00965	8p23.1	0.032513042	0.46071179	0.586519734
ANGPTL7	1p36.22	-0.032512471	0.460719664	0.586519734
POGK	1q24.1	-0.032511212	0.460737037	0.586519734
KRTAP24-1	21q22.11	-0.032497242	0.460929818	0.586728041
ATF6B	6p21.32	-0.032483511	0.461119359	0.586916447
CSKMT	11q12.3	0.032482295	0.461136142	0.586916447
CALHM4	6q22.1	0.032463953	0.461389394	0.587201651
OR10H5	19p13.12	-0.03244709	0.461622294	0.587456463
SNORA29	6q25.3	0.03244523	0.461647978	0.587456463
HSD11B1L	19p13.3	-0.032424721	0.461931329	0.587779877
KRTAP15-1	21q22.11	-0.032416484	0.462045155	0.587887553
NYAP1	7q22.1	-0.032413276	0.462089492	0.587906806
TMPRSS11BNL	4q13.2	-0.032377964	0.462577684	0.588490727
PLS3	Xq23	0.032373921	0.462633599	0.588524668
KRT32	17q21.2	0.032370745	0.462677517	0.588543344
PKD1L1	7p12.3	0.032360375	0.462820951	0.588618649
ZNF138	7q11.21	0.032358377	0.46284859	0.588618649
CLPB	11q13.4	0.032356163	0.462879223	0.588618649
KCNJ9	1q23.2	0.032355884	0.462883085	0.588618649
PARP14	3q21.1	0.032355251	0.462891847	0.588618649
MLIP	6p12.1	0.032353782	0.462912163	0.588618649
CREBL2	12p13.1	-0.032346827	0.463008385	0.588703815

SCN7A	2q24.3	0.03233962	0.463108116	0.58879343
TRPC4AP	20q11.22	-0.032333628	0.463191035	0.58886166
BAX	19q13.33	-0.032309487	0.463525194	0.589239567
HARS2	5q31.3	-0.032307924	0.463546835	0.589239567
CDKN2A-DT	9p21.3	-0.032304593	0.463592945	0.58926097
UBE2MP1	16p11.2	-0.032299587	0.463662262	0.589311867
MORC1	3q13.13	-0.032295366	0.463720722	0.589348958
HGH1	8q24.3	-0.032292293	0.463763274	0.589365828
WNK4	17q21.2	-0.032253082	0.464306472	0.590018893
TAL2	9q31.2	0.032230004	0.464626336	0.590388092
ADRA1D	20p13	-0.032216415	0.464814739	0.59059021
OR51A7	11p15.4	0.03221273	0.464865839	0.590617857
ATP10B	5q34	0.03220971	0.464907717	0.590633786
CCDC22	Xp11.23	-0.032192429	0.465147405	0.590901002
DDX39A	19p13.12	0.032181227	0.465302811	0.591061122
ACIN1	14q11.2	0.032168548	0.465478732	0.591247279
LINC00305	18q22.1	-0.032158771	0.465614427	0.591349845
RMST	12q23.1 12q21	-0.032158496	0.465618234	0.591349845
DCAF4L2	8q21.3	0.032155942	0.465653684	0.591357559
CAPN2	1q41	-0.03214762	0.465769202	0.591446868
SON	21q22.11	0.032144755	0.465808984	0.591446868
SYCP1	1p13.2	-0.032142862	0.465835262	0.591446868
CES3	16q22.1	-0.03214241	0.465841534	0.591446868
NIM1K	5p12	-0.032133972	0.465958685	0.591521698
JADE3	Xp11.3	0.032133552	0.465964513	0.591521698
PPM1H	12q14.1-q14.2	-0.032131816	0.465988628	0.591521698
ACER1	19p13.3	0.03212832	0.466037171	0.591546014
SNRNP70	19q13.33	-0.032111669	0.466268419	0.591802224
OR51Q1	11p15.4	0.032107207	0.4663304	0.591840886
SCNN1A	12p13.31	-0.032105243	0.466357682	0.591840886
SPIRE1	18p11.21	-0.032099338	0.466439716	0.59185907
TPI1P2	7q32.1	-0.032099253	0.466440893	0.59185907
SP2	17q21.32	0.032097863	0.466460216	0.59185907
EHD4	15q15.1	0.032093433	0.466521758	0.591899848
OR13D1	9q31.1	0.032090881	0.466557223	0.591907538
OR1J4	9q33.2	-0.032070661	0.466838223	0.592226709
VWA3A	16p12.2	-0.032065446	0.46691071	0.592281341
DEFA1B	8p23.1	-0.032054183	0.467067293	0.592442634
TPSD1	16p13.3	0.032050151	0.467123345	0.592476399
TRIM52	5q35.3	0.032018144	0.467568491	0.593003637
IFNA1	9p21.3	0.032015785	0.467601308	0.593007896
SERPINE3	13q14.3	0.032003403	0.467773584	0.593189004
ZNF470	19q13.43	0.031998606	0.467840347	0.593236295
TRIM5	11p15.4	0.031988706	0.46797812	0.593373618
NMU	4q12	0.031948734	0.468534646	0.594041848
DCDC1	11p13	0.031943169	0.46861216	0.594082081
RDM1	17q12	0.031942218	0.468625403	0.594082081
NUP54	4q21.1	0.031930351	0.468790714	0.594254224
YAE1	7p14.1	-0.031924272	0.468875404	0.594279373
CDK4	12q14.1	0.031922535	0.468899603	0.594279373
TBC1D21	15q24.1	-0.031920583	0.468926802	0.594279373
GNG12	1p31.3	-0.031920451	0.468928642	0.594279373
LINC00158	21q21.2	0.03190967	0.469078883	0.594432352
ZNF14	19p13.11	0.031904951	0.469144644	0.594478262
KBTD3	11q22.3	-0.031866785	0.469676746	0.595073903
SYT10	12p11.1	-0.031866705	0.46967786	0.595073903
RHOV	15q15.1	0.031864875	0.46970339	0.595073903
IRX2	5p15.33	-0.031862617	0.469734879	0.595076344

RAB18	10p12.1	-0.031860359	0.469766369	0.595078787
TFEB	6p21.1	0.03185593	0.469828142	0.595119588
OR6K3	1q23.1	-0.03185007	0.469909897	0.595185693
LAP3	4p15.32	0.031843513	0.470001371	0.595262705
C8ORF86	8p11.22	0.031841472	0.470029841	0.595262705
CCDC40	17q25.3	0.031831963	0.470162518	0.595375769
FXR1	3q26.33	-0.031830834	0.470178271	0.595375769
OCRL	Xq26.1	0.031822845	0.470289761	0.595468119
KIAA0100	17q11.2	-0.031821369	0.470310364	0.595468119
KLC2	11q13.2	0.031792538	0.470712828	0.595940203
ANO4	12q23.1	-0.031783705	0.470836182	0.596058885
TNPO1	5q13.2	-0.031777255	0.47092626	0.596129404
B3GALT2	1q31.2	0.031775475	0.470951113	0.596129404
TBC1D9B	5q35.3	-0.031772913	0.470986903	0.596137221
NPY4R	10q11.22	-0.031749246	0.471317534	0.596518199
HTRA4	8p11.22	0.031720855	0.471714335	0.596962376
KIF13B	8p12	-0.031718639	0.471745311	0.596962376
SLC1A5	19q13.32	-0.031717771	0.471757451	0.596962376
COPS7B	2q37.1	0.03170735	0.471903144	0.597109201
C7ORF66	7q31.1	0.031695999	0.472061875	0.597272504
PPP1R42	8q13.1	-0.031687951	0.472174439	0.597362273
LTK	15q15.1	0.031686683	0.472192175	0.597362273
ZWINT	10q21.1	0.031673917	0.472370743	0.597550622
CGB5	19q13.33	0.031670683	0.472415991	0.597570309
CHMP4A	14q12	-0.031668012	0.472453358	0.597580025
TK1	17q25.3	-0.031659676	0.472570005	0.597681659
C7	5p13.1	-0.031658026	0.472593093	0.597681659
FRG2	4q35.2	-0.031649078	0.47271832	0.597802473
ARFGEF3	6q23.3-q24.1	0.031643698	0.472793622	0.597857133
KLRG1	12p13.31	0.031641746	0.472820942	0.597857133
AGAP5	10q22.2	-0.031637532	0.472879925	0.597894158
AIPL1	17p13.2	0.031631115	0.472969753	0.597963005
ATCAY	19p13.3	-0.031629399	0.472993787	0.597963005
LINC00654	20p12.3	0.031620384	0.473120009	0.598062707
PADI6	1p36.13	0.031617462	0.473160915	0.598062707
LUC7L3	17q21.33	-0.031617299	0.473163205	0.598062707
FSHR	2p16.3	0.031615279	0.473191492	0.598062707
TUBAL3	10p15.1	-0.031607832	0.473295773	0.598156951
KRTAP20-2	21q22.11	-0.031604257	0.473345847	0.598182679
SNORA22	7q11.21	-0.031592087	0.473516311	0.598360536
SLC6A5	11p15.1	0.031575527	0.473748336	0.598616158
RBMY1E	Yq11.223	-0.031558209	0.473991026	0.598870627
DNAI1	9p13.3	-0.031556911	0.474009225	0.598870627
PPP2R1B	11q23.1	0.031554688	0.47404038	0.598872401
ZNF404	19q13.31	-0.031547394	0.474142633	0.598963991
OR2A25	7q35	-0.031540237	0.47424297	0.599033374
MRC1	10p12.33	0.031539231	0.474257073	0.599033374
PANK4	1p36.32	-0.031529766	0.474389794	0.599163418
PNPLA8	7q31.1	0.031524642	0.474461643	0.599216567
DIRAS2	9q22.2	-0.031516327	0.474578271	0.599326261
ZBTB43	9q33.3	0.031512051	0.474638244	0.599364398
ZNF124	1q44	0.031509099	0.47467965	0.599379084
HYPM	Xp11.4	0.031499951	0.474807982	0.599492895
PRB1	12p13.2	-0.031498428	0.474829346	0.599492895
5-Mar	10q23.32-q23.33	-0.031488691	0.474965967	0.599627777
HNRNPA3P1	10q11.21	0.031481223	0.475070766	0.599722471
ARMC8	3q22.3	0.031469587	0.475234084	0.599874945
MLLT3	9p21.3	-0.031468371	0.475251149	0.599874945

RIT2	18q12.3	-0.031464126	0.475310743	0.599912549
STMN4	8p21.2	0.03144049	0.475642593	0.600293755
DRAIC	15q23	0.031431245	0.475772432	0.600419977
PITPNM1	11q13.2	-0.031404806	0.476143862	0.60085105
COPS8	2q37.3	0.031390564	0.476343995	0.60106592
ERP44	9q31.1	-0.031378059	0.476519759	0.601250015
PDSS2	6q21	-0.031365425	0.47669738	0.601436431
UBR2	6p21.1	0.031355221	0.476840863	0.601579755
CHRM3	1q43	-0.031346557	0.476962704	0.601695759
GTF3C5	9q34.13	-0.031344106	0.476997185	0.60170155
ZNF678	1q42.13	-0.031339243	0.477065575	0.601750111
SLC22A2	6q25.3	0.031324749	0.477269481	0.601943613
LRP5	11q13.2	0.031323438	0.47728792	0.601943613
UBE2B	5q31.1	-0.031321962	0.477308691	0.601943613
ZNF319	16q21	0.031307112	0.477517645	0.602169404
TMEM251	14q32.12	-0.03130442	0.477555531	0.602179456
APBB1IP	10p12.1	0.031299992	0.477617863	0.602196346
NOX3	6q25.3	0.031299218	0.477628756	0.602196346
UNG	12q24.11	0.031280279	0.477895355	0.60249474
LIPN	10q23.31	-0.031274787	0.47797269	0.602541798
ATP6V1C1	8q22.3	0.031271335	0.478021295	0.602541798
PREX2	8q13.2	0.031271251	0.47802248	0.602541798
POLR2B	4q12	0.031255792	0.478240195	0.602778481
EEF1D	8q24.3	-0.031246499	0.478371087	0.602871796
CARTPT	5q13.2	0.031246283	0.478374128	0.602871796
SLC25A29	14q32.2	-0.031222619	0.478707556	0.603254232
DDIT3	12q13.3	0.031217061	0.47878588	0.603310576
OS9	12q13.3-q14.1	0.031214282	0.478825045	0.603310576
FAM161B	14q24.3	-0.031213067	0.47884218	0.603310576
C2ORF49	2q12.2	-0.031207769	0.478916844	0.603366883
CCDC47	17q23.3	-0.03120308	0.478982945	0.603412396
AXIN1	16p13.3	-0.031191878	0.479140873	0.603573578
OR6C3	12q13.2	0.031188066	0.479194624	0.603577563
RNF17	13q12.12	0.031186426	0.479217745	0.603577563
C19ORF71	19p13.3	0.031185274	0.479233988	0.603577563
ZNF514	2q11.1	0.03117069	0.479439669	0.603798832
NDUFB6	9p21.1	-0.0311627	0.479552355	0.603902966
SULT1B1	4q13.3	-0.031157611	0.479624143	0.603955587
TCIM	8p11.21	0.03113908	0.4798856	0.604247022
PAQR8	6p12.2	-0.031135173	0.479940745	0.60427018
SMARCD1	4q22.3	0.031133523	0.479964029	0.60427018
POMK	8p11.21	0.031129702	0.480017953	0.604300275
HIST1H4B	6p22.2	0.031118022	0.480182817	0.604470021
DNAJB14	4q23	-0.031112682	0.4802582	0.604527111
TRPC5	Xq23	-0.031093532	0.480528573	0.604829623
IZUMO2	19q13.33	-0.03109086	0.480566309	0.604839302
CDK5RAP1	20q11.21	0.031087325	0.480616239	0.604864326
MRPL42	12q22	-0.031083243	0.480673882	0.604899053
METTL8	2q31.1	0.031080117	0.480718037	0.604916803
WDR6	3p21.31	-0.031076036	0.480775687	0.60495153
TBCD	17q25.3	-0.031067439	0.480897132	0.605066521
WNT9B	17q21.32	0.031027993	0.481454581	0.605697184
DPEP2	16q22.1	-0.031027712	0.481458552	0.605697184
DRGX	10q11.23	0.03102014	0.481565596	0.605793991
RORB	9q21.13	0.031005324	0.481775082	0.606008344
DLX6	7q21.3	0.031003126	0.481806172	0.606008344
CTU2	16q24.3	-0.031001702	0.481826306	0.606008344
ARRDC1-AS1	9q34.3	-0.030994452	0.481928848	0.606099445

BZW2	7p21.1	-0.030971396	0.482255012	0.606471755
UBE2K	4p14	-0.03096662	0.482322592	0.606518851
KNCN	1p33	0.030955916	0.482474055	0.606671418
MUC7	4q13.3	0.030953532	0.482507798	0.60667595
S100A9	1q21.3	0.030930929	0.48282776	0.607040336
NUTM2F	9q22.32	0.030927566	0.482875376	0.607062286
GGNBP1	6p21.31	0.030924232	0.482922589	0.607083726
TFE3	Xp11.23	-0.030917295	0.483020808	0.607094196
CYLC1	Xq21.1	0.030915621	0.483044522	0.607094196
KRTAP5-11	11q13.4	-0.030915513	0.483046054	0.607094196
DPYSL2	8p21.2	-0.030915124	0.483051552	0.607094196
MALSU1	7p15.3	0.03091113	0.483108123	0.607127389
RNF227	17p13.1	0.03090097	0.483252028	0.607270324
NT5M	17p11.2	-0.030888812	0.483424252	0.607448826
MAGED1	Xp11.22	0.030885773	0.483467313	0.607465016
LIN37	19q13.12	0.030857898	0.483862343	0.607898607
CPLX1	4p16.3	-0.030857161	0.483872796	0.607898607
XRRA1	11q13.4	0.030845306	0.48404084	0.608071775
CIPC	14q24.3	-0.030827678	0.484290797	0.608347815
ATP1A4	1q23.2	-0.030809992	0.484541653	0.608624951
KLHL35	11q13.4	-0.030806273	0.484594399	0.608640814
IGFL1	19q13.32	0.030800824	0.484671704	0.608640814
DNAAF5	7p22.3	0.030800672	0.48467387	0.608640814
MYBPH	1q32.1	0.030800576	0.484675224	0.608640814
OLIG3	6q23.3	-0.030791744	0.484800544	0.608760211
ST3GAL3	1p34.1	-0.030787125	0.484866084	0.608804533
REX1BD	19p13.11	-0.030783564	0.484916608	0.608818508
OR14A16	1q44	-0.030782078	0.484937703	0.608818508
OR5AK2	11q12.1	0.030779854	0.484969267	0.608820165
HEATR9	17q12	0.03077759	0.485001393	0.608822526
TRPM5	11p15.5	-0.030773114	0.485064926	0.608864311
LCE3E	1q21.3	-0.030764111	0.48519272	0.608986747
TCEA2	20q13.33	-0.03074605	0.485449138	0.6092706
ZNF774	15q26.1	-0.030741101	0.485519417	0.609320814
GPR78	4p16.1	0.03073822	0.485560326	0.609334166
RAB33B	4q31.1	0.030735717	0.485595886	0.609340805
SOWAHD	Xq24	0.030733416	0.485628559	0.609343819
ARAP1	11q13.4	-0.030718349	0.485842575	0.60957436
SEZ6	17q11.2	-0.030696409	0.486154303	0.609911664
SESN1	6q21	-0.030695163	0.48617201	0.609911664
ZNF579	19q13.42	-0.030691647	0.486221981	0.609936342
WDR1	4p16.1	0.030684395	0.486325047	0.610027616
ITPR2	12p11.23	0.030673498	0.486479952	0.610183901
HYLS1	11q24.2	0.030666767	0.486575639	0.610265895
FBXO21	12q24.22	-0.030645752	0.486874465	0.610595916
CETN4P	4q27	0.030643996	0.486899436	0.610595916
LCE2C	1q21.3	0.030638692	0.486974883	0.610652489
SNHG6	8q13.1 8q13	-0.030633161	0.487053562	0.610713105
ZAN	7q22.1	0.030618943	0.487255822	0.610928663
DEFB118	20q11.21	0.030588177	0.487693673	0.611439564
SRPRB	3q22.1	0.030583315	0.487762884	0.611488251
TMEM250	9q34.3	0.030580102	0.487808626	0.611507513
PCGF2	17q12	0.030576021	0.487866734	0.611539838
CLK4	5q35.3	0.030574024	0.487895171	0.611539838
OR2G6	1q44	0.030563504	0.488044962	0.611689502
PIGA	Xp22.2	0.030556395	0.488146198	0.611778295
OR10A6	11p15.4	-0.030554126	0.488178525	0.611780721
C2	6p21.33	-0.030549188	0.488248855	0.611830768

SOD3	4p15.2	-0.030538507	0.488401007	0.611983334
FAM157A	3q29	-0.03052622	0.488576065	0.612140725
OR5AC2	3q11.2	0.030525422	0.488587433	0.612140725
TMEM155	4q27	-0.030520464	0.488658081	0.612191136
MAGOHB	12p13.2	-0.030511413	0.488787066	0.612314621
OXNAD1	3p25.1-p24.3	-0.030502208	0.488918264	0.612440863
APOC2	19q13.32	-0.030493959	0.489035864	0.612550056
DPAGT1	11q23.3	-0.030484146	0.489175765	0.612687168
GNAO1	16q13	0.030478241	0.489259964	0.6127545
HLA-DOA	6p21.32	0.030466257	0.489430862	0.6129304
KCNE5	Xq23	-0.03045863	0.489539652	0.613028504
AOC2	17q21.31	-0.030449281	0.489673013	0.613157362
RAD51C	17q22	0.030445677	0.489724436	0.61318361
CACNG3	16p12.1	0.030425494	0.490012424	0.61350604
KIAA0040	1q25.1	0.030421015	0.490076353	0.613547919
PNMA5	Xq28	0.030413669	0.490181193	0.613641008
MAMDC4	9q34.3	0.030407294	0.490272197	0.613693825
SPANXN1	Xq27.3	0.030403553	0.490325608	0.613693825
POLE3	9q32	0.030402692	0.4903379	0.613693825
ZKSCAN2	16p12.1	0.030402171	0.490345329	0.613693825
ATP1A3	19q13.2	0.030379161	0.490673893	0.614066862
LACTB	15q22.2	0.030364309	0.490886029	0.614286707
ARHGEF3	3p14.3	0.030358925	0.490962942	0.614286707
CXCL3	4q13.3	0.030358838	0.490964182	0.614286707
MAN2B2	4p16.1	-0.030358317	0.490971626	0.614286707
ST20	15q25.1	-0.030353889	0.491034899	0.614327688
LY86-AS1	6p25.1	0.030349562	0.491096714	0.614366842
EDC4	16q22.1	-0.030337997	0.491261972	0.614535389
PIWIL2	8p21.3	0.03033203	0.491347249	0.614567222
OR4C13	11p11.12	-0.030331944	0.491348479	0.614567222
TUBB1	20q13.32	-0.030327752	0.491408401	0.614603984
ARFGEF2	20q13.13	0.030313943	0.49160579	0.614776017
FN3KRP	17q25.3	-0.030313856	0.491607032	0.614776017
SLC25A35	17p13.1	-0.030304217	0.491744844	0.614896802
PPP2R2A	8p21.2	-0.030302828	0.49176471	0.614896802
ATP7A	Xq21.1	-0.030290323	0.491943528	0.615082187
PFAS	17p13.1	0.03028051	0.492083874	0.615219452
SLC7A5P1	16p11.2	0.030276795	0.492137013	0.615241653
SRRM4	12q24.23	-0.030274995	0.492162759	0.615241653
ZNF140	12q24.33	-0.030260016	0.492377057	0.615471321
AKTIP	16q12.2	0.030257759	0.492409362	0.615473484
LOC202181	5q35.3	0.030252461	0.49248516	0.615530006
SNORA14B	1q42.3	-0.030249153	0.492532509	0.615550965
LINC01140	1p22.3	-0.030234096	0.492748007	0.615755493
PLA2G6	22q13.1	-0.030233444	0.492757339	0.615755493
ZNF816	19q13.41	-0.030224239	0.492889108	0.61588192
CUL5	11q22.3	0.030210174	0.493090488	0.616062986
EEF1DP3	13q13.1	-0.030207257	0.493132258	0.616062986
CLEC4C	12p13.31	-0.030206554	0.493142328	0.616062986
DAB2IP	9q33.2	0.030205569	0.493156431	0.616062986
DYDC2	10q23.1	-0.030198764	0.493253888	0.616121626
TSPYL6	2p16.2	0.030198017	0.493264586	0.616121626
BRSK2	11p15.5	0.030186703	0.493426635	0.616285796
ATAD3B	1p36.33	-0.03018438	0.493459907	0.616289113
SLCO4A1	20q13.33	0.030170574	0.493657707	0.6164979
GTF2F1	19p13.3	-0.030146345	0.49400492	0.61689324
RNU12-2P	Xp11.3	-0.030126508	0.494289299	0.617210073
FKTN	9q31.2	0.030085558	0.494876611	0.61790511

PTS	11q23.1	-0.030073488	0.495049802	0.618083019
PREB	2p23.3	-0.030070969	0.495085939	0.618089801
TSPAN12	7q31.31	-0.030052386	0.495352651	0.618384426
FRG1BP	20q11.1	-0.030042661	0.49549226	0.618520352
CCDC169	13q13.3	-0.030028504	0.49569552	0.618735712
ITGA2B	17q21.31	-0.03000922	0.495972472	0.618950185
BIN3	8p21.3	-0.03000532	0.496028498	0.618950185
AASS	7q31.32	0.030004538	0.496039725	0.618950185
OR4D2	17q22	0.030002819	0.496064426	0.618950185
ZIC4	3q24	0.030001415	0.496084596	0.618950185
ATXN7L2	1p13.3	-0.030001369	0.496085247	0.618950185
PARP8	5q11.1	-0.030000978	0.49609087	0.618950185
TLE1	9q21.32	0.029999415	0.496113325	0.618950185
HBE1	11p15.4	-0.029997083	0.496146821	0.618953613
PLA2G2C	1p36.12	-0.029978508	0.496413719	0.619207654
OR10G8	11q24.2	-0.029976394	0.496444095	0.619207654
SRSF11	1p31.1	0.029975447	0.496457703	0.619207654
SDK2	17q25.1	-0.02997332	0.49648827	0.619207654
FAM170B	10q11.23	0.029972208	0.49650426	0.619207654
KRTAP4-2	17q21.2	-0.029970066	0.496535049	0.61920769
FLJ23867	1q25.2	0.029965721	0.496597487	0.619247192
CCDC183-AS1	9q34.3	0.02995999	0.496679869	0.619311557
PLET1	11q23.1	-0.02993456	0.497045494	0.619729067
MAFF	22q13.1	0.02992569	0.497173058	0.619809316
H2BFWT	Xq22.2	0.029924333	0.497192576	0.619809316
LINC01599	14q21.3	-0.029923476	0.497204895	0.619809316
PPAN	19p13.2	-0.029921521	0.497233018	0.619809316
CSDE1	1p13.2	0.0299111	0.497382911	0.61993183
BAG4	8p11.23	0.029910406	0.497392896	0.61993183
IGFALS	16p13.3	-0.029905897	0.497457764	0.619948191
CYFIP1	15q11.2	-0.029904674	0.497475357	0.619948191
VSTM1	19q13.42	-0.029903072	0.497498414	0.619948191
NUDT22	11q13.1	-0.029896946	0.497586555	0.619992265
GOT1L1	8p11.23	0.029896332	0.497595382	0.619992265
FAM81A	15q22.2	-0.029890693	0.497676522	0.620046189
ANKRD46	8q22.3	0.029889043	0.497700265	0.620046189
EFHD2	1p36.21	-0.029883833	0.497775246	0.620101225
HRC	19q13.33	-0.029868116	0.498001466	0.620344647
HOXD13	2q31.1	0.029864643	0.498051454	0.620368528
LOC220729	3q29	-0.029860473	0.498111484	0.620391274
MRGPRX1	11p15.1 11	-0.029859093	0.498131354	0.620391274
FFAR4	10q23.33	0.029844724	0.498338252	0.620610556
LINC00032	9p21.2	-0.02983618	0.498461291	0.620695502
EHMT2	6p21.33	0.029832512	0.498514129	0.620695502
GTDC1	2q22.3	0.029828865	0.498566652	0.620695502
USP24	1p32.3	0.029826867	0.49859543	0.620695502
SLC35G6	17p13.1	0.029825316	0.498617773	0.620695502
TCF15	20p13	0.029825087	0.498621075	0.620695502
SMCP	1q21.3	0.029825001	0.498622303	0.620695502
DEPTOR	8q24.12	-0.029819225	0.498705509	0.620725422
NOP2	12p13.31	0.029819052	0.498708011	0.620725422
TYRP1	9p23	-0.029813344	0.498790243	0.620762875
HSBP1	16q23.3	-0.02981167	0.49881435	0.620762875
TMEM63A	1q42.12	-0.029810541	0.498830614	0.620762875
CCPG1	15q21.3	-0.02978614	0.49918225	0.621162063
GSPT2	Xp11.22	-0.029782927	0.499228561	0.621181291
WNT4	1p36.12	0.029779366	0.49927988	0.621206749
ATXN3L	Xp22.2	-0.029774092	0.499355915	0.621216471

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OR9G4	11q12.1	0.029772402	0.499380275	0.621216471
FCAMR	1q32.1	-0.029759937	0.499559987	0.621401628
SRSF8	11q21	-0.029755573	0.499622918	0.621441507
TTI2	8p12	-0.029752533	0.499666746	0.621457621
MAGEE1	Xq13.3	0.029744023	0.499789474	0.62154592
SMPD3	16q22.1	-0.029743329	0.499799494	0.62154592
RADX	Xq22.3	0.029737771	0.499879652	0.621607203
PXN	12q24.23	-0.029719969	0.500136456	0.621888125
POLB	8p11.21	-0.029716669	0.500184066	0.62190891
ARL6IP1	16p12.3	0.029711112	0.500264258	0.6219702
ANKRD33	12q13.13	0.029705549	0.50034453	0.622031582
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KHDC4	1q22	-0.029696871	0.500469769	0.622103195
TM9SF2	13q32.3	-0.029695133	0.500494845	0.622103195
ME2	18q21.2	-0.029677853	0.500744294	0.622346759
LINC00167	11q24.3	-0.029672383	0.500823257	0.622346759
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NUDT21	16q13	0.029670124	0.500855878	0.622346759
IL12A	3q25.33	-0.02966522	0.500926685	0.622346759
MFN1	3q26.33	0.02966474	0.500933618	0.622346759
MAGEB10	Xp21.3	0.029664428	0.500938129	0.622346759
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GBE1	3p12.2	0.029622623	0.501541968	0.622904727
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BTG4	11q23.1	0.029593567	0.5019619	0.623349355
TIFAB	5q31.1	0.02957787	0.502188834	0.623592698
LRTM2	12p13.33	-0.029575149	0.50222818	0.623603088
AP1S3	2q36.1	-0.029558884	0.502463387	0.623856657
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UBLCP1	5q33.3	-0.02954829	0.502616625	0.623969945
LINC00705	10p15.1	0.029533286	0.502833681	0.624200912
SOX30	5q33.3	0.029498187	0.503341661	0.624749717
IFNL3	19q13.2	0.029493748	0.503405923	0.624749717
AHSP	16p11.2	0.02949329	0.50341255	0.624749717
KANSL1	17q21.31	0.029492192	0.503428442	0.624749717
LARGE2	11p11.2	0.029492019	0.503430957	0.624749717
TMIGD1	17q11.2	-0.029477157	0.503646148	0.624978237
MADCAM1	19p13.3	-0.029472567	0.503712618	0.625017446
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SERPINA11	14q32.13	0.029407892	0.504649694	0.625953437
GPR32	19q13.33	0.029398124	0.50479131	0.626077226
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CIRBP	19p13.3	-0.029336144	0.505690329	0.62674217
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GPR12	13q12.13	0.029306116	0.50612619	0.62704526
MOV10	1p13.2	-0.029304274	0.506152927	0.62704526
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SIM2	21q22.13	0.029276791	0.506552031	0.627462457
KLHL17	1p36.33	0.029269973	0.506651067	0.627546516
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ZNF711	Xq21.1	-0.029215439	0.507443576	0.628231395
QSOX1	1q25.2	0.029214744	0.507453675	0.628231395
FBXO34	14q22.3	0.029199113	0.507680949	0.628474111
MED24	17q21.1	0.029191298	0.507794606	0.628576155
SLC12A7	5p15.33	0.029166201	0.508159662	0.628989362
C5	9q33.2	-0.029163596	0.508197565	0.6289976
OR56A4	11p15.4	-0.029153855	0.508339301	0.629134345
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RTRAF	14q22.1	0.029147792	0.50842754	0.629136896
NDEL1	17p13.1	-0.029147271	0.508435123	0.629136896
MAP2K6	17q24.3	0.029141236	0.508522949	0.629206894
CCL19	9p13.3	0.029133203	0.508639874	0.629312886
LY6E	8q24.3	-0.02912695	0.508730888	0.62938681
SLC30A9	4p13	-0.029123737	0.508777663	0.629405995
CREB3L1	11p11.2	0.029118006	0.508861104	0.62944107
LINC00710	10p14	-0.029117494	0.508868553	0.62944107
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GATA6	18q11.2	-0.029098381	0.509146872	0.629697841
SDR42E1	16q23.3	-0.029096557	0.50917344	0.629697841
PLRG1	4q31.3	0.029094647	0.509201264	0.629697841
DAGLB	7p22.1	-0.029091781	0.509243002	0.629710771
CHCHD7	8q12.1	0.029077192	0.509455514	0.629909957
SCN11A	3p22.2	-0.029076427	0.509466667	0.629909957
SOX6	11p15.2	-0.029069855	0.50956241	0.629928699
NXF4	Xq22.1	-0.029069621	0.509565819	0.629928699
JDP2	14q24.3	0.029068942	0.509575704	0.629928699
ANKRD66	6p12.3	-0.029058102	0.509733658	0.630085264
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AMELY	Yp11.2	-0.029052361	0.509817327	0.630111304
ASTE1	3q22.1	0.029049838	0.509854097	0.630118061
ECPAS	9q31.3	0.029043586	0.509945225	0.630191993
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OSBPL2	20q13.33	-0.02903551	0.510062944	0.630260086
PALB2	16p12.2	0.029031733	0.510118002	0.630289429
TFCP2L1	2q14.2	0.029028997	0.510157889	0.630300025
TIRAP	11q24.2	-0.028997866	0.510611845	0.630796769
ITGB1BP1	2p25.1	0.028997127	0.510622621	0.630796769
IP6K1	3p21.31	0.028981757	0.510846834	0.631035025

CGB3	19q13.33	0.028962607	0.511126256	0.631341445
RBMXL2	11p15.4	0.028955781	0.511225863	0.631425735
PCYOX1	2p13.3	-0.028946067	0.511367654	0.631562113
PRAMEF2	1p36.21	0.028942398	0.511421212	0.631562644
CHODL	21q21.1	-0.028941739	0.511430832	0.631562644
MARK2	11q13.1	0.02893608	0.511513443	0.631625912
PRO0611	1p35.2	-0.028930543	0.511594279	0.63168698
SNORA6	3p22.1	-0.028924314	0.511685232	0.631760532
UBE2V2	8q11.21	0.028906121	0.511950914	0.632049794
PRR23B	3q23	-0.028883835	0.512276456	0.632412919
AMZ2	17q24.2	-0.028872688	0.512439335	0.632575202
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B3GNT7	2q37.1 2q37.1	0.028865915	0.512538318	0.632584146
PEX26	22q11.21	0.028865741	0.512540856	0.632584146
CNKSR2	Xp22.12	0.028834936	0.512991144	0.63310108
CCDC42	17p13.1	0.028821839	0.513182649	0.633262168
TGM7	15q15.2-q15.3	0.028821707	0.513184588	0.633262168
SNHG17	20q11.23	0.028776081	0.513852034	0.634046919
RNF20	9q31.1	0.028762491	0.514050927	0.634253458
CBLL2	Xp22.11	0.028757249	0.514127654	0.634309247
MAGOH	1p32.3	-0.02875233	0.514199656	0.634359201
JUNB	19p13.13	0.028747901	0.51426449	0.634362096
SKIDA1	10p12.31	0.02874673	0.514281634	0.634362096
TGM4	3p21.31	0.028744027	0.514321203	0.634362096
SHISA5	3p21.31	-0.028743559	0.514328056	0.634362096
OR8S1	12q13.11	0.028738674	0.514399583	0.634411445
PSG7	19q13.31	0.028727073	0.514569457	0.634582073
OR13F1	9q31.1	0.028724299	0.514610076	0.634593288
KLHL8	4q22.1	-0.028715945	0.514732433	0.634705291
PCDHA11	5q31.3	-0.028696168	0.515022146	0.635023631
TUFT1	1q21.3	0.028675999	0.515317673	0.6353309
ZNF322	6p22.2	0.028674089	0.515345671	0.6353309
TMEM231	16q23.1	0.028672699	0.515366034	0.6353309
OR10P1	12q13.2	0.028667552	0.515441477	0.635384992
OR6T1	11q24.1	-0.028664467	0.5154867	0.635401829
FLJ42627	16p13.3	-0.028658936	0.515567768	0.635462844
R3HDM2	12q13.3	0.028655592	0.515616787	0.635484352
SLC7A2	8p22	0.028647603	0.515733911	0.63558979
PARP9	3q21.1	0.028640569	0.515837043	0.635677972
TPPP	5p15.33	-0.028637356	0.515884156	0.635697114
KBTBD12	3q21.3	0.028634998	0.51591873	0.635700804
BAG3	10q26.11	0.028626415	0.516044612	0.635792201
EEF1E1	6p24.3	-0.028625633	0.516056074	0.635792201
LAMA5	20q13.33	0.028622854	0.516096829	0.635803499
OR4C16	11q11	-0.028611971	0.516256463	0.635961239
ELF5	11p13	0.028601914	0.516404002	0.636090013
LMTK2	7q21.3	-0.028600537	0.516424197	0.636090013
DMRTC1B	Xq13.1	-0.028578481	0.516747846	0.636422092
GBAP1	1q22	-0.028576048	0.516783552	0.636422092
ENTR1	9q34.3	-0.028575701	0.51678865	0.636422092
CFAP97	4q35.1	-0.028570057	0.516871496	0.636485179
PGM1	1p31.3	-0.028559636	0.517024462	0.636634599
GTF2H3	12q24.31	0.028554686	0.517097129	0.636685131
SERAC1	6q25.3	-0.028551995	0.517136643	0.636694839
TOP1P1	1q24.3	0.028542573	0.517274976	0.636826204
MTRF1L	6q25.2	0.028533498	0.517408254	0.63695133
GTF2H2B	5q13.2	-0.028528982	0.517474572	0.636994015
LINC01366	5q35.1	0.028493146	0.518001025	0.637603072

SERPINB11	18q21.33	-0.028490312	0.518042671	0.637615346
WDR88	19q13.11	0.028448806	0.518652805	0.638327278
GAPDH	12p13.31	0.028443794	0.518726505	0.638378953
SH3TC1	4p16.1	0.02843537	0.518850379	0.638492366
SHKBP1	19q13.2	-0.028424255	0.519013865	0.638654508
KIAA1586	6p12.1	-0.028392299	0.519484035	0.639170553
LMO1	11p15.4	0.028389451	0.519525943	0.639170553
IRGC	19q13.31	-0.028389278	0.519528494	0.639170553
SNHG4	5q31.2	-0.028386134	0.519574764	0.639188412
DCAF12L2	Xq25	0.028357762	0.519992405	0.639663108
KRTAP9-4	17q21.2	-0.02834971	0.520110974	0.639686523
CLCN4	Xp22.2	0.028348879	0.520123205	0.639686523
MAGEB16	Xp21.1	0.028348608	0.520127201	0.639686523
RRAS2	11p15.2	-0.028347837	0.52013855	0.639686523
CDKL4	2p22.1	-0.028337846	0.520285685	0.639828385
CYREN	7q33	0.028329601	0.520407125	0.639938634
R3HCC1L	10q24.2	0.028322829	0.520506891	0.640022217
SP140L	2q37.1	0.02831866	0.520568305	0.640035272
CSNK2A1	20p13	0.028317791	0.520581098	0.640035272
OR1K1	9q33.2	0.028306729	0.520744077	0.640196548
ARMC5	16p11.2	-0.028301553	0.52082036	0.640251227
SCX	8q24.3	-0.028287521	0.521027142	0.640466315
TAS2R10	12p13.2	0.028284358	0.521073764	0.640484512
SCAF4	21q22.11	-0.02827689	0.521183838	0.640580697
C19ORF47	19q13.2	0.028262215	0.521400195	0.640807492
ARIH2	3p21.31	0.028252402	0.521544885	0.640946186
ZDHHC2	8p22	0.028239116	0.521740826	0.641108917
PLSCR5	3q24	-0.02823727	0.521768046	0.641108917
YPEL1	22q11.21-q11.22	0.028236945	0.521772846	0.641108917
TRIM34	11p15.4	-0.028230258	0.521871474	0.641190965
MMP23A	1p36.33	0.028225244	0.521945443	0.641242708
ADAM11	17q21.31	-0.02820439	0.522253123	0.641555379
CDRT15	17p12	-0.028202104	0.522286861	0.641555379
PODXL2	3q21.3	0.028201515	0.522295556	0.641555379
OR13H1	Xq26.2	0.02819926	0.522328829	0.641557101
CAAP1	9p21.2	0.028196391	0.522371167	0.641569956
NUTM2A-AS1	10q23.2	-0.028181195	0.522595467	0.641806281
HSH2D	19p13.11	0.028178157	0.522640315	0.641822202
AFDN	6q27	-0.028172858	0.522718533	0.641879099
CTAGE6	7q35	-0.028165796	0.522822797	0.64196797
UBA5	3q22.1	-0.028153841	0.522999332	0.642145566
PKM	15q23	-0.028146112	0.523113469	0.642244353
CEBPG	19q13.11	0.028144072	0.5231436	0.642244353
CD207	2p13.3	-0.028140328	0.523198896	0.642273068
MON1B	16q23.1	-0.028121103	0.523482899	0.64258252
MTFR1	8q13.1	0.028116326	0.523553465	0.642629954
FAM197Y2	Yp11.2	0.028110694	0.523636684	0.642679339
SCAMP1	5q14.1	0.028108511	0.523668947	0.642679339
UBA1	Xp11.3	-0.028107122	0.523689478	0.642679339
FERMT1	20p12.3	0.028102346	0.523760058	0.642726772
SYNGR1	22q13.1	0.028094877	0.52387043	0.642823026
SESN2	1p35.3	0.028092446	0.523906367	0.642827939
ATP6V1D	14q23.3	-0.028083415	0.52403986	0.642952544
APOC4	19q13.32	-0.028080244	0.524086732	0.642970863
MACO1	1p36.11 1p36.11	0.028075165	0.524161816	0.643023789
MRPS30	5p12	-0.028069607	0.524243984	0.643085399
ONECUT2	18q21.31	-0.028067373	0.524277018	0.643086733
MAPKBP1	15q15.1	0.028047116	0.524576575	0.643414967

