

Table S2 Genes are correlated with RUNX2 in LUSC

Correlated Gene	Cytoband	Spearman's Correlation	p-Value	q-Value
PMEPA1	20q13.31	0.666687883	1.08E-65	2.17E-61
APCDD1L	20q13.32	0.647424619	7.46E-61	7.53E-57
LOXL2	8p21.3	0.6412603	2.23E-59	1.50E-55
COL5A1	9q34.3	0.637548012	1.66E-58	8.40E-55
COL6A2	21q22.3	0.624767517	1.37E-55	5.52E-52
LTPBP2	14q24.3	0.622393683	4.60E-55	1.55E-51
TPM1	15q22.2	0.621275378	8.11E-55	2.34E-51
ADAMTS14	10q22.1	0.619570308	1.92E-54	4.84E-51
TIMP3	22q12.3	0.619182766	2.33E-54	5.23E-51
INHBA	7p14.1	0.616864852	7.44E-54	1.50E-50
AEBP1	7p13	0.616501372	8.92E-54	1.64E-50
FBLN2	3p25.1	0.616021948	1.13E-53	1.90E-50
STARD13	13q13.1-q13.2	0.610871389	1.43E-52	2.22E-49
FN1	2q35	0.608133884	5.40E-52	7.78E-49
ANGPTL2	9q33.3	0.607336403	7.94E-52	1.07E-48
FAP	2q24.2	0.605297326	2.11E-51	2.60E-48
COL6A3	2q37.3	0.605220221	2.19E-51	2.60E-48
PHLDB1	11q23.3	0.603823079	4.27E-51	4.78E-48
MMP2	16q12.2	0.601619104	1.21E-50	1.29E-47
SMAD7	18q21.1	0.599339266	3.54E-50	3.58E-47
COL5A2	2q32.2	0.594817377	2.90E-49	2.78E-46
COL6A1	21q22.3	0.593935253	4.35E-49	3.99E-46
COL1A2	7q21.3	0.591385929	1.40E-48	1.22E-45
ZCCHC24	10q22.3	0.591158814	1.55E-48	1.30E-45
CLMP	11q24.1	0.590800296	1.82E-48	1.42E-45
ENC1	5q13.3	0.590791803	1.83E-48	1.42E-45
SFXN3	10q24.31	0.590404275	2.18E-48	1.63E-45
TIMP2	17q25.3	0.590171339	2.42E-48	1.75E-45
ITGB3	17q21.32	0.589479495	3.32E-48	2.31E-45
BGN	Xq28	0.589185772	3.79E-48	2.55E-45
MICAL2	11p15.3	0.588775533	4.56E-48	2.97E-45
DACT1	14q23.1	0.587090202	9.73E-48	5.86E-45
MXRA5	Xp22.33	0.587071498	9.82E-48	5.86E-45
CSGALNACT2	10q11.21	0.587059379	9.87E-48	5.86E-45
PCOLCE	7q22.1	0.584887277	2.61E-47	1.50E-44
LAMA4	6q21	0.58443047	3.19E-47	1.79E-44
FSTL1	3q13.33	0.582858124	6.41E-47	3.50E-44
PODNL1	19p13.12	0.581512036	1.16E-46	6.17E-44
COL1A1	17q21.33	0.58118081	1.34E-46	6.95E-44
AXL	19q13.2	0.579320371	3.04E-46	1.53E-43
PDGFRB	5q32	0.579056516	3.41E-46	1.68E-43
EFEMP2	11q13.1	0.578988668	3.51E-46	1.69E-43
KANK4	1p31.3	0.578751186	3.89E-46	1.82E-43
TSPAN2	1p13.2	0.578701625	3.98E-46	1.82E-43
P4HA3	11q13.4	0.578549671	4.25E-46	1.91E-43
COL3A1	2q32.2	0.578033829	5.32E-46	2.33E-43
BICC1	10q21.1	0.57782265	5.83E-46	2.50E-43
MAGEL2	15q11.2	0.577647864	6.29E-46	2.64E-43
ZNF521	18q11.2	0.575048405	1.94E-45	7.97E-43
IGDCC4	15q22.31	0.574889424	2.07E-45	8.36E-43
BTBD19	1p34.1	0.574777087	2.17E-45	8.61E-43
THBS2	6q27	0.5728722	4.92E-45	1.91E-42
COL8A2	1p34.3	0.572578572	5.58E-45	2.12E-42
ANTXR2	4q21.21	0.572090942	6.87E-45	2.57E-42
BNC2	9p22.3-p22.2	0.571303862	9.60E-45	3.52E-42
SGIP1	1p31.3	0.570458825	1.37E-44	4.95E-42

CALD1	7q33	0.570367918	1.43E-44	5.06E-42
CTHRC1	8q22.3	0.56525801	1.22E-43	4.25E-41
UNC5C	4q22.3	0.564702585	1.54E-43	5.26E-41
PDLIM7	5q35.3	0.564422168	1.73E-43	5.81E-41
LRRC17	7q22.1	0.563468283	2.57E-43	8.49E-41
ETS1	11q24.3	0.562795715	3.39E-43	1.09E-40
POSTN	13q13.3	0.562790371	3.39E-43	1.09E-40
COL16A1	1p35.2	0.562197104	4.34E-43	1.37E-40
SLC12A4	16q22.1	0.561098266	6.81E-43	2.11E-40
GAS1	9q21.33	0.56054002	8.56E-43	2.62E-40
CPXM1	20p13	0.560311759	9.40E-43	2.83E-40
EMILIN1	2p23.3	0.559744924	1.19E-42	3.52E-40
GFPT2	5q35.3	0.558251879	2.18E-42	6.37E-40
TGFB3	14q24.3	0.557740392	2.68E-42	7.73E-40
CACNA1C	12p13.33	0.55736212	3.13E-42	8.88E-40
NUAK1	12q23.3	0.556461388	4.50E-42	1.26E-39
VCAN	5q14.2-q14.3	0.555813155	5.85E-42	1.62E-39
ADAMTS7	15q25.1	0.555215497	7.44E-42	2.03E-39
GLT8D2	12q23.3	0.554869957	8.54E-42	2.30E-39
RCN3	19q13.33	0.554544075	9.74E-42	2.59E-39
SPON2	4p16.3	0.554259895	1.09E-41	2.86E-39
MRC2	17q23.2	0.553680655	1.38E-41	3.56E-39
TSHZ3	19q12	0.553621681	1.41E-41	3.60E-39
GPC6	13q31.3-q32.1	0.553059618	1.76E-41	4.45E-39
TNS3	7p12.3	0.552482764	2.22E-41	5.53E-39
ADAM19	5q33.3	0.551855047	2.85E-41	7.02E-39
EDNRA	4q31.22-q31.23	0.550893432	4.18E-41	1.02E-38
HIVEP3	1p34.2	0.550725481	4.47E-41	1.07E-38
NID2	14q22.1	0.54991779	6.15E-41	1.46E-38
GLIS2	16p13.3	0.549042059	8.69E-41	2.04E-38
COL8A1	3q12.1	0.548512155	1.07E-40	2.48E-38
KANK2	19p13.2	0.547960016	1.33E-40	3.05E-38
FILIP1L	3q12.1	0.547385738	1.67E-40	3.78E-38
SPARC	5q33.1	0.546921106	2.00E-40	4.45E-38
AZIN2	1p35.1	0.546906853	2.01E-40	4.45E-38
SPON1	11p15.2	0.546228881	2.62E-40	5.74E-38
ST3GAL2	16q22.1	0.544686417	4.77E-40	1.03E-37
MXRA8	1p36.33	0.54465978	4.82E-40	1.03E-37
SNED1	2q37.3	0.543850466	6.60E-40	1.40E-37
CSMD2	1p35.1	0.543565045	7.37E-40	1.55E-37
DACT3	19q13.32	0.543428776	7.77E-40	1.62E-37
ISLR	15q24.1	0.54313219	8.71E-40	1.79E-37
EVA1A	2p12	0.542737791	1.01E-39	2.07E-37
SHANK1	19q13.33	0.542582789	1.08E-39	2.17E-37
RASGRF2	5q14.1	0.541423003	1.68E-39	3.36E-37
SSC5D	19q13.42	0.541125271	1.89E-39	3.73E-37
FMOD	1q32.1	0.540875253	2.08E-39	4.07E-37
CHST15	10q26.13	0.540067467	2.83E-39	5.46E-37
HEPH	Xq12	0.540053786	2.84E-39	5.46E-37
EVC	4p16.2	0.539912207	3.00E-39	5.71E-37
THY1	11q23.3	0.538589689	4.97E-39	9.37E-37
SHISAL1	22q13.31	0.538512584	5.12E-39	9.48E-37
CDK14	7q21.13	0.538509626	5.12E-39	9.48E-37
MYL9	20q11.23	0.53807887	6.03E-39	1.11E-36
LRRC15	3q29	0.537802037	6.70E-39	1.22E-36
SORCS2	4p16.1	0.537460601	7.63E-39	1.37E-36
VIM	10p13	0.536419305	1.13E-38	2.02E-36
ARHGEF40	14q11.2	0.536031491	1.31E-38	2.32E-36

ADAMTS2	5q35.3	0.535156142	1.82E-38	3.19E-36
ADAMTS12	5p13.3-p13.2	0.533431018	3.48E-38	6.05E-36
COL5A3	19p13.2	0.533370709	3.56E-38	6.13E-36
COL10A1	6q22.1	0.53318644	3.81E-38	6.51E-36
KIAA1755	20q11.23	0.533056278	4.00E-38	6.78E-36
UNC5B	10q22.1	0.53274261	4.50E-38	7.56E-36
OLFML1	11p15.4	0.531835675	6.30E-38	1.05E-35
PTK7	6p21.1	0.531692154	6.65E-38	1.10E-35
ADAMTS10	19p13.2	0.531147649	8.14E-38	1.34E-35
FHL3	1p34.3	0.530810793	9.22E-38	1.50E-35
GAS7	17p13.1	0.530636067	9.84E-38	1.59E-35
CD248	11q13.2	0.530432343	1.06E-37	1.70E-35
GATA3	10p14	0.53030589	1.11E-37	1.77E-35
NOX4	11q14.3	0.530225636	1.15E-37	1.81E-35
FMNL3	12q13.12	0.530033542	1.23E-37	1.92E-35
CRISPLD2	16q24.1	0.529615478	1.43E-37	2.23E-35
MFG8	15q26.1	0.52936317	1.57E-37	2.43E-35
SCARF2	22q11.21	0.528653291	2.05E-37	3.13E-35
MMP14	14q11.2	0.528540783	2.13E-37	3.23E-35
OLFML2B	1q23.3	0.528528091	2.14E-37	3.23E-35
PLEKHF1	19q12	0.528059069	2.55E-37	3.80E-35
WBP1L	10q24.32	0.527903142	2.70E-37	4.00E-35
SSPN	12p12.1	0.527115299	3.60E-37	5.28E-35
DCHS1	11p15.4	0.52710423	3.61E-37	5.28E-35
SMIM3	5q33.1	0.52688513	3.91E-37	5.68E-35
FNDC1	6q25.3	0.526578346	4.38E-37	6.31E-35
SGCD	5q33.2-q33.3	0.526068182	5.27E-37	7.55E-35
ADGRA2	8p11.23	0.525951476	5.50E-37	7.82E-35
ZFPM2	8q23.1	0.52515953	7.34E-37	1.04E-34
FIBIN	11p14.2	0.524772002	8.46E-37	1.18E-34
LGALS1	22q13.1	0.524246392	1.02E-36	1.42E-34
MYADM	19q13.42	0.523026934	1.59E-36	2.20E-34
ADORA1	1q32.1	0.522986473	1.61E-36	2.22E-34
VASN	16p13.3	0.522789894	1.73E-36	2.36E-34
FBN1	15q21.1	0.52247804	1.94E-36	2.63E-34
ARHGEF17	11q13.4	0.521543145	2.72E-36	3.65E-34
FKBP7	2q31.2	0.520723871	3.64E-36	4.87E-34
FBLN5	14q32.12	0.520436768	4.04E-36	5.36E-34
CPZ	4p16.1	0.520327695	4.20E-36	5.54E-34
COL12A1	6q13-q14.1	0.519753704	5.16E-36	6.76E-34
CDH11	16q21	0.519286686	6.09E-36	7.93E-34
VDR	12q13.11	0.519259394	6.15E-36	7.96E-34
VSTM4	10q11.23	0.519116444	6.47E-36	8.32E-34
GASK1B	4q32.1	0.518491495	8.08E-36	1.03E-33
ITGA11	15q23	0.518162559	9.09E-36	1.15E-33
CLEC11A	19q13.33	0.518027053	9.54E-36	1.20E-33
TWIST1	7p21.1	0.517359747	1.21E-35	1.51E-33
TGFB11	16p11.2	0.516953122	1.40E-35	1.74E-33
EMP3	19q13.33	0.51662724	1.57E-35	1.94E-33
CHST11	12q23.3	0.516414438	1.69E-35	2.08E-33
GGT5	22q11.23	0.516027292	1.94E-35	2.37E-33
DSE	6q22.1	0.515578787	2.27E-35	2.76E-33
ANXA6	5q33.1	0.515399862	2.41E-35	2.92E-33
CDH23	10q22.1	0.514390247	3.44E-35	4.14E-33
ANTXR1	2p13.3	0.514013789	3.93E-35	4.69E-33
HTRA3	4p16.1	0.513819119	4.21E-35	4.99E-33
RPLP0P2	11q12.2	0.513114297	5.38E-35	6.35E-33
COL11A1	1p21.1	0.512851492	5.90E-35	6.90E-33

TGFBR2	3p24.1	0.512842713	5.92E-35	6.90E-33
TNFSF11	13q14.11	0.512821528	5.96E-35	6.92E-33
LOC100126784	11p15.1	0.512126643	7.60E-35	8.76E-33
ANKH	5p15.2	0.51107856	1.09E-34	1.25E-32
XYLT1	16p12.3	0.5110081	1.12E-34	1.28E-32
DAAM2	6p21.2	0.510703915	1.25E-34	1.41E-32
RCAN2	6p12.3	0.510501706	1.34E-34	1.51E-32
PRRX1	1q24.2	0.510416681	1.38E-34	1.54E-32
CHN1	2q31.1	0.510107594	1.53E-34	1.71E-32
NAV3	12q21.2	0.510090798	1.54E-34	1.71E-32
VGLL3	3p12.1	0.50945144	1.92E-34	2.12E-32
FOXP1	3p13	0.509250662	2.06E-34	2.26E-32
MMP23B	1p36.33	0.508820956	2.39E-34	2.61E-32
CAMK2A	5q32	0.50863339	2.55E-34	2.76E-32
GXYLT2	3p13	0.508587924	2.59E-34	2.79E-32
C1QTNF6	22q12.3	0.508501467	2.67E-34	2.86E-32
SLC24A3	20p11.23	0.507630794	3.60E-34	3.84E-32
OLFML3	1p13.2	0.507246893	4.10E-34	4.36E-32
DDR2	1q23.3	0.506855643	4.69E-34	4.96E-32
NETO1	18q22.3	0.506826255	4.74E-34	4.98E-32
ZBTB46	20q13.33	0.506790479	4.80E-34	5.01E-32
TM6SF2	19p13.11	0.506113464	6.05E-34	6.29E-32
RIPOR3	20q13.13	0.505799139	6.73E-34	6.96E-32
HMCN1	1q25.3-q31.1	0.505047081	8.70E-34	8.95E-32
TGFBI	5q31.1	0.504445547	1.07E-33	1.09E-31
SERPING1	11q12.1	0.503863731	1.30E-33	1.32E-31
TBC1D2B	15q24.3-q25.1	0.503621502	1.41E-33	1.43E-31
CYP27C1	2q14.3	0.503441134	1.50E-33	1.51E-31
C1QTNF1	17q25.3	0.503024835	1.73E-33	1.73E-31
CCN2	6q23.2	0.502702865	1.92E-33	1.92E-31
PXDN	2p25.3	0.502486056	2.07E-33	2.06E-31
TENM3	4q34.3-q35.1	0.502308562	2.20E-33	2.17E-31
GDPD5	11q13.4-q13.5	0.50220073	2.28E-33	2.24E-31
ALPK2	18q21.31-q21.32	0.502005547	2.43E-33	2.39E-31
PTGIR	19q13.32	0.501703092	2.70E-33	2.63E-31
CMTM3	16q22.1	0.501082425	3.32E-33	3.22E-31
ITGA5	12q13.13	0.501029654	3.38E-33	3.26E-31
LAMP5	20p12.2	0.499282296	6.07E-33	5.83E-31
MMP13	11q22.2	0.499267123	6.10E-33	5.83E-31
CAMK2N1	1p36.12	0.49861784	7.57E-33	7.21E-31
CCN1	1p22.3	0.498108357	8.97E-33	8.50E-31
COL15A1	9q22.33	0.497104755	1.25E-32	1.18E-30
KLF7	2q33.3	0.496663788	1.45E-32	1.36E-30
TPM2	9p13.3	0.495306534	2.27E-32	2.12E-30
MRGPRF	11q13.3	0.49518836	2.36E-32	2.19E-30
MSRB3	12q14.3	0.494840184	2.65E-32	2.45E-30
CALHM5	6q22.1	0.494825584	2.66E-32	2.45E-30
PLPP4	10q26.12	0.494701386	2.77E-32	2.54E-30
PTPRN	2q35	0.494411037	3.05E-32	2.78E-30
MMP16	8q21.3	0.494365865	3.09E-32	2.81E-30
LAMA2	6q22.33	0.494207792	3.26E-32	2.95E-30
PDZRN3	3p13	0.49346499	4.15E-32	3.74E-30
TAGLN	11q23.3	0.493373762	4.28E-32	3.84E-30
ATP10A	15q12	0.492539924	5.62E-32	5.02E-30
MIR100HG	11q24.1	0.492306892	6.07E-32	5.39E-30
PALM2-AKAP2	9q31.3	0.49177298	7.22E-32	6.39E-30
VCL	10q22.2	0.491041248	9.16E-32	8.07E-30
COA3	17q21.2	-0.491019109	9.22E-32	8.09E-30

P3H1	1p34.2	0.490924601	9.51E-32	8.31E-30
PRR16	5q23.1	0.489596739	1.46E-31	1.27E-29
TNN	1q25.1	0.48925839	1.63E-31	1.41E-29
LATS2	13q12.11	0.489211346	1.66E-31	1.43E-29
SYNPO	5q33.1	0.488819524	1.88E-31	1.61E-29
SULF1	8q13.2-q13.3	0.488530763	2.06E-31	1.76E-29
FSTL3	19p13.3	0.488016795	2.43E-31	2.07E-29
CYS1	2p25.1	0.487899897	2.53E-31	2.14E-29
MBNL2	13q32.1	0.487452633	2.92E-31	2.46E-29
APBB2	4p14-p13	0.487062815	3.31E-31	2.78E-29
AKAP12	6q25.1	0.486625915	3.80E-31	3.19E-29
S1PR2	19p13.2	0.486303314	4.22E-31	3.52E-29
TBX5	12q24.21	0.48600167	4.65E-31	3.86E-29
GREM1	15q13.3	0.485691533	5.13E-31	4.24E-29
PLXNA4	7q32.3	0.485047308	6.30E-31	5.19E-29
COMP	19p13.11	0.484948295	6.50E-31	5.33E-29
PHC2	1p35.1	0.484681633	7.08E-31	5.78E-29
PDGFC	4q32.1	0.484379894	7.79E-31	6.34E-29
CERCAM	9q34.11	0.484121955	8.45E-31	6.85E-29
ADAM8	10q26.3	0.483269795	1.11E-30	8.94E-29
SLC39A13	11p11.2	0.48298676	1.21E-30	9.74E-29
SLC16A2	Xq13.2	0.482819572	1.28E-30	1.02E-28
INHBA-AS1	7p14.1	0.482709697	1.32E-30	1.05E-28
ORAI2	7q22.1	0.482395591	1.46E-30	1.16E-28
JPH2	20q13.12	0.482231171	1.54E-30	1.22E-28
STX2	12q24.33	0.481907484	1.70E-30	1.34E-28
MFAP4	17p11.2	0.481628075	1.86E-30	1.46E-28
NKD1	16q12.1	0.481558318	1.90E-30	1.49E-28
CAVIN3	11p15.4	0.481483217	1.95E-30	1.52E-28
GLI3	7p14.1	0.48136985	2.02E-30	1.57E-28
ZNF469	16q24.2	0.481040819	2.24E-30	1.73E-28
COLEC12	18p11.32	0.480833552	2.39E-30	1.84E-28
TTYH3	7p22.3	0.480531622	2.63E-30	2.01E-28
TNFAIP6	2q23.3	0.480233795	2.88E-30	2.20E-28
SEMA6B	19p13.3	0.48001899	3.08E-30	2.35E-28
SH3TC1	4p16.1	0.479935205	3.17E-30	2.40E-28
NNMT	11q23.2	0.479884343	3.22E-30	2.43E-28
SOGA3	6q22.33	0.479627616	3.49E-30	2.62E-28
AFAP1L2	10q25.3	0.479473245	3.66E-30	2.74E-28
JAK1	1p31.3	0.479389842	3.76E-30	2.81E-28
TSPAN11	12p11.21	0.4785999	4.81E-30	3.58E-28
ARHGAP22	10q11.22-q11.23	0.478585109	4.83E-30	3.58E-28
BHLHE41	12p12.1	0.478512203	4.94E-30	3.65E-28
PRDM8	4q21.21	0.477874562	6.02E-30	4.44E-28
PPP1R18	6p21.33	0.477382446	7.02E-30	5.15E-28
LIPG	18q21.1	0.476260992	9.94E-30	7.27E-28
F2R	5q13.3	0.47588024	1.12E-29	8.14E-28
C1R	12p13.31	0.475069781	1.44E-29	1.04E-27
TMEM204	16p13.3	0.474605148	1.66E-29	1.20E-27
ZNF423	16q12.1	0.474343297	1.80E-29	1.29E-27
HIC1	17p13.3	0.474300451	1.82E-29	1.31E-27
PLXND1	3q22.1	0.474133073	1.92E-29	1.37E-27
CAMK1G	1q32.2	0.473996421	2.00E-29	1.42E-27
FHOD3	18q12.2	0.473632464	2.23E-29	1.59E-27
ENOX1	13q14.11	0.47359984	2.26E-29	1.60E-27
ST6GALNAC5	1p31.1	0.473556123	2.29E-29	1.61E-27
CXXC5	5q31.2	0.473527458	2.31E-29	1.62E-27
RFLNA	12q24.31	0.47313745	2.60E-29	1.82E-27

SHROOM4	Xp11.22	0.47295713	2.75E-29	1.92E-27
LOXL3	2p13.1	0.472665696	3.00E-29	2.09E-27
CSDC2	22q13.2	0.471842841	3.86E-29	2.68E-27
PODN	1p32.3	0.471628027	4.12E-29	2.85E-27
PDGFRA	4q12	0.471597777	4.16E-29	2.87E-27
TRIM8	10q24.32	0.471472004	4.32E-29	2.97E-27
RFLNB	17p13.3	0.471337071	4.50E-29	3.08E-27
BEAN1	16q21	0.471277067	4.59E-29	3.13E-27
RUNX1T1	8q21.3	0.470744814	5.39E-29	3.66E-27
PLXDC1	17q12	0.470544075	5.73E-29	3.88E-27
TMEM26	10q21.2	0.469627597	7.57E-29	5.11E-27
NALCN	13q32.3-q33.1	0.468830515	9.63E-29	6.48E-27
ITGBL1	13q33.1	0.468736312	9.91E-29	6.64E-27
SYNE3	14q32.13	0.468596666	1.03E-28	6.91E-27
SYDE1	19p13.12	0.468464596	1.08E-28	7.16E-27
UACA	15q23	0.468453849	1.08E-28	7.16E-27
IL1R1	2q11.2-q12.1	0.467509889	1.43E-28	9.49E-27
TSPAN4	11p15.5	0.467483265	1.45E-28	9.53E-27
RARRES2	7q36.1	0.467292411	1.53E-28	1.01E-26
PDGFRL	8p22	0.467198798	1.57E-28	1.03E-26
INSYN2B	5q35.1	0.466901351	1.72E-28	1.12E-26
RFTN1	3p24.3	0.466621334	1.87E-28	1.22E-26
SPOCD1	1p35.2	0.46652604	1.93E-28	1.25E-26
GALNT17	7q11.22	0.466485017	1.95E-28	1.26E-26
CNRIP1	2p14	0.466463917	1.96E-28	1.27E-26
ANPEP	15q26.1	0.466446263	1.97E-28	1.27E-26
CCDC51	3p21.31	-0.465949853	2.29E-28	1.47E-26
BMF	15q15.1	0.465860438	2.35E-28	1.50E-26
ADAMTS6	5q12.3	0.465769592	2.42E-28	1.54E-26
PTPRU	1p35.3	0.465210297	2.86E-28	1.81E-26
CSF1	1p13.3	0.465081757	2.97E-28	1.88E-26
VEGFC	4q34.3	0.465058473	2.99E-28	1.88E-26
SP6	17q21.32	0.465039101	3.00E-28	1.89E-26
POU2F2	19q13.2	0.464735835	3.29E-28	2.06E-26
ACTN1	14q24.1 14q22-q24	0.464391154	3.64E-28	2.28E-26
H2AFZ	4q23	-0.46277892	5.88E-28	3.66E-26
HRH2	5q35.2	0.462623243	6.16E-28	3.82E-26
SFRP2	4q31.3	0.462481762	6.42E-28	3.97E-26
DPT	1q24.2	0.462384903	6.61E-28	4.08E-26
PGD	1p36.22	-0.462284896	6.81E-28	4.19E-26
COL13A1	10q22.1	0.462251556	6.87E-28	4.22E-26
CLEC5A	7q34	0.462215044	6.95E-28	4.25E-26
PDGFA	7p22.3	0.461681036	8.13E-28	4.96E-26
PLK2	5q11.2	0.461265453	9.19E-28	5.59E-26
DOK5	20q13.2	0.461122574	9.59E-28	5.81E-26
CILP2	19p13.11	0.460540592	1.14E-27	6.87E-26
COL18A1	21q22.3	0.460485817	1.16E-27	6.97E-26
TBXA2R	19p13.3	0.460466218	1.16E-27	6.98E-26
SLC9A3R1	17q25.1	-0.460248205	1.24E-27	7.42E-26
PRICKLE1	12q12	0.460000954	1.33E-27	7.96E-26
PTPN21	14q31.3	0.459990839	1.34E-27	7.96E-26
CTSK	1q21.3	0.459879667	1.38E-27	8.20E-26
LHFPL6	13q13.3-q14.11	0.459605124	1.50E-27	8.86E-26
HEYL	1p34.2	0.459288785	1.64E-27	9.69E-26
RIN3	14q32.12	0.458981893	1.80E-27	1.06E-25
ISM1	20p12.1	0.458562588	2.03E-27	1.19E-25
PRDM6	5q23.2	0.458492068	2.07E-27	1.21E-25
NBL1	1p36.13	0.457975809	2.41E-27	1.40E-25

MCRIP2	16p13.3	-0.457962163	2.42E-27	1.40E-25
VENTX	10q26.3	0.457961972	2.42E-27	1.40E-25
MRAS	3q22.3	0.457783906	2.55E-27	1.47E-25
VCAM1	1p21.2	0.457748885	2.57E-27	1.48E-25
ZFP36L2	2p21	0.457154377	3.06E-27	1.76E-25
LZTS1	8p21.3	0.457140826	3.07E-27	1.76E-25
SKI	1p36.33-p36.32	0.457032612	3.17E-27	1.81E-25
GNAI2	3p21.31	0.456910848	3.28E-27	1.87E-25
KIF26B	1q44	0.456680488	3.51E-27	2.00E-25
TNFRSF6B	20q13.33	0.456655009	3.54E-27	2.01E-25
TGFB2	1q41	0.456337774	3.88E-27	2.19E-25
MRVI1	11p15.4	0.456288761	3.93E-27	2.22E-25
ECM2	9q22.31	0.455878045	4.43E-27	2.49E-25
PTGS1	9q33.2	0.455645681	4.74E-27	2.66E-25
ROR1	1p31.3	0.455614071	4.78E-27	2.67E-25
RHOBTB1	10q21.2	0.455400816	5.09E-27	2.84E-25
MEIS3	19q13.32	0.45528869	5.25E-27	2.92E-25
PTH1R	3p21.31	0.455133203	5.49E-27	3.05E-25
INSRR	1q23.1	0.455049675	5.63E-27	3.11E-25
PTPRE	10q26.2	0.455016056	5.68E-27	3.13E-25
MRAP2	6q14.2	-0.454850599	5.96E-27	3.28E-25
LRP1	12q13.3	0.453998903	7.62E-27	4.18E-25
KIFC3	16q21	0.453974664	7.67E-27	4.20E-25
ASPN	9q22.31	0.453946609	7.73E-27	4.22E-25
MCAM	11q23.3	0.453311449	9.28E-27	5.05E-25
MFRP	11q23.3	0.452521411	1.16E-26	6.31E-25
LOXL1	15q24.1	0.452511201	1.17E-26	6.31E-25
SYNE1	6q25.2	0.452474843	1.18E-26	6.36E-25
FLNA	Xq28	0.452378653	1.21E-26	6.52E-25
RASA3	13q34	0.451980342	1.36E-26	7.29E-25
GPR68	14q32.11	0.451689959	1.48E-26	7.90E-25
DCBLD1	6q22.1	0.451580695	1.52E-26	8.13E-25
LOC100130691	2q31.2	-0.451251855	1.67E-26	8.90E-25
MAN1A1	6q22.31	0.451018918	1.79E-26	9.49E-25
JCAD	10p11.23	0.45094544	1.82E-26	9.67E-25
PEAK1	15q24.3	0.450606771	2.01E-26	1.06E-24
LOC100129034	9q33.3	0.450598755	2.01E-26	1.06E-24
FBLN1	22q13.31	0.450553141	2.04E-26	1.07E-24
CCBE1	18q21.32	0.450049685	2.35E-26	1.23E-24
MFAP2	1p36.13	0.44899864	3.17E-26	1.66E-24
CCDC8	19q13.32	0.448994346	3.17E-26	1.66E-24
WNT2	7q31.2	0.448918768	3.24E-26	1.69E-24
DLC1	8p22	0.448709116	3.44E-26	1.78E-24
ITGB1	10p11.22	0.448687263	3.46E-26	1.79E-24
TMEM52B	12p13.2	0.448255706	3.91E-26	2.02E-24
CILP	15q22.31	0.448081972	4.11E-26	2.11E-24
GEM	8q22.1	0.447935873	4.28E-26	2.20E-24
CYTH3	7p22.1	0.447808192	4.44E-26	2.27E-24
EXOSC7	3p21.31	-0.447681752	4.60E-26	2.35E-24
MSX2	5q35.2	0.447105375	5.41E-26	2.76E-24
ZNF697	1p12	0.447021495	5.54E-26	2.81E-24
FAM225B	9q32	0.446937339	5.67E-26	2.87E-24
FHL2	2q12.2	0.44691643	5.70E-26	2.88E-24
BMP1	8p21.3	0.445580838	8.29E-26	4.18E-24
CRIP2	14q32.33	0.445492282	8.50E-26	4.28E-24
PAPLN	14q24.2	0.445258545	9.07E-26	4.55E-24
COX5A	15q24.2	-0.444934609	9.93E-26	4.97E-24
ARSB	5q14.1	0.444909321	1.00E-25	4.99E-24

CREB3L1	11p11.2	0.444883842	1.01E-25	5.02E-24
CNN3	1p21.3	0.444671422	1.07E-25	5.31E-24
CNTN3	3p12.3	0.44465398	1.07E-25	5.32E-24
NTM	11q25	0.444565308	1.10E-25	5.44E-24
GSTP1	11q13.2	-0.444347449	1.17E-25	5.77E-24
MT2A	16q13	0.444143999	1.24E-25	6.09E-24
CDH2	18q12.1	0.443098504	1.65E-25	8.12E-24
METAP1	4q23	-0.442760026	1.82E-25	8.90E-24
HAS2	8q24.13	0.442742563	1.83E-25	8.92E-24
NEXN	1p31.1	0.442257795	2.09E-25	1.02E-23
DENND2A	7q34	0.441937257	2.28E-25	1.11E-23
ROR2	9q22.31	0.441689338	2.44E-25	1.19E-23
NAP1L3	Xq21.32	0.441669405	2.46E-25	1.19E-23
PMP22	17p12	0.441516998	2.56E-25	1.24E-23
DYSF	2p13.2	0.441393802	2.65E-25	1.28E-23
ADAMTS16	5p15.32	0.440961813	2.99E-25	1.43E-23
GAS6	13q34	0.440809123	3.11E-25	1.49E-23
UQCR11	19p13.3	-0.440427225	3.46E-25	1.65E-23
FIGN	2q24.3	0.440364455	3.52E-25	1.68E-23
PDE7A	8q13.1	0.440145907	3.74E-25	1.78E-23
AMZ1	7p22.3	0.439701192	4.22E-25	2.01E-23
GUCA1A	6p21.1	0.439673737	4.26E-25	2.02E-23
NDUFA8	9q33.2	-0.439421714	4.56E-25	2.15E-23
CDC42EP3	2p22.2	0.439227235	4.81E-25	2.27E-23
FAM180A	7q33	0.439130735	4.94E-25	2.32E-23
RBMS2	12q13.3	0.439104707	4.97E-25	2.33E-23
EVPLL	17p11.2	-0.438278044	6.23E-25	2.92E-23
BDH1	3q29	-0.43822201	6.33E-25	2.96E-23
IQSEC1	3p25.2-p25.1	0.438165804	6.43E-25	3.00E-23
SLC16A4	1p13.3	0.437928536	6.86E-25	3.19E-23
MICALCL	11p15.3	0.43786355	6.98E-25	3.24E-23
SNAI1	20q13.13	0.437857099	6.99E-25	3.24E-23
SPECC1	17p11.2	0.437713291	7.27E-25	3.36E-23
LAMB1	7q31.1	0.437306868	8.12E-25	3.74E-23
BMPR2	2q33.1-q33.2	0.437282439	8.18E-25	3.76E-23
FAM155A	13q33.3	0.43699635	8.84E-25	4.05E-23
GSTA4	6p12.2	-0.436400659	1.04E-24	4.75E-23
ZEB2	2q22.3	0.43633762	1.06E-24	4.82E-23
ADAMTS5	21q21.3	0.436115	1.12E-24	5.11E-23
IL11	19q13.42	0.436011737	1.15E-24	5.25E-23
PABPC5	Xq21.31	0.435974754	1.17E-24	5.29E-23
CALHM2	10q24.33	0.435890927	1.19E-24	5.40E-23
GSTA1	6p12.2	-0.435424073	1.35E-24	6.11E-23
FRMD4A	10p13	0.435413985	1.36E-24	6.11E-23
PRSS23	11q14.2	0.435396713	1.36E-24	6.13E-23
SH3PXD2B	5q35.1	0.43526197	1.41E-24	6.34E-23
SUSD5	3p22.3	0.435077282	1.49E-24	6.65E-23
ENPEP	4q25	0.434931317	1.55E-24	6.90E-23
CBR1	21q22.12	-0.434743326	1.63E-24	7.25E-23
ARSI	5q32	0.434668321	1.66E-24	7.38E-23
LSAMP	3q13.31	0.434344252	1.81E-24	8.03E-23
SMIM10	Xq26.3	0.434291672	1.84E-24	8.13E-23
ITGA1	5q11.2	0.434252356	1.86E-24	8.20E-23
LDLRAD4	18p11.21	0.434237469	1.86E-24	8.21E-23
GPX2	14q23.3	-0.433936684	2.02E-24	8.88E-23
FGD5	3p25.1	0.43392237	2.03E-24	8.88E-23
RUBCNL	13q14.13	0.43392237	2.03E-24	8.88E-23
ANAPC7	12q24.11	-0.433811485	2.09E-24	9.13E-23

ST5	11p15.4	0.433747262	2.13E-24	9.27E-23
PIR	Xp22.2	-0.433731708	2.14E-24	9.29E-23
AFAP1	4p16.1	0.433438366	2.31E-24	1.00E-22
MME	3q25.2	0.43342014	2.32E-24	1.01E-22
FAM20C	7p22.3	0.433408402	2.33E-24	1.01E-22
FOXC1	6p25.3	0.433307918	2.39E-24	1.03E-22
MATN3	2p24.1	0.433177851	2.48E-24	1.07E-22
SLC6A17	1p13.3	0.433070092	2.55E-24	1.10E-22
OMD	9q22.31	0.433047793	2.57E-24	1.10E-22
TMEM173	5q31.2	0.433016867	2.59E-24	1.11E-22
MINAR1	15q25.1	0.432747477	2.78E-24	1.19E-22
SH3RF3	2q13	0.432490684	2.98E-24	1.27E-22
SLFN11	17q12	0.432421977	3.04E-24	1.29E-22
ACTA2	10q23.31	0.432343154	3.10E-24	1.31E-22
PKNOX2	11q24.2	0.4323393	3.10E-24	1.31E-22
PTX3	3q25.32	0.432305461	3.13E-24	1.32E-22
MYOZ3	5q33.1	0.432275664	3.16E-24	1.33E-22
EPHB2	1p36.12	0.432148007	3.27E-24	1.37E-22
GJD3	17q21.2	0.432018704	3.38E-24	1.42E-22
LOC730101	6p12.2	-0.431952	3.44E-24	1.44E-22
BHLHE22	8q12.3	0.431764497	3.62E-24	1.51E-22
ASXL3	18q12.1	0.431665298	3.72E-24	1.55E-22
TMEM119	12q23.3	0.431530405	3.85E-24	1.60E-22
C5ORF46	5q32	0.431371227	4.02E-24	1.67E-22
S1PR3	9q22.1	0.431178567	4.23E-24	1.75E-22
PLAUR	19q13.31	0.431161677	4.25E-24	1.75E-22
ADGRE2	19p13.12	0.43116139	4.25E-24	1.75E-22
SALL4	20q13.2	0.43110318	4.32E-24	1.78E-22
NFE2L2	2q31.2	-0.431085144	4.34E-24	1.78E-22
PLA2G15	16q22.1	0.431052604	4.38E-24	1.79E-22
AKAP2	9q31.3	0.430969774	4.47E-24	1.83E-22
TMEM45A	3q12.2	0.430266384	5.39E-24	2.20E-22
LINC00341	14q32.13	0.430099683	5.64E-24	2.30E-22
GALNT10	5q33.2	0.429868645	5.99E-24	2.44E-22
ENG	9q34.11	0.429579407	6.47E-24	2.63E-22
PGR	11q22.1	0.429472587	6.66E-24	2.70E-22
TMEM169	2q35	0.429468293	6.67E-24	2.70E-22
C1QTNF3	5p13.2	0.42945936	6.68E-24	2.70E-22
KCNMB1	5q35.1	0.429390997	6.80E-24	2.74E-22
TAB2	6q25.1	0.429286447	6.99E-24	2.81E-22
COX6A1	12q24.31 12q24.2	-0.429189589	7.18E-24	2.88E-22
GPR176	15q14-q15.1	0.42918434	7.19E-24	2.88E-22
PRDX2	19p13.13	-0.42864518	8.29E-24	3.31E-22
JAM3	11q25	0.428619224	8.35E-24	3.33E-22
GBP6	1p22.2	-0.428421977	8.79E-24	3.50E-22
FERMT2	14q22.1	0.428339528	8.99E-24	3.57E-22
NRP1	10p11.22	0.428286853	9.11E-24	3.61E-22
TMPRSS11BNL	4q13.2	-0.428149571	9.45E-24	3.74E-22
KLF10	8q22.3	0.427980628	9.88E-24	3.90E-22
CCDC80	3q13.2	0.42758957	1.10E-23	4.32E-22
BMERB1	16p13.11	0.427568767	1.10E-23	4.33E-22
FYN	6q21	0.427517236	1.12E-23	4.38E-22
AKR1C2	10p15.1	-0.427439368	1.14E-23	4.46E-22
SULF2	20q13.12	0.427342224	1.17E-23	4.57E-22
CPQ	8q22.1	0.42721397	1.21E-23	4.72E-22
PRPH2	6p21.1	0.42680627	1.35E-23	5.24E-22
KCTD10	12q24.11	0.426734356	1.37E-23	5.33E-22
PTGER2	14q22.1	0.426522328	1.45E-23	5.63E-22

STRA6	15q24.1	0.426473708	1.47E-23	5.69E-22
ICAM1	19p13.2	0.426464776	1.47E-23	5.69E-22
IGFBP7	4q12	0.426141375	1.60E-23	6.18E-22
PCDH18	4q28.3	0.426074671	1.63E-23	6.28E-22
ATP5MC3	2q31.1	-0.426057113	1.64E-23	6.30E-22
IL32	16p13.3	0.425863683	1.72E-23	6.61E-22
COL4A1	13q34	0.425742109	1.78E-23	6.81E-22
FBXL7	5p15.1	0.425663573	1.82E-23	6.94E-22
MEG3	14q32.2	0.425656512	1.82E-23	6.94E-22
RNF19A	8q22.2	0.425536369	1.88E-23	7.15E-22
GLIS1	1p32.3	0.4251325	2.09E-23	7.93E-22
NTNG2	9q34.13	0.424570652	2.42E-23	9.16E-22
MEDAG	13q12.3	0.424268912	2.61E-23	9.89E-22
DBI	2q14.2	-0.424171482	2.68E-23	1.01E-21
FAT4	4q28.1	0.423928716	2.86E-23	1.08E-21
ILK	11p15.4	0.423869075	2.90E-23	1.09E-21
NDUFAF8	17q25.3	-0.42345206	3.23E-23	1.21E-21
JMJD1C	10q21.3	0.423204714	3.45E-23	1.29E-21
AMIGO2	12q13.11	0.423004413	3.63E-23	1.36E-21
PLA2G5	1p36.13	0.422767278	3.86E-23	1.44E-21
PTGER3	1p31.1	0.422689219	3.94E-23	1.47E-21
SUGCT	7p14.1	0.422642947	3.99E-23	1.48E-21
GALNT15	3p25.1	0.422610932	4.02E-23	1.49E-21
SAMD4A	14q22.2	0.422531765	4.10E-23	1.52E-21
SERPINE1	7q22.1	0.422495026	4.14E-23	1.53E-21
SULT1C4	2q12.3	0.422234797	4.43E-23	1.64E-21
PLPP7	9q34.13	0.422184507	4.49E-23	1.66E-21
PCDHGA12	5q31.3	0.422167903	4.51E-23	1.66E-21
COL4A2	13q34	0.422019896	4.68E-23	1.72E-21
MRPL12	17q25.3	-0.421903476	4.83E-23	1.77E-21
ALDH3A2	17p11.2	-0.421873417	4.87E-23	1.78E-21
LMOD1	1q32.1	0.421855858	4.89E-23	1.79E-21
PDE3A	12p12.2	0.42166176	5.14E-23	1.88E-21
SH2B3	12q24.12	0.421444855	5.43E-23	1.98E-21
SYNDIG1	20p11.21	0.421417372	5.47E-23	1.99E-21
ITGB6	2q24.2	0.421204285	5.78E-23	2.10E-21
MRPL58	17q25.1	-0.420829067	6.37E-23	2.31E-21
CSGALNACT1	8p21.3	0.420747095	6.51E-23	2.35E-21
ELK3	12q23.1	0.420391631	7.13E-23	2.57E-21
MMD	17q22	0.420093232	7.70E-23	2.77E-21
AKR1C1	10p15.1	-0.420039984	7.80E-23	2.81E-21
THBS1	15q14	0.419828518	8.24E-23	2.96E-21
MAML2	11q21	0.419583176	8.77E-23	3.14E-21
TMEM51	1p36.21	0.419396999	9.20E-23	3.29E-21
FNDC3A	13q14.2	0.419327147	9.37E-23	3.35E-21
ATP5PD	17q25.1	-0.419206718	9.66E-23	3.44E-21
HSPG2	1p36.12	0.419113772	9.89E-23	3.52E-21
DAB2	5p13.1	0.419090393	9.95E-23	3.54E-21
PDZD2	5p13.3	0.419061574	1.00E-22	3.56E-21
LRRRC32	11q13.5	0.418971873	1.03E-22	3.63E-21
TMEM200A	6q23.1	0.418648281	1.11E-22	3.94E-21
TALDO1	11p15.5	-0.418362287	1.20E-22	4.23E-21
LINC00922	16q21	0.418277411	1.23E-22	4.32E-21
AMOTL2	3q22.2	0.418169058	1.26E-22	4.43E-21
RRAS	19q13.33	0.417960636	1.33E-22	4.66E-21
DIO3	14q32.31	0.417671901	1.43E-22	5.01E-21
EVA1B	1p34.3	0.41751404	1.49E-22	5.21E-21
CYP26B1	2p13.2	0.417274767	1.58E-22	5.52E-21

COL22A1	8q24.23-q24.3	0.417201899	1.61E-22	5.62E-21
FRMD5	15q15.3	0.417177321	1.62E-22	5.64E-21
PLAU	10q22.2	0.41713176	1.64E-22	5.70E-21
SAMD14	17q21.33	0.416988869	1.70E-22	5.90E-21
CYP1B1	2p22.2	0.416954076	1.72E-22	5.94E-21
CHSY1	15q26.3	0.416721521	1.82E-22	6.29E-21
GPR84	12q13.13	0.416601283	1.88E-22	6.48E-21
IGFBP4	17q21.2	0.416566262	1.89E-22	6.52E-21
KLF5	13q22.1	-0.416349262	2.00E-22	6.88E-21
PTGDR	14q22.1	0.41631923	2.02E-22	6.92E-21
TMEM116	12q24.12-q24.13	-0.4162942	2.03E-22	6.95E-21
THEMIS2	1p35.3	0.416264236	2.05E-22	6.99E-21
CACNA1G	17q21.33	0.415581185	2.43E-22	8.30E-21
GPR132	14q32.33	0.415338502	2.59E-22	8.81E-21
MARS2	2q33.1	-0.415152802	2.71E-22	9.22E-21
CDC42EP5	19q13.42	0.414541022	3.16E-22	1.07E-20
L1CAM	Xq28	0.414388444	3.29E-22	1.11E-20
CFH	1q31.3	0.41436954	3.30E-22	1.12E-20
RSPO3	6q22.33	0.414303353	3.36E-22	1.13E-20
LOX	5q23.1	0.414218098	3.43E-22	1.16E-20
PNMA2	8p21.2	0.414046234	3.58E-22	1.21E-20
IQSEC3	12p13.33	0.414032162	3.59E-22	1.21E-20
LAMB2	3p21.31	0.413728177	3.88E-22	1.30E-20
PEAR1	1q23.1	0.413705466	3.90E-22	1.31E-20
RASL12	15q22.31	0.413462414	4.15E-22	1.39E-20
PTPRM	18p11.23	0.413331307	4.29E-22	1.43E-20
ITGAV	2q32.1	0.413299139	4.32E-22	1.44E-20
BMP8A	1p34.3	0.413225469	4.40E-22	1.47E-20
GLIPR1	12q21.2	0.413063339	4.59E-22	1.52E-20
IL7R	5p13.2	0.413023928	4.63E-22	1.54E-20
MMP1	11q22.2	0.412832121	4.86E-22	1.61E-20
HECW1	7p14.1-p13	0.412804081	4.89E-22	1.62E-20
DANCR	4q12	-0.411917074	6.11E-22	2.02E-20
SPRY1	4q28.1	0.41172332	6.41E-22	2.11E-20
PLXNC1	12q22	0.410942959	7.79E-22	2.56E-20
MGST2	4q31.1	-0.410780161	8.11E-22	2.66E-20
VASH1	14q24.3	0.410779111	8.12E-22	2.66E-20
EHD2	19q13.33	0.410736551	8.20E-22	2.69E-20
SLC2A3	12p13.31	0.410502087	8.69E-22	2.84E-20
SORBS1	10q24.1	0.410432436	8.85E-22	2.89E-20
TACO1	17q23.3	-0.410167331	9.45E-22	3.08E-20
COL14A1	8q24.12	0.410148341	9.49E-22	3.09E-20
ATP8B2	1q21.3	0.410117709	9.57E-22	3.11E-20
MARVELD1	10q24.2	0.409905671	1.01E-21	3.27E-20
TNF	6p21.33	0.409876184	1.02E-21	3.29E-20
ZNHIT3	17q12	-0.409694778	1.06E-21	3.44E-20
ABCC9	12p12.1	0.409490565	1.12E-21	3.61E-20
FAM20A	17q24.2	0.409368428	1.15E-21	3.71E-20
GNG2	14q22.1	0.409115824	1.23E-21	3.95E-20
LPAR4	Xq21.1	0.409065284	1.24E-21	3.99E-20
SUFU	10q24.32	0.409048644	1.25E-21	4.00E-20
ANK1	8p11.21	0.40897694	1.27E-21	4.07E-20
RHOJ	14q23.2	0.408812844	1.32E-21	4.23E-20
ANO6	12q12	0.408733163	1.35E-21	4.30E-20
MRPL4	19p13.2	-0.408672949	1.37E-21	4.36E-20
FZD4	11q14.2	0.408570174	1.40E-21	4.47E-20
ALDH1A3	15q26.3	0.408531336	1.42E-21	4.50E-20
LIMS3	2q13	0.408473058	1.44E-21	4.56E-20

DRAXIN	1p36.22	0.40804325	1.60E-21	5.06E-20
ADH7	4q23	-0.408036751	1.60E-21	5.06E-20
LRRC4	7q32.1	-0.408004294	1.61E-21	5.10E-20
CORO2B	15q23	0.407991412	1.62E-21	5.11E-20
DCN	12q21.33	0.4078748	1.67E-21	5.25E-20
CMTM1	16q21	0.407589723	1.79E-21	5.62E-20
C8ORF48	8p22	0.407493258	1.83E-21	5.74E-20
MAP7D1	1p34.3	0.407492521	1.83E-21	5.74E-20
CEBPB	20q13.13	0.407419806	1.86E-21	5.83E-20
SEMA3C	7q21.11	0.407372474	1.89E-21	5.89E-20
NXPH3	17q21.33	0.407362655	1.89E-21	5.90E-20
ADARB1	21q22.3	0.407268364	1.93E-21	6.03E-20
TWIST2	2q37.3	0.407132476	2.00E-21	6.22E-20
COA6	1q42.2	-0.406781688	2.18E-21	6.77E-20
TIMP1	Xp11.3	0.406778634	2.18E-21	6.77E-20
IGSF21	1p36.13	0.406628249	2.26E-21	7.01E-20
PCDHGB6	5q31.3	0.406552148	2.31E-21	7.13E-20
IFFO1	12p13.31	0.406425651	2.38E-21	7.34E-20
MEOX2	7p21.2	0.406355656	2.42E-21	7.46E-20
KCNE4	2q36.1	0.406326789	2.44E-21	7.50E-20
TIMM13	19p13.3	-0.406119236	2.57E-21	7.87E-20
COL23A1	5q35.3	0.406117232	2.57E-21	7.87E-20
HGF	7q21.11	0.40611017	2.57E-21	7.87E-20
COX7A1	19q13.12	0.405853663	2.74E-21	8.37E-20
CD93	20p11.21	0.405721211	2.83E-21	8.63E-20
HRH1	3p25.3	0.405614429	2.90E-21	8.85E-20
PLK3	1p34.1	0.405379679	3.08E-21	9.36E-20
PLCL1	2q33.1	0.405067347	3.32E-21	1.01E-19
NLRP3	1q44	0.404699	3.63E-21	1.10E-19
DIO2	14q31.1	0.404508242	3.80E-21	1.15E-19
MAMDC2	9q21.12	0.404496066	3.82E-21	1.15E-19
KEAP1	19p13.2	-0.404433237	3.87E-21	1.17E-19
EBPL	13q14.2	-0.404184555	4.12E-21	1.24E-19
TRUB2	9q34.11	-0.404020517	4.28E-21	1.29E-19
FOXC2	16q24.1	0.403895555	4.42E-21	1.33E-19
NDUFA7	19p13.2	-0.403885106	4.43E-21	1.33E-19
CDR1	Xq27.1	0.403111901	5.34E-21	1.60E-19
TRIO	5p15.2	0.402959372	5.54E-21	1.66E-19
NPTX2	7q22.1	0.402799246	5.76E-21	1.72E-19
ATP2B1	12q21.33	-0.402629577	6.00E-21	1.79E-19
TMEM14A	6p12.2	-0.402615263	6.03E-21	1.80E-19
SIK1	21q22.3	0.402577856	6.08E-21	1.81E-19
SAMD12	8q24.11-q24.12	-0.402497698	6.20E-21	1.84E-19
JAM2	21q21.3	0.402360856	6.41E-21	1.90E-19
DEPP1	10q11.21	0.402242431	6.59E-21	1.95E-19
SYTL2	11q14.1	0.401842117	7.26E-21	2.15E-19
TCEAL7	Xq22.2	0.401752129	7.42E-21	2.19E-19
DNM3	1q24.3	0.401748035	7.43E-21	2.19E-19
MMP3	11q22.2	0.401439179	8.01E-21	2.36E-19
INPP4B	4q31.21	0.401427965	8.03E-21	2.36E-19
GIPC3	19p13.3	0.401361262	8.16E-21	2.40E-19
SCN2B	11q23.3	0.401290577	8.30E-21	2.43E-19
CLDN9	16p13.3	0.401139623	8.61E-21	2.52E-19
C1S	12p13.31	0.401101033	8.69E-21	2.54E-19
PRELP	1q32.1	0.400659112	9.66E-21	2.82E-19
SERINC1	6q22.31	0.400652528	9.68E-21	2.82E-19
PALM2	9q31.3	0.40035118	1.04E-20	3.03E-19
RASGRP4	19q13.2	0.399938316	1.15E-20	3.34E-19

ENDOG	9q34.11	-0.39977756	1.19E-20	3.47E-19
ECSIT	19p13.2	-0.399497197	1.28E-20	3.70E-19
TPRN	9q34.3	-0.399441181	1.29E-20	3.75E-19
PRPSAP1	17q25.1	-0.399430875	1.30E-20	3.75E-19
PXN	12q24.23	0.399358542	1.32E-20	3.81E-19
ESR1	6q25.1-q25.2	0.39935692	1.32E-20	3.81E-19
NEGR1	1p31.1	0.399341079	1.33E-20	3.82E-19
NPAS3	14q13.1	0.399300203	1.34E-20	3.85E-19
METTL2A	17q23.2	-0.399253859	1.35E-20	3.89E-19
ALDH1A1	9q21.13	-0.399125605	1.40E-20	4.00E-19
FMC1	7q34	-0.399068063	1.42E-20	4.05E-19
CLDN14	21q22.13	0.399060266	1.42E-20	4.05E-19
PEG3	19q13.43	0.398646563	1.57E-20	4.47E-19
ATXN1	6p22.3	0.398538254	1.61E-20	4.58E-19
CUBN	10p13	0.398437064	1.65E-20	4.68E-19
LIPC	15q21.3	0.398260675	1.72E-20	4.88E-19
MRPL24	1q23.1	-0.398163475	1.76E-20	4.99E-19
HTRA1	10q26.13	0.398150536	1.76E-20	4.99E-19
TNFRSF12A	16p13.3	0.398018083	1.82E-20	5.15E-19
KCNJ12	17p11.2	0.398005869	1.82E-20	5.16E-19
DCLK3	3p22.2	0.397937734	1.85E-20	5.23E-19
SAMD11	1p36.33	0.397905479	1.87E-20	5.27E-19
DCXR	17q25.3	-0.39779364	1.92E-20	5.40E-19
MYCN	2p24.3	0.397515815	2.05E-20	5.76E-19
COQ2	4q21.22-q21.23	-0.397492473	2.06E-20	5.79E-19
PDGFB	22q13.1	0.39745602	2.08E-20	5.83E-19
PAPPA	9q33.1	0.397431018	2.09E-20	5.85E-19
SLC25A10	17q25.3	-0.397415855	2.10E-20	5.87E-19
KCNJ8	12p12.1	0.397380547	2.12E-20	5.91E-19
SOX2	3q26.33	-0.397192165	2.21E-20	6.16E-19
SYT7	11q12.2	0.397188921	2.22E-20	6.16E-19
DHRS11	17q12	-0.397188787	2.22E-20	6.16E-19
ALDH3A1	17p11.2	-0.397059332	2.29E-20	6.34E-19
DPYD	1p21.3	0.397021352	2.31E-20	6.39E-19
CORIN	4p12	0.396918787	2.36E-20	6.54E-19
MMP9	20q13.12	0.396707303	2.48E-20	6.87E-19
GRIP2	3p25.1	0.39654889	2.58E-20	7.12E-19
CACNA1H	16p13.3	0.396546509	2.58E-20	7.12E-19
SMARCD2	17q23.3	-0.396461865	2.63E-20	7.25E-19
GP5	3q29	0.396421255	2.66E-20	7.31E-19
LRCH1	13q14.13-q14.2	0.396181024	2.81E-20	7.73E-19
FXD5	19q13.12	0.396171768	2.82E-20	7.73E-19
ENTPD1	10q24.1	0.396137796	2.84E-20	7.79E-19
DIO3OS	14q32.31	0.396132234	2.85E-20	7.79E-19
MYH9	22q12.3	0.395849512	3.04E-20	8.31E-19
NUDT8	11q13.2	-0.395835103	3.06E-20	8.33E-19
LTBP1	2p22.3	0.395481547	3.32E-20	9.05E-19
KLF17	1p34.1	0.395459616	3.34E-20	9.08E-19
INSYN2A	10q26.2	0.395345135	3.43E-20	9.32E-19
AGTR1	3q24	0.395297148	3.47E-20	9.41E-19
LOC441204	7p15.2	0.395201001	3.55E-20	9.61E-19
TIAM2	6q25.2-q25.3	0.395024167	3.70E-20	1.00E-18
PRKCA	17q24.2	0.395018346	3.71E-20	1.00E-18
ADAMTS3	4q13.3	0.39481022	3.89E-20	1.05E-18
PDE1B	12q13.2	0.394523272	4.16E-20	1.12E-18
CYP7B1	8q12.3	0.394384713	4.30E-20	1.16E-18
DGKE	17q22	-0.394343107	4.35E-20	1.17E-18
TMEM255B	13q34	0.394316578	4.37E-20	1.17E-18

JAK3	19p13.11	0.394150345	4.55E-20	1.22E-18
QPCT	2p22.2	0.39412143	4.58E-20	1.23E-18
NMNAT2	1q25.3	0.394078488	4.62E-20	1.24E-18
TNFRSF10D	8p21.3	0.393911778	4.81E-20	1.28E-18
LRRN4CL	11q12.3	0.393898132	4.82E-20	1.29E-18
GCLC	6p12.1	-0.393726459	5.02E-20	1.34E-18
WWC2	4q35.1	0.393654412	5.11E-20	1.36E-18
HSPA12B	20p13	0.393505356	5.29E-20	1.40E-18
FNDC3B	3q26.31	0.393442851	5.37E-20	1.42E-18
IQGAP2	5q13.3	0.393210965	5.67E-20	1.50E-18
NCOR2	12q24.31	0.392921058	6.07E-20	1.60E-18
RGS3	9q32	0.392815039	6.22E-20	1.64E-18
PODXL	7q32.3	0.392686881	6.41E-20	1.69E-18
WIPF1	2q31.1	0.392685736	6.41E-20	1.69E-18
UGT1A6	2q37.1	-0.392680963	6.42E-20	1.69E-18
NDUFB9	8q24.13	-0.392511678	6.68E-20	1.75E-18
IRAK3	12q14.3	0.39234951	6.94E-20	1.82E-18
ACVRL1	12q13.13	0.39228294	7.05E-20	1.85E-18
CHRNA9	4p14	0.392162746	7.25E-20	1.90E-18
PGAP2	11p15.4	-0.392010888	7.51E-20	1.96E-18
MAP4	3p21.31	0.391972326	7.58E-20	1.98E-18
CCN4	8q24.22	0.391929671	7.65E-20	2.00E-18
PAM	5q21.1	0.391909631	7.69E-20	2.00E-18
ARMC7	17q25.1	-0.391712384	8.05E-20	2.09E-18
SERPINH1	11q13.5	0.391597299	8.27E-20	2.15E-18
POLDIP2	17q11.2	-0.391592051	8.28E-20	2.15E-18
ACTG2	2p13.1	0.391416084	8.63E-20	2.23E-18
TGM2	20q11.23	0.391397667	8.66E-20	2.24E-18
TKT	3p21.1	-0.391323329	8.82E-20	2.28E-18
PLXDC2	10p12.31	0.390941241	9.64E-20	2.49E-18
HAPLN4	19p13.11	0.390916735	9.69E-20	2.50E-18
KIFAP3	1q24.2	0.390812606	9.93E-20	2.56E-18
PIEZO1	16q24.3	0.390656392	1.03E-19	2.65E-18
TFEB	6p21.1	0.390527471	1.06E-19	2.72E-18
FCGR2A	1q23.3	0.390521841	1.06E-19	2.72E-18
KCND2	7q31.31	0.390456951	1.08E-19	2.76E-18
PDZD7	10q24.31	0.390282535	1.12E-19	2.87E-18
SLIT3	5q34-q35.1	0.390238614	1.13E-19	2.90E-18
DNAJA3	16p13.3	-0.390213708	1.14E-19	2.91E-18
PPFIBP1	12p11.23-p11.22	0.390187561	1.15E-19	2.93E-18
MIEN1	17q12	-0.390165422	1.15E-19	2.94E-18
GALNT2	1q42.13	0.390096047	1.17E-19	2.98E-18
SPSB4	3q23	0.390090855	1.17E-19	2.98E-18
LINC01119	2p21	0.390073715	1.18E-19	2.99E-18
HHIPL1	14q32.2	0.389966935	1.21E-19	3.06E-18
TPCN1	12q24.13	0.389824367	1.25E-19	3.16E-18
SHMT1	17p11.2	-0.389791159	1.26E-19	3.18E-18
LAMC2	1q25.3	0.389760622	1.27E-19	3.20E-18
GPX8	5q11.2	0.389679319	1.29E-19	3.25E-18
TENM3-AS1	4q34.3	0.389605962	1.31E-19	3.31E-18
SCN1B	19q13.11	0.38959792	1.32E-19	3.31E-18
MOXD1	6q23.2	0.389499249	1.35E-19	3.38E-18
PART1	5q12.1	-0.389458233	1.36E-19	3.41E-18
EHD1	11q13.1	0.38928368	1.42E-19	3.54E-18
TXN	9q31.3	-0.389223561	1.44E-19	3.59E-18
STK10	5q35.1	0.38921106	1.44E-19	3.60E-18
LSM4	19p13.11	-0.38918434	1.45E-19	3.61E-18
TSEN54	17q25.1	-0.389151514	1.46E-19	3.64E-18

ZC3H12B	Xq11.2-q12	0.389141494	1.46E-19	3.64E-18
LGI2	4p15.2	0.389132906	1.47E-19	3.64E-18
APLP1	19q13.12	0.389106949	1.47E-19	3.66E-18
CPN2	3q29	0.389104104	1.48E-19	3.66E-18
SH3KBP1	Xp22.12	0.389029368	1.50E-19	3.72E-18
ARMC9	2q37.1	0.388976415	1.52E-19	3.75E-18
UGT1A9	2q37.1	-0.388975858	1.52E-19	3.75E-18
ERRFI1	1p36.23	0.388635923	1.64E-19	4.06E-18
KIF21B	1q32.1	0.388495932	1.70E-19	4.18E-18
HDAC7	12q13.11	0.388273684	1.79E-19	4.40E-18
KCNN4	19q13.31	0.388228738	1.81E-19	4.44E-18
BLNK	10q24.1	0.388183696	1.83E-19	4.48E-18
SNRNP25	16p13.3	-0.388121192	1.85E-19	4.54E-18
PDE2A	11q13.4	0.387988358	1.91E-19	4.68E-18
MMP19	12q13.2	0.387694444	2.04E-19	5.00E-18
MOCS1	6p21.2	0.387584894	2.10E-19	5.12E-18
ADGRB2	1p35.2	0.387531264	2.12E-19	5.18E-18
CORO2A	9q22.33	-0.387418279	2.18E-19	5.31E-18
SYPL2	1p13.3	0.386968351	2.41E-19	5.88E-18
LSM7	19p13.3	-0.386859651	2.48E-19	6.01E-18
CTSO	4q32.1	0.386858888	2.48E-19	6.01E-18
NTRK1	1q23.1	0.386853631	2.48E-19	6.01E-18
SLC15A4	12q24.33	0.386450089	2.72E-19	6.59E-18
RELN	7q22.1	0.386267479	2.84E-19	6.86E-18
SNAP25	20p12.2	0.386192742	2.88E-19	6.97E-18
KCTD12	13q22.3	0.386094234	2.95E-19	7.12E-18
TEX264	3p21.2	-0.385860725	3.11E-19	7.50E-18
DIXDC1	11q23.1	0.385800988	3.15E-19	7.60E-18
NAV2	11p15.1	0.385728368	3.21E-19	7.71E-18
CHAC2	2p16.2	-0.385700503	3.23E-19	7.75E-18
AGPAT4	6q26	0.385665291	3.25E-19	7.81E-18
IGFL2	19q13.32	0.385603642	3.30E-19	7.91E-18
ADAMTSL2	9q34.2	0.385452203	3.42E-19	8.17E-18
LRFN5	14q21.1	0.385449439	3.42E-19	8.17E-18
UGT1A7	2q37.1	-0.385306308	3.53E-19	8.44E-18
PRDX1	1p34.1	-0.384776678	3.99E-19	9.51E-18
SLC2A14	12p13.31	0.384756847	4.00E-19	9.54E-18
LINC00242	6q27	0.384702206	4.05E-19	9.65E-18
NDUFB7	19p13.12	-0.384651001	4.10E-19	9.75E-18
GSDME	7p15.3	0.384575327	4.17E-19	9.90E-18
OXLD1	17q25.3	-0.384573037	4.18E-19	9.90E-18
SLC45A1	1p36.23	0.384554143	4.19E-19	9.93E-18
FBLIM1	1p36.21	0.384366916	4.38E-19	1.04E-17
WDR86	7q36.1	0.384168008	4.58E-19	1.08E-17
MICAL1	6q21	0.383860963	4.91E-19	1.16E-17
ATG4D	19p13.2	-0.383763533	5.02E-19	1.18E-17
DNAJC19	3q26.33	-0.383687191	5.11E-19	1.20E-17
LOC401463	8q12.3	0.383483722	5.35E-19	1.26E-17
PCDH12	5q31.3	0.383419233	5.43E-19	1.27E-17
GPR39	2q21.2	0.383361114	5.50E-19	1.29E-17
SRSF9	12q24.31	-0.383309588	5.56E-19	1.30E-17
RNASE4	14q11.2	0.383070544	5.87E-19	1.38E-17
IMP3	15q24.2	-0.382929313	6.06E-19	1.42E-17
TNFRSF19	13q12.12	0.382883699	6.13E-19	1.43E-17
ZNF300P1	5q33.1	0.382794698	6.25E-19	1.46E-17
ARL14	3q25.33	0.382777147	6.28E-19	1.46E-17
RAB3IL1	11q12.2-q12.3	0.382714603	6.37E-19	1.48E-17
TRABD2A	2p11.2	0.382619271	6.51E-19	1.51E-17

OSTF1	9q21.13	-0.382579097	6.56E-19	1.52E-17
ITGA4	2q31.3	0.382489396	6.70E-19	1.55E-17
MYLK	3q21.1	0.382166758	7.21E-19	1.67E-17
PIEZO2	18p11.22-p11.21	0.381961209	7.55E-19	1.75E-17
TENT5A	6q14.1	0.381937257	7.59E-19	1.75E-17
DISP3	1p36.22	0.38184159	7.75E-19	1.79E-17
HEG1	3q21.2	0.381765394	7.89E-19	1.82E-17
GJA5	1q21.2	0.38139781	8.57E-19	1.97E-17
DKC1	Xq28	-0.38138216	8.60E-19	1.98E-17
NLRP12	19q13.42	0.381331129	8.70E-19	2.00E-17
FLT4	5q35.3	0.381324999	8.71E-19	2.00E-17
FMNL1	17q21.31	0.381091681	9.18E-19	2.11E-17
SLC43A3	11q12.1	0.381070592	9.23E-19	2.11E-17
EPYC	12q21.33	0.381050178	9.27E-19	2.12E-17
HOGA1	10q24.2	-0.38104592	9.28E-19	2.12E-17
LOC283731	15q24.1	0.381000719	9.37E-19	2.14E-17
SKIL	3q26.2	0.380955316	9.47E-19	2.16E-17
ENAH	1q42.12	0.380734308	9.95E-19	2.27E-17
CGNL1	15q21.3	0.380662929	1.01E-18	2.30E-17
MRPL34	19p13.11	-0.380558532	1.04E-18	2.35E-17
SOX11	2p25.2	0.380445691	1.06E-18	2.41E-17
RIMS3	1p34.2	0.380289334	1.10E-18	2.49E-17
XPA	9q22.33	-0.380279123	1.10E-18	2.50E-17
C2ORF27A	2q21.2	0.380168055	1.13E-18	2.56E-17
STARD8	Xq13.1	0.380102775	1.15E-18	2.59E-17
ITGAM	16p11.2	0.380080636	1.15E-18	2.60E-17
GPR88	1p21.2	0.379904744	1.20E-18	2.70E-17
NT5E	6q14.3	0.379891023	1.20E-18	2.71E-17
HDHD3	9q32	-0.379842641	1.22E-18	2.73E-17
PAM16	16p13.3	-0.379827659	1.22E-18	2.74E-17
GJC2	1q42.13	0.379764496	1.24E-18	2.78E-17
C1QTNF7	4p15.32	0.379718241	1.25E-18	2.80E-17
CDH4	20q13.33	0.379603624	1.28E-18	2.87E-17
CLIP3	19q13.12	0.379411465	1.34E-18	2.99E-17
PIK3R5	17p13.1	0.379237445	1.39E-18	3.11E-17
TK2	16q21	0.379205955	1.40E-18	3.13E-17
DOCK1	10q26.2	0.379198798	1.40E-18	3.13E-17
NTS	12q21.31	-0.379193348	1.41E-18	3.13E-17
AOC3	17q21.31	0.379053177	1.45E-18	3.23E-17
LOC100130872	4p16.3	0.378919102	1.49E-18	3.32E-17
KIAA1211	4q12	0.378875778	1.51E-18	3.35E-17
TMEM106A	17q21.31	0.378865949	1.51E-18	3.35E-17
PLEKHG2	19q13.2	0.378853353	1.52E-18	3.36E-17
MRPS7	17q25.1	-0.378834554	1.52E-18	3.37E-17
CCDC102B	18q22.1-q22.2	0.378652489	1.59E-18	3.51E-17
CYTL1	4p16.2	0.378569793	1.62E-18	3.57E-17
ZYX	7q34	0.378459241	1.66E-18	3.65E-17
STAB1	3p21.1	0.37843548	1.66E-18	3.67E-17
TRAP1	16p13.3	-0.378239664	1.74E-18	3.83E-17
SLC41A2	12q23.3	0.378205788	1.75E-18	3.85E-17
PRPSAP2	17p11.2	-0.378097001	1.80E-18	3.94E-17
TAFA3	1p13.2	0.378094638	1.80E-18	3.94E-17
NOG	17q22	0.37807485	1.80E-18	3.95E-17
PRTG	15q21.3	0.377997221	1.84E-18	4.02E-17
MDFI	6p21.1	0.377764344	1.93E-18	4.23E-17
CYP2C18	10q23.33	-0.37765406	1.98E-18	4.33E-17
RAD23A	19p13.13	-0.377598588	2.01E-18	4.38E-17
LRCH2	Xq23	0.377516902	2.04E-18	4.45E-17

NAXE	1q22	-0.377473388	2.06E-18	4.49E-17
ECE2	3q27.1	-0.377368132	2.11E-18	4.59E-17
RSU1	10p13	0.377009805	2.29E-18	4.97E-17
SCG5	15q13.3	0.37684778	2.37E-18	5.14E-17
PPFIA2	12q21.31	0.376809064	2.39E-18	5.18E-17
PITX1	5q31.1	-0.376803397	2.39E-18	5.18E-17
DRAM1	12q23.2	0.376757688	2.42E-18	5.23E-17
NEK6	9q33.3	0.376517881	2.55E-18	5.51E-17
ZEB1	10p11.22	0.376439154	2.59E-18	5.60E-17
CSPG4	15q24.2	0.376390581	2.62E-18	5.65E-17
MRPL50	9q31.1	-0.376369206	2.63E-18	5.67E-17
LOC728392	17p13.2	0.376215187	2.73E-18	5.86E-17
HAS2-AS1	8q24.13	0.376066258	2.82E-18	6.05E-17
KATNAL1	13q12.3	0.37605487	2.82E-18	6.06E-17
FAM43B	1p36.12	0.376053513	2.83E-18	6.06E-17
VWA2	10q25.3	0.37595659	2.89E-18	6.18E-17
PTAFR	1p35.3	0.37593177	2.90E-18	6.21E-17
LINC00654	20p12.3	0.37592385	2.91E-18	6.22E-17
STRBP	9q33.3	-0.375869075	2.94E-18	6.28E-17
PDE7B	6q23.3	0.37585915	2.95E-18	6.29E-17
MT1M	16q13	0.375821552	2.97E-18	6.34E-17
CRB3	19p13.3	-0.375631271	3.10E-18	6.60E-17
FLI1	11q24.3	0.375496052	3.20E-18	6.80E-17
COX7B	Xq21.1	-0.375298996	3.34E-18	7.09E-17
CLCN4	Xp22.2	0.375184102	3.42E-18	7.26E-17
UQCR10	22q12.2	-0.375108906	3.48E-18	7.37E-17
FZD1	7q21.13	0.375107093	3.48E-18	7.37E-17
PLPP3	1p32.2	0.375046401	3.53E-18	7.46E-17
LINC00346	13q34	0.375033432	3.54E-18	7.48E-17
LYPLAL1	1q41	-0.37502722	3.54E-18	7.48E-17
BASP1	5p15.1	0.37493437	3.62E-18	7.63E-17
EDA2R	Xq12	0.374875119	3.66E-18	7.72E-17
DCLK2	4q31.23-q31.3	0.37474762	3.77E-18	7.93E-17
ADAMTS4	1q23.3	0.374743231	3.77E-18	7.93E-17
TEFM	17q11.2	-0.374626867	3.87E-18	8.13E-17
CD70	19p13.3	0.374430282	4.04E-18	8.48E-17
PRICKLE2	3p14.1	0.374417539	4.05E-18	8.49E-17
MRPS33	7q34	-0.374397882	4.07E-18	8.52E-17
POLR2D	2q14.3	-0.374275163	4.18E-18	8.74E-17
HOXB5	17q21.32	0.374269628	4.19E-18	8.75E-17
SURF2	9q34.2	-0.374154639	4.29E-18	8.96E-17
IFITM2	11p15.5	0.374134695	4.31E-18	8.99E-17
NLRP1	17p13.2	0.374065892	4.38E-18	9.12E-17
FAT3	11q14.3	0.373955745	4.49E-18	9.33E-17
CISD3	17q12	-0.373924184	4.52E-18	9.39E-17
EFHD1	2q37.1	0.373777513	4.66E-18	9.68E-17
TNFRSF1B	1p36.22	0.373585419	4.87E-18	1.01E-16
OLR1	12p13.2	0.373575208	4.88E-18	1.01E-16
ZC4H2	Xq11.2	0.373463902	5.00E-18	1.03E-16
FOPNL	16p13.11	-0.373305723	5.17E-18	1.07E-16
TMEM176A	7q36.1	0.373223084	5.27E-18	1.09E-16
CYP4F3	19p13.12	-0.373085192	5.43E-18	1.12E-16
CD300E	17q25.1	0.372988026	5.55E-18	1.14E-16
FCGR2C	1q23.3	0.372913997	5.64E-18	1.16E-16
RAB8B	15q22.2	0.372781258	5.80E-18	1.19E-16
SLC1A7	1p32.3	0.372668074	5.95E-18	1.22E-16
FLRT2	14q31.3	0.372570938	6.08E-18	1.25E-16
TREM1	6p21.1	0.372540592	6.12E-18	1.25E-16

FIBCD1	9q34.12	0.372523054	6.14E-18	1.26E-16
ALOX5	10q11.21	0.372498318	6.17E-18	1.26E-16
OSBPL5	11p15.4	0.372286375	6.46E-18	1.32E-16
DOCK11	Xq24	0.37227626	6.48E-18	1.32E-16
COX8A	11q13.1	-0.371813727	7.17E-18	1.46E-16
CENPX	17q25.3	-0.371808956	7.17E-18	1.46E-16
LUM	12q21.33	0.371756376	7.26E-18	1.48E-16
SIAH2	3q25.1	-0.371706945	7.34E-18	1.49E-16
UGDH	4p14	-0.371409786	7.83E-18	1.59E-16
ALG1L	3q21.2	-0.371409023	7.83E-18	1.59E-16
MZT2B	2q21.1	-0.371258344	8.09E-18	1.64E-16
ABCA6	17q24.2-q24.3	0.371159222	8.26E-18	1.67E-16
FBLN7	2q13-q14.1	0.371129136	8.32E-18	1.68E-16
NCBP2AS2	3q29	-0.371057089	8.45E-18	1.71E-16
XPNPEP2	Xq26.1	0.37092945	8.69E-18	1.75E-16
CASP14	19p13.12	0.370921816	8.70E-18	1.75E-16
SOD1	21q22.11	-0.370920056	8.70E-18	1.75E-16
TMEM200B	1p35.3	0.37087616	8.79E-18	1.77E-16
COX5B	2q11.2	-0.370874442	8.79E-18	1.77E-16
SMAD5-AS1	5q31.1	-0.370619802	9.29E-18	1.87E-16
ATP5F1B	12q13.3	-0.370509531	9.52E-18	1.91E-16
FGF5	4q21.21	0.370289312	9.98E-18	2.00E-16
F5	1q24.2	0.370078393	1.04E-17	2.09E-16
FOXL1	16q24.1	0.370067992	1.05E-17	2.10E-16
FYB1	5p13.1	0.369864637	1.09E-17	2.19E-16
C17ORF53	17q21.31	-0.36983974	1.10E-17	2.20E-16
PDZRN4	12q12	0.369770025	1.12E-17	2.23E-16
PAG1	8q21.13	0.369749457	1.12E-17	2.24E-16
NDUFA1	Xq24	-0.369565379	1.17E-17	2.33E-16
ITPR2	12p11.23	0.369479972	1.19E-17	2.37E-16
PCDHGA3	5q31.3	0.369435681	1.20E-17	2.39E-16
PCDHGA9	5q31.3	0.369401063	1.21E-17	2.40E-16
ATP5MPL	14q32.33	-0.3693396	1.23E-17	2.43E-16
ANXA10	4q32.3	-0.369323028	1.23E-17	2.44E-16
C15ORF61	15q23	-0.369244173	1.25E-17	2.48E-16
SLC35G1	10q23.33	-0.369197319	1.26E-17	2.50E-16
PLEKHO2	15q22.31	0.369110385	1.29E-17	2.55E-16
FAM225A	9q32	0.369014958	1.31E-17	2.60E-16
HTR1B	6q14.1	0.368925667	1.34E-17	2.64E-16
SNX9	6q25.3	0.36890913	1.35E-17	2.65E-16
RERE	1p36.23	0.368905504	1.35E-17	2.65E-16
SDC3	1p35.2	0.368870864	1.36E-17	2.67E-16
CSF1R	5q32	0.368775342	1.38E-17	2.72E-16
MRPL16	11q12.1	-0.368738086	1.40E-17	2.74E-16
SYT11	1q22	0.36873698	1.40E-17	2.74E-16
LINC00310	21q22.11	0.368716115	1.40E-17	2.75E-16
LDB2	4p15.32	0.368565212	1.45E-17	2.84E-16
GSTM5	1p13.3	0.368400983	1.50E-17	2.93E-16
TAFA5	22q13.32	0.368080922	1.61E-17	3.14E-16
NTRK2	9q21.33	-0.368069661	1.61E-17	3.15E-16
LHFPL2	5q14.1	0.367956008	1.65E-17	3.22E-16
CNN1	19p13.2	0.367955722	1.65E-17	3.22E-16
HAPLN3	15q26.1	0.367903619	1.67E-17	3.25E-16
SEPTIN4	17q22	0.367805425	1.71E-17	3.32E-16
BMP2	20p12.3	0.367803144	1.71E-17	3.32E-16
GLTP	12q24.11	-0.367780614	1.72E-17	3.33E-16
SIRT5	6p23	-0.367486604	1.83E-17	3.54E-16
FAM83D	20q11.23	-0.367356633	1.88E-17	3.64E-16

APTX	9p21.1	-0.367275712	1.91E-17	3.70E-16
MRRF	9q33.2	-0.367226853	1.93E-17	3.73E-16
SERPINF1	17p13.3	0.367019873	2.02E-17	3.90E-16
PDLIM3	4q35.1	0.366957177	2.05E-17	3.95E-16
GADD45GIP1	19p13.13	-0.366932271	2.06E-17	3.97E-16
RSP01	1p34.3	0.366843849	2.10E-17	4.04E-16
UBE2QL1	5p15.31	0.366782794	2.12E-17	4.09E-16
GYPC	2q14.3	0.366743517	2.14E-17	4.12E-16
RASGRP3	2p22.3	0.366677386	2.17E-17	4.17E-16
SEPTIN8	5q31.1	0.366597991	2.21E-17	4.24E-16
GSR	8p12	-0.366506859	2.25E-17	4.32E-16
DLG2	11q14.1	0.366405516	2.30E-17	4.41E-16
ETFB	19q13.41	-0.36639855	2.31E-17	4.41E-16
PTGFR	1p31.1	0.366372554	2.32E-17	4.43E-16
FLNC	7q32.1	0.366359806	2.33E-17	4.44E-16
C8ORF31	8q24.3	0.366277628	2.37E-17	4.51E-16
ST8SIA1	12p12.1	0.366257891	2.38E-17	4.53E-16
FOXE1	9q22.33	-0.366216476	2.40E-17	4.57E-16
POM121L9P	22q11.23	0.366191422	2.41E-17	4.59E-16
TCF7	5q31.1	0.366186893	2.41E-17	4.59E-16
SCT	11p15.5	0.365926405	2.55E-17	4.84E-16
SNRPD1	18q11.2	-0.365900804	2.57E-17	4.87E-16
CCDC58	3q21.1	-0.365790586	2.63E-17	4.98E-16
KCNT2	1q31.3	0.365660489	2.70E-17	5.11E-16
ADAMTS15	11q24.3	0.365529673	2.78E-17	5.25E-16
CNIH3	1q42.12	0.365521006	2.78E-17	5.26E-16
DIRC1	2q32.2	0.365471684	2.81E-17	5.31E-16
MITF	3p13	0.365423671	2.84E-17	5.36E-16
CHCHD5	2q14.1	-0.365373381	2.87E-17	5.41E-16
DNAJB3	2q37.1	-0.365206073	2.98E-17	5.60E-16
KMT5A	12q24.31	-0.364939953	3.15E-17	5.92E-16
RAB11FIP2	10q26.11	0.364859755	3.20E-17	6.02E-16
BCAT1	12p12.1	0.364805783	3.24E-17	6.08E-16
AFAP1L1	5q32	0.364805687	3.24E-17	6.08E-16
HLX	1q41	0.364760837	3.27E-17	6.13E-16
THBS3	1q22	0.36466751	3.34E-17	6.25E-16
RNF144B	6p22.3	0.36454002	3.43E-17	6.41E-16
ABCB4	7q21.12	0.36451317	3.45E-17	6.44E-16
ADAM33	20p13	0.364365588	3.56E-17	6.64E-16
VPS25	17q21.2	-0.36434449	3.57E-17	6.66E-16
ADAMTS18	16q23.1	0.364222686	3.67E-17	6.83E-16
GATA6	18q11.2	0.364137987	3.73E-17	6.95E-16
NRP2	2q33.3	0.364117947	3.75E-17	6.97E-16
ZNF154	19q13.43	0.364059841	3.80E-17	7.05E-16
COX7C	5q14.3	-0.364013932	3.83E-17	7.12E-16
EXTL1	1p36.11	0.363831893	3.98E-17	7.39E-16
RPSAP52	12q14.3	0.363817984	4.00E-17	7.40E-16
KCNF1	2p25.1	0.363701698	4.10E-17	7.58E-16
NDUFV2	18p11.22	-0.363549586	4.23E-17	7.82E-16
ATP8A2	13q12.13	0.363454047	4.32E-17	7.97E-16
SH3PXD2A	10q24.33	0.363309588	4.45E-17	8.21E-16
RIPOR1	16q22.1	0.363272753	4.48E-17	8.27E-16
CFI	4q25	0.363050695	4.70E-17	8.66E-16
IMPA2	18p11.21	-0.363027125	4.72E-17	8.70E-16
IGLON5	19q13.41	0.362952501	4.80E-17	8.83E-16
TP63	3q28	-0.362936279	4.81E-17	8.85E-16
CHCHD10	22q11.23	-0.362894482	4.86E-17	8.92E-16
SEMA5A	5p15.31	0.362860566	4.89E-17	8.97E-16

EBF1	5q33.3	0.362849115	4.90E-17	8.99E-16
NOL4L	20q11.21	0.362846005	4.91E-17	8.99E-16
SEMA7A	15q24.1	0.362822053	4.93E-17	9.02E-16
ADAM12	10q26.2	0.362755254	5.00E-17	9.14E-16
RAI2	Xp22.13	0.362754586	5.00E-17	9.14E-16
BLMH	17q11.2	-0.362675764	5.09E-17	9.28E-16
AFG3L2	18p11.21	-0.362524131	5.25E-17	9.57E-16
HYPK	15q15.3	-0.361972279	5.90E-17	1.07E-15
RPS6KA2	6q27	0.361954147	5.92E-17	1.08E-15
CHRD	3q27.1	0.361889066	6.00E-17	1.09E-15
KIAA1614	1q25.3	0.361815588	6.10E-17	1.11E-15
LINC00623	1p11.2	0.361785624	6.14E-17	1.11E-15
MCHR1	22q13.2	0.361783924	6.14E-17	1.11E-15
DMRT2	9p24.3	-0.361557236	6.44E-17	1.17E-15
WFDC1	16q24.1	0.361215354	6.92E-17	1.25E-15
ZBTB47	3p22.1	0.36120081	6.94E-17	1.25E-15
CCDC186	10q25.3	0.360851301	7.47E-17	1.35E-15
TMEM97	17q11.2	-0.360811699	7.53E-17	1.36E-15
GDF5	20q11.22	0.360756399	7.62E-17	1.37E-15
PTPRR	12q15	0.360705086	7.70E-17	1.39E-15
PARVA	11p15.3	0.360692798	7.72E-17	1.39E-15
ANXA5	4q27	0.360371878	8.26E-17	1.48E-15
TOMM22	22q13.1	-0.36035346	8.29E-17	1.49E-15
CDH6	5p13.3	0.35981659	9.27E-17	1.66E-15
SNRPGP15	19p13.12	-0.359771835	9.36E-17	1.68E-15
ADD1	4p16.3	0.359709139	9.48E-17	1.70E-15
ATP5F1D	19p13.3	-0.359606365	9.69E-17	1.73E-15
SLC11A1	2q35	0.359533841	9.84E-17	1.76E-15
PARPBP	12q23.2	-0.359398717	1.01E-16	1.81E-15
BOLA3	2p13.1	-0.35930997	1.03E-16	1.84E-15
NT5C3B	17q21.2	-0.359240976	1.05E-16	1.87E-15
UNC119	17q11.2	-0.359217024	1.05E-16	1.87E-15
FAM78B	1q24.1	0.359182926	1.06E-16	1.89E-15
PHF20	20q11.22-q11.23	0.35913677	1.07E-16	1.90E-15
EPCAM	2p21	-0.35913448	1.07E-16	1.90E-15
ABCC5	3q27.1	-0.359134194	1.07E-16	1.90E-15
ADAMTSL4	1q21.2	0.359100317	1.08E-16	1.91E-15
ADCY7	16q12.1	0.359060811	1.09E-16	1.93E-15
PSD	10q24.32	0.359022124	1.09E-16	1.94E-15
TRANK1	3p22.2	0.358783787	1.15E-16	2.04E-15
RUNX1	21q22.12	0.358700575	1.17E-16	2.07E-15
NHSL2	Xq13.1	0.358350138	1.26E-16	2.22E-15
PCDHGA11	5q31.3	0.35834822	1.26E-16	2.22E-15
DENND3	8q24.3	0.358327075	1.26E-16	2.23E-15
MT1F	16q13	0.358324594	1.27E-16	2.23E-15
SEC14L2	22q12.2	0.358288809	1.27E-16	2.25E-15
ME1	6q14.2	-0.358124293	1.32E-16	2.32E-15
HDAC9	7p21.1	0.358046902	1.34E-16	2.36E-15
PKIG	20q13.12	0.357920271	1.38E-16	2.42E-15
SOBP	6q21	0.357902617	1.38E-16	2.42E-15
NFKBIE	6p21.1	0.35788086	1.39E-16	2.43E-15
TNFAIP3	6q23.3	0.35783725	1.40E-16	2.45E-15
SPRY4	5q31.3	0.357831429	1.40E-16	2.45E-15
FMN1	15q13.3	0.357728688	1.43E-16	2.50E-15
PCARE	2p23.2	-0.357592818	1.47E-16	2.57E-15
NOTCH2	1p12	0.357500107	1.50E-16	2.62E-15
NID1	1q42.3	0.357411074	1.53E-16	2.67E-15
CNTNAP1	17q21.2	0.357356395	1.55E-16	2.70E-15

EPSTI1	13q14.11	0.357264785	1.58E-16	2.75E-15
PTPRB	12q15	0.357247895	1.58E-16	2.75E-15
GNA12	7p22.3-p22.2	0.357062194	1.64E-16	2.86E-15
IGIP	5q31.3	0.357034521	1.65E-16	2.87E-15
TIMM44	19p13.2	-0.357007706	1.66E-16	2.89E-15
STMN3	20q13.33	0.356935277	1.69E-16	2.93E-15
EYA4	6q23.2	0.356885883	1.71E-16	2.95E-15
RTL3	Xq21.1	0.356702614	1.77E-16	3.06E-15
HLF	17q22	-0.356699955	1.77E-16	3.06E-15
TAPBP	6p21.32	0.356680774	1.78E-16	3.07E-15
WNT7A	3p25.1	0.356650801	1.79E-16	3.09E-15
TMEM246	9q31.1	-0.35662409	1.80E-16	3.10E-15
FAM13C	10q21.1	0.356613498	1.80E-16	3.11E-15
TMEM47	Xp21.1	0.356481905	1.85E-16	3.19E-15
CDK18	1q32.1	0.356452513	1.87E-16	3.21E-15
TMEM176B	7q36.1	0.356323306	1.92E-16	3.29E-15
TMEM177	2q14.2	-0.356237708	1.95E-16	3.35E-15
TLL1	4q32.3	0.356164134	1.98E-16	3.40E-15
UNC5A	5q35.2	0.356133859	1.99E-16	3.42E-15
MEGF6	1p36.32	0.356106019	2.00E-16	3.43E-15
ALOX5AP	13q12.3	0.355871556	2.10E-16	3.60E-15
NME2	17q21.33	-0.355824033	2.12E-16	3.63E-15
PALMD	1p21.2	0.355739294	2.16E-16	3.69E-15
WTIP	19q13.11	0.35568013	2.19E-16	3.73E-15
PLN	6q22.31	0.355525825	2.26E-16	3.85E-15
STK4	20q13.12	0.355364935	2.33E-16	3.98E-15
MAN1C1	1p36.11	0.355281246	2.37E-16	4.04E-15
PSAT1	9q21.2	-0.354970251	2.53E-16	4.31E-15
PIGW	17q12	-0.35486385	2.59E-16	4.40E-15
LAMTOR4	7q22.1	-0.354853162	2.59E-16	4.40E-15
C14ORF132	14q32.2	0.354841997	2.60E-16	4.41E-15
EREG	4q13.3	0.354792254	2.63E-16	4.45E-15
NFATC2	20q13.2	0.354780546	2.63E-16	4.46E-15
ARHGAP31	3q13.32-q13.33	0.354760503	2.64E-16	4.47E-15
NDUFB5	3q26.33	-0.354610015	2.73E-16	4.61E-15
PSD2	5q31.2	0.354488166	2.79E-16	4.72E-15
AKR1C3	10p15.1	-0.354422215	2.83E-16	4.78E-15
LRRC55	11q12.1	0.354206481	2.96E-16	4.99E-15
PAK1	11q13.5-q14.1	-0.354204643	2.96E-16	4.99E-15
PAK3	Xq23	0.35406387	3.05E-16	5.13E-15
RECK	9p13.3	0.353968557	3.11E-16	5.23E-15
BCAR3	1p22.1	0.353877234	3.17E-16	5.32E-15
RHOBTB2	8p21.3	0.353856908	3.18E-16	5.34E-15
KCNIP3	2q11.1	0.353733044	3.26E-16	5.48E-15
GSTM3	1p13.3	-0.353548202	3.39E-16	5.68E-15
KNSTRN	15q15.1	-0.353355631	3.52E-16	5.90E-15
CCL11	17q12	0.353344598	3.53E-16	5.91E-15
FAM131B	7q34	0.353330877	3.54E-16	5.92E-15
AIFM1	Xq26.1	-0.353307632	3.56E-16	5.95E-15
WNT6	2q35	0.353098027	3.71E-16	6.20E-15
PHLPP1	18q21.33	-0.352921535	3.85E-16	6.42E-15
WDSUB1	2q24.2	-0.352879166	3.88E-16	6.48E-15
PSMD11	17q11.2	-0.352807119	3.94E-16	6.57E-15
TNFSF4	1q25.1	0.352773108	3.97E-16	6.61E-15
EXOSC3	9p13.2	-0.352702054	4.03E-16	6.70E-15
MMP7	11q22.2	0.352596035	4.11E-16	6.84E-15
ITGA9	3p22.2	0.352555002	4.15E-16	6.89E-15
GATA3-AS1	10p14	0.352535692	4.16E-16	6.91E-15

TRIM16L	17p11.2	-0.35251664	4.18E-16	6.93E-15
PCDHGC3	5q31.3	0.352437054	4.25E-16	7.04E-15
HTR2A	13q14.2	0.352404383	4.28E-16	7.08E-15
PRDM1	6q21	0.352266145	4.40E-16	7.28E-15
CLIC4	1p36.11	0.352233318	4.43E-16	7.32E-15
TCF21	6q23.2	0.352138369	4.51E-16	7.46E-15
HSPA12A	10q25.3	0.352114607	4.54E-16	7.49E-15
ACTB	7p22.1	0.352020994	4.62E-16	7.62E-15
NTNG1	1p13.3	0.35186479	4.77E-16	7.86E-15
AKAP1	17q22	-0.351647208	4.99E-16	8.21E-15
KLF6	10p15.2	0.35163423	5.00E-16	8.23E-15
POLR2H	3q27.1	-0.351618484	5.02E-16	8.25E-15
MICOS13	19p13.3	-0.351441754	5.20E-16	8.54E-15
UQCRC1	3p21.31	-0.351379917	5.27E-16	8.64E-15
CDYL2	16q23.2	0.351363027	5.28E-16	8.66E-15
PRKG1	10q11.23-q21.1	0.351350908	5.30E-16	8.68E-15
ZNF503	10q22.2	0.351333063	5.32E-16	8.70E-15
MT1L	16q13	0.35121502	5.45E-16	8.90E-15
GCLM	1p22.1	-0.351108619	5.56E-16	9.09E-15
ZNF454	5q35.3	0.351084769	5.59E-16	9.13E-15
PLPPR4	1p21.3-p21.2	0.351040198	5.64E-16	9.20E-15
GALC	14q31.3	0.350872534	5.84E-16	9.51E-15
CSRNP1	3p22.2	0.35085717	5.85E-16	9.54E-15
RGS4	1q23.3	0.350813083	5.91E-16	9.61E-15
CLPP	19p13.3	-0.350747811	5.99E-16	9.73E-15
NDUFS7	19p13.3	-0.350648663	6.11E-16	9.92E-15
CLSTN2	3q23	0.35048301	6.32E-16	1.03E-14
KRT81	12q13.13	0.350419734	6.40E-16	1.04E-14
CLDN6	16p13.3	0.350333232	6.51E-16	1.06E-14
HSPB7	1p36.13	0.350229366	6.65E-16	1.08E-14
GREM2	1q43	0.35015215	6.75E-16	1.09E-14
TRIB1	8q24.13	0.350146727	6.76E-16	1.09E-14
CCDC92	12q24.31	0.350017129	6.94E-16	1.12E-14
LRRC8D	1p22.2	-0.350009877	6.95E-16	1.12E-14
LOC646999	7p14.1	0.350007254	6.95E-16	1.12E-14
DIPK2A	3q24	-0.349950426	7.03E-16	1.13E-14
GUCY1A2	11q22.3	0.349933249	7.06E-16	1.14E-14
ADH5	4q23	-0.3498842	7.13E-16	1.15E-14
SHANK2	11q13.3-q13.4	0.349822268	7.22E-16	1.16E-14
GOPC	6q22.1	0.34972331	7.36E-16	1.18E-14
ZBTB7C	18q21.1	-0.349695637	7.40E-16	1.19E-14
TBL1X	Xp22.31-p22.2	-0.349647446	7.48E-16	1.20E-14
NFATC4	14q12	0.349617578	7.52E-16	1.21E-14
GLRX5	14q32.13	-0.349551351	7.62E-16	1.22E-14
TUBB3	16q24.3	0.349423671	7.82E-16	1.25E-14
ACTBL2	5q11.2	0.349420826	7.82E-16	1.25E-14
GASK1A	3p22.1	0.349410979	7.84E-16	1.25E-14
TIMM29	19p13.2	-0.349404872	7.85E-16	1.25E-14
GPD2	2q24.1	-0.349235489	8.12E-16	1.30E-14
POLR3K	16p13.3	-0.349232913	8.13E-16	1.30E-14
RARA	17q21.2	0.349192556	8.19E-16	1.30E-14
PTP4A3	8q24.3	0.349149414	8.26E-16	1.32E-14
PIK3CD	1p36.22	0.349099411	8.35E-16	1.33E-14
RAPGEFL1	17q21.1	-0.3488576	8.76E-16	1.39E-14
NIFK	2q14.3	-0.348789465	8.88E-16	1.41E-14
NDN	15q11.2	0.348720185	9.01E-16	1.43E-14
MGAT1	5q35.3	0.348600902	9.23E-16	1.46E-14
NDUFAB1	16p12.2	-0.348519598	9.38E-16	1.49E-14

UNC13D	17q25.1	0.348487535	9.44E-16	1.49E-14
FAM162A	3q21.1	-0.348448505	9.51E-16	1.50E-14
ENPP1	6q23.2	0.348446883	9.52E-16	1.50E-14
LINC02591	1q21.1	0.348420164	9.57E-16	1.51E-14
CPA4	7q32.2	0.348363169	9.68E-16	1.53E-14
FARSA	19p13.13	-0.348158599	1.01E-15	1.59E-14
1-Mar	1q41	-0.34811957	1.02E-15	1.60E-14
ANO1	11q13.3	0.348047809	1.03E-15	1.62E-14
DOLPP1	9q34.11	-0.34800773	1.04E-15	1.63E-14
DNAJC3	13q32.1	0.347978147	1.05E-15	1.64E-14
C10ORF55	10q22.2	0.347722786	1.10E-15	1.73E-14
CCL2	17q12	0.347712575	1.10E-15	1.73E-14
BOC	3q13.2	0.347541189	1.14E-15	1.79E-14
RIT1	1q22	-0.347506453	1.15E-15	1.80E-14
OSGIN1	16q23.3	-0.347464752	1.16E-15	1.81E-14
ALYREF	17q25.3	-0.347462843	1.16E-15	1.81E-14
SERINC3	20q13.12	0.347387074	1.18E-15	1.84E-14
CENPM	22q13.2	-0.347325906	1.19E-15	1.86E-14
DRD5	4p16.1	0.347292677	1.20E-15	1.87E-14
PTRH2	17q23.1	-0.347290121	1.20E-15	1.87E-14
LITAF	16p13.13	0.347219791	1.22E-15	1.90E-14
HAUS8	19p13.11	-0.347115013	1.24E-15	1.93E-14
SPRYD4	12q13.3	-0.347101462	1.25E-15	1.94E-14
MTFMT	15q22.31	-0.346951165	1.28E-15	2.00E-14
TEP1	14q11.2	0.346871293	1.30E-15	2.03E-14
LIMS3-LOC44089	2q13	0.346711549	1.35E-15	2.09E-14
EXOSC2	9q34.12	-0.346655343	1.36E-15	2.11E-14
KLHL38	8q24.13	0.346634042	1.37E-15	2.12E-14
FDXR	17q25.1	-0.34657862	1.38E-15	2.14E-14
MEF2C	5q14.3	0.346341771	1.45E-15	2.24E-14
TIMM8A	Xq22.1	-0.346249597	1.48E-15	2.28E-14
RFX8	2q11.2	0.346217317	1.49E-15	2.30E-14
MRPL38	17q25.1	-0.346146528	1.51E-15	2.33E-14
CBR3	21q22.12	-0.34598936	1.56E-15	2.40E-14
GRIA3	Xq25	0.345944108	1.57E-15	2.42E-14
C10ORF25	10q11.21	0.345801656	1.61E-15	2.49E-14
ODC1	2p25.1	-0.345717012	1.64E-15	2.53E-14
CXCL12	10q11.21	0.345695923	1.65E-15	2.54E-14
FCGR2B	1q23.3	0.345613379	1.68E-15	2.58E-14
CHRDL2	11q13.4	0.345571654	1.69E-15	2.59E-14
IRS1	2q36.3	0.345568624	1.69E-15	2.59E-14
ARHGAP6	Xp22.2	0.345473865	1.72E-15	2.64E-14
PCDHGC5	5q31.3	0.345360413	1.76E-15	2.70E-14
AMZ2	17q24.2	-0.345349524	1.77E-15	2.70E-14
CKS2	9q22.2	-0.345332252	1.77E-15	2.71E-14
CHPF	2q35	0.345199704	1.82E-15	2.78E-14
ST6GAL1	3q27.3	0.345168977	1.83E-15	2.80E-14
ABTB2	11p13	0.345129947	1.84E-15	2.82E-14
LY75	2q24.2	0.345086528	1.86E-15	2.84E-14
TRPV2	17p11.2	0.344993296	1.90E-15	2.89E-14
CDH15	16q24.3	0.344856868	1.95E-15	2.96E-14
C1QBP	17p13.2	-0.344853687	1.95E-15	2.96E-14
BPI	20q11.23	0.34484929	1.95E-15	2.97E-14
CARMN	5q32	0.344819238	1.96E-15	2.98E-14
PDGFD	11q22.3	0.344780113	1.98E-15	3.00E-14
HPRT1	Xq26.2-q26.3	-0.344595367	2.05E-15	3.11E-14
ATP5MC1	17q21.32	-0.344481141	2.10E-15	3.18E-14
SLCO2A1	3q22.1-q22.2	0.344348403	2.15E-15	3.26E-14

MARF1	16p13.11	0.344316912	2.17E-15	3.28E-14
NDUFB2	7q34	-0.344262137	2.19E-15	3.31E-14
SNAPIN	1q21.3	-0.344247728	2.20E-15	3.32E-14
ARHGAP29	1p22.1	0.343879094	2.36E-15	3.57E-14
BBOF1	14q24.3	0.343705227	2.44E-15	3.69E-14
KIF13B	8p12	0.343672591	2.46E-15	3.71E-14
FGF1	5q31.3	0.343653506	2.47E-15	3.72E-14
IFNAR2	21q22.11	0.343621347	2.49E-15	3.74E-14
ANAPC11	17q25.3	-0.343503495	2.54E-15	3.83E-14
TLR9	3p21.2	0.343445571	2.57E-15	3.87E-14
CEP76	18p11.21	-0.343398335	2.60E-15	3.90E-14
CCIN	9p13.3	0.343397761	2.60E-15	3.90E-14
CAPZB	1p36.13	0.343365317	2.61E-15	3.92E-14
PARL	3q27.1	-0.343363027	2.62E-15	3.92E-14
SNRPG	2p13.3	-0.343327814	2.63E-15	3.95E-14
PRLR	5p13.2	0.343311886	2.64E-15	3.96E-14
BCL6B	17p13.1	0.34324527	2.68E-15	4.00E-14
TM7SF2	11q13.1	-0.343203092	2.70E-15	4.03E-14
KRT24	17q21.2	-0.343200662	2.70E-15	4.03E-14
GPR4	19q13.32	0.343170074	2.72E-15	4.06E-14
SMPDL3A	6q22.31	0.343096556	2.76E-15	4.11E-14
TMEM130	7q22.1	0.343069113	2.77E-15	4.13E-14
BTN2A1	6p22.2	0.342950116	2.84E-15	4.23E-14
ARHGAP1	11p11.2	0.342766992	2.94E-15	4.38E-14
OXSM	3p24.2	-0.342730157	2.96E-15	4.41E-14
PDE4DIP	1q21.2	0.342644846	3.01E-15	4.48E-14
ETFA	15q24.2-q24.3	-0.342627764	3.02E-15	4.49E-14
ITSN1	21q22.11	0.342609729	3.03E-15	4.50E-14
SLC35F2	11q22.3	0.342557912	3.06E-15	4.54E-14
ZMYND19	9q34.3	-0.342547511	3.07E-15	4.55E-14
NDUFAF4	6q16.1	-0.342533769	3.08E-15	4.56E-14
EIF1	17q21.2	-0.342488155	3.11E-15	4.60E-14
PINK1	1p36.12	0.342380037	3.17E-15	4.69E-14
MTMR11	1q21.2	0.342344443	3.20E-15	4.72E-14
SCARF1	17p13.3	0.342319059	3.21E-15	4.74E-14
RBMS1	2q24.2	0.342197581	3.29E-15	4.85E-14
AKR1B10	7q33	-0.342159983	3.31E-15	4.88E-14
NFAM1	22q13.2	0.342121582	3.34E-15	4.92E-14
OSCAR	19q13.42	0.341842498	3.53E-15	5.19E-14
ZNF532	18q21.32	0.341801942	3.55E-15	5.23E-14
NDUFA12	12q22	-0.341742109	3.60E-15	5.29E-14
CYP39A1	6p12.3	0.34171978	3.61E-15	5.31E-14
MSN	Xq12	0.341688193	3.63E-15	5.33E-14
FAM117B	2q33.2	-0.341657275	3.66E-15	5.36E-14
CDX1	5q32	0.341627959	3.68E-15	5.39E-14
ITM2C	2q37.1	0.341613761	3.69E-15	5.40E-14
IL16	15q25.1	0.341457165	3.80E-15	5.56E-14
SNHG20	17q25.2	-0.341328435	3.90E-15	5.70E-14
LYST	1q42.3	0.341296944	3.92E-15	5.73E-14
FGF7	15q21.2	0.341256101	3.96E-15	5.78E-14
IDH1	2q34	-0.341045304	4.12E-15	6.01E-14
SNPH	20p13	0.341035952	4.13E-15	6.02E-14
LCP1	13q14.13	0.340938044	4.21E-15	6.13E-14
C17ORF75	17q11.2	-0.340918577	4.23E-15	6.15E-14
SNRPF	12q23.1	-0.340897774	4.24E-15	6.17E-14
NFKB2	10q24.32	0.340848725	4.28E-15	6.23E-14
SLC4A11	20p13	-0.340837274	4.29E-15	6.24E-14
CREB3L2	7q33	0.340774292	4.35E-15	6.31E-14

IL4R	16p12.1	0.340751581	4.37E-15	6.33E-14
NUCB1	19q13.33	0.340745569	4.37E-15	6.34E-14
SFRP4	7p14.1	0.34063182	4.47E-15	6.47E-14
CNOT11	2q11.2	-0.340540783	4.55E-15	6.58E-14
PRDX6	1q25.1	-0.340538874	4.55E-15	6.58E-14
SDHAF3	7q21.3	-0.340475702	4.61E-15	6.66E-14
CTSZ	20q13.32	0.340473889	4.61E-15	6.66E-14
SBNO2	19p13.3	0.340393062	4.68E-15	6.76E-14
LTBP3	11q13.1	0.340381516	4.69E-15	6.77E-14
BCL9L	11q23.3	0.340343441	4.73E-15	6.81E-14
FAM189A1	15q13.1	0.340253214	4.81E-15	6.93E-14
PXDC1	6p25.2	0.340054584	5.00E-15	7.20E-14
FLAD1	1q21.3	-0.340049526	5.01E-15	7.20E-14
CHEK2	22q12.1	-0.340039411	5.02E-15	7.21E-14
TUBG1	17q21.2	-0.339979388	5.07E-15	7.29E-14
MRPL57	13q12.11	-0.339894554	5.16E-15	7.40E-14
PAPSS2	10q23.2-q23.31	0.33986688	5.19E-15	7.44E-14
COL2A1	12q13.11	0.33985563	5.20E-15	7.45E-14
NDST2	10q22.2	0.339771262	5.28E-15	7.57E-14
PCDHGA2	5q31.3	0.339505396	5.56E-15	7.96E-14
MRPS24	7p13	-0.339249278	5.85E-15	8.36E-14
ASF1A	6q22.31	-0.33918916	5.92E-15	8.45E-14
HSPB2	11q23.1	0.339186774	5.92E-15	8.45E-14
TECR	19p13.12	-0.339185915	5.92E-15	8.45E-14
APCDD1	18p11.22	0.339104993	6.01E-15	8.58E-14
PCDHB18P	5q31.3	0.33909627	6.02E-15	8.59E-14
TOMM5	9p13.2	-0.339032946	6.10E-15	8.69E-14
COIL	17q22	-0.339007085	6.13E-15	8.72E-14
RGMA	15q26.1	-0.338953169	6.19E-15	8.81E-14
NCAM2	21q21.1	0.338914323	6.24E-15	8.87E-14
TANC2	17q23.2-q23.3	0.338911277	6.24E-15	8.87E-14
GLA	Xq22.1	-0.338815755	6.36E-15	9.03E-14
ZMIZ1-AS1	10q22.3	0.338774634	6.41E-15	9.09E-14
SHC3	9q22.1	0.338710603	6.49E-15	9.20E-14
TUBA1A	12q13.12	0.338677959	6.53E-15	9.25E-14
DIPK2B	Xp11.3	0.338631733	6.59E-15	9.33E-14
SEC24D	4q26	0.338578811	6.66E-15	9.42E-14
ARHGEF10	8p23.3	0.338530525	6.72E-15	9.50E-14
HLA-F-AS1	6p22.1	0.338426223	6.86E-15	9.69E-14
MPDZ	9p23	0.338381468	6.92E-15	9.76E-14
BTN3A1	6p22.2	0.338316578	7.01E-15	9.88E-14
LRRC4C	11p12	0.338287829	7.05E-15	9.93E-14
THOC7	3p14.1	-0.338280888	7.06E-15	9.94E-14
LILRA6	19q13.42	0.338252165	7.10E-15	9.98E-14
CISH	3p21.2	0.338038982	7.39E-15	1.04E-13
PTGES2	9q34.11	-0.337997185	7.45E-15	1.05E-13
LY6H	8q24.3	0.337982311	7.48E-15	1.05E-13
RCVRN	17p13.1	0.337967064	7.50E-15	1.05E-13
TMEM133	11q22.1	0.337942028	7.53E-15	1.06E-13
CPED1	7q31.31	0.337935253	7.54E-15	1.06E-13
SIRPB2	20p13	0.3378529	7.66E-15	1.07E-13
CEMIP	15q25.1	0.337731899	7.85E-15	1.10E-13
GSTA2	6p12.2	-0.337676306	7.93E-15	1.11E-13
TREML2	6p21.1	0.337590859	8.06E-15	1.13E-13
PPP2R5A	1q32.3	-0.337394279	8.37E-15	1.17E-13
SNTB1	8q24.12	0.337309636	8.51E-15	1.19E-13
PDLIM2	8p21.3	0.337291695	8.54E-15	1.19E-13
SPR	2p13.2	-0.337265167	8.59E-15	1.20E-13

PGM2L1	11q13.4	0.337262686	8.59E-15	1.20E-13
POP7	7q22.1	-0.337158098	8.76E-15	1.22E-13
TRMT10A	4q23	-0.337046544	8.95E-15	1.25E-13
C19ORF53	19p13.13	-0.337041868	8.96E-15	1.25E-13
TIE1	1p34.2	0.336952358	9.12E-15	1.27E-13
PCDHGA10	5q31.3	0.336815039	9.36E-15	1.30E-13
CAP1	1p34.2	0.33671236	9.55E-15	1.32E-13
EFEMP1	2p16.1	0.336634397	9.69E-15	1.34E-13
SEC24A	5q31.1	0.336604146	9.75E-15	1.35E-13
TAOK3	12q24.23	0.336470605	1.00E-14	1.38E-13
TMEM161A	19p13.11	-0.336367393	1.02E-14	1.41E-13
SLC16A14	2q36.3	-0.336287902	1.04E-14	1.43E-13
KCNJ5	11q24.3	0.336274829	1.04E-14	1.43E-13
ZNF578	19q13.41	0.336271489	1.04E-14	1.43E-13
SARDH	9q34.2	0.336176539	1.06E-14	1.46E-13
ECI1	16p13.3	-0.336163943	1.06E-14	1.46E-13
NDUFA6	22q13.2	-0.336142385	1.07E-14	1.47E-13
WNT10A	2q35	0.33609514	1.08E-14	1.48E-13
C1ORF131	1q42.2	-0.336003149	1.09E-14	1.51E-13
REM1	20q11.21	0.335910315	1.11E-14	1.53E-13
BVES	6q21	0.335851142	1.13E-14	1.55E-13
GATD3A	21q22.3	-0.335774698	1.14E-14	1.57E-13
TXNDC5	6p24.3	0.335686237	1.16E-14	1.59E-13
KDR	4q12	0.335685855	1.16E-14	1.59E-13
SOD3	4p15.2	0.335676464	1.17E-14	1.60E-13
ARHGEF26	3q25.2	-0.335580791	1.19E-14	1.62E-13
AK5	1p31.1	0.335563834	1.19E-14	1.63E-13
B4GALT4	3q13.32	-0.335552353	1.19E-14	1.63E-13
DYRK3	1q32.1	0.335520386	1.20E-14	1.64E-13
CAB39	2q37.1	0.335333922	1.24E-14	1.70E-13
RASSF9	12q21.31	-0.335283537	1.26E-14	1.71E-13
DOCK5	8p21.2	0.335265604	1.26E-14	1.72E-13
C1QTNF2	5q33.3	0.335140627	1.29E-14	1.76E-13
GLS	2q32.2	0.335091824	1.30E-14	1.77E-13
PCED1B	12q13.11	0.335090011	1.30E-14	1.77E-13
FOXP3	Xp11.23	0.335082854	1.31E-14	1.77E-13
C3AR1	12p13.31	0.335043348	1.32E-14	1.79E-13
SYNJ2	6q25.3	0.334817624	1.37E-14	1.86E-13
RAI14	5p13.2	0.334757545	1.39E-14	1.88E-13
CD14	5q31.3	0.334745099	1.39E-14	1.89E-13
MMP28	17q12	0.334686834	1.41E-14	1.91E-13
MCCC1	3q27.1	-0.334347878	1.50E-14	2.03E-13
TIMM8B	11q23.1	-0.334272682	1.52E-14	2.06E-13
REP15	12p11.22	0.33411949	1.57E-14	2.12E-13
TXNL1	18q21.31	-0.334070282	1.58E-14	2.14E-13
ABHD3	18q11.2	-0.334050815	1.59E-14	2.15E-13
PEAK3	19p13.3	0.333963149	1.62E-14	2.18E-13
HSPE1	2q33.1	-0.333939738	1.62E-14	2.19E-13
MZT2A	2q21.1	-0.333930482	1.63E-14	2.19E-13
MT1E	16q13	0.333864637	1.65E-14	2.22E-13
TMEM141	9q34.3	-0.333696495	1.70E-14	2.29E-13
GRM4	6p21.31	0.33366053	1.71E-14	2.30E-13
PSME3	17q21.31	-0.333609275	1.73E-14	2.32E-13
ZNF677	19q13.42	0.333482684	1.77E-14	2.38E-13
ADORA2A	22q11.23	0.333398478	1.80E-14	2.42E-13
NXN	17p13.3	0.333249326	1.85E-14	2.48E-13
PSMD12	17q24.2	-0.332977169	1.95E-14	2.61E-13
ZNF699	19p13.2	0.332829266	2.01E-14	2.69E-13

CD4	12p13.31	0.332797004	2.02E-14	2.70E-13
IP6K3	6p21.31	0.332777852	2.02E-14	2.71E-13
CDH3	16q22.1	0.332766849	2.03E-14	2.71E-13
ILVBL	19p13.12	-0.332735358	2.04E-14	2.73E-13
SSBP1	7q34	-0.332722666	2.05E-14	2.73E-13
LYPD1	2q21.2	0.332632774	2.08E-14	2.78E-13
ZNF365	10q21.2	0.332606532	2.09E-14	2.79E-13
AGPAT4-IT1	6q26	0.33243036	2.16E-14	2.88E-13
KIRREL1	1q23.1	0.332425412	2.16E-14	2.88E-13
EMB	5q11.1	0.332263282	2.23E-14	2.97E-13
PREX1	20q13.13	0.332198774	2.26E-14	3.01E-13
FBXO32	8q24.13	0.332088079	2.31E-14	3.07E-13
CD47	3q13.12	0.33197433	2.36E-14	3.13E-13
DOCK2	5q35.1	0.331864303	2.41E-14	3.20E-13
PRDM2	1p36.21	0.331754849	2.46E-14	3.26E-13
FAM151B	5q14.1	0.33168572	2.49E-14	3.30E-13
PTGR1	9q31.3	-0.331624782	2.52E-14	3.34E-13
KCNIP1	5q35.1	0.331513905	2.57E-14	3.41E-13
IL4I1	19q13.33	0.331507312	2.57E-14	3.41E-13
CCN5	20q13.12	0.331435647	2.61E-14	3.45E-13
KLHL2	4q32.3	0.331426009	2.61E-14	3.46E-13
PSMB3	17q12	-0.331348427	2.65E-14	3.50E-13
BEND3P3	10q22.3	0.331314415	2.67E-14	3.52E-13
LIX1L	1q21.1	0.331312833	2.67E-14	3.52E-13
SOX21	13q32.1	-0.331183275	2.74E-14	3.61E-13
PLCL2	3p24.3	0.331048652	2.81E-14	3.70E-13
SIGLEC9	19q13.41	0.331022831	2.82E-14	3.71E-13
CHAF1A	19p13.3	-0.33093208	2.87E-14	3.78E-13
SGPP1	14q23.2	0.330903929	2.89E-14	3.79E-13
MLXIP	12q24.31	0.330755159	2.97E-14	3.90E-13
FBXO2	1p36.22	0.330749012	2.97E-14	3.90E-13
CARD8	19q13.33	0.330689084	3.00E-14	3.94E-13
ERAL1	17q11.2	-0.330676527	3.01E-14	3.95E-13
ELMO2	20q13.12	0.33060782	3.05E-14	4.00E-13
VMA21	Xq28	-0.330490064	3.12E-14	4.08E-13
TNS2	12q13.13	0.330411822	3.17E-14	4.14E-13
NDUFB1	14q32.12	-0.330273644	3.25E-14	4.25E-13
SMIM7	19p13.11	-0.330249684	3.26E-14	4.26E-13
TRAM2	6p12.2	0.330235561	3.27E-14	4.27E-13
FAM104A	17q25.1	-0.330116468	3.35E-14	4.37E-13
MEF2D	1q22	0.330013885	3.41E-14	4.45E-13
SSTR2	17q25.1	0.329990282	3.43E-14	4.47E-13
ATP6V1F	7q32.1	-0.329893265	3.49E-14	4.54E-13
SWI5	9q34.11	-0.329879047	3.50E-14	4.55E-13
SUMO2	17q25.1	-0.32987189	3.50E-14	4.56E-13
ICK	6p12.1	-0.329861679	3.51E-14	4.56E-13
ASPSCR1	17q25.3	-0.32979364	3.55E-14	4.62E-13
SHE	1q21.3	0.329762531	3.58E-14	4.64E-13
CCL7	17q12	0.329668093	3.64E-14	4.72E-13
GPSM3	6p21.32	0.329649736	3.65E-14	4.74E-13
GPAT3	4q21.23	-0.329569864	3.71E-14	4.80E-13
ANGPTL1	1q25.2	0.329417976	3.81E-14	4.94E-13
CYTH4	22q13.1	0.329397524	3.83E-14	4.96E-13
THOC3	5q35.2	-0.32931956	3.88E-14	5.03E-13
DLGAP4	20q11.23	0.329180905	3.99E-14	5.15E-13
SLC6A1	3p25.3	0.329129049	4.03E-14	5.20E-13
SH3BP5	3p25.1	0.328936136	4.17E-14	5.39E-13
TNIP1	5q33.1	0.328930983	4.18E-14	5.39E-13

RPL19	17q12	-0.328758833	4.31E-14	5.56E-13
APOBR	16p12.1	0.32865415	4.40E-14	5.67E-13
STC1	8p21.2	0.328407472	4.61E-14	5.93E-13
FRAT2	10q24.1	-0.328317771	4.68E-14	6.03E-13
PLD6	17p11.2	-0.328304888	4.70E-14	6.04E-13
CAV1	7q31.2	0.328264427	4.73E-14	6.08E-13
SLAMF8	1q23.2	0.328083792	4.89E-14	6.29E-13
NR2C2AP	19p13.11	-0.328061836	4.91E-14	6.31E-13
RHOBTB3	5q15	0.328040747	4.93E-14	6.33E-13
CEBPG	19q13.11	-0.328010688	4.96E-14	6.36E-13
WDR1	4p16.1	0.327709044	5.25E-14	6.72E-13
MMAB	12q24.11	-0.327602262	5.35E-14	6.85E-13
NOVA2	19q13.32	0.327591105	5.36E-14	6.86E-13
ZC3H8	2q14.1	-0.327563518	5.39E-14	6.89E-13
C9ORF170	9q21.33	0.327535734	5.42E-14	6.93E-13
ACAP2	3q29	-0.327516759	5.44E-14	6.95E-13
RASSF2	20p13	0.327489276	5.47E-14	6.98E-13
ART3	4q21.1 4p15.1-p14	0.327436807	5.52E-14	7.04E-13
CCNG2	4q21.1	0.327228571	5.74E-14	7.31E-13
TSPAN7	Xp11.4	-0.327104707	5.87E-14	7.48E-13
TMEM86A	11p15.1	0.327004994	5.98E-14	7.62E-13
MEX3B	15q25.2	0.326920915	6.08E-14	7.73E-13
ADRA2A	10q25.2	0.32682979	6.18E-14	7.86E-13
MYO3B	2q31.1	0.326812163	6.20E-14	7.88E-13
SELPLG	12q24.11	0.326676814	6.36E-14	8.07E-13
THOP1	19p13.3	-0.326504378	6.56E-14	8.33E-13
MRPL41	9q34.3	-0.326492259	6.58E-14	8.34E-13
CAPG	2p11.2	0.326488251	6.58E-14	8.34E-13
PIK3R6	17p13.1	0.326418017	6.67E-14	8.45E-13
UGT1A5	2q37.1	-0.326376954	6.72E-14	8.51E-13
FAM107B	10p13	0.32634826	6.76E-14	8.54E-13
ERMN	2q24.1	0.326345412	6.76E-14	8.54E-13
ANP32B	9q22.33	-0.326344156	6.76E-14	8.54E-13
IL6ST	5q11.2	0.32633595	6.77E-14	8.55E-13
LILRB3	19q13.42	0.326277167	6.85E-14	8.64E-13
G0S2	1q32.2	0.326230599	6.91E-14	8.71E-13
DOCK10	2q36.2	0.326157311	7.00E-14	8.82E-13
PSMC5	17q23.3	-0.326123912	7.04E-14	8.87E-13
GPI	19q13.11	-0.326005105	7.20E-14	9.06E-13
TNFSF12	17p13.1	0.325973042	7.24E-14	9.11E-13
CCDC184	12q13.11	0.325892693	7.35E-14	9.24E-13
STAT2	12q13.3	0.325720448	7.59E-14	9.53E-13
NSDHL	Xq28	-0.325690865	7.63E-14	9.58E-13
TIMM10	11q12.1	-0.325614238	7.74E-14	9.71E-13
HNRNPC	14q11.2	-0.325519956	7.87E-14	9.88E-13
SLC25A53	Xq22.2	0.325478732	7.93E-14	9.95E-13
DYRK2	12q15	0.325390558	8.07E-14	1.01E-12
ZNF474	5q23.2	0.325212082	8.34E-14	1.04E-12
SLC16A12	10q23.31	0.325196779	8.36E-14	1.05E-12
ALG3	3q27.1	-0.32507355	8.55E-14	1.07E-12
CCDC47	17q23.3	-0.324909607	8.81E-14	1.10E-12
FXN	9q21.11	-0.324761035	9.06E-14	1.13E-12
DPYSL2	8p21.2	0.324680448	9.19E-14	1.15E-12
BTN3A3	6p22.2	0.324519026	9.47E-14	1.18E-12
CEP170	1q43	0.324247823	9.95E-14	1.24E-12
PDSS1	10p12.1	-0.324196484	1.00E-13	1.25E-12
UGT1A3	2q37.1	-0.324113617	1.02E-13	1.27E-12
COL9A2	1p34.2	0.324104929	1.02E-13	1.27E-12

MRPL46	15q25.3	-0.324071475	1.03E-13	1.28E-12
SLC49A3	4p16.3	0.323961066	1.05E-13	1.30E-12
ZCCHC18	Xq22.2	0.323960862	1.05E-13	1.30E-12
MLX	17q21.2	-0.323885774	1.06E-13	1.32E-12
CFB	6p21.33	0.323822506	1.08E-13	1.33E-12
L1TD1	1p31.3	0.323799855	1.08E-13	1.34E-12
C10ORF105	10q22.1	0.323792621	1.08E-13	1.34E-12
STMP1	7q33	-0.323789775	1.08E-13	1.34E-12
CYP4F11	19p13.12	-0.323762065	1.09E-13	1.35E-12
DCAKD	17q21.31	-0.323569586	1.13E-13	1.39E-12
C9ORF47	9q22.1	0.323518148	1.14E-13	1.41E-12
OIP5	15q15.1	-0.323493857	1.14E-13	1.41E-12
CTSA	20q13.12	0.323492426	1.14E-13	1.41E-12
JAZF1	7p15.2-p15.1	0.323477062	1.15E-13	1.41E-12
MRPS9	2q12.1	-0.323425818	1.16E-13	1.43E-12
CDKL5	Xp22.13	0.323223385	1.20E-13	1.48E-12
CLEC2B	12p13.31	0.323221986	1.20E-13	1.48E-12
ADGRE5	19p13.12	0.323211394	1.20E-13	1.48E-12
SPATA7	14q31.3	0.323198328	1.21E-13	1.48E-12
IRGM	5q33.1	0.323100869	1.23E-13	1.51E-12
FPR3	19q13.41	0.323075983	1.23E-13	1.52E-12
LRRC8C	1p22.2	0.323044779	1.24E-13	1.52E-12
RPS15	19p13.3	-0.323016819	1.25E-13	1.53E-12
NPHP4	1p36.31	0.322956032	1.26E-13	1.55E-12
SOX2-OT	3q26.33	-0.322951578	1.26E-13	1.55E-12
KLK4	19q13.41	0.322941651	1.26E-13	1.55E-12
MRPS34	16p13.3	-0.322741418	1.31E-13	1.61E-12
ATP9A	20q13.2	0.32270067	1.32E-13	1.62E-12
MRTFA	22q13.1-q13.2	0.32266813	1.33E-13	1.63E-12
NKAPL	6p22.1	0.322617504	1.34E-13	1.64E-12
AGAP2	12q14.1	0.322601999	1.35E-13	1.64E-12
COP1	1q25.1-q25.2	-0.322571367	1.35E-13	1.65E-12
C3	19p13.3	0.322554572	1.36E-13	1.66E-12
ERP29	12q24.13	-0.322543121	1.36E-13	1.66E-12
EMC9	14q12	-0.322490405	1.37E-13	1.67E-12
KLHL13	Xq24	-0.322488823	1.37E-13	1.67E-12
PAXIP1-AS1	7q36.2	-0.322272873	1.43E-13	1.74E-12
NDUFB10	16p13.3	-0.322237565	1.44E-13	1.75E-12
SYNC	1p35.1	0.322122671	1.47E-13	1.78E-12
SOX18	20q13.33	0.322116755	1.47E-13	1.79E-12
SLC6A2	16q12.2	0.321896703	1.53E-13	1.86E-12
CHRNA1	2q31.1	0.321884806	1.53E-13	1.86E-12
EGFLAM	5p13.2-p13.1	0.321852669	1.54E-13	1.87E-12
QPRT	16p11.2	0.321703557	1.59E-13	1.92E-12
MDH2	7q11.23	-0.321702794	1.59E-13	1.92E-12
RAPGEF3	12q13.11	0.321697831	1.59E-13	1.92E-12
ISLR2	15q24.1	0.321608703	1.61E-13	1.95E-12
SLC25A5	Xq24	-0.321460696	1.66E-13	2.00E-12
MYH10	17p13.1	0.321435981	1.66E-13	2.01E-12
MSI2	17q22	-0.321399146	1.68E-13	2.02E-12
HINT1	5q23.3	-0.321398478	1.68E-13	2.02E-12
H6PD	1p36.22	0.321324618	1.70E-13	2.05E-12
NKAIN4	20q13.33	0.321307136	1.70E-13	2.05E-12
SLC25A24	1p13.3	0.321294081	1.71E-13	2.06E-12
SRXN1	20p13	-0.321251044	1.72E-13	2.07E-12
ZNF281	1q32.1	0.321214789	1.73E-13	2.08E-12
MAF	16q23.2	0.321190639	1.74E-13	2.09E-12
PRPF4	9q32	-0.321004461	1.80E-13	2.16E-12

NPM3	10q24.32	-0.320898593	1.84E-13	2.20E-12
GLB1L	2q35	0.320897352	1.84E-13	2.20E-12
SIDT2	11q23.3	0.320839087	1.86E-13	2.22E-12
ANKLE2	12q24.33	0.320679152	1.91E-13	2.29E-12
TBC1D1	4p14	0.320669514	1.91E-13	2.29E-12
CRISPLD1	8q21.13	0.320657299	1.92E-13	2.29E-12
NAALADL1	11q13.1	0.320569411	1.95E-13	2.33E-12
FCAR	19q13.42	0.320553299	1.95E-13	2.34E-12
RAB25	1q22	-0.320488012	1.98E-13	2.36E-12
RBMX2	Xq26.1	-0.320462438	1.99E-13	2.37E-12
IL12RB2	1p31.3	0.320335671	2.03E-13	2.43E-12
STARD7	2q11.2	-0.320308896	2.04E-13	2.44E-12
BIRC5	17q25.3	-0.320302503	2.04E-13	2.44E-12
RGS16	1q25.3	0.320294868	2.05E-13	2.44E-12
SIRPA	20p13	0.320243529	2.07E-13	2.46E-12
STAMBPL1	10q23.31	0.320241334	2.07E-13	2.46E-12
ISCA1P1	5q12.1	-0.32021576	2.08E-13	2.47E-12
NTSR1	20q13.33	0.320178415	2.09E-13	2.49E-12
KAT2A	17q21.2	-0.320106114	2.12E-13	2.52E-12
F13A1	6p25.1	0.319966028	2.17E-13	2.58E-12
GAMT	19p13.3	-0.319868311	2.21E-13	2.62E-12
PARD3B	2q33.3	0.319862889	2.21E-13	2.62E-12
ZNF835	19q13.43	0.319842112	2.22E-13	2.63E-12
UNG	12q24.11	-0.319828137	2.23E-13	2.64E-12
NR2F2	15q26.2	0.319767827	2.25E-13	2.67E-12
EME1	17q21.33	-0.319725553	2.27E-13	2.68E-12
SMTNL2	17p13.2	0.319673415	2.29E-13	2.71E-12
CSRP1	1q32.1	0.319427058	2.40E-13	2.83E-12
CEP85L	6q22.31	0.31938503	2.41E-13	2.85E-12
MMRN2	10q23.2	0.319292085	2.45E-13	2.90E-12
PIGY	4q22.1	-0.319272944	2.46E-13	2.90E-12
ITPRIP	10q25.1	0.319215497	2.49E-13	2.93E-12
P4HA2	5q31.1	0.31920147	2.49E-13	2.94E-12
RYBP	3p13	0.319165589	2.51E-13	2.96E-12
CASS4	20q13.31	0.319141168	2.52E-13	2.97E-12
LAMP1	13q34	0.319139824	2.52E-13	2.97E-12
MYH13	17p13.1	0.319083376	2.55E-13	3.00E-12
DUSP4	8p12	0.318808598	2.68E-13	3.15E-12
OPTN	10p13	0.318793711	2.69E-13	3.15E-12
PLVAP	19p13.11	0.318730348	2.72E-13	3.19E-12
TNFRSF9	1p36.23	0.318687612	2.74E-13	3.21E-12
MRPL23	11p15.5	-0.318649617	2.76E-13	3.23E-12
VAT1L	16q23.1	0.31860381	2.78E-13	3.25E-12
MRC1	10p12.33	0.318549324	2.81E-13	3.28E-12
BRINP3	1q31.1	0.318549272	2.81E-13	3.28E-12
CPE	4q32.3	0.318501515	2.83E-13	3.31E-12
ITIH5	10p14	0.318469356	2.85E-13	3.33E-12
DUSP10	1q41	0.318429181	2.87E-13	3.35E-12
RABEPK	9q33.3	-0.318329174	2.92E-13	3.41E-12
PCCB	3q22.3	-0.31828022	2.95E-13	3.44E-12
NREP	5q22.1	0.318261524	2.95E-13	3.44E-12
CPAMD8	19p13.11	0.318250734	2.96E-13	3.45E-12
UQCRCQ	5q31.1	-0.318150726	3.01E-13	3.51E-12
HSPA7	1q23.3	0.318079538	3.05E-13	3.55E-12
LSM12	17q21.31	-0.318026607	3.08E-13	3.58E-12
EXOC3L2	19q13.32	0.317918553	3.14E-13	3.65E-12
KIAA0040	1q25.1	0.317871794	3.17E-13	3.68E-12
NDST1	5q33.1	0.317661951	3.29E-13	3.82E-12

KLF9	9q21.12	0.317609466	3.32E-13	3.85E-12
RPL38	17q25.1	-0.317605268	3.32E-13	3.86E-12
TRA2B	3q27.2	-0.31753093	3.37E-13	3.90E-12
RASSF8	12p12.1	0.31745831	3.41E-13	3.95E-12
MMP10	11q22.2	0.317430923	3.43E-13	3.97E-12
A2M	12p13.31	0.317401627	3.45E-13	3.99E-12
CD34	1q32.2	0.317078131	3.65E-13	4.22E-12
SEZ6L2	16p11.2	0.317078035	3.65E-13	4.22E-12
TPP1	11p15.4	0.317010282	3.70E-13	4.27E-12
TCTEX1D2	3q29	-0.316935849	3.75E-13	4.33E-12
RNF19B	1p35.1	0.316911325	3.76E-13	4.34E-12
CDK5R2	2q35	0.316847709	3.81E-13	4.39E-12
ALKBH7	19p13.3	-0.316704726	3.91E-13	4.50E-12
C20ORF141	20p13	0.316669495	3.93E-13	4.53E-12
BHMT2	5q14.1	0.316558224	4.01E-13	4.62E-12
SLC35D1	1p31.3	0.316499463	4.05E-13	4.66E-12
PDCD10	3q26.1	-0.316396307	4.13E-13	4.75E-12
ASGR2	17p13.1	0.316381197	4.14E-13	4.76E-12
KPNA2	17q24.2	-0.316372164	4.14E-13	4.76E-12
SFMBT2	10p14	0.316314335	4.19E-13	4.81E-12
GCNT2	6p24.3-p24.2	-0.316312999	4.19E-13	4.81E-12
TFAP4	16p13.3	-0.316290956	4.21E-13	4.82E-12
JPH3	16q24.2	0.316276608	4.22E-13	4.83E-12
ZNF362	1p35.1	0.316225207	4.25E-13	4.87E-12
TMEM38B	9q31.2	-0.316207458	4.27E-13	4.89E-12
CCR6	6q27	0.316184364	4.29E-13	4.90E-12
NQO1	16q22.1	-0.31610621	4.35E-13	4.97E-12
PPP1R3B	8p23.1	0.316068707	4.38E-13	5.00E-12
CD59	11p13	0.316023952	4.41E-13	5.04E-12
GRASP	12q13.13	0.316003825	4.43E-13	5.05E-12
ITGAX	16p11.2	0.31596637	4.46E-13	5.08E-12
CHSY3	5q23.3	0.315894554	4.51E-13	5.15E-12
ZNF385D	3p24.3	0.315873856	4.53E-13	5.16E-12
LCA5	6q14.1	0.315824892	4.57E-13	5.20E-12
RNASEH2A	19p13.13	-0.315778992	4.61E-13	5.24E-12
SSH1	12q24.11	0.315685092	4.68E-13	5.33E-12
GLIS3	9p24.2	0.315508894	4.83E-13	5.50E-12
PARVG	22q13.31	0.315464561	4.87E-13	5.54E-12
FASTKD1	2q31.1	-0.315409691	4.92E-13	5.59E-12
COL6A6	3q22.1	0.315362359	4.96E-13	5.63E-12
CYP1B1-AS1	2p22.2	0.315354472	4.97E-13	5.64E-12
TNFRSF8	1p36.22	0.315341993	4.98E-13	5.65E-12
ZNF280C	Xq26.1	-0.315333636	4.99E-13	5.65E-12
CCDC170	6q25.1	0.315277715	5.04E-13	5.70E-12
NPAS1	19q13.32	-0.315272974	5.04E-13	5.71E-12
LILRB2	19q13.42	0.315148508	5.15E-13	5.83E-12
CMC1	3p24.1	-0.315144977	5.16E-13	5.83E-12
CCNJL	5q33.3	0.315087053	5.21E-13	5.89E-12
SERPINA5	14q32.13	0.315055954	5.24E-13	5.92E-12
ACSS3	12q21.31	0.315040485	5.25E-13	5.93E-12
NKX3-2	4p15.33	0.314927279	5.36E-13	6.05E-12
EGR3	8p21.3	0.314802872	5.48E-13	6.18E-12
LCAT	16q22.1	0.314601999	5.68E-13	6.40E-12
CMAHP	6p22.3	0.314593602	5.69E-13	6.40E-12
TOM1L1	17q22	-0.314328411	5.96E-13	6.71E-12
SERPINB9	6p25.2	0.314321063	5.97E-13	6.71E-12
DOCK8	9p24.3	0.314149677	6.15E-13	6.92E-12
SEM1	7q21.3	-0.314111411	6.19E-13	6.96E-12

UQCRFS1	19q12	-0.314102154	6.20E-13	6.97E-12
TXNRD1	12q23.3	-0.314080683	6.23E-13	6.99E-12
SET	9q34.11	-0.314050624	6.26E-13	7.02E-12
GCNT1	9q21.13	0.313947181	6.38E-13	7.15E-12
MMP25	16p13.3	0.313939738	6.39E-13	7.15E-12
C6ORF89	6p21.2	0.313882387	6.45E-13	7.22E-12
FLT1	13q12.3	0.313871126	6.46E-13	7.23E-12
CATSPER1	11q13.1	0.313849818	6.49E-13	7.26E-12
ROBO1	3p12.3	0.313841162	6.50E-13	7.26E-12
CD300C	17q25.1	0.313822745	6.52E-13	7.28E-12
STAT4	2q32.2-q32.3	0.313818267	6.52E-13	7.29E-12
CHCHD4	3p25.1	-0.313779898	6.57E-13	7.33E-12
A1BG-AS1	19q13.43	0.313772073	6.58E-13	7.34E-12
AGK	7q34	-0.313714817	6.64E-13	7.41E-12
CTSB	8p23.1	0.313630556	6.74E-13	7.51E-12
ZSWIM4	19p13.13-p13.12	0.313629601	6.75E-13	7.51E-12
TICAM2	5q22.3	0.313577903	6.81E-13	7.58E-12
CLDN19	1p34.2	0.31355387	6.84E-13	7.60E-12
GLIPR2	9p13.3	0.313544775	6.85E-13	7.61E-12
STON1	2p16.3	0.313534843	6.86E-13	7.62E-12
PTP4A2	1p35.2	0.313488561	6.92E-13	7.68E-12
C5AR2	19q13.32	0.313483566	6.92E-13	7.68E-12
ZKSCAN7	3p21.31	0.313444243	6.97E-13	7.73E-12
RXFP3	5p13.2	0.313428779	6.99E-13	7.75E-12
GINS3	16q21	-0.313399623	7.02E-13	7.78E-12
CYGB	17q25.1	0.313143689	7.35E-13	8.14E-12
WWC2-AS2	4q35.1	0.313134184	7.36E-13	8.15E-12
SIVA1	14q32.33	-0.31310485	7.40E-13	8.19E-12
RAC2	22q13.1	0.313054846	7.47E-13	8.25E-12
SIGLEC5	19q13.41	0.313026123	7.50E-13	8.29E-12
C5ORF30	5q21.1	-0.312952263	7.60E-13	8.40E-12
SEC24C	10q22.2	0.312925257	7.64E-13	8.43E-12
MRPL47	3q26.33	-0.31291018	7.66E-13	8.45E-12
HCG11	6p22.2	0.31287344	7.71E-13	8.50E-12
TRPS1	8q23.3	0.312810172	7.79E-13	8.59E-12
NKRF	Xq24	-0.312770857	7.85E-13	8.64E-12
IGFBP6	12q13.13	0.312708925	7.93E-13	8.73E-12
IRX1	5p15.33	0.312704857	7.94E-13	8.73E-12
SLC7A7	14q11.2	0.312703485	7.94E-13	8.73E-12
COA4	11q13.4	-0.312641744	8.03E-13	8.82E-12
ARHGEF6	Xq26.3	0.312579526	8.12E-13	8.92E-12
RAD51C	17q22	-0.312541642	8.17E-13	8.97E-12
KIF21A	12q12	-0.312519885	8.20E-13	9.00E-12
SMIM4	3p21.1	-0.312502095	8.23E-13	9.02E-12
ELMOD1	11q22.3	0.312494916	8.24E-13	9.03E-12
NOP10	15q14	-0.312430088	8.33E-13	9.13E-12
ACOT13	6p22.3	-0.312363003	8.43E-13	9.23E-12
IGF2	11p15.5	0.312345922	8.46E-13	9.25E-12
SPATS2L	2q33.1	0.3123422	8.46E-13	9.26E-12
GABRD	1p36.33	0.312315862	8.50E-13	9.29E-12
CALCOCO1	12q13.13	0.312267672	8.57E-13	9.37E-12
GRHL3	1p36.11	-0.312208126	8.66E-13	9.46E-12
DLG4	17p13.1	0.31216318	8.73E-13	9.53E-12
PLA2G2F	1p36.12	0.312156159	8.74E-13	9.54E-12
CCDC68	18q21.2	0.312139609	8.77E-13	9.56E-12
PPP1R13L	19q13.32	0.312111077	8.81E-13	9.60E-12
DDAH2	6p21.33	0.312075196	8.87E-13	9.66E-12
ABHD17B	9q21.13	-0.312057447	8.90E-13	9.68E-12