ISG20	15q26.1	0.028032267	0.52479622	0.643645154
SNORA59B	17p11.2	-0.028014891	0.525053296	0.643921217
UBQLN3	11p15.4	0.027992472	0.525385079	0.644279235
KRTAP13-1	21q22.11	-0.02799084	0.525409236	0.644279235
DCSTAMP	8q22.3	-0.027985812	0.525483675	0.644314461
RNF113A	Xq24	0.027981076	0.525553772	0.644314461
MTCP1	Xq28	-0.027980946	0.525555709	0.644314461
COMMD5	8q24.3	-0.027980251	0.525565993	0.644314461
GLT6D1	9q34.3	-0.027977783	0.525602537	0.644320021
APOC1P1	19q13.32	-0.027962189	0.52583342	0.644548684
FAM71A	1q32.3	0.02796086	0.525853107	0.644548684
C20ORF194	20p13	0.027948902	0.526030191	0.644726483
CCDC189	16p11.2	0.027939611	0.526167819	0.644842332
FAM237A	2q33.3	-0.027933306	0.526261215	0.644842332
GC	4q13.3	-0.027932914	0.526267015	0.644842332
ZNF534	19q13.41	-0.027932807	0.526268612	0.644842332
SERINC1	6q22.31	-0.027931708	0.526284882	0.644842332
PICRAR	21q22.3	0.02792754	0.526346636	0.644878745
CSNK1D	17q25.3	-0.027919985	0.52645857	0.644951328
HMX1	4p16.1	-0.027919217	0.526469957	0.644951328
CTAGE11P	13q22.2	-0.027906178	0.526663165	0.645148756
IQGAP1	15q26.1	0.027898797	0.52677257	0.64524351
SHPK	17p13.2	-0.027874656	0.52713044	0.645642578
RAB10	2p23.3	-0.027866927	0.527245036	0.645743647
RAD51	15q15.1	0.027857896	0.527378953	0.645868366
PRPF8	17p13.3	-0.027853293	0.52744722	0.645912674
SAFB2	19p13.3	-0.02784843	0.527519346	0.645961703
OSGIN2	8q21.3	0.02783801	0.527673918	0.646024424
DMRTC1	Xq13.1	-0.027835521	0.527710843	0.646024424
KRT33B	17q21.2	-0.027834913	0.527719859	0.646024424
AFF2	Xq28	0.027834363	0.527728015	0.646024424
FAR2P1	2q21.1	-0.02783416	0.52773103	0.646024424
EMD	Xq28	-0.02782481	0.527869743	0.646154937
CT83	Xq23	-0.027817923	0.527971939	0.646240735
FAM107B	10p13	-0.027800061	0.528237014	0.646525877
SDF4	1p36.33	-0.027796501	0.528289861	0.646551246
NAA16	13q14.11	0.027791725	0.528360756	0.646589365
WRAP53	17p13.1	-0.027790075	0.528385248	0.646589365
METTL1	12q14.1	-0.02777071	0.528672753	0.646901862
FAM53B	10q26.13	0.027753082	0.528934542	0.647144626
CABYR	18q11.2	-0.027752908	0.528937122	0.647144626
MAP3K19	2q21.3	0.027750857	0.528967594	0.647144626
OR10A4	11p15.4	-0.02774496	0.529055174	0.647212437
SNORA4	3q27.3	-0.027741514	0.52910637	0.647235733
DDX51	12q24.33	-0.027736062	0.529187366	0.647295478
TPGS1	19p13.3	-0.027732154	0.529245421	0.647325696
OSCAR	19q13.42	0.02773007	0.529276385	0.647325696
OR2L8	1q44	-0.027727065	0.529321034	0.647340973
LINC01020	5p15.32	0.027711941	0.529545761	0.647576464
GBP7	1p22.2	0.027704903	0.529650359	0.64763287
GALNTL6	4q34.1	0.027704508	0.529656231	0.64763287
SPACA1	6q15	0.027701681	0.529698247	0.647644905
SSBP4	19p13.11	0.027690906	0.529858421	0.64778415
XK	Xp21.1	-0.02768969	0.529876494	0.64778415
MSLNL	16p13.3	-0.02768199	0.529990963	0.647884745
C9ORF129	9q22.31	-0.027676838	0.530067568	0.647915481
MAN2B1	19p13.13	0.02767597	0.53008048	0.647915481
CADM2	3p12.1	0.027665312	0.530238954	0.648069833

ZMYND19	9q34.3	-0.027656691	0.530367161	0.648187174
ARHGAP35	19q13.32	0.027626559	0.530815418	0.648695627
PRF1	10q22.1	0.027616138	0.53097048	0.648845733
KLHL21	1p36.31	-0.027611796	0.531035095	0.648885302
CLDN1	3q28	0.027606412	0.531115225	0.648943822
IFNA16	9p21.3	0.027579918	0.531509625	0.649386304
ZNHIT2	11q13.1	-0.027554261	0.531891697	0.649756053
ZNF7	8q24.3	0.027553441	0.531903917	0.649756053
CHI3L1	1q32.1	0.027553093	0.531909091	0.649756053
ZBTB41	1q31.3	-0.027541457	0.532082424	0.64992835
IL31RA	5q11.2	-0.027535827	0.532166296	0.649991356
LOC652276	16p13.3	0.027510327	0.532546279	0.650416006
KCNC3	19q13.33	-0.027506939	0.532596764	0.6504382
COX7B2	4p12	-0.027497944	0.532730842	0.650562476
PSMD2	3q27.1	-0.027491265	0.532830415	0.650644601
GJA3	13q12.11	0.027472274	0.533113554	0.650937215
ATAD3C	1p36.33	-0.027469642	0.53315281	0.650937215
XRCC3	14q32.33	-0.027468687	0.533167054	0.650937215
TMEM202	15q23-q24.1	-0.027451696	0.533420453	0.65117001
LRIT2	10q23.1	0.027451564	0.533422427	0.65117001
ZCCHC13	Xq13.2	-0.027449298	0.53345623	0.651171786
OR52N2	11p15.4	-0.02743509	0.533668181	0.651391007
TBC1D5	3p24.3	-0.027418581	0.533914517	0.651652169
CRX	19q13.33	0.02741321	0.533994676	0.65171049
CLEC14A	14q21.1	-0.027389924	0.534342246	0.652063094
SNORA16B	1q32.3	-0.027389514	0.534348375	0.652063094
PKHD1L1	8q23.1-q23.2	0.027386891	0.534387524	0.652071337
CIT	12q24.23	-0.027380546	0.534482267	0.652147414
CASQ2	1p13.1	-0.027375951	0.53455087	0.652191588
RAET1L	6q25.1	0.027368031	0.534669134	0.652296344
PLCD3	17q21.31	0.027358662	0.534809056	0.652427507
TPSG1	16p13.3	-0.027342819	0.535045712	0.652653806
SLC35F2	11q22.3	-0.027341903	0.535059402	0.652653806
G6PC	17q21.31	-0.027319401	0.535395605	0.653024329
VNN3	6q23.2	-0.027314633	0.535466871	0.653047891
PPP1R14B	11q13.1	0.027313767	0.535479805	0.653047891
RAVER1	19p13.2	0.02729666	0.535735502	0.653320146
ALKAL1	8q11.23	-0.027287778	0.535868277	0.653413484
UGT2B15	4q13.2	-0.027287198	0.53587696	0.653413484
SELENOO	22q13.33	-0.027280334	0.535979574	0.65346422
LHX3	9q34.3	0.027280072	0.535983494	0.65346422
GLRA1	5q33.1	-0.027262106	0.536252156	0.653752174
AMBRA1	11p11.2	-0.02725958	0.536289938	0.653758642
PRSS36	16p11.2	-0.027245686	0.536497754	0.653972375
SNORA11D	Xp11.22	-0.027234905	0.536659051	0.654129379
CALM2	2p21	-0.027221805	0.536855057	0.654328669
BIK	22q13.2	-0.027213643	0.536977214	0.654437932
KRT17P5	17p11.2	-0.027198873	0.537198274	0.654612028
PRDM16	1p36.32	-0.027197491	0.53721897	0.654612028
XRCC6P5	Xq22.1	-0.027196186	0.537238504	0.654612028
FANCF	11p14.3	0.027193366	0.537280709	0.654612028
LOC153684	5p12	-0.027193236	0.537282659	0.654612028
PLGLA	2q12.2	-0.027177082	0.53752451	0.654867057
MAP3K14	17q21.31	-0.027145301	0.538000501	0.65537222
OR4D9	11q12.1	0.027137127	0.538122951	0.65537222
OR4S2	11q11	-0.027137127	0.538122951	0.65537222
OR5AS1	11q12.1	0.027137127	0.538122951	0.65537222
OR8H1	11q12.1	0.027137127	0.538122951	0.65537222

CASC4	15q15.3	-0.027136356	0.538134497	0.65537222
NSRP1	17q11.2	0.027133838	0.538172227	0.65537852
CFAP157	9q34.11	-0.027124277	0.538315484	0.65551332
DHX9	1q25.3	0.027121247	0.538360898	0.655528967
PFN2	3q25.1	0.027112736	0.538488432	0.655644598
LINC00636	3q13.12	0.027102841	0.538636751	0.65578552
LUZP4	Xq23	0.027087006	0.538874121	0.656034839
RGPD8	2q14.1	0.027070612	0.539119933	0.656294403
HNRNPD	4q21.22	0.027058289	0.539304748	0.656425665
CLDN15	7q22.1	0.027057334	0.539319075	0.656425665
SIGLEC8	19q13.41	0.027056899	0.539325588	0.656425665
TIGD2	4q22.1	-0.027050734	0.539418066	0.656498529
FGF8	10q24.32	-0.027047178	0.539471409	0.656523758
GOLGA2P3Y	Yq11.23	-0.027037832	0.539611611	0.656644198
ARL5A	2q23.3	-0.027036232	0.539635617	0.656644198
GOLGA2P5	12q23.1	-0.027032846	0.53968642	0.656666322
ZFAND2A	7p22.3	-0.027020601	0.539870152	0.656850176
YIF1B	19q13.2	0.027013567	0.539975709	0.656938899
DOHH	19p13.3	0.026999499	0.540186855	0.657156064
SMAP1	6q13	0.02698986	0.540331553	0.657292371
FAM209A	20q13.31	0.026986278	0.540385331	0.657318068
SPDEF	6p21.31	0.026951435	0.540908571	0.657880588
CMSS1	3q12.1	-0.02695113	0.540913145	0.657880588
ZNF735	7q11.21	-0.026947462	0.540968247	0.657907855
IZUMO4	19p13.3	0.026940928	0.541066402	0.657987474
SLC9A3R2	16p13.3	0.02693194	0.54120144	0.658111936
MRI1	19p13.13	-0.026927858	0.541262772	0.658146759
TNR	1q25.1	0.026916984	0.541426164	0.658249647
C9ORF163	9q34.3	0.026916635	0.541431413	0.658249647
OR5H1	3q11.2	-0.026915698	0.541445487	0.658249647
MAP1LC3B	16q24.2	-0.026902848	0.541638616	0.658444673
MGAT4C	12q21.31-q21.32	0.026900404	0.541675351	0.658446071
SLC30A5	5q13.1-q13.2	-0.02689842	0.541705185	0.658446071
GAS2LIP2	9q22.33	0.02688755	0.541868584	0.658604915
PPAN-P2RY11	19p13.2	-0.026881749	0.541955805	0.658671156
PNO1	2p14	-0.026875321	0.542052456	0.658740885
ZNF679	7q11.21	0.026871905	0.542103809	0.658740885
CLEC3A	16q23.1	-0.026871404	0.542111351	0.658740885
SYCE1	10q26.3	-0.026864409	0.542216538	0.658828897
UBE3D	6q14.1	-0.026861297	0.542263344	0.658828897
VCY	Yq11.221	-0.026860058	0.542281967	0.658828897
PLAAT1	3q29	0.026856891	0.542329603	0.658841085
KRTAP12-1	21q22.3	-0.02685111	0.54241655	0.658841085
SHOC2	10q25.2	0.026845188	0.54250564	0.658841085
C5ORF60	5q35.3	-0.02684394	0.542524414	0.658841085
PIN4P1	15q15.3	-0.026842496	0.542546135	0.658841085
DEFB107A	8p23.1	0.026842158	0.54255121	0.658841085
TMEM120B	12q24.31	0.026841454	0.542561811	0.658841085
PIH1D1	19q13.33	-0.026839891	0.542585326	0.658841085
CHMP4B	20q11.22	0.026838241	0.542610147	0.658841085
OLFM2	19p13.2	0.026837633	0.542619292	0.658841085
OR6B3	2q37.3	-0.026832567	0.542695505	0.658893879
GSPT1	16p13.13	-0.026829383	0.542743409	0.658912298
POLRMT	19p13.3	0.026821307	0.542864926	0.659020079
MKNK1	1p33	0.026811408	0.543013892	0.659159682
MAGEB4	Xp21.2	0.026809314	0.543045413	0.659159682
STRA8	7q33	0.026801913	0.543156804	0.659255138
DMRT1	9p24.3	-0.026795343	0.543255699	0.659335416

RARS2	6q15	-0.026788743	0.543355051	0.659377898
WFDC11	20q13.12	0.026786612	0.543387123	0.659377898
VN1R4	19q13.42	0.026786065	0.54339536	0.659377898
ZNF627	19p13.2	-0.026784314	0.543421725	0.659377898
TEX15	8p12	0.026774367	0.543571496	0.659519873
PRAME	22q11.22	0.026770586	0.54362843	0.659549198
ZNF565	19q13.12	-0.026759912	0.543789159	0.65968214
CST8	20p11.21	0.026757304	0.543828443	0.65968214
BTBD8	1p22.1	-0.026756781	0.543836319	0.65968214
SLC2A7	1p36.23	0.026752405	0.543902235	0.659722342
HIST1H2BL	6p22.1	0.026749465	0.543946505	0.659736287
PLSCR1	3q24	0.026737595	0.544125318	0.659913402
RCAN1	21q22.12	0.026730474	0.544232596	0.659935784
OR8G5	11q24.2	0.02673029	0.54423537	0.659935784
SYPL1	7q22.3	-0.026728216	0.544266614	0.659935784
ITGAE	17p13.2	0.026725742	0.544303894	0.659935784
ZNF2	2q11.1	0.026725177	0.544312408	0.659935784
SLC22A6	11q12.3	-0.026723314	0.544340475	0.659935784
CRYGA	2q33.3	0.026717332	0.544430614	0.660005315
U2SURP	3q23	0.02671328	0.544491678	0.660039593
GP1BA	17p13.2	0.026711063	0.54452509	0.660040348
SCGB2A2	11q12.3	0.02670806	0.544570349	0.660055463
MPZ	1q23.3	-0.026698822	0.544709581	0.660148701
ZNF43	19p12	-0.026698605	0.544712862	0.660148701
CTR9	11p15.4	0.026685493	0.544910517	0.660316667
ZNF527	19q13.12	0.026685058	0.544917063	0.660316667
C15ORF39	15q24.2	-0.026669601	0.545150126	0.660559323
RPL31P11	1q23.3	-0.026638998	0.545611675	0.661078791
LIMCH1	4p13	-0.026627224	0.545789314	0.661254222
HCRT	17q21.2	-0.026619336	0.545908334	0.661358615
NECTIN2	19q13.32	0.026604385	0.546133949	0.661592128
CENPL	1q25.1	0.026599001	0.546215209	0.661637926
HCST	19q13.12	0.026597525	0.546237491	0.661637926
AQP7P1	9q13	0.026569727	0.546657154	0.662106409
CHST8	19q13.11	-0.026563731	0.546747687	0.662160325
KCNK4	11q13.1	-0.026562422	0.546767457	0.662160325
C17ORF64	17q23.2	-0.026544326	0.547040756	0.662451448
RPL13AP6	10q25.2	-0.026531355	0.547236696	0.662648862
ZSCAN18	19q13.43	0.026514855	0.547486004	0.662900382
PAICS	4q12	-0.026513249	0.547510271	0.662900382
SECISBP2	9q22.2	-0.026507734	0.547593609	0.66296141
CREB3	9p13.3	0.026503392	0.547659228	0.663000978
CTAG1B	Xq28	0.026492423	0.547825026	0.663161813
GRM3	7q21.11-q21.12	-0.026472879	0.548120475	0.663479565
RBM39	20q11.22	0.026450073	0.548465338	0.663857089
BRWD1	21q22.2	0.026442519	0.548579606	0.663928274
RAD52	12p13.33	-0.026441824	0.548590114	0.663928274
SLC10A4	4p11	-0.026424841	0.548847028	0.664199271
PTPRH	19q13.42	-0.026418074	0.548949406	0.664264733
LOC441455	9q22.33	0.026416904	0.548967118	0.664264733
BCAP29	7q22.3	0.026411257	0.549052554	0.664328179
OR10J1	1q23.2	0.026401251	0.549203981	0.66438568
UNKL	16p13.3	0.026398579	0.549244422	0.66438568
ANKS3	16p13.3	0.026396581	0.54927466	0.66438568
ZSCAN5A	19q13.43	0.026395496	0.54929108	0.66438568
SLC35G3	17q12	0.026394734	0.549302612	0.66438568
PRR26	10p15.3	0.02639421	0.549310547	0.66438568
ZNF142	2q35	0.026389547	0.549381124	0.66438568

ACSL3	2q36.1	-0.026388852	0.54939164	0.66438568
FAM13A-AS1	4q22.1	0.02638755	0.549411356	0.66438568
CENPN	16q23.2	0.026386247	0.549431074	0.66438568
RAB43	3q21.3	-0.026382079	0.549494171	0.66438568
TTC21A	3p22.2	0.026381949	0.549496134	0.66438568
CSN2	4q13.3	0.026379538	0.54953264	0.664389913
SOAT1	1q25.2	-0.026375306	0.549596712	0.664427471
WFIKKN2	17q21.33	0.026370272	0.549672919	0.664479694
LOC100130331	1q43	0.026366708	0.549726889	0.66450503
ABCC10	6p21.1	-0.026358025	0.549858366	0.664591755
DDX42	17q23.3	0.026354204	0.549916228	0.664591755
ALAS2	Xp11.21	-0.026353969	0.549919782	0.664591755
SIAH2	3q25.1	0.026353249	0.549930693	0.664591755
SDC1	2p24.1	-0.026346389	0.55003459	0.664648625
UNK	17q25.1	0.026345781	0.550043788	0.664648625
CDC42BPB	14q32.32	-0.026325895	0.550345021	0.664956636
TMEM38A	19p13.11	-0.026324592	0.550364755	0.664956636
LLCFC1	7q34	0.026306297	0.550641961	0.66525163
TIMM21	18q22.3	-0.026303056	0.550691069	0.665271033
CNPY3	6p21.1	-0.026299322	0.550747658	0.665299469
SPHK2	19q13.33	-0.026291333	0.55086874	0.665405805
CYTH1	17q25.3	0.026257813	0.551376902	0.665979661
ATF2	2q31.1	0.026236104	0.551706144	0.666281927
LINC02433	4q32.1	-0.026233	0.551753232	0.666281927
DHRS7C	17p13.1	-0.026232122	0.551766547	0.666281927
SLC5A11	16p12.1	-0.026230473	0.551791561	0.666281927
GRXCR2	5q32	-0.026230401	0.551792648	0.666281927
SCARNA12	12p13.31	-0.026226506	0.551851742	0.666313313
C11ORF16	11p15.4	0.026207631	0.552138105	0.666619088
ADGRE4P	19p13.2	0.026205323	0.552173132	0.666621396
CST9L	20p11.21	0.026199921	0.552255096	0.666680364
CFTR	7q31.2	-0.026196778	0.552302805	0.666697977
C14ORF180	14q32.33	-0.026194141	0.552342822	0.666706303
USP17L6P	4p16.1	-0.026186621	0.552456952	0.66680408
HTR3E	3q27.1	0.026177633	0.552593384	0.666928762
MAGT1	Xq21.1	0.02617497	0.552633809	0.666937565
KRIT1	7q21.2	0.026172365	0.552673357	0.666945308
KRT73	12q13.13	-0.026168042	0.552738985	0.66698452
OR6F1	1q44	0.02615377	0.552955678	0.667206006
ATP2A1	16p11.2	-0.026142668	0.553124278	0.667369438
FAM104A	17q25.1	0.02611288	0.553576749	0.667875335
DHX38	16q22.2	0.026109667	0.553625566	0.667894201
CSTA	3q21.1	-0.026102547	0.553733762	0.667984697
ELP3	8p21.1	-0.026086134	0.553983181	0.668245531
TPSAB1	16p13.3	0.02607554	0.55414421	0.668399721
SF1	11q13.1	0.026063469	0.554327706	0.668567506
PAK1	11q13.5-q14.1	0.026060517	0.554372594	0.668567506
SMG5	1q22	-0.026057738	0.554414843	0.668567506
CCDC88B	11q13.1	0.026057651	0.554416164	0.668567506
PTPN23	3p21.31	-0.02604671	0.554582537	0.668728074
UBOX5	20p13	0.026042281	0.554649885	0.668729948
OR10A5	11p15.4	0.026042238	0.554650532	0.668729948
OVOL1	11q13.1	0.026037592	0.554721199	0.668775094
ANKRD40	17q21.33	-0.026024176	0.554925253	0.668981037
RRP7BP	22q13.2	-0.026016837	0.555036885	0.669046625
TMEM106B	7p21.3	-0.026016229	0.555046132	0.669046625
SARAF	8p12	-0.026007632	0.555176924	0.66912733
GFM1	3q25.32	-0.026007459	0.555179566	0.66912733

SERGEF	11p15.1	-0.025973679	0.555693632	0.669706808
CCNQ	Xq28	-0.025969771	0.555753115	0.669738398
PLPP2	19p13.3	-0.025934167	0.556295211	0.67033785
NR2E1	6q21	0.025932727	0.556317144	0.67033785
CLC	19q13.2	0.025914494	0.556594865	0.670632348
IKZF5	10q26.13	-0.025907074	0.556707906	0.670728402
SIRPD	20p13	-0.025904128	0.556752784	0.670742327
ZNF117	7q11.21	0.025892137	0.55693548	0.670922275
LRFN4	11q13.2	0.025875725	0.5571856	0.671178331
UBE2O	17q25.1	0.025873815	0.557214718	0.671178331
CA6	1p36.23	0.025869456	0.557281145	0.67118957
TTY6	Yq11.223	-0.025868827	0.557290734	0.67118957
C1ORF115	1q41	-0.025833261	0.557832988	0.671802456
DHX8	17q21.31	0.025821451	0.558013103	0.671979168
EXOSC9	4q27	-0.025808165	0.558215767	0.672092244
STRIP1	1p13.3	0.025807123	0.558231663	0.672092244
CXORF38	Xp11.4	-0.02580708	0.558232309	0.672092244
CSTL1	20p11.21	-0.02580654	0.558240552	0.672092244
OR51S1	11p15.4	0.025798861	0.558357699	0.67219308
C20ORF173	20q11.22	-0.025790212	0.558489674	0.672311753
EXOC3L4	14q32.32	-0.025781253	0.558626375	0.672409921
DKFZP434H168	16q13	-0.02578049	0.558638029	0.672409921
GMPPB	3p21.31	-0.025775687	0.558711317	0.672457926
LINC00552	13q34	-0.025757632	0.558986908	0.6727494
RPUSD1	16p13.3	-0.025748681	0.559123554	0.672833401
TBC1D13	9q34.11	-0.025748681	0.559123554	0.672833401
UTRN	6q24.2	-0.02572619	0.559466976	0.673201288
ALKBH2	12q24.11	-0.025724279	0.559496152	0.673201288
CLASRP	19q13.32	-0.025718808	0.559579705	0.673261578
MAP3K20	2q31.1	0.025709256	0.559725605	0.67339687
PSMF1	20p13	-0.025703264	0.559817133	0.673466736
MAPT-IT1	17q21.31	0.025699706	0.55987149	0.673491878
KRTAP4-12	17q21.2	0.02569277	0.559977462	0.673579104
ST3GAL6	3q12.1	0.025683726	0.560115646	0.673682367
OGFR	20q13.33	-0.02568277	0.560130242	0.673682367
CCNB1IP1	14q11.2	0.025671742	0.560298773	0.673844802
IZUMO1R	11q21	-0.025669295	0.560336169	0.673849518
PTPN13	4q21.3	0.0256641	0.560415564	0.673897873
OR7A10	19p13.12	-0.025662283	0.560443333	0.673897873
SDS	12q24.13	0.02565394	0.560570861	0.674010956
SHF	15q21.1	-0.025647167	0.560674404	0.674095189
SNORA11B	14q32.11	-0.025642753	0.560741882	0.674108483
TOMM20L	14q23.1	-0.025642062	0.560752436	0.674108483
ZNF561	19p13.2	0.025628844	0.560954548	0.674311181
APCS	1q23.2	0.025620445	0.56108298	0.674425293
ZMYND10	3p21.31	-0.025613126	0.561194914	0.674519562
HLA-DQA2	6p21.32	0.025599666	0.561400793	0.674711988
RIMBP3	22q11.21	0.025598277	0.561422047	0.674711988
NPFFR2	4q13.3	0.025590749	0.5615372	0.674810092
RNF115	1q21.1	0.025532627	0.562426741	0.675838724
NHLRC3	13q13.3	-0.025514304	0.562707307	0.676135503
PISD	22q12.2	-0.025497805	0.562960006	0.676385563
SLC25A46	5q22.1	0.025496329	0.562982619	0.676385563
BBS5	2q31.1	-0.025489989	0.563079725	0.676461856
CLDN8	21q22.11	-0.025479979	0.563233079	0.676568096
SMS	Xp22.11	-0.025479829	0.563235377	0.676568096
THOC5	22q12.2	-0.025460725	0.563528114	0.676879344
PABPC1L	20q13.12	-0.025452389	0.563655867	0.676992399

OR5H14	3q11.2	0.025440108	0.563844101	0.677178077
NLGN3	Xq13.1	0.025432633	0.563958693	0.677275295
MYL3	3p21.31	0.025424363	0.564085483	0.677387148
YAF2	12q12	0.025411401	0.564284243	0.67758541
TRPV5	7q34	-0.02540786	0.564338548	0.677606704
GPR149	3q25.2	-0.025405854	0.5643693	0.677606704
TMED9	5q35.3	0.025399157	0.56447202	0.677689614
THSD4	15q23	0.025393903	0.564552591	0.677708265
SUCNR1	3q25.1	0.025393344	0.564561173	0.677708265
PPP2R3B	Xp22.33 and Yp11	0.025391559	0.564588555	0.677708265
RAD21L1	20p13	-0.025386684	0.564663331	0.677757609
SLC66A2	18q23	-0.025374408	0.56485166	0.677943234
SRMS	20q13.33	0.025368492	0.564942422	0.678011742
KRT38	17q21.2	0.025360905	0.565058844	0.678111037
KRT72	12q13.13	-0.025343158	0.565331193	0.678397432
ARF5	7q32.1	-0.025335678	0.565446009	0.678494764
UBL4A	Xq28	0.025287396	0.566187365	0.679329402
KRTAP7-1	21q22.11	0.025285898	0.566210374	0.679329402
SLC25A3P1	1p32.3	0.025283785	0.566242823	0.679329402
PRORS1P	2p16.1	0.02526942	0.566463493	0.679536475
UFD1	22q11.21	-0.025266294	0.566511522	0.679536475
CLEC2A	12p13.31	0.025265957	0.566516697	0.679536475
LARS	5q32	0.025260216	0.566604908	0.679601787
ARPP21	3p22.3	0.025257775	0.566642418	0.679606285
LBX2	2p13.1	-0.025253187	0.566712912	0.679650338
KDM1B	6p22.3	-0.025245019	0.566838436	0.679760378
TRIM11	1q42.13	-0.025223309	0.567172114	0.680120013
TGOLN2	2p11.2	-0.025204378	0.567463158	0.680428483
PLEKHG6	12p13.31	-0.025192742	0.567642093	0.680602497
IFIT1B	10q23.31	0.02516969	0.567996641	0.680987038
PLEKHA3	2q31.2	0.025165648	0.56805882	0.681010897
MBD6	12q13.3	-0.025163998	0.568084202	0.681010897
FBXO25	8p23.3	-0.025159266	0.568157004	0.681057613
FEZ2	2p22.2	0.025154664	0.568227814	0.681073273
HIST1H1A	6p22.2	0.025154019	0.568237736	0.681073273
ACSL4	Xq23	-0.025141768	0.568426248	0.68123039
NSUN6	10p12.31	-0.025139554	0.568460316	0.68123039
VAPB	20q13.32	-0.025138902	0.568470347	0.68123039
DNAJC5	20q13.33	0.025126571	0.568660125	0.681417246
HES4	1p36.33	0.025122577	0.568721609	0.681422609
TBRG4	7p13	0.025121882	0.568732302	0.681422609
LIN52	14q24.3	-0.025111461	0.568892712	0.681574234
CS	12q13.3	-0.025108769	0.568934154	0.68158332
OTULINL	5p15.2	0.025079765	0.569380755	0.682077755
ZNF846	19p13.2	-0.025073339	0.569479725	0.682093356
ZBTB17	1p36.13	0.025072471	0.5694931	0.682093356
LINC01558	6q27	0.02507232	0.569495431	0.682093356
ALK	2p23.2-p23.1	0.025057661	0.56972123	0.682323201
KRCC1	2p11.2	-0.025049893	0.569840901	0.682425923
TRNT1	3p26.2	0.025031223	0.570128583	0.682729826
LPGAT1	1q32.3	0.025026447	0.570202187	0.682777349
TXLNGY	Yq11.222-q11.223	-0.025016511	0.570355323	0.682920095
PRR34-AS1	22q13.31	-0.025011597	0.570431057	0.682970153
LRRC56	11p15.5	0.025005345	0.570527428	0.683044911
RWDD2A	6q14.1	0.024991364	0.57074298	0.683262336
IL10RB	21q22.11	-0.024988716	0.570783809	0.68327058
MTMR6	13q12.13	-0.024985112	0.570839385	0.683296474
CLEC19A	16p12.3	-0.024981825	0.570890061	0.683316502

AACS	12q24.31	-0.024975473	0.570988023	0.683393121
GABBR2	9q22.33	0.02495093	0.57136657	0.683805532
EIF2AK4	15q15.1	0.024947816	0.571414608	0.683822369
BCYRN1	2p21	0.024943863	0.571475591	0.683854693
MORN3	12q24.31	-0.024935313	0.571607508	0.683971891
USHBP1	19p13.11	-0.024927886	0.571722096	0.683978853
GDI2	10p15.1	-0.024924325	0.571777054	0.683978853
ITGAD	16p11.2	-0.024924178	0.571779325	0.683978853
HLA-DMB	6p21.32	-0.024924151	0.571779734	0.683978853
PTCHD1	Xp22.11	-0.024921788	0.571816208	0.683978853
LOC100129055	10p11.1	0.024921724	0.571817194	0.683978853
OSBPL11	3q21.2	0.024918507	0.57186684	0.683997593
TRIM72	16p11.2	0.024890793	0.572294607	0.684468567
DMBT1P1	10q26.13	-0.024867605	0.572652644	0.684856091
ANKRD19P	9q22.31	-0.024860759	0.572758368	0.684941837
ATF7	12q13.13	0.024843305	0.573027967	0.685223534
MIB2	1p36.33	-0.024831495	0.573210416	0.68537993
GGT8P	2p11.2	0.024830431	0.573226851	0.68537993
DEFB122	20q11.21	-0.024814916	0.573466581	0.685625841
CLDN25	11q23.2	-0.024802055	0.573665336	0.685822735
RAPSN	11p11.2	0.024792351	0.573815326	0.68596131
ABHD17A	19p13.3	-0.024771055	0.574144556	0.686314127
ZNF689	16p11.2	0.024768408	0.574185491	0.686322305
CHST5	16q23.1	0.024752526	0.574431082	0.686575091
ANKHD1	5q31.3	0.024748477	0.5744937	0.686584454
BTRC	10q24.32	-0.024747609	0.574507131	0.686584454
FEZF2	3p14.2	0.024742466	0.574586678	0.686638755
GPR37L1	1q32.1	-0.02473233	0.574743465	0.686785346
PTPN9	15q24.2	0.024728939	0.574795925	0.686807264
SPTSSB	3q26.1	0.024724774	0.574860347	0.686818345
TBC1D10A	22q12.2	-0.024720689	0.574923554	0.686818345
OSER1	20q13.12	-0.024719647	0.574939677	0.686818345
HRCT1	9p13.3	-0.024719518	0.574941675	0.686818345
TRAPPC2	Xp22.2	0.024701585	0.575219167	0.687109057
HEATR6	17q23.1	0.02469416	0.575334063	0.687177572
AGAP7P	10q11.22	-0.024693467	0.575344799	0.687177572
SYNJ2BP	14q24.2	-0.024688472	0.575422106	0.68722913
ODF1	8q22.3	0.024679852	0.575555528	0.687347697
OR5A2	11q12.1	0.024671531	0.575684339	0.687460742
IRF9	14q12	0.024662073	0.575830774	0.68759482
VCX	Xp22.31	0.024634827	0.576252704	0.688057829
JUN	1p32.1	0.024616396	0.576538201	0.688357887
ARPC5L	9q33.3	-0.024607191	0.576680811	0.688487322
C11ORF94	11p11.2	-0.024595883	0.576856042	0.688655682
GFOD2	16q22.1	0.024592994	0.576900806	0.688668281
HS3ST2	16p12.2	0.024580271	0.577097976	0.688862799
HERC3	4q22.1	-0.024549531	0.577574524	0.689390759
FUZ	19q13.33	-0.024517922	0.578064726	0.689934954
CLK2	1q22	0.024505764	0.578253317	0.690119124
YJEFN3	19p13.11	0.024499556	0.57834963	0.69019315
SERTAD4-AS1	1q32.2	0.02448996	0.578498529	0.690300252
NAPB	20p11.21	0.024489352	0.578507961	0.690300252
LIG1	19q13.33	-0.024478628	0.578674375	0.690455563
STARD7-AS1	2q11.2	0.024475502	0.578722892	0.690455563
DUXA	19q13.43	-0.024474334	0.578741019	0.690455563
BCORP1	Yq11.222	0.024451993	0.579087798	0.690800792
MYT1L-AS1	2p25.3	-0.024449518	0.579126213	0.690800792
CHCHD3	7q32.3-q33	0.024449059	0.579133341	0.690800792

RTL10	22q11.21	-0.024438117	0.579303219	0.690962482
GBP3	1p22.2	-0.024426481	0.579483908	0.691137047
MCTS1	Xq24	0.024420663	0.579574263	0.691203858
KRTAP9-2	17q21.2	-0.024414042	0.579677095	0.69128554
CAPZA1	1p13.2	-0.024392614	0.580009945	0.691633806
ATP1B4	Xq24	0.024390818	0.580037849	0.691633806
ALCAM	3q13.11	0.024373944	0.580300035	0.69190545
KRT84	12q13.13	-0.024368306	0.580387646	0.691968924
RBM26	13q31.1	-0.024365608	0.580429577	0.691977932
GRAMD2A	15q23	0.024359703	0.58052135	0.692046357
TRIM23	5q12.3	0.024355968	0.580579395	0.692074567
LPIN3	20q12	-0.024352582	0.580632035	0.692096333
MYO18A	17q11.2	-0.024335214	0.580902019	0.692357072
PRR3	6p21.33	0.024334085	0.58091957	0.692357072
SLC24A4	14q32.12	-0.024315942	0.581201671	0.692652279
LOC440896	9p11.2	0.02430013	0.581447582	0.692904323
DAZAP1	19p13.3	0.024297873	0.581482683	0.692905133
RPL13AP3	14q22.3	-0.024288497	0.581628534	0.69301224
LDLRAD2	1p36.12	0.024287019	0.581651532	0.69301224
IQCB1	3q13.33 3q21.1	0.024285456	0.581675848	0.69301224
ZMYM5	13q12.11	0.024275469	0.581831211	0.693156317
TRAI	3p21.31	0.024272343	0.581879851	0.693173239
RPS27	1q21.3	-0.024269651	0.581921737	0.693182115
SCART1	10q26.3	0.024262097	0.582039286	0.693280341
LINC00893	Xq28	0.024259925	0.582073077	0.693280341
SETD3	14q32.2	0.024236131	0.582443398	0.693650749
SNORA58	3q22.1	0.024235515	0.582452987	0.693650749
TRIB3	20p13	-0.024214943	0.582773264	0.693991115
AMHR2	12q13.13	-0.024205991	0.582912662	0.694090949
SPTLC1	9q22.31	0.02420513	0.58292606	0.694090949
SCUBE1	22q13.2	-0.024201354	0.582984868	0.694119915
LINC00470	18p11.32	0.024195144	0.583081569	0.694168386
CITED1	Xq13.1	-0.024194311	0.583094547	0.694168386
PCDH9	13q21.32	0.024190759	0.58314987	0.694193193
NCLN	19p13.3	-0.024188457	0.58318572	0.694194817
ZNF35	3p21.31	-0.024184463	0.583247938	0.694209318
C8ORF76	8q24.13	0.024183247	0.583266875	0.694209318
SLC25A31	4q28.1	0.024176592	0.583370535	0.694291644
KDM6A	Xp11.3	0.024159193	0.583641608	0.694573193
CDIPTOSP	16p11.2	0.024154365	0.583716833	0.694621651
DENND1C	19p13.3	-0.024152072	0.583752561	0.694623104
ZNF468	19q13.41	-0.024149467	0.583793156	0.694630348
SYT8	11p15.5	-0.024145387	0.583856725	0.694639205
STK25	2q37.3	-0.024142954	0.583894649	0.694639205
TM2D2	8p11.22	0.024142346	0.583904123	0.694639205
PDE8B	5q13.3	-0.024133098	0.58404825	0.694769606
MAPK10	4q21.3	-0.024123328	0.584200532	0.694909692
ZNF486	19p12	0.024119551	0.584259409	0.694938661
CAPN7	3p25.1	-0.024110563	0.584399532	0.695040894
SPATA32	17q21.31	0.024107251	0.584451165	0.695040894
SPATS1	6p21.1	-0.024104083	0.584500563	0.695040894
LPL	8p21.3	0.024102487	0.584525445	0.695040894
TMEM30CP	3q12.1	-0.024101228	0.584545075	0.695040894
MIGA2	9q34.11	-0.02410075	0.584552525	0.695040894
FBXL16	16p13.3	-0.024095714	0.58463106	0.695093216
HORMAD2	22q12.2	-0.024066811	0.585081836	0.695570599
THAP10	15q23	-0.024065538	0.585101687	0.695570599
DMAP1	1p34.1	-0.024057071	0.585233775	0.695686541

ZNF283	19q13.31	0.024049127	0.585357715	0.695764594
LY6K	8q24.3	0.024048431	0.585368562	0.695764594
BHLHE23	20q13.33	-0.024045295	0.585417504	0.695781683
TPTE2P6	13q12.12	-0.024022281	0.585776638	0.696167417
ZNF438	10p11.23	-0.024017559	0.585850331	0.696196041
ANKUB1	3q25.1	-0.024016306	0.585869892	0.696196041
FAM238B	10p12.1	-0.024008836	0.585986497	0.6962935
CLUHP3	16p11.2	-0.024003753	0.58606585	0.696346686
OR6W1P	7q34	-0.023998603	0.58614624	0.696377243
FRZB	2q32.1	0.023997673	0.586160756	0.696377243
PFN3	5q35.3	-0.023988565	0.58630296	0.696505081
NUPR2	7p11.2	-0.023983871	0.586376255	0.696547861
ARHGAP45	19p13.3	0.023980219	0.586433287	0.696547861
SPIDR	8q11.21	0.023979611	0.586442779	0.696547861
RAD51B	14q24.1	-0.023974445	0.586523458	0.696602584
TNFRSF10C	8p21.3	-0.023970667	0.586582458	0.696631557
ARMCX1	Xq22.1	0.02396728	0.58663535	0.696644386
ZNF223	19q13.31	-0.023965543	0.586662476	0.696644386
OR1N1	9q33.2	0.023962702	0.586706857	0.696655992
OR6C70	12q13.2	0.023959231	0.58676107	0.69667407
HNRNPU	1q44	0.023955123	0.586825238	0.69667407
TPTEP1	22q11.1	-0.02395508	0.586825908	0.69667407
MSH5	6p21.33	-0.023950173	0.586902558	0.696723977
ABHD17B	9q21.13	-0.023908577	0.587552499	0.697445499
TFAP4	16p13.3	0.023906841	0.587579643	0.697445499
KRTAP10-8	21q22.3	0.023892471	0.58780426	0.697670976
COPS6	7q22.1	-0.023876795	0.588049337	0.69792071
PPT1	1p34.2	-0.023864377	0.58824351	0.698110002
RHBG	1q22	-0.023859996	0.588312015	0.698150142
SZRD1	1p36.13	-0.023856214	0.588371164	0.698179175
TIMM29	19p13.2	-0.023851482	0.588445173	0.698213146
CHRNA7	15q13.3	-0.023849948	0.588469162	0.698213146
HES3	1p36.31	0.023834083	0.588717325	0.69846642
KNDC1	10q26.3	-0.023823693	0.588879861	0.698618081
OR52A5	11p15.4	0.023809301	0.589105052	0.69884405
PRLHR	10q26.11	0.023801066	0.58923393	0.698955746
ZNF733P	7q11.21	0.023793477	0.589352693	0.699055431
MEIOC	17q21.31	0.023771764	0.589692579	0.699417371
MGC57346	17q21.31	0.023758694	0.589897207	0.699618852
GPI	19q13.11	-0.023728127	0.590375914	0.700145348
OR6V1	7q34	-0.023689187	0.590986018	0.700773134
MYO15B	17q25.1	-0.023687748	0.591008569	0.700773134
KLHL33	14q11.2	0.023684149	0.591064968	0.700773134
SDF2L1	22q11.21	-0.023683753	0.591071171	0.700773134
DCAF4	14q24.2	0.023683232	0.591079337	0.700773134
RCAN2	6p12.3	0.023668817	0.591305276	0.700999717
C21ORF62	21q22.11	0.023662836	0.591399024	0.701069569
PDK4	7q21.3	-0.023648497	0.591623835	0.701294771
MBTPS2	Xp22.12	0.023645978	0.59166332	0.701300279
CEMIP2	9q21.13	0.023620014	0.592070495	0.701741584
CTAGE10P	13q14.2	0.023609506	0.592235315	0.701895607
INTS2	17q23.2	0.023605425	0.592299331	0.701930151
CNGA2	Xq28	0.023603068	0.592336303	0.701932642
FAM156A	Xp11.22	-0.023595091	0.592461449	0.702039614
LOC728613	5p15.33	0.023592139	0.592507772	0.702053178
PCGF5	10q23.32	-0.023560703	0.593001077	0.702586288
RMC1	18q11.2	0.023557403	0.593052871	0.702586288
CCNO	5q11.2	0.023556796	0.593062405	0.702586288

FAM138B	2q14.1	-0.023553504	0.593114076	0.702606153
SEZ6L	22q12.1	0.023544443	0.593256314	0.702733294
PARD6G-AS1	18q23	-0.023538794	0.593345002	0.702760003
CHUK	10q24.31	0.023538559	0.593348684	0.702760003
SPDYE8P	7q11.23	0.023528228	0.5935109	0.702880762
RSRC2	12q24.31	0.023527618	0.593520477	0.702880762
ZNF24	18q12.2	0.023523276	0.593588655	0.70292015
C11ORF21	11p15.5	0.023514072	0.593733188	0.703049946
SLC7A13	8q21.3	-0.023500118	0.59395234	0.703268079
S100A12	1q21.3	0.023476341	0.594325865	0.703668961
KRT9	17q21.2	0.023457087	0.594628424	0.703969879
IRAK2	3p25.3	-0.023455716	0.594649967	0.703969879
SOAT2	12q13.13	0.023438871	0.594914721	0.70424189
LRRD1	7q21.2	0.023431647	0.595028281	0.704334899
HLA-DRB1	6p21.32	-0.02341742	0.595251942	0.704519206
ZNF141	4p16.3	0.02341729	0.595253982	0.704519206
BCO2	11q23.1	-0.023411603	0.595343407	0.704583619
ESS2	22q11.21 22q11.2	-0.023406131	0.595429448	0.704634906
DENND2C	1p13.2	-0.023404395	0.595456751	0.704634906
OR2C1	16p13.3	0.023400563	0.595517007	0.704664787
RP1	8q11.23-q12.1	0.023383221	0.595789762	0.704946094
BRD7P3	6q22.31	0.023373318	0.595945533	0.705088961
TSNARE1	8q24.3	0.023364883	0.596078232	0.705166303
NSUN5P2	7q11.23	-0.023364709	0.596080965	0.705166303
CEACAM22P	19q13.31	0.023360984	0.596139569	0.705194189
XAB2	19p13.2	-0.023354029	0.59624901	0.705282206
ZFAND1	8q21.13	0.023347602	0.596350134	0.705360374
PTX4	16p13.3	0.023344199	0.596403687	0.705382269
ELP2	18q12.2	0.023335097	0.596546922	0.705510225
MINPP1	10q23.2	-0.023328237	0.596654895	0.705596466
CSRP1	1q32.1	-0.023322245	0.596749208	0.705613229
SSX1	Xp11.23	0.023321907	0.596754532	0.705613229
GAGE13	Xp11.23	0.023320656	0.596774229	0.705613229
LRRC70	5q12.1	0.023303966	0.597036963	0.70586764
SNORD103A	1p35.2	0.023302533	0.597059528	0.70586764
KLF2	19p13.11	-0.023296021	0.597162068	0.705924882
AGAP4	10q11.22	0.023293502	0.597201729	0.705924882
MYF5	12q21.31	0.023292646	0.59721521	0.705924882
HARBI1	11p11.2	0.023290549	0.59724822	0.705924882
ZFP42	4q35.2	-0.023286254	0.597315859	0.70595608
UNC45B	17q12	0.023284419	0.597344754	0.70595608
ADGRL1	19p13.12	0.023263977	0.597666716	0.706295115
PPP1R8	1p35.3	-0.023251559	0.597862333	0.706484811
COA7	1p32.3	-0.023242702	0.598001874	0.706575632
SPRN	10q26.3	-0.023242225	0.598009391	0.706575632
SCARNA15	15q25.2	-0.023231292	0.598181658	0.706737691
DLEU7	13q14.3	0.023223221	0.598308842	0.70684647
GSK3A	19q13.2	0.023216824	0.598409667	0.706892313
WDTC1	1p36.11	-0.023216303	0.598417879	0.706892313
GINM1	6q25.1	-0.023212482	0.5984781	0.706921967
SOX7	8p23.1	0.023205187	0.598593075	0.707016288
OXSR1	3p22.2	0.023194767	0.598757343	0.707132129
GRXCR1	4p13	-0.023194509	0.598761408	0.707132129
FBLL1	5q34	0.023184176	0.598924312	0.707283022
ADAT3	19p13.3	0.023168325	0.599174255	0.707536678
FNDC3A	13q14.2	-0.023147787	0.599498168	0.707877646
ALG10B	12q12	-0.023124428	0.59986668	0.708271234
SNORA66	1p22.1	0.023121443	0.599913777	0.708285298

SLC22A16	6q21 6q21-q22.1	-0.023113476	0.600039488	0.708392171
CCDC90B	11q14.1	0.023104715	0.600177735	0.708513828
BMP10	2p13.3	-0.023098881	0.600269818	0.70858098
IFNA4	9p21.3	-0.023091144	0.600391931	0.708683568
MICALL2	7p22.3	0.023078316	0.600594415	0.708822156
SMARCD3	7q36.1	-0.023077188	0.600612237	0.708822156
GPD2	2q24.1	-0.023077014	0.600614978	0.708822156
HMGA1	6p21.31	-0.023073367	0.600672557	0.708848551
SPINK7	5q32	-0.023061639	0.600857726	0.70898921
ABCC4	13q32.1	-0.023059473	0.60089192	0.70898921
ZDHHC18	1p36.11	0.023059125	0.600897413	0.70898921
LINC01881	2q37.3	0.023019789	0.601518681	0.709680638
FNDC7	1p13.3	-0.023009721	0.601677731	0.709826685
ZNF700	19p13.2	0.022988005	0.602020886	0.710188753
ETV5	3q27.2	0.022985834	0.602055195	0.710188753
OR5P3	11p15.4	-0.022970794	0.602292897	0.710427518
RNF208	9q34.3	-0.02295683	0.602513646	0.710646258
DVL2	17p13.1	-0.022951185	0.602602884	0.710709869
AKAP10	17p11.2	-0.022939636	0.602785496	0.710883593
DPM1	20q13.13	0.022930518	0.602929682	0.71101198
CARNMT1	9q21.13	-0.02291606	0.603158335	0.711239955
ATXN2L	16p11.2	0.022897693	0.603448878	0.711477686
KXD1	19p13.11	-0.022896613	0.603465964	0.711477686
DNER	2q36.3	0.022896612	0.603465971	0.711477686
DEFB109A	8p23.1	-0.022892203	0.603535729	0.711487573
CCL22	16q21	0.022891614	0.603545047	0.711487573
ASMTL-AS1	Xp22.33 and Yp11	0.022872076	0.603854209	0.711810343
KNSTRN	15q15.1	-0.022867647	0.603924288	0.711851266
FKBP1B	2p23.3	0.022861568	0.604020499	0.711922984
PTPN2	18p11.21	0.022853232	0.604152446	0.712036812
RBM19	12q24.13-q24.21	0.02284915	0.60421705	0.712071261
BRAT1	7p22.3	0.022837688	0.604398507	0.712243411
MTHFD2L	4q13.3	0.022824836	0.604601988	0.712439474
TEF	22q13.2	-0.022822708	0.604635667	0.712439474
GALK1	17q25.1	-0.022818844	0.604696864	0.712469879
GALNT8	12p13.32	0.022809044	0.604852054	0.712530427
IFIH1	2q24.2	0.022808163	0.604866008	0.712530427
RPL29P2	17p13.1	0.022806933	0.604885483	0.712530427
BEST3	12q15	0.022806658	0.60488984	0.712530427
MAGEA11	Xq28	0.022802994	0.604947859	0.712557074
ARHGAP24	4q21.23-q21.3	-0.022797916	0.605028297	0.71258759
BROX	1q41	-0.022795137	0.60507231	0.71258759
NKX2-3	10q24.2	0.022794654	0.605079964	0.71258759
IRX5	16q12.2	-0.022788016	0.605185102	0.712669715
OEEP	6q13	-0.022783893	0.605250413	0.712704932
ZNF552	19q13.43	-0.022777943	0.605344677	0.712732547
FAR2	12p11.22	-0.022777943	0.605344677	0.712732547
TMUB1	7q36.1	0.022746074	0.605849656	0.713285388
MAFK	7p22.3	-0.02272749	0.606144211	0.713590442
ZXDB	Xp11.21	0.022725145	0.606181378	0.713592465
IQCE	7p22.3	0.022707864	0.606455345	0.713873229
HHLA1	8q24.22	0.022696037	0.606642878	0.714052224
FAM163B	9q34.2	0.022688823	0.606757284	0.714145128
ENO3	17p13.2	0.022684939	0.606818883	0.714175872
RARG	12q13.13	-0.02267721	0.606941461	0.714278375
CCT8L2	22q11.1	-0.022644419	0.60746167	0.71484879
ETHE1	19q13.31	0.022620505	0.607841165	0.715253559
NUCB1	19q13.33	-0.022613558	0.607951429	0.715341494

MROH7	1p32.3	-0.022603919	0.608104436	0.715479707
FAM47B	Xp21.1	-0.022599679	0.608171742	0.715517075
RPA3	7p21.3	-0.022570053	0.608642157	0.716028673
ZBBX	3q26.1	0.022560815	0.608788857	0.716123785
ZKSCAN7	3p21.31	0.022558763	0.608821454	0.716123785
NPDC1	9q34.3	-0.022558242	0.60882973	0.716123785
EID1	15q21.1	0.022552076	0.60892766	0.716197125
NIPAL1	4p12	0.02252342	0.60938292	0.71669071
TMEM38B	9q31.2	0.022519078	0.609451912	0.716729976
PAX1	20p11.22	0.022500103	0.609753455	0.717042707
RNF2	1q25.3	0.022494763	0.609838331	0.717084688
CTCFL	20q13.31	-0.022493375	0.6098604	0.717084688
GOLGA8A	15q14	0.022478959	0.610089562	0.717312241
NOC3L	10q23.33	0.022466888	0.610281467	0.717495966
NAP1L4	11p15.4	-0.022459767	0.610394689	0.717559873
EXOSC2	9q34.12	-0.022458986	0.610407117	0.717559873
NFE2L1	17q21.32	0.022455078	0.610469256	0.717583199
BANK1	4q24	0.022453255	0.610498255	0.717583199
HBS1L	6q23.3	0.022446307	0.610608733	0.71767115
PLXNB2	22q13.33	0.022439534	0.610716458	0.717755856
RPL7L1	6p21.1	-0.022430069	0.61086701	0.717890882
ZNF408	11p11.2	-0.022398548	0.611368479	0.718414505
GABRA3	Xq28	0.02239555	0.611416183	0.718414505
INO80D	2q33.3	0.022395333	0.611419638	0.718414505
ZNF683	1p36.11	0.022389299	0.611515671	0.718485406
PYDC2	3q28	-0.022383095	0.611614406	0.718559472
SGTA	19p13.3	0.022377011	0.611711237	0.718631293
GOLGA6A	15q24.1	-0.022361142	0.611963825	0.718886076
UTP14C	13q14.3	-0.022342362	0.612262819	0.71919534
PLCZ1	12p12.3	0.022334799	0.612383247	0.719294828
RCL1	9p24.1	-0.022330943	0.612444646	0.719324974
PIP5K1A	1q21.3	-0.022320305	0.612614065	0.71948198
CCDC173	2q31.1	-0.022311144	0.612759975	0.719611359
TNMD	Xq22.1	0.022308277	0.612805644	0.719612686
TCEAL9	Xq22.2	0.022306585	0.612832602	0.719612686
SCNN1B	16p12.2	0.02230068	0.612926666	0.719681159
HLA-L	6p22.1	0.022296598	0.612991685	0.719715522
AFG3L2	18p11.21	-0.022291996	0.613065008	0.719759629
TRIM56	7q22.1	0.022284354	0.613186759	0.719860586
EPN1	19q13.42	-0.022282009	0.613224117	0.719862461
SERBP1	1p31.3	0.022274281	0.613347267	0.71996504
ART5	11p15.4	0.022268714	0.613435978	0.719992946
DMRTC2	19q13.2	0.0222683	0.613442574	0.719992946
DNAH14	1q42.12	-0.022261689	0.613547927	0.720074613
TBC1D3	17q12	0.022255871	0.613640655	0.720141456
SLED1	4q35.1	0.022246051	0.613797176	0.72028315
SLC7A14	3q26.2	0.02224096	0.613878336	0.720336397
NOD1	7p14.3	0.022237635	0.613931337	0.720356599
ZNF569	19q13.12	0.022224393	0.61414245	0.720562308
MRPS2	9q34.3	-0.022218531	0.614235925	0.720629979
OR6C4	12q13.2	0.022207835	0.614406472	0.720788057
FAM153CP	5q35.3	0.022178185	0.614879395	0.721300829
MAPKAPK5	12q24.12-q24.13	-0.022171812	0.614981062	0.721378054
THUMPD3-AS1	3p25.3	0.022154965	0.615249852	0.721651295
UGT2B10	4q13.2	-0.022151341	0.615307674	0.721677066
C8ORF44	8q13.1	0.022143416	0.615434155	0.721783357
MKRN2	3p25.2	-0.02214055	0.615479888	0.72179494
HNRNPA3	2q31.2	-0.022131606	0.61562264	0.721882973

PRKG2	4q21.21	0.022131353	0.615626677	0.721882973
C10RF162	1p13.2	0.022112848	0.615922052	0.722187261
SLC10A1	14q24.1	-0.022101878	0.616097205	0.722350559
KLK8	19q13.41	-0.022092398	0.61624856	0.722485936
SPATA13	13q12.12	0.022087665	0.616324139	0.722532463
SLC24A5	15q21.1	-0.022074958	0.616527075	0.72272828
OR5T3	11q12.1	-0.022069168	0.616619558	0.722744906
OR5AR1	11q12.1	0.02206892	0.616623506	0.722744906
SNORA79	14q31.1	0.022066786	0.616657595	0.722744906
ARSH	Xp22.33	-0.022062884	0.616719927	0.722744906
PMS2P5	7q11.23	-0.022062831	0.616720777	0.722744906
RHOB	2p24.1	-0.022057359	0.616808182	0.722748744
LSM14B	20q13.33	0.022056925	0.616815118	0.722748744
WASF3	13q12.13	-0.022055883	0.616831765	0.722748744
EPN2	17p11.2	0.02199579	0.617792037	0.723831774
LINC00320	21q21.1	-0.021989019	0.617900281	0.72385827
DHRS2	14q11.2	0.021987655	0.617922086	0.72385827
STX5	11q12.3	-0.021987628	0.617922529	0.72385827
REXO5	16p12.3	-0.021975644	0.618114116	0.724040568
HERC2	15q13.1	0.021950808	0.61851128	0.724463637
SLK	10q24.33-q25.1	-0.021944903	0.618605725	0.724532103
INTS9	8p21.1	-0.021938738	0.618704344	0.724605448
SEPTIN2	2q37.3	0.021933441	0.618789078	0.724662525
SFI1	22q12.2	0.021924844	0.618926608	0.72478142
HNRNPH2	Xq22.1	0.021922065	0.618971065	0.724791317
ZBTB9	6p21.32	-0.021910863	0.619150288	0.72495901
HEATR3	16q12.1	-0.021900616	0.619314264	0.725070277
OR9A2	7q34	0.021900423	0.619317354	0.725070277
SP100	2q37.1	-0.021894624	0.619410152	0.725136746
LINC01098	4q34.3	-0.021888972	0.619500603	0.725200462
PDZK1	1q21.1	-0.021875915	0.619709587	0.725402918
RRN3	16p13.11	-0.02186588	0.619870227	0.725535815
CST13P	20p11.21	0.02186432	0.619895205	0.725535815
HSPA1L	6p21.33	-0.021852421	0.620085706	0.725716585
PCGEM1	2q32.3	-0.021844111	0.620218777	0.725819348
RAPGEF2	4q32.1	0.021842434	0.620245625	0.725819348
TEX13B	Xq22.3	0.02182611	0.620507041	0.726044621
SLC9A3	5p15.33	0.021825909	0.620510266	0.726044621
FBXW11	5q35.1	0.021810999	0.620749091	0.726281848
C11ORF45	11q24.3	-0.021805441	0.62083812	0.726343796
GML	8q24.3	0.021799497	0.620933338	0.726412977
IFT22	7q22.1	-0.021789289	0.621096891	0.726562089
CHERP	19p13.11	0.021779389	0.621255517	0.726705419
C1GALT1	7p22.1-p21.3	-0.021772356	0.621368235	0.726795036
SLC25A48	5q31.1	0.021752389	0.621688244	0.727127091
SLC22A7	6p21.1	0.02174102	0.621870491	0.727297989
SLC49A4	3q21.1	-0.021723031	0.622158902	0.727539534
VTA1	6q24.1-q24.2	-0.021722684	0.622164471	0.727539534
C10ORF131	10q24.1	-0.021721376	0.622185448	0.727539534
DCTN1	2p13.1	-0.021712003	0.622335748	0.727657724
TRIM77	11q14.3	0.021710564	0.62235882	0.727657724
PLEKHM3	2q33.3	-0.0216919	0.622658157	0.727965426
CRCP	7q11.21	0.021678831	0.622867809	0.728168244
PRB3	12p13.2	-0.021665918	0.623074975	0.728368133
BTBD1	15q25.2	-0.021654603	0.623256533	0.728538065
GCSAML-AS1	1q44	0.021646016	0.62339433	0.728656826
USP36	17q25.3	0.021634022	0.623586822	0.728838717
RTP3	3p21.31	0.021631808	0.623622358	0.728838717

P2RX2	12q24.33	-0.021625636	0.623721434	0.728912189
TBC1D32	6q22.31	-0.02161774	0.623848172	0.72898137
CARF	2q33.2	0.021617436	0.623853059	0.72898137
AVP	20p13	-0.02160329	0.624080167	0.72920442
CCDC9	19q13.32	-0.021587998	0.624325715	0.729448989
STK11	19p13.3	0.02157367	0.624555825	0.729675493
CYLC2	9q31.1	-0.021557215	0.624820131	0.729941921
CSNK1G1	15q22.31	0.021544839	0.625018944	0.730131809
LRP3	19q13.11	-0.021541192	0.625077542	0.73015789
OR8I2	11q12.1	-0.02153272	0.62521366	0.730274514
EAF1	3p25.1	-0.021519743	0.625422201	0.730475713
MRPS24	7p13	-0.021499162	0.625752983	0.730778874
OR4E2	14q11.2	0.021498862	0.625757813	0.730778874
APEX2	Xp11.21	0.021496818	0.625790672	0.730778874
DBNDD2	20q13.12	-0.021492042	0.625867449	0.730826135
BORA	13q21.33	0.021485355	0.625974943	0.730909257
NBPF22P	5q14.3	0.021474259	0.626153334	0.731075147
THAP1	8p11.21	-0.021470245	0.62621788	0.731108104
ADAT1	16q23.1	-0.021460564	0.626373562	0.731247451
PNLIP	10q25.3	0.021457052	0.62643003	0.731270964
	2-Mar 19p13.2	0.021444541	0.626631246	0.731463438
DNASE1	16p13.3	0.021440938	0.626689203	0.731488673
RNF10	12q24.31	-0.021421529	0.62700142	0.731774476
FITM1	14q12	-0.021421197	0.627006764	0.731774476
ANXA5	4q27	-0.021411456	0.627163488	0.731875783
MEMO1	2p22.3	0.021411282	0.627166282	0.731875783
TLDC2	20q11.23	0.021396172	0.627409418	0.732097426
LINC00298	2p25.1	-0.021394958	0.627428952	0.732097426
HMGN4	6p22.2	0.021391656	0.627482087	0.732116989
SHISA9	16p13.12	-0.021383668	0.627610658	0.732183761
ZDHHC6	10q25.2	-0.021383581	0.627612062	0.732183761
GALC	14q31.3	-0.021378023	0.627701513	0.732205639
LINC01091	4q28.1	-0.021377896	0.627703563	0.732205639
CENPQ	6p12.3	0.021375591	0.62774065	0.732206472
MANBA	4q24	-0.021366039	0.627894412	0.732343387
VPS35L	16p12.3	-0.021362045	0.627958717	0.732367763
RPTOR	17q25.3	-0.021360221	0.627988075	0.732367763
OR4X2	11p11.2	-0.021356756	0.628043866	0.732390396
RFX5	1q21.3	-0.021350408	0.628146057	0.732467134
TNNT1	19q13.42	0.021346625	0.628206979	0.732495741
PLEKHA8P1	12q12	-0.021341551	0.628288676	0.732548569
VCX3A	Xp22.31	0.021316135	0.628697985	0.732941362
DDX19A	16q22.1	0.021316107	0.62869843	0.732941362
PITPNA	17p13.3	-0.021313849	0.628734796	0.732941362
FOXD4L5	9q21.11	-0.02130746	0.628837713	0.733018887
TBC1D24	16p13.3	0.021304123	0.62889146	0.733035101
NKX2-5	5q35.1	0.021302075	0.628924452	0.733035101
CDIP1	16p13.3	-0.021286495	0.629175455	0.733285197
ANKRD34C	15q25.1	-0.021261808	0.62957327	0.733706359
DPP10	2q14.1	0.021255611	0.629673145	0.733780271
SIRT6	19p13.3	-0.021248721	0.629784194	0.733867197
ZNF419	19q13.43	0.021243945	0.629861187	0.73391443
PTPN18	2q21.1	-0.021240037	0.629924178	0.733925698
AKIRIN2	6q15	-0.021238821	0.629943776	0.733925698
EFTUD2	17q21.31	0.021200786	0.63055704	0.734597674
C1ORF100	1q44	-0.021196918	0.630619418	0.734627829
KIF2B	17q22	0.021192625	0.630688661	0.734665977
OCSTAMP	20q13.12	-0.021187212	0.63077596	0.734698353

GRK7	3q23	-0.021184613	0.630817888	0.734698353
KMT2E-AS1	7q22.3	0.021184113	0.630825948	0.734698353
TRA2A	7p15.3	0.021176298	0.630952015	0.734802665
MAP2K1	15q22.31	-0.021166658	0.631107513	0.734906192
SCARNA4	1q22	0.021166261	0.631113927	0.734906192
MAPT-AS1	17q21.31	-0.021161601	0.631189109	0.734918108
ZNF574	19q13.2	-0.021161101	0.631197177	0.734918108
PHF12	17q11.2	0.021156673	0.631268624	0.734958786
MYLK3	16q11.2	0.021154198	0.631308556	0.734962769
ZBTB11	3q12.3	0.021139652	0.631543274	0.735193506
GLB1L3	11q25	0.021135607	0.631608544	0.73522697
DHX15	4p15.2	-0.021118768	0.631880333	0.735500816
GPR62	3p21.2	-0.021105516	0.632094243	0.735707262
LOC100133920	2q11.1	-0.021091815	0.632315441	0.735889511
ATPSCKMT	5p15.2	-0.021090241	0.632340865	0.735889511
SRRM2	16p13.3	-0.021089025	0.632360495	0.735889511
CHM	Xq21.2	0.021076955	0.632555404	0.736073778
NOS1AP	1q23.3	-0.021074654	0.632592559	0.736074463
OR10K1	1q23.1	-0.021068247	0.632696021	0.736135417
DHX32	10q26.2	-0.021066881	0.632718082	0.736135417
IRF7	11p15.5	0.021049166	0.633004213	0.736411143
TAS2R14	12p13.2	0.021047679	0.633028238	0.736411143
DPY19L4	8q22.1	0.021041264	0.633131868	0.736489136
URAD	13q12.2	-0.021030625	0.633303746	0.736629214
NEURL4	17p13.1	0.02102928	0.633325475	0.736629214
E2F5	8q21.2	0.021026241	0.633374582	0.736643768
STXBP5L	3q13.33	0.021022746	0.63343106	0.736666892
EIF5	14q32.32	0.021010002	0.633636982	0.736863805
ASCL4	12q23.3	-0.020992724	0.633916223	0.737145952
GNA15	19p13.3	0.020985774	0.634028563	0.737233998
DDX31	9q34.13	-0.020975701	0.634191401	0.737380749
SRFBP1	5q23.1	0.020971359	0.634261595	0.737419771
TMOD4	1q21.3	0.020962371	0.634406913	0.737546126
UCKL1	20q13.33	-0.020955641	0.634515726	0.737571009
SLC20A2	8p11.21	-0.020955034	0.634525555	0.737571009
PIP4P1	14q11.2	0.020953297	0.634553639	0.737571009
NEUROD2	17q12	-0.02094908	0.634621819	0.737571009
METTL21C	13q33.1	0.020947038	0.634654843	0.737571009
TFF2	21q22.3	-0.020946922	0.634656728	0.737571009
PRDM14	8q13.3	0.020945186	0.6346848	0.737571009
C3ORF14	3p14.2	-0.02093975	0.634772708	0.737610852
TBRG1	11q24.2	0.020938534	0.63479237	0.737610852
HMGN2P46	15q21.1	0.020932369	0.634892079	0.73768413
PROSER1	13q13.3	0.020926812	0.63498197	0.737745992
RNF130	5q35.3	0.020922209	0.635056422	0.737789911
LOC541473	7q11.23	0.020908207	0.63528293	0.738010468
CYB5R3	22q13.2	-0.020900239	0.635411843	0.738117629
IGF1R	15q26.3	0.020893465	0.635521436	0.738202338
HOXA13	7p15.2	0.020886184	0.635639262	0.738296598
AIG1	6q24.2	-0.020874448	0.635829183	0.738474582
GDF3	12p13.31	0.020869417	0.635910607	0.73852654
XKR6	8p23.1	-0.02085717	0.636108822	0.738714122
PYY	17q21.31	-0.02083735	0.636429689	0.73904411
PDE4D	5q11.2-q12.1	-0.020811316	0.636851238	0.739490968
MLKL	16q23.1	0.020807669	0.636910305	0.739516897
CYB561	17q23.3	0.020799419	0.637043917	0.73960631
NUP133	1q42.13	0.020798377	0.637060795	0.73960631
TBL2	7q11.23	-0.020790996	0.637180355	0.739702252

KCNMB3	3q26.32	0.020788738	0.637216927	0.739702252
POLK	5q13.3	0.020782052	0.637325237	0.73978532
ZNF517	8q24.3	-0.02077797	0.637391364	0.739819418
CCDC7	10p11.22	-0.020771098	0.637502702	0.739905984
SYS1-DBNDD2	20q13.12	0.020767187	0.637566068	0.739936866
OGDH	7p13	-0.02075105	0.637827544	0.740195501
ADRA2B	2q11.2	0.020748896	0.637862462	0.740195501
DKK1	10q21.1	-0.020743418	0.637951239	0.740255847
WDR64	1q43	-0.020739835	0.638009296	0.740280542
CCDC97	19q13.2	-0.020735159	0.638085089	0.740325812
GOLPH3	5p13.3	0.020731425	0.638145611	0.74035336
ZFP3	17p13.2	0.02072717	0.638214582	0.740365984
FBXL12	19p13.2	-0.020726216	0.638230051	0.740365984
PSG11	19q13.31	0.020717875	0.638365251	0.740480149
QTRT2	3q13.31	-0.020711279	0.638472192	0.740561523
OR4C45	11p11.12	0.020708037	0.63852474	0.740579801
RBM15	1p13.3	0.02070355	0.638597494	0.74062151
TMEM167B	1p13.3	0.020700858	0.638641141	0.74062946
PGM5-AS1	9q21.11	-0.020693441	0.638761396	0.740716089
SNORA84	9q22.31	0.020691712	0.638789434	0.740716089
TFR2	7q22.1	-0.020663344	0.639249504	0.741206872
P2RY12	3q25.1	0.020651935	0.639434577	0.741378761
DYNAP	18q21.2	0.020625114	0.639869741	0.741840574
HM13	20q11.21	0.020621054	0.639935626	0.741874231
SPNS1	16p11.2	0.02060907	0.640130104	0.742056954
MAMDC2	9q21.12	-0.020588837	0.640458519	0.742394909
TAS2R3	7q34	-0.020561621	0.640900374	0.742864314
GJB3	1p34.3	0.020556461	0.640984157	0.742876169
CCDC107	9p13.3	-0.020556446	0.640984411	0.742876169
LOC341056	11q24.1	-0.020553712	0.641028809	0.742884855
NPHP3	3q22.1	0.020539426	0.641260823	0.74307721
CLDN16	3q28	0.020538946	0.641268618	0.74307721
TSNAX-DISC1	1q42.2	0.020529796	0.641417225	0.743187342
ZNF682	19p12	-0.020528137	0.641444184	0.743187342
GSTM2P1	6q21	0.020526275	0.64147442	0.743187342
CCDC33	15q24.1	0.020519205	0.641589268	0.743277622
PRAMEF14	1p36.21	-0.020514502	0.641665677	0.743323363
SNORA44	1p35.3	-0.020496069	0.641965166	0.743627505
GNAS	20q13.32	0.020488104	0.642094589	0.743734627
TOR3A	1q25.2	-0.020466221	0.642450241	0.74410376
FTHL17	Xp21.2	-0.020462239	0.642514964	0.744135909
PRR29	17q23.3	-0.020447637	0.642752326	0.744367986
TBX2	17q23.2	0.020443643	0.642817268	0.744392054
OR5B3	11q12.1	0.02044181	0.642847068	0.744392054
TTC36	11q23.3	0.020422315	0.643164056	0.744716275
PRPF40B	12q13.12	-0.020418373	0.64322816	0.744747663
MZF1-AS1	19q13.43	0.020410992	0.643348201	0.744843807
SCRT1	8q24.3	-0.0203966	0.643582271	0.744984079
GABRE	Xq28	-0.020392756	0.643644811	0.744984079
U2AF1L4	19q13.12	-0.020392582	0.643647636	0.744984079
CIB3	19p13.11	-0.020392388	0.643650788	0.744984079
CYP2C8	10q23.33	-0.020390457	0.643682205	0.744984079
ACVR1C	2q24.1	0.020388545	0.643713308	0.744984079
PCLAF	15q22.31	-0.020385461	0.643763471	0.744984079
METTL9	16p12.2	0.020385114	0.643769122	0.744984079
KRT82	12q13.13	-0.020383066	0.643802436	0.744984079
ZNF737	19p12	0.020345602	0.644412023	0.745646607
SLC8A2	19q13.32	-0.020341685	0.644475773	0.745677509

VSX2	14q24.3	-0.02033369	0.644605901	0.745785206
TMPRSS13	11q23.3	-0.020329277	0.644677739	0.745825453
DDX46	5q31.1	0.020317727	0.644865746	0.745956356
IFI44	1p31.1	0.020316772	0.644881297	0.745956356
C17ORF77	17q25.1	-0.020315497	0.64490206	0.745956356
SLC2A12	6q23.2	0.020301923	0.645123056	0.746169106
SS18L2	3p22.1	-0.020299318	0.645165474	0.746175294
BLOC1S3	19q13.32	-0.020287595	0.645356368	0.746353194
LRRC37A2	17q21.31	-0.020282384	0.645441217	0.746378645
MSL3P1	2q37.1	0.02028169	0.645452531	0.746378645
LDHC	11p15.1	0.020268432	0.645668443	0.746585431
WNT8B	10q24.31	-0.020245375	0.646044045	0.746887415
ZNF571	19q13.12	-0.020245045	0.646049424	0.746887415
NEUROD4	12q13.2	0.020242032	0.646098507	0.746887415
LINC02396	12q13.12	0.020240569	0.646122344	0.746887415
RNPS1	16p13.3	-0.020240528	0.646123007	0.746887415
MIR1-1HG-AS1	20q13.33	-0.020238735	0.646152227	0.746887415
TNFSF12-TNFSF	17p13.1	-0.020215701	0.646527552	0.747269493
HARS	5q31.3	0.020211698	0.646592794	0.747269493
FADS6	17q25.1	0.020211615	0.646594139	0.747269493
CAPN14	2p23.1	0.020199701	0.646788316	0.74745099
LOC150776	2q21.1	0.020191465	0.646922571	0.747563223
FANCC	9q22.32	0.020183215	0.647057052	0.747637696
ZBTB3	11q12.3	-0.020182955	0.647061299	0.747637696
CTDNEP1	17p13.1	0.020169494	0.647280748	0.74784833
ANKRA2	5q13.2	-0.020166802	0.64732464	0.747856118
TBXT	6q27	-0.020161216	0.647415737	0.747918438
THSD1P1	13q14.3	0.02015699	0.647484636	0.747921623
SF3B1	2q33.1	0.020155427	0.647510132	0.747921623
ETV3	1q23.1	0.020154211	0.647529957	0.747921623
GPRIN1	5q35.2	0.020132936	0.647876934	0.748258635
TCP10	6q27	-0.020129342	0.647935543	0.748258635
OSTC	4q25	0.020127986	0.64795767	0.748258635
PRELID2	5q32	-0.020127204	0.647970418	0.748258635
LMF2	22q13.33	-0.020123818	0.648025662	0.748273798
VCX2	Xp22.31	-0.020121722	0.648059837	0.748273798
WDR19	4p14	-0.020119563	0.648095066	0.748273798
TNS1	2q35	0.020114439	0.648178653	0.748327385
PLD5	1q43	0.020092849	0.648530903	0.748679027
OR3A3	17p13.2	0.020091212	0.648557619	0.748679027
INTS6	13q14.3	-0.020086998	0.648626381	0.748715468
PI4KAP2	22q11.21	0.020071107	0.648885724	0.748971882
TEX28	Xq28	-0.020057877	0.649101667	0.749170858
LINC00161	21q21.3	0.020055985	0.649132544	0.749170858
NACC1	19p13.13	-0.02005261	0.649187635	0.749191487
ACTR10	14q23.1	0.020034721	0.64947968	0.749485551
PTMA	2q37.1	-0.020006673	0.649937702	0.749971106
MIR7-3HG	19p13.3	-0.020000259	0.650042451	0.750048982
FAM157B	9q34.3	-0.019996315	0.650106875	0.750080323
AKT2	19q13.2	-0.019984268	0.650303648	0.750264353
OR13J1	9p13.3	-0.019981519	0.650348559	0.750273167
SLC26A5	7q22.1	-0.019971113	0.65051857	0.750426294
ARGFX	3q13.33	0.019956206	0.650762133	0.750664245
VBP1	Xq28	0.019941197	0.651007407	0.750904143
OR4D1	17q22	0.019933009	0.651141216	0.751004234
OR52E8	11p15.4	0.019929713	0.65119509	0.751004234
SUCO	1q24.3	0.019929039	0.651206105	0.751004234
CROCCP2	1p36.13	0.019925479	0.6512643	0.75102832