ARHGEF10L	1p36.13	0.312037694	8.93E-13	9.71E-12
CYP2S1	19q13.2	-0.311974807	9.03E-13	9.81E-12
RAB31	18p11.22	0.311928907	9.10E-13	9.89E-12
LINC00475	9q22.31	0.311856919	9.22E-13	1.00E-11
SGMS2	4q25	0.311764773	9.37E-13	1.02E-11
MIA2	14q21.1	-0.311757712	9.38E-13	1.02E-11
IL21R	16p12.1	0.31165885	9.54E-13	1.03E-11
DYNC2H1	11q22.3	0.311650643	9.56E-13	1.04E-11
NOTCH4	6p21.32	0.311620965	9.61E-13	1.04E-11
UBL5	19p13.2	-0.311613999	9.62E-13	1.04E-11
ZNF347	19q13.42	0.311608369	9.63E-13	1.04E-11
JPT1	17q25.1	-0.311423432	9.94E-13	1.08E-11
SLCO2B1	11q13.4	0.31140177	9.98E-13	1.08E-11
ACAA2	18q21.1	0.311331059	1.01E-12	1.09E-11
KIF12	9q32	0.31130216	1.02E-12	1.10E-11
PIWIL4	11q21	0.311247186	1.03E-12	1.11E-11
RPL35	9q33.3	-0.3112363	1.03E-12	1.11E-11
PHB	17q21.33	-0.311190018	1.04E-12	1.12E-11
RPP40	6p25.1	-0.311187633	1.04E-12	1.12E-11
COX6B1	19q13.12	-0.311163394	1.04E-12	1.12E-11
TYSND1	10q22.1	-0.311022735	1.07E-12	1.15E-11
TLCD1	17q11.2	-0.310929988	1.08E-12	1.17E-11
ZNF418	19q13.43	0.31088618	1.09E-12	1.17E-11
RPIA	2p11.2	-0.310883412	1.09E-12	1.17E-11
RBPJ	4p15.2	0.310876828	1.09E-12	1.18E-11
XDH	2p23.1	0.310776439	1.11E-12	1.20E-11
PLSCR3	17p13.1	0.310757354	1.12E-12	1.20E-11
WT1-AS	11p13	0.310651542	1.14E-12	1.22E-11
STAT5A	17q21.2	0.310644273	1.14E-12	1.22E-11
G6PD	Xq28	-0.310601331	1.15E-12	1.23E-11
ETV6	12p13.2	0.310376506	1.19E-12	1.28E-11
KCND1	Xp11.23	0.310344252	1.20E-12	1.28E-11
LCP2	5q35.1	0.310328983	1.20E-12	1.29E-11
MRM3	17p13.3	-0.310313429	1.21E-12	1.29E-11
MRPL11	11q13.2	-0.310297302	1.21E-12	1.29E-11
FGFBP1	4p15.32	-0.310296729	1.21E-12	1.29E-11
HINT2	9p13.3	-0.310147577	1.24E-12	1.33E-11
CYP24A1	20q13.2	0.310070289	1.26E-12	1.34E-11
KIAA0754	1p34.3	0.309915459	1.29E-12	1.38E-11
SLC16A9	10q21.2	-0.309907484	1.30E-12	1.38E-11
ADCY4	14q12	0.309906339	1.30E-12	1.38E-11
SPRED1	15q14	0.309764344	1.33E-12	1.41E-11
PPA2	4q24	-0.309741155	1.33E-12	1.42E-11
COQ3	6q16.2	-0.309644774	1.36E-12	1.44E-11
RPP25L	9p13.3	-0.309486748	1.39E-12	1.48E-11
IL3RA	Xp22.33 and Yp11	0.309482931	1.40E-12	1.48E-11
NKAIN2	6q22.31	-0.309464354	1.40E-12	1.49E-11
OBP2A	9q34.3	0.309450932	1.40E-12	1.49E-11
CTDSP2	12q14.1	0.309443996	1.40E-12	1.49E-11
NLE1	17q12	-0.309442374	1.41E-12	1.49E-11
SURF1	9q34.2	-0.309429301	1.41E-12	1.49E-11
TUFT1	1q21.3	-0.309369659	1.42E-12	1.51E-11
SLC46A3	13q12.3	0.309239974	1.46E-12	1.54E-11
OTOP2	17q25.1	-0.309205858	1.46E-12	1.55E-11
NAA20	20p11.23	-0.309195124	1.47E-12	1.55E-11
MYO1G	7p13	0.309119546	1.49E-12	1.57E-11
NT5C	17q25.1	-0.309105423	1.49E-12	1.57E-11
METTL23	17q25.1	-0.309038242	1.51E-12	1.59E-11

ABLIM3	5q32	0.308988055	1.52E-12	1.60E-11
LUZP1	1p36.12	0.308970776	1.53E-12	1.61E-11
C5AR1	19q13.32	0.308789369	1.57E-12	1.66E-11
COASY	17q21.2	-0.308667414	1.61E-12	1.69E-11
HOXB2	17q21.32	0.308645466	1.61E-12	1.70E-11
CRLF1	19p13.11	0.308644893	1.61E-12	1.70E-11
DISP2	15q15.1	0.308579526	1.63E-12	1.72E-11
TUBB4B	9q34.3	-0.30856693	1.64E-12	1.72E-11
ELN	7q11.23	0.308505284	1.65E-12	1.74E-11
CLEC4A	12p13.31	0.308407718	1.68E-12	1.77E-11
SLC2A6	9q34.2	0.308256602	1.73E-12	1.81E-11
ZNF662	3p22.1	0.308194766	1.74E-12	1.83E-11
SUCLG1	2p11.2	-0.308175299	1.75E-12	1.83E-11
PTEN	10q23.31	0.308044142	1.79E-12	1.88E-11
WHRN	9q32	0.307984732	1.81E-12	1.89E-11
CDH5	16q21	0.307946943	1.82E-12	1.91E-11
STK17B	2q32.3	0.307927571	1.83E-12	1.91E-11
GPRIN3	4q22.1	0.307789114	1.87E-12	1.96E-11
TTL12	22q13.2	-0.307762006	1.88E-12	1.96E-11
GLOD4	17p13.3	-0.307620202	1.93E-12	2.01E-11
SPATA6	1p33	0.307564909	1.95E-12	2.03E-11
PSAP	10q22.1	0.307544433	1.95E-12	2.04E-11
TM6SF1	15q25.2	0.307537188	1.95E-12	2.04E-11
CERS4	19p13.2	-0.30750359	1.97E-12	2.05E-11
ORC2	2q33.1	-0.307373428	2.01E-12	2.09E-11
YPEL4	11q12.1	0.307135735	2.09E-12	2.18E-11
SLC6A7	5q32	0.307103998	2.11E-12	2.19E-11
DUS1L	17q25.3	-0.307050409	2.13E-12	2.21E-11
ZNF771	16p11.2	-0.307044643	2.13E-12	2.21E-11
TPRG1	3q28	-0.307034576	2.13E-12	2.21E-11
DUS3L	19p13.3	-0.30696672	2.16E-12	2.24E-11
RBMS3	3p24.1	0.306927419	2.17E-12	2.25E-11
PNMA8A	19q13.32	0.30690078	2.18E-12	2.26E-11
C15ORF40	15q25.2	-0.306894005	2.18E-12	2.26E-11
LGI3	8p21.3	-0.306877333	2.19E-12	2.27E-11
DCTPP1	16p11.2	-0.306870776	2.19E-12	2.27E-11
RPL36	19p13.3	-0.306814705	2.21E-12	2.29E-11
RAD51	15q15.1	-0.306795198	2.22E-12	2.30E-11
MRPL45	17q12	-0.306736933	2.24E-12	2.32E-11
KLHDC1	14q21.3	0.306642174	2.28E-12	2.36E-11
SPTLC3	20p12.1	0.306636257	2.28E-12	2.36E-11
SLIRP	14q24.3	-0.306624234	2.29E-12	2.36E-11
CCR8	3p22.1	0.30661959	2.29E-12	2.36E-11
KCNMB4	12q15	0.306568314	2.31E-12	2.38E-11
TMEM11	17p11.2	-0.30647241	2.35E-12	2.42E-11
USE1	19p13.11	-0.306286614	2.42E-12	2.50E-11
PHC1	12p13.31	0.306275258	2.43E-12	2.50E-11
SHISAL2A	1p32.3	0.30624899	2.44E-12	2.51E-11
TDO2	4q32.1	0.306146528	2.48E-12	2.56E-11
SPATA13	13q12.12	0.306122576	2.49E-12	2.56E-11
MPLKIP	7p14.1	-0.306049956	2.52E-12	2.60E-11
DIP2C	10p15.3	0.306032397	2.53E-12	2.60E-11
PIGX	3q29	-0.3060073	2.54E-12	2.61E-11
SIGLEC15	18q12.3	0.305981531	2.55E-12	2.62E-11
ZFP57	6p22.1	0.305911377	2.59E-12	2.65E-11
ALPK3	15q25.3	0.305802228	2.63E-12	2.70E-11
PCDHGB7	5q31.3	0.305759572	2.65E-12	2.72E-11
NOL11	17q24.2	-0.305745068	2.66E-12	2.72E-11

TEX10	9q31.1	-0.305715772	2.67E-12	2.74E-11
EIPR1	2p25.3	-0.305711096	2.68E-12	2.74E-11
C17ORF82	17q23.2	-0.305684985	2.69E-12	2.75E-11
HACD3	15q22.31	-0.305660424	2.70E-12	2.76E-11
EZH2	7q36.1	-0.305572536	2.74E-12	2.80E-11
CLK4	5q35.3	0.305544576	2.75E-12	2.81E-11
TGFB1	19q13.2	0.305538755	2.76E-12	2.81E-11
PCLAF	15q22.31	-0.305387408	2.83E-12	2.89E-11
SMIM11A	21q22.11-q22.12	-0.305177279	2.93E-12	2.99E-11
CACNB2	10p12.33-p12.31	0.305170191	2.94E-12	2.99E-11
ALG11	13q14.3	0.305067226	2.99E-12	3.04E-11
SMPD1	11p15.4	0.30503767	3.00E-12	3.06E-11
PSAPL1	4p16.1	0.305003458	3.02E-12	3.07E-11
SEH1L	18p11.21	-0.304978696	3.03E-12	3.09E-11
PLAAT2	11q12.3	-0.304969336	3.04E-12	3.09E-11
COX6B2	19q13.42	0.304961104	3.04E-12	3.09E-11
MND1	4q31.3	-0.304874299	3.09E-12	3.14E-11
MACF1	1p34.3	0.304872963	3.09E-12	3.14E-11
ZDHC3	3p21.31	-0.304806737	3.12E-12	3.17E-11
SMAP2	1p34.2	0.304781258	3.14E-12	3.18E-11
PPP3CB	10q22.2	0.304705108	3.18E-12	3.22E-11
ITGA3	17q21.33	0.304701291	3.18E-12	3.22E-11
LRRC25	19p13.11	0.3046552	3.21E-12	3.25E-11
CIITA	16p13.13	0.304617792	3.23E-12	3.26E-11
OLFML2A	9q33.3	0.30445738	3.32E-12	3.35E-11
UGT3A2	5p13.2	0.304437834	3.33E-12	3.36E-11
CD82	11p11.2	0.304329127	3.39E-12	3.42E-11
PDPN	1p36.21	0.304241907	3.44E-12	3.47E-11
NLRP14	11p15.4	0.304236633	3.44E-12	3.48E-11
DOLK	9q34.11	-0.304208507	3.46E-12	3.49E-11
BOLA1	1q21.2	-0.304148293	3.50E-12	3.52E-11
ADPRH	3q13.33	0.304137231	3.50E-12	3.53E-11
PLEKHM2	1p36.21	0.30410745	3.52E-12	3.55E-11
GOLM1	9q21.33	0.304070807	3.54E-12	3.57E-11
BICDL1	12q24.23	-0.30406489	3.55E-12	3.57E-11
PALD1	10q22.1	0.304026815	3.57E-12	3.59E-11
HS3ST5	6q21-q22.1	-0.304020998	3.57E-12	3.59E-11
SLC7A11	4q28.3	-0.303984064	3.59E-12	3.61E-11
KIAA0513	16q24.1	0.30395076	3.61E-12	3.63E-11
LSM3	3p25.1	-0.303935969	3.62E-12	3.64E-11
TUFM	16p11.2	-0.303886538	3.65E-12	3.67E-11
CORO1C	12q24.11	-0.303871651	3.66E-12	3.67E-11
TSEN15	1q25.3	-0.303819548	3.70E-12	3.71E-11
SLC27A5	19q13.43	-0.303724599	3.76E-12	3.76E-11
ICAM5	19p13.2	0.303659804	3.80E-12	3.80E-11
USP39	2p11.2	-0.303649784	3.80E-12	3.81E-11
LRRC6	8q24.22	0.303645669	3.81E-12	3.81E-11
NMRK1	9q21.13	-0.303581649	3.85E-12	3.85E-11
TFPI2	7q21.3	0.303522199	3.89E-12	3.89E-11
TMEM203	9q34.3	-0.303490708	3.91E-12	3.90E-11
OIP5-AS1	15q15.1	-0.303486127	3.91E-12	3.91E-11
ANG	14q11.2	0.303456927	3.93E-12	3.92E-11
RMI1	9q21.32	-0.303414176	3.96E-12	3.95E-11
SPI1	11p11.2	0.303369134	3.99E-12	3.98E-11
SLC17A9	20q13.33	0.30335587	4.00E-12	3.99E-11
SMPDL3B	1p35.3	0.303307298	4.03E-12	4.02E-11
PPP1R12B	1q32.1	0.303221795	4.09E-12	4.07E-11
IER5L	9q34.11	0.303147363	4.14E-12	4.12E-11

TMEM51-AS1	1p36.21	0.303129804	4.16E-12	4.13E-11
MYO1F	19p13.2	0.303120548	4.16E-12	4.14E-11
MRPS2	9q34.3	-0.303053177	4.21E-12	4.18E-11
APLNR	11q12.1	0.303029892	4.23E-12	4.20E-11
SPCS3	4q34.2	0.302963762	4.27E-12	4.24E-11
FMO1	1q24.3	0.302913854	4.31E-12	4.28E-11
P2RX7	12q24.31	0.302906887	4.32E-12	4.28E-11
NACAD	7p13	0.302906029	4.32E-12	4.28E-11
POLE3	9q32	-0.302884367	4.33E-12	4.29E-11
ZNF57	19p13.3	-0.302845242	4.36E-12	4.32E-11
CD209	19p13.2	0.302810602	4.39E-12	4.34E-11
ROBO4	11q24.2	0.302795524	4.40E-12	4.35E-11
ELFN2	22q13.1	0.302772533	4.42E-12	4.37E-11
LRRC3	21q22.3	0.302679581	4.49E-12	4.43E-11
LILRA2	19q13.42	0.302674197	4.49E-12	4.43E-11
COL6A4P2	3q22.1	0.302560117	4.58E-12	4.52E-11
PTDSS1	8q22.1	-0.302559916	4.58E-12	4.52E-11
FAM78A	9q34.13	0.302517642	4.61E-12	4.55E-11
RNASE2	14q11.2	0.302403321	4.70E-12	4.63E-11
CSF2	5q31.1	0.302394683	4.71E-12	4.64E-11
DDIAS	11q14.1	-0.302393969	4.71E-12	4.64E-11
ODF2L	1p22.3	0.302375511	4.72E-12	4.65E-11
CAMSAP3	19p13.2	-0.302330415	4.76E-12	4.68E-11
ASPHD2	22q12.1	0.302327266	4.76E-12	4.68E-11
FH	1q43	-0.302308467	4.78E-12	4.70E-11
WDFY1	2q36.1	0.302253215	4.82E-12	4.74E-11
PCBD2	5q31.1	-0.302233175	4.84E-12	4.75E-11
ASH1L-AS1	1q22	-0.302153494	4.90E-12	4.81E-11
SS18L2	3p22.1	-0.302073717	4.97E-12	4.88E-11
GCDH	19p13.13	-0.302048906	4.99E-12	4.89E-11
RNF146	6q22.33	0.302004724	5.03E-12	4.93E-11
LPXN	11q12.1	0.301936303	5.09E-12	4.98E-11
CRABP2	1q23.1	0.301927428	5.09E-12	4.99E-11
DEPDC1B	5q12.1	-0.30179927	5.21E-12	5.09E-11
ABHD11	7q11.23	-0.301725696	5.27E-12	5.16E-11
GUCY1A1	4q32.1	0.301634468	5.35E-12	5.23E-11
CYC1	8q24.3	-0.301598683	5.39E-12	5.26E-11
C11ORF96	11p11.2	0.301556218	5.42E-12	5.30E-11
ANKRD53	2p13.3	0.301543016	5.44E-12	5.31E-11
KCND3	1p13.2	0.301495098	5.48E-12	5.35E-11
AKAP13	15q25.3	0.301486557	5.49E-12	5.35E-11
FAM86JP	3q21.2	-0.301478923	5.50E-12	5.36E-11
POLR2F	22q13.1	-0.301445905	5.53E-12	5.38E-11
SGCB	4q12	0.301371186	5.60E-12	5.45E-11
ABI3BP	3q12.2	0.301347425	5.62E-12	5.47E-11
KCNA3	1p13.3	0.301251359	5.71E-12	5.56E-11
COX11	17q22	-0.301211251	5.75E-12	5.59E-11
NDUFA13	19p13.11	-0.301186822	5.77E-12	5.61E-11
FAHD1	16p13.3	-0.301142544	5.82E-12	5.65E-11
DTX4	11q12.1	0.301116778	5.84E-12	5.67E-11
FAM86C2P	11q13.2	-0.301093113	5.86E-12	5.69E-11
HECTD3	1p34.1	0.30106458	5.89E-12	5.72E-11
PIK3CG	7q22.3	0.301052556	5.90E-12	5.73E-11
HLA-B	6p21.33	0.300995205	5.96E-12	5.78E-11
LACC1	13q14.11	0.300977074	5.98E-12	5.79E-11
PMS2P1	7q22.1	-0.300889472	6.07E-12	5.88E-11
F10	13q34	0.300871253	6.09E-12	5.89E-11
TRAPPC5	19p13.2	-0.300859031	6.10E-12	5.90E-11

CD163	12p13.31	0.300773433	6.19E-12	5.98E-11
ADTRP	6p24.1	0.300594222	6.38E-12	6.16E-11
TCF12	15q21.3	0.300563685	6.41E-12	6.19E-11
PABPC4L	4q28.3	0.300540838	6.44E-12	6.21E-11
CCDC177	14q24.1	-0.300483968	6.50E-12	6.27E-11
MDH1	2p15	-0.300482096	6.50E-12	6.27E-11
WT1	11p13	0.300431245	6.56E-12	6.32E-11
DPP4	2q24.2	0.300317007	6.68E-12	6.44E-11
COTL1	16q24.1	0.300315385	6.68E-12	6.44E-11
PLEKHA4	19q13.33	0.300315003	6.68E-12	6.44E-11
PTGIS	20q13.13	0.300229119	6.78E-12	6.53E-11
ZNF830	17q12	-0.300156309	6.86E-12	6.60E-11
FPR2	19q13.41	0.300120357	6.91E-12	6.64E-11
IL20	1q32.1	0.300101517	6.93E-12	6.66E-11
C4ORF17	4q23	-0.300044027	7.00E-12	6.72E-11
PRKD1	14q12	0.299956295	7.10E-12	6.81E-11
CBLN3	14q12	0.299919174	7.14E-12	6.85E-11
SNU13	22q13.2	-0.299873655	7.20E-12	6.90E-11
TPST1	7q11.21	0.299840828	7.24E-12	6.94E-11
GEMIN6	2p22.1	-0.299768304	7.33E-12	7.02E-11
SSNA1	9q34.3	-0.299753036	7.35E-12	7.03E-11
ARV1	1q42.2	-0.299738245	7.36E-12	7.05E-11
EVC2	4p16.2	0.299735096	7.37E-12	7.05E-11
RMI2	16p13.13	-0.299725362	7.38E-12	7.06E-11
PCYT2	17q25.3	-0.299698356	7.41E-12	7.09E-11
NME1	17q21.33	-0.299628695	7.50E-12	7.17E-11
LDLRAD2	1p36.12	0.299531605	7.62E-12	7.28E-11
ADI1	2p25.3	-0.2994806	7.69E-12	7.34E-11
HSPA9	5q31.2	-0.299471527	7.70E-12	7.35E-11
CLCN6	1p36.22	0.299445189	7.73E-12	7.37E-11
4-Mar	2q35	0.299444822	7.73E-12	7.37E-11
MIA	19q13.2	0.299250397	7.99E-12	7.61E-11
CCDC138	2q13	-0.299214257	8.04E-12	7.65E-11
FECH	18q21.31	-0.299167307	8.10E-12	7.71E-11
KRT13	17q21.2	-0.299084095	8.21E-12	7.82E-11
PLXNA1	3q21.3	0.299013861	8.31E-12	7.90E-11
C3ORF18	3p21.31	0.29895212	8.40E-12	7.98E-11
NECAP2	1p36.13	0.298933321	8.42E-12	8.00E-11
MAPRE2	18q12.1-q12.2	0.298916907	8.45E-12	8.02E-11
C9ORF72	9p21.2	-0.298887134	8.49E-12	8.06E-11
ZNF208	19p12	0.298878885	8.50E-12	8.07E-11
MRPS26	20p13	-0.298830546	8.57E-12	8.13E-11
MAN2B2	4p16.1	0.298816328	8.59E-12	8.14E-11
H2BFXP	Xq22.2	0.298802611	8.61E-12	8.16E-11
ZNF415	19q13.42	0.298714848	8.74E-12	8.27E-11
PI4K2A	10q24.2	0.298634253	8.86E-12	8.38E-11
EPS15L1	19p13.11	-0.298631677	8.86E-12	8.38E-11
TRIM46	1q22	0.298630873	8.86E-12	8.38E-11
FAM131A	3q27.1	-0.298522032	9.02E-12	8.53E-11
NT5C1B	2p24.2	-0.298401374	9.21E-12	8.70E-11
SDC2	8q22.1	0.298384577	9.23E-12	8.72E-11
LGR5	12q21.1	0.298362557	9.27E-12	8.75E-11
ELFN1	7p22.3	0.298280316	9.39E-12	8.86E-11
COPS6	7q22.1	-0.298080206	9.71E-12	9.16E-11
EPHA3	3p11.1	0.298071959	9.73E-12	9.17E-11
GRAMD2B	5q23.2	0.297956151	9.91E-12	9.34E-11
PLOD1	1p36.22	0.297948326	9.93E-12	9.35E-11
TMEM199	17q11.2	-0.297881051	1.00E-11	9.45E-11

GIT2	12q24.11	0.297708901	1.03E-11	9.72E-11
RNF208	9q34.3	-0.297670213	1.04E-11	9.78E-11
ELOVL6	4q25	-0.297284729	1.11E-11	1.04E-10
TCF25	16q24.3	0.297254288	1.11E-11	1.05E-10
GNB1	1p36.33	0.297208674	1.12E-11	1.05E-10
FCGR3A	1q23.3	0.297179474	1.13E-11	1.06E-10
CCDC71L	7q22.3	0.297099029	1.14E-11	1.07E-10
HDDC3	15q26.1	-0.297092349	1.14E-11	1.07E-10
SLC27A2	15q21.2	-0.29700427	1.16E-11	1.09E-10
FADS3	11q12.2	0.296992308	1.16E-11	1.09E-10
FETUB	3q27.3	-0.296966695	1.17E-11	1.09E-10
RAB51F	20q11.23	-0.29687888	1.19E-11	1.11E-10
PSMA3	14q23.1	-0.296760073	1.21E-11	1.13E-10
FPR1	19q13.41	0.296739748	1.21E-11	1.13E-10
ADGRL4	1p31.1	0.296714746	1.22E-11	1.14E-10
FEM1A	19p13.3	-0.29669671	1.22E-11	1.14E-10
ORC4	2q23.1	-0.2965279	1.26E-11	1.17E-10
CLIP2	7q11.23	0.296478667	1.27E-11	1.18E-10
SIGLEC17P	19q13.41	0.296442591	1.27E-11	1.19E-10
IL10	1q32.1	0.29643815	1.28E-11	1.19E-10
COA5	2q11.2	-0.296386287	1.29E-11	1.20E-10
WDFY4	10q11.23	0.29637016	1.29E-11	1.20E-10
OTULINL	5p15.2	0.29626954	1.31E-11	1.22E-10
INTS14	15q22.31	-0.296240284	1.32E-11	1.23E-10
NDUFA11	19p13.3	-0.296211179	1.32E-11	1.23E-10
MYO10	5p15.1	0.296199823	1.33E-11	1.23E-10
PCDH7	4p15.1	0.296186273	1.33E-11	1.24E-10
TCF7L2	10q25.2-q25.3	0.296160699	1.34E-11	1.24E-10
ABCF3	3q27.1	-0.296126822	1.34E-11	1.25E-10
NOX5	15q23	0.296114179	1.35E-11	1.25E-10
DDX39A	19p13.12	-0.296030918	1.36E-11	1.27E-10
CXCL5	4q13.3	0.296012692	1.37E-11	1.27E-10
CAP2	6p22.3	0.295973758	1.38E-11	1.28E-10
DLEU7	13q14.3	0.295896168	1.39E-11	1.29E-10
HELZ2	20q13.33	0.295889782	1.40E-11	1.29E-10
BBS12	4q27	0.295872128	1.40E-11	1.30E-10
ASF1B	19p13.12	-0.295777751	1.42E-11	1.32E-10
ZNF876P	4p16.3	0.295764284	1.43E-11	1.32E-10
SRPX2	Xq22.1	0.295742253	1.43E-11	1.32E-10
SLC25A30	13q14.13	0.295638142	1.46E-11	1.34E-10
MYL3	3p21.31	0.295627467	1.46E-11	1.35E-10
TSPAN9	12p13.33-p13.32	0.295571821	1.47E-11	1.36E-10
PLPP2	19p13.3	-0.295545483	1.48E-11	1.36E-10
CXCR4	2q22.1	0.295461794	1.50E-11	1.38E-10
TADA2A	17q12	-0.295453301	1.50E-11	1.38E-10
S100A4	1q21.3	0.295441086	1.50E-11	1.39E-10
PILRA	7q22.1	0.295325143	1.53E-11	1.41E-10
PHTF1	1p13.2	0.295319035	1.53E-11	1.41E-10
FAM168A	11q13.4	0.295315695	1.54E-11	1.41E-10
SAPCD2	9q34.3	-0.295275139	1.55E-11	1.42E-10
MBD5	2q23.1	0.295272658	1.55E-11	1.42E-10
TLN1	9p13.3	0.295243553	1.55E-11	1.43E-10
TRIM7	5q35.3	-0.295230956	1.56E-11	1.43E-10
TBXAS1	7q34	0.295148889	1.58E-11	1.45E-10
DCHS2	4q31.3	0.29510374	1.59E-11	1.46E-10
DOCK4	7q31.1	0.29510209	1.59E-11	1.46E-10
LAT2	7q11.23	0.295089248	1.59E-11	1.46E-10
KCNK13	14q32.11	0.294995021	1.62E-11	1.48E-10

EOGT	3p14.1	0.294985137	1.62E-11	1.48E-10
LIMS2	2q14.3	0.294972446	1.62E-11	1.49E-10
RAPGEF2	4q32.1	0.294952024	1.63E-11	1.49E-10
RANBP3L	5p13.2	0.294945944	1.63E-11	1.49E-10
RPL22L1	3q26.2	-0.294915858	1.64E-11	1.50E-10
YDJC	22q11.21	-0.29485822	1.66E-11	1.51E-10
IL10RA	11q23.3	0.294792185	1.67E-11	1.53E-10
RET	10q11.21	0.294776589	1.68E-11	1.53E-10
SIPA1	11q13.1	0.294756781	1.68E-11	1.54E-10
PRAG1	8p23.1	0.294708209	1.70E-11	1.55E-10
AMPH	7p14.1	0.294693566	1.70E-11	1.55E-10
ANKRD16	10p15.1	-0.294625092	1.72E-11	1.57E-10
ACE2	Xp22.2	-0.29455419	1.74E-11	1.58E-10
RASD2	22q12.3	0.294525658	1.75E-11	1.59E-10
RPAIN	17p13.2	-0.294487964	1.76E-11	1.60E-10
CETN3	5q14.3	-0.294471074	1.76E-11	1.60E-10
IGF2-AS	11p15.5	0.294316041	1.81E-11	1.65E-10
HMBS	11q23.3	-0.294270494	1.82E-11	1.66E-10
GRK7	3q23	-0.294264214	1.82E-11	1.66E-10
MGC57346	17q21.31	-0.294235656	1.83E-11	1.66E-10
PICALM	11q14.2	0.294210845	1.84E-11	1.67E-10
MAP3K21	1q42.2	-0.294194527	1.85E-11	1.67E-10
MMP11	22q11.23	0.29418508	1.85E-11	1.68E-10
FAM102A	9q34.11	-0.294127824	1.87E-11	1.69E-10
GIT1	17q11.2	-0.29409328	1.88E-11	1.70E-10
THSD4	15q23	0.294090798	1.88E-11	1.70E-10
LBH	2p23.1	0.2940532	1.89E-11	1.71E-10
KLHL6	3q27.1	0.293966744	1.92E-11	1.73E-10
CERKL	2q31.3	0.293943651	1.92E-11	1.74E-10
SELENOI	2p23.3	-0.293920557	1.93E-11	1.74E-10
GSS	20q11.22	-0.293919317	1.93E-11	1.74E-10
GADD45B	19p13.3	0.293863778	1.95E-11	1.76E-10
STX7	6q23.2	0.293819691	1.96E-11	1.77E-10
TMPRSS11F	4q13.2	-0.29378721	1.97E-11	1.78E-10
IER5	1q25.3	0.293736766	1.99E-11	1.79E-10
CRABP1	15q25.1	0.293718049	2.00E-11	1.80E-10
SUV39H1	Xp11.23	-0.293680273	2.01E-11	1.81E-10
SH3BGRL	Xq21.1	0.293680082	2.01E-11	1.81E-10
SMTN	22q12.2	0.293661092	2.01E-11	1.81E-10
MKRN1	7q34	-0.293633323	2.02E-11	1.82E-10
RBPMS2	15q22.31	0.293550302	2.05E-11	1.85E-10
MRPS11	15q25.3	-0.293536751	2.06E-11	1.85E-10
CRYGN	7q36.1	0.29352526	2.06E-11	1.85E-10
AFMID	17q25.3	-0.293501634	2.07E-11	1.86E-10
CDC25A	3p21.31	-0.293469475	2.08E-11	1.87E-10
DLL4	15q15.1	0.293311831	2.13E-11	1.91E-10
FHAD1	1p36.21	0.293218217	2.17E-11	1.94E-10
PPARG	3p25.2	-0.293176229	2.18E-11	1.96E-10
C17ORF58	17q24.2	-0.293138822	2.19E-11	1.97E-10
CCDC36	3p21.31	0.293028457	2.23E-11	2.00E-10
ABR	17p13.3	0.293016199	2.24E-11	2.00E-10
PHYHIPL	10q21.1	0.292978767	2.25E-11	2.02E-10
FGFRL1	4p16.3	0.292966481	2.26E-11	2.02E-10
TOM1	22q12.3	0.29295713	2.26E-11	2.02E-10
TMPRSS4	11q23.3	-0.2929014	2.28E-11	2.04E-10
MRPL17	11p15.4	-0.292884605	2.29E-11	2.04E-10
CDK15	2q33.1	0.292778304	2.33E-11	2.08E-10
PRKCQ	10p15.1	0.292745473	2.34E-11	2.09E-10

GNB4	3q26.33	0.292644703	2.38E-11	2.12E-10
EIF4A3	17q25.3	-0.292638691	2.38E-11	2.12E-10
DYNC1LI2	16q22.1	0.292600711	2.39E-11	2.14E-10
HAS1	19q13.41	0.292520808	2.43E-11	2.16E-10
UMPS	3q21.2	-0.292511678	2.43E-11	2.16E-10
PMS2P5	7q11.23	-0.292465491	2.45E-11	2.18E-10
MRPS23	17q22	-0.292411384	2.47E-11	2.20E-10
GRAP	17p11.2	0.292366057	2.49E-11	2.21E-10
FAM163A	1q25.2	0.292358618	2.49E-11	2.22E-10
LRRN3	7q31.1	0.292348527	2.50E-11	2.22E-10
FAT1	4q35.2	0.292149724	2.58E-11	2.29E-10
TIGD3	11q13.1	-0.292108405	2.59E-11	2.30E-10
ZBTB8A	1p35.1	0.292102393	2.60E-11	2.31E-10
GGCT	7p14.3	-0.29204361	2.62E-11	2.33E-10
SRSF2	17q25.1	-0.291949042	2.66E-11	2.36E-10
DNAJC30	7q11.23	-0.291865258	2.70E-11	2.39E-10
ZNF77	19p13.3	-0.291821368	2.72E-11	2.41E-10
HCN2	19p13.3	0.29181659	2.72E-11	2.41E-10
KCNIP4-IT1	4p15.2	-0.291748498	2.75E-11	2.44E-10
ACOX2	3p14.3	0.291594825	2.82E-11	2.50E-10
SFXN1	5q35.2	-0.291593673	2.82E-11	2.50E-10
PDCD2L	19q13.11	-0.29148231	2.87E-11	2.54E-10
STOML2	9p13.3	-0.291472768	2.88E-11	2.54E-10
SELENOM	22q12.2	0.291465992	2.88E-11	2.54E-10
INO80C	18q12.2	-0.291436028	2.89E-11	2.56E-10
FAIM2	12q13.12	0.29142901	2.90E-11	2.56E-10
IL22RA2	6q23.3	0.291315009	2.95E-11	2.60E-10
ITGB2	21q22.3	0.29125529	2.98E-11	2.63E-10
PSMD6	3p14.1	-0.291247465	2.98E-11	2.63E-10
NOD1	7p14.3	0.291197366	3.01E-11	2.65E-10
KCNJ6	21q22.13	0.291186534	3.01E-11	2.65E-10
SLC30A7	1p21.2	0.291116731	3.05E-11	2.68E-10
MRPL30	2q11.2	-0.291111005	3.05E-11	2.68E-10
ATP5MF	7q22.1	-0.291029606	3.09E-11	2.72E-10
KRT19	17q21.2	-0.291022831	3.09E-11	2.72E-10
PARD3	10p11.22-p11.21	-0.291005654	3.10E-11	2.73E-10
CST3	20p11.21	0.290997924	3.11E-11	2.73E-10
SLA	8q24.22	0.290951452	3.13E-11	2.75E-10
MRM1	17q12	-0.290914808	3.15E-11	2.76E-10
IL18R1	2q12.1	0.290913186	3.15E-11	2.76E-10
TMEM266	15q24.2	0.290820049	3.20E-11	2.80E-10
MEFV	16p13.3	0.290743238	3.24E-11	2.84E-10
ATP8B4	15q21.2	0.29073531	3.24E-11	2.84E-10
CCR1	3p21.31	0.290721855	3.25E-11	2.85E-10
IL13RA2	Xq23	0.290682909	3.27E-11	2.86E-10
FAM229B	6q21	0.290661068	3.28E-11	2.87E-10
TMEM251	14q32.12	-0.290638745	3.29E-11	2.88E-10
TINAGL1	1p35.2	0.290565642	3.33E-11	2.91E-10
HS6ST2	Xq26.2	-0.290464203	3.39E-11	2.96E-10
OGN	9q22.31	0.290331039	3.46E-11	3.02E-10
TLL2	10q24.1	0.290266193	3.50E-11	3.05E-10
GSTM2	1p13.3	-0.290221724	3.52E-11	3.07E-10
CSF2RB	22q12.3	0.290166472	3.55E-11	3.10E-10
LMO2	11p13	0.29010893	3.59E-11	3.13E-10
PLEKHA6	1q32.1	0.290039745	3.63E-11	3.16E-10
ITGB5	3q21.2	0.289992795	3.66E-11	3.18E-10
DDIT4L	4q24	0.289928669	3.69E-11	3.22E-10
TMF1	3p14.1	0.289913973	3.70E-11	3.22E-10

SEMA5B	3q21.1	0.289910067	3.70E-11	3.22E-10
HYOU1	11q23.3	0.289908534	3.71E-11	3.22E-10
FCN1	9q34.3	0.289831347	3.75E-11	3.26E-10
TFB2M	1q44	-0.28982265	3.76E-11	3.26E-10
GSTM4	1p13.3	-0.289720352	3.82E-11	3.32E-10
L2HGDH	14q21.3	-0.289698786	3.83E-11	3.33E-10
AMPD3	11p15.4	0.289682372	3.84E-11	3.34E-10
C19ORF73	19q13.33	-0.289659859	3.86E-11	3.35E-10
SNX29	16p13.13-p13.12	0.289649225	3.86E-11	3.35E-10
SEMA3B	3p21.31	0.289605363	3.89E-11	3.37E-10
PANX1	11q21	0.28957454	3.91E-11	3.39E-10
CYTIP	2q24.1	0.289523391	3.94E-11	3.41E-10
GPC3	Xq26.2	-0.289461841	3.98E-11	3.45E-10
PLBD2	12q24.13	0.289448959	3.99E-11	3.45E-10
ME3	11q14.2	0.289379679	4.03E-11	3.49E-10
NOP16	5q35.2	-0.289254438	4.12E-11	3.56E-10
STAC2	17q12	0.289210176	4.15E-11	3.58E-10
VPS13C	15q22.2	0.289186535	4.16E-11	3.60E-10
POLR1B	2q14.1	-0.289166687	4.18E-11	3.61E-10
ARRB1	11q13.4	0.289148555	4.19E-11	3.61E-10
ARHGAP42	11q22.1	0.288998068	4.29E-11	3.70E-10
SEMA4C	2q11.2	0.288991388	4.29E-11	3.70E-10
CPM	12q15	0.288953122	4.32E-11	3.72E-10
CCDC149	4p15.2	0.288907794	4.35E-11	3.75E-10
MAP3K3	17q23.3	0.288900732	4.36E-11	3.75E-10
LOC728554	5q35.3	-0.288838323	4.40E-11	3.79E-10
IKZF1	7p12.2	0.288762077	4.46E-11	3.83E-10
ARHGAP18	6q22.33	0.288757306	4.46E-11	3.84E-10
RICTOR	5p13.1	0.288681067	4.51E-11	3.88E-10
TNFSF8	9q32-q33.1	0.288669895	4.52E-11	3.89E-10
EGOT	3p26.1	0.288662145	4.53E-11	3.89E-10
C1RL	12p13.31	0.288544123	4.61E-11	3.96E-10
ITGA8	10p13	0.288539071	4.62E-11	3.96E-10
MAPKAPK2	1q32.1	0.288499082	4.65E-11	3.99E-10
NDUFS4	5q11.2	-0.288480092	4.66E-11	4.00E-10
UTP18	17q21.33	-0.288393158	4.73E-11	4.05E-10
VRK1	14q32.2	-0.2883276	4.78E-11	4.09E-10
RFPL1	22q12.2	-0.288302764	4.80E-11	4.11E-10
MARVELD2	5q13.2	-0.288280364	4.81E-11	4.12E-10
SH3GLB1	1p22.3	0.288220913	4.86E-11	4.16E-10
POLR2J	7q22.1	-0.288134647	4.93E-11	4.21E-10
CSTA	3q21.1	-0.288004676	5.03E-11	4.30E-10
PDE4A	19p13.2	0.287975857	5.05E-11	4.32E-10
GNG11	7q21.3	0.287961829	5.07E-11	4.33E-10
FOXS1	20q11.21	0.287917272	5.10E-11	4.36E-10
ZNF781	19q13.12	0.287907078	5.11E-11	4.36E-10
SLC2A10	20q13.12	0.287847794	5.16E-11	4.40E-10
ULK4P3	15q13.2	0.287847242	5.16E-11	4.40E-10
CYBB	Xp21.1-p11.4	0.287846745	5.16E-11	4.40E-10
FUT11	10q22.2	0.287835771	5.17E-11	4.40E-10
SPRR3	1q21.3	-0.287793472	5.20E-11	4.43E-10
GPC4	Xq26.2	0.287774602	5.22E-11	4.44E-10
RNF7	3q23	-0.287744638	5.24E-11	4.46E-10
DHRS4L2	14q11.2	-0.287735286	5.25E-11	4.47E-10
MCEMP1	19p13.2	0.287712957	5.27E-11	4.48E-10
MYOF	10q23.33	0.287711048	5.27E-11	4.48E-10
CHRNB1	17p13.1	0.287677553	5.30E-11	4.50E-10
DRP2	Xq22.1	0.287666102	5.31E-11	4.51E-10

DMAC1	9p24.1	-0.287613713	5.36E-11	4.55E-10
SUSD6	14q24.1	0.287588425	5.38E-11	4.56E-10
ADRA1B	5q33.3	0.287579472	5.38E-11	4.57E-10
GIN52	16q24.1	-0.287487082	5.46E-11	4.63E-10
GNG7	19p13.3	0.287485269	5.47E-11	4.63E-10
SEMA3A	7q21.11	0.287457786	5.49E-11	4.65E-10
CCDC86	11q12.2	-0.287449102	5.50E-11	4.66E-10
MS4A14	11q12.2	0.287360219	5.58E-11	4.72E-10
TECTA	11q23.3	0.287257185	5.67E-11	4.80E-10
SH3BP2	4p16.3	0.287213112	5.71E-11	4.83E-10
YPEL2	17q22	0.287168936	5.75E-11	4.86E-10
CEBPZ	2p22.2	-0.287127418	5.79E-11	4.89E-10
ADAM22	7q21.12	0.287124287	5.79E-11	4.89E-10
ARHGEF5	7q35	-0.287036477	5.87E-11	4.96E-10
CYP27A1	2q35	0.286984469	5.92E-11	5.00E-10
MANSC1	12p13.2	-0.286926259	5.98E-11	5.04E-10
FBXO22-AS1	15q24.2	-0.286918625	5.98E-11	5.05E-10
GSTZ1	14q24.3	-0.286851254	6.05E-11	5.10E-10
FNDC8	17q12	-0.28670446	6.19E-11	5.21E-10
POU3F1	1p34.3	0.28670416	6.19E-11	5.21E-10
RCBTB2	13q14.2	0.286699525	6.20E-11	5.22E-10
ZNF491	19p13.2	0.286688844	6.21E-11	5.22E-10
TTC21A	3p22.2	0.286676637	6.22E-11	5.23E-10
HSPD1	2q33.1	-0.286664599	6.23E-11	5.24E-10
ZFYVE16	5q14.1	0.286639216	6.26E-11	5.26E-10
ADGRG2	Xp22.13	0.286594229	6.30E-11	5.29E-10
HLA-H	6p22.1	0.286580814	6.31E-11	5.30E-10
UBE2T	1q32.1	-0.286557053	6.34E-11	5.32E-10
SFT2D3	2q14.3	-0.286534055	6.36E-11	5.34E-10
RASGRF1	15q25.1	0.286439937	6.46E-11	5.42E-10
TMEM233	12q24.23	0.286375341	6.52E-11	5.47E-10
ACTR1A	10q24.32	0.286371544	6.53E-11	5.47E-10
TTC22	1p32.3	-0.2863182	6.58E-11	5.51E-10
PLOD3	7q22.1	0.286315242	6.59E-11	5.51E-10
CITED2	6q24.1	0.28628003	6.62E-11	5.54E-10
NEK11	3q22.1	0.286257032	6.65E-11	5.56E-10
LAMC1	1q25.3	0.286177064	6.73E-11	5.63E-10
SLC29A3	10q22.1	0.286155784	6.76E-11	5.65E-10
LILRB1	19q13.42	0.28606656	6.85E-11	5.73E-10
DMD	Xp21.2-p21.1	0.28598268	6.94E-11	5.80E-10
MVP	16p11.2	0.285966076	6.96E-11	5.81E-10
TREML1	6p21.1	0.285952969	6.98E-11	5.82E-10
NBPF10	1q21.1	0.285926665	7.01E-11	5.84E-10
CHST3	10q22.1	0.285919508	7.01E-11	5.85E-10
NATD1	17p11.2	0.285894506	7.04E-11	5.87E-10
POGLUT2	13q33.1	0.285887158	7.05E-11	5.87E-10
SEC31A	4q21.22	0.28586311	7.08E-11	5.89E-10
LINC01588	14q21.3	0.285835819	7.11E-11	5.92E-10
ITPR1	3p26.1	0.285769879	7.18E-11	5.98E-10
NDUFS3	11p11.2	-0.285755183	7.20E-11	5.99E-10
CUL7	6p21.1	0.285750125	7.20E-11	5.99E-10
DUSP6	12q21.33	0.285649832	7.32E-11	6.08E-10
PCK2	14q11.2-q12	-0.285584942	7.40E-11	6.14E-10
IL24	1q32.1	0.285460073	7.54E-11	6.26E-10
KLHL33	14q11.2	0.28543594	7.57E-11	6.29E-10
AKR1C4	10p15.1	-0.285428451	7.58E-11	6.29E-10
VSIR	10q22.1	0.285425293	7.59E-11	6.29E-10
CHRM4	11p11.2	0.28541782	7.59E-11	6.30E-10

FCHSD2	11q13.4	0.285407162	7.61E-11	6.30E-10
MRPL35	2p11.2	-0.285365174	7.66E-11	6.34E-10
NCF2	1q25.3	0.285304292	7.73E-11	6.40E-10
ARL3	10q24.32	0.285276046	7.77E-11	6.43E-10
WDR35	2p24.1	0.285265644	7.78E-11	6.44E-10
TM4SF18	3q25.1	0.285181628	7.88E-11	6.52E-10
SLC52A1	17p13.2	-0.285158194	7.91E-11	6.54E-10
SPAST	2p22.3	-0.285142448	7.93E-11	6.56E-10
KLKP1	19q13.33	0.285040253	8.06E-11	6.66E-10
SFXN4	10q26.11	-0.284969058	8.15E-11	6.73E-10
SRSF7	2p22.1	-0.284921726	8.21E-11	6.78E-10
KIRREL2	19q13.12	0.284802547	8.37E-11	6.91E-10
ZNF660	3p21.31	0.284779068	8.40E-11	6.93E-10
NUP37	12q23.2	-0.284751199	8.44E-11	6.96E-10
SNX20	16q12.1	0.284683637	8.53E-11	7.03E-10
ORC5	7q22.1-q22.2	-0.284644225	8.58E-11	7.07E-10
RFC5	12q24.23	-0.284552234	8.71E-11	7.17E-10
EDIL3	5q14.3	0.284533912	8.73E-11	7.19E-10
CARD9	9q34.3	0.284514731	8.76E-11	7.21E-10
RTN2	19q13.32	0.284508052	8.77E-11	7.21E-10
SYT12	11q13.2	0.284479042	8.81E-11	7.24E-10
BTN3A2	6p22.2	0.284433237	8.87E-11	7.29E-10
DMRT3	9p24.3	-0.284377643	8.95E-11	7.35E-10
MAP3K4	6q26	0.284366725	8.97E-11	7.36E-10
AQP9	15q21.3	0.284358518	8.98E-11	7.37E-10
MCCC2	5q13.2	-0.284355274	8.98E-11	7.37E-10
PYM1	12q13.2	-0.284321492	9.03E-11	7.41E-10
MATN4	20q13.12	0.284256253	9.12E-11	7.48E-10
ZNF366	5q13.2 5q13.2	0.284255543	9.13E-11	7.48E-10
TRIM74	7q11.23	-0.284251933	9.13E-11	7.48E-10
LILRB5	19q13.42	0.284216809	9.18E-11	7.52E-10
DNAJC12	10q21.3	0.28403588	9.45E-11	7.73E-10
FHOD1	16q22.1	0.284024238	9.46E-11	7.74E-10
CD163L1	12p13.31	0.283915193	9.63E-11	7.87E-10
EIF2B5	3q27.1	-0.28391507	9.63E-11	7.87E-10
POU6F1	12q13.13	0.283908677	9.64E-11	7.87E-10
ZDHHC12	9q34.11	-0.283892359	9.66E-11	7.89E-10
GAS2	11p14.3	0.283831821	9.76E-11	7.96E-10
ITGA10	1q21.1	0.283747174	9.89E-11	8.07E-10
UBL3	13q12.3	0.283608751	1.01E-10	8.24E-10
PBK	8p21.1	-0.28359959	1.01E-10	8.25E-10
DERL3	22q11.23	0.283587661	1.01E-10	8.26E-10
MAP3K12	12q13.13	0.283578119	1.02E-10	8.27E-10
TRPC6	11q22.1	0.283515137	1.03E-10	8.35E-10
F12	5q35.3	-0.283398335	1.04E-10	8.50E-10
TGOLN2	2p11.2	0.283398239	1.04E-10	8.50E-10
NDUFC1	4q31.1	-0.283352339	1.05E-10	8.56E-10
UBE2O	17q25.1	-0.283221795	1.07E-10	8.73E-10
PRUNE2	9q21.2	0.283111196	1.09E-10	8.88E-10
UQCC3	11q12.3	-0.283066441	1.10E-10	8.94E-10
PHF5A	22q13.2	-0.283032183	1.11E-10	8.98E-10
CD80	3q13.33	0.283028461	1.11E-10	8.98E-10
ZNF667	19q13.43	0.283016253	1.11E-10	9.00E-10
C11ORF71	11q23.2	-0.283009376	1.11E-10	9.00E-10
KAZALD1	10q24.31	0.282972446	1.12E-10	9.05E-10
LINC02381	12q13.13	0.282908128	1.13E-10	9.14E-10
ATP8B1	18q21.31	-0.282899062	1.13E-10	9.15E-10
RBM43	2q23.3	0.282842665	1.14E-10	9.23E-10

PLPPR1	9q31.1	-0.282775386	1.15E-10	9.32E-10
RFFL	17q12	-0.282775008	1.15E-10	9.32E-10
MICB	6p21.33	0.282773958	1.15E-10	9.32E-10
DYNLT3	Xp11.4	-0.282755636	1.16E-10	9.34E-10
CMKLR1	12q23.3	0.282704201	1.16E-10	9.41E-10
TUBA1C	12q13.12	-0.282703247	1.16E-10	9.41E-10
MTLN	2q13	-0.282647995	1.17E-10	9.49E-10
ARHGEF15	17p13.1	0.282602531	1.18E-10	9.55E-10
NDUFB6	9p21.1	-0.28250266	1.20E-10	9.70E-10
DUSP18	22q12.2	0.28249808	1.20E-10	9.70E-10
CTIF	18q21.1	0.282496839	1.20E-10	9.70E-10
NINJ2	12p13.33	0.282481189	1.21E-10	9.72E-10
NES	1q23.1	0.28247365	1.21E-10	9.73E-10
CCNQ	Xq28	-0.282427375	1.22E-10	9.79E-10
PREX2	8q13.2	0.282419562	1.22E-10	9.80E-10
SELENOH	11q12.1	-0.282369254	1.23E-10	9.87E-10
ZC3H12D	6q25.1	0.282349664	1.23E-10	9.90E-10
CLNS1A	11q14.1	-0.2823349	1.23E-10	9.92E-10
SLC48A1	12q13.11	-0.282323449	1.24E-10	9.93E-10
MTMR9LP	1p35.2	0.282181317	1.26E-10	1.02E-09
ATP5ME	4p16.3	-0.282149104	1.27E-10	1.02E-09
PTS	11q23.1	-0.282102631	1.28E-10	1.03E-09
FKBP10	17q21.2	0.282100818	1.28E-10	1.03E-09
VPS29	12q24.11	-0.281964835	1.31E-10	1.05E-09
FICD	12q23.3	0.281806141	1.34E-10	1.07E-09
SPIN2B	Xp11.21	-0.281801369	1.34E-10	1.07E-09
ANK2	4q25-q26	0.281758577	1.35E-10	1.08E-09
PLPPR5	1p21.3	0.281742653	1.35E-10	1.08E-09
KCNS1	20q13.12	0.28157308	1.39E-10	1.11E-09
ZMYND15	17p13.2	0.281550206	1.39E-10	1.12E-09
EMILIN2	18p11.32-p11.31	0.281408021	1.43E-10	1.14E-09
GLCCI1	7p21.3	0.281349238	1.44E-10	1.15E-09
ZSCAN12P1	6p22.1	0.281348195	1.44E-10	1.15E-09
FAM120AOS	9q22.31	-0.281214972	1.47E-10	1.17E-09
ZNF608	5q23.2	0.281192261	1.47E-10	1.18E-09
FNBP1L	1p22.1	0.281179665	1.48E-10	1.18E-09
IL2RB	22q12.3	0.281087292	1.50E-10	1.20E-09
DNAJB1	19p13.12	-0.281081566	1.50E-10	1.20E-09
LILRA1	19q13.42	0.281051737	1.51E-10	1.20E-09
PYCR2	1q42.12	-0.281023165	1.51E-10	1.21E-09
OSMR	5p13.1	0.281014004	1.52E-10	1.21E-09
KCNC4	1p13.3	0.281000699	1.52E-10	1.21E-09
VAV2	9q34.2	0.280992724	1.52E-10	1.21E-09
OPRL1	20q13.33	0.280938617	1.53E-10	1.22E-09
CCR10	17q21.2	0.280929224	1.54E-10	1.22E-09
PCYT1A	3q29	-0.280917146	1.54E-10	1.22E-09
ENSA	1q21.3	-0.280911802	1.54E-10	1.22E-09
PCED1B-AS1	12q13.11	0.280902457	1.54E-10	1.23E-09
UBTD1	10q24.1-q24.2	0.280897488	1.54E-10	1.23E-09
EDEM1	3p26.1	0.280895389	1.54E-10	1.23E-09
NPTXR	22q13.1	0.280885464	1.55E-10	1.23E-09
WDTC1	1p36.11	0.280761505	1.58E-10	1.25E-09
DLD	7q31.1	-0.280746809	1.58E-10	1.25E-09
NFAT5	16q22.1	0.280738793	1.58E-10	1.25E-09
GMEB1	1p35.3	0.28071446	1.59E-10	1.26E-09
MYO9B	19p13.11	0.280663406	1.60E-10	1.27E-09
MTERF3	8q22.1	-0.280513873	1.64E-10	1.30E-09
XRCC3	14q32.33	-0.280495551	1.64E-10	1.30E-09

KLHL30	2q37.3	0.280418654	1.66E-10	1.32E-09
RPL35A	3q29	-0.280397166	1.67E-10	1.32E-09
DMWD	19q13.32	0.280371305	1.68E-10	1.32E-09
CXORF21	Xp21.2	0.280369683	1.68E-10	1.32E-09
ELAVL2	9p21.3	0.280312521	1.69E-10	1.34E-09
WDR74	11q12.3	-0.280310709	1.69E-10	1.34E-09
PLEKHA8P1	12q12	0.280291051	1.70E-10	1.34E-09
RABAC1	19q13.2	0.280251736	1.71E-10	1.35E-09
RPP14	3p14.3	-0.280242765	1.71E-10	1.35E-09
SLC24A2	9p22.1-p21.3	0.280237355	1.71E-10	1.35E-09
CCR2	3p21.31	0.280213088	1.72E-10	1.35E-09
SLC8A3	14q24.2	0.280209754	1.72E-10	1.35E-09
NIPSNAP1	22q12.2	-0.280183601	1.73E-10	1.36E-09
TBCEL	11q23.3	0.280114512	1.74E-10	1.37E-09
PROSER2	10p14	-0.280113176	1.74E-10	1.37E-09
RNASE3	14q11.2	0.280092293	1.75E-10	1.38E-09
A1BG	19q13.43	0.280030441	1.77E-10	1.39E-09
NPHP1	2q13	0.280007355	1.77E-10	1.39E-09
HRG	3q27.3	-0.279999006	1.78E-10	1.39E-09
WDR18	19p13.3	-0.279929671	1.79E-10	1.41E-09
OSTM1	6q21	0.279897416	1.80E-10	1.42E-09
RALGAPA2	20p11.23	0.279891786	1.81E-10	1.42E-09
C17ORF47	17q22	0.279887756	1.81E-10	1.42E-09
DUSP5	10q25.2	0.279861345	1.81E-10	1.42E-09
HSPB6	19q13.12	0.279855906	1.82E-10	1.42E-09
C2	6p21.33	0.279797886	1.83E-10	1.43E-09
TWF2	3p21.2	0.279782141	1.84E-10	1.44E-09
TRIL	7p14.3	0.279743589	1.85E-10	1.45E-09
ARHGDI1B	12p12.3	0.279740726	1.85E-10	1.45E-09
HLA-C	6p21.33	0.279609323	1.89E-10	1.47E-09
CDKN3	14q22.2	-0.279559129	1.90E-10	1.49E-09
DUS4L	7q22.3	-0.279547678	1.90E-10	1.49E-09
SCMH1	1p34.2	0.279528688	1.91E-10	1.49E-09
TAZ	Xq28	-0.279514183	1.91E-10	1.49E-09
EPHX1	1q42.12	-0.279489754	1.92E-10	1.50E-09
HLA-F	6p22.1	0.279380872	1.95E-10	1.52E-09
SACS	13q12.12	0.279377627	1.95E-10	1.52E-09
KLF13	15q13.3	0.279357969	1.96E-10	1.53E-09
RTL8A	Xq26.3	-0.279341079	1.97E-10	1.53E-09
CCDC190	1q23.3	-0.279332803	1.97E-10	1.53E-09
TRAIP	3p21.31	-0.279237445	2.00E-10	1.56E-09
GATA5	20q13.33	0.279211018	2.01E-10	1.56E-09
MUC12	7q22.1	0.279210248	2.01E-10	1.56E-09
LAPTM5	1p35.2	0.279162535	2.02E-10	1.57E-09
TCERG1L	10q26.3	0.279126125	2.03E-10	1.58E-09
ATP1B3	3q23	-0.279105757	2.04E-10	1.58E-09
PDE5A	4q26	0.279097359	2.04E-10	1.59E-09
FAM104B	Xp11.21	-0.279043634	2.06E-10	1.60E-09
KIAA1324	1p13.3	-0.278895436	2.11E-10	1.63E-09
LIG3	17q12	-0.278876923	2.11E-10	1.64E-09
SIGLEC1	20p13	0.27884028	2.12E-10	1.65E-09
PGP	16p13.3	-0.27883923	2.12E-10	1.65E-09
CD86	3q13.33	0.278813751	2.13E-10	1.65E-09
CAVIN2	2q32.3	-0.278777584	2.14E-10	1.66E-09
UGT1A4	2q37.1	-0.2787116	2.17E-10	1.68E-09
RUNDC1	17q21.31	-0.278698476	2.17E-10	1.68E-09
TIMM21	18q22.3	-0.27867252	2.18E-10	1.69E-09
ENTR1	9q34.3	-0.278639502	2.19E-10	1.69E-09

SLC9A4	2q12.1	-0.278623319	2.20E-10	1.70E-09
ATP2A3	17p13.2	0.278566691	2.22E-10	1.71E-09
PTTG1IP	21q22.3	0.278556576	2.22E-10	1.71E-09
COX6C	8q22.2	-0.278548083	2.22E-10	1.72E-09
SPAG5	17q11.2	-0.278539304	2.22E-10	1.72E-09
SYNPO2	4q26	0.278510676	2.23E-10	1.72E-09
LPIN2	18p11.31	0.278467161	2.25E-10	1.74E-09
ENPP2	8q24.12	0.278398168	2.27E-10	1.75E-09
ZNF665	19q13.42	0.27835288	2.29E-10	1.77E-09
SPN	16p11.2	0.278342152	2.29E-10	1.77E-09
STARD3NL	7p14.1	0.278294057	2.31E-10	1.78E-09
CCNB2	15q22.2	-0.278231457	2.33E-10	1.80E-09
PAGR1	16p11.2	-0.278062266	2.39E-10	1.84E-09
TSPYL4	6q22.1	0.278024054	2.41E-10	1.85E-09
MYL5	4p16.3	-0.278020851	2.41E-10	1.85E-09
UGT1A1	2q37.1	-0.27799434	2.42E-10	1.86E-09
CD63	12q13.2	0.27798039	2.42E-10	1.86E-09
TRIM61	4q32.3	0.277956183	2.43E-10	1.87E-09
ATPAF1	1p33	-0.277893361	2.46E-10	1.89E-09
TRIM16	17p12	-0.277846029	2.48E-10	1.90E-09
TDRD6	6p12.3	0.277828701	2.48E-10	1.90E-09
MKKS	20p12.2	-0.277798793	2.49E-10	1.91E-09
MRPL42	12q22	-0.277753083	2.51E-10	1.93E-09
ORC6	16q11.2	-0.277726173	2.52E-10	1.93E-09
SOX9	17q24.3	0.277722738	2.52E-10	1.93E-09
ZNF367	9q22.32 9q22.32	-0.277713386	2.53E-10	1.93E-09
RFC4	3q27.3	-0.277711955	2.53E-10	1.93E-09
COL21A1	6p12.1 6p12.3-p11	0.277690865	2.53E-10	1.94E-09
PTGER4	5p13.1	0.277662714	2.55E-10	1.95E-09
SPTSSA	14q13.1	-0.277643725	2.55E-10	1.95E-09
SDHD	11q23.1	-0.277597443	2.57E-10	1.97E-09
MYLK4	6p25.2	0.277510325	2.61E-10	1.99E-09
OLIG2	21q22.11	0.277499804	2.61E-10	1.99E-09
TMEM59L	19p13.11	0.277493119	2.61E-10	2.00E-09
ENPP6	4q35.1	0.277491	2.61E-10	2.00E-09
ZDHHC15	Xq13.3	0.277488472	2.61E-10	2.00E-09
ARSE	Xp22.33	0.277486105	2.62E-10	2.00E-09
TST	22q12.3	-0.277478929	2.62E-10	2.00E-09
AKAP11	13q14.11	0.277382446	2.66E-10	2.03E-09
CC2D2B	10q24.1	0.277332561	2.68E-10	2.04E-09
GGN	19q13.2	0.277233757	2.72E-10	2.07E-09
REXO5	16p12.3	-0.277192165	2.74E-10	2.08E-09
NDUFAF7	2p22.2	-0.277172412	2.74E-10	2.09E-09
PRKD3	2p22.2	0.277165255	2.75E-10	2.09E-09
AGPAT1	6p21.32	0.277154186	2.75E-10	2.09E-09
ERI2	16p12.3	-0.277134432	2.76E-10	2.10E-09
SPC25	2q24.3	-0.277062958	2.79E-10	2.12E-09
MMP8	11q22.2	0.277047571	2.80E-10	2.13E-09
KCTD16	5q31.3	0.277014872	2.81E-10	2.14E-09
BRCC3	Xq28	-0.276876876	2.87E-10	2.18E-09
AR	Xq12	0.276837431	2.89E-10	2.19E-09
NDUFA2	5q31.3	-0.276733068	2.94E-10	2.23E-09
MOB3B	9p21.2	0.276711883	2.95E-10	2.23E-09
FGF10	5p12	0.276688703	2.96E-10	2.24E-09
ADGRV1	5q14.3	-0.276670372	2.96E-10	2.25E-09
TSFM	12q14.1	-0.276663311	2.97E-10	2.25E-09
OPA1	3q29	-0.276662929	2.97E-10	2.25E-09
ZNF804A	2q32.1	0.276656728	2.97E-10	2.25E-09

LSG1	3q29	-0.276650905	2.97E-10	2.25E-09
UBA7	3p21.31	0.276622945	2.99E-10	2.26E-09
NCF4	22q12.3	0.27661069	2.99E-10	2.26E-09
GPR183	13q32.3	0.276595183	3.00E-10	2.27E-09
PDCL3	2q11.2	-0.27649975	3.04E-10	2.30E-09
TRHDE	12q21.1	0.276465693	3.06E-10	2.31E-09
ACP1	2p25.3	-0.276431806	3.07E-10	2.32E-09
EVI2A	17q11.2	0.276374836	3.10E-10	2.34E-09
LIMS1	2q12.3	0.276353938	3.11E-10	2.35E-09
POLA2	11q13.1	-0.276321874	3.13E-10	2.36E-09
AARSD1	17q21.31	-0.276292251	3.14E-10	2.37E-09
PIGK	1p31.1	0.27626061	3.16E-10	2.38E-09
FCGBP	19q13.2	0.276181311	3.19E-10	2.41E-09
C19ORF24	19p13.3	-0.276120619	3.22E-10	2.43E-09
CEMIP2	9q21.13	0.276110218	3.23E-10	2.43E-09
LEMD1	1q32.1	0.276109287	3.23E-10	2.43E-09
CD180	5q12.3	0.27606489	3.25E-10	2.45E-09
ATP5F1A	18q21.1	-0.276055347	3.26E-10	2.45E-09
DMBX1	1p33	0.276035106	3.27E-10	2.45E-09
MTERF1	7q21.2	-0.27598664	3.29E-10	2.47E-09
CTSH	15q25.1	0.275973853	3.30E-10	2.48E-09
SLC27A1	19p13.11	0.275874711	3.35E-10	2.51E-09
HSD17B10	Xp11.22	-0.275857528	3.36E-10	2.52E-09
GPR141	7p14.1	0.275822835	3.37E-10	2.53E-09
MFSD2B	2p23.3	-0.275817544	3.38E-10	2.53E-09
CCR4	3p22.3	0.275777165	3.40E-10	2.55E-09
WAS	Xp11.23	0.275761201	3.41E-10	2.55E-09
CIC	19q13.2	0.27571706	3.43E-10	2.57E-09
TXNL4A	18q23	-0.275711143	3.43E-10	2.57E-09
SLC25A38	3p22.1	-0.275701601	3.44E-10	2.57E-09
SOX30	5q33.3	0.27565916	3.46E-10	2.59E-09
GRM6	5q35.3	0.275637814	3.47E-10	2.60E-09
TBATA	10q22.1	0.275594527	3.49E-10	2.61E-09
ZNF264	19q13.43	0.275589952	3.50E-10	2.61E-09
TMA7	3p21.31	-0.275511893	3.54E-10	2.64E-09
ODAPH	4q21.1	0.275482946	3.55E-10	2.65E-09
SND1-IT1	7q32.1	-0.275476153	3.56E-10	2.65E-09
ARHGAP30	1q23.3	0.275346709	3.63E-10	2.71E-09
CABYR	18q11.2	-0.275335544	3.63E-10	2.71E-09
LRRN1	3p26.2	0.275289507	3.66E-10	2.73E-09
GRAMD1B	11q24.1	0.275277265	3.67E-10	2.73E-09
NPR1	1q21.3	0.275252427	3.68E-10	2.74E-09
CASC15	6p22.3	0.275249278	3.68E-10	2.74E-09
DOK3	5q35.3	0.275209485	3.70E-10	2.76E-09
SIRPB1	20p13	0.275171506	3.72E-10	2.77E-09
ABCA9	17q24.2	0.275099172	3.77E-10	2.80E-09
SEZ6L	22q12.1	0.275092162	3.77E-10	2.80E-09
TIPIN	15q22.31	-0.275089827	3.77E-10	2.80E-09
CCL13	17q12	0.27503056	3.81E-10	2.83E-09
SYTL3	6q25.3	0.27501491	3.81E-10	2.83E-09
CALU	7q32.1	0.274952501	3.85E-10	2.86E-09
SLC38A5	Xp11.23	0.274832168	3.92E-10	2.91E-09
RPL23	17q12	-0.274811461	3.93E-10	2.92E-09
SAC3D1	11q13.1	-0.274797242	3.94E-10	2.93E-09
PEA15	1q23.2	0.274775771	3.96E-10	2.93E-09
FAM71E2	19q13.42	0.274747431	3.97E-10	2.95E-09
STAP2	19p13.3	-0.274735978	3.98E-10	2.95E-09
HDCC2	6q22.31	-0.274695422	4.00E-10	2.97E-09

MACO1	1p36.11 1p36.11	0.274674046	4.02E-10	2.97E-09
ACHE	7q22.1	0.274610301	4.06E-10	3.00E-09
DPYSL3	5q32	0.27456631	4.08E-10	3.02E-09
SVEP1	9q31.3	0.274559834	4.09E-10	3.02E-09
GCOM1	15q21.3	0.274543121	4.10E-10	3.03E-09
CD74	5q33.1	0.27451602	4.11E-10	3.04E-09
BTBD2	19p13.3	-0.274508004	4.12E-10	3.04E-09
IFITM3	11p15.5	0.274493499	4.13E-10	3.05E-09
WDR83OS	19p13.13	-0.274454851	4.15E-10	3.07E-09
PFN2	3q25.1	-0.274441396	4.16E-10	3.07E-09
SAMD9L	7q21.2	0.274441014	4.16E-10	3.07E-09
SGK1	6q23.2	-0.274434525	4.17E-10	3.07E-09
SEC23A	14q21.1	0.274427082	4.17E-10	3.07E-09
WSCD1	17p13.2	0.274341205	4.23E-10	3.11E-09
CD151	11p15.5	0.274324498	4.24E-10	3.12E-09
TXN2	22q12.3	-0.274217143	4.31E-10	3.17E-09
BDKRB2	14q32.2	0.274150822	4.35E-10	3.20E-09
MTX1	1q22	-0.274126106	4.37E-10	3.21E-09
VDAC3	8p11.21	-0.274089463	4.39E-10	3.23E-09
GLDN	15q21.2	0.274027149	4.43E-10	3.26E-09
FERMT3	11q13.1	0.274026863	4.43E-10	3.26E-09
SLC31A2	9q32	0.273998712	4.45E-10	3.27E-09
PPP6C	9q33.3	-0.273944796	4.49E-10	3.30E-09
KRT8	12q13.13	-0.27385853	4.55E-10	3.34E-09
ERCC6L	Xq13.1	-0.273748026	4.62E-10	3.39E-09
FAM136A	2p13.3	-0.273738483	4.63E-10	3.40E-09
DPH6	15q14	-0.273723597	4.64E-10	3.40E-09
EIF4E	4q23	-0.273719302	4.64E-10	3.40E-09
ETV2	19q13.12	-0.27363033	4.70E-10	3.45E-09
PBX4	19p13.11	0.273629601	4.71E-10	3.45E-09
HNMT	2q22.1	0.273591144	4.73E-10	3.47E-09
PLAC9	10q22.3	0.273572536	4.75E-10	3.48E-09
COX4I1	16q24.1	-0.273551447	4.76E-10	3.48E-09
SLC15A3	11q12.2	0.273534652	4.77E-10	3.49E-09
MRPL54	19p13.3	-0.273502779	4.80E-10	3.51E-09
MTFR2	6q23.3	-0.273488567	4.81E-10	3.51E-09
ZNF174	16p13.3	-0.273454405	4.83E-10	3.53E-09
YARS2	12p11.21	-0.273433983	4.85E-10	3.54E-09
PPP1R27	17q25.3	-0.273298431	4.95E-10	3.61E-09
EVI2B	17q11.2	0.273288833	4.95E-10	3.62E-09
SYS1-DBNDD2	20q13.12	0.273274348	4.96E-10	3.62E-09
AOC1	7q36.1	0.273239981	4.99E-10	3.64E-09
JTB	1q21.3	-0.273233581	5.00E-10	3.64E-09
KCTD14	11q14.1	0.273090727	5.10E-10	3.72E-09
TMPRSS11A	4q13.2	-0.27306727	5.12E-10	3.73E-09
PCNX4	14q23.1	0.27297507	5.19E-10	3.78E-09
RAB23	6p12.1-p11.2	0.27288785	5.26E-10	3.83E-09
PLCG1	20q12	0.27287783	5.27E-10	3.84E-09
RELCH	18q21.33	-0.272825304	5.31E-10	3.87E-09
SPRR1A	1q21.3	-0.272793844	5.34E-10	3.88E-09
PRXL2A	10q23.1	-0.272772384	5.35E-10	3.89E-09
GRK5	10q26.11	0.272767612	5.36E-10	3.90E-09
PBXIP1	1q21.3	0.272743565	5.38E-10	3.91E-09
ZIK1	19q13.43	0.272742897	5.38E-10	3.91E-09
ZNF836	19q13.41	0.272738698	5.38E-10	3.91E-09
CYP2C19	10q23.33	-0.272717223	5.40E-10	3.92E-09
TDP2	6p22.3	-0.272707589	5.41E-10	3.92E-09
CTAGE11P	13q22.2	-0.27270339	5.41E-10	3.92E-09

IL15RA	10p15.1	0.272671524	5.44E-10	3.94E-09
URB1-AS1	21q22.11	-0.272649092	5.46E-10	3.95E-09
BOD1L1	4p15.33	0.272622945	5.48E-10	3.97E-09
SLC1A3	5p13.2	0.272612025	5.49E-10	3.97E-09
RELL2	5q31.3	-0.272599375	5.50E-10	3.98E-09
SLC25A39	17q21.31	-0.272550612	5.54E-10	4.01E-09
FAM32A	19p13.11	-0.272545554	5.54E-10	4.01E-09
NPAS2	2q11.2	0.272537157	5.55E-10	4.01E-09
CSTF3	11p13	-0.272477897	5.60E-10	4.05E-09
ECT2	3q26.31	-0.272444688	5.63E-10	4.06E-09
EPB41L1	20q11.23	-0.272443788	5.63E-10	4.06E-09
RTEL1	20q13.33	0.272415011	5.65E-10	4.08E-09
ELOVL3	10q24.32	0.272408244	5.66E-10	4.08E-09
PIGN	18q21.33	-0.272406422	5.66E-10	4.08E-09
ABCC1	16p13.11	-0.272382279	5.68E-10	4.10E-09
EVI5	1p22.1	0.272369492	5.69E-10	4.10E-09
CST6	11q13.1	0.272337732	5.72E-10	4.12E-09
IER3IP1	18q21.1	-0.272332944	5.72E-10	4.12E-09
BASP1-AS1	5p15.1	0.272248217	5.79E-10	4.17E-09
NECAB1	8q21.3	0.27224239	5.80E-10	4.18E-09
ZDHC7	16q24.1	0.272231791	5.81E-10	4.18E-09
HLA-DQB2	6p21.32	0.272221676	5.82E-10	4.19E-09
TMEM132E	17q12	0.272211164	5.83E-10	4.19E-09
RNASE1	14q11.2	0.272199155	5.84E-10	4.20E-09
FOXF2	6p25.3	0.272187418	5.85E-10	4.20E-09
TRPC3	4q27	0.272171474	5.86E-10	4.21E-09
TLR7	Xp22.2	0.272150774	5.88E-10	4.22E-09
SLC39A7	6p21.32	0.272150202	5.88E-10	4.22E-09
UGGT2	13q32.1	0.272137414	5.89E-10	4.23E-09
IMP4	2q21.1	-0.272127204	5.90E-10	4.23E-09
TRIM39	6p22.1	0.272100675	5.92E-10	4.25E-09
NLRP7	19q13.42	0.272094471	5.93E-10	4.25E-09
TDH	8p23.1	-0.272040694	5.98E-10	4.28E-09
CST1	20p11.21	0.27204019	5.98E-10	4.28E-09
NTPCR	1q42.2	-0.272039793	5.98E-10	4.28E-09
PHLDA3	1q32.1	0.272017177	6.00E-10	4.30E-09
PRDM12	9q34.12	-0.272002598	6.01E-10	4.30E-09
GFRA1	10q25.3	0.271976661	6.04E-10	4.32E-09
KERA	12q21.33	0.271955538	6.05E-10	4.33E-09
SH2D3C	9q34.11	0.271897512	6.11E-10	4.37E-09
SLC35F5	2q14.1	-0.271894554	6.11E-10	4.37E-09
DNASE1L3	3p14.3	-0.271877186	6.13E-10	4.38E-09
CELF2	10p14	0.271856287	6.15E-10	4.39E-09
HDHD5	22q11.1	-0.271801131	6.20E-10	4.42E-09
CCDC158	4q21.1	0.271789414	6.21E-10	4.43E-09
RUNX1-IT1	21q22.12	0.271787689	6.21E-10	4.43E-09
KCNG2	18q23	0.271714654	6.28E-10	4.48E-09
HLA-DOA	6p21.32	0.271702364	6.29E-10	4.48E-09
DDX49	19p13.11	-0.271664766	6.32E-10	4.51E-09
ARHGAP9	12q13.3	0.271628081	6.36E-10	4.53E-09
ARHGEF28	5q13.2	-0.271586707	6.40E-10	4.56E-09
NUDT1	7p22.3	-0.271574397	6.41E-10	4.56E-09
HLA-E	6p22.1	0.271553403	6.43E-10	4.58E-09
ZNF211	19q13.43	0.271495193	6.49E-10	4.62E-09
MEPCE	7q22.1	-0.271444998	6.54E-10	4.65E-09
KDELR3	22q13.1	0.271391273	6.59E-10	4.68E-09
GALNT5	2q24.1	0.271358596	6.62E-10	4.71E-09
CYCS	7p15.3	-0.271347472	6.63E-10	4.71E-09

LINGO1	15q24.3	0.271311115	6.67E-10	4.74E-09
KCNG3	2p21	-0.271291116	6.69E-10	4.75E-09
ZNF207	17q11.2	-0.271262924	6.72E-10	4.77E-09
DSCAML1	11q23.3	0.271249612	6.73E-10	4.77E-09
OTOP3	17q25.1	-0.271206421	6.77E-10	4.80E-09
AGRN	1p36.33	0.271189446	6.79E-10	4.81E-09
MAOA	Xp11.3	-0.27118582	6.79E-10	4.82E-09
DDX60L	4q32.3	0.271118258	6.86E-10	4.86E-09
HYLS1	11q24.2	-0.271115449	6.87E-10	4.86E-09
HGC6.3	6q27	0.271081335	6.90E-10	4.89E-09
CHMP1B	18p11.21	-0.271050027	6.93E-10	4.91E-09
XIRP1	3p22.2	0.27102925	6.96E-10	4.92E-09
ATP2B4	1q32.1	0.271018918	6.97E-10	4.93E-09
DIRAS1	19p13.3	0.270990154	7.00E-10	4.95E-09
PTENP1	9p13.3	0.270940191	7.05E-10	4.98E-09
PTPRZ1	7q31.32	-0.270936122	7.05E-10	4.98E-09
CCNA2	4q27	-0.27089181	7.10E-10	5.01E-09
CLDN8	21q22.11	-0.270837552	7.16E-10	5.05E-09
TIMM17B	Xp11.23	-0.270779588	7.22E-10	5.10E-09
GNAO1	16q13	0.270759262	7.24E-10	5.11E-09
SEPTIN6	Xq24	0.270633299	7.38E-10	5.20E-09
MSX2P1	17q22	0.270539844	7.48E-10	5.28E-09
ANOS1	Xp22.31	0.270504091	7.52E-10	5.30E-09
SPAG1	8q22.2	0.270494358	7.53E-10	5.31E-09
ZBP1	20q13.31	0.270488441	7.54E-10	5.31E-09
DEPDC4	12q23.1	-0.27048159	7.55E-10	5.31E-09
ZNF69	19p13.2	0.270465927	7.57E-10	5.32E-09
LAIR1	19q13.42	0.270435384	7.60E-10	5.35E-09
TNFSF18	1q25.1	-0.270413938	7.62E-10	5.36E-09
SOX17	8q11.23	0.270390833	7.65E-10	5.38E-09
ATP5F1C	10p14	-0.270385476	7.66E-10	5.38E-09
HSP90B1	12q23.3	0.27035389	7.69E-10	5.41E-09
CTSD	11p15.5	0.270350645	7.70E-10	5.41E-09
PRKX	Xp22.33	-0.270310471	7.74E-10	5.44E-09
MYO1C	17p13.3	0.270308658	7.75E-10	5.44E-09
TRIM55	8q13.1	0.270193279	7.88E-10	5.53E-09
SLC6A8	Xq28	-0.270173724	7.90E-10	5.54E-09
ECM1	1q21.2	0.270173629	7.90E-10	5.54E-09
SRPX	Xp11.4	0.270161987	7.92E-10	5.55E-09
NPY4R	10q11.22	0.270119814	7.97E-10	5.58E-09
TAGAP	6q25.3	0.2701158	7.97E-10	5.58E-09
ARF5	7q32.1	-0.270098814	7.99E-10	5.60E-09
CCDC59	12q21.31	-0.269990219	8.12E-10	5.68E-09
CCPG1	15q21.3	0.269961591	8.16E-10	5.71E-09
RANBP1	22q11.21	-0.269960732	8.16E-10	5.71E-09
SEC63	6q21	0.269957774	8.16E-10	5.71E-09
DAAM1	14q23.1	0.269938879	8.18E-10	5.72E-09
EMC6	17p13.2	-0.269880192	8.26E-10	5.77E-09
C9ORF40	9q21.13	-0.269792208	8.36E-10	5.84E-09
NDUFS8	11q13.2	-0.269783429	8.37E-10	5.85E-09
SEL1L	14q31.1	0.269739437	8.43E-10	5.88E-09
KIF25	6q27	0.269723238	8.45E-10	5.90E-09
CRELD1	3p25.3	0.269633037	8.56E-10	5.97E-09
CST7	20p11.21	0.269580743	8.63E-10	6.02E-09
GTPBP3	19p13.11	-0.269572441	8.64E-10	6.02E-09
QKI	6q26	0.269571773	8.64E-10	6.02E-09
OAF	11q23.3	0.269552878	8.67E-10	6.04E-09
SLC12A6	15q14	-0.269520433	8.71E-10	6.06E-09

MPP3	17q21.31	-0.269513658	8.72E-10	6.07E-09
CASC10	10p12.31	0.269491955	8.75E-10	6.09E-09
MGP	12p12.3	0.269476823	8.77E-10	6.10E-09
SIGLEC10	19q13.41	0.269475583	8.77E-10	6.10E-09
C6ORF141	6p12.3	0.269449175	8.80E-10	6.12E-09
TSC22D1	13q14.11	0.26934857	8.93E-10	6.21E-09
OSBPL8	12q21.2	0.269317652	8.98E-10	6.23E-09
CHODL	21q21.1	-0.269282725	9.02E-10	6.26E-09
EBF2	8p21.2	0.269255687	9.06E-10	6.29E-09
MED13L	12q24.21	0.269219648	9.11E-10	6.32E-09
KRT86	12q13.13	0.269203105	9.13E-10	6.33E-09
PDE12	3p14.3	-0.269189684	9.15E-10	6.34E-09
HLA-A	6p22.1	0.269111816	9.25E-10	6.41E-09
LRR1	14q21.3	-0.269110194	9.26E-10	6.41E-09
CFAP57	1p34.2	0.269106901	9.26E-10	6.41E-09
CKMT1B	15q15.3	-0.2690579	9.33E-10	6.46E-09
LPCAT2	16q12.2	0.269042918	9.35E-10	6.47E-09
IL27RA	19p13.12	0.269024596	9.37E-10	6.49E-09
EFCAB11	14q32.11	-0.268979937	9.44E-10	6.53E-09
CD69	12p13.31	0.268955794	9.47E-10	6.55E-09
ICOSLG	21q22.3	0.268949782	9.48E-10	6.55E-09
POF1B	Xq21.1	-0.268918863	9.52E-10	6.58E-09
CREBRF	5q35.1	0.268911897	9.53E-10	6.58E-09
CCDC43	17q21.31	-0.268891094	9.56E-10	6.60E-09
AKNA	9q32	0.268872486	9.59E-10	6.62E-09
PSG5	19q13.31	0.268872088	9.59E-10	6.62E-09
SHISA4	1q32.1	0.268784694	9.71E-10	6.70E-09
PCDHGA5	5q31.3	0.268750585	9.76E-10	6.73E-09
PDE1A	2q32.1	0.26874242	9.77E-10	6.74E-09
TRMT61B	2p23.2	-0.268693561	9.84E-10	6.78E-09
BMP5	6p12.1	0.268644992	9.92E-10	6.83E-09
TPD52L1	6q22.31	-0.268638595	9.93E-10	6.84E-09
KMT2E-AS1	7q22.3	-0.268601672	9.98E-10	6.87E-09
MPV17L2	19p13.11	-0.268587835	1.00E-09	6.88E-09
GPB1	7p22.3	0.268583875	1.00E-09	6.88E-09
MRPL10	17q21.32	-0.268496219	1.01E-09	6.97E-09
IP6K1	3p21.31	0.268481428	1.02E-09	6.98E-09
TBCA	5q14.1	-0.268441921	1.02E-09	7.02E-09
RAD51D	17q12	-0.268432951	1.02E-09	7.03E-09
PRND	20p13	0.268425882	1.02E-09	7.04E-09
SIGLEC7	19q13.41	0.268398311	1.03E-09	7.06E-09
BEND6	6p12.1	0.268351552	1.04E-09	7.11E-09
CHRNA6	8p11.21	0.268347565	1.04E-09	7.11E-09
C1ORF162	1p13.2	0.268336093	1.04E-09	7.12E-09
TP53I11	11p11.2	0.268318821	1.04E-09	7.14E-09
RELB	19q13.32	0.268263187	1.05E-09	7.19E-09
CDC26	9q32	-0.268148579	1.07E-09	7.31E-09
DNAJC22	12q13.12	0.268063083	1.08E-09	7.40E-09
LINC00957	7p13	0.268060787	1.08E-09	7.40E-09
MUL1	1p36.12	0.268019372	1.09E-09	7.45E-09
KLHDC7B	22q13.33	0.267912494	1.10E-09	7.56E-09
TADA1	1q24.1	-0.267911539	1.11E-09	7.56E-09
ADORA3	1p13.2	0.267889741	1.11E-09	7.58E-09
SNAPC5	15q22.31	-0.267820693	1.12E-09	7.66E-09
REEP4	8p21.3	-0.267791302	1.12E-09	7.69E-09
CYLD	16q12.1	0.267790061	1.13E-09	7.69E-09
TMOD2	15q21.2	0.267684329	1.14E-09	7.80E-09
CLEC1A	12p13.2	0.267674369	1.14E-09	7.81E-09

CD33	19q13.41	0.267632226	1.15E-09	7.86E-09
LTB	6p21.33	0.267600449	1.16E-09	7.89E-09
MN1	22q12.1	0.267574397	1.16E-09	7.92E-09
MSR1	8p22	0.267535558	1.17E-09	7.96E-09
NSF	17q21.31	-0.267506549	1.17E-09	7.99E-09
HLA-DPA1	6p21.32	0.267504258	1.17E-09	7.99E-09
BBS9	7p14.3	0.267493666	1.18E-09	8.00E-09
RPLP1	15q23	-0.267486509	1.18E-09	8.01E-09
LOXHD1	18q21.1	0.267477624	1.18E-09	8.02E-09
APOLD1	12p13.1	0.267364267	1.20E-09	8.15E-09
ESCO1	18q11.2	-0.267318946	1.21E-09	8.20E-09
MPO	17q22	0.267297042	1.21E-09	8.23E-09
PCDHGA6	5q31.3	0.267272807	1.21E-09	8.25E-09
LINC00574	6q27	0.267246312	1.22E-09	8.28E-09
ARL5A	2q23.3	-0.26721044	1.23E-09	8.32E-09
APBB1IP	10p12.1	0.267157382	1.24E-09	8.39E-09
ENTPD7	10q24.2	0.267143164	1.24E-09	8.40E-09
ATP2B1-AS1	12q21.33	-0.267138835	1.24E-09	8.40E-09
MED9	17p11.2	-0.267117494	1.24E-09	8.43E-09
PDF	16q22.1	-0.2671132	1.24E-09	8.43E-09
PTGS2	1q31.1	0.26708419	1.25E-09	8.46E-09
HS2ST1	1p22.3	0.267083999	1.25E-09	8.46E-09
CHPF2	7q36.1	0.26706186	1.25E-09	8.48E-09
RHOH	4p14	0.266999165	1.26E-09	8.56E-09
C5ORF58	5q35.1	0.266978106	1.27E-09	8.58E-09
TK1	17q25.3	-0.266903643	1.28E-09	8.68E-09
KCNA7	19q13.33	0.266888929	1.28E-09	8.69E-09
SLFN12L	17q12	0.266882649	1.29E-09	8.70E-09
CTLA4	2q33.2	0.266869868	1.29E-09	8.71E-09
ADGRE4P	19p13.2	0.266865316	1.29E-09	8.71E-09
GCC2	2q12.3	0.266730736	1.31E-09	8.88E-09
AMPD2	1p13.3	0.266714412	1.32E-09	8.90E-09
GFRA2	8p21.3	0.266688128	1.32E-09	8.93E-09
PXDNL	8q11.22-q11.23	0.266678967	1.32E-09	8.94E-09
TNC	9q33.1	0.266661164	1.33E-09	8.96E-09
TSTD1	1q23.3	-0.26665372	1.33E-09	8.97E-09
CBX1	17q21.32	-0.266642174	1.33E-09	8.98E-09
INPP5D	2q37.1	0.266562206	1.35E-09	9.08E-09
ADGRF5	6p12.3	0.26655963	1.35E-09	9.08E-09
ANO4	12q23.1	0.266525296	1.36E-09	9.13E-09
NUDT2	9p13.3	-0.266511153	1.36E-09	9.14E-09
SMIM15	5q12.1	-0.266483002	1.36E-09	9.18E-09
METTL5	2q31.1	-0.266475177	1.37E-09	9.19E-09
PIM1	6p21.2	0.266444641	1.37E-09	9.22E-09
BARX2	11q24.3	0.26635494	1.39E-09	9.34E-09
CEP78	9q21.2	-0.266295447	1.40E-09	9.42E-09
NUDCD2	5q34	-0.266234851	1.41E-09	9.50E-09
RSPO4	20p13	0.266195621	1.42E-09	9.55E-09
ACSL5	10q25.2	0.266114941	1.44E-09	9.66E-09
LPL	8p21.3	0.266102441	1.44E-09	9.68E-09
SORBS2	4q35.1	0.266064842	1.45E-09	9.73E-09
CXCL11	4q21.1	0.266042894	1.45E-09	9.76E-09
TPP2	13q33.1	0.265999571	1.46E-09	9.82E-09
GPR37L1	1q32.1	-0.26592155	1.48E-09	9.93E-09
C9ORF43	9q32	-0.265879072	1.49E-09	9.98E-09
MEGF8	19q13.2	0.265804518	1.51E-09	1.01E-08
CEP112	17q24.1	0.265767588	1.51E-09	1.01E-08
PSMG2	18p11.21	-0.265762531	1.52E-09	1.01E-08

MYO1B	2q32.3	0.2657423	1.52E-09	1.02E-08
PKDCC	2p21	0.265725314	1.52E-09	1.02E-08
PSMB4	1q21.3	-0.265707851	1.53E-09	1.02E-08
SLC24A4	14q32.12	0.265694072	1.53E-09	1.02E-08
HSD17B1	17q21.2	-0.26557664	1.56E-09	1.04E-08
CCDC28B	1p35.2	0.265473579	1.58E-09	1.06E-08
CCDC102A	16q21	0.265469857	1.58E-09	1.06E-08
LPCAT1	5p15.33	0.265456211	1.58E-09	1.06E-08
IKBIP	12q23.1	0.265448863	1.59E-09	1.06E-08
ABHD10	3q13.2	-0.265389222	1.60E-09	1.07E-08
DAPL1	2q24.1	-0.265362926	1.61E-09	1.07E-08
STRIP1	1p13.3	0.265338168	1.61E-09	1.08E-08
SELENON	1p36.11	0.265286447	1.62E-09	1.08E-08
PSMD3	17q21.1	-0.265213827	1.64E-09	1.09E-08
NAA38	17p13.1	-0.265211728	1.64E-09	1.09E-08
CXCL16	17p13.2	0.265179665	1.65E-09	1.10E-08
DUSP14	17q12	-0.265147942	1.66E-09	1.10E-08
NLRC4	2p22.3	0.265121359	1.66E-09	1.11E-08
CCDC9B	15q15.1	0.265110194	1.67E-09	1.11E-08
RAB6B	3q22.1	-0.26506458	1.68E-09	1.12E-08
DHRS4	14q11.2	-0.265056182	1.68E-09	1.12E-08
GPRC5D	12p13.1	-0.265046455	1.68E-09	1.12E-08
AMN	14q32.32	-0.264986718	1.70E-09	1.13E-08
ANXA13	8q24.13	0.264945222	1.71E-09	1.13E-08
PECAM1	17q23.3	0.264936613	1.71E-09	1.14E-08
DHDDS	1p36.11	0.264932605	1.71E-09	1.14E-08
WDR43	2p23.2	-0.264918195	1.71E-09	1.14E-08
ENTPD3	3p22.1	-0.264837465	1.73E-09	1.15E-08
ANKDD1A	15q22.31	0.264819429	1.74E-09	1.15E-08
CRY2	11p11.2	0.264803779	1.74E-09	1.16E-08
HEXIM2	17q21.31	-0.264775437	1.75E-09	1.16E-08
ADGRE3	19p13.12	0.26473885	1.76E-09	1.17E-08
EIF3J	15q21.1	-0.264680351	1.77E-09	1.18E-08
ARHGEF35	7q35	-0.264667223	1.78E-09	1.18E-08
CPNE5	6p21.2	0.264615502	1.79E-09	1.19E-08
ZSCAN20	1p35.1	0.264613886	1.79E-09	1.19E-08
AP1S1	7q22.1	-0.264610254	1.79E-09	1.19E-08
ZFP36L1	14q24.1	0.26460157	1.80E-09	1.19E-08
ULK3	15q24.1	-0.264587256	1.80E-09	1.19E-08
HECW2	2q32.3	0.264582007	1.80E-09	1.19E-08
FAS	10q23.31	0.26452103	1.82E-09	1.20E-08
RRP9	3p21.2	-0.26451664	1.82E-09	1.20E-08
CLSTN3	12p13.31	0.264499082	1.82E-09	1.20E-08
CKAP4	12q23.3	0.264479614	1.83E-09	1.21E-08
TRDMT1	10p13	0.264477611	1.83E-09	1.21E-08
PRAM1	19p13.2	0.264470835	1.83E-09	1.21E-08
VMO1	17p13.2	0.264384337	1.85E-09	1.22E-08
C12ORF29	12q21.32	-0.264379703	1.85E-09	1.22E-08
CNNM1	10q24.2	-0.264374098	1.86E-09	1.22E-08
IRAK2	3p25.3	0.26436558	1.86E-09	1.22E-08
RFC2	7q11.23	-0.264303266	1.87E-09	1.23E-08
FANCI	15q26.1	-0.264285803	1.88E-09	1.24E-08
STON1-GTF2A11	2p16.3	0.264225105	1.90E-09	1.25E-08
PCDHGA4	5q31.3	0.264208603	1.90E-09	1.25E-08
HERPUD1	16q13	0.264194002	1.90E-09	1.25E-08
NKIRAS1	3p24.2	-0.264188181	1.91E-09	1.25E-08
CDC45	22q11.21	-0.264158408	1.91E-09	1.26E-08
PTPN22	1p13.2	0.264152396	1.92E-09	1.26E-08

OLA1	2q31.1	-0.264105256	1.93E-09	1.27E-08
SLC14A2	18q12.3	0.264059226	1.94E-09	1.28E-08
LYRM1	16p12.3	-0.263986449	1.96E-09	1.29E-08
EBF4	20p13	0.263973471	1.97E-09	1.29E-08
NUP35	2q32.1	-0.263962688	1.97E-09	1.29E-08
KAZN	1p36.21	0.263954291	1.97E-09	1.29E-08
SLC18A2	10q25.3	0.263932335	1.98E-09	1.30E-08
CDKN1A	6p21.2	0.263906005	1.99E-09	1.30E-08
CCR5	3p21.31	0.263884725	1.99E-09	1.30E-08
SPACA6	19q13.41	0.26387814	1.99E-09	1.31E-08
AKR1C8P	10p15.1	-0.263815274	2.01E-09	1.32E-08
CACYBP	1q25.1	-0.263787771	2.02E-09	1.32E-08
CBLN4	20q13.2	0.263646018	2.06E-09	1.35E-08
PNPO	17q21.32	-0.263598922	2.08E-09	1.36E-08
TRAM1	8q13.3	0.263585944	2.08E-09	1.36E-08
SNX7	1p21.3	0.263560942	2.09E-09	1.36E-08
NHLRC4	16p13.3	0.263533942	2.10E-09	1.37E-08
SPOCK2	10q22.1	0.263494907	2.11E-09	1.38E-08
ATP6V1B2	8p21.3	0.263479543	2.11E-09	1.38E-08
DES1I	22q13.2	-0.263458454	2.12E-09	1.38E-08
TBRG4	7p13	-0.263423146	2.13E-09	1.39E-08
OLFM2	19p13.2	0.263419806	2.13E-09	1.39E-08
SLC25A33	1p36.22	-0.263408832	2.13E-09	1.39E-08
ATP5MC2	12q13.13	-0.263303194	2.17E-09	1.41E-08
MATN1	1p35.2	0.263286585	2.17E-09	1.42E-08
CYSLTR1	Xq21.1	0.263240976	2.19E-09	1.42E-08
FAM161B	14q24.3	0.263208245	2.20E-09	1.43E-08
C6ORF136	6p21.33	-0.263151466	2.22E-09	1.44E-08
FBXO22	15q24.2	-0.263114154	2.23E-09	1.45E-08
CDH20	18q21.33	0.263093735	2.23E-09	1.45E-08
LRRK1	15q26.3	0.263073693	2.24E-09	1.46E-08
HSPA4L	4q28.1	-0.263042393	2.25E-09	1.46E-08
MPEG1	11q12.1	0.263023976	2.26E-09	1.47E-08
NTRK3	15q25.3	0.263016911	2.26E-09	1.47E-08
ZNF331	19q13.42	0.263003459	2.26E-09	1.47E-08
GRID1	10q23.1-q23.2	0.26297646	2.27E-09	1.48E-08
ADAMTS9	3p14.1	0.262930458	2.29E-09	1.48E-08
ILDR2	1q24.1	0.262918234	2.29E-09	1.49E-08
GTF2A2	15q22.2	-0.262891428	2.30E-09	1.49E-08
CACUL1	10q26.11	0.262886084	2.30E-09	1.49E-08
SOCS5	2p21	0.262833886	2.32E-09	1.50E-08
PLAT	8p11.21	0.262788463	2.34E-09	1.51E-08
C12ORF73	12q23.3	-0.262760407	2.34E-09	1.52E-08
CD5	11q12.2	0.2627543	2.35E-09	1.52E-08
RAB3A	19p13.11	-0.262742563	2.35E-09	1.52E-08
CNN2	19p13.3	0.262682444	2.37E-09	1.53E-08
TMEM273	10q11.23	0.262630746	2.39E-09	1.55E-08
CHI3L2	1p13.2	0.262584727	2.40E-09	1.55E-08
PLEKHJ1	19p13.3	-0.262584059	2.41E-09	1.55E-08
SLC22A2	6q25.3	0.26257914	2.41E-09	1.56E-08
GAST	17q21.2	-0.262528842	2.42E-09	1.57E-08
MICALL2	7p22.3	0.262510676	2.43E-09	1.57E-08
TMEM108	3q22.1	0.262482716	2.44E-09	1.58E-08
PNO1	2p14	-0.262450652	2.45E-09	1.58E-08
SIK2	11q23.1	0.26243004	2.46E-09	1.59E-08
SRSF3	6p21.31-p21.2	-0.262402844	2.47E-09	1.59E-08
TFRC	3q29	-0.262375647	2.48E-09	1.60E-08
PPAN	19p13.2	-0.262373452	2.48E-09	1.60E-08

PSMD4	1q21.3	-0.262359234	2.48E-09	1.60E-08
ARID5B	10q21.2	0.262327934	2.50E-09	1.61E-08
TOR4A	9q34.3	0.262311998	2.50E-09	1.61E-08
THAP4	2q37.3	-0.262296729	2.51E-09	1.61E-08
PSMA4	15q25.1	-0.262259227	2.52E-09	1.62E-08
ILRUN	6p21.31	0.262207696	2.54E-09	1.63E-08
NME2P1	12q24.23	-0.262199871	2.54E-09	1.64E-08
WDR53	3q29	-0.262173438	2.55E-09	1.64E-08
CFAP53	18q21.1	-0.262147154	2.56E-09	1.65E-08
PRMT3	11p15.1	-0.262087268	2.58E-09	1.66E-08
LAMB4	7q31.1	0.26192376	2.65E-09	1.70E-08
MGST1	12p12.3	-0.261916359	2.65E-09	1.70E-08
GLS2	12q13.3	-0.261898806	2.65E-09	1.70E-08
MRPS36	5q13.2	-0.261895842	2.66E-09	1.70E-08
WNT1	12q13.12	0.261841694	2.68E-09	1.72E-08
TMCO3	13q34	0.261833719	2.68E-09	1.72E-08
PAEP	9q34.3	0.261801876	2.69E-09	1.73E-08
CD101	1p13.1	0.261792113	2.70E-09	1.73E-08
EFCAB14	1p33	0.261769783	2.70E-09	1.73E-08
ZSCAN4	19q13.43	0.261765158	2.71E-09	1.73E-08
AHI1	6q23.3	0.261752511	2.71E-09	1.74E-08
PTTG1	5q33.3	-0.261739151	2.72E-09	1.74E-08
TRAF1	9q33.2	0.261731422	2.72E-09	1.74E-08
PIGT	20q13.12	0.261700313	2.73E-09	1.75E-08
TYMSOS	18p11.32	-0.261690961	2.74E-09	1.75E-08
DYNAP	18q21.2	-0.261689921	2.74E-09	1.75E-08
ZNF417	19q13.43	0.261670539	2.74E-09	1.75E-08
MRPL27	17q21.33	-0.261647637	2.75E-09	1.76E-08
EPOR	19p13.2	0.261599637	2.77E-09	1.77E-08
SLC35F1	6q22.2-q22.31	0.261545295	2.79E-09	1.78E-08
GBF1	10q24.32	0.26150192	2.81E-09	1.79E-08
SLC50A1	1q22	-0.26149839	2.81E-09	1.79E-08
ZBTB17	1p36.13	0.261495151	2.81E-09	1.79E-08
ZNF486	19p12	0.261470175	2.82E-09	1.80E-08
CFAP69	7q21.13	0.261469857	2.82E-09	1.80E-08
NR5A2	1q32.1	0.261390039	2.86E-09	1.82E-08
MC5R	18p11.21	0.261387803	2.86E-09	1.82E-08
POP5	12q24.31	-0.261347335	2.87E-09	1.83E-08
BTN2A3P	6p22.2	0.261339749	2.88E-09	1.83E-08
MARCO	2q14.2	0.261273374	2.90E-09	1.85E-08
ALDH9A1	1q24.1	-0.26118978	2.94E-09	1.87E-08
TBCCD1	3q27.3	-0.26117747	2.94E-09	1.87E-08
TRMT2B	Xq22.1	-0.261175275	2.95E-09	1.87E-08
KIAA0319	6p22.3	-0.261158218	2.95E-09	1.88E-08
TBX19	1q24.2	0.261117351	2.97E-09	1.89E-08
PDZD11	Xq13.1	-0.261092826	2.98E-09	1.89E-08
CIAO3	16p13.3	-0.260890903	3.07E-09	1.95E-08
WNK2	9q22.31	-0.260890522	3.07E-09	1.95E-08
ZNF639	3q26.33	-0.260729442	3.14E-09	1.99E-08
MYO1E	15q22.2	0.260675144	3.16E-09	2.01E-08
AREG	4q13.3	0.260668655	3.17E-09	2.01E-08
MRPS12	19q13.2	-0.260645943	3.18E-09	2.02E-08
FGF14	13q33.1	0.260641363	3.18E-09	2.02E-08
CD28	2q33.2	0.26060825	3.19E-09	2.02E-08
NFE2	12q13.13	0.260593483	3.20E-09	2.03E-08
ACKR2	3p22.1	0.260586505	3.20E-09	2.03E-08
P2RY8	Xp22.33 and Yp11	0.260552425	3.22E-09	2.04E-08
ACOT9	Xp22.11	0.260491257	3.25E-09	2.06E-08

DHODH	16q22.2	-0.260459766	3.26E-09	2.07E-08
HSPB1P1	9q21.13	-0.260436863	3.27E-09	2.07E-08
FUT7	9q34.3	0.260285761	3.35E-09	2.12E-08
MAD2L1	4q27	-0.260278741	3.35E-09	2.12E-08
ABHD6	3p14.3	-0.260204786	3.38E-09	2.14E-08
RGS19	20q13.33	0.260182223	3.40E-09	2.15E-08
NDUFV3	21q22.3	-0.260150297	3.41E-09	2.15E-08
H2AFX	11q23.3	-0.26004819	3.46E-09	2.19E-08
MRPL21	11q13.3	-0.260013837	3.48E-09	2.20E-08
CNPY4	7q22.1	0.259910967	3.53E-09	2.23E-08
ZC3H15	2q32.1	-0.259889591	3.54E-09	2.23E-08
TRIR	19p13.13	-0.25988587	3.54E-09	2.23E-08
VAV3	1p13.3	0.259853329	3.56E-09	2.24E-08
HTATIP2	11p15.1	-0.259852947	3.56E-09	2.24E-08
ALAS1	3p21.2	-0.259849512	3.56E-09	2.24E-08
XKR4	8q12.1	0.259825455	3.57E-09	2.25E-08
BRCA1	17q21.31	-0.259817162	3.58E-09	2.25E-08
OS9	12q13.3-q14.1	0.259802944	3.58E-09	2.26E-08
ZNFX1	20q13.13	0.259765441	3.60E-09	2.27E-08
CCNB1	5q13.2	-0.259753513	3.61E-09	2.27E-08
DBF4	7q21.12	-0.259712384	3.63E-09	2.28E-08
ZNF25	10p11.21	0.259706658	3.63E-09	2.28E-08
MID1IP1	Xp11.4	-0.259679271	3.65E-09	2.29E-08
KCNN3	1q21.3	0.259653983	3.66E-09	2.30E-08
PRRG1	Xp21.1	0.259632804	3.67E-09	2.31E-08
GIMAP8	7q36.1	0.25957726	3.70E-09	2.32E-08
SCML2	Xp22.13	-0.259563232	3.71E-09	2.33E-08
SAMHD1	20q11.23	0.259560274	3.71E-09	2.33E-08
SERPINA3	14q32.13	0.259538135	3.72E-09	2.34E-08
KHK	2p23.3	-0.259527829	3.73E-09	2.34E-08
UBAC1	9q34.3	-0.259486891	3.75E-09	2.35E-08
MAN2B1	19p13.13	0.259476871	3.76E-09	2.35E-08
LRPPRC	2p21	-0.259444808	3.77E-09	2.36E-08
FAM189A2	9q21.12	0.259438439	3.78E-09	2.36E-08
C1ORF56	1q21.3	-0.259437651	3.78E-09	2.36E-08
RAB40B	17q25.3	-0.259361977	3.82E-09	2.39E-08
DUT	15q21.1	-0.259328578	3.84E-09	2.40E-08
BIRC3	11q22.2	0.259323329	3.84E-09	2.40E-08
MNDA	1q23.1	0.25930335	3.85E-09	2.41E-08
TMX2	11q12.1	-0.259277525	3.86E-09	2.42E-08
CCDC89	11q14.1	0.259269189	3.87E-09	2.42E-08
SERPINA4	14q32.13	0.259246177	3.88E-09	2.42E-08
SUV39H2	10p13	-0.259224849	3.89E-09	2.43E-08
ZNF214	11p15.4	0.259220937	3.89E-09	2.43E-08
HLA-DPB1	6p21.32	0.259214734	3.90E-09	2.43E-08
SPOUT1	9q34.11	-0.259182193	3.92E-09	2.44E-08
ARTN	1p34.1	-0.259175323	3.92E-09	2.45E-08
GIPC1	19p13.12	-0.259151561	3.93E-09	2.45E-08
KLRG2	7q34	-0.259105089	3.96E-09	2.47E-08
WASHC4	12q23.3	0.259061956	3.98E-09	2.48E-08
PLCB2	15q15.1	0.259055044	3.99E-09	2.48E-08
C20ORF197	20q13.33	0.259005245	4.02E-09	2.50E-08
TWF1	12q12	-0.258972923	4.03E-09	2.51E-08
YJU2	19p13.3	-0.258902593	4.08E-09	2.54E-08
MAGED2	Xp11.21	0.258857266	4.10E-09	2.55E-08
PLSCR4	3q24	0.258818618	4.12E-09	2.57E-08
FOXP2	7q31.1	-0.258809191	4.13E-09	2.57E-08
COPS2	15q21.1	-0.258782069	4.15E-09	2.58E-08

PCDH8	13q14.3	0.258763209	4.16E-09	2.58E-08
CDC6	17q21.2	-0.258731684	4.18E-09	2.59E-08
WDR81	17p13.3	0.258663931	4.22E-09	2.62E-08
ATP5MG	11q23.3	-0.258621371	4.24E-09	2.63E-08
BATF	14q24.3	0.258607248	4.25E-09	2.64E-08
DNAH5	5p15.2	0.258554858	4.28E-09	2.66E-08
ACTL6A	3q26.33	-0.258552282	4.28E-09	2.66E-08
NCKAP1L	12q13.13-q13.2	0.2585519	4.28E-09	2.66E-08
EMBP1	1p11.2	0.258506817	4.31E-09	2.67E-08
TRMT10C	3q12.3	-0.258486437	4.32E-09	2.68E-08
CHST7	Xp11.3	-0.258481857	4.33E-09	2.68E-08
ZDHHC2	8p22	-0.258481284	4.33E-09	2.68E-08
TKFC	11q12.2	-0.25845113	4.34E-09	2.69E-08
C1ORF226	1q23.3	-0.258407042	4.37E-09	2.71E-08
LAMC3	9q34.12	0.258378892	4.39E-09	2.72E-08
UQCRH	1p33	-0.258378701	4.39E-09	2.72E-08
BMPER	7p14.3	0.258370876	4.39E-09	2.72E-08
STK19	6p21.33	0.258315242	4.43E-09	2.74E-08
TUBD1	17q23.1	-0.258303982	4.44E-09	2.74E-08
HS3ST3B1	17p12	0.258302073	4.44E-09	2.74E-08
COX7A2	6q14.1	-0.258266384	4.46E-09	2.75E-08
ISCA1	9q21.33	-0.258240237	4.48E-09	2.76E-08
PHETA1	12q24.12	0.258196531	4.50E-09	2.78E-08
PLAC8	4q21.22	-0.258160269	4.53E-09	2.79E-08
DENND6B	22q13.33	0.258134695	4.54E-09	2.80E-08
SPRED3	19q13.2	0.258123921	4.55E-09	2.81E-08
IDS	Xq28	0.2581012	4.57E-09	2.81E-08
DIRAS3	1p31.3	0.258090286	4.57E-09	2.82E-08
AATF	17q12	-0.258019038	4.62E-09	2.85E-08
FANCG	9p13.3	-0.258001002	4.63E-09	2.85E-08
MEGF9	9q33.2	-0.257950426	4.66E-09	2.87E-08
ABL2	1q25.2	0.257939452	4.67E-09	2.88E-08
COL24A1	1p22.3	0.257926474	4.68E-09	2.88E-08
RMND5A	2p11.2	-0.257875039	4.71E-09	2.90E-08
HAS3	16q22.1	-0.257760813	4.79E-09	2.95E-08
CD302	2q24.2	0.257706897	4.83E-09	2.97E-08
CD300A	17q25.1	0.257664528	4.86E-09	2.99E-08
SKA1	18q21.1	-0.257649355	4.87E-09	2.99E-08
RASL11A	13q12.2	-0.25757454	4.92E-09	3.02E-08
OTX1	2p15	-0.257554554	4.93E-09	3.03E-08
SLCO5A1	8q13.3	0.257488257	4.98E-09	3.06E-08
MGARP	4q31.1	0.257432329	5.02E-09	3.08E-08
ADGRG3	16q21	0.257426415	5.02E-09	3.08E-08
ZNF706	8q22.3	-0.257415846	5.03E-09	3.09E-08
COLEC11	2p25.3	-0.257393522	5.05E-09	3.09E-08
EYA2	20q13.12	0.257379774	5.06E-09	3.10E-08
GMPPA	2q35	0.257324713	5.10E-09	3.12E-08
MTNR1B	11q14.3	0.257323726	5.10E-09	3.12E-08
VASH2	1q32.3	0.257320133	5.10E-09	3.12E-08
ARL6IP5	3p14.1	0.257288928	5.12E-09	3.14E-08
MEIS2	15q14	0.257283107	5.13E-09	3.14E-08
USH1G	17q25.1	-0.257265301	5.14E-09	3.14E-08
BRPF3	6p21.31	0.257235107	5.16E-09	3.16E-08
OPN3	1q43	0.257153041	5.22E-09	3.19E-08
NDUFB3	2q33.1	-0.257147315	5.22E-09	3.19E-08
ZC3H7A	16p13.13	0.257093494	5.26E-09	3.22E-08
ABHD5	3p21.33	-0.257091967	5.27E-09	3.22E-08
JAML	11q23.3	0.257088628	5.27E-09	3.22E-08

IFT122	3q21.3-q22.1	0.257079562	5.28E-09	3.22E-08
EPS15	1p32.3	0.257071737	5.28E-09	3.22E-08
FXVD1	19q13.12	0.257048752	5.30E-09	3.23E-08
HAX1	1q21.3	-0.256959038	5.37E-09	3.27E-08
PTCD2	5q13.2	-0.25694411	5.38E-09	3.28E-08
TEX19	17q25.3	-0.256838855	5.46E-09	3.33E-08
CDKN1C	11p15.4	0.256833934	5.46E-09	3.33E-08
ELANE	19p13.3	0.256833544	5.46E-09	3.33E-08
MPRIIP	17p11.2	0.256724384	5.55E-09	3.38E-08
CEACAM4	19q13.2	0.256680884	5.58E-09	3.40E-08
NUTM2D	10q23.2	0.256678197	5.58E-09	3.40E-08
ST3GAL5	2p11.2	0.256492783	5.73E-09	3.49E-08
RPL39	Xq24	-0.256431329	5.78E-09	3.52E-08
CETP	16q13	0.256422508	5.79E-09	3.52E-08
LYPD6B	2q23.2	-0.25629525	5.89E-09	3.58E-08
MFAP5	12p13.31	0.256270248	5.91E-09	3.59E-08
UBE2A	Xq24	-0.256248586	5.93E-09	3.60E-08
PARM1	4q13.3	0.256236086	5.94E-09	3.61E-08
ETNK2	1q32.1	-0.256213565	5.96E-09	3.62E-08
LEPROT	1p31.3	0.256209271	5.96E-09	3.62E-08
ZNF626	19p12	0.25619043	5.98E-09	3.63E-08
BOLA2	16p11.2	-0.256154496	6.01E-09	3.65E-08
MYO19	17q12	-0.256114417	6.04E-09	3.67E-08
ZNF549	19q13.43	0.256104111	6.05E-09	3.67E-08
NEURL1B	5q35.1	0.256080731	6.07E-09	3.68E-08
C16ORF54	16p11.2	0.256072483	6.08E-09	3.68E-08
SERPINB11	18q21.33	-0.25606803	6.08E-09	3.68E-08
EFNB2	13q33.3	0.256007348	6.13E-09	3.71E-08
UBXN10	1p36.12	0.25598206	6.16E-09	3.73E-08
TP73-AS1	1p36.32	0.255960875	6.17E-09	3.74E-08
DPM2	9q34.11	-0.255942744	6.19E-09	3.75E-08
GALNT9	12q24.33	0.255890744	6.24E-09	3.77E-08
GRIK4	11q23.3	0.255816119	6.30E-09	3.81E-08
TMEM229B	14q24.1	0.255811341	6.31E-09	3.81E-08
KIF22	16p11.2	-0.255797218	6.32E-09	3.82E-08
ACTA1	1q42.13	0.255717329	6.39E-09	3.86E-08
PDE1C	7p14.3	0.255703751	6.40E-09	3.87E-08
IGF1	12q23.2	0.255659613	6.44E-09	3.89E-08
MS4A2	11q12.1	0.255641005	6.46E-09	3.90E-08
HLA-DRB1	6p21.32	0.255608178	6.49E-09	3.91E-08
RITA1	12q24.13	-0.255599685	6.50E-09	3.92E-08
CDK4	12q14.1	-0.255587661	6.51E-09	3.92E-08
DRAM2	1p13.3	-0.255510652	6.58E-09	3.96E-08
MRPS18C	4q21.23	-0.255509698	6.58E-09	3.96E-08
FGF18	5q35.1	0.255497042	6.59E-09	3.97E-08
CCL5	17q12	0.255476108	6.61E-09	3.98E-08
SLC25A27	6p12.3	0.255465187	6.62E-09	3.99E-08
ROMO1	20q11.22	-0.255455883	6.63E-09	3.99E-08
POLR2E	19p13.3	-0.255453873	6.63E-09	3.99E-08
GDA	9q21.13	-0.255446777	6.64E-09	3.99E-08
FAXDC2	5q33.2	0.255331059	6.74E-09	4.06E-08
ATP5PF	21q21.3	-0.255327433	6.75E-09	4.06E-08
SCN3B	11q24.1	0.255294601	6.78E-09	4.07E-08
LRMP	12p12.1	0.255263688	6.81E-09	4.09E-08
NUP88	17p13.2	-0.255221318	6.85E-09	4.11E-08
GPR55	2q37.1	0.255218646	6.85E-09	4.11E-08
PTPN1	20q13.13	0.255200611	6.87E-09	4.12E-08
SMUG1	12q13.13	-0.255113295	6.95E-09	4.17E-08

PCDHGC4	5q31.3	0.255105382	6.96E-09	4.18E-08
RPS7	2p25.3	-0.254941623	7.12E-09	4.27E-08
DOK2	8p21.3	0.254913949	7.15E-09	4.29E-08
CXORF49B	Xq13.1	0.254885563	7.18E-09	4.30E-08
GRIN3B	19p13.3	0.254852499	7.21E-09	4.32E-08
CCNB1IP1	14q11.2	-0.254851451	7.21E-09	4.32E-08
SLC17A7	19q13.33	0.254820067	7.24E-09	4.34E-08
WDR91	7q33	0.254774817	7.29E-09	4.37E-08
ABLIM2	4p16.1	0.254751533	7.31E-09	4.38E-08
SYPL1	7q22.3	-0.254740463	7.32E-09	4.38E-08
FST	5q11.2	-0.254695613	7.37E-09	4.41E-08
AOC4P	17q21.31	0.254674227	7.39E-09	4.42E-08
TCIRG1	11q13.2	0.254653243	7.41E-09	4.43E-08
CABP4	11q13.2	0.25463202	7.44E-09	4.45E-08
IL2RA	10p15.1	0.254622516	7.45E-09	4.45E-08
TMEM101	17q21.31	-0.254543503	7.53E-09	4.50E-08
KCNA1	12p13.32	0.254541119	7.53E-09	4.50E-08
LIX1	5q15	0.254526255	7.55E-09	4.51E-08
TMEM186	16p13.2	-0.254522318	7.55E-09	4.51E-08
SRGN	10q22.1	0.254515543	7.56E-09	4.51E-08
COQ5	12q24.31	-0.254514302	7.56E-09	4.51E-08
ASNS	7q21.3	-0.254488537	7.59E-09	4.52E-08
LINC01142	1q24.2	0.254461902	7.62E-09	4.54E-08
GRIN2A	16p13.2	0.254460294	7.62E-09	4.54E-08
GTSE1-DT	22q13.31	-0.254445178	7.63E-09	4.55E-08
FLVCR2	14q24.3	0.25441773	7.66E-09	4.56E-08
MEIS3P1	17p12	0.254415535	7.66E-09	4.56E-08
LOC220729	3q29	-0.254352077	7.73E-09	4.60E-08
FXD2	11q23.3	0.254305323	7.78E-09	4.63E-08
NDUFB4	3q13.33	-0.254304077	7.78E-09	4.63E-08
CLDN11	3q26.2	0.254254557	7.84E-09	4.66E-08
NUF2	1q23.3	-0.254178788	7.92E-09	4.71E-08
SCN7A	2q24.3	0.25415647	7.95E-09	4.72E-08
MYCT1	6q25.2	0.254091276	8.02E-09	4.76E-08
TNFRSF4	1p36.33	0.254059499	8.05E-09	4.78E-08
CHCHD3	7q32.3-q33	-0.254008445	8.11E-09	4.82E-08
ZP1	11q12.2	0.253945476	8.18E-09	4.86E-08
CCK	3p22.1	0.25390995	8.22E-09	4.88E-08
GPR153	1p36.31	0.253870458	8.27E-09	4.91E-08
LCK	1p35.2	0.253826562	8.32E-09	4.93E-08
CCSER1	4q22.1	-0.253819906	8.33E-09	4.94E-08
GFM1	3q25.32	-0.253772264	8.38E-09	4.97E-08
REEP3	10q21.3	0.25373562	8.43E-09	4.99E-08
ZNF611	19q13.41	0.253697503	8.47E-09	5.02E-08
PRKCG	19q13.42	0.25368944	8.48E-09	5.02E-08
LEXM	1p32.3	-0.253596215	8.59E-09	5.09E-08
BLVRB	19q13.2	-0.253572441	8.62E-09	5.10E-08
PADI2	1p36.13	0.253545053	8.65E-09	5.12E-08
8-Mar	10q11.21-q11.22	0.253536751	8.66E-09	5.12E-08
AGTRAP	1p36.22	0.25352969	8.67E-09	5.13E-08
ALDH3B1	11q13.2	0.253508505	8.70E-09	5.14E-08
FGFR2	10q26.13	-0.253483312	8.73E-09	5.16E-08
CX3CR1	3p22.2	0.253481595	8.73E-09	5.16E-08
UBR2	6p21.1	0.253466994	8.75E-09	5.17E-08
FGFR1	8p11.23	0.253456116	8.76E-09	5.17E-08
GNPTG	16p13.3	0.253452585	8.76E-09	5.17E-08
NBPF14	1q21.2	0.253427875	8.79E-09	5.19E-08
COMMD4	15q24.2	-0.25339676	8.83E-09	5.21E-08

EDAR	2q13	0.253369995	8.86E-09	5.23E-08
TBPL1	6q23.2	-0.253337023	8.91E-09	5.25E-08
CPEB4	5q35.2	0.253258105	9.00E-09	5.31E-08
CHST6	16q23.1	0.253256006	9.01E-09	5.31E-08
TDRD9	14q32.33	0.253203024	9.07E-09	5.35E-08
RP1L1	8p23.1	0.253165463	9.12E-09	5.37E-08
PMPCA	9q34.3	-0.253148651	9.14E-09	5.38E-08
IRF4	6p25.3	0.253090685	9.22E-09	5.42E-08
UBR1	15q15.2	0.253023457	9.30E-09	5.47E-08
FOXP4	6p21.1	0.252969535	9.37E-09	5.51E-08
EXOSC10	1p36.22	0.252901782	9.46E-09	5.56E-08
DDX52	17q12	-0.252838705	9.54E-09	5.61E-08
PKP1	1q32.1	-0.252823914	9.56E-09	5.62E-08
CSF2RA	Xp22.33 and Yp11	0.252789274	9.61E-09	5.65E-08
TRMO	9q22.33	-0.252777346	9.62E-09	5.65E-08
C1ORF54	1q21.2	0.252756161	9.65E-09	5.67E-08
ARFRP1	20q13.33	0.252705585	9.72E-09	5.71E-08
FGD3	9q22.31	0.252697187	9.73E-09	5.71E-08
LINC01003	7q36.1	-0.252674285	9.76E-09	5.73E-08
PPARGC1A	4p15.2	0.252509441	9.99E-09	5.86E-08
P2RY1	3q25.2	-0.252382279	1.02E-08	5.96E-08
CHI3L1	1q32.1	0.252353938	1.02E-08	5.98E-08
PCDHGB5	5q31.3	0.252208984	1.04E-08	6.10E-08
MAIP1	2q33.1	-0.252196674	1.04E-08	6.11E-08
USP48	1p36.12	0.252191808	1.04E-08	6.11E-08
VSIG4	Xq12	0.252190567	1.04E-08	6.11E-08
GPR160	3q26.2	-0.252185611	1.04E-08	6.11E-08
GVINP1	11p15.4	0.252173009	1.05E-08	6.12E-08
SH2D4B	10q23.1	0.252171789	1.05E-08	6.12E-08
C12ORF10	12q13.13	-0.252145818	1.05E-08	6.14E-08
TMEM216	11q12.2	-0.252121669	1.05E-08	6.16E-08
BMPR1B	4q22.3	0.2520939	1.06E-08	6.18E-08
CD37	19q13.33	0.252020517	1.07E-08	6.24E-08
SIRT1	10q21.3	0.252015227	1.07E-08	6.25E-08
FKBP3	14q21.2	-0.251999141	1.07E-08	6.26E-08
SUSD4	1q41	-0.251990839	1.07E-08	6.26E-08
ZNF382	19q13.12	0.251983873	1.07E-08	6.27E-08
MRPS14	1q25.1	-0.25196097	1.08E-08	6.29E-08
XPOT	12q14.2	-0.251919555	1.08E-08	6.32E-08
TCEA3	1p36.12	-0.251905146	1.09E-08	6.33E-08
GRHL2	8q22.3	-0.251902665	1.09E-08	6.33E-08
RCCD1	15q26.1	-0.251900279	1.09E-08	6.33E-08
PPP1R9B	17q21.33	0.251782904	1.10E-08	6.43E-08
TAFA1	3p14.1	0.251759647	1.11E-08	6.45E-08
NDUFB11	Xp11.3	-0.251723549	1.11E-08	6.48E-08
ROBO3	11q24.2	0.251710762	1.12E-08	6.49E-08
APPL2	12q23.3	-0.251612759	1.13E-08	6.58E-08
CMC2	16q23.2	-0.251575065	1.14E-08	6.61E-08
SDF2	17q11.2	-0.251573824	1.14E-08	6.61E-08
RRS1	8q13.1	-0.251530882	1.14E-08	6.65E-08
TXNDC15	5q31.1	0.251476489	1.15E-08	6.70E-08
TPT1-AS1	13q14.13	0.251442708	1.16E-08	6.73E-08
CDR2	16p12.2	0.251438223	1.16E-08	6.73E-08
FAM237A	2q33.3	-0.251385686	1.17E-08	6.77E-08
XXYLT1	3q29	-0.251375814	1.17E-08	6.78E-08
GPR37	7q31.33	0.251313978	1.18E-08	6.84E-08
F2RL3	19p13.11	0.251187728	1.20E-08	6.96E-08
MPST	22q12.3	-0.251168643	1.20E-08	6.97E-08

C11ORF21	11p15.5	0.251161289	1.20E-08	6.98E-08
TLR4	9q33.1	0.251039912	1.22E-08	7.09E-08
LONRF3	Xq24	0.250987875	1.23E-08	7.14E-08
PRKCB	16p12.2-p12.1	0.250978457	1.23E-08	7.15E-08
TMEM140	7q33	0.250949734	1.24E-08	7.17E-08
PROX1	1q32.3	0.250913305	1.24E-08	7.21E-08
ST3GAL4	11q24.2	0.250841616	1.26E-08	7.28E-08
HELB	12q14.3 12q	0.25083852	1.26E-08	7.28E-08
SAMSN1	21q11.2	0.250795143	1.26E-08	7.32E-08
NUTM2A	10q23.2	0.250697998	1.28E-08	7.42E-08
AP1M2	19p13.2	-0.250697193	1.28E-08	7.42E-08
SSTR3	22q13.1	0.250688373	1.28E-08	7.42E-08
ADRA1D	20p13	0.250642485	1.29E-08	7.47E-08
STXBP5	6q24.3	0.250623184	1.30E-08	7.48E-08
HACL1	3p25.1	-0.250600282	1.30E-08	7.51E-08
SLC22A3	6q25.3	0.250576616	1.30E-08	7.53E-08
FGR	1p35.3	0.250521936	1.31E-08	7.58E-08
HLA-DRA	6p21.32	0.250516306	1.31E-08	7.59E-08
GABRE	Xq28	-0.250485197	1.32E-08	7.62E-08
HYKK	15q25.1	-0.250476609	1.32E-08	7.62E-08
RUSC2	9p13.3	0.250473364	1.32E-08	7.62E-08
HAAO	2p21	0.250451708	1.33E-08	7.64E-08
MRPL55	1q42.13	-0.250447981	1.33E-08	7.65E-08
UCK2	1q24.1	-0.250445881	1.33E-08	7.65E-08
ANKRD26P3	13q12.11	-0.250416711	1.33E-08	7.68E-08
KCTD7	7q11.21	0.250368586	1.34E-08	7.72E-08
KIAA1671	22q11.23	-0.250351218	1.34E-08	7.74E-08
KYAT1	9q34.11	-0.250298924	1.35E-08	7.79E-08
PDE10A	6q27	0.250273922	1.36E-08	7.82E-08
PRRC1	5q23.2	0.250272682	1.36E-08	7.82E-08
MYCNOS	2p24.3	0.250244629	1.36E-08	7.84E-08
MYC	8q24.21	-0.250210464	1.37E-08	7.88E-08
ZNF710	15q26.1	0.250167903	1.38E-08	7.92E-08
PTPRG	3p14.2	0.250139943	1.38E-08	7.95E-08
HOXC4	12q13.13	0.25013708	1.38E-08	7.95E-08
BICD1	12p11.21	0.250065224	1.40E-08	8.03E-08
TPD52L2	20q13.33	0.250026481	1.41E-08	8.07E-08
LIMA1	12q13.12	0.249964072	1.42E-08	8.13E-08
YPEL1	22q11.21-q11.22	0.249963118	1.42E-08	8.13E-08
TMEM223	11q12.3	-0.249863588	1.44E-08	8.24E-08
PRPF19	11q12.2	-0.2498529	1.44E-08	8.25E-08
CD84	1q23.3	0.249840781	1.44E-08	8.26E-08
SCARB2	4q21.1	0.249834292	1.44E-08	8.27E-08
ZFP2	5q35.3	0.249829353	1.44E-08	8.27E-08
AKAP8	19p13.12	-0.249796312	1.45E-08	8.31E-08
RNF113A	Xq24	-0.249753465	1.46E-08	8.35E-08
ESCO2	8p21.1	-0.249673975	1.47E-08	8.44E-08
ADAM23	2q33.3	-0.249669681	1.48E-08	8.45E-08
LSM8	7q31.31	-0.249646307	1.48E-08	8.47E-08
PACS1	11q13.1-q13.2	0.24963275	1.48E-08	8.48E-08
NDUFB2-AS1	7q34	-0.249614429	1.49E-08	8.50E-08
POPDC2	3q13.33	0.249569673	1.50E-08	8.55E-08
PLIN2	9p22.1	0.249564043	1.50E-08	8.56E-08
LMNTD2	11p15.5	-0.249557363	1.50E-08	8.56E-08
NOL12	22q13.1	-0.249523391	1.51E-08	8.60E-08
KCNA2	1p13.3	0.249520833	1.51E-08	8.60E-08
PDXK	21q22.3	0.249451726	1.52E-08	8.68E-08
BTN2A2	6p22.2	0.249445332	1.52E-08	8.68E-08

SPOCK1	5q31.2	0.249385404	1.53E-08	8.75E-08
STRADA	17q23.3	-0.249379106	1.54E-08	8.76E-08
TRIM5	11p15.4	0.249350574	1.54E-08	8.79E-08
ABCB6	2q35	-0.249342462	1.54E-08	8.80E-08
LINC01091	4q28.1	0.249336986	1.54E-08	8.80E-08
SNHG4	5q31.2	-0.249294272	1.55E-08	8.85E-08
EGR2	10q21.3	0.249292745	1.55E-08	8.85E-08
OXT	20p13	0.249263464	1.56E-08	8.88E-08
MRPS25	3p25.1	-0.249258964	1.56E-08	8.89E-08
UBASH3B	11q24.1	0.249253239	1.56E-08	8.89E-08
AJAP1	1p36.32	0.24921383	1.57E-08	8.94E-08
SETD4	21q22.12	-0.249206957	1.57E-08	8.94E-08
RASGEF1B	4q21.21	0.249103514	1.59E-08	9.07E-08
DHPS	19p13.13	-0.248981368	1.62E-08	9.21E-08
OXTR	3p25.3	0.248970543	1.62E-08	9.23E-08
LIN54	4q21.22	-0.248938426	1.63E-08	9.26E-08
JMJD7-PLA2G4B	15q15.1	-0.248928406	1.63E-08	9.27E-08
SHROOM1	5q31.1	0.248878975	1.64E-08	9.33E-08
PSMD14	2q24.2	-0.248853019	1.65E-08	9.36E-08
SNUPN	15q24.2	-0.248786125	1.66E-08	9.45E-08
DNTTIP2	1p22.1	-0.24875473	1.67E-08	9.48E-08
BMP7	20q13.31	-0.248747477	1.67E-08	9.49E-08
PMS2P2	7q11.23	-0.248743469	1.67E-08	9.49E-08
IQUB	7q31.32	0.248735232	1.68E-08	9.50E-08
KCNE3	11q13.4	-0.248721044	1.68E-08	9.52E-08
MCRIP1	17q25.3	0.248670659	1.69E-08	9.58E-08
MPC2	1q24.2	-0.248656726	1.69E-08	9.60E-08
KIAA1210	Xq24	0.248651352	1.70E-08	9.60E-08
DPF3	14q24.2	0.248600961	1.71E-08	9.66E-08
HSDL2	9q32	-0.248585687	1.71E-08	9.68E-08
DTX1	12q24.13	0.248509865	1.73E-08	9.78E-08
WDR61	15q25.1	-0.248452609	1.74E-08	9.85E-08
NELFCD	20q13.32	-0.248406327	1.75E-08	9.91E-08
ACVR1	2q24.1	0.248357087	1.76E-08	9.97E-08
ATP23	12q14.1	-0.248355751	1.77E-08	9.97E-08
LINC01002	19p13.3	-0.248322924	1.77E-08	1.00E-07
LBX2-AS1	2p13.1	0.248310996	1.78E-08	1.00E-07
UFSP1	7q22.1	-0.248291719	1.78E-08	1.01E-07
MAP2K2	19p13.3	-0.248258129	1.79E-08	1.01E-07
MORC4	Xq22.3	-0.248254789	1.79E-08	1.01E-07
ANKRD13B	17q11.2	-0.248244769	1.79E-08	1.01E-07
GMNN	6p22.3	-0.248243815	1.79E-08	1.01E-07
GLE1	9q34.11	-0.248227211	1.80E-08	1.01E-07
EXOC2	6p25.3	0.248188659	1.81E-08	1.02E-07
CLDN20	6q25.3	-0.248183531	1.81E-08	1.02E-07
FAM160B1	10q25.3	0.248179879	1.81E-08	1.02E-07
THAP2	12q21.1	0.248150488	1.82E-08	1.02E-07
RFTN2	2q33.1	0.248129971	1.82E-08	1.02E-07
RASIP1	19q13.33	0.248070425	1.83E-08	1.03E-07
UTP14C	13q14.3	0.248036453	1.84E-08	1.04E-07
RTN4RL2	11q12.1	0.248018853	1.85E-08	1.04E-07
ELOVL7	5q12.1	-0.248013264	1.85E-08	1.04E-07
IRF7	11p15.5	0.24800668	1.85E-08	1.04E-07
WASF1	6q21	-0.248001241	1.85E-08	1.04E-07
KRTCAP3	2p23.3	-0.247983968	1.86E-08	1.04E-07
PIANP	12p13.31	0.247893373	1.88E-08	1.06E-07
UQCRC2	16p12.2	-0.247887492	1.88E-08	1.06E-07
SPAG4	20q11.22	0.247876518	1.88E-08	1.06E-07

TRAK1	3p22.1	-0.247685665	1.93E-08	1.09E-07
C3ORF33	3q25.31	-0.247676504	1.94E-08	1.09E-07
HABP4	9q22.32	0.247656941	1.94E-08	1.09E-07
GIMAP1	7q36.1	0.247640623	1.94E-08	1.09E-07
POFUT2	21q22.3	0.247555789	1.97E-08	1.10E-07
FKBP9P1	7p11.2	0.247546055	1.97E-08	1.10E-07
USP2	11q23.3	0.24754491	1.97E-08	1.10E-07
ILF3-DT	19p13.2	-0.247495765	1.98E-08	1.11E-07
P2RX1	17p13.2	0.247475684	1.99E-08	1.11E-07
LBX1	10q24.32	0.247456468	1.99E-08	1.12E-07
DAPK3	19p13.3	0.24739509	2.01E-08	1.13E-07
GOT2	16q21	-0.247310829	2.03E-08	1.14E-07
DPEP1	16q24.3	0.247254498	2.05E-08	1.15E-07
SLC25A15	13q14.11	-0.247245461	2.05E-08	1.15E-07
ZBTB40	1p36.12	0.247235346	2.05E-08	1.15E-07
OLFM4	13q14.3	0.247185714	2.07E-08	1.16E-07
CNIH4	1q42.11	-0.24717017	2.07E-08	1.16E-07
SDF4	1p36.33	0.24708753	2.10E-08	1.17E-07
LIF	22q12.2	0.247059284	2.10E-08	1.18E-07
OAZ1	19p13.3	-0.247015578	2.12E-08	1.18E-07
CSTB	21q22.3	-0.247002028	2.12E-08	1.18E-07
SF3B5	6q24.2	-0.24699802	2.12E-08	1.18E-07
FBXO17	19q13.2	0.246985137	2.13E-08	1.19E-07
PNPT1	2p16.1	-0.246979889	2.13E-08	1.19E-07
TNFSF14	19p13.3	0.246881929	2.16E-08	1.20E-07
CCDC137	17q25.3	-0.246878259	2.16E-08	1.20E-07
TOR3A	1q25.2	-0.246865091	2.16E-08	1.20E-07
RASAL3	19p13.12	0.246854403	2.16E-08	1.21E-07
SP110	2q37.1	0.246848868	2.16E-08	1.21E-07
TRIM47	17q25.1	0.246838371	2.17E-08	1.21E-07
MCTP1	5q15	0.246823389	2.17E-08	1.21E-07
HS3ST3A1	17p12	0.246766228	2.19E-08	1.22E-07
PDCD5	19q13.11	-0.246741227	2.20E-08	1.22E-07
FCRLB	1q23.3	0.246722905	2.20E-08	1.22E-07
FDFT1	8p23.1	-0.246680631	2.21E-08	1.23E-07
CXCL13	4q21.1	0.246576043	2.25E-08	1.25E-07
ZYG11B	1p32.3	0.246565642	2.25E-08	1.25E-07
GABRR2	6q15	0.246540173	2.26E-08	1.25E-07
YEATS4	12q15	-0.246497316	2.27E-08	1.26E-07
KRT17P5	17p11.2	-0.246488732	2.27E-08	1.26E-07
C7ORF65	7p12.3	0.246453504	2.28E-08	1.27E-07
ZSCAN2	15q25.2	0.246433953	2.29E-08	1.27E-07
ZFP92	Xq28	0.246351683	2.31E-08	1.28E-07
S1PR1	1p21.2	0.24626791	2.34E-08	1.30E-07
ICAM2	17q23.3	0.246241191	2.35E-08	1.30E-07
EXO1	1q43	-0.246219815	2.36E-08	1.31E-07
NEDD4	15q21.3	0.246186893	2.37E-08	1.31E-07
AHCY	20q11.22	-0.246170193	2.37E-08	1.31E-07
FEN1	11q12.2	-0.246154066	2.38E-08	1.32E-07
HOXA5	7p15.2	0.246142764	2.38E-08	1.32E-07
CEP135	4q12	0.246136126	2.38E-08	1.32E-07
TNFRSF14	1p36.32	0.246103872	2.39E-08	1.32E-07
GRP	18q21.32	0.246095155	2.40E-08	1.33E-07
IMPACT	18q11.2	-0.246079443	2.40E-08	1.33E-07
TRAF3IP3	1q32.2	0.246052055	2.41E-08	1.33E-07
TBC1D16	17q25.3	0.246003865	2.43E-08	1.34E-07
CSMD3	8q23.3	0.245974918	2.44E-08	1.35E-07
CCT7	2p13.2	-0.245954815	2.44E-08	1.35E-07

KIAA0825	5q15	0.245935444	2.45E-08	1.35E-07
UGT1A8	2q37.1	-0.245891533	2.46E-08	1.36E-07
LOC285593	5q35.2	0.245840647	2.48E-08	1.37E-07
TMEM44	3q29	-0.245838586	2.48E-08	1.37E-07
TNFSF13B	13q33.3	0.24581053	2.49E-08	1.37E-07
LSM5	7p14.3	-0.245802896	2.49E-08	1.37E-07
UBTD2	5q35.1	0.245798984	2.49E-08	1.38E-07
HMGA1	6p21.31	-0.24574106	2.51E-08	1.39E-07
RAB10	2p23.3	-0.245701553	2.53E-08	1.39E-07
IFFO2	1p36.13	0.24569077	2.53E-08	1.39E-07
MIF4GD	17q25.1	-0.245663573	2.54E-08	1.40E-07
UQCRHL	1p36.21	-0.245652408	2.54E-08	1.40E-07
FAM83F	22q13.1	-0.245642102	2.55E-08	1.40E-07
UBE2N	12q22	-0.245640766	2.55E-08	1.40E-07
SDC4	20q13.12	0.24561586	2.56E-08	1.41E-07
SLC2A8	9q33.3	-0.245606126	2.56E-08	1.41E-07
CGAS	6q13	0.24558895	2.56E-08	1.41E-07
NDUFAF2	5q12.1	-0.245560226	2.57E-08	1.42E-07
COBLL1	2q24.3	-0.245499153	2.60E-08	1.43E-07
LIN7C	11p14.1	-0.245475201	2.60E-08	1.43E-07
IFRD2	3p21.31	-0.24545478	2.61E-08	1.43E-07
FLJ16779	20q13.33	0.245437386	2.62E-08	1.44E-07
NAMPT	7q22.3	-0.245419281	2.62E-08	1.44E-07
GBGT1	9q34.2	0.245362788	2.64E-08	1.45E-07
EIF5A	17p13.1	-0.245353914	2.65E-08	1.45E-07
MYOM1	18p11.31	0.245305538	2.66E-08	1.46E-07
PPM1K	4q22.1	0.245197706	2.70E-08	1.48E-07
MAPK10	4q21.3	-0.245170504	2.71E-08	1.49E-07
TMPRSS3	21q22.3	0.245166114	2.71E-08	1.49E-07
C4A	6p21.33	0.245156858	2.72E-08	1.49E-07
MS4A7	11q12.2	0.245073073	2.75E-08	1.51E-07
SCIN	7p21.3	-0.245053129	2.76E-08	1.51E-07
SLC22A4	5q31.1	0.244997835	2.78E-08	1.52E-07
ZSWIM8	10q22.2	0.244993105	2.78E-08	1.52E-07
ZC3H13	13q14.13	0.244951881	2.79E-08	1.53E-07
MINDY2	15q21.3-q22.1	0.244949305	2.79E-08	1.53E-07
GPR156	3q13.33	0.244937482	2.80E-08	1.53E-07
PHLDA1	12q21.2	0.244785362	2.86E-08	1.56E-07
TRIM36	5q22.3	0.244742861	2.87E-08	1.57E-07
TEAD3	6p21.31	0.244739461	2.87E-08	1.57E-07
SLC5A9	1p33	0.244679848	2.90E-08	1.58E-07
HSPB1	7q11.23	-0.24467648	2.90E-08	1.58E-07
ACTR3	2q14.1	-0.244528568	2.96E-08	1.61E-07
MRI1	19p13.13	-0.244519026	2.96E-08	1.62E-07
TRPA1	8q21.11	0.244512632	2.96E-08	1.62E-07
MLF2	12p13.31	-0.244500513	2.97E-08	1.62E-07
GNPTAB	12q23.2	0.244472362	2.98E-08	1.62E-07
ATP11A	13q34	0.244461865	2.98E-08	1.63E-07
ZNF701	19q13.41	0.244457953	2.98E-08	1.63E-07
ENOSF1	18p11.32	-0.244355083	3.03E-08	1.65E-07
NCALD	8q22.3	0.244322733	3.04E-08	1.66E-07
TES	7q31.2	0.244308324	3.04E-08	1.66E-07
JHY	11q24.1	0.244303457	3.05E-08	1.66E-07
MTTP	4q23	-0.244294011	3.05E-08	1.66E-07
VEPH1	3q25.31-q25.32	0.244208609	3.09E-08	1.68E-07
NKIRAS2	17q21.2	-0.24414648	3.11E-08	1.69E-07
SPATA18	4q12	0.244089129	3.14E-08	1.70E-07
SLC28A3	9q21.32-q21.33	0.244088329	3.14E-08	1.70E-07