OR5A1	11q12.1	0.019921677	0.651326447	0.751056962
MORC2-AS1	22q12.2	0.019918011	0.651386374	0.751062934
SLC39A10	2q32.3	-0.019916795	0.651406247	0.751062934
CST2	20p11.21	0.019908276	0.651545518	0.751180486
PPID	4q32.1	0.019903682	0.651620612	0.751224037
MEOX1	17q21.31	0.019895738	0.651750508	0.75133076
CEACAM20	19q13.31	0.019892252	0.6518075	0.751353431
HLA-DQB1	6p21.32	0.019885099	0.651924462	0.751441481
NECAP2	1p36.13	0.019883015	0.651958543	0.751441481
CHURC1	14q23.3	-0.019877805	0.652043746	0.751496657
HTR3B	11q23.2	-0.019874107	0.652104215	0.751523321
CACNG8	19q13.42	0.019870639	0.652160941	0.751545669
SNORA19	10q26.11	-0.019866401	0.652230253	0.751582517
TYW1B	7q11.22-q11.23	-0.019861957	0.652302929	0.751623238
GJC2	1q42.13	-0.019857399	0.652377491	0.751664729
CXXC4	4q24	-0.019854265	0.652428745	0.751664729
LINC00934	12q24.23	-0.019852244	0.652461805	0.751664729
TUBG1	17q21.2	-0.019850624	0.6524883	0.751664729
THAP11	16q22.1	-0.019846717	0.652552224	0.751695351
CNNM2	10q24.32	-0.01984168	0.652634618	0.751747245
AKT1	14q32.33	0.01983317	0.652773845	0.751792328
ANKHD1-EIF4EE	5q31.3	-0.019832475	0.652785211	0.751792328
SNORA70B	2p15	-0.019832439	0.652785798	0.751792328
SSX7	Xp11.22	0.019813834	0.653090223	0.752099897
ARL2	11q13.1	-0.019802082	0.653282553	0.752278348
MS4A5	11q12.2	-0.019798121	0.653347379	0.752293747
ZNF200	16p13.3	0.019796698	0.65337067	0.752293747
FBXO46	19q13.32	0.019764307	0.653900893	0.752830155
OR5C1	9q33.2	0.019762589	0.653929029	0.752830155
TAS2R38	7q34	0.019760192	0.653968273	0.752830155
PSMD5	9q33.2	0.019757534	0.654011793	0.752830155
CNGB3	8q21.3	-0.019756816	0.654023535	0.752830155
ARHGAP31	3q13.32-q13.33	-0.019730006	0.654462579	0.753251947
POU6F2	7p14.1	0.01972987	0.654464807	0.753251947
PCDHA1	5q31.3	-0.019724401	0.654554373	0.753311962
ARL6IP5	3p14.1	-0.01970491	0.654873658	0.753636332
TAS2R31	12p13.2	-0.019693872	0.655054488	0.75380134
TRIML1	4q35.2	0.019690495	0.65510981	0.75382191
DPRXP4	17q11.2	0.019688018	0.655150409	0.753825535
ARL3	10q24.32	0.019681724	0.655253536	0.753877137
ZNF687	1q21.3	-0.019680334	0.655276303	0.753877137
USP45	6q16.2	0.019678424	0.655307608	0.753877137
GCNT4	5q13.3	-0.01967061	0.655435653	0.753981353
ETAA1	2p14	-0.019666961	0.655495452	0.754007054
PRODH2	19q13.12	-0.019653367	0.655718256	0.754220244
TTY9B	Yq11.222	0.019648687	0.65579496	0.754265373
LMO4	1p22.3	0.019639781	0.655940957	0.754390189
ZCCHC3	20p13	0.0196225	0.656224265	0.754672901
TMEM165	4q12	-0.019598446	0.656618701	0.755083373
DAP	5p15.2	-0.019592367	0.656718392	0.755154875
TRPV1	17p13.2	-0.019578777	0.65694129	0.755368034
WLS	1p31.3	0.019570397	0.657078758	0.755482945
CLCN6	1p36.22	-0.019561453	0.657225491	0.755608495
ACD	16q22.1	-0.019550772	0.657400733	0.755766805
ZNF16	8q24.3	-0.019537833	0.657613044	0.75596771
DDX18	2q14.1	0.019515342	0.657982159	0.756348838
GALNS	16q24.3	0.019496671	0.65828863	0.756657918
FAM83F	22q13.1	0.019486735	0.658451751	0.756802201

FAM182B	20p11.1	-0.019478175	0.658592307	0.756918711
DRC7	16q21	-0.01947475	0.658648536	0.756918711
INS	11p15.5	-0.019472523	0.658685114	0.756918711
TCTN3	10q24.1	-0.019471401	0.658703526	0.756918711
RBMY1F	Yq11.223	-0.019466209	0.658788789	0.756973476
PEX5	12p13.31	0.019458636	0.658913153	0.757073161
GCNT7	20q13.31	0.01943559	0.659291674	0.757421373
CRYAA	21q22.3	0.019434738	0.659305682	0.757421373
DEXI	16p13.13	0.019432064	0.659349605	0.757421373
KPNA6	1p35.2	0.019431022	0.659366723	0.757421373
TUBG2	17q21.2	-0.019425377	0.659459449	0.757470936
NPTN	15q24.1	-0.019423814	0.659485128	0.757470936
MBL1P	10q22.3	-0.019420697	0.659536335	0.75748653
MYC	8q24.21	-0.019409833	0.65971483	0.757648307
TMEM132D	12q24.33	-0.019394646	0.659964376	0.757891659
SPATA33	16q24.3	0.019384737	0.660127232	0.758035435
ARAP2	4p14	0.019375966	0.660271382	0.758157716
ZMAT1	Xq22.1	0.019365546	0.66044266	0.758311131
ZUP1	6q22.1	0.019358121	0.660564711	0.758351455
APBA1	9q21.12	-0.019357817	0.660569715	0.758351455
LINC00606	3p25.3	-0.019356535	0.660590798	0.758351455
MED6	14q24.2	-0.019351304	0.660676785	0.758406916
CEACAM19	19q13.31	0.019346615	0.66075388	0.758452164
TPSB2	16p13.3	-0.019338105	0.660893802	0.758569519
RPAP2	1p22.1	-0.019331072	0.661009447	0.758658998
FAM226B	Xq13.1	-0.019320136	0.661189269	0.75882212
ZNF180	19q13.31	0.019317742	0.661228649	0.758824053
RAB35	12q24.23	0.019296596	0.661576448	0.759110187
HIST2H2AA3	1q21.2	-0.01929373	0.661623586	0.759110187
ZNF513	2p23.3	0.019293036	0.661635014	0.759110187
CCSER1	4q22.1	-0.019291214	0.661664978	0.759110187
TTC41P	12q23.3	0.019288999	0.661701419	0.759110187
LINC00879	3q11.2	0.019288827	0.661704245	0.759110187
PNPT1	2p16.1	-0.019275581	0.661922162	0.759316909
OR2B3	6p22.1	0.019268823	0.662033362	0.759401195
MOCS1	6p21.2	0.019255521	0.662252229	0.759608967
ETV3L	1q23.1	-0.01924483	0.662428169	0.75976748
NOL4	18q12.1	-0.01923573	0.662577954	0.759895978
CPA3	3q24	0.01923112	0.662653821	0.759939692
OTOAP1	16p12.2	0.01921916	0.662850706	0.760122178
ANKRD42	11q14.1	0.019191174	0.663311457	0.760607214
GYG2	Xp22.33	-0.019178931	0.66351308	0.7607542
SLC1A2	11p13	0.0191788	0.663515225	0.7607542
ZNF764	16p11.2	0.019173894	0.66359602	0.760783143
ZC3H4	19q13.32	0.019172678	0.663616056	0.760783143
MUSTN1	3p21.1	-0.019163647	0.663764794	0.760896515
C12ORF43	12q24.31	-0.019162083	0.663790546	0.760896515
TANC1	2q24.2	0.019154442	0.663916419	0.760983649
SEC23IP	10q26.11-q26.12	-0.019152879	0.663942167	0.760983649
OR8B3	11q24.2	0.019146491	0.664047392	0.76106092
ST7-OT4	7q31.2	0.019136575	0.664210757	0.761204813
LYZL1	10p12.1-p11.23	-0.019132837	0.664272334	0.761232043
NSMCE3	15q13.1	-0.019128217	0.664348464	0.761275948
ZBTB37	1q25.1	-0.019120835	0.664470086	0.761371974
SLC22A24	11q12.3	0.019112289	0.664610909	0.761489987
LINC00476	9q22.32	0.019108417	0.664674717	0.761507564
NEDD9	6p24.2	-0.019106767	0.664701908	0.761507564
OCM	7p22.1	0.019100989	0.664797147	0.761544662

PRR15	7p14.3	0.019100212	0.664809952	0.761544662
ZNF790	19q13.12	0.01909791	0.664847879	0.761544771
LRSAM1	9q33.3-q34.11	-0.019085839	0.665046838	0.761695107
TEX36	10q26.13	0.019084897	0.66506238	0.761695107
BANP	16q24.2	0.019083061	0.665092643	0.761695107
GOLGA6B	15q24.1	-0.019038901	0.665820717	0.762485551
CLVS2	6q22.31	0.019033698	0.665906524	0.762540436
CEP95	17q23.3	-0.019011289	0.666276129	0.762920277
EPB41L4B	9q31.3	0.01900508	0.666378558	0.762994162
TMEM154	4q31.3	0.018999175	0.666475972	0.763062298
DHRXS	Xp22.33 and Yp11	0.018992141	0.666592017	0.763151754
SPRR2B	1q21.3	-0.0189848	0.666713135	0.763247009
OR52K2	11p15.4	-0.018973222	0.666904175	0.763422294
SEC62	3q26.2	-0.018969129	0.666971726	0.763456206
ADAMTSL5	19p13.3	-0.018965308	0.66703478	0.763484967
ANKRD2	10q24.2	-0.018952618	0.667244216	0.763681264
TIMM8A	Xq22.1	0.018949764	0.66729132	0.763691754
OR2T3	1q44	0.018934688	0.667540163	0.763933115
OR8G2P	11q24.2	0.018929927	0.667618762	0.763979631
AANAT	17q25.1	0.018919886	0.667784538	0.764125895
C15ORF62	15q15.1	-0.018915159	0.667862577	0.764171754
NPIPA1	16p13.11	0.018906866	0.667999514	0.764284996
ZNF137P	19q13.41	0.018901482	0.668088418	0.764343271
TMPRSS11B	4q13.2	0.018897884	0.668147826	0.764367796
OR1I1	19p13.12	0.018878001	0.668476194	0.764699994
LGMN	14q32.12	0.018852852	0.668891628	0.765131746
SCGB1D4	11q12.3	0.018847221	0.668984658	0.76518182
RFX2	19p13.3	0.018843387	0.669048011	0.76518182
HHEX	10q23.33	0.018843301	0.669049439	0.76518182
RSPH4A	6q22.1	-0.018838698	0.669125484	0.765202885
SEBOX	17q11.2	-0.018837585	0.669143884	0.765202885
TMEM214	2p23.3	0.018821504	0.669409612	0.765463275
PDSS1	10p12.1	0.018797102	0.669812916	0.765880943
C12ORF29	12q21.32	0.018786334	0.669990917	0.766040961
GNAQ	9q21.2	-0.018781124	0.670077046	0.766089339
BRDT	1p22.1	0.018777158	0.670142619	0.766089339
GMEB2	20q13.33	-0.018776869	0.6701474	0.766089339
OR2T8	1q44	0.018767315	0.670305365	0.766222251
MAP3K13	3q27.2	-0.018765233	0.670339794	0.766222251
ALOX15	17p13.2	-0.018749936	0.670592739	0.766467853
EGFEM1P	3q26.2	0.018746924	0.670642553	0.766481269
LYG2	2q11.2	0.018734004	0.670856227	0.766659636
HSFY2	Yq11.222	-0.018732882	0.670874789	0.766659636
MAP2K7	19p13.2	0.01872164	0.671060738	0.766784233
NME9	3q22.3	-0.018720733	0.671075747	0.766784233
ZNF410	14q24.3	0.018719382	0.671098093	0.766784233
MYLPF	16p11.2	-0.018699075	0.671434041	0.767124538
SENP2	3q27.2	-0.018695762	0.671488862	0.767143632
FRMD3	9q21.32	0.018681261	0.671728814	0.767371467
AADACL4	1p36.21	-0.018679102	0.67176453	0.767371467
ZNRF1	16q23.1	-0.018666063	0.671980323	0.767574414
GLP2R	17p13.1	0.018663382	0.672024699	0.767581547
SPATA2	20q13.13	0.018639664	0.672417294	0.76798639
ABAT	16p13.2	-0.018633326	0.672522234	0.768043729
DGKG	3q27.2-q27.3	-0.018632023	0.672543806	0.768043729
CASTOR3	7q22.1	-0.018626899	0.672628632	0.768097025
PCDHA10	5q31.3	0.018601614	0.673047316	0.768531537
METTL7A	12q13.12	-0.01859694	0.673124731	0.768576338

KRTAP8-1	21q22.11	0.018589666	0.673245209	0.7686703
SMAD9	13q13.3	-0.018558645	0.673759075	0.769213372
AKAP4	Xp11.22	-0.018540721	0.674056053	0.769508782
PPIF	10q22.3	-0.018538237	0.674097209	0.769512125
LRRRC74B	22q11.21	-0.018531876	0.674202626	0.769588821
GNG7	19p13.3	0.018522911	0.6743512	0.769714769
AMACR	5p13.2	0.018505239	0.674644106	0.770005435
HLA-G	6p22.1	0.018491431	0.674872991	0.770223002
ABRAXAS2	10q26.13	0.018484571	0.674986724	0.770309131
ETS2	21q22.2	-0.018475453	0.675137901	0.770437978
EEPD1	7p14.2	-0.018460951	0.67537837	0.770668703
AGO4	1p34.3	-0.018443497	0.675667841	0.770955313
POLI	18q21.2	-0.018395475	0.676464492	0.771783044
RFPL2	22q12.3	-0.018393605	0.67649552	0.771783044
ANKRD11	16q24.3	-0.018390699	0.676543745	0.771783044
RPL7	8q21.11	-0.018390525	0.676546627	0.771783044
KAT6B	10q22.2	-0.018341027	0.677368185	0.772676465
LAMB3	1q32.2	0.018336251	0.677447479	0.772723127
KRTAP10-12	21q22.3	-0.018323426	0.677660418	0.772922218
CLLU1	12q22	0.018315455	0.677792788	0.773029395
SPATA3	2q37.1	0.018303038	0.677998996	0.773220768
LEAP2	5q31.1	-0.018294963	0.678133106	0.773329902
ZNF320	19q13.41	0.018287796	0.678252148	0.773410924
CUL9	6p21.1	-0.018286059	0.678280996	0.773410924
CERS4	19p13.2	-0.018283193	0.678328596	0.77342139
KRTAP10-6	21q22.3	0.018279117	0.678396305	0.773454781
FEV	2q35	0.018276082	0.678446723	0.773468456
PUS1	12q24.33	-0.018273728	0.67848583	0.773469236
HIST2H4A	1q21.2	0.018269473	0.678556518	0.773506014
SORT1	1p13.3 1p21.3-p13	-0.018261657	0.67868636	0.773610217
PPIAL4E	1q21.1	0.018255658	0.678786032	0.773662389
TBC1D3B	17q12	0.018254276	0.678808997	0.773662389
MYOCD	17p12	-0.018230379	0.679206093	0.774071146
KRTAP4-5	17q21.2	-0.01822276	0.679332722	0.774171631
TP53I11	11p11.2	-0.018211552	0.679519017	0.774340097
SFRP5	10q24.2	-0.018203885	0.679646457	0.774392238
LINC00599	8p23.1	-0.018201101	0.679692733	0.774392238
SNORA50C	17q23.3	-0.018199688	0.679716217	0.774392238
FRMPD2B	10q11.22	-0.018199542	0.679718651	0.774392238
PRKAR1A	17q24.2	-0.018193923	0.679812055	0.77445482
TARBP1	1q42.2	0.018178119	0.68007482	0.774710323
OR4F29	1p36.33	0.01817243	0.680169405	0.774757582
CNTN5	11q22.1	0.018170995	0.680193281	0.774757582
LINC00923	15q26.2	0.018156353	0.680436759	0.774991058
KCNN1	19p13.11	-0.018152908	0.680494049	0.775012459
FOSL1	11q13.1	0.018135394	0.680785344	0.77530035
TMEM43	3p25.1	0.01812975	0.680879236	0.775331286
LRRRC18	10q11.23	0.01812913	0.680889542	0.775331286
DDX27	20q13.13	-0.01812454	0.680965909	0.775338753
MYNN	3q26.2	-0.018124105	0.680973132	0.775338753
TAS2R20	12p13.2	-0.018115943	0.681108923	0.7754495
DIDO1	20q13.33	0.018097707	0.681412343	0.77571213
ATP1B2	17p13.1	0.018097446	0.681416671	0.77571213
EXOC1	4q12	-0.018066532	0.681931155	0.77625391
MAGEA3	Xq28	0.01804192	0.682340848	0.776676351
ZNF500	16p13.3	0.018037354	0.682416864	0.776718957
NXF2	Xq22.1	0.018024172	0.68263635	0.776900152
ZNF613	19q13.41	0.018023157	0.682653248	0.776900152

MAZ	16p11.2	-0.018014255	0.682801477	0.777024916
STAG3L2	7q11.23	0.018010955	0.682856428	0.777043522
BBC3	19q13.32	-0.018004529	0.682963444	0.777112887
CRP	1q23.2	0.018001372	0.683016026	0.777112887
COA1	7p13	0.017995672	0.683110962	0.777112887
PRAMEF20	1p36.21	0.017994315	0.683133565	0.777112887
FOXB2	9q21.2	0.017991909	0.683173635	0.777112887
NRBP2	8q24.3	-0.017991503	0.683180387	0.777112887
ZNF844	19p13.2	0.017991069	0.683187618	0.777112887
AJUBA	14q11.2	0.017974049	0.683471131	0.777391449
MINK1	17p13.2	-0.017936882	0.684090383	0.778051834
CETN2	Xq28	-0.017918907	0.684389958	0.778280309
SNORA20	6q25.3	-0.017918859	0.684390747	0.778280309
RASSF10	11p15.3	-0.017917869	0.684407255	0.778280309
PARVB	22q13.31	0.017911352	0.684515874	0.778333962
BRDTP1	Xq21.33	-0.017907387	0.684581972	0.778333962
YARS2	12p11.21	-0.017906315	0.684599834	0.778333962
SRRT	7q22.1	-0.017905273	0.684617204	0.778333962
SIGLEC16	19q13.33	0.01790344	0.684647763	0.778333962
CNOT1	16q21	0.017895634	0.684777886	0.778437929
SBF1P1	8q12.1	-0.017886162	0.684935797	0.778573471
ATP6V1G3	1q31.3	0.017880499	0.68503021	0.778636822
AGK	7q34	0.017873317	0.685149964	0.778671138
SSX2	Xp11.22	-0.017872732	0.685159718	0.778671138
KAT2B	3p24.3	0.017871146	0.685186169	0.778671138
OLR1	12p13.2	-0.017869409	0.685215129	0.778671138
DNAH3	16p12.3	0.017862201	0.685335317	0.778763755
LOC729609	Xp22.12	-0.01785712	0.685420048	0.778816074
MALAT1	11q13.1	0.017845528	0.685613372	0.778991769
CCDC186	10q25.3	0.017826858	0.685924786	0.77925044
PTPRB	12q15	0.017824079	0.68597114	0.77925044
PGRMC2	4q28.2	-0.017823949	0.685973307	0.77925044
AMH	19p13.3	0.017822596	0.685995879	0.77925044
DDX60L	4q32.3	-0.017819303	0.686050815	0.77926887
SSTR5-AS1	16p13.3	0.017814035	0.686138708	0.779281761
TMA16	4q32.2	-0.017811922	0.686173955	0.779281761
APOD	3q29	0.017811661	0.686178302	0.779281761
UFSP2	4q35.1	-0.017803064	0.686321735	0.779400684
RUSC1-AS1	1q22	0.017795249	0.686452138	0.779504798
TMEM94	17q25.1	-0.017789778	0.686543427	0.779564484
RALB	2q14.2	0.017785349	0.68661733	0.779604425
KRTAP5-8	11q13.4	-0.017769323	0.686884793	0.779864122
CPO	2q33.3	-0.017762652	0.68699613	0.77994654
CARD10	22q13.1	-0.017755564	0.687114442	0.780036867
C1QL2	2q14.2	0.017749449	0.687216507	0.780108739
MDP1	14q12	0.017719786	0.687711736	0.780626888
KLHL26	19p13.11	0.017714837	0.687794386	0.780676684
YTHDF3	8q12.3	0.017710668	0.68786399	0.780711666
DYRK4	12p13.32	0.017705979	0.687942296	0.780756522
DHX40	17q23.1	-0.017698164	0.688072815	0.780820816
OR8H2	11q12.1	-0.017697942	0.688076525	0.780820816
FBXW12	3p21.31	-0.01768279	0.688329591	0.78102847
FAM41AY1	Yq11.222	-0.017682339	0.688337113	0.78102847
TVP23B	17p11.2	-0.017678886	0.688394802	0.781037239
HYAL4	7q31.32	0.017677231	0.68842244	0.781037239
ORC5	7q22.1-q22.2	-0.017670028	0.68854276	0.781129721
C3ORF35	3p22.2	0.017666545	0.688600948	0.781151709
HEATR4	14q24.3	-0.01766367	0.688648967	0.781162161

SQLE	8q24.13	0.017656134	0.688774876	0.781226806
EWSR1	22q12.2	-0.017655613	0.688783575	0.781226806
CERS1	19p13.11	0.017624317	0.689306513	0.781775881
ALPK1	4q25	-0.017616101	0.689443823	0.781887558
OR2A2	7q35	-0.01759838	0.689740022	0.782179406
EFHC2	Xp11.3	-0.017591657	0.689852414	0.782262793
ULBP2	6q25.1	0.0175851	0.689962024	0.782340916
STARD4	5q22.1	0.017582886	0.689999038	0.782340916
OR5K4	3q11.2	0.017577602	0.690087377	0.78239701
FAM209B	20q13.31	0.017569022	0.690230843	0.782479596
ABRA	8q23.1	0.017568596	0.690237963	0.782479596
TTYH2	17q25.1	0.017560178	0.690378722	0.782578178
IQCG	3q29	0.017558745	0.690402675	0.782578178
PADI2	1p36.13	0.017544808	0.690635751	0.782798292
FUOM	10q26.3	0.017540031	0.690715634	0.782844756
LOC100128076	9q22.31	0.017532541	0.690840905	0.782942653
ZSCAN4	19q13.43	-0.017527807	0.690920096	0.78298832
SPDYC	11q13.1	-0.01751392	0.691152385	0.78320747
ZNF285	19q13.31	-0.017506946	0.691269057	0.783251855
MROH5	8q24.3	-0.0175047	0.691306636	0.783251855
TTC25	17q21.2	0.017504601	0.691308282	0.783251855
C21ORF58	21q22.3	0.01746179	0.69202465	0.784019372
OR1L8	9q33.2	0.017453819	0.692158057	0.784126382
ZNF346	5q35.2	-0.017437823	0.692425813	0.784385572
DIPK2A	3q24	0.01743513	0.692470884	0.784392487
PRRG1	Xp21.1	-0.017417502	0.692766009	0.784682634
LILRA4	19q13.42	0.017407752	0.692929261	0.78482221
MOXD2P	7q34	-0.017403158	0.693006198	0.78482221
NPS	10q26.2	-0.017403158	0.693006198	0.78482221
CCDC85A	2p16.1	0.017399701	0.693064083	0.784832805
LOC148696	1q32.2	-0.017397942	0.693093531	0.784832805
DCAF1	3p21.2	-0.017390582	0.693216783	0.784928217
NPM2	8p21.3	-0.017385982	0.69329383	0.784955167
ZNF354B	5q35.3	0.017384505	0.693318573	0.784955167
OR1D4	17p13.3	0.017373427	0.693504108	0.785121067
CXCR2P1	2q35	0.017343616	0.694003494	0.785642242
UROCI	3q21.3	0.017322962	0.694349571	0.785989814
SNORA50A	16q21	-0.017311415	0.694543064	0.786164635
PACRG-AS1	6q26	-0.017278728	0.69509095	0.786740558
TEAD3	6p21.31	0.017274045	0.695169444	0.786780471
PRR5	22q13.31	-0.017271961	0.695204384	0.786780471
HLA-DRB5	6p21.32	-0.017269096	0.695252426	0.786790608
ULK2	17p11.2	-0.017260238	0.695400929	0.786914425
TMPPE	3p22.3	0.01724374	0.695677571	0.787183222
OR2W3	1q44	-0.017238401	0.695767098	0.787240272
PRXL2C	9q22.33	0.017231408	0.695884373	0.787324005
AATBC	21q22.3	-0.017229324	0.695919326	0.787324005
KRTAP5-5	11p15.5	0.01722469	0.695997035	0.787367669
RAB11FIP2	10q26.11	0.017214995	0.696159642	0.787507366
ATF6	1q23.3	0.017211696	0.696214991	0.787525724
MBNL1-AS1	3q25.1	0.017180955	0.696730696	0.788064781
SH3BP5L	1q44	-0.01716984	0.6969172	0.788231444
ATP13A2	1p36.13	-0.017162111	0.697046889	0.788315159
PEX5L	3q26.33	-0.017160761	0.697069539	0.788315159
C20ORF96	20p13	0.017149433	0.697259657	0.788485866
DANCR	4q12	-0.017145785	0.697320868	0.78851079
CD68	17p13.1	-0.017135104	0.697500142	0.788654966
CYP3A43	7q22.1	0.01713352	0.697526727	0.788654966

REG1CP	2p12	-0.017128846	0.697605182	0.788699371
SMG9	19q13.31	0.017111918	0.697889355	0.788976341
SPEF2	5p13.2	-0.017103408	0.698032232	0.789070607
FLRT1	11q13.1	0.017102282	0.698051136	0.789070607
NIPAL2	8q22.2	-0.017096765	0.698143765	0.789131001
RPL22L1	3q26.2	-0.017076575	0.698482803	0.789400141
DDX3Y	Yq11.221	-0.017075698	0.698497537	0.789400141
CDH22	20q13.12	-0.017075558	0.698499519	0.789400141
TSGA13	7q32.2	-0.017072574	0.698549996	0.789412868
BET1L	11p15.5	-0.017061465	0.698736568	0.789579383
FLACC1	2q33.1	0.017049677	0.698934574	0.789758797
OR2B6	6p22.1	0.017046372	0.698990095	0.789777201
TAC1	7q21.3	-0.017035013	0.699180911	0.789948461
TACR3	4q24	-0.017015222	0.699513413	0.790238606
SOX14	3q22.3	-0.017015055	0.699516231	0.790238606
TPI1	12p13.31	0.017002328	0.699730078	0.790417804
TAS2R5	7q34	0.017000941	0.699753387	0.790417804
CD22	19q13.12	0.016995295	0.699848283	0.790480638
GP6	19q13.42	-0.016971668	0.700245381	0.790861859
ZPBP2	17q21.1	-0.016970432	0.70026616	0.790861859
WNT7B	22q13.31	0.016968201	0.700303658	0.790861859
TBCB	19q13.12	0.016961688	0.700413139	0.790941125
SULT2A1	19q13.33	-0.016956719	0.700496678	0.790991088
STRN4	19q13.32	0.016952831	0.700562044	0.791020526
SPAG6	10p12.2	-0.016944585	0.700700678	0.791132685
GBF1	10q24.32	0.016925303	0.701024889	0.791454347
THAP2	12q21.1	-0.016919745	0.701118347	0.791515469
ECSCR	5q31.2	-0.016916316	0.701176018	0.791536185
KRTAP19-8	21q22.11	-0.016907927	0.701317102	0.791651055
SMYD3	1q44	0.016902812	0.701403131	0.79170377
LINC00029	20q13.33	0.016875002	0.701870916	0.792187359
RIOX2	3q11.2	0.016872332	0.701915848	0.792193654
SH2B1	16p11.2	-0.01686495	0.702040031	0.792289388
HMGCLL1	6p12.1	-0.016856415	0.70218364	0.792407034
ANP32B	9q22.33	0.016852967	0.702241661	0.792428087
C17ORF102	17q12	-0.016843963	0.70239316	0.792554613
C6	5p13.1	-0.016839958	0.702460569	0.792586248
FSIP1	15q14	0.016831707	0.702599422	0.792698485
RNF185	22q12.2	-0.016810503	0.702956304	0.793056683
LINC00336	6p21.31	-0.0168037	0.703070808	0.793141413
PAN2	12q13.3	-0.016798085	0.703165339	0.793203602
ZNF589	3p21.31	0.016784148	0.703399976	0.793393388
ETV4	17q21.31	-0.016783409	0.703412409	0.793393388
SCARNA5	2q37.1	-0.016772394	0.703597866	0.793513974
PTPRK	6q22.33	0.016770731	0.70362588	0.793513974
LRRC37A6P	10p12.1	0.016770036	0.703637578	0.793513974
SEMA4F	2p13.1	-0.016757792	0.703843761	0.793665813
APTX	9p21.1	-0.016757358	0.703851073	0.793665813
HDGFL1	6p22.3	0.0167476	0.7040154	0.793804514
CCNL1	3q25.31	0.016745027	0.704058741	0.793804514
TP73-AS1	1p36.32	0.016743029	0.704092379	0.793804514
ACSBG1	15q25.1	0.016734713	0.704232447	0.793905279
LSG1	3q29	0.016731393	0.704288371	0.793905279
APBB3	5q31.3	0.016730698	0.704300073	0.793905279
PBX1	1q23.3	0.016712115	0.704613118	0.794176614
RSKR	17q11.2	0.016711725	0.704619689	0.794176614
ABHD1	2p23.3	0.016709076	0.704664307	0.794182437
CMYA5	5q14.1	0.016702563	0.704774048	0.794229156

LRWD1	7q22.1	0.016699871	0.704819397	0.794229156
ARGFXP2	17q11.2	0.01669959	0.704824126	0.794229156
TTYT2	Yp11.2	-0.016695695	0.704889765	0.794258661
HNRNPAB	5q35.3	-0.016692229	0.70494816	0.794279999
AMOTL2	3q22.2	0.016682069	0.705119361	0.794428429
CTDP1	18q23	-0.016676598	0.705211552	0.794481285
B3GNT3	19p13.11	0.016674601	0.70524521	0.794481285
KMO	1q43	0.01666253	0.705448635	0.794665978
LOC440040	11p11.12	0.016657932	0.705526131	0.794708803
REG1B	2p12	-0.016654698	0.705580642	0.794722811
SBK2	19q13.42	-0.01665251	0.705617526	0.794722811
TERF2IP	16q23.1	0.016646813	0.705713558	0.794755218
ADGRF1	6p12.3 6	-0.016646118	0.705725262	0.794755218
RAG1	11p12	0.016630922	0.705981432	0.79499923
RNF103	2p11.2	-0.016624582	0.706088316	0.795075114
LPIN2	18p11.31	0.01661833	0.70619373	0.795149334
LOC286238	9q22.1	-0.016603612	0.706441881	0.795384254
RBBP9	20p11.23	0.016583507	0.706780928	0.795637975
ZNF91	19p12	0.016581684	0.706811684	0.795637975
GPR89B	1q21.2	0.016579947	0.706840969	0.795637975
TMEM133	11q22.1	-0.01657986	0.70684244	0.795637975
PLA2G3	22q12.2	-0.016578531	0.706864855	0.795637975
ABCA4	1p22.1	-0.016569831	0.707011602	0.795758655
ASAP3	1p36.12	0.016564316	0.70710462	0.795818853
ARHGEF9	Xq11.1	0.01655624	0.70724085	0.795927674
CPEB4	5q35.2	-0.016547817	0.707382949	0.796043089
VSTM2A	7p11.2	-0.016542201	0.707477688	0.796105197
RPS6KL1	14q24.3	-0.016520811	0.707838609	0.796466808
KPNA3	13q14.2	0.016513516	0.707961707	0.796560794
PCIF1	20q13.12	-0.016503703	0.7081273	0.796687295
SUPT20HL2	Xp22.11	0.016502163	0.708153292	0.796687295
NKAIN1	1p35.2	0.016482805	0.708480026	0.797010335
RWDD1	6q22.1	-0.016477217	0.708574347	0.797058151
INGX	Xq13.1	-0.016475596	0.708601722	0.797058151
SPATA31D1	9q21.32	-0.016463512	0.708805712	0.797243057
ANKS1B	12q23.1	-0.016457622	0.70890515	0.797310352
FRG2DP	16p11.1	-0.016454781	0.708953126	0.797319763
FUBP1	1p31.1	0.016451166	0.709014157	0.797343854
SLC13A2	17q11.2	-0.016447791	0.709071135	0.797363385
SUN3	7p12.3	0.016441712	0.709173779	0.797434263
CCT5	5p15.2	0.016438053	0.709235565	0.797442679
CTNBL1	20q11.23	0.016436577	0.709260493	0.797442679
DTX3	12q13.3	0.016429326	0.709382933	0.797535797
SNORA51	20p13	-0.016422693	0.70949496	0.797617198
CCDC63	12q24.11	-0.016414359	0.709635706	0.797730875
BCOR	Xp11.4	0.016411741	0.70967992	0.797736028
UNC5D	8p12	-0.016386494	0.710106389	0.798170842
CAMTA1	1p36.31-p36.23	-0.016377527	0.710257876	0.798296541
RBSN	3p25.1	0.016360941	0.710538112	0.798511369
CDRT4	17p12	-0.016360333	0.710548383	0.798511369
CFAP299	4q21.21	-0.016359171	0.710568015	0.798511369
MORF4L2	Xq22.2	0.016337668	0.710931389	0.798875118
SNORA36A	Xq28	0.016321737	0.711200643	0.79913307
PTH	11p15.3	0.016316507	0.711289046	0.799187793
LOC284379	19q13.42	-0.016310208	0.711395537	0.799262832
PZP	12p13.31	-0.016293058	0.711685449	0.799504733
TEK	9p21.2	0.016292773	0.711690279	0.799504733
ASB16-AS1	17q21.31	-0.016282439	0.711864996	0.799621027

ZFY	Yp11.2	-0.016281951	0.711873245	0.799621027
DNAH7	2q32.3	-0.01627241	0.712034582	0.799757624
EXOC6B	2p13.2	-0.016261468	0.712219603	0.799899786
RPRML	17q21.32	-0.016260225	0.712240624	0.799899786
SELP	1q24.2	0.016250743	0.712400986	0.80003525
ADGRE3	19p13.12	0.016240354	0.712576707	0.800187945
MNT	17p13.3	-0.016225907	0.712821067	0.800395704
ADGRG7	3q12.2	-0.016224715	0.712841241	0.800395704
TPPP2	14q11.2	0.016213604	0.713029207	0.800532705
PSMA6	14q13.2	0.016210624	0.713079622	0.800532705
CD48	1q23.3	0.01621045	0.71308256	0.800532705
IGSF10	3q25.1	0.016208019	0.713123697	0.800534241
FAM169A	5q13.3	0.016203938	0.713192744	0.800567107
ARMS2	10q26.13	0.016199375	0.713269934	0.800608687
CPLX3	15q24.1	0.016197047	0.713309329	0.800608687
TRIM35	8p21.2	0.016187134	0.71347706	0.800752298
KCNH6	17q23.3	-0.016163713	0.713873433	0.801152489
DUSP18	22q12.2	-0.016136551	0.714333195	0.801536998
ADGRG6	6q24.2	0.016133685	0.714381707	0.801536998
CRYGS	3q27.3	0.016132339	0.714404488	0.801536998
QRICH1	3p21.31	0.01613108	0.71442581	0.801536998
P4HB	17q25.3	-0.016127433	0.714487556	0.801536998
SLC9A5	16q22.1	-0.016127172	0.714491967	0.801536998
ABCB7	Xq13.3	-0.016126738	0.714499318	0.801536998
ZNF169	9q22.32	0.016124654	0.714534596	0.801536998
EPAS1	2p21	-0.016096431	0.715012473	0.802028368
OR9A4	7q34	0.016080336	0.715285049	0.80228941
LZTS3	20p13	0.016060046	0.715628724	0.802595175
HCP5	6p21.33	0.016059091	0.715644905	0.802595175
SLC44A2	19p13.2	-0.016057181	0.715677267	0.802595175
KRT86	12q13.13	0.016045458	0.715875847	0.802729926
CHRN4	15q25.1	0.016045299	0.715878544	0.802729926
XPO1	2p15	-0.016043026	0.715917057	0.802729926
STK19	6p21.33	-0.016035384	0.716046526	0.802830376
KIAA2013	1p36.22	-0.016028698	0.716159818	0.802891056
ADCK5	8q24.3	-0.016027482	0.716180417	0.802891056
ZNF750	17q25.3	0.016014456	0.716401136	0.803052351
PJA2	5q21.3	0.016014282	0.716404079	0.803052351
DDX56	7p13	-0.016003341	0.716589502	0.803215472
PRSS33	16p13.3	-0.015989237	0.716828534	0.803438663
NEFL	8p21.2	-0.015970337	0.717148909	0.803709789
CFLAR	2q33.1	-0.015970255	0.717150285	0.803709789
RFFL	17q12	-0.015963048	0.71727247	0.803763884
NHLH1	1q23.2	-0.015962697	0.717278411	0.803763884
DIO3OS	14q32.31	-0.015959589	0.71733111	0.803778194
NUMB	14q24.2-q24.3	0.015954885	0.717410858	0.803822808
HJV	1q21.1	-0.015945927	0.717562738	0.803878025
CD244	1q23.3	-0.015944464	0.717587536	0.803878025
RESP18	2q35	-0.015942032	0.717628788	0.803878025
ENY2	8q23.1	0.015939515	0.717671464	0.803878025
RCAN3	1p36.11	0.015937604	0.717703858	0.803878025
RNF212	4p16.3	-0.015937344	0.717708269	0.803878025
OR51B4	11p15.4	-0.015933584	0.717772036	0.803878025
MAGEA5	Xq28	0.015933137	0.717779614	0.803878025
GIP	17q21.32	-0.015926291	0.717895697	0.803963303
CARD18	11q22.3	-0.015923615	0.71794108	0.8039694
YIPF7	4p12	0.015919608	0.718009027	0.803976904
MPPED1	22q13.2	-0.01591851	0.718027659	0.803976904

SF3A1	22q12.2	-0.015912942	0.71812208	0.804031109
CANX	5q35.3	-0.015910945	0.718155954	0.804031109
HDAC3	5q31.3	-0.015899222	0.718354789	0.804192301
CISD1	10q21.1	0.015897745	0.718379829	0.804192301
ZNF98	19p12	0.015891005	0.718494165	0.804275568
TRAF3IP1	2q37.3	-0.015870131	0.718848278	0.804627215
STK36	2q35	0.015863271	0.71896467	0.80471275
PRSS50	3p21.31	0.015838542	0.719384279	0.805137637
OR1L6	9q33.2	0.015835066	0.719443267	0.805158891
MS4A13	11q12.2	-0.015814019	0.719800472	0.80551387
LOC100133050	5q21.1	0.015806681	0.719925035	0.805608481
KDM4D	11q21	-0.015802223	0.720000698	0.805626674
PGM2	4p14	-0.015801008	0.720021336	0.805626674
SCML2	Xp22.13	0.015789502	0.720216652	0.805800423
TMEM212	3q26.31	-0.015786432	0.720268783	0.805803499
OR5AU1	14q11.2	0.015784625	0.720299462	0.805803499
POLR1B	2q14.1	0.015742826	0.721009218	0.806552684
SUV39H1	Xp11.23	-0.015737573	0.721098433	0.806586391
SYT14P1	4q13.2	0.015735562	0.721132594	0.806586391
TTL10	1p36.33	0.015733974	0.721159556	0.806586391
KDELR3	22q13.1	0.015710262	0.72156234	0.806953816
LMBR1L	12q13.12	-0.015709914	0.721568241	0.806953816
PSG2	19q13.31	0.015704213	0.72166509	0.807017291
CARD14	17q25.3	-0.015701231	0.721715759	0.80702912
CNDP1	18q22.3	-0.015683431	0.722018173	0.807320543
TTC14	3q26.33	-0.015681171	0.722056585	0.807320543
TRIML2	4q35.2	0.01567327	0.72219083	0.807425794
ANAPC7	12q24.11	-0.015664932	0.722332527	0.807539363
CEP57	11q21	-0.015655814	0.722487484	0.807667743
C8A	1p32.2	-0.015652646	0.722541323	0.807683076
MROH1	8q24.3	0.015618995	0.723113329	0.808237672
REPS1	6q24.1	0.015618734	0.723117758	0.808237672
DPP6	7q36.2	-0.015603693	0.723373469	0.808478593
LINC00526	18p11.31	0.015589991	0.72360646	0.808678903
ZNF542P	19q13.43	0.015588428	0.723633039	0.808678903
LIN7C	11p14.1	0.015585475	0.723683245	0.808690115
C5ORF52	5q33.3	-0.015579376	0.723786955	0.808715833
PLEKHA1	10q26.13	0.015579309	0.723788091	0.808715833
ABCB11	2q31.1	0.015577034	0.723826784	0.808715833
KPNA1	3q21.1	0.015557861	0.724152871	0.809033993
HTR3A	11q23.2	0.015552583	0.724242647	0.809033993
TERB1	16q22.1	0.01555155	0.724260215	0.809033993
HABP2	10q25.3	-0.015550839	0.724272309	0.809033993
SLC52A2	8q24.3	0.015541709	0.724427614	0.809162572
SLC25A19	17q25.1	0.015531722	0.724597497	0.809307419
ZNF787	19q13.43	-0.015523994	0.72472898	0.809409364
MYOT	5q31.2	0.015492534	0.725264269	0.80996226
SOX12	20p13	0.015488737	0.725328885	0.809989484
ARF4	3p14.3	-0.015454349	0.725914175	0.810598122
SNX10	7p15.2	0.01544801	0.726022087	0.810673652
PPP1R2B	5q33.3	-0.015437937	0.726193574	0.810820159
FSTL5	4q32.2	0.015427867	0.726365014	0.810966597
BIRC8	19q13.42	-0.015421352	0.72647594	0.811033806
LCE1F	1q21.3	-0.015419599	0.726505792	0.811033806
FAM181A	14q32.12	-0.015413265	0.726613641	0.811109222
PKLR	1q22	-0.015405104	0.726752619	0.811184146
MLLT6	17q12	0.015404591	0.726761354	0.811184146
ZNF585B	19q13.12	0.01539582	0.726910717	0.811305874

OR1J2	9q33.2	0.015386793	0.727064467	0.811432484
HNRNPA0	5q31.2	-0.015369421	0.727360347	0.811717696
SDHA	5p15.33	0.015364819	0.727438746	0.811760184
PRIM1	12q13.3	0.015354833	0.727608867	0.811866616
NECAB1	8q21.3	0.015354485	0.727614785	0.811866616
HSPB9	17q21.2	-0.015348339	0.727719486	0.8119022
GNAS-AS1	20q13.32	-0.015345774	0.727763191	0.8119022
ACTN2	1q43	-0.015345511	0.727767675	0.8119022
LBX2-AS1	2p13.1	-0.015332949	0.727981701	0.812095962
LINC00051	8q24.3	0.015323924	0.72813549	0.81222251
RNASEH2C	11q13.1	-0.015316363	0.728264328	0.812321212
KIAA0895L	16q22.1	0.01530655	0.728431554	0.81246272
HECW2	2q32.3	0.015301687	0.728514431	0.812510139
HIST1H2BD	6p22.2	-0.01529474	0.728632834	0.812597171
FIZ1	19q13.42	0.015285362	0.728792687	0.812730419
MEF2D	1q22	-0.015276678	0.728940704	0.812850453
ZNF491	19p13.2	0.015269384	0.729065051	0.812944081
IFNA14	9p21.3	0.015252864	0.729346685	0.813177554
USP33	1p31.1	-0.015252363	0.729355228	0.813177554
SMAD3	15q22.33	-0.015246285	0.72945887	0.813248064
MAGEA4	Xq28	0.015218041	0.729940487	0.813739935
TRIQK	8q22.1	0.015207902	0.730113407	0.813887633
ZNF335	20q13.12	0.015187669	0.730458525	0.814227261
ZNF83	19q13.41	0.015180809	0.730575551	0.814312616
PSME2	14q12	0.015173167	0.730705918	0.814410669
SMN2	5q13.2	-0.015170909	0.730744436	0.814410669
FAM118B	11q24.2	-0.015167827	0.730797025	0.814424188
MAS1L	6p22.1	-0.015134369	0.73136791	0.81501528
LOC100287704	7q11.21	0.015127814	0.731479784	0.815061643
ZFYVE9	1p32.3	-0.015127186	0.731490494	0.815061643
GORAB	1q24.2	-0.015104044	0.73188549	0.815456629
MAGEB6	Xp21.3	0.015094923	0.732041177	0.815584951
GABARAPL3	15q26.1	-0.015086834	0.732179272	0.815672439
ZPBP	7p12.2	-0.015084649	0.732216571	0.815672439
HERC2P2	15q11.2	0.015083202	0.732241264	0.815672439
TFIP11	22q12.1	-0.015075213	0.732377659	0.815735746
NAA10	Xq28	-0.015075126	0.732379142	0.815735746
KCNH5	14q23.2	0.01506683	0.732520792	0.815828575
BCAS4	20q13.13	-0.015063924	0.732570406	0.815828575
C3ORF84	3p21.31	-0.015063124	0.73258407	0.815828575
NR2F2	15q26.2	-0.01506019	0.732634165	0.815839229
MZT1	13q21.33	-0.015040999	0.732961882	0.816159016
CDCA7L	7p15.3	0.015033357	0.73309239	0.816259185
IFT74	9p21.2	0.015020766	0.733307447	0.816443002
ITFG2	12p13.33	0.015018942	0.733338595	0.816443002
GPR22	7q22.3	0.015013697	0.73342819	0.816497593
ENTPD8	9q34.3	-0.014998851	0.733681782	0.816734739
MIS12	17p13.2	-0.014986638	0.733890432	0.816921831
PCK2	14q11.2-q12	0.014957287	0.734391951	0.817401707
FUT3	19p13.3	0.014954942	0.734432018	0.817401707
SYCE1L	16q23.1	0.014952442	0.734474743	0.817401707
PHLDA2	11p15.4	0.014951903	0.734483958	0.817401707
COX19	7p22.3	-0.014939746	0.734691729	0.817587734
PHYHD1	9q34.11	0.014932798	0.734810465	0.817674663
ZNRD1ASP	6p22.1	0.01493028	0.734853508	0.81767736
HMOX1	22q12.3	-0.014925678	0.734932175	0.817719693
CLCN2	3q27.1	0.014920728	0.735016782	0.81776863
DARS	2q21.3	-0.014914997	0.735114753	0.817832429

MED10	5p15.31	0.014912478	0.735157802	0.817835123
BRPF3	6p21.31	0.014894242	0.73546956	0.818136729
TBC1D7	6p24.1	-0.01488443	0.735637334	0.818254782
CGB8	19q13.33	0.014879362	0.735723979	0.818254782
ABI3BP	3q12.2	-0.014879132	0.735727907	0.818254782
TTLL9	20q11.21	-0.014878526	0.735738279	0.818254782
PCDHA5	5q31.3	-0.01486872	0.735905958	0.818396052
GAGE8	Xp11	0.014844363	0.736322502	0.818814051
SOCS7	17q12	0.014836929	0.736449655	0.818910212
SNORA1	11q21	-0.014832813	0.736520056	0.818943257
LOC400710	19q13.33	0.014826938	0.736620546	0.819007883
GUCY2D	17p13.1	-0.014824658	0.73665955	0.819007883
AK3	9p24.1	0.014819474	0.736748224	0.819061233
PRAMEF8	1p36.21	0.014806073	0.736977487	0.819269677
ATP13A1	19p13.11	-0.014803757	0.737017118	0.819269677
HCN3	1q22	0.014793162	0.73719838	0.819425918
UCP1	4q31.1	0.014786685	0.73730922	0.819455331
GH2	17q23.3	0.014784876	0.737340172	0.819455331
LUC7L	16p13.3	0.014784479	0.737346966	0.819455331
RPL34-AS1	4q25	0.014778759	0.73744484	0.81951886
EFCAB1	8q11.21	0.014765662	0.73766897	0.819722681
GAGE1	Xp11.23	0.014761064	0.737747656	0.819764866
ZNF485	10q11.21	0.014749787	0.737940654	0.819897899
REEP3	10q21.3	0.014749309	0.737948839	0.819897899
LINC01550	14q32.2	0.014736215	0.73817297	0.820101655
SEC22A	3q21.1	0.014729771	0.738283283	0.820178945
DPH3	3p25.1	-0.014720913	0.738434913	0.820302125
PIRT	17p12	0.01471675	0.738506186	0.82033603
IL3	5q31.1	-0.014707356	0.738667022	0.820469412
SNORD15B	11q13.4	-0.014694939	0.738879616	0.820660267
IFNA13	9p21.3	-0.01469077	0.738951001	0.820694271
MYOM3	1p36.11	-0.014684485	0.739058624	0.820768515
GSKIP	14q32.2	-0.014679231	0.739148605	0.820791091
CWC22	2q31.3	0.014678536	0.739160502	0.820791091
SLC32A1	20q11.23	-0.014668987	0.739324029	0.820927393
U2AF2	19q13.42	-0.014665337	0.739386552	0.820951533
LIG4	13q33.3	0.014661342	0.739454967	0.820982212
ADAM20	14q24.2	0.014657071	0.739528116	0.821018143
NAT1	8p22	0.014649358	0.739660222	0.821103961
TMEM198	2q35	0.014647795	0.739686996	0.821103961
WTAP	6q25.3	0.014640761	0.739807482	0.821192424
AURKAP1	1q41	0.014636333	0.739883342	0.821231345
AGAP3	7q36.1	0.014627041	0.740042523	0.821362738
CHKA	11q13.2	-0.014618618	0.740186832	0.821477612
C10ORF113	10p12.31	-0.014612315	0.740294816	0.821543889
FAM13A	4q22.1	0.014610368	0.740328174	0.821543889
ATP6V1C2	-	0.014594998	0.740591541	0.821790845
LINC00314	21q21.3	0.014583099	0.740795431	0.82197178
CDKN2B	9p21.3	-0.014580452	0.740840795	0.821976806
NPPA	1p36.22	-0.014574081	0.740949986	0.822052647
SAT1	Xp22.11	-0.014567296	0.741066273	0.82213635
LOC284009	17p13.3	0.014556111	0.741257979	0.82230371
TRIM45	1p13.1	-0.014552751	0.741315578	0.822322289
ZSWIM5	1p34.1	-0.014513977	0.741980296	0.823014292
JAML	11q23.3	0.01451007	0.742047299	0.82304326
SCAMP4	19p13.3	0.014491313	0.742368941	0.823314237
RAD17	5q13.2	0.014491052	0.742373408	0.823314237
OR10H1	19p13.12	-0.014488491	0.742417332	0.82331511

GPR179	17q12	0.014486236	0.742455996	0.82331511
SCARNA1	1p35.3	0.01447868	0.742585591	0.823412726
CCDC87	11q13.2	0.014476333	0.742625834	0.823412726
SNORA14A	7q11.23	-0.014467339	0.742780097	0.823502844
SMARCAL1	2q35	0.014466824	0.742788929	0.823502844
SRPK1	6p21.31	0.014462048	0.742870851	0.823521121
INTS5	11q12.3	0.014461093	0.742887235	0.823521121
IQUB	7q31.32	0.014455145	0.742989259	0.823575367
TAAR2	6q23.2	-0.01445347	0.743017995	0.823575367
OR1F2P	16p13.3	-0.014449335	0.743088922	0.823594117
CRISP2	6p12.3	-0.014446037	0.743145492	0.823594117
OMP	11q13.5	-0.014443173	0.74319464	0.823594117
RAP1A	1p13.2	-0.014442944	0.743198566	0.823594117
CRIPAK	4p16.3	0.014431394	0.743396707	0.823768342
KMT5A	12q24.31	0.014421234	0.743571025	0.82390652
GALNTL5	7q36.1	0.014419355	0.743603262	0.82390652
TPTE2P3	13q14.3	0.014415214	0.74367432	0.823939901
FHL1	Xq26.3	-0.01440378	0.743870527	0.824081941
LINC00662	19q11	-0.014400176	0.743932363	0.824081941
CD24	6q21	-0.014399785	0.743939075	0.824081941
ANKRD20A20P	9q13	-0.0143982	0.743966275	0.824081941
RPF2	6q21	-0.014369131	0.744465173	0.82458919
FMR1-AS1	Xq27.3	0.014362181	0.744584474	0.824675954
POMZP3	7q11.23	-0.014340127	0.744963064	0.825049872
ATP8B1	18q21.31	0.014336306	0.745028662	0.825077129
CEP112	17q24.1	0.01433153	0.745110663	0.825122546
BCDIN3D-AS1	12q13.12	0.014328057	0.745170302	0.825143197
CHML	1q43	0.014324149	0.745237397	0.825172101
LSM5	7p14.3	0.014321023	0.745291074	0.825186146
ARMC2	6q21	-0.014303743	0.745587804	0.825469282
ZNF20	19p13.2	-0.014301094	0.745633292	0.825474244
BAP1	3p21.1	-0.014282467	0.745953199	0.82578299
SLC35F5	2q14.1	-0.014280035	0.745994961	0.825783809
ANKRD20A11P	21q11.2	-0.014274121	0.746096542	0.825850841
ISYNA1	19p13.11	-0.014264752	0.746257481	0.825954661
TRMT61B	2p23.2	-0.014263883	0.746272398	0.825954661
XPC	3p25.1	-0.014246689	0.74656777	0.826236143
FCHO1	19p13.11	0.014238527	0.746708005	0.826345912
NBPF6	1p13.3	-0.014232216	0.746816425	0.826420463
TYRO3	15q15.1	-0.014224372	0.746951202	0.826506818
UBE2N	12q22	-0.014222895	0.746976579	0.826506818
PRKAR2A	3p21.31	-0.014208046	0.747231747	0.82673981
GK2	4q21.21	-0.014205861	0.747269292	0.82673981
LMLN	3q29	-0.014198451	0.747396646	0.826832379
LRTM1	3p14.3	-0.014196213	0.747435112	0.826832379
JADE1	4q28.2	0.01416949	0.747894419	0.827295013
TP53	17p13.1	-0.014155422	0.748136251	0.827514734
LINC00111	21q22.3	0.014151467	0.748204247	0.827514734
OR51F1	11p15.4	-0.014150761	0.748216377	0.827514734
MSGN1	2p24.2	0.014145551	0.748305949	0.82756833
PSAPL1	4p16.1	0.014130956	0.748556885	0.827800368
CCNK	14q32.2	-0.014119384	0.748755871	0.827974933
GTPBP10	7q21.13	-0.014116866	0.748799176	0.827977336
BPIFC	22q12.3	0.014113397	0.748858823	0.827997809
SERPINB5	18q21.33	0.01410161	0.749061531	0.828175906
FUS	16p11.2	0.014098717	0.749111292	0.828175906
LINC02800	1p36.11	-0.014095774	0.749161904	0.828175906
LINC01777	1p36.32	0.014094462	0.749184463	0.828175906

POC5	5q13.3	-0.014091249	0.749239735	0.828191525
S1PR1	1p21.2	0.014086299	0.749324869	0.828240151
PDE11A	2q31.2	0.01407706	0.749483778	0.828370309
LOC100132287	1p36.33	-0.014055472	0.749855156	0.828735275
RBMV2EP	Yq11.223	0.014052658	0.749903558	0.828743267
LRRC2	3p21.31	0.014033068	0.75024062	0.82907025
NBPF3	1p36.12	-0.014011965	0.750603745	0.829425997
MAPK8IP2	22q13.33	-0.0140091	0.750653062	0.829434962
GBP6	1p22.2	0.014005547	0.750714209	0.829456997
NAALAD2	11q14.3	0.014002066	0.750774115	0.829477658
OR6M1	11q24.1	0.013994501	0.750904306	0.829575967
TNFRSF10B	8p21.3	-0.013981225	0.751132826	0.829782888
SNTG2	2p25.3	0.013974819	0.751243094	0.82985916
TRMT13	1p21.2	0.013972367	0.751285295	0.829860239
L3MBTL4	18p11.31	-0.013961425	0.751473652	0.83002275
PRPSAP1	17q25.1	-0.01395196	0.751636608	0.830157188
NFATC3	16q22.1	-0.013946229	0.751735278	0.830220615
LINC00301	11q12.2	-0.013941072	0.751824073	0.830273129
OR51I2	11p15.4	-0.013936977	0.75189457	0.83030543
NISCH	3p21.1	0.013928601	0.752038812	0.83041916
UBR4	1p36.13	0.013904112	0.752460525	0.83083925
PPIEL	1p34.3	0.01389977	0.752535305	0.830876244
ICAM1	19p13.2	-0.013890218	0.752699828	0.831012315
PLG	6q26	-0.01388779	0.752741653	0.831012914
ZNF276	16q24.3	-0.013883445	0.752816497	0.831049963
C22ORF24	22q12.3	0.013873235	0.752992366	0.831198527
TRIM66	11p15.4	-0.013865816	0.753120161	0.831294009
TTY7	Yp11.2	-0.013845071	0.753477581	0.831642927
ADTRP	6p24.1	0.013841111	0.753545799	0.831663451
GLIS3-AS1	9p24.2	0.013837859	0.753601835	0.831663451
SLC1A1	9p24.2	-0.013835684	0.753639321	0.831663451
TNIK	3q26.2-q26.31	0.013830821	0.753723115	0.831663451
LMX1B	9q33.3	0.013830408	0.753730233	0.831663451
H2AFY2	10q22.1	-0.013829605	0.753744064	0.831663451
C1ORF68	1q21.3	-0.013815826	0.753981516	0.831879853
ANO7	2q37.3	0.013810371	0.75407552	0.831890178
ZKSCAN3	6p22.1	-0.013807374	0.754127163	0.831890178
ZNF341	20q11.22	0.013805551	0.754158591	0.831890178
RBMXL3	Xq23	0.013804743	0.754172506	0.831890178
ALG1L	3q21.2	-0.013803293	0.754197504	0.831890178
RAB14	9q33.2	0.013800167	0.754251383	0.831904024
ANKRD30BP2	21q11.2	0.013797008	0.754305829	0.831918493
SEH1L	18p11.21	-0.013773507	0.754710906	0.832319648
GABRA4	4p12	0.013769	0.754788609	0.832359741
CSNK1A1P1	15q14	0.013759226	0.754957103	0.832486604
LOC407835	7q32.1	0.013757529	0.754986361	0.832486604
SLC25A44	1q22	-0.013754577	0.755037264	0.832497131
RPL32P3	3q21.3	0.013751103	0.755097151	0.832517562
NOLC1	10q24.32	0.013744938	0.755203454	0.832564918
NOX1	Xq22.1	0.013743814	0.755222822	0.832564918
STK24	13q32.2	0.013738598	0.755312756	0.832618465
PTPN21	14q31.3	-0.013733909	0.755393608	0.832661994
SLITRK2	Xq27.3	0.013728427	0.755488147	0.832720605
DTX2	7q11.23	-0.013720449	0.755625717	0.832826636
GSTT4	22q11.23	0.013714143	0.755734463	0.832900889
NOL11	17q24.2	0.013707337	0.755851853	0.83298466
VTI1B	14q24.1	0.013693269	0.756094485	0.833181452
VPS13A	9q21.2	-0.013692184	0.756113202	0.833181452

SH2D7	15q25.1	-0.013682149	0.756286282	0.833326556
HLA-H	6p22.1	-0.013669215	0.756509411	0.83352679
HINFP	11q23.3	0.013660183	0.756665214	0.833634162
TMPRSS15	21q21.1	-0.013658765	0.756689687	0.833634162
BARHL1	9q34.13	0.013648586	0.756865296	0.833781996
GYS2	12p12.1	0.013645012	0.756926974	0.833804311
NEURL3	2q11.2	0.013638996	0.757030769	0.833873017
GABRB1	4p12	-0.013632521	0.757142498	0.833950453
PPM1B	2p21	-0.013622539	0.757314743	0.834084388
TRIM37	17q22	-0.013620672	0.757346967	0.834084388
MIER3	5q11.2	0.013615027	0.757444375	0.83414603
ANKRD30B	18p11.21	0.013609834	0.757533999	0.834199091
BMS1P1	10q11.22	0.013601915	0.757670673	0.834303957
MYLIP	6p22.3	-0.013572173	0.758184052	0.834823595
APOBEC4	1q25.3	-0.013564745	0.758312285	0.834867349
GLRA4	Xq22.2	0.013563809	0.758328449	0.834867349
MAP2K2	19p13.3	0.013562664	0.758348211	0.834867349
PTPN20	10q11.22	-0.013552057	0.758531338	0.835023288
CELA2B	1p36.21	-0.013546103	0.758634132	0.835090779
CD164	6q21	-0.013538783	0.758760517	0.835184231
ATN1	12p13.31	-0.013534181	0.758839988	0.835208425
RGS3	9q32	-0.013532705	0.758865479	0.835208425
M6PR	12p13.31	0.01352871	0.758934456	0.835238675
DEFB103A	8p23.1	-0.013521997	0.75905039	0.835320596
CCDC65	12q13.12	-0.013518117	0.75911739	0.835347564
GPC3	Xq26.2	0.013515772	0.75915789	0.835347564
PGS1	17q25.3	-0.013489893	0.759604834	0.835793676
NHSL1	6q24.1	-0.013483381	0.759717331	0.835827158
MYL10	7q22.1	0.013483324	0.759718307	0.835827158
UBTFL1	11q14.3	-0.013473414	0.759889503	0.835947602
ATAT1	6p21.33	0.013472178	0.759910838	0.835947602
NRDE2	14q32.11	-0.013469226	0.759961843	0.835958027
OR10J5	1q23.2	0.013466043	0.760016832	0.835972833
TMTC4	13q32.3	-0.013459847	0.760123863	0.836033321
IER2	19p13.13	0.013456808	0.760176372	0.836033321
HERC2P4	16p11.2	-0.013455648	0.760196418	0.836033321
UBASH3B	11q24.1	0.01343918	0.760480946	0.836300543
PSMD1	2q37.1	0.013433275	0.760582979	0.836367058
ZMYM2	13q12.11	0.013422768	0.760764543	0.836521016
VMAC	19p13.3	0.013402968	0.761106713	0.836851548
ZNF630	Xp11.23	0.013393634	0.761268053	0.83690186
RNASE7	14q11.2	0.013392789	0.761282648	0.83690186
DUSP11	2p13.1	-0.013391028	0.761313081	0.83690186
CAGE1	6p24.3	0.013389503	0.761339451	0.83690186
RDH16	12q13.3	0.013388294	0.761360346	0.83690186
FIGLA	2p13.3	-0.013385482	0.761408956	0.836909592
HENMT1	1p13.3	-0.013375875	0.761575015	0.837046413
ZBTB20	3q13.31	-0.013371015	0.761659019	0.837093036
SEC31B	10q24.31	0.013358855	0.76186925	0.837278375
LOC644669	18p11.21	0.013351528	0.76199592	0.837371868
ASPRV1	2p13.3	0.013342095	0.762159014	0.837462948
RRN3P3	16p12.2	0.013341922	0.762162007	0.837462948
MC3R	20q13.2	0.013335169	0.76227877	0.837545529
MLNR	13q14.2	-0.013329068	0.762384266	0.837593882
KCNIP4	4p15.31-p15.2	-0.013327811	0.762405996	0.837593882
CST11	20p11.21	0.013299255	0.762899839	0.838090688
ZSCAN12P1	6p22.1	0.013283827	0.763166681	0.838317093
DYNC1LI2	16q22.1	0.013282524	0.763189222	0.838317093

OR2G3	1q44	-0.013273595	0.763343673	0.83842689
EIF4E3	3p13	0.013271929	0.763372481	0.83842689
PRAM1	19p13.2	-0.013258817	0.76359932	0.838597722
KBTBD11	8p23.3	-0.013258122	0.763611338	0.838597722
OR11G2	14q11.2	0.013249755	0.763756099	0.838710942
SIDT2	11q23.3	0.013239365	0.763935859	0.838862581
IZUMO1	19q13.33	0.013231605	0.764070124	0.83896425
C1ORF140	1q41	-0.013218167	0.764302667	0.839173812
TCAP	17q12	0.013205112	0.764528595	0.839364215
OSR1	2p24.1	-0.013203327	0.764559476	0.839364215
LAMP1	13q34	0.013198898	0.764636124	0.839402583
FAM71B	5q33.3	0.013187914	0.764826237	0.8395655
FLJ42393	3q27.3	0.013168858	0.765156083	0.839881779
PPP1R21	2p16.3	-0.013157216	0.765357627	0.840057199
KATNAL2	18q21.1	-0.01314545	0.765561333	0.840234973
IRF6	1q32.2	-0.013132033	0.765793634	0.840444109
YTHDC1	4q13.2	0.013126649	0.765886859	0.840500598
SMAD4	18q21.2	0.013120049	0.766001139	0.840557466
XRCC1	19q13.31	-0.013118834	0.766022191	0.840557466
RRS1	8q13.1	-0.013115491	0.766080076	0.840575162
SNORA80E	1q22	-0.013112248	0.766136239	0.840588312
FAM149B1	10q22.2	0.013109976	0.766175576	0.840588312
IGSF3	1p13.1	-0.01310685	0.766229715	0.840601894
SNORA5A	7p13	0.013099312	0.766360258	0.840699291
NRSN1	6p22.3	0.013092128	0.766484669	0.840789951
USP25	21q21.1	-0.01308132	0.766671881	0.840949486
MRS2P2	12q21.1	0.013076898	0.766748475	0.840987675
GATA4	8p23.1	0.013071512	0.76684176	0.841012347
SNTG1	8q11.21	0.013070775	0.766854527	0.841012347
RBM18	9q33.2	0.013066036	0.766936623	0.84105656
M1AP	2p13.1	-0.013059874	0.767043369	0.8411278
CYP4F29P	21q11.2	-0.013024692	0.76765291	0.841725069
TAS2R39	7q34	-0.01302361	0.767671662	0.841725069
B3GAT3	11q12.3	-0.012991442	0.76822911	0.84226104
TTC7A	2p21	-0.012990573	0.76824416	0.84226104
OR4C3	11p11.2	0.012978687	0.768450169	0.842396303
SNORA36C	2p13.3	-0.012978626	0.768451232	0.842396303
PAX4	7q32.1	-0.012975026	0.768513638	0.842418837
CLEC12B	12p13.2	-0.012969758	0.768604935	0.842473038
APOF	12q13.3	0.012965766	0.768674145	0.842503024
BTBD18	11q12.1	0.012961063	0.768755663	0.842546496
RAB21	12q21.1	0.012940902	0.769105177	0.842883668
GOLGA8CP	15q11.2	0.012918021	0.769501891	0.843262122
PER2	2q37.3	-0.012916153	0.769534286	0.843262122
PRR18	6q27	0.012904642	0.769733889	0.843434934
ANKRD54	22q13.1	-0.012889103	0.770003371	0.843645795
PPP1R32	11q12.2	-0.012888713	0.770010143	0.843645795
RBPJL	20q13.12	-0.012882444	0.770118856	0.843718982
VKORC1	16p11.2	-0.012875773	0.770234563	0.843736695
LINC02249	15q13.2	-0.012874495	0.770256733	0.843736695
PGK2	6p12.3	-0.012874262	0.770260767	0.843736695
CTXN2	15q21.1	0.012864873	0.770423623	0.843811696
ASZ1	7q31.2	0.012862556	0.770463824	0.843811696
GCSAML	1q44	0.012862282	0.770468574	0.843811696
C10ORF120	10q26.13	-0.012859305	0.770520212	0.843811696
BRD7	16q12.1	-0.012858232	0.770538827	0.843811696
TERC	3q26.2	0.012848223	0.770712448	0.843955915
WDR48	3p22.2	0.012843035	0.770802451	0.844008559

INSL5	1p31.3	0.012833434	0.770969017	0.844145026
DSG2	18q12.1	0.01282202	0.771167049	0.84431593
PWP1	12q23.3	-0.012819328	0.771213757	0.844321147
CNFN	19q13.2	0.012815594	0.771278548	0.844346158
B3GALT1	2q24.3	-0.012795004	0.771635837	0.844645865
ADIPOQ	3q27.3	-0.012794981	0.771636237	0.844645865
EFHC1	6p12.2	-0.012788761	0.77174418	0.844718088
EDA2R	Xq12	0.012775432	0.771975516	0.844925355
WDR38	9q33.3	-0.012769545	0.772077696	0.844991247
CABP5	19q13.33	0.012766369	0.772132807	0.845005621
MAGEA6	Xq28	0.012752731	0.772369535	0.845218741
C9ORF131	9p13.3	0.012742824	0.772541519	0.84536099
MOB3C	1p33	-0.012737874	0.772627446	0.84540906
RPL23AP7	2q14.1	-0.012730666	0.772752579	0.845472213
RAPGEF3	12q13.11	0.012729711	0.772769163	0.845472213
ZSCAN29	15q15.3	-0.012723806	0.772871678	0.845538417
PPP1R1B	17q12	0.012717988	0.772972694	0.84560096
OR56A1	11p15.4	0.012714426	0.773034542	0.84560096
SPATC1L	21q22.3	0.012713256	0.773054867	0.84560096
SNX30	9q32	-0.012706786	0.773167204	0.845648361
USP50	15q21.2	-0.012705921	0.77318222	0.845648361
P2RX6P	22q11.21	-0.012683657	0.773568835	0.846025244
ZNF547	19q13.43	-0.01266658	0.773865427	0.846299484
SORCS1	10q25.1	-0.012661042	0.773961614	0.846299484
MED19	11q12.1	-0.012660762	0.77396648	0.846299484
HPN-AS1	19q13.11-q13.12	-0.01265928	0.773992219	0.846299484
NKX2-8	14q13.3	0.012657116	0.774029796	0.846299484
TEX43	5q23.2	0.012634545	0.774421875	0.846682182
SAXO1	9p22.1	0.012630799	0.774486956	0.84670735
RAB11FIP5	2p13.2	0.012620816	0.774660386	0.84685096
DCAF12	9p13.3	-0.012613695	0.774784101	0.84694021
FRY	13q13.1	0.012591899	0.775162821	0.847308188
OR5F1	11q12.1	0.012572622	0.775497823	0.847628342
PTPN1	20q13.13	-0.012555948	0.775787611	0.847899045
LINS1	15q26.3	-0.012551085	0.775872129	0.847945381
KRTAP19-5	21q22.11	0.012535424	0.77614435	0.848196838
OR8D4	11q24.1	-0.012527971	0.776273909	0.848208124
ZFP14	19q13.12	-0.012525468	0.776317429	0.848208124
WDR4	21q22.3	-0.012524165	0.776340078	0.848208124
MBNL3	Xq26.2	0.01252321	0.776356684	0.848208124
FRMPD1	9p13.2	-0.012522711	0.77636536	0.848208124
LGALS17A	19q13.2	-0.012505974	0.776656329	0.848479969
CCDC27	1p36.32	-0.0124888	0.776954939	0.848760131
C8ORF33	8q24.3	-0.012469457	0.77729131	0.84908151
KRTAP19-1	21q22.11	0.012464042	0.77738547	0.849138289
UNC80	2q34	-0.012455892	0.777527218	0.849247037
PRRG4	11p13	0.0124408	0.777789707	0.849469704
SLC33A1	3q25.31	0.01243915	0.777818406	0.849469704
GPHN	14q23.3-q24.1	-0.012436892	0.777857678	0.849469704
AGGF1	5q13.3	-0.012433593	0.777915076	0.849486302
ADPRH	3q13.33	0.012426906	0.778031387	0.84953465
MBOAT4	8p12	-0.012425	0.778064544	0.84953465
LINC00486	2p22.3	-0.012423424	0.778091956	0.84953465
ACE	17q23.3	-0.012420133	0.778149214	0.84953465
CASC3	17q21.1	-0.012418917	0.778170363	0.84953465
SSMEM1	7q32.2	-0.012410503	0.778316733	0.849648364
KPNA5	6q22.1	-0.012404676	0.778418115	0.849712958
SNCG	10q23.2	0.012400073	0.778498193	0.849744148

OR11H6	14q11.2	0.012398181	0.778531114	0.849744148
ART3	4q21.1 4p15.1-p14	-0.01239427	0.778599152	0.849772334
ALKBH8	11q22.3	0.012383226	0.778791308	0.849935974
SAMD12	8q24.11-q24.12	0.012376106	0.778915212	0.849979962
SLC4A1	17q21.31	-0.012376057	0.778916064	0.849979962
ZMYM1	1p34.3	0.012372111	0.778984722	0.850008806
UHMK1	1q23.3	-0.012363167	0.779140369	0.850132561
VN1R10P	6p22.1	0.012358453	0.779222407	0.850175992
CNTNAP5	2q14.3	0.012353003	0.779317243	0.850233338
DCTN1-AS1	2p13.1	-0.012337221	0.779591911	0.850470905
FAM189B	1q22	-0.012335639	0.779619454	0.850470905
C1QTNF2	5q33.3	0.012328519	0.779743391	0.850560012
KCNIP4-IT1	4p15.2	0.012321296	0.779869103	0.850651046
PDE6C	10q23.33	-0.012316883	0.779945922	0.850688742
PPY2P	17q11.2	-0.012298187	0.7802714	0.850997631
SUPV3L1	10q22.1	-0.012289441	0.78042366	0.851117579
VPS35	16q11.2	-0.012283883	0.780520422	0.851176992
IFNA2	9p21.3	0.012272348	0.780721265	0.851349895
SHOC1	9q31.3	-0.012268025	0.78079655	0.85138587
TEX19	17q25.3	0.012261305	0.780913553	0.851467328
PASD1	Xq28	0.012256583	0.780995791	0.851476738
SYTL5	Xp11.4	0.012255531	0.781014109	0.851476738
SCAF8	6q25.2	-0.012252014	0.781075358	0.851476738
OR1L3	9q33.2	0.012251094	0.781091378	0.851476738
ISX	22q12.3	-0.012246623	0.781169229	0.851515491
UNC5CL	6p21.1	-0.012241767	0.781253809	0.851561575
ASIC4	2q35	-0.012228296	0.781488428	0.851771187
CEACAM1	19q13.2	0.0122145	0.781728723	0.851903777
LINC02347	12q24.32	0.012214298	0.781732231	0.851903777
PAQR6	1q22	-0.012214022	0.781737038	0.851903777
AFAP1-AS1	4p16.1	-0.012200953	0.781964698	0.852087622
C11ORF42	11p15.4	-0.012199478	0.781990398	0.852087622
PRSS54	16q21	-0.012186699	0.782213009	0.852284053
FAM183BP	7p14.1	-0.01218402	0.782259688	0.852288782
NEPRO	3q13.2	-0.012178722	0.782351983	0.852343206
CDH9	5p14.1	0.012155304	0.782760017	0.852714717
ZNF99	19p12	0.012154289	0.782777707	0.852714717
NFYA	6p21.1	-0.012147287	0.782899719	0.852781707
TMOD3	15q21.2	0.012145897	0.782923931	0.852781707
SNORA69	Xq24	0.0121373	0.783073745	0.852898738
SPATA31A5	9q12	-0.012127097	0.783251572	0.853037205
SERF1A	5q13.2	-0.012121453	0.783349938	0.853037205
SMNDC1	10q25.2	0.012117675	0.783415779	0.853037205
PHIP	6q14.1	0.012115678	0.78345059	0.853037205
MRPL36	5p15.33	-0.012114506	0.783471018	0.853037205
TBC1D29P	17q11.2	-0.012114444	0.783472096	0.853037205
DDX23	12q13.12	-0.012112986	0.78349751	0.853037205
PPM1L	3q25.33-q26.1	-0.012107472	0.783593618	0.853095702
IL37	2q14.1	-0.012093485	0.783837411	0.853314969
OR1L1	9q33.2	0.012090791	0.783884378	0.853319951
TERF2	16q22.1	-0.01208307	0.784018974	0.853399699
CTAG2	Xq28	0.012081394	0.784048186	0.853399699
PRR30	2p23.3	-0.012075744	0.784146698	0.853399699
SPOCK2	10q22.1	0.012074777	0.784163553	0.853399699
GCC2	2q12.3	0.012074429	0.784169609	0.853399699
SRP72	4q12	-0.012054978	0.784508747	0.853722623
SOGA3	6q22.33	0.012038652	0.784793412	0.853913689
KTN1-AS1	14q22.3	-0.012038522	0.784795679	0.853913689