EVL	14q32.2	0.244087793	3.14E-08	1.70E-07
TPST2	22q12.1	0.244084166	3.14E-08	1.71E-07
PHF8	Xp11.22	-0.244065272	3.14E-08	1.71E-07
SKA3	13q12.11	-0.244022521	3.16E-08	1.72E-07
COX14	12q13.12	-0.24402233	3.16E-08	1.72E-07
AFF4	5q31.1	0.244019181	3.16E-08	1.72E-07
B4GALT1	9p21.1	0.244015459	3.17E-08	1.72E-07
IKZF4	12q13.2	0.243993893	3.18E-08	1.72E-07
TEX2	17q23.3	-0.24390839	3.21E-08	1.74E-07
IL12RB1	19p13.11	0.243851612	3.24E-08	1.76E-07
MAK	6p24.2	0.243838538	3.24E-08	1.76E-07
LOC644936	5q14.1	0.243782809	3.27E-08	1.77E-07
ZNF432	19q13.41	0.243738913	3.28E-08	1.78E-07
NDP	Xp11.3	0.243725591	3.29E-08	1.78E-07
SECISBP2L	15q21.1	0.243695207	3.30E-08	1.79E-07
ACSF2	17q21.33	0.243670396	3.31E-08	1.80E-07
SDHC	1q23.3	-0.243584989	3.35E-08	1.82E-07
RASGRP2	11q13.1	0.243568671	3.36E-08	1.82E-07
MIR31HG	9p21.3	0.243560947	3.36E-08	1.82E-07
C9ORF139	9q34.3	0.243556896	3.37E-08	1.82E-07
EEF2KMT	16p13.3	-0.24354157	3.37E-08	1.82E-07
LOC388242	16p11.2	0.243522729	3.38E-08	1.83E-07
PCDHB16	5q31.3	0.243522294	3.38E-08	1.83E-07
BACE1	11q23.3	0.243516855	3.38E-08	1.83E-07
DPM3	1q22	-0.243492616	3.39E-08	1.83E-07
MTSS2	16q22.1	0.243483265	3.40E-08	1.84E-07
GRIA1	5q33.2	0.243475395	3.40E-08	1.84E-07
ZNF800	7q31.33	-0.243449102	3.41E-08	1.84E-07
ZNF671	19q13.43	0.243432879	3.42E-08	1.85E-07
CCDC69	5q33.1	0.243420092	3.43E-08	1.85E-07
RASSF1	3p21.31	0.243387742	3.44E-08	1.86E-07
CBFA2T3	16q24.3	0.243382494	3.44E-08	1.86E-07
RUFY1	5q35.3	0.243329532	3.47E-08	1.87E-07
TMEM183A	1q32.1	-0.243313023	3.48E-08	1.87E-07
ZNF83	19q13.41	0.243255004	3.50E-08	1.89E-07
SKA2	17q22	-0.243226758	3.52E-08	1.89E-07
RETN	19p13.2	0.243162674	3.55E-08	1.91E-07
NPL	1q25.3	-0.243151943	3.55E-08	1.91E-07
FKBP11	12q13.12	0.243140206	3.56E-08	1.91E-07
MASTL	10p12.1	-0.243131808	3.56E-08	1.92E-07
NTN4	12q22	0.243111673	3.57E-08	1.92E-07
CD276	15q24.1	0.243041821	3.60E-08	1.94E-07
SGTA	19p13.3	-0.243039053	3.61E-08	1.94E-07
VSTM2L	20q11.23	0.242985519	3.63E-08	1.95E-07
CACNA2D3	3p21.1-p14.3	-0.242972064	3.64E-08	1.95E-07
GLT1D1	12q24.33	0.242963243	3.64E-08	1.96E-07
LIFR	5p13.1	0.242806403	3.72E-08	2.00E-07
CKS1B	1q21.3	-0.242799819	3.72E-08	2.00E-07
SLC43A2	17p13.3	0.242793139	3.72E-08	2.00E-07
AOX1	2q33.1	0.242778831	3.73E-08	2.00E-07
RNASE6	14q11.2	0.242771382	3.74E-08	2.00E-07
DLEU1	13q14.2-q14.3	-0.242746571	3.75E-08	2.01E-07
RCSD1	1q24.2	0.242702483	3.77E-08	2.02E-07
TCTEX1D4	1p34.1	0.242621318	3.81E-08	2.04E-07
EMD	Xq28	-0.242583868	3.83E-08	2.05E-07
PTPRC	1q31.3-q32.1	0.242528998	3.86E-08	2.07E-07
GDF10	10q11.22	0.242423764	3.91E-08	2.10E-07
B3GNT9	16q22.1	0.242405707	3.92E-08	2.10E-07

CST2	20p11.21	0.242335435	3.96E-08	2.12E-07
MAL2	8q24.12	-0.242326598	3.96E-08	2.12E-07
ENOPH1	4q21.22	-0.242303886	3.97E-08	2.13E-07
MYO16	13q33.3	0.242295102	3.98E-08	2.13E-07
ICOS	2q33.2	0.242276129	3.99E-08	2.13E-07
CYYR1	21q21.3	0.242241095	4.01E-08	2.14E-07
SH2D7	15q25.1	0.24222403	4.02E-08	2.15E-07
RNF180	5q12.3	0.24216819	4.05E-08	2.16E-07
DHX35	20q11.23-q12	-0.242139466	4.06E-08	2.17E-07
CFAP206	6q15	0.242066762	4.10E-08	2.19E-07
C9ORF85	9q21.13	-0.242065129	4.10E-08	2.19E-07
SLC35E2B	1p36.33	0.24203402	4.12E-08	2.20E-07
AACSP1	5q35.3	0.242008115	4.13E-08	2.21E-07
PTGR2	14q24.3	-0.241864924	4.21E-08	2.25E-07
TMEM220	17p13.1	0.241833916	4.23E-08	2.26E-07
AXIN2	17q24.1	0.24182284	4.24E-08	2.26E-07
SNX33	15q24.2	0.241818928	4.24E-08	2.26E-07
MAP1LC3C	1q43	0.241688228	4.31E-08	2.30E-07
CLCNKB	1p36.13	0.241680742	4.32E-08	2.30E-07
PLEKHO1	1q21.2	0.241670158	4.32E-08	2.30E-07
URM1	9q34.11	-0.241663382	4.33E-08	2.30E-07
MTOR	1p36.22	0.241633705	4.34E-08	2.31E-07
FRRS1L	9q31.3	-0.241613444	4.35E-08	2.32E-07
DGUOK	2p13.1	-0.241607081	4.36E-08	2.32E-07
PHOSPHO2	2q31.1	-0.241603264	4.36E-08	2.32E-07
TEN1	17q25.1	-0.241576735	4.37E-08	2.33E-07
PLEC	8q24.3	0.241513085	4.41E-08	2.35E-07
PEX11A	15q26.1	-0.241494954	4.42E-08	2.35E-07
SOX12	20p13	-0.241483217	4.43E-08	2.35E-07
VBP1	Xq28	-0.241452972	4.45E-08	2.36E-07
CD53	1p13.3	0.241435026	4.46E-08	2.37E-07
ERCC5	13q33.1	0.241432354	4.46E-08	2.37E-07
LOC93429	19q13.32	0.241422732	4.46E-08	2.37E-07
ERP27	12p12.3	0.2413542	4.51E-08	2.39E-07
TAL1	1p33	0.241331584	4.52E-08	2.40E-07
SLC43A1	11q12.1	0.241318988	4.53E-08	2.40E-07
PPARGC1B	5q32	-0.241302055	4.54E-08	2.41E-07
ARID1B	6q25.3	0.241263545	4.56E-08	2.42E-07
PEX12	17q12	-0.241255052	4.56E-08	2.42E-07
ABCA8	17q24.2	0.2412411	4.57E-08	2.42E-07
NCKAP5	2q21.2	0.241205334	4.59E-08	2.43E-07
DSEL	18q22.1	0.241199036	4.60E-08	2.44E-07
BIN2	12q13.13	0.241195124	4.60E-08	2.44E-07
LARP6	15q23	0.241104278	4.66E-08	2.46E-07
RAP1A	1p13.2	0.24109817	4.66E-08	2.47E-07
ZBTB10	8q21.13	0.241070783	4.68E-08	2.47E-07
C16ORF86	16q22.1	0.24105561	4.69E-08	2.48E-07
ZNF443	19p13.2	-0.240938718	4.76E-08	2.52E-07
NHP2	5q35.3	-0.24093814	4.76E-08	2.52E-07
SNORD116-20	15q11.2	0.240935058	4.76E-08	2.52E-07
HLA-DQA2	6p21.32	0.240905408	4.78E-08	2.53E-07
TMEM30A	6q14.1	0.240884414	4.79E-08	2.53E-07
ICAM3	19p13.2	0.24086113	4.81E-08	2.54E-07
DNAJC10	2q32.1	0.240827445	4.83E-08	2.55E-07
ZNF713	7p11.2	0.24082655	4.83E-08	2.55E-07
EXOC3L1	16q22.1	0.240804924	4.84E-08	2.56E-07
CACNA1B	9q34.3	-0.240777023	4.86E-08	2.56E-07
C1QL1	17q21.31	0.240757169	4.87E-08	2.57E-07

HSPA14	10p13	-0.240742706	4.88E-08	2.57E-07
DDT	22q11.23	-0.240660353	4.94E-08	2.60E-07
SLC22A17	14q11.2	0.24065205	4.94E-08	2.60E-07
CINP	14q32.31	-0.240648806	4.94E-08	2.60E-07
RNF150	4q31.21	0.240631734	4.95E-08	2.61E-07
ABI3	17q21.32	0.240631349	4.95E-08	2.61E-07
RAB42	1p35.3	0.240515399	5.03E-08	2.65E-07
ESRP1	8q22.1	-0.240504521	5.04E-08	2.65E-07
ZFYVE1	14q24.2	0.240471408	5.06E-08	2.66E-07
ATAD5	17q11.2	-0.24045738	5.07E-08	2.67E-07
SNHG6	8q13.1 8q13	-0.240433333	5.09E-08	2.67E-07
HMGCLL1	6p12.1	0.240425578	5.09E-08	2.68E-07
APP	21q21.3	0.240359854	5.13E-08	2.70E-07
CTTNBP2NL	1p13.2	0.240340769	5.15E-08	2.70E-07
LURAP1	1p34.1	0.240291248	5.18E-08	2.72E-07
CYB561A3	11q12.2	0.24025727	5.20E-08	2.73E-07
CKMT1A	15q15.3	-0.240225213	5.23E-08	2.74E-07
MBD2	18q21.2	-0.240176826	5.26E-08	2.76E-07
KANSL1L	2q34	0.240152874	5.28E-08	2.77E-07
RASSF6	4q13.3	0.240123578	5.30E-08	2.78E-07
FIP1L1	4q12	-0.240112317	5.30E-08	2.78E-07
USP14	18p11.32	-0.240098385	5.31E-08	2.79E-07
PPM1L	3q25.33-q26.1	-0.240083403	5.32E-08	2.79E-07
LAMA3	18q11.2	0.240067658	5.33E-08	2.80E-07
NFYA	6p21.1	0.23999332	5.39E-08	2.82E-07
CTSF	11q13.2	0.23999208	5.39E-08	2.82E-07
C1QTNF4	11p11.2	0.239982598	5.39E-08	2.83E-07
KRT23	17q21.2	0.239979979	5.40E-08	2.83E-07
FRYL	4p11	0.239891219	5.46E-08	2.86E-07
SCARNA17	18q21.1	0.239820613	5.51E-08	2.88E-07
COLEC10	8q24.12	-0.23981473	5.51E-08	2.89E-07
SCN9A	2q24.3	-0.239754944	5.56E-08	2.91E-07
SLC38A3	3p21.31	0.23975475	5.56E-08	2.91E-07
TNFSF13	17p13.1	0.239729179	5.58E-08	2.92E-07
C1ORF35	1q42.13	-0.239701887	5.60E-08	2.93E-07
AP2A1	19q13.33	0.239668106	5.62E-08	2.94E-07
AHSA1	14q24.3	-0.239660472	5.63E-08	2.94E-07
SNHG15	7p13	-0.239652647	5.63E-08	2.94E-07
THNSL1	10p12.1	-0.239640241	5.64E-08	2.95E-07
KIAA1958	9q32	-0.239635434	5.65E-08	2.95E-07
CELF4	18q12.2	0.239626032	5.65E-08	2.95E-07
PCDHB4	5q31.3	0.239620255	5.66E-08	2.95E-07
ARFGAP1	20q13.33	0.239616003	5.66E-08	2.95E-07
GPR21	9q33.2	0.239614031	5.66E-08	2.95E-07
RRAGC	1p34.3	0.239613808	5.66E-08	2.95E-07
AUNIP	1p36.11	-0.239583463	5.68E-08	2.96E-07
PTCD1	7q22.1	-0.239581172	5.69E-08	2.96E-07
KCNK1	1q42.2	-0.239565713	5.70E-08	2.97E-07
TRIM3	11p15.4	0.239563518	5.70E-08	2.97E-07
UBQLNL	11p15.4	0.239561412	5.70E-08	2.97E-07
PGM5	9q21.11	0.239556266	5.70E-08	2.97E-07
CDA	1p36.12	0.239529266	5.72E-08	2.98E-07
GPN3	12q24.11	-0.239519908	5.73E-08	2.98E-07
BTF3	5q13.2	-0.239468092	5.77E-08	3.00E-07
CEP152	15q21.1	-0.239435456	5.80E-08	3.01E-07
EBI3	19p13.3	0.239433452	5.80E-08	3.01E-07
TIMELESS	12q13.3	-0.239398335	5.82E-08	3.03E-07
MILR1	17q23.3	0.239364512	5.85E-08	3.04E-07

RAD54B	8q22.1	-0.239332777	5.87E-08	3.05E-07
BABAM1	19p13.11	-0.239284204	5.91E-08	3.07E-07
ARL4D	17q21.31	-0.239276666	5.92E-08	3.07E-07
GLT8D1	3p21.1	0.239171506	6.00E-08	3.11E-07
DGAT2	11q13.5	0.239166925	6.00E-08	3.11E-07
EPHB6	7q34	-0.239165022	6.00E-08	3.11E-07
TRIM69	15q21.1	0.239155909	6.01E-08	3.12E-07
RTN1	14q23.1	0.239152521	6.01E-08	3.12E-07
RNASEH2C	11q13.1	-0.239130854	6.03E-08	3.13E-07
ACTN3	11q13.2	0.239119888	6.04E-08	3.13E-07
RPS29	14q21.3	-0.239083331	6.07E-08	3.14E-07
CLEC7A	12p13.2	0.239073502	6.08E-08	3.15E-07
TM9SF2	13q32.3	0.239055562	6.09E-08	3.15E-07
LONP1	19p13.3	-0.239054417	6.09E-08	3.15E-07
BCL2A1	15q25.1	0.238992008	6.14E-08	3.18E-07
FUT4	11q21	0.238988954	6.14E-08	3.18E-07
FAM178B	2q11.2	0.238920616	6.20E-08	3.21E-07
IMPG2	3q12.3	0.238904741	6.21E-08	3.21E-07
RBFOX2	22q12.3	0.238782069	6.31E-08	3.26E-07
SLC30A1	1q32.3	0.238768519	6.32E-08	3.27E-07
LRRFIP1	2q37.3	0.23873197	6.35E-08	3.28E-07
RAD23B	9q31.2	-0.238641124	6.43E-08	3.32E-07
MRPS21	1q21.2	-0.238606007	6.46E-08	3.34E-07
SLC16A13	17p13.1	-0.238585639	6.47E-08	3.34E-07
CIAO2A	15q22.31	-0.238491304	6.55E-08	3.38E-07
UQCRB	8q22.1	-0.238478231	6.57E-08	3.39E-07
ADCY1	7p12.3	0.238467066	6.57E-08	3.39E-07
PNPLA4	Xp22.31	-0.238430136	6.61E-08	3.41E-07
KCTD1	18q11.2	-0.238416299	6.62E-08	3.41E-07
NPC2	14q24.3	0.23840313	6.63E-08	3.42E-07
GALNT12	9q22.33	-0.238243099	6.77E-08	3.49E-07
EIF4A2	3q27.3	-0.238172961	6.83E-08	3.52E-07
PTPRT	20q12-q13.11	-0.238158313	6.84E-08	3.53E-07
FAU	11q13.1	-0.238143665	6.86E-08	3.53E-07
PRR26	10p15.3	0.23811783	6.88E-08	3.54E-07
DGKB	7p21.2	-0.238089595	6.91E-08	3.55E-07
NEDD4L	18q21.31	-0.238076866	6.92E-08	3.56E-07
MAGEF1	3q27.1	-0.238034592	6.96E-08	3.58E-07
RPL27	17q21.31	-0.237876947	7.10E-08	3.65E-07
FIGNL1	7p12.2	-0.237870267	7.11E-08	3.65E-07
ALKBH4	7q22.1	-0.237840017	7.13E-08	3.67E-07
ITGA7	12q13.2	0.237799037	7.17E-08	3.69E-07
ARPC1B	7q22.1	0.237713863	7.25E-08	3.73E-07
UCHL5	1q31.2	-0.237686094	7.28E-08	3.74E-07
FKBP4	12p13.33	-0.237641816	7.32E-08	3.76E-07
ERG	21q22.2	0.237641721	7.32E-08	3.76E-07
NDUFV1	11q13.2	-0.237610993	7.35E-08	3.77E-07
MFSD10	4p16.3	0.237595343	7.36E-08	3.78E-07
PDC	1q31.1	0.237558319	7.40E-08	3.80E-07
C12ORF66	12q14.2	-0.23751729	7.44E-08	3.82E-07
HLA-L	6p22.1	0.23747396	7.48E-08	3.84E-07
MRPL19	2p12	-0.237421953	7.53E-08	3.86E-07
THAP9	4q21.22	-0.23740115	7.55E-08	3.87E-07
AIF1	6p21.33	0.237398096	7.55E-08	3.87E-07
BTBD16	10q26.13	-0.237384558	7.57E-08	3.88E-07
PML	15q24.1	0.237317174	7.63E-08	3.91E-07
UBA52	19p13.11	-0.237315934	7.63E-08	3.91E-07
NGFR	17q21.33	0.237299425	7.65E-08	3.92E-07

FKBP9	7p14.3	0.237099602	7.85E-08	4.02E-07
MEI1	22q13.2	0.237069447	7.88E-08	4.03E-07
SLC9A3R2	16p13.3	0.237002648	7.95E-08	4.07E-07
SGO1	3p24.3	-0.236983372	7.97E-08	4.08E-07
FGF23	12p13.32	0.236980543	7.97E-08	4.08E-07
HAVCR2	5q33.3	0.23696963	7.98E-08	4.08E-07
MMP20	11q22.2	0.236951812	8.00E-08	4.09E-07
FBXO42	1p36.13	0.236947014	8.01E-08	4.09E-07
RASSF4	10q11.21	0.236927929	8.03E-08	4.10E-07
NMRAL1	16p13.3	-0.236923253	8.03E-08	4.10E-07
NDUFA10	2q37.3	-0.23690016	8.06E-08	4.11E-07
MICU1	10q22.1	0.236868287	8.09E-08	4.13E-07
ARRDC2	19p13.11	0.236841186	8.12E-08	4.14E-07
RFXANK	19p13.11	-0.23677935	8.18E-08	4.17E-07
CAPN2	1q41	0.236775437	8.19E-08	4.17E-07
COLQ	3p25.1	0.236773815	8.19E-08	4.17E-07
DAP3	1q22	-0.236763413	8.20E-08	4.18E-07
NPAS4	11q13.2	0.236747117	8.22E-08	4.19E-07
PTPN2	18p11.21	-0.236738698	8.23E-08	4.19E-07
TMEM236	10p12.33	0.236728296	8.24E-08	4.20E-07
ZWILCH	15q22.31	-0.236655486	8.31E-08	4.23E-07
OPN4	10q23.2	0.236621179	8.35E-08	4.25E-07
HCFC2	12q23.3	0.236604581	8.37E-08	4.26E-07
LMO4	1p22.3	-0.236593268	8.38E-08	4.26E-07
NIF3L1	2q33.1	-0.236509292	8.47E-08	4.31E-07
FCER1G	1q23.3	0.236509197	8.47E-08	4.31E-07
ACBD6	1q25.2-q25.3	-0.236508147	8.47E-08	4.31E-07
CLINT1	5q33.3	-0.236427994	8.56E-08	4.35E-07
PPP1R15A	19q13.33	0.236410716	8.58E-08	4.36E-07
RND2	17q21.31	-0.236343822	8.66E-08	4.40E-07
LOC143188	10q25.2	0.236342486	8.66E-08	4.40E-07
GOT1	10q24.2	-0.236332371	8.67E-08	4.40E-07
LINC01634	22q11.21	0.236330519	8.67E-08	4.40E-07
GEN1	2p24.2	-0.236327314	8.67E-08	4.40E-07
AMD1	6q21	-0.236318821	8.68E-08	4.41E-07
SREBF1	17p11.2	-0.236287043	8.72E-08	4.42E-07
LAT	16p11.2	0.236245915	8.77E-08	4.45E-07
ABHD15	17q11.2	-0.236240952	8.77E-08	4.45E-07
RP1	8q11.23-q12.1	0.236193887	8.82E-08	4.47E-07
NHLRC3	13q13.3	0.236179688	8.84E-08	4.48E-07
ZHX3	20q12	0.236123673	8.90E-08	4.51E-07
RPUSD2	15q15.1	-0.236114512	8.92E-08	4.52E-07
TMEM92	17q21.33	0.236100961	8.93E-08	4.52E-07
PPARD	6p21.31	0.236100728	8.93E-08	4.52E-07
C21ORF62	21q22.11	0.236095168	8.94E-08	4.52E-07
POR	7q11.23	-0.236092564	8.94E-08	4.52E-07
FCGRT	19q13.33	0.236076341	8.96E-08	4.53E-07
STXBP1	9q34.11	0.236046282	8.99E-08	4.55E-07
ACAT2	6q25.3	-0.23594866	9.11E-08	4.60E-07
TENT5C	1p12	0.235847794	9.23E-08	4.66E-07
PHLPP2	16q22.2	0.235830999	9.25E-08	4.67E-07
CXCL10	4q21.1	0.235779851	9.31E-08	4.70E-07
ADGRG6	6q24.2	0.235740821	9.35E-08	4.72E-07
BCAP31	Xq28	-0.235692249	9.41E-08	4.75E-07
GTF3C5	9q34.13	-0.235659231	9.45E-08	4.77E-07
MYO7B	2q14.3	0.235652441	9.46E-08	4.78E-07
HYAL4	7q31.32	0.235647571	9.47E-08	4.78E-07
DDX28	16q22.1	-0.235644345	9.47E-08	4.78E-07

CACNA1A	19p13.13	0.235587476	9.54E-08	4.81E-07
ZZEF1	17p13.2	0.235519622	9.62E-08	4.85E-07
BRI3BP	12q24.31	-0.235512656	9.63E-08	4.86E-07
BCL2L11	2q13	0.235505117	9.64E-08	4.86E-07
GPX7	1p32.3	0.235464519	9.69E-08	4.88E-07
APOO	Xp22.11	-0.235453778	9.71E-08	4.89E-07
LRRIQ1	12q21.31	0.235446089	9.72E-08	4.89E-07
POTEM	14q11.2	0.235416466	9.75E-08	4.91E-07
SPRTN	1q42.2	-0.235391655	9.78E-08	4.92E-07
ZNF577	19q13.41	0.235380967	9.80E-08	4.93E-07
TMEM240	1p36.33	0.235374114	9.81E-08	4.93E-07
ATP11B	3q26.33	-0.235305294	9.89E-08	4.98E-07
SNRPD2	19q13.32	-0.235262352	9.95E-08	5.00E-07
WDR75	2q32.2	-0.235244984	9.97E-08	5.01E-07
PCDHB15	5q31.3	0.235239073	9.98E-08	5.01E-07
GPT2	16q11.2	-0.235164158	1.01E-07	5.06E-07
PIN1	19p13.2	-0.235137915	1.01E-07	5.08E-07
ZFYVE26	14q24.1	0.235136961	1.01E-07	5.08E-07
STK26	Xq26.2	-0.235047546	1.02E-07	5.13E-07
SHOC1	9q31.3	-0.235023653	1.03E-07	5.15E-07
CDH13	16q23.3	0.234949072	1.04E-07	5.20E-07
LTC4S	5q35.3	0.234926467	1.04E-07	5.21E-07
SLC3A2	11q12.3	-0.234866904	1.05E-07	5.25E-07
SSBP3	1p32.3	0.234855071	1.05E-07	5.26E-07
MTMR6	13q12.13	0.234819763	1.05E-07	5.28E-07
FAM222A-AS1	12q24.11	-0.234761215	1.06E-07	5.32E-07
ALKBH6	19q13.12	-0.23472405	1.07E-07	5.34E-07
ASB1	2q37.3	0.234723668	1.07E-07	5.34E-07
TRMT9B	8p22	0.234659659	1.07E-07	5.38E-07
ST3GAL6	3q12.1	0.234643372	1.08E-07	5.39E-07
RGCC	13q14.11	0.234626619	1.08E-07	5.40E-07
MRPL40	22q11.21	-0.234583105	1.09E-07	5.43E-07
NMNAT3	3q23	-0.234555526	1.09E-07	5.45E-07
PLA2G4C	19q13.33	0.234548369	1.09E-07	5.45E-07
C1QC	1p36.12	0.234547892	1.09E-07	5.45E-07
MPP7	10p12.1	-0.234522413	1.09E-07	5.47E-07
SLC26A7	8q21.3	0.234456109	1.10E-07	5.51E-07
ERVFRD-1	6p24.2	0.234442697	1.10E-07	5.52E-07
NUP205	7q33	-0.234432617	1.11E-07	5.53E-07
CCDC88A	2p16.1	0.234379464	1.11E-07	5.56E-07
LINC00926	15q21.3	0.23436778	1.12E-07	5.57E-07
SNCG	10q23.2	0.234341389	1.12E-07	5.59E-07
MGAT4A	2q11.2	0.23432717	1.12E-07	5.60E-07
KRTAP2-1	17q21.2	0.234324488	1.12E-07	5.60E-07
GSDMA	17q21.1	0.234302543	1.12E-07	5.61E-07
OSM	22q12.2	0.23429692	1.13E-07	5.61E-07
CCT6B	17q12	-0.234291672	1.13E-07	5.62E-07
PDHX	11p13	-0.234290717	1.13E-07	5.62E-07
HMCES	3q21.3	-0.23427898	1.13E-07	5.62E-07
HABP2	10q25.3	0.234160779	1.15E-07	5.71E-07
CEACAM21	19q13.2	0.234148633	1.15E-07	5.71E-07
PPP4R1L	20q13.32	0.234147482	1.15E-07	5.71E-07
NOL9	1p36.31	0.234138989	1.15E-07	5.72E-07
FANCB	Xp22.2	-0.234048715	1.16E-07	5.78E-07
OXER1	2p21	0.234036119	1.16E-07	5.79E-07
SPEN	1p36.21-p36.13	0.234013885	1.17E-07	5.81E-07
ZNF841	19q13.41	0.234006155	1.17E-07	5.81E-07
FCMR	1q32.1	0.233967793	1.17E-07	5.84E-07

HERC4	10q21.3	0.233954529	1.18E-07	5.85E-07
TMED9	5q35.3	0.233935253	1.18E-07	5.86E-07
SLC39A8	4q24	0.233932295	1.18E-07	5.86E-07
POLR2G	11q12.3	-0.233898037	1.18E-07	5.88E-07
ZNF137P	19q13.41	0.233897231	1.18E-07	5.88E-07
UBR4	1p36.13	0.233845934	1.19E-07	5.92E-07
SNRPE	1q32.1	-0.23383954	1.19E-07	5.92E-07
SUMO4	6q25.1	0.233809371	1.20E-07	5.94E-07
CC2D1A	19p13.12	-0.233806141	1.20E-07	5.95E-07
ASXL1	20q11.21	0.233726459	1.21E-07	6.00E-07
ZBED6CL	7q36.1	0.23372207	1.21E-07	6.01E-07
HLA-DMA	6p21.32	0.233717298	1.21E-07	6.01E-07
ESRG	3p14.3 3p14.3	-0.23368367	1.22E-07	6.03E-07
LINC02800	1p36.11	-0.233665968	1.22E-07	6.04E-07
ARFGEF2	20q13.13	0.2336484	1.22E-07	6.06E-07
TRIM10	6p22.1	0.233642992	1.22E-07	6.06E-07
RIPK2	8q21.3	0.23361815	1.23E-07	6.08E-07
CREG1	1q24.2	-0.233615383	1.23E-07	6.08E-07
CCDC30	1p34.2	0.233589957	1.23E-07	6.10E-07
HSD11B1	1q32.2	0.233589427	1.23E-07	6.10E-07
VWF	12p13.31	0.233574826	1.23E-07	6.10E-07
SLC7A6	16q22.1	0.233573586	1.23E-07	6.10E-07
SEN3	17p13.1	-0.233542095	1.24E-07	6.13E-07
SASH3	Xq26.1	0.233536083	1.24E-07	6.13E-07
BLM	15q26.1	-0.233518143	1.24E-07	6.14E-07
NOL10	2p25.1	-0.233518143	1.24E-07	6.14E-07
CCL21	9p13.3	0.233466093	1.25E-07	6.18E-07
MRPS35	12p11.22	-0.233447241	1.25E-07	6.19E-07
PIAS2	18q21.1	-0.233383019	1.26E-07	6.24E-07
RPL41	12q13.2	-0.23337882	1.27E-07	6.24E-07
CARMIL2	16q22.1	0.233378725	1.27E-07	6.24E-07
IPPK	9q22.31	-0.233378438	1.27E-07	6.24E-07
PVT1	8q24.21	-0.2333396	1.27E-07	6.27E-07
ITSN2	2p23.3	0.233256006	1.29E-07	6.34E-07
CCDC113	16q21	0.233220316	1.29E-07	6.36E-07
ALKBH8	11q22.3	0.233184627	1.30E-07	6.39E-07
PAICS	4q12	-0.23313386	1.31E-07	6.43E-07
SUSD2	22q11.23	0.233119069	1.31E-07	6.44E-07
SAR1A	10q22.1	0.233090154	1.31E-07	6.46E-07
GAP43	3q13.31	0.233088245	1.31E-07	6.46E-07
BANF1	11q13.1	-0.233040723	1.32E-07	6.50E-07
LRRC2	3p21.31	0.233038778	1.32E-07	6.50E-07
KIAA1217	10p12.2-p12.1	0.233026218	1.32E-07	6.51E-07
9-Mar	12q14.1	-0.233015584	1.32E-07	6.52E-07
KLF2	19p13.11	0.233011046	1.33E-07	6.52E-07
ELOF1	19p13.2	-0.23300198	1.33E-07	6.53E-07
UBE2J1	6q15	0.232985185	1.33E-07	6.54E-07
FRZB	2q32.1	0.232978219	1.33E-07	6.54E-07
PRKAR1A	17q24.2	0.23297736	1.33E-07	6.54E-07
FAM89A	1q42.2	-0.23296944	1.33E-07	6.55E-07
MKNK2	19p13.3	-0.232956557	1.33E-07	6.56E-07
HIVEP2	6q24.2	0.232890999	1.35E-07	6.61E-07
PA2G4	12q13.2	-0.232821528	1.36E-07	6.67E-07
RPL26L1	5q35.1	-0.232811222	1.36E-07	6.67E-07
HMG20B	19p13.3	-0.232810172	1.36E-07	6.67E-07
ADAM6	14q32.33	0.232775533	1.37E-07	6.70E-07
NLN	5q12.3	-0.232774865	1.37E-07	6.70E-07
WDR78	1p31.3	0.232743278	1.37E-07	6.72E-07

BTK	Xq22.1	0.232728583	1.37E-07	6.74E-07
GPRASP1	Xq22.1	0.232725153	1.37E-07	6.74E-07
RPL23A	17q11.2	-0.232696996	1.38E-07	6.76E-07
MAOB	Xp11.3	0.232688122	1.38E-07	6.76E-07
ATXN10	22q13.31	-0.232666651	1.38E-07	6.78E-07
EXOSC4	8q24.3	-0.232665506	1.39E-07	6.78E-07
FNDC5	1p35.1	0.232660639	1.39E-07	6.78E-07
CPS1	2q34	0.232636305	1.39E-07	6.80E-07
TEDC2	16p13.3	-0.23260949	1.40E-07	6.82E-07
RPL31	2q11.2	-0.232598612	1.40E-07	6.83E-07
FGL2	7q11.23	0.232581912	1.40E-07	6.84E-07
FLRT3	20p12.1	0.232562159	1.40E-07	6.86E-07
FASTKD5	20p13	-0.232545077	1.41E-07	6.87E-07
AADACP1	3q25.1	-0.232476999	1.42E-07	6.93E-07
RGL3	19p13.2	0.23245967	1.42E-07	6.95E-07
BCL2L13	22q11.21	-0.232452418	1.42E-07	6.95E-07
RRBP1	20p12.1	0.232434669	1.43E-07	6.96E-07
GPBAR1	2q35	0.232412816	1.43E-07	6.98E-07
CTSL	9q21.33	0.2324048	1.43E-07	6.99E-07
TRIM15	6p22.1	0.232349619	1.44E-07	7.03E-07
CENPA	2p23.3	-0.232323019	1.45E-07	7.06E-07
SNF8	17q21.32	-0.232299735	1.45E-07	7.08E-07
HK3	5q35.2	0.23228523	1.45E-07	7.09E-07
CDK5RAP2	9q33.2	-0.232232555	1.46E-07	7.13E-07
MELK	9p13.2	-0.232190281	1.47E-07	7.17E-07
TMEM150B	19q13.42	0.232155267	1.48E-07	7.20E-07
DPEP2	16q22.1	0.232144498	1.48E-07	7.21E-07
METTL8	2q31.1	-0.232143045	1.48E-07	7.21E-07
SNRPA	19q13.2	-0.232111172	1.49E-07	7.23E-07
FAM122B	Xq26.3	-0.232086075	1.49E-07	7.25E-07
FAM210A	18p11.21	-0.232065272	1.49E-07	7.27E-07
NME8	7p14.1	0.232063293	1.49E-07	7.27E-07
LOC100132215	2p15	-0.23205134	1.50E-07	7.28E-07
SNX31	8q22.3	-0.232040722	1.50E-07	7.29E-07
POLRMT	19p13.3	-0.232027387	1.50E-07	7.30E-07
MSRA	8p23.1	0.232001431	1.51E-07	7.32E-07
CPSF3	2p25.1	-0.231987976	1.51E-07	7.33E-07
TESPA1	12q13.2	0.231969463	1.51E-07	7.35E-07
XPNPEP3	22q13.2	-0.231965456	1.51E-07	7.35E-07
SMIM26	20p11.23	-0.231957726	1.51E-07	7.36E-07
ANGPT4	20p13	0.231932053	1.52E-07	7.38E-07
DCUN1D1	3q26.33	-0.231915166	1.52E-07	7.39E-07
PER3	1p36.23	0.231908772	1.52E-07	7.40E-07
ZNF22	10q11.21	0.231868502	1.53E-07	7.43E-07
CCL22	16q21	0.231864839	1.53E-07	7.43E-07
ACAP1	17p13.1	0.231858387	1.53E-07	7.44E-07
MAFG	17q25.3	-0.231853425	1.54E-07	7.44E-07
PPBP	4q13.3	0.231826836	1.54E-07	7.46E-07
CYB5R1	1q32.1	0.231800654	1.55E-07	7.49E-07
PTGER1	19p13.12	0.231784098	1.55E-07	7.50E-07
ARHGAP25	2p13.3	0.231783859	1.55E-07	7.50E-07
JPX	Xq13.2	-0.231767541	1.55E-07	7.51E-07
C19ORF12	19q12	0.231725171	1.56E-07	7.55E-07
AOPEP	9q22.32	-0.231628981	1.58E-07	7.64E-07
PACC1	1q32.3	-0.231607701	1.58E-07	7.66E-07
NECAB2	16q23.3	-0.231560127	1.59E-07	7.70E-07
FDPS	1q22	-0.231549395	1.60E-07	7.71E-07
PCNX1	14q24.2	0.231547678	1.60E-07	7.71E-07

RGL1	1q25.3	0.23154367	1.60E-07	7.72E-07
TEK	9p21.2	0.231529642	1.60E-07	7.73E-07
ITGAL	16p11.2	0.231514374	1.60E-07	7.74E-07
ERN1	17q23.3	0.23149109	1.61E-07	7.76E-07
RPGRIP1L	16q12.2	0.231461126	1.61E-07	7.79E-07
PPP1R16B	20q11.23	0.231413126	1.62E-07	7.83E-07
ERH	14q24.1	-0.231389174	1.63E-07	7.86E-07
RIOK1	6p24.3	-0.231362168	1.63E-07	7.88E-07
MTCH2	11p11.2	-0.231343178	1.64E-07	7.90E-07
SOX15	17p13.1	-0.231329628	1.64E-07	7.91E-07
BHLHE40	3p26.1	0.231327433	1.64E-07	7.91E-07
CLEC4D	12p13.31	0.231316559	1.64E-07	7.92E-07
RECQL	12p12.1	0.231279242	1.65E-07	7.95E-07
SLC4A3	2q35	0.231229334	1.66E-07	8.00E-07
PWWP2A	5q33.3	0.231210535	1.66E-07	8.02E-07
KLF12	13q22.1	0.23116683	1.67E-07	8.06E-07
KCTD3	1q41	-0.231163299	1.67E-07	8.06E-07
PDS5B	13q13.1	0.2311299	1.68E-07	8.10E-07
NPR2	9p13.3	0.231062242	1.70E-07	8.16E-07
FNDC11	20q13.33	0.231060068	1.70E-07	8.16E-07
PHKA1	Xq13.1	-0.231056898	1.70E-07	8.16E-07
IDH3A	15q25.1	-0.231044016	1.70E-07	8.18E-07
ADCYAP1R1	7p14.3	0.231012496	1.71E-07	8.21E-07
DOCK9	13q32.3	0.231009567	1.71E-07	8.21E-07
IL2RG	Xq13.1	0.231006513	1.71E-07	8.21E-07
GNS	12q14.3	0.230998402	1.71E-07	8.21E-07
QRICH2	17q25.1	-0.230995921	1.71E-07	8.22E-07
ACTN4	19q13.2	0.230954601	1.72E-07	8.26E-07
PHACTR4	1p35.3	0.230929026	1.72E-07	8.28E-07
ADGRE1	19p13.3-p13.2	0.230912619	1.73E-07	8.30E-07
SGPL1	10q22.1	0.230902402	1.73E-07	8.30E-07
TMEM67	8q22.1	0.230865472	1.74E-07	8.34E-07
GDNF	5p13.2	0.230855462	1.74E-07	8.35E-07
CST4	20p11.21	0.230740473	1.77E-07	8.47E-07
FAM3D	3p14.2	-0.230734088	1.77E-07	8.47E-07
SNHG1	11q12.3	-0.230732447	1.77E-07	8.47E-07
VGLL4	3p25.3-p25.2	0.230679199	1.78E-07	8.53E-07
LAX1	1q32.1	0.230654579	1.79E-07	8.55E-07
TNFAIP8L2	1q21.3	0.230615741	1.79E-07	8.59E-07
KCNAB2	1p36.31	0.230603717	1.80E-07	8.60E-07
MTMR1	Xq28	-0.230601808	1.80E-07	8.60E-07
NABP2	12q13.3	-0.230596655	1.80E-07	8.61E-07
LINC00908	18q23	0.230562716	1.81E-07	8.64E-07
P4HA1	10q22.1	0.230461817	1.83E-07	8.75E-07
ASCC3	6q16.3	0.230405707	1.84E-07	8.81E-07
SURF6	9q34.2	-0.23039979	1.84E-07	8.81E-07
PPM1G	2p23.3	-0.230375838	1.85E-07	8.84E-07
SOD2	6q25.3	0.23029921	1.87E-07	8.92E-07
AADAC	3q25.1	-0.23026722	1.87E-07	8.96E-07
PRC1	15q26.1	-0.230222964	1.88E-07	9.00E-07
CFAP54	12q23.1	0.230217564	1.89E-07	9.01E-07
GALNT6	12q13.13	0.230205024	1.89E-07	9.02E-07
STUM	1q42.12	0.230198682	1.89E-07	9.02E-07
ESAM	11q24.2	0.230192523	1.89E-07	9.03E-07
SYNGAP1	6p21.32	0.23019176	1.89E-07	9.03E-07
RPS17	15q25.2	-0.230175442	1.90E-07	9.04E-07
ELAVL1	19p13.2	-0.230132023	1.91E-07	9.09E-07
C12ORF65	12q24.31	-0.230056636	1.92E-07	9.18E-07

ZP3	7q11.23	-0.229972088	1.94E-07	9.27E-07
FEZF1	7q31.32	-0.229944561	1.95E-07	9.30E-07
CORO1A	16p11.2	0.229923038	1.96E-07	9.32E-07
TULP4	6q25.3	0.229885059	1.97E-07	9.37E-07
ZBED1	Xp22.33 and Yp11	0.229879142	1.97E-07	9.37E-07
DAP	5p15.2	0.229864446	1.97E-07	9.39E-07
BEX2	Xq22.2	-0.229816447	1.98E-07	9.44E-07
CD1A	1q23.1	0.229814171	1.98E-07	9.44E-07
CDO1	5q22.3	0.229810541	1.98E-07	9.44E-07
CAVIN1	17q21.2	0.229809481	1.98E-07	9.44E-07
LIPK	10q23.31	0.229806232	1.99E-07	9.44E-07
UTP15	5q13.2	-0.229790872	1.99E-07	9.46E-07
RIPK3	14q12	0.22978696	1.99E-07	9.46E-07
INSIG2	2q14.1-q14.2	0.229745354	2.00E-07	9.51E-07
ALKBH2	12q24.11	-0.229724455	2.01E-07	9.53E-07
ZNF471	19q13.43	0.229708328	2.01E-07	9.55E-07
DMTN	8p21.3	-0.229705084	2.01E-07	9.55E-07
DCP1B	12p13.33	0.229684567	2.02E-07	9.57E-07
PTPMT1	11p11.2	-0.229679796	2.02E-07	9.58E-07
SLC25A23	19p13.3	-0.229635232	2.03E-07	9.63E-07
PVR	19q13.31	0.229598683	2.04E-07	9.67E-07
GRPEL1	4p16.1	-0.229564043	2.05E-07	9.71E-07
UBA2	19q13.11	-0.229517189	2.06E-07	9.76E-07
NDC80	18p11.32	-0.229470048	2.07E-07	9.82E-07
HCG18	6p22.1	0.229452585	2.08E-07	9.84E-07
C3ORF36	3q22.1	0.22942549	2.08E-07	9.87E-07
ANKRD42	11q14.1	0.22941117	2.09E-07	9.88E-07
WDR19	4p14	0.229403207	2.09E-07	9.89E-07
ARHGAP27	17q21.31	-0.22939676	2.09E-07	9.90E-07
TTC37	5q15	0.22938884	2.09E-07	9.90E-07
FAXC	6q16.2	-0.229388554	2.09E-07	9.90E-07
CD40	20q13.12	0.229350669	2.10E-07	9.95E-07
SLC2A12	6q23.2	-0.229328053	2.11E-07	9.97E-07
TIMM9	14q23.1	-0.229319756	2.11E-07	9.98E-07
SLC25A1	22q11.21	-0.229318988	2.11E-07	9.98E-07
CNST	1q44	-0.229299139	2.12E-07	1.00025E-06
ZNF439	19p13.2	0.229291224	2.12E-07	1.001E-06
NARS	18q21.31	-0.229272801	2.12E-07	1.00291E-06
FGD4	12p11.21	0.229272228	2.12E-07	1.00291E-06
PIGF	2p21	-0.229258773	2.13E-07	1.00436E-06
TPRKB	2p13.1	-0.229232531	2.13E-07	1.00742E-06
LYL1	19p13.13	0.229221467	2.14E-07	1.00858E-06
NDUFC2	11q14.1	-0.229217931	2.14E-07	1.00879E-06
NTF3	12p13.31	0.229190794	2.14E-07	1.01197E-06
LRRC27	10q26.3	0.22917747	2.15E-07	1.01342E-06
SP140	2q37.1	0.229169358	2.15E-07	1.01421E-06
NR4A3	9q31.1	0.22916306	2.15E-07	1.01477E-06
NLGN2	17p13.1	0.229113725	2.17E-07	1.02079E-06
BCL6	3q27.3	-0.22910027	2.17E-07	1.02227E-06
DNAJC7	17q21.2	-0.229051411	2.18E-07	1.02828E-06
KIT	4q12	0.229027841	2.19E-07	1.03102E-06
TENT5B	1p36.11	0.22902536	2.19E-07	1.03102E-06
HTR6	1p36.13	0.22902443	2.19E-07	1.03102E-06
ENPP4	6p21.1	0.229018107	2.19E-07	1.03159E-06
SIDT1	3q13.2	0.229011427	2.19E-07	1.03221E-06
VOPP1	7p11.2	0.228958996	2.21E-07	1.03874E-06
RGS11	16p13.3	0.228953413	2.21E-07	1.03922E-06
KCNJ1	11q24.3	0.228911443	2.22E-07	1.04443E-06

SPACA4	19q13.33	-0.22889993	2.22E-07	1.04568E-06
RANBP3	19p13.3	-0.228871436	2.23E-07	1.04916E-06
HSPA4	5q31.1	-0.228858655	2.24E-07	1.05058E-06
TRAF5	1q32.3	0.228852924	2.24E-07	1.05109E-06
MIER1	1p31.3	0.228847484	2.24E-07	1.05133E-06
SMAD6	15q22.31	0.228847389	2.24E-07	1.05133E-06
MED30	8q24.11	-0.228823532	2.24E-07	1.05421E-06
MEF2A	15q26.3	0.228771048	2.26E-07	1.06088E-06
MCL1	1q21.2	0.228720949	2.27E-07	1.0671E-06
BMP2K	4q21.21	0.228720376	2.27E-07	1.0671E-06
RNF13	3q25.1	-0.228631725	2.30E-07	1.07869E-06
MIF	22q11.23	-0.22862285	2.30E-07	1.07963E-06
GAB3	Xq28	0.228614452	2.30E-07	1.08051E-06
LRPAP1	4p16.3	0.228598421	2.31E-07	1.08241E-06
TTC3	21q22.13	0.228539065	2.33E-07	1.09018E-06
FGF12	3q28-q29	-0.228515787	2.33E-07	1.09309E-06
KCNK5	6p21.2	0.228513205	2.33E-07	1.09319E-06
TXLNA	1p35.2	0.228510724	2.33E-07	1.09327E-06
PTGES3	12q13.3 12	-0.228505666	2.34E-07	1.09371E-06
DHRS4L1	14q11.2	-0.228464601	2.35E-07	1.09905E-06
HIST2H2AC	1q21.2	-0.228461059	2.35E-07	1.09928E-06
DHRS13	17q11.2	-0.228415583	2.36E-07	1.10526E-06
ZMIZ1	10q22.3	0.228377603	2.37E-07	1.11015E-06
HSCB	22q12.1	-0.228376267	2.37E-07	1.11015E-06
SP4	7p15.3	0.228374454	2.37E-07	1.11015E-06
PSMB6	17p13.2	-0.228371591	2.37E-07	1.11029E-06
FAM83C	20q11.22	-0.228367348	2.38E-07	1.11062E-06
DCAF12	9p13.3	-0.228356037	2.38E-07	1.11193E-06
IRF8	16q24.1	0.228339915	2.38E-07	1.1139E-06
PARP8	5q11.1	0.228326741	2.39E-07	1.11547E-06
SYT3	19q13.33	0.228232975	2.42E-07	1.12828E-06
RDH8	19p13.2	0.228214167	2.42E-07	1.13066E-06
AKAP6	14q12	0.228210326	2.42E-07	1.13093E-06
STIMATE	3p21.1	0.228088323	2.46E-07	1.14793E-06
GPR82	Xp11.4	0.228045503	2.47E-07	1.15379E-06
LAP3	4p15.32	0.228030441	2.48E-07	1.15568E-06
CLDN7	17p13.1	-0.228022521	2.48E-07	1.15655E-06
YIPF3	6p21.1	0.228014314	2.48E-07	1.15746E-06
SNHG29	17p11.2	-0.228009734	2.48E-07	1.15785E-06
PLEKHH2	2p21	0.227969845	2.50E-07	1.16333E-06
CPSF4	7q22.1	-0.227890068	2.52E-07	1.17463E-06
FTO	16q12.2	0.227884629	2.52E-07	1.17515E-06
ANXA1	9q21.13	-0.227828805	2.54E-07	1.18304E-06
PSMG4	6p25.2	-0.227817735	2.54E-07	1.18439E-06
IQCK	16p12.3	0.227806856	2.55E-07	1.18572E-06
HPGDS	4q22.3	0.227760818	2.56E-07	1.19223E-06
ICMT	1p36.31	0.227740821	2.57E-07	1.19491E-06
KPNA6	1p35.2	0.227730229	2.57E-07	1.19621E-06
LILRA5	19q13.42	0.227717304	2.58E-07	1.19785E-06
SCN4B	11q23.3	0.227700265	2.58E-07	1.2001E-06
NUDT9	4q22.1	-0.227680612	2.59E-07	1.20275E-06
CC2D1B	1p32.3	0.227677458	2.59E-07	1.20295E-06
TBX3	12q24.21	0.227639287	2.60E-07	1.20837E-06
UBASH3A	21q22.3	0.227625069	2.61E-07	1.21022E-06
VASP	19q13.32	0.227622683	2.61E-07	1.2103E-06
SYNDIG1L	14q24.3	0.227582952	2.62E-07	1.21599E-06
MFNG	22q13.1	0.227469714	2.66E-07	1.23288E-06
GEMIN4	17p13.3	-0.227458931	2.66E-07	1.23425E-06

POLR3A	10q22.3	0.227443853	2.66E-07	1.23627E-06
HLA-DRB6	6p21.32	0.227441617	2.67E-07	1.23633E-06
DTX2P1-UPK3BF	7q11.23	-0.227410549	2.68E-07	1.2408E-06
MTNR1A	4q35.2	0.227306563	2.71E-07	1.25659E-06
ADGRD1	12q24.33	0.227276952	2.72E-07	1.26091E-06
ZP4	1q43	0.227272805	2.72E-07	1.26126E-06
GRM3	7q21.11-q21.12	0.227264683	2.72E-07	1.26216E-06
SDR39U1	14q12	-0.227263359	2.72E-07	1.26216E-06
ZNF702P	19q13.41	0.227179808	2.75E-07	1.27497E-06
POLD2	7p13	-0.227145168	2.76E-07	1.28015E-06
KIF18B	17q21.31	-0.227096691	2.78E-07	1.28755E-06
CZIB	1p32.3	0.22705499	2.80E-07	1.29373E-06
HNRNPK	9q21.32	-0.227054226	2.80E-07	1.29373E-06
LPCAT4	15q14	-0.227003078	2.81E-07	1.30164E-06
DIAPH2	Xq21.33	-0.226996493	2.82E-07	1.3024E-06
TREM2	6p21.1	0.226964239	2.83E-07	1.3073E-06
PGGT1B	5q22.3	-0.226867476	2.86E-07	1.32271E-06
EFTUD2	17q21.31	-0.22684381	2.87E-07	1.32628E-06
PHB2	12p13.31	-0.226771859	2.90E-07	1.3378E-06
IFI30	19p13.11	0.22673636	2.91E-07	1.34337E-06
MRPL15	8q11.23	-0.22672529	2.91E-07	1.34489E-06
APBB1	11p15.4	0.226717465	2.91E-07	1.34589E-06
GPR34	Xp11.4	0.226708305	2.92E-07	1.3471E-06
NUDT16L1	16p13.3	-0.226696472	2.92E-07	1.34876E-06
GDF6	8q22.1	0.22667879	2.93E-07	1.35139E-06
RGS1	1q31.2	0.226647041	2.94E-07	1.35639E-06
RD3	1q32.3	0.226617148	2.95E-07	1.36109E-06
TSACC	1q22	-0.226593105	2.96E-07	1.36482E-06
AIMP2	7p22.1	-0.226575566	2.97E-07	1.36746E-06
P2RY6	11q13.4	0.226518501	2.99E-07	1.3768E-06
STYK1	12p13.2	-0.22649598	3.00E-07	1.38031E-06
ANKS1A	6p21.31	0.22640208	3.03E-07	1.39605E-06
KLHL23	2q31.1	-0.226373929	3.04E-07	1.40059E-06
PSG9	19q13.31	0.226310448	3.06E-07	1.41123E-06
TOMM40	19q13.32	-0.226308753	3.07E-07	1.41123E-06
CLEC4E	12p13.31	0.226284324	3.07E-07	1.41516E-06
IARS2	1q41	-0.226268006	3.08E-07	1.41768E-06
GCM1	6p12.1	0.226250553	3.09E-07	1.42041E-06
UBE2S	19q13.42	-0.226248539	3.09E-07	1.42044E-06
NTMT1	9q34.11	-0.226181836	3.11E-07	1.43182E-06
LACTB	15q22.2	0.226136699	3.13E-07	1.43947E-06
PLOD2	3q24	0.226130782	3.13E-07	1.44019E-06
NCKAP5L	12q13.12	0.226125534	3.14E-07	1.44079E-06
BTD	3p25.1	0.226099101	3.15E-07	1.44515E-06
IKZF3	17q12-q21.1	0.226062033	3.16E-07	1.45143E-06
ALDH1L2	12q23.3	0.226031634	3.17E-07	1.45653E-06
SWSAP1	19p13.2	-0.226005779	3.18E-07	1.46084E-06
JMJD1C-AS1	10q21.3	0.225926996	3.21E-07	1.47472E-06
KRT20	17q21.2	-0.225904241	3.22E-07	1.47852E-06
BTBD9	6p21.2	0.2258508	3.24E-07	1.48778E-06
RAB11A	15q22.31	-0.225849751	3.24E-07	1.48778E-06
CACNG7	19q13.42	0.225804614	3.26E-07	1.49571E-06
SLIT2	4p15.31	0.22578467	3.27E-07	1.49904E-06
TMED7-TICAM2	5q22.3	0.2257779	3.27E-07	1.49995E-06
TMSB4XP8	4q22.1	0.225754419	3.28E-07	1.50394E-06
SERPINA1	14q32.13	0.225734094	3.29E-07	1.50736E-06
TOX2	20q13.12	0.225729609	3.29E-07	1.50784E-06
HSD17B2	16q23.3	0.225715795	3.30E-07	1.5099E-06

TICRR	15q26.1	-0.225714817	3.30E-07	1.5099E-06
ZNF250	8q24.3	0.225688289	3.31E-07	1.51448E-06
TGFA	2p13.3	0.225672353	3.31E-07	1.51711E-06
IGFL3	19q13.32	0.225657951	3.32E-07	1.51945E-06
PFDN2	1q23.3	-0.225558986	3.36E-07	1.53767E-06
DRD1	5q35.2	0.225537062	3.37E-07	1.54146E-06
METTL11B	1q24.2	0.225463393	3.40E-07	1.5551E-06
CACNA2D4	12p13.33	0.225447771	3.41E-07	1.55773E-06
EBP	Xp11.23	-0.225408498	3.42E-07	1.5649E-06
NUDT19	19q13.11	-0.225406303	3.42E-07	1.56497E-06
CCT6P1	7q11.21	-0.225385595	3.43E-07	1.56859E-06
PAXX	9q34.3	-0.225373572	3.44E-07	1.57055E-06
PCDHB19P	5q31.3	0.225341615	3.45E-07	1.57636E-06
OR2A7	7q35	-0.225290031	3.47E-07	1.58569E-06
RERG	12p12.3	0.225289787	3.47E-07	1.58569E-06
F11R	1q23.3	-0.225279576	3.48E-07	1.58732E-06
CADPS2	7q31.32	0.225275759	3.48E-07	1.5877E-06
ANGPT2	8p23.1	0.225214782	3.51E-07	1.59925E-06
CTAGE9	6q23.2	-0.225160675	3.53E-07	1.60952E-06
NUSAP1	15q15.1	-0.225152659	3.53E-07	1.61074E-06
ELP5	17p13.1	-0.225145597	3.54E-07	1.61177E-06
GSTM2P1	6q21	-0.225143495	3.54E-07	1.61182E-06
KCNMB2	3q26.32	-0.22512524	3.54E-07	1.61506E-06
QSOX1	1q25.2	0.225085574	3.56E-07	1.62256E-06
LOC143666	11p15.5	-0.225044063	3.58E-07	1.63046E-06
TMEM50A	1p36.11	0.22502889	3.59E-07	1.63312E-06
NTHL1	16p13.3	-0.224944438	3.62E-07	1.64972E-06
MS4A4A	11q12.2	0.224932509	3.63E-07	1.65176E-06
RHOT1	17q11.2	-0.224928788	3.63E-07	1.65214E-06
MAPK4	18q21.1-q21.2	0.22491506	3.64E-07	1.65454E-06
CXCL3	4q13.3	0.224898654	3.64E-07	1.65749E-06
UBXN8	8p12	-0.224894816	3.65E-07	1.6579E-06
RPL7A	9q34.2	-0.224870578	3.66E-07	1.66244E-06
SPATA12	3p14.3	-0.224824142	3.68E-07	1.67154E-06
DHX9	1q25.3	-0.224821815	3.68E-07	1.67164E-06
SHB	9p13.1	0.224817139	3.68E-07	1.67222E-06
LRRC66	4q12	0.22480978	3.68E-07	1.67335E-06
ADGRG5	16q21	0.224800821	3.69E-07	1.6748E-06
LCNL1	9q34.3	0.224788437	3.69E-07	1.67696E-06
ARHGAP27P1	17q24.1	-0.224770475	3.70E-07	1.68027E-06
EPAS1	2p21	0.224765322	3.70E-07	1.68096E-06
SFRP5	10q24.2	0.224759323	3.71E-07	1.68147E-06
SUSD3	9q22.31	0.224759119	3.71E-07	1.68147E-06
TMPRSS6	22q12.3	0.224752461	3.71E-07	1.68247E-06
ZNF704	8q21.13	0.224724098	3.72E-07	1.68793E-06
ICE1	5p15.32	0.224715223	3.73E-07	1.68913E-06
CYP17A1	10q24.32	0.224714622	3.73E-07	1.68913E-06
CCDC74A	2q21.1	0.224711215	3.73E-07	1.68945E-06
TROAP	12q13.12	-0.224701248	3.73E-07	1.69113E-06
TCTN2	12q24.31	0.224680297	3.74E-07	1.69509E-06
TERF1	8q21.11	-0.224662452	3.75E-07	1.69841E-06
MRPS28	8q21.13	-0.224638882	3.76E-07	1.70282E-06
MDFIC	7q31.1-q31.2	0.224637546	3.76E-07	1.70282E-06
RUNX3	1p36.11	0.22460825	3.78E-07	1.70854E-06
TYRO3	15q15.1	-0.224597562	3.78E-07	1.71039E-06
RASL11B	4q12	0.224541027	3.81E-07	1.72186E-06
LDAH	2p24.1	-0.224517785	3.82E-07	1.72637E-06
LAMTOR2	1q22	-0.224488107	3.83E-07	1.73225E-06

SOX8	16p13.3	0.224479468	3.84E-07	1.73369E-06
ZNF750	17q25.3	-0.224395734	3.88E-07	1.75111E-06
THPO	3q27.1	0.224368477	3.89E-07	1.75655E-06
CTAGE1	18q11.2	-0.22435688	3.89E-07	1.75865E-06
ANKRD1	10q23.31	0.224352209	3.90E-07	1.75926E-06
ADRB3	8p11.23	0.224350057	3.90E-07	1.75933E-06
CPT1C	19q13.33	0.224320973	3.91E-07	1.76519E-06
GRPEL2	5q32	-0.224319064	3.91E-07	1.7652E-06
GLRB	4q32.1	0.224291126	3.93E-07	1.77084E-06
AIMP1	4q24	-0.224259274	3.94E-07	1.77733E-06
CERS6	2q24.3	-0.224189995	3.97E-07	1.79201E-06
IGF2BP3	7p15.3	-0.22417215	3.98E-07	1.79552E-06
AXDND1	1q25.2	-0.224114943	4.01E-07	1.80768E-06
SLAMF6	1q23.2-q23.3	0.224112508	4.01E-07	1.80781E-06
KDM8	16p12.1	0.224081781	4.03E-07	1.8141E-06
MED27	9q34.13	-0.224080349	4.03E-07	1.8141E-06
FBXL2	3p22.3	0.224072333	4.03E-07	1.81547E-06
NCAPH	2q11.2	-0.224015942	4.06E-07	1.82726E-06
C10ORF99	10q23.1	-0.224013778	4.06E-07	1.82726E-06
METTL2B	7q32.1	-0.224013741	4.06E-07	1.82726E-06
SLC4A4	4q13.3	0.223998781	4.07E-07	1.83018E-06
RTL5	Xq13.1	0.223970614	4.08E-07	1.83607E-06
CEP126	11q22.1	0.223927571	4.10E-07	1.84531E-06
TMEM215	9p21.1	0.223905435	4.11E-07	1.84988E-06
CYB5R2	11p15.4	-0.22389818	4.12E-07	1.8511E-06
COL25A1	4q25	0.223876018	4.13E-07	1.85569E-06
RSL24D1	15q21.3	-0.223832431	4.15E-07	1.86515E-06
HCG4	6p22.1	0.223817067	4.16E-07	1.86822E-06
NUP85	17q25.1	-0.223758857	4.19E-07	1.88095E-06
DYNLL2	17q22	-0.223756185	4.19E-07	1.88095E-06
CLTA	9p13.3	-0.223755803	4.19E-07	1.88095E-06
ICAM4	19p13.2	0.223750459	4.19E-07	1.88176E-06
CD6	11q12.2	0.223748127	4.19E-07	1.88187E-06
ACSS2	20q11.22	-0.223643772	4.25E-07	1.90549E-06
NRL	14q11.2-q12	-0.223638905	4.25E-07	1.9062E-06
EIF5AL1	10q22.3	-0.223593005	4.27E-07	1.91644E-06
KCNA6	12p13.32	0.223579795	4.28E-07	1.9191E-06
YAE1	7p14.1	-0.223556033	4.29E-07	1.92422E-06
RFT1	3p21.1	-0.223538331	4.30E-07	1.92794E-06
C21ORF91	21q21.1	-0.22351361	4.32E-07	1.93332E-06
POLQ	3q13.33	-0.223457404	4.34E-07	1.9457E-06
LIN9	1q42.12	-0.223455591	4.35E-07	1.9457E-06
SSB	2q31.1	-0.223455591	4.35E-07	1.9457E-06
KRT75	12q13.13	0.223422827	4.36E-07	1.95303E-06
MLKL	16q23.1	0.22340845	4.37E-07	1.95601E-06
SPATA9	5q15	0.223405375	4.37E-07	1.95605E-06
SLC6A4	17q11.2	-0.223404653	4.37E-07	1.95605E-06
HVCN1	12q24.11	0.223400816	4.37E-07	1.95653E-06
TMEM200C	18p11.31	0.223372009	4.39E-07	1.96295E-06
HOMEZ	14q11.2	-0.223364077	4.39E-07	1.96441E-06
VPS11	11q23.3	0.22330997	4.42E-07	1.97692E-06
SYVN1	11q13.1	0.223294797	4.43E-07	1.98013E-06
GBP3	1p22.2	0.223275139	4.44E-07	1.98442E-06
LDLRAP1	1p36.11	0.223234773	4.46E-07	1.99373E-06
LRRN2	1q32.1	0.223217215	4.47E-07	1.99755E-06
KLHL4	Xq21.31	0.223213489	4.48E-07	1.99801E-06
FOXO1	13q14.11	0.223190686	4.49E-07	2.0031E-06
VSTM1	19q13.42	0.223182903	4.49E-07	2.00455E-06

GCAT	22q13.1	-0.223152516	4.51E-07	2.01151E-06
RAP2A	13q32.1	0.223123792	4.52E-07	2.01809E-06
COPS5	8q13.1	-0.223082663	4.55E-07	2.02774E-06
FN3KRP	17q25.3	-0.223078083	4.55E-07	2.02842E-06
PALM	19p13.3	0.223072071	4.55E-07	2.02945E-06
THUMPD3	3p25.3	-0.223055944	4.56E-07	2.03298E-06
GIMAP4	7q36.1	0.223010235	4.59E-07	2.04383E-06
FNIP2	4q32.1	0.22299029	4.60E-07	2.04833E-06
SIGLEC6	19q13.41	0.222971218	4.61E-07	2.05261E-06
ITK	5q33.3	0.222869289	4.67E-07	2.07768E-06
BEST1	11q12.3	0.22286614	4.67E-07	2.07801E-06
ARAP1	11q13.4	0.222816041	4.70E-07	2.09021E-06
TNFSF12-TNFSF	17p13.1	0.222811216	4.70E-07	2.09097E-06
PACSN1	6p21.31	0.22277654	4.72E-07	2.09931E-06
ST8SIA2	15q26.1	0.222772213	4.72E-07	2.09995E-06
RPP38	10p13	-0.222767374	4.72E-07	2.10072E-06
GLI4	8q24.3	-0.222746666	4.74E-07	2.10553E-06
LAPTM4A	2p24.1	0.222741799	4.74E-07	2.10631E-06
GPR1	2q33.3	0.222710839	4.76E-07	2.11375E-06
PFKFB3	10p15.1	0.22270506	4.76E-07	2.11477E-06
ARF4	3p14.3	0.222687406	4.77E-07	2.11883E-06
MPND	19p13.3	-0.222611213	4.81E-07	2.13799E-06
EVPL	17q25.1	-0.222588353	4.83E-07	2.14345E-06
SATB1	3p24.3	0.222567168	4.84E-07	2.14848E-06
ZSCAN9	6p22.1	0.222558103	4.85E-07	2.15036E-06
NADSYN1	11q13.4	-0.22253854	4.86E-07	2.15499E-06
DOK6	18q22.2	0.222470788	4.90E-07	2.17225E-06
TOX	8q12.1	0.222453706	4.91E-07	2.17626E-06
ZNF827	4q31.21-q31.22	0.222443305	4.91E-07	2.17852E-06
PNRC1	6q15	0.222406661	4.94E-07	2.18772E-06
FAM205A	9p13.3	0.222320198	4.99E-07	2.20974E-06
TMEM134	11q13.2	-0.222318773	4.99E-07	2.20974E-06
ACOT11	1p32.3	0.222318391	4.99E-07	2.20974E-06
PSMC3IP	17q21.2	-0.222289954	5.01E-07	2.21686E-06
RNF144A	2p25.1	0.222242813	5.03E-07	2.22904E-06
FOLR2	11q13.4	0.222219338	5.05E-07	2.23488E-06
CDK5	7q36.1	-0.222209032	5.05E-07	2.23718E-06
CTAGE15	7q35	-0.222198058	5.06E-07	2.23965E-06
TRAF4	17q11.2	-0.222193	5.06E-07	2.24053E-06
ZADH2	18q22.3	-0.222180595	5.07E-07	2.2434E-06
FCGR1A	1q21.2	0.222155879	5.09E-07	2.24962E-06
PSMB7	9q33.3	-0.222047761	5.15E-07	2.27868E-06
JUN	1p32.1	0.222023332	5.17E-07	2.28491E-06
CADM1	11q23.3	0.221984493	5.19E-07	2.29515E-06
TEAD1	11p15.3	0.221974378	5.20E-07	2.29745E-06
CCND3	6p21.1	0.221970847	5.20E-07	2.29793E-06
LEAP2	5q31.1	-0.221921118	5.23E-07	2.31125E-06
COX20	1q44	-0.221907866	5.24E-07	2.31445E-06
CDCA3	12p13.31	-0.221900804	5.25E-07	2.31581E-06
HLA-DQB1	6p21.32	0.221898514	5.25E-07	2.31581E-06
FLNB	3p14.3	0.221897559	5.25E-07	2.31581E-06
CALM3	19q13.32	0.221893742	5.25E-07	2.31623E-06
NME7	1q24.2	0.221892406	5.25E-07	2.31623E-06
IQCE	7p22.3	0.221824367	5.29E-07	2.33481E-06
MAP3K7CL	21q21.3	0.221811103	5.30E-07	2.33804E-06
PQBP1	Xp11.23	-0.221765298	5.33E-07	2.35048E-06
PCDHB12	5q31.3	0.221724074	5.36E-07	2.36167E-06
SORT1	1p13.3 1p21.3-p13	0.221683899	5.39E-07	2.37262E-06

TMEM263	12q23.3	0.221670921	5.39E-07	2.37582E-06
DNAJC2	7q22.1	-0.221655367	5.40E-07	2.37975E-06
SCML1	Xp22.13	-0.221645633	5.41E-07	2.38203E-06
GMPS	3q25.31	-0.221604695	5.44E-07	2.39329E-06
RPL6	12q24.13	-0.221579407	5.45E-07	2.40007E-06
RDH10	8q21.11	-0.221473865	5.52E-07	2.43024E-06
PTPRK	6q22.33	0.221469953	5.53E-07	2.43086E-06
LMBR1L	12q13.12	0.221457452	5.53E-07	2.43399E-06
LARP1B	4q28.2	-0.22145039	5.54E-07	2.43553E-06
STK11IP	2q35	0.221441611	5.54E-07	2.43757E-06
CSF3R	1p34.3	0.221367083	5.59E-07	2.459E-06
PTGFRN	1p13.1	0.221314312	5.63E-07	2.47413E-06
CD1D	1q23.1	0.221308491	5.63E-07	2.47533E-06
GOLGA3	12q24.33	0.221305151	5.64E-07	2.47578E-06
CLCN2	3q27.1	-0.221272706	5.66E-07	2.48492E-06
P2RY13	3q25.1	0.221247227	5.68E-07	2.49201E-06
RBP1	3q23	0.221192929	5.71E-07	2.50774E-06
HOXB7	17q21.32	-0.221191307	5.71E-07	2.50774E-06
TYROBP	19q13.12	0.221166782	5.73E-07	2.5146E-06
BAG1	9p13.3	-0.221164873	5.73E-07	2.51463E-06
JAKMIP3	10q26.3	-0.221161968	5.73E-07	2.51496E-06
MT1A	16q13	0.22112684	5.76E-07	2.52505E-06
IL13RA1	Xq24	0.22111153	5.77E-07	2.52916E-06
GYPE	4q31.21	0.221067167	5.80E-07	2.54213E-06
LINC00636	3q13.12	0.221038887	5.82E-07	2.55023E-06
CIAO1	2q11.2	-0.220994346	5.85E-07	2.56336E-06
FAM83E	19q13.33	-0.220974116	5.87E-07	2.56904E-06
ADAMTSL3	15q25.2	0.220903881	5.91E-07	2.59024E-06
PDK4	7q21.3	0.220840523	5.96E-07	2.60946E-06
BZW2	7p21.1	-0.220806355	5.98E-07	2.61961E-06
ACE	17q23.3	0.220775819	6.01E-07	2.62866E-06
COPS4	4q21.22	-0.220766849	6.01E-07	2.63092E-06
PKIB	6q22.31	0.220722666	6.05E-07	2.64434E-06
DIS3L	15q22.31	-0.2207157	6.05E-07	2.64598E-06
PUM1	1p35.2	0.220708161	6.06E-07	2.6478E-06
GTPBP8	3q13.2	-0.220675239	6.08E-07	2.6577E-06
GCSH	16q23.2	-0.220617792	6.12E-07	2.6755E-06
NACC1	19p13.13	-0.220600902	6.13E-07	2.68034E-06
PRG2	11q12.1	0.220580123	6.15E-07	2.68645E-06
ANKRD34B	5q14.1	0.220575134	6.15E-07	2.68747E-06
LCMT2	15q15.3	-0.220532195	6.18E-07	2.70076E-06
FXD3	19q13.12	-0.220526087	6.19E-07	2.70215E-06
ULK4P2	15q13.2	0.220460424	6.24E-07	2.72292E-06
DDX56	7p13	-0.220418446	6.27E-07	2.73606E-06
SAAL1	11p15.1	-0.220398311	6.28E-07	2.74207E-06
SYNJ1	21q22.11	0.22039144	6.29E-07	2.74374E-06
ASPA	17p13.2	0.220385387	6.29E-07	2.74514E-06
SYTL5	Xp11.4	-0.220296117	6.36E-07	2.77405E-06
ZNF221	19q13.31	0.220253416	6.39E-07	2.78767E-06
GPBP1L1	1p34.1	0.22024935	6.40E-07	2.78842E-06
SGPP2	2q36.1	-0.220229602	6.41E-07	2.79442E-06
VNN1	6q23.2	0.220225403	6.42E-07	2.79522E-06
ZNF542P	19q13.43	0.220192285	6.44E-07	2.80572E-06
INTS1	7p22.3	0.220181215	6.45E-07	2.80883E-06
ZNF813	19q13.42	0.220153542	6.47E-07	2.81754E-06
LST1	6p21.33	0.220104301	6.51E-07	2.83358E-06
SPC24	19p13.2	-0.220083021	6.53E-07	2.84019E-06
ARSA	22q13.33	0.220075387	6.53E-07	2.84218E-06

PTPN7	1q32.1	0.220063554	6.54E-07	2.84559E-06
PRKACB	1p31.1	0.220038934	6.56E-07	2.85337E-06
NUDT14	14q32.33	-0.220032445	6.57E-07	2.85497E-06
ATP5PO	21q22.11	-0.220012978	6.58E-07	2.86101E-06
HTT	4p16.3	0.219890641	6.68E-07	2.90254E-06
ACP2	11p11.2 11p12-p1	0.219875277	6.69E-07	2.90724E-06
EPS8	12p12.3	-0.219845218	6.71E-07	2.91708E-06
RAB3B	1p32.3	-0.21972409	6.81E-07	2.95896E-06
N4BP2L1	13q13.1	0.219694348	6.84E-07	2.96882E-06
GPD1L	3p22.3	-0.219692631	6.84E-07	2.96882E-06
PTPN12	7q11.23	0.219689291	6.84E-07	2.96937E-06
NCK2	2q12.2	0.219670301	6.86E-07	2.97547E-06
HEXB	5q13.3	0.219663526	6.86E-07	2.97724E-06
LINC01366	5q35.1	0.219659786	6.87E-07	2.97793E-06
LAS1L	Xq12	-0.219650738	6.87E-07	2.98051E-06
GPR65	14q31.3	0.21962879	6.89E-07	2.98768E-06
S100B	21q22.3	0.219626214	6.89E-07	2.98796E-06
ICE2	15q22.2	-0.219619916	6.90E-07	2.98957E-06
MYLIP	6p22.3	-0.219611613	6.90E-07	2.99189E-06
CD68	17p13.1	0.219574397	6.94E-07	3.00456E-06
CLEC4G	19p13.2	0.21953629	6.97E-07	3.01761E-06
C18ORF21	18q12.2	-0.21951361	6.99E-07	3.02514E-06
CDK1	10q21.2	-0.219509984	6.99E-07	3.02573E-06
HLA-DQA1	6p21.32	0.219508171	6.99E-07	3.02573E-06
ADCK2	7q34	-0.219506262	6.99E-07	3.02573E-06
TRPC1	3q23	0.219504788	6.99E-07	3.02573E-06
GMCL1	2p13.3	-0.219480306	7.01E-07	3.03393E-06
ZNF33A	10p11.1	0.219467042	7.02E-07	3.03808E-06
HTR1F	3p11.2-p11.1	0.219464571	7.03E-07	3.03833E-06
DDIT4	10q22.1	0.219459122	7.03E-07	3.03965E-06
DDO	6q21	0.219428967	7.06E-07	3.04995E-06
SMIM8	6q15	-0.219426104	7.06E-07	3.05034E-06
ALDH1A2	15q21.3	0.219373524	7.10E-07	3.06887E-06
HLA-DRB5	6p21.32	0.219367321	7.11E-07	3.07048E-06
ADCY10	1q24.2	-0.219362907	7.11E-07	3.07144E-06
VWA1	1p36.33	0.219322471	7.15E-07	3.08562E-06
LINC00313	21q22.3	0.219292129	7.17E-07	3.09614E-06
NDUFA5	7q31.32	-0.219249565	7.21E-07	3.11122E-06
C12ORF77	12p12.1	0.219233087	7.22E-07	3.11667E-06
RRN3P2	16p11.2	0.219151758	7.29E-07	3.14634E-06
VAMP2	17p13.1	0.219130663	7.31E-07	3.15358E-06
LY6E	8q24.3	0.219124174	7.32E-07	3.15535E-06
MTHFS	15q25.1	-0.218996588	7.43E-07	3.20296E-06
GIMAP2	7q36.1	0.218976931	7.45E-07	3.20978E-06
RAB20	13q34	0.218972446	7.45E-07	3.21081E-06
HNRNPA3	2q31.2	-0.218841138	7.57E-07	3.26067E-06
C8ORF82	8q24.3	-0.218806308	7.60E-07	3.2735E-06
VKORC1	16p11.2	0.218783787	7.62E-07	3.28158E-06
SUCO	1q24.3	0.218747811	7.65E-07	3.29495E-06
ALDOC	17q11.2	-0.218619749	7.77E-07	3.34477E-06
SUZ12	17q11.2	-0.218610683	7.78E-07	3.34766E-06
PIPSL	10q23.33	-0.218586731	7.80E-07	3.35648E-06
CD300LB	17q25.1	0.21857906	7.81E-07	3.35883E-06
IL5RA	3p26.2	0.218572836	7.81E-07	3.36059E-06
RRNAD1	1q23.1	-0.218566697	7.82E-07	3.36233E-06
TLR8	Xp22.2	0.21847795	7.90E-07	3.39723E-06
ZNF273	7q11.21	-0.21845342	7.93E-07	3.40641E-06
PPP1R2B	5q33.3	-0.218444312	7.93E-07	3.40937E-06

ZC3H12A	1p34.3	0.218419353	7.96E-07	3.41876E-06
GRHPR	9p13.2	-0.218360098	8.01E-07	3.44216E-06
NMT2	10p13	0.218353508	8.02E-07	3.44412E-06
SIGLEC14	19q13.41	0.21832789	8.04E-07	3.45387E-06
ABCA13	7p12.3	-0.218293294	8.08E-07	3.46734E-06
MRPL3	3q22.1	-0.218286423	8.08E-07	3.46943E-06
ETV1	7p21.2	0.218267147	8.10E-07	3.47663E-06
PTGDS	9q34.3	0.218226877	8.14E-07	3.49253E-06
HSD17B7	1q23.3	-0.218219624	8.15E-07	3.4948E-06
DPP6	7q36.2	0.218198851	8.17E-07	3.50226E-06
PDCL	9q33.2	-0.218198058	8.17E-07	3.50226E-06
SPIN4	Xq11.1	0.218187275	8.18E-07	3.50599E-06
TPD52	8q21.13	-0.218184126	8.18E-07	3.50656E-06
ATF7IP2	16p13.2-p13.13	0.21817611	8.19E-07	3.50915E-06
FANCD2	3p25.3	-0.218166472	8.20E-07	3.51241E-06
MTF1	1p34.3	0.218133263	8.23E-07	3.52509E-06
BACH2	6q15	0.2181325	8.23E-07	3.52509E-06
SAA2	11p15.1	0.218110174	8.26E-07	3.53368E-06
PNMA1	14q24.3	0.21802171	8.34E-07	3.57017E-06
CBWD6	9p11.2	-0.217970847	8.39E-07	3.59098E-06
ARHGEF39	9p13.3	-0.217947563	8.42E-07	3.60014E-06
NGRN	15q26.1	-0.217931341	8.43E-07	3.6063E-06
KL	13q13.1	0.21792342	8.44E-07	3.60892E-06
MXD4	4p16.3	0.2179134	8.45E-07	3.61243E-06
BST1	4p15.32	0.217901663	8.46E-07	3.61669E-06
C9ORF16	9q34.11	-0.217857767	8.51E-07	3.63477E-06
PERP	6q23.3	-0.217754897	8.61E-07	3.67852E-06
KDM7A-DT	7q34	-0.217716917	8.65E-07	3.6943E-06
IFIT2	10q23.31	0.217698786	8.67E-07	3.70145E-06
PAMR1	11p13	0.217671398	8.70E-07	3.71268E-06
PRICKLE3	Xp11.23	-0.21765174	8.72E-07	3.72054E-06
PPEF1	Xp22.13	0.217618632	8.75E-07	3.73355E-06
PER1	17p13.1	0.217618627	8.75E-07	3.73355E-06
NAA10	Xq28	-0.217604313	8.76E-07	3.73909E-06
RRM1	11p15.4	-0.217597252	8.77E-07	3.74142E-06
GLRX2	1q31.2	-0.217587804	8.78E-07	3.74481E-06
FRMD3	9q21.32	0.217576492	8.79E-07	3.74903E-06
GPR173	Xp11.22	0.217513944	8.86E-07	3.77606E-06
ADCY3	2p23.3	-0.21749276	8.88E-07	3.78473E-06
IL25	14q11.2	-0.217466641	8.91E-07	3.79562E-06
NPF1	10q22.1	0.217460508	8.91E-07	3.79757E-06
DNAJC18	5q31.2	0.217451249	8.92E-07	3.80093E-06
BIRC2	11q22.2	0.217421094	8.96E-07	3.81369E-06
GADD45A	1p31.3	0.217414414	8.96E-07	3.8159E-06
RPLP2	11p15.5	-0.217409261	8.97E-07	3.81741E-06
LOXL4	10q24.2	0.217403345	8.98E-07	3.81917E-06
HADH	4q25	-0.217400005	8.98E-07	3.81917E-06
HNRNPL	19q13.2	-0.217400005	8.98E-07	3.81917E-06
MRPL53	2p13.1	-0.217390653	8.99E-07	3.82259E-06
ST6GALNAC6	9q34.11	0.217364792	9.02E-07	3.83348E-06
UGT8	4q26	-0.217350097	9.03E-07	3.83933E-06
FGD2	6p21.2	0.21731622	9.07E-07	3.85391E-06
PROK2	3p13	0.217286795	9.10E-07	3.86616E-06
ASNA1	19p13.13	-0.217285779	9.10E-07	3.86616E-06
LMAN1	18q21.32	0.217278527	9.11E-07	3.86865E-06
PRNP	20p13	0.217275664	9.11E-07	3.86915E-06
MCM10	10p13	-0.217251235	9.14E-07	3.87951E-06
TPK1	7q35	0.217224611	9.17E-07	3.8909E-06

RIN2	20p11.23	0.21716306	9.23E-07	3.91844E-06
TMEM121	14q32.33	0.21714283	9.26E-07	3.92651E-06
STEAP3	2q14.2	0.217142066	9.26E-07	3.92651E-06
ENOX2	Xq26.1	-0.21711382	9.29E-07	3.93879E-06
RHNO1	12p13.33	-0.217067825	9.34E-07	3.95939E-06
XKR8	1p35.3	0.217035952	9.37E-07	3.97346E-06
SLC22A15	1p13.1	0.217033185	9.38E-07	3.97393E-06
LINC00882	3q13.12	0.217025612	9.38E-07	3.97664E-06
FLT3	13q12.2	0.21700665	9.41E-07	3.98471E-06
SHISA3	4p13	0.216988466	9.43E-07	3.99242E-06
METTL26	16p13.3	-0.21698633	9.43E-07	3.99259E-06
OLFM3	1p21.1	0.216968243	9.45E-07	4.00027E-06
FKBP14	7p14.3	0.21695389	9.46E-07	4.00621E-06
FAM149B1	10q22.2	0.216950354	9.47E-07	4.00704E-06
GLG1	16q23.1	0.216935086	9.49E-07	4.01341E-06
HDLBP	2q37.3	0.216882888	9.54E-07	4.03733E-06
RPL19P12	7q22.1	-0.216879357	9.55E-07	4.03817E-06
C19ORF38	19p13.2	0.216876213	9.55E-07	4.03882E-06
SLC25A25	9q34.11	-0.216871627	9.56E-07	4.04015E-06
IL15	4q31.21	0.216846435	9.58E-07	4.05132E-06
SDHAF1	19q13.12	-0.216840995	9.59E-07	4.05306E-06
EPC1	10p11.22	0.2168096	9.63E-07	4.06723E-06
NFS1	20q11.22	-0.216802878	9.63E-07	4.0696E-06
MOGAT2	11q13.5	0.216780543	9.66E-07	4.07947E-06
RRP1	21q22.3	-0.216773815	9.67E-07	4.08185E-06
INPP5B	1p34.3	0.21676151	9.68E-07	4.08691E-06
PLAAT1	3q29	-0.216732776	9.71E-07	4.09991E-06
GNGT2	17q21.32	0.216712837	9.74E-07	4.10869E-06
GBP2	1p22.2	0.216695088	9.76E-07	4.11642E-06
NRK	Xq22.3	0.216656253	9.80E-07	4.13442E-06
CABLES1	18q11.2	0.216626572	9.84E-07	4.14803E-06
NXT1	20p11.21	-0.216563357	9.91E-07	4.17728E-06
MS4A6A	11q12.2	0.216563304	9.91E-07	4.17728E-06
MYOCD	17p12	0.216540095	9.94E-07	4.18783E-06
TMPRSS11B	4q13.2	-0.216524597	9.95E-07	4.1946E-06
SLC8B1	12q24.13	0.216516163	9.96E-07	4.19788E-06
DCBLD2	3q12.1 3	0.216488585	1.00E-06	4.21065E-06
CLVS2	6q22.31	0.216419014	1.00793E-06	4.24435E-06
FXD7	19q13.12	0.216411877	1.00877E-06	4.24703E-06
E2F6	2p25.1	-0.216398502	1.01036E-06	4.25283E-06
PJA2	5q21.3	0.216356896	1.01531E-06	4.27242E-06
GGNBP2	17q12	-0.216355846	1.01544E-06	4.27242E-06
RPA1	17p13.3	-0.216327695	1.0188E-06	4.28569E-06
SIRT7	17q25.3	-0.216304602	1.02157E-06	4.29644E-06
APAF1	12q23.1	0.2162963	1.02257E-06	4.29974E-06
MAPKAPK5-AS1	12q24.12	-0.216238471	1.02954E-06	4.32816E-06
MBL1P	10q22.3	0.216197623	1.0345E-06	4.34807E-06
ATP13A5	3q29	-0.216181686	1.03643E-06	4.35531E-06
TMEM256	17p13.1	-0.216168428	1.03805E-06	4.36119E-06
TSHR	14q31.1	0.21612206	1.04372E-06	4.38409E-06
PSG3	19q13.2	0.216115013	1.04458E-06	4.38681E-06
RNASEH1	2p25.3	-0.216109264	1.04529E-06	4.38885E-06
LINC00284	13q14.11	0.216095618	1.04696E-06	4.39498E-06
PMF1	1q22	-0.216083403	1.04847E-06	4.40037E-06
CDCA4	14q32.33	-0.216047671	1.05287E-06	4.41795E-06
VGLL2	6q22.1	0.216041121	1.05368E-06	4.42043E-06
SLC35B1	17q21.33	-0.216021089	1.05616E-06	4.42991E-06
FAM227A	22q13.1	0.216012787	1.05719E-06	4.43331E-06

TMEM99	17q21.2	-0.215994656	1.05944E-06	4.44183E-06
ZNF329	19q13.43	0.215992276	1.05974E-06	4.44215E-06
OSGEPL1	2q32.2	-0.215984827	1.06067E-06	4.44511E-06
ZNF823	19p13.2	-0.215959539	1.06382E-06	4.45739E-06
CNPPD1	2q35	0.215956199	1.06424E-06	4.45821E-06
LOC284798	20p11.21	0.215916715	1.06918E-06	4.47798E-06
AURKB	17p13.1	-0.215877377	1.07412E-06	4.49776E-06
TMC7	16p12.3	0.215872033	1.0748E-06	4.49965E-06
C11ORF1	11q23.1	-0.215851134	1.07743E-06	4.50975E-06
C1ORF43	1q21.3	-0.215847317	1.07791E-06	4.51083E-06
LSP1	11p15.5	0.215771358	1.08756E-06	4.55025E-06
LINC01973	17q25.3	0.215753068	1.08989E-06	4.55907E-06
EIF4G3	1p36.12	0.215743779	1.09108E-06	4.56309E-06
ERCC3	2q14.3	-0.215713815	1.09492E-06	4.57819E-06
FARP1	13q32.2	0.215678508	1.09946E-06	4.59622E-06
CRYBB1	22q12.1	0.215561675	1.11461E-06	4.65859E-06
ZNF3	7q22.1	-0.215528401	1.11896E-06	4.67581E-06
KLC2	11q13.2	-0.215433356	1.13148E-06	4.72715E-06
BTBD11	12q23.3	-0.215388506	1.13743E-06	4.75104E-06
DCP2	5q22.2	0.215349095	1.14269E-06	4.77201E-06
RAVER2	1p31.3	-0.21527991	1.15198E-06	4.80979E-06
TMCC1	3q22.1	0.215271417	1.15312E-06	4.81358E-06
XRCC2	7q36.1	-0.215251569	1.1558E-06	4.82376E-06
C19ORF25	19p13.3	-0.215191068	1.16401E-06	4.857E-06
POLR2I	19q13.12	-0.215166448	1.16736E-06	4.86999E-06
LYPD5	19q13.31	0.215148227	1.16985E-06	4.87937E-06
DLX6-AS1	7q21.3	-0.215130075	1.17233E-06	4.88872E-06
BDNF	11p14.1	-0.215115299	1.17436E-06	4.89616E-06
GPR85	7q31.1	0.215111291	1.17491E-06	4.89744E-06
DPH7	9q34.3	-0.215088771	1.17801E-06	4.90933E-06
MRPL52	14q11.2	-0.215083999	1.17866E-06	4.91105E-06
RAB39A	11q22.3	0.215040582	1.18466E-06	4.93501E-06
GEMIN8P4	1p22.2	-0.215023976	1.18696E-06	4.94357E-06
ZNF135	19q13.43	0.215014242	1.18831E-06	4.94818E-06
FAM200B	4p15.32	-0.215006895	1.18933E-06	4.9514E-06
CYP8B1	3p22.1	0.214934415	1.19944E-06	4.99246E-06
HRAS	11p15.5	-0.214918625	1.20165E-06	5.00064E-06
ARID5A	2q11.2	0.214910323	1.20282E-06	5.00446E-06
SP5	2q31.1	0.214901406	1.20407E-06	5.00864E-06
TMEM191A	22q11.21	-0.214867858	1.20879E-06	5.02726E-06
TIAM1	21q22.11	0.214864995	1.2092E-06	5.0279E-06
USHBP1	19p13.11	0.21484152	1.21252E-06	5.04066E-06
TTC39B	9p22.3	-0.214828924	1.2143E-06	5.04703E-06
MBTPS1	16q23.3-q24.1	0.214789322	1.21992E-06	5.06936E-06
FCGR1CP	1q21.1	0.21478455	1.2206E-06	5.07114E-06
SRP68	17q25.1	-0.214769282	1.22278E-06	5.07914E-06
NRXN3	14q24.3-q31.1	-0.214704493	1.23206E-06	5.11662E-06
TTF2	1p13.1	-0.214685211	1.23483E-06	5.12708E-06
SYCE3	22q13.33	-0.214673775	1.23648E-06	5.13287E-06
GRAMD1A	19q13.11	0.214647231	1.24031E-06	5.14772E-06
POLE2	14q21.3	-0.214636639	1.24184E-06	5.15302E-06
NLK	17q11.2	-0.214621567	1.24403E-06	5.16103E-06
WNT10B	12q13.12	0.214578047	1.25035E-06	5.18621E-06
PKD2	4q22.1	0.214568409	1.25176E-06	5.19097E-06
LIMK2	22q12.2	0.21452957	1.25744E-06	5.21345E-06
RPS6KA5	14q32.11	-0.214500847	1.26166E-06	5.22986E-06
TUBGCP4	15q15.3	-0.214470215	1.26617E-06	5.24748E-06
HIVEP1	6p24.1	0.214412482	1.27471E-06	5.2818E-06

ATM	11q22.3	0.214381277	1.27935E-06	5.29994E-06
DPY30	2p22.3	-0.21436181	1.28225E-06	5.31088E-06
TRIM44	11p13	0.214340244	1.28548E-06	5.32314E-06
NRROS	3q29	0.214306558	1.29053E-06	5.34296E-06
PAX9	14q13.3	-0.214264475	1.29687E-06	5.3681E-06
EHP1L1	11q13.1	0.214176587	1.3102E-06	5.42217E-06
B9D1	17p11.2	-0.214105303	1.32111E-06	5.46619E-06
AFF1	4q21.3-q22.1	0.21409662	1.32244E-06	5.47059E-06
FAM135B	8q24.23	0.214075163	1.32575E-06	5.48314E-06
FAM200A	7q22.1	-0.214007682	1.33619E-06	5.52519E-06
PHF21A	11p11.2	0.213978672	1.3407E-06	5.54272E-06
TP53INP1	8q22.1	0.213968939	1.34222E-06	5.54786E-06
NANS	9q22.33	-0.213966458	1.34261E-06	5.54832E-06
ZDHHC24	11q13.2	-0.213960732	1.3435E-06	5.55088E-06
GMFG	19q13.2	0.213954243	1.34451E-06	5.55393E-06
TIMP4	3p25.2	-0.213939292	1.34685E-06	5.56245E-06
B2M	15q21.1	0.213920939	1.34973E-06	5.57318E-06
TRIQK	8q22.1	0.21390987	1.35146E-06	5.57921E-06
PSKH1	16q22.1	0.213898418	1.35326E-06	5.5855E-06
PPIF	10q22.3	-0.213894029	1.35395E-06	5.5872E-06
ANGPTL6	19p13.2	0.213889548	1.35466E-06	5.58897E-06
GRHL1	2p25.1	-0.213796789	1.36933E-06	5.64836E-06
ANKRD44	2q33.1	0.213791254	1.37021E-06	5.65084E-06
COX16	14q24.2	-0.213772651	1.37318E-06	5.6619E-06
SLC2A5	1p36.23	0.21375232	1.37642E-06	5.67412E-06
DGKZ	11p11.2	0.213710237	1.38316E-06	5.70075E-06
MAP3K7	6q15	0.21368848	1.38666E-06	5.71399E-06
CTAGE4	7q35	-0.213555937	1.40815E-06	5.80137E-06
EQTN	9p21.2	0.213521898	1.41372E-06	5.82313E-06
FBL	19q13.2	-0.213513849	1.41504E-06	5.82737E-06
PCNA	20p12.3	-0.213491328	1.41874E-06	5.84142E-06
RSL1D1	16p13.13	-0.21346165	1.42363E-06	5.86036E-06
CDKN2AIP	4q35.1	-0.213435217	1.428E-06	5.87715E-06
RPL18A	19p13.11	-0.213420235	1.43048E-06	5.88617E-06
ARHGAP17	16p12.1	0.213395901	1.43453E-06	5.90159E-06
KXD1	19p13.11	-0.213353627	1.44157E-06	5.92936E-06
DBH	9q34.2	0.213349716	1.44222E-06	5.93084E-06
PLEK2	14q23.3-q24.1	0.213316697	1.44775E-06	5.95236E-06
SNHG7	9q34.3	-0.213312499	1.44846E-06	5.95405E-06
TRIM45	1p13.1	-0.213303051	1.45004E-06	5.95935E-06
TRMT1	19p13.13	-0.213286256	1.45287E-06	5.96975E-06
SULT1E1	4q13.3	0.213278835	1.45412E-06	5.97366E-06
ACSL4	Xq23	0.21325696	1.45781E-06	5.9876E-06
NEDD9	6p24.2	0.213230145	1.46234E-06	6.005E-06
TLE2	19p13.3	0.213219267	1.46418E-06	6.01135E-06
FXVD6	11q23.3	0.213147315	1.47643E-06	6.06041E-06
ARHGAP21	10p12.1 10p12.3	0.213141494	1.47743E-06	6.06326E-06
KCNJ11	11p15.1	-0.213135482	1.47846E-06	6.06625E-06
HOXC5	12q13.13	0.213110197	1.48279E-06	6.08279E-06
UBXN2A	2p23.3	-0.21310819	1.48314E-06	6.08297E-06
CYP26A1	10q23.33	-0.213091708	1.48597E-06	6.09335E-06
ADH1C	4q23	-0.213061786	1.49112E-06	6.11324E-06
NAA35	9q21.33	-0.212994728	1.50274E-06	6.1596E-06
CBWD2	2q14.1	-0.212939666	1.51234E-06	6.19745E-06
ANKRD2	10q24.2	-0.212938262	1.51258E-06	6.19745E-06
NANP	20p11.21	-0.212925448	1.51483E-06	6.20538E-06
FOXN2	2p16.3	-0.212923539	1.51516E-06	6.20549E-06
PDHA1	Xp22.12	-0.212884796	1.52196E-06	6.23183E-06

CFAP58	10q25.1	0.212883396	1.52221E-06	6.23183E-06
ZNF826P	19p12	0.212873735	1.52391E-06	6.23753E-06
FAM98C	19q13.2	-0.212863521	1.52571E-06	6.24364E-06
PLK1	16p12.2	-0.212857504	1.52677E-06	6.24671E-06
PICRAR	21q22.3	0.212784938	1.53963E-06	6.29805E-06
ARHGEF7	13q34	0.212761409	1.54383E-06	6.31305E-06
KANK3	19p13.2	0.212760842	1.54393E-06	6.31305E-06
RAMAC	15q25.2	-0.212752248	1.54546E-06	6.31805E-06
CYP2C9	10q23.33	-0.212736182	1.54833E-06	6.3285E-06
ST8SIA6	10p12.33	0.212724424	1.55044E-06	6.33582E-06
PSMC1	14q32.11	-0.21268001	1.55841E-06	6.36713E-06
CRLF3	17q11.2	-0.212678102	1.55876E-06	6.36724E-06
NCBP1	9q22.33	-0.212660734	1.56189E-06	6.37873E-06
POC1A	3p21.2	-0.212651478	1.56356E-06	6.38427E-06
LOC91450	15q24.3	0.212634166	1.56669E-06	6.39575E-06
CENPH	5q13.2	-0.212613975	1.57034E-06	6.40938E-06
DGKG	3q27.2-q27.3	-0.212500513	1.59105E-06	6.49257E-06
PAQR5	15q23	0.212482859	1.59429E-06	6.5045E-06
LILRB4	19q13.42	0.212438867	1.60241E-06	6.53628E-06
TUSC1	9p21.2	0.21231863	1.62478E-06	6.62622E-06
GPS1	17q25.3	-0.21227855	1.63231E-06	6.65556E-06
KIF2A	5q12.1	0.212270153	1.63389E-06	6.66066E-06
KLK5	19q13.41	0.212260855	1.63564E-06	6.6646E-06
RUVBL1	3q21.3	-0.212225112	1.6424E-06	6.69263E-06
PPP2R3C	14q13.2	0.212210893	1.64509E-06	6.70226E-06
PLA2G7	6p12.3	0.212162607	1.65427E-06	6.73829E-06
MCF2	Xq27.1	0.21213322	1.65988E-06	6.75978E-06
MRPL39	21q21.3	-0.212118043	1.66278E-06	6.77024E-06
THAP7	22q11.21	-0.212089319	1.6683E-06	6.79131E-06
DKK3	11p15.3	0.212065367	1.6729E-06	6.8087E-06
LINC00452	13q34	0.212059993	1.67394E-06	6.81154E-06
TDRKH	1q21.3	0.211997519	1.68603E-06	6.85933E-06
TDRD10	1q21.3	0.211930063	1.69917E-06	6.91141E-06
CRADD	12q22	-0.211923372	1.70048E-06	6.91471E-06
SNN	16p13.13	0.211922418	1.70066E-06	6.91471E-06
SLC35A3	1p21.2	-0.211889687	1.70708E-06	6.9394E-06
N4BP3	5q35.3	0.211887497	1.70751E-06	6.93976E-06
IDNK	9q21.32	-0.211869361	1.71108E-06	6.95285E-06
NAALAD2	11q14.3	0.211852661	1.71437E-06	6.96482E-06
BAP1	3p21.1	-0.21184016	1.71684E-06	6.97344E-06
RBBP8	18q11.2	-0.211830331	1.71878E-06	6.97993E-06
TEX35	1q25.2	-0.211721347	1.74046E-06	7.06654E-06
GORASP1	3p22.2	0.211702937	1.74415E-06	7.08009E-06
RHOU	1q42.13	0.211691581	1.74643E-06	7.08791E-06
METAP2	12q22	-0.211616576	1.76155E-06	7.14785E-06
ATP6V1G2	6p21.33	0.211597013	1.76551E-06	7.16249E-06
RTN4	2p16.1	0.211576401	1.7697E-06	7.17803E-06
LILRA3	19q13.4	0.211519732	1.78126E-06	7.22347E-06
CFLAR	2q33.1	0.21150903	1.78345E-06	7.2309E-06
VWA5B1	1p36.12	0.211489825	1.78739E-06	7.2447E-06
NBR2	17q21.31	-0.211487654	1.78783E-06	7.2447E-06
MMP12	11q22.2	0.211487177	1.78793E-06	7.2447E-06
LDHB	12p12.1	-0.21145998	1.79352E-06	7.26591E-06
DIMT1	5q12.1	-0.211444044	1.79681E-06	7.27775E-06
ANKRA2	5q13.2	-0.211389651	1.80806E-06	7.32187E-06
HTR7	10q23.31	0.211357979	1.81465E-06	7.34707E-06
PRDM13	6q16.2	-0.211343802	1.8176E-06	7.35756E-06
FAM185A	7q22.1	-0.21130902	1.82487E-06	7.3855E-06

TGFBR3	1p22.1	-0.211307107	1.82527E-06	7.38564E-06
ZBTB20	3q13.31	0.211264386	1.83424E-06	7.42044E-06
BUB1B	15q15.1	-0.2112384	1.83972E-06	7.44111E-06
EIF4EBP3	5q31.3	-0.211206336	1.8465E-06	7.46703E-06
CUX2	12q24.11-q24.12	0.211175668	1.853E-06	7.49183E-06
CCL26	7q11.23	-0.211156288	1.85713E-06	7.507E-06
NXPE1	11q23.2	0.211144929	1.85955E-06	7.51528E-06
BACH1	21q21.3	0.211100985	1.86894E-06	7.55172E-06
WWP2	16q22.1	0.211076365	1.87422E-06	7.57155E-06
RAB33A	Xq26.1	0.211057757	1.87822E-06	7.5862E-06
KRT15	17q21.2	-0.210999928	1.89071E-06	7.634E-06
BCCIP	10q26.2	-0.210999451	1.89081E-06	7.634E-06
SYN3	22q12.3	0.210971267	1.89693E-06	7.65655E-06
HDX	Xq21.1	0.210970213	1.89716E-06	7.65655E-06
TMEM214	2p23.3	0.21095336	1.90082E-06	7.66981E-06
NECTIN2	19q13.32	0.210918339	1.90846E-06	7.6991E-06
RPLP0	12q24.23	-0.210877782	1.91735E-06	7.7334E-06
CCDC144CP	17p11.2	0.210862296	1.92075E-06	7.74557E-06
CORO7	16p13.3	0.210852876	1.92282E-06	7.75238E-06
CD9	12p13.31	-0.210831405	1.92756E-06	7.76991E-06
HLA-DMB	6p21.32	0.210791039	1.93649E-06	7.80434E-06
SLC4A9	5q31.3	-0.210739605	1.94792E-06	7.84885E-06
ZNF263	16p13.3	-0.210692559	1.95843E-06	7.88964E-06
CTSS	1q21.3	0.210684162	1.96031E-06	7.89565E-06
VAMP3	1p36.23	0.210681108	1.961E-06	7.89683E-06
SLC14A1	18q12.3	0.21062507	1.97361E-06	7.94603E-06
GMIP	19p13.11	0.210620226	1.9747E-06	7.94884E-06
MSL3	Xp22.2	0.210590643	1.9814E-06	7.97419E-06
COPA	1q23.2	0.210586731	1.98228E-06	7.97617E-06
SDHAP2	3q29	-0.210530715	1.99502E-06	8.02581E-06
AGT	1q42.2	0.210476227	2.00748E-06	8.07435E-06
GGT1	22q11.23	0.210459718	2.01127E-06	8.08625E-06
STX1B	16p11.2	0.210459484	2.01133E-06	8.08625E-06
KLHDC8A	1q32.1	0.210458106	2.01164E-06	8.08625E-06
CYP27B1	12q14.1	0.210431853	2.01769E-06	8.10893E-06
DCAF5	14q24.1	0.210397786	2.02556E-06	8.13893E-06
PLCG2	16q23.3	0.210371257	2.03171E-06	8.16201E-06
TRIM34	11p15.4	0.210357325	2.03494E-06	8.17255E-06
UNC13A	19p13.11	0.210356479	2.03514E-06	8.17255E-06
TNFRSF10B	8p21.3	0.210353031	2.03594E-06	8.17412E-06
MGRN1	16p13.3	0.210351313	2.03634E-06	8.17412E-06
UTP6	17q11.2	-0.210341103	2.03872E-06	8.18203E-06
SLITRK6	13q31.1	0.210337954	2.03945E-06	8.18335E-06
FAM167B	1p35.2	0.210326698	2.04207E-06	8.19224E-06
TCTN3	10q24.1	0.210313906	2.04506E-06	8.20259E-06
SOS2	14q21.3	0.210286328	2.05151E-06	8.22683E-06
SDHAF2	11q12.2	-0.210282797	2.05234E-06	8.22851E-06
HELLS	10q23.33	-0.210257223	2.05834E-06	8.25093E-06
CCDC151	19p13.2	0.210253579	2.05919E-06	8.25272E-06
ALOX12	17p13.1	-0.210246344	2.0609E-06	8.2579E-06
SEC22C	3p22.1	0.210225827	2.06573E-06	8.27562E-06
NAT2	8p22	0.210217423	2.06771E-06	8.28192E-06
ZC3HC1	7q32.2	-0.21018613	2.07511E-06	8.30991E-06
ARMCX1	Xq22.1	0.210151585	2.08331E-06	8.34108E-06
CECR7	22q11.1	0.210116898	2.09157E-06	8.37249E-06
ZNF831	20q13.32	0.21007763	2.10096E-06	8.40842E-06
ATPAF2	17p11.2	-0.210055066	2.10637E-06	8.42841E-06
NDNF	4q27	0.210051196	2.1073E-06	8.43046E-06

ACO2	22q13.2	-0.210032397	2.11183E-06	8.44688E-06
SIRT4	12q24.23-q24.31	0.209998722	2.11995E-06	8.4777E-06
C8ORF58	8p21.3	0.20995806	2.1298E-06	8.51541E-06
FBXO30	6q24.3	-0.209943937	2.13323E-06	8.52744E-06
CABCOC01	10q21.2	0.209935138	2.13537E-06	8.53431E-06
RPL23P8	7p21.1	-0.209922848	2.13837E-06	8.54458E-06
EID3	12q23.3	-0.209884353	2.14777E-06	8.58045E-06
TLR2	4q31.3	0.209857289	2.1544E-06	8.60525E-06
DSTYK	1q32.1	0.209839826	2.1587E-06	8.62068E-06
ITPRIPL2	16p12.3	0.209806141	2.167E-06	8.65212E-06
HSPA6	1q23.3	0.209797171	2.16921E-06	8.65925E-06
JDP2	14q24.3	0.209733426	2.18502E-06	8.72062E-06
HAUS1	18q21.1	-0.209713768	2.18991E-06	8.73844E-06
POLH	6p21.1	0.209704893	2.19213E-06	8.74555E-06
SKAP2	7p15.2	0.209699931	2.19337E-06	8.74876E-06
LAMB3	1q32.2	0.20969077	2.19566E-06	8.75576E-06
DNAJC25	9q31.3	-0.209689434	2.19599E-06	8.75576E-06
TARBP2	12q13.13	-0.209667486	2.20148E-06	8.77593E-06
KCNQ1	11p15.5-p15.4	0.209664337	2.20227E-06	8.77734E-06
ZNF880	19q13.41	0.209642823	2.20767E-06	8.79706E-06
ACTN2	1q43	0.20964116	2.20809E-06	8.79706E-06
SDSL	12q24.13	0.20962712	2.21162E-06	8.80939E-06
PCDHA6	5q31.3	0.209566749	2.22687E-06	8.86837E-06
ACADSB	10q26.13	-0.209494095	2.24535E-06	8.94021E-06
TMEM181	6q25.3	0.20948942	2.24655E-06	8.9432E-06
COG2	1q42.2	-0.209468617	2.25187E-06	8.96262E-06
KAT8	16p11.2	-0.209459456	2.25422E-06	8.97019E-06
TNKS1BP1	11q12.1	0.209457547	2.25471E-06	8.97037E-06
ZSCAN32	16p13.3	-0.209443906	2.25821E-06	8.98253E-06
HSD17B6	12q13.3	0.209411413	2.26657E-06	9.014E-06
B3GAT1	11q25	0.209401132	2.26922E-06	9.02277E-06
TEX29	13q34	0.209383033	2.27389E-06	9.03957E-06
LRATD1	2p24.3	-0.209380156	2.27464E-06	9.04075E-06
BAG5	14q32.33	-0.209377866	2.27523E-06	9.04132E-06
ISL1	5q11.1	0.209323747	2.28927E-06	9.09532E-06
DLGAP1-AS1	18p11.31	-0.209286638	2.29894E-06	9.13196E-06
IFITM1	11p15.5	0.209206479	2.31997E-06	9.21369E-06
RALB	2q14.2	-0.209195696	2.32282E-06	9.22317E-06
C6ORF203	6q21	-0.209166687	2.33048E-06	9.25178E-06
NECTIN4	1q23.3	-0.209145216	2.33617E-06	9.27255E-06
TNS1	2q35	0.209100365	2.3481E-06	9.31805E-06
ZNF204P	6p22.1	0.209095503	2.3494E-06	9.32136E-06
REPIN1	7q36.1	-0.209024119	2.36851E-06	9.39535E-06
EIF3K	19q13.2	-0.209013145	2.37146E-06	9.40521E-06
LINC02210	17q21.31	-0.208976692	2.38129E-06	9.44234E-06
ERAP1	5q15	0.208961996	2.38526E-06	9.45624E-06
CLDN23	8p23.1	0.20894167	2.39077E-06	9.47621E-06
HMOX2	16p13.3	-0.208907031	2.40018E-06	9.51165E-06
SAA1	11p15.1	0.208866283	2.4113E-06	9.55383E-06
FYCO1	3p21.31	0.208854069	2.41464E-06	9.56519E-06
SLC6A11	3p25.3	0.208829255	2.42145E-06	9.59026E-06
PGLS	19p13.11	-0.208780972	2.43474E-06	9.64101E-06
NSMCE3	15q13.1	-0.208677911	2.46334E-06	9.75235E-06
RRM2	2p25.1	-0.208634301	2.47554E-06	9.79865E-06
FAM201A	9p13.1	-0.208632646	2.476E-06	9.79865E-06
RBMXL1	1p22.2	-0.208570556	2.49348E-06	9.86586E-06
CRTAC1	10q24.2	0.20856775	2.49427E-06	9.86706E-06
MAD1L1	7p22.3	0.208557578	2.49714E-06	9.8765E-06

SEC23IP	10q26.11-q26.12	0.20855252	2.49858E-06	9.88022E-06
CTNS	17p13.2	0.208529523	2.50509E-06	9.90404E-06
TACC2	10q26.13	-0.208486771	2.51724E-06	9.95013E-06
HAP1	17q21.2	-0.208426939	2.53435E-06	1.00158E-05
BLOC1S1	12q13.2	-0.208422263	2.53569E-06	1.00191E-05
PTCD3	2p11.2	-0.208370828	2.55049E-06	1.00756E-05
BTBD3	20p12.2	0.208365007	2.55217E-06	1.00803E-05
C9ORF78	9q34.11	-0.208346113	2.55763E-06	1.00999E-05
SGCA	17q21.33	0.208340983	2.55911E-06	1.01038E-05
CGB8	19q13.33	0.208328642	2.56269E-06	1.01159E-05
MRPS22	3q23	-0.208229883	2.59147E-06	1.02275E-05
THOC1	18p11.32	-0.208196865	2.60116E-06	1.02637E-05
SNX10	7p15.2	0.208188277	2.60368E-06	1.02717E-05
LGALS1	2p14	-0.208174631	2.6077E-06	1.02855E-05
PDZD8	10q25.3-q26.11	0.208166997	2.60995E-06	1.02924E-05
GPR137B	1q42.3	0.20810516	2.62825E-06	1.03625E-05
CHCHD2	7p11.2	-0.208098385	2.63027E-06	1.03685E-05
NSG2	5q35.2	0.2080694	2.63889E-06	1.04004E-05
RGS6	14q24.2	-0.208060208	2.64163E-06	1.04092E-05
EFCAB1	8q11.21	0.208012506	2.6559E-06	1.04634E-05
ACKR4	3q22.1	0.207991602	2.66218E-06	1.04861E-05
TMUB2	17q21.31	-0.207980247	2.6656E-06	1.04975E-05
KLF16	19p13.3	-0.207959253	2.67192E-06	1.05203E-05
CHCHD6	3q21.3	-0.207932438	2.68002E-06	1.05502E-05
PROC	2q14.3	0.207921135	2.68345E-06	1.05616E-05
CADM3	1q23.2	0.207904192	2.68858E-06	1.05797E-05
OMA1	1p32.2-p32.1	-0.207899802	2.68992E-06	1.05829E-05
GJA4	1p34.3	0.207868216	2.69952E-06	1.06186E-05
PURG	8p12	0.207841014	2.70782E-06	1.06492E-05
TNFRSF10C	8p21.3	0.207834063	2.70995E-06	1.06555E-05
ARMCX6	Xq22.1	-0.2078289	2.71152E-06	1.06596E-05
TRIAP1	12q24.31	-0.207826991	2.71211E-06	1.06598E-05
CD226	18q22.2	0.207792023	2.72283E-06	1.06999E-05
ESRRA	11q13.1	-0.207789584	2.72358E-06	1.07008E-05
C16ORF91	16p13.3	-0.207711334	2.74772E-06	1.07935E-05
SLC8A1	2p22.1	0.207674886	2.75904E-06	1.08359E-05
CALR	19p13.13	0.207653887	2.76558E-06	1.08594E-05
BUB1	2q13	-0.207632226	2.77234E-06	1.08839E-05
PHACTR2	6q24.2	0.207603025	2.78148E-06	1.09176E-05
KRI1	19p13.2	-0.207552544	2.79735E-06	1.09778E-05
FCRL5	1q23.1	0.207548112	2.79874E-06	1.09811E-05
SLAMF1	1q23.3	0.207501401	2.81351E-06	1.10369E-05
LYVE1	11p15.4	0.207472863	2.82257E-06	1.10703E-05
FBXO27	19q13.2	-0.207464656	2.82518E-06	1.10784E-05
HNRNPA3P1	10q11.21	-0.207443376	2.83196E-06	1.11028E-05
CD3E	11q23.3	0.207426677	2.83729E-06	1.11215E-05
VSIG10	12q24.23	-0.207421714	2.83888E-06	1.11256E-05
WDR72	15q21.3	-0.20740387	2.84459E-06	1.11458E-05
APOD	3q29	0.207384021	2.85095E-06	1.11686E-05
CSRNP2	12q13.12	0.207371138	2.85509E-06	1.11808E-05
FAM169B	15q26.3	0.207370873	2.85517E-06	1.11808E-05
SEN5	3q29	-0.207359019	2.85899E-06	1.11935E-05
CXORF40A	Xq28	-0.207339843	2.86516E-06	1.12155E-05
ACAN	15q26.1	0.207320848	2.8713E-06	1.12374E-05
VAV1	19p13.3	0.207308347	2.87534E-06	1.1251E-05
ELAVL4	1p33-p32.3	0.207300185	2.87798E-06	1.12592E-05
GSTO1	10q25.1	-0.207290503	2.88112E-06	1.12693E-05
NTAN1	16p13.11	0.207277906	2.88521E-06	1.12831E-05

SMN2	5q13.2	-0.207237541	2.89834E-06	1.13322E-05
RSPH9	6p21.1	0.20722379	2.90283E-06	1.13476E-05
EXOC6	10q23.33	-0.207215402	2.90557E-06	1.13561E-05
CR1L	1q32.2	0.20720121	2.91021E-06	1.1372E-05
RASSF10	11p15.3	0.207182529	2.91633E-06	1.13937E-05
ANXA3	4q21.21	0.207169692	2.92054E-06	1.1408E-05
ATG9A	2q35	0.207109097	2.94051E-06	1.14838E-05
PPP1CC	12q24.11	-0.207095928	2.94487E-06	1.14986E-05
TPI1P2	7q32.1	-0.207079991	2.95015E-06	1.15164E-05
ARSJ	4q26	0.207078655	2.95059E-06	1.15164E-05
BCAT2	19q13.33	-0.207051268	2.95969E-06	1.15497E-05
FCGR3B	1q23.3	0.207029435	2.96696E-06	1.15759E-05
KIAA0355	19q13.11	0.207027507	2.96761E-06	1.15761E-05
CDC45	11q13.1	-0.206991054	2.97979E-06	1.16214E-05
FBXO9	6p12.1	-0.206974545	2.98532E-06	1.16407E-05
SPTAN1	9q34.11	0.206971778	2.98625E-06	1.16421E-05
RNF126	19p13.3	-0.206959086	2.99051E-06	1.16565E-05
GNL3	3p21.1	-0.20693647	2.99812E-06	1.16839E-05
RAB27A	15q21.3	0.206920629	3.00346E-06	1.17024E-05
TAF10	11p15.4	-0.206918816	3.00407E-06	1.17025E-05
ORAI3	16p11.2	-0.206909946	3.00707E-06	1.17119E-05
RBBP8NL	20q13.33	-0.206907555	3.00787E-06	1.17128E-05
C5ORF15	5q31.1	0.206830642	3.03397E-06	1.18122E-05
RBM28	7q32.1	-0.206816232	3.03888E-06	1.1829E-05
MOAP1	14q32.12	-0.206792471	3.047E-06	1.18583E-05
NOD2	16q12.1	0.206789608	3.04798E-06	1.18598E-05
SIRT6	19p13.3	-0.206758117	3.05877E-06	1.18995E-05
BIN1	2q14.3	0.206708972	3.07569E-06	1.1963E-05
SLC9A1	1p36.11	0.206659923	3.09266E-06	1.20267E-05
PGBD3	10q11.23	0.206648949	3.09647E-06	1.20392E-05
CCDC3	10p13	0.206609442	3.11022E-06	1.20904E-05
CARM1	19p13.2	-0.206591789	3.11639E-06	1.21119E-05
PRCC	1q23.1	-0.206590166	3.11695E-06	1.21119E-05
PIP4P2	8q21.3	0.206556958	3.12858E-06	1.21517E-05
EHD4	15q15.1	0.206556672	3.12868E-06	1.21517E-05
DNASE1L1	Xq28	0.206555717	3.12902E-06	1.21517E-05
SNRPB	20p13	-0.206545507	3.1326E-06	1.21633E-05
LINC01001	11p15.5	-0.20653062	3.13783E-06	1.21813E-05
TMEM121B	22q11.1	0.206499468	3.14881E-06	1.22216E-05
SLC25A3	12q23.1	-0.206489777	3.15223E-06	1.22325E-05
PRDM4	12q23.3	0.20645447	3.16473E-06	1.22786E-05
TBL1XR1	3q26.32	-0.206446645	3.16751E-06	1.2287E-05
MYBPC2	19q13.33	0.206419014	3.17733E-06	1.23228E-05
ESM1	5q11.2	0.206410192	3.18048E-06	1.23326E-05
C1ORF198	1q42.2	0.206407233	3.18153E-06	1.23343E-05
PLK4	4q28.1	-0.206397595	3.18497E-06	1.23453E-05
BST2	19p13.11	0.206336522	3.20683E-06	1.24276E-05
UFD1	22q11.21	-0.206333755	3.20783E-06	1.24283E-05
YIPF1	1p32.3	0.20633261	3.20824E-06	1.24283E-05
ANO2	12p13.31	0.206324418	3.21118E-06	1.24373E-05
RSBN1L	7q11.23	-0.206321063	3.21239E-06	1.24396E-05
ARMC6	19p13.11	-0.206313047	3.21528E-06	1.24483E-05
CENPS	1p36.22	-0.206311425	3.21586E-06	1.24483E-05
ZNF727	7q11.21	0.206215447	3.25061E-06	1.25804E-05
LRP1B	2q22.1-q22.2	-0.206166079	3.26862E-06	1.26476E-05
KRTAP1-5	17q21.2	0.20611369	3.28784E-06	1.27196E-05
NRG2	5q31.2	0.206077262	3.30126E-06	1.27691E-05
IL1B	2q14.1	0.206069041	3.3043E-06	1.27784E-05

TMEM65	8q24.13	0.206043281	3.31384E-06	1.28128E-05
CLCN1	7q34	0.206019829	3.32254E-06	1.2844E-05
FLT3LG	19q13.33	0.205987929	3.33441E-06	1.28874E-05
TRIML2	4q35.2	0.205866398	3.38002E-06	1.30599E-05
DDX18	2q14.1	-0.205865592	3.38033E-06	1.30599E-05
NEIL3	4q34.3	-0.205838877	3.39043E-06	1.30944E-05
PJA1	Xq13.1	0.205836964	3.39116E-06	1.30944E-05
GBP1P1	1p22.2	-0.205836825	3.39121E-06	1.30944E-05
RBP7	1p36.22	-0.205834005	3.39228E-06	1.30956E-05
ECI2	6p25.2	-0.205832574	3.39282E-06	1.30956E-05
CHST13	3q21.3	0.205809344	3.40164E-06	1.31271E-05
FOXF1	16q24.1	0.205804518	3.40347E-06	1.31317E-05
EEF1AKMT3	12q14.1	0.205801369	3.40467E-06	1.31331E-05
B3GNT5	3q27.1	-0.205800129	3.40514E-06	1.31331E-05
RPL27A	11p15.4	-0.205795835	3.40678E-06	1.31369E-05
PSMC2	7q22.1	-0.205731326	3.43141E-06	1.32294E-05
CDSN	6p21.33	0.205705446	3.44134E-06	1.32651E-05
CRIP1	14q32.33	0.20569869	3.44394E-06	1.32726E-05
CDH22	20q13.12	0.20567978	3.45122E-06	1.32981E-05
MST1R	3p21.31	0.205667199	3.45607E-06	1.33142E-05
MRPL51	12p13.31	-0.205606656	3.47951E-06	1.3402E-05
C19ORF48	19q13.33	-0.205565093	3.49568E-06	1.34593E-05
SUDS3	12q24.23	-0.205564997	3.49572E-06	1.34593E-05
RETREG3	17q21.2	-0.205524823	3.51142E-06	1.3516E-05
AP1AR	4q25	-0.205523869	3.5118E-06	1.3516E-05
CLCNKA	1p36.13	0.205519501	3.51351E-06	1.352E-05
SHC1	1q21.3	0.205472815	3.53186E-06	1.3588E-05
MINDY1	1q21.3	0.205469189	3.53328E-06	1.3591E-05
C10ORF91	10q26.3	-0.205418625	3.55326E-06	1.36652E-05
NEK3	13q14.3	0.205359353	3.57682E-06	1.37532E-05
CAMTA2	17p13.2	0.205324236	3.59085E-06	1.38045E-05
RPS6KA1	1p36.11	0.205299425	3.60079E-06	1.38401E-05
B3GALT6	1p36.33	0.20527032	3.61249E-06	1.38824E-05
DUSP28	2q37.3	-0.205264117	3.61499E-06	1.38893E-05
TGS1	8q12.1	-0.205256674	3.61799E-06	1.38982E-05
SEMA3E	7q21.11	0.20520737	3.63791E-06	1.39721E-05
NRIP1	21q11.2-q21.1	0.205161152	3.65669E-06	1.40416E-05
MYLK3	16q11.2	0.205146873	3.66251E-06	1.40612E-05
GIMAP6	7q36.1	0.205138249	3.66603E-06	1.40721E-05
TRIM22	11p15.4	0.205109812	3.67765E-06	1.41113E-05
WDR83	19p13.13	-0.205109812	3.67765E-06	1.41113E-05
DDIT3	12q13.3	-0.205107331	3.67867E-06	1.41125E-05
KRT7	12q13.13	0.205065491	3.69584E-06	1.41757E-05
TPSG1	16p13.3	0.205060988	3.6977E-06	1.41801E-05
THUMPD2	2p22.1 2p22-p21	-0.205001503	3.72226E-06	1.42716E-05
ADCY6	12q13.12	0.204998736	3.72341E-06	1.42733E-05
RCN1	11p13	0.20499072	3.72673E-06	1.42833E-05
SELENOO	22q13.33	-0.204944247	3.74605E-06	1.43546E-05
MAP3K1	5q11.2	0.204933845	3.75038E-06	1.43685E-05
PKHD1	6p12.3-p12.2	0.20492892	3.75244E-06	1.43737E-05
SPDYE8P	7q11.23	-0.204903605	3.76302E-06	1.44115E-05
MGC2889	3q29	-0.204834278	3.79214E-06	1.45202E-05
APOL6	22q12.3	0.204805497	3.8043E-06	1.45627E-05
OPCML	11q25	0.204804594	3.80468E-06	1.45627E-05
PENK	8q12.1	0.204741967	3.83126E-06	1.46617E-05
FBXW11	5q35.1	0.204707398	3.846E-06	1.47153E-05
RS1	Xp22.13	0.204693909	3.85177E-06	1.47346E-05
RAB43	3q21.3	0.204687263	3.85462E-06	1.47425E-05

FZD10	12q24.33	-0.204685646	3.85531E-06	1.47425E-05
XAF1	17p13.1	0.204682396	3.8567E-06	1.47451E-05
ZFP90	16q22.1	0.20465644	3.86784E-06	1.47844E-05
BAIAP2	17q25.3	-0.204655009	3.86845E-06	1.47844E-05
NOP2	12p13.31	-0.204629625	3.87938E-06	1.48208E-05
PM20D2	6q15	-0.204629434	3.87946E-06	1.48208E-05
ZNF548	19q13.43	0.204619319	3.88382E-06	1.48347E-05
EMG1	12p13.31	-0.204611303	3.88728E-06	1.48451E-05
RPL29	3p21.2	-0.204606818	3.88922E-06	1.48497E-05
CFAP46	10q26.3	0.204571149	3.90465E-06	1.49058E-05
SLC39A3	19p13.3	-0.204515781	3.92873E-06	1.49949E-05
FSIP1	15q14	0.204491658	3.93927E-06	1.50322E-05
ALDOA	16p11.2	-0.204441062	3.96145E-06	1.5114E-05
PLPP1	5q11.2	0.204423885	3.96901E-06	1.514E-05
SLCO4C1	5q21.1	-0.204400029	3.97953E-06	1.51773E-05
LOC100240735	12q13.13	0.204392956	3.98265E-06	1.51863E-05
DDTL	22q11.23	-0.204373691	3.99117E-06	1.52159E-05
HTR4	5q32	0.204357221	3.99847E-06	1.52389E-05
OVCA2	17p13.3	-0.204356705	3.9987E-06	1.52389E-05
MTPAP	10p11.23	-0.20425727	4.04304E-06	1.54049E-05
RHBDD1	2q36.3	0.204171768	4.08154E-06	1.55487E-05
GFI1	1p22.1	0.204160221	4.08676E-06	1.55656E-05
TNKS2	10q23.32	0.204158408	4.08758E-06	1.55658E-05
CNTNAP4	16q23.1	0.204146697	4.09289E-06	1.55831E-05
CDK6	7q21.2	0.204122432	4.10391E-06	1.56215E-05
KRTAP19-3	21q22.11	0.204121106	4.10451E-06	1.56215E-05
SLC25A37	8p21.2	0.204100866	4.11373E-06	1.56536E-05
AVPR1A	12q14.2	0.20407255	4.12665E-06	1.56998E-05
AIRE	21q22.3	0.204055349	4.13452E-06	1.57268E-05
PMPCB	7q22.1	-0.204041892	4.14069E-06	1.57473E-05
RTN4IP1	6q21	-0.203981678	4.16839E-06	1.58496E-05
GOLGA7B	10q24.2	0.203937119	4.18901E-06	1.5925E-05
KIF26A	14q32.33	0.203903099	4.20481E-06	1.59821E-05
NOTUM	17q25.3	0.203896557	4.20785E-06	1.59906E-05
GSC	14q32.13	0.203876444	4.21723E-06	1.60233E-05
CBLB	3q13.11	0.203872701	4.21898E-06	1.60269E-05
RGS5	1q23.3	0.203857719	4.22598E-06	1.60504E-05
SORD	15q21.1	-0.203853234	4.22808E-06	1.60554E-05
C6ORF226	6p21.1	-0.203834106	4.23703E-06	1.60864E-05
SLC39A12	10p12.33	0.203798324	4.25384E-06	1.61471E-05
GPAM	10q25.2	0.203758761	4.27249E-06	1.62149E-05
ARRDC5	19p13.3	0.203749287	4.27697E-06	1.62289E-05
MAMLD1	Xq28	0.203739581	4.28157E-06	1.62432E-05
PA2G4P4	3q25.31	-0.203649116	4.32461E-06	1.64034E-05
LIPT2	11q13.4	-0.203645013	4.32657E-06	1.64078E-05
WWC3	Xp22.2	0.20362087	4.33813E-06	1.64485E-05
AIFM3	22q11.21	-0.203595677	4.35022E-06	1.64913E-05
GPR182	12q13.3	0.203571397	4.36191E-06	1.65325E-05
IL7	8q21.13	0.203556457	4.36912E-06	1.65567E-05
YAP1	11q22.1	0.203549968	4.37225E-06	1.65655E-05
MAFG-DT	17q25.3	-0.20352592	4.38388E-06	1.66064E-05
GDF9	5q31.1	-0.203416275	4.43729E-06	1.68037E-05
SMCP	1q21.3	-0.203415563	4.43764E-06	1.68037E-05
PLXNA3	Xq28	0.203390701	4.44984E-06	1.68468E-05
MLST8	16p13.3	-0.203352435	4.46867E-06	1.69149E-05
FMNL2	2q23.3	0.203317031	4.48617E-06	1.69779E-05
SNHG10	14q32.13	-0.203238691	4.52511E-06	1.71221E-05
PANX2	22q13.33	-0.203227426	4.53074E-06	1.71402E-05

PLXNB2	22q13.33	0.203206241	4.54134E-06	1.71771E-05
C15ORF54	15q14	0.203190893	4.54903E-06	1.7203E-05
DDC	7p12.2-p12.1	-0.20317684	4.55609E-06	1.72264E-05
CLIC3	9q34.3	0.203152516	4.56833E-06	1.72694E-05
CCR3	3p21.31	0.203096357	4.5967E-06	1.73734E-05
SDHAF4	6q13	-0.203081137	4.60442E-06	1.73994E-05
FTLP10	4q13.2	-0.203076275	4.60689E-06	1.74054E-05
PPIA	7p13	-0.203015865	4.63766E-06	1.75184E-05
PCBP3	21q22.3	0.202984278	4.65383E-06	1.75762E-05
AHNAK	11q12.3	0.202968724	4.66181E-06	1.7603E-05
EIF3M	11p13	-0.2029588	4.66691E-06	1.7619E-05
NAT14	19q13.42	0.202956223	4.66823E-06	1.76207E-05
SNRPA1	15q26.3	-0.202935993	4.67865E-06	1.76567E-05
AFDN	6q27	0.202870053	4.71275E-06	1.77821E-05
CENPN	16q23.2	-0.202867094	4.71428E-06	1.77845E-05
MLEC	12q24.31	0.20285593	4.72008E-06	1.78031E-05
FCGR1B	1p11.2	0.202843906	4.72634E-06	1.78233E-05
MYL4	17q21.32	0.202820405	4.73858E-06	1.78662E-05
ELAC1	18q21.2	-0.202754777	4.77293E-06	1.79923E-05
CEP104	1p36.32	0.202749433	4.77574E-06	1.79996E-05
SLC30A2	1p36.11	0.202686588	4.80888E-06	1.81211E-05
MFAP3	5q33.2	0.202637021	4.83517E-06	1.82167E-05
ZDHHC11	5p15.33	-0.202622611	4.84284E-06	1.82422E-05
CYBRD1	2q31.1	0.202607725	4.85077E-06	1.82687E-05
TEX11	Xq13.1	0.20258635	4.86219E-06	1.83049E-05
HCCS	Xp22.2	-0.202586349	4.86219E-06	1.83049E-05
DHX36	3q25.2	-0.202580051	4.86556E-06	1.83128E-05
FAM114A2	5q33.2	0.202579006	4.86612E-06	1.83128E-05
RPL39L	3q27.3	-0.202488155	4.91496E-06	1.84932E-05
KCNQ1OT1	11p15.5	0.202484624	4.91687E-06	1.84969E-05
HERC5	4q22.1	0.202455996	4.93236E-06	1.85517E-05
TBCE	1q42.3	-0.202448553	4.93639E-06	1.85635E-05
SLC15A2	3q13.33	-0.202429086	4.94696E-06	1.85997E-05
P3H3	12p13.31	0.202412673	4.95589E-06	1.86298E-05
MCFD2	2p21	0.202410001	4.95735E-06	1.86318E-05
GALNT16	14q24.1	0.202371163	4.97854E-06	1.8708E-05
SOX13	1q32.1	-0.202367822	4.98037E-06	1.87112E-05
PUS7	7q22.3	-0.2023662	4.98126E-06	1.87112E-05
SYN1	Xp11.3-p11.23	0.20236181	4.98366E-06	1.87168E-05
SEC16B	1q25.2	0.202345588	4.99255E-06	1.87467E-05
TAX1BP3	17p13.2	0.202338049	4.99668E-06	1.87587E-05
GAPT	5q11.2	0.202308944	5.01268E-06	1.88153E-05
USP24	1p32.3	0.202289095	5.02362E-06	1.88528E-05
MAST3	19p13.11	0.202275926	5.03088E-06	1.88766E-05
MYT1	20q13.33	0.20223567	5.05317E-06	1.89567E-05
CCL28	5p12	0.202229931	5.05635E-06	1.89651E-05
LINC00189	21q21.3	0.202205034	5.07019E-06	1.90134E-05
HOOK2	19p13.13	-0.202201875	5.07194E-06	1.90165E-05
RPS15A	16p12.3	-0.202172102	5.08854E-06	1.90752E-05
ABRACL	6q24.1	-0.20216838	5.09062E-06	1.90794E-05
WDR37	10p15.3	0.20216046	5.09505E-06	1.90925E-05
CLEC14A	14q21.1	0.202062743	5.14996E-06	1.92946E-05
PLEKHS1	10q25.3	0.202052008	5.15602E-06	1.93138E-05
DMAC2L	14q21.3	-0.202047284	5.1587E-06	1.93187E-05
TAF15	17q12	-0.20204633	5.15924E-06	1.93187E-05
HPCAL4	1p34.2	0.202007606	5.18119E-06	1.93973E-05
MAPKAP1	9q33.3	-0.201954147	5.21164E-06	1.95076E-05
DNAJB2	2q35	0.201922275	5.22988E-06	1.95723E-05

YIPF5	5q31.3	0.201911873	5.23585E-06	1.9591E-05
NRXN2	11q13.1	0.201906243	5.23908E-06	1.95994E-05
CYP4F12	19p13.12	-0.201896141	5.24488E-06	1.96175E-05
CLEC16A	16p13.13	0.201893838	5.2462E-06	1.96188E-05
CUL1	7q36.1	-0.20188878	5.24911E-06	1.96254E-05
PCDHA10	5q31.3	0.20188585	5.2508E-06	1.96254E-05
SF3B6	2p23.3	-0.201884772	5.25142E-06	1.96254E-05
ZBTB5	9p13.2	-0.201884009	5.25186E-06	1.96254E-05
CPLANE2	1p36.13	0.201849751	5.27161E-06	1.96956E-05
PORCN	Xp11.23	0.201840208	5.27712E-06	1.97125E-05
ADSL	22q13.1	-0.201827039	5.28474E-06	1.97373E-05
SULT4A1	22q13.31	0.201804743	5.29766E-06	1.97819E-05
FAM215A	17q21.31	0.201793073	5.30444E-06	1.98036E-05
KLHL35	11q13.4	0.201771883	5.31676E-06	1.98454E-05
PM20D1	1q32.1	0.20177043	5.31761E-06	1.98454E-05
ADCYAP1	18p11.32	0.201763636	5.32157E-06	1.98565E-05
FGF8	10q24.32	-0.201758517	5.32455E-06	1.98639E-05
AMER1	Xq11.2	-0.201750412	5.32928E-06	1.98779E-05
COL6A5	3q22.1	0.201740301	5.33518E-06	1.98963E-05
FNDC4	2p23.3	0.201722356	5.34567E-06	1.99317E-05
INPP4A	2q11.2	0.201698595	5.3596E-06	1.99799E-05
DNAH7	2q32.3	0.201644636	5.39135E-06	2.00946E-05
ABCG4	11q23.3	0.201607668	5.4132E-06	2.01723E-05
LINC00473	6q27	0.201586	5.42605E-06	2.02165E-05
ANKRD33	12q13.13	0.201581624	5.42865E-06	2.02224E-05
KATNBL1	15q14	-0.201558795	5.44223E-06	2.02692E-05
TMEM60	7q11.23	-0.201539232	5.45388E-06	2.03089E-05
LYRM4	6p25.1	-0.201529594	5.45964E-06	2.03266E-05
KIAA1109	4q27	0.201510986	5.47076E-06	2.03642E-05
NAIP	5q13.2	0.201446287	5.5096E-06	2.0505E-05
ATXN1L	16q22.2	0.201436839	5.5153E-06	2.05224E-05
ZMYM4	1p34.3	0.201425007	5.52244E-06	2.05452E-05
ZNF589	3p21.31	-0.201361834	5.5607E-06	2.06838E-05
SHF	15q21.1	0.201357826	5.56314E-06	2.0689E-05
CHST12	7p22.3	0.201351719	5.56685E-06	2.0699E-05
TGM3	20p13	-0.201279559	5.61092E-06	2.0859E-05
GAN	16q23.2	-0.201275187	5.6136E-06	2.08651E-05
ECSCR	5q31.2	0.201272896	5.615E-06	2.08665E-05
ANKRD36BP2	2p11.2	0.201235394	5.63805E-06	2.09458E-05
POGLUT3	11q22.3	0.201234821	5.63841E-06	2.09458E-05
ABITRAM	9q31.3	-0.201218408	5.64852E-06	2.09795E-05
TMEM154	4q31.3	-0.201211823	5.65259E-06	2.09907E-05
HASPIN	17p13.2	-0.201209438	5.65406E-06	2.09923E-05
NUGGC	8p21.1	0.201204953	5.65683E-06	2.09987E-05
DDOST	1p36.12	0.201171172	5.67773E-06	2.10725E-05
CACNG4	17q24.2	0.201112198	5.71441E-06	2.12041E-05
ADA2	22q11.1	0.201110767	5.7153E-06	2.12041E-05
NENF	1q32.3	-0.201094926	5.72519E-06	2.12369E-05
CR1	1q32.2	0.201046544	5.7555E-06	2.13454E-05
SNX17	2p23.3	-0.201043014	5.75772E-06	2.13497E-05
CRYBB3	22q11.23	-0.200996436	5.78705E-06	2.14545E-05
ROS1	6q22.1	0.200957441	5.81172E-06	2.1542E-05
WDR63	1p22.3	0.200939711	5.82297E-06	2.15797E-05
MSGN1	2p24.2	-0.200937076	5.82464E-06	2.1582E-05
VAC14	16q22.1-q22.2	0.200919341	5.83592E-06	2.16198E-05
MEIS1	2p14	0.200837751	5.88806E-06	2.1809E-05
ZNF467	7q36.1	0.200826395	5.89535E-06	2.1832E-05
FAM228A	2p23.3	0.200805131	5.90903E-06	2.18785E-05

AAK1	2p13.3	0.200803493	5.91009E-06	2.18785E-05
MAP3K6	1p36.11	0.20076652	5.93395E-06	2.19628E-05
SLC26A11	17q25.3	-0.200753394	5.94244E-06	2.19884E-05
HYAL3	3p21.31	-0.200752439	5.94306E-06	2.19884E-05
MC1R	16q24.3	0.200725677	5.96041E-06	2.20486E-05
ZNF43	19p12	0.20071341	5.96838E-06	2.20741E-05
HTR1D	1p36.12	0.200603297	6.04039E-06	2.23363E-05
CENPP	9q22.31	-0.200599375	6.04297E-06	2.23417E-05
CPLX2	5q35.2	-0.200592029	6.0478E-06	2.23555E-05
MAP4K3	2p22.1	-0.200513114	6.09998E-06	2.25442E-05
ADAM29	4q34.1	0.200476448	6.12436E-06	2.26302E-05
KCNQ3	8q24.22	0.200433215	6.15324E-06	2.27327E-05
PADI4	1p36.13	0.200408802	6.1696E-06	2.2789E-05
FGF9	13q12.11	0.200344695	6.21276E-06	2.29442E-05
LLPH	12q14.3	-0.200327504	6.22439E-06	2.2983E-05
ABCA5	17q24.3	-0.200291147	6.24904E-06	2.30698E-05
CYB5R4	6q14.2	-0.200260038	6.27021E-06	2.31437E-05
RPS4X	Xq13.1	-0.200244197	6.28101E-06	2.31793E-05
FOXK2	17q25.3	-0.200230169	6.29059E-06	2.32104E-05
CAMK4	5q22.1	0.200221738	6.29636E-06	2.32275E-05
CENPO	2p23.3	-0.200213088	6.30228E-06	2.32451E-05
DARS2	1q25.1	-0.200181788	6.32375E-06	2.332E-05
PRKRA	2q31.2	-0.200170337	6.33162E-06	2.33448E-05
ABHD4	14q11.2	-0.200164611	6.33556E-06	2.3355E-05
ADGRL2	1p31.1	0.200159744	6.33891E-06	2.33631E-05
TMSB15B	Xq22.2	0.200142281	6.35095E-06	2.34032E-05
FCRLA	1q23.3	0.200127776	6.36097E-06	2.34358E-05
GAS2L1P2	9q22.33	0.200051948	6.41356E-06	2.36253E-05
SRSF1	17q22	-0.200036071	6.42463E-06	2.36617E-05
GBP1	1p22.2	0.200014028	6.44002E-06	2.37141E-05
DUSP22	6p25.3	0.200008259	6.44405E-06	2.37246E-05
ANKFY1	17p13.2	0.199999714	6.45004E-06	2.37423E-05
CCNI	4q21.1	0.199958394	6.47903E-06	2.38447E-05
RPL8	8q24.3	-0.199947802	6.48648E-06	2.38677E-05
CDC34	19p13.3	-0.199920987	6.50538E-06	2.39329E-05
1-Mar	4q32.2-q32.3	0.199914593	6.5099E-06	2.39452E-05
DOCK7	1p31.3	0.199898466	6.5213E-06	2.39827E-05
AVIL	12q14.1	0.199884725	6.53103E-06	2.40141E-05
GLRX3	10q26.3	-0.199881957	6.53299E-06	2.4017E-05
ADAL	15q15.3	-0.199879858	6.53447E-06	2.40181E-05
BFSP2	3q22.1	0.199869396	6.54189E-06	2.4041E-05
NCBP2	3q29	-0.199825942	6.5728E-06	2.41501E-05
RGS18	1q31.2	0.199809151	6.58478E-06	2.41891E-05
MAP3K14	17q21.31	0.199807715	6.58581E-06	2.41891E-05
USP31	16p12.2	0.199779183	6.60621E-06	2.42597E-05
ADGRA3	4p15.2	0.199774602	6.6095E-06	2.42673E-05
TRMU	22q13.31	-0.199726698	6.64391E-06	2.43892E-05
RSAD2	2p25.2	0.199714006	6.65306E-06	2.44183E-05
CAVIN4	9q31.1	0.19966186	6.69076E-06	2.45523E-05
S1PR4	19p13.3	0.199659518	6.69246E-06	2.4554E-05
ASTN1	1q25.2	0.199649434	6.69978E-06	2.45764E-05
DOP1A	6q14.1	0.199606651	6.73091E-06	2.46861E-05
FCRL6	1q23.2	0.199592456	6.74127E-06	2.47196E-05
NDUFAF5	20p12.1	-0.199532409	6.78525E-06	2.48764E-05
TECPR1	7q21.3	0.199510275	6.80154E-06	2.49316E-05
BUD23	7q11.23	-0.199478207	6.82519E-06	2.50137E-05
HOOK3	8p11.21	0.199444712	6.84999E-06	2.51E-05
TIGIT	3q13.31	0.199441849	6.85211E-06	2.51033E-05