TPTEP2	22q13.1	0.01203761	0.784811583	0.853913689
VPS13D	1p36.22-p36.21	-0.012032487	0.784900926	0.853920236
DDX47	12p13.1	-0.0120324	0.78490244	0.853920236
CCDC77	12p13.33	0.012012557	0.785248477	0.854250532
CMPK2	2p25.2	0.012004177	0.785394634	0.854359128
MYO3A	10p12.1	0.012001826	0.785435646	0.854359128
RELCH	18q21.33	-0.011999011	0.785484748	0.854359128
PARD3	10p11.22-p11.21	-0.011996535	0.78552792	0.854359128
SLC5A4	22q12.3	0.011994667	0.785560512	0.854359128
CFAP100	3q21.3	0.011972721	0.785943331	0.854729296
SEC22C	3p22.1	-0.011968834	0.786011133	0.854756853
EGR4	2p13.2	0.011952675	0.786293036	0.855017222
DDX20	1p13.2	-0.011946864	0.78639443	0.855056517
CXCL2	4q13.3	-0.011945735	0.786414126	0.855056517
RIMBP2	12q24.33	0.011937931	0.786550285	0.855114056
RTN3	11q13.1	-0.011937833	0.786552005	0.855114056
DAD1P1	12p12.1	-0.011927885	0.786725581	0.855256573
LOC441666	10q11.21	-0.011920902	0.786847433	0.855342847
VENTXP7	3p24.3	-0.011912194	0.786999405	0.855461851
SBF1	22q13.33	0.011904313	0.787136929	0.85555683
AHSA2P	2p15	0.011902316	0.787171786	0.85555683
FAF1	1p32.3	-0.011899277	0.78722483	0.855568288
RTKN	2p13.1	-0.011893372	0.787327889	0.855634098
CCL27	9p13.3	0.011882523	0.787517233	0.855793667
ACSBG2	19p13.3	0.011875608	0.787637941	0.855878637
CSF2RA	Xp22.33 and Yp11	-0.011871662	0.787706815	0.855907276
AMT	3p21.31	-0.011866799	0.787791701	0.855936385
FAM99A	11p15.5	0.011865256	0.787818646	0.855936385
IFIT2	10q23.31	0.011852471	0.788041827	0.856132656
LKAAEAR1	20q13.33	0.01184729	0.788132268	0.856184703
CAPS2	12q21.1-q21.2	0.011841182	0.788238907	0.856254342
LINC00620	3p25.1	0.011835231	0.788342811	0.856270079
NOL10	2p25.1	0.011833627	0.788370814	0.856270079
PROK2	3p13	0.011833043	0.788381006	0.856270079
OR52L1	11p15.4	-0.011821484	0.788582832	0.856443076
TMEM225	11q24.1	-0.011809475	0.788792524	0.856624595
PBOV1	6q23.3	0.011800815	0.788943746	0.856735532
DEFB127	20p13	-0.011798751	0.788979796	0.856735532
BAHCC1	17q25.3	0.011779527	0.789315534	0.85705387
ITGA10	1q21.1	-0.011767456	0.789526356	0.857236545
LAGE3	Xq28	-0.011763635	0.789593094	0.857262768
EIF4G1	3q27.1	-0.011760249	0.78965225	0.857280757
GLP1R	6p21.2	-0.011754171	0.789758413	0.857349774
TUBB4A	19p13.3	0.011749046	0.789847928	0.857400711
IL5	5q31.1	0.011746308	0.789895756	0.857406394
IPO7	11p15.4	-0.011719435	0.790365247	0.857869752
SLC25A18	22q11.21	0.011713747	0.790464617	0.857931349
OPN3	1q43	0.01171023	0.790526075	0.857951795
FAM74A1	9p12	-0.011704153	0.790632245	0.85802076
LOC284798	20p11.21	0.01170059	0.790694505	0.85804207
AQP12A	2q37.3	0.011695794	0.790778309	0.858086753
PYCR1	17q25.3	0.011692601	0.7908341	0.858101037
NLRC4	2p22.3	0.011682615	0.791008612	0.858244131
NEU2	2q37.1	0.011678326	0.791083561	0.85827919
KCND3	1p13.2	0.011655419	0.791483906	0.85866726
PPM1G	2p23.3	0.011646404	0.791641493	0.85878303
SAE1	19q13.32	0.011643451	0.791693101	0.85878303
KCNH7	2q24.2	0.011641992	0.791718602	0.85878303

CD1A	1q23.1	-0.011633691	0.79186371	0.858894148
B3GAT1	11q25	0.01159886	0.792472638	0.859508309
GKN1	2p13.3	-0.01158903	0.792644509	0.8596484
ALX4	11p11.2	-0.011579748	0.79280681	0.8597781
SPACA7	13q34	0.011574371	0.79290083	0.85983374
LYAR	4p16.3	-0.011570073	0.792976001	0.859868935
DDX39B	6p21.33	-0.01155036	0.793320733	0.860147548
CFAP43	10q25.1	-0.011547668	0.793367815	0.860147548
SNORA15	7p11.2	-0.011546035	0.793396381	0.860147548
NAT10	11p13	0.011545063	0.793413378	0.860147548
SHQ1	3p13	0.01154185	0.793469573	0.860147548
H2AFZ	4q23	0.011540721	0.793489318	0.860147548
GTPBP3	19p13.11	0.011526133	0.793744491	0.860377825
OR9K2	12q13.2	-0.011517917	0.793888198	0.860469057
PRDM7	16q24.3	-0.011516434	0.793914148	0.860469057
HIST1H3H	6p22.1	0.011507294	0.79407403	0.860596006
TMEM173	5q31.2	0.011492266	0.794336941	0.860764155
C1ORF105	1q24.3	-0.011490704	0.794364265	0.860764155
AMIGO3	3p21.31	0.011489313	0.794388596	0.860764155
C6ORF118	6q27	-0.011488649	0.794400222	0.860764155
SNORA23	11p15.4	-0.011469845	0.794729228	0.861074297
TNNI2	11p15.5	0.011460665	0.794889844	0.861201968
KRBOX4	Xp11.3	-0.011454578	0.794996371	0.861220626
RLBP1	15q26.1	-0.01145383	0.795009462	0.861220626
LARP4	12q13.12	0.011451365	0.795052596	0.861220626
GHSR	3q26.31	-0.011448076	0.795110155	0.861220626
TMEM19	12q21.1	-0.011447457	0.79512098	0.861220626
IDE	10q23.33	0.011444157	0.795178727	0.861236833
OPN5	6p12.3	-0.011422696	0.795554324	0.861542202
GTF3A	13q12.2	-0.011422534	0.795557153	0.861542202
VSIG1	Xq22.3	0.011420711	0.795589071	0.861542202
LOC392196	8p23.1	0.011407322	0.795823418	0.861749618
HTR1A	5q12.3	-0.011402622	0.795905681	0.861776494
TRIM42	3q23	0.011399734	0.795956242	0.861776494
MAST3	19p13.11	-0.011398567	0.795976669	0.861776494
MYRIP	3p22.1	0.01138476	0.796218369	0.861991813
CYB561A3	11q12.2	0.011379636	0.796308067	0.86200497
ASB15	7q31.32	0.011377153	0.79635155	0.86200497
SOX15	17p13.1	0.011376728	0.796358988	0.86200497
XYLT2	17q21.33	-0.011341601	0.796974015	0.86262431
ZFP64	20q13.2	0.011327707	0.79721732	0.862765683
SEPTIN14	7p11.2	-0.011327374	0.797223151	0.862765683
PROKR1	2p13.3	0.0113268	0.797233207	0.862765683
MAB21L4	2q37.3	-0.011298182	0.797734405	0.863251158
TTC23L	5p13.2	0.011296128	0.797770384	0.863251158
EHF	11p13	0.01129384	0.797810459	0.863251158
LCE3D	1q21.3	0.01125902	0.798420415	0.863864712
ATG101	12q13.13	-0.011250247	0.798574106	0.863984562
LAMB2P1	3p21.31	-0.011245167	0.798663106	0.864034413
PRRT4	7q32.1	-0.011241007	0.798735998	0.864066834
LTBP4	19q13.2	-0.011238437	0.798781024	0.864069107
SLC19A2	1q24.2	0.011233835	0.798861665	0.864109904
RSRP1	1p36.11	-0.011229667	0.7989347	0.86414247
SPINK8	3p21.31	-0.011226286	0.798993936	0.864160108
SKINT1L	1p33	0.011202568	0.799409563	0.864497483
PDXDC2P-NPIPE	16q22.1	0.011199794	0.79945817	0.864497483
ARL11	13q14.2	0.011199621	0.799461213	0.864497483
RNF186	1p36.13	0.011198683	0.799477653	0.864497483

MAGEA2	Xq28	0.011189249	0.799642987	0.864585583
ENTPD3	3p22.1	-0.011187984	0.799665147	0.864585583
HAL	12q23.1	-0.011186682	0.799687977	0.864585583
KRTAP6-3	21q22.11	0.011180163	0.799802219	0.864650674
CAMTA2	17p13.2	-0.011178345	0.799834088	0.864650674
SYT4	18q12.3	0.011173835	0.799913146	0.864689702
DMRTB1	1p32.3	0.011162108	0.800118701	0.864865459
TCEAL4	Xq22.2	-0.011157851	0.800193309	0.864899662
OCLNP1	5q13.2	0.011154793	0.800246914	0.864911161
COPB1	11p15.2	-0.011150817	0.80031661	0.86494005
KRTAP10-9	21q22.3	-0.011135577	0.800583786	0.865182349
H2BFM	Xq22.2	-0.011096697	0.801265486	0.86587257
TGS1	8q12.1	0.011087599	0.801425024	0.865954841
HIST1H2AM	6p22.1	-0.011087449	0.801427655	0.865954841
DNAAF1	16q24.1	0.011077404	0.801603809	0.866061259
ARHGEF10L	1p36.13	0.011075615	0.80163518	0.866061259
FAM169B	15q26.3	0.011074473	0.801655213	0.866061259
NTN4	12q22	-0.011061113	0.801889519	0.866229639
MTO1	6q13	-0.011060679	0.801897134	0.866229639
SGCZ	8p22	-0.011038923	0.802278748	0.866595364
COQ10A	12q13.3	0.011032544	0.802390643	0.866669724
CMTM2	16q21	0.01102869	0.802458247	0.86669624
MLH3	14q24.3	-0.01102056	0.802600865	0.866803767
FOXE1	9q22.33	0.01101311	0.802731558	0.866898404
CCZ1P-OR7E38P	7q21.3	-0.011005884	0.80285833	0.866988798
ZC3H18	16q24.2	0.010996158	0.80302897	0.867126551
CD83	6p23	-0.010987301	0.803184382	0.867212396
LOC100130093	1q42.13	-0.010985347	0.803218661	0.867212396
FAM174B	15q26.1	-0.010984262	0.803237711	0.867212396
PSMC6	14q22.1	-0.010973928	0.803419038	0.867361646
BDNF	11p14.1	-0.010956213	0.803729905	0.867650721
GYPE	4q31.21	-0.010945584	0.803916444	0.867805556
COL6A6	3q22.1	0.01094037	0.804007955	0.867855747
FAM66D	8p23.1	-0.010938022	0.804049164	0.867855747
AMFR	16q13	-0.010933374	0.804130734	0.867891846
ZNF383	19q13.12	-0.010931203	0.804168838	0.867891846
OR5K3	3q11.2	0.010922601	0.804319825	0.86800826
GRASP	12q13.13	0.010918438	0.804392899	0.868040584
PRKCSH	19p13.2	0.010910796	0.804527038	0.868138798
SEPHS1	10p13	0.010894123	0.804819725	0.868393938
FBP2	9q22.32	-0.010892078	0.804855629	0.868393938
PRKCA	17q24.2	0.010889955	0.804892901	0.868393938
VWA3B	2q11.2	0.010887179	0.80494164	0.86839998
GAA	17q25.3	0.010876409	0.805130731	0.868557428
GMNN	6p22.3	-0.010866683	0.805301499	0.86865348
MYBBP1A	17p13.2	-0.010866422	0.805306073	0.86865348
GAPDHS	19q13.12	0.010851637	0.805565688	0.868852354
MAGED2	Xp11.21	-0.010850357	0.805588158	0.868852354
ARHGDI1A	17q25.3	-0.010848099	0.805627805	0.868852354
OR5AP2	11q12.1	0.01084609	0.805663092	0.868852354
PFDN4	20q13.2	-0.010842021	0.805734544	0.868882861
EDAR	2q13	-0.010826469	0.806007654	0.869130816
KMT2D	12q13.12	0.010817358	0.806167656	0.869238181
GCA	2q24.2	-0.010815882	0.806193584	0.869238181
PRDX4	Xp22.11	0.010804767	0.806388809	0.869391496
PTCD1	7q22.1	-0.010800425	0.806465072	0.869391496
C14ORF119	14q11.2	-0.010797993	0.80650778	0.869391496
MFSD4B	6q21	-0.010797951	0.806508534	0.869391496

TRAM1L1	4q26	0.010794954	0.806561166	0.869401674
TLCD3A	17p13.3	-0.010791915	0.806614552	0.869412665
CASQ1	1q23.2	0.010789213	0.806662006	0.869417261
HPYR1	8q24.22	0.010783136	0.806768765	0.869485772
SLC25A40	7q21.12	-0.010780018	0.806823532	0.869498244
C1ORF194	1p13.3	-0.010767613	0.807041444	0.869686524
KIAA1958	9q32	0.010755096	0.807261354	0.869876937
ROPN1L	5p15.2	-0.010750849	0.807335977	0.869910782
GAGE2E	Xp11.23	-0.010739034	0.807543564	0.870087884
FBXO38	5q32	-0.010701082	0.808210469	0.870759834
ZMPSTE24	1p34.2	-0.01068493	0.808494338	0.870980662
DYNC1I2	2q31.1	-0.010684496	0.80850197	0.870980662
ACTRT1	Xq25	0.010675267	0.808664169	0.871079805
PDZD11	Xq13.1	-0.010674336	0.808680546	0.871079805
ISY1	3q21.3	-0.010663481	0.80887134	0.871238701
STXBP3	1p13.3	-0.010657663	0.808973617	0.871302242
UCHL1	4p13	-0.010645158	0.809193437	0.87149237
PRDM9	5p14.2	0.010626926	0.809513969	0.871790937
GLYATL1	11q12.1	0.010613043	0.809758064	0.872007159
LHX5	12q24.13	0.010588228	0.810194397	0.872430363
TEDC2	16p13.3	0.010583069	0.810285127	0.872481391
SOX3	Xq27.1	-0.010576125	0.810407241	0.872527879
GREB1L	18q11.1-q11.2	-0.010575684	0.810414991	0.872527879
MAD1L1	7p22.3	0.010569088	0.810530999	0.872606108
DUSP21	Xp11.3	-0.010562738	0.810642675	0.872674277
INTU	4q28.1	0.010558059	0.810724961	0.872674277
LGR6	1q32.1	-0.010556193	0.810757794	0.872674277
ZNF311	6p22.1	-0.010555628	0.810767726	0.872674277
MYL1	2q34	-0.010548832	0.810887246	0.872756256
H2AFY	5q31.1	-0.010543905	0.810973921	0.872802878
SHANK2	11q13.3-q13.4	-0.010528795	0.811239704	0.873014686
FAM182A	20p11.1	0.010527785	0.811257462	0.873014686
TIAL1	10q26.11	-0.010520806	0.811380241	0.873076479
AGR2	7p21.1	-0.01051959	0.811401628	0.873076479
DEFB132	20p13	-0.010516915	0.811448678	0.873080437
IAPP	12p12.1	-0.010503236	0.811689324	0.873292682
MAPK12	22q13.33	0.010500659	0.811734666	0.873294791
NLRP12	19q13.42	0.010497367	0.811792582	0.873310425
RBM10	Xp11.3	0.010491454	0.811896615	0.873375667
SCAF1	19q13.33	0.010485202	0.812006622	0.873447329
SPANXN5	Xp11.22	-0.010478567	0.812123374	0.873526237
SNORA11E	Xp11.22	-0.01046875	0.812296101	0.87366534
C2CD4D	1q21.3	0.010457154	0.812500153	0.873821021
TARP	7p14.1	-0.010455591	0.812527664	0.873821021
ACSM2A	16p12.3	-0.010451156	0.812605705	0.873858264
PKD1L3	16q22.2	0.010446713	0.812683899	0.873895667
CNIH1	14q22.2	-0.010429886	0.812980043	0.87416742
SHROOM4	Xp11.22	-0.010426673	0.813036593	0.87418153
RBM22	5q33.1	0.01042372	0.813088558	0.874190711
C9ORF135	9q21.12	-0.010413265	0.813272591	0.874341874
TCF21	6q23.2	-0.010407221	0.813378969	0.87440954
LINC00667	18p11.31	0.010383688	0.81379323	0.874808166
PTH2	19q13.33	0.010378717	0.813880751	0.874836863
FCN2	9q34.3	-0.010377234	0.813906844	0.874836863
PLAAT4	11q12.3	-0.010363889	0.814141801	0.875002519
NT5C1B	2p24.2	0.010361381	0.814185953	0.875002519
USP17L9P	4p16.1	-0.010361074	0.814191366	0.875002519
PRSS45P	3p21.31	-0.010333148	0.814683077	0.875484216

CFAP44	3q13.2	0.010330369	0.814732007	0.875490061
ABCA13	7p12.3	-0.010311569	0.815063085	0.875782691
PLCXD3	5p13.1	-0.010309965	0.815091342	0.875782691
CNOT2	12q15	0.010303884	0.815198433	0.875851006
KCNG4	16q24.1	-0.010296993	0.815319794	0.875934646
IFNA8	9p21.3	-0.010293527	0.815380842	0.875953482
PPARGC1B	5q32	0.010287255	0.815491315	0.876025411
SLC8A3	14q24.2	0.01028469	0.815536494	0.876027194
DHH	12q13.12	0.010280652	0.815607617	0.876056844
IRF2BP2	1q42.3	0.010276877	0.815674109	0.876081518
ANKRD18DP	3q29	0.010263851	0.815903564	0.876281211
KIRREL2	19q13.12	0.010256351	0.816035685	0.8763487
HSP90AA1	14q32.31	0.010255341	0.816053472	0.8763487
SLU7	5q33.3	0.010237105	0.81637474	0.876646939
SREK1	5q12.3	0.010201328	0.817005127	0.877258669
CIDECP1	3p25.3	0.010196986	0.817081639	0.877258669
CPNE6	14q11.2	0.010195408	0.817109442	0.877258669
NPVF	7p15.3	-0.010194881	0.817118731	0.877258669
FGF7P6	9q13	-0.01018482	0.817296024	0.877399915
OR1E2	17p13.2	-0.010178885	0.817400624	0.877399915
BNIP3	10q26.3	-0.0101771	0.817432083	0.877399915
CRISPLD1	8q21.13	-0.010176492	0.817442795	0.877399915
NAA35	9q21.33	0.010173539	0.81749483	0.877399915
ZDHHC15	Xq13.3	-0.0101705	0.817548395	0.877399915
MYH1	17p13.1	-0.010170103	0.817555401	0.877399915
GPR135	14q23.1	-0.010161296	0.817710616	0.877519709
CDSN	6p21.33	-0.010158039	0.817768019	0.877534528
MSX2	5q35.2	-0.01012756	0.818305263	0.87806423
DNAJA4	15q25.1	-0.010117268	0.818486695	0.878212098
GALR2	17q25.1	-0.010113593	0.818551488	0.878234808
OIP5	15q15.1	0.010103548	0.818728582	0.878377997
IL27RA	19p13.12	0.01008783	0.819005702	0.87862848
SLC22A13	3p22.2	0.010083595	0.819080379	0.878661766
CREBRF	5q35.1	0.010061692	0.819466599	0.879029235
B4GALT4	3q13.32	-0.010057263	0.819544697	0.879066167
ATF1	12q13.12	-0.010047103	0.81972387	0.879211504
OTUD7B	1q21.2	-0.010042414	0.819806569	0.879253355
ZNF675	19p12	-0.010036335	0.81991377	0.87932148
OTOR	20p12.1	0.010031239	0.820003641	0.87933175
TRIM60	4q32.3	-0.010030839	0.820010711	0.87933175
ANKFY1	17p13.2	0.010007331	0.820425339	0.879729509
NLRP4	19q13.43	0.009998883	0.820574356	0.87984243
SNAP91	6q14.2	-0.009996098	0.820623478	0.879848235
MIRLET7BHG	22q13.31	0.009991353	0.820707185	0.879891118
ZNF302	19q13.11	-0.009987011	0.820783787	0.87992638
EIF2B2	14q24.3	-0.009980151	0.82090481	0.880009257
MBD3L5	19p13.2	0.009975321	0.820990019	0.88004034
BBS10	12q21.2	0.009973551	0.821021241	0.88004034
COPG2	7q32.2	-0.009964085	0.821188235	0.88017247
CACNG1	17q24.2	0.009960393	0.821253379	0.880181311
TBC1D25	Xp11.23	0.009956617	0.821319997	0.880181311
USP12	13q12.13	0.009956183	0.821327658	0.880181311
RAB34	17q11.2	0.009950973	0.821419588	0.880232968
PRSS37	7q34	0.009940916	0.821597035	0.880359259
ITGA3	17q21.33	0.009939337	0.821624908	0.880359259
TAAR1	6q23.2	-0.009934025	0.821718634	0.880412822
SPATA31A6	9p11.2	0.009918724	0.821988638	0.880633127
HSPB3	5q11.2	0.009915412	0.822047094	0.880633127

EPM2A	6q24.3	-0.009914936	0.822055494	0.880633127
PMS2P9	7q11.23	0.009899677	0.822324776	0.88087472
LOC400940	2p25.2	-0.009890228	0.82249154	0.880997659
SLC5A8	12q23.1-q23.2	-0.009888215	0.822527074	0.880997659
GOLGA8EP	15q11.2	-0.009884498	0.822592682	0.881021052
CELF4	18q12.2	0.009878637	0.822696134	0.881084975
SMG8	17q22	-0.009873079	0.822794236	0.881143159
SEMA6A	5q23.1	-0.00987004	0.822847884	0.881153735
MYD88	3p22.2	-0.009847288	0.823249506	0.881511369
ZBTB49	4p16.3	-0.009846159	0.823269435	0.881511369
ADGRE1	19p13.3-p13.2	0.009840645	0.823366779	0.881525955
SNORA25	11q21	-0.009840426	0.823370641	0.881525955
OR2M3	1q44	-0.009832157	0.823516638	0.881602852
GMFB	14q22.2	0.009831397	0.823530056	0.881602852
RNF19B	1p35.1	0.009822192	0.823692571	0.881729936
DGKB	7p21.2	0.009809704	0.823913061	0.881919064
OPN1LW	Xq28	0.009801195	0.824063295	0.882017609
JOSD1	22q13.1	0.009799527	0.824092757	0.882017609
HAUS1	18q21.1	0.009790322	0.824255294	0.88213574
CRIP3	6p21.1	0.009788313	0.824290773	0.88213574
SLC18A3	10q11.23	-0.009763929	0.824721394	0.88254966
PRPS1L1	7p21.1	0.009749979	0.824967763	0.882766377
TMEM39B	1p35.2	0.009742561	0.825098789	0.882859652
TAS2R8	12p13.2	-0.009698785	0.825872081	0.883640108
CSH2	17q23.3	0.009676145	0.826272082	0.884021101
MYOF	10q23.33	0.009668141	0.826413504	0.884125416
STARD3NL	7p14.1	-0.009664406	0.826479483	0.884149013
MAK16	8p12	-0.009649818	0.826737271	0.884377791
UGP2	2p15	-0.009644086	0.826838551	0.884439132
C5ORF47	5q35.2	-0.009639029	0.826927926	0.884446909
PTDSS2	11p15.5	0.009638702	0.826933694	0.884446909
PRAMEF1	1p36.21	0.009635056	0.826998124	0.884468826
PRKRIP1	7q22.1	-0.009628021	0.827122455	0.884554801
LAS1L	Xq12	-0.009614909	0.827354199	0.884755632
HSDL1	16q24.1	-0.009603272	0.827559865	0.884909451
PREP	6q21	-0.009601796	0.827585958	0.884909451
ATP6V1A	3q13.31	-0.00959181	0.827762473	0.885051181
TBP	6q27	-0.009579305	0.827983505	0.885240491
OR2T4	1q44	0.009575652	0.82804808	0.885262512
PAXIP1-AS1	7q36.2	-0.00957175	0.828117064	0.885289246
GABRG2	5q34	0.009567286	0.828195985	0.885289337
MRPL13	8q24.12	-0.009566279	0.828213777	0.885289337
FAM120B	6q27	-0.009564282	0.828249086	0.885289337
LST1	6p21.33	-0.009561156	0.828304352	0.885301402
TEX44	2q37.1	-0.009549611	0.828508447	0.885395105
SNORA32	11q21	-0.009549164	0.828516358	0.885395105
NPHP4	1p36.31	-0.00954813	0.828534637	0.885395105
GABPB2	1q21.3	0.009545569	0.828579924	0.885395105
CSAG3	Xq28	0.009542361	0.828636628	0.885395105
GTPBP1	22q13.1	0.00954127	0.828655926	0.885395105
LINC00284	13q14.11	-0.009530321	0.828849503	0.885554933
KLHL31	6p12.1	-0.00952451	0.828952254	0.885617709
MAGEB1	Xp21.2	0.009519224	0.829045721	0.88567056
VPS4B	18q21.33	-0.009508879	0.82922865	0.885818973
ZNF609	15q22.31	0.009505319	0.829291606	0.885839216
QRFRP	4q27	-0.009489613	0.829569355	0.886088884
ADAMTS20	12q12	-0.009483438	0.829678559	0.886104444
PAPPA2	1q25.2	-0.009479802	0.829742856	0.886104444

OCM2	7q21.3	-0.009479766	0.829743498	0.886104444
GOLGA1	9q33.3	-0.009478833	0.829759999	0.886104444
MLEC	12q24.31	-0.009473189	0.829859827	0.88616404
LMAN1L	15q24.1	0.00946748	0.829960795	0.886178732
SLC22A8	11q12.3	0.009467433	0.829961631	0.886178732
ASB6	9q34.11	0.009452521	0.830225376	0.886405669
RPIA	2p11.2	0.009450437	0.83026224	0.886405669
PPIAL4D	1q21.1	-0.009439525	0.830455267	0.886524242
C16ORF90	16p13.3	0.009439179	0.830461382	0.886524242
LINC00324	17p13.1	-0.009433808	0.830556391	0.886578648
GPR107	9q34.11	0.009430725	0.830610931	0.886589854
SCARNA6	2q37.1	-0.009427775	0.830663118	0.886598545
GPHA2	11q13.1	0.009423043	0.83074683	0.886640883
H3F3AP5	Xp11.22	-0.009418287	0.830830952	0.886683653
C19ORF73	19q13.33	-0.009398899	0.831173966	0.887002701
TP53RK	20q13.12	-0.009389086	0.83134759	0.887140956
TMEM203	9q34.3	-0.009382269	0.831468209	0.887222637
DCAF8L2	Xp21.3	0.009379459	0.831517931	0.887228663
ACSM6	10q23.33	0.009353346	0.831980015	0.887674654
POLD1	19q13.33	0.009343539	0.83215356	0.88781276
CLEC16A	16p13.13	0.009337374	0.832262674	0.887830639
GDPD2	Xq13.1	0.009337068	0.832268084	0.887830639
DBP	19q13.33	-0.009335116	0.832302633	0.887830639
KCNS1	20q13.12	0.009326353	0.832457716	0.887946381
UIMC1	5q35.2	0.009324	0.832499357	0.887946381
OR2AT4	11q13.4	0.009318732	0.8325926	0.887998784
MAGEB18	Xp21.3	0.009313427	0.832686495	0.888051875
CASP12	11q22.3	0.009274906	0.833368375	0.888732009
SUB1	5p13.3	-0.009268077	0.833489283	0.888813862
SPAAR	9p13.3	-0.009256267	0.833698359	0.888963246
SSX6P	Xp11.23	-0.009255175	0.833717691	0.888963246
FOLR2	11q13.4	0.009229173	0.834178083	0.889407035
NLRP2	19q13.42	-0.009219968	0.834341077	0.889494791
BATF2	11q13.1	-0.009219534	0.834348766	0.889494791
ZNF362	1p35.1	0.009207463	0.834562514	0.889630076
UBE2G1	17p13.2	0.009207377	0.834564051	0.889630076
OR52A4P	11p15.4	0.009199195	0.834708944	0.889737413
SNORA48	17p13.1	-0.009190583	0.834861451	0.889852855
C1ORF185	1p32.3	0.009182985	0.83499602	0.889949165
MAS1	6q25.3	0.009177718	0.835089302	0.890001464
RASD1	17p11.2	0.009170818	0.835211521	0.890043209
IQCD	12q24.13	0.009170514	0.835216901	0.890043209
SLC47A1	17p11.2	0.009159008	0.835420704	0.890213264
MEAK7	16q24.1	-0.009154102	0.835507607	0.890258741
CEP76	18p11.21	0.009145461	0.835660663	0.890374697
SLC25A47	14q32.2	-0.009132338	0.835893121	0.890575236
ZNF274	19q13.43	0.009122796	0.836062167	0.890708199
KIAA1671	22q11.23	-0.009119149	0.836126781	0.890729896
YOD1	1q32.1	0.009109076	0.836305244	0.890872867
OSBP	11q12.1	0.009097439	0.83651141	0.891045332
ZNF585A	19q13.12	-0.009080072	0.836819142	0.89132596
SLC30A6	2p22.3	0.009067133	0.837048418	0.891522997
MYEF2	15q21.1	-0.009056278	0.837240774	0.891679408
CCDC130	19p13.13	0.009053847	0.837283863	0.891679408
ZNF428	19q13.31	0.009046552	0.837413134	0.891738179
RHD	1p36.11	-0.00904326	0.837471475	0.891738179
ST3GAL1	8q24.22	0.009041602	0.837500855	0.891738179
PCNP	3q12.3	-0.009040734	0.837516245	0.891738179

TDGF1	3p21.31	-0.009037899	0.837566487	0.891744506
ROBO4	11q24.2	0.009032137	0.837668609	0.89179003
PIGK	1p31.1	0.009030487	0.837697848	0.89179003
OR4F17	19p13.3	-0.009011711	0.838030635	0.892097127
NAA11	4q21.21	-0.009003973	0.838167797	0.892195957
VPS8	3q27.2	0.008999746	0.838242722	0.892225589
FAIM	3q22.3	-0.008997402	0.83828428	0.892225589
GOLGA6D	15q24.2	-0.008979713	0.838597842	0.892512137
PRR12	19q13.33	-0.008972305	0.83872917	0.892549661
C8B	1p32.2	-0.008970467	0.838761755	0.892549661
LTF	3p21.31	-0.008970221	0.838766117	0.892549661
PRAC2	17q21.32	-0.008960179	0.838944147	0.892632867
SLC25A28	10q24.2	0.00895789	0.838984733	0.892632867
METTL3	14q11.2	-0.008956935	0.839001668	0.892632867
DCUN1D2	13q34	0.008955806	0.839021683	0.892632867
LINC01600	6p25.2	0.008933486	0.839417427	0.893006702
PYDC1	16p11.2	-0.008922258	0.839616526	0.893171309
SPATA31A1	9p12	-0.008910566	0.839823853	0.89334465
MTMR11	1q21.2	0.008905874	0.839907057	0.893385947
MPIG6B	6p21.33	-0.008898028	0.840046195	0.893486733
NCBP2	3q29	-0.008887725	0.840228921	0.893633866
POLR3C	1q21.1	-0.008878433	0.840393713	0.893733564
SARM1	17q11.2	0.008871226	0.840521548	0.893733564
LGII	10q23.33	0.008870815	0.840528828	0.893733564
IGSF6	16p12.2	0.008870184	0.84054003	0.893733564
ZNF213	16p13.3	-0.008869923	0.840544651	0.893733564
SNORA41	2q33.3	0.008859024	0.840737962	0.893891891
GPR6	6q21	0.008842143	0.841037404	0.894163037
CCDC157	22q12.2	-0.00883267	0.841205453	0.894277119
RSPH10B2	7p22.1	0.00883093	0.841236311	0.894277119
CLRN1	3q25.1	0.008828581	0.841277983	0.894277119
IRX6	16q12.2	-0.008819515	0.841438824	0.894400862
CDK3	17q25.1	-0.008789163	0.841977308	0.894876429
BIRC3	11q22.2	-0.008781522	0.842112898	0.894876429
IFNA7	9p21.3	0.008780352	0.842133644	0.894876429
LINC02593	1p36.33	-0.008780331	0.842134017	0.894876429
PIGX	3q29	0.008779959	0.842140633	0.894876429
UBE2E2	3p24.3	-0.008779264	0.842152959	0.894876429
C6ORF58	6q22.33	0.008772479	0.842273353	0.894915894
TRIM10	6p22.1	0.008769174	0.842331988	0.894915894
SCARNA10	12p13.31	-0.008769086	0.842333554	0.894915894
TMEM88B	1p36.33	0.008767149	0.842367927	0.894915894
POLH	6p21.1	0.008755557	0.842573628	0.895078417
OR2J2	6p22.1	-0.008753517	0.842609837	0.895078417
OPN1MW	Xq28	-0.008750058	0.842671207	0.895096375
CACNA1D	3p21.1	0.008743964	0.842779358	0.895164018
IL17B	5q32	-0.00873212	0.842989557	0.89534004
SNCA	4q22.1	0.008708925	0.843401238	0.89570405
PDE12	3p14.3	-0.008707796	0.843421275	0.89570405
BIVM	13q33.1	0.008701717	0.84352917	0.895771375
STON2	14q31.1	0.008679573	0.843922241	0.896141515
DESI2	1q44	0.008666808	0.844148852	0.896334866
C4ORF36	4q21.3	-0.008661261	0.84424733	0.896392149
CD74	5q33.1	0.008649875	0.844449478	0.896559494
NPC1	18q11.2	-0.008641451	0.844599029	0.89667098
KIAA1549	7q34	-0.008635286	0.844708498	0.896739904
CENPM	22q13.2	-0.00862734	0.844849575	0.896842374
SUGT1P4-STRA6	9q22.33	0.008623129	0.84492436	0.896874466

H3F3C	12p11.21	0.008619655	0.844986037	0.896892641
KRTAP19-3	21q22.11	-0.008607712	0.845198118	0.897070448
OR13C2	9q31.1	0.008602745	0.845286306	0.897075583
PHOSPHO1	17q21.32	0.00860242	0.845292084	0.897075583
MEGF6	1p36.32	-0.008596382	0.845399298	0.897082521
HAVCR1P1	19p12	0.00859473	0.845428634	0.897082521
KCNJ4	22q13.1	0.008594523	0.845432315	0.897082521
ESRRG	1q41	0.008591889	0.845479091	0.897084867
CAMK1	3p25.3	0.008583183	0.845633704	0.897201626
CMAS	12p12.1	-0.008578146	0.845723152	0.897249238
NPAS2	2q11.2	0.008562776	0.845996134	0.897491551
FAM74A4	9q12	0.008551271	0.846200474	0.897661022
NGB	14q24.3	-0.008545858	0.846296622	0.897715708
EIF4EBP2	10q22.1	-0.008539069	0.846417211	0.897783508
PHRF1	11p15.5	0.008535682	0.846477368	0.897783508
C6ORF89	6p21.2	0.008534727	0.846494336	0.897783508
OR6C2	12q13.2	-0.008531256	0.846555991	0.897783793
RAB32	6q24.3	-0.008529691	0.846583803	0.897783793
GPR52	1q25.1	0.008517403	0.846802084	0.897967969
TRIM24	7q33-q34	0.00851076	0.846920092	0.898034483
PDPK1	16p13.3	0.008508849	0.846954031	0.898034483
FAM234A	16p13.3	0.008505723	0.847009569	0.898046066
MAGEA9B	Xq28	-0.008501616	0.847082539	0.898076132
NR2C1	12q22	-0.00849895	0.847129902	0.898079046
KLRF1	12p13.31	-0.008485072	0.847376469	0.898293134
TPI1P3	6q22.1	0.008478532	0.847492666	0.898369003
TBC1D3H	17q12	0.008475591	0.847544915	0.89837708
DGCR2	22q11.21	-0.008472464	0.84760047	0.898388661
TCF7	5q31.1	0.008468122	0.847677617	0.898423126
FSCN2	17q25.3	0.008462435	0.847778679	0.898482932
IFNA5	9p21.3	0.008453399	0.847939229	0.898605774
PLAC8L1	5q32	-0.008438169	0.848209871	0.898845268
SLC35F3	1q42.2	-0.00843558	0.848255876	0.898846701
NXF2B	Xq22.1	-0.008431555	0.848327408	0.898875183
LRP11	6q25.1	-0.008427482	0.848399788	0.89890456
KRTAP12-4	21q22.3	-0.008418201	0.848564727	0.899031998
DLEU2	13q14.2	-0.008408117	0.848743944	0.899174548
FSHB	11p14.1	0.008401926	0.84885398	0.899231961
ATF4	22q13.1	0.008400041	0.848887479	0.899231961
TAS2R4	7q34	0.008390304	0.84906054	0.899367958
ATG7	3p25.3	0.008383108	0.849188457	0.899448035
RAD51D	17q12	-0.008381023	0.849225502	0.899448035
SCARNA9L	Xp22.12	-0.008376171	0.849311754	0.899492061
ANKK1	11q23.2	-0.008360967	0.849582011	0.899730949
IL1F10	2q14.1	-0.008357601	0.84964186	0.899746996
LOC93622	4p16.1	0.008354017	0.849705572	0.899767131
OR4K1	14q11.2	-0.008335232	0.850039521	0.900030449
PSMD10	Xq22.3	-0.008334999	0.850043661	0.900030449
ENDOD1	11q21	-0.008327965	0.850168715	0.900115512
L3MBTL1	20q13.12	-0.008325013	0.850221204	0.900123742
RPS6KA4	11q13.1	0.008316068	0.850380234	0.90024476
NEK7	1q31.3	-0.008312682	0.850440449	0.900261161
SLC9A3R1	17q25.1	-0.008305214	0.850573235	0.900287539
IFNK	9p21.2	-0.00830338	0.850605835	0.900287539
CRYGB	2q33.3	-0.008302667	0.850618513	0.900287539
CCDC84	11q23.3	-0.008301219	0.850644262	0.900287539
CHAF1B	21q22.12-q22.13	0.00829132	0.850820289	0.900367892
ASB8	12q13.11	-0.008290625	0.850832643	0.900367892

CSF2	5q31.1	-0.008285263	0.850927985	0.900367892
IFI30	19p13.11	-0.008285241	0.85092838	0.900367892
GOT1	10q24.2	-0.008284372	0.850943822	0.900367892
LANCL3	Xp21.1	-0.008265371	0.85128173	0.900678084
DDX52	17q12	0.008258712	0.85140015	0.900756032
FEM1C	5q22.3	-0.00825615	0.851445712	0.900756894
LOC100128573	19p13.2	-0.00824989	0.851557048	0.900827336
LRRC58	3q13.33	-0.008243472	0.851671195	0.900900744
NFKBIE	6p21.1	0.008238088	0.851766952	0.900954692
ZNF573	19q13.12	-0.008234788	0.851825643	0.90096943
COL4A3BP	5q13.3	-0.008226625	0.851970829	0.901075647
MPHOSPH8	13q12.11	-0.008209561	0.852274343	0.901349297
EPHX4	1p22.1	0.008187201	0.852672111	0.901706573
ZNF132	19q13.43	-0.00817869	0.852823509	0.901706573
SMG7	1q25.3	0.008177561	0.852843596	0.901706573
LECT2	5q31.1	-0.008176006	0.852871269	0.901706573
DDAH2	6p21.33	-0.008175998	0.852871404	0.901706573
H1FX-AS1	3q21.3	-0.00817361	0.852913885	0.901706573
TRIM6-TRIM34	11p15.4	0.008172945	0.852925726	0.901706573
MAST1	19p13.13	-0.008161757	0.853124767	0.901866379
ABHD18	4q28.2	0.008159152	0.853171123	0.901866379
NDUFB2-AS1	7q34	0.008156894	0.853211293	0.901866379
ZNF75A	16p13.3	0.008149773	0.853337986	0.90190559
C12ORF71	12p11.23	-0.00814928	0.853346762	0.90190559
MS4A3	11q12.1	-0.008146719	0.85339232	0.90190559
NANOG	12p13.31	0.008144264	0.85343601	0.90190559
TRIM21	11p15.4	-0.008142218	0.853472408	0.90190559
CGNL1	15q21.3	-0.008135879	0.853585203	0.901974171
SDCBP	8q12.1	-0.008133534	0.853626922	0.901974171
GOLGA6L10	15q25.2	0.008124329	0.853790712	0.902099887
CLDN12	7q21.13	-0.00811964	0.853874155	0.902140699
SERPINA3	14q32.13	0.008108872	0.854065771	0.90227619
SGK1	6q23.2	0.008107396	0.854092041	0.90227619
THTPA	14q11.2	-0.008100709	0.854211034	0.902313919
DPPA3	12p13.31	-0.008100351	0.854217404	0.902313919
LINC02685	11p11.2	0.008096138	0.85429239	0.902345777
TSBP1	6p21.32	-0.00808201	0.854543829	0.902522573
H2AFJ	12p12.3	0.008080824	0.854564939	0.902522573
SSX5	Xp11.23	0.008075706	0.85465601	0.902522573
C1ORF52	1p22.3	-0.008074528	0.854676983	0.902522573
HLA-DQB2	6p21.32	0.008074137	0.854683944	0.902522573
RDH12	14q24.1	-0.008069874	0.85475981	0.902555338
CDX2	13q12.2	-0.008061235	0.854913582	0.90267036
KIAA1328	18q12.2	0.00804713	0.855164633	0.902888076
CACNG2	22q12.3	0.008042036	0.855255306	0.902889628
EEF1AKMT2	10q26.13	0.008041399	0.855266654	0.902889628
HSF1	8q24.3	0.008039488	0.855300661	0.902889628
C11ORF53	11q23.1	0.008026448	0.855532796	0.90308732
RTP1	3q27.3	0.008002761	0.855954487	0.903485073
CFHR1	1q31.3	-0.007976875	0.856415354	0.903924134
YWHAEP7	17q12	-0.007973448	0.856476371	0.903941139
LRRFIP2	3p22.2	-0.007958903	0.85673537	0.904138151
F9	Xq27.1	0.00795792	0.856752868	0.904138151
OCA2	15q12-q13.1	0.007954365	0.856816174	0.904157559
DNAJC11	1p36.31	-0.007946398	0.85695804	0.90425986
SH3TC2	5q32	-0.00793207	0.857213181	0.904444006
EME2	16p13.3	0.007931552	0.857222414	0.904444006
MBTPS1	16q23.3-q24.1	0.007926338	0.857315263	0.904455345