TMEM91	19q13.2	0.199433547	6.85827E-06	2.51213E-05
VDAC2	10q22.2	-0.199407496	6.87764E-06	2.51876E-05
HPD	12q24.31	-0.199391371	6.88965E-06	2.5227E-05
DNAL1	14q24.3	0.199363504	6.91045E-06	2.52986E-05
CTBS	1p22.3	0.199337739	6.92975E-06	2.53647E-05
NAA50	3q13.31	-0.19930787	6.95217E-06	2.54412E-05
IFIH1	2q24.2	0.199306534	6.95318E-06	2.54412E-05
YBEY	21q22.3	-0.199289649	6.96589E-06	2.54831E-05
ZNF615	19q13.41	0.199286399	6.96834E-06	2.54874E-05
RCL1	9p24.1	-0.19927428	6.97748E-06	2.55162E-05
SAT2	17p13.1	-0.199233056	7.00865E-06	2.56256E-05
DNAJC1	10p12.31	0.199205578	7.02951E-06	2.56972E-05
RPS2	16p13.3	-0.199189828	7.04149E-06	2.57363E-05
SLC29A2	11q13.2	-0.199165303	7.06018E-06	2.58E-05
ASAP1	8q24.21-q24.22	0.199159248	7.0648E-06	2.58122E-05
EPN3	17q21.33	-0.199112436	7.10064E-06	2.59384E-05
EIF5	14q32.32	-0.199045542	7.15215E-06	2.61218E-05
DOC2A	16p11.2	-0.19903922	7.15703E-06	2.6135E-05
SHC2	19p13.3	0.199016914	7.1743E-06	2.61933E-05
KCNE5	Xq23	0.199014409	7.17624E-06	2.61956E-05
FCER1A	1q23.2	0.198991415	7.19408E-06	2.6256E-05
ABCB10	1q42.13	-0.198984469	7.19948E-06	2.6271E-05
TMEM205	19p13.2	-0.198938569	7.23526E-06	2.63967E-05
CD27	12p13.31	0.198933511	7.23921E-06	2.64064E-05
SLC22A16	6q21 6q21-q22.1	0.19891888	7.25065E-06	2.64433E-05
F7	13q34	0.198878654	7.28221E-06	2.65536E-05
SLC35E2A	1p36.33	0.198855834	7.30016E-06	2.66143E-05
VAPA	18p11.22	-0.198736837	7.3945E-06	2.69533E-05
NOL8	9q22.31	-0.198712217	7.41416E-06	2.70172E-05
CMTR1	6p21.2	0.198711549	7.41469E-06	2.70172E-05
MTX2	2q31.1	-0.198673378	7.44528E-06	2.71237E-05
C1ORF127	1p36.22	0.198639784	7.47229E-06	2.72172E-05
PPM1B	2p21	-0.19862891	7.48106E-06	2.72442E-05
CLMN	14q32.13	0.198601713	7.50302E-06	2.73193E-05
LOC441666	10q11.21	0.198598826	7.50536E-06	2.73229E-05
EXTL3	8p21.1	0.19857862	7.52172E-06	2.73775E-05
HLA-DPB2	6p21.32	0.198509094	7.57829E-06	2.75784E-05
TAF6L	11q12.3	-0.198488303	7.59528E-06	2.76353E-05
TPSB2	16p13.3	0.198473078	7.60775E-06	2.76756E-05
MYCL	1p34.2	-0.19847136	7.60916E-06	2.76758E-05
NEU3	11q13.4	0.198459198	7.61913E-06	2.77071E-05
SUZ12P1	17q11.2	-0.198431758	7.64168E-06	2.77841E-05
WDR45B	17q25.3	-0.19841773	7.65323E-06	2.7821E-05
PPP1R32	11q12.2	0.198364014	7.69763E-06	2.79774E-05
TPGS2	18q12.2	-0.198333278	7.72314E-06	2.80651E-05
ATRIP	3p21.31	-0.198326507	7.72877E-06	2.80805E-05
ZNF45	19q13.31	0.198304459	7.74714E-06	2.81421E-05
LDHAL6B	15q22.2	0.198254089	7.78924E-06	2.829E-05
TLNRD1	15q25.1	0.198197486	7.83682E-06	2.84577E-05
AFAP1-AS1	4p16.1	0.198190042	7.8431E-06	2.84753E-05
CALML3	10p15.1	-0.198181186	7.85057E-06	2.84973E-05
ATP6V0D2	8q21.3	0.19816275	7.86616E-06	2.85488E-05
TRPM1	15q13.3	-0.19815693	7.87108E-06	2.85615E-05
BAG6	6p21.33	0.198154448	7.87318E-06	2.8564E-05
MIGA1	1p31.1	0.198151204	7.87593E-06	2.85688E-05
TSN	2q14.3	-0.198144333	7.88175E-06	2.85848E-05
CEBPA	19q13.11	-0.198129065	7.8947E-06	2.86266E-05
TPSAB1	16p13.3	0.198099387	7.91994E-06	2.8713E-05

ABCA1	9q31.1	0.198092802	7.92555E-06	2.87277E-05
NUDT12	5q21.2	-0.198091276	7.92685E-06	2.87277E-05
OR51E1	11p15.4	0.198086976	7.93051E-06	2.87358E-05
WDR5	9q34.2	-0.198083928	7.93311E-06	2.87401E-05
ADAM28	8p21.2	0.198030203	7.97906E-06	2.89014E-05
LMCD1	3p25.3	0.198008307	7.99786E-06	2.89642E-05
CYP4F2	19p13.12	-0.197973836	8.02754E-06	2.90665E-05
LGMN	14q32.12	0.197964454	8.03564E-06	2.90906E-05
CLUH	17p13.3	-0.197870745	8.11693E-06	2.93797E-05
TERC	3q26.2	-0.197815845	8.16492E-06	2.95481E-05
MPP1	Xq28	0.197804805	8.17461E-06	2.95778E-05
FZD2	17q21.31	0.197764535	8.21002E-06	2.97006E-05
NLRC3	16p13.3	0.197745831	8.22652E-06	2.9755E-05
USP4	3p21.31	0.197724556	8.24532E-06	2.98176E-05
TMEM17	2p15	-0.197705847	8.26189E-06	2.98722E-05
P2RY10	Xq21.1	0.197699072	8.2679E-06	2.98886E-05
TRAF7	16p13.3	-0.197680464	8.28443E-06	2.99429E-05
FBXL13	7q22.1	0.197646605	8.31457E-06	3.00465E-05
STAR	8p11.23	-0.197643725	8.31714E-06	3.00504E-05
PLEKHG4B	5p15.33	0.197635422	8.32455E-06	3.00718E-05
INIP	9q32	-0.197629506	8.32984E-06	3.00855E-05
PITPNM1	11q13.2	0.197600401	8.35588E-06	3.01742E-05
NCF1C	7q11.23	0.197597443	8.35853E-06	3.01784E-05
MYF6	12q21.31	0.197591765	8.36362E-06	3.01913E-05
NCF1B	7q11.23	0.197527786	8.4212E-06	3.03937E-05
OR2A1	7q35	-0.197519561	8.42862E-06	3.04151E-05
ECEL1	2q37.1	0.197490604	8.45483E-06	3.05042E-05
TIGD5	8q24.3	-0.197474438	8.46949E-06	3.05516E-05
BEND5	1p33	0.197444951	8.4963E-06	3.06429E-05
GTPBP2	6p21.1	0.19735668	8.57703E-06	3.09285E-05
TLE3	15q23	0.197331775	8.59994E-06	3.10056E-05
IGSF6	16p12.2	0.197316984	8.61358E-06	3.10492E-05
MRPS17	7p11.2	-0.197293795	8.63499E-06	3.11208E-05
EFNB3	17p13.1	0.197263926	8.66265E-06	3.12149E-05
SLC4A10	2q24.2	0.197231905	8.6924E-06	3.13165E-05
SLC47A1	17p11.2	-0.197060286	8.8535E-06	3.18868E-05
LBHD1	11q12.3	-0.197059904	8.85386E-06	3.18868E-05
PPP1R2	3q29	-0.197039578	8.87312E-06	3.19505E-05
PSMB5	14q11.2	-0.197015722	8.89579E-06	3.20264E-05
OR6C2	12q13.2	-0.197002046	8.90881E-06	3.20676E-05
ORC1	1p32.3	-0.196996255	8.91433E-06	3.20817E-05
C2ORF69	2q33.1	-0.19697278	8.93673E-06	3.21566E-05
ASAP3	1p36.12	0.196922871	8.98453E-06	3.23228E-05
LRP8	1p32.3	-0.196820574	9.08328E-06	3.26723E-05
PCDHGB3	5q31.3	0.196802479	9.10085E-06	3.27297E-05
ZNF649	19q13.41	0.196788224	9.11472E-06	3.27737E-05
HES6	2q37.3	-0.196684973	9.21577E-06	3.31311E-05
RSRC1	3q25.32	-0.196674285	9.22629E-06	3.3163E-05
DUSP13	10q22.2	-0.196650578	9.24966E-06	3.32411E-05
GPR174	Xq21.1	0.196644891	9.25528E-06	3.32554E-05
MYPN	10q21.3	0.196637715	9.26237E-06	3.32749E-05
ARIH2OS	3p21.31	-0.196608684	9.29111E-06	3.33723E-05
TMPO-AS1	12q23.1	-0.196606532	9.29324E-06	3.3374E-05
GEMIN2	14q21.1	-0.196596894	9.30281E-06	3.34024E-05
CRYBG1	6q21	0.19658821	9.31143E-06	3.34274E-05
RAB9B	Xq22.2	0.196568049	9.33148E-06	3.34934E-05
PNOC	8p21.1	0.19653441	9.36503E-06	3.36078E-05
IGFBP5	2q35	0.196531145	9.36829E-06	3.36136E-05

HCST	19q13.12	0.196523797	9.37564E-06	3.3634E-05
UQCRBP1	Xp11.21	-0.196517456	9.38198E-06	3.36507E-05
KRTAP4-1	17q21.2	-0.19648703	9.41247E-06	3.37541E-05
C12ORF56	12q14.2	-0.196482085	9.41744E-06	3.37659E-05
NORAD	20q11.23	0.196478756	9.42078E-06	3.37719E-05
SIGLEC16	19q13.33	0.196460039	9.4396E-06	3.38334E-05
TPRA1	3q21.3	-0.196389627	9.51073E-06	3.40817E-05
KRT222	17q21.2	-0.1963881	9.51228E-06	3.40817E-05
FOXA1	14q21.1	-0.196369301	9.53136E-06	3.4144E-05
CDC123	10p14-p13	-0.196361381	9.53941E-06	3.41668E-05
RDH16	12q13.3	0.196349166	9.55183E-06	3.42052E-05
UFM1	13q13.3	0.196337333	9.56389E-06	3.42423E-05
SLC16A3	17q25.3	0.196315958	9.5857E-06	3.43143E-05
COCH	14q12	-0.196304507	9.5974E-06	3.43479E-05
DHX8	17q21.31	-0.196303457	9.59847E-06	3.43479E-05
LY86	6p25.1	0.196205358	9.6993E-06	3.46998E-05
UPK1B	3q13.32	-0.196204425	9.70026E-06	3.46998E-05
NQO2	6p25.2	-0.196198965	9.7059E-06	3.47138E-05
SLC49A4	3q21.1	-0.196168619	9.73731E-06	3.482E-05
C2CD4D-AS1	1q21.3	0.196159374	9.7469E-06	3.48481E-05
NIPBL	5p13.2	0.196121383	9.7864E-06	3.49831E-05
INPP5F	10q26.11	0.196025193	9.8871E-06	3.53368E-05
LRRC75A	17p11.2	0.195944423	9.97241E-06	3.56354E-05
N4BP1	16q12.1	0.195934537	9.9829E-06	3.56666E-05
NLRP6	11p15.5	0.195880328	1.00406E-05	3.58664E-05
SESN2	1p35.3	0.195872796	1.00487E-05	3.58888E-05
SNAI3	16q24.2	0.195860868	1.00614E-05	3.5928E-05
PDCD1	2q37.3	0.195840738	1.0083E-05	3.59986E-05
ELF3	1q32.1	-0.195837966	1.00859E-05	3.60028E-05
LONRF1	8p23.1	-0.195833576	1.00906E-05	3.60133E-05
GMPPB	3p21.31	0.195827087	1.00976E-05	3.60317E-05
BCAM	19q13.32	0.195810292	1.01156E-05	3.60874E-05
EBF3	10q26.3	0.195809235	1.01168E-05	3.60874E-05
RINT1	7q22.3	-0.195786053	1.01417E-05	3.617E-05
COPS3	17p11.2	-0.195754281	1.0176E-05	3.62859E-05
NDUFA4	7p21.3	-0.195740344	1.01911E-05	3.63333E-05
MROH7	1p32.3	0.195737868	1.01938E-05	3.63364E-05
SCARNA12	12p13.31	-0.195719932	1.02132E-05	3.63993E-05
SAMM50	22q13.31	-0.195711721	1.02221E-05	3.64246E-05
PC	11q13.2	-0.195689672	1.02461E-05	3.65036E-05
NEFH	22q12.2	0.195619438	1.03228E-05	3.67704E-05
SMCO3	12p12.3	0.195613961	1.03288E-05	3.67853E-05
DSCAM	21q22.2	0.195560692	1.03874E-05	3.69873E-05
ALOX12P2	17p13.1	-0.195541857	1.04082E-05	3.70548E-05
JAGN1	3p25.3	-0.195513515	1.04395E-05	3.71599E-05
ARRDC1-AS1	9q34.3	-0.195498437	1.04563E-05	3.72128E-05
MMS19	10q24.1	0.195440609	1.05206E-05	3.74352E-05
MTUS2	13q12.3	0.195432818	1.05293E-05	3.74596E-05
ASB9	Xp22.2	-0.195422382	1.0541E-05	3.74916E-05
PKP4	2q24.1	-0.195421428	1.0542E-05	3.74916E-05
DTD2	14q12	-0.195402247	1.05635E-05	3.75614E-05
NACA	12q13.3	-0.195382876	1.05852E-05	3.7632E-05
XYLB	3p22.2	-0.195379727	1.05888E-05	3.76379E-05
PPCDC	15q24.2	-0.195331632	1.06429E-05	3.78237E-05
LENEP	1q21.3	-0.195327545	1.06475E-05	3.78334E-05
RYR3	15q13.3-q14	0.1953156	1.0661E-05	3.78722E-05
HERC1	15q22.31	0.19531455	1.06622E-05	3.78722E-05
MANF	3p21.2	0.195303767	1.06744E-05	3.79089E-05

PYROXD2	10q24.2	0.195300522	1.06781E-05	3.79153E-05
PSMD2	3q27.1	-0.19528096	1.07002E-05	3.79873E-05
LIN7B	19q13.33	-0.195274089	1.0708E-05	3.80083E-05
APOE	19q13.32	0.195264451	1.0719E-05	3.80404E-05
RBBP7	Xp22.2	-0.195260443	1.07235E-05	3.80499E-05
HIGD2A	5q35.2	-0.195202138	1.079E-05	3.8279E-05
CENPL	1q25.1	-0.195157764	1.08408E-05	3.84526E-05
TRO	Xp11.21	0.195107283	1.08989E-05	3.86519E-05
TTC7A	2p21	0.195069113	1.09431E-05	3.88016E-05
MCTS1	Xq24	-0.19506625	1.09464E-05	3.88066E-05
NBPF15	1q21.1	0.195059856	1.09538E-05	3.8826E-05
EPOP	17q12	-0.195053463	1.09612E-05	3.88455E-05
GZMK	5q11.2	0.19504268	1.09737E-05	3.88831E-05
IMMT	2p11.2 2	-0.194994585	1.10297E-05	3.90747E-05
DMGDH	5q14.1	0.194975324	1.10523E-05	3.91475E-05
GNG12	1p31.3	0.194948971	1.10831E-05	3.92469E-05
FDX2	19p13.2	-0.194947444	1.10849E-05	3.92469E-05
ADRB2	5q32	0.194946394	1.10861E-05	3.92469E-05
EIF4EBP1	8p11.23	-0.194940573	1.1093E-05	3.92642E-05
CXCR1	2q35	0.194915163	1.11228E-05	3.9363E-05
KLF4	9q31.2	-0.19489639	1.11449E-05	3.94343E-05
CD300LF	17q25.1	0.194892149	1.11499E-05	3.94451E-05
TPI1	12p13.31	-0.194887802	1.11551E-05	3.94563E-05
SORCS1	10q25.1	0.194871548	1.11743E-05	3.95173E-05
DISP1	1q41	0.19485593	1.11927E-05	3.95757E-05
PKHD1L1	8q23.1-q23.2	0.194799532	1.12597E-05	3.98054E-05
SAMD3	6q23.1	0.194738554	1.13325E-05	4.00558E-05
HAR1A	20q13.33	0.194716471	1.1359E-05	4.01424E-05
GFI1B	9q34.13	0.194706352	1.13711E-05	4.01783E-05
MRPS18A	6p21.1	-0.194695517	1.13842E-05	4.02173E-05
ZNF320	19q13.41	0.194691319	1.13892E-05	4.02281E-05
OBSL1	2q35	0.194674905	1.1409E-05	4.02909E-05
HMGB3	Xq28	-0.194663072	1.14233E-05	4.03343E-05
KMO	1q43	0.194587399	1.1515E-05	4.06509E-05
LYSMD3	5q14.3	0.194584154	1.15189E-05	4.06555E-05
LY96	8q21.11	0.194583009	1.15203E-05	4.06555E-05
RUNDC3B	7q21.12	0.194530959	1.15838E-05	4.08724E-05
B3GALT1	2q24.3	-0.194499146	1.16228E-05	4.10028E-05
DRG1	22q12.2	-0.194488251	1.16361E-05	4.10428E-05
METTL21A	2q33.3	-0.194486533	1.16383E-05	4.10431E-05
ACYP1	14q24.3	-0.194445118	1.16892E-05	4.1215E-05
OLMALINC	10q24.31	-0.194442732	1.16922E-05	4.1215E-05
BMS1P20	22q11.22	0.194441969	1.16931E-05	4.1215E-05
CLRN3	10q26.2	0.194436566	1.16998E-05	4.12313E-05
BRINP2	1q25.2	0.19442749	1.1711E-05	4.12636E-05
FAM189B	1q22	-0.194397977	1.17475E-05	4.13851E-05
ILF2	1q21.3	-0.194392728	1.1754E-05	4.14008E-05
COL11A2	6p21.32	0.194361672	1.17926E-05	4.15294E-05
GRN	17q21.31	0.194316292	1.18492E-05	4.17214E-05
TCTEX1D1	1p31.3	0.194311913	1.18547E-05	4.17334E-05
ZNF71	19q13.43	0.194289095	1.18832E-05	4.18266E-05
GREB1	2p25.1	0.194279075	1.18958E-05	4.18635E-05
PSTPIP1	15q24.3	0.194273254	1.19031E-05	4.18819E-05
SERF1A	5q13.2	-0.194256077	1.19247E-05	4.19506E-05
ZBTB26	9q33.2	-0.194183172	1.20167E-05	4.22669E-05
DNAH6	2p11.2	0.194170105	1.20333E-05	4.23177E-05
RAD51B	14q24.1	-0.194102154	1.21197E-05	4.26144E-05
SNHG17	20q11.23	-0.194084882	1.21418E-05	4.26846E-05

IFRD1	7q31.1	-0.194036214	1.22042E-05	4.28965E-05
RPTN	1q21.3	-0.193995695	1.22564E-05	4.30724E-05
ZNF808	19q13.41	0.193987929	1.22664E-05	4.31002E-05
DBF4B	17q21.31 17q21	-0.193982203	1.22738E-05	4.31186E-05
CYP2U1	4q25	0.193942983	1.23246E-05	4.32895E-05
ARHGAP20	11q22.3-q23.1	0.193940979	1.23272E-05	4.32911E-05
ZSCAN31	6p22.1 6p22.3-p22	-0.193919794	1.23547E-05	4.33802E-05
ZKSCAN8	6p22.1	0.193917408	1.23578E-05	4.33836E-05
CHD4	12p13.31	0.193915691	1.23601E-05	4.33839E-05
DNM1P46	15q26.3	0.193892196	1.23907E-05	4.34837E-05
ELOB	16p13.3	-0.193879333	1.24075E-05	4.3535E-05
ALCAM	3q13.11	-0.193839731	1.24593E-05	4.37071E-05
KLRG1	12p13.31	0.193838543	1.24608E-05	4.37071E-05
SCML4	6q21	0.193830861	1.24709E-05	4.37348E-05
RPSA	3p22.1	-0.193793258	1.25203E-05	4.39006E-05
ZDHHC9	Xq26.1	-0.193773028	1.2547E-05	4.39864E-05
KREMEN2	16p13.3	0.193761767	1.25619E-05	4.40234E-05
FAM135A	6q13	-0.193761099	1.25628E-05	4.40234E-05
TENM2	5q34	0.193760096	1.25641E-05	4.40234E-05
VTN	17q11.2	0.193729123	1.26051E-05	4.41593E-05
PRR22	19p13.3	-0.193621547	1.27484E-05	4.46538E-05
C1QL2	2q14.2	0.193598876	1.27788E-05	4.47526E-05
DTL	1q32.3	-0.193554405	1.28387E-05	4.49544E-05
CCSER2	10q23.1	0.193548393	1.28468E-05	4.4975E-05
NFATC1	18q23	0.193540759	1.28571E-05	4.50032E-05
DNALI1	1p34.3	0.193537801	1.28611E-05	4.50094E-05
TAF9	5q13.2	-0.193517475	1.28886E-05	4.50978E-05
GRAPL	17p11.2	0.193510718	1.28978E-05	4.5122E-05
TNIK	3q26.2-q26.31	0.193499821	1.29125E-05	4.51659E-05
HIF3A	19q13.32	0.193494782	1.29194E-05	4.51819E-05
TRMT112	11q13.1	-0.193475678	1.29453E-05	4.52648E-05
ZNF251	8q24.3	0.193439511	1.29946E-05	4.54292E-05
ATP13A4	3q29	-0.193404733	1.30421E-05	4.55875E-05
HIPK4	19q13.2	0.193394956	1.30555E-05	4.56264E-05
CDKN2AIPNL	5q31.1	-0.193392466	1.30589E-05	4.56304E-05
EMX2OS	10q26.11	0.193366197	1.3095E-05	4.57485E-05
ZNF676	19p12	0.193359192	1.31046E-05	4.57742E-05
CCRL2	3p21.31	0.193350955	1.31159E-05	4.58059E-05
CBS	21q22.3	-0.19332853	1.31468E-05	4.59059E-05
MAZ	16p11.2	-0.193316316	1.31637E-05	4.59568E-05
NEURL3	2q11.2	0.193309974	1.31725E-05	4.59794E-05
C1QA	1p36.12	0.193305532	1.31786E-05	4.59929E-05
IMMP1L	11p13	-0.193285588	1.32062E-05	4.60813E-05
RETREG1	5p15.1	0.193270797	1.32267E-05	4.61449E-05
SLC25A41	19p13.3	-0.193256773	1.32462E-05	4.62048E-05
CENPV	17p11.2	-0.193247418	1.32592E-05	4.62422E-05
GINS1	20p11.21	-0.193240165	1.32693E-05	4.62694E-05
DNAJC24	11p13	0.193233008	1.32793E-05	4.62885E-05
COL4A4	2q36.3	0.193232913	1.32794E-05	4.62885E-05
VEGFB	11q13.1	0.19323129	1.32816E-05	4.62885E-05
FAM110C	2p25.3	-0.193205639	1.33174E-05	4.64037E-05
EFHD2	1p36.21	0.193204285	1.33193E-05	4.64037E-05
RALGAPB	20q11.23	0.193190448	1.33387E-05	4.64631E-05
LINC00323	21q22.2	0.193179779	1.33536E-05	4.65071E-05
CHAF1B	21q22.12-q22.13	-0.193152182	1.33923E-05	4.66338E-05
ARRB2	17p13.2	0.193137772	1.34125E-05	4.66963E-05
IRX4	5p15.33	0.193128955	1.34249E-05	4.67306E-05
ELOVL2	6p24.2	0.193127466	1.3427E-05	4.67306E-05

SLC20A2	8p11.21	-0.193114011	1.3446E-05	4.67885E-05
DLX3	17q21.33	0.193106809	1.34561E-05	4.68158E-05
LCTL	15q22.31	0.193101986	1.34629E-05	4.68314E-05
SMC6	2p24.2	-0.193060477	1.35216E-05	4.70274E-05
EPHA7	6q16.1	-0.193031645	1.35626E-05	4.71616E-05
C1QB	1p36.12	0.193024978	1.3572E-05	4.71864E-05
ZNF746	7q36.1	-0.193015435	1.35856E-05	4.72255E-05
DAZAP1	19p13.3	-0.192989818	1.36221E-05	4.73443E-05
TOMM70	3q12.2	-0.19297965	1.36366E-05	4.73866E-05
RPAP3	12q13.11	-0.19296276	1.36608E-05	4.74623E-05
ZBTB33	Xq24	-0.192934418	1.37014E-05	4.75952E-05
DKK2	4q25	0.192926688	1.37125E-05	4.76255E-05
SLBP	4p16.3	-0.192904454	1.37445E-05	4.77283E-05
APLN	Xq26.1	0.192888804	1.3767E-05	4.77984E-05
PCBP4	3p21.2	0.192879695	1.37801E-05	4.78358E-05
TFEC	7q31.2	0.192874681	1.37874E-05	4.78527E-05
SLC12A7	5p15.33	0.192866188	1.37996E-05	4.7887E-05
CHERP	19p13.11	-0.192855023	1.38158E-05	4.79348E-05
SNORD116-4	15q11.2	0.19284913	1.38243E-05	4.79561E-05
DUSP26	8p12	0.192792777	1.39061E-05	4.82315E-05
PGRMC1	Xq24	-0.192777155	1.39288E-05	4.83021E-05
RBM22	5q33.1	0.19271465	1.40202E-05	4.86107E-05
B4GAT1	11q13.2	0.192706635	1.4032E-05	4.86431E-05
MMP17	12q24.33	0.192703199	1.4037E-05	4.86522E-05
PWWP3B	Xq22.3	0.192695404	1.40485E-05	4.86836E-05
CCR7	17q21.2	0.192692989	1.4052E-05	4.86875E-05
HCFC1R1	16p13.3	0.192676771	1.40759E-05	4.87618E-05
NBEA	13q13.3	0.19263182	1.41422E-05	4.89831E-05
CDC14B	9q22.32-q22.33	-0.192625045	1.41522E-05	4.90094E-05
CD207	2p13.3	0.192619328	1.41607E-05	4.90303E-05
HIPK2	7q34	0.192583343	1.42141E-05	4.92067E-05
SPATA41	15q26.3	-0.192566362	1.42393E-05	4.92857E-05
ACER3	11q13.5	0.192496319	1.43439E-05	4.96377E-05
VPS13D	1p36.22-p36.21	0.192494978	1.4346E-05	4.96377E-05
RBM4	11q13.2	-0.192492115	1.43503E-05	4.9644E-05
LRRC45	17q25.3	-0.192458482	1.44008E-05	4.98103E-05
VPS8	3q27.2	-0.192438676	1.44306E-05	4.99049E-05
PHKG2	16p11.2	-0.192424076	1.44526E-05	4.99725E-05
COQ4	9q34.11	-0.192421118	1.44571E-05	4.99794E-05
NLGN4X	Xp22.32-p22.31	0.192412816	1.44696E-05	5.00142E-05
SUGT1	13q14.3	0.192401746	1.44864E-05	5.00634E-05
ATF6B	6p21.32	0.192347162	1.45692E-05	5.03343E-05
C1ORF216	1p34.3	0.19234554	1.45716E-05	5.03343E-05
TMEM175	4p16.3	0.192345158	1.45722E-05	5.03343E-05
KPNB1	17q21.32	-0.192288379	1.46589E-05	5.06249E-05
ALKBH3	11p11.2	-0.192276069	1.46777E-05	5.06767E-05
SEPTIN11	4q21.1	0.192275306	1.46789E-05	5.06767E-05
NIT2	3q12.2	-0.192270444	1.46863E-05	5.06937E-05
ZNF304	19q13.43	0.192252404	1.4714E-05	5.07806E-05
ZFAND2B	2q35	0.192241811	1.47303E-05	5.0828E-05
HCN4	15q24.1	0.192239103	1.47344E-05	5.08337E-05
FAM71F1	7q32.1	-0.192207177	1.47836E-05	5.09946E-05
CMC4	Xq28	-0.192200873	1.47933E-05	5.10194E-05
TBC1D19	4p15.2	0.192165756	1.48476E-05	5.11927E-05
EGF	4q25	-0.192165106	1.48486E-05	5.11927E-05
ZNF525	19q13.42	0.192154973	1.48643E-05	5.12381E-05
ITPR3	6p21.31	0.192122146	1.49153E-05	5.1405E-05
PCDHGB2	5q31.3	0.192070386	1.4996E-05	5.16744E-05

BCL9	1q21.2	0.192054393	1.50211E-05	5.17518E-05
OVOL1	11q13.1	-0.192043515	1.50381E-05	5.18017E-05
BORCS8	19p13.11	-0.19203922	1.50449E-05	5.1816E-05
BCDIN3D	12q13.12	-0.192000668	1.51054E-05	5.20158E-05
MAPK13	6p21.31	-0.191989694	1.51227E-05	5.20664E-05
SCRN3	2q31.1	-0.191949042	1.51869E-05	5.22786E-05
GBP5	1p22.2	0.191937496	1.52052E-05	5.23326E-05
TPBG	6q14.1	0.191930243	1.52167E-05	5.23632E-05
JUP	17q21.2	-0.191895126	1.52725E-05	5.25462E-05
SOWAHB	4q21.1	-0.191862781	1.5324E-05	5.27145E-05
RAX	18q21.32	0.191857683	1.53322E-05	5.27335E-05
CTAGE6	7q35	-0.191854162	1.53378E-05	5.27439E-05
TMTC3	12q21.32	-0.191832144	1.5373E-05	5.28559E-05
TLDC2	20q11.23	-0.191819644	1.5393E-05	5.29158E-05
UBL4B	1p13.3	0.191817741	1.53961E-05	5.29172E-05
MRPL14	6p21.1	-0.191802658	1.54203E-05	5.29914E-05
SMC4	3q25.33	-0.191793974	1.54342E-05	5.30303E-05
SRPRB	3q22.1	-0.191790729	1.54394E-05	5.30392E-05
VPS13B	8q22.2	0.1917663	1.54787E-05	5.31652E-05
SLF2	10q24.31	0.191740726	1.552E-05	5.32978E-05
HYI	1p34.2	0.191728893	1.55391E-05	5.33545E-05
METTL27	7q11.23	-0.191720877	1.55521E-05	5.33899E-05
ELL3	15q15.3	-0.19169368	1.55962E-05	5.35321E-05
IL17REL	22q13.33	0.191683953	1.5612E-05	5.35772E-05
INO80E	16p11.2	-0.191671594	1.56321E-05	5.3637E-05
LOC100130264	20p11.23	0.191664406	1.56438E-05	5.3668E-05
UBE2D1	10q21.1	0.191662094	1.56475E-05	5.36718E-05
NLRP11	19q13.42-q13.43	0.191649848	1.56675E-05	5.37311E-05
LIMCH1	4p13	0.191628981	1.57015E-05	5.38322E-05
TRPV4	12q24.11	-0.191627168	1.57045E-05	5.38322E-05
EMC4	15q14	-0.191626882	1.5705E-05	5.38322E-05
FOXRED2	22q12.3	-0.191614285	1.57255E-05	5.38936E-05
KBTBD11	8p23.3	0.191609323	1.57337E-05	5.39123E-05
RNF167	17p13.2	-0.19160646	1.57383E-05	5.39192E-05
CYTOR	2p11.2	0.191600215	1.57486E-05	5.39451E-05
SZRD1	1p36.13	0.191596727	1.57543E-05	5.39555E-05
HEPHL1	11q21	0.191562152	1.5811E-05	5.41407E-05
KRT79	12q13.13	0.191543027	1.58425E-05	5.42393E-05
C11ORF52	11q23.1	-0.19153594	1.58542E-05	5.42619E-05
LRP10	14q11.2	0.191535749	1.58545E-05	5.42619E-05
LMOD3	3p14.1	0.191530788	1.58627E-05	5.42807E-05
PIK3R2	19p13.11	-0.191506835	1.59022E-05	5.44068E-05
KNOP1	16p12.3	-0.191495575	1.59209E-05	5.44613E-05
THSD1	13q14.3	0.191476351	1.59527E-05	5.4561E-05
FAM205BP	9p13.3	0.191471615	1.59606E-05	5.45786E-05
DPH5	1p21.2	-0.191464084	1.59731E-05	5.46121E-05
SLC25A17	22q13.2	-0.19145206	1.5993E-05	5.46711E-05
CNGA3	2q11.2	0.191404048	1.6073E-05	5.49353E-05
NOB1	16q22.1	-0.191386888	1.61017E-05	5.5024E-05
PCDHGA7	5q31.3	0.191381272	1.61111E-05	5.50468E-05
TMEM52	1p36.33	-0.191336498	1.61862E-05	5.52941E-05
GABPB2	1q21.3	-0.191293938	1.62579E-05	5.55296E-05
FAM193A	4p16.3	0.191262066	1.63118E-05	5.57043E-05
MAPK6	15q21.2	-0.191260348	1.63147E-05	5.57048E-05
NFU1	2p13.3	-0.191255099	1.63236E-05	5.57257E-05
C16ORF74	16q24.1	-0.191250423	1.63316E-05	5.57434E-05
ARPC5L	9q33.3	-0.191237541	1.63534E-05	5.58085E-05
SIGLEC11	19q13.33	0.191224011	1.63764E-05	5.58775E-05

BRD9	5p15.33	0.191212825	1.63954E-05	5.5933E-05
PBLD	10q21.3	0.191195276	1.64253E-05	5.60255E-05
ATG7	3p25.3	0.191193167	1.64289E-05	5.60283E-05
PKN3	9q34.11	-0.191175227	1.64595E-05	5.61232E-05
LRRC49	15q23	0.191149462	1.65036E-05	5.6264E-05
CRELD2	22q13.33	0.19108314	1.66176E-05	5.66406E-05
FKBP5	6p21.31	0.191081232	1.66209E-05	5.66406E-05
IBTK	6q14.1	0.191080278	1.66225E-05	5.66406E-05
C12ORF76	12q24.11	-0.191022926	1.67217E-05	5.69689E-05
CAPN6	Xq23	0.191017962	1.67303E-05	5.69886E-05
LATS1	6q25.1	0.191007949	1.67477E-05	5.70382E-05
GPSM1	9q34.3	0.190981225	1.67941E-05	5.71868E-05
SMC2	9q31.1	-0.190963571	1.68249E-05	5.72819E-05
PPP4C	16p11.2	-0.190949066	1.68502E-05	5.73584E-05
INSC	11p15.2	0.190942865	1.68611E-05	5.73856E-05
AP2A2	11p15.5	0.190917289	1.69058E-05	5.75283E-05
ENHO	9p13.3	-0.190908731	1.69208E-05	5.75696E-05
BBS1	11q13.2	0.190874251	1.69814E-05	5.77659E-05
SLC35D3	6q23.3	0.190865327	1.69971E-05	5.78096E-05
KCTD11	17p13.1	0.190858888	1.70084E-05	5.78385E-05
ATP6V1G1	9q32	-0.19084925	1.70254E-05	5.78865E-05
TMEM71	8q24.22	0.190823198	1.70715E-05	5.80314E-05
OR2A9P	7q35	-0.190820908	1.70755E-05	5.80314E-05
TUBBP5	9q34.3	-0.19082024	1.70767E-05	5.80314E-05
AMZ2P1	17q24.1	-0.190805831	1.71022E-05	5.81083E-05
SMS	Xp22.11	-0.190778348	1.7151E-05	5.82641E-05
CELP	9q34.13	-0.190735182	1.72278E-05	5.85153E-05
IPCEF1	6q25.2	0.190709354	1.72739E-05	5.86622E-05
PRG4	1q31.1	0.190627726	1.74205E-05	5.91433E-05
DCK	4q13.3	-0.190627192	1.74215E-05	5.91433E-05
RPL12	9q33.3	-0.190622707	1.74296E-05	5.91608E-05
HNRNPCL3	1p36.21	-0.190619371	1.74356E-05	5.91713E-05
SH2D2A	1q23.1	0.190600759	1.74692E-05	5.92754E-05
ZNF385B	2q31.2-q31.3	0.190552521	1.75566E-05	5.95619E-05
CLDND1	3q11.2	-0.190535678	1.75872E-05	5.96558E-05
PLPPR2	19p13.2	0.190493213	1.76646E-05	5.99083E-05
RUSC1	1q22	-0.190480426	1.7688E-05	5.99775E-05
ZNF385A	12q13.13	-0.190471742	1.77039E-05	6.00213E-05
PDPK1	16p13.3	0.190415345	1.78074E-05	6.03622E-05
JAK2	9p24.1	0.190389675	1.78547E-05	6.05124E-05
CEP170P1	4q26	0.190379031	1.78744E-05	6.05688E-05
MTIF2	2p16.1	-0.19037078	1.78896E-05	6.06103E-05
ENKUR	10p12.1	0.190338385	1.79496E-05	6.08034E-05
ITGB7	12q13.13	0.190328697	1.79676E-05	6.0854E-05
IBSP	4q22.1	0.190307761	1.80065E-05	6.09756E-05
EXOC3L4	14q32.32	0.190292162	1.80356E-05	6.10637E-05
SUMO1	2q33.1	-0.19026562	1.80851E-05	6.12211E-05
TBC1D32	6q22.31	0.190261517	1.80927E-05	6.12368E-05
SMO	7q32.1	-0.190256077	1.81029E-05	6.12609E-05
RNF8	6p21.2	-0.19024873	1.81167E-05	6.12971E-05
CCL27	9p13.3	0.190234946	1.81425E-05	6.13742E-05
C17ORF107	17p13.2	0.190230789	1.81503E-05	6.13902E-05
ZNF788P	19p13.2	0.190225598	1.816E-05	6.14129E-05
CXCR3	Xq13.1	0.190199776	1.82085E-05	6.15665E-05
KCNS3	2p24.2	-0.190184985	1.82363E-05	6.16503E-05
GRIN2D	19q13.33	0.190174774	1.82556E-05	6.1705E-05
GRAP2	22q13.1	0.190120762	1.83576E-05	6.20396E-05
SPRYD3	12q13.13	0.190117136	1.83645E-05	6.20525E-05

EPN2	17p11.2	-0.190082592	1.84301E-05	6.22637E-05
ABL1	9q34.12	0.190050624	1.8491E-05	6.24589E-05
ASGR1	17p13.1	0.19004142	1.85086E-05	6.25078E-05
MORN4	10q24.2	0.189979722	1.86267E-05	6.28964E-05
CXCL1	4q13.3	0.189975714	1.86344E-05	6.29119E-05
CIRBP-AS1	19p13.3	-0.189962736	1.86594E-05	6.29856E-05
CNBP	3q21.3	-0.189958346	1.86678E-05	6.30036E-05
TMEM41B	11p15.4	-0.189931913	1.87188E-05	6.3165E-05
LMNB1	5q23.2	-0.189897178	1.8786E-05	6.33811E-05
PSMG3-AS1	7p22.3	0.18989546	1.87893E-05	6.33817E-05
BDKRB1	14q32.2	0.189883245	1.8813E-05	6.34509E-05
GPR22	7q22.3	-0.189848327	1.88808E-05	6.36691E-05
SON	21q22.11	0.18982952	1.89174E-05	6.37738E-05
C5ORF56	5q31.1	0.189829139	1.89182E-05	6.37738E-05
CD40LG	Xq26.3	0.189823269	1.89296E-05	6.38018E-05
AKAP5	14q23.3	0.189804518	1.89663E-05	6.39145E-05
TMEM217	6p21.2	0.189775032	1.9024E-05	6.40983E-05
ZAP70	2q11.2	0.189675979	1.92191E-05	6.47448E-05
DROSHA	5p13.3	0.189671589	1.92278E-05	6.4762E-05
MGAT3	22q13.1	0.189670158	1.92306E-05	6.4762E-05
HNF4A	20q13.12	0.189648164	1.92742E-05	6.4898E-05
BATF3	1q32.3	0.189619868	1.93304E-05	6.50765E-05
ENPP3	6q23.2	0.189609848	1.93504E-05	6.51328E-05
CCDC13	3p22.1	0.189549179	1.94716E-05	6.55299E-05
LINC00161	21q21.3	-0.189451576	1.96681E-05	6.61802E-05
GSTA3	6p12.2	-0.189445214	1.9681E-05	6.62125E-05
EML4	2p21	0.189441706	1.96881E-05	6.62254E-05
ZFP82	19q13.12	0.189406398	1.97597E-05	6.64552E-05
TMEM105	17q25.3	0.189401731	1.97692E-05	6.6476E-05
STX1A	7q11.23	0.189387599	1.9798E-05	6.65616E-05
LIME1	20q13.33	0.189297326	1.99825E-05	6.7171E-05
MALSU1	7p15.3	-0.18926927	2.00402E-05	6.73538E-05
IGFN1	1q32.1	0.189252034	2.00758E-05	6.74619E-05
ATP2B2	3p25.3	0.189238513	2.01037E-05	6.75445E-05
WIPF3	7p14.3	-0.189229432	2.01224E-05	6.75963E-05
LINC01554	5q15	0.189225336	2.01309E-05	6.76135E-05
PLPPR3	19p13.3	0.189211197	2.01602E-05	6.77005E-05
FOXI1	5q35.1	0.189194392	2.0195E-05	6.78062E-05
HNF1A	12q24.31	-0.189187256	2.02098E-05	6.78446E-05
RGL4	22q11.23	0.18917649	2.02322E-05	6.79084E-05
ANAPC15	11q13.4	-0.189128898	2.03313E-05	6.82251E-05
NAA60	16p13.3	-0.189127943	2.03333E-05	6.82251E-05
SPRR2A	1q21.3	-0.189120877	2.03481E-05	6.82633E-05
TBC1D31	8q24.13	-0.189096409	2.03993E-05	6.84236E-05
NFASC	1q32.1	0.189052079	2.04923E-05	6.87243E-05
GNPDA1	5q31.3	-0.189015774	2.05688E-05	6.89694E-05
ICA1	7p21.3	0.18899301	2.06169E-05	6.91192E-05
STAG3L4	7q11.21	-0.188950927	2.07061E-05	6.94068E-05
RPS19BP1	22q13.1	-0.188866379	2.08865E-05	6.99997E-05
HDGFL1	6p22.3	0.188861706	2.08965E-05	7.00216E-05
POLR1D	13q12.2	-0.188852542	2.09161E-05	7.00758E-05
MERTK	2q13	-0.188849775	2.09221E-05	7.00827E-05
DNAAF2	14q21.3	-0.188848343	2.09251E-05	7.00827E-05
LINC00426	13q12.3	0.188846163	2.09298E-05	7.00868E-05
NOS1AP	1q23.3	-0.188837374	2.09487E-05	7.01383E-05
ORMDL1	2q32.2	-0.188774197	2.10848E-05	7.05823E-05
EPB41L4B	9q31.3	-0.188765417	2.11038E-05	7.06342E-05
ZBTB4	17p13.1	0.188756924	2.11222E-05	7.06839E-05

RARRES1	3q25.32	0.188751485	2.11339E-05	7.07089E-05
SRGAP2	1q32.1	0.188750245	2.11366E-05	7.07089E-05
TRMT10B	9p13.2	-0.188743088	2.11521E-05	7.07491E-05
MRPS27	5q13.2	-0.188673235	2.13041E-05	7.12454E-05
MFN1	3q26.33	-0.188658635	2.1336E-05	7.13403E-05
KRT76	12q13.13	-0.188654584	2.13448E-05	7.1358E-05
LIPF	10q23.31	0.188611513	2.14392E-05	7.16569E-05
EGFL6	Xp22.2	0.18861054	2.14413E-05	7.16569E-05
PFN1P2	1p11.2	0.188598711	2.14673E-05	7.17319E-05
FES	15q26.1	0.188590119	2.14862E-05	7.17832E-05
SCHIP1	3q25.32-q25.33	-0.18854355	2.15889E-05	7.21143E-05
LINC01124	2q31.1	0.188537131	2.16031E-05	7.21498E-05
FBXO45	3q29	-0.188530954	2.16168E-05	7.21835E-05
SLC4A8	12q13.13	0.188489443	2.17088E-05	7.24788E-05
NXPE2	11q23.2-q23.3	0.188484081	2.17207E-05	7.25066E-05
SYT15	10q11.22	0.188479714	2.17304E-05	7.2527E-05
B4GALNT3	12p13.33	-0.188442016	2.18144E-05	7.27953E-05
ADGRB3	6q12-q13	0.18842515	2.18521E-05	7.2909E-05
CENPK	5q12.3	-0.188384665	2.19428E-05	7.31995E-05
BECN1	17q21.31	-0.188365198	2.19865E-05	7.33333E-05
BACE2	21q22.2-q22.3	0.188323306	2.20809E-05	7.3636E-05
ZNF732	4p16.3	0.188308028	2.21155E-05	7.37389E-05
HS3ST6	16p13.3	-0.188257689	2.22296E-05	7.41071E-05
MAD2L2	1p36.22	0.188230933	2.22904E-05	7.42978E-05
TMEM198	2q35	0.188217096	2.2322E-05	7.43907E-05
MYL7	7p13	0.188213136	2.2331E-05	7.44085E-05
CNMD	13q14.3	0.188211365	2.23351E-05	7.44097E-05
FAM114A1	4p14	0.188180738	2.24051E-05	7.46306E-05
SLFN14	17q12	0.188153553	2.24674E-05	7.48258E-05
AIM2	1q23.1-q23.2	0.188140182	2.24981E-05	7.49158E-05
RNF135	17q11.2	-0.188110122	2.25673E-05	7.51338E-05
RAB11FIP5	2p13.2	0.188069661	2.26608E-05	7.54324E-05
CASP10	2q33.1	0.188035403	2.27402E-05	7.56843E-05
NFIL3	9q22.31	0.18803235	2.27473E-05	7.56954E-05
CCDC61	19q13.32	0.188022807	2.27694E-05	7.57567E-05
RPS15AP10	1p34.1	0.188018583	2.27793E-05	7.57769E-05
CGGBP1	3p11.1	0.187987785	2.2851E-05	7.6003E-05
TTC30B	2q31.2	-0.187977575	2.28748E-05	7.60697E-05
PIWIL1	12q24.33	0.187962244	2.29106E-05	7.61763E-05
PEMT	17p11.2	-0.187931197	2.29834E-05	7.64054E-05
FMO2	1q24.3	0.187852852	2.31678E-05	7.7006E-05
SP100	2q37.1	0.187830331	2.32211E-05	7.71703E-05
CDC16	13q34	0.187825369	2.32328E-05	7.71967E-05
PTRHD1	2p23.3	-0.187784336	2.33303E-05	7.75077E-05
NDOR1	9q34.3	-0.187780709	2.33389E-05	7.75145E-05
FAM110D	1p36.11	0.187780237	2.334E-05	7.75145E-05
NAA25	12q24.13	-0.18777756	2.33464E-05	7.75229E-05
FTSJ3	17q23.3	-0.187757616	2.33939E-05	7.7668E-05
TSC22D3	Xq22.3	0.187737481	2.3442E-05	7.78148E-05
IKBKG	Xq28	-0.18772279	2.34771E-05	7.79186E-05
FLVCR1	1q32.3	-0.18768471	2.35684E-05	7.82087E-05
GOLGA8IP	15q11.2	0.187666739	2.36116E-05	7.83392E-05
NCAPD3	11q25	-0.187629367	2.37017E-05	7.86252E-05
SPX	12p12.1	0.187594752	2.37855E-05	7.88834E-05
DLG5	10q22.3	0.187593959	2.37874E-05	7.88834E-05
PIM2	Xp11.23	0.187527447	2.39491E-05	7.94065E-05
RPL24	3q12.3	-0.187434311	2.41772E-05	8.01499E-05
TCIM	8p11.21	0.187419997	2.42125E-05	8.02536E-05

AGAP3	7q36.1	0.18737381	2.43266E-05	8.06184E-05
MCM7	7q22.1	-0.187322089	2.44549E-05	8.10304E-05
SMIM10L2A	Xq26.3	-0.187272562	2.45784E-05	8.14248E-05
IFT27	22q12.3	-0.187271131	2.4582E-05	8.14248E-05
SLC45A2	5p13.2	0.18726487	2.45976E-05	8.14633E-05
SPATA19	11q25	-0.187258447	2.46137E-05	8.15031E-05
TATDN1	8q24.13	-0.187252618	2.46283E-05	8.15381E-05
KLF3	4p14	-0.187248801	2.46379E-05	8.15563E-05
RGS17	6q25.2	0.187245463	2.46462E-05	8.15706E-05
ALPL	1p36.12	0.18721941	2.47116E-05	8.17736E-05
ANGPT1	8q23.1	0.187194026	2.47755E-05	8.19714E-05
FTSJ1	Xp11.23	0.187183148	2.48029E-05	8.20487E-05
FABP4	8q21.13	0.187177415	2.48173E-05	8.20831E-05
ZNF776	19q13.43	0.187165017	2.48486E-05	8.21731E-05
FANCL	2p16.1	-0.187161295	2.4858E-05	8.21907E-05
MAP7	6q23.3	-0.187146408	2.48957E-05	8.23017E-05
SPEG	2q35	0.187081614	2.50601E-05	8.28318E-05
FBXW7	4q31.3	0.187075888	2.50747E-05	8.28664E-05
LINC00598	13q14.11	0.187065306	2.51017E-05	8.2942E-05
SLC25A36	3q23	-0.1870339	2.51819E-05	8.31934E-05
COQ9	16q21	-0.187031992	2.51868E-05	8.31959E-05
SLC25A5-AS1	Xq24	-0.187013536	2.5234E-05	8.33383E-05
DUSP1	5q35.1	0.186944008	2.54128E-05	8.3915E-05
FXR1	3q26.33	-0.186872534	2.55978E-05	8.45122E-05
SZT2	1p34.2	0.186844769	2.56701E-05	8.47368E-05
MRPL32	7p14.1	-0.186836367	2.56919E-05	8.47952E-05
OR3A1	17p13.3	0.186792244	2.58072E-05	8.51617E-05
TMEM253	14q11.2	-0.186672381	2.61228E-05	8.61891E-05
PXK	3p14.3	0.186660114	2.61553E-05	8.62822E-05
ICA1L	2q33.2	-0.186627669	2.62415E-05	8.65523E-05
FOXH1	8q24.3	-0.186603877	2.63048E-05	8.67471E-05
RAB18	10p12.1	-0.186575948	2.63794E-05	8.69787E-05
DAB1	1p32.2	0.186568362	2.63997E-05	8.70314E-05
PLLP	16q13	-0.186514016	2.65454E-05	8.74976E-05
ARHGAP24	4q21.23-q21.3	-0.186487201	2.66176E-05	8.77212E-05
SMG8	17q22	-0.186474414	2.66521E-05	8.78206E-05
RHOA	3p21.31	0.186430231	2.67716E-05	8.82E-05
DEGS2	14q32.2	-0.186416733	2.68082E-05	8.83062E-05
FAM89B	11q13.1	0.186405611	2.68384E-05	8.83912E-05
ZFYVE28	4p16.3	0.186367254	2.69429E-05	8.87206E-05
ADAM10	15q21.3	0.186344443	2.70051E-05	8.89112E-05
CLEC4GP1	19p13.2	0.186334428	2.70325E-05	8.89868E-05
PAK1IP1	6p24.2	-0.186319441	2.70735E-05	8.91073E-05
PCDHB7	5q31.3	0.186295012	2.71405E-05	8.93133E-05
ADGRB1	8q24.3	0.186291099	2.71513E-05	8.93341E-05
NGDN	14q11.2	-0.186287568	2.7161E-05	8.93514E-05
TMEM260	14q22.3	-0.18626457	2.72243E-05	8.9545E-05
ELP6	3p21.31	-0.186260658	2.7235E-05	8.95658E-05
PCDHA3	5q31.3	0.186248453	2.72687E-05	8.96619E-05
MAPK14	6p21.31	0.186218766	2.73507E-05	8.99168E-05
IFNAR1	21q22.11	0.186141284	2.75658E-05	9.06093E-05
SERPINB5	18q21.33	-0.186105685	2.76652E-05	9.09212E-05
TMOD4	1q21.3	-0.186100852	2.76787E-05	9.09508E-05
NAGS	17q21.31	0.186094711	2.76959E-05	9.09924E-05
DIABLO	12q24.31	-0.186087554	2.77159E-05	9.10434E-05
STAT3	17q21.2	0.186080779	2.77349E-05	9.1091E-05
KIF1C	17p13.2	0.186071904	2.77598E-05	9.11579E-05
UNC93A	6q27	0.186054473	2.78087E-05	9.13037E-05

CRYBA4	22q12.1	0.185936749	2.81414E-05	9.2381E-05
RPSAP58	19p12	-0.18593468	2.81473E-05	9.23853E-05
SNX15	11q13.1	0.185893456	2.82647E-05	9.27555E-05
PMS2P4	7q11.21	-0.185851	2.83861E-05	9.31388E-05
ENTHD1	22q13.1	0.185832129	2.84402E-05	9.33012E-05
LCN1	9q34.3	0.18581185	2.84985E-05	9.34772E-05
RPP21	6p22.1	-0.185771405	2.86151E-05	9.38442E-05
COL17A1	10q25.1	0.185751557	2.86724E-05	9.4017E-05
DPY19L3	19q13.11	0.185746503	2.8687E-05	9.40497E-05
PSG6	19q13.31	0.185742072	2.86999E-05	9.40765E-05
KCNH3	12q13.12	0.185674886	2.8895E-05	9.47008E-05
SAMD15	14q24.3	0.185645876	2.89797E-05	9.49628E-05
TPM4	19p13.12-p13.11	0.185626357	2.90368E-05	9.51344E-05
NCF1	7q11.23	0.185610516	2.90832E-05	9.5271E-05
PHOX2A	11q13.4	0.185595741	2.91265E-05	9.53975E-05
RABIF	1q32.1	-0.185565093	2.92166E-05	9.56772E-05
SUPT20HL2	Xp22.11	0.185557959	2.92377E-05	9.57305E-05
SLC38A4	12q13.11	0.185543292	2.92809E-05	9.58565E-05
RNF24	20p13	0.185537037	2.92994E-05	9.59014E-05
CBX8	17q25.3	-0.185453921	2.95458E-05	9.66922E-05
BRINP1	9q33.1	0.185437253	2.95954E-05	9.68389E-05
ACTC1	15q14	0.185431548	2.96124E-05	9.68789E-05
ZFHX4	8q21.13	0.185410502	2.96753E-05	9.70651E-05
STAC3	12q13.3	0.185409261	2.9679E-05	9.70651E-05
ANKRD34A	1q21.1	0.185371568	2.97918E-05	9.74185E-05
MIPOL1	14q13.3-q21.1	-0.185369143	2.97991E-05	9.74264E-05
KCTD17	22q12.3	0.185339313	2.98887E-05	9.77036E-05
FNDC9	5q33.3	0.185258255	3.01336E-05	9.84881E-05
FOLH1	11p11.12	-0.185231438	3.0215E-05	9.87382E-05
RBM38	20q13.31	0.185210869	3.02776E-05	9.89267E-05
NAE1	16q22.1	-0.185167927	3.04086E-05	9.93388E-05
FAM72A	1q32.1	-0.185110671	3.05842E-05	9.98963E-05
RPL37A	2q35	-0.185098552	3.06215E-05	0.000100002
C8ORF34	8q13.2	0.185086823	3.06577E-05	0.000100104
RBIS	8q21.2	-0.185062576	3.07325E-05	0.000100332
PCM1	8p22	0.184997304	3.09348E-05	0.000100976
FAM30A	14q32.33	0.184992264	3.09504E-05	0.000101011
KANSL2	12q13.11	-0.184983372	3.09781E-05	0.000101085
TRMT12	8q24.13	-0.184979746	3.09894E-05	0.000101105
FOXI2	10q26.2	0.184968251	3.10252E-05	0.000101206
RTN4RL1	17p13.3	0.184957511	3.10587E-05	0.000101298
TFB1M	6q25.3	-0.184925166	3.11598E-05	0.000101605
TMEM8A	16p13.3	0.184924207	3.11628E-05	0.000101605
ZNF99	19p12	0.184916064	3.11883E-05	0.000101669
GBP4	1p22.2	0.18491476	3.11924E-05	0.000101669
PCMTD1	8q11.23	0.184911134	3.12037E-05	0.000101689
SERTAD3	19q13.2	0.184848152	3.14017E-05	0.000102318
ITIH3	3p21.1	0.184837966	3.14338E-05	0.000102406
KIF15	3p21.31	-0.184771906	3.1643E-05	0.000103071
RPL23AP53	8p23.3	0.184763318	3.16703E-05	0.000103143
ZNF18	17p12	-0.184748718	3.17167E-05	0.000103268
PLAGL1	6q24.2	0.18474805	3.17188E-05	0.000103268
PRRT2	16p11.2	0.184736312	3.17562E-05	0.000103373
ARL6IP1	16p12.3	-0.184723239	3.17979E-05	0.000103492
RHO	3q22.1	0.184698341	3.18774E-05	0.000103734
TRAK2	2q33.1	0.184685832	3.19175E-05	0.000103848
ARHGEF2	1q22	0.18468001	3.19361E-05	0.000103891
CCDC54	3q13.12	0.184516368	3.24645E-05	0.000105593

ABCB1	7q21.12	0.184462924	3.26388E-05	0.000106143
FAM20B	1q25.2	-0.184455281	3.26638E-05	0.000106208
TOMM20L	14q23.1	-0.184441281	3.27097E-05	0.000106339
OTULIN	5p15.2	0.184410812	3.28097E-05	0.000106647
KPNA1	3q21.1	-0.184407186	3.28216E-05	0.000106669
TARSL2	15q26.3	0.184400506	3.28436E-05	0.000106723
ARRDC3	5q14.3	0.184395353	3.28605E-05	0.000106761
USP21	1q23.3	-0.184335138	3.30593E-05	0.00010739
ARMC10	7q22.1	-0.184279028	3.32456E-05	0.000107977
FAM49A	2p24.2	0.184263473	3.32974E-05	0.000108128
TADA2B	4p16.1	0.184241716	3.337E-05	0.000108346
TMEM68	8q12.1	-0.184219386	3.34446E-05	0.000108571
TRAPPC12	2p25.3	-0.184204977	3.34929E-05	0.00010871
C20ORF203	20q11.21	0.184181713	3.35709E-05	0.000108942
LINC00294	11p13	0.184180452	3.35752E-05	0.000108942
ALDH7A1	5q23.2	0.184170527	3.36085E-05	0.000109033
RIPK1	6p25.2	0.184160126	3.36435E-05	0.000109129
CES1P1	16q12.2	-0.184148327	3.36833E-05	0.00010924
APOM	6p21.33	-0.184143622	3.36991E-05	0.000109274
EVA1C	21q22.11	-0.184137128	3.3721E-05	0.000109328
MGC16025	2q37.3	-0.184131863	3.37388E-05	0.000109368
TRPC4AP	20q11.22	0.184115753	3.37932E-05	0.000109527
MZB1	5q31.2	0.184065749	3.39626E-05	0.000110058
CISD2	4q24	-0.184053534	3.40041E-05	0.000110169
IL17RD	3p14.3	0.184052485	3.40077E-05	0.000110169
WNT4	1p36.12	0.184046473	3.40281E-05	0.000110203
ZFP28	19q13.43	0.184046187	3.40291E-05	0.000110203
MT1G	16q13	0.184043133	3.40395E-05	0.000110219
RCC1L	7q11.23	-0.184040556	3.40483E-05	0.000110229
SAP18	13q12.11	-0.184037884	3.40573E-05	0.000110241
PPIAL4C	1q21.2	-0.183987404	3.42296E-05	0.000110781
CRTC1	19p13.11	0.183971658	3.42836E-05	0.000110938
FAM3B	21q22.3	-0.183969325	3.42916E-05	0.000110943
COPRS	17q11.2	-0.183967937	3.42963E-05	0.000110943
MAGED1	Xp11.22	0.183951332	3.43533E-05	0.00011111
CCND1	11q13.3	0.183932056	3.44195E-05	0.000111306
LOC400940	2p25.2	0.183916619	3.44726E-05	0.00011146
CCDC115	2q21.1	-0.183882625	3.45899E-05	0.000111822
FYTTD1	3q29	-0.183866689	3.4645E-05	0.000111982
MTHFD2L	4q13.3	-0.183848844	3.47068E-05	0.000112151
SUPT4H1	17q22	-0.183848367	3.47085E-05	0.000112151
C2ORF49	2q12.2	-0.183845504	3.47184E-05	0.000112165
POC1B	12q21.33	-0.183827278	3.47817E-05	0.000112351
KCNK4	11q13.1	0.183824698	3.47906E-05	0.000112362
ETV4	17q21.31	-0.183807143	3.48517E-05	0.000112541
SUSD1	9q31.3-q32	0.183794069	3.48972E-05	0.00011267
SLC27A6	5q23.3	0.183749018	3.50545E-05	0.00011316
ARHGEF9	Xq11.1	0.183714102	3.51769E-05	0.000113537
HJURP	2q37.1	-0.183674786	3.53152E-05	0.000113965
SLC7A2	8p22	0.183668201	3.53384E-05	0.000114022
UBD	6p22.1	0.183666579	3.53441E-05	0.000114022
ZSCAN1	19q13.43	0.183649313	3.54051E-05	0.000114201
POLG2	17q23.3	-0.183645303	3.54192E-05	0.000114223
FAM219B	15q24.1-q24.2	-0.183644154	3.54233E-05	0.000114223
TRIM58	1q44	0.183620314	3.55076E-05	0.000114469
ZNF833P	19p13.2	-0.183619352	3.5511E-05	0.000114469
HOXB6	17q21.32	0.18361085	3.55412E-05	0.000114548
RGS22	8q22.2	0.183592977	3.56046E-05	0.000114734

HSPA1B	6p21.33	-0.18359062	3.5613E-05	0.000114743
TMCC2	1q32.1	0.18357621	3.56642E-05	0.000114889
UNC45A	15q26.1	-0.183548727	3.57621E-05	0.000115186
SLC2A13	12q12	0.183539185	3.57961E-05	0.000115278
SUPT20HL1	Xp22.11	0.183511085	3.58965E-05	0.000115583
ZNF641	12q13.11	0.183508648	3.59053E-05	0.000115592
TSC22D2	3q25.1	0.183495861	3.59511E-05	0.000115721
GID4	17p11.2 17p11.2	-0.183484791	3.59908E-05	0.000115831
ZWINT	10q21.1	-0.183468855	3.6048E-05	0.000115996
POLR1C	6p21.1	-0.183453491	3.61032E-05	0.000116155
SLC47A2	17p11.2	-0.183413466	3.62475E-05	0.000116601
PKD1L1	7p12.3	0.183385991	3.63469E-05	0.000116902
COPE	19p13.11	-0.183380108	3.63682E-05	0.000116952
IRX2	5p15.33	0.183369134	3.6408E-05	0.000117056
ZNF501	3p21.31	0.183367989	3.64121E-05	0.000117056
ALDH5A1	6p22.3	-0.183357206	3.64513E-05	0.000117163
MGME1	20p11.23	-0.183343751	3.65002E-05	0.000117302
DCUN1D5	11q22.3	-0.183316077	3.66009E-05	0.000117607
UCHL1	4p13	-0.18331331	3.6611E-05	0.00011762
ALPP	2q37.1	0.18327732	3.67424E-05	0.000118024
LOC100131496	20q13.12	0.183259431	3.68079E-05	0.000118215
C7	5p13.1	0.183244889	3.68613E-05	0.000118368
RASSF3	12q14.2	0.18323735	3.6889E-05	0.000118438
CGB5	19q13.33	0.183206189	3.70036E-05	0.000118787
FAM3A	Xq28	-0.183203951	3.70118E-05	0.000118795
AGRP	16q22.1	0.18318893	3.70672E-05	0.000118953
SIGLEC12	19q13.41	0.183092918	3.7423E-05	0.000120076
TATDN3	1q32.3	-0.183071403	3.75032E-05	0.000120314
TMEM167B	1p13.3	0.183065773	3.75242E-05	0.000120363
KYAT3	1p22.2	-0.183035618	3.76369E-05	0.000120705
RNF213	17q25.3	0.183029034	3.76615E-05	0.000120765
CRKL	22q11.21	-0.183025121	3.76762E-05	0.000120793
SIK3	11q23.3	0.183018823	3.76998E-05	0.000120849
NT5DC3	12q23.3	-0.183008231	3.77395E-05	0.000120957
IVNS1ABP	1q25.3	0.18298008	3.78453E-05	0.000121277
RBM8A	1q21.1	-0.182978362	3.78518E-05	0.000121278
TARBP1	1q42.2	-0.182971396	3.7878E-05	0.000121343
CD2	1p13.1	0.182966911	3.78949E-05	0.000121378
BHMT	5q14.1	-0.182959691	3.79221E-05	0.000121446
MATK	19p13.3	0.182942004	3.79888E-05	0.00012164
SLC5A7	2q12.3	-0.18291835	3.80782E-05	0.000121907
CLUL1	18p11.32	0.182910861	3.81066E-05	0.000121979
OSBPL3	7p15.3	0.182893055	3.81741E-05	0.000122175
PRXL2B	1p36.32	0.182872248	3.82531E-05	0.000122409
CNGB1	16q21	0.18284305	3.83642E-05	0.000122742
DNAJA4	15q25.1	-0.182841711	3.83693E-05	0.000122742
ADAP2	17q11.2	0.182836749	3.83882E-05	0.000122783
EXOSC5	19q13.2	-0.182816995	3.84636E-05	0.000123004
UBP1	3p22.3	-0.182790467	3.85651E-05	0.000123309
VAMP5	2p11.2	0.182723954	3.88207E-05	0.000124091
MPZL1	1q24.2	0.182723668	3.88218E-05	0.000124091
C9ORF106	9q34.11	0.182720813	3.88328E-05	0.000124106
MAP3K20	2q31.1	0.18270048	3.89113E-05	0.000124337
ANAPC13	3q22.2	-0.182695136	3.89319E-05	0.000124384
CHFR	12q24.33	0.182657919	3.9076E-05	0.000124824
UBXN4	2q21.3	-0.182648567	3.91123E-05	0.000124903
RASAL2	1q25.2	0.182648377	3.9113E-05	0.000124903
IGF2R	6q25.3	0.182621848	3.92161E-05	0.000125212

PSMG3	7p22.3	-0.182617077	3.92347E-05	0.000125252
COPS9	2q37.3	-0.182613546	3.92484E-05	0.000125276
NOXA1	9q34.3	-0.182528239	3.9582E-05	0.000126321
WASHC2A	10q11.23	0.182522127	3.9606E-05	0.000126377
ZNF354C	5q35.3	0.182493811	3.97174E-05	0.000126712
CRSP8P	5q14.1	-0.182486394	3.97466E-05	0.000126786
NME4	16p13.3	-0.182472028	3.98032E-05	0.000126946
HUNK	21q22.11	0.182461965	3.9843E-05	0.000127044
TRERF1	6p21.1	0.182461054	3.98466E-05	0.000127044
PPP2CA	5q31.1	-0.182455996	3.98666E-05	0.000127088
EIF2AK3	2p11.2	-0.182438438	3.9936E-05	0.000127289
GIN54	8p11.21	-0.182368776	4.02127E-05	0.00012815
NUDT15	13q14.2	-0.18236725	4.02188E-05	0.00012815
NPTX1	17q25.3	0.182363055	4.02355E-05	0.000128183
GALM	2p22.1	0.182343393	4.0314E-05	0.000128413
FAM166B	9p13.3	-0.182340444	4.03257E-05	0.00012843
WDR64	1q43	0.182284554	4.05496E-05	0.000129123
DZIP1	13q32.1	0.182268578	4.06138E-05	0.000129307
GTF2IRD1	7q11.23	-0.18224892	4.0693E-05	0.000129538
VWA5B2	3q27.1	-0.182219204	4.08129E-05	0.0001299
RHEX	1q32.1	0.182181055	4.09674E-05	0.000130351
C20ORF194	20p13	0.182180977	4.09677E-05	0.000130351
DVL3	3q27.1	-0.182169144	4.10157E-05	0.000130483
STX12	1p35.3	0.18215388	4.10777E-05	0.000130639
GSKIP	14q32.2	-0.182153876	4.10777E-05	0.000130639
JSRP1	19p13.3	0.182143995	4.11179E-05	0.000130747
AKT3	1q43-q44	0.182130687	4.11721E-05	0.000130898
SLC39A1	1q21.3	0.182110647	4.12538E-05	0.000131138
DEF8	16q24.3	0.182102059	4.12889E-05	0.000131228
PUS1	12q24.33	-0.182089844	4.13388E-05	0.000131366
SYNGR3	16p13.3	0.182009838	4.16673E-05	0.000132389
SLCO3A1	15q26.1	-0.181928573	4.20035E-05	0.000133437
S100Z	5q13.3	0.181926642	4.20115E-05	0.000133441
TPCN2	11q13.3	0.181889162	4.21675E-05	0.000133915
CARD17	11q22.3	-0.181853187	4.23177E-05	0.000134371
NRIP2	12p13.33	0.181826848	4.24279E-05	0.0001347
RPUSD1	16p13.3	-0.181815302	4.24764E-05	0.000134833
SLC26A5	7q22.1	-0.181796789	4.25541E-05	0.000135055
TEDC1	14q32.33	-0.181795453	4.25597E-05	0.000135055
MIGA2	9q34.11	-0.181769306	4.26698E-05	0.000135383
ZNF587	19q13.43	0.181756233	4.2725E-05	0.000135536
PALB2	16p12.2	-0.181731422	4.28298E-05	0.000135848
TSPAN33	7q32.1	-0.181679796	4.30487E-05	0.00013652
FZD9	7q11.23	-0.181664068	4.31156E-05	0.000136711
CD1E	1q23.1	0.181624309	4.32851E-05	0.000137227
NIPSNAP3A	9q31.1	-0.181620536	4.33012E-05	0.000137257
ATOH8	2p11.2	0.181609848	4.33469E-05	0.00013738
CPEB1	15q25.2	0.181607789	4.33557E-05	0.000137386
ZNF511	10q26.3	-0.181604842	4.33683E-05	0.000137405
PCDHA2	5q31.3	0.18159997	4.33892E-05	0.000137449
TSC2	16p13.3	0.181595343	4.3409E-05	0.00013749
STPG1	1p36.11	-0.181563566	4.35454E-05	0.0001379
POMC	2p23.3	-0.181546693	4.36179E-05	0.000138109
TXNDC11	16p13.13	0.181525109	4.37109E-05	0.000138381
LIG4	13q33.3	0.181492282	4.38527E-05	0.00013879
SLC39A14	8p21.3	0.181491996	4.38539E-05	0.00013879
ADIPOR2	12p13.33	-0.181485698	4.38811E-05	0.000138847
HOXC12	12q13.13	0.181484662	4.38856E-05	0.000138847

GAPDH	12p13.31	-0.181463559	4.39771E-05	0.000139111
IL34	16q22.1	0.181462223	4.39828E-05	0.000139111
LIAS	4p14	-0.181457642	4.40027E-05	0.000139152
LNX1	4q12	-0.18145039	4.40342E-05	0.00013923
VPS72	1q21.3	-0.181446859	4.40495E-05	0.000139257
INPP1	2q32.2	0.18143474	4.41022E-05	0.000139401
TSEN2	3p25.2	-0.181414891	4.41886E-05	0.000139653
CXCL2	4q13.3	0.181404013	4.4236E-05	0.000139781
VSIG10L	19q13.41	-0.181353532	4.44567E-05	0.000140454
LAIR2	19q13.42	0.181352056	4.44631E-05	0.000140454
METTL4	18p11.32	-0.181335401	4.45362E-05	0.000140663
GZMM	19p13.3	0.18129599	4.47095E-05	0.000141183
FUNDC1	Xp11.3	-0.181294749	4.47149E-05	0.000141183
INTS13	12p11.23	-0.181230241	4.5E-05	0.000142061
ZNF70	22q11.23	0.18120438	4.51148E-05	0.000142401
GALNS	16q24.3	0.181167545	4.52787E-05	0.000142896
FOLR3	11q13.4	0.181147779	4.53669E-05	0.000143152
ZNF215	11p15.4	0.181145311	4.53779E-05	0.000143165
FAM124A	13q14.3	0.181134719	4.54253E-05	0.000143292
PCDH1	5q31.3	0.181094258	4.56065E-05	0.000143841
PIGH	14q24.1	-0.181050266	4.58044E-05	0.000144442
RPL15	3p24.2	-0.181033089	4.58819E-05	0.000144664
CDH17	8q22.1	0.181020707	4.59378E-05	0.000144818
FBXO36	2q36.3	0.181010091	4.59858E-05	0.000144947
RBSN	3p25.1	0.18097035	4.61659E-05	0.000145492
LINC00937	12p13.31	0.180962618	4.6201E-05	0.000145579
SENP2	3q27.2	-0.18094835	4.62659E-05	0.000145761
ARL4C	2q37.1	0.18093938	4.63067E-05	0.000145867
HSD17B8	6p21.32	-0.180936995	4.63176E-05	0.000145878
CSDE1	1p13.2	0.180931746	4.63415E-05	0.000145931
ERGIC1	5q35.1	0.180903881	4.64687E-05	0.000146309
INSL3	19p13.11	0.180879125	4.65819E-05	0.000146642
CBWD3	9q21.11	-0.180842808	4.67485E-05	0.000147144
FGFBP3	10q23.32	-0.180834897	4.67849E-05	0.000147235
C15ORF48	15q21.1	0.180829926	4.68077E-05	0.000147284
DTD1	20p11.23	-0.180827158	4.68205E-05	0.000147301
ASPHD1	16p11.2	0.180807362	4.69116E-05	0.000147565
AKR1B1	7q33	-0.180804924	4.69229E-05	0.000147577
ARHGAP45	19p13.3	0.180732209	4.72593E-05	0.000148612
SEPTIN12	16p13.3	-0.180713624	4.73456E-05	0.000148861
NDUFA9	12p13.32	-0.180682969	4.74884E-05	0.000149286
DNM1	9q34.11	0.180653295	4.7627E-05	0.000149699
NWD1	19p13.11	0.180644539	4.76679E-05	0.000149804
DNAAF4	15q21.3	0.180630744	4.77325E-05	0.000149984
PAX5	9p13.2	0.180623026	4.77687E-05	0.000150074
HSP90AA1	14q32.31	-0.180618174	4.77915E-05	0.000150101
SLITRK2	Xq27.3	0.18061802	4.77922E-05	0.000150101
CENPW	6q22.32	-0.180600329	4.78753E-05	0.000150339
ZNF407	18q22.3	0.180540783	4.81559E-05	0.000151196
MVB12A	19p13.11	-0.180525706	4.82272E-05	0.000151396
TMEM185B	2q14.2	-0.1805133	4.82859E-05	0.000151557
PUDP	Xp22.31	-0.180503471	4.83325E-05	0.00015168
ADAM11	17q21.31	-0.180486633	4.84124E-05	0.000151907
CXCR5	11q23.3	0.180469499	4.84939E-05	0.000152139
APOBEC3G	22q13.1	0.180463678	4.85216E-05	0.000152202
AFF3	2q11.2	0.180429329	4.86853E-05	0.000152692
CSTF2	Xq22.1	-0.180373786	4.89512E-05	0.000153502
PLEKHM3	2q33.3	0.180361103	4.90121E-05	0.000153669

KCNE2	21q22.11	-0.180307569	4.92699E-05	0.000154454
ARID1A	1p36.11	0.180297827	4.9317E-05	0.000154577
TRIM2	4q31.3	-0.180277119	4.94172E-05	0.000154867
GAB2	11q14.1	0.180206885	4.97584E-05	0.000155912
PPP1R11	6p22.1	0.180175203	4.9913E-05	0.000156372
OPRD1	1p35.3	0.180138611	5.00922E-05	0.000156909
CYP7A1	8q12.1	0.180126202	5.01531E-05	0.000157076
GPR142	17q25.1	0.180122403	5.01718E-05	0.00015711
ALG10	12p11.1	-0.18010287	5.02678E-05	0.000157386
RPN2	20q11.23	0.180095904	5.03021E-05	0.000157469
SRFBP1	5q23.1	-0.180084262	5.03594E-05	0.000157624
PRR5-ARHGAP8	22q13.31	-0.180058957	5.04843E-05	0.000157991
LINC00028	20q11.21	0.180026816	5.06434E-05	0.000158464
LYRM7	5q23.3-q31.1	-0.179986831	5.08419E-05	0.000159046
NOP58	2q33.1	-0.179986163	5.08452E-05	0.000159046
CBLN1	16q12.1	0.179982988	5.0861E-05	0.000159071
INO80D	2q33.3	0.17997381	5.09067E-05	0.000159189
ZBTB1	14q23.3	0.179969845	5.09265E-05	0.000159226
CD79A	19q13.2	0.179953813	5.10064E-05	0.000159451
ZCCHC14	16q24.2	0.179887397	5.13388E-05	0.000160466
OLIG1	21q22.11	0.179878951	5.13812E-05	0.000160573
FNBP1	9q34.11	0.179857242	5.14904E-05	0.000160871
ECE1	1p36.12	0.17985686	5.14923E-05	0.000160871
GLMP	1q22	0.179845409	5.155E-05	0.000161026
TMC8	17q25.3	0.179810005	5.17287E-05	0.000161559
TMEM59	1p32.3	0.179788057	5.18398E-05	0.000161853
SCO1	17p13.1	-0.179786626	5.1847E-05	0.000161853
CCDC9	19q13.32	0.179786201	5.18492E-05	0.000161853
C9ORF50	9q34.11	0.179785084	5.18549E-05	0.000161853
NMUR1	2q37.1	0.179664952	5.2467E-05	0.000163738
CALHM6	6q22.1	0.17965007	5.25434E-05	0.000163951
DTYMK	2q37.3	-0.179632989	5.26311E-05	0.0001642
EIF1B	3p22.1	-0.179608369	5.27578E-05	0.000164569
ARCN1	11q23.3	0.179598349	5.28094E-05	0.000164705
RPL14	3p22.1	-0.179573634	5.2937E-05	0.000165077
DENND5B	12p11.21	0.179556361	5.30263E-05	0.000165329
WDR12	2q33.2	-0.179554835	5.30342E-05	0.000165329
RMC1	18q11.2	-0.17954825	5.30683E-05	0.00016541
TNFRSF11B	8q24.12	0.179534318	5.31405E-05	0.00016561
SPATA1	1p22.3	0.179526694	5.31801E-05	0.000165707
DHCR7	11q13.4	-0.17951924	5.32188E-05	0.000165802
ITM2A	Xq21.1	0.179490135	5.33701E-05	0.000166248
CNTN4	3p26.3-p26.2	0.179481043	5.34175E-05	0.00016637
TOMM7	7p15.3	-0.17947439	5.34522E-05	0.000166452
CFAP300	11q22.1	0.179464374	5.35044E-05	0.000166571
SERPINB7	18q21.33	0.179463951	5.35066E-05	0.000166571
PCSK5	9q21.13	0.179419233	5.37406E-05	0.000167273
BICRAL	6p21.1	0.179410549	5.37861E-05	0.00016738
LINC00052	15q25.3	0.179409538	5.37914E-05	0.00016738
HCG26	6p21.33	0.17940282	5.38267E-05	0.000167463
OXCT2	1p34.2	0.179394293	5.38714E-05	0.000167577
NFE2L3	7p15.2	0.179389556	5.38963E-05	0.000167629
SERPINA12	14q32.13	0.179387707	5.3906E-05	0.000167633
ZDHHC18	1p36.11	-0.179369802	5.40002E-05	0.0001679
GDPD2	Xq13.1	-0.179367026	5.40149E-05	0.00016792
SPEF2	5p13.2	0.179323143	5.42465E-05	0.000168614
PRX	19q13.2	0.179319894	5.42637E-05	0.000168641
MRPL48	11q13.4	-0.179267223	5.4543E-05	0.000169483

EGR1	5q31.2	0.179263974	5.45602E-05	0.000169511
CHDH	3p21.1	0.179253859	5.4614E-05	0.000169652
TRIM23	5q12.3	0.179145263	5.51949E-05	0.00017143
MINDY4	7p14.3	0.179143164	5.52062E-05	0.000171438
STK17A	7p13	0.179128564	5.52847E-05	0.000171656
OVCH2	11p15.4	0.179074686	5.55755E-05	0.000172532
PON1	7q21.3	0.179032867	5.58022E-05	0.000173209
DNAJB9	7q31.1 14q24.2-q2	0.178964621	5.61741E-05	0.000174337
MCMDC2	8q13.1	-0.178940625	5.63054E-05	0.000174717
OVOL2	20p11.23	-0.178936279	5.63292E-05	0.000174764
CDT1	16q24.3	-0.178919388	5.64218E-05	0.000175009
PTPRN2	7q36.3	0.17891872	5.64255E-05	0.000175009
TAS2R10	12p13.2	0.178900413	5.6526E-05	0.000175294
ALG8	11q14.1	-0.178897631	5.65413E-05	0.000175315
DGCR6	22q11.21 22q11	-0.178841043	5.68533E-05	0.000176255
TCN2	22q12.2	0.178825966	5.69368E-05	0.000176486
ATP4A	19q13.12	-0.178820989	5.69643E-05	0.000176521
PIKFYVE	2q34	0.178820813	5.69653E-05	0.000176521
SCARNA16	17q25.2	-0.178814891	5.69981E-05	0.000176595
UBQLN1	9q21.32 9q21.2-q2	-0.178810984	5.70197E-05	0.000176635
EFNA2	19p13.3	0.178781443	5.71837E-05	0.000177116
PRRC2A	6p21.33	0.17877768	5.72046E-05	0.000177143
MTHFD2	2p13.1	-0.178776725	5.72099E-05	0.000177143
ZNF518B	4p16.1	0.178730062	5.747E-05	0.000177921
SCUBE1	22q13.2	0.178714352	5.75578E-05	0.000178165
ADGRG1	16q21	0.178673283	5.77879E-05	0.00017885
REPS2	Xp22.2	0.178658206	5.78726E-05	0.000179085
SMARCE1	17q21.2	-0.178651621	5.79096E-05	0.000179172
MGAM2	7q34	0.178589968	5.82574E-05	0.00018022
ZNF737	19p12	0.178559916	5.84276E-05	0.000180719
TBC1D2	9q22.33	-0.178555145	5.84547E-05	0.000180775
ZNF354A	5q35.3	0.178508481	5.87201E-05	0.000181568
NYAP2	2q36.3	0.178504202	5.87445E-05	0.000181616
RPS21	20q13.33	-0.178473173	5.89216E-05	0.000182135
DECR2	16p13.3	-0.178467638	5.89533E-05	0.000182205
ASIC5	4q32.1	-0.178457773	5.90098E-05	0.000182352
NMT1	17q21.31	-0.178439678	5.91135E-05	0.000182644
NUP42	7p15.3	-0.178414104	5.92603E-05	0.00018307
BTG4	11q23.1	-0.178378317	5.94664E-05	0.000183679
PCSK7	11q23.3	0.178367727	5.95275E-05	0.000183839
IGF1R	15q26.3	0.178363814	5.95501E-05	0.000183881
HMX3	10q26.13	0.178350768	5.96255E-05	0.000184085
SLA2	20q11.23	0.178321158	5.97969E-05	0.000184586
TICAM1	19p13.3	-0.178307226	5.98777E-05	0.000184808
NAT10	11p13	-0.178294534	5.99515E-05	0.000185007
APOL3	22q12.3	0.178279648	6.0038E-05	0.000185246
CA3	8q21.2	0.178269433	6.00975E-05	0.000185401
FMO9P	1q24.1	-0.17826742	6.01092E-05	0.000185409
ABLIM1	10q25.3	-0.178245294	6.02383E-05	0.000185778
TNRC18	7p22.1	0.178231553	6.03186E-05	0.000185998
FAM122A	9q21.11	-0.17819844	6.05124E-05	0.000186567
PDRG1	20q11.21	-0.178190615	6.05583E-05	0.00018668
CD99	Xp22.33 and Yp11	0.178161987	6.07265E-05	0.00018717
LRRC18	10q11.23	0.178125866	6.09394E-05	0.00018777
KPNA5	6q22.1	0.178125777	6.09399E-05	0.00018777
TRAPPC6A	19q13.32	-0.178124007	6.09503E-05	0.000187774
AHSG	3q27.3	-0.178121491	6.09652E-05	0.000187791
ZNF674-AS1	Xp11.3	-0.178117136	6.09909E-05	0.000187841

IGDCC3	15q22.31	0.178112922	6.10158E-05	0.000187889
RPS27L	15q22.2	0.178097669	6.1106E-05	0.000188138
LGALS12	11q12.3	0.178086098	6.11745E-05	0.00018832
ZNF224	19q13.31	0.178064461	6.13028E-05	0.000188687
DNAJC9	10q22.2	-0.178061216	6.13221E-05	0.000188717
MIR155HG	-	0.178016652	6.15872E-05	0.000189504
CHCHD1	10q22.2	-0.17799833	6.16965E-05	0.000189812
COX10	17p12	-0.177984302	6.17804E-05	0.000190041
PATL2	15q21.1	0.17795993	6.19262E-05	0.00019045
PSMA2	7p14.1	-0.177958919	6.19323E-05	0.00019045
MAPK8	10q11.22	0.17794012	6.20451E-05	0.000190768
HOXC6	12q13.13	0.177918362	6.21758E-05	0.00019114
WNT5B	12p13.33	0.17790443	6.22597E-05	0.000191344
KIRREL3	11q24.2	0.177904216	6.2261E-05	0.000191344
CD83	6p23	0.177898227	6.2297E-05	0.000191426
PHF1	6p21.32	0.177886872	6.23655E-05	0.000191587
LVRN	5q23.1	0.177886354	6.23686E-05	0.000191587
RBM14	11q13.2	-0.177875611	6.24335E-05	0.000191757
CARD6	5p13.1	0.177858148	6.2539E-05	0.000192052
OCRL	Xq26.1	-0.177844216	6.26233E-05	0.000192282
DHRS7B	17p11.2	-0.177829043	6.27153E-05	0.000192535
CADPS	3p14.2	0.177796306	6.29141E-05	0.000193116
TMED5	1p22.1	0.177782761	6.29966E-05	0.00019334
ARSH	Xp22.33	0.177759026	6.31413E-05	0.000193754
VWA5A	11q24.2	0.177741441	6.32487E-05	0.000194054
PLEK	2p14	0.177735239	6.32866E-05	0.000194141
TSPAN32	11p15.5	0.177709343	6.34452E-05	0.000194598
TM9SF3	10q24.1	0.177685331	6.35926E-05	0.000195021
SLAMF7	1q23.3	0.177634086	6.39082E-05	0.000195959
ID1I	10p15.3	-0.177632273	6.39194E-05	0.000195963
PPP1R3G	6p25.1	-0.177612043	6.40444E-05	0.000196317
SMU1	9p21.1	-0.177608035	6.40692E-05	0.000196363
CHRNE	17p13.2	0.177578357	6.42531E-05	0.000196897
NXPH2	2q22.1	0.177564152	6.43413E-05	0.000197137
OR3A2	17p13.3	0.177557037	6.43856E-05	0.000197242
CEBPE	14q11.2	0.177496093	6.47655E-05	0.000198376
MAP3K5	6q23.3	0.177469094	6.49345E-05	0.000198853
ST6GALNAC3	1p31.1	0.177468096	6.49407E-05	0.000198853
TRIM17	1q42.13	0.177400868	6.53634E-05	0.000200116
AQP12B	2q37.3	0.177366787	6.55786E-05	0.000200745
SRPK1	6p21.31	-0.177334065	6.57859E-05	0.000201349
STS	Xp22.31	0.177304006	6.59769E-05	0.000201903
RPS26	12q13.2	-0.177261254	6.62494E-05	0.000202706
EIF4E3	3p13	0.177221561	6.65034E-05	0.000203452
RAD51AP1	12p13.32	-0.177186917	6.67258E-05	0.000204102
CASC4	15q15.3	0.177182146	6.67565E-05	0.000204154
KDM2A	11q13.2	0.177181096	6.67632E-05	0.000204154
TMEM244	6q22.33	0.177135251	6.70588E-05	0.000205027
CAST	5q15	0.17710714	6.72406E-05	0.000205552
PDCL3P4	3q12.3	-0.177099315	6.72913E-05	0.000205676
RAN	12q24.33	-0.177091299	6.73433E-05	0.000205803
DNAJB12	10q22.1	0.177081475	6.7407E-05	0.000205967
LEPR	1p31.3	0.177076699	6.7438E-05	0.000206031
NUDT5	10p14	-0.177062385	6.75311E-05	0.000206277
LMBRD1	6q13	0.177061145	6.75391E-05	0.000206277
SOAT2	12q13.13	0.177042508	6.76604E-05	0.000206616
PPL	16p13.3	-0.176986712	6.80249E-05	0.000207698
ACOXL	2q13	0.176921963	6.84501E-05	0.000208964

REPS1	6q24.1	-0.176909989	6.8529E-05	0.000209142
RGPD4	2q12.3	0.176909989	6.8529E-05	0.000209142
PES1	22q12.2	-0.176862943	6.88399E-05	0.000210059
IRF2BP2	1q42.3	0.176852447	6.89094E-05	0.000210239
LCLAT1	2p23.1	-0.176848534	6.89353E-05	0.000210287
HRH4	18q11.2	0.176836539	6.90149E-05	0.000210498
SLC35D2	9q22.32	-0.17682859	6.90677E-05	0.000210618
ZNF391	6p22.1	0.176827445	6.90753E-05	0.000210618
LOC407835	7q32.1	-0.17680626	6.92162E-05	0.000211016
OPN1SW	7q32.1	0.176792197	6.93099E-05	0.000211269
RNASE7	14q11.2	0.176766779	6.94795E-05	0.000211754
PSG8	19q13.2	0.176761886	6.95121E-05	0.000211811
HPSE	4q21.23	-0.176760837	6.95192E-05	0.000211811
SEC61B	9q22.33	-0.176726388	6.97498E-05	0.000212482
SLC10A1	14q24.1	-0.176721369	6.97834E-05	0.000212552
SLC9A2	2q12.1	-0.176706118	6.98858E-05	0.000212832
MAPK8IP2	22q13.33	-0.176704535	6.98964E-05	0.000212832
SKIV2L	6p21.33	0.176693084	6.99734E-05	0.000213035
APEX2	Xp11.21	-0.176682014	7.00479E-05	0.000213229
MRPL18	6q25.3	-0.176671327	7.01198E-05	0.000213416
FAHD2A	2q11.1	-0.176650333	7.02614E-05	0.000213815
NDUFS2	1q23.3	-0.176638118	7.03439E-05	0.000214034
TRAT1	3q13.13	0.17663406	7.03714E-05	0.000214085
PYCR3	8q24.3	-0.176615979	7.04937E-05	0.000214425
XRN1	3q23	0.176609013	7.05409E-05	0.000214536
DHX38	16q22.2	0.176594126	7.06418E-05	0.00021481
PDCD7	15q22.31	-0.176585634	7.06995E-05	0.000214953
BATF2	11q13.1	0.176572803	7.07867E-05	0.000215186
NSUN5	7q11.23	-0.176548703	7.09507E-05	0.000215596
KAT2B	3p24.3	0.176548035	7.09552E-05	0.000215596
KBTD2	7p14.3	0.176547654	7.09578E-05	0.000215596
HAUS7	Xq28	-0.176546699	7.09643E-05	0.000215596
RPS27A	2p16.1	-0.176544505	7.09793E-05	0.000215609
ARMH3	10q24.32	0.176538397	7.10209E-05	0.000215703
NTN3	16p13.3	0.176533864	7.10519E-05	0.000215765
CWC25	17q12	-0.176507002	7.12353E-05	0.000216289
FBXL20	17q12	-0.176501372	7.12739E-05	0.000216351
GSE1	16q24.1	0.176500895	7.12771E-05	0.000216351
KCTD6	3p14.3	-0.176494119	7.13235E-05	0.000216459
AEBP2	12p12.3	-0.176461961	7.1544E-05	0.000217096
KLHL12	1q32.1	-0.17645404	7.15984E-05	0.000217228
KDM5B	1q32.1	0.176431233	7.17553E-05	0.000217671
HSD11B2	16q22.1	-0.176419114	7.18388E-05	0.000217892
TCEAL4	Xq22.2	-0.176403941	7.19435E-05	0.000218177
GPR171	3q25.1	0.176393353	7.20166E-05	0.000218366
MAST2	1p34.1	0.176377699	7.21249E-05	0.000218661
SNORA74A	5q31.2	-0.176370924	7.21717E-05	0.00021877
MCM3AP-AS1	21q22.3	-0.176354033	7.22888E-05	0.000219092
CCL23	17q12	0.176325063	7.24899E-05	0.000219669
PTRH1	9q34.11	-0.176278932	7.28113E-05	0.00022061
MGAM	7q34	0.176259881	7.29445E-05	0.00022098
CCDC12	3p21.31	-0.176242436	7.30666E-05	0.000221316
CIAO2B	16q22.1	-0.176217287	7.32429E-05	0.000221817
KHSRP	19p13.3	-0.17615879	7.36547E-05	0.000223031
NUB1	7q36.1	0.176102397	7.40537E-05	0.000224206
TBC1D10C	11q13.2	0.176079777	7.42144E-05	0.000224658
SERPINA9	14q32.13	0.176051213	7.44177E-05	0.00022524
C16ORF46	16q23.2	0.175988839	7.48635E-05	0.000226555

LINC00667	18p11.31	-0.175978815	7.49353E-05	0.000226739
FARSB	2q36.1	-0.17597538	7.496E-05	0.000226779
CXORF65	Xq13.1	0.175963279	7.50469E-05	0.000227008
SNHG8	4q26	-0.175948565	7.51526E-05	0.000227294
DRD2	11q23.2	0.175938609	7.52243E-05	0.00022746
IFT52	20q13.12	0.175937782	7.52302E-05	0.00022746
ASRGL1	11q12.3	-0.175928812	7.52948E-05	0.000227622
EMC1	1p36.13	0.175899325	7.55076E-05	0.000228231
RAE1	20q13.31	-0.175880144	7.56463E-05	0.000228616
TCEA1	8q11.23	-0.175824224	7.60521E-05	0.000229808
C12ORF75	12q23.3	-0.175810483	7.61521E-05	0.000230075
ABHD14B	3p21.2	-0.175791397	7.62912E-05	0.000230461
PIIG	2q31.1	-0.17573271	7.67205E-05	0.000231723
SHROOM3	4q21.1	0.175723644	7.6787E-05	0.00023189
MAP6D1	3q27.1	-0.175719541	7.68172E-05	0.000231946
SETBP1	18q12.3	0.175712957	7.68655E-05	0.000232057
TMEM182	2q12.1	-0.175673068	7.71592E-05	0.000232909
GRIK1-AS1	21q21.3	0.175656046	7.72848E-05	0.000233253
EMC8	16q24.1	-0.175637474	7.7422E-05	0.000233632
HAGH	16p13.3	-0.175605033	7.76624E-05	0.000234323
PPP1R13B	14q32.33	-0.175552405	7.80538E-05	0.000235468
FURIN	15q26.1	0.1755493	7.80769E-05	0.000235503
TMX4	20p12.3	0.175539757	7.81481E-05	0.000235682
AP1S2	Xp22.2	0.175534608	7.81866E-05	0.000235763
GPAT2	2q11.2	0.175532982	7.81987E-05	0.000235764
EXPH5	11q22.3	-0.175526779	7.8245E-05	0.000235869
PLGRKT	9p24.1	-0.175522485	7.82771E-05	0.00023593
KLHDC7A	1p36.13	0.175505362	7.84052E-05	0.000236281
ASPG	14q32.33	-0.175492889	7.84987E-05	0.000236527
ZNF283	19q13.31	0.175444859	7.88594E-05	0.000237579
TPTE2	13q12.11	0.175438899	7.89043E-05	0.000237674
PCBD1	10q22.1	-0.175437555	7.89144E-05	0.000237674
C17ORF99	17q25.3	-0.17543062	7.89666E-05	0.000237796
DDA1	19p13.11	-0.175398049	7.92125E-05	0.0002385
BRIP1	17q23.2	-0.175386216	7.9302E-05	0.000238714
ARMH4	14q23.1	0.175385548	7.9307E-05	0.000238714
SOCS3	17q25.3	0.1753615	7.94892E-05	0.000239226
RNF20	9q31.1	-0.17529556	7.99908E-05	0.000240675
RNPS1	16p13.3	-0.175295083	7.99944E-05	0.000240675
UXT	Xp11.23	-0.17528096	8.01022E-05	0.000240945
MAP4K4	2q11.2	0.175280197	8.01081E-05	0.000240945
CCM2	7p13	0.175266455	8.02131E-05	0.000241225
TIMM22	17p13.3	-0.175251473	8.03278E-05	0.000241534
ZNF536	19q12	0.175246637	8.03648E-05	0.000241609
APOB	2p24.1	0.175243545	8.03885E-05	0.000241645
FILIP1	6q14.1	0.175221891	8.05547E-05	0.000242108
NSUN3	3q11.2	-0.175210249	8.06441E-05	0.000242341
C10ORF62	10q24.2	-0.175185526	8.08344E-05	0.000242847
TMEM245	9q31.3	-0.175185247	8.08365E-05	0.000242847
ZPLD1	3q12.3	0.175181161	8.0868E-05	0.000242905
TRIP12	2q36.3	0.17517246	8.09351E-05	0.00024307
SNRPN	15q11.2	0.175156237	8.10603E-05	0.00024341
LINC01558	6q27	0.175113013	8.13949E-05	0.000244378
ASNSD1	2q32.2	-0.175102703	8.14749E-05	0.000244582
FKBP6	7q11.23	-0.175098089	8.15107E-05	0.000244653
CD7	17q25.3	0.175083713	8.16224E-05	0.000244931
STX10	19p13.13	-0.175083045	8.16276E-05	0.000244931
AP5M1	14q22.3	-0.175079896	8.16521E-05	0.000244968

STMN2	8q21.13	0.175068789	8.17385E-05	0.000245191
MRPS15	1p34.3	-0.175063578	8.17791E-05	0.000245249
TRAPPC4	11q23.3	-0.175063196	8.17821E-05	0.000245249
RBPMS	8p12	0.175047355	8.19056E-05	0.000245583
S100A3	1q21.3	0.175037145	8.19853E-05	0.000245785
ZNF134	19q13.43	0.174968438	8.25234E-05	0.000247362
H2AFJ	12p12.3	-0.174909846	8.29849E-05	0.000248708
CRIM1	2p22.2	0.174901734	8.3049E-05	0.000248863
EEF1B2	2q33.3	-0.17486719	8.33224E-05	0.000249646
NISCH	3p21.1	0.17485488	8.34201E-05	0.000249901
HOXD3	2q31.1	0.174851403	8.34477E-05	0.000249947
GHRL	3p25.3	0.174833724	8.35882E-05	0.00025033
LOC606724	16p11.2	0.174813898	8.37459E-05	0.000250766
FAM160A1	4q31.3	-0.174787413	8.39572E-05	0.000251361
SIGMAR1	9p13.3	-0.174755636	8.42113E-05	0.000252084
ARHGAP15	2q22.2-q22.3	0.174741895	8.43214E-05	0.000252376
TMEM117	12q12	-0.174706969	8.46018E-05	0.000253178
BID	22q11.21	-0.174703533	8.46295E-05	0.000253223
CCDC81	11q14.2	0.174684599	8.47819E-05	0.000253642
RNF217-AS1	6q22.31	-0.174670913	8.48923E-05	0.000253934
FABP3	1p35.2	0.174641697	8.51283E-05	0.000254603
MEG8	14q32.2-q32.31	0.174604331	8.54311E-05	0.00025547
HOXC10	12q13.13	0.174518654	8.61292E-05	0.00025752
TMEM272	13q14.3	0.174492092	8.63467E-05	0.000258132
BUD31	7q22.1	-0.17446907	8.65357E-05	0.000258658
NSRP1	17q11.2	-0.174428227	8.68718E-05	0.000259625
IFNGR1	6q23.3	0.174422979	8.69151E-05	0.000259716
NUAK2	1q32.1	0.174395687	8.71406E-05	0.000260351
EXOSC9	4q27	-0.174388053	8.72037E-05	0.000260501
ST6GALNAC2	17q25.1	-0.174381182	8.72606E-05	0.000260632
PMS2P9	7q11.23	-0.174370546	8.73487E-05	0.000260857
KCNK12	2p16.3	0.174367806	8.73714E-05	0.000260886
C1D	2p14	-0.174348164	8.75344E-05	0.000261334
CMTM2	16q21	0.174346296	8.75499E-05	0.000261342
SPIRE1	18p11.21	0.174342629	8.75804E-05	0.000261394
DEPDC7	11p13	0.174328793	8.76954E-05	0.000261699
MAS1	6q25.3	0.174300044	8.79349E-05	0.000262374
PCDH9	13q21.32	0.174282383	8.80823E-05	0.000262775
RHOV	15q15.1	-0.174223442	8.8576E-05	0.000264209
COL27A1	9q32	0.174213326	8.8661E-05	0.000264424
TLR1	4p14	0.174202448	8.87525E-05	0.000264657
FUT6	19p13.3	-0.17418001	8.89414E-05	0.000265182
KATNBL1P6	6q24.3	-0.174168432	8.90391E-05	0.000265434
COQ8A	1q42.13	-0.174145001	8.92371E-05	0.000265984
A4GALT	22q13.2	-0.174117709	8.94681E-05	0.000266634
MYNN	3q26.2	-0.174110552	8.95288E-05	0.000266775
ZNF285	19q13.31	0.174085218	8.9744E-05	0.000267377
PGA3	11q12.2	0.174059458	8.99633E-05	0.000267991
PPHLN1	12q12	-0.174044135	9.00939E-05	0.00026831
LINC01128	1p36.33	0.174043753	9.00972E-05	0.00026831
PIAS4	19p13.3	-0.174039554	9.0133E-05	0.000268378
PTPRA	20p13	0.174036882	9.01558E-05	0.000268406
LPO	17q22	0.173995446	9.05103E-05	0.000269421
GLUD1	10q23.2	-0.173978195	9.06583E-05	0.000269822
RSPRY1	16q13	0.173973805	9.0696E-05	0.000269894
KIF4A	Xq13.1	-0.173953289	9.08723E-05	0.000270379
C11ORF95	11q13.1	0.173909965	9.12458E-05	0.000271415
MRPL28	16p13.3	-0.173909774	9.12474E-05	0.000271415

ATF4	22q13.1	-0.173886681	9.1447E-05	0.000271969
SUPV3L1	10q22.1	-0.1738821	9.14867E-05	0.000272047
SLC6A12	12p13.33	0.173861635	9.1664E-05	0.000272534
RMDN2	2p22.2	0.173781711	9.23597E-05	0.000274562
ANKRD6	6q15	0.173778376	9.23889E-05	0.000274608
GIMAP7	7q36.1	0.173757477	9.25717E-05	0.000275111
GHITM	10q23.1	-0.173755851	9.25859E-05	0.000275113
PRR12	19q13.33	0.173734857	9.27699E-05	0.000275619
SOX6	11p15.2	-0.173713959	9.29534E-05	0.000276123
ARNT2	15q25.1	0.173693156	9.31364E-05	0.000276626
CEP55	10q23.33	-0.173688193	9.31801E-05	0.000276715
UQCC2	6p21.31	-0.173683136	9.32246E-05	0.000276807
CACNG5	17q24.2	0.173667544	9.33621E-05	0.000277174
UBL4A	Xq28	-0.173645156	9.35599E-05	0.000277721
PTPRF	1p34.2	0.173630746	9.36874E-05	0.000278058
ARL16	17q25.3	-0.17361147	9.38582E-05	0.000278524
TMEM235	17q25.3	0.173580114	9.41367E-05	0.000279309
RGL2	6p21.32	0.173549252	9.44115E-05	0.000280045
CD200	3q13.2	0.173549157	9.44124E-05	0.000280045
DCAF17	2q31.1	-0.173546294	9.44379E-05	0.00028008
HILPDA	7q32.1	-0.17352988	9.45844E-05	0.000280473
MFAP1	15q15.3	-0.173524632	9.46313E-05	0.000280571
C2ORF42	2p13.3	-0.173484605	9.49897E-05	0.000281592
PWP1	12q23.3	-0.173482835	9.50056E-05	0.000281598
RPF2	6q21	-0.173476346	9.50638E-05	0.000281729
WDR62	19q13.12	-0.173452108	9.52816E-05	0.000282333
IL1RAPL2	Xq22.3	-0.173436322	9.54237E-05	0.000282713
NSMAF	8q12.1	-0.173413842	9.56264E-05	0.000283271
VNN2	6q23.2	0.173360784	9.61064E-05	0.000284652
PTTG3P	8q13.1	-0.173339143	9.63029E-05	0.000285192
LINC00472	6q13	0.17333551	9.63359E-05	0.000285248
DES	2q35	0.173324383	9.64371E-05	0.000285505
KCTD15	19q13.11	-0.173316697	9.6507E-05	0.00028567
LRRC10B	11q12.2	0.173308437	9.65823E-05	0.000285851
TCTN1	12q24.11	0.173304391	9.66191E-05	0.000285918
SPATA22	17p13.2	0.173270177	9.69315E-05	0.000286801
NPBWR1	8q11.23	0.173263173	9.69955E-05	0.000286948
CCDC124	19p13.11	-0.173242646	9.71834E-05	0.000287462
KMT2E	7q22.3	0.173222225	9.73708E-05	0.000287933
HFM1	1p22.2	0.173221479	9.73776E-05	0.000287933
FGFBP2	4p15.32	-0.173220623	9.73855E-05	0.000287933
HMGCR	5q13.3	-0.173206193	9.7518E-05	0.000288283
IFT20	17q11.2	-0.173196746	9.76049E-05	0.000288497
NSMCE1	16p12.1	-0.173185963	9.77042E-05	0.000288748
KHDC1	6q13	-0.173177239	9.77846E-05	0.000288944
YY1	14q32.2	-0.173167641	9.78731E-05	0.000289163
GRSF1	4q13.3	-0.173155617	9.79841E-05	0.000289448
THAP6	4q21.1	-0.173142639	9.8104E-05	0.00028976
TNFRSF17	16p13.13	0.173135332	9.81716E-05	0.000289917
HOXB4	17q21.32	0.173133573	9.81879E-05	0.000289923
NPSR1	7p14.3	-0.173118187	9.83303E-05	0.000290276
CYB5A	18q22.3	-0.173117542	9.83363E-05	0.000290276
GAS5	1q25.1	-0.173085956	9.86294E-05	0.000291099
PCDHA12	5q31.3	0.173073402	9.87462E-05	0.000291401
ISM2	14q24.3	-0.173061452	9.88574E-05	0.000291686
SEPTIN1	16p11.2	0.173054846	9.89189E-05	0.000291825
KCNA5	12p13.32	0.17303048	9.91462E-05	0.000292453
PRKAB1	12q24.23	-0.173006565	9.93698E-05	0.000293032

PRF1	10q22.1	0.17300637	9.93716E-05	0.000293032
TVP23A	16p13.13	0.172986807	9.95548E-05	0.00029353
CHTOP	1q21.3	-0.172978028	9.96372E-05	0.00029373
IER3	6p21.33	0.172950163	9.98989E-05	0.000294458
DHRS7	14q23.1	0.172931555	0.000100074	0.000294931
GRAMD4	22q13.31	0.172924971	0.000100136	0.000295071
EFCAB12	3q21.3	0.172923409	0.000100151	0.000295071
MCM2	3q21.3	-0.172902641	0.000100347	0.000295606
WASHC2C	10q11.22	0.172890999	0.000100457	0.000295887
ZDHHC5	11q12.1	-0.172869623	0.000100659	0.000296439
DOK1	2p13.1	0.172867142	0.000100683	0.000296456
SNRK	3p22.1	0.172864808	0.000100705	0.000296456
RASA1	5q14.3	0.172864375	0.000100709	0.000296456
ETFRF1	12p12.1	-0.172843954	0.000100903	0.000296983
ERAP2	5q15	0.172837083	0.000100968	0.000297131
RRAGB	Xp11.21	-0.172803779	0.000101285	0.000297982
PRR7	5q35.3	-0.172803588	0.000101286	0.000297982
ZNF658	9q21.11	-0.172793286	0.000101385	0.000298228
RGS9BP	19q13.11	-0.172787361	0.000101441	0.000298331
ZFAS1	20q13.13	-0.172786507	0.000101449	0.000298331
LINC00696	3p21.2	0.172764286	0.000101662	0.000298911
SHMT2	12q13.3	-0.172671136	0.000102556	0.000301497
PCDHB6	5q31.3	0.17265978	0.000102665	0.000301775
PRR5	22q13.31	-0.172642508	0.000102832	0.000302221
NFKBIZ	3q12.3	0.172586588	0.000103374	0.000303769
FIG4	6q21	0.172579053	0.000103447	0.00030394
PCYOX1L	5q32	-0.172572274	0.000103513	0.00030409
ASB16-AS1	17q21.31	-0.172560918	0.000103624	0.00030437
SENP8	15q23	-0.172554147	0.00010369	0.000304519
CKM	19q13.32	0.172536088	0.000103866	0.000304992
LINC02396	12q13.12	0.172502714	0.000104192	0.000305905
TIGD1	2q37.1	-0.172480664	0.000104408	0.000306494
NDRG4	16q21	-0.172449269	0.000104716	0.000307355
POLR1E	9p13.2	-0.172410239	0.0001051	0.000308438
CHD5	1p36.31	0.17239435	0.000105257	0.000308853
MIR503HG	Xq26.3	0.172368268	0.000105515	0.000309565
LSM1	8p11.23	-0.172320347	0.000105991	0.000310915
CD3G	11q23.3	0.172303127	0.000106162	0.000311373
SIPA1L2	1q42.2	-0.172300594	0.000106187	0.000311401
EFHC1	6p12.2	0.17229859	0.000106207	0.000311415
RAB15	14q23.3	-0.172260038	0.000106592	0.000312497
STK32C	10q26.3	0.17225498	0.000106643	0.0003126
RELT	11q13.4	0.172234897	0.000106844	0.000313144
PDP2	16q22.1	-0.172217573	0.000107017	0.000313607
TSSK6	19p13.11	-0.172214428	0.000107049	0.000313654
SCUBE3	6p21.31	0.172194861	0.000107245	0.000314185
MRPL33	2p23.2	-0.172155927	0.000107638	0.000315288
SUGP1	19p13.11	-0.172151065	0.000107687	0.000315386
TMPO	12q23.1	-0.172127585	0.000107924	0.000316035
COA1	7p13	-0.172113081	0.000108071	0.000316419
NR2F1	5q15	0.172100103	0.000108202	0.000316758
CCL3	17q12	0.172085884	0.000108346	0.000317116
LMNB2	19p13.3	-0.17208493	0.000108356	0.000317116
TLE5	19p13.3	-0.172071475	0.000108493	0.00031747
KCTD8	4p13	0.172037429	0.000108839	0.000318438
ZFR2	19p13.3	0.172022777	0.000108989	0.000318829
TNXB	6p21.33-p21.32	0.171996088	0.000109262	0.000319581
R3HDM1	2q21.3	-0.171950474	0.000109729	0.000320902

CANX	5q35.3	0.171935682	0.000109881	0.000321301
KIF7	15q26.1	0.171912398	0.000110121	0.000321955
TUBGCP2	10q26.3	0.171908581	0.00011016	0.000322023
PNMA8B	19q13.32	0.171904625	0.000110201	0.000322096
NPSR1-AS1	7p14.3	-0.171864888	0.000110612	0.000323249
GUCA1B	6p21.1	0.171860295	0.000110659	0.000323341
COX7A2L	2p21	-0.171844264	0.000110826	0.000323736
LRRC8E	19p13.2	-0.171844168	0.000110827	0.000323736
MRPS5	2q11.1	-0.171828518	0.000110989	0.000324163
POMT2	14q24.3	0.171807906	0.000111203	0.000324742
RPS19	19q13.2	-0.171785767	0.000111434	0.000325368
RNF168	3q29	-0.171764678	0.000111654	0.000325964
EPHA4	2q36.1	0.17174731	0.000111835	0.000326411
BICD2	9q22.31	-0.171746928	0.000111839	0.000326411
CMTM6	3p22.3	0.171714865	0.000112175	0.000327343
LINGO3	19p13.3	0.171703682	0.000112292	0.000327639
PTBP2	1p21.3	0.171671732	0.000112628	0.000328571
NACA4P	8q22.3	-0.171637379	0.000112991	0.00032958
RDH12	14q24.1	-0.171608955	0.000113291	0.000330409
ATG101	12q13.13	-0.1715639	0.000113769	0.000331755
SLC25A19	17q25.1	-0.171558461	0.000113827	0.000331876
PALLD	4q32.3	0.17154262	0.000113995	0.000332319
KIF17	1p36.12	0.171525924	0.000114173	0.00033279
PPP1R36	14q23.3	0.171462714	0.000114849	0.000334712
CDHR2	5q35.2	0.171445832	0.00011503	0.000335191
PRKG2	4q21.21	-0.171403011	0.000115491	0.000336485
KIF6	6p21.2	0.171362622	0.000115927	0.000337707
TMEM63A	1q42.12	0.171358065	0.000115977	0.000337802
IL11RA	9p13.3	0.171351576	0.000116047	0.000337958
DZANK1	20p11.23	0.171347854	0.000116087	0.000338027
SLC9A6	Xq26.3	-0.171298423	0.000116624	0.00033954
SNX11	17q21.32	-0.171288499	0.000116732	0.000339806
METTL1	12q14.1	-0.171280006	0.000116824	0.000340026
PWAR5	15q11.2	0.171271341	0.000116919	0.000340252
TEDDM1	1q25.3	-0.171258172	0.000117063	0.000340621
SEPTIN7	7p14.2	0.171239449	0.000117267	0.000341167
CSRNP3	2q24.3	0.171234552	0.000117321	0.000341274
PPP1R17	7p14.3	0.171217686	0.000117505	0.000341761
CRCP	7q11.21	-0.171210821	0.000117581	0.000341931
CIART	1q21.2	-0.171200134	0.000117698	0.000342223
TBL2	7q11.23	-0.171196794	0.000117734	0.00034228
MAPKAPK5	12q24.12-q24.13	-0.171193167	0.000117774	0.000342346
TCF7L1	2p11.2	0.171179903	0.00011792	0.00034272
C2CD4B	15q22.2	0.171154237	0.000118202	0.000343492
GOSR1	17q11.2	-0.171146408	0.000118289	0.000343693
TTPAL	20q13.12	0.171119311	0.000118588	0.000344513
SDCBP	8q12.1	0.171115395	0.000118631	0.000344589
CT62	15q23	0.171101096	0.000118789	0.000344999
IGSF22	11p15.1	0.171068076	0.000119155	0.000346012
UBE3A	15q11.2	-0.171060334	0.000119241	0.000346212
TTC32	2p24.1	-0.171044978	0.000119412	0.000346657
ULBP3	6q25.1	0.171042584	0.000119439	0.000346685
DNPH1	6p21.1	-0.171039053	0.000119478	0.000346735
OR52N4	11p15.4	0.171037929	0.00011949	0.000346735
MNAT1	14q23.1	-0.17100928	0.00011981	0.000347612
NRARP	9q34.3	-0.170993726	0.000119983	0.000348066
WNT5A	3p14.3	-0.170960517	0.000120355	0.000349094
RAB11FIP1	8p11.23	-0.170947157	0.000120505	0.000349478

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DDX54	12q24.13	-0.170932462	0.00012067	0.000349856
TRHDE-AS1	12q21.1	0.170912361	0.000120896	0.000350443
SINHCAF	12p11.21	-0.170911372	0.000120907	0.000350443
IFIT3	10q23.31	0.170893241	0.000121111	0.000350984
C10ORF82	10q25.3	0.170886074	0.000121192	0.000351168
KIF5C	2q23.1-q23.2	0.170874017	0.000121328	0.000351512
IFNE	9p21.3	0.170840269	0.00012171	0.000352567
GPR162	12p13.31	0.170823675	0.000121898	0.000353061
SESTD1	2q31.2	0.1708023	0.00012214	0.000353713
CES3	16q22.1	-0.170792471	0.000122252	0.000353982
GPIHBP1	8q24.3	0.170791025	0.000122269	0.000353982
MYH1	17p13.1	0.170765869	0.000122555	0.000354761
6-Mar	5p15.2	0.170744853	0.000122795	0.000355392
PROB1	5q31.2	0.170743664	0.000122808	0.000355392
DDX10	11q22.3	-0.170731111	0.000122952	0.000355756
HK1	10q22.1	-0.170674333	0.000123603	0.000357588
ULBP2	6q25.1	0.170654293	0.000123833	0.000358204
USPL1	13q12.3	0.170640552	0.000123991	0.00035861
LEFTY2	1q42.12	0.170621312	0.000124213	0.0003592
PACSN3	11p11.2	-0.170615741	0.000124278	0.000359335
CD72	9p13.3	0.170595701	0.000124509	0.000359921
DHH	12q13.12	0.170595121	0.000124516	0.000359921
NCR1	19q13.42	0.17059148	0.000124558	0.000359991
MCM6	2q21.3	-0.170475845	0.000125903	0.000363826
AGBL1	15q25.3	0.170468169	0.000125993	0.000364034
FLII	17p11.2	0.170462008	0.000126065	0.00036419
NOL7	6p23	-0.17045905	0.0001261	0.000364238
SPAAR	9p13.3	0.170443603	0.000126281	0.000364708
KIF3B	20q11.21	0.170433571	0.000126398	0.000364996
KCNH8	3p24.3	-0.170424087	0.00012651	0.000365265
KCMF1	2p11.2	-0.17041773	0.000126584	0.000365428
TP53I13	17q11.2	-0.170416203	0.000126602	0.000365428
FER1L4	20q11.22	0.170392442	0.000126882	0.000366183
REX1BD	19p13.11	-0.170344252	0.000127451	0.000367771
MED23	6q23.2	0.170326693	0.000127658	0.000368311
DOCK8-AS1	9p24.3	0.170325369	0.000127674	0.000368311
SSR4P1	21q22.3	0.170319874	0.000127739	0.000368446
TCAIM	3p21.31	-0.170312475	0.000127827	0.000368646
STK32B	4p16.2	0.170309998	0.000127856	0.000368678
RGPD3	2q12.2	0.170283179	0.000128175	0.000369544
PPP3CA	4q24	0.17027135	0.000128315	0.000369897
BNIPL	1q21.3	-0.170248157	0.000128592	0.00037064
SLC25A11	17p13.2	-0.170245632	0.000128622	0.000370674
CXORF56	Xq24	-0.170238328	0.000128709	0.000370872
SMOC1	14q24.2	0.170220106	0.000128927	0.000371447
CBWD1	9p24.3	-0.170195577	0.00012922	0.000372239
MFSD5	12q13.13	-0.170176396	0.00012945	0.000372848
S100A7A	1q21.3	0.170162502	0.000129617	0.000373276
C5ORF49	5p15.31	0.170156937	0.000129684	0.000373415
SCIMP	17p13.2	0.170121717	0.000130108	0.000374582
IL36A	2q14.1	-0.170117947	0.000130153	0.000374625
CBLL1	7q22.3	-0.170117423	0.00013016	0.000374625
DDX31	9q34.13	-0.170109025	0.000130261	0.000374863
FAM155B	Xq13.1	-0.170090147	0.000130489	0.000375466
RASA4	7q22.1	0.170081256	0.000130597	0.000375721
LOC100240734	12q13.13	0.170066398	0.000130777	0.000376185
THEG	19p13.3	0.17004971	0.000130979	0.000376688

HSPA13	21q11.2	0.170048906	0.000130989	0.000376688
SMDT1	22q13.2	-0.170040222	0.000131094	0.000376938
HNRNPD	4q21.22	-0.170024095	0.00013129	0.000377447
L3MBTL3	6q23.1	0.170013694	0.000131417	0.000377757
CTNNAL1	9q31.3	-0.169992604	0.000131674	0.000378442
C11ORF80	11q13.2	-0.169963022	0.000132035	0.000379426
CDK17	12q23.1	0.169959969	0.000132072	0.000379479
C11ORF24	11q13.2	0.169952716	0.000132161	0.00037968
FAM234B	12p13.1	-0.169937257	0.00013235	0.00038017
LRRC39	1p21.2	0.169917964	0.000132587	0.000380795
STAU2	8q21.11	-0.169887826	0.000132957	0.000381804
PEBP1	12q24.23	-0.169885059	0.000132991	0.000381848
FAN1	15q13.3	-0.16987313	0.000133138	0.000382201
RPA3	7p21.3	-0.169871985	0.000133152	0.000382201
CPLX4	18q21.32	0.169867575	0.000133206	0.000382303
ITPKA	15q15.1	-0.169859918	0.000133301	0.00038252
CLCN7	16p13.3	0.169852327	0.000133395	0.000382734
ZBTB8B	1p35.1	0.169850659	0.000133415	0.000382739
PGAM5	12q24.33	-0.169844121	0.000133496	0.000382916
CEL	9q34.13	-0.169841162	0.000133532	0.000382966
MYH4	17p13.1	0.169821713	0.000133773	0.000383602
TMEM222	1p36.11	0.169812439	0.000133888	0.000383876
LTA	6p21.33	0.169794073	0.000134115	0.000384474
BCL7C	16p11.2	-0.169792304	0.000134137	0.000384483
CNOT6	5q35.3	0.169784383	0.000134236	0.00038471
HCAR1	12q24.31	0.169767204	0.000134449	0.000385267
VDAC1	5q31.1	-0.169755469	0.000134595	0.000385631
TAF3	10p14	0.169751366	0.000134646	0.000385722
LLGL1	17p11.2	0.169720925	0.000135026	0.000386755
RABL2A	2q14.1	-0.169716058	0.000135087	0.000386874
ZRANB1	10q26.13	0.169713959	0.000135113	0.000386894
RPL18	19q13.33	-0.169710141	0.000135161	0.000386976
RNF138	18q12.1	-0.169697736	0.000135316	0.000387365
RIOX1	14q24.3	-0.169695637	0.000135342	0.000387385
GGTA1P	9q33.2	0.169692774	0.000135378	0.000387433
FAM207A	21q22.3	-0.169683517	0.000135494	0.000387709
CD55	1q32.2	0.169671303	0.000135647	0.000388092
ALG2	9q22.33	-0.169651168	0.000135899	0.00038876
SGF29	16p11.2	-0.169648114	0.000135938	0.000388815
ATF7	12q13.13	0.169642675	0.000136006	0.000388955
INS-IGF2	11p15.5	0.16962037	0.000136287	0.000389703
ETV3L	1q23.1	0.169618298	0.000136313	0.000389722
PDE4B	1p31.3	0.169608894	0.000136431	0.000389974
PYCR1	17q25.3	-0.169608226	0.00013644	0.000389974
KCNMB3	3q26.32	-0.169604886	0.000136482	0.000390039
ZNF189	9q31.1	-0.169600496	0.000136537	0.000390116
AK9	6q21	0.169599697	0.000136547	0.000390116
DLGAP2	8p23.3	0.169534074	0.000137378	0.000392433
FBXO10	9p13.2	0.169529785	0.000137432	0.000392533
PRKCI	3q26.2	-0.169507074	0.000137721	0.000393301
MPHOSPH9	12q24.31	-0.169494954	0.000137875	0.000393686
RANBP10	16q22.1	0.16948732	0.000137972	0.000393859
DYNC1LI1	3p22.3	-0.169487129	0.000137975	0.000393859
LUC7L2	7q34	-0.169479781	0.000138068	0.000394071
MTERF2	12q23.3	-0.16947396	0.000138143	0.000394227
EYA1	8q13.3	0.169470283	0.000138189	0.000394305
SERINC2	1p35.2	0.16944142	0.000138558	0.000395301
RAMP1	2q37.3	0.169418422	0.000138853	0.000396085

GRK4	4p16.3	0.169374908	0.000139411	0.000397623
GPR158	10p12.1	0.16936409	0.000139551	0.000397964
PSTPIP2	18q21.1 tdb7990	0.169356109	0.000139654	0.000398201
ANKRD20A9P	13q11	-0.169351393	0.000139714	0.000398318
HRNR	1q21.3	-0.169330196	0.000139988	0.000399042
FOXB1	15q22.2	0.169322538	0.000140087	0.000399267
MC2R	18p11.21	0.169260198	0.000140895	0.000401513
CPA3	3q24	0.169256674	0.00014094	0.000401587
SCARA5	8p21.1	0.16922033	0.000141414	0.000402878
GIMAP5	7q36.1	0.169155044	0.000142267	0.000405253
AAGAB	15q23	-0.169130902	0.000142584	0.000406098
C15ORF56	15q15.1	-0.169110497	0.000142853	0.000406805
NLRP2	19q13.42	0.169104278	0.000142935	0.000406981
WBP1	2p13.1	-0.169051984	0.000143625	0.000408889
UGT2B28	4q13.2	-0.169045535	0.00014371	0.000409074
FBXO34	14q22.3	-0.169041061	0.000143769	0.000409185
IGSF11	3q13.32	-0.169028788	0.000143932	0.00040959
PHETA2	22q13.2	0.169021352	0.000144031	0.000409813
STBD1	4q21.1	0.168996541	0.00014436	0.000410693
LYPLA2P1	6p21.32	0.168971634	0.000144692	0.000411578
HECTD2	10q23.32	0.168954458	0.000144921	0.000412171
FSD1L	9q31.2	0.168950545	0.000144973	0.000412211
BBOX1	11p14.2	0.168950343	0.000144976	0.000412211
ZDHHC13	11p15.1	-0.168901265	0.000145632	0.000414019
MUC1	1q22	0.168885273	0.000145846	0.000414571
MBOAT7	19q13.42	0.168865425	0.000146113	0.00041527
ATP7B	13q14.3	0.168859126	0.000146198	0.000415452
MAN2A1	5q21.3	0.16883422	0.000146533	0.000416347
UNKL	16p13.3	-0.168823437	0.000146679	0.000416701
GTF2F1	19p13.3	-0.168807882	0.000146889	0.000417239
PPAT	4q12	-0.168725338	0.000148008	0.00042036
LINC02249	15q13.2	0.168676578	0.000148673	0.000422189
VSNL1	2p24.2	-0.16866646	0.000148811	0.000422522
PDP1	8q22.1	0.168659207	0.000148911	0.000422745
KLHL28	14q21.2	0.168641462	0.000149154	0.000423375
ADCY2	5p15.31	0.168615682	0.000149508	0.00042432
SEC22B	1p12	0.168609872	0.000149587	0.000424487
APH1B	15q22.2	0.168607009	0.000149627	0.000424539
CDCA2	8p21.2	-0.168530668	0.00015068	0.000427466
C2CD4D	1q21.3	0.168526673	0.000150735	0.000427563
GPR137C	14q22.1	0.16851173	0.000150942	0.00042809
PGA5	11q12.2	0.168498033	0.000151132	0.000428569
CDK5R1	17q11.2	-0.16847074	0.000151511	0.000429584
TANK	2q24.2	0.168431997	0.000152051	0.000431016
ZNF234	19q13.31	0.16843047	0.000152073	0.000431016
LRRC8B	1p22.2	-0.168429897	0.000152081	0.000431016
HDC	15q21.2	0.168398502	0.000152519	0.000432199
RPS20	8q12.1	-0.168376554	0.000152827	0.00043301
CTTNBP2	7q31.31	-0.168361874	0.000153033	0.000433533
TNFRSF14-AS1	1p36.32	0.168351456	0.000153179	0.000433886
PLA1A	3q13.33	0.168330133	0.000153479	0.000434675
CAPN5	11q13.5	0.168328172	0.000153507	0.000434692
OTOA	16p12.2 16p12.2	0.168302908	0.000153863	0.00043564
FIGNL2	12q13.13	0.168288952	0.00015406	0.000436137
GCNT4	5q13.3	0.16827731	0.000154225	0.000436541
GPR108	19p13.3	-0.168275688	0.000154248	0.000436545
HTR2B	2q37.1	0.168264531	0.000154406	0.000436923
ISCA2	14q24.3	-0.168263187	0.000154425	0.000436923

MRPL36	5p15.33	-0.168209418	0.000155188	0.000438969
TLR6	4p14	0.168209175	0.000155191	0.000438969
HAND1	5q33.2	0.168172908	0.000155708	0.00044037
C4ORF47	4q35.1	0.168169801	0.000155753	0.000440433
FRMPD1	9p13.2	0.168161974	0.000155864	0.000440688
USP49	6p21.1	0.168155068	0.000155963	0.000440905
RHCE	1p36.11	0.168152768	0.000155996	0.000440936
ACTR6	12q23.1	-0.16813541	0.000156244	0.000441576
TEAD2	19q13.33	0.168133124	0.000156277	0.000441607
TMEM41A	3q27.2	-0.16805926	0.000157338	0.000444544
RPS25	11q23.3	-0.168044278	0.000157554	0.000445092
TFDP2	3q23	-0.168037598	0.000157651	0.000445302
PTCHD4	6p12.3	0.168021953	0.000157877	0.000445878
MAFA	8q24.3	0.168018165	0.000157932	0.00044597
TULP2	19q13.33	0.167987039	0.000158382	0.000447181
KIF5A	12q13.3	0.167948774	0.000158938	0.000448687
NXPE4	11q23.2	0.167931219	0.000159194	0.000449346
DOK4	16q21	0.167892359	0.000159761	0.000450884
ZNF540	19q13.12	0.167875472	0.000160008	0.000451518
BPIFC	22q12.3	0.167869184	0.0001601	0.000451715
KCNK6	19q13.2	0.167847508	0.000160418	0.000452548
STIM1	11p15.4	-0.167838061	0.000160557	0.000452876
UCK1	9q34.13	-0.167828805	0.000160693	0.000453197
ADORA2A-AS1	22q11.23	0.167809831	0.000160972	0.000453921
EMC7	15q14	-0.16778987	0.000161266	0.000454687
C9	5p13.1	0.167779419	0.000161421	0.000455058
WBP2NL	22q13.2	0.16776698	0.000161604	0.000455512
FJX1	11p13	0.167739676	0.000162008	0.000456587
BTRC	10q24.32	0.167736813	0.000162051	0.000456643
COLCA1	11q23.1	-0.167722213	0.000162267	0.000457189
MARCKS	6q21	0.167704368	0.000162532	0.000457872
RPS3	11q13.4	-0.167675454	0.000162962	0.00045902
ZNF23	16q22.2	0.167647876	0.000163374	0.000460114
RGN	Xp11.3	0.167637665	0.000163526	0.000460479
SELL	1q24.2	0.167623542	0.000163737	0.000461009
RPL34	4q25	-0.167613999	0.00016388	0.000461347
CDK11B	1p36.33	0.167612281	0.000163906	0.000461355
FAM167A-AS1	8p23.1	-0.167598537	0.000164112	0.000461871
HAUS4	14q11.2	-0.167590906	0.000164226	0.000462128
MOCS2	5q11.2	-0.167576306	0.000164445	0.000462681
TNK2	3q29	-0.167568671	0.00016456	0.000462939
TIMM50	19q13.2	-0.16756619	0.000164598	0.000462979
ASIC2	17q11.2-q12	0.167547289	0.000164882	0.000463715
ASIC1	12q13.12	-0.167516187	0.000165351	0.000464969
VIPR2	7q36.3	0.167469467	0.000166058	0.000466892
GFAP	17q21.31	0.167442228	0.000166471	0.000467989
BTBD10	11p15.3	-0.167412458	0.000166924	0.000469197
RPL32	3p25.2	-0.16737276	0.00016753	0.000470834
PGBD1	6p22.1	0.167363122	0.000167678	0.000471183
RNF212	4p16.3	0.167349385	0.000167888	0.000471708
CLEC4F	2p13.3	0.167317934	0.00016837	0.000472998
CCDC141	2q31.2	0.167296461	0.0001687	0.000473859
ENDOD1	11q21	0.167281628	0.000168929	0.000474435
HACE1	6q16.3	0.167266073	0.000169169	0.000475042
SPATS2	12q13.12	0.167225803	0.000169791	0.000476723
WASHC5	8q24.13	0.167189446	0.000170355	0.000478239
MAB21L4	2q37.3	0.167173796	0.000170598	0.000478855
GJA1	6q22.31	0.167167784	0.000170691	0.000479051

TRAF3IP2	6q21	0.167145072	0.000171045	0.000479977
SLC4A2	7q36.1	0.167108238	0.00017162	0.000481524
SNORA50C	17q23.3	-0.167106098	0.000171653	0.000481551
DLG1	3q29	-0.1670986	0.000171771	0.000481813
C1ORF74	1q32.2	0.167071172	0.000172201	0.000482951
TIMM23	10q11.22	-0.167048214	0.000172561	0.000483895
SLC9A9	3q24	-0.167000024	0.00017332	0.000485956
TUBB4A	19p13.3	-0.166984096	0.000173572	0.000486593
LRTM2	12p13.33	0.166976287	0.000173695	0.000486814
SOX4	6p22.3	0.166976072	0.000173698	0.000486814
LINC01140	1p22.3	0.166968247	0.000173822	0.000487076
TTLL4	2q35	0.166967102	0.00017384	0.000487076
P2RY11	19p13.2	-0.166964283	0.000173885	0.000487134
GPR25	1q32.1	0.166883241	0.000175172	0.000490672
WFDC2	20q13.12	0.166874347	0.000175314	0.000491001
ARAP3	5q31.3	0.166863277	0.000175491	0.000491428
BPIFB4	20q11.21	0.166851392	0.000175681	0.000491891
IZUMO4	19p13.3	-0.166840566	0.000175854	0.000492308
C12ORF60	12p13.1-p12.3	-0.166759648	0.000177153	0.000495842
LINC01226	1p35.2	0.166758869	0.000177165	0.000495842
SQSTM1	5q35.3	-0.166757258	0.000177191	0.000495846
MNS1	15q21.3	0.166737748	0.000177506	0.000496657
SCLY	2q37.3	-0.166689509	0.000178286	0.000498771
TIMM17A	1q32.1	-0.166639788	0.000179093	0.00050096
TOR1AIP1	1q25.2	0.166590166	0.000179903	0.000503154
MLPH	2q37.3	0.166579956	0.00018007	0.000503551
GAD1	2q31.1	0.166570795	0.00018022	0.000503901
SESN3	11q21	-0.166553332	0.000180506	0.000504631
FFAR3	19q13.12	0.166525402	0.000180964	0.000505842
C2ORF76	2q14.2	-0.166478048	0.000181744	0.000507952
AHCTF1	1q44	-0.166463535	0.000181984	0.000508551
ARL10	5q35.2	0.166438299	0.000182401	0.000509647
FAM199X	Xq22.2	-0.166429086	0.000182553	0.000510002
YES1	18p11.32	-0.166381182	0.000183349	0.000512153
AP5Z1	7p22.1	0.166368681	0.000183557	0.000512664
SPTBN1	2p16.2	0.166366963	0.000183586	0.000512673
AMELX	Xp22.2	0.166363841	0.000183638	0.000512747
STRAP	12p12.3	-0.16634616	0.000183932	0.000513499
PRKAG1	12q13.12	-0.166332896	0.000184154	0.000514028
YWHAG	7q11.23	-0.166331751	0.000184173	0.000514028
SDHB	1p36.13	-0.166300546	0.000184695	0.000515414
NPRL2	3p21.31	-0.166298638	0.000184727	0.000515432
NR2C2	3p25.1	0.166241286	0.00018569	0.000518048
RALGPS1	9q33.3	-0.166236662	0.000185768	0.000518194
PPP1R35	7q22.1	-0.166229167	0.000185894	0.000518474
PRADC1	2p13.2	-0.16613355	0.000187512	0.000522915
ARPC2	2q35	0.166115037	0.000187827	0.00052372
CYP46A1	14q32.2	0.16611347	0.000187854	0.000523722
FNIP1	5q31.1	0.16608221	0.000188386	0.000525135
RPRD1A	18q12.2	-0.166069614	0.000188601	0.000525662
FBXW9	19p13.13	-0.16605091	0.000188921	0.00052648
URB2	1q42.13	-0.166033352	0.000189222	0.000527241
TBC1D17	19q13.33	0.16603192	0.000189246	0.000527241
GCK	7p13	0.166013502	0.000189562	0.000528048
ZNF254	19p12	0.16601064	0.000189611	0.000528112
ADAT1	16q23.1	0.165999093	0.00018981	0.000528578
STN1	10q24.33	0.165997853	0.000189831	0.000528578
ZNF778	16q24.3	0.165992509	0.000189923	0.000528742

LOC728989	1q21.1	0.165991367	0.000189943	0.000528742
THYN1	11q25	-0.165972947	0.00019026	0.000529552
CENPQ	6p12.3	-0.165953766	0.00019059	0.000530399
RBM18	9q33.2	-0.165930295	0.000190996	0.00053138
CARMIL3	14q11.2	-0.165930291	0.000190996	0.00053138
CCDC82	11q21	0.165910875	0.000191332	0.000532241
THAP11	16q22.1	-0.165895842	0.000191592	0.000532892
SLC16A11	17p13.1	-0.165873321	0.000191983	0.000533906
CGB3	19q13.33	0.165801731	0.00019323	0.000537301
NELL1	11p15.1	-0.165761199	0.00019394	0.000539199
CCL4	17q12	0.165754324	0.00019406	0.00053946
OR2L13	1q44	0.165747327	0.000194183	0.000539727
FAM106A	17p11.2	0.165730104	0.000194486	0.000540494
CYFIP2	5q33.3	0.16569869	0.000195039	0.000541896
RACGAP1	12q13.12	-0.165697831	0.000195054	0.000541896
CEP95	17q23.3	-0.165696877	0.000195071	0.000541896
ONECUT1	15q21.3	-0.165642476	0.000196032	0.000544491
FADS6	17q25.1	-0.16562474	0.000196346	0.000545289
TXNDC17	17p13.1	-0.16560813	0.000196641	0.000546033
IFI44	1p31.1	0.165589144	0.000196979	0.000546895
NCAPH2	22q13.33	-0.165545817	0.000197751	0.000548903
ALDH2	12q24.12	0.16554553	0.000197756	0.000548903
SMIM29	6p21.31	-0.165543049	0.000197801	0.00054895
SPATC1	8q24.3	0.165540725	0.000197842	0.00054899
TMPRSS11D	4q13.2	-0.165522822	0.000198162	0.000549803
PLPP6	9p24.1	-0.165507837	0.00019843	0.000550471
DPYS	8q22.3	0.165482349	0.000198888	0.000551664
PLEKHM1	17q21.31	-0.165475964	0.000199002	0.000551906
TOP2A	17q21.2	-0.165457833	0.000199328	0.000552734
TYMS	18p11.32	-0.165456307	0.000199356	0.000552734
ARSK	5q15	0.165416227	0.000200078	0.000554661
BCAS2	1p13.2	-0.165387695	0.000200594	0.0005559
SYS1	20q13.12	0.165386792	0.00020061	0.0005559
GRM5	11q14.2-q14.3	0.165386615	0.000200613	0.0005559
LYSMD4	15q26.3	-0.165385404	0.000200635	0.0005559
DTHD1	4p14	0.165359801	0.000201099	0.000557109
FAM120A	9q22.31	-0.165347425	0.000201324	0.000557655
HAO2	1p12	0.165339672	0.000201465	0.000557968
LYNX1	8q24.3	0.165312021	0.000201968	0.000559285
MRPL22	5q33.2	-0.165309159	0.00020202	0.000559352
LURAP1L	9p23	0.165305246	0.000202091	0.000559473
MIR99AHG	21q21.1	0.165299184	0.000202202	0.000559702
BRD4	19p13.12	-0.165198464	0.000204046	0.00056473
RASAL2-AS1	1q25.2	0.165189641	0.000204208	0.000565102
UBE2V2	8q11.21	-0.165115156	0.000205584	0.000568829
C17ORF80	17q25.1	-0.165110003	0.000205679	0.000569015
IZUMO1	19q13.33	-0.165102452	0.000205819	0.000569253
CGA	6q14.3	0.16510233	0.000205821	0.000569253
CCDC152	5p12	0.165098743	0.000205888	0.000569359
ESYT1	12q13.2	0.165087005	0.000206106	0.000569883
KRR1	12q21.2	-0.165076317	0.000206304	0.000570353
CERS3	15q26.3	-0.165037651	0.000207024	0.000572264
EPHX4	1p22.1	0.165030421	0.000207158	0.000572559
SNAI2	8q11.21	0.16501868	0.000207378	0.000573086
ZNF582	19q13.43	0.165006461	0.000207606	0.000573638
ZNF557	19p13.2	-0.165004652	0.00020764	0.000573653
PSMD10	Xq22.3	-0.164988239	0.000207947	0.000574354
CCDC85C	14q32.2	-0.164988048	0.00020795	0.000574354

BIK	22q13.2	-0.164984708	0.000208013	0.000574448
FGF20	8p22	0.164943285	0.00020879	0.000576515
MUC2	11p15.5	0.164928716	0.000209064	0.000577192
RORB	9q21.13	0.164899685	0.000209611	0.000578623
FANCC	9q22.32	-0.164863039	0.000210303	0.000580454
NR1I3	1q23.3	-0.164856168	0.000210433	0.000580733
TXNDC2	18p11.22	0.164849485	0.000210559	0.000581003
ARPC3	12q24.11	-0.164843286	0.000210677	0.000581248
KLHL34	Xp22.12	0.164821595	0.000211088	0.000582303
SH2B2	7q22.1	0.164813512	0.000211242	0.000582647
MIEF1	22q13.1	-0.164811508	0.00021128	0.000582672
DERA	12p12.3	-0.164809791	0.000211312	0.000582683
UCN2	3p21.31	0.164805409	0.000211396	0.000582833
BORCS7	10q24.32	0.164798626	0.000211525	0.000583109
SOSTDC1	7p21.2	-0.164790435	0.00021168	0.000583458
CD200R1	3q13.2	0.164778777	0.000211902	0.000583991
SLC22A9	11q12.3	-0.164755464	0.000212347	0.000585136
ITPK1	14q32.12	-0.164744614	0.000212554	0.000585627
MYLK2	20q11.21	0.164741815	0.000212608	0.000585694
TMEM161B	5q14.3	-0.164691748	0.000213567	0.000588256
GBX2	2q37.2	0.164683211	0.000213731	0.000588608
S100A7	1q21.3	0.164682052	0.000213753	0.000588608
SOAT1	1q25.2	0.164649951	0.00021437	0.000590227
GPM6A	4q34.2	0.164642252	0.000214519	0.000590555
TRIT1	1p34.2	-0.164639645	0.000214569	0.000590613
CHAC1	15q15.1	-0.164570178	0.000215912	0.000594229
TNR	1q25.1	0.164559815	0.000216113	0.000594701
KISS1	1q32.1	0.164523291	0.000216823	0.000596573
PLD2	17p13.2	0.164479805	0.000217671	0.000598789
LZTFL1	3p21.31	0.164478946	0.000217688	0.000598789
AMTN	4q13.3	0.164432226	0.000218602	0.000601223
EFR3A	8q24.22	0.164411862	0.000219002	0.000602241
CDPF1	22q13.31	-0.164410291	0.000219033	0.000602243
IL18RAP	2q12.1	0.164387723	0.000219477	0.000603382
KIAA0556	16p12.1	0.164385047	0.00021953	0.000603444
PLCXD3	5p13.1	0.164360403	0.000220015	0.000604698
PLD4	14q32.33	0.164327314	0.000220669	0.000606412
CYP4F29P	21q11.2	-0.164315525	0.000220903	0.000606971
TASP1	20p12.1	0.164304125	0.000221129	0.000607509
MFS14C	9q22.33	-0.164298495	0.00022124	0.000607733
ASB16	17q21.31	-0.164285158	0.000221505	0.000608377
CTDSP1	2q35	0.164230265	0.000222598	0.000611295
CNOT4	7q33	-0.164205263	0.000223097	0.000612583
GCC1	7q32.1	-0.164189517	0.000223412	0.000613365
ROM1	11q12.3	-0.164179116	0.00022362	0.000613853
MYO1D	17q11.2	0.164169191	0.000223819	0.000614232
PROM2	2q11.1	0.164168524	0.000223833	0.000614232
RPL4	15q22.31	-0.164167665	0.00022385	0.000614232
LIPT1	2q11.2	-0.164156118	0.000224082	0.000614785
ETF1	5q31.2	-0.164108691	0.000225036	0.000617318
RBM34	1q42.3	-0.164102202	0.000225166	0.000617593
IPW	15q11.2	0.164088174	0.000225449	0.000618285
SEPTIN3	22q13.2	0.164077009	0.000225675	0.00061882
C20ORF27	20p13	-0.164059451	0.00022603	0.000619709
IDUA	4p16.3	0.164054679	0.000226127	0.00061989
TNFAIP8L3	15q21.2	0.164028819	0.000226651	0.000621242
SUGT1P4-STRA6	9q22.33	0.164018326	0.000226864	0.000621742
TRIM24	7q33-q34	-0.164012692	0.000226978	0.000621971

MMRN1	4q22.1	0.164005439	0.000227126	0.000622287
ADAMTS19	5q23.3	0.164003988	0.000227155	0.000622287
ABCA2	9q34.3	0.164000859	0.000227219	0.000622377
SNCAIP	5q23.2	0.16399895	0.000227258	0.000622398
TSPOAP1	17q22	0.163990318	0.000227433	0.000622795
LYPD6	2q23.2	-0.163985686	0.000227528	0.000622969
FZD8	10p11.21	0.16397538	0.000227738	0.000623459
GCSAML	1q44	0.163965059	0.000227948	0.00062395
ACSS1	20p11.21	-0.16396202	0.00022801	0.000624035
HDAC8	Xq13.1	-0.163960493	0.000228041	0.000624036
NAPG	18p11.22	-0.163951957	0.000228215	0.000624428
FATE1	Xq28	0.163948235	0.000228291	0.000624552
LSM11	5q33.3	0.163946275	0.000228331	0.000624577
ABI2	2q33.2	0.163930339	0.000228657	0.000625383
TAP2	6p21.32	0.163907532	0.000229124	0.000626575
TIMMDC1	3q13.33	-0.163877949	0.000229731	0.000628151
CCDC173	2q31.1	0.163875277	0.000229786	0.000628216
NDUFB8	10q24.31	-0.163855047	0.000230203	0.000629268
SCOC	4q31.1	-0.163835198	0.000230612	0.000630258
ZFP64	20q13.2	-0.163834435	0.000230627	0.000630258
HMGXB3	5q32	0.163824129	0.00023084	0.000630754
IVD	15q15.1	-0.1637809	0.000231734	0.000633111
PBDC1	Xq13.3	-0.163768972	0.000231981	0.000633701
ACVR2B-AS1	3p22.2	-0.163745219	0.000232474	0.000634962
MAPK15	-	0.163741827	0.000232545	0.000635068
COX17	3q13.33	-0.163714388	0.000233116	0.000636541
TCP11L1	11p13	0.163705609	0.000233299	0.00063695
ILKAP	2q37.3	-0.163704177	0.000233328	0.00063695
IL9R	Xq28 and Yq12	0.163695485	0.000233351	0.000637359
BORA	13q21.33	-0.163681179	0.000233808	0.00063805
DNAH1	3p21.1	0.163680321	0.000233826	0.00063805
TBX20	7p14.2	0.163627481	0.000234933	0.000640982
KIF11	10q23.33	-0.163623351	0.000235019	0.000641132
NAGA	22q13.2	0.163584417	0.000235838	0.000643278
KCNH2	7q36.1	0.163579359	0.000235944	0.000643482
MIRLET7BHG	22q13.31	0.163574496	0.000236047	0.000643674
SLC35C1	11p11.2	0.16356495	0.000236248	0.000644136
LOC541473	7q11.23	-0.163533964	0.000236903	0.000645833
MARCKSL1	1p35.1	0.163526111	0.000237069	0.000646199
SPRYD7	13q14.2	-0.163497769	0.000237669	0.000647721
C19ORF57	19p13.12	-0.16349672	0.000237692	0.000647721
SETDB2	13q14.2	0.163486509	0.000237908	0.000648224
RNF152	18q21.33	0.16343336	0.000239039	0.000651218
FAM86EP	4p16.3	-0.163421909	0.000239284	0.000651747
NFKB1	4q24	0.163421237	0.000239298	0.000651747
TMEM18	2p25.3	-0.163403202	0.000239683	0.000652708
ZNF239	10q11.21	0.163398717	0.000239779	0.000652881
MAGOHB	12p13.2	-0.163358637	0.000240638	0.000655131
HAR1B	20q13.33	0.163353207	0.000240754	0.00065536
SLC13A3	20q13.12	0.163338979	0.00024106	0.000656103
OTOP1	4p16.3	0.16332033	0.000241461	0.000657106
ILDR1	3q13.33	-0.163313214	0.000241614	0.000657435
ABO	9q34.2	-0.163307243	0.000241743	0.000657696
RPP25	15q24.2	-0.163263974	0.000242677	0.000660149
CDK2AP1	12q24.31	-0.163253382	0.000242906	0.000660683
ZNF470	19q13.43	0.163229239	0.00024343	0.000662017
CDON	11q24.2	0.163220702	0.000243615	0.000662432
LDLRAD3	11p13	0.16321378	0.000243765	0.000662751

MPP4	2q33.1	-0.163208544	0.000243879	0.000662971
CEP70	3q22.3	-0.163183243	0.000244429	0.000664378
MCTS2P	20q11.21	-0.163165927	0.000244807	0.000665284
TUSC3	8p22	0.163164921	0.000244829	0.000665284
CES1	16q12.2	-0.163161486	0.000244904	0.000665304
MAML1	5q35.3	0.163160913	0.000244916	0.000665304
DOP1B	21q22.12	0.163160054	0.000244935	0.000665304
NRAS	1p13.2	0.16314011	0.00024537	0.000666397
TAF8	6p21.1	0.16311444	0.000245932	0.000667832
ZMIZ2	7p13	0.163111005	0.000246007	0.000667933
FBXO39	17p13.1	0.163109726	0.000246035	0.000667933
DSG3	18q12.1	-0.16310743	0.000246086	0.000667979
ZNF534	19q13.41	-0.163102154	0.000246201	0.000668204
IQCG	3q29	0.163088675	0.000246497	0.000668916
FBXO21	12q24.22	-0.16307064	0.000246893	0.000669901
PCDHGB4	5q31.3	0.163064055	0.000247038	0.000670204
MTRR	5p15.31	0.163001551	0.000248416	0.000673852
S100PBP	1p35.1	0.162989718	0.000248678	0.000674472
ATP2B3	Xq28	0.162982545	0.000248837	0.000674812
TTC31	2p13.1	0.162980461	0.000248883	0.000674846
GSDMD	8q24.3	0.162974831	0.000249007	0.000675093
FBXW10	17p11.2	-0.162924034	0.000250135	0.00067806
TGIF1	18p11.31	-0.16290078	0.000250653	0.000679303
CCR9	3p21.31	0.162900425	0.000250661	0.000679303
CLEC17A	19p13.12	0.162875299	0.000251222	0.000680731
PPM1H	12q14.1-q14.2	-0.162852208	0.000251738	0.000682039
LINC00924	15q26.2	0.162826413	0.000252316	0.000683513
SYNGR1	22q13.1	-0.162820908	0.00025244	0.000683756
BORCS5	12p13.2	-0.162762602	0.000253752	0.000687217
NYNRIN	14q12	0.16274304	0.000254193	0.00068832
LRIT2	10q23.1	-0.16273969	0.000254269	0.000688433
KMT2A	11q23.3	0.162714698	0.000254834	0.000689849
CAMP	3p21.31	0.162713551	0.00025486	0.000689849
ABT1	6p22.2	-0.1627084	0.000254977	0.000690072
TMEM14B	6p24.2	-0.162700957	0.000255145	0.000690436
CFP	Xp11.23	0.162676432	0.000255702	0.000691849
MAPK12	22q13.33	-0.162609347	0.00025723	0.00069589
NR6A1	9q33.3	-0.162596472	0.000257524	0.000696592
HIBADH	7p15.2	-0.162584345	0.000257802	0.000697249
MIS18A	21q22.11	-0.162581387	0.000257869	0.000697339
TRIM6	11p15.4	0.162556004	0.000258451	0.000698818
SLC66A1L	3q25.32	0.162543021	0.000258749	0.00069953
LRTM1	3p14.3	-0.162535672	0.000258918	0.000699893
EHHADH	3q27.2	-0.162533292	0.000258973	0.000699947
OTUD6B	8q21.3	-0.16248806	0.000260014	0.000702668
RASSF5	1q32.1	0.162481571	0.000260164	0.000702979
PRKAB2	1q21.1	0.162477086	0.000260267	0.000703165
TRIM59	3q25.33	-0.162454088	0.000260799	0.000704507
SNORD116-28	15q11.2	0.162449642	0.000260902	0.00070469
INAFM1	19q13.32	0.162441014	0.000261102	0.000705135
PPIL4	6q25.1	0.162435193	0.000261237	0.000705405
LYZ	12q15	0.162425364	0.000261464	0.000705926
CEP164	11q23.3	0.162408283	0.000261861	0.000706902
OR2AE1	7q22.1	0.162378817	0.000262546	0.000708656
ZNF319	16q21	0.16235952	0.000262996	0.000709775
SNX13	7p21.1	0.162316292	0.000264005	0.000712405
DVL2	17p13.1	-0.162273827	0.000265001	0.000714996
CLN6	15q23	-0.162269533	0.000265102	0.000715173

MEMO1	2p22.3	-0.16225226	0.000265508	0.000716172
UTRN	6q24.2	0.162246726	0.000265638	0.000716428
ZNF844	19p13.2	0.162241195	0.000265768	0.000716683
CRIP1	2p21	-0.162229453	0.000266045	0.000717333
MLIP	6p12.1	-0.16221672	0.000266345	0.000718047
MRS2	6p22.3	-0.1622118	0.000266461	0.000718264
BMP4	14q22.2	0.162209322	0.00026652	0.000718326
TWNK	10q24.31	-0.162177593	0.00026727	0.000720252
TRMT61A	14q32.33	-0.162174869	0.000267335	0.000720329
XRCC6	22q13.2	-0.162166949	0.000267522	0.000720738
MOV10	1p13.2	0.162152019	0.000267876	0.000721596
GPR31	6q27	0.162145973	0.00026802	0.000721886
GGTLC2	22q11.22	0.162143188	0.000268086	0.000721967
ARHGAP8	22q13.31	-0.162118377	0.000268675	0.000723459
PLB1	2p23.2	0.162096238	0.000269203	0.000724782
C17ORF102	17q12	0.162088968	0.000269376	0.000725151
FLOT2	17q11.2	-0.162081828	0.000269546	0.000725513
FAM110B	8q12.1	0.162077824	0.000269642	0.000725674
HACD4	9p21.3	0.162049002	0.000270331	0.00072743
NDUFAF1	15q15.1	-0.162026385	0.000270872	0.000728791
IL1RL1	2q12.1	0.162007808	0.000271318	0.000729892
ZC3H6	2q14.1	0.161998044	0.000271552	0.000730426
HS3ST2	16p12.2	0.161977913	0.000272036	0.00073163
OR4C6	11q11	0.161973991	0.000272131	0.000731787
C4BPB	1q32.1	0.161923243	0.000273355	0.000734981
FAM72B	1p11.2	-0.161918744	0.000273464	0.000735176
LINC00326	6q23.2	0.161905993	0.000273772	0.000735907
NCOA2	8q13.3	0.161877043	0.000274474	0.000737695
MRPL13	8q24.12	-0.161871413	0.000274611	0.000737964
TDP1	14q32.11	-0.161869504	0.000274657	0.00073799
C1RL-AS1	12p13.31	0.161820741	0.000275844	0.00074108
IQCB1	3q13.33 3q21.1	-0.161788773	0.000276624	0.000743078
VAT1	17q21.31	0.161786769	0.000276673	0.000743111
PIGS	17q11.2	-0.16174364	0.00027773	0.000745849
MYOM3	1p36.11	0.161733519	0.000277978	0.000746377
GARS	7p14.3	-0.161732618	0.000278	0.000746377
ABHD8	19p13.11	-0.161701458	0.000278767	0.000748266
CLDN17	21q21.3	-0.161700993	0.000278778	0.000748266
ATG4C	1p31.3	0.161538755	0.0002828	0.00075896
SRD5A2	2p23.1	0.161530196	0.000283013	0.000759432
FOXA2	20p11.21	0.161509654	0.000283527	0.000760709
RNF187	1q42.13	-0.161489229	0.000284038	0.000761949
CYP51A1	7q21.2	-0.161488179	0.000284065	0.000761949
RSAD1	17q21.33	-0.161460982	0.000284747	0.000763677
BAD	11q13.1	-0.161459169	0.000284792	0.000763698
NBPF9	1q21.2	0.161453635	0.000284931	0.000763969
C11ORF88	11q23.1	-0.161369	0.000287066	0.000769498
SPATA8	15q26.2	0.161368849	0.00028707	0.000769498
CKLF	16q21	0.161354391	0.000287436	0.000770377
CCDC62	12q24.31	0.161344862	0.000287677	0.000770922
TMEM42	3p21.31	-0.161334828	0.000287932	0.000771502
ZFH4-AS1	8q21.13	0.161313188	0.000288482	0.000772872
AASS	7q31.32	-0.161301715	0.000288773	0.000773551
FLYWCH1	16p13.3	-0.161293986	0.00028897	0.000773975
SYT8	11p15.5	0.161282057	0.000289274	0.000774686
TEPSIN	17q25.3	-0.161261254	0.000289805	0.000776005
CDIPT	16p11.2	-0.161220984	0.000290835	0.000778659
CEBPA-DT	19q13.11	-0.161218312	0.000290903	0.000778739

FAM157A	3q29	-0.161189016	0.000291655	0.000780647
PRRG4	11p13	-0.16118644	0.000291721	0.000780721
AMACR	5p13.2	0.16117747	0.000291951	0.000781234
HDHD5-AS1	22q11.1	-0.161167254	0.000292214	0.000781834
IL23R	1p31.3	0.161155039	0.000292529	0.000782553
MSMO1	4q32.3	-0.161153804	0.00029256	0.000782553
SLC16A10	6q21	0.161128325	0.000293217	0.000784206
FCHO2	5q13.2	0.161116492	0.000293523	0.000784919
HOXA2	7p15.2	0.161108389	0.000293733	0.000785376
HGSNAT	8p11.21-p11.1	0.161106186	0.000293789	0.000785424
NME5	5q31.2	0.161096663	0.000294036	0.000785978
C11ORF68	11q13.1	0.161066775	0.00029481	0.000787944
CAPRN2	12p11.21	0.161059332	0.000295004	0.000788356
KCNK3	2p23.3	0.161022314	0.000295966	0.000790823
DNAH8	6p21.2	0.161000455	0.000296536	0.000792241
BTN1A1	6p22.2	0.160987629	0.00029687	0.00079303
CYP26C1	10q23.33	0.160983006	0.000296991	0.000793248
HOTAIR	12q13.13	0.160946236	0.000297953	0.000795672
EPG5	18q12.3-q21.1	0.160945297	0.000297978	0.000795672
REST	4q12	0.160938621	0.000298153	0.000796034
KIFC2	8q24.3	-0.160891476	0.000299391	0.000799235
ING1	13q34	0.160875826	0.000299803	0.000800229
IL18BP	11q13.4	0.160842713	0.000300677	0.000802456
CXCL6	4q13.3	0.160834163	0.000300903	0.000802953
PBRM1	3p21.1	0.160829258	0.000301033	0.000803193
PEX5L	3q26.33	0.160827013	0.000301092	0.000803245
OXNAD1	3p25.1-p24.3	-0.160813894	0.00030144	0.000804026
SH3D21	1p34.3	0.16081294	0.000301465	0.000804026
SUMO1P3	1q23.2	-0.160790133	0.00030207	0.000805533
MPPED2	11p14.1	0.160777838	0.000302396	0.000806297
HNRNPA1	12q13.13	-0.16077057	0.000302589	0.000806705
PPP1R14A	19q13.2	0.160768141	0.000302654	0.000806771
FAR2	12p11.22	0.160736885	0.000303486	0.000808882
ARHGAP4	Xq28	0.16072238	0.000303873	0.000809806
ZNF805	19q13.43	0.160693084	0.000304656	0.000811785
DLG3	Xq13.1	-0.160599757	0.000307162	0.000818356
CXCR6	3p21.31	0.160595844	0.000307268	0.000818528
NMBR	6q24.1	0.160593406	0.000307333	0.000818596
CARD18	11q22.3	-0.160557683	0.000308298	0.000821057
GOLPH3L	1q21.3	-0.160553856	0.000308402	0.000821225
TM4SF1	3q25.1	-0.160495264	0.000309991	0.000825348
APBA2	15q13.1	0.16046635	0.000310778	0.000827334
KLK11	19q13.41	-0.160464623	0.000310825	0.00082735
KIF3A	5q31.1	0.160415869	0.000312157	0.000830785
CENPI	Xq22.1	-0.160408004	0.000312372	0.000831249
RIDA	8q22.2	-0.160391822	0.000312816	0.000832319
PSG4	19q13.31	0.1603687	0.00031345	0.000833898
ANKMY2	7p21.1	-0.16031319	0.000314979	0.000837853
WNT16	7q31.31	0.160306978	0.00031515	0.000838199
CS	12q13.3	-0.160295918	0.000315456	0.000838901
ANXA2R	5p12	0.160273111	0.000316087	0.000840468
MCRS1	12q13.12	-0.160264714	0.000316319	0.000840976
CTAGE10P	13q14.2	-0.160253345	0.000316634	0.000841703
C6ORF52	6p24.2	-0.160237731	0.000317068	0.000842743
PDCD1LG2	9p24.1	0.160223203	0.000317471	0.000843705
SIT1	9p13.3	0.16020698	0.000317923	0.000844793
FGF16	Xq21.1	0.160181677	0.000318628	0.000846556
HNRNPAB	5q35.3	-0.160118138	0.000320405	0.000851165

CRACR2A	12p13.32	0.160106401	0.000320734	0.000851928
SERTAD1	19q13.2	0.160084453	0.000321351	0.000853453
SF3B4	1q21.2	-0.160068898	0.000321788	0.000854503
C11ORF45	11q24.3	0.159985495	0.000324145	0.000860646
HEY2	6q22.31	0.159968891	0.000324616	0.000861784
CEACAM22P	19q13.31	0.159928123	0.000325775	0.000864747
SLC25A4	4q35.1	-0.159913925	0.000326179	0.000865707
PRR34-AS1	22q13.31	-0.159909253	0.000326312	0.000865947
SF3A1	22q12.2	0.159900565	0.00032656	0.000866491
SNX32	11q13.1	0.159881059	0.000327118	0.000867855
BIRC7	20q13.33	0.159861309	0.000327683	0.00086924
RFESD	5q15	-0.159857484	0.000327792	0.000869416
GART	21q22.11	-0.159854856	0.000327868	0.000869502
IARS	9q22.31	-0.159831954	0.000328524	0.000871129
HIKESHI	11q14.2	-0.1597809	0.000329993	0.000874908
RRN3P1	16p12.2	0.159772312	0.00033024	0.000875449
TMEM37	2q14.2	-0.159763437	0.000330496	0.000876013
ALPK1	4q25	0.159742921	0.000331089	0.000877469
CD96	3q13.13-q13.2	0.159718778	0.000331788	0.000879205
ANAPC10	4q31.21	-0.159684762	0.000332775	0.000881704
PHACTR1	6p24.1	0.159660854	0.00033347	0.00088343
DMXL2	15q21.2	0.159656655	0.000333592	0.000883638
PON3	7q21.3	0.159649788	0.000333792	0.000884052
CENPU	4q35.1	-0.159627741	0.000334435	0.000885638
SAA4	11p15.1	0.15961014	0.000334949	0.000886883
DNAJA2	16q11.2	-0.159599208	0.000335269	0.000887613
DGCR5	22q11.21	0.15958852	0.000335581	0.000888325
HSF2BP	21q22.3	0.159549491	0.000336726	0.000891238
UBE4B	1p36.22	0.15954491	0.000336861	0.000891477
OR1G1	17p13.3	0.159529884	0.000337302	0.000892529
FAM86C1	11q13.4	-0.15952697	0.000337388	0.000892639
ATXN7L3	17q21.31	-0.159503972	0.000338065	0.000894313
MED15	22q11.21	0.159499201	0.000338206	0.000894568
SLC44A1	9q31.1-q31.2	-0.159490899	0.000338451	0.000895099
UBXN7	3q29	-0.159487272	0.000338558	0.000895265
PPP2R3B	Xp22.33 and Yp11	-0.159473722	0.000338958	0.000896206
UBE2Q1	1q21.3	-0.159457022	0.000339452	0.000897394
CHORDC1	11q14.3	-0.159442136	0.000339893	0.000898441
ENPP5	6p21.1	0.15943183	0.000340199	0.000899096
KBTBD8	3p14.1	0.15943078	0.00034023	0.000899096
GPR180	13q32.1	0.15941513	0.000340694	0.000900205
ARPIN	15q26.1	0.159392514	0.000341366	0.000901863
PSPH	7p11.2	-0.15935711	0.000342421	0.000904531
GPA33	1q24.1	0.159335556	0.000343065	0.000906113
AQP7P1	9q13	0.159323482	0.000343426	0.000906948
RTL1	14q32.2	0.159308424	0.000343876	0.000908005
ABCD2	12q12	0.159307097	0.000343916	0.000908005
DYRK1A	21q22.13	0.159269986	0.00034503	0.000910826
KCNS2	8q22.2	0.159251613	0.000345582	0.000912165
ADRA2B	2q11.2	-0.159223609	0.000346426	0.000914272
KRIT1	7q21.2	-0.159212444	0.000346763	0.000915041
TRARG1	17p13.3	0.159197394	0.000347217	0.000916121
ZGRF1	4q25	-0.159111959	0.000349808	0.000922837
TTC9C	11q12.3	-0.15908085	0.000350756	0.000925204
PTGES	9q34.11	0.159079514	0.000350797	0.000925204
CCDC7	10p11.22	0.159045839	0.000351826	0.000927797
RAPGEF1	9q34.13	0.159040866	0.000351978	0.000928077
LEO1	15q21.2	-0.159025077	0.000352462	0.00092923

MAP2K6	17q24.3	-0.158985424	0.000353679	0.000932266
LOC646214	15q11.2	-0.158984565	0.000353706	0.000932266
GAGE12F	Xp11.23	0.158977805	0.000353914	0.000932692
NOP56	20p13	-0.15893208	0.000355323	0.000936284
CCNO	5q11.2	-0.158928549	0.000355432	0.000936449
ZNF175	19q13.41	0.15891309	0.00035591	0.000937586
PRELID3B	20q13.32	-0.158905456	0.000356146	0.000938085
UBL7	15q24.1	-0.158854212	0.000357735	0.000942148
BPGM	7q33	0.158828351	0.00035854	0.000944144
TMEM9B	11p15.4	-0.158811938	0.000359051	0.000945368
ACTL8	1p36.13	-0.158793632	0.000359623	0.000946748
XPO1	2p15	-0.158772336	0.000360288	0.000948377
KCNK7	11q13.1	-0.158760507	0.000360659	0.000949228
ACSM3	16p12.3	0.158742372	0.000361227	0.000950599
TAS2R40	7q34	0.158713811	0.000362124	0.000952835
C5ORF60	5q35.3	-0.158671928	0.000363442	0.00095618
BCL7B	7q11.23	-0.158639693	0.00036446	0.000958733
DNAH11	7p15.3	0.158594498	0.000365892	0.000962374
CBR4	4q32.3	-0.158574707	0.000366521	0.000963902
CHD9	16q12.2	0.158552473	0.000367228	0.000965636
SREBF2	22q13.2	-0.158548847	0.000367344	0.000965814
ALG13	Xq23	-0.158537586	0.000367702	0.000966558
CTNNA3	10q21.3	0.158535735	0.000367761	0.000966558
TMEM74	8q23.1	0.158535468	0.00036777	0.000966558
AGO3	1p34.3	0.158530429	0.000367931	0.00096684
SRP9	1q42.12	-0.158529093	0.000367973	0.00096684
C6ORF62	6p22.3	0.158499988	0.000368903	0.000969157
DNA2	10q21.3	-0.158493499	0.000369111	0.000969576
OTUB1	11q13.1	-0.158485102	0.000369379	0.000970109
SPRR2E	1q21.3	-0.158484154	0.00036941	0.000970109
CACNA1D	3p21.1	0.158481013	0.00036951	0.000970247
SLFN12	17q12	0.158476418	0.000369657	0.000970507
C1QL3	10p13	0.158469834	0.000369868	0.000970935
CCT3	1q22	-0.158463917	0.000370058	0.000971307
PUS7L	12q12	-0.158453519	0.000370392	0.000972056
DCP1A	3p21.1	0.158443495	0.000370714	0.000972774
GPR12	13q12.13	0.158433418	0.000371038	0.000973497
TLR3	4q35.1	0.158431472	0.0003711	0.000973535
TSR2	Xp11.22	-0.158412291	0.000371718	0.000975028
THRSP	11q14.1	0.1583503	0.000373719	0.000980151
SMPD4	2q21.1	-0.158325834	0.000374512	0.000982102
REXO4	9q34.2	-0.158321445	0.000374654	0.000982348
NUMB	14q24.2-q24.3	0.158292626	0.00037559	0.000984555
ERBIN	5q12.3	0.15829253	0.000375593	0.000984555
LRRC1	6p12.1	-0.158229358	0.000377653	0.000989819
FUOM	10q26.3	0.158227927	0.0003777	0.000989819
POLN	4p16.3	0.158200867	0.000378586	0.000992011
COLCA2	11q23.1	-0.158157025	0.000380024	0.000995652
LINC01590	6q15	0.158151656	0.000380201	0.000995985
LMO1	11p15.4	-0.158141305	0.000380542	0.000996748
MUC20	3q29	-0.1580845	0.000382416	0.001001528
CDH12	5p14.3	0.158006865	0.000384991	0.001008098
MDC1	6p21.33	0.158005869	0.000385025	0.001008098
MED14	Xp11.4	0.158002243	0.000385145	0.001008283
MYH16	7q22.1	0.15799285	0.000385458	0.001008971
L3HYPDH	14q23.1	-0.157984926	0.000385722	0.001009531
DLX6	7q21.3	-0.157969352	0.000386242	0.001010176
NCOA7	6q22.31-q22.32	0.157965217	0.00038638	0.00101099

PLA2G4D	15q15.1	0.15788947	0.000388917	0.001017496
PAXIP1-AS2	7q36.2	0.157845934	0.000390382	0.001021197
FANCE	6p21.31	-0.157787437	0.000392359	0.001026235
SNORD17	20p11.23	-0.157756795	0.000393398	0.00102882
VKORC1L1	7q11.21	-0.157753656	0.000393504	0.001028965
LUZP2	11p14.3	-0.157719561	0.000394664	0.001031863
MFHAS1	8p23.1	-0.157698786	0.000395372	0.001033581
NDE1	16p13.11	0.157696305	0.000395457	0.001033668
LRRC37A3	17q24.1	-0.157678225	0.000396074	0.001035148
TMEM132D	12q24.33	0.157618709	0.000398113	0.001040341
EIF3G	19p13.2	-0.157587614	0.000399181	0.001042999
ODAM	4q13.3	0.157573918	0.000399653	0.001044096
TMEM40	3p25.2	-0.157566333	0.000399915	0.001044644
PGM1	1p31.3	0.157558508	0.000400184	0.001045214
ZNF816	19q13.41	0.157541523	0.000400771	0.00104661
CD79B	17q23.3	0.157537419	0.000400913	0.001046722
AURKC	19q13.43	0.15753728	0.000400917	0.001046722
EI24	11q24.2	-0.157493237	0.000402442	0.001050567
RGPD1	2p11.2	0.157450104	0.000403941	0.001054342
PBX1	1q23.3	0.157428346	0.000404699	0.00105616
RBM19	12q24.13-q24.21	-0.157427106	0.000404742	0.00105616
ERMP1	9p24.1	-0.157421571	0.000404935	0.001056527
DRG2	17p11.2	-0.157374908	0.000406566	0.001060645
RBMX	Xq26.3	-0.157358494	0.000407141	0.001062008
SPG21	15q22.31	-0.157311544	0.00040879	0.001066172
TAF7	5q31.3	-0.157306868	0.000408954	0.001066463
DCTN5	16p12.2	-0.157298662	0.000409243	0.001067079
CNTN6	3p26.3	0.157266631	0.000410373	0.001069886
NAPSB	19q13.33	0.157258869	0.000410647	0.001070463
CD320	19p13.2	-0.157238066	0.000411383	0.001072243
USP25	21q21.1	0.157234917	0.000411495	0.001072395
PRRX2	9q34.11	0.157201804	0.000412669	0.001075315
SRRT	7q22.1	-0.157190448	0.000413072	0.001076227
MRM2	7p22.3	-0.157178285	0.000413504	0.001077213
GGCX	2p11.2	0.157176802	0.000413557	0.001077213
KTN1-AS1	14q22.3	-0.157174893	0.000413625	0.001077251
ANKRD55	5q11.2	0.157138892	0.000414908	0.001080452
ZNF277	7q31.1	-0.157115538	0.000415742	0.001082485
QTRT1	19p13.2	-0.157112484	0.000415851	0.001082629
MVK	12q24.11	-0.157002076	0.000419816	0.001092812
PPP1R3D	20q13.33	-0.156939857	0.000422066	0.001098527
CCDC157	22q12.2	0.156881742	0.000424178	0.001103881
COMTD1	10q22.2	-0.156879643	0.000424255	0.001103938
PLEKHH3	17q21.2	-0.15686886	0.000424648	0.001104818
ZNF613	19q13.41	0.156858268	0.000425034	0.00110568
RAB2B	14q11.2	0.156848299	0.000425398	0.001106484
DEDD	1q23.3	-0.156835461	0.000425867	0.001107521
SUCNR1	3q25.1	0.156834386	0.000425906	0.001107521
ST8SIA4	5q21.1	0.156804638	0.000426995	0.001110167
PAK2	3q29	-0.156803588	0.000427034	0.001110167
YPEL3	16p11.2	0.156799962	0.000427167	0.001110369
ARL15	5q11.2	0.156776773	0.000428018	0.001112438
REV1	2q11.2	-0.156747	0.000429112	0.00111514
AUP1	2p13.1	-0.156732209	0.000429657	0.001116412
CLEC6A	12p13.31	0.156704859	0.000430667	0.00111889
SH3RF1	4q32.3-q33	0.15664079	0.000433039	0.00112491
CD1C	1q23.1	0.156629633	0.000433454	0.001125842
PCGF1	2p13.1	-0.15659823	0.000434622	0.001128732

CPSF6	12q15	-0.156586969	0.000435042	0.001129676
PSG1	19q13.2	0.15657167	0.000435613	0.001131013
PYHIN1	1q23.1	0.156569514	0.000435693	0.001131077
TMEM231	16q23.1	0.156523797	0.000437404	0.00113537
SUN2	22q13.1	0.156493451	0.000438542	0.00113818
TMEM151B	6p21.1	0.15648625	0.000438813	0.001138736
YWHAH	22q12.3	0.156471408	0.000439371	0.001139956
RPS6KL1	14q24.3	-0.15647074	0.000439396	0.001139956
TRNT1	3p26.2	-0.156468163	0.000439493	0.001139961
DHRS9	2q31.1	-0.156467686	0.000439511	0.001139961
VNN3	6q23.2	0.156465174	0.000439606	0.00114006
IL1RAP	3q28	0.156448983	0.000440216	0.001141496
FMO6P	1q24.3	-0.156443661	0.000440417	0.001141869
ZNF550	19q13.43	0.156441826	0.000440486	0.001141902
TRNAU1AP	1p35.3	0.156423313	0.000441185	0.001143567
TBC1D7	6p24.1	-0.156395448	0.000442239	0.001146152
TTC9	14q24.2	-0.15630632	0.000445626	0.001154781
SLC13A2	17q11.2	-0.156301716	0.000445801	0.001155087
NEK7	1q31.3	0.15628962	0.000446263	0.001156135
ZNF326	1p22.2	-0.15622473	0.000448747	0.001162422
LAMTOR3	4q23	-0.156182742	0.000450361	0.001166454
LDHD	16q23.1	-0.156156691	0.000451366	0.001168905
ZEB1-AS1	10p11.22	-0.156132933	0.000452283	0.001171131
CA2	8q21.2	0.15612186	0.000452712	0.00117209
ISOC1	5q23.3	-0.156076246	0.00045448	0.001176517
FCRL3	1q23.1	0.156048275	0.000455567	0.001179181
MEA1	6p21.1	-0.156037694	0.00045598	0.001180096
SMYD5	2p13.2	-0.156028151	0.000456351	0.001180907
RAET1L	6q25.1	-0.156022652	0.000456566	0.001181311
SPRR2F	1q21.3	-0.156001784	0.00045738	0.001183267
ARC	8q24.3	0.1559805	0.000458213	0.001185268
BTBD6	14q32.33	-0.155947324	0.000459513	0.001188478
ZSCAN26	6p22.1	0.155945563	0.000459582	0.001188505
SOX7	8p23.1	0.155933869	0.000460041	0.00118954
LINC02694	15q14	0.155919069	0.000460623	0.001190891
CA9	9p13.3	0.155912545	0.000460879	0.001191402
SFRP1	8p11.21	0.155888923	0.00046181	0.001193654
TBX21	17q21.32	0.155872231	0.000462468	0.001195089
MX2	21q22.3	0.155871842	0.000462483	0.001195089
POLR3H	22q13.2	-0.155869838	0.000462563	0.001195141
ZNF197	3p21.31	0.155866307	0.000462702	0.001195348
SLC2A9	4p16.1	0.1558456	0.00046352	0.001197309
SPIDR	8q11.21	-0.155841401	0.000463687	0.001197585
PRIM1	12q13.3	-0.155812487	0.000464832	0.00120039
PELP1	17p13.2	-0.155785385	0.000465908	0.001203014
COL9A3	20q13.33	0.155779043	0.00046616	0.001203511
CLDN22	4q35.1	-0.155747955	0.000467398	0.001206553
MTHFR	1p36.22	0.155745592	0.000467492	0.001206642
SIAH3	13q14.13	0.155740629	0.00046769	0.001206998
HIST1H4B	6p22.2	-0.155712155	0.000468827	0.001209778
ANKRD50	4q28.1	0.155702364	0.000469219	0.001210633
RAB12	18p11.22	-0.155698643	0.000469368	0.001210652
DSN1	20q11.23	-0.155697879	0.000469398	0.001210652
RHBDD3	22q12.2	-0.155697688	0.000469406	0.001210652
WDR20	14q32.31	-0.15569349	0.000469574	0.00121093
SLC9A7	Xp11.3 Xp11.3	0.155686333	0.00046986	0.001211515
BLOC1S2	10q24.31	-0.155681466	0.000470055	0.001211863
3-Mar	5q23.2	-0.155657947	0.000470999	0.00121414

PROKR2	20p12.3	0.155627329	0.00047223	0.001217068
PCDHA7	5q31.3	0.155626685	0.000472256	0.001217068
ZNF782	9q22.33	-0.155618198	0.000472597	0.001217794
LINC00494	20q13.13	0.155588991	0.000473775	0.001220672
UBR7	14q32.12	-0.15555951	0.000474967	0.001223586
C12ORF45	12q23.3	-0.155555693	0.000475121	0.001223828
U2AF1	21q22.3	-0.155552258	0.00047526	0.00122403
DNAJB14	4q23	-0.155548155	0.000475426	0.001224301
TMEM147	19q13.12	-0.155538707	0.000475809	0.001225131
APOL5	22q12.3	0.15552811	0.000476239	0.001226081
UBQLN4	1q22	-0.155502922	0.000477261	0.001228557
FDX1	11q22.3	-0.15550025	0.00047737	0.00122868
ANO3	11p14.3-p14.2	0.155485474	0.000477971	0.00123007
AKAP9	7q21.2	0.155461316	0.000478955	0.001232446
SH3TC2	5q32	0.155425693	0.00048041	0.001236032
MSH2	2p21-p16.3	-0.155410072	0.000481049	0.001237519
SUGT1P1	9p13.3	0.155408135	0.000481129	0.001237565
PEX11G	19p13.2	-0.155357492	0.000483207	0.001242664
NIPA1	15q11.2	-0.155356824	0.000483234	0.001242664
TEX26	13q12.3	0.155343416	0.000483786	0.001243924
FASTK	7q36.1	-0.155332586	0.000484232	0.001244912
CPOX	3q11.2	-0.155328101	0.000484417	0.001245229
PCDHA13	5q31.3	0.155322191	0.00048466	0.001245696
POM121L1P	22q11.22	0.155305838	0.000485335	0.00124712
ZNF528	19q13.41	0.155305771	0.000485338	0.00124712
H1FX	3q21.3	-0.155274757	0.00048662	0.001250255
KNDC1	10q26.3	0.155266871	0.000486946	0.001250934
MOG	6p22.1	0.155232582	0.000488368	0.001254427
RPL30	8q22.2	-0.155231052	0.000488432	0.001254431
PDAP1	7q22.1	-0.1552071	0.000489427	0.001256828
GCFC2	2p12	-0.155196603	0.000489864	0.001257722
TDRD3	13q21.2	0.155195744	0.0004899	0.001257722
LINC00552	13q34	0.155167093	0.000491095	0.001260628
ECHS1	10q26.3	-0.155152993	0.000491684	0.001261979
CACNG1	17q24.2	0.155127919	0.000492732	0.00126451
PAK5	20p12.2	-0.155125829	0.00049282	0.001264574
SLC23A2	20p13	0.155115586	0.000493249	0.001265514
SERPINB13	18q21.33	-0.155089417	0.000494347	0.00126817
MPPE1	18p11.21	-0.155082473	0.000494639	0.001268757
WDR66	12q24.31	-0.155069304	0.000495192	0.001270016
CIB2	15q25.1	0.155060385	0.000495568	0.001270817
AP4M1	7q22.1	0.155043825	0.000496265	0.001272444
KLHL41	2q31.1	0.155035945	0.000496597	0.001273134
MYO15B	17q25.1	0.155025216	0.00049705	0.001274132
LTV1	6q24.2	-0.155012481	0.000497588	0.001275349
UBE2L3	22q11.21	-0.155008855	0.000497741	0.001275475
LTB4R	14q12	-0.155008326	0.000497763	0.001275475
ZNF75D	Xq26.3	0.154978267	0.000499035	0.001278572
TSSC4	11p15.5	-0.154953169	0.0005001	0.001281137
EIF4EBP2	10q22.1	0.154928072	0.000501166	0.001283706
MSC	8q13.3	0.154924351	0.000501325	0.001283948
PHKG1	7p11.2	0.154817122	0.000505906	0.001295518
PCDHA11	5q31.3	0.154793965	0.000506901	0.0012979
TSPO	22q13.2	-0.154745616	0.000508983	0.001303067
NPY1R	4q32.2	0.154740615	0.000509199	0.001303454
TUBB7P	4q35.2	-0.154700589	0.00051093	0.001307718
SNRPD3	22q11.23	-0.154686643	0.000511534	0.001309099
ZNF284	19q13.31	0.15468168	0.000511749	0.001309483

PUM3	9p24.2	-0.154673474	0.000512105	0.001310228
FMO3	1q24.3	0.154655629	0.00051288	0.001312045
NOS3	7q36.1	0.154641888	0.000513478	0.001313407
JOSD1	22q13.1	-0.15463788	0.000513652	0.001313686
RHBDF2	17q25.1	0.154629196	0.00051403	0.001314487
MISP	19p13.3	0.154548179	0.00051757	0.00132337
EPHA1	7q34-q35	-0.15453291	0.000518239	0.001324757
LHX1	17q12	0.154532819	0.000518243	0.001324757
GPR149	3q25.2	-0.154524528	0.000518607	0.001325519
TRIM78P	11p15	0.154515719	0.000518994	0.001326256
MPP6	7p15.3	-0.15451497	0.000519027	0.001326256
STXBP2	19p13.2	-0.15451163	0.000519174	0.001326463
NBAS	2p24.3	0.154490636	0.000520097	0.001328655
FBXL17	5q21.3	0.154462963	0.000521317	0.001331602
MCM4	8q11.21	-0.154438247	0.000522409	0.001334221
FAM72D	1q21.1	-0.154407042	0.00052379	0.00133758
RXRБ	6p21.32	0.154346447	0.000526482	0.001344284
COMMD1	2p15	-0.154291099	0.000528952	0.001350419
RHBDF1	16p13.3	0.154279075	0.00052949	0.001351622
CFAP161	15q25.1	0.154271001	0.000529851	0.001352374
CWH43	4p11	0.154257453	0.000530458	0.001353752
GOLGA8CP	15q11.2	0.15423966	0.000531257	0.001355618
ARID4A	14q23.1	0.154213899	0.000532415	0.001358401
PAWR	12q21.2	-0.154189947	0.000533493	0.001360982
MTMR9	8p23.1	0.154136317	0.000535916	0.001366989
ZFPM1	16q24.2	0.154133836	0.000536028	0.001367103
CACNG8	19q13.42	0.154131793	0.000536121	0.001367166
BRAP	12q24.12	-0.154125394	0.000536411	0.001367732
GLYATL3	6p12.3	0.154106642	0.000537261	0.001369727
CHKB	22q13.33	0.1540845	0.000538267	0.001372118
GTPBP10	7q21.13	-0.154059785	0.000539391	0.001374519
METTL7A	12q13.12	0.154059785	0.000539391	0.001374519
LRP2BP	4q35.1	0.154059308	0.000539413	0.001374519
METTL21C	13q33.1	0.154052639	0.000539717	0.001375002
CLIP4	2p23.2	-0.154052151	0.000539739	0.001375002
LYRM9	17q11.2	-0.154017988	0.000541298	0.001378736
PHF13	1p36.31	0.154017034	0.000541341	0.001378736
ZMYND11	10p15.3	0.154004966	0.000541893	0.001379967
FAM214B	9p13.3	0.153993654	0.000542411	0.001381111
TDRD7	9q22.33	-0.153987929	0.000542673	0.001381604
CDC25C	5q31.2	-0.153936494	0.000545033	0.001387439
ASB5	4q34.2	0.153889646	0.000547192	0.001392757
PON2	7q21.3	0.153883627	0.000547469	0.001393289
NAT9	17q25.1	-0.153875802	0.000547831	0.001394033
EFS	14q11.2	-0.153857576	0.000548674	0.001396001
CNIH1	14q22.2	-0.15383954	0.000549509	0.00139795
GNA13	17q24.1	-0.153833433	0.000549792	0.001398493
DSCC1	8q24.12	-0.153824275	0.000550216	0.001399397
HMGB2	4q34.1	-0.153818546	0.000550482	0.001399897
FOXЕ3	1p33	0.153776214	0.00055245	0.001404724
SALL1	16q12.1	0.153773746	0.000552565	0.00140484
NACC2	9q34.3	0.153761099	0.000553154	0.001406161
FAM126B	2q33.1	0.153743159	0.000553991	0.001408111
NGB	14q24.3	0.153737649	0.000554249	0.001408588
URI1	19q12	-0.153724169	0.000554879	0.001409992
MBLAC2	5q14.3	-0.153722833	0.000554941	0.001409992
MMP23A	1p36.33	0.153716802	0.000555223	0.001410531
PRPF40A	2q23.3	-0.153714722	0.000555321	0.001410601

CLN5	13q22.3	0.153707183	0.000555673	0.001411319
CHRDL1	Xq23	0.153700158	0.000556002	0.001411977
ZDHHC17	12q21.2	0.153650118	0.000558351	0.001417763
TH	11p15.5	0.153648568	0.000558424	0.00141777
RNF32	7q36.3	-0.15364182	0.000558741	0.001418398
CCNG1	5q34	0.153620059	0.000559766	0.001420821
IQGAP1	15q26.1	0.153609943	0.000560243	0.001421853
RPS16	19q13.2	-0.153604218	0.000560513	0.001422359
CCKAR	4p15.2	0.153562339	0.000562493	0.001427204
WDR77	1p13.2	-0.153529594	0.000564046	0.001430963
NOA1	4q12	-0.153502111	0.000565352	0.001434096
CCT4	2p15	-0.15349066	0.000565897	0.001435298
PPP4R4	14q32.12-q32.13	0.153482171	0.000566301	0.001436143
TRPV3	17p13.2	0.153448029	0.00056793	0.001440093
RHBDL3	17q11.2	0.15343245	0.000568675	0.001441801
PRR19	19q13.2	-0.153421285	0.000569209	0.001442974
NECAB3	20q11.22	-0.15340344	0.000570064	0.00144496
UBE2U	1p31.3	0.153328856	0.00057365	0.001453867
LINC00895	22q11.21	-0.153325533	0.000573811	0.001454091
PARP15	3q21.1	0.153295894	0.000575242	0.001457535
EIF1AX	Xp22.12	-0.153264499	0.000576762	0.001461202
CLGN	4q31.1	-0.153252585	0.000577339	0.001462482
HHIP	4q31.21	0.153170311	0.000581343	0.00147244
CLPTM1L	5p15.33	0.153130138	0.000583308	0.00147723
MBTD1	17q21.33	-0.153126512	0.000583485	0.001477494
WDR4	21q22.3	-0.153083188	0.000585611	0.001482691
MYO6	6q14.1	0.153038624	0.000587806	0.001488061
ESPNL	2q37.3	0.152971062	0.000591147	0.001496332
SLCO1C1	12p12.2	0.152955297	0.000591929	0.001498124
TSSC2	11p15.4	0.152943579	0.000592511	0.001499409
CD81	11p15.5	0.152920772	0.000593646	0.001502091
BARHL2	1p22.2	0.152909906	0.000594187	0.001503272
CDC7	1p22.1	-0.152891476	0.000595106	0.001505351
C1GALT1	7p22.1-p21.3	0.152890426	0.000595158	0.001505351
SPPL2C	17q21.31	-0.152879971	0.00059568	0.001506483
EOMES	3p24.1	0.152857695	0.000596793	0.001509109
WHAMMP2	15q13.1	0.152842045	0.000597577	0.001510901
CCL3L1	17q21.1	0.152806101	0.00059938	0.001515269
HSPB8	12q24.23	0.152794904	0.000599942	0.001516502
TMEM234	1p35.2	0.152740129	0.000602702	0.001523286
C14ORF28	14q21.2	0.152726197	0.000603405	0.001524874
LCMT1	16p12.1	-0.152713505	0.000604047	0.001526235
PIK3R1	5q13.1	0.152712551	0.000604095	0.001526235
CMTM7	3p22.3	0.152699859	0.000604738	0.001527667
CRAT	9q34.11	-0.152692702	0.0006051	0.001528392
C1ORF53	1q31.3	-0.152666078	0.000606451	0.001531611
TP73	1p36.32	0.152649188	0.000607309	0.001533587
PDE8B	5q13.3	0.152600381	0.000609795	0.001539672
PYGO2	1q21.3	-0.152590023	0.000610324	0.001540815
HSD17B12	11p11.2	-0.152587924	0.000610431	0.001540892
PRPS2	Xp22.2	-0.152586111	0.000610524	0.001540934
ATL1	14q22.1	0.152581721	0.000610748	0.001541307
VAMP4	1q24.3	-0.152577331	0.000610973	0.00154168
ADSS	1q44	-0.152552902	0.000612223	0.001544642
UFL1	6q16.1	0.152531622	0.000613314	0.001547201
SGK2	20q13.12	0.152514335	0.000614201	0.001549246
PAQR8	6p12.2	0.152499658	0.000614956	0.001550956
CALHM3	10q24.33	0.152477399	0.000616102	0.001553651

RTRAF	14q22.1	-0.152436291	0.000618223	0.001558807
TRMT2A	22q11.21	-0.152410526	0.000619557	0.001561973
CBY1	22q13.1	-0.152408331	0.00061967	0.001562064
LINC00852	3p25.3	0.152402711	0.000619961	0.001562603
MAP6	11q13.5	0.152394876	0.000620368	0.001563432
SLC4A5	2p13.1	-0.152384092	0.000620927	0.001564646
ZNF225	19q13.31	0.152366629	0.000621834	0.001566736
MED12L	3q25.1	-0.152353174	0.000622534	0.001568303
SH3GLB2	9q34.11	-0.152318916	0.000624318	0.001572602
TLN2	15q22.2	0.152300499	0.00062528	0.001574643
PPP2R1A	19q13.41	0.152300403	0.000625285	0.001574643
ROGDI	16p13.3	-0.152289238	0.000625868	0.001575916
WDHD1	14q22.2-q22.3	-0.152280272	0.000626337	0.0015769
SILC1	2p25.2	0.152245442	0.000628162	0.001581297
NLRC5	16q13	0.152222726	0.000629354	0.001584102
SLIT1	10q24.1	0.152220964	0.000629447	0.001584137
TMEM62	15q15.2	-0.152201827	0.000630454	0.001586473
GRM1	6q24.3	-0.152190204	0.000631066	0.001587815
GTF2A1L	2p16.3	0.152184454	0.000631369	0.001588204
ODF3L1	15q24.2	0.15218428	0.000631378	0.001588204
TMEM150A	2p11.2	0.15216671	0.000632305	0.001590337
MTMR7	8p22	0.152139418	0.000633747	0.001593766
ARNT	1q21.3	0.152133311	0.00063407	0.001594379
PDCD6IP	3p22.3	0.152127299	0.000634388	0.001594981
LPAR2	19p13.11	-0.152112985	0.000635146	0.001596688
CTC1	17p13.1	0.152088842	0.000636427	0.001599709
CLDN2	Xq22.3	0.15207397	0.000637217	0.001601495
VIRMA	8q22.1	0.152065081	0.00063769	0.001602484
PHF10	6q27	0.152016604	0.000640274	0.001608776
PCDHAC2	5q31.3	0.152011196	0.000640563	0.001609302
HIST2H3C	1q21.2	-0.151991679	0.000641606	0.001611602
DOC2B	17p13.3	0.151991083	0.000641638	0.001611602
CDRT15P1	17p12	0.151971971	0.000642661	0.001613971
CPNE1	20q11.22	0.151945893	0.00064406	0.001617184
SGCE	7q21.3	0.15194513	0.000644101	0.001617184
INTS2	17q23.2	-0.15193969	0.000644393	0.001617717
LYN	8q12.1	-0.151932533	0.000644778	0.001618481
TMEM241	18q11.2	-0.15192404	0.000645234	0.001619425
NSD3	8p11.23	-0.151920891	0.000645404	0.001619649
LASP1	17q12	0.151900375	0.000646508	0.001622219
MYSM1	1p32.1	0.151885297	0.000647321	0.001624057
TNFAIP2	14q32.32	0.151862108	0.000648573	0.001626996
EGLN1	1q42.2	-0.151835484	0.000650013	0.001630406
ENAM	4q13.3	-0.151811396	0.000651319	0.001633478
ANKRD10	13q34	0.151803039	0.000651772	0.001634412
ATP5MD	10q24.33	-0.151737577	0.000655335	0.001643029
DDAH1	1p22.3	0.151736909	0.000655371	0.001643029
TTC39C	18q11.2	-0.151732519	0.000655611	0.001643425
SLC25A44	1q22	-0.15172145	0.000656216	0.001644736
LYAR	4p16.3	-0.151692822	0.000657781	0.00164833
UBALD2	17q25.1	-0.151692249	0.000657813	0.00164833
CETN4P	4q27	0.151688599	0.000658012	0.001648626
BNIP5	6p21.31	0.1516757	0.000658719	0.001650192
RIPOR2	6p22.3	0.151619057	0.000661831	0.001657782
DRC3	17p11.2	0.151611955	0.000662223	0.001658556
PRR27	4q13.3	0.151607925	0.000662445	0.001658907
RNGTT	6q15	0.151596444	0.000663078	0.001660286
SLC22A18	11p15.4	-0.151567622	0.000664669	0.001664064

ZNF568	19q13.12	0.151564664	0.000664833	0.001664267
SNX29P2	16p11.2	0.151550254	0.00066563	0.001666056
CALY	10q26.3	0.151542978	0.000666033	0.001666858
RMND5B	5q35.3	-0.151535272	0.00066646	0.00166772
ANKS6	9q22.33	-0.151527065	0.000666915	0.001668651
SUPT3H	6p21.1	0.151505404	0.000668117	0.001671452
ITCH	20q11.22	0.151481738	0.000669433	0.001674536
PEX11B	1q21.1	-0.151459122	0.000670692	0.001677479
PGF	14q24.3	0.15143517	0.000672029	0.001680613
ATG3	3q13.2	-0.151401106	0.000673934	0.001685168
FAM124B	2q36.2	0.151386799	0.000674735	0.001686964
ZBTB16	11q23.2	0.151382078	0.000675	0.001687256
LSP1P4	2p11.2	0.151381731	0.00067502	0.001687256
LSM6	4q31.22	-0.151374574	0.000675421	0.001688051
CCDC40	17q25.3	0.151354629	0.000676541	0.00169064
EPHA10	1p34.3	0.151298213	0.000679718	0.00169837
CENPC	4q13.2	-0.151289262	0.000680224	0.001699422
NPPC	2q37.1	-0.151262261	0.00068175	0.001703025
TEPP	16q21	0.151256553	0.000682073	0.001703621
YIPF4	2p22.3	-0.151239927	0.000683015	0.001705763
GSTT4	22q11.23	-0.151194229	0.000685611	0.001711823
ZNF44	19p13.2	-0.151194217	0.000685611	0.001711823
LYPLA2	1p36.11	0.151183148	0.000686241	0.001713184
ZNF200	16p13.3	-0.151172269	0.000686861	0.001714519
AFTPH	2p14	-0.151145168	0.000688407	0.001718166
KRT85	12q13.13	-0.151120697	0.000689806	0.001721444
MACROD2	20p12.1	0.151061053	0.000693227	0.001729766
BTBD8	1p22.1	0.151042759	0.000694279	0.001732178
GPR35	2q37.3	0.151011192	0.000696098	0.001736502
LGI4	19q13.12 19q13.11	0.15099697	0.000696919	0.001738335
GNG4	1q42.3	0.150989909	0.000697327	0.001739138
ZNF487	10q11.21	0.150967296	0.000698635	0.001742185
MPHOSPH10	2p13.3	-0.150960422	0.000699033	0.001742962
GNG10	9q31.3	-0.150950497	0.000699608	0.001744103
GINM1	6q25.1	0.150949543	0.000699664	0.001744103
KCNJ15	21q22.13-q22.2	0.150939527	0.000700245	0.001745335
GON7	14q32.12	-0.150934561	0.000700533	0.001745838
GBP7	1p22.2	0.150917687	0.000701513	0.001748064
MBLAC1	7q22.1	-0.15090565	0.000702213	0.001749592
ANKS1B	12q23.1	0.150876933	0.000703885	0.001753543
FAM192A	16q13	-0.150851922	0.000705344	0.001756962
PKD1L2	16q23.2	-0.150796636	0.000708581	0.001764805
MEAK7	16q24.1	0.150751533	0.000711231	0.001771187
OR6C70	12q13.2	-0.15071853	0.000713176	0.001775811
CENPE	4q24	-0.150675955	0.000715692	0.001781858
CASP4	11q22.3	0.150652098	0.000717106	0.001785157
MRPL9	1q21.3	-0.150629959	0.00071842	0.001788208
CRISP2	6p12.3	0.150626887	0.000718603	0.001788442
MED26	19p13.11	-0.150607152	0.000719776	0.001791142
C22ORF39	22q11.21	-0.150579192	0.000721442	0.001795066
DARS	2q21.3	-0.150568695	0.000722069	0.001796403
FAM171A1	10p13	0.150535773	0.000724036	0.001801076
RBM44	2q37.3	0.150534144	0.000724134	0.001801097
OST4	2p23.3	-0.150515543	0.000725248	0.001803645
KCNB2	8q21.11	0.150488271	0.000726884	0.0018074
NDFIP2	13q31.1	0.150487392	0.000726937	0.0018074
RPUSD3	3p25.3	-0.15048243	0.000727235	0.001807919
GRM2	3p21.2	0.150404362	0.00073194	0.001819391

TRAPPC13	5q12.3	-0.150400649	0.000732164	0.001819725
RHPN1-AS1	8q24.3	0.150397023	0.000732384	0.001819893
FBXL18	7p22.1	0.150396546	0.000732413	0.001819893
TMPRSS11E	4q13.2	-0.150363722	0.0007344	0.001824608
ERICH4	19q13.2	0.150344275	0.00073558	0.001827315
UBXN6	19p13.3	-0.150323926	0.000736817	0.001830037
LRMDA	10q22.2-q22.3	0.150323258	0.000736858	0.001830037
CHRNA5	15q25.1	-0.15031696	0.000737241	0.001830764
RTF1	15q15.1	-0.150296443	0.00073849	0.001833641
MFSD14B	9q22.32	-0.150265906	0.000740354	0.001838041
LAG3	12p13.31	0.150208845	0.000743847	0.001846487
KAT7	17q21.33	-0.150200539	0.000744357	0.001847525
AGAP1	2q37.2	0.150186416	0.000745225	0.001849451
AMMECR1	Xq23	-0.150176682	0.000745823	0.001850709
C17ORF100	17p13.1	-0.150160089	0.000746844	0.001853015
NIPAL4	5q33.3	0.150127347	0.000748863	0.001857796
SHISA2	13q12.13	0.150066178	0.000752649	0.001866957
PARP12	7q34	0.150050338	0.000753632	0.001869166
HOXD12	2q31.1	-0.150032246	0.000754756	0.001871725
NOCT	4q31.1	0.149989932	0.000757392	0.001878031
CD8B	2p11.2	0.149975141	0.000758315	0.001880089
RNF10	12q24.31	0.14995701	0.000759449	0.001882668
OR10S1	11q24.1	-0.149925137	0.000761445	0.001887384
KRT18	12q13.13	-0.149897559	0.000763176	0.001891442
ZBTB8OS	1p35.1	-0.149832383	0.000767281	0.001901383
SERPINB2	18q21.33-q22.1	-0.149812809	0.000768518	0.001904214
SPATA5L1	15q21.1	-0.149798558	0.00076942	0.001906215
THAP7-AS1	22q11.21	-0.149794403	0.000769683	0.001906632
SRRM2	16p13.3	0.149780471	0.000770565	0.001908585
NUFIP2	17q11.2	-0.149758905	0.000771934	0.001911739
ESYT3	3q22.3	0.149753465	0.000772279	0.00191236
DYNLL1	12q24.31	-0.149747314	0.00077267	0.001913093
NHSL1	6q24.1	-0.149730181	0.00077376	0.001915556
PARS2	1p32.3	-0.149727032	0.00077396	0.001915817
STK38L	12p11.23	0.149663478	0.000778015	0.001925619
LPAL2	6q25.3	0.149572491	0.000783855	0.001939835
NPY	7p15.3	0.14956525	0.000784322	0.001940751
ZNF780A	19q13.2	0.149555169	0.000784972	0.001942121
SERP1	3q25.1	-0.149551638	0.000785199	0.001942447
ALX3	1p13.3	0.149537995	0.00078608	0.001944387
FAM241A	4q25	0.149532317	0.000786447	0.001945014
PAH	12q23.2	-0.149531083	0.000786526	0.001945014
TNFAIP1	17q11.2	-0.149510223	0.000787875	0.001948111
CYP2R1	11p15.2	-0.149508512	0.000787986	0.001948146
SLC44A2	19p13.2	0.149501062	0.000788468	0.0019491
UHRF1BP1L	12q23.1	0.149486366	0.00078942	0.001951214
DENND4C	9p22.1	0.149448768	0.000791861	0.001957008
THBS4	5q14.1	0.14944567	0.000792063	0.001957079
C2CD4C	19p13.3	0.14944534	0.000792084	0.001957079
ATP1B1	1q24.2	-0.149433118	0.000792879	0.001958804
KPNA4	3q25.33	-0.149428346	0.00079319	0.001959332
OR2B11	1q44	0.149412004	0.000794255	0.001961722
DDB2	11p11.2	-0.149409929	0.00079439	0.001961816
SOWAHC	2q13	-0.14940344	0.000794813	0.001962621
TASOR	3p14.3	0.149391894	0.000795567	0.001964242
SRMS	20q13.33	0.149386131	0.000795943	0.00196493
PCDH17	13q21.1	0.14938111	0.000796271	0.0019655
CYSLTR2	13q14.2	0.149368514	0.000797095	0.001967292

LEMD2	6p21.31	0.149365651	0.000797282	0.001967514
MCUB	4q25	0.149362502	0.000797488	0.001967781
MAFK	7p22.3	0.149356013	0.000797913	0.001968589
KLK12	19q13.41	-0.149350885	0.000798249	0.001969177
B3GNT7	2q37.1 2q37.1	0.14934857	0.000798401	0.00196931
GTF2E1	3q13.33	-0.14934523	0.000798619	0.001969609
EDNRB	13q22.3	0.149333588	0.000799383	0.00197125
SH2D1A	Xq25	0.149330057	0.000799614	0.00197158
CNDP2	18q22.3	0.149323854	0.000800021	0.001972343
CMTM4	16q21-q22.1	0.149286733	0.000802461	0.001978116
SARNP	12q13.2	-0.149273469	0.000803335	0.001980028
ZNF700	19p13.2	-0.149270224	0.000803548	0.001980313
OLIG3	6q23.3	0.149256156	0.000804476	0.001982357
ZFP42	4q35.2	0.149203858	0.000807933	0.001990633
EIF2AK1	7p22.1	-0.149190734	0.000808803	0.001992532
OASL	12q24.31	0.149187012	0.00080905	0.001992897
TGM6	20p13	-0.149182278	0.000809364	0.001993427
CEACAM5	19q13.2	-0.14915953	0.000810874	0.001996904
SLC12A5	20q13.12	0.149105302	0.000814485	0.002005552
KDELR2	7p22.1	0.14910256	0.000814668	0.002005758
SLC12A2	5q23.3	0.149068687	0.000816932	0.002011086
ZC3H7B	22q13.2	0.149020875	0.000820137	0.00201873
TAPBPL	12p13.31	0.149017726	0.000820349	0.002019005
TRPT1	11q13.1	-0.149015435	0.000820503	0.002019137
HSFX2	Xq28	0.149013813	0.000820612	0.002019159
SFN	1p36.11	-0.148989098	0.000822274	0.002023003
ERC1	12p13.33	0.148966291	0.000823811	0.002026372
MPPED1	22q13.2	-0.148965794	0.000823844	0.002026372
EFCC1	3q21.3	0.148932891	0.000826066	0.002031589
ARSF	Xp22.33	0.148859072	0.000831071	0.002043648
ANKHD1-EIF4EE	5q31.3	0.148851492	0.000831586	0.002044667
PLD3	19q13.2	0.148834411	0.000832749	0.002047276
ZCCHC8	12q24.31	-0.148827639	0.00083321	0.002048161
SCARNA10	12p13.31	-0.148821596	0.000833622	0.002048924
ZFAND5	9q21.13	-0.148792423	0.000835614	0.002053568
PRL	6p22.3	0.148788761	0.000835864	0.002053933
VPS37D	7q11.23	-0.148765513	0.000837454	0.00205759
NAGK	2p13.3	0.148699287	0.000842	0.002068507
RPPH1	14q11.2	-0.14869032	0.000842617	0.002069656
RAMP2	17q21.2	0.148688694	0.000842729	0.002069656
PRSS12	4q26	0.148688026	0.000842775	0.002069656
DHRS4-AS1	14q11.2	-0.148686118	0.000842907	0.002069727
UPF3B	Xq24	-0.148680583	0.000843288	0.002070411
LIMD2	17q23.3	0.148658253	0.000844828	0.00207394
RGP1	9p13.3	0.14865186	0.00084527	0.002074771
CHMP7	8p21.3	0.148649951	0.000845401	0.002074843
TCP11L2	12q23.3	0.148630484	0.000846747	0.002077892
HEXA	15q23	0.148595462	0.000849173	0.002083592
SERPINA6	14q32.13	0.148572861	0.000850742	0.002087187
SETD6	16q21	-0.148560059	0.000851631	0.002089116
FSD2	15q25.2	0.148549971	0.000852333	0.002090584
NUP58	13q12.13	0.148540401	0.000853	0.002091954
ATG2A	11q13.1	0.14853897	0.000853099	0.002091954
PRAF2	Xp11.23	0.148516163	0.000854689	0.002095598
OTOF	2p23.3	0.148511963	0.000854982	0.002096062
NFYB	12q23.3	-0.148477229	0.00085741	0.002101758
CHKB-DT	22q13.33	-0.148463164	0.000858394	0.002103916
TNFRSF1A	12p13.31	0.148443066	0.000859803	0.002107113

TBC1D20	20p13	0.14843505	0.000860366	0.002108236
NFATC3	16q22.1	0.148411766	0.000862002	0.002111988
EVX1	7p15.2	0.148405588	0.000862436	0.002112797
DDRKG1	20p13	-0.148402987	0.000862619	0.002112988
FBP1	9q22.32	0.148393062	0.000863318	0.002114443
PFKM	12q13.11	-0.148385428	0.000863856	0.002115503
TAMM41	3p25.2	-0.148343822	0.000866792	0.002122262
GPX3	5q33.1	0.148343345	0.000866826	0.002122262
RAB8A	19p13.11	-0.148310518	0.000869149	0.002127692
GAPVD1	9q33.3	-0.14828523	0.000870943	0.002131824
PTPRCAP	11q13.2	0.148275306	0.000871648	0.002133291
ZCCHC9	5q14.1	-0.14825374	0.000873181	0.002136785
LAMA1	18p11.31	0.148250304	0.000873426	0.002137124
FCRL2	1q23.1	0.148227411	0.000875057	0.002140855
DUBR	3q13.12	0.148219246	0.000875639	0.00214202
MIR600HG	9q33.3	-0.148217191	0.000875786	0.00214212
DCSTAMP	8q22.3	0.148202936	0.000876804	0.002144349
PIGU	20q11.22	-0.148197629	0.000877183	0.002145017
NEDD8	14q12	-0.148181024	0.000878371	0.00214766
PSORS1C1	6p21.33	0.148127308	0.000882222	0.002156816
ELMO3	16q22.1	-0.1481252	0.000882374	0.002156925
TBX15	1p12	0.14809815	0.000884319	0.00216142
TIMM10B	11p15.4	-0.148088938	0.000884983	0.002162779
HCG22	6p21.33	0.148074626	0.000886015	0.002165039
MASP1	3q27.3	0.148071489	0.000886241	0.00216533
PTPRO	12p12.3 12p13-p1	0.148028966	0.000889314	0.002172575
GPCPD1	20p12.3	0.148024525	0.000889635	0.002173097
PLCD4	2q35	0.147994274	0.000891828	0.00217819
FOSL2	2p23.2	0.147981296	0.000892771	0.002180227
GGT3P	22q11.21	0.147949233	0.000895102	0.002185657
CCDC130	19p13.13	-0.147930052	0.0008965	0.002188805
ZNF334	20q13.12	0.147927476	0.000896688	0.002188999
IL2	4q27	0.147920736	0.00089718	0.002189935
RRM2B	8q22.3	0.147903193	0.000898461	0.002192796
SLC37A2	11q24.2	0.147889878	0.000899434	0.002194906
SP8	7p21.1	0.147878376	0.000900276	0.002196695
ATP1B2	17p13.1	0.147836303	0.000903361	0.002203955
TUBA8	22q11.21	0.14780748	0.00090548	0.002208858
REL	2p16.1	0.147742539	0.000910271	0.002220277
HLA-G	6p22.1	0.147707613	0.000912857	0.002226047
IRAK4	12q12	-0.147706372	0.000912949	0.002226047
CCDC42	17p13.1	0.147706126	0.000912967	0.002226047
PDIK1L	1p36.11	-0.147704273	0.000913105	0.002226113
C2ORF15	2q11.2	-0.14768667	0.000914411	0.002229029
ERICH5	8q22.2	-0.147661032	0.000916317	0.002233405
TNKS	8p23.1	0.147631939	0.000918484	0.002238417
HIPK1	1p13.2	0.147627359	0.000918826	0.002238979
MCM3AP	21q22.3	0.147617625	0.000919552	0.002240478
ATF6	1q23.3	0.147613621	0.000919851	0.002240936
RCN2	15q24.3	-0.147609991	0.000920122	0.002241326
STAMBP	2p13.1	-0.147577642	0.000922542	0.002246948
MAATS1	3q13.33	0.147568093	0.000923257	0.002248419
WFS1	4p16.1	0.147553689	0.000924337	0.002250777
APH1A	1q21.2	-0.147546723	0.000924859	0.002251778
NOMO2	16p12.3	0.147525348	0.000926465	0.002255415
ZNHIT1	7q22.1	-0.147519336	0.000926917	0.002256243
SNHG9	16p13.3	-0.14749128	0.000929029	0.002261111
UTP4	16q22.1	-0.147479638	0.000929907	0.002262975

ZFP69B	1p34.2	0.147444235	0.000932581	0.002269208
FUBP1	1p31.1	0.147416657	0.000934668	0.002274014
INE2	Xp22.2	-0.147411406	0.000935066	0.002274708
SLC26A8	6p21.31	0.147374357	0.000937879	0.002281276
S100A6	1q21.3	-0.147348808	0.000939823	0.00228573
ZNF519	18p11.21	-0.147326288	0.00094154	0.002289629
PIAS3	1q21.1	0.147312833	0.000942567	0.00229184
SDHAP1	3q29	-0.147311401	0.000942677	0.00229184
PTK2B	8p21.2	0.14730453	0.000943202	0.002292674
MIR1-1HG-AS1	20q13.33	0.147303939	0.000943247	0.002292674
BTNL9	5q35.3	0.147299869	0.000943558	0.002292881
CD164	6q21	0.147299854	0.000943559	0.002292881
ZNF680	7q11.21	-0.147276761	0.000945326	0.002296898
EEF1G	11q12.3	-0.147258916	0.000946694	0.002299944
ADH1A	4q23	-0.147172518	0.000953341	0.002315813
STAC	3p22.3-p22.2	0.147166448	0.000953809	0.002316673
FZR1	19p13.3	-0.147101367	0.000958847	0.002328628
TNFRSF21	6p12.3	0.147090584	0.000959684	0.002330381
LOC100190986	16p12.2	0.14708085	0.00096044	0.002331936
ZCCHC3	20p13	-0.147063769	0.000961768	0.00233488
RNF227	17p13.1	-0.147052986	0.000962608	0.002336637
TPTEP2	22q13.1	-0.147033618	0.000964117	0.002340019
LY6G6E	6p21.33	-0.147023819	0.000964882	0.002341593
HNRNPA1L2	13q14.3	-0.146998306	0.000966875	0.002346148
USP27X-AS1	Xp11.23	-0.146992489	0.00096733	0.002346969
IFT88	13q12.11	0.146990481	0.000967487	0.002347068
RHPN2	19q13.11	0.146975976	0.000968622	0.00234954
GCKR	2p23.3	0.146960009	0.000969874	0.002352293
TMTC2	12q21.31	0.146957177	0.000970096	0.002352549
SLC22A5	5q31.1	-0.146952501	0.000970462	0.002353156
TSBP1	6p21.32	-0.146944039	0.000971127	0.002354483
SERF2	15q15.3	-0.146941527	0.000971324	0.002354678
ZDHHC23	3q13.31	-0.146931985	0.000972073	0.002356213
SLC19A3	2q36.3	0.146902879	0.000974363	0.002361479
LOC100272217	9q34.11	-0.14689849	0.000974709	0.002362033
C5ORF63	5q23.2	-0.146878457	0.000976288	0.002365576
PKMYT1	16p13.3	-0.146862419	0.000977554	0.00236836
ADPRHL1	13q34	-0.14681218	0.00098153	0.002377707
AGMO	7p21.2	0.146774994	0.000984483	0.002384573
TESC	12q24.22	0.146765465	0.00098524	0.002386122
DENND4A	15q22.31	-0.146748479	0.000986593	0.00238911
ZNF616	19q13.41	0.146720233	0.000988845	0.002394278
EDC3	15q24.1	-0.146697808	0.000990637	0.002398328
OR8B12	11q24.2	0.146694638	0.000990891	0.002398654
UBE2E3	2q31.3	0.146684543	0.000991698	0.002400126
RNF44	5q35.2	0.146684066	0.000991737	0.002400126
PECR	2q35	-0.146665649	0.000993212	0.002403408
CFAP298	21q22.11	-0.146653342	0.000994199	0.002405508
ABCA17P	16p13.3	0.146639673	0.000995296	0.002407874
TRIM62	1p35.1	0.146635589	0.000995624	0.002408379
PARP11	12p13.32	0.146607343	0.000997896	0.002413585
CENPBD1P1	19q13.43	0.146604576	0.000998118	0.002413834
SMIM19	8p11.21	-0.1465853	0.000999672	0.002417301
GLUL	1q25.3	-0.146568886	0.001000996	0.002420213
HOXA11	7p15.2	0.146564824	0.001001324	0.002420716
OTUD4	4q31.21	0.14656192	0.001001559	0.002420993
SLC39A11	17q24.3-q25.1	-0.146556672	0.001001983	0.002421728
RTL10	22q11.21	0.146554668	0.001002145	0.00242183

ARHGEF1	19q13.2	0.146542262	0.001003148	0.002423964
STK32A	5q32	0.146515145	0.001005344	0.002428979
SLC10A7	4q31.22	0.146508195	0.001005907	0.002429908
KRBA1	7q36.1	0.146507431	0.001005969	0.002429908
COLGALT2	1q25.3	-0.146424223	0.001012739	0.002445968
HOXC11	12q13.13	0.146374736	0.001016785	0.002455446
C12ORF43	12q24.31	-0.146363623	0.001017696	0.002457186
C1ORF105	1q24.3	0.146362973	0.001017749	0.002457186
DAPK2	15q22.31	0.146333755	0.001020147	0.00246267
UNC50	2q11.2	-0.146332323	0.001020265	0.00246267
CPSF2	14q32.12	-0.146306081	0.001022423	0.002467585
ZNF235	19q13.31	0.146295584	0.001023288	0.002469376
CPLANE1	5p13.2	0.146286996	0.001023996	0.002470789
BTBD17	17q25.1	0.146270238	0.001025378	0.002473829
PNKD	2q35	0.14625331	0.001026776	0.002476906
MYL12A	18p11.31	0.146227831	0.001028884	0.002481695
HHEX	10q23.33	-0.146217239	0.001029762	0.002483514
INSR	19p13.2	0.146192142	0.001031844	0.002488238
ORMDL2	12q13.2	-0.146182026	0.001032684	0.002489967
RPL36AL	14q21.3	-0.14617611	0.001033176	0.002490855
MCAT	22q13.2	-0.146152495	0.001035141	0.002495293
ELL	19p13.11	0.14614815	0.001035502	0.002495868
TACSTD2	1p32.1	-0.146113796	0.001038368	0.002502475
ARX	Xp21.3	0.146080732	0.001041133	0.002508839
C5ORF38	5p15.33	0.146076424	0.001041493	0.002509408
TYRP1	9p23	0.146061424	0.00104275	0.002512137
LAGE3	Xq28	-0.146039745	0.001044569	0.002516219
CDK19	6q21	0.146020278	0.001046205	0.002519858
SHFL	19p13.2	0.146018751	0.001046334	0.002519867
PPM1M	3p21.2	0.146017129	0.00104647	0.002519895
ATP6AP2	Xp11.4	0.146006728	0.001047345	0.002521702
CMAS	12p12.1	-0.145998521	0.001048036	0.002523064
RANBP17	5q35.1	0.145966445	0.001050741	0.002529275
TCP11	6p21.31	0.145959633	0.001051317	0.002530358
SYNGR2	17q25.3	-0.145956724	0.001051562	0.002530647
MS4A3	11q12.1	0.145929245	0.001053887	0.002535812
PTPN14	1q32.3-q41	0.145928382	0.00105396	0.002535812
PDZK1IP1	1p33	0.145911015	0.001055431	0.002539049
GNB1L	22q11.21	-0.145906339	0.001055828	0.0025397
CCNE2	8q22.1	-0.145894315	0.001056848	0.002541851
PRPF40B	12q13.12	-0.145862347	0.001059565	0.002548082
RTF2	20q13.31	0.145852995	0.001060361	0.002549623
FAM71D	14q23.3	-0.14585185	0.001060458	0.002549623
UGT3A1	5p13.2	0.145838832	0.001061567	0.002551985
ABCC6P1	16p12.3	0.145800296	0.001064857	0.002559287
MFSD6	2q32.2	-0.145800033	0.001064879	0.002559287
ESYT2	7q36.3	0.145798793	0.001064985	0.002559287
DLX5	7q21.3	-0.145791063	0.001065646	0.00256057
NANOS3	19p13.12	0.1457859	0.001066088	0.002561327
TSNAXIP1	16q22.1	0.145743783	0.001069697	0.002569693
PII5	8q21.13	0.145724742	0.001071333	0.002573316
PKD1	16p13.3	0.145715676	0.001072112	0.002574882
PLP2	Xp11.23	-0.145681418	0.001075063	0.002581661
CREB1	2q33.3	0.145664814	0.001076496	0.002584794
RAB28	4p15.33	0.145663287	0.001076627	0.002584803
C11ORF53	11q23.1	0.145661515	0.00107678	0.002584862
HOXD1	2q31.1	0.145609562	0.001081276	0.002595345
KLHDC9	1q23.3	-0.145603649	0.001081789	0.002596267

EXTL2	1p21.2	0.145556505	0.001085885	0.002605787
BRF2	8p11.23	-0.1455086	0.001090061	0.002615499
MCUR1	6p23	-0.14550192	0.001090645	0.002616588
HMSD	18q22.1	-0.14549416	0.001091323	0.002617904
IL27	16p12.1-p11.2	0.14547652	0.001092867	0.002621295
FAM9C	Xp22.2	0.145466889	0.00109371	0.002623006
GPATCH4	1q22-q23.1	-0.145454684	0.00109478	0.00262526
EPDR1	7p14.1	0.145436458	0.001096379	0.002628783
IKZF5	10q26.13	0.145423671	0.001097503	0.002631164
ANP32E	1q21.2	-0.145346852	0.001104273	0.002647082
CYB5D2	17p13.2	-0.145306677	0.00110783	0.002655291
ZRANB3	2q21.3	-0.145268602	0.00111121	0.002663077
PGA4	11q12.2	0.145239486	0.001113801	0.00266897
STUB1	16p13.3	-0.145212205	0.001116234	0.002674483
CYSRT1	9q34.3	-0.14520284	0.001117071	0.002676169
GLRX	5q15	0.145188635	0.001118341	0.002678893
SPATA17	1q41	0.14517672	0.001119407	0.002681128
MDM2	12q15	-0.145167545	0.001120228	0.002682777
MREG	2q35	-0.145144548	0.00112229	0.002687396
SIRPG	20p13	0.145130138	0.001123583	0.002690174
OGA	10q24.32	0.14509817	0.001126458	0.002696736
DCAF6	1q24.2	-0.145079085	0.001128177	0.002700532
CCL24	7q11.23	0.145030199	0.001132592	0.00271078
RPL17	18q21.1	-0.145027936	0.001132797	0.002710948
KIAA1324L	7q21.12	0.145002076	0.00113514	0.002716232
CACNA1E	1q25.3	0.1449961	0.001135682	0.002717206
TP53BP2	1q41	0.144960279	0.001138935	0.002724668
LRRC14B	5p15.33	0.144956617	0.001139268	0.002725018
TYMP	22q13.33	0.144955698	0.001139352	0.002725018
FAM107A	3p14.3-p14.2	0.144945201	0.001140307	0.00272698
RDM1	17q12	-0.144932278	0.001141484	0.002729472
DLEU2L	1p31.3	0.144897925	0.001144619	0.002736643
CBX2	17q25.3	-0.144884033	0.001145889	0.002739354
DBN1	5q35.3	0.144877925	0.001146448	0.002740365
NAP1L2	Xq13.2	-0.144873059	0.001146893	0.002741105
ZNF229	19q13.31	0.144862275	0.00114788	0.00274314
RAB22A	20q13.32	0.144807691	0.001152891	0.002754787
CLSTN1	1p36.22	0.144772765	0.001156107	0.002762146
LL22NC03-63E9.1	22q11.22	-0.144771017	0.001156268	0.002762204
C2CD3	11q13.4	0.144766085	0.001156723	0.002762963
GJC1	17q21.31	0.144693179	0.001163467	0.00277854
TF	3q22.1	-0.14469261	0.00116352	0.00277854
ARPC1A	7q22.1	-0.144677816	0.001164893	0.00278149
CMPK2	2p25.2	0.144671708	0.00116546	0.002782515
ID3	1p36.12	0.144655963	0.001166923	0.00278568
PRSS55	8p23.1	0.144650536	0.001167428	0.002786555
C3ORF20	3p25.1	0.144639013	0.001168501	0.002788785
SPDYA	2p23.2	-0.144618747	0.001170389	0.002792929
DUSP19	2q32.1	-0.144617411	0.001170514	0.002792929
KLF14	7q32.2	0.144606428	0.001171539	0.002795044
TMED10	14q24.3	0.144603669	0.001171796	0.002795328
WAPL	10q23.2	0.144570461	0.001174901	0.002802402
KIF24	9p13.3	-0.144518453	0.001179777	0.002813497
ASXL2	2p23.3	0.144517881	0.001179831	0.002813497
DENND2C	1p13.2	-0.144514827	0.001180118	0.002813848
ZNF292	6q14.3	0.144490016	0.001182452	0.00281908
NNAT	20q11.23	0.144413634	0.001189663	0.002835936
OR10A3	11p15.4	0.144400344	0.001190921	0.002838602

MPHOSPH8	13q12.11	0.144398406	0.001191105	0.002838704
DNAJB5	9p13.3	0.144378844	0.00119296	0.00284279
SLC1A6	19p13.12	0.144368205	0.001193971	0.002844862
PDIA3P1	1q21.1	0.144366057	0.001194175	0.002845012
GRPR	Xp22.2	0.144362272	0.001194534	0.002845533
IRF1	5q31.1	0.144356896	0.001195045	0.002846414
GSTCD	4q24	-0.144331659	0.001197447	0.002851797
HK2	2p12	-0.144329031	0.001197697	0.002852057
COL4A3	2q36.3	0.144317314	0.001198814	0.002854379
CACTIN	19p13.3	-0.144305461	0.001199944	0.002856734
GRB2	17q25.1	-0.144284181	0.001201977	0.002861234
KRT1	12q13.13	0.1442492	0.001205324	0.002868865
THRAP3	1p34.3	0.144133406	0.001216467	0.002895044
REN	1q32.1	0.144096262	0.001220061	0.002903256
OCEL1	19p13.11	0.144091228	0.001220549	0.002904074
SNHG11	20q11.23	-0.144056779	0.001223892	0.002911686
PAIP2	5q31.2	-0.144053439	0.001224217	0.002912115
SLED1	4q35.1	-0.144048409	0.001224706	0.002912935
OR5D18	11q12.1	-0.144036493	0.001225865	0.002915348
SGCG	13q12.12	0.143994644	0.001229944	0.002924667
TRIM37	17q22	-0.14399332	0.001230073	0.002924667
CACHD1	1p31.3	0.143978147	0.001231555	0.002927846
SFXN5	2p13.2	0.143972326	0.001232125	0.002928854
GFPT1	2p13.3	0.143945225	0.001234777	0.002934814
TMCO6	5q31.3	-0.143941984	0.001235095	0.002935223
ZSCAN22	19q13.43	0.14393511	0.001235768	0.002936478
GIPC2	1p31.1	0.14392829	0.001236437	0.002937721
SLC22A20P	11q13.1	-0.14392099	0.001237154	0.002939077
MGAT5B	17q25.2	0.143899332	0.001239281	0.002943785
EIF2D	1q32.1	-0.143891118	0.001240089	0.002945356
AGAP5	10q22.2	0.143874228	0.001241751	0.002948958
CRTAM	11q24.1	0.143872319	0.001241939	0.002949057
CEP128	14q31.1	0.143834148	0.001245704	0.002957649
PLEKHM1P1	17q24.1	-0.143808479	0.001248242	0.002963326
UBE2E1	3p24.2	-0.143802562	0.001248827	0.002964367
CHAD	17q21.33	0.143754683	0.001253576	0.002975289
CEP19	3q29	-0.143750459	0.001253995	0.002975935
CAB39L	13q14.2	0.143718205	0.001257204	0.002983199
ZNF583	19q13.43	0.143713625	0.001257661	0.002983931
HBQ1	16p13.3	-0.14370694	0.001258327	0.002985161
TSPAN10	17q25.3	0.143676364	0.001261379	0.002992049
TMEM94	17q25.1	-0.143674404	0.001261574	0.002992161
MR1	1q25.3	0.143672782	0.001261737	0.002992194
TCAF1	7q35	0.143670205	0.001261994	0.002992453
SUPT20H	13q13.3	0.143648066	0.001264209	0.002997353
FABP7	6q22.31	0.14363759	0.001265258	0.002999488
NIP7	16q22.1	-0.14362192	0.001266829	0.00300286
NR2F6	19p13.11	-0.143607701	0.001268256	0.003005889
COPS7A	12p13.31	-0.143595868	0.001269445	0.003008273
RWDD4	4q35.1	-0.143594723	0.00126956	0.003008273
ZSCAN23	6p22.1	0.14358732	0.001270304	0.003009683
CDAN1	15q15.2	-0.143565045	0.001272546	0.003014641
KCNK2	1q41	-0.143559537	0.001273101	0.003015601
MRPL42P5	15q15.1	0.143519904	0.001277101	0.00302472
ELAC2	17p12	-0.143482695	0.001280866	0.003033225
GPATCH3	1p36.11	0.143481451	0.001280992	0.003033225
SLC1A5	19q13.32	-0.143451774	0.001284003	0.003039998
ZNF274	19q13.43	0.143445384	0.001284652	0.003041178

RNF34	12q24.31	-0.143413985	0.001287846	0.003048381
GABRP	5q35.1	0.143354251	0.001293943	0.003062453
SPINK7	5q32	-0.143318444	0.00129761	0.003070773
MAP4K5	14q22.1	0.143214161	0.001308346	0.003095814
PAAF1	11q13.4	-0.143195267	0.001310299	0.003100074
PGGHG	11p15.5	0.143171696	0.00131274	0.003105485
SH2D4A	8p21.3	-0.143153565	0.001314621	0.003109569
GPHN	14q23.3-q24.1	-0.143146599	0.001315344	0.003110915
CACNG6	19q13.42	0.143127393	0.00131734	0.003115186
FAM223B	Xq28	-0.143126253	0.001317459	0.003115186
WFIKKN2	17q21.33	0.143095749	0.001320634	0.003122329
C8ORF76	8q24.13	-0.143090297	0.001321203	0.003123307
EIF4G1	3q27.1	-0.143049169	0.001325497	0.003133093
ZNF17	19q13.43	0.143040294	0.001326426	0.00313492
MFSD13A	10q24.32	-0.143013193	0.001329265	0.003141262
KIAA0319L	1p34.3	0.143003364	0.001330296	0.003143293
TTK	6q14.1	-0.143002028	0.001330436	0.003143293
SGK3	8q13.1	-0.14299468	0.001331207	0.003144747
BCAR1	16q23.1	0.142976931	0.001333072	0.003148784
LGALS7	19q13.2	0.142961649	0.001334679	0.003152211
MAGEB6	Xp21.3	-0.142949511	0.001335957	0.003154861
RHEB	7q36.1	-0.142936279	0.001337352	0.003157784
TTF1	9q34.13	-0.142904215	0.001340737	0.003165406
ZNF716	7p11.2	0.142902185	0.001340951	0.003165542
PTPN4	2q14.2	-0.142879405	0.001343361	0.00317086
IRGC	19q13.31	0.142839355	0.001347607	0.003180511
CBL	11q23.3	0.142837608	0.001347793	0.003180577
EIF2S2	20q11.22	-0.142828542	0.001348756	0.003182116
RBM5	3p21.31	0.142827206	0.001348898	0.003182116
EIF2A	3q25.1	-0.142827015	0.001348918	0.003182116
OR8S1	12q13.11	0.142811558	0.001350562	0.003185621
CCP110	16p12.3	0.142785886	0.001353296	0.003191697
VPS37A	8p22	-0.142774435	0.001354517	0.00319407
TLCD3A	17p13.3	-0.142773481	0.001354619	0.00319407
PCDHA5	5q31.3	0.142760512	0.001356003	0.003196961
CREBL2	12p13.1	0.142758022	0.001356269	0.003197214
HSF5	17q22	0.142737868	0.001358423	0.003201919
ARHGEF18	19p13.2	0.142727581	0.001359524	0.003204139
RPA4	Xq21.33	-0.142717545	0.001360599	0.003206297
CRH	8q13.1	0.142710725	0.00136133	0.003207645
PRRT4	7q32.1	-0.142660976	0.001366671	0.003219855
TINCR	19p13.3	-0.142648567	0.001368006	0.003222625
GATA1	Xp11.23	0.14264287	0.00136862	0.003223694
RNF157	17q25.1	0.142635208	0.001369445	0.003225261
XKR3	22q11.1	0.142628208	0.0013702	0.003226662
EFR3B	2p23.3	0.14256755	0.001376754	0.003241718
DLK1	14q32.2	0.142562357	0.001377317	0.003242664
HSP90B3P	1p22.1	0.142544839	0.001379216	0.003246757
PTBP1	19p13.3	-0.142509531	0.001383051	0.003255404
YIPF7	4p12	0.142500938	0.001383985	0.003257224
HSPB3	5q11.2	0.142486187	0.001385591	0.003260624
MOB3C	1p33	-0.142480712	0.001386188	0.003261647
OSER1	20q13.12	-0.142404848	0.001394478	0.003280771
MYRF	11q12.2	0.142401031	0.001394896	0.003281372
CLCC1	1p13.3	0.142370494	0.001398247	0.003288871
ARRDC1	9q34.3	-0.142354653	0.001399988	0.003292432
ZNF296	19q13.32	-0.14235375	0.001400087	0.003292432
MBNL1-AS1	3q25.1	-0.142345588	0.001400985	0.00329416

STAB2	12q23.3	0.142342022	0.001401378	0.003294699
CAPN11	6p21.1	0.142329817	0.001402722	0.003297474
AAAS	12q13.13	-0.142320872	0.001403707	0.003299407
CLECL1	12p13.31	0.142316768	0.00140416	0.003300087
CSE1L	20q13.13	-0.142303886	0.001405581	0.003302855
CERK	22q13.31	0.142303123	0.001405665	0.003302855
TMED1	19p13.2	-0.142286805	0.001407468	0.003306705
UXS1	2q12.2	-0.142282892	0.0014079	0.003307336
LINC01816	2p13.3	-0.142266397	0.001409725	0.003311237
ZNF426	19p13.2	0.142259417	0.001410497	0.003312454
CELSR2	1p13.3	0.142258749	0.001410571	0.003312454
ACLY	17q21.2	-0.142244245	0.001412178	0.003315842
IFNA1	9p21.3	0.142240342	0.001412611	0.003316472
MBL2	10q21.1	0.14223103	0.001413644	0.003318511
SPRR2B	1q21.3	-0.142217305	0.001415168	0.003321422
SPNS3	17p13.2	0.142216895	0.001415213	0.003321422
FBXO28	1q42.11	-0.142200638	0.00141702	0.003325275
DDX47	12p13.1	-0.142198344	0.001417275	0.003325487
TTL	2q14.1	-0.142195291	0.001417615	0.003325898
DDN	12q13.12	-0.14216137	0.001421393	0.003334374
GPRC5A	12p13.1	0.142135649	0.001424264	0.00334072
KRT80	12q13.13	0.142132023	0.001424669	0.003341282
SYT4	18q12.3	0.142105533	0.001427632	0.003347815
PRCP	11q14.1	-0.142104158	0.001427786	0.003347815
SMG5	1q22	0.142098242	0.001428449	0.003348979
CTBP1	4p16.3	0.142096524	0.001428641	0.003349041
GPR152	11q13.2	0.142082656	0.001430196	0.003352296
GIGYF2	2q37.1	0.142080877	0.001430395	0.003352374
RAB26	16p13.3	-0.142068278	0.001431809	0.003355298
PCDHAC1	5q31.3	0.142066594	0.001431998	0.003355351
SAMD8	10q22.2	-0.1420532	0.001433503	0.003358487
NOTCH1	9q34.3	0.14204986	0.001433878	0.003358977
TARP	7p14.1	0.142023113	0.001436888	0.003365636
KEL	7q34	0.142014287	0.001437882	0.003367575
IFI44L	1p31.1	0.142011594	0.001438186	0.003367895
NARF	17q25.3	-0.142001097	0.001439369	0.003370276
ADAM21	14q24.2	0.141999229	0.00143958	0.003370378
ZFAND1	8q21.13	-0.141980104	0.00144174	0.003374827
NUDT4	12q22	0.141979436	0.001441815	0.003374827
APRT	16q24.3	-0.14197705	0.001442085	0.003375067
DGKA	12q13.2	-0.141968748	0.001443023	0.003376872
ADM	11p15.4	-0.141958823	0.001444146	0.003379107
USP9X	Xp11.4	0.141939738	0.001446307	0.003383771
CCKBR	11p15.4	0.141901	0.001450702	0.003393661
TBX4	17q23.2	0.141876283	0.001453513	0.003399843
GPRIN2	10q11.22	0.141847747	0.001456765	0.003407054
PMFBP1	16q22.2	0.141818137	0.001460146	0.003414566
PEX10	1p36.32	-0.141813107	0.001460721	0.003415515
E2F1	20q11.22	-0.141791254	0.001463222	0.003420966
ZNF480	19q13.41	-0.14176797	0.001465891	0.003426809
CCDC103	17q21.31	0.141724455	0.001470891	0.003438099
DUOXA2	15q21.1	-0.141715141	0.001471963	0.003440207
CDS1	4q21.23	-0.141701127	0.001473578	0.003443581
GABBR2	9q22.33	0.141682564	0.001475719	0.003448186
C22ORF34	22q13.33	0.141625601	0.001482307	0.00346318
PIGP	21q22.13	-0.14158351	0.001487193	0.003474192
SULT1A1	16p11.2	-0.14157893	0.001487726	0.003475034
PROX2	14q24.3	0.141552014	0.001490859	0.003481949

NODAL	10q22.1	0.141416621	0.001506711	0.003518565
CLIC5	6p21.1	0.141382065	0.001510782	0.003527663
ACOX3	4p16.1	0.14133063	0.001516859	0.003541445
CIP2A	3q13.13	-0.14131164	0.001519109	0.003546087
RPL7	8q21.11	-0.141310876	0.001519199	0.003546087
WDFY2	13q14.3	-0.141298185	0.001520705	0.00354919
TRAM1L1	4q26	0.141280531	0.001522801	0.003553657
BCL11B	14q32.2	-0.141279099	0.001522971	0.003553657
PCYT1B	Xp22.11	-0.141263354	0.001524843	0.003557614
TMEM249	8q24.3	0.141248092	0.001526659	0.00356144
ZNF496	1q44	0.141232054	0.00152857	0.003565486
KRT32	17q21.2	-0.141206161	0.00153166	0.00357228
RAD9B	12q24.11	-0.141202758	0.001532066	0.003572815
RPS9	19q13.42	-0.141184722	0.001534222	0.003577429
GKAP1	9q21.32	-0.141160388	0.001537136	0.003583809
KDELR1	19q13.33	0.141146265	0.001538829	0.003587342
MAP1A	15q15.3	0.141085383	0.001546148	0.003603988
FGFR1OP	6q27	0.141065821	0.001548507	0.003608893
ZNF610	19q13.41	0.141064962	0.00154861	0.003608893
HMGB4	1p35.1	0.141054072	0.001549925	0.003611539
TLR10	4p14	0.14102555	0.001553372	0.003619154
DSG2	18q12.1	-0.141014672	0.001554689	0.003621804
CCDC144A	17p11.2	0.141013065	0.001554883	0.003621839
COMT	22q11.21	-0.140989575	0.00155773	0.003628052
THOC5	22q12.2	-0.140981368	0.001558726	0.003629952
NT5DC1	6q22.1	-0.140973165	0.001559722	0.003631758
TGM1	14q12	-0.140972016	0.001559862	0.003631758
SULT1B1	4q13.3	0.140970493	0.001560047	0.00363177
CHD3	17p13.1	0.140941289	0.001563598	0.003639617
CCT6A	7p11.2	-0.140939666	0.001563795	0.003639657
SNX5	20p11.23	-0.140893289	0.001569451	0.003652398
PEX7	6q23.3	-0.140877639	0.001571363	0.003656428
CPNE6	14q11.2	-0.140873294	0.001571895	0.003657243
CCDC144B	17p11.2	0.140852563	0.001574432	0.003662724
RASSF7	11p15.5	-0.14083193	0.001576962	0.003668186
SCNM1	1q21.3	-0.140803779	0.001580419	0.003675803
C21ORF58	21q22.3	-0.140762745	0.00158547	0.003686949
POLR2A	17p13.1	0.140761887	0.001585576	0.003686949
TNPO2	19p13.13	-0.140746809	0.001587436	0.003690848
7-Mar	2q24.2	-0.140696806	0.001593619	0.003704797
LINC02693	17p11.2	0.140681016	0.001595576	0.003708782
USB1	16q21	0.14068001	0.001595701	0.003708782
RSKR	17q11.2	-0.140664838	0.001597583	0.00371273
PLCD3	17q21.31	0.14059594	0.001606158	0.003732228
MDGA1	6p21.2	-0.14058258	0.001607826	0.003735547
SLC35A1	6q15	0.14058153	0.001607957	0.003735547
POTEE	2q21.1	0.140577362	0.001608477	0.003736326
IAH1	2p25.1	-0.140567121	0.001609757	0.003738869
RYR2	1q43	0.140532958	0.001614034	0.00374837
AMPD1	1p13.2	0.140524292	0.00161512	0.003750461
DLX2	2q31.1	0.140514157	0.001616391	0.003752981
SPIRE2	16q24.3	-0.140496314	0.001618632	0.003757751
DIRAS2	9q22.2	-0.140491581	0.001619227	0.0037587
PIGO	9p13.3	-0.140486676	0.001619843	0.003759587
KRTAP4-9	17q21.2	0.140485577	0.001619982	0.003759587
SIM1	6q16.3	0.140452563	0.001624138	0.003768799
MYL12B	18p11.31	-0.140442589	0.001625395	0.003771284
VWA3B	2q11.2	0.140395584	0.001631334	0.003784628

UTP3	4q13.3	-0.140378558	0.00163349	0.003789194
KCNU1	8p11.23	0.140373446	0.001634138	0.003790261
MED19	11q12.1	-0.140353747	0.001636637	0.003795621
HAUS2	15q15.2	-0.140346208	0.001637594	0.003797404
USP5	12p13.31	-0.140339624	0.001638431	0.003798907
LOC100130238	12q24.33	0.140312002	0.001641944	0.003806615
TDG	12q23.3	-0.140246964	0.001650243	0.003825416
SYNPO2L	10q22.2	0.140232569	0.001652085	0.003829247
HNRNPUL1	19q13.2	0.140208889	0.001655119	0.003835839
RGPD5	2q13	0.1402024	0.001655952	0.003837328
CHRND	2q37.1	0.140196915	0.001656656	0.003838518
UNC80	2q34	0.140194332	0.001656987	0.003838845
RORC	1q21.3	0.140190472	0.001657483	0.003839553
HUS1	7p12.3	-0.140141136	0.001663829	0.003853812
TRPC2	11p15.4	0.140136452	0.001664433	0.003854768
MRGPRE	11p15.4	0.140131134	0.001665119	0.003855914
TSNAX	1q42.2	-0.14011747	0.001666882	0.003859553
CTRC	1p36.21	0.140110299	0.001667808	0.00386117
PSG10P	19q13.2	0.140109099	0.001667963	0.00386117
GTF2E2	8p12	-0.140093614	0.001669964	0.003865359
DNAJC5B	8q13.1	0.140088196	0.001670664	0.003866537
AOC2	17q21.31	-0.140082258	0.001671433	0.003867872
GTPBP4	10p15.3	-0.140073669	0.001672544	0.003870001
ZMAT1	Xq22.1	0.140052825	0.001675245	0.003875806
ZNF160	19q13.41-q13.42	0.140016127	0.001680011	0.003886385
LNPBK	2q31.1	-0.140014314	0.001680246	0.003886485
NELFA	4p16.3	-0.140009543	0.001680867	0.003887474
PSMD5	9q33.2	-0.139989217	0.001683513	0.003893147
TNPO1	5q13.2	-0.139985495	0.001683998	0.003893822
EEF1AKNMT	1q24.3	-0.139950283	0.001688591	0.003903997
RNASE13	14q11.2	0.139937212	0.0016903	0.003907499
SLC39A6	18q12.2	-0.139932629	0.001690899	0.003908436
MAP10	1q42.2	0.139922418	0.001692235	0.003911076
SIRPD	20p13	0.139848943	0.001701877	0.00393291
CASC1	12p12.1	0.13981232	0.001706701	0.003943176
CYP11A1	15q24.1	0.139812253	0.00170671	0.003943176
PSMC6	14q22.1	-0.139771071	0.00171215	0.003955293
PELI3	11q13.2	-0.139762865	0.001713236	0.003957348
ACP5	19p13.2	0.139761338	0.001713438	0.003957362
KLRC3	12p13.2	0.139733574	0.001717118	0.003965406
FAM216A	12q24.11	-0.139726129	0.001718105	0.003967233
AMH	19p13.3	-0.139712461	0.00171992	0.003970969
ZCCHC10	5q31.1	-0.139666007	0.001726102	0.003984785
FOXK1	7p22.1	0.139664003	0.001726369	0.003984946
TMEM187	Xq28	-0.139632849	0.001730526	0.003994085
SDCBP2	20p13	-0.139627505	0.00173124	0.003995276
CAGE1	6p24.3	-0.13958087	0.001737483	0.004009225
RNF125	18q12.1	0.139577263	0.001737967	0.004009883
KRTAP2-2	17q21.2	0.139566915	0.001739355	0.004012627
MOBP	3p22.1	-0.139550204	0.0017416	0.004017345
GPATCH2	1q41	-0.13954491	0.001742311	0.004018527
CEACAM3	19q13.2	0.139539166	0.001743084	0.004019849
NIN	14q22.1	0.139526067	0.001744846	0.004023454
ZNF394	7q22.1	-0.139476108	0.001751583	0.004038527
PMS2	7p22.1	-0.139456927	0.001754176	0.004044043
SNX21	20q13.12	0.13944538	0.001755738	0.004047183
FUT3	19p13.3	-0.139409786	0.001760563	0.004057841
SERPINA13P	14q32.13	0.13937884	0.001764768	0.004067068

SLC39A10	2q32.3	0.139365699	0.001766556	0.004070724
NOMO3	16p13.11	0.139359305	0.001767426	0.004072265
NCSTN	1q23.2	0.13934814	0.001768948	0.004075305
KLRD1	12p13.2	0.139335977	0.001770607	0.004078661
DKFZP586I1420	7p14.3	0.139329628	0.001771473	0.004080191
EPPK1	8q24.3	0.13932228	0.001772476	0.004082036
MACROD1	11q13.1	-0.139319226	0.001772893	0.00408253
LNPEP	5q15	0.139309015	0.001774288	0.004085277
RIOX2	3q11.2	-0.139263497	0.00178052	0.004099158
VRK2	2p16.1	-0.139233724	0.001784607	0.004108099
POMGNT1	1p34.1	0.139209963	0.001787875	0.004115152
AARS2	6p21.1	0.13919937	0.001789334	0.004118039
LOC100128076	9q22.31	0.139180462	0.00179194	0.004123567
MARS	12q13.3	-0.139169025	0.001793519	0.004126729
CPNE4	3q22.1	0.13916221	0.00179446	0.004128423
LAMTOR1	11q13.4	-0.139159577	0.001794823	0.004128789
DDX19B	16q22.1	0.13915471	0.001795496	0.004129398
C10ORF71	10q11.23	0.139154699	0.001795497	0.004129398
MTMR4	17q22	-0.139152993	0.001795733	0.00412947
IRX3	16q12.2	0.139126369	0.001799416	0.004137467
KIF19	17q25.1	0.139121222	0.001800129	0.004138635
TRIM63	1p36.11	0.139082864	0.001805449	0.004150394
GPM6B	Xp22.2	0.139020827	0.001814084	0.004169769
MAN1B1-DT	9q34.3	-0.139009757	0.001815629	0.004172844
STMN1	1p36.11	-0.139003841	0.001816455	0.004174268
PEX1	7q21.2	-0.138999738	0.001817028	0.004175109
PHF7	3p21.1	-0.138996353	0.001817501	0.004175721
PLD5	1q43	0.138986923	0.001818819	0.004178273
FN3K	17q25.3	-0.138977121	0.00182019	0.004180947
GCSAML-AS1	1q44	0.138937684	0.001825716	0.004193163
ZNF765	19q13.42	0.138936139	0.001825933	0.004193184
ELF5	11p13	-0.13892962	0.001826848	0.004194808
POU3F2	6q16.1	0.138923269	0.00182774	0.004196378
SPINK6	5q32	0.138906471	0.001830101	0.00420132
UFSP2	4q35.1	0.138903834	0.001830472	0.004201694
TPPP3	16q22.1	0.138893241	0.001831962	0.004204636
ZNF843	16p11.2	0.138874875	0.001834549	0.004210095
RPL3	22q13.1	-0.138867762	0.001835552	0.004211596
MYBPH	1q32.1	0.138867272	0.001835621	0.004211596
MYBL2	20q13.12	-0.138842856	0.001839067	0.004219023
SLCO4A1-AS1	20q13.33	0.138832692	0.001840503	0.004221838
EMID1	22q12.2	0.138827874	0.001841184	0.004222657
LRRC57	15q15.2	-0.138827206	0.001841279	0.004222657
TBC1D9B	5q35.3	0.138822244	0.00184198	0.004223585
BIVM	13q33.1	0.138821385	0.001842102	0.004223585
CDC23	5q31.2	-0.138809648	0.001843763	0.004226914
GRB14	2q24.3	-0.138723109	0.001856053	0.004254606
TBR1	2q24.2	0.138708982	0.001858066	0.004258737
LINGO2	9p21.2-p21.1	0.13870683	0.001858373	0.004258957
ARHGAP11A	15q13.3	-0.138700861	0.001859225	0.004260424
ALKBH1	14q24.3	-0.138692845	0.001860369	0.004262562
SMARCA1	Xq25-q26.1	0.138672714	0.001863245	0.004268666
RABGEF1	7q11.21	-0.138642937	0.001867506	0.004277943
CLN8	8p23.3	0.138615931	0.001871378	0.004286327
LENG8	19q13.42	0.138612496	0.001871871	0.00428697
GOLGA6L5P	15q25.2	0.138599804	0.001873694	0.004290658
SLC25A14	Xq26.1	-0.138587494	0.001875464	0.004294223
ERG28	14q24.3	-0.138573467	0.001877482	0.004298356

TXNIP	1q21.1	0.13857194	0.001877702	0.004298372
C12ORF42	12q23.2-q23.3	-0.138560681	0.001879324	0.004301596
HSPA5	9q33.3	0.138543407	0.001881814	0.004306808
PUS10	2p16.1-p15	0.138477086	0.001891404	0.004328265
GATA2	3q21.3	0.13847241	0.001892082	0.004329325
PAFAH1B1	17p13.3	0.138468879	0.001892594	0.004330005
PPP2R1B	11q23.1	-0.138448362	0.001895571	0.004336325
PGM3	6q14.1	0.138438438	0.001897013	0.004339132
ZNF438	10p11.23	0.1384288	0.001898414	0.00434183
RBMY1A1	Yq11.223	0.138427365	0.001898623	0.00434183
SLC9A5	16q22.1	0.13842441	0.001899052	0.00434232
SASS6	1p21.2	-0.138399027	0.001902748	0.004350278
CCL14	17q12	0.13839082	0.001903944	0.00435252
CAPSL	5p13.2	0.138362773	0.001908038	0.004361384
FAM92B	16q24.1	0.13834793	0.001910208	0.004365849
NEIL1	15q24.2	-0.138339385	0.001911458	0.004368212
PDIA3	15q15.3	0.138324689	0.00191361	0.004372634
PNPLA2	11p15.5	0.1383036	0.001916701	0.004379202
FBXL12	19p13.2	-0.138301214	0.001917051	0.004379506
OR2AG2	11p15.4	0.138287714	0.001919033	0.004383537
MT1H	16q13	0.138281513	0.001919944	0.004385122
OR52K1	11p15.4	0.1382465	0.001925095	0.004396389
SMAD5	5q31.1	-0.138218957	0.001929156	0.004405164
KNL1	15q15.1	-0.138212849	0.001930057	0.004406724
LINC00887	3q29	0.138161468	0.001937657	0.004423575
PDLIM4	5q31.1	0.138128015	0.00194262	0.004434403
ATG2B	14q32.2	0.13810454	0.001946109	0.004441866
DMPK	19q13.32	0.138063125	0.001952279	0.004455445
PAX8-AS1	2q14.1	0.13802734	0.001957625	0.004466667
ASPM	1q31.3	-0.138027244	0.001957639	0.004466667
ZFC3H1	12q21.1	0.137994608	0.001962526	0.004477312
SHOC2	10q25.2	0.137976954	0.001965175	0.004482846
DPY19L2P2	7q22.1	0.137965727	0.001966861	0.004486185
MARK4	19q13.32	0.137955006	0.001968472	0.004489352
FAM106C	17p11.2	0.137951574	0.001968988	0.004490022
TAF5	10q24.33	-0.137911396	0.001975038	0.004503309
CD27-AS1	12p13.31	-0.137893552	0.00197773	0.004508938
RIC8A	11p15.5	0.137864256	0.001982158	0.004518061
COQ7	16p12.3	-0.137863778	0.00198223	0.004518061
EYA3	1p35.3	0.137862633	0.001982403	0.004518061
FBXL19	16p11.2	-0.137849178	0.00198444	0.004522192
GCNT3	15q22.2	-0.137836299	0.001986391	0.004526112
UCP2	11q13.4	0.137834864	0.001986609	0.004526112
GCH1	14q22.2	-0.137814538	0.001989692	0.004532626
PAQR3	4q21.21	-0.137764439	0.001997311	0.004549469
UBXN11	1p36.11	0.137761863	0.001997704	0.004549849
CPT1B	22q13.33	-0.137752702	0.0019991	0.004552515
LRRRC4B	19q13.33	0.137749839	0.001999537	0.004552574
IL1F10	2q14.1	-0.137749575	0.001999577	0.004552574
SF3A2	19p13.3	-0.137744972	0.002000279	0.004553658
CITED4	1p34.2 1p35-p34	0.137646874	0.002015295	0.004587326
USP54	10q22.2	0.137605745	0.002021622	0.004600699
ADGRF4	6p12.3	0.137605713	0.002021627	0.004600699
TMEM150C	4q21.22	0.137601737	0.002022239	0.004601575
PRUNE1	1q21.3	-0.137596297	0.002023077	0.004602963
CCDC33	15q24.1	0.137586493	0.002024589	0.004605473
NCAPG	4p15.31	-0.137586182	0.002024637	0.004605473
IRS4	Xq22.3	-0.13754848	0.00203046	0.004618199

ZDHHC21	9p22.3	-0.137542763	0.002031345	0.00461969
IL1A	2q14.1	0.13753761	0.002032142	0.004620982
GGH	8q12.3	-0.137508791	0.002036607	0.004630613
TSR3	16p13.3	-0.137498485	0.002038206	0.004633727
PDZD4	Xq28	0.137494382	0.002038843	0.004634652
POTEF	2q21.1	0.137481363	0.002040865	0.004638726
WASF3	13q12.13	0.137406208	0.002052573	0.004664813
ATG13	11p11.2	0.137398383	0.002053796	0.004667066
GALNT4	12q21.33	-0.137375576	0.002057363	0.004674645
ADGRF2	6p12.3	0.137371802	0.002057954	0.004675461
FBXL21P	5q31.1	-0.137369179	0.002058364	0.004675868
CCNE1	19q12	-0.137330248	0.002064469	0.004689208
CAAP1	9p21.2	-0.137322331	0.002065713	0.004691504
DGCR6L	22q11.21	-0.137277095	0.002072831	0.004707141
FOXJ3	1p34.2	0.137233962	0.002079639	0.004721778
JAKMIP2	5q32	-0.137233294	0.002079745	0.004721778
UTS2R	17q25.3	0.137211485	0.002083195	0.00472908
LINC02593	1p36.33	0.137208139	0.002083725	0.004729751
AURKAP1	1q41	-0.137201231	0.002084819	0.004731702
ZNF711	Xq21.1	-0.137191975	0.002086286	0.004734499
RAD54L	1p34.1	-0.137112293	0.002098954	0.004762711
TTC21B	2q24.3	-0.137095021	0.002101709	0.004768427
MGC16275	17q25.1	-0.13709149	0.002102273	0.004769169
GFM2	5q13.3	-0.137064103	0.002106649	0.004778561
TBX2	17q23.2	0.137054369	0.002108207	0.004781556
PIGV	1p36.11	-0.137037002	0.002110988	0.004787327
SCUBE2	11p15.4	0.137023547	0.002113146	0.004791681
MPDU1	17p13.1	-0.137020779	0.00211359	0.004792149
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STAT1	2q32.2	0.137006465	0.002115887	0.00479628
GPR89A	1q21.1	-0.137003221	0.002116408	0.004796923
SLK	10q24.33-q25.1	0.136991769	0.002118249	0.004800555
NEU2	2q37.1	0.136973811	0.002121137	0.004806562
SRGAP3	3p25.3	-0.136892812	0.002134212	0.004835645
CYBA	16q24.2	0.136886418	0.002135247	0.004837448
OSBPL10	3p23	0.136881265	0.002136081	0.004838795
CHGA	14q32.12	-0.136868765	0.002138107	0.004842841
PCDHGA8	5q31.3	0.136862968	0.002139048	0.004844427
CAMK2B	7p13	0.136825168	0.002145187	0.004857785
MINK1	17p13.2	0.136803779	0.002148668	0.004865122
HIST1H2AJ	6p22.1	-0.136776189	0.002153166	0.004874759
PDXP	22q13.1	-0.136766658	0.002154722	0.004877734
MFS12	19p13.3	0.136761409	0.002155579	0.004879128
ZNF322P1	9q22.33	-0.136759787	0.002155844	0.00487918
KCTD13	16p11.2	-0.136718277	0.002162635	0.004894001
POM121L8P	22q11.21	0.136686542	0.00216784	0.00490523
NKAP	Xq24	-0.136680869	0.002168772	0.004906306
PAX7	1p36.13	0.136680687	0.002168802	0.004906306
RNF138P1	5q11.2	-0.136674959	0.002169743	0.004907884
VPS36	13q14.3	0.136655963	0.002172866	0.004914399
MEF2B	19p13.11	0.136649907	0.002173863	0.004916102
RPS6KC1	1q32.3	-0.136635637	0.002176213	0.004920866
EFCAB7	1p31.3	0.136599951	0.002182101	0.004933626
KCNJ13	2q37.1	0.136597751	0.002182464	0.004933895
KCNK17	6p21.2	0.136584069	0.002184726	0.004938454
ELOC	8q21.11	-0.13655252	0.002189948	0.004949705
GLP2R	17p13.1	0.136533051	0.002193177	0.004956447
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HMGXB4	22q12.3	-0.136515164	0.002196147	0.004962048
ESRRB	14q24.3	0.136488829	0.002200527	0.004971388
BFSP1	20p12.1	-0.136484577	0.002201235	0.00497243
ZNF230	19q13.31	0.136480092	0.002201982	0.004973561
DNAJC13	3q22.1	0.136477515	0.002202411	0.004973973
FREM2	13q13.3	-0.136475387	0.002202766	0.004974217
IL17RA	22q11.1	0.136456	0.002205998	0.004980959
TENM1	Xq25	0.136436991	0.002209171	0.004987566
RXYLT1	12q14.2	-0.136433523	0.002209751	0.004988316
NKD2	5p15.33	0.136424553	0.00221125	0.004991142
CDHR1	10q23.1	-0.136402319	0.00221497	0.004998981
SERPINA10	14q32.13	0.136397782	0.00221573	0.005000137
TAL2	9q31.2	0.136373625	0.00221978	0.005008716
SERTAD4-AS1	1q32.2	0.136356183	0.002222708	0.005014762
SLC5A10	17p11.2	-0.136349759	0.002223788	0.005016637
IDO2	8p11.21	0.136319163	0.002228935	0.005027687
ESX1	Xq22.2	0.136303487	0.002231577	0.005033083
SAFB	19p13.3	-0.136279696	0.002235592	0.005041574
GPHA2	11q13.1	0.136264661	0.002238132	0.005046739
SLC13A5	17p13.1	0.13626224	0.002238541	0.005047098
GPR157	1p36.22	0.136219004	0.002245863	0.005063039
GSX2	4q12	-0.136214508	0.002246625	0.005064193
TLK2	17q23.2	-0.136201446	0.002248842	0.005068405
FAM81A	15q22.2	0.136200205	0.002249053	0.005068405
HIGD1A	3p22.1	-0.13619906	0.002249247	0.005068405
IFNB1	9p21.3	0.136172238	0.002253807	0.005078111
FAM66E	8p23.1	0.136165323	0.002254983	0.005080195
NARS2	11q14.1	-0.136161462	0.002255641	0.005081109
AKAP17A	Xp22.33 and Yp11	0.136140754	0.002259169	0.005088489
TMEM229A	7q31.32	0.136128113	0.002261325	0.005092777
UGT2B4	4q13.3	0.136119753	0.002262752	0.005095423
ELP4	11p13	-0.136112985	0.002263908	0.005097457
ART4	12p12.3	0.136085967	0.002268528	0.005107289
TPRXL	3p25.1	-0.136036662	0.002276981	0.005125748
GOLGA8G	15q13.1	0.136017733	0.002280234	0.005132399
CTSW	11q13.1	0.136016509	0.002280445	0.005132399
DDX55	12q24.31	-0.135990934	0.002284847	0.005141733
STXBP5L	3q13.33	-0.135971238	0.002288242	0.0051488
ALDH1B1	9p13.1	0.135958489	0.002290442	0.005152713
LY9	1q23.3	0.135958203	0.002290492	0.005152713
ZC3HAV1L	7q34	-0.135940931	0.002293476	0.00515885
INSM1	20p11.23	0.135933932	0.002294686	0.005160997
CLEC3A	16q23.1	0.135931477	0.002295111	0.005161377
HIST1H2BL	6p22.1	-0.135915943	0.002297799	0.005166848
EAPP	14q13.1	-0.135914402	0.002298066	0.005166872
THEM6	8q24.3	-0.135877568	0.002304453	0.005180655
KALRN	3q21.1-q21.2	0.135875182	0.002304868	0.005180656
CPNE8	12q12	-0.135874609	0.002304967	0.005180656
SULT2B1	19q13.33	-0.135867503	0.002306201	0.005182853
COL19A1	6q13	0.135862882	0.002307004	0.005183544
IFNGR2	21q22.11	0.135862776	0.002307023	0.005183544
PPP1R12C	19q13.42	0.135838347	0.002311272	0.005192514
ZNF106	15q15.1	0.135827564	0.00231315	0.005196155
CYP4V2	4q35.1-q35.2	0.135797409	0.002318409	0.005207389
TMEM167A	5q14.2	0.135777083	0.00232196	0.005214784
AURKA	20q13.2	-0.135773362	0.002322611	0.005215665
TAF13	1p13.3	0.13574836	0.002326987	0.005224236
CCDC77	12p13.33	-0.135747692	0.002327104	0.005224236

BAG4	8p11.23	-0.135747119	0.002327204	0.005224236
E2F2	1p36.12	-0.135719064	0.002332124	0.005234698
CALML4	15q23	-0.135694539	0.002336433	0.005243785
MOB3A	19p13.3	0.135692917	0.002336718	0.005243842
CRLF2	Xp22.33 and Yp110	0.135685583	0.002338008	0.005245839
RPS6	9p22.1	-0.135684901	0.002338128	0.005245839
UBE2MP1	16p11.2	-0.135676981	0.002339522	0.005248176
ZNF761	19q13.42	0.135676026	0.00233969	0.005248176
BEST3	12q15	0.135640448	0.002345961	0.005261659
MADD	11p11.2	0.135634802	0.002346957	0.005263309
PPP1CA	11q13.2	-0.135619248	0.002349705	0.005268885
ZNF593	1p36.11	-0.13561572	0.002350328	0.005269697
LINC00671	17q21.31	0.135608568	0.002351593	0.005271947
AADACL2	3q25.1	-0.135572862	0.002357916	0.005285535
SHANK3	22q13.33	0.135566286	0.002359082	0.005287562
XPC	3p25.1	0.135559224	0.002360335	0.005289782
NPEPPS	17q21.32	-0.135554835	0.002361114	0.005290941
BDH2	4q24	0.135478016	0.002374787	0.005320989
TCHP	12q24.11	-0.135473054	0.002375673	0.005322382
OSBPL6	2q31.2	-0.135451297	0.00237956	0.005330499
CCL4L1	17q12	0.135433643	0.002382718	0.005336981
SCD	10q24.31	-0.135417325	0.00238564	0.005342934
NEB	2q23.3	-0.135407591	0.002387385	0.005346248
TGFBRAP1	2q12.1-q12.2	0.135315695	0.002403916	0.00538267
ABCG2	4q22.1	-0.135298096	0.002407094	0.005389187
ZNF879	5q35.3	0.135285401	0.002409388	0.005393726
MIS12	17p13.2	-0.135282105	0.002409984	0.005394462
ADRB1	10q25.3	0.135278482	0.00241064	0.005395331
TREX1	3p21.31	-0.135268936	0.002412367	0.005398598
ARFIP2	11p15.4	-0.135264737	0.002413128	0.005399701
BCDIN3D-AS1	12q13.12	-0.135252905	0.002415271	0.005403898
HERC3	4q22.1	0.135200324	0.002424818	0.005424656
AGTPBP1	9q21.33	-0.135173226	0.002429751	0.005435089
TMSB10	2p11.2	0.135170265	0.002430291	0.005435694
VEGFD	Xp22.2	-0.135147141	0.002434508	0.005444525
RND3	2q23.3	0.135051745	0.00245198	0.00548299
ACSM4	12p13.31	0.135046073	0.002453022	0.005484713
PIFO	1p13.2	0.135026966	0.002456536	0.005491962
APOBEC3B	22q13.1	-0.135016246	0.00245851	0.005495766
SHLD2P1	10q11.22	0.134949161	0.002470895	0.005522839
ARAF	Xp11.3	0.134946108	0.00247146	0.00552349
PTPA	9q34.11	-0.13490851	0.002478427	0.005538448
SNORA63	3q27.3	-0.134886339	0.002482544	0.005547034
PSMC3	11p11.2	-0.134877401	0.002484206	0.005550132
MYH14	19q13.33	-0.134866808	0.002486176	0.005553919
TTC39A	1p32.3	-0.134843238	0.002490566	0.005563109
SLC5A4	22q12.3	0.134811364	0.002496513	0.005575776
CD2AP	6p12.3	0.134791326	0.002500258	0.005583523
EID2	19q13.2	-0.134774626	0.002503383	0.005589883
HOXC13	12q13.13	0.134772856	0.002503715	0.005590005
LINC01312	6q23.2	-0.134731059	0.002511554	0.005606886
HIPK3	11p13	0.134722809	0.002513104	0.005609725
MED12	Xq13.1	0.134717326	0.002514134	0.005611405
ANKRD24	19p13.3	-0.134698094	0.002517752	0.005618858
FIS1	7q22.1	-0.134683971	0.002520412	0.005624172
RTKN2	10q21.2	0.134671374	0.002522786	0.005628848
UNK	17q25.1	-0.134640933	0.002528532	0.005641045
FOXJ2	12p13.31	0.134625856	0.002531383	0.005646781

MASP2	1p36.22	0.134612506	0.00253391	0.005651792
RLF	1p34.2	0.134582437	0.002539608	0.005663877
QRFR	4q27	-0.134529459	0.002549678	0.005685705
APLP2	11q24.3	0.134494167	0.002556406	0.005700079
RASGEF1C	5q35.3	0.134488379	0.002557511	0.005701912
ATRAID	2p23.3	-0.134480903	0.002558939	0.005704465
ABCA3	16p13.3	0.13447575	0.002559923	0.00570603
ERC2	3p14.3	-0.134465539	0.002561875	0.00570975
PLEKHG5	1p36.31	0.134444641	0.002565875	0.005718033
PSG2	19q13.31	0.13437029	0.00258015	0.005748996
ZNF774	15q26.1	-0.134369308	0.002580339	0.005748996
PLA2G3	22q12.2	-0.134356353	0.002582834	0.005753919
FUBP3	9q34.11-q34.12	-0.134352649	0.002583547	0.005754874
MAT2B	5q34	0.134346351	0.002584761	0.005756307
PSMA6	14q13.2	-0.134346351	0.002584761	0.005756307
OIT3	10q22.1	0.134334431	0.00258706	0.005760774
SMIM13	6p24.2	0.134332991	0.002587338	0.005760774
GPAT4	8p11.21	0.134329747	0.002587964	0.005761533
FAM66A	8p23.1	0.134323687	0.002589134	0.005763501
HYDIN	16q22.2	0.134304942	0.002592756	0.005770477
CEP120	5q23.2	0.13430451	0.00259284	0.005770477
IL19	1q32.1	0.134285059	0.002596603	0.005778214
ETHE1	19q13.31	0.13426791	0.002599925	0.005784969
FAM13A-AS1	4q22.1	0.134253406	0.002602738	0.005790239
KCNAB1	3q25.31	0.134252738	0.002602867	0.005790239
FUT8	14q23.3	0.134243863	0.00260459	0.005793432
MYH8	17p13.1	0.134224647	0.002608323	0.005801096
NEK2	1q32.3	-0.134221915	0.002608854	0.005801638
LRRN4	20p12.3	0.134195995	0.002613898	0.005812215
SGO2	2q33.1	-0.134174011	0.002618183	0.005821102
TENT4A	5p15.31	0.134145955	0.002623661	0.005832638
KHNYN	14q12	0.134139752	0.002624874	0.005834691
IWS1	2q14.3	-0.134132214	0.002626348	0.005836848
GDAP1	8q21.11	-0.134131832	0.002626423	0.005836848
KLHL14	18q12.1	0.134126715	0.002627424	0.005838431
CCM2L	20q11.21	0.134101582	0.002632347	0.005848725
BET1P1	7q36.1	0.134082149	0.002636159	0.00585655
ANKRD49	11q21	-0.134039268	0.002644588	0.00587463
SIAH1	16q12.1	0.13403402	0.002645621	0.005876278
SNX19	11q24.3-q25	0.134015889	0.002649194	0.005883566
SPDYE4	17p13.1	0.133994284	0.002653457	0.005892385
UGP2	2p15	-0.1339865	0.002654994	0.00589515
BEGAIN	14q32.2	0.133979585	0.002656361	0.005897536
CCDC22	Xp11.23	-0.133973805	0.002657503	0.005899423
USP7	16p13.2	-0.133961686	0.002659901	0.005904096
REM2	14q11.2	-0.133932772	0.002665628	0.005916159
EXOSC8	13q13.3	-0.133920176	0.002668127	0.005921053
NSD1	5q35.3	0.133916645	0.002668828	0.005921957
FOXM1	12p13.33	-0.133893265	0.002673472	0.005931169
UPF3A	13q34	0.133892788	0.002673567	0.005931169
SLC36A4	11q21	0.133880287	0.002676054	0.005936033
TNFAIP8L1	19p13.3	0.133878665	0.002676377	0.005936096
SCNN1G	16p12.2	0.133846605	0.002682764	0.005949609
LINC00304	16q24.3	0.133808926	0.002690289	0.005965641
RPS6KB1	17q23.1	-0.133768212	0.002698441	0.005983061
SV2B	15q26.1	-0.133735239	0.00270506	0.005997078
CD36	7q21.11	0.133724646	0.002707189	0.006001139
LOC153684	5p12	0.133704565	0.00271123	0.006009437

MTA1	14q32.33	-0.133696305	0.002712894	0.006012465
TMEM106C	12q13.11	-0.13369411	0.002713336	0.006012784
ANKRD11	16q24.3	0.133663478	0.002719516	0.006025816
LIPA	10q23.31	0.133619391	0.002728432	0.006044844
TNNI2	11p15.5	0.133618055	0.002728702	0.006044844
ATP6V1G3	1q31.3	0.133613304	0.002729665	0.006046312
BRCA2	13q13.1	-0.133593435	0.002733693	0.006054571
ARHGAP10	4q31.23	0.13358895	0.002734603	0.006055922
ZNF799	19p13.2	-0.133581843	0.002736046	0.006058452
GUCY2EP	11q13.5	-0.133531835	0.002746218	0.006080308
KIAA1107	1p22.1	0.133513849	0.002749884	0.006087758
ANKRD13A	12q24.11	0.133503447	0.002752007	0.006091789
PYY2	17q11.2	-0.133496517	0.002753422	0.006093687
RPL36A	Xq22.1	-0.13349629	0.002753468	0.006093687
ZNF98	19p12	0.133488639	0.002755031	0.006096477
TTC28-AS1	22q12.1	-0.133483694	0.002756042	0.006098045
IFT140	16p13.3	0.133478541	0.002757095	0.006099707
BRAT1	7p22.3	-0.13345936	0.00276102	0.00610772
HILS1	17q21.33	0.133436438	0.002765716	0.006117439
YWHAE	17p13.3	-0.133426629	0.002767729	0.006120785
TUSC7	3q13.31	-0.133426105	0.002767836	0.006120785
SPSB2	12p13.31	-0.133423861	0.002768297	0.006121133
EIF4ENIF1	22q12.2	-0.133415273	0.00277006	0.00612436
SMN1	5q13.2	-0.133412765	0.002770575	0.006124828
PHKB	16q12.1	-0.13335859	0.002781722	0.006148797
TPSD1	16p13.3	0.13335405	0.002782658	0.006150192
NBPF3	1p36.12	0.133352196	0.00278304	0.006150363
SPZ1	5q14.1	-0.13331757	0.002790189	0.006165487
CDC42BPG	11q13.1	0.133241501	0.002805954	0.006199643
GPR45	2q12.1	0.133179759	0.002818809	0.006227364
CNTNAP2	7q35-q36.1	-0.133178138	0.002819147	0.00622743
FAM167A	8p23.1	0.133169549	0.00282094	0.006230707
MAPK7	17p11.2	0.133167355	0.002821398	0.006231037
REEP2	5q31.2	0.133159816	0.002822973	0.006233833
FAF2	5q35.2	0.133101987	0.002835078	0.006259879
TOPBP1	3q22.1	-0.133077749	0.002840165	0.006270401
CEP57L1	6q21	0.133076324	0.002840465	0.006270401
ZNF565	19q13.12	-0.133067443	0.002842331	0.006273835
IMPG1	6q14.1	0.133052234	0.00284553	0.006280209
CALML6	1p36.33	-0.133046898	0.002846653	0.006282
LINC01600	6p25.2	0.133029236	0.002850373	0.006288907
TMEM160	19q13.32	-0.133029081	0.002850406	0.006288907
TEX101	19q13.31	-0.133027015	0.002850842	0.00628918
LINC01512	6p21.1	-0.133022616	0.002851769	0.006290538
PLTP	20q13.12	0.133012191	0.002853968	0.006294701
GNA14	9q21.2	0.132977455	0.002861306	0.006310196
P2RY12	3q25.1	0.132970489	0.00286278	0.006312756
CCL8	17q12	0.132958182	0.002865385	0.00631781
ZNF271P	18q12.2	-0.132955984	0.00286585	0.006318106
RHD	1p36.11	0.132954594	0.002866145	0.006318106
CYREN	7q33	-0.132921535	0.002873155	0.006332867
CD8A	2p11.2	0.132855596	0.002887185	0.006363096
PMEL	12q13.2	-0.132841759	0.002890137	0.006368907
AHNAK2	14q32.33	0.132828208	0.002893031	0.006374587
C10ORF88	10q26.13	0.132806737	0.002897621	0.006384004
SKP1	5q31.1	-0.132804351	0.002898131	0.006384431
ZNF436	1p36.12	0.132789751	0.002901257	0.006390619
DSC3	18q12.1	-0.132775628	0.002904283	0.006396587

CHGB	20p12.3	0.132761568	0.002907299	0.006402531
TMEM39B	1p35.2	0.132717421	0.002916787	0.006422724
CENPB	20p13	0.132689935	0.002922708	0.00643506
RGS13	1q31.2	0.132672431	0.002926484	0.006442672
NUP188	9q34.11	-0.132662738	0.002928578	0.006446577
WNK1	12p13.33	0.132655104	0.002930227	0.006449255
SDS	12q24.13	0.13265415	0.002930433	0.006449255
MFF	2q36.3	-0.13264852	0.002931651	0.00645123
CHMP2B	3p11.2	0.132632297	0.00293516	0.006458249
WDR34	9q34.11	-0.132592981	0.002943682	0.006476293
RECQL5	17q25.1	-0.132577045	0.002947142	0.006483199
ARHGEF33	2p22.1	0.132519054	0.002959766	0.00651026
GUCY1B1	4q32.1	0.132502326	0.002963417	0.00651758
UCP1	4q31.1	-0.132485244	0.002967149	0.006525077
CCZ1	7p22.1	-0.132481046	0.002968067	0.006526384
GPX4	19p13.3	-0.132462151	0.002972201	0.006534762
ASPH	8q12.3	-0.132458811	0.002972933	0.006535658
DCANP1	5q31.1	0.13245014	0.002974832	0.006539122
METTL22	16p13.2	-0.132438486	0.002977387	0.006543634
GCSAM	3q13.2	0.132437818	0.002977533	0.006543634
NUP50	22q13.31	-0.132427702	0.002979752	0.006547798
TTC27	2p22.3	-0.132417778	0.002981931	0.006551872
IFT172	2p23.3	0.132411003	0.002983419	0.006554428
CDH18	5p14.3	0.132377341	0.002990823	0.006569978
SURF4	9q34.2	0.132374836	0.002991375	0.006570474
TBC1D12	10q23.33	0.132356609	0.002995391	0.00657858
NMNAT1	1p36.22	0.132353365	0.002996107	0.006579436
PIIB	15q22.31	0.132338574	0.00299937	0.006585886
NSUN5P1	7q11.23	-0.132326168	0.00300211	0.006591172
CCNQ1	1q32.1	-0.132324717	0.003002431	0.006591172
CCNH	5q14.3	-0.132290193	0.003010069	0.00660722
SMAD9	13q13.3	0.132216413	0.00302645	0.006642455
CCDC136	7q32.1	-0.132199346	0.003030251	0.006650074
CHMP5	9p13.3	-0.132185509	0.003033335	0.006656119
TARS2	1q21.2	-0.13218341	0.003033804	0.006656423
IFT43	14q24.3	-0.132172436	0.003036252	0.006661072
SCAMP1	5q14.1	-0.132164229	0.003038085	0.006664368
TMEM107	17p13.1	0.132150774	0.003041092	0.006670238
ATP10D	4p12	0.132125772	0.003046686	0.006681781
VWA7	6p21.33	0.132086743	0.003055437	0.006700246
TMEM218	11q24.2	-0.132078441	0.003057301	0.006703606
STEAP2	7q21.13	0.13206699	0.003059875	0.006708519
ITFG1	16q12.1	0.132057733	0.003061956	0.006712354
CD3D	11q23.3	0.13205139	0.003063383	0.006714753
UMODL1	21q22.3	-0.132049488	0.003063812	0.006714962
TRIM11	1q42.13	-0.132018608	0.003070769	0.00672948
PBX2	6p21.32	0.132009447	0.003072836	0.006733278
ZFYVE21	14q32.33	-0.131966982	0.003082433	0.00675294
C10ORF131	10q24.1	0.131966782	0.003082478	0.00675294
FAM133B	7q21.2	-0.131957917	0.003084485	0.006756603
ZNF614	19q13.41	0.131954481	0.003085263	0.006757573
ACP4	19q13.33	0.131934996	0.00308968	0.006766512
LCN10	9q34.3	0.131932629	0.003090216	0.006766954
GLYATL2	11q12.1	-0.131925407	0.003091855	0.006769807
MAP4K1	19q13.2	0.131918887	0.003093335	0.006772313
PIGG	4p16.3	0.131865353	0.003105511	0.006798233
ITGA2	5q11.2	0.131852184	0.003108513	0.006804067
KRT6A	12q13.13	-0.13181325	0.003117404	0.006822286

FANK1	10q26.2	0.131812773	0.003117513	0.006822286
ZNF556	19p13.3	-0.13180971	0.003118214	0.006823079
G3BP1	5q33.1	-0.131800558	0.003120307	0.00682692
ANAPC5	12q24.31	-0.131796073	0.003121334	0.006828426
ATP5IF1	1p35.3	-0.131751414	0.003131572	0.006850081
MMEL1	1p36.32	0.131724327	0.003137797	0.006862953
CHAMP1	13q34	0.131703128	0.003142676	0.00687288
NFATC2IP	16p11.2	-0.131691104	0.003145447	0.006878194
IREB2	15q25.1	-0.131666579	0.003151105	0.00688982
DHX30	3p21.31	-0.131654555	0.003153882	0.006895145
ATCAY	19p13.3	0.131651544	0.003154578	0.00689592
PTPRJ	11p11.2	0.131625546	0.003160592	0.006908318
PLEKHA1	10q26.13	-0.131607701	0.003164726	0.006916605
DEFB126	20p13	-0.131571066	0.003173229	0.006934235
OR2J3	6p22.1	0.131569983	0.003173481	0.006934235
CD19	16p11.2	0.13155671	0.003176566	0.006940227
GUSBP3	5q13.2	0.131515519	0.00318616	0.006960434
CCDC65	12q13.12	0.13149332	0.003191341	0.006970998
ATP5F1E	20q13.32	-0.131474962	0.003195632	0.006979614
GABARAPL3	15q26.1	-0.131459004	0.003199366	0.006987014
P2RX4	12q24.31	0.13143183	0.003205733	0.007000162
AKIP1	11p15.4	-0.131409309	0.003211019	0.007010945
BCR	22q11.23	0.131389651	0.00321564	0.007020274
CA5B	Xp22.2	0.131382971	0.003217211	0.007022944
HAT1	2q31.1	-0.131365699	0.003221277	0.007031034
HSD52	1p32.1	0.131364272	0.003221613	0.007031034
NKX2-8	14q13.3	-0.131335333	0.003228437	0.007045165
FAM47A	Xp21.1	-0.131331902	0.003229247	0.00704617
CNTD2	19q13.2	0.131322611	0.003231442	0.007050196
PSMG1	21q22.2	-0.13130329	0.003236009	0.007059398
MOB4	2q33.1	-0.131295942	0.003237748	0.007062427
GTF3A	13q12.2	-0.131292888	0.00323847	0.00706324
OARD1	6p21.1	-0.131244221	0.003250009	0.00708764
P2RX2	12q24.33	0.131217141	0.003256445	0.007100909
HNRNPA1P33	10q11.22	0.131200802	0.003260335	0.007108621
RTBDN	19p13.13	0.131192005	0.00326243	0.007112422
CBX5	12q13.13	0.131165017	0.003268867	0.007125685
NAA15	4q31.1	-0.131160722	0.003269892	0.00712715
SCYL1	11q13.1	0.131158146	0.003270508	0.007127722
ILF3	19p13.2	-0.131135625	0.00327589	0.007138159
TJP2	9q21.11	-0.131135148	0.003276004	0.007138159
PPFIA3	19q13.33	-0.131127991	0.003277717	0.007141119
ARHGEF12	11q23.3	0.131110337	0.003281944	0.007149557
TAAR1	6q23.2	0.131098767	0.003284717	0.007154241
CD22	19q13.12	0.131098409	0.003284803	0.007154241
B4GALNT2	17q21.32	0.131091224	0.003286526	0.007157222
DNAAF3	19q13.42	0.131072484	0.003291025	0.007166244
CFAP74	1p36.33	0.131066542	0.003292452	0.007168579
NKAPP1	Xq24	-0.131060429	0.003293921	0.007171004
EIF4A1	17p13.1	-0.131058043	0.003294495	0.007171479
TOMM6	6p21.1	-0.131001455	0.003308125	0.007200374
CEACAM20	19q13.31	0.13095549	0.003319235	0.007223775
DHRS12	13q14.3	0.130939714	0.003323056	0.00723131
TPMT	6p22.3	-0.130933893	0.003324466	0.0072336
OR52L1	11p15.4	0.13092218	0.003327307	0.007239
CALML5	10p15.1	0.130919507	0.003327955	0.00723963
PFDN6	6p21.32	-0.130911563	0.003329883	0.007243044
MAGEE2	Xq13.3	0.130908784	0.003330558	0.00724373