AP2B1	17q12	0.007925557	0.857329181	0.904455345
TRIM15	6p22.1	-0.00792338	0.857367953	0.904455345
ZNF492	19p12	0.007918604	0.857453003	0.904497666
ERLIN1	10q24.31	-0.007902371	0.857742113	0.904755226
DDI1	11q22.3	0.00789848	0.857811417	0.904768081
CARHSP1	16p13.2	-0.00789664	0.857844192	0.904768081
GMCL2	5q35.3	0.007890695	0.85795007	0.904820082
PSMD12	17q24.2	0.007888824	0.857983395	0.904820082
GPR89A	1q21.1	0.007886219	0.858029796	0.904821615
ZCCHC8	12q24.31	0.007867722	0.858359263	0.905121633
LL22NC03-63E9.1	22q11.22	0.007844775	0.858768038	0.905505244
LRRC8E	19p13.2	-0.007835766	0.858928541	0.905627044
PP12613	4q27	0.007830575	0.859021014	0.905667295
SRBD1	2p21	0.007825085	0.859118829	0.905667295
REEP4	8p21.3	-0.007824043	0.859137397	0.905667295
ZCCHC2	18q21.33	0.007823522	0.85914668	0.905667295
TSR1	17p13.3	-0.007813014	0.859333886	0.905815164
DEFA4	8p23.1	-0.007810538	0.85937801	0.905815164
SNORA74B	5q35.1	0.00780788	0.85942537	0.905815164
FLYWCH2	16p13.3	0.007805546	0.859466947	0.905815164
MGP	12p12.3	-0.00779747	0.859610842	0.905919389
ACACB	12q24.11	-0.007755701	0.860355149	0.906656327
WDR37	10p15.3	0.007742502	0.860590382	0.906856745
TRAPPC8	18q12.1	0.007730431	0.860805507	0.907035954
SAR1A	10q22.1	-0.007721226	0.860969567	0.907144842
DDIT4L	4q24	0.007719576	0.860998974	0.907144842
APOBEC3H	22q13.1	0.007716193	0.861059278	0.907160897
FAM74A3	9q21.11	0.007710701	0.861157157	0.907216537
GPR119	Xq26.1	0.007705516	0.86124959	0.907266184
LINC02159	5q34	-0.007701695	0.861317698	0.907266184
TUBGCP3	13q34	0.007700472	0.861339496	0.907266184
MC5R	18p11.21	0.007685473	0.861606863	0.907500322
LIPM	10q23.31	-0.007682015	0.861668507	0.907517766
ABLIM2	4p16.1	0.007666779	0.861940115	0.907756331
C6ORF201	6p25.2	-0.007654457	0.862159783	0.907940174
NARS2	11q14.1	-0.007647848	0.862277611	0.907977409
C7ORF31	7p15.3	0.007647414	0.862285352	0.907977409
PATE2	11q24.2	0.00764297	0.862364584	0.908013343
DHRS9	2q31.1	0.007635517	0.862497461	0.908077819
RAB29	1q32.1	0.007634475	0.86251604	0.908077819
LIM2	19q13.41	-0.007626934	0.862650495	0.908171877
ZNF718	4p16.3	0.007616152	0.86284274	0.908326763
DKK4	8p11.21	0.007606474	0.863015299	0.908460909
KDM3B	5q31.2	-0.007598524	0.863157076	0.908562641
RAET1E	6q25.1	0.007579179	0.86350205	0.908852278
ANKRD27	19q13.11	0.00757803	0.863522537	0.908852278
ZNF835	19q13.43	0.007572492	0.863621293	0.908908696
ACAD8	11q25	0.007568217	0.863697535	0.908941415
GCKR	2p23.3	-0.007561453	0.863818171	0.909020847
RAB8A	19p13.11	0.007548505	0.864049101	0.90921633
ALG11	13q14.3	0.007531615	0.86435035	0.909485785
GMNC	3q28	-0.007524474	0.86447772	0.909572262
LINC00894	Xq28	0.007510122	0.864733723	0.909794065
PAX6	11p13	0.007504652	0.86483131	0.909849183
CCL18	17q12	-0.00750031	0.864908767	0.909883119
LCE1C	1q21.3	-0.007497622	0.864956716	0.90988601
BPIFA3	20q11.21	0.007494727	0.865008348	0.909892775
HLA-F-AS1	6p22.1	-0.007487458	0.865138038	0.909981644

PRH2	12p13.2	0.007462016	0.865591927	0.91033921
OR1J1	9q33.2	0.007461105	0.865608178	0.91033921
THUMPD2	2p22.1 2p22-p21	-0.007460798	0.865613652	0.91033921
FAM27E5	17p11.2	0.007448355	0.865835677	0.910525137
UBALD2	17q25.1	-0.007440739	0.865971566	0.91056281
PRB2	12p13.2	-0.00743896	0.8660033	0.91056281
URI1	19q12	0.007438741	0.866007203	0.91056281
KRTAP4-1	17q21.2	0.007428159	0.866196029	0.910713782
RBM14	11q13.2	-0.007422155	0.866303159	0.910778848
UBE2D4	7p13	0.007405048	0.866608432	0.910958481
PMCHL2	5q13.2	0.007404418	0.866619674	0.910958481
MUS81	11q13.1	0.007402443	0.866654922	0.910958481
KLK5	19q13.41	-0.007402436	0.866655036	0.910958481
LOH12CR2	12p13.2	-0.007397537	0.86674247	0.911002816
C17ORF98	17q12	-0.007377493	0.867100184	0.911331212
FAM217B	20q13.33	0.007371007	0.867215936	0.911405283
C14ORF178	14q24.3	0.00735838	0.867441302	0.91159454
LINC00442	13q12.11	-0.007354067	0.867518294	0.911627858
DNALI1	1p34.3	0.007333841	0.867879322	0.911959636
PRICKLE3	Xp11.23	0.007321293	0.86810331	0.912147386
STK33	11p15.4	-0.007317862	0.868164544	0.912164114
TSPY4	Yp11.2	0.007314243	0.868229154	0.912184388
CANT1	17q25.3	-0.007308744	0.868327314	0.912236269
FNTB	14q23.3	0.0073064	0.86836917	0.912236269
FAM238C	10p12.1	-0.007295999	0.868554842	0.912383707
GRINA	8q24.3	-0.007286601	0.868722637	0.91251235
POLG	15q26.1	0.007281564	0.868812558	0.912559185
TRIM58	1q44	0.007277622	0.86888294	0.912585494
CXORF66	Xq27.1	0.00726808	0.869053308	0.91271681
LINC00461	5q14.3	0.007262627	0.869150657	0.912733437
UPB1	22q11.23	-0.007262114	0.869159823	0.912733437
GTF2IP1	7q11.23	-0.007254557	0.869294749	0.912827507
OPALIN	10q24.1	0.007245058	0.869464363	0.912957991
MDM1	12q15	-0.007240316	0.869549044	0.912997165
GAGE2D	Xp11.23	0.007237889	0.869592381	0.912997165
WDR41	5q13.3-q14.1	-0.007231632	0.869704108	0.913066845
ZNF628	19q13.42	-0.007219214	0.869925858	0.913252022
OR10AD1	12q13.11	-0.007202952	0.870216267	0.913509254
CLPTM1L	5p15.33	-0.007192207	0.870408162	0.913663049
DTX2P1-UPK3BF	7q11.23	-0.007174319	0.870727656	0.913950762
CTNNA3	10q21.3	0.007170614	0.870793817	0.91397255
CCDC60	12q24.23	-0.007166	0.870876231	0.914011393
DEFB109B	8p23.1	-0.007150269	0.871157225	0.914258639
L3MBTL2	22q13.2	-0.007143752	0.871273637	0.914333141
CBLIF	11q12.1	-0.007140177	0.871337482	0.914352474
HERC6	4q22.1	-0.007110753	0.871863117	0.914856367
KRTAP17-1	17q21.2	0.007099506	0.872064039	0.914907865
SYNE1	6q25.2	0.007098335	0.872084965	0.914907865
DYRK1A	21q22.13	-0.007097554	0.872098928	0.914907865
ZNF740	12q13.13	0.007094167	0.872159434	0.914907865
MRGBP	20q13.33	-0.007090346	0.872227699	0.914907865
CHRFAM7A	15q13.2	0.007090303	0.872228463	0.914907865
OR13C9	9q31.1	0.007089804	0.872237391	0.914907865
STX17	9q31.1	0.007087654	0.872275795	0.914907865
OR5K1	3q11.2	0.007067212	0.872641029	0.915201421
OR6C68	12q13.2	0.0070669	0.872646601	0.915201421
ZNF461	19q13.12	-0.007045624	0.873026771	0.915552431
MUC6	11p15.5	0.007028136	0.873339274	0.915821049

KRT23	17q21.2	0.007024353	0.873406894	0.915821049
NEK10	3p24.1	0.007023653	0.873419399	0.915821049
CRLF3	17q11.2	-0.007018965	0.87350317	0.915836118
CARD16	11q22.3	0.007015752	0.873560593	0.915836118
OR51L1	11p15.4	0.007015211	0.873570259	0.915836118
LYPD3	19q13.31	0.007009934	0.87366457	0.915870289
DDX17	22q13.1	0.007006981	0.873717336	0.915870289
PNPLA1	6p21.31	-0.007003411	0.873781144	0.915870289
UFSP1	7q22.1	0.007003204	0.873784843	0.915870289
PNPLA7	9q34.3	-0.006986401	0.874085159	0.916133587
MASTL	10p12.1	0.006984056	0.874127065	0.916133587
ZNF280A	22q11.22	-0.006973029	0.874324161	0.916292449
TFAM	10q21.1	-0.006960002	0.874557003	0.916488754
CTNND1	11q12.1	-0.006956181	0.874625303	0.916512616
ZNF793	19q13.12	0.006952794	0.87468584	0.916528341
TMEM189	20q13.13	-0.006948973	0.874754139	0.916552198
C1ORF159	1p36.33	-0.006939768	0.874918681	0.916676888
ASTN1	1q25.2	0.006931867	0.875059921	0.916777153
KIAA0753	17p13.1	-0.006929174	0.875108064	0.916779877
FAM228B	2p23.3	0.006918059	0.875306774	0.916940329
GAGE2A	Xp11.23	-0.006902617	0.875582842	0.917181798
RPGR	Xp11.4	0.006896089	0.875699555	0.917255189
CSH1	17q23.3	0.006891577	0.875780212	0.917255189
RBPMS2	15q22.31	0.006891052	0.875789604	0.917255189
LOC145845	15q14	0.006870558	0.876156037	0.91759123
TUSC7	3q13.31	0.006853878	0.876454287	0.917855831
LY86	6p25.1	-0.006845462	0.876604774	0.917936675
OR51I1	11p15.4	-0.006844461	0.876622684	0.917936675
MS4A8	11q12.2	0.006837686	0.876743824	0.917986375
OR5H15	3q11.2	0.006836109	0.876772024	0.917986375
PAGE4	Xp11.23	0.006834156	0.876806956	0.917986375
TES	7q31.2	0.00681915	0.877075303	0.918219568
UBE2D2	5q31.2	-0.006809077	0.877255449	0.918360403
OR51B5	11p15.4	0.006806205	0.87730682	0.918366421
CALN1	7q11.22	-0.006774292	0.877877593	0.918916122
DDX25	11q24.2	-0.006763006	0.878079447	0.919004496
CELF6	15q23	0.006761663	0.878103472	0.919004496
EPB41L4A-DT	5q22.2	0.006761055	0.878114345	0.919004496
JOSD2	19q13.33	0.006759362	0.878144634	0.919004496
ZNF516	18q23	-0.006742125	0.878452975	0.919279393
PRSS35	6q14.2	-0.006738138	0.878524285	0.919306226
UBAP1L	15q22.31	-0.006731703	0.878639396	0.919378888
POLR2M	15q21.3	0.006721978	0.878813374	0.919475097
LSM12	17q21.31	-0.006721457	0.878822695	0.919475097
FABP5P3	7q36.1	-0.006705259	0.879112483	0.919730486
LINC00950	9p13.3	-0.006699489	0.879215715	0.919790684
NFKBID	19q13.12	-0.006696361	0.879271676	0.919801426
KRTAP5-4	11p15.5	0.00669289	0.879333778	0.919818591
MATK	19p13.3	-0.006682727	0.879515603	0.919907922
MSTO1	1q22	-0.006679427	0.879574644	0.919907922
ZNF493	19p12	-0.006677083	0.879616595	0.919907922
TMED10	14q24.3	-0.00667578	0.879639901	0.919907922
CDC34	19p13.3	0.006675346	0.879647669	0.919907922
EMX1	2p13.2	-0.006646483	0.880164128	0.92033022
ENKUR	10p12.1	0.006644695	0.880196116	0.92033022
ARGLU1	13q33.3	0.006641913	0.880245896	0.92033022
HLA-DPB1	6p21.32	-0.006640003	0.880280082	0.92033022
MYO19	17q12	0.006640003	0.880280082	0.92033022

FAM76A	1p35.3	0.006632708	0.880410612	0.920418884
GIPC2	1p31.1	-0.006621159	0.880617297	0.920571836
TMEM30B	14q23.1	0.006619422	0.880648378	0.920571836
SLC6A20	3p21.31	0.006612958	0.880764065	0.92064496
MID1	Xp22.2	-0.006601099	0.880976288	0.920818977
CCNA1	13q13.3	0.006589933	0.881176143	0.920961866
SMIM10L2A	Xq26.3	-0.006586814	0.88123195	0.920961866
PRAP1	10q26.3	0.006585792	0.881250247	0.920961866
RTKN2	10q21.2	-0.006575569	0.881433227	0.921105273
COX6A2	16p11.2	0.006562507	0.881667023	0.921301764
FUNDC2P2	2p11.2	-0.006538369	0.882099092	0.921672423
FBN3	19p13.2	0.006537575	0.882113309	0.921672423
ANGPTL8	19p13.2	-0.006532028	0.882212595	0.921705531
PRDM12	9q34.12	0.006530689	0.882236571	0.921705531
SPAM1	7q31.32	0.006525179	0.882335199	0.921760732
PKNOX2	11q24.2	-0.006509615	0.882613827	0.921986288
NANOS2	19q13.32	-0.006507959	0.882643475	0.921986288
LCN2	9q34.11	-0.006503493	0.882723431	0.921986288
RHOC	1p13.2	-0.006502885	0.882734313	0.921986288
ANP32D	12q13.11	-0.006495918	0.882859052	0.922068731
KRT24	17q21.2	-0.006486971	0.883019233	0.922188179
PRKN	6q26	-0.006482739	0.883095005	0.922219467
PLSCR2	3q24	-0.006472642	0.883275777	0.922332164
OR52E2	11p15.4	0.00646976	0.883327386	0.922332164
HIST3H3	1q42.13	-0.006469034	0.883340377	0.922332164
OR7C2	19p13.12	0.006460524	0.883492747	0.922396802
FTLP10	4q13.2	-0.006460458	0.883493927	0.922396802
CSN1S1	4q13.3	-0.006451608	0.883652396	0.922477132
ST6GALNAC6	9q34.11	-0.006451043	0.883662521	0.922477132
PEX1	7q21.2	-0.006426554	0.884101026	0.922844053
HK1	10q22.1	-0.006426294	0.884105691	0.922844053
HCRTR1	1p35.2	-0.006422039	0.884181887	0.922875733
PPP1R13L	19q13.32	0.0064091	0.884413599	0.923069723
AQP7P3	9q21.11	0.006394947	0.884667065	0.923286396
TMEM259	19p13.3	-0.00637697	0.88498903	0.923574533
PBDC1	Xq13.3	0.00636898	0.885132119	0.923675975
TRAPPC11	4q35.1	-0.006355694	0.885370091	0.923802226
GAGE12D	Xp11.23	-0.006354725	0.885387451	0.923802226
HHATL	3p22.1	-0.006354539	0.885390777	0.923802226
DPPA5	6q13	-0.006343996	0.885579635	0.923905583
TOX	8q12.1	0.006343884	0.885581631	0.923905583
ERP27	12p12.3	-0.006337458	0.885696737	0.923977783
AOC1	7q36.1	-0.006319048	0.886026512	0.924273913
WDR63	1p22.3	-0.006307475	0.886233837	0.924389728
S100A16	1q21.3	-0.006304373	0.886289414	0.924389728
C1RL	12p13.31	-0.006301681	0.88633764	0.924389728
APOA2	1q23.3	0.006297532	0.88641197	0.924389728
LRRC3	21q22.3	0.006296905	0.886423203	0.924389728
AP4B1	1p13.2	0.006296731	0.886426314	0.924389728
PRADC1	2p13.2	-0.006294907	0.886458982	0.924389728
SLC9A1	1p36.11	-0.006289176	0.886561662	0.924448913
TOMM5	9p13.2	-0.006285181	0.886633227	0.924475648
CLEC4F	2p13.3	-0.006281492	0.886699318	0.924494867
PABPN1L	16q24.3	0.00627603	0.886797179	0.924494867
PRPF31	19q13.42	0.006274848	0.886818366	0.924494867
TMEM171	5q13.2	-0.006271579	0.886876936	0.924494867
GNAL	18p11.21	0.006271114	0.886885261	0.924494867
SCARNA16	17q25.2	-0.006266233	0.886972716	0.924494867

USP29	19q13.43	0.006265502	0.886985802	0.924494867
AARS2	6p21.1	-0.006263646	0.887019069	0.924494867
OR10AG1	11q12.1	-0.006253601	0.887199037	0.924629393
SLCO4C1	5q21.1	-0.006251315	0.887240007	0.924629393
MYH7B	20q11.22	0.006247453	0.887309193	0.924653624
SKIV2L	6p21.33	-0.006236465	0.887506078	0.92481092
VNN1	6q23.2	-0.006225784	0.887697468	0.924962474
RTBDN	19p13.13	-0.006210075	0.887978976	0.925207908
CNTNAP3	9p12	-0.006205046	0.888069089	0.925218203
INSIG2	2q14.1-q14.2	0.006199298	0.888172089	0.925218203
IFIT3	10q23.31	-0.006194956	0.888249899	0.925218203
NELFB	9q34.3	0.00619487	0.888251455	0.925218203
REXO1L6P	8q21.2	-0.006194344	0.88826087	0.925218203
ITGA6	2q31.1	0.006192612	0.888291917	0.925218203
EXOC7	17q25.1	-0.00619157	0.888310591	0.925218203
ARRDC3	5q14.3	-0.006181583	0.88848956	0.925356729
PRAMEF10	1p36.21	-0.00616863	0.888721714	0.925550629
VSTM2B	19q12	-0.006136941	0.889289685	0.926056001
SYT13	11p11.2	0.006136422	0.889298984	0.926056001
PIGO	9p13.3	0.006126788	0.889471657	0.926187899
MTM1	Xq28	-0.006118191	0.889625758	0.926300445
ARIH2OS	3p21.31	0.006115326	0.889677125	0.926306017
FAM90A1	12p13.31	0.006095874	0.890025813	0.926621133
SLC11A2	12q13.12	-0.006083456	0.890248427	0.926804967
KIAA0895	7p14.2	0.006076856	0.890366742	0.926880205
FAM168B	2q21.1	-0.006064178	0.890594038	0.927068879
CDK8	13q12.13	0.006061139	0.890648528	0.927077661
SCAI	9q33.3	-0.006056493	0.890731819	0.927116418
CTRB2	16q23.1	-0.006028974	0.891225212	0.927571946
HEATR5B	2p22.2	-0.006026273	0.891273642	0.927571946
SERPINA12	14q32.13	-0.006024373	0.891307708	0.927571946
LRP10	14q11.2	0.006017025	0.891439471	0.927661112
HMSD	18q22.1	0.006007705	0.89160659	0.927787059
ANKRD55	5q11.2	0.006002093	0.891707226	0.927843815
TGFBR2	3p24.1	-0.005991668	0.891894156	0.927990353
CTSA	20q13.12	0.00598446	0.892023405	0.928055459
G3BP2	4q21.1	-0.005982637	0.892056108	0.928055459
NDUFAF6	8q22.1	-0.005980466	0.892095039	0.928055459
TMEM150B	19q13.42	-0.005968917	0.892302155	0.928222954
SMYD2	1q32.3	-0.005960319	0.892456333	0.928335365
POLR2A	17p13.1	-0.005943646	0.892755352	0.928475907
TTC28-AS1	22q12.1	-0.005941215	0.89279896	0.928475907
DFFB	1p36.32	0.005940434	0.892812973	0.928475907
PRSS55	8p23.1	0.005939175	0.892835542	0.928475907
PHF3	6q12	0.00593531	0.892904867	0.928475907
RASGRP1	15q14	0.005935223	0.892906425	0.928475907
FAM153B	5q35.2	-0.005934783	0.892914311	0.928475907
CDKN2B-AS1	9p21.3	-0.005919292	0.893192163	0.928716851
CHRNA	2q37.1	-0.005908857	0.893379329	0.928863483
SCARF1	17p13.3	0.005904222	0.893462468	0.928900037
P2RX6	22q11.21	0.005901752	0.893506777	0.928900037
OR4F21	8p23.3	-0.005897996	0.893574146	0.928922101
SMC4	3q25.33	-0.005887983	0.89375375	0.929060831
IL17RA	22q11.1	-0.005879733	0.893901733	0.929166677
SF3B2	11q13.1	0.005871397	0.894051277	0.929274136
CABCOC01	10q21.2	0.005855234	0.894341237	0.929527525
RBP5	12p13.31	0.005846388	0.89449993	0.929557157
C18ORF21	18q12.2	-0.005844824	0.894527974	0.929557157

OR56A3	11p15.4	0.005843616	0.894549658	0.929557157
C9ORF78	9q34.11	0.005843348	0.894554458	0.929557157
SBDSP1	7q11.23	-0.005834795	0.894707911	0.929668624
SRL	16p13.3	-0.005826415	0.894858255	0.929775805
CPPED1	16p13.12	0.005823896	0.894903439	0.929775805
GNB5	15q21.2	-0.00582051	0.894964201	0.929790946
OR7D4	19p13.2	-0.005808629	0.895177364	0.929964408
ODF3L1	15q24.2	-0.00579663	0.895392655	0.930140063
CTDSPL2	15q15.3-q21.1	0.005785861	0.895585879	0.930292778
TUBE1	6q21	-0.005779696	0.89569651	0.930359687
ZNF28	19q13.41	0.005770144	0.895867914	0.93046607
NUP210L	1q21.3	-0.005768836	0.895891375	0.93046607
DBR1	3q22.3	-0.005760244	0.896045556	0.930551228
PAFAH1B3	19q13.2	0.00575842	0.89607828	0.930551228
GIT1	17q11.2	0.00575651	0.896112563	0.930551228
HTRA2	2p13.1	0.005752689	0.896181129	0.930551228
N4BP2L1	13q13.1	0.005751387	0.896204504	0.930551228
SPATA31D4	9q21.32	0.005735536	0.896488942	0.930798556
PLIN1	15q26.1	0.005725203	0.896674395	0.93081959
CA13	8q21.2	0.005723425	0.896706306	0.93081959
SSTR4	20p11.21	-0.005722154	0.896729111	0.93081959
SWT1	1q25.3	-0.005718909	0.896787347	0.93081959
ITPK1-AS1	14q32.12	-0.005718782	0.896789621	0.93081959
CRYGD	2q33.3	-0.005717597	0.896810889	0.93081959
PRPF3	1q21.2	0.005714914	0.896859037	0.93081959
SLCO4A1-AS1	20q13.33	-0.005713795	0.896879124	0.93081959
OR2T11	1q44	-0.005703594	0.897062203	0.9309616
FOXJ1	17q25.1	-0.005692163	0.897267377	0.931126523
ELAVL3	19p13.2	0.005686393	0.897370928	0.931185978
ZNF280D	15q21.3	0.005680266	0.897480909	0.931200285
WDR31	9q32	0.005679615	0.897492596	0.931200285
MAPK15	-	-0.005677403	0.8975323	0.931200285
HIC2	22q11.21	0.005675316	0.897569753	0.931200285
CHRNB3	8p11.21	-0.005665407	0.897747619	0.931295108
RRP12	10q24.1	0.005665069	0.897753679	0.931295108
DLK1	14q32.2	-0.00565923	0.897858492	0.931355841
ZNF716	7p11.2	0.005653402	0.8979631	0.931416355
ARHGAP10	4q31.23	0.005647354	0.898071667	0.931480372
C1QTNF8	16p13.3	0.005642733	0.89815463	0.931480372
SELENOS	15q26.3	0.005642231	0.898163637	0.931480372
ATP5MGL	22q13.2	-0.005636207	0.898271778	0.931521805
MPHOSPH10	2p13.3	0.00563485	0.898296139	0.931521805
MBLAC2	5q14.3	0.005629379	0.898394345	0.931575654
LOC100132215	2p15	0.005625124	0.89847072	0.931606861
FABP9	8q21.13	0.005612619	0.898695212	0.931791636
KRTAP5-AS1	11p15.5	0.005608544	0.898768369	0.931819492
TUBGCP6	22q13.33	-0.005604022	0.898849559	0.931855674
ADSS	1q44	0.005591257	0.899078736	0.932045264
KRT1	12q13.13	-0.005583844	0.899211819	0.932088925
ZFR2	19p13.3	-0.005583047	0.899226133	0.932088925
TP53TG5	20q13.12	-0.005581174	0.899259762	0.932088925
BCAR1	16q23.1	-0.005569808	0.899463834	0.932209295
KLHL36	16q24.1	-0.005569547	0.899468511	0.932209295
HIST1H2BB	6p22.2	-0.005563169	0.899583035	0.932279989
SYT9	11p15.4	-0.005556611	0.899700773	0.932307027
PCED1A	20p13	0.005554437	0.89973981	0.932307027
PLD4	14q32.33	-0.00555244	0.899775672	0.932307027
ZBTB45	19q13.43	-0.005551398	0.899794383	0.932307027

SPATA6	1p33	-0.005541412	0.899973697	0.932444826
SEC23B	20p11.23	-0.00553707	0.900051661	0.932477609
AQP12B	2q37.3	-0.00552927	0.900191711	0.932574708
OR2T34	1q44	0.00552362	0.90029317	0.93263182
ZNF232	17p13.2	-0.005511105	0.900517906	0.932778777
SPATA31C1	9q22.1	0.005509879	0.900539917	0.932778777
NR1I3	1q23.3	0.005507979	0.900574045	0.932778777
ZNF397	18q12.2	0.005495387	0.900800168	0.932964982
GNAT2	1p13.3	-0.005478881	0.901096607	0.93322399
PER4	7p21.3	0.005474512	0.901175058	0.933257223
CLEC10A	17p13.1	-0.005466948	0.901310916	0.933349902
RGS8	1q25.3	0.005454775	0.90152954	0.933461528
DPF2	11q13.1	0.005453705	0.901548762	0.933461528
OR14I1	1q44	0.0054532	0.901557826	0.933461528
CBLN2	18q22.3	-0.005448036	0.901650582	0.933509552
BRI3BP	12q24.31	0.005435816	0.901870061	0.933688764
CGB2	19q13.33	-0.005431384	0.901949678	0.933723169
NPHP3-AS1	3q22.1	0.005398248	0.902544867	0.93427844
CFAP77	9q34.13	-0.005396355	0.902578878	0.93427844
PARP10	8q24.3	-0.005391094	0.902673378	0.934328213
TSNAXIP1	16q22.1	0.005382629	0.902825448	0.934437568
C5ORF24	5q31.1	0.005356099	0.903302062	0.934882802
CREB3L3	19p13.3	-0.005352624	0.903364482	0.934899338
LOC283856	16q13	0.005343674	0.903525274	0.935017673
PPBPP2	4q13.3	-0.005336619	0.903652033	0.935100778
COPA	1q23.2	-0.005320582	0.903940168	0.935350857
BMS1P4	10q22.2	0.005314027	0.904057946	0.935424644
EI24	11q24.2	-0.005296441	0.904373928	0.935703493
TOPAZ1	3p21.31	-0.005283553	0.904605501	0.935865598
TEPSIN	17q25.3	-0.005282547	0.904623587	0.935865598
PRM1	16p13.13	-0.005254758	0.905122941	0.936334077
CLCNKB	1p36.13	-0.005246845	0.905265132	0.936433048
DCUN1D1	3q26.33	0.00523878	0.905410074	0.936534854
ZRANB3	2q21.3	0.00520995	0.905928206	0.936982577
FAM210B	20q13.2	-0.005209516	0.905936011	0.936982577
OR2T33	1q44	-0.005175406	0.906549069	0.937548086
TWNK	10q24.31	-0.005173912	0.906575931	0.937548086
C20ORF27	20p13	-0.005146124	0.907075422	0.938001951
PRAMEF4	1p36.21	0.005144311	0.907107997	0.938001951
NANP	20p11.21	0.00513249	0.907320496	0.938153441
ATP2B3	Xq28	-0.005130976	0.907347707	0.938153441
ITIH3	3p21.1	-0.005122981	0.907491431	0.938192415
UPK3A	22q13.31	0.005122397	0.907501942	0.938192415
MT1DP	16q13	0.005120113	0.907542994	0.938192415
CCNL2	1p36.33	0.005118509	0.907571828	0.938192415
ALB	4q13.3	0.00510961	0.907731815	0.938270332
C1ORF220	1q25.2	0.005109131	0.907740423	0.938270332
NPW	16p13.3	0.005096969	0.907959055	0.93844813
SLC38A9	5q11.2	0.005079779	0.908268106	0.93871936
NFATC2IP	16p11.2	-0.005073353	0.908383638	0.938790566
ANP32E	1q21.2	0.00506823	0.908475754	0.938837565
FGF3	11q13.3	-0.005057276	0.908672688	0.938992875
SEC11C	18q21.32	0.005030021	0.909162754	0.939451067
USP18	22q11.21	0.005027242	0.90921272	0.939454474
VPS37D	7q11.23	-0.00502264	0.909295476	0.939491758
USP10	16q24.1	0.005017603	0.909386043	0.93953711
KDM5D	Yq11.223	-0.005012187	0.909483433	0.939551174
ACKR4	3q22.1	-0.005011655	0.909493004	0.939551174

CD9	12p13.31	0.005007313	0.909571081	0.939583612
OR4N4	15q11.2	-0.004996992	0.909756677	0.939727109
TSPAN32	11p15.5	0.004990423	0.909874807	0.939800907
FOXP4	6p21.1	-0.004952822	0.910551012	0.940387663
HOXB13	17q21.32	-0.004951085	0.910582252	0.940387663
STAC	3p22.3-p22.2	0.004951042	0.910583026	0.940387663
THAP5	7q31.1	0.004942054	0.910744672	0.940506348
TXLNG	Xp22.2	0.004932371	0.910918812	0.940568037
CLTC	17q23.1	0.004932241	0.910921157	0.940568037
ADGRG2	Xp22.13	0.004930938	0.910944582	0.940568037
ACR	22q13.33	-0.004923107	0.911085441	0.940629716
SLC17A4	6p22.2	-0.004920393	0.911134243	0.940629716
STT3B	3p23	-0.004919823	0.911144502	0.940629716
SPINK14	5q32	-0.004916526	0.911203803	0.940642695
ANGPT1	8q23.1	-0.004906276	0.91138816	0.940784763
CLCN7	16p13.3	-0.004899503	0.911509992	0.940852728
DLAT	11q23.1	0.004897419	0.911547479	0.940852728
CHKB-CPT1B	22q13.33	-0.004889082	0.911697429	0.940959252
MKRN1	7q34	-0.004879096	0.911877062	0.941070718
RBM20	10q25.2	-0.00487788	0.911898928	0.941070718
GMDS	6p25.3	-0.004870499	0.912031705	0.941079126
DCST1	1q21.3	-0.004869813	0.912044038	0.941079126
PGM5	9q21.11	0.004869631	0.912047326	0.941079126
RNF111	15q22.1-q22.2	0.004861034	0.912201973	0.941190452
PPP3R2	9q31.1	-0.004852693	0.91235201	0.941275083
RRP15	1q41	0.004846879	0.912456602	0.941275083
ATXN7L3	17q21.31	-0.004846445	0.912464413	0.941275083
ZNF229	19q13.31	-0.004845142	0.912487845	0.941275083
ZSCAN5B	19q13.43	-0.004843477	0.912517796	0.941275083
SCNM1	1q21.3	0.004838977	0.91259876	0.941310363
REG4	1p12	0.004815053	0.913029147	0.941706037
LINC00643	14q23.2	-0.004811363	0.913095544	0.941726268
LSP1P5	1q21.1	-0.004807107	0.913172109	0.941756983
LSM1	8p11.23	-0.004797294	0.913348653	0.941890799
FUNDC2	Xq28	-0.004788176	0.913512703	0.942011716
GRHL2	8q22.3	0.004776974	0.913714254	0.94215364
FAM160B1	10q25.3	-0.004775324	0.91374394	0.94215364
UBE2NL	Xq27.3	-0.004761266	0.913996888	0.942366183
SH2D5	1p36.12	-0.00475072	0.914186644	0.942513554
GOLGA6C	15q24.2	-0.004742099	0.914341766	0.942625205
SNORA71D	20q11.23	0.004730487	0.914550715	0.942757605
OR2D3	11p15.4	0.004729757	0.914563861	0.942757605
GJB5	1p34.3	0.004718694	0.914762934	0.942893413
TRAM1	8q13.3	-0.004717229	0.914789288	0.942893413
PCP2	19p13.2	0.004713631	0.914854035	0.94291187
C17ORF80	17q25.1	0.004694912	0.915190903	0.943210776
FAAP24	19q13.11	0.004690527	0.91526982	0.943243817
EPC2	2q23.1	0.004686315	0.915345617	0.943255976
CCDC146	7q11.23	0.00468232	0.915417505	0.943255976
SRR	17p13.3	0.00468206	0.915422193	0.943255976
KCNAB1	3q25.31	-0.004676415	0.915523776	0.943291453
UPF1	19p13.11	0.004674939	0.915550343	0.943291453
RAB3D	19p13.2	-0.004667732	0.915680059	0.943334976
RHOU	1q42.13	0.004667384	0.91568631	0.943334976
MRPS6	21q22.11	-0.004637599	0.916222387	0.943838936
THSD1	13q14.3	0.004611678	0.916688942	0.944186629
SRRM1	1p36.11	-0.004606076	0.916789763	0.944186629
LSP1P4	2p11.2	-0.004603905	0.91682884	0.944186629

RNF215	22q12.2	-0.00460269	0.916850723	0.944186629
SUGT1P1	9p13.3	0.004602518	0.916853811	0.944186629
CHAT	10q11.23	0.004602205	0.916859441	0.944186629
ZFPL1	11q13.1	-0.004600606	0.916888238	0.944186629
SIGLEC17P	19q13.41	-0.004587158	0.917130305	0.944387592
TAGLN2	1q23.2	-0.004574728	0.917354055	0.944547113
DCAF15	19p13.12	0.004573338	0.917379066	0.944547113
LOC100133331	1p36.33	-0.004562831	0.917568216	0.944654019
PIN4	Xq13.1	0.004559184	0.917633872	0.944654019
UOX	1p31.1	0.004557977	0.917655601	0.944654019
PCDH8	13q14.3	0.004557143	0.917670608	0.944654019
TOB2P1	6p22.1	-0.004548676	0.917823027	0.944750502
AK9	6q21	0.004546722	0.9178582	0.944750502
NLN	5q12.3	0.004535824	0.918054398	0.944868694
NBEA	13q13.3	0.004535129	0.918066904	0.944868694
MATR3	5q31.2	-0.004528009	0.918195099	0.944952318
KCNE1	21q22.12	-0.004523363	0.918278736	0.944989146
LIN28B	6q16.3-q21	0.004519292	0.918352029	0.944989146
PHACTR2-AS1	6q24.2	-0.004515899	0.91841311	0.944989146
TAF5L	1q42.13	-0.004515591	0.918418662	0.944989146
ZNF23	16q22.2	-0.004508731	0.918542174	0.945039459
VCX3B	Xp22.31	0.00450766	0.918561453	0.945039459
ZPR1	11q23.3	0.004494576	0.918797018	0.945233504
TDGF1P3	Xq23	0.004483358	0.918999	0.945392982
IFT81	12q24.11	-0.004469653	0.919245751	0.945516582
ST7-AS2	7q31.2	0.004469406	0.91925021	0.945516582
CPS1-IT1	2q34	0.004468859	0.919260061	0.945516582
SNHG3	1p35.3	0.004436742	0.919838368	0.946063067
ANAPC2	9q34.3	-0.004409822	0.920323127	0.946513286
PAAF1	11q13.4	-0.004397664	0.920542061	0.946620701
KCNAB2	1p36.31	-0.004397491	0.920545188	0.946620701
PPP1R3C	10q23.32	-0.004396188	0.920568646	0.946620701
ADGRV1	5q14.3	0.004389762	0.92068437	0.946659065
EXOSC10	1p36.22	-0.004388894	0.920700009	0.946659065
GCG	2q24.2	0.004383188	0.920802773	0.94667813
GPT2	16q11.2	0.004382641	0.920812608	0.94667813
CCDC6	10q21.2	0.004366924	0.921095676	0.946920788
ARL6	3q11.2	0.004357893	0.921258324	0.947039631
PROS1	3q11.1	0.004336965	0.921635253	0.947378728
CCDC137	17q25.3	0.004322636	0.921893324	0.947595619
FAM221A	7p15.3	-0.004310132	0.922118555	0.947755741
EPO	7q22.1	-0.004303558	0.922236954	0.947755741
CTAGE1	18q11.2	0.004302838	0.922249932	0.947755741
SLC25A41	19p13.3	-0.004302653	0.922253265	0.947755741
KLF14	7q32.2	0.004300918	0.922284511	0.947755741
OR7D2	19p13.2	0.00428339	0.922600236	0.948031789
EQTN	9p21.2	0.004266417	0.922905981	0.948254938
TAOK3	12q24.23	0.004266104	0.922911612	0.948254938
MRM2	7p22.3	0.004262197	0.922982005	0.948278863
PATE3	11q24.2	-0.004248348	0.923231472	0.948429465
CCM2L	20q11.21	0.004246783	0.923259672	0.948429465
IL17F	6p12.2	0.004246213	0.923269935	0.948429465
RALYL	8q21.2	-0.004241932	0.923347065	0.948460296
UAP1	1q23.3	0.004238664	0.923405942	0.948472375
AWAT1	Xq13.1	-0.004222812	0.923691506	0.948717283
ENDOU	12q13.11	0.004210077	0.923920936	0.948904512
EIF3A	10q26.11	-0.004199413	0.924113072	0.949053423
KIF13A	6p22.3	-0.004195765	0.924178782	0.949072487