SCG2	2q36.1	0.130902879	0.003331992	0.007246068
NPM2	8p21.3	-0.130899905	0.003332715	0.00724617
VANGL1	1p13.1	0.13089973	0.003332757	0.00724617
RCC1	1p35.3	-0.130885798	0.003336144	0.007251165
ZCCHC7	9p13.2	-0.130885607	0.00333619	0.007251165
TNFSF15	9q32	0.130885423	0.003336235	0.007251165
RRP7A	22q13.2	-0.130884367	0.003336492	0.007251165
ANKRD36BP1	1q24.2	0.130879882	0.003337583	0.007252755
KIAA0232	4p16.1	0.130872632	0.003339347	0.007255807
PBX3	9q33.3	0.130856407	0.003343298	0.00726361
PGS1	17q25.3	-0.130810793	0.003354429	0.007287008
DNAH10	12q24.31	0.130802446	0.003356469	0.007290656
PRDM9	5p14.2	0.13079557	0.003358151	0.007293523
CASKIN1	16p13.3	-0.130778361	0.003362363	0.007301886
PHLDB3	19q13.31	-0.130775771	0.003362998	0.007302478
GOLGA1	9q33.3	-0.130766706	0.003365219	0.007306515
CNR1	6q15	0.130751213	0.003369018	0.007313977
GZMH	14q12	0.13073531	0.003372922	0.007321665
CETN2	Xq28	-0.130723668	0.003375783	0.007327086
TRMT5	14q23.1	-0.13065296	0.003393203	0.007364105
HTR3C	3q27.1	0.130639788	0.003396458	0.007370375
TEX36	10q26.13	0.130635811	0.003397441	0.007371716
ATF3	1q32.3	-0.130634158	0.00339785	0.00737181
IL23A	12q13.3	0.130622707	0.003400682	0.007377162
ABCD4	14q24.3	0.130617554	0.003401957	0.007379136
IL17D	13q12.11	0.1306083	0.003404249	0.007383312
FCHSD1	5q31.3	0.130589498	0.003408908	0.007392303
CCL17	16q21	0.130588618	0.003409127	0.007392303
CARNMT1	9q21.13	-0.130580528	0.003411134	0.00739586
SPRR1B	1q21.3	-0.130550007	0.003418715	0.0074115
SLC34A2	4p15.2	0.130545888	0.003419739	0.007412924
PAX1	20p11.22	0.130532425	0.003423089	0.007418639
MAX	14q23.3	-0.130532338	0.003423111	0.007418639
DDR1	6p21.33	-0.130528807	0.00342399	0.007419747
HSD3B7	16p11.2	0.13051268	0.003428007	0.007427655
ARHGEF3	3p14.3	0.130448362	0.003444072	0.007461664
AHR	7p21.1	0.130445118	0.003444885	0.007462622
SLC39A4	8q24.3	-0.130432808	0.003447968	0.0074685
CCT8	21q21.3	-0.13042107	0.00345091	0.00747407
PJVK	2q31.2	-0.130375507	0.003462353	0.007498049
C2ORF81	2p13.1	0.130368872	0.003464022	0.007500858
C3ORF67	3p14.2	-0.130335091	0.003472532	0.007518478
LINC00599	8p23.1	0.130331596	0.003473413	0.00751958
CCDC34	11p14.1	-0.130325071	0.003475059	0.007521702
ROPN1L	5p15.2	0.130324281	0.003475259	0.007521702
INHA	2q35	0.130323279	0.003475512	0.007521702
CDC42	1p36.12	0.130306463	0.003479758	0.007530085
EIF3A	10q26.11	0.130295298	0.00348258	0.007535383
RRN3	16p13.11	-0.130281843	0.003485984	0.007541939
RBM26	13q31.1	0.130273922	0.003487989	0.007545468
EARS2	16p12.2	-0.130264908	0.003490272	0.007549598
MYO18A	17q11.2	0.130256173	0.003492486	0.007553576
PREB	2p23.3	-0.130247966	0.003494567	0.007557267
RPAP1	15q15.1	-0.130245962	0.003495075	0.007557556
METTL3	14q11.2	-0.130237374	0.003497254	0.007561458
ZNF148	3q21.2	-0.130231171	0.003498829	0.007564053
CEP97	3q12.3	-0.130171816	0.00351393	0.007595885
ARID4B	1q42.3	0.130156452	0.003517848	0.007603541

ZNF853	7p22.1	0.130140423	0.00352194	0.007611571
HIST2H2AA3	1q21.2	-0.130127347	0.003525282	0.007617977
COA8	14q32.33	-0.13008221	0.003536839	0.007642132
RPS23	5q14.2	-0.13007782	0.003537965	0.007643746
CMIP	16q23.2-q23.3	0.130050815	0.003544898	0.007657905
RER1	1p36.32	0.130046998	0.003545879	0.007659204
IFIT1B	10q23.31	0.130035171	0.003548919	0.007664952
APIP	11p13	-0.130014648	0.003554202	0.007675539
ZG16B	16p13.3	0.130008925	0.003555676	0.007677901
DIP2B	12q13.12	-0.130002529	0.003557324	0.007680639
ANKRD19P	9q22.31	-0.12999151	0.003560166	0.007685951
KDF1	1p36.11	-0.129964644	0.003567102	0.007700102
LRRC75B	22q11.23	0.129960636	0.003568138	0.007701514
NPC1	18q11.2	-0.129940311	0.003573395	0.007712036
TEX9	15q21.3	0.129933825	0.003575074	0.007714835
SLC5A5	19p13.11	0.129917364	0.003579339	0.007723212
LGALS3	14q22.3	0.129907579	0.003581876	0.00772786
LOC727896	18p11.31	-0.129888589	0.003586805	0.007737666
GTF3C2	2p23.3	-0.129835818	0.003600533	0.007766452
LSM2	6p21.33	-0.129812156	0.003606705	0.007778932
SLU7	5q33.3	0.129806713	0.003608125	0.007781165
MTIF3	13q12.2	-0.129799938	0.003609895	0.007784149
GPR15	3q11.2	0.129722651	0.003630135	0.007826957
ADIRF	10q23.2	-0.129710905	0.00363322	0.007832772
ZNF48	16p11.2	-0.129691056	0.003638439	0.007843185
CARNS1	11q13.2	0.129684185	0.003640247	0.007846244
RAB41	Xq13.1	0.129668701	0.003644325	0.007854195
ENDOV	17q25.3	-0.129661283	0.003646279	0.007857569
JCHAIN	4q13.3	0.129643057	0.003651087	0.007867088
HES2	1p36.31	0.1296171	0.003657943	0.00788102
LINC01144	1p34.1	-0.129613433	0.003658913	0.007882268
HRC	19q13.33	0.129605778	0.003660938	0.007885788
CDC42EP4	17q25.1	0.129581983	0.003667238	0.007898515
SLC19A1	21q22.3	-0.129541713	0.003677922	0.007920683
MBD3	19p13.3	-0.129481595	0.003693926	0.007954299
ELMSAN1	14q24.3	0.129471384	0.003696651	0.007958276
CTSE	1q32.1	0.129471273	0.00369668	0.007958276
MPI	15q24.1	-0.129470239	0.003696956	0.007958276
UPK3A	22q13.31	0.129451602	0.003701934	0.007968141
ERII	8p23.1	0.129436267	0.003706034	0.007976116
NOS2	17q11.2	-0.129413842	0.003712038	0.007988185
CYB5R3	22q13.2	0.129398192	0.003716233	0.00799636
SLC29A4	7p22.1	-0.129372426	0.003723148	0.008010386
PRMT1	19q13.33	-0.129360975	0.003726226	0.008016153
MT1DP	16q13	0.129357075	0.003727274	0.008017554
MROH1	8q24.3	0.129329389	0.003734726	0.008032727
ACAD9	3q21.3	-0.12926364	0.003752477	0.008070045
BNIP3L	8p21.2	0.129254956	0.003754827	0.008074088
AKR1C6P	10p15.1	-0.129253736	0.003755157	0.008074088
SCO2	22q13.33	-0.129226805	0.003762455	0.008088917
SLC35F3	1q42.2	-0.129184448	0.003773958	0.008112784
C14ORF119	14q11.2	-0.129164396	0.003779415	0.008123649
MAP2K5	15q23	-0.129135915	0.003787178	0.008139468
CCL18	17q12	0.12911277	0.003793497	0.008152181
CRISP3	6p12.3	0.129094743	0.003798426	0.008161207
R3HDM4	19p13.3	-0.129094449	0.003798506	0.008161207
LGALS7B	19q13.2	0.12906112	0.003807634	0.008179946
KCP	7q32.1	0.129043014	0.003812601	0.008189745

SYT14P1	4q13.2	-0.129016776	0.003819808	0.008203582
ZIM2	19q13.43	0.129016606	0.003819855	0.008203582
ZDHHC20	13q12.11	0.129013718	0.003820649	0.008204415
TXNL4B	16q22.2	-0.128975833	0.003831081	0.008225939
RHOC	1p13.2	0.128946823	0.003839086	0.00824225
ATL3	11q13.1	0.128882983	0.003856756	0.008279306
ST13	22q13.2	-0.128864279	0.003861946	0.008289567
PCDHB3	5q31.3	0.128852402	0.003865246	0.008295767
MED31	17p13.1	-0.128822101	0.003873675	0.008312974
SALL2	14q11.2	0.128811127	0.003876732	0.00831865
IRGQ	19q13.31	0.128780209	0.003885357	0.008336269
STIP1	11q13.1	-0.128731636	0.00389894	0.008364524
LYSMD1	1q21.3	-0.12872343	0.00390124	0.008367889
SLC6A10P	16p11.2	-0.128723079	0.003901338	0.008367889
GTSF1	12q13.13	0.12871737	0.003902938	0.008370432
ZMYND10	3p21.31	0.128713798	0.00390394	0.00837169
NCAPG2	7q36.3	-0.128706157	0.003906083	0.008375396
RASEF	9q21.32	0.128692285	0.003909977	0.008382574
CDK2	12q13.2	-0.128691271	0.003910262	0.008382574
TTC33	5p13.1	0.128667605	0.003916913	0.008395941
SLC20A1	2q14.1	0.128647852	0.003922473	0.008406965
TMBIM1	2q35	0.128642415	0.003924004	0.008409354
GABPB1-AS1	15q21.2	-0.128592123	0.003938197	0.008438873
CDK20	9q22.1	0.128579622	0.003941731	0.008445551
PSIP1	9p22.3	-0.128569411	0.003944621	0.008450845
AAMP	2q35	-0.128565021	0.003945864	0.00845261
SNORA81	3q27.3	-0.128555026	0.003948695	0.008457776
NDUFA3	19q13.42	-0.128543741	0.003951893	0.008463729
PDCD11	10q24.33	0.12853458	0.003954492	0.008468395
TMEM100	17q22	0.128532941	0.003954957	0.008468493
JAKMIP1	4p16.1	0.12848502	0.003968575	0.008496752
HLA-DOB	6p21.32	0.128446597	0.003979525	0.008519292
CCL20	2q36.3	0.1284361	0.003982522	0.008524801
AEN	15q26.1	-0.128412625	0.00398923	0.008538255
MEGF10	5q23.2	-0.128408412	0.003990435	0.008539928
PPIAL4G	1q21.2	-0.128401755	0.003992339	0.008543098
MSH6	2p16.3	-0.128398311	0.003993325	0.008544301
EPB41L5	2q14.2	-0.12839583	0.003994035	0.008544915
KRAS	12p12.1	-0.128390868	0.003995456	0.008547048
TGM5	15q15.2	0.128384349	0.003997323	0.008550136
CNFN	19q13.2	-0.128373786	0.00400035	0.008555704
TMEM35A	Xq22.1	0.128348612	0.004007574	0.008570244
RGS10	10q26.11	0.128318439	0.004016247	0.008587882
AP2M1	3q27.1	-0.128311091	0.004018361	0.008591493
HIST1H1C	6p22.2	-0.128293723	0.004023363	0.008600777
SRSF4	1p35.3	0.128293055	0.004023556	0.008600777
CLEC10A	17p13.1	0.128286757	0.004025371	0.008603747
CD244	1q23.3	0.128274164	0.004029004	0.008610598
KRT10	17q21.2	-0.128255076	0.004034515	0.008621464
ZBTB32	19q13.12	0.128236041	0.004040018	0.008632308
RECQL4	8q24.3	-0.128233414	0.004040778	0.008633018
SLC22A1	6q25.3	0.128198769	0.004050812	0.00865354
PLCH2	1p36.32	0.128191044	0.004053053	0.00865741
RHCG	15q26.1	-0.128181711	0.004055761	0.008662278
MAEL	1q24.1	0.128168488	0.004059601	0.008669562
OR2W3	1q44	0.12814637	0.004066032	0.008682376
FAM169A	5q13.3	-0.128140277	0.004067805	0.008685243
FAM76A	1p35.3	0.128105065	0.004078066	0.00870623

GABRB2	5q34	0.128093319	0.004081493	0.008712626
ABHD17C	15q25.1	-0.128081685	0.004084891	0.008718957
PRDM16-DT	1p36.32	0.128075002	0.004086844	0.008722203
CKAP2L	2q14.1	-0.128019181	0.00410319	0.008756163
KLHL26	19p13.11	-0.127950286	0.004123446	0.008798458
SPDEF	6p21.31	0.127929636	0.004129535	0.008810518
LMBR1	7q36.3	-0.127926712	0.004130397	0.008811427
CD247	1q24.2	0.127921082	0.004132059	0.00881404
SLC35F4	14q22.3-q23.1	0.127893596	0.004140181	0.008829523
HOXD4	2q31.1	0.127893557	0.004140192	0.008829523
ATP5PB	1p13.2	-0.127882721	0.004143398	0.008835426
SRL	16p13.3	0.127873769	0.004146048	0.008840143
KLRK1	12p13.2	0.127868216	0.004147693	0.008842715
LSM10	1p34.3	-0.127839111	0.004156323	0.008860178
ANXA7	10q22.2	-0.127825942	0.004160233	0.008866728
GFOD2	16q22.1	0.127825802	0.004160275	0.008866728
IL22RA1	1p36.11	-0.127822128	0.004161366	0.008868118
ABHD17A	19p13.3	-0.127816304	0.004163097	0.008870869
PRORP	14q13.2	-0.127809338	0.004165168	0.008874345
MIR22HG	17p13.3	0.127804471	0.004166615	0.008876492
PCP4L1	1q23.3	-0.127787488	0.00417167	0.008886321
STK36	2q35	0.127782427	0.004173177	0.008888594
TBCK	4q24	0.127773743	0.004175764	0.008893166
LIPJ	10q23.31	0.127771333	0.004176483	0.008893757
DMXL1	5q23.1	0.12775948	0.004180017	0.008900345
R3HDML	20q13.12	0.127726496	0.004189868	0.008920378
CNTD1	17q21.2-q21.31	-0.127696925	0.004198716	0.008938274
OGFOD2	12q24.31	-0.127689768	0.004200861	0.008941895
AZGP1	7q22.1	0.12767727	0.004204607	0.008948926
HNRNPF	10q11.21	-0.127643009	0.004214894	0.008969458
SLC12A3	16q13	0.12764218	0.004215143	0.008969458
PPDPF	20q13.33	0.127613427	0.004223794	0.008986766
S100A11	1q21.3	-0.127612186	0.004224167	0.008986766
ACKR3	2q37.3	-0.127595868	0.004229084	0.008996278
LRRC37BP1	17q11.2	-0.127578691	0.004234266	0.009006351
CHTF18	16p13.3	-0.127560083	0.004239885	0.009017353
GPLD1	6p22.3	-0.127434839	0.004277885	0.009097211
SYCE1L	16q23.1	0.127425903	0.004280608	0.009102042
H2AFY2	10q22.1	-0.127414844	0.00428398	0.009108253
EML3	11q12.3	0.127402629	0.004287707	0.009115217
RALA	7p14.1	0.127368562	0.004298118	0.009136386
ANKRD30BP2	21q11.2	0.127343639	0.004305748	0.009151643
RFX2	19p13.3	0.127326243	0.004311082	0.009162014
KLHL31	6p12.1	-0.12730029	0.00431905	0.009177981
CPSF1	8q24.3	0.127258916	0.00433178	0.009204063
MON1B	16q23.1	0.127209295	0.004347093	0.009235627
LOC100129055	10p11.1	0.12719375	0.004351899	0.009244866
MRPS16	10q22.2	-0.127151848	0.004364881	0.009271467
DUSP12	1q23.3	-0.127134194	0.004370361	0.009282129
CCDC24	1p34.1	-0.127123411	0.004373711	0.009288267
SELE	1q24.2	0.127117303	0.004375609	0.009291321
DLGAP5	14q22.3	-0.127096596	0.004382052	0.009304022
STIL	1p33	-0.127073121	0.004389366	0.00931857
FRMPD4	Xp22.2	0.127071514	0.004389867	0.009318654
INF2	14q32.33	0.127040771	0.004399463	0.009338041
TTC30A	2q31.2	-0.127026603	0.004403891	0.009346458
ZBTB22	6p21.32	0.127022354	0.00440522	0.009348295
SIRT3	11p15.5	-0.127020159	0.004405907	0.009348769

ANAPC1	2q13	-0.127005749	0.004410417	0.009357355
HMG3	6q14.1	-0.127003268	0.004411194	0.00935802
GPR20	8q24.3	0.126999218	0.004412463	0.009359728
DDX59	1q32.1	-0.126972541	0.004420827	0.009376484
HIBCH	2q32.2	-0.126960994	0.004424452	0.009383186
NEPRO	3q13.2	-0.126947539	0.004428679	0.009391165
NUBP2	16p13.3	-0.126932175	0.004433511	0.009400422
IL36RN	2q14.1	-0.1269064	0.004441627	0.009416642
PHLDB2	3q13.2	-0.126876255	0.004451136	0.00943581
ZNF350	19q13.41	0.126868526	0.004453578	0.009439994
TTLL6	17q21.32	0.126863046	0.004455309	0.009442672
CA11	19q13.33	-0.126855643	0.004457649	0.009446639
EFNA1	1q22	-0.12684486	0.00446106	0.009452874
TAF2	12q14.1	0.126837143	0.004463502	0.009457056
LLCFC1	7q34	0.126824986	0.004467352	0.009463925
GRIK1	21q21.3	0.126823943	0.004467682	0.009463925
PRELID2	5q32	-0.126756304	0.004489158	0.009508419
ACY1	3p21.2	-0.126741799	0.004493775	0.009516385
OR56B1	11p15.4	0.126741527	0.004493862	0.009516385
ITPRIPL1	2q11.2	0.126721664	0.004500192	0.00952879
TMEM109	11q12.2	-0.12670172	0.004506556	0.009541265
GNAI3	1p13.3	0.12669275	0.004509421	0.009546329
LINC00324	17p13.1	-0.126680822	0.004513234	0.009553398
ABCF2	7q36.1	-0.126675669	0.004514881	0.009555883
TMEM209	7q32.2	-0.12667271	0.004515828	0.009556884
RPS3A	4q31.3	-0.126667176	0.004517599	0.009559629
TMEM196	7p21.1	0.126663294	0.004518841	0.009561255
ITIH6	Xp11.22	-0.126636745	0.004527346	0.009578247
ABHD1	2p23.3	-0.126625367	0.004530996	0.009584278
C1QL4	12q13.12	0.126624896	0.004531147	0.009584278
C12ORF49	12q24.22	0.12662223	0.004532002	0.009585083
VARS	6p21.33	0.126619653	0.004532829	0.009585827
MARVELD3	16q22.2	-0.126612687	0.004535066	0.009589552
EXOG	3p22.2	-0.126599804	0.004539205	0.009597298
EPN1	19q13.42	0.126575184	0.004547124	0.009613034
ERMAP	1p34.2	0.126530047	0.004561674	0.009642785
SHLD2P3	10q11.22	0.12651044	0.004568008	0.009655162
ANGPTL4	19p13.2	0.126499034	0.004571696	0.009661946
PDIA4	7q36.1	0.126486342	0.004575803	0.009669613
MLC1	22q13.33	0.126444694	0.004589304	0.009697127
ERLEC1	2p16.2	0.126443018	0.004589848	0.009697261
RFPL4B	6q21	0.126438634	0.004591272	0.009699253
FHL1	Xq26.3	0.126418589	0.004597785	0.009711996
ADRA1A	8p21.2	0.126414743	0.004599035	0.009713621
TIAL1	10q26.11	-0.126396068	0.004605112	0.009725438
NRG1	8p12	-0.126374839	0.004612029	0.009739027
C10ORF113	10p12.31	-0.126336205	0.004624641	0.009764637
IDO1	8p11.21	0.126330797	0.004626409	0.009767348
AQP3	9p13.3	0.126325262	0.004628219	0.009770147
WDR46	6p21.32	0.126320777	0.004629687	0.009772005
CHRM1	11q12.3	-0.126319612	0.004630068	0.009772005
SMIM5	17q25.1	-0.126317341	0.004630811	0.009772551
LAMA5	20q13.33	0.126315528	0.004631404	0.009772781
CLNK	4p16.1	0.12630257	0.004635647	0.009780711
OSBPL9	1p32.3	0.126296348	0.004637685	0.009783955
HES7	17p13.1	0.126294917	0.004638154	0.009783955
HEXA-AS1	15q23	0.126291645	0.004639227	0.009785194
ZNF687	1q21.3	-0.126258081	0.00465024	0.009807399

RGS2	1q31.2	0.126252928	0.004651933	0.009809944
TMEM179B	11q12.3	-0.126208269	0.004666629	0.009839906
IFNW1	9p21.3	0.126203157	0.004668313	0.00984243
LINC01550	14q32.2	0.126179525	0.004676109	0.009857836
OTOAP1	16p12.2	0.126139129	0.004689462	0.009884954
AIFM2	10q22.1	-0.126101009	0.004702095	0.009910546
CPA6	8q13.2	-0.126070331	0.004712284	0.009930984
SPRY2	13q31.1	0.126062934	0.004714743	0.009935129
PSMD9	12q24.31	-0.126036119	0.004723669	0.0099529
DDX60	4q32.3	0.12601837	0.004729586	0.009964326
ADAP1	7p22.3	0.125994227	0.004737645	0.009980262
LINC00518	6p24.3	0.125950009	0.004752437	0.010010377
AGO1	1p34.3	0.125942315	0.004755015	0.010014763
CHM	Xq21.2	0.125938498	0.004756294	0.010016412
FAM157B	9q34.3	-0.125924146	0.004761107	0.010025502
PMS1	2q32.2	-0.125915309	0.004764074	0.010030701
MYL2	12q24.11	0.125909952	0.004765872	0.010033441
KCNAB3	17p13.1	0.125900136	0.00476917	0.010039337
NSUN5P2	7q11.23	-0.125896036	0.004770548	0.01004119
SRP19	5q22.2	-0.125846792	0.004787127	0.010075035
USP47	11p15.3	0.125838395	0.004789959	0.010079945
CCNT2	2q21.3	-0.125826848	0.004793856	0.010087093
EFCAB8	20q11.21	0.125823578	0.004794961	0.010088365
SHKBP1	19q13.2	0.125804709	0.004801336	0.010100726
WNT7B	22q13.31	-0.125783906	0.004808374	0.010114478
KRTAP1-1	17q21.2	0.125770279	0.00481299	0.010123131
N4BP2	4p14	0.125736002	0.004824617	0.010146529
PHF11	13q14.2	0.125722642	0.004829156	0.010155016
PRSS8	16p11.2	0.125655557	0.004852004	0.010201903
SLC9C2	1q25.1	0.125654211	0.004852464	0.010201903
PAX8	2q14.1	0.125641625	0.004856762	0.010209875
ZCRB1	12q12	-0.125627311	0.004861654	0.010219095
KLHL11	17q21.2	-0.125621586	0.004863612	0.010222146
B3GNTL1	17q25.3	-0.125604504	0.004869458	0.010233367
CLK1	2q33.1	0.125544388	0.004890082	0.01027564
ANKRD13C	1p31.1	0.125527399	0.004895925	0.010286846
RGSL1	1q25.3	-0.125525069	0.004896727	0.01028746
ADH6	4q23	-0.125521459	0.00489797	0.010289
RGS7BP	5q12.3	0.12550773	0.004902698	0.010297859
DCAF7	17q23.3	-0.125503924	0.004904009	0.010299542
ESRP2	16q22.1	-0.125493905	0.004907463	0.010305723
NR1D2	3p24.2	-0.125485603	0.004910327	0.010310664
LINC00910	17q21.31	-0.125466231	0.004917014	0.010323632
NOM1	7q36.3	-0.125424339	0.004931505	0.010352979
WDR33	2q14.3	-0.125420903	0.004932695	0.0103544
CNNM2	10q24.32	0.125413937	0.004935109	0.010358389
CDCA8	1p34.3	-0.125407257	0.004937424	0.010362172
FAAP24	19q13.11	-0.125403682	0.004938664	0.010363696
ALDH6A1	14q24.3	-0.125398478	0.004940469	0.010366406
CFAP20	16q21	-0.125376053	0.004948255	0.010381662
GOLT1A	1q32.1	0.125350073	0.004957288	0.010398714
RBX1	22q13.2	-0.125349715	0.004957412	0.010398714
PAXIP1	7q36.2	-0.125342272	0.004960003	0.010403067
LINC00174	7q11.21	0.125336644	0.004961963	0.010406095
B4GALNT1	12q13.3	-0.125334351	0.004962762	0.010406689
RAB32	6q24.3	0.125321278	0.004967317	0.01041516
AMN1	12p11.21	-0.12531727	0.004968715	0.010417007
PNLIPRP1	10q25.3	0.125226749	0.005000371	0.010482286

LTO1	11q13.3	-0.125199513	0.005009931	0.010501237
CCDC191	3q13.31	0.12516974	0.005020401	0.010522089
ABHD13	13q33.3	0.125152945	0.005026316	0.01053265
PRR13	12q13.13	-0.125152468	0.005026484	0.01053265
CLPS	6p21.31	0.125143272	0.005029725	0.010538348
SLC25A51	9p13.2-p13.1	-0.125133001	0.005033348	0.010544843
SMCR8	17p11.2	0.125121073	0.005037558	0.010552567
NFIA	1p31.3	0.125066679	0.005056795	0.010591765
OR4N5	14q11.2	-0.125043786	0.005064911	0.010607665
HIST1H2BE	6p22.2	-0.125037956	0.00506698	0.010610896
HLA-J	6p22.1	0.12500662	0.005078113	0.010633106
RNLS	10q23.31	0.125001217	0.005080035	0.010636027
OCLN	5q13.2	-0.124990338	0.005083907	0.010643028
ERGIC3	20q11.22	0.124984899	0.005085843	0.010645978
KSR2	12q24.22-q24.23	0.124974038	0.005089712	0.010652972
LINC00029	20q13.33	0.124946841	0.005099412	0.010672168
FOXG1	14q12	0.124889622	0.005119875	0.010713881
CEP85	1p36.11	-0.12485307	0.005132985	0.010740202
ZP2	16p12.3-p12.2	0.12483692	0.005138787	0.01075014
ASB4	7q21.3	0.124836884	0.0051388	0.01075014
URAHP	16q24.3	-0.124816948	0.005145971	0.010764025
MICA	6p21.33	0.124787034	0.005156747	0.010785448
HNRNPM	19p13.2	-0.124778109	0.005159966	0.010791062
REEP6	19p13.3	-0.124771334	0.005162411	0.010795057
KIF23	15q23	-0.124744042	0.005172271	0.010814553
PIP5K1C	19p13.3	0.124725815	0.005178864	0.010827218
TUBAL3	10p15.1	-0.12472252	0.005180057	0.01082859
PRSS53	16p11.2	0.124705776	0.005186123	0.010840146
DCTN1	2p13.1	0.124685545	0.00519346	0.010854358
SLC22A25	11q12.3	-0.124676638	0.005196693	0.01085999
ROPN1	3q21.1	0.124666961	0.005200208	0.010866211
FCHO1	19p13.11	0.124646611	0.005207606	0.010879852
ADM5	19q13.33	-0.124646039	0.005207814	0.010879852
USP13	3q26.33	-0.124617983	0.00521803	0.010900065
VPS16	20p13	0.124600425	0.005224433	0.01091231
WNK4	17q21.2	-0.124567133	0.005236592	0.010936575
HSD3B2	1p12	0.12456405	0.005237719	0.010937797
OBP2B	9q34.2	0.124509414	0.005257733	0.010978455
IL26	12q15	0.124494122	0.005263347	0.01098904
CROT	7q21.12	0.124446743	0.005280775	0.011024286
MSL1	17q21.1	-0.124427321	0.005287934	0.01103809
TRAPPC2	Xp22.2	-0.124425794	0.005288497	0.011038124
HOXA11-AS	7p15.2	0.124416361	0.005291978	0.011044246
LOC642846	12p13.31	-0.124345635	0.00531814	0.011097699
SAP30L	5q33.2	0.124341246	0.005319768	0.011099947
CCDC116	22q11.21	0.124326429	0.005325265	0.011110268
DONSON	21q22.11	-0.124305842	0.005332911	0.011125071
SRPRA	11q24.2	0.124289715	0.005338908	0.01113643
C3ORF70	3q27.2	0.124276069	0.005343987	0.011145872
HAUS6	9p22.1	-0.124272634	0.005345266	0.011147388
GSDMB	17q21.1	-0.124259847	0.00535003	0.011156171
SPINK13	5q32	0.124258059	0.005350697	0.011156407
C7ORF69	7p12.3	0.124249051	0.005354056	0.011162258
AMBRA1	11p11.2	0.12424706	0.005354799	0.011162653
LINGO4	1q21.3	0.124236359	0.005358791	0.011169823
MCTP2	15q26.2	0.124222535	0.005363954	0.011179429
ADGB	6q24.3	0.124213675	0.005367265	0.011185175
VAR52	6p21.33	-0.124208316	0.005369269	0.011188194

ADCY9	16p13.3	0.124198583	0.00537291	0.011194625
CKMT2	5q14.1	0.124187117	0.005377201	0.01120241
EMC10	19q13.33	0.124177398	0.005380842	0.011208837
SLC27A4	9q34.11	-0.124173486	0.005382308	0.011210733
SNIP1	1p34.3	0.124167665	0.005384489	0.01121412
TG	8q24.22	0.124164712	0.005385596	0.011215268
ASIP	20q11.22	0.124159171	0.005387674	0.011218438
UBE4A	11q23.3	0.124150774	0.005390825	0.011223577
ENO2	12p13.31	0.124149629	0.005391255	0.011223577
IRS2	13q34	0.12412081	0.005402081	0.011244955
AZI2	3p24.1	0.124089797	0.005413753	0.011268089
LRGUK	7q33	0.124074358	0.005419572	0.011279038
TAP1	6p21.32	0.124062218	0.005424152	0.011287205
CLDND2	19q13.41	-0.12406099	0.005424615	0.011287205
RPL10	Xq28	-0.124059069	0.00542534	0.011287549
KCNMA1	10q22.3	0.124031109	0.005435903	0.01130836
AVPR2	Xq28	0.123998518	0.005448239	0.011332854
APLF	2p13.3	0.123983873	0.00545379	0.011343232
ATP6V0E2	7q36.1	-0.123979292	0.005455528	0.011345676
NPVF	7p15.3	0.123951046	0.005466252	0.011366808
SPANXB1	Xq27.1	0.123931287	0.005473766	0.011381259
FDCSP	4q13.3 4q13	0.123927874	0.005475064	0.011382787
ZBTB6	9q33.2	-0.123922514	0.005477105	0.011385855
CDYL	6p25.1	-0.123918601	0.005478595	0.011387779
LINC00159	21q22.11	0.123905455	0.005483603	0.011397015
PLA2G6	22q13.1	-0.123869647	0.005497264	0.011424232
TTC19	17p12	-0.123808765	0.005520563	0.011471469
ARF3	12q13.12	0.123796264	0.005525358	0.01148025
TOPORS	9p21.1	-0.12379092	0.005527408	0.011483329
PIMREG	17p13.2	-0.12376964	0.005535582	0.011499126
RAB14	9q33.2	-0.12374941	0.005543363	0.011514103
FRMPD2	10q11.22	0.123740286	0.005546875	0.011520212
EPHB1	3q22.2	-0.123725839	0.00555244	0.011530584
ZFP1	16q23.1	0.123701124	0.005561973	0.011549192
OGDHL	10q11.23	-0.123675027	0.005572054	0.011568935
ZNF341	20q11.22	0.123669919	0.005574029	0.011571846
C1ORF68	1q21.3	0.123665657	0.005575678	0.011574078
DBR1	3q22.3	-0.123653601	0.005580344	0.011582571
WWC1	5q34	0.123641768	0.005584926	0.011590891
MYPOP	19q13.32	-0.123635282	0.00558744	0.011594914
INPP5A	10q26.3	0.123588955	0.005605421	0.011631033
PHACTR3	20q13.32-q13.33	0.123586408	0.005606412	0.011631892
THSD1P1	13q14.3	0.123570487	0.005612604	0.011643543
SRPK2	7q22.3	-0.123563378	0.005615372	0.011648086
IGBP1	Xq13.1	-0.123560751	0.005616394	0.011649011
GAL3ST1	22q12.2	0.123552512	0.005619604	0.011654469
MZF1-AS1	19q13.43	-0.123535749	0.005626138	0.011666821
PELI2	14q22.3	-0.12351924	0.005632579	0.011678979
NCAM1	11q23.2	0.123513279	0.005634907	0.011682605
ZNF8	19q13.43	0.12350011	0.005640052	0.011692071
PNRC2	1p36.11	0.123476871	0.005649142	0.011709712
KHDRBS3	8q24.23	0.123457786	0.005656618	0.011724002
HIP1	7q11.23	0.123455877	0.005657366	0.011724348
GTF2H3	12q24.31	-0.123443567	0.005662192	0.011733146
MTSS1	8q24.13	0.123440513	0.00566339	0.011734424
USP32P2	17p11.2	0.123434024	0.005665937	0.011738494
PLEKHA2	8p11.22	0.123427154	0.005668634	0.011742877
OR5M11	11q12.1	-0.123421522	0.005670845	0.011746252

C1ORF185	1p32.3	0.123380298	0.005687059	0.011778626
FBXO41	2p13.2	-0.123377723	0.005688073	0.011779518
KIZ	20p11.23	0.12337257	0.005690103	0.011782512
SIGLEC8	19q13.41	0.123370962	0.005690736	0.011782615
INVS	9q31.1	-0.123359496	0.005695256	0.011790762
TLE6	19p13.3	0.123338535	0.005703526	0.011806674
IRF3	19q13.33	0.123336785	0.005704217	0.011806893
PEG3-AS1	19q13.43	0.123326391	0.005708323	0.011814179
UBE2NL	Xq27.3	-0.12330402	0.005717168	0.011831272
TSHB	1p13.2	0.123290205	0.005722637	0.011841375
KIF3C	2p23.3	0.123254241	0.005736895	0.011868671
CNGB3	8q21.3	-0.123253965	0.005737004	0.011868671
SLC5A3	21q22.11	0.123248038	0.005739357	0.011872321
WHAMMP3	15q11.2	0.123216547	0.005751873	0.011896991
KRT6C	12q13.13	-0.123188301	0.00576312	0.011919033
PRPF3	1q21.2	-0.123181335	0.005765897	0.011923553
RUFY4	2q35	0.123174758	0.00576852	0.011927755
SDC1	2p24.1	-0.12316578	0.005772102	0.011933938
FAM160B2	8p21.3	0.123150416	0.005778236	0.011945397
TBC1D10B	16p11.2	-0.123125128	0.005788346	0.011965072
ECRG4	2q12.2	0.123113317	0.005793073	0.011973617
BPHL	6p25.2	-0.123100413	0.005798242	0.011983073
RPL37	5p13.1	-0.12305165	0.005817812	0.012022286
LY6G6F	6p21.33	-0.123019745	0.005830648	0.012047577
DEPDC1	1p31.3	-0.123017582	0.005831519	0.012048143
EPB41L4A-AS1	5q22.1	-0.123011952	0.005833787	0.012051595
TDRD12	19q13.11	0.123003456	0.005837211	0.012057435
POLR2J4	7p13	-0.122981702	0.005845987	0.012074326
HIST1H3B	6p22.2	-0.122974652	0.005848833	0.012078061
PRR5L	11p13-p12	0.122974259	0.005848992	0.012078061
EEDP1	7p14.2	-0.122956318	0.005856241	0.012091793
SIKE1	1p13.2	0.122952024	0.005857978	0.012094141
DNAJC15	13q14.11	0.122928549	0.005867479	0.012112517
SNORA21	17q12	-0.122889581	0.00588328	0.012143895
CMYA5	5q14.1	0.122871102	0.005890787	0.012158145
GANC	15q15.1	0.122864664	0.005893404	0.012162303
JRK	8q24.3	0.122856407	0.005896763	0.01216799
PYGB	20p11.21	0.122848009	0.00590018	0.012173796
IP6K2	3p21.31	-0.122836558	0.005904843	0.012182171
EFCAB10	7q22.3	-0.122825253	0.005909449	0.012190429
ZNF773	19q13.43	0.122812606	0.005914606	0.01219982
DAPK1	9q21.33	0.122790276	0.005923722	0.012217373
ALOX12B	17p13.1	-0.122786366	0.005925319	0.012219419
WDCP	2p23.3	-0.122766419	0.005933474	0.012233897
GHRLOS	3p25.3	0.122766228	0.005933552	0.012233897
TMEM159	16p12.3	-0.122746857	0.005941482	0.012248995
CPEB2	4p15.32	0.1227397	0.005944414	0.012253788
SNW1	14q24.3	-0.12268149	0.005968311	0.012301792
CUTC	10q24.2	-0.122679199	0.005969253	0.012302477
STPG3	9q34.3	-0.122677284	0.00597004	0.012302844
ADAMDEC1	8p21.2	0.122664695	0.005975221	0.012312263
KRTAP9-4	17q21.2	-0.122662921	0.005975952	0.01231251
PPP1R3E	14q11.2	-0.122647613	0.005982257	0.012324244
SPRR2D	1q21.3	-0.122628596	0.005990099	0.01233914
GRIN3A	9q31.1	0.122613981	0.005996132	0.012350306
IFITM4P	6p22.1	0.122610098	0.005997736	0.012352349
PGAP3	17q12	-0.122604194	0.006000175	0.012356112
PCBP2	12q13.13	-0.1225978	0.006002818	0.012360006

LRFN4	11q13.2	-0.122596655	0.006003291	0.012360006
TAT	16q22.2	0.122594401	0.006004223	0.012360663
ATP10B	5q34	-0.122588353	0.006006724	0.012364551
NFKBID	19q13.12	0.122583585	0.006008697	0.01236735
MYL6	12q13.2	0.122561825	0.006017707	0.012384631
STEAP4	7q21.12	0.122504378	0.00604155	0.012432433
MYL10	7q22.1	0.122498817	0.006043862	0.01243545
SLC25A13	7q21.3	-0.122497889	0.006044249	0.01243545
HHLA2	3q13.13	-0.12248704	0.006048763	0.012443468
DLAT	11q23.1	-0.122446931	0.006065478	0.012476584
CD99L2	Xq28	0.122428609	0.006073128	0.012491045
ELP2	18q12.2	-0.122411146	0.006080427	0.012504783
CLDN4	7q11.23	-0.122369444	0.006097889	0.012539416
AQP1	7p14.3	0.122346924	0.006107337	0.012557029
VCPIP1	8q13.1	0.122346065	0.006107698	0.012557029
THAP10	15q23	-0.122324597	0.006116718	0.012574292
NLGN4Y	Yq11.221	0.122317679	0.006119627	0.01257899
RFWD3	16q23.1	-0.122277262	0.006136648	0.012612473
DUSP15	20q11.21	0.122276034	0.006137166	0.012612473
OR2A4	6q23.2	-0.122264764	0.00614192	0.012620957
FOXN1	17q11.2	-0.122247928	0.006149028	0.012634278
HAND2-AS1	4q34.1	0.122240155	0.006152313	0.012639739
TTC5	14q11.2	-0.122236229	0.006153972	0.012641603
XCR1	3p21.31	0.122235044	0.006154473	0.012641603
PCDHB2	5q31.3	0.122214376	0.006163216	0.012657469
RASD1	17p11.2	0.122212563	0.006163984	0.012657469
DNAAF1	16q24.1	0.122212338	0.006164079	0.012657469
AACS	12q24.31	-0.122174297	0.006180203	0.012689287
GH1	17q23.3	0.122171523	0.00618138	0.012690413
TMCO1	1q24.1	-0.122169621	0.006182187	0.012690779
ZNF311	6p22.1	0.122166045	0.006183705	0.012692603
PRKAR2B	7q22.3	0.122157311	0.006187414	0.012698925
CNP	17q21.2	-0.122150917	0.006190131	0.012703209
LRRC47	1p36.32	0.122133263	0.006197637	0.01271732
CDK16	Xp11.3	-0.12212124	0.006202754	0.012726526
KIAA1257	3q21.3	-0.122113513	0.006206045	0.012731982
INTS4P1	7q11.21	0.122101963	0.006210966	0.012740783
MAPRE3	2p23.3	-0.122099005	0.006212227	0.012742074
KLK10	19q13.41	-0.122093375	0.006214627	0.012745703
IFNK	9p21.2	0.122071706	0.006223875	0.012762151
MROH6	8q24.3	0.122071618	0.006223913	0.012762151
LOC145845	15q14	0.122061542	0.006228216	0.012769679
CFAP221	2q14.2	0.12203834	0.006238138	0.012788722
CD52	1p36.11	0.122030584	0.006241458	0.012794227
RPS6KA4	11q13.1	0.1220094	0.006250533	0.012811153
C17ORF67	17q22	-0.121984493	0.006261218	0.012832083
ZNF554	19p13.3	-0.121983062	0.006261833	0.012832083
EXT2	11p11.2	0.121969511	0.006267654	0.012842707
ANAPC2	9q34.3	-0.121949758	0.006276147	0.012858806
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ADORA2B	17p12	-0.121935253	0.006282391	0.012867678
EFCAB6	22q13.2-q13.31	0.121932593	0.006283537	0.012868719
CRYGS	3q27.3	-0.121879527	0.00630643	0.012914294
SAPCD1	6p21.33	-0.121874562	0.006308576	0.012917378
TOMM20	1q42.3	-0.121850419	0.00631902	0.012937449
ALOX15	17p13.2	-0.121803146	0.006339514	0.012978091
DLEC1	3p22.2	-0.121781538	0.006348901	0.01299599

PDE8A	15q25.3	0.121747644	0.006363651	0.013024861
PRMT5	14q11.2	-0.121736384	0.006368558	0.013033583
H3F3A	1q42.12	-0.121714245	0.006378216	0.013052025
DPH3	3p25.1	0.121702889	0.006383175	0.013060848
IRF6	1q32.2	0.12169793	0.006385341	0.013063956
MAPK8IP1	11p11.2	0.121691629	0.006388095	0.013068266
OGFOD1	16q13	-0.121690006	0.006388804	0.013068392
OR3A3	17p13.2	0.12165452	0.006404335	0.013098832
FFAR4	10q23.33	0.121639102	0.006411093	0.013111326
HRK	12q24.22	0.121627609	0.006416136	0.013120308
LINC01622	6p25.3	0.121618872	0.006419971	0.013126821
PCDHGB1	5q31.3	0.121609001	0.006424307	0.013134355
CCER1	12q21.33	-0.121601765	0.006427486	0.013139525
SNX14	6q14.3	0.121575113	0.006439211	0.01316216
CD1B	1q23.1	0.121561935	0.006445015	0.013172689
BPNT1	1q41	-0.121559558	0.006446063	0.013173496
CRNN	1q21.3	-0.121552372	0.00644923	0.013177323
ZBTB11-AS1	3q12.3	-0.121551211	0.006449742	0.013177323
CLEC2L	7q34	-0.121550865	0.006449895	0.013177323
SKINT1L	1p33	0.12145898	0.006490524	0.013258987
HIST1H3F	6p22.2	-0.121434635	0.006501327	0.013279712
CYB561	17q23.3	-0.121420426	0.006507639	0.013291261
ZNF28	19q13.41	0.121406401	0.006513876	0.013302651
LAD1	1q32.1	-0.121404108	0.006514896	0.013303388
DKFZP434L192	7p11.2	0.121362966	0.006533224	0.013339464
ST6GALNAC1	17q25.1	-0.121354486	0.006537007	0.013345838
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PPP2R3A	3q22.2-q22.3	-0.121344231	0.006541585	0.013352482
SNTA1	20q11.21	0.121329484	0.006548173	0.013364577
SLC17A6	11p14.3	0.121301703	0.0065606	0.013388587
CYB561D1	1p13.3	0.121298471	0.006562047	0.013390186
ABCC6	16p13.11	0.121292841	0.006564569	0.013393977
HPSE2	10q24.2	0.121271932	0.006573941	0.013411744
NT5M	17p11.2	-0.121255338	0.006581388	0.013425578
FBF1	17q25.1	-0.12122442	0.006595282	0.013452563
IL17RB	3p21.1	0.121206196	0.006603485	0.013467932
GALE	1p36.11	0.121203521	0.006604689	0.013469027
KRT33A	17q21.2	-0.12120051	0.006606046	0.013470432
LILRA4	19q13.42	0.121196815	0.00660771	0.013472465
REV3L	6q21	0.121186058	0.006612559	0.013480989
NOP14-AS1	4p16.3	0.121181096	0.006614797	0.013484188
VPS53	17p13.3	0.121160153	0.006624249	0.013501437
HCN1	5p12	0.121159383	0.006624596	0.013501437
SAMD4B	19q13.2	0.121153613	0.006627202	0.013505385
RAP1GDS1	4q23	-0.121128802	0.00663842	0.013526879
TAS1R3	1p36.33	0.121127084	0.006639197	0.013527096
CST11	20p11.21	0.12110759	0.006648024	0.013543713
LTBP4	19q13.2	0.121069638	0.006665239	0.013577278
COX15	10q24.2	-0.121068302	0.006665845	0.013577278
TCEAL1	Xq22.2	-0.121044257	0.006676773	0.013598163
THEM5	1q21.3	-0.121020185	0.006687729	0.013619103
TMEM50B	21q22.11	0.121018012	0.006688719	0.013619744
NMUR2	5q33.1	0.121009401	0.006692643	0.013626359
CCL19	9p13.3	0.121004652	0.006694807	0.013629391
KLHL8	4q22.1	-0.120981082	0.006705561	0.013649906
PPME1	11q13.4	-0.12093709	0.006725673	0.013689152
UROD	1p34.1	0.120935945	0.006726198	0.013689152
MAP9	4q32.1	0.120925066	0.00673118	0.01369791

GUSB	7q11.21	0.12088241	0.006750747	0.013736344
RIMKLA	1p34.2	-0.120874872	0.006754211	0.013742006
CD274	9p24.1	-0.120835988	0.0067721	0.013777014
MEP1A	6p12.3	0.120820565	0.006779208	0.013790084
ADAR	1q21.3	0.120797004	0.006790079	0.013810805
TRMT6	20p12.3	-0.120792709	0.006792062	0.013813446
ABCA10	17q24.3	0.120773152	0.006801099	0.013830433
MAP1B	5q13.2	-0.120744901	0.006814174	0.013855566
BRD7P3	6q22.31	0.12074348	0.006814832	0.013855566
PIN1P1	1p31.1	-0.120736078	0.006818262	0.013861135
LINC02418	12q24.33	0.120734603	0.006818945	0.013861135
PHF23	17p13.1	-0.120711934	0.006829459	0.01388111
CAPN3	15q15.1	0.120683446	0.006842692	0.013906606
FASTKD2	2q33.3	-0.120675048	0.006846598	0.013913141
STON2	14q31.1	-0.120664074	0.006851704	0.013922116
SKOR1	15q23	0.120637081	0.006864279	0.013946263
BSPRY	9q32	-0.120577331	0.006892187	0.014001555
HOXA6	7p15.2	0.120555667	0.006902331	0.014020752
VPS13A	9q21.2	-0.120530668	0.006914054	0.014043149
SMG1	16p12.3	0.12052332	0.006917503	0.01404874
ZUP1	6q22.1	-0.120501136	0.006927924	0.01406849
PRELID3A	18p11.21	-0.120477897	0.006938857	0.014088215
TBC1D3C	17q12	-0.120477521	0.006939034	0.014088215
RSPH3	6q25.3	0.120425985	0.006963334	0.014136129
NAA16	13q14.11	-0.12041482	0.006968609	0.014145414
SPTLC1	9q22.31	-0.120395353	0.006977814	0.014162674
ZNF275	Xq28	0.120383234	0.00698355	0.014172891
AHRR	5p15.33	0.120375313	0.006987301	0.014179078
DELE1	5q31.3	0.120370351	0.006989652	0.014182423
GAL3ST3	11q13.1	0.120364185	0.006992575	0.014186925
LOC728613	5p15.33	-0.120341723	0.00700323	0.014207115
NPNT	4q24	-0.120334757	0.007006537	0.014212396
MESTIT1	7q32.2	0.120298026	0.007023999	0.014246385
DCTN3	9p13.3	-0.120293914	0.007025956	0.014248922
PGLYRP4	1q21.3	0.12028809	0.00702873	0.014253114
MRPL1	4q21.1	-0.120284276	0.007030546	0.014255365
RNF166	16q24.2-q24.3	0.120277787	0.007033638	0.014260201
SMTNL1	11q12.1	0.120257757	0.007043188	0.014278129
XBP1	22q12.1 22q12	0.120235608	0.007053763	0.014297063
JPH4	14q11.2	0.120235227	0.007053945	0.014297063
SMAGP	12q13.13	-0.120220531	0.007060969	0.014309862
FMR1	Xq27.3	-0.120212134	0.007064986	0.014316564
PSD4	2q14.1	0.12020469	0.007068548	0.014322344
KIAA1549	7q34	-0.120196197	0.007072614	0.014329144
RASGEF1A	10q11.21	0.120102679	0.007117526	0.014417451
RBPJL	20q13.12	0.120102464	0.007117629	0.014417451
AREL1	14q24.3	0.120084834	0.007126125	0.01443321
FAM184A	6q22.31	0.120078632	0.007129116	0.014437819
NICN1	3p21.31	0.120076914	0.007129944	0.014438048
DERL1	8q24.13	0.120059642	0.00713828	0.01445324
ZNF684	1p34.2	0.120058401	0.007138879	0.01445324
SCNN1A	12p13.31	-0.120036358	0.007149531	0.014473353
H1FO	22q13.1	-0.120026338	0.007154378	0.014481712
SETMAR	3p26.1	-0.120007825	0.00716334	0.014497939
ABCC8	11p15.1	-0.120006811	0.007163831	0.014497939
EYS	6q12	-0.11997977	0.007176941	0.014523014
SETDB1	1q21.3	-0.119960112	0.007186485	0.014539879
ACADS	12q24.31	-0.119959635	0.007186717	0.014539879

ANO5	11p14.3	0.119948137	0.007192304	0.014549724
CASC2	10q26.11	0.119946275	0.007193209	0.014550097
NRF1	7q32.2	-0.119918792	0.007206582	0.014575542
ZGPAT	20q13.33	0.119917456	0.007207233	0.014575542
CMTM5	14q11.2	0.119911997	0.007209892	0.014579459
TBC1D3	17q12	-0.119896844	0.007217278	0.014592932
ZNF117	7q11.21	0.119847031	0.007241606	0.014640654
PAPOLA	14q32.2	-0.119798268	0.007265492	0.014686854
UBE2K	4p14	-0.119797409	0.007265913	0.014686854
ABCB5	7p21.1	0.119793029	0.007268062	0.014689726
PRR15	7p14.3	-0.119787297	0.007270876	0.014693941
HACD2	3q21.1	0.119782141	0.007273407	0.014697585
KRTAP5-4	11p15.5	0.119773577	0.007277613	0.014704612
TMEM201	1p36.22	-0.119732901	0.007297622	0.014742277
SPTLC2	14q24.3	-0.11973271	0.007297716	0.014742277
LIN28A	1p36.11	0.119729261	0.007299415	0.014743992
ATP2A1	16p11.2	-0.119726412	0.007300818	0.014743992
SLC18A1	8p21.3	0.119724162	0.007301927	0.014743992
RIN1	11q13.2	0.11972374	0.007302135	0.014743992
UGT2A3	4q13.2	-0.119723571	0.007302218	0.014743992
SCAND1	20q11.23	-0.119709712	0.00730905	0.014756311
AIDA	1q41	0.119652456	0.007337337	0.014811938
CD24	6q21	0.119646062	0.007340502	0.014816844
MYOZ2	4q26	0.119640787	0.007343114	0.014820635
SERPINB6	6p25.2	0.119632416	0.007347261	0.01482752
KIF18A	11p14.1	-0.119613236	0.00735677	0.014845227
ABHD16A	6p21.33	0.119604647	0.007361032	0.014852341
LY6G6C	6p21.33	-0.119601142	0.007362772	0.014853062
SERTM1	13q13.3	-0.119600962	0.007362861	0.014853062
CCDC163	1p34.1	0.119588234	0.007369182	0.014864327
PSMB1	6q27	-0.119551304	0.00738755	0.014899888
GPR78	4p16.1	0.119483354	0.007421454	0.014966771
MAD2L1BP	6p21.1	-0.119480402	0.00742293	0.014968252
SERHL2	22q13.2	-0.119454687	0.007435798	0.014992704
ATP6V1E2	2p21 2p16-p12	-0.119413317	0.007456544	0.015033303
ACBD5	10p12.1	-0.119409977	0.007458221	0.015034909
ZNF222	19q13.31	0.119403202	0.007461624	0.015040267
KLHL15	Xp22.11	-0.119393659	0.00746642	0.01504843
NEUROG2	4q25	0.119370672	0.007477983	0.01507023
ZNF441	19p13.2	0.119337262	0.007494817	0.015102648
RIPPLY2	6q14.2	-0.119318722	0.007504173	0.015119523
HDGFL2	19p13.3	-0.119317699	0.00750469	0.015119523
RNF11	1p32.3	0.119299759	0.007513754	0.015135149
CLEC12B	12p13.2	0.119299379	0.007513947	0.015135149
OR1E1	17p13.3	0.119281682	0.007522898	0.015151667
DPCD	10q24.32	0.119274853	0.007526355	0.015157117
LINC01101	2q14.2	-0.119238585	0.007544736	0.015192619
GTF2IP1	7q11.23	-0.119224467	0.007551903	0.015205532
KHDRBS2	6q11.1	0.119209391	0.007559562	0.015219436
C2CD2L	11q23.3	0.119189637	0.007569609	0.015238142
EMCN	4q24	0.11918601	0.007571454	0.015240337
FAM83H	8q24.3	-0.119167975	0.007580639	0.015257303
SH3BGR13	1p36.11	0.11916349	0.007582925	0.015260381
TACR2	10q22.1	-0.119156908	0.00758628	0.015265611
CXORF40B	Xq28	-0.119148031	0.007590808	0.015273199
PGPEP1L	15q26.3	-0.119137727	0.007596066	0.015282255
HENMT1	1p13.3	0.11912885	0.007600599	0.015289849
DDI1	11q22.3	0.119112157	0.007609129	0.015305484

GUCA2B	1p34.2	-0.119101028	0.00761482	0.015315405
GAB4	22q11.1	0.119080636	0.00762526	0.015333418
ATP1A1	1p13.1	-0.119080564	0.007625296	0.015333418
CIAPIN1	16q21	-0.119034473	0.007648938	0.015379426
TBC1D5	3p24.3	0.119018346	0.007657226	0.015394556
SAP130	2q14.3	-0.119014052	0.007659434	0.015397461
CROCCP3	1p36.13	0.119006704	0.007663213	0.015403525
ELP3	8p21.1	0.118985519	0.00767412	0.015423911
HCG4B	6p22.1	0.118950955	0.007691944	0.015458196
BDP1	5q13.2	0.118948207	0.007693363	0.015459507
TRPM6	9q21.13	-0.118934929	0.007700221	0.015471748
NUDT18	8p21.3	-0.118923065	0.007706354	0.015482528
GOLGA8DP	15q11.2	0.118916631	0.007709681	0.015487671
TNFAIP8	5q23.1	0.11890183	0.007717341	0.015501516
HOXC9	12q13.13	0.118895213	0.007720768	0.015506855
AUH	9q22.31	-0.118891619	0.00772263	0.015508798
GBA	1q22	0.118890379	0.007723272	0.015508798
ESPL1	12q13.13	-0.118831787	0.007753682	0.015568314
FLYWCH2	16p13.3	-0.118809698	0.007765174	0.015589837
EMC3	3p25.3	-0.118790849	0.007774993	0.015607997
SHARPIN	8q24.3	0.118782737	0.007779222	0.015614933
LPGAT1	1q32.3	0.118779588	0.007780864	0.015616676
CACFD1	9q34.2	0.118777489	0.007781959	0.01561732
NECTIN1	11q23.3	-0.118764988	0.007788482	0.015628857
ZNF142	2q35	0.118760217	0.007790973	0.015632301
IGFL1	19q13.32	0.118751265	0.007795649	0.015640127
DCUN1D3	16p12.3	0.118662691	0.007842047	0.015731649
SAP30BP	17q25.1	-0.118652862	0.00784721	0.015740443
TMEM164	Xq23	-0.118648567	0.007849467	0.015743405
MYADML2	17q25.3	-0.118637017	0.007855541	0.015752653
IFI6	1p35.3	0.11863683	0.007855639	0.015752653
GCG	2q24.2	0.118614677	0.0078673	0.015773491
ZNF839	14q32.31	-0.118614118	0.007867594	0.015773491
LOC441455	9q22.33	0.118605259	0.007872262	0.015781281
RPL26	17p13.1	-0.118602858	0.007873528	0.015782251
NKG7	19q13.41	0.118589212	0.007880724	0.015793638
FGF11	17p13.1	0.118589117	0.007880774	0.015793638
HARBI1	11p11.2	-0.118585013	0.007882939	0.015796407
AMOTL1	11q21	0.118579001	0.007886112	0.015801196
ASB2	14q32.12	0.118567741	0.007892057	0.01581154
CDKAL1	6p22.3	0.118550946	0.007900933	0.01582775
ZNF184	6p22.1	0.118542358	0.007905475	0.015835278
ANKRD9	14q32.31	-0.118538257	0.007907645	0.015838051
DBX1	11p15.1	0.118534028	0.007909883	0.015840962
ALOXE3	17p13.1	-0.11851216	0.007921464	0.015862581
RIPPLY3	21q22.13	-0.11850348	0.007926066	0.01587022
GABARAP	17p13.1	0.118501324	0.007927209	0.015870935
GSPT1	16p13.13	-0.11848243	0.007937235	0.01588943
HCP5	6p21.33	0.118480616	0.007938197	0.015889781
TBX6	16p11.2	-0.118445499	0.007956863	0.015925563
PRODH	22q11.21	-0.118435289	0.007962297	0.01593486
CSMD1	8p23.2	-0.11842512	0.007967713	0.015944117
PIN4	Xq13.1	-0.11840752	0.007977094	0.015961306
CHADL	22q13.2	-0.118373548	0.007995229	0.015996007
GJC3	7q22.1	0.11835022	0.008007703	0.016019375
ZNF81	Xp11.23	0.118316056	0.008026003	0.016054393
OR11H4	14q11.2	-0.118309878	0.008029316	0.016058311
OCSTAMP	20q13.12	0.118309436	0.008029553	0.016058311

PCSK1	5q15	0.118305031	0.008031917	0.016061185
FLOT1	6p21.33	0.118303791	0.008032582	0.016061185
FANCM	14q21.2	-0.118300355	0.008034426	0.016063279
PGBD4	15q14	-0.118238137	0.008067881	0.016128568
FER1L6	8q24.13	-0.118230755	0.008071858	0.016133353
RNF123	3p21.31	0.118229644	0.008072457	0.016133353
GANAB	11q12.3	0.118227927	0.008073383	0.016133353
DIDO1	20q13.33	0.118226972	0.008073897	0.016133353
MUTYH	1p34.1	-0.118226114	0.00807436	0.016133353
GULP1	2q32.1-q32.2	-0.118202257	0.00808723	0.016157645
C4ORF50	4p16.1	0.118188874	0.008094458	0.016170485
SERPINA11	14q32.13	0.118183667	0.008097272	0.016174505
TMEM120A	7q11.23	-0.118174774	0.008102079	0.016182506
DRD4	11p15.5	0.118164917	0.008107411	0.016191552
TNFRSF13B	17p11.2	0.11816082	0.008109627	0.016194376
POMZP3	7q11.23	-0.118140611	0.008120571	0.016214625
SH3BP5L	1q44	0.118127538	0.008127657	0.016227169
BBX	3q13.12	0.11811914	0.008132212	0.016234657
STK31	7p15.3	-0.1181169	0.008133427	0.016235477
SMAD2	18q21.1	-0.118099482	0.008142884	0.016252744
CYTH2	19q13.33	0.118085073	0.008150714	0.016266764
NCL	2q37.1	-0.118068564	0.008159693	0.016283074
C2ORF80	2q33.3	0.118066358	0.008160893	0.016283859
RACGAP1P	12q12	-0.11805306	0.008168133	0.016296694
SLC66A2	18q23	0.118045426	0.008172292	0.01630338
CSTL1	20p11.21	-0.118037636	0.008176538	0.016310238
DENND5A	11p15.4	0.118030203	0.008180592	0.016316711
SAR1B	5q31.1	-0.118016747	0.008187933	0.01632974
BHLHA15	7q21.3	0.117984555	0.008205522	0.016363201
MID2	Xq22.3	-0.117966267	0.008215529	0.016381538
LCA5L	21q22.2	0.117957967	0.008220074	0.016388981
C2CD5	12p12.1	-0.117939738	0.008230065	0.016407279
BMS1P4	10q22.2	0.117935857	0.008232194	0.016409902
HYAL2	3p21.31	0.117934299	0.008233048	0.016409984
MSTO1	1q22	-0.11793115	0.008234776	0.016411806
RGS7	1q43 1q23.1	0.117918036	0.008241973	0.016424528
OXGR1	13q32.1	-0.117916378	0.008242883	0.01642472
STOX2	4q35.1	-0.117898418	0.008252751	0.016442758
SLC51A	3q29	-0.117891166	0.008256738	0.016449079
HAVCR1	5q33.3	0.117882464	0.008261525	0.01645699
LTB4R2	14q12	-0.11787857	0.008263668	0.016459635
CIT	12q24.23	-0.117875898	0.008265139	0.016460939
TAF1D	11q21	-0.11786626	0.008270445	0.016469882
TET3	2p13.1	-0.117853377	0.008277543	0.01648239
TOP1MT	8q24.3	-0.117828661	0.008291176	0.016507631
CA6	1p36.23	-0.11782743	0.008291855	0.016507631
ARG1	6q23.2	-0.117803738	0.008304943	0.016532056
COG3	13q14.13	0.117797651	0.008308309	0.016537124
PRSS1	7q34	0.11777879	0.008318745	0.016556263
ZNF862	7q36.1	0.117777226	0.00831961	0.016556353
AGFG2	7q22.1	-0.117770356	0.008323415	0.016562292
DPF1	19q13.2	-0.117759112	0.008329645	0.016573054
SBDSP1	7q11.23	-0.117712623	0.008355448	0.016622754
NEUROD1	2q31.3	0.11770639	0.008358913	0.016628008
GALK1	17q25.1	-0.117669013	0.008379718	0.016667751
GSTM1	1p13.3	-0.1176392	0.008396345	0.016699177
ATP13A2	1p36.13	0.11763275	0.008399947	0.016704693
TPRG1L	1p36.32	0.117626452	0.008403464	0.016709138

METTL17	14q11.2	-0.117625784	0.008403838	0.016709138
CHST5	16q23.1	0.117605936	0.008414933	0.01672955
CCDC50	3q28	0.117582842	0.008427859	0.016753596
AP5B1	11q13.1	-0.117580457	0.008429195	0.016754602
POMP	13q12.3	-0.117555646	0.008443103	0.016780595
GALNT3	2q24.3	-0.117552401	0.008444924	0.01678256
PWWP2B	10q26.3	0.117532934	0.008455853	0.016802625
MRTO4	1p36.13	-0.117519861	0.0084632	0.016815568
OSBPL7	17q21.32	0.117517093	0.008464756	0.016816414
DNM1L	12p11.21	-0.117516139	0.008465292	0.016816414
CYP2A7	19q13.2	-0.117506692	0.008470606	0.016825314
CNOT7	8p22	-0.117500489	0.008474097	0.01683059
UVRAG	11q13.5	0.117473865	0.008489093	0.016858716
ZNF585B	19q13.12	0.117472243	0.008490008	0.016858873
SND1	7q32.1	0.117466231	0.008493398	0.016863945
ZNF644	1p22.2	0.117447241	0.008504114	0.01688356
HS3ST4	16p12.1	0.11741731	0.008521028	0.016915476
ZNF526	19q13.2	0.117394279	0.008534063	0.016939687
FAM71E1	19q13.33	-0.117392752	0.008534928	0.016939738
ISG20L2	1q23.1	-0.11739113	0.008535847	0.016939895
SESN1	6q21	0.117386645	0.008538388	0.016943272
C1ORF109	1p34.3	-0.117369805	0.008547935	0.016960549
ALX4	11p11.2	0.117362713	0.008551958	0.016966863
SUGT1P3	13q14.11	-0.117278243	0.00860001	0.017060519
TPD52L3	9p24.1	0.117247846	0.00861736	0.017093258
C7ORF31	7p15.3	0.11722824	0.008628568	0.017113807
SRC	20q11.23	0.117187299	0.008652013	0.017158621
PSG11	19q13.31	0.117185557	0.008653012	0.017158916
SMAD3	15q22.33	-0.117150273	0.008673265	0.017197388
PARP16	15q22.31	-0.117112293	0.008695113	0.017239014
PTN	7q33	-0.117086719	0.008709852	0.01726528
NDEL1	17p13.1	0.117086337	0.008710072	0.01726528
ANKRD20A11P	21q11.2	-0.11708366	0.008711617	0.017266645
TBX22	Xq21.1	0.117066736	0.008721385	0.017284308
SPECC1L	22q11.23	0.117043872	0.008734596	0.01730879
MSLN	16p13.3	0.117041105	0.008736196	0.017310262
SPRR4	1q21.3	-0.117003011	0.008758252	0.01735226
ROCK1	18q11.1	0.116990052	0.008765766	0.017365442
NEBL	10p12.31	-0.116931841	0.00879959	0.017430737
SUMO1P1	20q13.2	0.116916164	0.008808719	0.017447108
MSH5	6p21.33	-0.116903458	0.008816124	0.017460062
DUOXA1	15q21.1	-0.116894148	0.008821554	0.017469101
ETS2	21q22.2	0.116876017	0.008832136	0.01748834
WNT9B	17q21.32	0.116857928	0.008842705	0.01750755
MEN1	11q13.1	-0.116838419	0.008854117	0.017528424
FLG	1q21.3	-0.116833246	0.008857145	0.017532698
PARP4	13q12.12	0.116827254	0.008860654	0.017537923
MAT2A	2p11.2	-0.116817997	0.008866076	0.017546935
SMIM32	5q31.1	-0.116807057	0.008872489	0.017557905
BMP3	4q21.21	-0.116804156	0.00887419	0.017559549
ELP1	9q31.3	-0.116771238	0.008893513	0.017596059
CCDC181	1q24.2	0.116761636	0.008899157	0.017605499
TRIM25	17q22	-0.116754157	0.008903555	0.017612473
ANKRD54	22q13.1	-0.11674137	0.008911079	0.017625629
NOL3	16q22.1	-0.116736121	0.008914169	0.017630012
GIP	17q21.32	0.116723052	0.008921867	0.017643508
GRTP1	13q34	-0.116721426	0.008922826	0.017643674
KMT2C	7q36.1	0.116714841	0.008926707	0.017649619

HOXB9	17q21.32	0.116679484	0.008947573	0.017687846
ACOT12	5q14.1	-0.11667911	0.008947794	0.017687846
KCNH6	17q23.3	0.116664491	0.008956434	0.017703191
KIF1BP	10q22.1	0.116579717	0.009006685	0.017800773
FAM166A	9q34.3	-0.116530804	0.009035793	0.017856553
C22ORF24	22q12.3	0.116525936	0.009038694	0.017860538
MYDGF	19p13.3	0.116511773	0.009047141	0.017875477
CFAP45	1q23.2	0.116489637	0.009060356	0.017899836
CDH19	18q22.1	0.116486159	0.009062434	0.017902188
STRADB	2q33.1	-0.116448315	0.009085072	0.017945151
EIF6	20q11.22	-0.116442589	0.009088501	0.017948799
CLPX	15q22.31	-0.11644173	0.009089015	0.017948799
RADIL	7p22.1	0.116440776	0.009089587	0.017948799
TPTEP1	22q11.1	0.116426748	0.009097995	0.017963643
CFAP43	10q25.1	0.116405198	0.009110924	0.017987412
MYBL1	8q13.1	0.116395257	0.009116894	0.017997437
SNX4	3q21.2	-0.116323974	0.009159804	0.018080377
LRRC37A16P	17q24.2	-0.116316721	0.00916418	0.018087245
MC3R	20q13.2	0.116309084	0.00916879	0.018094573
DLGAP3	1p34.3	0.116291293	0.009179537	0.018114012
C12ORF71	12p11.23	0.116286825	0.009182238	0.018117569
RABL6	9q34.3	-0.116265286	0.009195267	0.018141503
C17ORF77	17q25.1	0.116259131	0.009198994	0.018147081
SELENOP	5p12	0.116252499	0.00920301	0.01815323
FAM174B	15q26.1	0.116238567	0.009211453	0.018166998
OTOL1	3q26.1	-0.11623801	0.009211791	0.018166998
PTH2R	2q34	-0.116230693	0.009216228	0.018173972
TRPV5	7q34	0.116199173	0.009235363	0.018209927
CDK5RAP3	17q21.32	-0.116194002	0.009238505	0.018214343
SOST	17q21.31	-0.116186991	0.009242768	0.018220967
EDDM3A	14q11.2	0.116131331	0.009276669	0.018286013
USP10	16q24.1	-0.116117375	0.009285187	0.018301015
CARD10	22q13.1	0.116085311	0.009304782	0.018337845
BOK	2q37.3	0.11608264	0.009306417	0.018339276
KMT2D	12q13.12	0.116054966	0.009323361	0.018370873
NUMA1	11q13.4	0.116037312	0.009334185	0.018390405
CMSS1	3q12.1	-0.11602567	0.009341329	0.018402683
CAV2	7q31.2	0.116020517	0.009344493	0.018407119
CCL16	17q12	0.116015155	0.009347786	0.018411808
JADE1	4q28.2	0.116005731	0.009353576	0.018420662
ANKRD27	19q13.11	-0.116004867	0.009354107	0.018420662
DBIL5P	17p13.3	-0.115988408	0.009364227	0.018438792
CCDC93	2q14.1	0.115978434	0.009370365	0.018445465
SSTR4	20p11.21	0.115977741	0.009370792	0.018445465
PPEF2	4q21.1	0.115976504	0.009371553	0.018445465
CFAP61	20p11.23	0.1159758	0.009371986	0.018445465
RPS13	11p15.1	-0.115975475	0.009372186	0.018445465
NINJ1	9q22.31	0.115960207	0.00938159	0.018462172
SATB2	2q33.1	0.115955436	0.009384531	0.018466158
PP7080	5p15.33	-0.11592948	0.009400542	0.018495859
MIB2	1p36.33	0.115920796	0.009405904	0.018504605
LUC7L3	17q21.33	-0.115904478	0.009415987	0.018522636
NRG3	10q23.1	0.115891304	0.009424134	0.018536855
RNF207	1p36.31	0.115886729	0.009426965	0.018540617
UBE2I	16p13.3	-0.115868311	0.009438369	0.018561237
HEATR9	17q12	0.115857182	0.009445266	0.018572991
REXO1	19p13.3	-0.115842832	0.009454165	0.018588678
LGR6	1q32.1	0.115837873	0.009457243	0.018592917

SBF1	22q13.33	0.115800749	0.009480308	0.018636447
UNQ6494	9q22.2	0.115782394	0.00949173	0.018657084
SYCE2	19p13.13	-0.115776224	0.009495572	0.018662817
ZNF878	19p13.2	0.11576582	0.009502055	0.01867374
ALG6	1p31.3	-0.11574731	0.009513597	0.018694602
TCTA	3p21.31	-0.115739199	0.009518658	0.018702727
RBM17	10p15.1	-0.115736432	0.009520386	0.0187043
NONO	Xq13.1	-0.115724503	0.009527835	0.018717114
LARP4	12q13.12	-0.115719923	0.009530697	0.018720913
CHIC2	4q12	-0.1157183	0.009531711	0.018721082
VRTN	14q24.3	0.11571422	0.009534261	0.018724269
TLX1	10q24.31	0.115701935	0.009541944	0.018737532
NMD3	3q26.1	-0.115643963	0.00957827	0.018807036
DISC1	1q42.2	0.115629077	0.009587618	0.018823559
CHN2	7p14.3	0.115620106	0.009593255	0.018832794
LOC90246	3q21.3	0.115599177	0.009606418	0.018856578
SKP2	5p13.2	-0.115597872	0.009607239	0.018856578
GRIK2	6q16.3	0.115586268	0.009614545	0.018869082
C7ORF61	7q22.1	0.115577748	0.009619912	0.018877369
PRR34	22q13.31	0.115576595	0.009620639	0.018877369
QSER1	11p13	-0.115538803	0.009644479	0.018922308
CLEC18B	16q23.1	0.11551787	0.009657707	0.018946419
PHYKPL	5q35.3	0.115515805	0.009659012	0.018947138
KTI12	1p32.3	-0.115511129	0.00966197	0.018951097
PNPLA6	19p13.2	0.115490994	0.009674714	0.018974249
CFAP44	3q13.2	0.11548794	0.009676648	0.018976198
SMG7	1q25.3	-0.115484028	0.009679126	0.018979213
ATP6V0D1	16q22.1	0.11548107	0.009681	0.018981044
SEC31B	10q24.31	0.115474485	0.009685173	0.018987381
SRF	6p21.1	0.115465611	0.009690801	0.018996567
BAG3	10q26.11	-0.115461221	0.009693585	0.01900018
DMAP1	1p34.1	0.115453014	0.009698792	0.01900854
EIF3F	11p15.4	-0.115407114	0.009727964	0.019063861
STXBP6	14q12	-0.115357683	0.009759466	0.019123739
MISP3	19p13.12	-0.115331822	0.009775983	0.019154245
TACC3	4p16.3	-0.115296419	0.009798635	0.019196764
PNCK	Xq28	-0.115277715	0.009810622	0.01921838
ACAP3	1p36.33	-0.115262829	0.009820171	0.019235219
CT55	Xq26.3	0.1152544	0.009825581	0.019243949
TRAPPC10	21q22.3	0.115249565	0.009828686	0.019248162
HSF2	6q22.31	-0.115239259	0.009835307	0.019259259
TGM4	3p21.31	-0.115234828	0.009838155	0.019262966
SAV1	14q22.1	0.115210917	0.009853535	0.019291209
SNORA53	12q23.1	-0.115200761	0.009860074	0.019302138
PWARSN	15q11.2	0.115193266	0.009864903	0.019309171
TFPT	19q13.42	0.115192213	0.009865581	0.019309171
MCM3	6p12.2	-0.115181907	0.009872224	0.019320299
NPPB	1p36.22	0.115161097	0.00988565	0.019344554
SULT1C2	2q12.3	0.115158693	0.009887202	0.019344554
SARS	1p13.3	0.115158241	0.009887493	0.019344554
OR56A5	11p15.4	0.115107446	0.009920337	0.019406931
ATP5MGL	22q13.2	-0.115093392	0.009929442	0.01942217
NIM1K	5p12	0.11509245	0.009930052	0.01942217
BMP10	2p13.3	0.115090326	0.009931429	0.01942298
PCDHB11	5q31.3	0.115088198	0.009932809	0.019423795
IL31RA	5q11.2	0.115055046	0.009954321	0.019463977
CXCL9	4q21.1	0.115014624	0.009980607	0.019513172
XRN2	20p11.22	0.115013384	0.009981414	0.019513172

ZCWPW2	3p24.1	0.115007932	0.009984964	0.019518221
ZNF398	7q36.1	-0.115004891	0.009986945	0.019520203
BTLA	3q13.2	0.114987629	0.009998195	0.019540299
SLC11A2	12q13.12	-0.114975595	0.010006045	0.019553747
BCAP29	7q22.3	0.114952692	0.010021	0.019581074
ETV3	1q23.1	0.114942863	0.010027424	0.019591729
FOXO3B	17p11.2	0.114929885	0.010035911	0.019606414
LINC00482	17q25.3	0.114924851	0.010039206	0.019610952
AQP12A	2q37.3	0.11491751	0.010044011	0.019618439
DRC1	2p23.3	-0.114862373	0.010080167	0.019687156
SETD9	5q11.2	-0.114855885	0.01008443	0.019693575
TFAP2A	6p24.3	0.114831405	0.010100526	0.0197231
RGS12	4p16.3	0.114817091	0.010109948	0.019739588
BRD7	16q12.1	-0.114809316	0.010115069	0.019747676
BMS1P1	10q11.22	0.114806403	0.010116989	0.019749513
GEMIN7	19q13.32	-0.114800773	0.010120699	0.019754845
TPX2	20q11.21	-0.114783024	0.010132405	0.019775781
CPNE3	8q21.3	-0.114770236	0.010140845	0.019788795
SLC31A1	9q32	-0.11476995	0.010141034	0.019788795
SPATA6L	9p24.2-p24.1	-0.114755827	0.010150364	0.019805086
TUBA3FP	22q11.21	0.114738692	0.010161693	0.019825274
SRP14	15q15.1	-0.114683303	0.010198394	0.019894952
SYT6	1p13.2	0.114667355	0.010208982	0.019913683
USP43	17p13.1	0.1146542	0.010217724	0.019928808
ZNF257	19p12	0.11463534	0.010230268	0.019951345
WNK3	Xp11.22	0.114593326	0.010258261	0.020004006
MUC16	19p13.2	0.114590999	0.010259814	0.020005101
ZNF814	19q13.43	0.114581482	0.010266165	0.020013989
SPNS2	17p13.2	0.114581196	0.010266356	0.020013989
HAMP	19q13.12	0.114553213	0.010285052	0.0200485
PRKRIP1	7q22.1	-0.114536059	0.010296527	0.020068929
BRMS1L	14q13.2	-0.114511535	0.010312954	0.020099004
RAVER1	19p13.2	-0.114498175	0.010321911	0.02011452
PNPLA7	9q34.3	0.114495408	0.010323768	0.020116195
PARP2	14q11.2	-0.114463153	0.010345427	0.020156451
TMEM69	1p34.1	-0.114445213	0.010357491	0.020178008
CHST10	2q11.2	-0.11443672	0.010363207	0.020187194
ZNF683	1p36.11	0.11443148	0.010366735	0.020192118
TTI2	8p12	-0.114427941	0.010369118	0.02019481
OR2L3	1q44	0.114360682	0.010414504	0.020281247
DNAJB11	3q27.3	-0.114346065	0.010424391	0.020298542
HOMER3	19p13.11	0.114340721	0.010428008	0.020303625
SYCE1	10q26.3	0.114298947	0.010456318	0.020356782
CPVL	7p14.3	0.114288904	0.010463134	0.020368087
ZNF195	11p15.4	-0.114283847	0.010466568	0.020372806
DGLUCY	14q32.11	-0.114274877	0.010472662	0.0203827
LZTS2	10q24.31	0.114251497	0.010488558	0.02041167
THTPA	14q11.2	-0.114219815	0.010510133	0.020451684
NUTM1	15q14	-0.114212304	0.010515254	0.020459677
PIF1	15q22.31	-0.114202164	0.01052217	0.02047116
GCA	2q24.2	0.114194909	0.010527121	0.020478818
SEPTIN10	2q13	-0.114171339	0.010543221	0.02050816
EDRF1	10q26.2	0.114154737	0.010554574	0.020528265
BSDC1	1p35.1	0.114140993	0.010563981	0.020544581
DPM1	20q13.13	-0.114131641	0.010570386	0.020555056
SSPO	7q36.1	0.114058034	0.010620919	0.020651332
GTSE1	22q13.31	-0.114032874	0.010638241	0.02068302
SDK2	17q25.1	0.114024	0.010644357	0.020692917

PLIN3	19p13.3	0.114020278	0.010646922	0.020695911
MMS22L	6q16.1	-0.113994322	0.010664832	0.020728727
IGFBP2	2q35	-0.113983825	0.010672082	0.020740821
GJB7	6q14.3-q15	-0.113981069	0.010673987	0.020742525
TNK1	17p13.1	-0.113960255	0.010688378	0.020768492
TRIM35	8p21.2	-0.113954338	0.010692472	0.020774446
TRAPPC11	4q35.1	0.113927142	0.010711309	0.020809041
GMPR2	14q12	-0.113923897	0.010713559	0.020811407
CLDN10	13q32.1	0.113906188	0.010725843	0.020833264
SCN10A	3p22.2	0.113867304	0.010752858	0.020883728
NR3C2	4q31.23	0.113863113	0.010755774	0.020887379
KCTD20	6p21.31	0.113847938	0.010766336	0.020905879
PAX2	10q24.31	0.113835446	0.010775038	0.020920762
SPIN2A	Xp11.21	0.113829946	0.01077887	0.02092619
LARS2	3p21.31	-0.11381158	0.010791679	0.020949042
TPR	1q31.1	0.113785624	0.010809804	0.020982208
LINC02433	4q32.1	0.113773974	0.010817948	0.020995997
PCDHA4	5q31.3	0.113760989	0.010827031	0.021011605
INO80B	2p13.1	-0.113756328	0.010830294	0.021015915
BRAF	7q34	-0.113753083	0.010832565	0.021018301
KY	3q22.2	0.11374931	0.010835207	0.021021407
POM121L4P	22q11.21	0.113738397	0.010842851	0.021034214
NFKBIA	14q13.2	0.113725696	0.010851755	0.021049462
CASD1	7q21.3	0.113717203	0.010857711	0.021058993
ANKRD39	2q11.2	-0.113711096	0.010861997	0.021065279
SHCBP1	16q11.2	-0.113703175	0.010867557	0.021074037
GAK	4p16.3	0.113687144	0.010878818	0.021093847
HTRA2	2p13.1	-0.113682468	0.010882104	0.021098192
UBAP2L	1q21.3	-0.113653363	0.010902581	0.021135862
THRA	17q21.1	0.11364382	0.010909302	0.02114686
NPAP1	15q11.2	0.113642239	0.010910416	0.021146987
TCF4	18q21.2	0.113626834	0.010921275	0.021166001
HOXA9	7p15.2	0.113624308	0.010923056	0.021167421
INTS7	1q32.3	-0.113618055	0.010927467	0.021173936
GMCL2	5q35.3	-0.113609954	0.010933184	0.021182979
GTF3C3	2q33.1	-0.113588186	0.010948559	0.021210731
PPM1D	17q23.2	-0.113539709	0.010982868	0.021275156
FOSB	19q13.32	0.113532266	0.010988144	0.021283333
H2AFV	7p13	-0.113523391	0.010994438	0.02129348
DET1	15q26.1	0.113517812	0.010998397	0.021299103
NPAT	11q22.3	0.113515566	0.01099999	0.021300145
SV2C	5q13.3	0.113498842	0.011011866	0.021321094
CLPSL1	6p21.31	0.113482052	0.011023798	0.021342149
NUP62CL	Xq22.3	-0.113468807	0.01103322	0.02135834
TNNT2	1q32.1	-0.113458624	0.011040468	0.021370322
CFAP410	21q22.3	0.113417754	0.011069602	0.021424659
SPAG6	10p12.2	0.113411937	0.011073754	0.021430641
CARD19	9q22.31	-0.11337548	0.011099808	0.021479002
ZMYM6	1p34.3	0.113366319	0.011106364	0.021489626
NPHS1	19q13.12	0.113337124	0.011127278	0.0215269
CENPJ	13q12.12-q12.13	-0.113336451	0.011127761	0.0215269
RAET1K	6q25.1	0.113309778	0.01111469	0.021561857
HDAC5	17q21.31	0.113267075	0.011177601	0.021619171
PNLIPRP3	10q25.3	0.113265038	0.011179068	0.021619936
LUZP4	Xq23	0.113253572	0.011187326	0.021633833
LBX2	2p13.1	0.113250089	0.011189834	0.02163661
SAXO2	15q25.2	0.113239047	0.011197793	0.021649925
MS4A10	11q12.2	0.113230017	0.011204306	0.021660441

UHRF1	19p13.3	-0.113219648	0.011211787	0.021672271
CA4	17q23.1	-0.113218398	0.01121269	0.021672271
RPS14	5q33.1	-0.113217072	0.011213647	0.021672271
PYGM	11q13.1	0.113172606	0.011245788	0.021732307
SEC61G	7p11.2	-0.113168786	0.011248552	0.021735568
NPLOC4	17q25.3	-0.113151705	0.011260923	0.021757389
TMEM250	9q34.3	-0.113141303	0.011268462	0.021769871
MTA2	11q12.3	-0.113117924	0.011285424	0.021800552
TRPM7	15q21.2	-0.113111625	0.011289997	0.02180722
BRICD5	16p13.3	-0.113110194	0.011291037	0.02180722
CERS2	1q21.3	-0.113080803	0.011312402	0.021846392
NAAA	4q21.1	0.113077653	0.011314693	0.021848244
P4HTM	3p21.31 3p21.3	-0.113076508	0.011315526	0.021848244
S1PR5	19p13.2	-0.113067061	0.011322403	0.02185943
ASCL2	11p15.5	-0.113055324	0.011330951	0.021873763
CHMP6	17q25.3	-0.113053892	0.011331994	0.021873763
ZNF93	19p12	0.113045399	0.011338184	0.021883617
ZNF121	19p13.2	-0.113018871	0.011357538	0.021918875
ZNHIT6	1p22.3	0.11300761	0.011365761	0.021932648
OR2T8	1q44	0.113004776	0.011367832	0.021934546
NIBAN2	9q34.11	-0.112973638	0.011390604	0.021976383
CD48	1q23.3	0.112964477	0.011397311	0.021987222
RIBC1	Xp11.22	-0.112904173	0.011441551	0.022070384
MFAP3L	4q33	0.112902736	0.011442606	0.022070384
TTC25	17q21.2	0.112882986	0.01145713	0.022096284
MKS1	17q22	-0.112867715	0.01146837	0.022115849
NOSTRIN	2q24.3	0.112865046	0.011470336	0.022117526
STXBP4	17q22	-0.112854167	0.011478351	0.022130865
LFNG	7p22.3	0.112831834	0.011494819	0.022160012
WDR6	3p21.31	0.112830689	0.011495664	0.022160012
DPY19L2P4	7q21.13	0.112811117	0.011510115	0.022185749
OR52A4P	11p15.4	0.112808335	0.011512171	0.022187592
SCRG1	4q34.1	0.112804088	0.011515309	0.022191521
LPAR5	12p13.31	-0.112781258	0.011532193	0.022220735
TMEM114	16p13.2	0.112780613	0.01153267	0.022220735
POLR3G	5q14.3	-0.112778491	0.011534241	0.022221638
CSF3	17q21.1	0.112760867	0.011547291	0.022244657
TRIP13	5p15.33	-0.11275139	0.011554314	0.022256062
NTN1	17p13.1	0.112723907	0.011574702	0.022293206
LHX9	1q31.3	0.112704173	0.011589361	0.022317754
TMEM189	20q13.13	-0.112703772	0.01158966	0.022317754
KLHDC10	7q32.2	0.112695279	0.011595974	0.022327782
SULT1A3	16p11.2	-0.112642222	0.011635488	0.022401729
PXMP2	12q24.33	-0.112628671	0.011645599	0.022419056
CFAP65	2q35	0.112573533	0.011686821	0.022496267
MTUS1	8p22	-0.112565403	0.01169291	0.022505841
PDIA6	2p25.1	0.112563495	0.01169434	0.022506446
PIGM	1q23.2	-0.112556433	0.011699632	0.022514483
DSCR9	21q22.13	-0.112545632	0.01170773	0.022527918
PRDX5	11q13.1	-0.112529523	0.011719817	0.022549026
NRAP	10q25.3	0.11252103	0.011726193	0.022559144
MYO9A	15q23	0.112505284	0.011738024	0.02257975
CD109	6q13	0.112501753	0.011740678	0.022582704
ZNF493	19p12	0.112497176	0.01174412	0.022587172
PIK3CD-AS1	1p36.22	0.11244834	0.011780897	0.022655743
ITIH4	3p21.1	0.112445356	0.011783147	0.022657912
NDUFS6	5p15.33	-0.112430756	0.011794164	0.022676935
UBE2C	20q13.12	-0.11242045	0.011801946	0.022689736

SPATA24	5q31.2	-0.112391154	0.011824092	0.022730146
PPIL3	2q33.1	-0.112380275	0.011832324	0.022743806
C7ORF25	7p14.1	-0.112372832	0.01183796	0.022752472
TMEM127	2q11.2	0.112369397	0.011840562	0.022755305
EHMT1	9q34.3	-0.112358995	0.011848444	0.022768283
FOXO3	6q21	0.112348975	0.01185604	0.022780712
GPATCH2L	14q24.3	0.112334089	0.011867334	0.022800242
TSR1	17p13.3	-0.112330653	0.011869942	0.022803081
CORO6	17q11.2	-0.112304029	0.011890169	0.022839764
CNKSR3	6q25.2	-0.112266908	0.011918421	0.022891854
TMSB15A	Xq22.1	0.112260398	0.011923382	0.022899203
SERPINI1	3q26.1	-0.11225603	0.011926712	0.022903419
F3	1p21.3	0.112245437	0.01193479	0.02291675
GLO1	6p21.2	-0.11223599	0.011941998	0.022928409
DBT	1p21.2	-0.112227879	0.01194819	0.022938115
KDM3A	2p11.2	-0.112216905	0.011956572	0.022952024
CLEC9A	12p13.2	0.112203583	0.011966754	0.022969384
DDX12P	12p13.31	-0.112141995	0.012013928	0.023057738
SLC2A7	1p36.23	-0.11214004	0.012015428	0.023058423
FAM216B	13q14.11	0.112138272	0.012016785	0.023058835
UPF1	19p13.11	-0.112108596	0.012039579	0.023100377
MFSD8	4q28.2	-0.112090369	0.012053598	0.023125076
UBE2Q2P2	15q25.2	-0.112080415	0.012061259	0.023137575
ITPA	20p13	-0.112067467	0.012071233	0.023154506
C6	5p13.1	0.112061143	0.012076106	0.023161652
GRAMD2A	15q23	0.112058592	0.012078073	0.023163223
CIPC	14q24.3	-0.112055157	0.012080721	0.0231661
IFT57	3q13.12-q13.13	0.112038457	0.012093604	0.02318795
TYW1	7q11.21	-0.112037407	0.012094414	0.02318795
RUFY2	10q21.3	0.112009256	0.012116159	0.023227433
HCCAT5	16q22.3	0.11193756	0.012171695	0.023331685
PLK5	19p13.3	-0.111919754	0.012185523	0.023355186
MEX3A	1q22	0.111918792	0.012186271	0.023355186
PVRIG	7q22.1	0.111913639	0.012190275	0.023360642
ENKD1	16q22.1	0.111899516	0.012201256	0.023379466
ST7L	1p13.2	-0.111877141	0.012218672	0.023410613
MRPS30	5p12	-0.111860677	0.0122315	0.023432967
SLCO4A1	20q13.33	0.111847222	0.012241993	0.023450843
SLCO1B3	12p12.2	-0.111829216	0.012256047	0.023475536
FPGS	9q34.11	-0.111811341	0.012270013	0.023500056
TMEM259	19p13.3	-0.111806188	0.012274042	0.023505541
PABPN1	14q11.2	-0.111794356	0.012283297	0.023521034
CASP5	11q22.3	0.1117907	0.012286158	0.02352428
CDC40	6q21	-0.111782713	0.01229241	0.023534017
MOB1A	2p13.1	-0.111770594	0.012301902	0.023549956
ARID3B	15q24.1	-0.111761815	0.012308783	0.023560892
EEF1A2	20q13.33	0.1117601	0.012310127	0.02356123
HSPB9	17q21.2	-0.111744061	0.012322707	0.023583071
GDF7	2p24.1	0.111693215	0.012362662	0.023657293
MAPK8IP1P2	17q21.31	0.111670282	0.01238072	0.023689602
EIF2B1	12q24.31	-0.111651788	0.0123953	0.023715251
PTPRS	19p13.3	-0.111630126	0.012412396	0.023745709
MAST4	5q12.3	0.111620106	0.012420311	0.023758599
SHC4	15q21.1	0.111597204	0.01243842	0.023790983
JRKL	11q21	0.111573729	0.012457005	0.023824273
CASC3	17q21.1	-0.111546723	0.012478416	0.02386296
SLC25A29	14q32.2	-0.111539712	0.01248398	0.023871338
EID1	15q21.1	-0.111529451	0.012492127	0.023884653

SNORD94	2p11.2	-0.11151756	0.012501574	0.023900451
OR51T1	11p15.4	-0.111511975	0.012506013	0.023906673
B4GALT5	20q13.13	0.111500441	0.012515185	0.02392194
JPH1	8q21.11	-0.111495384	0.012519209	0.023927365
PPIL1	6p21.2	-0.111468762	0.012540408	0.023965611
DSG1	18q12.1	-0.111453055	0.012552931	0.023987272
HR	8p21.3	-0.111426009	0.01257452	0.02402625
ATP13A3	3q29	-0.111416657	0.012581992	0.024038252
ZBTB49	4p16.3	0.111414176	0.012583975	0.024039765
SLC25A12	2q31.1	-0.111399384	0.012595803	0.024060083
UBLCP1	5q33.3	-0.111396235	0.012598323	0.024062618
GLB1L3	11q25	0.11139007	0.012603257	0.024069764
TOGARAM1	14q21.2	0.111386406	0.01260619	0.024073086
PWWP3A	19p13.3	0.111381253	0.012610316	0.024078687
SH3BGR	21q22.2	0.111359976	0.012627366	0.024108961
CCNC	6q16.2	-0.111355965	0.012630582	0.02411282
KBTBD3	11q22.3	-0.111322566	0.012657392	0.024161717
P2RY4	Xq13.1	0.111296791	0.012678116	0.024198988
PIGQ	16p13.3	0.111294511	0.012679951	0.024200036
PRAP1	10q26.3	-0.111293128	0.012681064	0.024200036
CFL1	11q13.1	0.11128869	0.012684636	0.024204565
CXXC1	18q21.1	-0.111245461	0.012719477	0.024268752
TPPP	5p15.33	-0.111204523	0.012752549	0.024329554
LSS	21q22.3	-0.111187442	0.012766371	0.024353621
CNOT10	3p22.3	-0.111159386	0.012789102	0.024394677
GABRR1	6q15	-0.111143933	0.012801638	0.024416281
TTLL5	14q24.3	0.111128564	0.012814116	0.02443777
TMEM53	1p34.1	0.111126464	0.012815821	0.024438712
AADACL3	1p36.21	0.111118499	0.012822293	0.024448743
KRT77	12q13.13	-0.111117006	0.012823506	0.024448747
DIPK1B	9q34.3	-0.111076461	0.012856497	0.02450933
OR1Q1	9q33.2	0.111066639	0.012864501	0.024522271
CD58	1p13.1	-0.111058807	0.012870886	0.024532124
MAP1LC3B	16q24.2	0.111049169	0.012878747	0.024544789
OR56A3	11p15.4	0.110998701	0.012919979	0.024619336
GLI2	2q14.2	-0.110998306	0.012920302	0.024619336
GRIP1	12q14.3	0.110994298	0.012923581	0.02462326
NDUFS1	2q33.3	-0.110983897	0.012932096	0.024635873
RRAD	16q22.1	0.110983229	0.012932643	0.024635873
FOXB2	9q21.2	-0.110975071	0.012939325	0.024646274
POLR2C	16q21	-0.110913952	0.012989481	0.024739476
UNC13B	9p13.3	-0.110900589	0.01300047	0.024756428
XIST	Xq13.2	0.110900144	0.013000836	0.024756428
PCOLCE2	3q23	0.110861846	0.013032376	0.024813209
CALCB	11p15.2	-0.110859912	0.013033971	0.024813209
HNRNPH3	10q21.3	0.11085946	0.013034343	0.024813209
CHD2	15q26.1	0.110817284	0.01306916	0.024877142
MPIG6B	6p21.33	-0.110812463	0.013073145	0.02488238
SEMA4A	1q22	-0.110750865	0.013124156	0.024977115
CNTFR-AS1	9p13.3	-0.11072362	0.013146774	0.0250178
HIST1H2BK	6p22.1	-0.110718324	0.013151174	0.025021656
DGKI	7q33	0.110718197	0.01315128	0.025021656
PLEKHA5	12p12.3	-0.110702006	0.013164742	0.025044906
MRGBP	20q13.33	-0.11067376	0.013188256	0.025087275
GRINA	8q24.3	0.110671184	0.013190402	0.025088993
ELK4	1q32.1	-0.110660209	0.013199549	0.025104025
SERBP1	1p31.3	0.110657347	0.013201936	0.025106198
PCDHB5	5q31.3	0.110652957	0.013205597	0.025110794

SMPD3	16q22.1	0.110612878	0.013239064	0.025172059
KLK7	19q13.41	0.110608122	0.01324304	0.025177247
STK3	8q22.2	0.11058215	0.013264772	0.025216188
CYP1A2	15q24.1	0.110565501	0.01327872	0.025238029
TIPRL	1q24.2	-0.110565451	0.013278763	0.025238029
TFF3	21q22.3	-0.110532112	0.013306731	0.025288805
UST	6q25.1	-0.11050724	0.013327631	0.025326138
CCDC63	12q24.11	0.110465704	0.013362598	0.025390194
ZBTB45	19q13.43	0.110464203	0.013363863	0.025390207
LINC01777	1p36.32	0.110461761	0.013365921	0.025391727
ARAP2	4p14	0.110448839	0.013376818	0.025410037
TMEM143	19q13.33	-0.110434433	0.013388977	0.025430739
GAR1	4q25	-0.110422979	0.01339865	0.025444449
CDH7	18q22.1	0.110422146	0.013399354	0.025444449
WDR48	3p22.2	0.110421407	0.013399978	0.025444449
CDC27	17q21.32	-0.110402462	0.013415993	0.025472462
DHRXS	Xp22.33 and Yp11	0.110397977	0.013419787	0.025477268
ZNF33B	10q11.21	0.110356371	0.013455026	0.025541766
FNDC7	1p13.3	0.110351382	0.013459257	0.025547394
GNG8	19q13.32	0.110339732	0.013469142	0.025563752
ZSWIM3	20q13.12	0.110315147	0.013490022	0.025600974
GRIA2	4q32.1	0.110310946	0.013493593	0.025602427
RWDD2B	21q21.3	-0.110309135	0.013495133	0.025602427
GBX1	7q36.1	0.110308452	0.013495713	0.025602427
POLE4	2p12	-0.110308276	0.013495863	0.025602427
SGTB	5q12.3	0.11027335	0.013525586	0.025656402
LRRTM1	2p12	-0.1102485	0.01354677	0.025694169
TMEM151A	11q13.2	0.110163071	0.013619817	0.025830291
FCF1	14q24.3	0.110158742	0.013623528	0.025834899
MAGI3	1p13.2	0.110149486	0.013631465	0.025847523
RNF181	2p11.2	-0.110134408	0.013644403	0.025869624
UCP3	11q13.4	0.11010893	0.013666291	0.025908689
PLP1	Xq22.2	0.110102859	0.013671511	0.02591615
KIF4B	5q33.2	-0.110092185	0.013680693	0.025931119
F8A1	Xq28	-0.110081256	0.013690099	0.025946512
IL17RC	3p25.3 3p25.3-p24	0.110067133	0.013702264	0.025967129
NOL4	18q12.1	0.110052229	0.013715111	0.025989034
GCHFR	15q15.1	-0.110037646	0.013727692	0.026010432
UGT2A1	4q13.3	-0.110033916	0.013730912	0.026014089
TP53I3	2p23.3	0.110012739	0.013749203	0.026044005
ACTR3B	7q36.1-q36.2	-0.110012647	0.013749283	0.026044005
XPNPEP1	10q25.1	0.109993654	0.013765706	0.026072667
EDF1	9q34.3	-0.109981535	0.013776195	0.026090084
C10RF140	1q41	0.109977481	0.013779705	0.026094282
FOXI3	2p11.2	0.109973187	0.013783424	0.026098876
HUWE1	Xp11.22	0.109969225	0.013786856	0.026102925
CCL25	19p13.2	0.109949602	0.013803865	0.026132676
PUS3	11q24.2	-0.109908247	0.013839773	0.026198197
C16ORF82	16p12.1	0.10990618	0.01384157	0.02619914
TERF2IP	16q23.1	0.109896319	0.013850145	0.026212913
GPRIN1	5q35.2	0.10989441	0.013851805	0.026213597
PEX19	1q23.2	-0.109889257	0.013856289	0.026219622
SLC12A1	15q21.1	0.109861236	0.013880692	0.026263336
INSIG1	7q36.3	-0.109838872	0.013900194	0.026297771
KRTCAP2	1q22	-0.109820836	0.01391594	0.026325092
ATF7IP	12p13.1	0.109800797	0.013933454	0.026355753
C9ORF163	9q34.3	-0.109798297	0.01393564	0.026357417
RASA2	3q23	0.109788442	0.013944262	0.026371252

RNF122	8p12	0.109755374	0.013973224	0.026423549
PROSER3	19q13.12	0.10974774	0.013979918	0.026432835
RHOB	2p24.1	0.109746785	0.013980755	0.026432835
IGFLR1	19q13.12	0.109736861	0.013989461	0.026446818
FKTN	9q31.2	-0.10968409	0.014035837	0.026532006
CRYBB2	22q11.23	-0.109666819	0.014051045	0.026558265
RTP5	2q37.3	0.109657389	0.014059354	0.026571481
KLF15	3q21.3	-0.109652695	0.014063492	0.026576813
CDRT1	17p12	-0.109638283	0.014076203	0.026598343
FBXO11	2p16.3	-0.109634182	0.014079822	0.02660269
PPP3R1	2p14	-0.109628933	0.014084455	0.026608951
CCNK	14q32.2	-0.109588854	0.014119875	0.026673371
RSBN1	1p13.2	0.109576735	0.014130601	0.026691134
ZNF181	19q13.11	-0.109568292	0.014138077	0.026702757
GABRB1	4p12	0.109562254	0.014143426	0.02671036
IQCA1	2q37.2-q37.3	0.109548393	0.014155712	0.02673106
NRBP2	8q24.3	0.109537419	0.014165446	0.026744595
PARP14	3q21.1	0.109537324	0.01416553	0.026744595
NME1-NME2	17q21.33	-0.109534366	0.014168155	0.026747049
PDCD2	6q27	-0.109529499	0.014172474	0.0267527
PNMA3	Xq28	0.109521578	0.014179506	0.02676347
SOX5	12p12.1	-0.109507768	0.014191775	0.026784122
PLEKHG1	6q25.1	0.109494954	0.014203166	0.026803114
VN1R2	19q13.42	0.109471383	0.014224143	0.026840189
LINC02731	11q25	0.109467906	0.014227239	0.026843521
C16ORF70	16q22.1	-0.109463941	0.014230771	0.026847675
ZNF32	10q11.21	-0.109453348	0.01424021	0.026862971
GPR17	2q14.3	0.109440405	0.014251752	0.02688223
MYCBP	1p34.3	-0.109434072	0.014257401	0.026890373
ZNF404	19q13.31	0.109346807	0.014335456	0.027035062
TMEM31	Xq22.2	0.109335507	0.01434559	0.027051646
NUDT3	6p21.31	-0.10930496	0.014373019	0.027100837
CDC47L	7p15.3	-0.109292077	0.014384601	0.02712014
HPF1	4q33	-0.109284684	0.014391251	0.027130142
PCCA	13q32.3	0.109263067	0.01441071	0.027164289
ZBED2	3q13.13	0.109239497	0.014431955	0.027201795
A4GNT	3q22.3	0.109229664	0.014440826	0.027214156
CDH10	5p14.2-p14.1	0.109229238	0.01444121	0.027214156
CNTN1	12q12	-0.109227525	0.014442756	0.027214527
PPRC1	10q24.32	0.109202853	0.014465037	0.027253967
PTPN3	9q31.3	-0.109192165	0.014474699	0.027267404
ABRAXAS1	4q21.23	-0.109191975	0.014474872	0.027267404
SNORA14B	1q42.3	-0.109190331	0.014476358	0.027267659
CAMK1	3p25.3	0.109184054	0.014482035	0.027275807
ZNF223	19q13.31	0.109097598	0.014560435	0.027420429
ZKSCAN4	6p22.1	0.109096264	0.014561647	0.027420429
XIAP	Xq25	0.10909483	0.014562951	0.027420429
MAB21L1	13q13.3	0.109093392	0.014564258	0.027420429
MIA3	1q41	0.10908128	0.014575274	0.027436377
KANSL3	2q11.2	-0.109081089	0.014575448	0.027436377
CCDC84	11q23.3	-0.109071787	0.014583912	0.02744975
LMBRD2	5p13.2	0.109064583	0.014590472	0.027459534
LIN52	14q24.3	-0.109060286	0.014594385	0.027462735
RBM46	4q32.1	0.109059726	0.014594894	0.027462735
TOR2A	9q34.11	-0.109030799	0.014621264	0.027509789
BMP6	6p24.3	0.109026791	0.014624921	0.027514104
LINC00523	14q32.2	0.10901724	0.014633639	0.027527938
ACACA	17q12	-0.109012668	0.014637813	0.027533225

RAB3D	19p13.2	-0.108944724	0.014699976	0.027647573
PNN	14q21.1	-0.108913997	0.014728165	0.027697899
TP53TG1	7q21.12	-0.108912565	0.014729479	0.027697899
VMAC	19p13.3	-0.108905313	0.01473614	0.027707842
AFF2	Xq28	-0.108901687	0.014739471	0.027711524
ZNF764	16p11.2	-0.108880216	0.01475921	0.027746049
LOC645752	15q24.3	0.10885737	0.014780238	0.027782992
ELOA	1p36.11	0.108854737	0.014782663	0.027784963
UBE2D4	7p13	-0.108851588	0.014785564	0.027787827
PSPC1	13q12.11	-0.108803493	0.014829933	0.027868617
DDX42	17q23.3	-0.108799676	0.014833459	0.027872648
EXO5	1p34.2	0.108772577	0.014858515	0.027917129
MED28	4p15.32	-0.108751199	0.014878307	0.027951714
TUBB8	10p15.3	-0.108740084	0.014888607	0.02796846
AAR2	20q11.23	0.108737171	0.014891307	0.027970929
RTL9	Xq23	0.108732801	0.014895359	0.027973394
PGLYRP3	1q21.3	-0.108732765	0.014895392	0.027973394
ARHGAP39	8q24.3	0.108722571	0.014904848	0.027988548
GET4	7p22.3	-0.108687549	0.014937374	0.028047014
PSMB9	6p21.32	0.108648329	0.014973872	0.02811293
LYRM2	6q15	-0.10862514	0.014995489	0.028150895
ACAT1	11q22.3	-0.108609013	0.015010538	0.028176526
SRRM3	7q11.23	-0.108581244	0.015036484	0.028222603
ADHFE1	8q13.1	-0.108570652	0.015046391	0.028238571
EML5	14q31.3	0.108558106	0.015058132	0.028257979
DDX41	5q35.3	0.108549276	0.0150664	0.028270866
LETM1	4p16.3	-0.108547272	0.015068278	0.028271759
MED6	14q24.2	-0.108538397	0.015076593	0.028284111
ZNF606	19q13.43	0.108537255	0.015077664	0.028284111
PCDHGA1	5q31.3	0.108530861	0.015083657	0.028292724
GFRA3	5q31.2	0.108493748	0.01511849	0.028355424
KRCC1	2p11.2	-0.108467686	0.015142992	0.02839874
TTY5	Yq11.223	-0.108452398	0.015157382	0.028423085
SPIB	19q13.33	0.108442589	0.015166621	0.028437767
NT5C3A	7p14.3	-0.108436768	0.015172106	0.028445408
NOVA1	14q12	-0.108430592	0.015177928	0.028453679
ST7-OT3	7q31.2	0.10842434	0.015183822	0.028462085
CNKSR1	1p36.11	0.108410621	0.015196765	0.028483701
TECPR2	14q32.31	0.108404037	0.01520298	0.028492704
FAM66C	12p13.31	0.108375981	0.015229488	0.028539732
MCOLN1	19p13.2	0.108369113	0.015235983	0.028549253
VLDLR-AS1	9p24.2	-0.108357115	0.015247336	0.028567873
ZNF322	6p22.2	-0.108318916	0.01528353	0.028633029
KRT73	12q13.13	0.108305233	0.015296513	0.028654692
TMEM86B	19q13.42	0.108302693	0.015298924	0.028656548
CCNI2	5q31.1	0.108279531	0.015320927	0.028695098
CTNBL1	20q11.23	0.10826834	0.015331568	0.028712362
PAQR4	16p13.3	0.108243911	0.015354818	0.02875278
CDC42BPA	1q42.13	0.10824267	0.015356	0.02875278
TLCD4	1p21.3	-0.108226066	0.015371821	0.028779735
NELFB	9q34.3	-0.108224539	0.015373277	0.02877979
KIDINS220	2p25.1	0.108205835	0.015391118	0.028810516
CEP68	2p14	-0.108199728	0.015396947	0.028818755
PRPF6	20q13.33	0.108193334	0.015403052	0.028827508
CBFB	16q22.1	0.108175967	0.015419646	0.028855888
LUZP6	7q33	-0.108173772	0.015421744	0.028857138
ARMC5	16p11.2	-0.108171673	0.015423751	0.028858218
SEC11A	15q25.2-q25.3	-0.108159649	0.015435251	0.028877057

LCT	2q21.3	-0.108149818	0.015444659	0.028891979
ZDHHC14	6q25.3	0.108126917	0.015466595	0.028930332
BCAS3	17q23.2	-0.108121001	0.015472267	0.028936774
PFDN5	12q13.13	-0.108120333	0.015472907	0.028936774
CKAP2	13q14.3	-0.108114798	0.015478215	0.028944018
BBIP1	10q25.2	0.108109932	0.015482883	0.028950065
SLC6A14	Xq23	0.108107164	0.015485538	0.028952346
TSPYL2	Xp11.22	0.108101534	0.015490941	0.028959765
SIAE	11q24.2	0.10809285	0.015499278	0.028972666
PRORS1P	2p16.1	-0.108058497	0.015532296	0.029030149
SPATA31C1	9q22.1	0.108057862	0.015532906	0.029030149
PRSS3P2	7q34	0.108027557	0.015562086	0.02908199
LRRD1	7q21.2	0.10801756	0.015571723	0.029097304
APEX1	14q11.2	-0.107997805	0.015590779	0.02912787
TM4SF5	17p13.2	0.107997611	0.015590967	0.02912787
RSF1	11q14.1	0.107992748	0.015595662	0.029133944
HPX	11p15.4	0.107976413	0.015611439	0.029160718
WDR73	15q25.2	-0.10797204	0.015615666	0.029165912
CLEC18A	16q22.1	0.107964886	0.015622582	0.029175323
PCK1	20q13.31	0.107963837	0.015623596	0.029175323
NUPR1	16p11.2	0.107952859	0.015634215	0.029192451
JUNB	19p13.13	0.107922227	0.015663878	0.029245132
LRFN1	19q13.2	-0.107910585	0.015675165	0.029263498
PANK1	10q23.31	0.10790505	0.015680533	0.029270812
JMJD6	17q25.1	-0.10788711	0.015697945	0.029300604
TMEM211	22q11.23	-0.107863625	0.015720764	0.029339464
RBM11	21q11.2	-0.107862691	0.015721672	0.029339464
LIPH	3q27.2	-0.107852184	0.015731891	0.02935582
LLGL2	17q25.1	-0.10784913	0.015734862	0.029358649
SCAPER	15q24.3	0.107839397	0.015744336	0.029373609
SHLD2	10q23.2	0.107797027	0.015785632	0.02944793
PYGL	14q22.1	0.10777737	0.015804824	0.029481007
POM121L2	6p22.1	0.107750215	0.015831368	0.029527792
LOC100132287	1p36.33	-0.10774168	0.01583972	0.029540638
SLC1A2	11p13	0.107738629	0.015842706	0.029543477
PROZ	13q34	-0.107716251	0.015864625	0.029581617
NUBPL	14q12	0.107714674	0.01586617	0.029581765
TNS4	17q21.2	0.107666675	0.015913278	0.029666854
PAPSS1	4q25	0.107660376	0.015919468	0.029675653
TTC12	11q23.2	-0.107657991	0.015921813	0.029677283
GOLPH3	5p13.3	0.107641387	0.015938145	0.029704981
XPO6	16p12.1	-0.107638237	0.015941244	0.029706154
ALG1L2	3q22.1	0.107637755	0.015941719	0.029706154
FSTL4	5q31.1	-0.107635852	0.015943592	0.029706902
GPR52	1q25.1	-0.107618972	0.015960216	0.02973513
AKR1B15	7q33	-0.10761533	0.015963804	0.029739069
TRAPPC8	18q12.1	-0.10760083	0.015978098	0.02976067
TRIM29	11q23.3	-0.107598826	0.015980075	0.02976067
MYH15	3q13.13	0.107598031	0.015980859	0.02976067
LTK	15q15.1	0.107597586	0.015981298	0.02976067
ZMAT5	22q12.2	-0.107586039	0.015992691	0.029779137
PPP1R14B	11q13.1	-0.107568194	0.016010312	0.029809198
PTGES2-AS1	9q34.11	-0.107566544	0.016011942	0.029809483
IMMP2L	7q31.1	-0.107553597	0.01602474	0.029830556
HOMER2	15q25.2	0.107506453	0.016071411	0.029914676
SLC2A1	1p34.2	-0.107504068	0.016073776	0.029916319
IL6R	1q21.3	0.107471145	0.016106443	0.029974354
ING2	4q35.1	-0.107469237	0.016108339	0.029975117

EGLN3	14q13.1	0.107449865	0.01612759	0.030008173
SMCO1	3q29	-0.107419032	0.016158272	0.030062491
SERTAD2	2p14	0.107386025	0.016191175	0.030120929
FAM241B	10q22.1	-0.107377677	0.016199505	0.030133648
PHF21B	22q13.31	0.107365331	0.016211833	0.0301538
CNDP1	18q22.3	0.107352298	0.016224856	0.030175241
POLK	5q13.3	0.107336167	0.016240986	0.030202457
INMT	7p14.3	0.107327242	0.016249917	0.03021628
DVL1	1p36.33	0.107315504	0.016261669	0.030235346
CDS2	20p12.3	-0.107289453	0.016287778	0.030281102
RBP4	10q23.33	0.107265424	0.016311893	0.030323141
TNNT1	19q13.42	0.107248525	0.016328871	0.030349665
ASAH1	8p22	0.107248229	0.016329169	0.030349665
YY1AP1	1q22	-0.107242598	0.01633483	0.030357389
SAFB2	19p13.3	-0.107230479	0.016347019	0.030377245
ARPP19	15q21.2	-0.107210631	0.016367	0.030411574
ABCC3	17q21.33	-0.107208913	0.01636873	0.030411989
GAS2L1	22q12.2	-0.107168929	0.016409049	0.030483254
SEC13	3p25.3	0.107167879	0.016410109	0.030483254
OXA1L	14q11.2	-0.107165112	0.016412903	0.030485638
INTS6L	Xq26.3	0.107148701	0.01642948	0.03051362
UNC5CL	6p21.1	0.107141446	0.016436813	0.03052443
UROS	10q26.2	-0.107129232	0.016449166	0.030544558
RAB5C	17q21.2	-0.107094973	0.016483854	0.030606156
OR6V1	7q34	0.107080406	0.016498624	0.03063076
STK35	20p13	0.107029224	0.016550609	0.030724447
UBE2G1	17p13.2	-0.107010712	0.016569448	0.03075659
ATP6V0A2	12q24.31	-0.106993821	0.016586652	0.030785693
ADAMTS8	11q24.3	0.106976066	0.016604754	0.030816457
CYSTM1	5q31.3	-0.106970823	0.016610102	0.030823547
TMC3	15q25.1	0.106913847	0.016668323	0.030928745
RFX1	19p13.12	0.106907746	0.016674568	0.030937488
CAPN14	2p23.1	-0.106906227	0.016676124	0.030937529
AKR1A1	1p34.1	-0.10688513	0.016697736	0.030974288
STAM2	2q23.3	0.10688389	0.016699008	0.030974288
SELENOF	1p22.3	0.106878882	0.016704141	0.030980962
APOA5	11q23.3	-0.106872953	0.016710222	0.030989392
CAMLG	5q31.1	-0.106861464	0.016722009	0.031008401
VAMP1	12p13.31	0.106857552	0.016726025	0.031012998
VSX2	14q24.3	0.106854876	0.016728772	0.031015241
HTR5A	7q36.2	0.106829747	0.016754589	0.031060253
API5	11p12	-0.106818618	0.016766034	0.031078614
CHMP2A	19q13.43	-0.106813846	0.016770942	0.031079694
MGAT5	2q21.2-q21.3	0.106813563	0.016771234	0.031079694
CMPK1	1p33	0.10681356	0.016771237	0.031079694
FGL1	8p22	0.106811849	0.016772997	0.031080102
MAGEC3	Xq27.2	0.106806455	0.016778549	0.031087534
PPIL2	22q11.21	-0.106795811	0.016789509	0.031104985
APOBEC3H	22q13.1	0.10679343	0.016791961	0.031106672
ZNF628	19q13.42	0.106789608	0.016795898	0.031111111
SLC10A2	13q33.1	0.106779913	0.016805889	0.031126759
CNBD1	8q21.3	0.106772671	0.016813356	0.03113773
KRTAP10-2	21q22.3	0.106766672	0.016819544	0.031146331
E2F7	12q21.2	-0.106756304	0.016830241	0.031163281
RAB13	1q21.3	0.10675096	0.016835758	0.031170635
HM13	20q11.21	0.106722428	0.016865238	0.031220035
PLS1	3q23	-0.106722141	0.016865534	0.031220035
ATP2A2	12q24.11	-0.106713648	0.016874318	0.03123343

COPZ1	12q13.13	-0.10670964	0.016878464	0.03123824
TEX15	8p12	-0.106707343	0.016880842	0.031239775
GTF3C4	9q34.13	-0.10669733	0.016891206	0.031256088
YWHAB	20q13.12	0.106694754	0.016893874	0.031258159
RRN3P3	16p12.2	0.106667655	0.016921956	0.031307247
LRRC40	1p31.1	0.106616313	0.016975273	0.03140301
EEF1AKMT1	13q12.11	0.106610924	0.016980878	0.031410499
RNPEPL1	2q37.3	0.106595701	0.016996719	0.03143692
PIGC	1q24.3	-0.106579192	0.017013913	0.031465838
PLGLB2	2p11.2	0.106569363	0.017024158	0.031481899
LINC00999	10p11.1	0.106532338	0.017062796	0.031550459
SPDYE3	7q22.1	-0.10647804	0.017119597	0.031652589
CNEP1R1	16q12.1	0.106447411	0.017151712	0.03170906
ODF3B	22q13.33	0.106445595	0.017153617	0.031709678
IGSF9B	11q25	0.106439374	0.017160147	0.031718842
ADH4	4q23	-0.10643004	0.017169948	0.031734053
ECH1	19q13.2	-0.106407042	0.017194118	0.031775128
DCAF15	19p13.12	-0.106405897	0.017195322	0.031775128
AOX2P	2q33.1	0.106402597	0.017198793	0.031778633
MXRA7	17q25.1	-0.106354844	0.017249087	0.031868644
PCDHB10	5q31.3	0.106345969	0.017258448	0.031882837
RSPH1	21q22.3	0.106344566	0.017259929	0.031882837
PFKFB2	1q32.1	0.106312188	0.017294121	0.031943073
B3GALNT2	1q42.3	-0.106307703	0.017298863	0.031948906
KRT17	17q21.2	0.106193191	0.017420298	0.032170238
GALR3	22q13.1	-0.106178916	0.017435488	0.032195344
GZF1	20p11.21	0.106172961	0.017441829	0.032204105
DMRT1	9p24.3	-0.10614161	0.017475241	0.032262844
PSMA1	11p15.2	-0.106136031	0.017481193	0.03227088
TMEM81	1q32.1	0.106105163	0.017514154	0.032328771
AK7	14q32.2	-0.106099055	0.017520682	0.032337862
TXLNG	Xp22.2	-0.106058735	0.017563834	0.032414542
CREB3L4	1q21.3	-0.106052628	0.017570378	0.032423654
MCM5	22q12.3	-0.106043753	0.017579891	0.032438243
GHRH	20q11.23	-0.106032429	0.017592037	0.032457686
NOMO1	16p13.11	0.106030203	0.017594426	0.032459125
GTF2A1	14q31.1	0.106010163	0.017615939	0.032495844
TOP3B	22q11.22	-0.105961114	0.017668694	0.032590181
ST18	8q11.23	0.105953161	0.01767726	0.032603
RTCA	1p21.2	0.105947181	0.017683704	0.032611905
BTG1	12q21.33	-0.105901377	0.01773313	0.032700067
TMC4	19q13.42	-0.105883913	0.017752006	0.032731883
EEF1E1	6p24.3	-0.1058675	0.017769763	0.03276163
SNORA57	11q12.3	-0.105811809	0.017830128	0.03286992
UBE2Q2P1	15q25.2	0.105791636	0.017852039	0.032907307
SCRN2	17q21.32	-0.105755946	0.017890859	0.032975854
SPESP1	15q23	0.105730159	0.017918956	0.033024624
BRWD1	21q22.2	0.105710332	0.017940583	0.033060363
LY6D	8q24.3	0.105709378	0.017941624	0.033060363
CELA1	12q13.13	-0.105701016	0.017950754	0.033074165
KIR3DL1	19q13.42	0.105675697	0.017978419	0.033122114
EDN2	1p34.2	0.105672625	0.017981778	0.033125278
WDR17	4q34.2	0.105670965	0.017983593	0.033125598
ACTR3C	7q36.1	0.105654889	0.018001183	0.033154972
DAXX	6p21.32	0.105643152	0.018014035	0.033175615
OTX2	14q22.3	-0.105631862	0.018026405	0.033195366
CACNG2	22q12.3	-0.105620322	0.018039056	0.033215632
GAL3ST2	2q37.3	-0.105603029	0.01805803	0.033247535

11-Mar	5p15.1	0.10557375	0.018090193	0.033303713
VEGFA	6p21.1	0.105554405	0.01811147	0.033339843
HIST2H2BE	1q21.2	-0.105546771	0.018119873	0.033352268
STK40	1p34.3	0.105542286	0.018124811	0.033358315
OTUD3	1p36.13	0.105538183	0.01812933	0.033363589
INTS12	4q24	-0.105492142	0.018180103	0.033453976
ZNF586	19q13.43	-0.105486652	0.018186165	0.033457776
CXCR2	2q35	0.105485987	0.0181869	0.033457776
SH3BP4	2q37.2	0.10548503	0.018187957	0.033457776
KHDC4	1q22	-0.105484267	0.0181888	0.033457776
GIPR	19q13.32	0.105468386	0.018206349	0.033487004
DCUN1D4	4q12	-0.105464513	0.018210631	0.033491827
NAIF1	9q34.11	-0.105462605	0.018212741	0.033492655
KCNB1	20q13.13	0.105455291	0.018220831	0.033504479
AK3	9p24.1	-0.10540678	0.018274567	0.033600226
BCOR	Xp11.4	0.105394375	0.01828833	0.033622469
STX19	3q11.2	-0.10537935	0.018305012	0.033650072
KRTAP9-2	17q21.2	-0.1053295	0.018360456	0.03374892
INTS4P2	7q11.21	0.105318227	0.018373015	0.033768928
RRP8	11p15.4	-0.105297421	0.018396212	0.033808485
MYO7A	11q13.5	0.105272515	0.018424015	0.033856498
CDC14C	7p12.3	-0.105261737	0.018436058	0.033875544
CMTR2	16q22.2	0.105254097	0.018444598	0.033888149
PRTN3	19p13.3	0.105246085	0.018453559	0.033901527
SLC35B2	6p21.1	0.105244268	0.018455591	0.033902173
SRRD	22q12.1	0.10523568	0.018465201	0.033916739
DENR	12q24.31	-0.105197414	0.018508073	0.033992391
DENND1A	9q33.3	-0.105189589	0.01851685	0.034005417
BCO1	16q23.2	-0.105182327	0.018525	0.034017287
NAA30	14q22.3	-0.105171935	0.018536666	0.034035613
KRT39	17q21.2	0.105162959	0.018546749	0.034051029
OR52N5	11p15.4	0.105154957	0.018555741	0.034064438
UTS2	1p36.23	0.105149022	0.018562413	0.034073587
YLPM1	14q24.3	0.105107808	0.018608803	0.034155633
ZDHHC22	14q24.3	0.105083847	0.01863582	0.034202111
MATN2	8q22.1-q22.2	-0.105082043	0.018637855	0.034202735
RAD18	3p25.3	-0.105070783	0.018650564	0.034222946
KMT5B	11q13.2	0.105045449	0.018679185	0.034272348
EDEM3	1q25.3	0.105016485	0.018711955	0.034329353
ZNRD2	11q13.1	-0.105010855	0.018718331	0.034337928
PCED1A	20p13	0.104978887	0.018754569	0.034401276
UMODL1-AS1	21q22.3	0.104953639	0.018783232	0.034450721
TM9SF1	14q12	0.104947873	0.018789783	0.034459604
ITGB4	17q25.1	0.104945488	0.018792494	0.034461444
SNX2	5q23.2	0.104938998	0.01879987	0.034471837
HDAC2	6q21	-0.104916669	0.018825271	0.034515278
CPLX3	15q24.1	-0.104892916	0.018852325	0.034561739
ZNF562	19p13.2	-0.104881745	0.018865059	0.034581943
PAQR9	3q23	0.104872646	0.018875438	0.034597433
TPTE2P3	13q14.3	0.104871331	0.018876938	0.034597433
YWHAQ	2p25.1	-0.104850252	0.018901002	0.034636643
RTL6	22q13.31	0.104849584	0.018901765	0.034636643
PCDH10	4q28.3	0.104831096	0.018922893	0.03467221
CABP1	12q24.31	0.104829149	0.01892512	0.034673142
AURKAIP1	1p36.33	-0.104794045	0.018965297	0.034743599
PPP1R12A	12q21.2-q21.31	0.104785457	0.018975139	0.034758472
MYEOV	11q13.3	0.104773624	0.018988705	0.034780165
PPP2R5B	11q13.1	0.104749386	0.01901652	0.034827951

ZNF768	16p11.2	-0.10474242	0.019024521	0.034839442
USP36	17q25.3	-0.104738507	0.019029016	0.034844511
PAN3	13q12.2	0.104722666	0.019047224	0.034874688
USO1	4q21.1	0.104713982	0.019057212	0.03488981
SNX16	8q21.13	0.104701959	0.019071049	0.034911976
SMYD1	2p11.2	0.104689469	0.019085432	0.034935135
FOXRED1	11q24.2	-0.104687454	0.019087753	0.034936216
IL20RA	6q23.3	-0.104683255	0.019092591	0.034941901
RAB17	2q37.3	0.104677625	0.019099908	0.034950606
ZNF600	19q13.41	0.104648806	0.019132323	0.035008266
ERLIN2	8p11.23	-0.104643462	0.019138493	0.03501638
MUC6	11p15.5	0.104640323	0.019142118	0.035019837
LOC553137	6q21	0.104618878	0.0191669	0.035061995
FAM83G	17p11.2	-0.104606532	0.019181179	0.035084935
MUSTN1	3p21.1	0.10460157	0.019186921	0.035092257
TSPAN6	Xq22.1	-0.104597371	0.01919178	0.035097964
FLJ12825	12q13.13	0.104594462	0.019195148	0.035100942
NEK8	17q11.2	-0.104584061	0.019207192	0.035119783
SCN2A	2q24.3	-0.104575539	0.019217065	0.035134653
MPL	1p34.2	0.104554577	0.019241371	0.035175904
TEKT2	1p34.3	0.104529132	0.019270911	0.035226716
TCHHL1	1q21.3	0.104524553	0.01927623	0.035233247
ZNF85	19p12	0.104518549	0.019283209	0.035242811
BRSK1	19q13.42	0.104458811	0.019352752	0.035366708
MBNL3	Xq26.2	-0.104452036	0.019360653	0.035377943
RPS10	6p21.31	-0.10444736	0.019366108	0.035384706
LOC256880	4q23	-0.104422241	0.019395434	0.03543508
PLA2R1	2q24.2	-0.104417587	0.019400871	0.035441805
SPRR2C	1q21.3	-0.104404199	0.01941652	0.035467183
C2ORF83	2q36.3	0.10437218	0.019453993	0.035532415
RBM45	2q31.2	-0.104361763	0.019466198	0.035550822
KLF1	19p13.13	-0.104360572	0.019467594	0.035550822
ZG16	16p11.2	0.104350245	0.0194797	0.03556971
EIF2S1	14q23.3	-0.104348307	0.019481972	0.035570641
DHX34	19q13.32	-0.104346113	0.019484547	0.035572122
AMER2	13q12.13	0.104311854	0.019524765	0.035642322
GRB7	17q12	-0.104309182	0.019527904	0.035644828
SLC7A10	19q13.11	0.104284483	0.019556949	0.035694616
CPB2	13q14.13	0.104248145	0.019599747	0.035768391
LRP11	6q25.1	0.104247155	0.019600915	0.035768391
TMCC3	12q22	0.104239712	0.019609692	0.035781172
TCF15	20p13	-0.104222935	0.019629489	0.035814056
SART3	12q23.3	-0.104208221	0.019646865	0.035842518
TRIM50	7q11.23	-0.104203617	0.019652305	0.035849201
STRA8	7q33	0.10419578	0.019661568	0.035862856
POPDC3	6q21	0.104188179	0.019670555	0.035876006
SEMA6D	15q21.1	-0.104183124	0.019676534	0.035883668
MT1B	16q13	0.104178034	0.019682556	0.035891405
MGC15885	15q22.2	-0.104131497	0.019737689	0.03598869
PRPF8	17p13.3	0.104117184	0.019754673	0.036016403
TTLL2	6q27	0.104105251	0.019768842	0.03603898
EXOSC1	10q24.1	-0.104079109	0.019799915	0.036092366
ARL6IP6	2q23.3	-0.104040747	0.019845589	0.036172354
ZSCAN18	19q13.43	0.104035549	0.019851785	0.03618038
ZNF717	3p12.3	0.104019768	0.019870605	0.03621141
ZNF648	1q25.3	-0.104016561	0.019874432	0.036215113
BICRA	19q13.33	0.10401126	0.019880758	0.036223369
ZC2HC1A	8q21.13	-0.103997996	0.019896596	0.036248954

EML2	19q13.32	-0.103987785	0.019908796	0.036263951
GORASP2	2q31.1	-0.103987785	0.019908796	0.036263951
TP53TG3B	16p11.2	0.103986594	0.019910219	0.036263951
LCE1F	1q21.3	-0.103963882	0.019937381	0.036310145
COLGALT1	19p13.11	0.103959348	0.019942806	0.036316748
LINC00634	22q13.2	-0.10395251	0.019950992	0.036328377
DUSP23	1q23.2	-0.10394847	0.01995583	0.036333908
CDK7	5q13.2	-0.103945607	0.019959259	0.036336872
CAPN12	19q13.2	0.103931102	0.019976639	0.036365232
HIST1H4D	6p22.2	-0.103923693	0.019985521	0.036378118
RAB3IP	12q15	-0.103918601	0.019991628	0.036385953
IHH	2q35	0.103911093	0.020000635	0.036399063
TNIP2	4p16.3	0.103900947	0.020012812	0.03641794
KCNH4	17q21.2	0.103898091	0.020016241	0.036420895
HTN1	4q13.3	0.103882886	0.020034506	0.036450842
SHISA9	16p13.12	-0.1038627	0.020058775	0.036488668
RDH13	19q13.42	-0.103862586	0.020058913	0.036488668
PCGF3	4p16.3	0.103842832	0.020082687	0.036528623
MAMDC4	9q34.3	0.10383	0.020098145	0.036553444
BAZ2A	12q13.3	0.103826801	0.020102	0.036557161
MANBA	4q24	0.103824701	0.02010453	0.036558468
ZFAND2A	7p22.3	-0.103818594	0.020111893	0.036568561
LRCH4	7q22.1	0.103809051	0.020123401	0.036585195
ZNF267	16p11.2	0.103808002	0.020124668	0.036585195
NAGLU	17q21.2	-0.103805714	0.020127428	0.036585719
BET1L	11p15.5	0.103804757	0.020128582	0.036585719
OR52N2	11p15.4	0.103798626	0.02013598	0.03659587
NFIX	19p13.13	0.103787294	0.020149662	0.036617438
HSDL1	16q24.1	0.103778419	0.020160382	0.036631788
TMEM168	7q31.1	-0.103777751	0.020161189	0.036631788
RAD21L1	20p13	0.103744528	0.020201367	0.036701484
KIAA1211L	2q11.2	0.103695589	0.020260677	0.036805924
CCDC150	2q33.1	-0.103671637	0.02028976	0.036855439
CHEK1	11q24.2	-0.103657514	0.020306926	0.036883299
PCP4	21q22.2	0.10364267	0.02032498	0.036912769
LINC00158	21q21.2	0.103625809	0.020345506	0.036946721
HEY1	8q21.13	-0.103620011	0.020352569	0.036956221
BEX3	Xq22.2	-0.103617816	0.020355243	0.036957751
OR11A1	6p22.1	0.10360461	0.020371338	0.036983647
FASLG	1q24.3	0.103584656	0.02039568	0.037024507
MIAT	22q12.1	0.103514946	0.020480914	0.037175889
PIK3CA	3q26.32	-0.10350025	0.020498922	0.03720523
ZNF655	7q22.1	-0.103497101	0.020502783	0.03720889
SPAG7	17p13.2	-0.10347897	0.020525023	0.037245903
SPINK5	5q32	-0.103473054	0.020532285	0.03725573
SAYSD1	6p21.2	0.103470718	0.020535152	0.037257582
FAM25BP	10q11.22	-0.103437541	0.02057592	0.037328193
ITGAE	17p13.2	-0.103432879	0.020581654	0.03733524
GRXCR1	4p13	0.103430639	0.02058441	0.037336882
RPL13AP3	14q22.3	-0.103359165	0.020672509	0.03749331
PMVK	1q21.3	-0.103338693	0.020697802	0.03753581
VPS4B	18q21.33	-0.103329437	0.020709248	0.037553191
GK3P	4q32.3	-0.103327051	0.020712199	0.037555167
IMPDH1	7q32.1	-0.103324284	0.020715622	0.037558
TSPYL5	8q22.1	0.103319226	0.02072188	0.03756597
SSBP2	5q14.1	-0.103308827	0.020734751	0.037585928
GBA3	4p15.2	0.103300654	0.020744873	0.037596632
B9D2	19q13.2	0.103300522	0.020745036	0.037596632

PROM1	4p15.32	0.103299483	0.020746324	0.037596632
NPM1	5q35.1	-0.103298041	0.020748109	0.037596632
KCNN2	5q22.3	0.103280199	0.020770222	0.037633323
YJEFN3	19p13.11	-0.103267374	0.02078613	0.037658764
IFIT1	10q23.31	0.103252618	0.020804446	0.037688563
KDM5A	12p13.33	0.103248133	0.020810015	0.03769527
OPHN1	Xq12	-0.103195365	0.020875645	0.037810756
PRSS35	6q14.2	0.103177943	0.020897352	0.037846677
SLC38A7	16q21	0.103167593	0.020910257	0.037866649
DPP7	9q34.3	-0.103161295	0.020918113	0.037875803
ELF1	13q14.11	0.103160532	0.020919066	0.037875803
MITD1	2q11.2	-0.103152993	0.020928473	0.037889437
LRRC58	3q13.33	-0.103151466	0.020930379	0.037889488
NPFFR2	4q13.3	0.103148769	0.020933746	0.037892184
PIK3R3	1p34.1	0.103132858	0.020953618	0.037923175
FCRL4	1q23.1	0.103132051	0.020954626	0.037923175
PIGA	Xp22.2	-0.103105947	0.020987265	0.037978838
GZMB	14q12	0.103096023	0.020999686	0.037997907
UBE2M	19q13.43	-0.103079228	0.02102072	0.038032556
PLCB1	20p12.3	0.103063578	0.021040336	0.038064635
DAZL	3p24.3	0.103054535	0.021051678	0.03808174
LINC01278	Xq11.1	0.103043157	0.021065957	0.038104154
CNPY2	12q13.3	-0.103015292	0.02110096	0.038164047
RPGRIP1	14q11.2	0.103000417	0.021119667	0.038194009
GOLGA6B	15q24.1	0.102999109	0.021121312	0.038194009
SNORA23	11p15.4	-0.102996269	0.021124885	0.038197048
CATSPER3	5q31.1	-0.102991267	0.021131181	0.038205008
IGF2BP1	17q21.32	0.102965885	0.021163149	0.038259378
MEGF11	15q22.31	0.102949748	0.021183495	0.038292729
LDB3	10q23.2	0.102927022	0.021212176	0.038341142
CBX3	7p15.2	-0.102893909	0.021254029	0.038413349
RIMBP3	22q11.21	0.102889424	0.021259703	0.038420164
UPP2	2q24.1	0.102877956	0.021274218	0.038442953
ZNF414	19p13.2	-0.102873584	0.021279755	0.038449514
ETFDH	4q32.1	-0.102839039	0.021323539	0.038522754
LYG2	2q11.2	-0.102838591	0.021324107	0.038522754
LXN	3q25.32	0.102832741	0.02133153	0.038532713
ADCY8	8q24.22	-0.102802615	0.021369789	0.038598369
RPL34-AS1	4q25	0.102775171	0.021404696	0.038657957
NIPA2	15q11.2	-0.102764034	0.021418875	0.038680103
IDH3B	20p13	-0.102751247	0.021435165	0.038706057
DR1	1p22.1	0.102745616	0.021442341	0.03871555
DOCK6	19p13.2	0.102720137	0.021474841	0.038770762
TMEM126A	11q14.1	-0.102717943	0.021477642	0.038772352
RMRP	9p13.3	-0.102661598	0.021549674	0.038898906
BMP8B	1p34.2	0.102651335	0.021562817	0.038919149
POU3F4	Xq21.1	0.102631442	0.021588311	0.038961679
OR5P2	11p15.4	0.10262858	0.021591981	0.038964818
VXN	8q13.1	0.102625201	0.021596315	0.038969154
ARMT1	6q25.1	0.102602763	0.021625113	0.039017629
TMEM258	11q12.2	-0.102591121	0.021640068	0.039041121
HCRTR2	6p12.1	0.102589356	0.021642335	0.03904172
RPS5	19q13.43	-0.10258759	0.021644605	0.039042325
ABCE1	4q31.21	-0.102582341	0.021651351	0.039051003
DHFR	5q14.1	-0.102554	0.021687811	0.039113267
LIPN	10q23.31	0.102531708	0.021716526	0.039161552
PIK3C2B	1q32.1	0.102524894	0.021725309	0.039173891
PVAFEF	17q25.3	-0.102522197	0.021728787	0.039176661

G2E3	14q12	-0.10249369	0.021765574	0.039239482
ARPP21	3p22.3	0.1024894	0.021771115	0.039245964
HNF1B	17q12	0.102485607	0.021776014	0.03925129
EME2	16p13.3	-0.102441501	0.021833061	0.039350601
CNTFR	9p13.3	-0.102417676	0.02186393	0.039402719
FSCN1	7p22.1	0.102399218	0.021887872	0.039442344
SCYL2	12q23.1	-0.10237975	0.021913147	0.03948245
ALOX15B	17p13.1	0.102378701	0.02191451	0.03948245
HNRNPU	1q44	-0.102377556	0.021915998	0.03948245
UGT1A10	2q37.1	-0.102368349	0.021927962	0.039500477
HERPUD2	7p14.2	0.102344729	0.02195868	0.039552281
FAM45A	10q26.11	-0.102341961	0.021962282	0.039555238
GMDS	6p25.3	0.102324689	0.021984772	0.03959221
GAS2L3	12q23.1	0.102319155	0.021991983	0.039601662
RRP7BP	22q13.2	-0.102307322	0.022007406	0.039625899
CNTN2	1q32.1	0.102284963	0.022036575	0.03967488
AXIN1	16p13.3	-0.102282797	0.022039402	0.03967643
ADGRL1	19p13.12	-0.102246535	0.022086786	0.039758184
TXK	4p12	0.102238576	0.022097197	0.039773377
HNRNPA2B1	7p15.2	-0.10223661	0.022099769	0.03977446
EZH1P	Xp11.22	0.102180295	0.022173568	0.039903722
OAS1	12q24.13	-0.102175728	0.022179563	0.03991095
ZNF654	3p11.1	0.102173915	0.022181943	0.039911674
ART1	11p15.4	0.102150399	0.022212833	0.039963691
PARD6A	16q22.1	-0.102144049	0.022221181	0.039975146
ZRSR2	Xp22.2	0.102119617	0.022253324	0.040029401
SAA3P	11p15.1	0.102093693	0.022287474	0.040087258
PHLDA2	11p15.4	0.102088508	0.02229431	0.040095979
SEMA3D	7q21.11	0.102081924	0.022302994	0.040108022
GUSBP1	5p14.3	0.102057876	0.022334732	0.040161518
ERCC2	19q13.32	0.102024286	0.02237913	0.040237768
IL36B	2q14.1	-0.102016117	0.022389939	0.040253615
TMEM139	7q34	0.102006356	0.022402862	0.04027326
HEXIM1	17q21.31	-0.102001863	0.022408811	0.040280366
LINC02610	2q37.3	0.101993076	0.022420452	0.040297702
WFDC3	20q13.12	0.10198282	0.022434044	0.040318541
TTY10	Yq11.223	0.101980893	0.022436598	0.040319541
SFPQ	1p34.3	-0.101972469	0.02244777	0.040336024
CCDC88B	11q13.1	0.101956915	0.02246841	0.040369517
CDK11A	1p36.33	0.101929718	0.022504538	0.040430829
FAM126A	7p15.3	0.101918362	0.022519638	0.040454355
MED25	19q13.33	0.101874752	0.022577708	0.040555063
LAMTOR5	1p13.3	-0.101862156	0.022594506	0.040581622
KDM5D	Yq11.223	0.101858401	0.022599516	0.040587009
VPS41	7p14.1	0.101852995	0.022606728	0.040596349
CRHR2	7p14.3	-0.101789669	0.022691377	0.040744627
CCDC110	4q35.1	0.101788205	0.022693338	0.040744627
GLUD2	Xq24	-0.101786674	0.022695389	0.040744684
IGLL1	22q11.23	0.101756808	0.022735413	0.040812907
TYK2	19p13.2	0.101699549	0.022812316	0.040947316
CTDSP2	15q15.3-q21.1	-0.101660615	0.022864737	0.04103776
CENPF	1q41	-0.1016484	0.022881204	0.041063663
DYNLT1	6q25.3	-0.101644774	0.022886095	0.041068787
MDS2	1p36.11	0.101635975	0.022897967	0.041086438
NKX6-1	4q21.23	0.101621848	0.022917037	0.041116999
DHFR2	3q11.2	-0.101593435	0.022955434	0.041182229
PITPNM3	17p13.2-p13.1	-0.101559081	0.023001934	0.041261981
SIN3A	15q24.2	-0.101549634	0.023014735	0.041281275

TUBGCP3	13q34	0.101516425	0.023059784	0.041358402
ZNF624	17p11.2	0.101460508	0.023135811	0.041491071
MFS11	17q25.1-q25.2	-0.101456974	0.023140622	0.041496012
STT3A	11q24.2	0.101452489	0.023146731	0.041500056
CD2BP2	16p11.2	-0.101452299	0.023146991	0.041500056
SEPTIN9	17q25.3	0.101442266	0.023160123	0.041519991
RAB40C	16p13.3	-0.101436171	0.023168967	0.041532077
BEST2	19p13.13	-0.101425169	0.023183971	0.041555281
PPIL6	6q21	0.101413844	0.023199423	0.041579283
NRGN	11q24.2	0.101411838	0.023202161	0.041580498
UBE2H	7q32.2	-0.101397715	0.023221445	0.041611362
OR2L1P	1q44	0.10139156	0.023229853	0.041622732
SUGP2	19p13.11	-0.10136546	0.023265538	0.041682971
MB21D2	3q29	0.101351051	0.02328526	0.041714601
NCR3	6p21.33	0.101316313	0.023332865	0.041796173
ACSM5	16p12.3	0.101303818	0.023350008	0.041819933
STIM2	4p15.2	0.101303624	0.023350275	0.041819933
CWC15	11q21	-0.10129265	0.023365341	0.041843203
SUMF1	3p26.1	0.101264308	0.023404289	0.041909233
BAK1	6p21.31	0.101245127	0.02343068	0.041952767
TMIGD1	17q11.2	-0.101221219	0.023463611	0.042008003
PRY2	Yq11.223	0.10121851	0.023467345	0.042010962
ARL4A	7p21.3	-0.101167832	0.023537292	0.042132442
GOLGA6L9	15q25.2	-0.101146742	0.023566453	0.042180899
INTS4	11q14.1	0.101128707	0.023591416	0.042221835
RPL10A	6p21.31	-0.101120691	0.023602518	0.042235632
BAZ2B	2q24.2	0.101120118	0.023603311	0.042235632
AP1S3	2q36.1	-0.101112102	0.023614418	0.042249434
RPS18	6p21.32	-0.10111153	0.023615212	0.042249434
STAP1	4q13.2	0.101105751	0.023623222	0.042260018
C10ORF12	10q24.1	0.101098552	0.023633205	0.042274128
IZUMO1R	11q21	0.101092835	0.023641135	0.042284564
CES4A	16q22.1	-0.101076985	0.023663131	0.042320156
AGBL4	1p33	0.101047488	0.023704115	0.042389697
IFNA13	9p21.3	0.101031139	0.023726858	0.042426607
VSX1	20p11.21	0.101019326	0.023743301	0.042452248
EDARADD	1q42.3-q43	0.101013908	0.023750846	0.042461976
RPS27	1q21.3	-0.101008946	0.023757758	0.042470571
SH3BP1	22q13.1	-0.100998831	0.023771854	0.042492005
SCN11A	3p22.2	0.100992204	0.023781093	0.042504754
PMCH	12q23.2	0.10099049	0.023783483	0.042505261
ADAM17	2p25.1	-0.100987284	0.023787954	0.042509486
HMHB1	5q31.3	0.100984274	0.023792152	0.042513224
PPIAL4D	1q21.1	-0.100970142	0.023811873	0.042544695
PPTC7	12q24.11	-0.100957225	0.02382991	0.042573152
PARP1	1q42.12	-0.100951977	0.023837242	0.042582482
RABGGTA	14q12	-0.100936136	0.023859384	0.042618263
DEK	6p22.3	-0.100911038	0.023894501	0.042677211
WASHC3	12q23.2	-0.100874585	0.023945586	0.042764668
CSPG4P2Y	Yq11.23	0.100825459	0.024014583	0.042884094
DNASE2	19p13.13	-0.100820765	0.024021184	0.042892086
FAM238B	10p12.1	0.100780435	0.024077967	0.042989674
KCTD9	8p21.2	-0.10077496	0.024085684	0.042999648
S100A1	1q21.3	-0.10077043	0.024092072	0.043007247
NIPSNAP2	7p11.2	-0.100767612	0.024096045	0.043010535
DNAJC16	1p36.21	0.100751008	0.024119472	0.043048543
PSMD8	19q13.2	-0.100736408	0.024140088	0.043079637
WDR11	10q26.12	0.100735647	0.024141163	0.043079637

WRAP53	17p13.1	-0.100715414	0.024169759	0.043126851
PPP1R10	6p21.33	-0.100708161	0.024180016	0.043141339
ISY1	3q21.3	-0.100653959	0.024256794	0.043274498
PIP4P1	14q11.2	-0.100633729	0.024285504	0.043321888
LOC340357	8p23.1-p22	0.100631547	0.024288601	0.043323583
IQCD	12q24.13	0.100604387	0.024327197	0.04338859
DHX16	6p21.33	0.100600043	0.024333375	0.043395774
RPS10P7	1q32.1	-0.100593031	0.024343349	0.043409725
VIL1	2q35	0.10058951	0.02434836	0.04341356
C2ORF68	2p11.2	-0.100588496	0.024349803	0.04341356
NRN1	6p25.1	-0.100575327	0.02436855	0.043443147
DCLK1	13q13.3	0.100543741	0.024413568	0.043519557
FA2H	16q23.1	-0.100541928	0.024416154	0.043520323
COQ10B	2q33.1	-0.100529713	0.024433584	0.043547543
ATP6AP1L	5q14.2	0.100499418	0.02447686	0.043620821
MYB	6q23.3	-0.100455472	0.024539754	0.043726975
PMAIP1	18q21.32	0.100453327	0.024542827	0.043726975
KRTAP6-3	21q22.11	0.100453257	0.024542927	0.043726975
RHOG	11p15.4	0.100403846	0.024613816	0.043849404
PIP	7q34	0.10039688	0.024623824	0.043863361
PROCR	20q11.22	0.100389532	0.024634385	0.0438783
HIST1H2AM	6p22.1	-0.100380137	0.024647893	0.043898485
SLC5A8	12q23.1-q23.2	0.100326609	0.02472498	0.044026267
GNB2	7q22.1	-0.100326359	0.02472534	0.044026267
ZNF804B	7q21.13	0.100325774	0.024726185	0.044026267
RMST	12q23.1 12q21	0.100322821	0.024730443	0.044029963
ACTG1P4	1p21.1	0.100320413	0.024733917	0.044032264
L3MBTL4	18p11.31	-0.100283131	0.024787747	0.044124202
BTG3	21q21.1	-0.100232555	0.024860935	0.044250578
NCK1	3q22.3	-0.100198965	0.024909645	0.044333368
ZNF625	19p13.2	0.100183293	0.024932399	0.044369951
MDP1	14q12	-0.100174633	0.02494498	0.044388427
AP3S2	15q26.1	-0.100165279	0.024958576	0.044408704
UBN2	7q34	-0.100160412	0.024965653	0.044417378
ZNF37A	10p11.1	0.100155355	0.024973008	0.044426548
PYROXD1	12p12.1	-0.100140086	0.024995225	0.044462152
UBA1	Xp11.3	0.100114226	0.025032894	0.044525234
AFP	4q13.3	-0.100110741	0.025037973	0.044530343
TSG101	11p15.1	-0.1000772	0.025086912	0.044613447
DOHH	19p13.3	-0.100071952	0.025094577	0.044623146
NAP1L5	4q22.1 4q21-q22	0.10005029	0.025126235	0.044675503
SHLD1	20p12.3	0.100040652	0.025140331	0.04469663
INTS5	11q12.3	-0.100034926	0.025148709	0.044707585
MRPL37	1p32.3	-0.100018036	0.025173437	0.044747602
MANBAL	20q11.23	-0.100014123	0.025179167	0.044753847
G6PC3	17q21.31	-0.100004485	0.02519329	0.044775004
NDUFAF3	3p21.31	-0.099997521	0.025203498	0.044789201
DQX1	2p13.1	-0.099950142	0.025273045	0.044908839
OGFR	20q13.33	0.099936923	0.025292478	0.044939413
MORC3	21q22.12	0.099932056	0.025299636	0.044948174
KDM6A	Xp11.3	0.099894744	0.025354571	0.045041808
AGPAT3	21q22.3	0.099873369	0.02538609	0.04509383
ZNF507	19q13.11	-0.099860009	0.025405806	0.04512488
ZNF747	16p11.2	-0.099847126	0.02542483	0.045154696
RAB3GAP2	1q41	0.099844264	0.02542906	0.045158232
SARAF	8p12	0.099837679	0.025438789	0.045171536
PUM2	2p24.1	-0.099832812	0.025445983	0.045180334
FAM163B	9q34.2	0.099805242	0.025486769	0.045248769

CDC42EP2	11q13.1	-0.09977403	0.025533009	0.045326876
TSHZ2	20q13.2	0.099753706	0.025563157	0.045376403
WDYHV1	8q24.13	-0.09969912	0.025644283	0.045516404
TMLHE	Xq28	-0.099662481	0.025698861	0.045609262
TRIM56	7q22.1	0.099654842	0.025710252	0.045625466
LY86-AS1	6p25.1	0.099647207	0.025721641	0.045641664
UPB1	22q11.23	0.099642526	0.025728627	0.045650046
PRPF38B	1p13.3	0.099627263	0.025751414	0.045686459
TESK2	1p34.1	-0.099546914	0.025871664	0.045895763
MUC13	3q21.2	0.099527265	0.025901144	0.045944022
HIRIP3	16p11.2	-0.099517809	0.025915342	0.045962396
GPAA1	8q24.3	0.099517332	0.025916058	0.045962396
TRMT1L	1q25.3	-0.099515232	0.025919211	0.045963948
WDR59	16q23.1	-0.099506358	0.025932544	0.04598355
PHF2	9q22.31	-0.099496815	0.025946886	0.04600494
BTNL3	5q35.3	0.099489873	0.025957324	0.046019403
FRS3	6p21.1	0.099470096	0.025987082	0.046068113
PCBP1	2p13.3	-0.099456259	0.026007919	0.046101
CHRM3	1q43	-0.099451392	0.026015251	0.046109947
KLRB1	12p13.31	0.099419734	0.02606299	0.046190503
BTAFL	10q23.32	0.0994158	0.026068927	0.046196968
TNIP3	4q27	0.099408641	0.026079736	0.046212064
INTS10	8p21.3	-0.099403106	0.026088094	0.046222816
CNPY1	7q36.3	0.099393346	0.02610284	0.046244882
CHPT1	12q23.2	-0.099377341	0.026127035	0.046283684
RNF4	4p16.3	0.099332872	0.026194362	0.046398879
C10ORF90	10q26.2	-0.099312719	0.026224924	0.046448936
MSANTD4	11q22.3	-0.099309588	0.026229674	0.046453273
CSNK1G1	15q22.31	-0.099293175	0.026254591	0.046493321
COG6	13q14.11	0.099266646	0.026294907	0.046560629
CALB1	8q21.3	-0.099258962	0.026306594	0.046574044
TMEM80	11p15.5	-0.09925863	0.026307099	0.046574044
TOR1A	9q34.11	-0.099256435	0.026310438	0.046575869
TTC38	22q13.31	0.099226948	0.026355335	0.046651255
ASH1L	1q22	0.099203569	0.02639098	0.046710252
ZNF410	14q24.3	-0.099200706	0.026395347	0.046713885
MRPL20	1p36.33	-0.099192213	0.026408308	0.046732724
THG1L	5q33.3	0.099183102	0.026422218	0.046749655
ZNF678	1q42.13	0.099182911	0.026422509	0.046749655
TBC1D24	16p13.3	0.099178472	0.02642929	0.046757552
C1ORF220	1q25.2	-0.099161214	0.026455661	0.046800104
NCLN	19p13.3	-0.099151561	0.02647042	0.046822108
TSEN34	19q13.42	-0.099149798	0.026473117	0.046822774
CDKN2B	9p21.3	0.099138965	0.026489692	0.046847983
AIF1L	9q34.12-q34.13	-0.09913553	0.02649495	0.046853176
SIX6	14q23.1	0.099107235	0.02653829	0.046925705
SPCS2	11q13.4	0.099102989	0.026544799	0.046933103
NUP210	3p25.1	-0.099090965	0.026563239	0.046961591
MORN1	1p36.32	0.099075793	0.026586524	0.046998639
SLC29A1	6p21.1	0.099065391	0.026602497	0.047022756
PPP6R1	19q13.42	0.099040771	0.026640337	0.047085518
CTU1	19q13.41	-0.099007085	0.026692186	0.047173026
PSRC1	1p13.3	-0.098985996	0.02672469	0.047226336
PCDHGB8P	5q31.3	0.098982814	0.026729598	0.047230872
TRIM9	14q22.1	0.098980225	0.026733591	0.047233791
HTR1A	5q12.3	0.098957513	0.026768645	0.047289403
NFIB	9p23-p22.3	0.098956796	0.026769753	0.047289403
QTRT2	3q13.31	-0.098885607	0.026879886	0.047479799

U2AF1L4	19q13.12	-0.098875587	0.026895419	0.047499965
CAMKK2	12q24.31	0.098875206	0.026896011	0.047499965
GPR18	13q32.3	0.098842474	0.026946806	0.047585507
RTL8B	Xq26.3	-0.098818809	0.026983583	0.047646283
ZNF333	19p13.12	0.098816041	0.026987886	0.047649712
SLC37A4	11q23.3	-0.098791707	0.027025752	0.047712393
KRT6B	12q13.13	-0.098787413	0.027032439	0.047720024
TBK1	12q14.2	-0.098754109	0.027084349	0.047807477
GUCA2A	1p34.2	-0.098738796	0.027108246	0.047845474
OR5K2	3q11.2	0.098722539	0.027133636	0.047886097
TRIP6	7q22.1	-0.098688933	0.027186185	0.047974641
LINC01018	5p15.31	0.098675946	0.027206516	0.048006321
GFOD1	6p23	-0.098667276	0.027220096	0.048026084
MZT1	13q21.33	-0.098643891	0.027256753	0.048086555
MORF4L1	15q25.1	0.098629577	0.027279212	0.048118047
SLC9B1	4q24	-0.098629475	0.027279372	0.048118047
ZFY	Yp11.2	0.098620383	0.027293648	0.048139019
HIST1H4J	6p22.1	-0.098613164	0.027304985	0.048154806
PAFAH2	1p36.11	0.098595033	0.027333479	0.048200846
C9ORF131	9p13.3	0.098588241	0.027344161	0.048215468
WIPF2	17q21.2	-0.098569363	0.027373865	0.048263628
PITPNB	22q12.1	-0.098544648	0.027412798	0.04832805
GPR150	5q15	0.098516518	0.027457167	0.048402042
SLC36A1	5q33.1	0.098505332	0.027474828	0.048428945
GTF2H5	6q25.3	-0.098502469	0.02747935	0.048432684
RUVBL2	19q13.33	-0.098488823	0.027500911	0.048466453
ITFG2	12p13.33	0.098480139	0.027514639	0.048486412
SNORA22	7q11.21	-0.098476124	0.02752099	0.048493368
MEX3C	18q21.2	0.098467066	0.027535318	0.048514379
SUB1	5p13.3	0.098461531	0.027544077	0.048525574
UAP1L1	9q34.3	-0.098457237	0.027550874	0.048533312
MRPL44	2q36.1	-0.098455519	0.027553593	0.048533865
PRKAA1	5p13.1	0.098450462	0.027561601	0.048543733
TSTA3	8q24.3	0.098441682	0.027575507	0.048563986
TRAPPC3L	6q22.1	0.098436398	0.02758388	0.048574493
GPR146	7p22.3	0.098428991	0.02759562	0.048590926
EEF2	19p13.3	-0.098427273	0.027598343	0.048591481
USP34	2p15	0.098417539	0.027613778	0.048614415
RNASE8	14q11.2	0.098409653	0.027626289	0.048632198
EBLN2	3p13	0.098407782	0.027629259	0.048633184
AMBN	4q13.3	0.098401961	0.027638497	0.0486452
PPFIBP2	11p15.4	-0.098392538	0.027653459	0.04866729
XAGE1B	Xp11.22	0.098379193	0.027674658	0.048700351
FLG2	1q21.3	-0.098363948	0.027698894	0.048738749
PCTP	17q22	-0.098331178	0.027751051	0.048826268
MOSPD2	Xp22.2	0.098328029	0.027756068	0.048830837
ZNF609	15q22.31	0.098314383	0.027777816	0.048864837
QSOX2	9q34.3	-0.098302932	0.027796077	0.048892698
FNTA	8p11.21	-0.098282511	0.027828668	0.048945759
TOR1AIP2	1q25.2	0.098269246	0.027849855	0.048978754
SLC25A26	3p14.1	-0.098260753	0.027863428	0.048998354
SLC7A5	16q24.2	-0.098256459	0.027870293	0.049006155
IGSF9	1q23.2	-0.098251497	0.027878227	0.049015835
GPN1	2p23.3	-0.098232125	0.027909221	0.049066054
DCAF10	9p13.2	-0.098200157	0.027960433	0.049151805
SPINDOC	11q13.1	-0.098196627	0.027966094	0.049157475
SSR3	3q25.31	0.098193859	0.027970532	0.049160993
PF4	4q13.3	0.098094769	0.028129836	0.04943668

E4F1	16p13.3	-0.098079347	0.028154698	0.049476065
NXPE3	3q12.3	-0.098074862	0.028161933	0.049484469
CCDC171	9p22.3	-0.098073335	0.028164396	0.049484488
ZNRF2	7p14.3	0.098055204	0.02819366	0.049531591
CALCRL	2q32.1	0.098037455	0.028222332	0.049577648
EPS8L2	11p15.5	-0.098012358	0.028262918	0.049644623
LEP	7q32.1	0.097989347	0.028300173	0.049705736
DRGX	10q11.23	0.097987331	0.02830344	0.049707146
LINC01138	1q21.2	0.097980006	0.02831531	0.049723665
LOC148696	1q32.2	0.097964503	0.028340444	0.049763472
CNTN5	11q22.1	-0.097959603	0.028348394	0.0497731
FRMD6	14q22.1	0.097957487	0.028351826	0.049774795
NUPR2	7p11.2	0.097955861	0.028354464	0.049775097
RGS14	5q35.3	0.097915023	0.028420797	0.049887201
IL33	9p24.1	0.097907866	0.028432436	0.04990329
SEMA4G	10q24.31	0.097885536	0.028468774	0.049962724
EPHB4	7q22.1	0.097858721	0.028512465	0.050035049
OPA3	19q13.32	0.09785414	0.028519934	0.050043803
ACACB	12q24.11	0.097848415	0.028529272	0.050055837
PGAP1	2q33.1	-0.097832478	0.028555278	0.050095858
C8B	1p32.2	0.097831395	0.028557047	0.050095858
AJM1	9q34.3	0.097829803	0.028559646	0.050096062
EDN3	20q13.32	0.097808082	0.028595129	0.050153942
GATAD1	7q21.2	-0.09778028	0.028640601	0.050229331
YWHAZ	8q22.3	-0.097766729	0.028662786	0.050263871
DST	6p12.1	0.09770642	0.028761706	0.050432957
TMPRSS12	12q13.12	0.097671447	0.028819204	0.050529387
ATP9B	18q23	0.097656991	0.028842998	0.050566712
DNAJC21	5p13.2	0.097649164	0.028855889	0.050584917
MRPL2	6p21.1	-0.097643438	0.028865322	0.050597058
SNAPC1	14q23.2	-0.097610134	0.028920242	0.050688922
ITPRID2	2q31.3	-0.097587614	0.02895743	0.050749695
AKT2	19q13.2	0.097574731	0.028978722	0.050782599
TMEM30B	14q23.1	-0.097561753	0.029000185	0.050815798
CDH1	16q22.1	-0.097551542	0.029017081	0.050840989
IPO8	12p11.21	0.097538278	0.029039042	0.05087505
SDE2	1q42.12	-0.097525777	0.029059752	0.050906914
PIGZ	3q29	-0.097519002	0.029070983	0.050922166
KIAA0087	7p15.2	0.097516274	0.029075505	0.050925668
TRIM77	11q14.3	0.097513451	0.029080186	0.050929446
LCE1A	1q21.3	0.097508289	0.029088747	0.050940018
CAMSAP1	9q34.3	-0.097502302	0.029098678	0.050952987
CLEC18C	16q22.1	0.097489982	0.029119126	0.050984368
TAF1B	2p25.1	-0.097468426	0.02915493	0.051042629
IFNL3	19q13.2	0.097462332	0.029165059	0.051055932
LINC01020	5p15.32	0.097451262	0.029183466	0.051083723
CDKL3	5q31.1	0.097441709	0.02919936	0.051107112
TTC29	4q31.22	0.097430767	0.029217573	0.051134554
5-Mar	10q23.32-q23.33	-0.097426343	0.02922494	0.051143011
SLC6A13	12p13.33	-0.097419305	0.029236661	0.051159087
KRT78	12q13.13	-0.097413442	0.029246429	0.051171741
EMILIN3	20q12	-0.097401536	0.029266275	0.051202025
SULT1C3	2q12.3	0.097395583	0.029276202	0.051214952
ZPR1	11q23.3	-0.097349047	0.029353904	0.051346431
PLAAT3	11q12.3-q13.1	-0.097346661	0.029357892	0.051348956
GNPNAT1	14q22.1	-0.097338741	0.029371136	0.051367668
LINC00339	1p36.12	-0.097334067	0.029378953	0.05137469
UXT-AS1	Xp11.23	-0.09733235	0.029381827	0.05137469

EPHA2	1p36.13	0.097331775	0.029382789	0.05137469
ZIC4	3q24	0.097321673	0.029399694	0.051399794
TIPARP	3q25.31	0.097319083	0.029404029	0.051402919
RFC3	13q13.2	-0.097314598	0.029411538	0.051411592
OTUD1	10p12.2	0.097285016	0.029461107	0.051490717
MLLT1	19p13.3	-0.097284538	0.029461907	0.051490717
ZSCAN25	7q22.1	-0.09727366	0.029480154	0.051518146
PLA2G4F	15q15.1	-0.097258773	0.029505139	0.051557344
CSPG5	3p21.31	-0.097234153	0.029546501	0.051625149
SMG1P3	16p12.2	0.097202472	0.0295998	0.051713797
SLC38A11	2q24.3	-0.09719472	0.029612853	0.051732124
MTFP1	22q12.2	-0.097184436	0.029630178	0.051757909
CLCA2	1p22.3	-0.097158575	0.029673783	0.051827074
MSANTD2	11q24.2	0.097157907	0.02967491	0.051827074
ZNF695	1q44	-0.097126139	0.029728553	0.051912276
NBPF4	1p13.3	0.097125969	0.02972884	0.051912276
LHB	19q13.33	0.097100399	0.029772078	0.05198328
SNORA2C	12q13.11	-0.097045475	0.029865135	0.05214125
PLAC1	Xq26.3	-0.097040421	0.02987371	0.052151708
OR10A6	11p15.4	0.097028653	0.029893685	0.052182065
TMEM19	12q21.1	0.097011141	0.029923432	0.052229473
GRIK3	1p34.3	0.096999536	0.029943159	0.052259384
MTMR14	3p25.3	0.096993296	0.02995377	0.052273384
RND1	12q13.12	0.096983372	0.029970654	0.052298326
CACNB3	12q13.12	0.096930219	0.03006122	0.052451554
EBAG9	8q23.2	-0.096927452	0.030065942	0.052451554
BSX	11q24.1	0.096927264	0.030066263	0.052451554
GDPD4	11q13.5	0.09692542	0.030069409	0.052452508
CHRNA2	8p21.2	0.096921453	0.03007618	0.052459783
ZNF335	20q13.12	0.096919531	0.030079459	0.052460969
UQCC1	20q11.22	-0.096917241	0.030083369	0.052463253
DECR1	8q21.3	-0.096912088	0.030092167	0.052474061
HBD	11p15.4	0.09688206	0.030143481	0.052558999
GABRG2	5q34	0.096863102	0.030175915	0.052611006
CDH24	14q11.2	-0.096833838	0.03022604	0.052693845
NGLY1	3p24.2	-0.096795477	0.030291856	0.052804023
GJB5	1p34.3	-0.096783835	0.030311855	0.05283432
HDAC10	22q13.33	-0.096772956	0.030330552	0.052862343
NCR3LG1	11p15.1	-0.096754634	0.030362065	0.052912696
GATC	12q24.31	-0.096743851	0.030380624	0.052940468
EEA1	12q22	0.096725529	0.030412181	0.052990882
PIGB	15q21.3	-0.096719422	0.030422706	0.053004645
P2RY2	11q13.4	0.096713124	0.030433564	0.053018983
FEZF2	3p14.2	0.096702176	0.030452444	0.053047295
SPRN	10q26.3	-0.096671327	0.030505702	0.053135482
TLX1NB	10q24.31	0.096649344	0.030543701	0.053197078
MAP11	7q22.1	-0.096645466	0.030550409	0.053204168
AP1M1	19p13.11	0.09662953	0.030577986	0.053241634
CGREF1	2p23.3	-0.096628766	0.030579308	0.053241634
FMN2	1q43	0.09662846	0.030579837	0.053241634
USP30	12q24.11	-0.096623422	0.030588561	0.053252227
MTBP	8q24.12	-0.096619415	0.030595502	0.053259716
FOS	14q24.3	0.096617792	0.030598312	0.053260013
MSRB2	10p12.2	0.096600425	0.030628408	0.053307801
CYP2A6	19q13.2	-0.096593629	0.03064019	0.053323709
CHRNA2	2q37.1	0.096581689	0.030660902	0.053355153
TEX14	17q22	0.096572474	0.030676897	0.053373934
FCAMR	1q32.1	0.096572423	0.030676985	0.053373934

ADAM3A	8p11.22	0.096569548	0.030681977	0.053378016
ARMCX2	Xq22.1	0.096561777	0.030695471	0.053396889
SLC22A7	6p21.1	-0.09654509	0.030724466	0.05344272
OSCP1	1p34.3	0.096534771	0.030742407	0.053469319
PREP	6q21	0.096522175	0.030764321	0.053502821
NT5DC2	3p21.1	0.096487821	0.030824153	0.053602256
MON1A	3p21.31	-0.096465396	0.030863263	0.053665643
CCDC140	2q36.1	0.096461021	0.030870898	0.053674293
GGTLC1	20p11.21	0.096438575	0.030910096	0.053737816
ZNF80	3q13.31	0.096432268	0.030921118	0.05375028
AK4	1p31.3	-0.096431424	0.030922593	0.05375028
ANKRD35	1q21.1	0.096422549	0.030938108	0.053772616
CCZ1P-OR7E38P	7q21.3	-0.096405563	0.030967822	0.053819626
SBF1P1	8q12.1	0.096371982	0.031026639	0.053914329
WBP11	12p12.3	-0.096371401	0.031027658	0.053914329
CSPP1	8q13.1-q13.2	-0.096369778	0.031030502	0.053914628
PDLIM5	4q22.3	0.096351647	0.031062301	0.053965232
HIST3H2A	1q42.13	-0.096345876	0.031072428	0.053978179
GZMA	5q11.2	0.096333803	0.031093625	0.054010352
TAS2R1	5p15.31	0.096301146	0.031151019	0.054105389
SERGEF	11p15.1	-0.096288857	0.031172642	0.054138285
MXD3	5q35.3	-0.096271584	0.031203053	0.054186437
CHMP4B	20q11.22	0.096260324	0.031222892	0.054216224
ZMAT2	5q31.3	-0.096228547	0.031278938	0.054308871
DICER1-AS1	14q32.13	-0.096226264	0.031282969	0.054311196
TTLL9	20q11.21	0.096207508	0.031316093	0.054364027
YWHAEP7	17q12	0.096177232	0.031369626	0.054452274
PPIH	1p34.2	-0.096169001	0.031384194	0.054472875
LYPLA1	8q11.23	-0.096164325	0.031392472	0.054482557
TUT4	1p32.3	0.096148198	0.031421037	0.054527442
COMMD5	8q24.3	-0.096143999	0.031428477	0.054535665
CLTCL1	22q11.21	-0.096133216	0.031447593	0.054564144
LGALS14	19q13.2	0.096124242	0.03146351	0.054587065
FHIT	3p14.2	0.096108407	0.031491611	0.054630254
USP6NL	10p14	-0.096107164	0.031493818	0.054630254
PRKD2	19q13.32	0.096095427	0.031514663	0.054661714
C10ORF67	10p12.2	0.096089786	0.031524684	0.054674396
TOP1	20q12	0.096079013	0.031543832	0.054702903
APOL4	22q12.3	0.096068089	0.031563258	0.054731889
WDR3	1p12	-0.096064986	0.03156878	0.054734428
ZNF679	7q11.21	0.096064217	0.031570148	0.054734428
RMND1	6q25.1	-0.095989694	0.031702971	0.054959988
OTUD7A	15q13.3	0.095981285	0.031717989	0.054981299
FIRRE	Xq26.2	-0.095967837	0.031742017	0.055018224
MPV17	2p23.3	-0.09593516	0.031800471	0.055114808
GALNTL5	7q36.1	-0.095918246	0.031830762	0.055162569
OR56B4	11p15.4	0.095907959	0.031849198	0.055189779
ADD3	10q25.1-q25.2	-0.095881957	0.031895838	0.055265851
ADAM20	14q24.2	-0.095872146	0.031913452	0.055290196
WDR44	Xq24	0.095871079	0.031915368	0.055290196
PPP1R3C	10q23.32	0.09584684	0.031958919	0.055360892
BRDT	1p22.1	0.095842843	0.031966106	0.055368588
HHAT	1q32.2	-0.095838156	0.031974534	0.055378434
MDGA2	14q21.3	0.095810067	0.03202509	0.055461234
BOD1	5q35.2	-0.095804091	0.032035854	0.055470814
LINC02085	3q12.3	0.095803944	0.03203612	0.055470814
RGPD6	2q13	0.095784953	0.032070347	0.055525314
ERO1B	1q42.3	0.095783286	0.032073354	0.055525756

MGAT4B	5q35.3	0.095775461	0.032087468	0.055545424
SLC25A28	10q24.2	-0.095759334	0.032116573	0.055591038
RFX7	15q21.3	-0.095743589	0.03214501	0.055635489
SLC4A1AP	2p23.3	-0.095740535	0.032150528	0.055640266
RPS8	1p34.1	-0.095730324	0.032168984	0.055667432
RNF182	6p23	0.095677553	0.032264511	0.055827951
PAQR7	1p36.11	0.095668106	0.032281638	0.055852797
GOLGA8F	15q13.1	0.095651135	0.032312424	0.055901269
AS3MT	10q24.32	0.095633275	0.032344851	0.055952571
TFAP2D	6p12.3	-0.095627286	0.032355731	0.055966594
IFI27L1	14q32.12	-0.095613045	0.032381615	0.056006566
ZFAND3	6p21.2	0.095598635	0.032407822	0.05604709
CSTF1	20q13.2-q13.31	-0.09559415	0.032415983	0.056056399
SLC35F6	2p23.3	0.095573538	0.032453511	0.056116487
ZNF185	Xq28	-0.095570675	0.032458727	0.056120696
COG4	16q22.1	0.09556619	0.032466898	0.056130016
TAF5L	1q42.13	-0.095563709	0.03247142	0.056133023
POM121	7q11.23	-0.095548536	0.032499082	0.056176029
ZCCHC12	Xq24	0.095543768	0.032507779	0.056184321
KRT83	12q13.13	0.095542854	0.032509447	0.056184321
CDK2AP2	11q13.2	0.095521626	0.032548191	0.056246463
SEMA6C	1q21.3	-0.095512561	0.03256475	0.056270259
DGKH	13q14.11	-0.095506549	0.032575734	0.05628442
CLEC2A	12p13.31	0.095498153	0.03259108	0.056306114
MON2	12q14.1	0.095476203	0.03263123	0.056370652
NOTCH2NLA	1q21.1	0.095415798	0.032741937	0.056557058
ZNF709	19p13.2	0.095412458	0.032748068	0.056562806
CAPN7	3p25.1	-0.095407834	0.032756556	0.056572625
HSH2D	19p13.11	0.095404538	0.03276261	0.056578237
PRSS30P	16p13.3	0.095387438	0.032794024	0.05662764
SLC37A1	21q22.3	0.09537715	0.032812937	0.056655451
ETNK1	12p12.1	-0.095369707	0.032826626	0.056674237
EHD3	2p23.1	0.095365508	0.03283435	0.056682723
TUBGCP5	15q11.2	-0.095349572	0.032863681	0.056728505
LARP4B	10p15.3	-0.0953448	0.032872467	0.056738818
LOC100134368	16p13.3	-0.09532283	0.03291295	0.056803833
KLRF1	12p13.31	0.095316107	0.032925346	0.056820368
MUCL3	6p21.33	0.095287205	0.032978683	0.05690666
LINC01555	1p22.3	0.095285956	0.032980989	0.05690666
ZSWIM2	2q32.1	0.095282825	0.032986774	0.056911774
PNPLA5	22q13.31	0.095277091	0.032997365	0.05692518
BCAN	1q23.1	-0.09524473	0.033057203	0.057023535
TAC4	17q21.33	0.095236221	0.033072952	0.057041304
TRIP11	14q32.12	0.095236109	0.033073158	0.057041304
BSCL2	11q12.3	0.095207672	0.033125838	0.057127278
SPA17	11q24.2	0.095200897	0.0331384	0.057144058
TFR2	7q22.1	-0.095175895	0.033184789	0.057219163
SHISA5	3p21.31	0.09513448	0.033261755	0.057346972
SRP14P1	12p13.31	-0.095095812	0.033333754	0.057466196
ATP5F1EP2	13q12.2	-0.095091729	0.033341364	0.057470105
GAPDHS	19q13.12	-0.095091138	0.033342465	0.057470105
AP1G1	16q22.2	0.095090011	0.033344566	0.057470105
UBAP2	9p13.3	-0.095067872	0.033385859	0.057536361
GRK2	11q13.2	0.095052986	0.033413649	0.057579337
MRGPRX4	11p15.1	0.09504335	0.033431648	0.057605434
EWSR1	22q12.2	-0.095031038	0.033454659	0.05764016
PTBP3	9q32	-0.095026934	0.03346233	0.057648456
RAPGEF6	5q31.1	0.095007997	0.033497756	0.05770456

VEZT	12q22	-0.095000978	0.033510893	0.057722263
TTC16	9q34.11	0.094989001	0.033533322	0.057755966
FAM153B	5q35.2	-0.094978888	0.03355227	0.057779964
CR2	1q32.2	0.094977314	0.03355522	0.057779964
ACVR1B	12q13.13	0.094976981	0.033555845	0.057779964
CDADC1	13q14.2	0.094943531	0.033618588	0.057883061
OR2C3	1q44	0.094941622	0.033622171	0.057884293
RNF217	6q22.31	-0.094919675	0.033663398	0.057950325
HTRA4	8p11.22	0.094906992	0.033687241	0.057986422
P2RX6	22q11.21	0.094904318	0.03369227	0.057990133
FAM153CP	5q35.3	-0.094884303	0.033729931	0.058050002
SRBD1	2p21	0.094863564	0.033768993	0.058109305
DNTT	10q24.1	0.09486295	0.033770148	0.058109305
MED8	1p34.2	0.094837703	0.033817754	0.058186261
HMX2	10q26.13	0.094832812	0.033826983	0.058197177
WDR7	18q21.31	0.094829405	0.033833413	0.058203277
ACRBP	12p13.31	0.094827163	0.033837646	0.058205597
SNX22	15q22.31	0.094821099	0.033849094	0.058220327
PCYOX1	2p13.3	-0.094810029	0.033870002	0.058251322
TNMD	Xq22.1	0.094805555	0.033878456	0.058260897
SLC7A3	Xq13.1	0.094803179	0.033882945	0.058263652
BEST4	1p34.1	0.094795431	0.03389759	0.058283867
PTCHD3P1	10p11.23	0.09477997	0.033926831	0.058329174
TMEM95	17p13.1	0.094769796	0.033946083	0.058357302
CDC42EP1	22q13.1	0.094758785	0.03396693	0.058388167
CPB1	3q24	0.094756701	0.033970878	0.058389979
THADA	2p21	0.094748002	0.033987357	0.058413328
SUPT5H	19q13.2	0.094723	0.034034758	0.058489813
TMA16	4q32.2	-0.094709736	0.034059929	0.05852352
CCDC198	14q22.3	0.094709608	0.034060173	0.05852352
XKR5	8p23.1	0.094705586	0.034067807	0.058531653
PSMD13	11p15.5	-0.094703247	0.034072249	0.058534302
RAB11FIP4	17q11.2	0.094638548	0.03419529	0.058740679
INPPL1	11q13.4	0.094591123	0.03428572	0.058891006
ARHGEF25	12q13.3	0.094583868	0.034299571	0.058909784
SNORA5B	7p13	-0.094557289	0.03435036	0.058991992
BCL2L1	20q11.21	0.094537204	0.034388779	0.059051371
PSMA7	20q13.33	-0.094536155	0.034390788	0.059051371
SLC22A23	6p25.2	0.094534533	0.034393893	0.059051678
NBPF6	1p13.3	0.094480593	0.03449727	0.059224129
CDC25B	20p13	0.094414772	0.034623776	0.059436256
ABAT	16p13.2	0.094407901	0.034637004	0.059453906
NOTO	2p13.2	0.094399194	0.034653775	0.059477632
PEPD	19q13.11	-0.094385381	0.034680393	0.059518256
EEFSEC	3q21.3	-0.094358375	0.034732484	0.059602586
VCPKMT	14q21.3	-0.094352649	0.034743537	0.059616483
ZNF114	19q13.33	0.094345181	0.034757959	0.059636157
LOC100128164	3q26.2	0.094339389	0.034769146	0.059650281
C4BPA	1q32.2	0.094328434	0.034790315	0.059681523
KCNK10	14q31.3	0.094320776	0.034805119	0.059701845
PKP2	12p11.21	0.094269819	0.034903767	0.059865967
B3GALT2	1q31.2	0.094231537	0.034978033	0.059986136
SLC6A20	3p21.31	0.09423064	0.034979774	0.059986136
PEX16	11p11.2	-0.094218384	0.03500358	0.06002186
BTG2	1q32.1	0.094215617	0.035008957	0.060025979
MORN3	12q24.31	0.094208226	0.035023322	0.060045507
FAM43A	3q29	-0.094175347	0.035087284	0.060144946
PRPS1	Xq22.3	-0.094175347	0.035087284	0.060144946

TMEFF1	9q31.1	0.094134122	0.035167622	0.060277536
PISD	22q12.2	-0.09412248	0.035190338	0.060311349
IRX5	16q12.2	0.094119522	0.035196112	0.060316123
DRC7	16q21	0.094107356	0.035219866	0.060351705
BAG2	6p12.1	-0.094101486	0.035231333	0.060366228
FBN3	19p13.2	0.094064045	0.035304546	0.060486537
PRR23A	3q23	-0.09403538	0.035360686	0.060577577
CLYBL	13q32.3	-0.093999761	0.035430549	0.06069211
TAS1R2	1p36.13	0.093989029	0.035451623	0.060723054
PI3	20q13.12	-0.093985925	0.035457721	0.060728345
ST13P4	13q14.2	-0.09395014	0.035528075	0.060843676
TIGD2	4q22.1	-0.093947945	0.035532394	0.060845908
HTR3E	3q27.1	0.09394579	0.035536634	0.060848005
TMEM132C	12q24.32-q24.33	0.093879308	0.035667683	0.061067212
LZTR1	22q11.21 22q11.1-	0.093871222	0.03568365	0.061089367
AAMDC	11q14.1	0.093855858	0.035714004	0.061134819
MAP3K8	10p11.23	0.093854717	0.035716258	0.061134819
NUDT10	Xp11.22	0.093836782	0.035751724	0.061190334
FGF13	Xq26.3-q27.1	-0.093830761	0.035763636	0.061205531
JMJD4	1q42.13	-0.093766729	0.035890531	0.061417488
RAB30	11q14.1	0.093755087	0.035913643	0.061451828
CASQ2	1p13.1	0.093731722	0.035960068	0.061526048
TUBG2	17q21.2	-0.093726173	0.035971101	0.061539707
NANOS1	10q26.11	0.093721593	0.035980211	0.061545505
CLU	8p21.1	0.093721402	0.03598059	0.061545505
P2RY14	3q25.1	0.093684283	0.036054483	0.061666673
MAN1B1	9q34.3	0.093679414	0.036064185	0.06167804
PIP5K1B	9q21.11	-0.093676647	0.0360697	0.061679294
ZNF79	9q33.3	-0.093675979	0.036071032	0.061679294
YKT6	7p13	0.093662905	0.036097098	0.061717395
LINC00620	3p25.1	0.093661736	0.036099431	0.061717395
AKAP8L	19p13.12	-0.093646778	0.036129275	0.061763185
LRRC71	1q23.1	0.093624405	0.036173954	0.061834326
DFFA	1p36.22	0.093621204	0.036180351	0.061840022
TMC5	16p12.3	0.093601546	0.036219653	0.061901954
RPL3L	16p13.3	0.093566113	0.036290584	0.062017928
SOWAHD	Xq24	0.093563948	0.036294923	0.06202009
PLCB4	20p12.3-p12.2	-0.093561371	0.036300086	0.06202366
LINC00520	14q22.3	-0.093559617	0.036303602	0.062024416
ZNF594	17p13.2	-0.093556886	0.036309074	0.062028514
MKLN1	7q32.3	-0.09352425	0.03637454	0.062135092
CSNK1E	22q13.1	0.093513944	0.036395234	0.062159567
AP3B2	15q25.2	0.093513803	0.036395517	0.062159567
WARS2	1p12	-0.093512513	0.036398109	0.062159567
F2RL1	5q13.3	-0.093507837	0.036407502	0.062170346
SPTY2D1	11p15.1	0.093503066	0.036417089	0.062181455
KIAA0586	14q23.1	0.093495527	0.03643224	0.062202062
EPB41L2	6q23.1-q23.2	0.093456688	0.036510383	0.062330205
SYTL4	Xq22.1	0.093445714	0.036532489	0.062362668
MTERF4	2q37.3	0.093438939	0.036546142	0.062380698
CSK	15q24.1	-0.09343016	0.036563841	0.062405628
ULK2	17p11.2	0.093423098	0.036578082	0.062424654
SIPA1L1	14q24.2	0.093420999	0.036582316	0.062426601
RBM12	20q11.22	-0.093406303	0.036611971	0.062471923
LINC00515	21q21.3	0.09340085	0.036622979	0.062485422
CIB3	19p13.11	-0.093392688	0.036639462	0.062508261
NSMCE4A	10q26.13	-0.093382592	0.036659861	0.062537774
HECA	6q24.1	0.093365749	0.036693911	0.062590568

OR6T1	11q24.1	-0.093353123	0.036719454	0.062628844
VSIG1	Xq22.3	0.093351242	0.03672326	0.062630043
TMIGD2	19p13.3	0.093320901	0.036784707	0.062729537
SMURF1	7q22.1	-0.093272419	0.036883076	0.062891971
COQ6	14q24.3	-0.093259728	0.036908864	0.062926302
RPS11	19q13.33	-0.093259441	0.036909446	0.062926302
SCG3	15q21.2	0.093239183	0.036950641	0.062991212
ZNF227	19q13.31	0.093227664	0.036974081	0.063025847
BLID	11q24.1	0.093224641	0.036980236	0.063031014
PRRG3	Xq28	0.093197821	0.037034869	0.063118803
KRT5	12q13.13	-0.093174798	0.037081825	0.063193493
AGO4	1p34.3	0.093161343	0.03710929	0.063234424
CDH26	20q13.33	-0.093159961	0.037112111	0.063234424
NCOR1	17p12-p11.2	0.093154854	0.037122542	0.063246857
ATP1A3	19q13.2	0.093148796	0.037134915	0.063262597
BMT2	7q31.1	-0.093131283	0.03717071	0.06331823
MRO	18q21.2	0.09310034	0.037234027	0.063420734
FGFR4	5q35.2	-0.09309817	0.037238469	0.063422947
HDAC1	1p35.2-p35.1	-0.093079657	0.037276398	0.063482187
LINC00592	12q13.13	-0.093074893	0.037286165	0.063489459
YIPF6	Xq12-q13.1	-0.093074504	0.037286961	0.063489459
C17ORF49	17p13.1	0.093068779	0.037298701	0.063501724
XRCC4	5q14.2	0.093067922	0.037300457	0.063501724
SLC26A3	7q22.3-q31.1	-0.093044359	0.037348807	0.063578671
LINC01184	5q23.3	-0.093042155	0.037353332	0.063581012
RWDD2A	6q14.1	0.093023165	0.037392341	0.063642041
C4ORF33	4q28.2	0.093015912	0.037407247	0.063662043
MPZL3	11q23.3	0.093001598	0.037436683	0.063706766
RTL4	Xq23	0.092999683	0.037440624	0.0637081
ABCC11	16q12.1	-0.09297679	0.037487748	0.063782906
MOCS3	20q13.13	-0.092974497	0.037492469	0.06378556
NUDT22	11q13.1	-0.092951786	0.037539273	0.063859804
LY6G5C	6p21.33	0.092948732	0.03754557	0.063865132
HTN3	4q13.3	0.092941205	0.037561095	0.063886154
COPG1	3q21.3	0.092918005	0.037608982	0.063962212
FLACC1	2q33.1	0.092880901	0.037685673	0.064087241
WNT2B	1p13.2	-0.092861703	0.037725406	0.064149404
KLHL20	1q25.1	0.092857981	0.037733113	0.064157102
WDR92	2p14	-0.09282754	0.037796199	0.064258952
KLK13	19q13.41	-0.092822959	0.037805701	0.064269691
TMCO4	1p36.13	0.09280521	0.037842533	0.064326886
EGFR	7p11.2	0.092780495	0.037893872	0.064408731
STX16	20q13.32	0.092746714	0.037964139	0.064522728
SLC2A4RG	20q13.33	0.092713696	0.038032924	0.06463419
SF3A3	1p34.3	0.09270339	0.038054416	0.064665268
GABPA	21q21.3	0.092665315	0.038133907	0.064794889
MECR	1p35.3	0.092636687	0.038193767	0.064891136
IFT46	11q23.3	-0.092634492	0.03819836	0.064893475
ZNF295-AS1	21q22.3	0.092620026	0.038228641	0.06493616
ZNF708	19p12	0.092619415	0.038229921	0.06493616
ABHD12B	14q22.1	0.092616841	0.038235311	0.064939849
MYD88	3p22.2	0.092610826	0.038247909	0.064955778
ATRNL1	10q25.3	-0.092608725	0.038252311	0.064957787
GLRA4	Xq22.2	0.092594696	0.038281712	0.065002244
GAL	11q13.2	0.092578069	0.038316583	0.065055981
FERD3L	7p21.1	0.092553722	0.038367694	0.065137279
CXCL8	4q13.3	0.092541451	0.038393476	0.065175565
CUZD1	10q26.13	0.092536749	0.038403357	0.065186857

ESPNP	1p36.13	0.09252281	0.038432669	0.065231124
LOC441601	11p11.12	0.09251097	0.03845758	0.065267915
BCL7A	12q24.31	-0.092489443	0.038502908	0.065339347
IGF2BP2-AS1	3q27.2	-0.092460972	0.038562928	0.065435698
ZDHHC8	22q11.21	0.092459384	0.038566278	0.065435881
FKRP	19q13.32	0.092436863	0.038613814	0.065511026
PPM1E	17q22	0.092420068	0.038649296	0.065565712
SLC34A1	5q35.3	-0.092414265	0.038661563	0.065581008
FAM27C	9q13	0.092353571	0.038790053	0.065793434
CPNE9	3p25.3	0.092327069	0.038846272	0.065883251
MUSK	9q31.3	-0.092309	0.038884641	0.065942783
SLC22A8	11q12.3	-0.09230283	0.03889775	0.065959471
SOWAHA	5q31.1	0.092290844	0.038923228	0.065997127
ZDBF2	2q33.3	-0.092255076	0.038999341	0.066120627
KLHL7	7p15.3	-0.09221576	0.039083148	0.066257148
LINC02035	3q21.1	0.092209271	0.039096994	0.066275055
CDRT4	17p12	0.092189995	0.039138152	0.06633925
ADGRD2	9q33.3	-0.092184969	0.039148888	0.066351873
ANTXRL	10q11.22	0.092170267	0.039180312	0.066399556
SYCP2L	6p24.2	0.092166111	0.039189199	0.06640904
ORAI1	12q24.31	-0.092164134	0.039193426	0.066410626
ID2	2p25.1	0.092155832	0.039211185	0.066434058
GJB3	1p34.3	0.092154591	0.039213839	0.066434058
HIST1H2AH	6p22.1	-0.092141998	0.039240792	0.066474139
MECOM	3q26.2	0.092129589	0.039267364	0.066513568
PHYHD1	9q34.11	0.092120333	0.039287196	0.066538335
EFHC2	Xp11.3	0.092119687	0.039288581	0.066538335
PPP1CB	2p23.2	-0.092117661	0.039292922	0.066540104
RNF121	11q13.4	0.092114798	0.039299059	0.066544688
ZNF529	19q13.12	0.092113321	0.039302224	0.066544688
THSD7A	7p21.3	0.092109004	0.039311481	0.066554776
EPS8L1	19q13.42	0.092096526	0.039338242	0.066594495
LOC100130093	1q42.13	0.092081972	0.039369477	0.066641782
SMIM24	19p13.3	0.092079527	0.039374726	0.066645076
C15ORF41	15q14	-0.092072906	0.039388943	0.066663548
CD164L2	1p36.11	0.092064803	0.039406348	0.066687412
FAM177A1	14q13.2	0.092037694	0.03946463	0.066780442
CFAP47	Xp21.1	-0.09201617	0.039510954	0.066853223
D2HGDH	2q37.3	-0.09200563	0.039533655	0.066886025
SNORA15	7p11.2	-0.091999752	0.03954632	0.066901843
SSX1	Xp11.23	-0.091978618	0.039591884	0.066973312
SCN8A	12q13.13	0.091968223	0.039614313	0.067005635
ATXN7L3B	12q21.1	-0.09196307	0.039625435	0.06701883
TAB3	Xp21.2	0.09195639	0.039639857	0.067037602
RFPL1S	22q12.2	-0.091919532	0.039719511	0.067166682
CST13P	20p11.21	0.091914418	0.039730573	0.067179758
SLC25A18	22q11.21	0.091901956	0.039757542	0.067219727
PLAG1	8q12.1	0.091887778	0.039788242	0.067265996
CREB3L3	19p13.3	0.091873712	0.039818721	0.067311885
AMDHD2	16p13.3	0.09186249	0.03984305	0.067347371
AMHR2	12q13.13	0.091845386	0.039880157	0.067404447
DMC1	22q13.1	-0.091843667	0.039883887	0.067405105
FAM182B	20p11.1	0.091836059	0.039900404	0.067427372
POU4F2	4q31.22	0.091827225	0.03991959	0.067454145
ZACN	17q25.1	-0.091818251	0.039939086	0.067478734
SNX24	5q23.2	-0.091817449	0.039940829	0.067478734
SMC1B	22q13.31	0.091785167	0.040011034	0.067591684
NFYC	1p34.2	0.091775368	0.040032365	0.067622057

DTNA	18q12.1	0.091769545	0.040045046	0.067637815
EEF1A1P9	4q24	-0.091759334	0.040067289	0.067669721
DNAJB13	11q13.4	0.09175555	0.040075534	0.067677982
GTF2H1	11p15.1	-0.091751509	0.040084342	0.067687192
TLR5	1q41	0.091737767	0.040114304	0.067732118
UTP14A	Xq26.1	-0.091735384	0.040119503	0.067735229
LINC00469	17q25.1	0.091725673	0.04014069	0.06776533
TSPAN1	1p34.1	0.091719159	0.040154908	0.067783661
ADAM21P1	14q24.2	0.091673862	0.040253894	0.067945072
ADAMTSL1	9p22.2-p22.1	0.091668063	0.040266581	0.067960802
NECTIN3	3q13.13	0.091664003	0.040275466	0.067970112
ELSPBP1	19q13.33	0.091660501	0.04028313	0.067977361
S100A16	1q21.3	-0.091656941	0.040290923	0.067984825
KCNN1	19p13.11	0.091621779	0.040367962	0.068109123
MYOG	1q32.1	0.09161528	0.040382215	0.068127474
BCORP1	Yq11.222	0.091565227	0.040492129	0.068307195
PRPF39	14q21.2	-0.091538612	0.040550676	0.068400242
MEX3D	19p13.3	0.091526207	0.04057799	0.068440593
SLC24A1	15q22.31	0.091520435	0.040590702	0.068456312
ZNF41	Xp11.3	0.091507312	0.040619621	0.068499359
PCDH11X	Xq21.31	0.091502556	0.040630106	0.068511316
KLK6	19q13.41	0.091499252	0.040637392	0.068517875
SAMD9	7q21.2	0.091496147	0.040644238	0.068523693
ST8SIA5	18q21.1	0.091485303	0.04066816	0.068558295
SEMG2	20q13.12	-0.09148103	0.040677591	0.068568466
CBLC	19q13.32	-0.091460553	0.040722803	0.06863712
TTC4	1p32.3	-0.091459503	0.040725122	0.06863712
SLC17A1	6p22.2	0.091453138	0.040739187	0.068651407
FKBP1B	2p23.3	0.091452587	0.040740403	0.068651407
DKFZP434A062	9q34.3	0.091449017	0.040748293	0.068658969
FAM133CP	10q21.1	-0.091428303	0.040794097	0.068730407
FAM204A	10q26.11	0.091414939	0.040823671	0.068774492
CEACAM7	19q13.2	-0.091397839	0.040861541	0.068832543
LHFPL1	Xq23	0.091389992	0.040878927	0.068856083
NKTR	3p22.1	0.091386406	0.040886874	0.06886372
CSNK1G2-AS1	19p13.3	0.091376603	0.040908609	0.068894577
LINC00938	12q12	-0.091365508	0.040933219	0.068926815
NRXN1	2p16.3	0.091364893	0.040934583	0.068926815
AATBC	21q22.3	-0.091356538	0.040953125	0.068952282
ARHGEF4	2q21.1	-0.091353198	0.040960539	0.068959011
LPCAT3	12p13.31	-0.091341174	0.040987238	0.068998204
KLRA1P	12p13.2	0.091319901	0.041034513	0.069072025
DEFB124	20q11.21	0.091315579	0.041044122	0.069082437
FRS2	12q15	0.091311497	0.041053201	0.069091956
SYP	Xp11.23	-0.091300238	0.041078248	0.069128343
ITGB1BP1	2p25.1	-0.091278002	0.041127756	0.069205887
H1FOO	3q22.1	0.091258315	0.041171631	0.069273938
POTEH	22q11.1	0.091250785	0.041188421	0.069296411
WDR5B	3q21.1	-0.091217215	0.041263352	0.069416689
PTPN5	11p15.1	0.091193927	0.041315401	0.069498456
PABPC4	1p34.3	0.091189923	0.041324355	0.069507723
CSN2	4q13.3	0.091185686	0.041333833	0.069517871
SCRT2	20p13	-0.091179342	0.041348025	0.069535945
SCAP	3p21.31	-0.091173891	0.041360224	0.069550663
ODR4	1q31.1	-0.091158146	0.041395478	0.069604146
HADHB	2p23.3	-0.091156046	0.041400181	0.069606253
SEC16A	9q34.3	0.091150512	0.04141258	0.069621299
SPATA2	20q13.13	0.091136675	0.041443593	0.069667633

NPEPL1	20q13.32	-0.091129804	0.041459	0.069687726
KCTD18	2q33.1	-0.091122124	0.041476226	0.069710875
RIOK3	18q11.2	-0.091097836	0.041530747	0.069796698
GAREM1	18q12.1	-0.091091683	0.041544568	0.069814111
TMEM88	17p13.1	0.091079566	0.041571798	0.069854053
IFI27L2	14q32.12	-0.09107632	0.041579097	0.0698605
ARMCX5	Xq22.1	-0.091059284	0.041617412	0.069919054
UBE2V1	20q13.13	0.091046592	0.041645976	0.069961218
OR4F6	15q26.3	0.091027989	0.041687874	0.070025773
ST3GAL3	1p34.1	-0.091022258	0.041700788	0.070041635
ANP32A	15q23	-0.091005654	0.041738224	0.070098679
EFNB1	Xq13.1	0.09099907	0.041753078	0.070117789
FBXL3	13q22.3	0.09097569	0.041805853	0.070197629
U2AF2	19q13.42	-0.090974927	0.041807578	0.070197629
LINC00112	21q22.3	0.090949562	0.041864901	0.0702866
TAB1	22q13.1	-0.090948398	0.041867532	0.0702866
PDIA2	16p13.3	0.090941435	0.041883281	0.07030719
TBC1D3B	17q12	-0.090935756	0.041896128	0.070322906
CFHR1	1q31.3	-0.090861335	0.042064804	0.070600156
GS1-124K5.11	7q11.21	-0.090859174	0.04206971	0.070602519
ZNF674	Xp11.3	-0.090843238	0.042105908	0.07065739
TMEM232	5q22.1	0.090828011	0.042140518	0.070709589
AQP11	11q14.1	-0.090820815	0.042156884	0.070731169
VN1R5	1q44	0.090802737	0.042198019	0.070791177
SBNO1	12q24.31	-0.090802014	0.042199667	0.070791177
ZNF354B	5q35.3	0.090774531	0.04226227	0.070890303
KNTC1	12q24.31	-0.090772622	0.042266621	0.070891708
C3ORF35	3p22.2	0.09076091	0.042293325	0.070928974
HTR2C	Xq23	0.090759795	0.042295869	0.070928974
KRT4	12q13.13	-0.09072279	0.042380344	0.07106473
PER2	2q37.3	-0.090717561	0.042392292	0.071078858
FSD1	19p13.3	0.090704537	0.042422063	0.071122865
AQP5	12q13.12	0.090700623	0.042431014	0.071131962
PPA1	10q22.1	-0.090684257	0.042468457	0.071188818
PHC3	3q26.2	-0.09067605	0.042487243	0.071214393
WDR49	3q26.1	-0.090654572	0.042536443	0.071290937
PTPN23	3p21.31	0.090629196	0.042594634	0.071377092
RNASE12	14q11.2	0.09062907	0.042594923	0.071377092
CASP1	11q22.3	0.090606771	0.042646114	0.071454423
SNORA72	8q22.2	-0.090605883	0.042648153	0.071454423
PMM2	16p13.2	-0.090588735	0.042687554	0.071514501
RRAGD	6q15	-0.090562588	0.042747693	0.071609306
DDX50	10q22.1	0.090555145	0.042764826	0.071623423
TM2D1	1p31.3	0.09055419	0.042767023	0.071623423
CT83	Xq23	0.090553846	0.042767817	0.071623423
KDM5C	Xp11.22	0.090552759	0.042770318	0.071623423
COPS8	2q37.3	0.090542358	0.042794273	0.071657591
MESP1	15q26.1	-0.090514736	0.042857939	0.071758244
POLB	8p11.21	-0.090503519	0.042883816	0.071795614
VPS18	15q15.1	0.090495217	0.042902978	0.071821734
OR7E156P	13q21.31	0.090487366	0.042921105	0.071846119
ERBB4	2q34	0.090478582	0.042941392	0.071874117
LINC00602	6q27	0.090467093	0.04296794	0.071912587
TMTC1	12p11.22	-0.090457523	0.042990065	0.071942484
MBD6	12q13.3	-0.090456283	0.042992934	0.071942484
RASL10A	22q12.2	0.090444858	0.043019361	0.071980737
POLD3	11q13.4	-0.090440156	0.043030242	0.071992973
IPO5	13q32.2	0.090434048	0.043044377	0.072010652

SLC30A3	2p23.3	-0.090414848	0.043088843	0.072079065
PATZ1	22q12.2	-0.090405802	0.043109805	0.072108153
FRMD4B	3p14.1	0.090395878	0.043132813	0.072140657
LRIF1	1p13.3	-0.090382804	0.043163137	0.072185393
GRIK5	19q13.2	0.090364248	0.04320621	0.072251439
OR4N2	14q11.2	0.090361431	0.043212752	0.072256391
MT3	16q13	0.09035345	0.04323129	0.072281398
PIK3IP1	22q12.2	0.090348069	0.043243794	0.072295516
CCDC106	19q13.42	-0.090346733	0.043246899	0.072295516
GAL3ST4	7q22.1	0.090325834	0.04329549	0.072370751
UBR5	8q22.3	0.090273159	0.043418171	0.072569807
IL31	12q24.31	-0.090268005	0.043430192	0.072583886
HIST2H3D	1q21.2	-0.090263906	0.043439751	0.072593849
DTNB	2p23.3	-0.090244149	0.04348586	0.072664886
RIMBP3C	22q11.21	0.090225244	0.04353002	0.072732655
NLRP13	19q13.43	0.090214362	0.043555453	0.072769125
OCLM	1q31.1	0.090152375	0.043700583	0.073005552
QRICH1	3p21.31	0.090148627	0.04370937	0.073014187
SPPL2B	19p13.3	-0.090131164	0.043750336	0.073076569
APOL2	22q12.3	-0.090123816	0.043767582	0.073099325
SCAMP3	1q22	-0.090109502	0.043801196	0.073149412
FLJ36000	17p11.2	0.090103364	0.043815618	0.073167441
RCOR2	11q13.1	-0.090056063	0.04392688	0.073347167
MIA2	14q13.2	0.090040339	0.043963919	0.07340294
ANKRD30B	18p11.21	0.090005739	0.044045516	0.073533091
RPTOR	17q25.3	-0.089993654	0.044074045	0.073574632
PPP2R2C	4p16.1	-0.089990505	0.044081482	0.07358096
LINC00661	19p13.12	-0.089968272	0.044134017	0.073662559
CTBP1-DT	4p16.3	0.089928764	0.0442275	0.073812483
CYP19A1	15q21.2	0.089919676	0.044249027	0.073842301
NUP93	16q13	-0.089913209	0.044264351	0.073861766
MS4A15	11q12.2	0.089907922	0.044276885	0.073876572
TUSC2	3p21.31	-0.089893456	0.044311187	0.073927692
GLIPR1L2	12q21.2	-0.089888276	0.044323475	0.07394208
RBM4B	11q13.2	-0.089857957	0.04439546	0.074056045
ZNF763	19p13.2	0.089855858	0.044400448	0.074058244
NHLH2	1p13.1	0.089838087	0.04444269	0.074122575
HEATR5A	14q12	0.089832765	0.044455348	0.07413656
C19ORF18	19q13.43	0.089831472	0.044458423	0.07413656
KRT2	12q13.13	0.089826128	0.044471137	0.074151633
NDUFA4L2	12q13.3	-0.0898195	0.044486908	0.074171801
ZNF492	19p12	0.089806386	0.04451813	0.074217725
HIST2H2BF	1q21.2	0.089796407	0.044541898	0.074251215
CRYZ	1p31.1	0.089773123	0.044597401	0.074337597
FOXO4	Xq13.1	0.089758237	0.044632916	0.074390652
FUCA1	1p36.11	0.089746785	0.044660252	0.074430065
RNF149	2q11.2	-0.089741346	0.044673242	0.074445565
TFDP3	Xq26.2	0.089725776	0.044710441	0.074501402
TRIP10	19p13.3	0.089721211	0.044721353	0.074513433
UBIAD1	1p36.22	0.089716726	0.044732076	0.074525146
EPB41	1p35.3	0.089688384	0.044799885	0.074631956
HAPLN1	5q14.3	0.089659154	0.04486991	0.074742439
RPS24	10q22.3	-0.089647255	0.044898441	0.074783719
ADD2	2p13.3	-0.089645728	0.044902103	0.074783719
MED7	5q33.3	-0.08963151	0.04493622	0.074832765
NFKBIL1	6p21.33	0.089630365	0.044938968	0.074832765
LRIG3	12q14.1	0.089628265	0.044944008	0.074834981
PIP5K1A	1q21.3	-0.0896025	0.045005894	0.074931843

TUBBP6	7p11.2	0.089571977	0.045079301	0.075046319
RHOQ	2p21	0.089570819	0.045082089	0.075046319
RAD21	8q24.11	-0.089559272	0.045109886	0.075086397
PDE6G	17q25.3	0.089534366	0.045169894	0.075180079
ENPP7	17q25.3	0.08952833	0.045184445	0.075198095
SMG6	17p13.3	0.089525395	0.045191522	0.075203671
GJD2	15q14	0.089512339	0.045223019	0.075249881
MALT1	18q21.32	0.089488942	0.045279506	0.07533766
ANKRD45	1q25.1	0.089478854	0.04530388	0.075369578
ZNF829	19q13.12	0.089477911	0.045306159	0.075369578
ZNF253	19p13.11	0.089445332	0.045384952	0.075494432
GPR143	Xp22.2	-0.089431209	0.045419146	0.075545083
C14ORF39	14q23.1	0.089417546	0.045452246	0.075593907
GALR2	17q25.1	-0.089415865	0.045456319	0.075594451
CHIA	1p13.2	0.089409722	0.045471209	0.075612982
FAM117A	17q21.33	-0.089379011	0.04554571	0.075730627
SLC25A21	14q13.3	-0.089375141	0.045555105	0.075740007
LOC653653	17q23.1	0.089371186	0.045564709	0.075749733
MAGOH	1p32.3	-0.089347234	0.045622905	0.075840234
PADI1	1p36.13	-0.089321291	0.045686008	0.075932674
ASTE1	3q22.1	-0.089321278	0.04568604	0.075932674
PPM1J	1p13.2	-0.08930391	0.045728326	0.075996696
TXNDC9	2q11.2	-0.089287878	0.045767388	0.076055351
EXOC6B	2p13.2	-0.089285779	0.045772505	0.076057591
VPS26C	21q22.13	0.089278717	0.045789722	0.076079934
NIT1	1q23.3	-0.089269366	0.045812531	0.076111564
BLVRA	7p13	-0.089250807	0.045857822	0.076180537
BRF1	14q32.33	-0.08923339	0.045900363	0.076244931
HIST1H2AE	6p22.2	-0.089206338	0.0459665	0.076348506
SCARA3	8p21.1	0.089200372	0.045981097	0.076366466
TMEM45B	11q24.3	-0.08918644	0.0460152	0.076416815
TRIM71	3p22.3	0.089178556	0.046034507	0.076442587
C5ORF22	5p13.3	0.08916745	0.046061717	0.076481477
TBC1D10A	22q12.2	0.089153327	0.046096338	0.076532665
FGD1	Xp11.22	-0.089136245	0.04613824	0.076595931
UTF1	10q26.3	0.089134326	0.04614295	0.076597449
SPRY3	Xq28 and Yq12	0.0891289	0.04615627	0.076613257
LRRC41	1p34.1-p33	0.089125939	0.046163537	0.076619018
SNORA55	1p34.3	-0.089119916	0.046178327	0.076637262
KRTAP6-1	21q22.11	0.089109644	0.046203559	0.07667283
SGCZ	8p22	0.089095321	0.046238762	0.076724939
ACPP	3q22.1	-0.089077176	0.046283388	0.076792673
RNF165	18q21.1	0.089064485	0.046314625	0.076838182
LINC00167	11q24.3	-0.089058803	0.046328614	0.076855072
LINC02447	4p16.1	-0.089051431	0.04634677	0.076878871
DAD1P1	12p12.1	0.089035876	0.046385102	0.076936131
FAM170B	10q11.23	0.089025445	0.046410819	0.07697246
AGPAT5	8p23.1	-0.088993296	0.046490161	0.077097712
KLRC4	12p13.2	0.088977477	0.046529245	0.077156186
TFE3	Xp11.23	0.088975738	0.046533543	0.077156972
RAC3	17q25.3	-0.088956843	0.046580263	0.077228093
MFSD2A	1p34.2	-0.088944438	0.046610959	0.077272637
WIZ	19p13.12	-0.088942625	0.046615447	0.077273729
MKX	10p12.1	0.088911377	0.046692849	0.077395679
METTL6	3p25.1	-0.088893671	0.046736755	0.077462092
PCAT4	4q21.21	0.088888823	0.046748782	0.077475662
TMEM184C	4q31.23	0.088883842	0.046761143	0.077489784
APOA1	11q23.3	-0.088874479	0.046784385	0.077521934

SERPINE2	2q36.1	0.08886886	0.046798337	0.077538685
ALB	4q13.3	0.088846321	0.046854341	0.077625102
PANK4	1p36.32	0.088842331	0.046864259	0.077635159
RBM12B	8q22.1	0.088832025	0.046889889	0.077671243
C18ORF25	18q21.1	-0.088818284	0.046924082	0.077721501
ZNF428	19q13.31	0.088814944	0.046932396	0.077728892
HPN	19q13.11	0.088810215	0.04694417	0.07774201
EXOSC6	16q22.1	-0.088804065	0.046959484	0.07776099
NAT16	7q22.1	0.088765882	0.047054665	0.077910888
EIF5B	2q11.2	-0.088764654	0.047057728	0.077910888
FDPSP2	7q11.23	-0.088756783	0.047077369	0.077937011
TMEM43	3p25.1	0.088743851	0.047109656	0.077984064
PIH1D2	11q23.1	0.088720185	0.047168787	0.078075544
DNAJC8	1p35.3	0.088694229	0.047233713	0.078176599
SEZ6	17q11.2	0.088692529	0.047237969	0.078177231
ACTRT3	3q26.2	-0.088689649	0.047245178	0.07818275
CRP	1q23.2	0.088666886	0.047302189	0.078270674
RNF169	11q13.4	0.08866417	0.047308996	0.078275519
OR52D1	11p15.4	-0.088659218	0.047321408	0.078289636
FUT2	19q13.33	-0.088640027	0.047369535	0.078362833
KRTAP10-3	21q22.3	0.088620362	0.047418893	0.078438055
DNASE1L2	16p13.3	-0.088614803	0.047432852	0.078454714
ZIC2	13q32.3	-0.088605101	0.047457227	0.078488598
HIC2	22q11.21	-0.088601761	0.04746562	0.078491983
PIPOX	17q11.2	0.08860119	0.047467053	0.078491983
KCNG1	20q13.13	0.088561013	0.047568115	0.078652654
OR5M10	11q12.1	-0.088539851	0.047621418	0.078734339
PABPC1	8q22.3	-0.088534008	0.047636147	0.078752237
SOX14	3q22.3	0.088530272	0.047645563	0.078761351
GAS2L2	17q12	0.088525424	0.047657789	0.078775108
ING3	7q31.31	-0.088521509	0.047667661	0.078784972
OAS3	12q24.13	0.088486103	0.047757026	0.07892621
SEC61A2	10p14	-0.088469499	0.047798984	0.078983695
RLBP1	15q26.1	0.088469241	0.047799637	0.078983695
RNU12-2P	Xp11.3	-0.088453116	0.047840415	0.079044603
HOXB1	17q21.32	-0.088437901	0.047878918	0.079101743
EFNA5	5q21.3	0.08842274	0.047917309	0.079158688
NPS	10q26.2	-0.088407161	0.047956786	0.079217419
SELENBP1	1q21.3	0.088404037	0.047964707	0.079224018
ZCCHC4	4p15.2	0.088378748	0.048028854	0.079323478
WSB2	12q24.23	-0.088373214	0.048042904	0.079340187
PRDX4	Xp22.11	0.08835222	0.048096225	0.079421746
HSD17B14	19q13.33	0.088343822	0.048117568	0.079450487
ANKRD12	18p11.22	0.088314335	0.048192573	0.079567822
DNMBP	10q24.2	-0.088306701	0.048212007	0.079590095
EEF2K	16p12.2	0.088305938	0.048213951	0.079590095
HTR3D	3q27.1	-0.088302677	0.048222254	0.07959729
COL4A3BP	5q13.3	0.088298972	0.048231691	0.079606355
PILRB	7q22.1	-0.0882942	0.048243845	0.079619903
SCLT1	4q28.2	0.088278932	0.048282756	0.079677603
TSPY26P	20q11.21	0.088275592	0.048291271	0.079681835
STAG2	Xq25	-0.088274829	0.048293218	0.079681835
DDX5	17q23.3	-0.088268435	0.048309522	0.079702219
RPH3A	12q24.13	0.088255101	0.04834354	0.079747412
PPP1R3F	Xp11.23	0.0882546	0.048344818	0.079747412
SLC22A11	11q13.1	-0.088245459	0.048368154	0.079779383
DAZ3	Yq11.23	0.088243244	0.048373807	0.079782186
CAPRN1	11p13	0.088234654	0.048395745	0.07980894

SNRPC	6p21.31	-0.088233795	0.048397938	0.07980894
MTMR12	5p13.3	0.088227402	0.048414273	0.079829352
CCDC197	14q32.12	0.088224152	0.048422576	0.07983652
WEE1	11p15.4	-0.088221294	0.04842988	0.079842038
CTNND1	11q12.1	-0.088214424	0.048447443	0.079864467
WDR24	16p13.3	-0.088206312	0.048468183	0.079892131
SCN4A	17q23.3	-0.088195629	0.048495513	0.079930651
R3HDM2	12q13.3	0.088169669	0.048561976	0.080033659
GMNC	3q28	0.088157627	0.04859283	0.080077967
METTL9	16p12.2	-0.088127013	0.048671348	0.080200811
ZNF100	19p12	0.088100198	0.048740209	0.080307722
GK	Xp21.2	-0.088097049	0.048748301	0.080314497
UTP23	8q24.11	-0.088071761	0.048813324	0.08041506
CCDC167	6p21.2	-0.088052485	0.048862938	0.080490222
INHBB	2q14.2	0.08804466	0.04888309	0.080516846
PGK1	Xq21.1	-0.088041892	0.048890219	0.080522015
LOC285074	2p11.2	-0.088023429	0.048937801	0.080588246
MYRIP	3p22.1	0.08802319	0.048938419	0.080588246
PLA2G2A	1p36.13	0.088011245	0.048969223	0.080632391
ZNF790	19q13.12	0.088005153	0.048984941	0.080651691
PLCH1	3q25.31	-0.087990744	0.049022134	0.080706342
SH3RF2	5q32	-0.087986163	0.049033961	0.080719229
SLC17A3	6p22.2	0.087940345	0.049152406	0.08090761
RRAS2	11p15.2	-0.087898657	0.04926038	0.081078728
NEMF	14q21.3	0.08789484	0.049270276	0.081085157
GGT8P	2p11.2	0.087894051	0.049272322	0.081085157
RAD17	5q13.2	0.087885393	0.049294777	0.081115494
MOB1B	4q13.3	0.087877568	0.049315078	0.081142283
OTOR	20p12.1	-0.087875121	0.049321427	0.081146113
PPOX	1q23.3	-0.087849226	0.049388667	0.081250114
MSRB1	16p13.3	-0.087838252	0.049417185	0.081290403
NFX1	9p13.3	-0.087818689	0.049468057	0.081367453
POU5F2	5q15	-0.087813313	0.049482046	0.08138383
AMDHD1	12q23.1	0.087804886	0.049503978	0.081413266
CDCP2	1p32.3	0.087786816	0.049551037	0.081484017
RBP5	12p13.31	0.087777133	0.049576267	0.081518864
GUCY1B2	13q14.3	-0.087728522	0.0497031	0.081720758
ZNF34	8q24.3	0.087722213	0.049719581	0.08173965
ETAA1	2p14	-0.087721022	0.049722692	0.08173965
TMEM184B	22q13.1	0.087702269	0.049771711	0.081813567
PUF60	8q24.3	-0.087697116	0.049785187	0.081829053
BRIX1	5p13.2	-0.087694635	0.049791677	0.081833055
NEK10	3p24.1	0.087686174	0.049813812	0.081862767
PHF3	6q12	0.087649307	0.049910363	0.082014757
PYDC1	16p11.2	0.087646057	0.049918883	0.082022078
PARP3	3p21.2	0.087622397	0.049980937	0.082113959
CDKN2D	19p13.2	-0.087621633	0.049982941	0.082113959
MSMB	10q11.22	-0.087618443	0.049991314	0.08212103
EEF1DP3	13q13.1	-0.087612886	0.0500059	0.082138303
LOC148709	1q32.1	0.087611158	0.050010436	0.082139069
LELP1	1q21.3	-0.087608569	0.050017235	0.082143549
C12ORF50	12q21.32	-0.087584115	0.050081477	0.08224236
TBXT	6q27	0.087569626	0.050119575	0.082298226
USP27X	Xp11.23	-0.087564093	0.050134129	0.082315426
CNR2	1p36.11	0.08751406	0.050265901	0.082525069
TRIM75P	4q32.3	0.087495101	0.05031591	0.082600451
SLCO6A1	5q21.1	0.087490768	0.050327346	0.082612504
TNP2	16p13.13	-0.087483402	0.05034679	0.082637699

RFNG	17q25.3	-0.087465133	0.050395041	0.082710169
KIR3DX1	19q13.42	0.087449115	0.050437382	0.082768737
ZNF358	19p13.2	0.087448529	0.05043893	0.082768737
TRIOBP	22q13.1	0.087442327	0.050455333	0.082788922
GJB6	13q12.11	-0.087434597	0.050475781	0.082815739
ARL8B	3p26.1	-0.087354057	0.05068925	0.083159218
KRBOX4	Xp11.3	-0.087351244	0.05069672	0.083164711
TMEM70	8q21.11	-0.087348713	0.050703441	0.083168975
MIR4697HG	11q25	0.087324161	0.050768679	0.083264413
ADIPOR1	1q32.1	-0.087323711	0.050769876	0.083264413
EPC2	2q23.1	0.087312165	0.050800583	0.083308002
NFE2L3P2	17q21.32	0.087300763	0.050830918	0.083350975
RBKS	2p23.2	0.087276666	0.050895084	0.08344941
ST14	11q24.3	0.08726426	0.050928143	0.083496831
PCSK4	19p13.3	-0.087197798	0.051105563	0.083778917
GHDC	17q21.2	0.087196698	0.051108502	0.083778917
ZNF707	8q24.3	0.087188396	0.051130702	0.083808499
C11ORF49	11p11.2	0.087176659	0.051162101	0.083853154
CCDC117	22q12.1	-0.087157001	0.051214725	0.083926607
EP300	22q13.2	0.08715681	0.051215236	0.083926607
ANKZF1	2q35	0.087124174	0.051302701	0.084063111
SLC9A3	5p15.33	-0.087090655	0.051392663	0.084203682
PSME1	14q12	-0.087080755	0.05141926	0.084240419
ZNF132	19q13.43	0.087071117	0.051445163	0.084276015
KRTAP9-8	17q21.2	-0.087057175	0.051482653	0.084330584
ORM1	9q32	0.087044678	0.051516277	0.084378811
MIR4435-2HG	2q13	0.087026173	0.051566098	0.08444828
KRTAP1-3	17q21.2	0.087025655	0.051567492	0.08444828
NDUFS5	1p34.3	-0.087024262	0.051571245	0.08444828
QRFP	9q34.12	-0.086990227	0.051662993	0.084585352
SOS1	2p22.1	0.086990099	0.051663336	0.084585352
LINC02159	5q34	-0.086964901	0.051731352	0.084687884
USP22	17p11.2	0.086962521	0.051737778	0.084687884
LINC01089	12q24.31	-0.086962235	0.051738552	0.084687884
TMED8	14q24.3	0.086957941	0.051750151	0.0847
KRT25	17q21.2	0.086941341	0.051795012	0.084766548
CCDC60	12q24.23	0.086921962	0.051847421	0.084845439
AKNAD1	1p13.3	0.086912972	0.051871751	0.08487837
LINC00643	14q23.2	0.086890486	0.051932644	0.084969664
ATXN2	12q24.12	0.086889233	0.051936039	0.084969664
SLC26A4	7q22.3	0.086887707	0.051940176	0.084969664
SCP2	1p32.3	0.086881218	0.051957762	0.084991543
BCAS4	20q13.13	0.086873202	0.051979493	0.085020198
ZNF576	19q13.31	-0.086825679	0.05210848	0.085224268
XRRA1	11q13.4	0.086821862	0.052118852	0.085234324
LRRC23	12p13.31	-0.086810413	0.052149973	0.085270428
OSTC	4q25	0.086809934	0.052151276	0.085270428
CT47A2	Xq24	0.086809077	0.052153606	0.085270428
GARNL3	9q33.3	-0.086803636	0.052168402	0.085287709
PPIEL	1p34.3	0.086793043	0.052197217	0.085327903
RNASEK	17p13.1	0.086778729	0.052236176	0.085384673
SRRM2-AS1	16p13.3	-0.08676166	0.052282665	0.0854524
PDPR	16q22.1	0.086760407	0.052286079	0.0854524
PMM1	22q13.2	-0.086735406	0.05235424	0.085556868
TTLL11	9q33.2	0.086725863	0.052380275	0.085592483
CPNE7	16q24.3	-0.086715366	0.052408927	0.085632367
KRTAP17-1	17q21.2	-0.086693094	0.052469761	0.085724825
FXR2	17p13.1	-0.086678436	0.052509831	0.085783344

CLIP1	12q24.31	0.086673092	0.052524445	0.085797165
FGFR3	4p16.3	-0.086672233	0.052526794	0.085797165
DCLRE1B	1p13.2	0.086665935	0.052544023	0.085818361
UCN3	10p15.1	0.086657716	0.052566514	0.085848145
ABCF1	6p21.33	0.086569986	0.052807085	0.086234052
RPSAP9	9q21.13	-0.086567793	0.05281311	0.086236911
LMAN2	5q35.3	0.086533101	0.052908502	0.086385684
ZNF429	19p12	0.086527378	0.052924254	0.086404411
UBR3	2q31.1	-0.086524226	0.052932928	0.086411581
OSBPL11	3q21.2	-0.086518215	0.05294948	0.086431609
MTCH1	6p21.2	0.08650829	0.052976813	0.086469231
SPPL3	12q24.31	-0.086505427	0.0529847	0.08647511
NLRP4	19q13.43	0.086502543	0.052992647	0.086481086
USP3	15q22.31	-0.086497984	0.05300521	0.086494592
MIR205HG	1q32.2	-0.086495935	0.053010859	0.086496816
ST20	15q25.1	-0.086480903	0.053052303	0.08655744
FOLH1B	11q14.3	-0.0864771	0.053062792	0.086563373
KLHL10	17q21.2	-0.086474764	0.053069235	0.086563373
GUSBP2	6p22.2	0.086473891	0.053071644	0.086563373
PRKCD	3p21.1	0.086473364	0.053073098	0.086563373
LINC00271	6q23.3	0.086466099	0.053093144	0.086589069
TCF3	19p13.3	-0.086455424	0.053122613	0.086630128
EFL1	15q25.2	0.086445022	0.053151338	0.086669968
CEP192	18p11.21	-0.086442782	0.053157527	0.086673056
GCM2	6p24.2	0.086432338	0.053186385	0.086713102
CEP83-DT	12q22	0.086418305	0.053225182	0.086768368
EDC4	16q22.1	0.086416967	0.053228883	0.086768368
PTPRVP	1q32.1	0.086398166	0.053280901	0.086846147
CATSPERZ	11q13.1	0.086377243	0.053338839	0.086933562
PLET1	11q23.1	0.086368638	0.053362682	0.086959907
SLC33A1	3q25.31	-0.086368299	0.053363622	0.086959907
FAM41AY1	Yq11.222	0.086356316	0.053396843	0.087007016
XAGE2	Xp11.22	0.086346926	0.053422884	0.08704242
OR2A2	7q35	-0.086337582	0.053448811	0.087077633
NR4A1	12q13.13	0.0862869	0.053589615	0.087299979
METR1	16p13.3	0.086256459	0.053674335	0.087430933
NMB	15q25.2	-0.086251497	0.053688156	0.087442229
FBXW4	10q24.32	-0.086250447	0.05369108	0.087442229
YIF1A	11q13.2	-0.086249302	0.053694269	0.087442229
PTPRQ	12q21.31	-0.086246721	0.05370146	0.087446882
TBX10	11q13.2	-0.086230413	0.053746913	0.087513834
MAFB	20q12	0.086228595	0.053751982	0.087515027
CA8	8q12.1	-0.086220554	0.053774405	0.08754447
GJB2	13q12.11	0.086197008	0.053840113	0.087644372
SNRNP35	12q24.31	-0.086188706	0.053863297	0.087675039
TGFBR1	9q22.33	0.08618069	0.053885689	0.087704414
RDH5	12q13.2	0.086165762	0.053927412	0.087765244
DDX19A	16q22.1	0.086152921	0.053963324	0.087816606
TYR	11q14.3	0.086139672	0.054000397	0.087869849
TRMT11	6q22.32	-0.086132118	0.054021544	0.087897172
PLIN4	19p13.3	-0.086128492	0.054031698	0.087906605
C2ORF16	2p23.3	0.086108357	0.054088107	0.087991286
LDHC	11p15.1	0.086100853	0.054109142	0.08801841
SYK	9q22.2	-0.086089081	0.054142156	0.088065014
RCE1	11q13.2	-0.086031443	0.054304036	0.088321201
CHRAC1	8q24.3	-0.086017034	0.054344569	0.088380001
IRF2BP1	19q13.32	-0.085997853	0.054398562	0.088460681
DPEP3	16q22.1	0.085985893	0.05443225	0.088508331

SNAR-B2	19q13.33	-0.085957693	0.054511755	0.088630465
FLJ34503	6q21	0.085946032	0.054544661	0.088676822
ZNF503-AS2	10q22.2	-0.085933154	0.054581018	0.088728782
THUMPD1	16p12.3	0.085925615	0.054602311	0.088756246
FAM184B	4p15.32-p15.31	-0.085889181	0.054705313	0.088916513
EIF3L	22q13.1	-0.085854617	0.054803179	0.089068408
C1QTNF8	16p13.3	0.085838507	0.054848846	0.089135448
COMMD2	3q25.1	-0.085836582	0.054854304	0.089137139
KIFC1	6p21.32	-0.085815111	0.054915218	0.089228938
SMPD2	6q21	-0.085811675	0.05492497	0.089237597
GNLY	2p11.2	0.085757187	0.055079832	0.089477885
HNRNPDL	4q21.22	-0.085756519	0.055081733	0.089477885
TMBIM4	12q14.3	0.08574774	0.055106719	0.089511268
NUDT6	4q28.1	-0.085742587	0.055121389	0.08952789
PEX26	22q11.21	0.085733616	0.055146934	0.089562171
ATP11C	Xq27.1	0.085713577	0.055204037	0.089647696
FAM53B	10q26.13	0.085708615	0.055218185	0.089663455
TBC1D26	17p12	0.085706489	0.055224246	0.089666081
DEFB106A	8p23.1	-0.085697241	0.055250625	0.089701694
TXLNB	6q24.1	0.08569101	0.0552684	0.089720767
ACTR2	2p14	0.085690006	0.055271265	0.089720767
ZNF560	19p13.2	0.085684441	0.055287148	0.089737277
ZNF112	19q13.31	0.085683327	0.05529033	0.089737277
SMOX	20p13	0.085677887	0.055305858	0.08975526
CP	3q24-q25.1	0.08561815	0.055476634	0.090012014
SENP6	6q14.1	0.085618009	0.055477038	0.090012014
BICDL2	16p13.3	-0.085617866	0.055477448	0.090012014
BCKDHB	6q14.1	-0.085611566	0.055495484	0.090034039
UBTF	17q21.31	-0.085570246	0.055613899	0.090218897
FAM83B	6p12.1	-0.085565769	0.055626741	0.090232476
IL18	11q23.1	0.085561562	0.055638811	0.090244801
DDI2	1p36.21	0.085556791	0.055652504	0.090259755
CATIP	2q35	0.085514667	0.055773507	0.090448734
NBPF7	1p12	0.085501493	0.055811395	0.090502904
STATH	4q13.3	-0.08546306	0.055922051	0.090675055
DDX1	2p24.3	-0.085460601	0.055929138	0.09067926
AQP2	12q13.12	0.085418843	0.056049584	0.090862533
FUNDC2P2	2p11.2	-0.085418289	0.056051182	0.090862533
LOC100133331	1p36.33	-0.085406589	0.05608497	0.090910001
PCLO	7q21.11	-0.08540344	0.056094067	0.090910579
SLC1A1	9p24.2	0.085403347	0.056094336	0.090910579
SPOCK3	4q32.3	0.085391793	0.056127723	0.090957382
ELF2	4q31.1	0.085388172	0.056138189	0.090967038
CRYAB	11q23.1	-0.085380824	0.056159434	0.090994156
HDAC4	2q37.3	-0.085376434	0.056172128	0.091007417
RBFA	18q23	-0.085341699	0.056272665	0.091157854
RANBP2	2q13	0.08534084	0.056275153	0.091157854
MGC27382	1p31.1	0.085339673	0.056278534	0.091157854
HIST4H4	12p12.3	-0.085330916	0.056303906	0.091191631
MED11	17p13.2	-0.085307345	0.056372244	0.091294985
ZC3H11A	1q32.1	0.085302765	0.056385533	0.091309178
ARMC8	3q22.3	-0.085296753	0.056402977	0.091323784
ODF3L2	19p13.3	0.085296058	0.056404994	0.091323784
PCDH11Y	Yp11.2	0.085294978	0.056408129	0.091323784
FKSG29	13q32.3	0.085276531	0.05646169	0.091403164
ARHGAP11B	15q13.2	-0.085245702	0.056551294	0.091540876
ANKRD30BL	2q21.2	0.085238923	0.056571014	0.09156439
CA5BP1	Xp22.2	-0.085237589	0.056574895	0.09156439

ARID3C	9p13.3	0.085219368	0.056627927	0.09164287
FGD6	12q22	0.085215927	0.056637948	0.091651736
MXI1	10q25.2	-0.085198082	0.056689934	0.091728504
TRABD	22q13.33	-0.085183482	0.056732497	0.091790015
KLRC2	12p13.2	0.085178879	0.056745922	0.091804374
HES5	1p36.32	-0.085166173	0.05678299	0.091853499
MUC4	3q29	-0.085165351	0.056785391	0.091853499
LHCGR	2p16.3	0.085159303	0.056803042	0.091874687
HOXA1	7p15.2	-0.085120214	0.056917245	0.092052023
DYNLRB2	16q23.2	0.085093329	0.056995901	0.092171846
RDH14	2p24.2	-0.085088341	0.057010504	0.092188073
NABP1	2q32.3	0.085068397	0.057068926	0.092275149
MANEA	6q16.1	0.085058759	0.057097176	0.092313429
FGF4	11q13.3	0.085002629	0.057261928	0.092572379
PSORS1C3	6p21.33	0.084994752	0.057285082	0.092602393
PTCH1	9q22.32	-0.084989386	0.057300857	0.092620474
RPL21	13q12.2	-0.084986261	0.057310045	0.092626509
SPHK1	17q25.1	0.084984994	0.057313772	0.092626509
BRPF1	3p25.3	0.084975165	0.057342684	0.092660277
VCY	Yq11.221	-0.084974769	0.05734385	0.092660277
BCRP3	22q11.23	0.084921989	0.057499312	0.092904045
USP17L2	8p23.1	0.084918915	0.057508376	0.092911251
NPIPB5	16p12.2	0.084915046	0.057519788	0.092915607
LEUTX	19q13.2	-0.084914879	0.057520281	0.092915607
STEAP1	7q21.13	-0.084912947	0.057525981	0.092917375
LYSMD2	15q21.2	-0.08489682	0.057573571	0.092986801
RYR1	19q13.2	-0.084893098	0.057584558	0.0929933
HSPH1	13q12.3	-0.084892335	0.057586812	0.0929933
NAA40	11q13.1	-0.084854355	0.057699039	0.093167072
CYHR1	8q24.3	-0.084851492	0.057707505	0.093173288
DNAI1	9p13.3	0.084847503	0.057719306	0.093184885
HTR3B	11q23.2	-0.084830846	0.057768596	0.093257
PYCARD	16p11.2	-0.084828685	0.057774993	0.093259866
ALLC	2p25.3	-0.08482467	0.057786882	0.093271595
TUBB6	18p11.21	0.0848096	0.057831518	0.093336176
AMIGO1	1p13.3	-0.084800248	0.057859232	0.093373437
ZNF675	19p12	-0.084788701	0.057893466	0.093421212
RAB3C	5q11.2	0.084776461	0.057929776	0.093472329
UTS2B	3q28	0.084753848	0.057996902	0.09356694
RBBP4	1p35.1	0.084753584	0.057997685	0.09356694
OR2T10	1q44	0.084740334	0.058037049	0.09362296
POM121C	7q11.23	-0.084733927	0.058056092	0.093646194
WTAP	6q25.3	0.084728869	0.058071128	0.093662959
B3GNT6	11q13.5	-0.084712341	0.058120284	0.093734751
ZNF445	3p21.31	0.084695088	0.058171633	0.093810069
KDM1A	1p36.12	0.084674571	0.058232745	0.093901116
HCN3	1q22	-0.084664742	0.058262041	0.093940849
ZNF772	19q13.43	0.084650428	0.058304727	0.093999692
RTTN	18q22.2	0.084649381	0.058307852	0.093999692
PSMC4	19q13.2	-0.084647661	0.058312982	0.094000453
EIF2AK2	2p22.2	-0.084635733	0.058348577	0.094050319
NT5C2	10q24.32-q24.33	0.084628194	0.058371083	0.09407908
LOC100132831	Xp11.4	0.084615222	0.058409823	0.094134001
POLR3E	16p12.2	-0.084605101	0.058440068	0.094175223
C5ORF64	5q12.1	0.084596352	0.05846622	0.094209842
HGS	17q25.3	-0.08459155	0.058480579	0.094225455
OR10A2	11p15.4	0.084585407	0.058498951	0.094247532
STK11	19p13.3	-0.084552807	0.058596533	0.094397209

MSANTD1	4p16.3	0.084537195	0.05864331	0.094465024
ZNF321P	19q13.41	0.084517739	0.05870165	0.094551452
MIR924HG	18q12.2-q12.3	-0.084512789	0.0587165	0.094567824
AGBL5	2p23.3	-0.084501944	0.058749048	0.094610802
CELF5	19p13.3	0.084500773	0.058752563	0.094610802
HP1BP3	1p36.12	0.084492688	0.058776839	0.094642342
TCEAL2	Xq22.1	0.084476039	0.058826852	0.094715315
ZNF169	9q22.32	-0.084467018	0.058853966	0.094751411
S100A5	1q21.3	0.084460956	0.058872194	0.094765852
ATP6V1C1	8q22.3	0.084460911	0.058872329	0.094765852
HAVCR1P1	19p12	0.084446953	0.058914312	0.094825868
KLHL3	5q31.2	0.084438676	0.058939219	0.094858391
LINC00205	21q22.3	0.084432092	0.05895904	0.094882724
A2ML1	12p13.31	-0.084400102	0.059055416	0.095023948
NKX3-1	8p21.2	0.084399838	0.059056213	0.095023948
TEKT3	17p12	0.084392975	0.059076907	0.095049665
OR1J1	9q33.2	-0.084364502	0.059162822	0.095180307
EIF3D	22q12.3	-0.084356991	0.059185504	0.095209206
MTCP1	Xq28	-0.084345063	0.059221539	0.09525958
ARL9	4q12	0.084340342	0.059235805	0.095274934
RANGAP1	22q13.2	-0.084320729	0.059295108	0.095362715
R3HCC1L	10q24.2	0.084314528	0.059313867	0.095385282
SRGAP1	12q14.2	0.084306701	0.059337553	0.095415768
RHEBL1	12q13.12	0.084295441	0.059371642	0.095462977
PLEKHB1	11q13.4	0.084293628	0.059377132	0.095464198
AGA	4q34.3	-0.084276547	0.059428879	0.095539783
IFNA4	9p21.3	0.084264942	0.059464056	0.095588719
PCDHB14	5q31.3	0.084223012	0.059591299	0.095778469
ATP7A	Xq21.1	-0.084222917	0.059591589	0.095778469
MFSD3	8q24.3	-0.084157263	0.05979128	0.096091767
SELP	1q24.2	0.084147148	0.059822095	0.096133635
ST20-AS1	15q25.1	0.084127872	0.059880855	0.0962204
KCNT1	9q34.3	0.08412337	0.059894584	0.096231731
GAB1	4q31.21	-0.084122432	0.059897445	0.096231731
UBALD1	16p13.3	-0.084118711	0.059908798	0.096242308
SCAI	9q33.3	-0.084104637	0.059951745	0.096303634
OR1D4	17p13.3	0.084095487	0.059979682	0.096340843
NAPB	20p11.21	-0.084078822	0.060030589	0.096414936
A2M-AS1	12p13.31	0.084074624	0.060043421	0.09642787
RTL8C	Xq26.3	-0.084072715	0.060049254	0.096429564
MFSD9	2q12.1	-0.084063268	0.060078137	0.096468268
CACNA2D2	3p21.31	0.084054489	0.060104988	0.096503704
ZNF143	11p15.4	0.084017368	0.06021863	0.096678473
NET1	10p15.1	0.084008684	0.06024524	0.0967135
OR6C3	12q13.2	-0.083999205	0.060274297	0.096752449
LINC01565	3q21.3	0.083963809	0.060382906	0.09691908
WDR13	Xp11.23	0.083932438	0.060479301	0.097066079
CWF19L2	11q22.3	0.08392614	0.060498668	0.097089441
SLC5A11	16p12.1	-0.083913968	0.060536112	0.097141805
TSPAN15	10q22.1	0.08391049	0.060546816	0.097144004
PLPBP	8p11.23	-0.083910394	0.06054711	0.097144004
OPRM1	6q25.2	0.083888312	0.060615101	0.097245359
ERP44	9q31.1	-0.083869647	0.06067262	0.0973299
GTF2H2C	5q13.2	-0.083864926	0.060687178	0.097345514
MSTN	2q32.2	0.083856453	0.060713308	0.097379687
PLAGL2	20q11.21	-0.083850753	0.060730892	0.097400149
ADARB2	10p15.3	0.083842793	0.060755456	0.0974318
TFDP1	13q34	-0.083808479	0.060861436	0.097594002

10-Mar	17q23.2	0.083767633	0.060987788	0.097788842
POFUT1	20q11.21	0.083754658	0.061027972	0.097845498
AANAT	17q25.1	-0.083752252	0.061035424	0.097849673
MCOLN2	1p22.3	0.08371372	0.061154897	0.098033418
NUP43	6q25.1	-0.083689291	0.061230741	0.098143208
C11ORF74	11p12	0.083688527	0.061233113	0.098143208
TMEM184A	7p22.3	0.08367908	0.061262465	0.098182454
CDC14A	1p21.2	-0.083665339	0.06130518	0.098239111
ZNF268	12q24.33	0.083664575	0.061307554	0.098239111
POP4	19q12	-0.08365904	0.061324766	0.098258889
RADX	Xq22.3	-0.083646351	0.061364244	0.098312251
CLEC12A	12p13.31	0.083645204	0.061367814	0.098312251
SLC7A9	19q13.11	0.083621817	0.06144063	0.09842109
LINC00879	3q11.2	0.083604254	0.061495359	0.098500941
VENTXP1	Xp21.3	0.083595513	0.061522612	0.098536772
EIF3E	8q23.1	-0.083581363	0.061566751	0.098591241
RIMS4	20q13.12	0.083581027	0.0615678	0.098591241
TMEM14EP	3q25.2	-0.083579912	0.061571278	0.098591241
LMNA	1q22	0.083537085	0.06170504	0.098797589
COL9A1	6q13	0.083520951	0.061755496	0.098870529
SNORA11	Xp11.21	0.083467602	0.061922568	0.099130146
ABHD12	20p11.21	-0.083452346	0.061970413	0.099195794
TANC1	2q24.2	-0.083451392	0.061973407	0.099195794
FAM90A1	12p13.31	0.083443472	0.06199826	0.099227703
RIPPLY1	Xq22.3	0.083426762	0.06205072	0.099297341
PAGE3	Xp11.21	0.083426478	0.062051612	0.099297341
EXOC3	5p15.33	0.083411983	0.062097148	0.09936233
ELMO1	7p14.2-p14.1	0.083405492	0.062117548	0.099384553
PCSK2	20p12.1	-0.08340443	0.062120886	0.099384553
HYAL1	3p21.31	-0.083392991	0.062156853	0.099434211
RNF215	22q12.2	0.083388506	0.06217096	0.099448894
SPANXC	Xq27.2	0.083367593	0.06223677	0.099546274
CCNYL1	2q33.3	0.083365699	0.062242735	0.099547923
ABCG8	2p21	-0.083336993	0.06233317	0.09968466
SNAR-G1	19q13.33	-0.083331757	0.062349677	0.099703157
RETREG2	2q35	0.083299377	0.062451842	0.099858614
ARRDC3-AS1	5q14.3	-0.083291705	0.062476068	0.099889436
ACOT4	14q24.3	0.083284014	0.062500365	0.099920366
GOLGA7	8p11.21	-0.083266169	0.062556763	0.100002608
ZNF618	9q32	0.083259394	0.062578187	0.100028932
FHL5	6q16.1	0.083245606	0.062621802	0.10009072
PSMD7	16q23.1	-0.08323172	0.062665757	0.100153042
PRSS3	9p13.3	-0.08321969	0.062703857	0.100205997
SHQ1	3p13	-0.083209008	0.0627377	0.100252143
PROKR1	2p13.3	0.083200608	0.062764326	0.100286748
PPFIA4	1q32.1	0.083183243	0.062819399	0.100366798
ATXN2L	16p11.2	-0.083180857	0.062826968	0.100370944
GDAP1L1	20q13.12	0.083171181	0.062857677	0.100408062
DGAT2L6	Xq13.1	0.083170401	0.062860154	0.100408062
PARVB	22q13.31	0.083164826	0.062877852	0.100428382
CCL3L3	17q12	0.083161689	0.062887812	0.100436341
WARS	14q32.2	0.083135625	0.062970621	0.100559489
ZFP36	19q13.2	0.083131999	0.06298215	0.100559489
ABCG5	2p21	-0.083131498	0.062983742	0.100559489
MMD2	7p22.1	0.083131148	0.062984855	0.100559489
LRP2	2q31.1	0.083126915	0.062998314	0.10057302
DCLRE1A	10q25.3	-0.083090488	0.063114241	0.10075012
ASCC2	22q12.2	-0.083080278	0.063146768	0.100794069

CASC8	8q24.21	-0.083076984	0.063157261	0.100802846
BLK	8p23.1	0.083063436	0.063200447	0.100863795
FOLR1	11q13.4	0.083023303	0.063328518	0.101060194
ACVR1C	2q24.1	0.082999451	0.063404731	0.101173815
TMEM14C	6p24.2	-0.08295441	0.06354886	0.101395782
NUDT16	3q22.1	-0.082942004	0.063588604	0.101451174
ME2	18q21.2	-0.082937997	0.063601449	0.101463645
CFAP73	12q24.13	-0.082919254	0.063661546	0.101551489
RAP2C	Xq26.2	0.082877687	0.06379499	0.101756312
KLRC1	12p13.2	0.08286147	0.063847114	0.101831403
TTY3B	Yq11.23	0.082846673	0.063894707	0.101899257
GGT6	17p13.2	-0.082844391	0.063902048	0.101902911
BTBD7	14q32.12	0.082836749	0.063926641	0.101929936
DCAF13	8q22.3	-0.082835985	0.063929098	0.101929936
NUDT17	1q21.1	-0.082834413	0.06393416	0.101929953
HES3	1p36.31	0.082825296	0.063963512	0.101968692
RELA	11q13.1	0.082813178	0.064002542	0.102022852
EPB42	15q15.2	0.082808737	0.064016852	0.102037603
HSPBAP1	3q21.1	-0.082801632	0.064039751	0.10206604
TMEM190	19q13.42	0.082796496	0.064056307	0.102084364
XK	Xp21.1	-0.082773197	0.064131459	0.10219002
ABCB11	2q31.1	0.082772802	0.064132733	0.10219002
ODF4	17p13.1	-0.082757297	0.064182786	0.102261701
KLC4	6p21.1	0.082747907	0.064213115	0.102301946
P3H4	17q21.2	0.082742276	0.064231305	0.102317835
FAM238A	10p12.1	0.082741681	0.064233229	0.102317835
KIAA0408	6q22.33	0.082723068	0.064293395	0.10240559
ZSCAN5A	19q13.43	0.082683303	0.064422095	0.102602482
SLC38A2	12q13.11	0.082665363	0.064480227	0.102686962
LTF	3p21.31	0.082658778	0.064501573	0.102712851
UBAC2	13q32.3	0.082645514	0.064544593	0.102773246
SAE1	19q13.32	-0.082522318	0.064945282	0.103403097
STX18	4p16.3-p16.2	0.082514397	0.064971113	0.103436062
RING1	6p21.32	0.08249703	0.065027783	0.103518116
FAM160A2	11p15.4	0.082493499	0.065039309	0.103528296
ZNF599	19q13.11	0.082473414	0.065104907	0.10362454
ADNP2	18q23	-0.082456378	0.065160588	0.103704985
CDHR4	3p21.31	0.082437738	0.065221557	0.103793833
TYW5	2q33.1	-0.082422024	0.065272991	0.103867493
CTNNA2	2p12	0.08241681	0.065290066	0.103886472
E2F5	8q21.2	0.082414581	0.065297366	0.103889895
ANKRD40	17q21.33	-0.082409237	0.06531487	0.103909553
FBXO44	1p36.22	0.082364959	0.065460057	0.104132321
PRAME	22q11.22	-0.082338355	0.06554742	0.104263077
PRR35	16p13.3	0.082333577	0.065563119	0.104272885
GOLGA8EP	15q11.2	0.082333333	0.065563921	0.104272885
KIF1B	1p36.22	0.082310566	0.065638775	0.104383705
ZBTB41	1q31.3	-0.082293866	0.065693724	0.104462858
WDR93	15q26.1	0.082279369	0.065741457	0.104530522
HAND2	4q34.1	0.08226658	0.065783591	0.104589275
VSTM2A	7p11.2	0.082255774	0.065819208	0.104637659
OR2H1	6p22.1	0.082249122	0.06584114	0.104664279
SLC66A1	1p36.13	0.082209986	0.065970301	0.10486134
ARIH1	15q24.1	-0.082178877	0.06607312	0.1050165
PLS3	Xq23	0.082170671	0.066100266	0.105051372
ERBB3	12q13.2	-0.082167426	0.066111	0.105060157
MKNK1	1p33	-0.082148436	0.066173858	0.105151019
RPS12	6q23.2	-0.082147005	0.066178598	0.105151019

POGZ	1q21.3	0.082142997	0.066191872	0.105163828
KRTAP5-7	11q13.4	-0.082121215	0.066264049	0.105270212
KLHL1	13q21.33	0.082108734	0.066305435	0.105327668
SPATA31A5	9q12	-0.082106502	0.066312839	0.105331137
BRS3	Xq26.3	-0.082089055	0.06637073	0.105414794
SCAMP2	15q24.1	-0.082083451	0.066389336	0.105436047
PKD1L3	16q22.2	0.0820728	0.066424708	0.10548392
CDK12	17q12	-0.082066846	0.066444485	0.105507024
NHS	Xp22.2-p22.13	0.082050719	0.066498084	0.105583826
DEFB122	20q11.21	0.082039378	0.066535799	0.105635397
DENND1C	19p13.3	0.082015411	0.066615557	0.105753703
CACNB4	2q23.3	-0.082002912	0.066657182	0.10581146
UPRT	Xq13.3	-0.08198602	0.066713474	0.105885629
DDX25	11q24.2	0.081985742	0.066714401	0.105885629
NANOS2	19q13.32	-0.081975425	0.066748801	0.105929611
RBL2	16q12.2	0.081974283	0.066752611	0.105929611
AGR2	7p21.1	-0.081956151	0.066813103	0.106017268
ENO1	1p36.23	0.081937639	0.066874914	0.106107005
PGBD5	1q42.13	-0.081910633	0.066965167	0.106233499
RPH3AL	17p13.3	0.081910633	0.066965167	0.106233499
SHCBP1L	1q25.3	0.081879933	0.067067887	0.10638809
LOC202181	5q35.3	0.081877138	0.067077245	0.106394571
MED17	11q21	0.081873417	0.067089708	0.106405974
SIGLECL1	19q13.41	0.081860723	0.067132229	0.106465047
FAM227B	15q21.2	0.081833814	0.06722244	0.106599734
CTNND2	5p15.2	0.081812355	0.067294455	0.106705548
TCN1	11q12.1	-0.081790305	0.067368518	0.106812836
KCNC3	19q13.33	0.081789059	0.067372703	0.106812836
CHRNA7	15q13.3	-0.081783042	0.067392926	0.106836504
HDAC6	Xp11.23	0.081758714	0.067474744	0.106957805
OR5M1	11q12.1	0.081747631	0.067512042	0.107008522
HIST1H2AG	6p22.1	-0.081713598	0.067626684	0.107181814
GABRQ	Xq28	-0.081686372	0.067718512	0.107318923
OXCT1	5p13.1	0.081670444	0.067772282	0.107395702
SYT16	14q23.2	0.081646233	0.06785408	0.10751688
MAP3K9	14q24.2	0.081642579	0.06786643	0.107528007
B3GLCT	13q12.3	0.081638094	0.067881594	0.107543589
TAGLN2	1q23.2	0.081590095	0.068044056	0.107792511
SCAMP5	15q24.2	0.081585801	0.068058606	0.107807097
LHPP	10q26.13	0.081583319	0.068067014	0.107811952
KRTAP19-1	21q22.11	-0.081566604	0.068123679	0.107893235
GOLGB1	3q13.33	0.081559272	0.068148548	0.107923373
KDM7A	7q34	-0.08155784	0.068153404	0.107923373
PLPP5	8p11.23	-0.081513564	0.068303743	0.108152953
FAM186B	12q13.12	-0.081497443	0.06835855	0.108231243
TMEM212	3q26.31	0.081485176	0.068400278	0.108288812
PLBD1	12p13.1	0.081482931	0.068407919	0.108292414
KIF20A	5q31.2	-0.081434168	0.068574016	0.108546836
ZNF252P	8q24.3	-0.081420331	0.068621207	0.108613015
SYT5	19q13.42 11p	0.081410556	0.068654561	0.108657286
C15ORF32	15q26.1	0.081407727	0.068664215	0.108664042
RBM10	Xp11.3	-0.081404299	0.068675917	0.108674037
GDF15	19p13.11	-0.081380824	0.068756092	0.108790066
HIST1H2BM	6p22.1	-0.081379674	0.068760023	0.108790066
INTS11	1p36.33	0.081359639	0.068828512	0.108889889
SMG1P5	16p11.2	-0.081337691	0.068903607	0.109000147
TMX3	18q22.1	0.081320514	0.068962423	0.109084639
SEC22A	3q21.1	-0.081313834	0.068985308	0.109112284

MOS	8q12.1	0.081312053	0.068991411	0.109113385
VPS33B	15q26.1	-0.081304771	0.069016368	0.109144302
HSD17B3	9q22.32	0.081289316	0.069069356	0.109219539
SMCR5	-	-0.081255506	0.069185399	0.109394465
MRPL49	11q13.1	-0.081247895	0.069211542	0.109427228
MTR	1q43	0.081218122	0.06931389	0.109576781
OR5A1	11q12.1	0.081217045	0.069317594	0.109576781
GYPA	4q31.21	0.081214721	0.069325589	0.109576781
PPP4R3C	Xp21.3	0.081214062	0.069327854	0.109576781
TCF19	6p21.33	-0.081203426	0.069364454	0.109626043
PDE3B	11p15.2	-0.081197796	0.069383834	0.109648083
KLK3	19q13.33	0.081186094	0.069424125	0.109697888
AKTIP	16q12.2	0.081185486	0.069426222	0.109697888
FAIM	3q22.3	-0.081179187	0.069447917	0.109723576
SNTN	3p14.2	-0.081168237	0.06948565	0.109774597
CATSPERB	14q32.12	0.081116512	0.069664116	0.110047926
ADAD2	16q24.1	-0.081099177	0.069724012	0.11013392
ABHD16B	20q13.33	0.081092399	0.069747442	0.110162307
LSM14A	19q13.11	-0.081065916	0.06983905	0.110298364
NKX2-5	5q35.1	0.081058432	0.069864956	0.110330643
ABCC6P2	16p13.11	0.081031467	0.069958362	0.110469503
CASP8	2q33.1	-0.081019588	0.069999541	0.110525879
UBAP1	9p13.3	-0.081002266	0.070059626	0.110612095
DCTN2	12q13.3	-0.080992151	0.070094732	0.110658864
MAP3K2	2q14.3	0.080989384	0.070104339	0.110665373
OR2T5	1q44	0.080972528	0.07016288	0.11074912
ANGEL2	1q32.3	-0.080963428	0.0701945	0.110790365
C1ORF94	1p35.1	0.08095932	0.070208776	0.11080423
SELENOK	3p21.1	-0.080955316	0.070222695	0.11081753
ZNF692	1q44	-0.08094172	0.070269976	0.110883472
MDN1	6q15	0.080936613	0.070287743	0.110902836
ABHD18	4q28.2	-0.080906744	0.070391724	0.111058218
PANK3	5q34	-0.080880502	0.070483185	0.111193823
SRY	Yp11.2	0.080871491	0.070514612	0.111234705
ABCC12	16q12.1	0.080846004	0.070603567	0.111366324
UAP1	1q23.3	0.080831834	0.070653061	0.111435682
ARPC4	3p25.3	0.080829926	0.07065973	0.11143749
DCAF8L2	Xp21.3	0.080823597	0.070681846	0.111463659
BCL2L10	15q21.2	-0.080810393	0.070728008	0.111527739
RSPH4A	6q22.1	0.080792748	0.070789735	0.111616352
BUD13	11q23.3	-0.080784312	0.070819263	0.111654184
MAEA	4p16.3	0.080776296	0.070847328	0.111687829
CCND2	12p13.32	0.080775055	0.070851672	0.111687829
ZNF444	19q13.43	0.080768662	0.070874065	0.111714401
RAPH1	2q33.2	0.080750245	0.070938604	0.111807395
CASKIN2	17q25.1	-0.080721998	0.071037678	0.111948171
BNIP3	10q26.3	-0.080721617	0.071039017	0.111948171
CRYM-AS1	16p12.2	-0.080715773	0.071059529	0.11197175
NEMP1	12q13.3	-0.080701959	0.071108035	0.112039435
TIPARP-AS1	3q25.31	-0.080686456	0.071162504	0.112116503
PLEKHG4	16q22.1	-0.080657108	0.071265709	0.112270336
AMY1A	1p21.1	0.080641919	0.071319171	0.112345789
TENT4B	16q12.1	0.080634492	0.071345325	0.112378215
MARK1	1q41	-0.080628957	0.07136482	0.112400148
HIST2H2AB	1q21.2	-0.080625665	0.071376418	0.112409642
LOC399815	10q26.13	-0.08061872	0.071400889	0.112439405
TAPT1	4p15.32	0.080616456	0.071408868	0.112443195
AP4B1	1p13.2	0.080592218	0.071494338	0.112568995

SEC14L1P1	11p11.2	0.080546749	0.071654896	0.112812994
RASA4CP	7p13	0.080516926	0.071760365	0.11297023
DGCR2	22q11.21	0.080481714	0.071885058	0.113157702
TCAP	17q12	-0.080450725	0.07199494	0.113321833
SYMPK	19q13.32	0.080431519	0.072063111	0.113420288
POLE	12q24.33	-0.080417778	0.072111918	0.113487919
ACY3	11q13.2	0.080416255	0.072117329	0.113487919
IFNA14	9p21.3	0.080412537	0.072130541	0.113492116
SYTL1	1p36.11	-0.080412339	0.072131245	0.113492116
KRT3	12q13.13	-0.080400149	0.072174571	0.113551433
C1GALT1C1	Xq24	-0.080380084	0.072245937	0.113647814
GRIN2B	12p13.1	0.080378416	0.072251875	0.113647814
C1ORF112	1q24.2	-0.080378176	0.072252728	0.113647814
GRID2	4q22.1-q22.2	0.080367984	0.072289005	0.113696011
SPCS2P4	1p35.3	0.080363912	0.072303502	0.113706676
OTOS	2q37.3	0.080362914	0.072307055	0.113706676
SC5D	11q23.3-q24.1	-0.080356896	0.072328486	0.113731513
CENPBD1	16q24.3	0.080351552	0.07234752	0.11375258
E2F4	16q22.1	-0.080348212	0.072359419	0.113762424
LIPE	19q13.2	-0.080337047	0.072399205	0.113816108
C6ORF201	6p25.2	0.080333155	0.072413078	0.113829049
GLB1	3p22.3	0.08031195	0.072488706	0.113939056
CNGA2	Xq28	0.080306226	0.072509132	0.113962285
LMO3	12p12.3	0.080295109	0.072548814	0.114015772
GMPR	6p22.3	0.080274733	0.072621592	0.11412126
NLRP10	11p15.4	0.080270872	0.072635389	0.114134054
ENY2	8q23.1	-0.080261183	0.072670025	0.114179587
RBM48	7q21.2	-0.080242956	0.072735213	0.114273113
FER	5q21.3	0.080239998	0.072745798	0.114280845
TAF1C	16q24.1	0.080194193	0.07290985	0.114529649
GATM	15q21.1	-0.08019133	0.072920114	0.114536855
SNX27	1q21.3	-0.080183601	0.072947831	0.114571472
APOC4	19q13.32	0.08017607	0.072974842	0.114604976
LINC00691	3p24.2	-0.080171671	0.072990625	0.114620842
VPS35	16q11.2	0.080164611	0.073015962	0.114651707
TMEM270	7q11.23	-0.080162928	0.073022004	0.114652273
STX6	1q25.3	0.080150583	0.073066323	0.114712933
ATP8B5P	9p13.3	-0.080134838	0.073122885	0.114792803
PPIC	5q23.2	0.080132931	0.073129736	0.114794628
TAS2R46	12p13.2	-0.080078096	0.073327012	0.115095346
C9ORF129	9q22.31	-0.080070807	0.07335327	0.115127607
LOH12CR2	12p13.2	-0.080067136	0.073366493	0.115139405
EEF1A1	6q13	-0.080063554	0.073379402	0.115150708
FAM47B	Xp21.1	0.080060773	0.073389424	0.115157479
FAM8A1	6p22.3	0.080045805	0.073443388	0.115233195
SFTPD	10q22.3	0.080030059	0.073500187	0.115313348
ZSWIM5	1p34.1	0.08002462	0.073519817	0.115335178
GFRAL	6p12.1	0.080013277	0.073560767	0.115390447
LZTS3	20p13	-0.080008398	0.073578388	0.115409118
KBTBD12	3q21.3	0.07999408	0.073630113	0.115473078
SYBU	8q23.2	-0.079993942	0.073630611	0.115473078
FTL	19q13.33	-0.079959444	0.073755366	0.115659739
GDPGP1	15q26.1	-0.079943698	0.073812362	0.115740124
CAMKK1	17p13.2	-0.07994074	0.073823074	0.115747927
PFKFB1	Xp11.21	-0.079934114	0.073847072	0.115776557
TRAF3IP1	2q37.3	-0.079930961	0.073858496	0.115785472
PRSS33	16p13.3	0.079929134	0.073865115	0.115786853
C2ORF48	2p25.1	0.07991949	0.073900062	0.115832636

PIK3AP1	10q24.1	0.079915261	0.073915392	0.115847665
HIST1H3H	6p22.1	-0.079899048	0.073974185	0.115930807
NSL1	1q32.3	-0.07987146	0.074074314	0.116078713
THUMPD3-AS1	3p25.3	-0.079866021	0.074094069	0.116100654
SFTA1P	10p14	0.079847641	0.074160855	0.116188014
NAPRT	8q24.3	-0.079847508	0.074161337	0.116188014
IGFBPL1	9p13.1	0.079833535	0.074212142	0.116258584
SACM1L	3p21.31	-0.079829282	0.074227614	0.116273794
KHDRBS1	1p35.2	0.079817926	0.074268931	0.116329485
TMEM170A	16q23.1	0.079801848	0.07432746	0.116412124
MAGIX	Xp11.23	-0.079793592	0.074357531	0.116450183
NME3	16p13.3	-0.079773171	0.074431951	0.116552167
SPHKAP	2q36.3	0.079772553	0.074434203	0.116552167
LRRC10	12q15	0.079768367	0.074449467	0.116567023
TNRC6B	22q13.1	-0.079732519	0.074580278	0.116762777
EPHA6	3q11.2	-0.079693724	0.074722055	0.116975667
SH3D19	4q31.3	0.07967784	0.074780167	0.117057559
ADO	10q21.3	-0.079667056	0.074819639	0.117110261
TUBB	6p21.33	0.079659708	0.074846545	0.117143289
SEC61A1	3q21.3	0.079656464	0.074858428	0.117144952
GRM8	7q31.33	0.079656248	0.074859218	0.117144952
TBCD	17q25.3	-0.079646826	0.074893736	0.117189881
ATP6V1D	14q23.3	0.079642818	0.074908423	0.117203774
LHFPL5	6p21.31	0.07961917	0.074995129	0.117330339
BTF3L4	1p32.3	-0.079577928	0.075146537	0.117558103
INCENP	11q12.3	-0.079557793	0.075220547	0.117664762
LINC01587	4p16.2	0.07955166	0.075243103	0.117690921
POU2AF1	11q23.1	0.079548727	0.075253889	0.117698669
ZIC3	Xq26.3	-0.079537248	0.075296124	0.117755599
RARB	3p24.2	0.079519908	0.07535996	0.117846298
ARMH1	1p34.1	0.079506501	0.07540935	0.117914396
SERTAD4	1q32.2	0.079496243	0.075447156	0.11796437
NGF	1p13.2	0.079481512	0.075501472	0.118034694
SLC25A2	5q31.3	0.079480872	0.075503832	0.118034694
SFT2D2	1q24.2	0.079463561	0.075567705	0.118125395
PRKAR2A	3p21.31	0.079433834	0.075677493	0.118287849
TMEM156	4p14	0.079431162	0.075687367	0.11829412
LRRC43	12q24.31	0.07942025	0.075727704	0.118347996
CUL2	10p11.21	-0.079400911	0.075799232	0.118450607
CCDC168	13q33.1	0.079386798	0.075851468	0.118523058
CNGA4	11p15.4	0.079365083	0.075931899	0.118639549
KDM4A	1p34.2-p34.1	0.079359878	0.075951187	0.118660498
LNX2	13q12.2	0.079343369	0.076012392	0.118739946
ROCK2	2p25.1	0.079342987	0.076013807	0.118739946
SCGB1B2P	19q13.11	0.079330497	0.076060142	0.118803127
HMGB1	13q12.3	-0.079328673	0.076066909	0.118804501
CWF19L1	10q24.31	-0.079317318	0.076109057	0.118861131
TUBA4B	2q35	0.07930174	0.076166907	0.11894227
ZNF226	19q13.31	0.079282296	0.076239165	0.119045895
IFNL1	19q13.2	0.07926861	0.076290058	0.119116146
RPL13AP20	12p13.1	-0.079221845	0.076464169	0.119378759
KRT74	12q13.13	-0.07919802	0.076552996	0.119508194
C4ORF51	4q31.21	0.079188861	0.076587168	0.119552291
RAB36	22q11.23	0.07916807	0.076664777	0.119664182
DNAJC4	11q13.1	0.079162154	0.076686875	0.119689415
DAO	12q24.11	0.079120665	0.076841978	0.119922217
MTO1	6q13	-0.079104611	0.076902062	0.120006706
PRIM2	6p11.2	-0.079097359	0.076929218	0.1200398

MINPP1	10q23.2	0.079089345	0.076959235	0.120077353
FBXO31	16q24.2	0.079084667	0.076976761	0.120095411
EED	11q14.2	-0.079060906	0.077065832	0.120225081
TRADD	16q22.1	0.079055753	0.07708516	0.120245937
MORF4L2	Xq22.2	-0.0790339	0.077167168	0.120364558
WDR41	5q13.3-q14.1	-0.079023213	0.077207302	0.120417851
ATP12A	13q12.12 13q12.1-	-0.078995458	0.077311603	0.120571207
LECT2	5q31.1	-0.078988521	0.077337691	0.120602571
SPSB1	1p36.22	0.078974068	0.077392068	0.120678041
RHBDL2	1p34.3	0.078941814	0.077513526	0.120858093
STAU1	20q13.13	0.078935802	0.077536182	0.120884078
SLC35B4	7q33	0.078928263	0.077564599	0.120908965
LYG1	2q11.2	0.078927543	0.077567314	0.120908965
SPINK1	5q32	0.078925892	0.077573539	0.120908965
FAM210B	20q13.2	0.078925209	0.077576112	0.120908965
ASB6	9q34.11	-0.078919484	0.077597703	0.120928424
SCAF8	6q25.2	0.07891872	0.077600583	0.120928424
DESI2	1q44	-0.078908319	0.07763982	0.120980226
UBE2R2	9p13.3	-0.078896009	0.077686278	0.12104327
SLC35E3	12q15	-0.078874633	0.077767002	0.121159692
SP140L	2q37.1	0.078865854	0.077800176	0.121202019
OR6A2	11p15.4	0.07884897	0.077864009	0.121292099
ULK1	12q24.33	0.078846864	0.077871973	0.12129514
CD160	1q21.1	0.07883976	0.077898844	0.12132763
SHTN1	10q25.3	-0.078836844	0.077909877	0.121335449
PHF20L1	8q24.22	0.078820049	0.077973446	0.121425078
CYP21A2	6p21.33	0.078798586	0.078054745	0.121542303
VCP	9p13.3	-0.078764129	0.078185404	0.121736363
ZNF652	17q21.32-q21.33	-0.078731302	0.078310048	0.121921029
LINC01139	1q43	0.078729057	0.078318578	0.121924903
NUP107	12q15	-0.078702961	0.078417791	0.122069938
ZNF569	19q13.12	0.078694181	0.078451191	0.12211251
KPRP	1q21.3	-0.078686207	0.078481539	0.122150326
MTA3	2p21	-0.078672187	0.078534914	0.122223973
CPA5	7q32.2	0.078664247	0.078565157	0.122261611
GNAZ	22q11.22-q11.23	0.078661641	0.078575087	0.122267635
TAS2R50	12p13.2	0.078655872	0.078597068	0.122292408
IK	5q31.3	0.078646659	0.078632184	0.122337613
CLIC6	21q22.12	0.078641983	0.078650011	0.122355914
SGSH	17q25.3	-0.078639216	0.078660563	0.122362897
MCM8	20p12.3	-0.078631486	0.078690042	0.122399319
KRT9	17q21.2	0.078624737	0.078715791	0.122429933
DEPTOR	8q24.12	0.078617745	0.078742472	0.122461992
ZNF280B	22q11.22	-0.078604244	0.078794012	0.122524689
MTHFD1	14q23.3	-0.078604003	0.07879493	0.122524689
OR1F1	16p13.3	-0.07858528	0.07886645	0.122622624
WFDC13	20q13.12	0.078584334	0.078870065	0.122622624
KIF1A	2q37.3	0.078553441	0.078988195	0.122796825
OR2A25	7q35	-0.078504602	0.079175238	0.123078124
FUT10	8p12	-0.078500465	0.079191099	0.123093298
PABPC3	13q12.13	-0.078496222	0.079207368	0.123109102
IFNA21	9p21.3	0.078492676	0.07922097	0.12312076
TP53TG5	20q13.12	0.078488074	0.079238621	0.123138708
PRKCZ	1p36.33	0.078480521	0.079267597	0.123174252
LARP7	4q25	-0.078457905	0.079354416	0.123291315
LOC100271832	2p22.3	-0.078457713	0.079355152	0.123291315
PEX5	12p13.31	-0.078446358	0.079398771	0.123349588
SDAD1	4q21.1	-0.078417062	0.079511398	0.123515051

HELZ	17q24.2	0.078404752	0.079558763	0.123579114
CABS1	4q13.3	0.078401973	0.079569459	0.123586215
LOC284379	19q13.42	0.078398791	0.079581706	0.123595724
M1AP	2p13.1	0.078390452	0.079613812	0.123630635
APPBP2	17q23.2	-0.07838977	0.079616438	0.123630635
ASB12	Xq11.2	0.078373007	0.079681012	0.123721387
SLC16A5	17q25.1	-0.078369635	0.079694004	0.123732039
C16ORF72	16p13.2	0.078368015	0.079700249	0.123732215
MAP7D3	Xq26.3	0.078355798	0.079747344	0.123795804
CYP3A5	7q22.1	-0.078347072	0.079780996	0.123838517
SLC10A3	Xq28	-0.078303982	0.079947348	0.124082222
SIX5	19q13.32	0.078303218	0.079950297	0.124082222
CDC20	1p34.2	-0.078292626	0.079991233	0.124136207
LANCL1	2q34	-0.078276785	0.080052485	0.124221708
AKR1E2	10p15.1	-0.078267711	0.080087588	0.124266624
PPM1N	19q13.32	0.078259372	0.080119861	0.124307141
CLDN25	11q23.2	0.078252008	0.080148366	0.124341806
DENND1B	1q31.3	0.078248348	0.080162537	0.124354231
SELENOT	3q25.1	-0.078242431	0.080185449	0.124380212
LRRRC7	1p31.1	-0.078210146	0.080310572	0.124563386
TIFAB	5q31.1	0.078208776	0.080315883	0.124563386
CAPN13	2p23.1	0.078190874	0.080385337	0.124661522
C22ORF46	22q13.2	0.078180022	0.080427459	0.12471726
SIL1	5q31.2	0.078159315	0.08050789	0.124832389
DUS2	16q22.1	-0.0781555	0.080522716	0.124843678
HSPBP1	19q13.42	-0.078154257	0.080527544	0.124843678
LRRFIP2	3p22.2	-0.078129637	0.080623275	0.124982489
MYO1H	12q24.11	0.078118073	0.080668271	0.125042636
ERCC8	5q12.1	-0.078109216	0.080702749	0.125086472
FAM209B	20q13.31	0.078107248	0.080710412	0.125088741
CHD8	14q11.2	0.078092516	0.080767787	0.12516805
ZKSCAN3	6p22.1	0.078074958	0.080836216	0.125261662
GPR63	6q16.1	-0.078073831	0.080840608	0.125261662
PFN1	17p13.2	0.078071618	0.080849238	0.125265415
STK25	2q37.3	0.078064652	0.080876402	0.125297883
ATRX	Xq21.1	0.078051483	0.080927775	0.125367847
KCTD5	16p13.3	-0.07804967	0.08093485	0.125369183
BAHCC1	17q25.3	0.078047093	0.080944905	0.125375134
GOLGA2P6	10p11.23	-0.078029404	0.081013967	0.125472472
ZMYM5	13q12.11	-0.07802362	0.081036557	0.125497827
UBE2Z	17q21.32	-0.078011881	0.081082425	0.125559225
NBPF22P	5q14.3	0.077986729	0.081180768	0.125701866
B3GNT8	19q13.2	0.077967507	0.081255992	0.12580869
SAMD1	19p13.12	-0.077959491	0.081287378	0.125843181
SNHG5	6q14.3	-0.077958633	0.081290741	0.125843181
PITPNM2	12q24.31	0.077938879	0.08136813	0.125953321
ENTPD2	9q34.3	0.077925901	0.081419007	0.126022408
PGM2	4p14	-0.077883341	0.081586034	0.126271252
PLXNA2	1q32.2	0.077863301	0.081664775	0.126383427
ASCC1	10q22.1	0.077833242	0.081783002	0.126552717
RNF151	16p13.3	-0.0778323	0.081786708	0.126552717
OR6B2	2q37.3	-0.077818344	0.08184165	0.126628021
SPAG8	9p13.3	0.077810595	0.081872165	0.126665524
MEOX1	17q21.31	0.077798697	0.08191904	0.126728329
CYP2B6	19q13.2	0.077795519	0.081931566	0.126732031
NXF4	Xq22.1	0.077794903	0.081933995	0.126732031
ZNF573	19q13.12	0.077779421	0.081995031	0.126816718
SNAR-C4	19q13.33	-0.077750973	0.082107284	0.126980601

PSMA5	1p13.3	-0.077723024	0.082217686	0.127141596
SGSM2	17p13.3	0.077714817	0.082250127	0.127182016
TAS2R5	7q34	-0.077697538	0.082318464	0.127277932
WDFY3-AS2	4q21.23	-0.077691774	0.082341273	0.127303443
TSG1	6q16.1	0.077681427	0.082382224	0.127356998
DAGLA	11q12.2	0.077676647	0.08240115	0.127376497
PRIMA1	14q32.12	0.077671988	0.082419597	0.127395255
TBCC	6p21.1	-0.077661285	0.082461992	0.127451022
SEC14L5	16p13.3	-0.077652317	0.082497529	0.127496181
DDX58	9p21.1	0.077645919	0.082522886	0.12751759
VTA1	6q24.1-q24.2	-0.077645633	0.082524021	0.12751759
EVX2	2q31.1	0.077632015	0.082578018	0.127591258
PLA2G1B	12q24.31	0.077622551	0.082615562	0.127639494
C5	9q33.2	-0.077613379	0.082651963	0.127685957
DCAF1	3p21.2	-0.077610707	0.082662569	0.127692566
EXD3	9q34.3	-0.077603836	0.082689847	0.127724925
DIAPH1	5q31.3	0.077595629	0.082722438	0.127765486
GPR161	1q24.2	0.077589045	0.082748594	0.127796103
ASS1	9q34.11	-0.077569769	0.082825206	0.127894845
TESMIN	11q13.3	-0.077569769	0.082825206	0.127894845
KANK1	9p24.3	-0.077558795	0.082868847	0.127952442
CALCR	7q21.3	0.07754648	0.082917841	0.128018295
ATP6V1E1	22q11.21	-0.077539519	0.082945549	0.128051276
USP12	13q12.13	0.077525682	0.083000642	0.128126527
CBWD5	9q21.11	0.077522819	0.083012045	0.128134327
RPL13AP17	7q21.11	-0.077508428	0.083069383	0.128206265
TSPYL1	6q22.1	0.077507932	0.083071357	0.128206265
CRMP1	4p16.2	-0.07749066	0.083140218	0.128302726
HOXB13	17q21.32	0.077486502	0.083156801	0.128318505
TSPAN19	12q21.31	0.077479393	0.083185162	0.128352454
ALPG	2q37.1	0.077476534	0.083196569	0.128360239
TM2D2	8p11.22	-0.077470813	0.0832194	0.128385647
QRSL1	6q21	-0.077455829	0.08327922	0.12846733
ARHGAP27P2	17q24.2	0.077454362	0.083285079	0.12846733
RUBCN	3q29	0.077436171	0.083357754	0.128569603
DNAJC25-GNG11	9q31.3	0.077394436	0.083524688	0.128815228
IL4	5q31.1	0.077393166	0.083529772	0.128815228
TMEM131	2q11.2	0.077389985	0.083542506	0.128825021
FCN2	9q34.3	0.07738653	0.083556337	0.128836504
PCID2	13q34	-0.07738216	0.083573839	0.128853644
SLC16A1	1p13.2	-0.077370613	0.083620093	0.128915108
OR11H1	22q11.1	0.077361909	0.083654974	0.128959032
FBXL15	10q24.32	0.077291505	0.083937542	0.129384743
ALDH1L1	3q21.3	0.077263934	0.084048408	0.129545094
ITGAD	16p11.2	0.077262442	0.084054409	0.129545094
MSL3P1	2q37.1	-0.077247513	0.084114494	0.129627797
CIDEC	3p25.3	0.077236076	0.084160549	0.129688867
C16ORF96	16p13.3	0.077231678	0.084178261	0.129706256
KRT18P55	17q11.2	-0.077214169	0.084248817	0.129805061
CLEC4C	12p13.31	0.07720913	0.084269131	0.129826447
LPIN3	20q12	-0.077202376	0.084296365	0.129858488
HMGCS1	5p12	-0.077176897	0.084399167	0.130006931
AQP4-AS1	18q11.2	-0.077165274	0.084446099	0.130069294
PMS2P3	7q11.23	-0.077121742	0.084622053	0.130330362
SERPINB12	18q21.33	-0.07711173	0.084662565	0.130382805
NPR3	5p13.3	-0.07709693	0.084722478	0.130459629
KRTDAP	19q13.12	-0.077096213	0.08472538	0.130459629
INSYN1	15q24.1	-0.077079562	0.084792828	0.130548825

PLGLA	2q12.2	0.077078718	0.084796246	0.130548825
NSUN2	5p15.31	0.077070592	0.084829181	0.130589567
SLC7A13	8q21.3	0.077065214	0.08485098	0.130613161
VRK3	19q13.33	0.077057232	0.084883347	0.130653017
CDKL2	4q21.1	0.0770496	0.084914304	0.130690698
KRTAP3-1	17q21.2	0.077038418	0.084959675	0.130750556
MAS1L	6p22.1	0.077032545	0.084983511	0.130777264
OOSP2	11q12.1	0.077021538	0.085028202	0.13083606
RPAP2	1p22.1	-0.077013336	0.085061517	0.130877343
CNNM4	2q11.2	0.077003032	0.085103385	0.130931778
RFX4	12q23.3	-0.076988758	0.085161407	0.131011057
MFN2	1p36.22	0.076965623	0.085255522	0.131145844
BAZ1B	7q11.23	-0.076947491	0.085329338	0.131249387
CTRB2	16q23.1	0.076945525	0.085337348	0.131251703
GLYR1	16p13.3	0.076937472	0.085370153	0.131292151
SLC25A34	1p36.21	0.076932464	0.085390559	0.131299804
BCL10	1p22.3	0.076932223	0.085391538	0.131299804
PGPEP1	19p13.11	0.07693146	0.085394649	0.131299804
ESS2	22q11.2 22q11.2	-0.076907794	0.085491135	0.131438142
ZBTB11	3q12.3	-0.076893289	0.085550314	0.131519107
LINC00965	8p23.1	0.076877811	0.085613501	0.131597873
RAB33B	4q31.1	0.076877544	0.085614593	0.131597873
NRM	6p21.33	0.076875921	0.085621218	0.131598031
LINC00652	20p11.23	0.076861824	0.085678807	0.131676515
SEPTIN2	2q37.3	0.076858745	0.085691389	0.131679585
MAPT-IT1	17q21.31	-0.076858141	0.085693855	0.131679585
LSMEM1	7q31.1	0.076853116	0.085714392	0.131701112
CLRN1	3q25.1	-0.076849161	0.085730561	0.131715928
NHEG1	6q23.3	0.076837198	0.085779477	0.131777135
SSRP1	11q12.1	-0.076836224	0.08578346	0.131777135
C22ORF42	22q12.3	-0.07681773	0.085859129	0.131883334
VLDLR	9p24.2	-0.076812654	0.085879909	0.131905213
SNORC	2q37.1	0.07679873	0.085936925	0.13198274
CYP2D6	22q13.2	-0.076786842	0.085985627	0.132041952
TLCD5	11q23.3	0.076786125	0.085988567	0.132041952
MCOLN3	1p22.3	-0.076778968	0.0860179	0.132076945
BBS5	2q31.1	0.07675597	0.086112212	0.132211697
FAM193B	5q35.3	0.076751008	0.086132573	0.132225241
UCHL3	13q22.2	-0.076750626	0.086134139	0.132225241
AKAP3	12p13.32	0.076724672	0.086240697	0.132378748
UBE2D2	5q31.2	-0.076690317	0.086381909	0.132585423
ZRANB2	1p31.1	0.076673044	0.086452975	0.132684406
CAPN1	11q13.1	-0.076657394	0.086517406	0.132773194
UBE2E2	3p24.3	0.076628289	0.086637335	0.132947132
NUP98	11p15.4	-0.076617888	0.086680227	0.133002837
ZNF205-AS1	16p13.3	-0.076591842	0.086787707	0.13315763
PAK6	15q15.1	-0.076588305	0.086802308	0.133167641
NF1	17q11.2	-0.076587065	0.086807431	0.133167641
NXF2B	Xq22.1	0.076562929	0.086907143	0.133310471
CLP1	11q12.1	-0.076540117	0.087001471	0.13344502
TMEM155	4q27	0.076508101	0.087133997	0.133638133
PWAR1	15q11.2	0.076484979	0.087229805	0.133774907
IFI16	1q23.1	-0.076458239	0.087340713	0.133931926
PSMB8	6p21.32	0.076457094	0.087345466	0.133931926
RPL13A	19q13.33	-0.0764507	0.087372002	0.133962436
SYT13	11p11.2	0.076446083	0.087391171	0.133981647
OR52E2	11p15.4	0.076417639	0.087509322	0.134143346
ACAD11	3q22.1	0.076417492	0.087509936	0.134143346