TRPC7	5q31.1	0.004173253	0.924584398	0.949440592
SRSF1	17q22	-0.004168325	0.924673187	0.949483333
RAB24	5q35.3	-0.004153649	0.924937612	0.949706408
QRFP	9q34.12	0.004148258	0.925034746	0.949757698
WNT7A	3p25.1	-0.00414256	0.925137418	0.949768601
CYCSP52	1q23.1	0.004142432	0.925139728	0.949768601
ZNF546	19q13.2	0.004137106	0.925235685	0.949818672
ATAD3A	1p36.33	0.004125861	0.925438321	0.949978245
EXO5	1p34.2	-0.004116916	0.925599492	0.950095242
SPATA46	1q23.3	-0.004110383	0.925717228	0.950167642
CSNK1A1L	13q13.3	0.00410112	0.92588414	0.950290508
PWWP3B	Xq22.3	0.004074786	0.926358693	0.950724521
FBXL13	7q22.1	0.004072413	0.926401464	0.950724521
SLC39A2	14q11.2	0.004069226	0.92645889	0.950734984
TAF1C	16q24.1	0.004059169	0.926640141	0.950849763
COX8C	14q32.12	0.004057778	0.926665209	0.950849763
KRTAP5-3	11p15.5	0.004052392	0.926762272	0.950900888
CEACAM4	19q13.2	-0.004039462	0.926995307	0.951091515
GAS8-AS1	16q24.3	0.003984009	0.927994764	0.952068426
ZNF441	19p13.2	-0.003965514	0.928328131	0.952361904
C9ORF57	9q21.13	0.003956534	0.928489992	0.952479414
ZNF155	19q13.31	0.00395023	0.928603627	0.952497371
OR2B11	1q44	-0.003947925	0.928645177	0.952497371
HOMEZ	14q11.2	-0.003945758	0.928684243	0.952497371
PLGRKT	9p24.1	0.003945063	0.928696766	0.952497371
IMPA1	8q21.13	-0.003936293	0.928854867	0.952610988
ZBTB18	1q44	0.003925004	0.929058368	0.952771152
MRPL42P5	15q15.1	0.003912436	0.929284917	0.952911657
MRPL32	7p14.1	0.003912152	0.929290052	0.952911657
CFAP97D1	17q21.31	0.003896295	0.929575903	0.953156221
DEFB115	20q11.21	0.003887524	0.929734024	0.953225891
RPGRIP1	14q11.2	0.003887273	0.929738557	0.953225891
CLRN1-AS1	3q25.1	0.003880192	0.929866205	0.95330821
ABCA10	17q24.3	0.003874682	0.929965547	0.953361503
OPTC	1q32.1	0.003867607	0.93009311	0.953443719
SLC36A2	5q33.1	0.003860952	0.93021309	0.953488307
SCRT2	20p13	0.003859939	0.930231339	0.953488307
ZNF727	7q11.21	0.003853135	0.930354017	0.953565497
ZSCAN10	16p13.3	0.003844332	0.930512731	0.953679613
TTY5	Yq11.223	-0.003840107	0.930588898	0.953709119
FXD5	19q13.12	0.003832955	0.930717855	0.953792721
DDX53	Xp22.11	0.003828927	0.930790484	0.953818593
EPB41L4A	5q22.1-q22.2	0.003820537	0.930941752	0.953925043
LRRC42	1p32.3	-0.003817064	0.931004382	0.95394066
ANKRD49	11q21	0.003813851	0.931062314	0.953947008
FAM218A	4q32.3	-0.003811464	0.931105356	0.953947008
TMEM40	3p25.2	0.003798174	0.931344985	0.954143953
OR10J3	1q23.2	0.003787642	0.931534883	0.954289934
UBA3	3p14.1	-0.003771474	0.931826434	0.954511687
SPINT3	20q13.12	-0.003770378	0.931846183	0.954511687
ADAD1	4q27	-0.003767013	0.931906863	0.954525271
GRIPAP1	Xp11.23	0.003758361	0.932062886	0.954636506
TPRXL	3p25.1	-0.003752896	0.932161443	0.954645215
DYNLL1	12q24.31	0.00375263	0.932166237	0.954645215
C19ORF48	19q13.33	-0.003744945	0.932304823	0.95473857
STK31	7p15.3	-0.003741818	0.932361197	0.954747731
GM2A	5q33.1	-0.00373778	0.932434017	0.954754512
ASB17	1p31.1	0.003736191	0.932462678	0.954754512

LINC01734	20q12	0.003733149	0.932517528	0.95476211
OR1A2	17p13.3	0.003725606	0.932653571	0.954852832
ZNF789	7q22.1	0.003718155	0.932787936	0.954913844
IFITM4P	6p22.1	0.00371704	0.932808039	0.954913844
JADE2	5q31.1	-0.003697574	0.933159096	0.955224643
PAX3	2q36.1	-0.003692735	0.933246378	0.955265412
SCNN1G	16p12.2	0.003686372	0.933361126	0.955324186
THBD	20p11.21	-0.003684288	0.933398713	0.955324186
RBM48	7q21.2	-0.003667702	0.93369785	0.955581764
ALMS1P1	2p13.1	0.003661787	0.93380453	0.955642358
SSPO	7q36.1	0.003653853	0.933947629	0.955740215
LRIT1	10q23.1	0.003648535	0.934043542	0.955789778
SLX4IP	20p12.2	-0.003632402	0.934334529	0.95603894
HNRNPK	9q21.32	0.003622199	0.934518572	0.956178655
KDM5C	Xp11.22	-0.003611952	0.934703401	0.956287494
SSTR5	16p13.3	0.003611034	0.934719956	0.956287494
ZNF620	3p22.1	0.003596017	0.93499083	0.956516004
SLC27A6	5q23.3	0.003578287	0.935310644	0.956728298
ZBED8	5q33.3	-0.00357739	0.935326831	0.956728298
MTCH2	11p11.2	0.003576608	0.935340929	0.956728298
SLC30A2	1p36.11	0.0035697	0.93546555	0.956799303
PPP1R15B	1q32.1	0.00356749	0.935505408	0.956799303
OR6N2	1q23.1	0.003559255	0.935653976	0.956902634
CELA1	12q13.13	-0.00355157	0.935792611	0.956995797
OR52B6	11p15.4	0.003539316	0.936013655	0.957173222
WDR53	3q29	-0.003527892	0.93621975	0.957335343
KCNV2	9p24.2	-0.003521405	0.936336789	0.957406388
IGF2BP2-AS1	3q27.2	-0.003516835	0.936419229	0.95744205
GS1-124K5.11	7q11.21	0.003501754	0.936691309	0.957671596
LY6G5C	6p21.33	0.003493939	0.936832308	0.957767108
ZNF876P	4p16.3	0.003490552	0.936893412	0.957780934
ZFP82	19q13.12	-0.003478047	0.937119019	0.957962922
KALRN	3q21.1-q21.2	-0.0034711	0.937244359	0.958042398
SMG1P5	16p11.2	-0.003458248	0.937476242	0.958230768
OR1F1	16p13.3	-0.003442468	0.937760949	0.95847311
IGSF11	3q13.32	0.003435821	0.93788089	0.95854703
GNL3	3p21.1	0.003428636	0.938010533	0.958630859
GAGE12F	Xp11.23	0.00340948	0.93835619	0.95893543
LINC02210	17q21.31	0.003392338	0.938665508	0.959166242
OR4D10	11q12.1	-0.003391383	0.93868273	0.959166242
LINC01102	2q12.1	0.003389041	0.938724995	0.959166242
OGFOD1	16q13	0.00337523	0.938974206	0.959350709
RASEF	9q21.32	-0.003373754	0.939000846	0.959350709
LINC00326	6q23.2	0.003358411	0.93927772	0.95955275
SYT14	1q32.2	0.003357438	0.939295278	0.95955275
STK32A	5q32	-0.003354871	0.939341605	0.95955275
ACRV1	11q24.2	-0.003344906	0.939521428	0.959687743
APOOL	Xq21.1	0.003336153	0.93967939	0.959800392
CALHM3	10q24.33	0.003313564	0.940087052	0.960168063
TEDC1	14q32.33	0.003293733	0.940444958	0.960484881
WVOX	16q23.1-q23.2	0.003289	0.940530374	0.960523385
ADRB3	8p11.23	0.003283266	0.94063386	0.960571572
TCTN1	12q24.11	-0.003281098	0.940672995	0.960571572
MCU	10q22.1	-0.003275801	0.940768599	0.960595747
MMRN1	4q22.1	-0.003274498	0.940792109	0.960595747
SVOP	12q24.11	0.003269503	0.94088226	0.960632719
HEXD	17q25.3	0.003267204	0.940923762	0.960632719
OR9I1	11q12.1	0.003247259	0.941283739	0.9609515

OR2V2	5q35.3	0.003243292	0.941355334	0.960975855
NXF5	Xq22.1	-0.00321727	0.941825039	0.961391964
TEX38	1p33	0.003215418	0.941858466	0.961391964
CAND2	3p25.2	-0.003212061	0.94191905	0.961405054
UEVLD	11p15.1	-0.003195823	0.942212167	0.961655475
HSPA14	10p13	0.003186357	0.942383026	0.961781095
UBE2T	1q32.1	0.003182015	0.942461402	0.961812321
C1ORF109	1p34.3	-0.003172159	0.942639317	0.961934635
GNG13	16p13.3	0.003170081	0.942676828	0.961934635
FGFR2	10q26.13	0.003164213	0.942782751	0.961993956
COL28A1	7p21.3	-0.003154271	0.942962227	0.962080892
DNAJB8	3q21.3	-0.003154199	0.942963537	0.962080892
ERICH4	19q13.2	-0.00314288	0.943167859	0.962240586
EIF4H	7q11.23	0.003139812	0.943223248	0.962248327
OR5E1P	11p15.4	0.00313477	0.943314271	0.962292417
RBP3	10q11.22	0.003126725	0.943459509	0.962391806
SNRPB2	20p12.1	0.003110547	0.943751555	0.962640932
C22ORF46	22q13.2	-0.003106119	0.943831508	0.962673706
NR3C1	5q31.3	-0.003103079	0.943886379	0.962680894
ATG12	5q22.3	0.00309852	0.943968684	0.962716061
PHEX	Xp22.11	-0.003091549	0.944094539	0.962795636
AVPR2	Xq28	-0.00307117	0.944462462	0.963122055
OSTCP1	6q25.3	-0.003059791	0.944667913	0.963178647
IQCF3	3p21.2	-0.003058854	0.944684832	0.963178647
LINC00303	1q32.1	-0.003057793	0.944703976	0.963178647
HIST1H4K	6p22.1	-0.003057496	0.94470935	0.963178647
GIGYF2	2q37.1	-0.003052018	0.944808242	0.963230687
MST1	3p21.31	0.003046244	0.944912504	0.963288195
NBEAP1	15q11.2	-0.003042964	0.944971721	0.963299779
FAM193B	5q35.3	-0.003036127	0.945095163	0.963356814
QRICH2	17q25.1	0.003034564	0.945123384	0.963356814
RACGAP1P	12q12	0.003026131	0.945275649	0.963463232
CT47A2	Xq24	0.00301908	0.945402965	0.96354421
RAB42	1p35.3	-0.003015286	0.945471464	0.963565238
PILRB	7q22.1	0.00301242	0.945523207	0.963566745
TRIM28	19q13.43	-0.003009902	0.945568677	0.963566745
PHF2P1	13q12.11	-0.002982081	0.94607102	0.964029847
AVPR1B	1q32.1	0.002979235	0.946122422	0.964033426
LDHAL6B	15q22.2	0.002958221	0.946501876	0.964371249
LCE1D	1q21.3	0.002949688	0.946655959	0.964479423
NUP62CL	Xq22.3	-0.00293991	0.946832521	0.964610488
LINC01144	1p34.1	-0.002937131	0.946882701	0.964612792
ZNF239	10q11.21	-0.002930184	0.947008152	0.964691772
RBL2	16q12.2	0.002924887	0.94710381	0.964740395
SEC24B	4q25	0.002912209	0.947332764	0.964857699
PART1	5q12.1	-0.002911333	0.947348581	0.964857699
RGR	10q23.1	-0.002910548	0.947362763	0.964857699
FAM110D	1p36.11	-0.002907085	0.947425286	0.964872559
SCYL1	11q13.1	0.002901267	0.947530357	0.964930748
PGAM5	12q24.33	0.002897794	0.947593086	0.964945813
TM9SF3	10q24.1	-0.002891454	0.947707567	0.964987117
GPR153	1p36.31	-0.002890239	0.947729523	0.964987117
SNORD115-26	15q11.2	-0.002879688	0.94792006	0.965112377
KLF8	Xp11.21	0.002876084	0.947985149	0.965112377
PRLH	2q37.3	0.002875462	0.947996375	0.965112377
SYP	Xp11.23	0.002862972	0.94822196	0.965293216
APLP1	19q13.12	0.002852117	0.948418001	0.965417493
USF2	19q13.12	-0.002850901	0.948439958	0.965417493

PRAMEF11	1p36.21	-0.002846055	0.948527482	0.965457765
MTREX	5q11.2	-0.002842564	0.948590519	0.965473109
CYB5R2	11p15.4	0.002838396	0.9486658	0.965475785
COG1	17q25.1	-0.002837094	0.948689325	0.965475785
SNURF	15q11.2	-0.002832904	0.948764993	0.965475785
PMS2P2	7q11.23	-0.002831796	0.948784996	0.965475785
ZNF581	19q13.42	0.002825718	0.948894783	0.965538694
TWF1	12q12	0.002806179	0.949247676	0.965848955
KIR3DL1	19q13.42	0.002802974	0.94930557	0.965859041
SPANXN4	Xq27.3	-0.002799745	0.949363888	0.965869558
ZNF106	15q15.1	0.002793674	0.949473533	0.96593229
ALG1L2	3q22.1	-0.002785079	0.949628793	0.966014221
TIPARP	3q25.31	0.002779346	0.949732332	0.966014221
CYP21A2	6p21.33	-0.00277635	0.949786444	0.966014221
OR4M2	15q11.2	0.002776342	0.949786587	0.966014221
GNGT2	17q21.32	0.002774223	0.949824874	0.966014221
SDR9C7	12q13.3	-0.002773275	0.949842001	0.966014221
TECRL	4q13.1	0.002714272	0.950907774	0.96696754
PIP4K2B	17q12	0.002712307	0.950943269	0.96696754
USP2	11q23.3	-0.00271209	0.95094719	0.96696754
PTGDS	9q34.3	0.002710744	0.950971505	0.96696754
GTF2H1	11p15.1	0.002707791	0.951024839	0.966972927
PRR27	4q13.3	-0.002700501	0.95115654	0.96705799
NCK1	3q22.3	-0.00269685	0.951222491	0.967076199
FAM20A	17q24.2	0.002682435	0.951482894	0.967292089
LINC01559	12p13.1	0.002670394	0.951700415	0.967433592
IMMT	2p11.2 2	-0.002669409	0.951718203	0.967433592
ELOC	8q21.11	-0.002653691	0.952002147	0.96767336
UBA6-AS1	4q13.2	-0.002646788	0.952126864	0.967751264
OR2M7	1q44	0.002626464	0.952494027	0.968075571
CPSF3	2p25.1	-0.002613225	0.952733215	0.968269784
NDRG3	20q11.23	0.002597854	0.953010905	0.968503106
PCTP	17q22	0.002586218	0.953221138	0.968667854
ABCC1	16p13.11	-0.002574581	0.953431374	0.968796956
RETREG3	17q21.2	-0.002573366	0.953453339	0.968796956
NANOS1	10q26.11	-0.002571195	0.953492563	0.968796956
RNF40	16p11.2	-0.002568155	0.953547476	0.968803851
HAAO	2p21	0.002559211	0.953709079	0.968919136
ZNF772	19q13.43	-0.002551569	0.953847149	0.969010503
L1TD1	1p31.3	-0.002547232	0.953925513	0.969041207
HSD3B1	1p12	0.00253719	0.954106948	0.96917661
TP53BP1	15q15.3	0.002532899	0.954184485	0.969206463
TLX3	5q35.1	-0.002529567	0.954244694	0.969218713
FRG2B	10q26.3	0.002522042	0.954380664	0.96930791
MYO1D	17q11.2	0.002518831	0.954438669	0.969317916
TANGO6	16q22.1	-0.002513795	0.954529674	0.969361434
RERG	12p12.3	-0.002510582	0.95458773	0.969371488
OVCH1	12p11.22	-0.002457859	0.955540406	0.970289971
CCDC197	14q32.12	0.002445022	0.955772376	0.970476567
SHOX	Xp22.33 and Yp11	0.002439101	0.955879366	0.970518675
TAS2R7	12p13.2	-0.002437391	0.955910271	0.970518675
DYDC1	10q23.1	0.002433896	0.955973414	0.970533833
FCN1	9q34.3	-0.002399602	0.956593141	0.971114021
PAIP2	5q31.2	-0.002396172	0.956655127	0.971127973
ATG13	11p11.2	-0.002362696	0.957260103	0.971649149
OR2T1	1q44	0.00235975	0.957313342	0.971649149
OR4C12	11p11.12	0.00235975	0.957313342	0.971649149
SCML1	Xp22.13	0.002342636	0.957622629	0.971914063

RUSC1	1q22	-0.002339597	0.957677558	0.971917707
MROH2B	5p13.1	0.002337095	0.957722783	0.971917707
MYOZ2	4q26	0.00232198	0.957995951	0.972138518
PELO	5q11.2	0.002319711	0.958036956	0.972138518
FOXI2	10q26.2	0.002316704	0.958091313	0.972144671
HSF2	6q22.31	-0.002305556	0.958292777	0.972267716
PAGE2	Xp11.21	0.002302417	0.958349519	0.972267716
WDR90	16p13.3	-0.002300867	0.958377528	0.972267716
RAMP2-AS1	17q21.2	0.002299304	0.958405777	0.972267716
RIIAD1	1q21.3	0.002296606	0.958454545	0.972268192
SORBS1	10q24.1	-0.002292444	0.958529768	0.972295502
PADI4	1p36.13	0.002284093	0.958680696	0.972399597
KCP	7q32.1	-0.002271776	0.958903311	0.972576392
SLC35E2A	1p36.33	0.002265177	0.959022596	0.972632795
UNC13D	17q25.1	-0.002263353	0.959055556	0.972632795
STX4	16p11.2	0.002257622	0.959159146	0.972674863
TAF13	1p13.3	0.002255711	0.959193677	0.972674863
PABPC1L2B	Xq13.2	0.002235522	0.959558585	0.972926068
MIA2	14q21.1	0.002235217	0.959564097	0.972926068
CCDC167	6p21.2	-0.002233915	0.959587641	0.972926068
CRTC2	1q21.3	0.00223131	0.959634729	0.972926068
RNASE8	14q11.2	0.00222429	0.95976161	0.973005702
SLC35E2B	1p36.33	-0.002218458	0.959867031	0.973063572
SNORA9	7p13	0.002202959	0.960147174	0.97329855
TSPAN19	12q21.31	-0.002197608	0.960243895	0.973347581
WSCD1	17p13.2	-0.002193188	0.960323797	0.973379559
BCL2L12	19q13.33	-0.002173823	0.960673839	0.973685332
DCTN3	9p13.3	0.002164531	0.960841798	0.973741171
LCE1A	1q21.3	-0.002164491	0.96084253	0.973741171
MSH4	1p31.1	0.002162747	0.96087405	0.973741171
ZNF189	9q31.1	0.002154545	0.961022317	0.973842398
BEST4	1p34.1	0.002145514	0.961185566	0.97391932
CH25H	10q23.31	-0.002144992	0.961194989	0.97391932
WDR78	1p31.3	0.002138002	0.961321354	0.973998331
TMEM107	17p13.1	-0.002130317	0.961460279	0.974051201
OR10K2	1q23.1	0.002129762	0.961470311	0.974051201
TMEM247	2p21	-0.002126275	0.961533341	0.974066033
LGSN	6q12	-0.00211487	0.96173952	0.974213879
BZW1	2q33.1	-0.002112341	0.961785227	0.974213879
HNRNPA1L2	13q14.3	0.00211017	0.961824472	0.974213879
LINC01590	6q15	-0.002101226	0.961986164	0.974328628
KIAA0556	16p12.1	-0.002090632	0.962177684	0.974473575
ETV7	6p21.31	0.002086116	0.962259316	0.974507221
IDH3G	Xq28	-0.002078127	0.962403743	0.974604455
CC2D1A	19p13.12	-0.002074306	0.962472818	0.974625374
SHC2	19p13.3	-0.002071006	0.962532473	0.974636755
USO1	4q21.1	-0.002048602	0.962937507	0.974997838
MOGAT2	11q13.5	0.002009621	0.963642246	0.975635681
FNBP1L	1p22.1	0.002008396	0.963664393	0.975635681
SGCA	17q21.33	0.001993894	0.963926582	0.975852046
SPZ1	5q14.1	-0.00197323	0.96430019	0.976175244
GAGE4	Xp11.4-p11.2	0.001969283	0.964371535	0.976175244
ZNF768	16p11.2	0.00196819	0.96439131	0.976175244
AP2M1	3q27.1	-0.001947696	0.964761845	0.976501204
SNRPF	12q23.1	-0.00192286	0.965210893	0.976906595
CTPS1	1p34.2	0.001915392	0.965345924	0.976935633
SLC6A11	3p25.3	0.001913679	0.965376903	0.976935633
EDEM1	3p26.1	0.001913221	0.965385177	0.976935633

ARMC4	10p12.1	0.001892854	0.96575344	0.977259174
CSAG2	Xq28	0.001884102	0.965911697	0.977331655
ZNF528	19q13.41	-0.001883522	0.96592217	0.977331655
IL1RN	2q14.1	0.001876923	0.966041504	0.977403271
C1ORF198	1q42.2	-0.001872233	0.966126294	0.977439931
VMP1	17q23.1	0.001869368	0.966178111	0.977443229
KHDC3L	6q13	-0.001856862	0.966404235	0.977618417
ERCC6	10q11.23	0.001850958	0.966510996	0.977618417
CPVL	7p14.3	-0.001850524	0.966518847	0.977618417
SLC10A7	4q31.22	0.001849048	0.966545541	0.977618417
CDC47	2q31.1	-0.001843577	0.966644466	0.977669351
ATP7B	13q14.3	0.001833504	0.966826614	0.977762163
ZNF732	4p16.3	-0.00183313	0.966833376	0.977762163
FLCN	17p11.2	0.001814139	0.967176784	0.978060316
PRAMEF9	1p36.21	-0.001806028	0.967323455	0.978159499
C6ORF163	6q15	-0.001802116	0.967394182	0.978181881
ADCK2	7q34	-0.001796858	0.967489272	0.978228894
BHMT2	5q14.1	0.001785308	0.967698124	0.978390921
OR4D11	11q12.1	-0.001769813	0.967978339	0.97862508
LINC02145	5p15.31	0.001762874	0.968103815	0.978671445
TLX2	2p13.1	-0.0017619	0.968121434	0.978671445
LINC00691	3p24.2	0.001754338	0.968258186	0.978721593
GRSF1	4q13.3	0.001750226	0.968332545	0.978721593
TRAK2	2q33.1	-0.001749531	0.968345108	0.978721593
PITPNM2	12q24.31	0.001748402	0.968365523	0.978721593
NIPSNAP2	7p11.2	-0.00174406	0.968444042	0.97875181
ACTL6A	3q26.33	0.001735637	0.968596369	0.978856615
TUBD1	17q23.1	0.001730079	0.968696875	0.978909041
ITFG1	16q12.1	-0.001716532	0.968941859	0.979077888
MTNR1B	11q14.3	-0.001715461	0.968961236	0.979077888
BRD1	22q13.33	-0.001699512	0.969249664	0.979320169
KLKB1	4q35.2	0.001686082	0.969492542	0.979516406
GPN1	2p23.3	0.00168145	0.969576318	0.979551884
RRAGB	Xp11.21	-0.001671898	0.969749071	0.979677245
DSCR9	21q22.13	-0.001668174	0.969816406	0.979696104
MYLK4	6p25.2	0.001662258	0.969923395	0.979755015
OSTN	3q28	-0.001648903	0.970164941	0.979921608
PTPRN2	7q36.3	-0.001647149	0.970196662	0.979921608
RIC8A	11p15.5	-0.001645064	0.970234355	0.979921608
DEAF1	11p15.5	0.00163282	0.970455799	0.980096088
PNMA2	8p21.2	-0.001622573	0.970641123	0.980234074
LCE2B	1q21.3	0.001613706	0.970801501	0.980346856
ICAM2	17q23.3	-0.001600082	0.971047898	0.980546485
GJB7	6q14.3-q15	-0.001586055	0.971301596	0.980753468
CLCNKA	1p36.13	0.001580666	0.971399067	0.980802689
RNU11	1p35.3	0.001562686	0.971724256	0.981080759
LONRF2	2q11.2	0.00156005	0.971771945	0.981080759
TMEM72	10q11.21	0.001550203	0.971950046	0.981211355
TTLL4	2q35	-0.001543724	0.972067224	0.981280438
LGALS14	19q13.2	-0.001537485	0.972180069	0.981310446
ZMYM3	Xq13.1	0.00153669	0.972194448	0.981310446
ARHGAP19	10q24.1	-0.001529439	0.972325597	0.981393616
SUSD1	9q31.3-q32	0.001504473	0.972777168	0.98180017
TRIM48	11q11	0.001499409	0.97286877	0.981822115
SNHG5	6q14.3	-0.001495963	0.972931097	0.981822115
AGFG1	2q36.3	0.001495182	0.972945233	0.981822115
ADD3	10q25.1-q25.2	0.001487366	0.973086597	0.981915545
LPO	17q22	0.00147987	0.973222182	0.982003134

ZGPAT	20q13.33	-0.001467654	0.973443152	0.982176866
BSN	3p21.31	0.001459361	0.973593158	0.982209744
ANXA8	10q11.22	-0.001459318	0.973593938	0.982209744
COPB2	3q23	0.001457667	0.973623788	0.982209744
TADA2A	17q12	-0.001455062	0.973670911	0.982209744
POMT1	9q34.13	0.0014436	0.973878251	0.982322033
CNP	17q21.2	-0.001443513	0.973879822	0.982322033
ADGRA3	4p15.2	0.001407128	0.974537982	0.982903241
INPP5B	1p34.3	0.001406259	0.974553691	0.982903241
OR12D3	6p22.1	0.001391574	0.974819338	0.983059238
NME1-NME2	17q21.33	-0.001388023	0.974883563	0.983059238
RAD50	5q31.1	-0.001386807	0.974905555	0.983059238
TAF11	6p21.31	0.001386113	0.974918121	0.983059238
CCDC149	4p15.2	-0.001382118	0.97499038	0.983059238
YARS	1p35.1	0.00138151	0.975001376	0.983059238
MS4A10	11q12.2	0.001369579	0.975217205	0.983204507
TREML1	6p21.1	0.0013661	0.975280144	0.983204507
UBA7	3p21.31	0.001365445	0.975291982	0.983204507
PUM1	1p35.2	0.001362232	0.975350104	0.983213861
SLC6A14	Xq23	-0.001354677	0.975486769	0.983302387
CPSF4	7q22.1	0.001347296	0.975620293	0.983387737
DTWD1	15q21.2	0.001339828	0.975755389	0.983474664
METTL22	16p13.2	-0.001335399	0.975835504	0.983495186
IL4	5q31.1	-0.001333301	0.975873465	0.983495186
TTY10	Yq11.223	-0.001311898	0.976260635	0.983836125
XPO4	13q12.11	-0.001304962	0.976386106	0.983876978
THUMPD1	16p12.3	0.001301532	0.976448158	0.983876978
E2F4	16q22.1	0.001300664	0.976463867	0.983876978
CDC42EP1	22q13.1	0.001297364	0.976523562	0.983876978
PPM1D	17q23.2	0.001296148	0.976545555	0.983876978
RBM1A3P	Yp11.2	-0.001292027	0.976620114	0.983902853
C2ORF80	2q33.3	0.001282701	0.976788829	0.984023577
SPRYD3	12q13.13	0.001276002	0.976910014	0.984096411
OR6B2	2q37.3	-0.001269252	0.977032121	0.984170166
PRRT2	16p11.2	-0.001256029	0.977271334	0.984315165
RGPD4-AS1	2q12.3	0.001255889	0.977273864	0.984315165
TXNIP	1q21.1	-0.001243264	0.977502269	0.984495956
CHKB-DT	22q13.33	-0.001236056	0.977632659	0.984538256
PDS5A	4p14	0.001235535	0.977642087	0.984538256
NDST4	4q26	0.001211639	0.978074402	0.984924348
TPRX1	19q13.33	0.001197797	0.978324817	0.985127235
FAM138D	12p13.33	-0.001188496	0.978493085	0.985247389
PIIG	2q31.1	0.00118556	0.978546206	0.985251595
BTBD3	20p12.2	0.001175356	0.978730805	0.985388171
NSF	17q21.31	-0.00114696	0.979244543	0.98575775
OR2G2	1q44	-0.001146543	0.979252094	0.98575775
C2ORF78	2p13.1	0.001145626	0.979268681	0.98575775
EVX1	7p15.2	0.001144164	0.979295137	0.98575775
FBXL4	6q16.1-q16.2	-0.001141533	0.979342735	0.98575775
ZNF511	10q26.3	-0.001116046	0.979803851	0.986172576
PIDD1	11p15.5	0.001100502	0.98008508	0.986406313
RAP2B	3q25.2	0.001089994	0.980275186	0.986510068
HLA-A	6p22.1	0.001089386	0.980286184	0.986510068
OR52D1	11p15.4	-0.001081605	0.98042696	0.986602415
TMEM105	17q25.3	-0.001073234	0.980578415	0.986705499
MAVS	20p13	-0.001049441	0.981008912	0.987089343
CTXN3	5q23.2	0.001040434	0.981171868	0.987203964
PPIL2	22q11.21	0.001025126	0.98144884	0.987412956

TCL1A	14q32.13	0.00102132	0.9815177	0.987412956
OTP	5q14.1	0.001020821	0.981526738	0.987412956
CADPS2	7q31.32	-0.001011753	0.981690803	0.987528653
EEF2	19p13.3	0.001001419	0.981877776	0.987667381
CDH20	18q21.33	-0.000979067	0.982282197	0.988024815
USP6NL	10p14	-0.000975845	0.982340498	0.988034087
UBA2	19q13.11	-0.000946798	0.982866077	0.988513321
ELOA2	18q21.1	0.00094325	0.982930267	0.988528491
ZNF33A	10p11.1	0.000919531	0.983359451	0.988910713
OR7G1	19p13.2	-0.000911024	0.983513364	0.989016086
GPR35	2q37.3	-0.000864562	0.984354076	0.989803662
FZD9	7q11.23	-0.000860987	0.984418764	0.989803662
TMEM60	7q11.23	-0.000857789	0.984476638	0.989803662
OR10G3	14q11.2	0.000856871	0.98449324	0.989803662
SRP19	5q22.2	-0.000847542	0.984662053	0.989923944
PRMT6	1p13.3	0.000820101	0.985158592	0.990373675
ANKRD31	5q13.3	0.000812178	0.985301948	0.990468325
SNORA2A	12q13.11	0.000806006	0.985413637	0.990531136
ACRBP	12p13.31	0.000799129	0.985538071	0.990578527
SLC39A9	14q24.1	-0.000797132	0.985574212	0.990578527
DAND5	19p13.13	0.000795242	0.985608411	0.990578527
DRC1	2p23.3	0.000777519	0.985929124	0.990837511
SMIM32	5q31.1	-0.000775561	0.98596454	0.990837511
ALG2	9q22.33	-0.000772079	0.98602755	0.990851367
SWI5	9q34.11	0.000752454	0.98638268	0.991144017
SETDB2	13q14.2	0.000750543	0.98641725	0.991144017
RERGL	12p12.3	-0.000743835	0.986538641	0.991216513
CCDC66	3p14.3	-0.000741078	0.986588531	0.991217166
ZNF296	19q13.32	0.000736649	0.986668672	0.991248209
OR2T10	1q44	-0.000717142	0.987021659	0.991553348
CCDC102A	16q21	0.000711466	0.987124377	0.991607051
SF3A3	1p34.3	-0.000697659	0.987374231	0.991808546
TMEM184C	4q31.23	0.000691146	0.987492087	0.991877437
FABP2	4q26	0.000685276	0.987598305	0.991934631
FTSJ3	17q23.3	0.000675168	0.987781228	0.992058185
POTEH	22q11.1	-0.000673032	0.987819883	0.992058185
PPP4R3C	Xp21.3	-0.000666126	0.98794484	0.992083358
SRSF9	12q24.31	0.000663445	0.98799337	0.992083358
MED30	8q24.11	-0.000663358	0.987994942	0.992083358
HLA-DRA	6p21.32	0.000660753	0.988042085	0.992083358
STAG3L1	7q11.23	-0.000651635	0.988207085	0.992183188
PPP6C	9q33.3	-0.000649811	0.988240086	0.992183188
TYROBP	19q13.12	-0.000636959	0.988472659	0.992329742
HIST1H2AJ	6p22.1	0.000634023	0.98852579	0.992329742
OTUD5	Xp11.23	0.000633572	0.988533945	0.992329742
CFAP61	20p11.23	-0.000627979	0.988635164	0.992381861
TBL1Y	Yp11.2	-0.000625106	0.988687158	0.992384567
DUS4L	7q22.3	0.000582598	0.989456391	0.993107158
LURAP1L	9p23	0.000576606	0.989564823	0.99316647
TSKS	19q13.33	-0.000558525	0.98989203	0.993437059
ENOPH1	4q21.22	0.000554983	0.989956121	0.993437059
HTN1	4q13.3	0.000553527	0.989982484	0.993437059
HIST1H2AK	6p22.1	0.000543859	0.990157443	0.993563099
ABHD13	13q33.3	0.000530625	0.990396923	0.993656525
C16ORF46	16q23.2	-0.000529019	0.990425996	0.993656525
EDDM3A	14q11.2	-0.000527988	0.990444658	0.993656525
RANBP9	6p23	0.000527803	0.990447997	0.993656525
KRTAP5-6	11p15.5	0.000524507	0.990507644	0.993666843

ANKRD20A4	9q13	0.000510849	0.990754808	0.993865266
SPIB	19q13.33	-0.000505138	0.990858159	0.993919411
PRR25	16p13.3	0.000492905	0.991079551	0.994027947
MAML3	4q31.1	0.000491418	0.991106457	0.994027947
XKRY2	Yq11.222	-0.000490973	0.991114502	0.994027947
L3HYPDH	14q23.1	0.000478739	0.991335898	0.994200459
TCTEX1D2	3q29	-0.00047379	0.991425474	0.994240761
PWARSN	15q11.2	-0.00046059	0.991664345	0.994392483
NGFR	17q21.33	0.000458029	0.991710705	0.994392483
MTVR2	17q22	0.000457241	0.991724962	0.994392483
LRRN4	20p12.3	-0.00044166	0.992006938	0.994609411
C8ORF74	8p23.1	0.000439252	0.99205051	0.994609411
OLFM1	9q34.3	-0.000436536	0.992099658	0.994609411
CCDC39	3q26.33	0.000434365	0.992138946	0.994609411
TEX33	22q12.3	0.000409346	0.992591728	0.995013768
ISG15	1p36.33	0.000395722	0.99283828	0.995211363
STOML2	9p13.3	-0.000380699	0.993110158	0.995434322
RANBP10	16q22.1	-0.00036941	0.99331446	0.995589528
STAG3L3	7q11.23	-0.000347874	0.993704205	0.995871076
HNRNPCL2	1p36.21	0.000346101	0.993736302	0.995871076
ZIC5	13q32.3	-0.000345687	0.99374378	0.995871076
TJAP1	6p21.1	0.000337714	0.993888078	0.9959661
CYBRD1	2q31.1	0.000325209	0.994114383	0.996143289
DNAJC16	1p36.21	-0.000316699	0.994268396	0.996248025
HRAS	11p15.5	0.000309926	0.994390979	0.996321258
ZNF488	10q11.22	0.00029462	0.994667981	0.996549197
AKIRIN1	1p34.3	-0.000286219	0.994820018	0.996651917
ZNF354A	5q35.3	-0.000270979	0.995095829	0.996831376
CNTD1	17q21.2-q21.31	-0.000270849	0.995098187	0.996831376
DOCK3	3p21.2	0.000265465	0.995195625	0.996879375
HLA-DPA1	6p21.32	0.000256954	0.99534964	0.99698404
LOC285847	6p21.31	-0.000249991	0.995475658	0.997060652
IGSF22	11p15.1	0.000246621	0.995536658	0.997072139
SNRPD1	18q11.2	0.000236026	0.995728391	0.997214553
SNORA55	1p34.3	-0.00022939	0.995848498	0.997285223
TCN2	22q12.2	0.00019226	0.996520472	0.997869045
KLHL10	17q21.2	-0.000190301	0.996555919	0.997869045
PTPRJ	11p11.2	-0.00018896	0.996580192	0.997869045
SLC25A45	11q13.1	0.000177584	0.996786071	0.998025547
ZC3H15	2q32.1	-0.000174284	0.996845792	0.9980357
AKAP8L	19p13.12	-0.000155527	0.997185257	0.998288855
HERC4	10q21.3	0.000154833	0.997197829	0.998288855
YY1AP1	1q22	-0.000142241	0.997425711	0.998442695
SH3BGRL3	1p36.11	-0.00013981	0.997469716	0.998442695
SCARNA2	1p13.3	0.00013812	0.9975003	0.998442695
TMCO3	13q34	0.000128173	0.997680311	0.998573223
UTP3	4q13.3	-9.94298E-05	0.998200511	0.999026027
OR11L1	1q44	-9.76917E-05	0.998231968	0.999026027
PCDH11X	Xq21.31	9.05885E-05	0.998360522	0.999105011
DNMBP-AS1	10q24.2	8.44974E-05	0.99847076	0.999153542
MAGEE2	Xq13.3	8.00135E-05	0.998551909	0.999153542
OAS2	12q24.13	7.88492E-05	0.998572981	0.999153542
POLR2K	8q22.2	-7.69387E-05	0.998607556	0.999153542
TAL1	1p33	6.69957E-05	0.998787505	0.99928392
AKAIN1	18p11.31	-4.22078E-05	0.999236119	0.999644476
MPHOSPH6	16q23.3	-4.15955E-05	0.9992472	0.999644476
CYP2A7	19q13.2	2.74712E-05	0.999502824	0.999850512
PNISR	6q16.2	-2.40542E-05	0.999564665	0.999862686

DEFB119	20q11.21	-1.52883E-05	0.999723311	0.999877745
CRHR2	7p14.3	-1.37459E-05	0.999751226	0.999877745
SFXN5	2p13.2	1.37204E-05	0.999751686	0.999877745
RELL1	4p14	1.22442E-05	0.999778403	0.999877745
OSTF1	9q21.13	6.51287E-06	0.999882129	0.999931803
CFHR2	1q31.3	-2.35731E-06	0.999957337	0.999957337