COQ10A	12q13.3	-0.076415108	0.087519845	0.134148344
ZNHIT2	11q13.1	-0.076408847	0.087545871	0.134178044
LY6G5B	6p21.33	0.076405945	0.087557937	0.134186346
ARHGEF37	5q32	0.076401078	0.087578176	0.134203964
TNNI1	1q32.1	-0.076398694	0.08758809	0.134203964
WFDC5	20q13.12	0.076397523	0.087592964	0.134203964
URB1	21q22.11	0.076396784	0.087596036	0.134203964
LOC646813	11p11.12	0.076379753	0.087666902	0.134302339
GABRA6	5q34	-0.076361781	0.087741728	0.134406766
NCOA6	20q11.22	0.076344395	0.087814168	0.134507522
KCNJ16	17q24.3	-0.07633989	0.087832945	0.134526073
TRRAP	7q22.1	0.076333993	0.087857528	0.134553511
FAM221A	7p15.3	-0.076311377	0.087951867	0.134687769
EMX2	10q26.11	0.076303241	0.087985824	0.134729545
PRSS38	1q42.13	-0.076299337	0.088002123	0.134744278
CYTH1	17q25.3	-0.076284467	0.088064224	0.134829054
HRCT1	9p13.3	0.076282845	0.088071002	0.134829054
FLJ25758	19p13.2	-0.076281281	0.088077535	0.134829054
ZZZ3	1p31.1	0.076277214	0.088094525	0.134844831
ADNP	20q13.13	0.076275592	0.088101303	0.134844979
SLC26A9	1q32.1	0.076248968	0.088212616	0.135005111
DCDC2	6p22.3	0.07622241	0.088323768	0.135164972
KCNJ2	17q24.3	-0.076208984	0.088379998	0.135240766
SEPHS2	16p11.2	-0.076203545	0.088402788	0.135265382
PLCD1	3p22.2	-0.076197915	0.088426382	0.135286475
VPS52	6p21.32	0.076197056	0.088429982	0.135286475
LDHAL6A	11p15.1	0.076174998	0.088522473	0.135417707
ACTR8	3p21.1	0.076170814	0.088540027	0.135434294
OR1J2	9q33.2	0.076164326	0.088567251	0.135465668
P2RX5	17p13.2	0.076156977	0.088598095	0.13549843
GSTA5	6p12.2	-0.076156023	0.088602101	0.13549843
NOC2L	1p36.33	0.076138178	0.088677037	0.135602753
TMEM257	Xq27.3	0.076135958	0.088686363	0.135606737
UNC5D	8p12	0.076126771	0.088724963	0.13565548
TAS1R1	1p36.31	0.076124533	0.088734368	0.135659581
ADRA2C	4p16.3	0.076095999	0.08885436	0.135832737
BABAM2	2p23.2	-0.076092659	0.088868414	0.135836709
PHPT1	9q34.3	-0.076092182	0.088870422	0.135836709
PAFAH1B2	11q23.3	0.076075864	0.08893911	0.135931403
MESD	15q25.1	0.076050481	0.089046044	0.13608453
LINC00526	18p11.31	-0.076040365	0.089088686	0.136139386
RPS26P11	Xq13.1	-0.076031381	0.089126574	0.13618697
GCNT7	20q13.31	0.076027887	0.089141314	0.136199181
COL26A1	7q22.1	0.076021584	0.089167904	0.136229493
GTF2H2	5q13.2	-0.076011978	0.089208444	0.136276294
HIST1H3I	6p22.1	0.076011125	0.089212044	0.136276294
CASQ1	1q23.2	0.07600832	0.089223883	0.136284061
RPRML	17q21.32	0.076003722	0.089243296	0.136303395
PRSS22	16p13.3	0.075993988	0.089284403	0.13635586
ZKSCAN1	7q22.1	0.075977384	0.089354559	0.136443726
C20ORF202	20p13	0.075975576	0.089362199	0.136443726
SETD3	14q32.2	-0.075975571	0.089362222	0.136443726
ACTL7B	9q31.3	-0.075970262	0.089384666	0.136467668
USH1C	11p15.1	-0.075967319	0.089397105	0.136476334
AHCYL1	1p13.3	0.075964024	0.089411038	0.136487279
PYY	17q21.31	0.075928311	0.089562158	0.136707623
ORM2	9q32	0.07591821	0.089604936	0.136743379
FAM120C	Xp11.22	-0.075917265	0.089608941	0.136743379

XG	Xp22.33	0.075916456	0.089612369	0.136743379
GLP1R	6p21.2	0.07591638	0.089612689	0.136743379
KIAA1147	7q34	0.075913639	0.089624303	0.136750761
PRR29	17q23.3	0.075910108	0.089639263	0.136763246
TRAPPC9	8q24.3	0.075880526	0.089764682	0.136935127
ATP6V0E2-AS1	7q36.1	0.075880335	0.089765492	0.136935127
FYB2	1p32.2	0.075873533	0.089794348	0.136968792
CASP2	7q34	-0.07586688	0.089822585	0.137001507
CDC42BPB	14q32.32	0.075861631	0.089844863	0.137016009
SECTM1	17q25.3	0.07586144	0.089845673	0.137016009
NXPH1	7p21.3	0.075845902	0.089911655	0.137106272
GPR27	3p13	0.075817715	0.090031447	0.137278569
HDGFL3	15q25.2	-0.075790443	0.090147472	0.137445096
AARD	8q24.11	0.075778885	0.090196682	0.13750437
SLC7A8	14q11.2	-0.075777847	0.090201102	0.13750437
JADE3	Xp11.3	-0.075776511	0.090206792	0.13750437
TRIM53AP	11q14.3	0.075728102	0.090413146	0.13780851
SPATS1	6p21.1	0.075723695	0.090431951	0.137826763
TAF4B	18q11.2	-0.075687859	0.090584976	0.138049561
FAM214A	15q21.2-q21.3	0.075659708	0.090705333	0.138222543
GPR158-AS1	10p12.1	-0.075640185	0.090788881	0.138339411
TRIM27	6p22.1	0.075631367	0.090826635	0.138386489
GABRA1	5q34	0.075615495	0.090894621	0.138479619
SEC14L1	17q25.2-q25.3	0.075602071	0.090952158	0.138556816
LHX5	12q24.13	0.07558971	0.091005162	0.138621941
C2ORF66	2q33.1	-0.075588897	0.091008647	0.138621941
RAD9A	11q13.2	-0.0755806	0.091044241	0.138665692
XAB2	19p13.2	-0.075537944	0.091227403	0.138934171
RIMKLB	12p13.31	0.075534509	0.091242167	0.13894617
ZNF213	16p13.3	0.075521531	0.09129796	0.139020641
ZER1	9q34.11	-0.075500346	0.091389093	0.13914891
GPSM2	1p13.3	-0.075483074	0.091463448	0.139251616
ZNF460	19q13.43	0.075477634	0.091486874	0.139276773
HSBP1	16q23.3	-0.075469237	0.09152305	0.139321335
NYX	Xp11.4	0.075410618	0.091775894	0.139695691
LGR4	11p14.1	0.075378486	0.091914726	0.139896459
C12ORF4	12p13.32	0.075355297	0.092015022	0.140026833
CLCN5	Xp11.23	-0.075353771	0.092021629	0.140026833
DNPEP	2q35	-0.075352721	0.092026172	0.140026833
SYNRG	17q12	0.075351767	0.092030301	0.140026833
SLC30A8	8q24.11	0.075350662	0.09203508	0.140026833
CSTF2T	10q21.1	-0.075326383	0.092140206	0.140176207
RSPO2	8q23.1	0.075321161	0.092162829	0.140200055
ADGRG7	3q12.2	0.075307264	0.092223057	0.140281099
JMJD8	16p13.3	0.075283155	0.092327616	0.140429559
MAFF	22q13.1	0.075273708	0.092368614	0.140481328
CASK	Xp11.4	-0.075269223	0.092388082	0.140500348
APOA2	1q23.3	-0.075258215	0.092435877	0.140562439
SYCP2	20q13.33	0.075240549	0.092512628	0.140668549
DPY19L4	8q22.1	0.075230766	0.092555151	0.140722603
WASH7P	1p36.33	-0.075227616	0.092568842	0.140732816
LHX6	9q33.2	0.075218123	0.092610125	0.140784972
WDR70	5p13.2	0.075143927	0.092933292	0.141265605
ZNF506	19p13.11	0.075141828	0.09294245	0.141268883
LINC00662	19q11	-0.0751299	0.092994493	0.14133734
SERAC1	6q25.3	-0.075112914	0.093068642	0.141439383
COL6A4P1	3p25.1	-0.075107019	0.093094387	0.141467854
ARMC4	10p12.1	0.075103633	0.093109175	0.141479671

FANCF	11p14.3	0.075085908	0.093186629	0.141586702
MSTO2P	1q22	-0.075070162	0.093255475	0.141680638
CBX4	17q25.3	-0.075064628	0.093279685	0.14170675
MPP2	17q21.31	0.075062624	0.093288452	0.1417094
EIF4H	7q11.23	-0.075059666	0.093301395	0.141718393
SLC24A5	15q21.1	-0.075012637	0.093507347	0.142020529
NKAIN1	1p35.2	-0.075006181	0.093535651	0.142052827
MAGEA4	Xq28	0.074994621	0.093586341	0.142119114
ENO3	17p13.2	-0.074987572	0.093617263	0.142155373
C1ORF194	1p13.3	-0.074981059	0.093645844	0.142188073
BMS1P2	10q11.22	0.074979412	0.093653072	0.142188349
LRIG1	3p14.1	-0.074975213	0.093671501	0.142205629
GPC1	2q37.3	-0.074958895	0.093743148	0.142299986
RAB37	17q25.1	0.074957845	0.093747758	0.142299986
SHD	19p13.3	0.074947159	0.093794702	0.142354117
GNGT1	7q21.3	0.074946516	0.093797529	0.142354117
FADS1	11q12.2	-0.074932271	0.09386014	0.142438427
SPATA46	1q23.3	-0.074922115	0.0939048	0.142495485
TRIM54	2p23.3	-0.074902648	0.093990446	0.142614724
UGT2B10	4q13.2	-0.074899209	0.094005583	0.142626967
ERICH6B	13q14.13	0.074878376	0.094097324	0.142755424
NCR2	6p21.1	0.074873953	0.094116808	0.14277425
AMELY	Yp11.2	-0.074869469	0.094136568	0.142793491
SUMO3	21q22.3	-0.074855834	0.094196669	0.142873917
MS4A5	11q12.2	-0.074851158	0.09421729	0.142894453
PICK1	22q13.1	-0.07482482	0.094333488	0.143053633
APOBEC2	6p21.1	0.074824155	0.094336424	0.143053633
FUT9	6q16.1	0.074816728	0.094369213	0.143092602
CHRN3	8p11.21	0.074803413	0.094428021	0.143171014
RNF186	1p36.13	0.074794256	0.094468479	0.143221595
RAP1GAP	1p36.12	-0.074782165	0.094521926	0.14329186
MAB21L2	4q31.3	0.074776391	0.094547454	0.143319793
SLC28A1	15q25.3	0.074760931	0.094615842	0.143411531
SPINK8	3p21.31	-0.074759497	0.094622187	0.143411531
RIOK2	5q15	-0.07475225	0.094654258	0.143449363
SMCO2	12p11.23	0.074748805	0.094669508	0.1434617
GUSBP11	22q11.23	0.074734261	0.094733909	0.14353243
PRELID1	5q35.3	-0.074733974	0.094735177	0.14353243
LINC00606	3p25.3	0.074733445	0.094737521	0.14353243
PRO0628	20q12	0.074697194	0.094898193	0.143765063
REXO1L1P	8q21.2	0.074664049	0.09504529	0.143977097
FFAR1	19q13.12	0.074659675	0.095064717	0.143995715
LRRC28	15q26.3	-0.074653911	0.095090318	0.144023683
QDPR	4p15.32	0.074635494	0.095172163	0.144136827
KNR1	3q27.3	-0.074629012	0.095200984	0.144169655
CRHBP	5q13.3	-0.074621415	0.095234765	0.14420999
MUC5B	11p15.5	0.074581818	0.095411015	0.144463652
LINC01257	12q24.33	0.074580565	0.095416599	0.144463652
FOXQ1	6p25.3	0.074559916	0.095508616	0.144592119
CNOT6L	4q21.1	0.074555049	0.095530314	0.144614118
RAMP3	7p13	0.074511248	0.095725772	0.144890288
HYPM	Xp11.4	-0.074510576	0.095728777	0.144890288
FAM220A	7p22.1	-0.074509342	0.095734289	0.144890288
OR13A1	10q11.21	0.074505613	0.095750942	0.144904624
ADGRG4	Xq26.3	0.074474697	0.095889126	0.145102862
LINC00899	22q13.31	0.074456189	0.095971925	0.145217267
UHRF1BP1	6p21.31	0.07443176	0.096081302	0.145371867
RHOF	12q24.31	0.074419066	0.096138173	0.145447009

PYDC2	3q28	-0.074412038	0.096169676	0.145483761
TMEM63C	14q24.3	-0.074403989	0.096205761	0.14552744
TFAM	10q21.1	-0.07439311	0.09625455	0.145590328
TNFSF10	3q26.31	0.074388243	0.096276383	0.145612437
DDX51	12q24.33	-0.074382041	0.096304215	0.145643615
OR1L8	9q33.2	0.074358874	0.096408224	0.145789985
ANGPTL7	1p36.22	0.074353574	0.096432031	0.145815058
SCGB2B2	19q13.11	0.074350389	0.096446341	0.145825769
CDK8	13q12.13	-0.074346448	0.096464046	0.145841611
CCDC185	1q41	-0.074344002	0.096475037	0.145843109
HS3ST1	4p15.33	0.074343011	0.096479492	0.145843109
PPFIA1	11q13.3	0.074320204	0.096582032	0.145987178
ORC3	6q15	-0.074318487	0.096589759	0.145987921
MTM1	Xq28	0.074298065	0.096681653	0.146115869
USP40	2q37.1	-0.074280125	0.09676244	0.146227011
TSGA10IP	11q13.1	0.074269761	0.096809134	0.146277046
MEPE	4q22.1	0.074269559	0.096810048	0.146277046
SDR16C5	8q12.1	0.074267435	0.096819617	0.146280552
HJV	1q21.1	-0.074264868	0.096831185	0.146287076
CTXN1	19p13.2	0.074247871	0.096907821	0.146391893
GML	8q24.3	0.074241582	0.096936186	0.146423781
BRD8	5q31.2	0.074239473	0.0969457	0.146427191
FIBP	11q13.1	-0.074191092	0.097164165	0.146746178
DAGLB	7p22.1	0.07418403	0.097196084	0.146783399
SLCO1B7	12p12.2	-0.074174573	0.097238847	0.146836989
PTMA	2q37.1	-0.074163227	0.097290165	0.14690349
LEKR1	3q25.31	-0.074147482	0.097361421	0.147000083
PWRN1	15q11.2	0.074144828	0.097373437	0.147007226
SLC5A1	22q12.3	0.074133744	0.097423626	0.147071994
FAM25A	10q23.2	-0.074119176	0.097489623	0.147160615
KDM6B	17p13.1	0.074094616	0.097600974	0.147317679
RAB40A	Xq22.2	0.07406624	0.097729744	0.14750101
CNTF	11q12.1	0.074060739	0.097754724	0.147527678
RPS6KB2	11q13.2	-0.074056254	0.097775094	0.147547385
OR13C4	9q31.1	-0.074008197	0.097993572	0.14786602
MSI1	12q24.31	-0.073982298	0.098111473	0.148032856
GBE1	3p12.2	0.073931054	0.098345091	0.148373127
DNAH12	3p14.3	0.073929606	0.0983517	0.148373127
LHFPL4	3p25.3	0.073917564	0.098406665	0.148444949
SLC15A1	13q32.2-q32.3	0.073911796	0.098433004	0.148457414
TMEM106B	7p21.3	-0.073911301	0.098435264	0.148457414
SPDYE7P	7q11.23	-0.073910921	0.098436999	0.148457414
CSNK2A1	20p13	-0.073894697	0.098511111	0.148548297
CISD1	10q21.1	-0.073894506	0.098511983	0.148548297
SVBP	1p34.2	0.073889544	0.09853466	0.148571389
HIST1H1E	6p22.2	-0.073881579	0.098571065	0.148615177
SMARCAL1	2q35	0.073869027	0.098628462	0.148690604
CTPS2	Xp22.2	-0.073855573	0.098690009	0.148772276
CCDC78	16p13.3	-0.073807812	0.098908755	0.149090892
SMC3	10q25.2	0.073800608	0.098941786	0.149129542
H19	11p15.5	0.073794594	0.098969364	0.149159966
MELTF	3q29	-0.073782761	0.099023645	0.149230629
BYSL	6p21.1	-0.073765775	0.099101605	0.149336965
RBAKDN	7p22.1	-0.073747077	0.099187482	0.149455212
NLRP5	19q13.43	0.07372186	0.099303392	0.149607616
DEFB132	20p13	0.073721846	0.099303455	0.149607616
MFSD14A	1p21.2	-0.073716726	0.099327002	0.149631921
OLFM1	9q34.3	-0.073706038	0.09937617	0.149694815

ZNF232	17p13.2	-0.073702748	0.099391312	0.149706447
INAVA	1q32.1	0.073700408	0.099402079	0.149711491
NCAPD2	12p13.31	-0.073693156	0.099435461	0.149750591
FAM83A	8q24.13	0.073686857	0.099464457	0.149783081
NOXO1	16p13.3	0.073671783	0.099533885	0.149876447
MS4A13	11q12.2	0.073659467	0.099590643	0.149950722
SNRNP40	1p35.2	-0.073644392	0.099660141	0.150044168
SNORA13	5q22.1	-0.07363597	0.09969899	0.150091459
ZSWIM6	5q12.1	-0.073623399	0.099756997	0.150161419
CCN6	6q21	0.073622673	0.099760344	0.150161419
STXBP3	1p13.3	0.073620154	0.099771972	0.15016772
DUSP3	17q21.31	-0.073609085	0.099823077	0.150233434
DEFB130A	8p23.1	0.073594561	0.099890163	0.150323186
2-Mar	1q41	0.073581888	0.099948727	0.150400101
DYNLRB1	20q11.22	-0.0735733	0.099988432	0.150448629
HEMGN	9q22.33	0.073564671	0.100028336	0.15049745
CABIN1	22q11.23	0.073551542	0.100089073	0.150577605
PHF6	Xq26.2	-0.073534461	0.100168142	0.150685325
AKIRIN1	1p34.3	0.073511559	0.100274235	0.150833677
PTCRA	6p21.1	0.073509163	0.100285335	0.15083913
TREML3P	6p21.1	-0.073506364	0.100298308	0.150844834
NRADDP	3p21.31	-0.07350512	0.100304077	0.150844834
RNF6	13q12.13	-0.073495336	0.100349437	0.150901803
DDX3Y	Yq11.221	0.07349327	0.100359019	0.150904966
ERGIC2	12p11.22	-0.073484553	0.10039945	0.150954511
ARHGAP19	10q24.1	-0.073471956	0.100457897	0.151031135
ABHD11-AS1	7q11.23	-0.073456573	0.100529311	0.151127242
RRP12	10q24.1	0.073436362	0.100623199	0.151257117
PTDSS2	11p15.5	-0.073427774	0.100663117	0.15130585
TULP3	12p13.33	0.07342243	0.100687961	0.15133192
GAGE8	Xp11	0.073405677	0.100765879	0.15143775
TMEM129	4p16.3	-0.073388649	0.100845123	0.151545557
NUFIP1	13q14.12	-0.073376627	0.100901101	0.151618387
KRT8P41	11p15.4	-0.073367099	0.100945483	0.151672625
ANKIB1	7q21.2	0.073365651	0.100952229	0.151672625
SNORA47	5q13.3	0.073339929	0.101072131	0.151841463
CDY1B	Yq11.23	0.07333521	0.101094138	0.151863218
RC3H1	1q25.1	-0.073320801	0.101161368	0.151952899
SUCLA2	13q14.2	-0.073305628	0.101232197	0.152047973
LDLR	19p13.2	-0.073296467	0.101274981	0.152100912
PCIF1	20q13.12	0.073283586	0.101335162	0.152179969
KATNB1	16q21	-0.073256578	0.101461437	0.152358262
KCNA10	1p13.3	0.073236794	0.101554021	0.152484759
NACA2	17q23.2	-0.073235348	0.101560789	0.152484759
RBMXL2	11p15.4	0.073231221	0.10158011	0.152502421
LINC01205	3q13.13	0.073222976	0.10161872	0.152539616
YRDC	1p34.3	-0.073222702	0.101620004	0.152539616
AVPI1	10q24.2	0.073220507	0.101630284	0.1525437
NRSN1	6p22.3	0.073200398	0.101724511	0.152673775
KRT35	17q21.2	0.073196395	0.101743277	0.152690584
GSG1	12p13.1	0.073181775	0.101811834	0.152773512
CCDC97	19q13.2	0.073181382	0.101813677	0.152773512
SPEM1	17p13.1	0.073172431	0.10185567	0.152825159
SNAI3-AS1	16q24.2	0.073166782	0.101882182	0.152853572
NEK4	3p21.1	0.073149223	0.101964614	0.152965873
TSKS	19q13.33	0.073140707	0.102004618	0.153011673
DKK4	8p11.21	-0.073139495	0.10201031	0.153011673
PEF1	1p35.2	-0.073123554	0.102085223	0.153103297

RPL13	16q24.3 17p11.2	-0.073123267	0.102086568	0.153103297
KCNQ2	20q13.33	0.073107642	0.102160039	0.153202098
SEC11C	18q21.32	0.073103323	0.102180354	0.153205257
KCNG4	16q24.1	0.073102086	0.102186175	0.153205257
PSEN2	1q42.13	0.073100747	0.102192475	0.153205257
CTSIV	9q22.33	-0.073099888	0.102196516	0.153205257
LYPD3	19q13.31	-0.073099124	0.102200107	0.153205257
RRP1B	21q22.3	0.07309588	0.102215373	0.15321419
APOC2	19q13.32	0.073093113	0.102228396	0.15321419
NDUFAF6	8q22.1	-0.073093017	0.102228845	0.15321419
CDIPTOSP	16p11.2	-0.073075268	0.102312395	0.153328023
IL3	5q31.1	0.073071873	0.102328385	0.153340597
TNPO3	7q32.1	-0.073046544	0.102447727	0.153508033
C19ORF71	19p13.3	0.073021071	0.102567861	0.153676631
OGG1	3p25.3	0.073018489	0.102580045	0.153683475
COL18A1-AS1	21q22.3	0.072999425	0.102670034	0.153806875
MLNR	13q14.2	0.0729907	0.102711239	0.153857181
SNORA80E	1q22	0.072983102	0.102747136	0.153899529
HERC2	15q13.1	0.072952454	0.102892023	0.154105109
COG7	16p12.2	-0.072937185	0.102964263	0.154201861
EAF2	3q13.33	-0.072927356	0.103010789	0.154260091
TRIM6-TRIM34	11p15.4	0.07291987	0.10304624	0.154301728
LPAR6	13q14.2	0.072912852	0.10307948	0.154340048
ERF	19q13.2	0.072903118	0.103125595	0.154397639
PGRMC2	4q28.2	-0.072885464	0.103209277	0.154511463
LNP1	3q12.2	0.07288117	0.10322964	0.154530483
ARFGAP3	22q13.2	0.072874967	0.10325906	0.154563056
ZNF155	19q13.31	0.072872582	0.103270376	0.15456853
HGH1	8q24.3	-0.072870768	0.103278978	0.15456994
ATF5	19q13.33	0.072857695	0.103341016	0.154651317
ZBTB7B	1q21.3	-0.072853496	0.103360947	0.154669673
METTL14	4q26	0.072847293	0.103390395	0.154702268
LIM2	19q13.41	-0.072787704	0.103673647	0.155114594
SCRN1	7p14.3	0.072758165	0.103814287	0.155313501
SPCS1	3p21.1	-0.072732877	0.103934807	0.155482279
UBE2F	2q37.3	0.072705012	0.104067734	0.155669593
FBXO47	17q12 17q12	-0.072671527	0.104227651	0.155887792
NUP210L	1q21.3	0.072671234	0.104229055	0.155887792
C16ORF71	16p13.3	-0.072667036	0.104249116	0.155906241
UBE2Q2	15q24.2	0.072663597	0.104265553	0.155919267
EIF2B4	2p23.3	-0.072650237	0.104329429	0.156003226
TRHR	8q23.1	0.072648556	0.104337469	0.156003689
HSPA2	14q23.3	0.072617029	0.10448834	0.156217694
ASMT	Xp22.33 and Yp11	0.072599945	0.104570165	0.156328446
SFMBT1	3p21.1	-0.072561491	0.104754534	0.156582923
NLRX1	11q23.3	-0.072561204	0.104755908	0.156582923
CIB4	2p23.3	0.072542906	0.104843727	0.156702583
SNORD115-13	15q11.2	0.072522383	0.104942297	0.156833132
DNMBP-AS1	10q24.2	0.072521484	0.104946617	0.156833132
GPHB5	14q23.2	-0.072509604	0.105003709	0.156901615
MROH9	1q24.3	0.072508713	0.105007994	0.156901615
KIAA0753	17p13.1	0.072497364	0.10506256	0.156971523
TCL6	14q32.13	0.07249287	0.105084171	0.156992189
HARS2	5q31.3	0.072483336	0.105130036	0.157049082
THAP5	7q31.1	-0.072475129	0.105169528	0.157096447
RNF216	7p22.1	0.072462247	0.105231544	0.157177448
ASCL4	12q23.3	0.072448922	0.105295722	0.157261666
ZNF219	14q11.2	-0.072431806	0.105378202	0.157373204

UPK1A	19q13.12	0.072423584	0.105417839	0.157420748
MYOZ1	10q22.2	0.072418278	0.105443427	0.157447308
ZNF638	2p13.3-p13.2	0.072408522	0.105490487	0.157505923
ARFGEF3	6q23.3-q24.1	-0.072382947	0.105613927	0.157678561
ASB13	10p15.1	0.072379607	0.105630056	0.157690975
PDSS2	6q21	0.072368061	0.105685833	0.157762569
ATP8A1	4p13	0.072351552	0.105765619	0.157869992
AK8	9q34.13	0.072332371	0.105858379	0.157996762
PRXL2C	9q22.33	0.072329176	0.105873837	0.158008147
PNISR	6q16.2	0.072322447	0.105906399	0.158045055
CRAMP1	16p13.3	0.07231653	0.105935035	0.158076098
HCG9	6p22.1	0.072307761	0.10597749	0.158127756
KCNIP4	4p15.31-p15.2	-0.072283608	0.106094491	0.158290627
SMARCD3	7q36.1	0.07227984	0.106112751	0.158306166
SLC39A2	14q11.2	0.07225766	0.106220303	0.158449462
PLD1	3q26.31	-0.072256793	0.106224507	0.158449462
PRR25	16p13.3	0.072218322	0.106411261	0.1587163
VAX2	2p13.3	-0.072215099	0.106426919	0.158727923
KLHL25	15q25.3	0.072208366	0.106459632	0.158764978
CD177	19q13.31	0.072177972	0.106607409	0.158973612
CRIP3	6p21.1	-0.072154582	0.106721247	0.159131607
BMX	Xp22.2	0.072150249	0.106742347	0.15915131
SEMA3F	3p21.31	0.072142854	0.106778363	0.159193247
ZNF598	16p13.3	-0.072130498	0.106838563	0.15926085
FZD3	8p21.1	-0.072130307	0.106839493	0.15926085
MCEE	2p13.3	-0.072125963	0.106860662	0.159280639
AP2S1	19q13.32	-0.072113939	0.106919277	0.159356237
SNORA36B	1q41	0.072111732	0.106930039	0.159360507
FCRL1	1q23.1	0.07208807	0.107045476	0.159520763
ANKRD20A20P	9q13	0.072043627	0.107262559	0.159832461
GABBR1	6p22.1	0.072024811	0.10735457	0.159957754
ANKRD36	2q11.2	0.072016654	0.107394479	0.160005404
CNBD2	20q11.23	0.072000415	0.10747396	0.160112001
C1ORF50	1p34.2	0.071982537	0.10756152	0.160230615
STRIP2	7q32.1	0.07195973	0.107673301	0.160385291
MICOS10	1p36.13	-0.071942746	0.107756603	0.160497527
CHIAP2	1p13.2	0.071940616	0.107767052	0.160501244
AGXT	2q37.3	0.071938462	0.10777762	0.160505136
DCD	12q13.2	-0.071926471	0.107836473	0.160580931
ZNF37BP	10q11.21	0.07190486	0.107942605	0.160727113
C6ORF118	6q27	0.07188088	0.108060462	0.16089073
ZFPL1	11q13.1	0.071871937	0.108104443	0.160944338
PAFAH1B3	19q13.2	-0.071860772	0.108159371	0.161014234
ZNF718	4p16.3	0.071853426	0.108195523	0.161056172
MAP3K14-AS1	17q21.31	-0.071849084	0.108216896	0.161076104
ZNF468	19q13.41	0.071842832	0.108247677	0.161110036
SPOP	17q21.33	-0.071840591	0.10825871	0.161114575
TPI1P3	6q22.1	-0.071827496	0.108323208	0.161195093
DKKL1	19q13.33	0.071826363	0.10832879	0.161195093
CAD	2p23.3	0.071808574	0.108416461	0.161313654
RTN3	11q13.1	-0.071800177	0.108457866	0.161363362
AKR7A3	1p36.13	-0.071787389	0.108520939	0.161445298
SYCP1	1p13.2	-0.071778439	0.108565105	0.161499098
LSM14B	20q13.33	-0.071772598	0.108593932	0.161530072
MET	7q31.2	0.071762292	0.108644815	0.161593846
ALMS1	2p13.1	0.071749791	0.108706559	0.161673765
APOBEC3A	22q13.1	-0.071745974	0.108725417	0.161679383
PWP2	21q22.3	-0.071745783	0.10872636	0.161679383

OPALIN	10q24.1	0.071735574	0.108776813	0.161742488
METAP1D	2q31.1	-0.071726125	0.108823524	0.161800021
CH25H	10q23.31	0.071710571	0.108900454	0.161902473
BRMS1	11q13.2	-0.071707422	0.108916034	0.161913707
DPPA5	6q13	-0.071688834	0.109008031	0.162038531
PLCZ1	12p12.3	-0.071685866	0.109022731	0.162048445
CTH	1p31.1	-0.071665339	0.109124409	0.16218763
IGF2BP2	3q27.2	-0.071646444	0.109218068	0.162308548
RCOR1	14q32.31-q32.32	-0.071645681	0.109221853	0.162308548
KRTAP20-4	21q22.11	0.071626728	0.109315865	0.162436292
TXNRD2	22q11.21	-0.071601116	0.109443012	0.162613249
VIPAS39	14q24.3	0.071562755	0.10963367	0.162884541
EPPIN	20q13.12	0.071532991	0.109781778	0.163080642
ZNF14	19p13.11	-0.071532982	0.109781825	0.163080642
HDGF	1q23.1	-0.071529928	0.109797029	0.163091221
NRBF2	10q21.3	0.071526779	0.10981271	0.163102508
UIMC1	5q35.2	-0.071504449	0.109923954	0.163255719
RNU6ATAC	9q34.2	-0.071470137	0.110095063	0.163497813
ZBTB42	14q32.33	-0.071464515	0.110123122	0.163521071
UBFD1	16p12.2	0.071463751	0.110126932	0.163521071
ATG14	14q22.3	0.071438414	0.110253451	0.163696886
ZBTB37	1q25.1	-0.071432692	0.110282039	0.163727286
SNAR-D	19q13.33	-0.071430015	0.110295416	0.163735099
NUP155	5p13.2	0.071410549	0.11039272	0.163867493
MSMP	9p13.3	0.071394138	0.110474812	0.163977288
AWAT2	Xq13.1	0.071372169	0.110584775	0.164128434
PSME4	2p16.2	-0.071335258	0.110769727	0.164390845
TAF1L	9p21.1	0.071317127	0.110860666	0.164513706
CALR3	19p13.11	-0.071310779	0.110892515	0.164548869
RBBP6	16p12.1	-0.071271894	0.11108779	0.164826508
MIR1-1HG	20q13.33	0.071269452	0.111100064	0.1648326
BSN	3p21.31	0.071263879	0.111128078	0.164862041
FSCB	14q21.2	-0.071253554	0.111179988	0.164926927
THBD	20p11.21	0.071243171	0.111232209	0.164992262
ZBTB24	6q21	0.0712363	0.111266776	0.165031405
OR1L6	9q33.2	0.071224969	0.111323801	0.16510385
OR5P3	11p15.4	-0.071221312	0.111342213	0.16511902
LAMB2P1	3p21.31	-0.071202903	0.111434923	0.165241568
FGF21	19q13.33	-0.071201353	0.11144273	0.165241568
OR52I1	11p15.4	-0.071200026	0.111449415	0.165241568
SDCCAG8	1q43-q44	-0.071197748	0.111460893	0.165246445
KRTAP10-4	21q22.3	0.071187267	0.111513713	0.165312607
LIMD1	3p21.31	-0.071182861	0.111535921	0.165333383
HMOX1	22q12.3	-0.071151848	0.111692356	0.16555311
WFDC11	20q13.12	0.071141436	0.111744911	0.165618844
RPF1	1p22.3	-0.071134575	0.111779553	0.165658019
OR13F1	9q31.1	-0.071103519	0.111936475	0.165878396
POU5F1	6p21.33	0.071077766	0.112066728	0.166052523
PHGDH	1p12	-0.071077033	0.112070435	0.166052523
ATP1A4	1q23.2	0.071069883	0.112106624	0.166093948
KIAA1328	18q12.2	0.071057948	0.112167045	0.166171265
USP51	Xp11.21	0.071051165	0.11219894	0.166196978
CREBBP	16p13.3	0.071051268	0.112200874	0.166196978
TRIM14	9q22.33	-0.071048787	0.112213441	0.166201687
KRTAP10-6	21q22.3	0.071047388	0.112220525	0.166201687
ADAM2	8p11.22	0.071042365	0.112245972	0.166227173
RBM1B	Yq11.223	0.071040445	0.112255703	0.166229385
GLIPR1L1	12q21.2	0.071028611	0.112315675	0.166305987

PLEKHG3	14q23.3	0.070991722	0.112502789	0.166570825
DOT1L	19p13.3	-0.070966529	0.112630714	0.166741069
OR6C65	12q13.2	-0.070965823	0.112634299	0.166741069
ZNF317	19p13.2	-0.07095002	0.112714606	0.166847713
L3MBTL2	22q13.2	-0.070935134	0.112790296	0.166947508
KRTAP12-4	21q22.3	0.070911304	0.112911538	0.167114708
LOC646471	1p36.11	0.070905361	0.112941796	0.167147232
CDH16	16q22.1	-0.070883507	0.1130531	0.167299685
HSF4	16q22.1	-0.070873774	0.113102697	0.167360807
CLDN15	7q22.1	-0.070848963	0.113229211	0.167535727
LINC00626	1q24.2	-0.070842715	0.113261088	0.167570606
PIN4P1	15q15.3	-0.070831023	0.113320759	0.167646598
NPHP3-AS1	3q22.1	0.070820442	0.11337478	0.167714221
UBXN1	11q12.3	-0.070817568	0.113389458	0.167723639
ZNF559	19p13.2	0.070805353	0.113451852	0.167803363
LINC01106	2q13	-0.070802395	0.113466967	0.167813686
N4BP2L2	13q13.1	0.070756972	0.113699255	0.168144908
ZDHHC19	3q29	-0.070741239	0.1137798	0.168251692
HSPB11	1p32.3	-0.070734739	0.113813086	0.168288581
RGS9	17q24.1	0.070716129	0.113908437	0.16841723
KRTAP21-2	21q22.11	0.070713233	0.113923282	0.168426837
OR2J2	6p22.1	0.070704023	0.113970498	0.1684843
OR56A1	11p15.4	0.070661703	0.114187662	0.168792969
CDK3	17q25.1	-0.070636544	0.114316917	0.168971658
FAM92A1P2	4q35.1	0.070594369	0.114533848	0.169279021
DOK7	4p16.3	0.070592855	0.11454164	0.169279021
PIP5KL1	9q34.11	-0.070587879	0.114567256	0.169304479
TLCD3B	16p11.2	0.070583655	0.114589007	0.169324221
SCART1	10q26.3	0.070573691	0.114640324	0.169387647
STC2	5q35.2	-0.070559725	0.114712283	0.169481561
SLC7A14	3q26.2	0.070557922	0.114721574	0.169482879
TMEM63B	6p21.1	0.07052165	0.114908644	0.169746818
ZSCAN29	15q15.3	-0.070507145	0.114983518	0.16984499
CCNL2	1p36.33	0.070492545	0.115058922	0.169940959
ZNRD1	6p22.1	-0.070491304	0.115065331	0.169940959
SLC25A22	11p15.5	-0.070478135	0.115133379	0.170029015
FBXO48	2p13.3	-0.070475177	0.11514867	0.170039152
KLHL42	12p11.22	-0.070466589	0.115193071	0.170080542
SNORD1C	17q25.1	-0.070466495	0.115193556	0.170080542
RENBP	Xq28	0.070446072	0.115299194	0.170224059
OR2W5	1q44	0.070436946	0.115346426	0.170279347
CASTOR1	22q12.2	0.070435575	0.11535352	0.170279347
KLKB1	4q35.2	0.070427296	0.115396379	0.170330154
NUS1	6q22.1	0.070422885	0.115419222	0.170344012
HIST1H4C	6p22.2	-0.070422223	0.115422651	0.170344012
SYF2	1p36.11	0.070416871	0.115450367	0.170372456
MTF2	1p22.1	0.070402271	0.115526012	0.170471619
KIAA2013	1p36.22	0.070394542	0.115566075	0.170509449
PROS1	3q11.1	0.070394064	0.115568548	0.170509449
WDPCP	2p15	-0.070380609	0.115638314	0.170593949
DNLZ	9q34.3	-0.070379655	0.115643264	0.170593949
ZBED8	5q33.3	-0.070378128	0.115651183	0.170593949
TTC14	3q26.33	-0.07035351	0.115778928	0.170769899
OR5M8	11q12.1	0.07034088	0.115844508	0.170854138
GIN1	5q21.1	-0.070337763	0.115860698	0.170865528
SLC12A8	3q21.2	-0.070314765	0.1159802	0.171029265
PPP4R1	18p11.22	-0.070312761	0.115990618	0.171032128
SMR3B	4q13.3	0.070311092	0.115999296	0.171032427

TSHZ1	18q22.3	-0.070299497	0.116059591	0.171108825
BBS7	4q27	0.07029024	0.116107742	0.171167309
COG1	17q25.1	-0.07026896	0.1162185	0.171318074
ZNF786	7q36.1	-0.070264477	0.116241846	0.171332923
NR5A1	9q33.3	0.070263764	0.116245555	0.171332923
RHOXF1	Xq24	0.070246153	0.116337298	0.171455619
CREB5	7p15.1	0.070238233	0.116378575	0.171503926
USP50	15q21.2	0.070225183	0.116446611	0.171591658
GPR62	3p21.2	-0.070215766	0.116495727	0.171651498
ARSD	Xp22.33	0.070198058	0.116588125	0.171775101
SMIM20	4p15.2	-0.070194527	0.116606556	0.171789713
SP3	2q31.1	-0.070192428	0.116617516	0.171793317
MGAT4C	12q21.31-q21.32	0.070176204	0.116702241	0.171905579
GRM7	3p26.1	0.070137413	0.116905007	0.172191689
GNAQ	9q21.2	0.070122098	0.116985138	0.172289107
PWRN2	15q11.2	0.070121509	0.116988222	0.172289107
DSG4	18q12.1	-0.070067967	0.117268706	0.172689573
CXCL17	19q13.2	-0.070064556	0.117286593	0.17270331
RETSAT	2p11.2	-0.070060453	0.117308113	0.172722394
GNRH1	8p21.2	0.070037843	0.117426744	0.17288445
LGALS9C	17p11.2	-0.070023765	0.117500662	0.172980657
CHMP3	2p11.2	-0.070001861	0.117615737	0.173137434
RAMP2-AS1	17q21.2	0.069981107	0.11772485	0.173285414
GRIA4	11q22.3	0.069971384	0.117775995	0.173337353
IFT81	12q24.11	0.069971133	0.117777316	0.173337353
LRRC8A	9q34.11	-0.069962163	0.117824517	0.173394175
PAOX	10q26.3	-0.069911778	0.118089926	0.17376383
PRAMEF16	1p36.21	0.069911209	0.118092926	0.17376383
RCC2	1p36.13	0.069902617	0.118138232	0.173805886
PLEKHN1	1p36.33	0.069902522	0.118138735	0.173805886
PCDHB9	5q31.3	0.069889162	0.11820921	0.17389608
CGB7	19q13.33	0.069887633	0.118217277	0.17389608
HBBP1	11p15.4	0.069880106	0.118257002	0.173941835
AGL	1p21.2	-0.069874134	0.118288524	0.173975519
KRT12	17q21.2	0.069856266	0.11838288	0.174101607
ADGRA1	10q26.3	0.069842185	0.118457281	0.17419833
ALG12	22q13.33	-0.069836964	0.118484879	0.174226217
MRPS18B	6p21.33	-0.069812821	0.118612552	0.174401246
SPP2	2q37.1	0.069807043	0.118643121	0.174429708
PPP1R1A	12q13.2	0.069805895	0.118649198	0.174429708
LINC01599	14q21.3	0.069794744	0.118708217	0.174503759
SS18L1	20q13.33	0.069787819	0.118744881	0.174544941
ATR	3q23	-0.069783525	0.11876762	0.17456565
CTNNB1	3p22.1	0.069772169	0.118827771	0.174640124
MLYCD	16q23.3	-0.069770691	0.118835598	0.174640124
SPACA1	6q15	0.069758773	0.118898757	0.174720216
SMARCB1	22q11.23 22q11	-0.069739915	0.118998748	0.174854419
ZNF541	19q13.33	0.069736182	0.119018549	0.17487078
USP35	11q14.1	-0.069733998	0.119030132	0.174875066
PRPF31	19q13.42	0.069707947	0.119168397	0.175065455
OACYLP	18q21.32	0.069703235	0.119193415	0.175089461
EIF1AD	11q13.1	-0.069691533	0.119255574	0.175168018
DAB2IP	9q33.2	0.069672353	0.119357513	0.175302662
DNAJC14	12q13.2	-0.069671017	0.119364616	0.175302662
RPL28	19q13.42	-0.069659088	0.119428047	0.175383056
PLEKHG6	12p13.31	-0.069637426	0.119543307	0.175539542
C8ORF33	8q24.3	-0.069633991	0.119561594	0.17555362
DPPA4	3q13.13	0.069626813	0.119599813	0.17559696

FAAH2	Xp11.21	0.069625116	0.119608846	0.175597446
OR8A1	11q24.2	0.069620219	0.119634926	0.175616659
RABEP2	16p11.2	-0.069619391	0.119639338	0.175616659
WASL	7q31.32	-0.069616623	0.119654079	0.17562552
EXOC7	17q25.1	-0.06961252	0.119675938	0.175644828
LOC644669	18p11.21	0.06960599	0.11971073	0.175683114
SPANXN1	Xq27.3	0.069601343	0.119735492	0.175706675
APBB3	5q31.3	0.069594771	0.119770526	0.175739991
FAM91A1	8q24.13	0.069593816	0.119775613	0.175739991
MTDH	8q22.1	0.06956891	0.119908445	0.175922096
PRAMEF12	1p36.21	0.069565098	0.119928786	0.175939147
CSKMT	11q12.3	-0.069486938	0.120346431	0.176539011
MAK16	8p12	-0.069477396	0.1203975	0.176601087
LRRC20	10q22.1	-0.069472911	0.120421508	0.176623464
FAAP20	1p36.33	0.069417277	0.120719624	0.177047844
CCDC169	13q13.3	-0.069405787	0.120781264	0.177125373
TSSK4	14q12	0.069401869	0.12080229	0.177143334
ANKRD29	18q11.2	0.069395329	0.120837392	0.177181073
WDR55	5q31.3	0.069393802	0.120845588	0.177181073
ATP2C1	3q22.1	0.06939008	0.120865567	0.177197492
APOH	17q24.2	0.069372574	0.120959586	0.177322447
ANKRD40CL	17q21.33	-0.069360207	0.121026036	0.177406972
CLRN1-AS1	3q25.1	-0.069342976	0.121118666	0.177529858
SCGB1A1	11q12.3	-0.069337162	0.121149932	0.17756279
RALBP1	18p11.22	-0.069333542	0.121169407	0.177578434
ALG9	11q23.1	0.069318797	0.121248745	0.177681803
HPN-AS1	19q13.11-q13.12	-0.069313512	0.12127719	0.177710582
TAFA4	3p14.1	-0.069302112	0.121338569	0.177771701
LDB1	10q24.32	0.06930162	0.121341219	0.177771701
ZDHHC1	16q22.1	0.069300856	0.12134533	0.177771701
DEFB121	20q11.21	0.069265469	0.121536022	0.178038141
SLCO1B1	12p12.1	-0.069263496	0.121546659	0.178040799
KRT84	12q13.13	0.069254584	0.121594725	0.178098276
CAPS	19p13.3	0.06924904	0.121624633	0.178112242
ZNF792	19q13.11	0.069248086	0.121629781	0.178112242
PRMT8	12p13.32	0.069247796	0.121631346	0.178112242
ACTL9	19p13.2	0.069246272	0.121639566	0.178112242
RPL21P44	4q12	0.069235361	0.121698446	0.178185528
STRC	15q15.3	-0.069219092	0.121786284	0.178301199
P3H2	3q28	0.069205334	0.121860604	0.178397063
ZSCAN12	6p22.1	0.069203475	0.121870649	0.178398827
LOC729603	6q25.3	0.069192835	0.121928154	0.178470058
ZNF770	15q14	-0.069182623	0.121983367	0.178537924
SENP7	3q12.3	0.069173176	0.12203446	0.178599752
PSMB10	16q22.1	0.069163347	0.122087636	0.178653921
MYT1L	2p25.3	0.069163061	0.122089181	0.178653921
TEX12	11q23.1	0.06915189	0.122149641	0.178729433
LCE5A	1q21.3	-0.069118252	0.122331836	0.178983043
KAT6A	8p11.21	0.069107999	0.12238741	0.17905137
ANKRD28	3p25.1	0.069106281	0.122396723	0.179052013
C10RF159	1p36.33	0.069096071	0.122452092	0.179120026
THNSL2	2p11.2	0.069086719	0.12250282	0.179181242
DDX43	6q13	0.069071152	0.122587298	0.17929181
LRFN3	19q13.12	-0.069063817	0.122627124	0.179332397
IMPDH2	3p21.31	-0.069062767	0.122632823	0.179332397
DUSP5P1	1q42.13	-0.069056423	0.122667275	0.179369779
MIXL1	1q42.12	0.069048613	0.122709698	0.17941881
VHLL	1q22	-0.069020953	0.122860029	0.179625599

MUC17	7q22.1	0.068993733	0.123008116	0.179829079
LAMP2	Xq24	0.068979078	0.1230879	0.179932681
TSLP	5q22.1	-0.068956656	0.123210047	0.180076468
CT47A7	Xq24	0.068956248	0.123212269	0.180076468
NPW	16p13.3	0.068956108	0.123213033	0.180076468
POP1	8q22.2	-0.06895274	0.123231388	0.180090251
HPS1	10q24.2	0.068949688	0.123248024	0.180096092
EMP2	16p13.13	-0.068948732	0.123253235	0.180096092
PLEKHG7	12q22	0.068934279	0.123332043	0.180198197
KRTAP4-8	17q21.2	-0.068926133	0.123376473	0.180250062
RABGAP1	9q33.2-q33.3	-0.068919818	0.123410932	0.180287353
HKDC1	10q22.1	0.068865336	0.123708501	0.18070898
NAALADL2	3q26.31	-0.068851255	0.123785496	0.180808362
ATP6V0C	16p13.3	-0.068847961	0.123803513	0.18082159
TCEAL9	Xq22.2	0.068830594	0.123898545	0.180947293
AGFG1	2q36.3	0.068827731	0.123914216	0.180957082
PLEKHA7	11p15.2-p15.1	-0.068811127	0.124005133	0.181076747
OR2A14	7q35	-0.068797548	0.124079521	0.181172262
TENT2	5q14.1	0.068792805	0.124105515	0.181186995
KCNJ3	2q24.1	0.06879243	0.12410757	0.181186995
EP400	12q24.33	0.068758451	0.124293903	0.1814459
RCBTB1	13q14.2	0.06874099	0.124389743	0.181572673
OR5B2	11q12.1	0.068735034	0.124422445	0.181607271
PID1	2q36.3	0.06872868	0.124457343	0.181628754
ZNF596	8p23.3	0.068727724	0.124462594	0.181628754
DCAF4	14q24.2	-0.068727438	0.124464166	0.181628754
DALRD3	3p21.31	0.068723334	0.124486707	0.181648511
CXADRP2	15q11.2	0.068692291	0.124657337	0.181884339
PLXNB1	3p21.31	-0.068663883	0.124813642	0.182099232
CHMP4A	14q12	-0.068647565	0.124903495	0.18221715
ATRNL	20p13	0.068639168	0.124949754	0.182271459
DUOX2	15q21.1	-0.068629625	0.125002339	0.182334986
ELL2	5q15	0.068626572	0.125019169	0.182346354
GPRC5B	16p12.3	0.068617601	0.125068619	0.182405295
LMX1A	1q23.3	0.068614236	0.125087177	0.182419176
EWSAT1	15q23	-0.068606326	0.125130801	0.182469346
PHYHIP	8p21.3	0.068604719	0.125139664	0.182469346
SLC12A9	7q22.1	-0.068583439	0.125257089	0.182627369
GPR101	Xq26.3	-0.068574895	0.125304256	0.182682941
SELENOV	19q13.2	0.06856653	0.125350451	0.182737086
MCF2L2	3q27.1	0.068549755	0.125443133	0.182858989
CTNNBIP1	1p36.22	0.068546699	0.125460019	0.182870393
CTNNA1	5q31.2	0.068530763	0.125548123	0.182985595
ATP6V0A1	17q21.2	-0.068525801	0.125575566	0.183012375
IFNA16	9p21.3	0.068502201	0.12570615	0.183180433
SLC10A6	4q21.3	0.068499399	0.125721659	0.183180433
TSPEAR	21q22.3	0.068499126	0.125723174	0.183180433
ACER1	19p13.3	-0.0684984	0.125727191	0.183180433
TBC1D8B	Xq22.3	0.068416156	0.126183147	0.183831472
PPP4R3B	2p16.1	-0.068408235	0.126227125	0.183868133
TMPRSS5	11q23.2	0.068407277	0.126232445	0.183868133
SSX9P	Xp11.23	-0.068406701	0.126235647	0.183868133
ETV5	3q27.2	0.068354224	0.126527339	0.184267169
TBC1D23	3q12.1-q12.2	0.068354128	0.12652787	0.184267169
TTYT8	Yp11.2	-0.068337806	0.126618703	0.184386145
C2CD6	2q33.1	0.068330344	0.126660248	0.184433334
ASB7	15q26.3	-0.068305175	0.126800453	0.184624167
LRIG2	1p13.2	0.068302693	0.12681428	0.184630978

USP19	3p21.31	0.068284087	0.126918012	0.184768672
ZNF672	1q44	0.068273779	0.126975506	0.184839038
MECP2	Xq28	0.068252404	0.127094799	0.184999347
SPTA1	1q23.1	0.06823898	0.127169756	0.185084714
AKR7L	1p36.13 1p35-p36.	-0.068238616	0.127171791	0.185084714
AMY2B	1p21.1	0.068232173	0.127207781	0.185123743
CYP3A43	7q22.1	0.068227807	0.127232173	0.185145887
PDE11A	2q31.2	0.068211381	0.127323982	0.185266126
SHPRH	6q24.3	-0.068207648	0.12734485	0.18528313
DGCR10	22q11.21	-0.068198525	0.127395871	0.185332482
TPGS1	19p13.3	-0.068198298	0.127397138	0.185332482
ZNF579	19q13.42	0.068194575	0.127417964	0.185349416
CAMK2D	4q26	0.068189422	0.127446792	0.185377988
GLYAT	11q12.1	0.068162332	0.127598428	0.185585173
SIM2	21q22.13	-0.068151253	0.12766048	0.185654117
ST6GALNAC4	9q34.11	0.068150583	0.127664231	0.185654117
SLC6A16	19q13.33	0.068129971	0.127779746	0.185808711
FLJ37453	1p36.21	-0.068122051	0.127824155	0.185859895
MTMR3	22q12.2	0.068108214	0.127901766	0.185959343
VANGL2	1q23.2	-0.068087697	0.128016911	0.186113346
TTL7	1p31.1	0.068083595	0.12803994	0.186133417
RUSC1-AS1	1q22	-0.068067276	0.1281316	0.186242337
LOC100128573	19p13.2	-0.068066969	0.128133325	0.186242337
OR52R1	11p15.4	-0.068055294	0.12819893	0.186324274
M6PR	12p13.31	-0.068035212	0.128311834	0.186474937
TMEM126B	11q14.1	-0.068008256	0.128463513	0.186681926
LRG1	19p13.3	0.068005821	0.128477221	0.186688402
SLC52A2	8q24.3	0.068003626	0.128489578	0.186692914
NKAIN3-IT1	8q12.3	0.067994061	0.128543441	0.186757728
TRIM4	7q22.1	-0.067979674	0.12862449	0.186862029
OR2B2	6p22.1	-0.067976504	0.128642357	0.186874531
SPTBN2	11q13.2	-0.067970799	0.128674505	0.186907777
DCAF12L2	Xq25	-0.067958986	0.128741103	0.186991054
LRRC70	5q12.1	0.067948137	0.128802291	0.187066462
GDF3	12p13.31	0.067940634	0.128844622	0.187109522
USP8	15q21.2	-0.067939595	0.128850484	0.187109522
TADA3	3p25.3	0.067935682	0.128872562	0.187128116
MFSD6L	17p13.1	-0.067916592	0.128980327	0.187260784
CHST8	19q13.11	0.06791621	0.128982488	0.187260784
IQCN	19p13.11	0.067907054	0.129034196	0.187322377
SEC24B	4q25	0.067896368	0.129094571	0.187396543
CNTRL	9q33.2	-0.067883293	0.129168472	0.187490331
TFCP2L1	2q14.2	0.067875945	0.129210016	0.187531488
FEZ1	11q24.2	0.067874991	0.129215413	0.187531488
ZNF138	7q11.21	-0.067859723	0.129301776	0.187643332
SRRM1	1p36.11	0.067849703	0.129358475	0.187712115
LRRC37B	17q11.2	-0.06782914	0.129474896	0.187867544
LINC00261	20p11.21	0.067819944	0.129526989	0.187929617
TCP1	6q25.3	-0.067815349	0.129553021	0.187953873
LDLRAD1	1p32.3	-0.067803947	0.129617643	0.188034106
ADAM5	8p11.22	0.067780608	0.129749993	0.188212574
CASP3	4q35.1	-0.067750268	0.129922199	0.188448824
LINC00593	15q23	0.067740889	0.129975472	0.188512546
CEP131	17q25.3	-0.067736718	0.129999168	0.188533362
HMMR	5q34	-0.067734714	0.130010553	0.188536325
BHLHE23	20q13.33	0.067728477	0.130045994	0.188574167
TAS2R14	12p13.2	0.067723406	0.130074817	0.188602409
ARHGAP26	5q31.3	-0.067695016	0.130236259	0.188822925

URGCP	7p13	-0.067685855	0.130288388	0.188884933
ZNF845	19q13.42	0.067681943	0.130310656	0.188903644
TUBB1	20q13.32	-0.067665676	0.130403273	0.189024326
DUX4L6	4q35.2	-0.06764423	0.130525451	0.189187838
PGLYRP2	19p13.12	0.067637673	0.130562826	0.189227891
GLYCTK	3p21.2	0.067636092	0.13057184	0.189227891
ZFAND6	15q25.1	-0.067629458	0.130609662	0.189269111
EDEM2	20q11.22	0.067626214	0.130628163	0.189282329
ULK4	3p22.1	0.067540236	0.13111918	0.189980178
CCL1	17q12	0.067531146	0.131171175	0.190032769
SEC23B	20p11.23	0.067530598	0.131174312	0.190032769
ABCB7	Xq13.3	-0.067517427	0.131249679	0.190128303
CASZ1	1p36.22	0.067512179	0.131279722	0.190150062
KIF5B	10p11.22	0.067511511	0.131283546	0.190150062
SETD5	3p25.3	0.067500728	0.131345289	0.190225836
FAM45BP	Xq26.1	-0.067494811	0.131379175	0.190261258
CLDN16	3q28	0.067481814	0.131453639	0.190355434
LINC00051	8q24.3	0.067479155	0.131468875	0.190363837
AMMECR1L	2q14.3	-0.067475153	0.131491813	0.190383389
B3GAT3	11q12.3	-0.067469332	0.131525181	0.190407237
OR2T12	1q44	-0.067468988	0.131527156	0.190407237
BCORL1	Xq26.1	0.067455209	0.131606168	0.190507953
CT45A2	Xq26.3	-0.067430026	0.13175067	0.190703448
FUCA2	6q24.2	0.067389937	0.131980957	0.191023077
DTNBP1	6p22.3	-0.067360832	0.132148344	0.191251626
RABL3	3q13.33	-0.067353293	0.132191726	0.191294921
NCEH1	3q26.31	-0.067352339	0.132197218	0.191294921
KAT5	11q13.1	-0.067322184	0.132370864	0.191532459
FBXO33	14q21.1	-0.067318081	0.132394507	0.191552933
ATOX1	5q33.1	0.067300236	0.132497363	0.191688005
STPG4	2p21	0.067297218	0.132514768	0.191699441
FAM24A	10q26.13	0.067292229	0.132543535	0.191727311
CCDC73	11p13	-0.06727304	0.132654241	0.191849552
NAPSA	19q13.33	0.067272944	0.132654791	0.191849552
LOC286359	9q22.33	0.067272637	0.132656564	0.191849552
TEX55	3q13.32	-0.067260979	0.132723858	0.191933118
ALK	2p23.2-p23.1	0.067253271	0.132768359	0.191979394
BANK1	4q24	0.067252141	0.132774886	0.191979394
OR56A4	11p15.4	0.067246875	0.132805303	0.192009616
USP9Y	Yq11.221	0.067217216	0.132976695	0.19224364
TAF7L	Xq22.1	0.067199944	0.133076588	0.192374272
CBX6	22q13.1	0.067172842	0.133233449	0.192583022
CDK9	9q34.11	-0.067171696	0.13324008	0.192583022
BGLAP	1q22	-0.067166306	0.133271294	0.192614341
PRDM15	21q22.3	0.067154997	0.133336807	0.192695226
LINC00839	10q11.21	0.06713553	0.133449633	0.192844467
S100A12	1q21.3	-0.067126285	0.133503237	0.192908114
GYG2	Xp22.33	0.067113009	0.133580248	0.193005573
SPIN3	Xp11.21	-0.067102798	0.1336395	0.193077359
HIST1H2AK	6p22.1	0.067098618	0.133663765	0.193098591
LRRC74A	14q24.3	0.067078773	0.133779001	0.193251232
WHAMM	15q25.2	-0.067063723	0.133866442	0.193363704
ACTL6B	7q22.1	0.067048924	0.133952469	0.193474116
NPY5R	4q32.2	0.067036585	0.134024226	0.193563903
TAS2R43	12p13.2	-0.067029055	0.134068033	0.193613314
AGXT2	5p13.2	0.067010245	0.134177513	0.193757552
PDIA5	3q21.1	0.067005654	0.134204241	0.193782281
ZC3H14	14q31.3	-0.067002314	0.13422369	0.193796497

FGF2	4q28.1	0.066972064	0.134399942	0.194037092
RNU4ATAC	2q14.2	-0.066942117	0.134574602	0.194275354
ADAMTS13	9q34.2	-0.06693647	0.134607559	0.19430903
ANKAR	2q32.2	-0.066930267	0.134643764	0.19434739
UBXN2B	8q12.1	0.066913758	0.134740162	0.194472622
PTCHD3	10p12.1	0.06687658	0.134957445	0.194772299
AOAH	7p14.2	-0.066873202	0.134977203	0.194786883
NOP14	4p16.3	-0.066836653	0.135191095	0.195081601
ABCB8	7q36.1	0.066824534	0.135262077	0.195170072
C22ORF15	22q11.23	0.066808024	0.135358824	0.195295704
PPP1R7	2q37.3	-0.066799437	0.135409164	0.195354366
PER4	7p21.3	0.066782474	0.135508649	0.195483917
PKM	15q23	0.066779302	0.135527257	0.195496785
SUMF2	7p11.2	0.066740368	0.135755834	0.195812507
TAC1	7q21.3	0.066719712	0.135877221	0.195973586
LACTB2	8q13.3	-0.066709736	0.135935879	0.196044175
PROSER1	13q13.3	0.066692273	0.136038603	0.196178301
CLLU1	12q22	0.066675877	0.136135103	0.196303433
HECTD4	12q24.13	0.066670706	0.136165547	0.196333303
SNAP91	6q14.2	-0.066659812	0.136229712	0.196411786
GLT6D1	9q34.3	0.066645731	0.136312669	0.19651735
TSPAN3	15q24.3	-0.066626524	0.1364259	0.19666654
NBEAL1	2q33.2	0.066624043	0.136440531	0.196673582
NRDC	1p32.3	0.066612114	0.136510892	0.196760949
BANP	16q24.2	0.066588067	0.136652825	0.196951457
EPX	17q22	0.066572836	0.13674278	0.197063572
FKBP2	11q13.1	0.066570604	0.136755966	0.197063572
IL17RE	3p25.3	-0.066569936	0.136759912	0.197063572
GNPDA2	4p12	0.066559439	0.13682194	0.197138873
CTSG	14q12	0.066548626	0.136885856	0.197216885
ABCA12	2q35	-0.066546747	0.136896966	0.19721881
NUDCD1	8q23.1	-0.066522604	0.137039771	0.197410447
CACNA2D1	7q21.11	0.066513737	0.137092247	0.197471943
PCDHB17P	5q31.3	0.066506091	0.137137513	0.197523046
KDM2B	12q24.31	-0.066494262	0.137207559	0.197609831
LRATD2	8q24.21	0.066484147	0.137267481	0.197682023
TNFRSF25	1p36.31	0.06644674	0.137489255	0.197987274
SF3B3	16q22.1	0.0664434	0.137509069	0.198001677
BAAT	9q31.1	-0.066437178	0.137545987	0.198040704
AQP6	12q13.12	0.066414203	0.137682379	0.198211618
CAV3	3p25.3	0.066413873	0.137684338	0.198211618
IL17B	5q32	0.066408038	0.137718993	0.198243098
WDR82	3p21.2	0.066406375	0.137728875	0.198243098
CPT1A	11q13.3	-0.066405229	0.137735678	0.198243098
APOOL	Xq21.1	-0.066399744	0.137768267	0.198275861
ZBTB39	12q13.3	-0.066397309	0.137782735	0.198282542
TIAF1	17q11.2	-0.066386526	0.13784682	0.198360621
PCMTD2	20q13.33	0.066375647	0.137911496	0.19842579
OR1A1	17p13.3	-0.0663756	0.137911775	0.19842579
OR4M1	14q11.2	0.066339855	0.138124451	0.198717617
MRPS31	13q14.11	-0.066337954	0.138135773	0.198718649
SYNCRIP	6q14.3	-0.066336427	0.138144864	0.198718649
ISYNA1	19p13.11	0.066327934	0.138195438	0.198777229
GABPB1	15q21.2	-0.06632617	0.138205943	0.19877817
AATK	17q25.3	-0.066323067	0.138224426	0.198790584
PHTF2	7q11.23-q21.11	-0.066317819	0.138255692	0.19882138
LOC100130987	11q13.2	0.066301217	0.138354623	0.198949472
COMMD3	10p12.2	-0.066266574	0.138561248	0.199232394

SPATA33	16q24.3	0.066263712	0.138578333	0.199242764
GJA8	1q21.2	0.066247227	0.138676748	0.199370055
ATF2	2q31.1	0.066220388	0.138837091	0.199586354
HHATL	3p22.1	-0.066212575	0.138883793	0.199639269
ZNF883	9q32	0.066207601	0.138913535	0.199667798
CCNY	10p11.21	-0.066201207	0.138951769	0.199708529
TTYT15	Yq11.221	0.066171586	0.139129009	0.199935816
RNMT	18p11.21	-0.066171339	0.139130493	0.199935816
TOLLIP	11p15.5	-0.066169812	0.139139634	0.199935816
SLC32A1	20q11.23	0.066138547	0.139326908	0.200190663
C12ORF57	12p13.31	-0.066106067	0.139521672	0.200456235
FPGT	1p31.1	-0.066097765	0.139571488	0.200513531
LY6E-DT	8q24.3	0.066092558	0.139602734	0.200544142
ASPDH	19q13.33	0.066055402	0.139825894	0.200850421
TMED3	15q25.1	-0.066051483	0.139849447	0.200861962
C9ORF24	9p13.3	-0.066050752	0.139853836	0.200861962
ANKS3	16p13.3	0.066042703	0.139902221	0.200917153
ARGFXP2	17q11.2	0.066032874	0.139961327	0.200984588
ALAD	9q32	-0.066031252	0.139971079	0.200984588
SNORA19	10q26.11	-0.066029926	0.139979058	0.200984588
RNF133	7q31.32	0.066014656	0.140070924	0.201102182
TMEM243	7q21.12	-0.06599394	0.140195624	0.201266897
OR4E2	14q11.2	0.065969305	0.140344034	0.201465623
FUT1	19q13.33	-0.065964167	0.140374999	0.201488012
ERO1A	14q22.1	0.065963404	0.140379601	0.201488012
ISOC2	19q13.42	-0.065953957	0.140436556	0.201555424
DNAH17	17q25.3	0.065949662	0.14046245	0.201578251
CLDN3	7q11.23	0.065937359	0.140536664	0.201670412
DNAH14	1q42.12	-0.065917217	0.140658216	0.201830488
PCDHB13	5q31.3	0.065900185	0.140761068	0.201946757
ZBTB14	18p11.31	-0.065899945	0.140762518	0.201946757
ID2B	3p14.2	0.065897027	0.140780146	0.201946757
SRM	1p36.22	0.065896891	0.140780964	0.201946757
DEFB4A	8p23.1	0.065895514	0.140789285	0.201946757
LETMD1	12q13.12	-0.065883913	0.140859382	0.202032942
IDH2	15q26.1	0.065878188	0.140893988	0.202068216
ZSCAN5B	19q13.43	0.065876239	0.14090577	0.202070751
ALG14	1p21.3	0.06587313	0.140924563	0.20208334
CXORF58	Xp22.11	-0.065855524	0.141031038	0.202221652
ITLN1	1q23.3	-0.06585118	0.141057314	0.202244959
PHF14	7p21.3	0.065847365	0.141080399	0.202263685
PRDM16	1p36.32	0.065841353	0.14111678	0.20230147
OR4C3	11p11.2	-0.065820857	0.141240867	0.202464975
PP2D1	3p24.3	0.065813393	0.141286077	0.202515396
PRR4	12p13.2	0.065802419	0.141352562	0.202596303
BEND7	10p13	0.065784097	0.141463623	0.202741083
PSMA8	18q11.2	0.065758131	0.141621134	0.202952408
SNURF	15q11.2	0.065745705	0.141696561	0.20304608
ATP1A2	1q23.2	0.065737849	0.141744258	0.203100006
TDGF1	3p21.31	0.065725167	0.141821288	0.20319595
PXYLP1	3q23	-0.065715867	0.141877798	0.203262483
FAM153A	5q35.3	-0.065712178	0.14190022	0.203273789
PGM5-AS1	9q21.11	0.065711254	0.141905836	0.203273789
CEPT1	1p13.3	-0.065701362	0.141965965	0.203345487
AGAP11	10q23.2	-0.065688433	0.142044588	0.203432977
NHEJ1	2q35	0.065688002	0.14204721	0.203432977
CCNJ	10q24.1	0.065682849	0.142078556	0.20346343
KCTD4	13q14.12-q14.13	0.065662083	0.142204935	0.203629959

TMC2	20p13	-0.065649235	0.14228317	0.203727531
SNORA29	6q25.3	0.065645353	0.142306809	0.20374692
LINC00575	4q21.22	0.065617405	0.142477125	0.203975311
FAM111A	11q12.1	0.06561586	0.142486544	0.203975311
TTC23L	5p13.2	0.065603932	0.142559285	0.204064965
MINDY3	10p13	0.065593579	0.142622439	0.204140885
STX3	11q12.1	0.065551065	0.142882018	0.204497925
HELQ	4q21.23	-0.065543336	0.142929251	0.204551018
NPIPB13	16p11.2	-0.065529299	0.143015057	0.204659304
PTER	10p13	0.065521769	0.143061101	0.204710676
CADM2	3p12.1	0.065479151	0.143321928	0.205069361
ZNF571	19q13.12	0.065459743	0.143440824	0.205224928
SCAF4	21q22.11	-0.065416132	0.143708276	0.205593003
HPDL	1p34.1	-0.065406589	0.143766848	0.205662217
HOXD10	2q31.1	0.065387591	0.143883511	0.205814515
TRIM67	1q42.2	0.065368226	0.144002506	0.205970128
FAR1	11p15.3	-0.065352482	0.144099297	0.206093963
ZNF777	7q36.1	-0.065335496	0.144203785	0.206228787
MAP1LC3A	20q11.22	0.065322995	0.144280721	0.206324191
NAP1L6	Xq13.2	0.065317611	0.144313867	0.206356967
PALM3	19p13.12	0.065294274	0.144457605	0.206547865
ASB18	2q37.2	0.065228078	0.144865906	0.207116984
CASP12	11q22.3	0.065220637	0.144911856	0.207168002
ADIG	20q11.23	0.065213795	0.144954118	0.20721374
AVPR1B	1q32.1	0.065200265	0.14503772	0.207318563
TUB	11p15.4	-0.065181766	0.145152085	0.207467341
PLEKHD1	14q24.1	-0.065173315	0.145204348	0.207527342
RBM42	19q13.12	-0.065164778	0.145257165	0.207588125
NUP214	9q34.13	-0.065144643	0.14538179	0.207737912
LOC440173	9q21.33	0.065144518	0.145382566	0.207737912
GJA9	1p34.3	0.06513816	0.145421932	0.20777945
FRG1BP	20q11.1	0.065125464	0.145500575	0.207877096
RARG	12q13.13	-0.065108285	0.145607031	0.208014462
PDXDC1	16p13.11	0.065096071	0.145682762	0.208107918
XRCC1	19q13.31	0.06509025	0.145718863	0.208144754
CROCC	1p36.13	-0.065080707	0.14577806	0.208214572
PCDHA9	5q31.3	0.065068093	0.145856338	0.208311631
ISG20	15q26.1	0.065057614	0.145921393	0.208389794
CSN1S1	4q13.3	0.065053218	0.145948692	0.20841403
TTY6	Yq11.223	0.065047534	0.145983988	0.208449682
LKAAEAR1	20q13.33	0.065045745	0.145995103	0.208450802
HAL	12q23.1	0.065042484	0.146015357	0.20846497
RAB5A	3p24.3	0.065023356	0.146134221	0.208619912
PRSS40A	2q21.1	0.065021333	0.146146793	0.2086231
PPP3CC	8p21.3	0.065019157	0.146160322	0.208627654
FLCN	17p11.2	0.065012	0.146204821	0.20867641
CXORF51A	Xq27.3	-0.065004987	0.146248433	0.208723893
TMEM248	7q11.21	0.064999404	0.146283164	0.208758696
MBP	18q23	-0.06498967	0.146343723	0.208830351
ACR	22q13.33	0.064978001	0.146416348	0.208919212
FTX	Xq13.2	0.064928312	0.146725917	0.209346127
PRPF18	10p13	-0.064922108	0.146764605	0.209386522
PIGL	17p11.2	-0.064918195	0.146789006	0.209406529
OR5C1	9q33.2	-0.064900949	0.146896603	0.209545211
MB	22q12.3	0.064891062	0.146958316	0.209618425
AP3D1	19p13.3	-0.064863898	0.147127969	0.209845581
REXO2	11q23.2	0.064857313	0.147169114	0.20988943
OR7A5	19p13.12	-0.064847445	0.147230797	0.209962562

VPS50	7q21.2-q21.3	0.064831834	0.147328409	0.210086917
ZNF10	12q24.33	0.06482086	0.14739706	0.21016996
FAM218A	4q32.3	0.064804861	0.147497191	0.210297874
SLC9A8	20q13.13	0.064787556	0.14760555	0.210437501
PLCB3	11q13.1	0.064783644	0.147630058	0.210457573
HCK	20q11.21	0.064745475	0.147869312	0.210777356
RBM20	10q25.2	0.064744525	0.147875268	0.210777356
VGF	7q22.1	-0.064742016	0.147891004	0.210784896
RPL22	1p36.31	-0.064734881	0.14793577	0.210833808
ALKBH5	17p11.2 17p11.2	-0.06471112	0.148084911	0.211031456
LCE2B	1q21.3	0.064678519	0.148289718	0.211308398
WFDC8	20q13.12	0.064669772	0.148344707	0.211371829
TENM4	11q14.1	0.064639454	0.148535426	0.211628635
MZF1	19q13.43	0.064617601	0.148673007	0.211809701
ATP2C2	16q24.1	0.064612258	0.148706666	0.211842698
LRSAM1	9q33.3-q34.11	-0.064608154	0.148732516	0.211864565
C12ORF74	12q22	0.064603372	0.148762643	0.211892523
LRAT	4q32.1	0.06460032	0.148781877	0.211904961
NUTM2F	9q22.32	-0.064587207	0.148864529	0.212007716
FAM50B	6p25.2	-0.064581244	0.148902124	0.212046292
GRAMD1C	3q13.31	-0.064565403	0.149002033	0.212173596
IQGAP3	1q22	-0.064563495	0.149014074	0.212175769
RFPL3S	22q12.3	-0.064555162	0.149066653	0.212235658
LINC00894	Xq28	-0.064531622	0.149215263	0.212430291
C16ORF90	16p13.3	-0.064530174	0.14922441	0.212430291
PRAC2	17q21.32	0.064507841	0.149365509	0.212616155
GJA3	13q12.11	-0.064503979	0.149389921	0.212635904
IL6	7p15.3	0.064500417	0.149412435	0.21265295
MSANTD3	9q31.1	-0.064482954	0.149522866	0.212795113
GDPD3	16p11.2	-0.064453468	0.149709472	0.213045658
LINC00632	Xq27.1	0.06444714	0.149749539	0.213087648
NIPAL1	4p12	-0.064444642	0.149765358	0.213095131
PRMT9	4q31.23	0.064439917	0.149795286	0.213122687
SERINC4	15q15.3	-0.064432683	0.149841114	0.21317286
AZU1	19p13.3	0.064376388	0.150198104	0.21366567
TMEM9	1q32.1	-0.064353556	0.150343075	0.213856825
IPO7	11p15.4	-0.064345635	0.150393391	0.213913317
ZNF720	16p11.2	0.064324164	0.150529852	0.214092324
LINC00905	19p13.12	-0.064322	0.150543612	0.214096803
GAD2	10p12.1	0.064312411	0.15060459	0.21416843
SMARCC2	12q13.2	-0.064305365	0.150649409	0.214217069
PRR21	2q37.3	-0.064296637	0.150704944	0.214280938
XCL1	1q24.2	0.064282321	0.150796061	0.214386171
ANKRD18DP	3q29	-0.064281671	0.150800204	0.214386171
MAL	2q11.1	-0.064275403	0.150840112	0.214427799
INPP5E	9q34.3	-0.064244006	0.151040141	0.214697027
TMED7	5q22.3	0.064231982	0.151116797	0.214785246
SPATA2L	16q24.3	-0.064230933	0.151123491	0.214785246
TDRD5	1q25.2	-0.06420148	0.151311392	0.215037155
KITLG	12q21.32	0.064190853	0.151379234	0.21511842
PKP3	11p15.5	-0.064179593	0.151451145	0.215190481
ZSCAN10	16p13.3	0.064179573	0.151451272	0.215190481
DCAF11	14q12	-0.064175299	0.151478575	0.215214122
CT47A1	Xq24	0.06416604	0.15153773	0.215283008
VIT	2p22.2	0.064151409	0.151631244	0.215400696
PRSS36	16p11.2	0.064133885	0.151743311	0.215533215
PF4V1	4q13.3	0.064133481	0.151745894	0.215533215
CLCF1	11q13.2	0.064128731	0.151776286	0.21556121

PP12613	4q27	0.064103063	0.151940571	0.21577935
DMBT1	10q26.13	0.064095331	0.151990081	0.215834472
MGLL	3q21.3	0.064072811	0.15213437	0.216024167
MAT1A	10q22.3	0.064041129	0.152337527	0.216297422
CDY1	Yq11.23	0.064038683	0.15235322	0.216304484
TPM3	1q21.3	0.064020803	0.152467975	0.21643699
CELA2A	1p36.21	0.064020799	0.152468002	0.21643699
SMYD3	1q44	-0.064010592	0.152533536	0.216514788
STAG3L3	7q11.23	-0.063996469	0.152624255	0.216628322
IER2	19p13.13	0.063985781	0.152692935	0.216710559
PPDPFL	8q11.21	0.063981961	0.152717489	0.216730164
ATF1	12q13.12	-0.063971754	0.152783112	0.216808046
IST1	16q22.2	0.063948947	0.152929813	0.217000963
PIP4K2A	10p12.2	0.063944939	0.152955604	0.217022299
PRSS48	4q31.3	-0.063935837	0.153014184	0.21708802
PPP1R42	8q13.1	0.0639344	0.15302344	0.21708802
NSUN6	10p12.31	-0.063926808	0.15307232	0.217142098
FBXL22	15q22.31	0.063909251	0.153185404	0.217287239
SEBOX	17q11.2	-0.063896647	0.153266621	0.217387161
LTN1	21q21.3	0.063884057	0.15334779	0.217487001
SPATA31E1	9q22.1	0.063866624	0.153460225	0.217631168
TATDN2	3p25.3	0.063857719	0.153517686	0.217697357
ABCA4	1p22.1	-0.063849703	0.153569422	0.217755419
ACSBG1	15q25.1	0.063834869	0.1536652	0.217875919
CCT2	12q15	-0.063828709	0.153704983	0.217917014
MYH2	17p13.1	0.063822665	0.153744026	0.217957053
PRDM11	11p11.2	0.063805807	0.153852972	0.218096179
IFIT5	10q23.31	0.063799413	0.153894304	0.218139447
HMG20A	15q24.3	0.063777942	0.15403317	0.218320948
STARD6	18q21.2	-0.063761834	0.154137412	0.218453353
SNX30	9q32	0.063732424	0.154327879	0.218694872
MYRF-AS1	11q12.2	0.063732173	0.1543295	0.218694872
MCC	5q22.2	0.063695207	0.154569153	0.219019095
GK5	3q23	-0.063678794	0.154675652	0.219154611
CLHC1	2p16.1	-0.063668489	0.154742542	0.219233992
OSBP	11q12.1	0.063660758	0.154792741	0.219289716
ZFR	5p13.3	0.0636265	0.155015332	0.219589638
BIN3-IT1	8p21.3	0.063608692	0.155131137	0.219738257
MORC1	3q13.13	0.063600646	0.155183476	0.219796965
GLIDR	9p12	-0.063589333	0.155257099	0.219885809
ASH2L	8p11.23	-0.063584989	0.155285371	0.219910415
LOC344967	4p14	-0.063571352	0.155374161	0.220020716
CLASP1	2q14.2-q14.3	0.063562278	0.155433267	0.22008897
ANKRD17	4q13.3	0.063538326	0.155589357	0.22029453
FERMT1	20p12.3	0.063525825	0.15567087	0.220394477
CEACAM8	19q13.2	0.063501363	0.155830466	0.220593584
ARL17A	17q21.31	-0.063500918	0.155833369	0.220593584
LINC00320	21q21.1	-0.063498692	0.155847903	0.220598684
SLCO1A2	12p12.1	-0.063467031	0.156054669	0.220875862
ITIH1	3p21.1	0.063442932	0.156212192	0.221083309
MPV17L	16p13.11	0.063425234	0.156327948	0.22123162
SRD5A1	5p15.31	0.063409023	0.156434043	0.221366239
DEFB136	8p23.1	0.063390273	0.156556815	0.221512013
PDHB	3p14.3	-0.063389937	0.156559013	0.221512013
DEGS1	1q42.11	-0.063383257	0.156602771	0.22155839
DNAJB6	7q36.3	0.063380395	0.156621527	0.221569391
LY6G6D	6p21.33	-0.06337475	0.156658511	0.221606176
OR5J2	11q12.1	-0.063372661	0.156672204	0.22161001

TAS2R31	12p13.2	-0.063365471	0.156719329	0.22166113
DHX33	17p13.2	-0.063343751	0.156861753	0.221847023
ARVCF	22q11.21	0.063330105	0.156951284	0.221958088
UGT2B7	4q13.2	0.063316292	0.157041947	0.222070739
SASH1	6q24.3-q25.1	0.063297373	0.157166189	0.222230855
DHTKD1	10p14	-0.063283823	0.157255224	0.222341169
BCL3	19q13.32	0.063275425	0.157310419	0.222403626
LIN28B	6q16.3-q21	0.063269268	0.157350902	0.222445275
SST	3q27.3	0.063252808	0.157459152	0.222582194
ATP6V0E1	5q35.1	-0.063251187	0.157469816	0.222582194
RNF26	11q23.3	-0.063231529	0.157599179	0.222749446
RAB7A	3q21.3	-0.063193549	0.157849343	0.223087399
UBE2D3	4q24	-0.063187251	0.157890856	0.223130442
HUS1B	6p25.3	-0.063165343	0.158035326	0.223318967
HSPA1L	6p21.33	0.063151275	0.158128143	0.22343448
COL7A1	3p21.31	0.063147744	0.158151446	0.223451759
MAF1	8q24.3	-0.063139156	0.158208139	0.223516211
ZNF397	18q12.2	-0.063135721	0.15823082	0.223532605
MIER2	19p13.3	-0.063131522	0.158258546	0.223556121
LOC155060	7q36.1	0.063127037	0.158288165	0.223576397
PCOTH	13q12.12	-0.063125993	0.158295058	0.223576397
C9ORF153	9q21.33	0.063096481	0.15849007	0.223836165
GP9	3q21.3	0.0630687	0.158673806	0.224079973
OR52N1	11p15.4	0.063065772	0.15869318	0.224091651
ADCK5	8q24.3	-0.063061098	0.158724108	0.224119641
PPP1R14C	6q25.1	0.063059379	0.158735487	0.224120024
FAM86FP	12p13.31	-0.063054512	0.1587677	0.224149823
TENT5D	Xq21.1	0.063030173	0.158928877	0.224361677
NASP	1p34.1	0.063020636	0.158992069	0.224435184
CFAP77	9q34.13	0.063014102	0.159035375	0.224471247
PRSS41	16p13.3	0.063013424	0.159039864	0.224471247
CHUK	10q24.31	0.06300804	0.159075557	0.224505922
DUSP9	Xq28	-0.063001264	0.159120478	0.224553613
GYG1	3q24	-0.062998306	0.159140094	0.224565591
HBEGF	5q31.3	-0.062972446	0.159311654	0.224791963
ACP6	1q21.2	-0.062963571	0.159370561	0.224859358
NOP9	14q12	0.062949258	0.159465596	0.224971976
ARL6IP4	12q24.31	-0.062947157	0.15947955	0.224971976
OR2T1	1q44	0.062946514	0.159483826	0.224971976
MTCL1	18p11.22	-0.062938378	0.15953787	0.225032481
MED1	17q12	-0.062917671	0.159675492	0.225210859
OR10A5	11p15.4	0.062900368	0.159790556	0.22535323
LOC642929	9q21.11	0.062899133	0.159798769	0.22535323
PDILT	16p12.3	0.062897166	0.159811853	0.225355931
CRYAA	21q22.3	0.06286335	0.160036933	0.225657556
MAPRE1	20q11.21	0.062857361	0.160076819	0.225698025
H2BFWT	Xq22.2	-0.062845492	0.160155887	0.225793729
MSX1	4p16.2	0.062833555	0.160235444	0.225890109
USP18	22q11.21	0.062803349	0.160436881	0.226158283
OR4K17	14q11.2	0.06279931	0.160463831	0.226180473
SPATA16	3q26.31	0.062773496	0.160636159	0.226407562
CRYBG2	1p36.11	-0.062758308	0.16073761	0.226534728
TIGD4	4q31.3	-0.062753333	0.160770856	0.226565759
BPIFB3	20q11.21	0.062745818	0.160821078	0.226620708
CPO	2q33.3	0.062741383	0.160850727	0.226646661
RNF183	9q32	0.062739163	0.160865564	0.226651739
TEF	22q13.2	-0.062720137	0.160992798	0.226812824
DSTN	20p12.1	0.062718706	0.161002374	0.226812824

DMRTC2	19q13.2	0.062708472	0.161070846	0.226893445
AP4S1	14q12	-0.062699621	0.161130088	0.226961052
SPATA4	4q34.2	0.062685362	0.161225551	0.227079667
OR2M1P	1q44	0.062671515	0.1613183	0.227194443
C8ORF44	8q13.1	-0.062608393	0.161741615	0.227774725
DHCR24	1p32.3	-0.062606103	0.161756989	0.22778048
TBC1D4	13q22.2	-0.062598947	0.161805032	0.227832233
RNASET2	6q27	0.062580624	0.161928106	0.227989621
LZIC	1p36.22	-0.0625686	0.162008905	0.228059863
MAP3K19	2q21.3	0.062568436	0.162010009	0.228059863
TMEM102	17p13.1	-0.06256755	0.16201596	0.228059863
OR6B3	2q37.3	-0.062566377	0.162023845	0.228059863
LINC01559	12p13.1	-0.062564622	0.162035639	0.228059863
TBC1D3P1-DHX4	17q23.1	0.06256311	0.162045806	0.228059863
DAZAP2	12q13.13	-0.062550946	0.162127593	0.228159055
CTSL3P	9q21.33	0.062545925	0.162161359	0.228180636
FRMPD2B	10q11.22	-0.062545303	0.162165543	0.228180636
SUPT7L	2p23.3	-0.062543121	0.162180221	0.228185378
SELENOW	19q13.33	0.062516688	0.162358099	0.228419722
CYP4A22	1p33	0.062512056	0.162389283	0.228447668
ABI1	10p12.1	-0.062506668	0.162425564	0.228482778
ZNF703	8p11.23	-0.062501324	0.162461553	0.228517474
SLC26A2	5q32	0.062495789	0.162498835	0.22853877
UNCX	7p22.3	0.062495714	0.162499345	0.22853877
CRACR2B	11p15.5	0.062486151	0.162563772	0.228613447
TMED6	16q22.1	0.062475996	0.162632215	0.228693761
RPL23AP32	2p16.2	-0.062463822	0.162714292	0.228793233
LCE2A	1q21.3	0.062456423	0.162764191	0.228847451
LINC00689	7q36.3	0.062428498	0.162952618	0.229096418
CEP44	4q34.1	-0.062423933	0.162983436	0.229123781
DCST1	1q21.3	-0.062362102	0.163401299	0.229695215
SULT2A1	19q13.33	-0.062358557	0.16342528	0.229712923
MED24	17q21.1	-0.062346065	0.163509808	0.229815728
PARP10	8q24.3	0.062330987	0.163611875	0.229943169
ZNF462	9q31.2	-0.062326502	0.163642246	0.229969836
PLSCR1	3q24	0.062317437	0.163703647	0.230040104
CCDC85A	2p16.1	0.062307322	0.163772179	0.230120381
NPHP3	3q22.1	0.062302932	0.163801925	0.230146153
KRTAP4-2	17q21.2	-0.062295203	0.163854315	0.230194068
DCTN6	8p12	-0.062294534	0.163858843	0.230194068
REC8	14q12	0.062246439	0.164185115	0.230636368
DAZ2	Yq11.223	0.062237663	0.164244702	0.230704013
ZNF287	17p11.2	0.062233366	0.164273888	0.230728947
TCL1B	14q32.13	0.062206508	0.164456374	0.23096918
FSCN2	17q25.3	-0.062201105	0.164493103	0.230999481
TTLL3	3p25.3	0.062199967	0.164500844	0.230999481
PMP2	8q21.13	-0.062179983	0.164636751	0.23117424
CDC42SE2	5q31.1	0.062177828	0.164651414	0.231178742
WNT8B	10q24.31	-0.062160496	0.164769362	0.231328251
KRTAP12-3	21q22.3	0.062148037	0.164854186	0.231431238
STX17	9q31.1	-0.062138513	0.164919049	0.231506191
HIF1AN	10q24.31	0.062135076	0.164942461	0.23152295
OTUD7B	1q21.2	-0.062129542	0.16498017	0.231559772
OSBPL2	20q13.33	0.06212458	0.165013983	0.231591123
OR4D5	11q24.1	-0.062120948	0.165038729	0.231609744
OR10H4	19p13.12	-0.062113251	0.1650912	0.231667269
SSH3	11q13.2	-0.062109407	0.165117405	0.23168793
CLBA1	14q32.33	-0.062106116	0.165139842	0.231703301

RRP15	1q41	-0.062098623	0.165190936	0.231758875
NBPF11	1q21.2	0.062095952	0.16520916	0.231768329
PGAM2	7p13	-0.062070091	0.165385619	0.23199975
ZNF35	3p21.31	-0.062052055	0.165508768	0.232156362
YTHDC1	4q13.2	-0.062041845	0.165578518	0.232238056
LAPTM4B	8q22.1	0.062017702	0.165743528	0.23245334
SSMEM1	7q32.2	0.062012025	0.165782344	0.23249162
LOC391322	22q11.23	-0.06198221	0.165986328	0.232755621
PEX14	1p36.22	0.061979531	0.166004665	0.232755621
C6ORF58	6q22.33	0.061979453	0.166005198	0.232755621
MAGEH1	Xp11.21	0.061970561	0.166066077	0.232824802
KRT14	17q21.2	0.061964407	0.166108216	0.232867701
PLCE1	10q23.33	-0.06195472	0.16617457	0.23294454
FCER2	19p13.2	0.061923004	0.166391951	0.233233064
SI	3q26.1	-0.061914367	0.166451187	0.233299889
ZNF627	19p13.2	0.061898991	0.166556677	0.233431531
HIST1H2BD	6p22.2	-0.061886776	0.166640515	0.233532811
MOV10L1	22q13.33	0.061869423	0.166759674	0.233683574
HIST1H2BO	6p22.1	-0.061860119	0.166823595	0.233756914
POTED	21q11.2	0.061835056	0.166995859	0.233982047
CDH8	16q21	0.061823227	0.167077209	0.234079505
NUP133	1q42.13	-0.06182055	0.167095621	0.234079505
ANKEF1	20p12.2	-0.061819882	0.167100217	0.234079505
CLOCK	4q12	0.061806904	0.167189513	0.234188337
RHBDL1	16p13.3	-0.061796598	0.16726045	0.234271438
FAM138F	19p13.3	0.061786129	0.167332528	0.234356128
ZNF396	18q12.2	0.061782429	0.167358015	0.234375556
TRIML1	4q35.2	0.061768228	0.167455836	0.234496274
ZC3H4	19q13.32	0.061763485	0.16748852	0.234525769
FAM110A	20p13	0.061754897	0.167547712	0.234592373
ONECUT2	18q21.31	-0.061749391	0.167585663	0.23462923
NAF1	4q32.2	-0.061740345	0.167648035	0.23470027
GOLGA4	3p22.2	0.061737911	0.167664826	0.234707495
GABRA2	4p12	-0.061735847	0.167679059	0.234711135
SCCPDH	1q44	-0.061701362	0.167917028	0.235027932
KC6	-	-0.061688873	0.168003276	0.235132342
RIBC2	22q13.31	0.061686384	0.168020466	0.235140092
DSCR10	21q22.13	-0.061672417	0.168116965	0.235258824
ABRA	8q23.1	0.061663261	0.168180247	0.235331059
MAPKBP1	15q15.1	-0.061658134	0.168215689	0.235364332
SPART	13q13.3	-0.061637235	0.168360218	0.235550221
ZFP91-CNTF	11q12.1	0.061628172	0.16842293	0.235607154
MARK2	11q13.1	-0.061627979	0.168424263	0.235607154
GPATCH8	17q21.31	-0.061617387	0.168497573	0.235693368
LINC01000	7q32.1	0.061612425	0.168531925	0.235725079
GP2	16p12.3	0.061567598	0.168842481	0.236143085
TSPY4	Yp11.2	0.061564829	0.168861682	0.236153572
GUCY2D	17p13.1	0.061560424	0.168892225	0.236179917
ZBTB7A	19p13.3	-0.061554978	0.168929996	0.236216367
RDH11	14q24.1	-0.061547916	0.168978977	0.236268485
SRA1	5q31.3	-0.061543813	0.169007443	0.236291914
PIWIL2	8p21.3	0.061534	0.169075535	0.236361923
MCMBP	10q26.11	-0.06153322	0.169080944	0.236361923
LINC02685	11p11.2	0.061527079	0.169123573	0.236405139
RESF1	12p11.21	-0.061513563	0.169217413	0.236519927
TUBE1	6q21	-0.061479592	0.169453438	0.23683342
SERINC5	5q14.1	-0.061462986	0.169568903	0.236960618
TTY18	Yp11.2	-0.061461	0.169582716	0.236960618

OR4N3P	15q11.2	0.061460223	0.169588124	0.236960618
AQP8	16p12.1	0.061459652	0.169592098	0.236960618
C5ORF47	5q35.2	0.061458061	0.169603162	0.236960618
DPH3P1	20q13.33	0.061442186	0.169713615	0.237098521
CXORF38	Xp11.4	0.061417372	0.169886374	0.237322798
TMEM128	4p16.3	0.06141575	0.169897673	0.237322798
WDR38	9q33.3	0.061406185	0.169964306	0.237399441
IFNA5	9p21.3	-0.061401295	0.169998375	0.237430594
NIPAL3	1p36.11	0.061394088	0.170048602	0.237484306
NBDY	Xp11.21	-0.061383687	0.17012111	0.237569126
DHX40	17q23.1	-0.061375671	0.170177003	0.237630735
PLAC4	21q22.2	0.0613595	0.170289801	0.237771789
SLC38A10	17q25.3	0.061357444	0.170304145	0.237775365
KRTAP2-4	17q21.2	0.061353284	0.170333179	0.237799448
PCGEM1	2q32.3	0.061343791	0.170399433	0.23786082
LBR	1q42.12	-0.061343608	0.170400714	0.23786082
MBNL1	3q25.1-q25.2	-0.061340554	0.170422031	0.237874121
CYFIP1	15q11.2	0.061336069	0.170453345	0.237901373
LGALS3BP	17q25.3	0.061320037	0.170565308	0.238041176
POLR2L	11p15.5	-0.061307345	0.170653985	0.238148463
SLC22A14	3p22.2	0.061265522	0.170946449	0.238540101
PPP2R2A	8p21.2	-0.061263258	0.170962288	0.238545707
RAB38	11q14.2	-0.061261541	0.170974309	0.238545984
COX4I2	20q11.21	0.061259441	0.170989001	0.238549989
RAB5B	12q13.2	0.061256197	0.171011709	0.238565176
OR2M3	1q44	0.061251391	0.171045351	0.238592915
DIPK1C	18q22.3	0.061249978	0.171055241	0.238592915
WDR36	5q22.1	-0.061238543	0.171135307	0.238688095
CSH1	17q23.3	0.061228936	0.171202593	0.238765439
GHR	5p13.1-p12	-0.061223465	0.171240919	0.238802384
OR8B4	11q24.2	0.061199043	0.171412092	0.239024573
NADK	1p36.33	0.061195124	0.171439574	0.239046377
ZNF384	12p13.31	0.061168118	0.171629026	0.239294003
TMIE	3p21.31	0.061162538	0.171668187	0.239323499
ZNF510	9q22.33	-0.061161724	0.171673901	0.239323499
TM4SF20	2q36.3	-0.061144805	0.171792695	0.23947256
SLC17A8	12q23.1	0.061142002	0.171812385	0.239483465
SSX7	Xp11.22	-0.061133129	0.171874717	0.2395538
CD5L	1q23.1	0.061103725	0.172081385	0.239809797
MUC15	11p14.2	-0.061103615	0.172082158	0.239809797
ACP7	19q13.2	-0.061093834	0.172150947	0.239880539
HIST1H4H	6p22.2	-0.061093017	0.172156696	0.239880539
COPS7B	2q37.1	-0.06108863	0.172187555	0.239906972
OR52B6	11p15.4	0.061080071	0.172247779	0.239974311
DUSP7	3p21.2	0.061074982	0.172283597	0.240007643
NRG4	15q24.2	-0.061060825	0.172383252	0.240129893
HPVC1	7p11.2	0.061058889	0.172396882	0.240132304
SOX3	Xq27.1	0.061056612	0.172412916	0.240138061
TUBB2A	6p25.2	0.061046449	0.172484499	0.240221182
FAM41C	1p36.33	-0.06103557	0.172561143	0.240311339
DERL2	17p13.2	-0.06101868	0.172680193	0.240460535
XPO7	8p21.3	-0.061015149	0.172705087	0.240478605
SNORA16A	1p35.3	-0.061003937	0.172784157	0.24056341
OCIAD1	4p11	-0.061002076	0.172797285	0.24056341
IL1RAPL1	Xp21.3-p21.2	0.061001442	0.172801756	0.24056341
KRTAP5-9	11q13.4	-0.060984814	0.172919075	0.240710128
DZIP3	3q13.13	0.060974116	0.172994591	0.240798637
DNAJC11	1p36.31	0.060961137	0.17308623	0.240909576

CTSC	11q14.2	-0.060951022	0.17315768	0.240992401
DAW1	2q36.3	0.060937068	0.173256285	0.241113005
LOC284009	17p13.3	0.060917943	0.173391492	0.241284527
HEBP2	6q24.1	-0.060915428	0.173409277	0.241292636
PSPN	19p13.3	-0.060910587	0.173443518	0.241307457
FSTL5	4q32.2	-0.060910541	0.173443845	0.241307457
LRP5L	22q11.23	-0.060907843	0.173462927	0.241317366
KLHL24	3q27.1	-0.060896629	0.173542268	0.241411101
HPCA	1p35.1	0.060893653	0.173563332	0.241417509
RASL10B	17q12	0.060892144	0.173574008	0.241417509
UBAP1L	15q22.31	0.060890907	0.173582766	0.241417509
FRMD1	6q27	0.060855665	0.173832328	0.241747935
MIER3	5q11.2	0.060847198	0.173892323	0.241814705
NT5C1A	1p34.2	0.060844576	0.173910906	0.241823882
PRKCH	14q23.1	-0.0608409	0.173936962	0.241843448
SERPINI2	3q26.1	-0.060835139	0.173977802	0.241883565
PRR30	2p23.3	0.06079786	0.174242243	0.242202325
UBE2B	5q31.1	0.060796622	0.174251031	0.242202325
LOC283922	16q23.1	0.060796431	0.174252386	0.242202325
LINC00663	19p13.11	0.060796051	0.174255085	0.242202325
CFL1P1	10q23.31	0.060786115	0.174325621	0.242283677
DPAGT1	11q23.3	0.060763795	0.174484147	0.242487301
DPYSL4	10q26.3	0.060761696	0.174499064	0.242491331
ABHD14A	3p21.2	-0.060744233	0.174623179	0.242647096
SLC66A3	2p25.1	0.060728201	0.174737178	0.242788785
NFXL1	4p12	-0.060707493	0.17488451	0.242976764
STAG3	7q22.1	0.060703295	0.174914395	0.242999308
CHRN4	15q25.1	-0.06070183	0.17492482	0.242999308
CIDCEP1	3p25.3	-0.060686978	0.175030564	0.243129466
PTCHD1	Xp22.11	-0.060683244	0.175057156	0.243149666
SLC25A20	3p21.31	-0.060671136	0.175143412	0.24325273
BRK1	3p25.3	-0.060653196	0.175271269	0.243413554
PRAMEF10	1p36.21	0.060647938	0.175308752	0.243448855
ACSL1	4q35.1	-0.060641172	0.175356999	0.243499098
HIST2H4A	1q21.2	-0.060639359	0.17536993	0.243500297
NAGPA	16p13.3	0.060615407	0.175540812	0.243720796
MSL2	3q22.3	-0.060609492	0.175583031	0.243762641
SNTG2	2p25.3	0.060606433	0.175604869	0.243776186
SPG7	16q24.3	0.060590691	0.175717271	0.243915445
CSAD	12q13.13	-0.060564163	0.175906822	0.244161766
OR14C36	1q44	0.060543742	0.176052835	0.24431402
OR51D1	11p15.4	0.060543742	0.176052835	0.24431402
OR51L1	11p15.4	0.060543742	0.176052835	0.24431402
TARDBP	1p36.22	-0.060515686	0.176253587	0.24457579
IDE	10q23.33	-0.060496314	0.176392299	0.244751441
KRTAP10-7	21q22.3	0.060440417	0.176793011	0.245290578
FOCAD	9p21.3	0.060430565	0.176863704	0.24537179
CRYBA1	17q11.2	-0.060424655	0.176906124	0.245413769
TAOK2	16p11.2	0.060388291	0.177167293	0.24575918
SCAF11	12q12	0.060383329	0.177202954	0.245780565
ATG9B	7q36.1	-0.060382756	0.177207069	0.245780565
LMOD2	7q31.32	0.060367827	0.177314396	0.245912522
CCDC112	5q22.3	0.060361953	0.177356632	0.245954193
RYK	3q22.2	-0.060353174	0.177419778	0.246013435
PPARA	22q13.31	-0.060351743	0.177430075	0.246013435
TPTE2P6	13q12.12	0.06035093	0.177435925	0.246013435
TTC24	1q22	0.060346797	0.177465656	0.246037751
CLUAP1	16p13.3	-0.060335045	0.177550231	0.246138095

ALG10B	12q12	-0.060329985	0.177586647	0.246158698
BAALC-AS2	8q22.3	0.06032959	0.177589491	0.246158698
CASP7	10q25.3	0.060321588	0.177647105	0.246221646
RSPH10B2	7p22.1	0.060312924	0.177709496	0.246263293
DEF6	6p21.31	0.060312809	0.177710329	0.246263293
TOB1	17q21.33	-0.060312332	0.177713765	0.246263293
CEP162	6q14.2-q14.3	0.060307514	0.177748466	0.246294466
MICAL3	22q11.21	0.060303839	0.177774943	0.246311004
MAGEB10	Xp21.3	0.060302468	0.177784814	0.246311004
AMFR	16q13	-0.060286853	0.177897347	0.24644999
OR51I2	11p15.4	-0.060275181	0.17798149	0.24654671
THAP12	11q13.5	-0.060273779	0.177991599	0.24654671
EIF3I	1p35.2	-0.060256793	0.178114113	0.246699477
ZNF572	8q24.13	-0.060240952	0.178228424	0.246840862
NDC1	1p32.3	-0.060194098	0.178566855	0.247292607
LINC00032	9p21.2	0.060186186	0.178624053	0.247354842
GRWD1	19q13.33	-0.060183219	0.1786455	0.247367567
VPS51	11q13.1	0.060174822	0.178706226	0.247434674
ZNF749	19q13.43	0.060161511	0.178802511	0.247551004
RNF111	15q22.1-q22.2	0.060159363	0.178818057	0.247555541
TPO	2p25.3	-0.060150848	0.178879674	0.247623855
DNAJC6	1p31.3	0.060123673	0.179076433	0.247878203
CAPN9	1q42.2	-0.060121837	0.179089732	0.247878203
CCDC155	19q13.33	0.060120383	0.179100263	0.247878203
ZNF558	19p13.2	-0.060114035	0.179146255	0.247924854
MDH1B	2q33.3	0.060110322	0.17917316	0.247945082
CDC47	2q31.1	-0.060098385	0.179259674	0.248047793
MAGEB18	Xp21.3	0.060048942	0.179618349	0.248527062
REG4	1p12	0.060027136	0.1797767	0.248729108
BOLL	2q33.1	-0.059999567	0.179977055	0.248989236
XKR9	8q13.3	0.059997426	0.17999262	0.248993699
NAPEPLD	7q22.1	-0.059987499	0.180064811	0.249076488
FAM171A2	17q21.31	0.059981201	0.180110621	0.24912278
GREB1L	18q11.1-q11.2	0.059978376	0.180131173	0.249134128
HIST1H3J	6p22.1	0.059972182	0.180176239	0.249175253
MTHFSD	16q24.1	0.059970895	0.180185603	0.249175253
ZNF775	7q36.1	0.05995744	0.180283531	0.249293591
RNF139	8q24.13	-0.059950855	0.180331468	0.249342791
GATAD2B	1q21.3	0.059948279	0.180350228	0.249351645
TRIB2	2p24.3	0.059934442	0.180451003	0.249471192
CCDC121	2p23.3	-0.059933012	0.18046142	0.249471192
CHP2	16p12.2	-0.059903314	0.18067786	0.24975329
C2CD4A	15q22.2	0.059877377	0.180867052	0.249997688
OAS2	12q24.13	0.059754753	0.181763473	0.25121005
ZNF789	7q22.1	-0.05975399	0.181769064	0.25121005
KRTAP5-8	11q13.4	-0.059746573	0.181823392	0.251267925
WDR60	7q36.3	0.059736622	0.181896296	0.25133992
XKR7	20q11.21	0.059736062	0.181900401	0.25133992
RPL23AP64	11q23.3	0.0597295	0.18194849	0.251389153
CCDC172	10q25.3	0.059710622	0.182086892	0.251563151
CFTR	7q31.2	0.05970597	0.182121007	0.251593057
RHAG	6p12.3	0.059696826	0.182188083	0.251668492
KLHDC8B	3p21.31	0.059654269	0.182500496	0.252069411
GEMIN8	Xp22.2	0.059653887	0.1825033	0.252069411
MGMT	10q26.3	0.059650929	0.182525032	0.252082172
FAM9B	Xp22.31	-0.059645961	0.182561532	0.252115327
SNORA51	20p13	-0.059632134	0.18266315	0.252238398
SKIDA1	10p12.31	0.059627742	0.182695434	0.252265715

OR2T33	1q44	0.059617359	0.182771775	0.252353859
PADI6	1p36.13	0.059611578	0.182814293	0.252395295
LHFPL3-AS2	7q22.2-q22.3	-0.059607701	0.18284281	0.252417395
ATP6V1C2	-	-0.059574303	0.183088602	0.252724423
TAS2R60	7q35	0.059574078	0.183090259	0.252724423
TSPAN12	7q31.31	-0.059556457	0.183220041	0.252886266
BRDTP1	Xq21.33	-0.059551071	0.18325972	0.252923733
KRT28	17q21.2	0.059533088	0.183392259	0.253089345
GJA10	6q15	-0.059499616	0.183639143	0.253412724
COPG2	7q32.2	-0.059486795	0.183733774	0.253525973
HPCAL1	2p25.1	0.059484601	0.183749977	0.253530994
OR52E4	11p15.4	0.059467731	0.183874551	0.253685531
TMEM267	5p12	-0.059457976	0.183946615	0.253767604
GOLGA8A	15q14	-0.059451965	0.183991039	0.253811538
TNFRSF10A	8p21.3	0.05941847	0.184238687	0.254135789
POLR3C	1q21.1	-0.059405301	0.18433612	0.254252807
GNPAT	1q42.2	-0.059397762	0.184391914	0.25431238
UBOX5	20p13	0.059392323	0.184432178	0.254350528
APOBEC1	12p13.31	0.059385489	0.184482772	0.254402915
KCNQ1DN	11p15.4 11p15.5	0.059382704	0.184503395	0.254413968
B4GALNT4	11p15.5	-0.059375146	0.184559371	0.254473765
MAP1LC3B2	12q24.22	0.059345852	0.184776445	0.254755662
SDR42E1	16q23.3	-0.059340888	0.184813244	0.25478899
C9ORF64	9q21.32	-0.059326669	0.184918687	0.254916941
PAGE2	Xp11.21	0.059321302	0.184958499	0.254954406
CCDC153	11q23.3	-0.059301529	0.185105236	0.255139245
SYAP1	Xp22.2	-0.05929661	0.18514175	0.255160575
IGFBP3	7p12.3	-0.059296037	0.185146001	0.255160575
OR5B12	11q12.1	0.059259561	0.185416955	0.255516543
NOXRED1	14q24.3	0.059237749	0.185579119	0.255722551
UMOD	16p12.3	0.059234458	0.185603595	0.255738815
EFNA3	1q21.3	-0.059226998	0.185659087	0.255797809
DHX58	17q21.2	0.059205955	0.185815681	0.255996083
TCTE1	6p21.1	0.059184359	0.185976492	0.256200139
CSNK2B	6p21.33	0.059182003	0.185994042	0.256206825
GAGE10	Xp11.23	0.059177112	0.186030479	0.256239524
SDHAP3	5p15.33	-0.0591737	0.186055894	0.25625704
NUP62	19q13.33	0.059169597	0.18608647	0.25628166
SNHG12	1p35.3	0.059166066	0.186112783	0.256300406
GNAS	20q13.32	0.059158241	0.186171107	0.25636323
CCNL1	3q25.31	-0.059154329	0.186200274	0.256385898
OR2G2	1q44	0.059141028	0.186299452	0.256504957
METTL7B	12q13.2	0.059120643	0.186451536	0.256696837
HAUS5	19q13.12	-0.05910986	0.186532021	0.256790124
PCDHA1	5q31.3	0.059087369	0.186699975	0.257003807
NETO2	16q12.1	-0.059062051	0.186889169	0.257246694
PARD6B	20q13.13	0.059058711	0.186914138	0.257263515
DNAJC27	2p23.3	-0.059042489	0.187035452	0.257412931
RNF214	11q23.3	0.059002982	0.187331131	0.257785505
GUCY2GP	10q25.2	0.059002904	0.187331713	0.257785505
SSX3	Xp11.23	0.058989844	0.187429533	0.257902526
PURB	7p13	-0.058978267	0.187516284	0.258004301
ZNF446	19q13.43	0.058950688	0.187723041	0.25827117
BLOC1S5	6p24.3	0.058944008	0.187773146	0.258322492
NEU4	2q37.3	-0.058932723	0.187857822	0.258408758
LONRF2	2q11.2	-0.058932237	0.187861464	0.258408758
RBM24	6p22.3	0.058923697	0.187925563	0.258479309
CD44	11p13	0.058920247	0.187951456	0.258497304

POU2F1	1q24.2	-0.058916239	0.187981545	0.258521066
ARMC1	8q13.1	-0.058910037	0.188028118	0.258567493
HAGHL	16p13.3	0.058884941	0.188216635	0.258809095
SLC6A15	12q21.31	0.058872747	0.18830828	0.258907953
ZSCAN30	18q12.2	0.058871961	0.188314189	0.258907953
RSPH14	22q11.22-q11.23	-0.058850014	0.188479234	0.259115559
BIRC8	19q13.42	0.058848467	0.188490871	0.259115559
PHKA2	Xp22.13	-0.058842474	0.188535953	0.259159878
DUOX1	15q21.1	-0.058839422	0.18855892	0.259173792
FEV	2q35	0.058835303	0.188589915	0.25919874
KMT2B	19q13.12	0.058828924	0.188637929	0.259238301
SLC18B1	6q23.2	0.058828065	0.188644393	0.259238301
DPF2	11q13.1	-0.058814133	0.188749286	0.259364783
SMIM12	1p34.3	-0.058780543	0.189002355	0.259694846
CYB5RL	1p32.3	0.058745521	0.189266473	0.260029266
ACAD8	11q25	0.058744853	0.189271513	0.260029266
MMP26	11p15.4	-0.058721541	0.189447472	0.260253288
SLITRK1	13q31.1	0.058712019	0.189519385	0.260329429
RFC1	4p14	0.058710786	0.1895287	0.260329429
SNCA	4q22.1	0.058693609	0.189658471	0.260489946
HNRNPH1	5q35.3	-0.058687501	0.189704628	0.260535608
POLR3D	8p21.3	0.058680917	0.1897544	0.260586228
INHBC	12q13.3	-0.058676528	0.18978758	0.260614057
BPIFA1	20q11.21	0.058667155	0.189858455	0.260693642
TCEAL5	Xq22.1	0.05866486	0.189875815	0.260699739
HIST1H3E	6p22.2	-0.058643701	0.190035899	0.260901783
C7ORF50	7p22.3	-0.058627669	0.190157255	0.261050633
LRBA	4q31.3	0.058589594	0.190445703	0.261428833
UNC93B1	11q13.2	0.058579574	0.190521664	0.261504086
FGB	4q31.3	0.058577819	0.190534967	0.261504086
LINC00303	1q32.1	0.058577235	0.190539401	0.261504086
CDC37L1	9p24.1	-0.058546461	0.190772854	0.261803905
KRTAP11-1	21q22.11	0.058545018	0.190783806	0.261803905
MRGPRX2	11p15.1	-0.058541947	0.190807112	0.261818082
TOPAZ1	3p21.31	-0.058539766	0.190823673	0.261823002
PPP4R3A	14q32.12	-0.058537395	0.190841666	0.261829887
MEIG1	10p13	-0.058530463	0.190894297	0.261884289
DENND2D	1p13.3-p13.2	-0.058527662	0.190915569	0.261886546
CLC	19q13.2	0.058526828	0.190921898	0.261886546
ARL1	12q23.2	-0.058488919	0.191209939	0.262263823
OR4M2	15q11.2	0.058480275	0.191275655	0.262336127
TLE4	9q21.31	-0.058435861	0.191613606	0.26278177
LOC643387	2q37.3	-0.058426893	0.191681903	0.262857569
FBXL8	16q22.1	0.058400649	0.191881853	0.263113883
ADAM9	8p11.22	0.058377556	0.192057925	0.263336496
SEMA3G	3p21.1	0.058375933	0.192070298	0.263336496
DTX3L	3q21.1	0.058347592	0.192286559	0.263615088
LINC00588	8q12.1	0.058327143	0.192442704	0.263811231
TMEM72	10q11.21	0.058324959	0.192459382	0.263816173
PPP1R2C	Xp11.3	0.058320498	0.192493465	0.263844969
PFKL	21q22.3	0.058313047	0.192550392	0.26390507
C12ORF40	12q12	-0.058300123	0.192649168	0.264009151
ERMARD	6q27	0.058299687	0.192652497	0.264009151
CCDC88C	14q32.11-q32.12	-0.058266479	0.192906475	0.264339247
AVL9	7p14.3	-0.058238807	0.193118299	0.26461154
KBTD13	15q22.31	0.05822831	0.193198694	0.264689774
PFDN1	5q31.3	-0.058227927	0.193201629	0.264689774
LOC284441	19p12	0.058221915	0.193247686	0.264724008

MANCR	10p15.1	0.05822124	0.193252855	0.264724008
PLA2G2C	1p36.12	0.058199643	0.193418379	0.264915243
ZDHHC8P1	22q11.23	0.058199599	0.193418716	0.264915243
PIRT	17p12	0.058194881	0.193454884	0.264931971
PRSS54	16q21	0.058194581	0.193457188	0.264931971
POMK	8p11.21	0.058149963	0.193799525	0.265382777
C2CD2	21q22.3	0.058144524	0.193841289	0.265421956
C19ORF54	19q13.2	-0.058142283	0.193858499	0.26542751
ATOH7	10q21.3 10q21.3-q	0.058125693	0.193985924	0.265583958
SETD1A	16p11.2	-0.058121335	0.19401941	0.265611782
KIR2DS4	19q13.42	0.058113521	0.194079459	0.265675966
KIR2DL3	19q13.42	0.058072059	0.194398313	0.266094394
ZMYM2	13q12.11	0.058051387	0.19455743	0.266294132
PTPRD	9p24.1-p23	0.058048143	0.194582412	0.266310262
OR4D2	17q22	-0.058042599	0.194625102	0.266350623
SPANXA2	Xq27.2	0.058029188	0.194728408	0.266462982
MYOD1	11p15.1	-0.058028512	0.194733614	0.266462982
CPTP	1p36.33	0.058021614	0.194786768	0.266517643
WRB	21q22.2	-0.058015411	0.194834572	0.266553947
USP32P1	17p11.2	0.058014743	0.19483972	0.266553947
BCL2	18q21.33	-0.05800396	0.194922847	0.266649592
WDFY3	4q21.23	0.057986689	0.195056041	0.26681371
RPL31P11	1q23.3	-0.057961166	0.195252998	0.267065021
ASTN2	9q33.1	0.057928096	0.195508411	0.267396247
MTVR2	17q22	-0.057922981	0.195547936	0.26742978
FGF22	19p13.3	0.057921493	0.195559435	0.26742978
ALAS2	Xp11.21	-0.057914731	0.195611699	0.267483125
RAB3GAP1	2q21.3	-0.057912541	0.195628629	0.267488148
C2ORF78	2p13.1	0.057876007	0.195911209	0.267856378
ANP32A-IT1	15q23	0.057871582	0.195945457	0.267885052
NXT2	Xq23	-0.057844789	0.196152906	0.268150497
APOF	12q13.3	-0.057842147	0.196173365	0.268160299
OR6B1	7q35	0.057839613	0.196193	0.268168973
OR8D4	11q24.1	-0.057833059	0.196243771	0.268220202
DYNC1I2	2q31.1	0.057811771	0.196408771	0.268427537
SF3B1	2q33.1	0.057778181	0.196669322	0.268765424
CYP4Z2P	1p33	0.057769539	0.196736392	0.268838875
COQ8B	19q13.2	-0.057766157	0.196762649	0.268856548
TRIM68	11p15.4	-0.057760628	0.196805577	0.268896997
FAM111B	11q12.1	-0.057754515	0.196853044	0.268943641
CEMP1	16p13.3	0.05770308	0.197252775	0.269454287
TBC1D14	4p16.1	0.057702984	0.197253517	0.269454287
RALGDS	9q34.13-q34.2	-0.057680177	0.197430953	0.269678414
ACTG1	17q25.3	-0.057654126	0.197633774	0.269937182
STK33	11p15.4	-0.057646587	0.197692494	0.269999109
ZNF646	16p11.2	0.057642866	0.197721487	0.270020431
DBNDD2	20q13.12	0.057624735	0.197862779	0.27017885
ERCC6	10q11.23	0.057624544	0.197864267	0.27017885
DMRTB1	1p32.3	0.057619453	0.197903953	0.270214755
CDK5RAP1	20q11.21	-0.057617673	0.197917829	0.270215418
ADIPOQ	3q27.3	-0.057594503	0.198098533	0.270443834
RLN1	9p24.1	-0.057534244	0.198569062	0.271067859
PPIE	1p34.2	-0.05750526	0.198795665	0.271358839
SPATA21	1p36.13	0.057501057	0.198828541	0.271385358
NLRP9	19q13.42	-0.057496065	0.198867601	0.271420313
LINC00239	14q32.31	0.057485236	0.198952335	0.271517595
NAT8B	2p13.1	0.057482545	0.198973396	0.271527975
MAG	19q13.12	0.057470611	0.199066812	0.271637084

IAPP	12p12.1	-0.057459032	0.199157489	0.271742441
POGLUT1	3q13.33	-0.057437794	0.199323876	0.271946694
OR51A7	11p15.4	-0.057436484	0.199334137	0.271946694
FLJ23867	1q25.2	0.057414319	0.199507906	0.272165362
TAS2R19	12p13.2	-0.057406647	0.199568079	0.272229045
SMIM30	7q31.1	-0.057395711	0.199653872	0.272327665
SCAF1	19q13.33	0.057384641	0.199740739	0.272427737
OR7E91P	2p13.3	-0.057347369	0.200033432	0.272808505
CLTC	17q23.1	0.057328339	0.200182992	0.272994025
INTU	4q28.1	0.057322663	0.200227621	0.273036435
VPS39	15q15.1	0.057313834	0.200297044	0.273112646
SNORD115-26	15q11.2	0.0572791	0.200570355	0.273466837
CYBC1	17q25.3	0.057270988	0.200634222	0.273535435
LINC00597	15q24.3	0.057242598	0.200857863	0.273820218
ZNF551	19q13.43	0.057241027	0.200870246	0.273820218
KDM4E	11q21	0.057233992	0.200925694	0.273877303
KCNQ4	1p34.2	0.05721698	0.201059822	0.274041617
UTY	Yq11.221	0.057214302	0.201080943	0.274051895
FBXW2	9q33.2	-0.057189398	0.201277431	0.27430116
ITPKC	19q13.2	0.057179092	0.201358784	0.274393498
SOX10	22q13.1	0.05717448	0.201395198	0.274400313
RSC1A1	1p36.21	0.057174321	0.201396456	0.274400313
SPATA31D4	9q21.32	-0.057173292	0.201404581	0.274400313
NSA2	5q13.3	-0.057170026	0.201430366	0.274416915
CEP72	5p15.33	-0.057165734	0.201464268	0.274444573
CPPED1	16p13.12	-0.05708462	0.202105643	0.275299701
NFIC	19p13.3	0.057066489	0.202249209	0.275476665
STAG3L1	7q11.23	-0.057045972	0.202411756	0.275679456
DXO	6p21.33	0.057041296	0.202448814	0.275711132
RAD52	12p13.33	-0.057035952	0.202491173	0.275750397
PIDD1	11p15.5	-0.057002171	0.20275909	0.276096611
HBA1	16p13.3	0.056992319	0.202837273	0.276166585
B4GALT7	5q35.3	0.056992247	0.202837849	0.276166585
ZNF619	3p22.1	0.056985758	0.202889358	0.276218078
ZMYM3	Xq13.1	0.056970298	0.203012107	0.276366545
ZIC1	3q24	0.056949729	0.20317552	0.276570347
TTC7B	14q32.11	0.056934372	0.203297582	0.276717836
SEC62	3q26.2	-0.056920581	0.20340724	0.276848421
SMIM6	17q25.1	0.056914815	0.203453099	0.276892162
SERP2	13q14.11	-0.056895586	0.203606101	0.277081704
SCFD2	4q12	-0.056889139	0.203657414	0.277132845
LOC646762	7p14.3	-0.056881838	0.203715542	0.277193252
C7ORF71	7p15.2	0.05687592	0.203762666	0.277238679
SH2B1	16p11.2	-0.056872963	0.203786211	0.277252019
FTMT	5q23.1	-0.056860741	0.203883563	0.277365766
HCRTR1	1p35.2	0.056858786	0.203899139	0.277368257
FBXO40	3q13.33	0.056834052	0.204096272	0.277604412
ZNF664	12q24.31	-0.056833552	0.204100256	0.277604412
C3ORF62	3p21.31	-0.056825441	0.204164933	0.277673666
UBE3D	6q14.1	-0.056801107	0.204359055	0.277918949
SLC36A2	5q33.1	0.056784919	0.204488266	0.27807593
HNRNPUL2	11q12.3	0.056781544	0.20451521	0.278093829
LCE2C	1q21.3	0.056769656	0.20461015	0.278204179
CCNA1	13q13.3	-0.056761619	0.204674355	0.278272727
ATP4B	13q34	0.056754603	0.204730409	0.278322843
SLC25A48	5q31.1	-0.056753553	0.204738802	0.278322843
OSGIN2	8q21.3	0.056746905	0.204791932	0.278376315
OGFRL1	6q13	-0.056735789	0.204880789	0.27847834

DPP10	2q14.1	-0.056728091	0.204942337	0.278543236
ZBTB9	6p21.32	0.056721044	0.204998697	0.278601072
TEX30	13q33.1	-0.056717419	0.205027692	0.278621711
FZD6	8q22.3	-0.056714269	0.205052893	0.278637194
STARD7-AS1	2q11.2	-0.056689935	0.205247627	0.278869064
RBMV2EP	Yq11.223	0.056689492	0.205251169	0.278869064
PWAR4	15q11.2	0.056674147	0.205374042	0.279017222
APOBEC3D	22q13.1	0.056657967	0.205503656	0.279168188
RBM6	3p21.31	0.056656822	0.205512832	0.279168188
C1ORF115	1q41	-0.0566531	0.205542654	0.279189904
RAB6D	2q21.1	0.056631536	0.205715511	0.27940589
DCT	13q32.1	-0.056628647	0.205738678	0.279418547
PLEKHB2	2q21.1	-0.05661722	0.205830334	0.279524215
MTHFD1L	6q25.1	0.056609967	0.205888517	0.279584414
FOXD3	1p31.3	0.056602695	0.205946871	0.279644836
NCKAP1	2q32.1	-0.056519694	0.206613745	0.280531474
USF1	1q23.3	-0.056502994	0.206748107	0.280695018
KRTAP10-12	21q22.3	0.056499845	0.20677345	0.280710539
LCN8	9q34.3	0.056490479	0.206848839	0.280776794
OR7G3	19p13.2	0.056488709	0.206863091	0.280776794
ANXA4	2p13.3	0.056487917	0.206869471	0.280776794
B3GNT3	19p13.11	0.056486868	0.206877911	0.280776794
NOC2LP2	2q21.1	0.056480141	0.206932083	0.280831427
BTBD1	15q25.2	-0.056474652	0.206976283	0.280872523
NFKBIB	19q13.2	-0.056467495	0.207033932	0.280931862
BRD3OS	9q34.2	0.056460338	0.207091593	0.280991208
IPMK	10q21.1	0.056446883	0.207200026	0.281119433
RBM47	4p14	-0.05644068	0.207250027	0.281168367
OR4D9	11q12.1	0.056430829	0.207329459	0.281241199
ARL11	13q14.2	-0.056430565	0.207331586	0.281241199
OR9G4	11q12.1	-0.056427781	0.207354037	0.281252746
GPC2	7q22.1	0.056413007	0.207473214	0.281395483
SEMG1	20q13.12	-0.056405645	0.207532613	0.281457127
LINC00608	2q35	0.056393499	0.207630648	0.281571159
STH	17q21.31	-0.05636418	0.20786742	0.281873307
FRG2	4q35.2	-0.056344732	0.208024592	0.28204059
BMPR1A	10q23.2	0.056343822	0.208031943	0.28204059
MGA	15q15.1	0.056343727	0.208032714	0.28204059
RPL23AP7	2q14.1	-0.056324261	0.208190114	0.282235023
TNFSF9	19p13.3	-0.056313286	0.2082789	0.282336418
BCO2	11q23.1	0.056289525	0.20847121	0.282578125
SNAR-H	2p12	-0.056278193	0.208562962	0.282683504
GAGE13	Xp11.23	0.056275275	0.208586601	0.282696556
GALNTL6	4q34.1	0.056267882	0.208646483	0.282758723
AKT1	14q32.33	-0.056254026	0.208758755	0.282891876
RARS2	6q15	0.056246393	0.208820619	0.282956707
OR10C1	6p22.1	0.056241231	0.208862463	0.282994403
LINC00244	7q36.3	0.056222441	0.20901484	0.283181848
SCGB1D1	11q12.3	-0.056214873	0.209076233	0.28324601
TEKT1	17p13.1	0.056208745	0.209125951	0.283277368
OR52I2	11p15.4	-0.05620856	0.209127457	0.283277368
ZNF735	7q11.21	-0.05619333	0.209251061	0.283418949
OR51G2	11p15.4	-0.056192221	0.209260068	0.283418949
RREB1	6p24.3	0.056180547	0.209354853	0.283528294
CDC5L	6p21.1	0.056153351	0.209575798	0.283808471
F2	11p11.2	-0.056140636	0.209679146	0.283929371
ZBBX	3q26.1	0.056125394	0.209803095	0.284068437
LPAR3	1p22.3	0.056124342	0.209811648	0.284068437

GTPBP1	22q13.1	0.056122814	0.209824078	0.284068437
HCAR3	12q24.31	0.056114512	0.209891615	0.284140809
LARS	5q32	-0.056110695	0.209922672	0.284163789
KRTAP5-AS1	11p15.5	0.056097923	0.210026616	0.284285423
PLA2G10	16p13.12	-0.056095053	0.210049975	0.284297971
TIRAP	11q24.2	0.056091991	0.2100749	0.284312636
ZSWIM7	17p12	-0.056077582	0.210192231	0.284452353
PSME2	14q12	-0.056071093	0.210245085	0.284504799
NR0B2	1p36.11	0.056065548	0.210290259	0.284533964
ING5	2q37.3	-0.056064986	0.210294838	0.284533964
LINC00906	19q12	0.056044703	0.210460132	0.284738519
NUDT21	16q13	-0.056020612	0.210656581	0.284985194
ZNF141	4p16.3	0.056017845	0.210679157	0.284996628
B3GALT4	6p21.32	-0.056013741	0.210712633	0.285022806
TOP1P1	1q24.3	0.055991889	0.210890981	0.28524493
LOC388955	2p15	-0.055948756	0.211243324	0.285702348
F8	Xq28	0.055941122	0.211305729	0.285767597
TP53AIP1	11q24.3	0.055919651	0.211481318	0.285974849
MPG	16p13.3	-0.055917647	0.21149771	0.285974849
PTCH2	1p34.1	0.055915835	0.211512532	0.285974849
CNOT2	12q15	0.055915452	0.211515666	0.285974849
RALGPS2	1q25.2	-0.055910871	0.211553143	0.286006356
COMMD10	5q23.1	0.055906579	0.21158827	0.286034683
COX6A2	16p11.2	0.055902567	0.211621097	0.286059895
ANO10	3p22.1-p21.33	0.055892836	0.211700753	0.286148402
SFTPB	2p11.2	0.055885488	0.211760912	0.286210546
FAM209A	20q13.31	0.055846015	0.212084297	0.286628426
PTPRH	19q13.42	0.055832144	0.21219802	0.286762915
DPP8	15q22.31	-0.05580991	0.212380405	0.286990169
LRRTM4	2p12	0.0557903	0.212541354	0.287188427
KRTAP4-5	17q21.2	-0.055786343	0.212573844	0.287213097
CLIC2	Xq28	0.055776988	0.212650667	0.287297658
FGF7P6	9q13	-0.055767256	0.212730604	0.287386414
REC114	15q24.1	-0.055758658	0.212801248	0.287462605
ISG15	1p36.33	0.055740917	0.212947065	0.287640326
OR10K2	1q23.1	0.055738197	0.212969421	0.287651268
MAGEB16	Xp21.1	-0.055718671	0.213130001	0.287848892
HTR3A	11q23.2	0.055677792	0.213466475	0.288284032
COMMD8	4p12	-0.055670778	0.213524245	0.288342752
PRNT	20p13	0.055664583	0.213575278	0.288392367
EVI5L	19p13.2	-0.055647303	0.213717675	0.288565337
LINC01548	21q22.11	0.055636641	0.213805569	0.28865842
ADCK1	14q24.3	-0.05563547	0.213815224	0.28865842
FAM24B	10q26.13	-0.055620503	0.213938659	0.288801459
LRRCC1	8q21.2	0.055619152	0.2139498	0.288801459
SLC4A1	17q21.31	0.055565252	0.214394754	0.28936504
POU4F3	5q32	0.055565102	0.214395992	0.28936504
ZNF20	19p13.2	-0.055554453	0.21448398	0.289464436
SLC6A19	5p15.33	0.055550287	0.214518409	0.289491539
C1ORF21	1q25.3	-0.055545864	0.214554961	0.289521504
TTYH1	19q13.42	0.055538326	0.214617281	0.28957765
PSMB11	14q11.2	-0.055537359	0.21462527	0.28957765
SLITRK5	13q31.2	0.055527347	0.214708059	0.289669982
FGF17	8p21.3	-0.05551493	0.214810768	0.289789175
TMPRSS9	19p13.3	-0.055487647	0.215036562	0.290074389
GOLGA2P3Y	Yq11.23	0.055483829	0.215068171	0.290097635
RBM7	11q23.2	0.055466374	0.215212731	0.290273224
ZNF91	19p12	0.05544872	0.215359011	0.290435874

GLDC	9p24.1	-0.055448346	0.215362108	0.290435874
GAGE2C	Xp11.23	0.055437154	0.215454886	0.290541577
SMIM14	4p14	-0.055411408	0.215668409	0.290810079
C2ORF70	2p23.3	0.055399565	0.21576668	0.290921752
ABTB1	3q21.3	0.055397953	0.215780061	0.290921752
OR1F2P	16p13.3	-0.055386625	0.215874097	0.29102909
IMPAD1	8q12.1	0.055379917	0.215929787	0.29108472
SNORA56	Xq28	-0.055373379	0.215984082	0.291138463
KLHL18	3p21.31	0.055359973	0.216095444	0.291269118
EMX1	2p13.2	-0.055355137	0.216135625	0.291303819
BMI1	10p12.2	0.055345087	0.216219152	0.291396932
WDR90	16p13.3	-0.055336498	0.216290545	0.291473681
TBKBP1	17q21.32	-0.055316554	0.2164564	0.291677709
OR12D2	6p22.1	0.055314483	0.216473633	0.291681453
NKX2-1	14q13.3	0.055311093	0.216501828	0.291699966
EID2B	19q13.2	0.055305962	0.216544523	0.291738011
SCP2D1	20p11.23	0.055295429	0.216632177	0.291836617
ZAR1L	13q13.1	0.055262347	0.21690765	0.292188216
PRKACG	9q21.11	-0.055254385	0.216973982	0.292258059
POMGNT2	3p22.1	-0.055251569	0.216997452	0.29226458
ZC2HC1C	14q24.3	-0.055250328	0.21700779	0.29226458
VGLL1	Xq26.3	0.055208701	0.217354887	0.29271251
CDKN2A	9p21.3	-0.055197748	0.217446282	0.292816051
MSLNL	16p13.3	0.055182477	0.217573754	0.292968156
IL9	5q31.1	-0.055167779	0.21769649	0.293113863
POLR3F	20p11.23	-0.055138297	0.217942837	0.293425975
LOR	1q21.3	0.055120198	0.218094168	0.293603548
ZNF592	15q25.3	0.055118258	0.218110398	0.293603548
C18ORF32	18q21.1	-0.055117303	0.21811838	0.293603548
ZNF280D	15q21.3	0.055113486	0.218150307	0.2936237
SLC6A3	5p15.33	0.055112034	0.218162453	0.2936237
SNORA5C	7p13	-0.055071316	0.218503262	0.29406278
MTFR1L	1p36.11	0.05503056	0.218844764	0.294502733
PDK1	2q31.1	-0.055019968	0.218933582	0.294602611
ARSG	17q24.2	-0.054985233	0.219225025	0.294975114
LINC00160	21q22.12	0.054945993	0.219554597	0.295398868
TRIM64	11q14.3	0.05493338	0.219660607	0.295521794
PCDHB8	5q31.3	0.054914617	0.219818375	0.295714333
EPRS	1q41	-0.054911277	0.219846468	0.295723705
HSFY2	Yq11.222	0.054908574	0.219869206	0.295723705
IL22	12q15	0.054908562	0.219869307	0.295723705
SCARNA1	1p35.3	-0.054904842	0.219900603	0.295746086
OR5A2	11q12.1	0.054902979	0.219916274	0.295747451
ZNF585A	19q13.12	0.054898872	0.219950833	0.29577178
ZBED3	5q13.3	0.054897345	0.21996368	0.29577178
OCIAD2	4p11	-0.054882267	0.220090577	0.295922692
LCN2	9q34.11	-0.054870339	0.220191007	0.296038
PPP2R2D	10q26.3	0.054859079	0.220285844	0.296145772
RFPL4A	19q13.42	0.054854927	0.220320815	0.296173055
ENTPD6	20p11.21	-0.054845051	0.220404028	0.29626518
MS4A12	11q12.2	-0.054783362	0.220924296	0.296944739
CDC37	19p13.2	-0.054780352	0.22094971	0.296959117
LINC00710	10p14	0.054767115	0.221061472	0.297089539
TCHH	1q21.3	-0.054749057	0.221213999	0.297274726
TUBA1B	12q13.12	-0.054745235	0.221246295	0.297298327
KDM3B	5q31.2	0.054739986	0.221290646	0.297338124
CT45A5	Xq26.3	-0.054733855	0.221342464	0.297387947
LYZL4	3p22.1	0.054724048	0.221425365	0.297479523

SNAP47	1q42.13	-0.054706014	0.221577871	0.297664594
SNORA37	18q21.2	-0.054688276	0.221727955	0.297837527
BCLAF1	6q23.3	0.054687311	0.22173612	0.297837527
WFDC10B	20q13.12	0.054680358	0.221794964	0.297896737
CALM1	14q32.11	-0.0546625	0.221946167	0.298079981
SLC25A16	10q21.3	-0.054631104	0.222212161	0.298417356
TEX13B	Xq22.3	-0.054617023	0.222331539	0.298557804
ZDHHC4	7p22.1	-0.054579383	0.222650859	0.298966708
MKRN3	15q11.2	-0.054573411	0.22270155	0.299014877
LARGE1	22q12.3	0.054567168	0.222754553	0.299066143
CIRBP	19p13.3	-0.054557053	0.222840451	0.299161564
SLC44A4	6p21.33	0.054553713	0.222868819	0.299179743
OR11H12	14q11.2	0.054550797	0.222893587	0.299193088
PPY2P	17q11.2	-0.054546816	0.222927408	0.299218583
RNF112	17p11.2	0.05454064	0.222979883	0.299269109
HHLA3	1p31.1	0.054531383	0.223058543	0.299354772
CETN1	18p11.32	0.054525317	0.223110106	0.29937777
HIST1H4E	6p22.2	-0.054524484	0.223117187	0.29937777
LARP1	5q33.2	-0.054524131	0.223120188	0.29937777
CHD1L	1q21.1	-0.05451497	0.223198073	0.299462361
C20ORF85	20q13.32	0.054508375	0.223254158	0.299517695
ACADVL	17p13.1	-0.054503042	0.223299513	0.299558628
KCNK18	10q25.3	-0.054491249	0.223399838	0.299673292
POLR1A	2p11.2	0.054486915	0.223436714	0.299702835
FOXA3	19q13.32	0.054478307	0.223509967	0.299781164
GAGE12J	Xp11.23	0.054476212	0.223527796	0.299785152
LOC284788	20p11.21	0.054457738	0.223685083	0.29997616
CCDC189	16p11.2	0.054454088	0.223716172	0.299997915
NBEAP1	15q11.2	-0.05442633	0.223952671	0.300295099
HMX1	4p16.1	0.054416109	0.2240398	0.300391969
WDR27	6q27	0.054405325	0.224131756	0.300495297
GCNA	Xq13.1	0.054399218	0.224183845	0.300534004
FAM138E	15q26.3	0.054398447	0.224190414	0.300534004
SPRED2	2p14	0.054375361	0.224387398	0.300778086
FBXL6	8q24.3	0.054355512	0.224556855	0.300985239
TRAPPC2L	16q24.3	-0.054350168	0.224602493	0.301026415
MAPT-AS1	17q21.31	-0.0543423	0.224669705	0.301096499
ZNF766	19q13.41	0.054338431	0.224702758	0.301102986
ZNRF1	16q23.1	-0.05433824	0.224704389	0.301102986
NPB	17q25.3	0.054325331	0.224814696	0.301230793
MCM9	6q22.31	-0.054317532	0.224881358	0.301282289
YEATS2	3q27.1	-0.054317341	0.224882989	0.301282289
MATR3	5q31.2	-0.054309326	0.22495152	0.301347206
NUDC	1p36.11	0.05430818	0.224961312	0.301347206
SERPINB8	18q22.1	0.054296825	0.225058426	0.301457283
FAM133A	Xq21.32	0.054291859	0.2251009	0.301494163
CCNB3	Xp11.22	0.054289731	0.225119106	0.301498536
ZNF440	19p13.2	-0.0542379	0.225562827	0.302072756
CHID1	11p15.5	0.054222201	0.225697347	0.302232847
ELAVL3	19p13.2	0.05421471	0.225761556	0.302298768
SORCS3	10q25.1	-0.054202156	0.225869194	0.302422829
FHDC1	4q31.3	0.054173247	0.226117187	0.302734788
SALL3	18q23	0.0541581	0.226247204	0.302888763
ACCSL	11p11.2	0.054155032	0.226273544	0.30290393
DEFA1B	8p23.1	0.054144701	0.226362264	0.302971018
NRTN	19p13.3	-0.054144619	0.226362965	0.302971018
TRIM38	6p22.2	0.054143951	0.226368702	0.302971018
ZNF682	19p12	0.054129065	0.226496584	0.303122069

OR2L8	1q44	0.054122062	0.226556758	0.303182494
HCG27	6p21.33	0.054119999	0.226574485	0.30318611
IQCF6	3p21.2	0.054112979	0.226634822	0.30323674
OR2S2	9p13.3	0.0541121	0.226642376	0.30323674
DLL1	6q27	0.054094711	0.226791891	0.303416666
PIK3CB	3q22.3	0.054089176	0.226839494	0.303456586
NAP1L4	11p15.4	-0.054087745	0.226851807	0.303456586
H2AFY	5q31.1	-0.054071713	0.226989737	0.303620966
MAGEA8	Xq28	-0.054069429	0.227009396	0.303627137
WAC	10p12.1 10p12.1-p	0.054059976	0.227090759	0.303715828
PIK3C2A	11p15.1	0.05405282	0.227152362	0.303778084
FITM1	14q12	0.054035461	0.227301854	0.30395786
FAM162B	6q22.1	0.054026004	0.227383328	0.304046662
USP38	4q31.21	0.054019419	0.227440065	0.304087606
TBL1Y	Yp11.2	0.054018953	0.227444087	0.304087606
PCSK9	1p32.3	-0.0540136	0.227490221	0.304129135
RWDD1	6q22.1	-0.053996612	0.227636666	0.304304756
SNTB2	16q22.1	0.053986688	0.227722254	0.304399004
C1ORF61	1q22	0.053966951	0.227892535	0.304606443
RABGGTB	1p31.1	-0.053941742	0.228110155	0.304877124
C6ORF163	6q15	-0.05393931	0.228131159	0.304885003
RNF185	22q12.2	0.053930577	0.228206585	0.304965608
CYP4B1	1p33	0.053928073	0.22822822	0.304974323
APOC1	19q13.32	0.053924851	0.228256048	0.304982133
YBX1	1p34.2	-0.053923897	0.228264293	0.304982133
PPT2	6p21.32	0.053910442	0.228380563	0.305106415
ITGB3BP	1p31.3	-0.053909634	0.228387551	0.305106415
HIST1H1T	6p22.2	0.053849318	0.228909286	0.305783165
CEP83	12q22	-0.053843788	0.228957163	0.305826874
FAH	15q25.1	-0.053833433	0.229046833	0.3059264
HS6ST3	13q32.1	-0.053830208	0.229074765	0.305943456
C4ORF3	4q26	-0.053815397	0.229203073	0.306094561
LINC00486	2p22.3	-0.053810511	0.22924541	0.30613084
SUN5	20q11.21	0.053804427	0.229298145	0.306181
SLC1A4	2p14	-0.053786483	0.229453711	0.306368454
ZNF30	19q13.11	-0.053766348	0.229628363	0.306580528
NKX2-2	20p11.22	0.053764669	0.22964293	0.306580528
OR2T3	1q44	0.053739458	0.229861754	0.306852364
SLPI	20q13.12	0.053734952	0.229900875	0.306884286
RGS8	1q25.3	0.05371667	0.230059675	0.307075948
CRHR1	17q21.31	0.05371	0.230117629	0.307132988
IPP	1p34.1	0.053706802	0.23014542	0.307149763
POT1	7q31.33	-0.0536964	0.230235823	0.307250095
EIF3CL	16p12.1	-0.053691342	0.23027979	0.307288447
MS4A8	11q12.2	0.053689428	0.230296432	0.307290333
SEL1L2	20p12.1	0.053672408	0.230444442	0.307467495
IPO13	1p34.1	0.053665959	0.230500544	0.307516796
DCAF8L1	Xp21.3	-0.05366423	0.230515589	0.307516796
MMACHC	1p34.1	0.053662905	0.230527111	0.307516796
SMYD4	17p13.3	-0.053651072	0.230630079	0.307633816
DYM	18q21.1	-0.053634659	0.230772959	0.307804054
PPP2R5D	6p21.1	0.053605268	0.23102897	0.30811318
PIK3C2G	12p12.3	-0.053604546	0.231035261	0.30811318
BCLAF3	Xp22.12	0.053595916	0.23111047	0.308193113
RNF130	5q35.3	0.053576735	0.231277693	0.308395729
SLC39A9	14q24.1	-0.053571487	0.231323465	0.308436382
ANAPC4	4p15.2	0.053555073	0.231466649	0.308606906
NEU1	6p21.33	0.053548012	0.231528271	0.30866867

PLEKHA3	2q31.2	-0.053516712	0.231801545	0.309012577
LRRC31	3q26.2	0.053514156	0.231823864	0.309021915
OR8U1	11q12.1	-0.053489387	0.232040293	0.309289985
RNF126P1	17q22	-0.053478509	0.232135392	0.309396306
MROH5	8q24.3	0.053466408	0.232241213	0.309516904
DHX15	4p15.2	0.053456307	0.232329576	0.30961422
RIC3	11p15.4	0.05345292	0.232359203	0.309633254
MAN2C1	15q24.2	0.053425675	0.23259767	0.309930559
TRMT13	1p21.2	-0.053414223	0.232697948	0.310043704
MAP2K7	19p13.2	-0.053406161	0.232768568	0.310117321
SUPT6H	17q11.2	-0.05339781	0.232841734	0.310194319
IRF2	4q35.1	0.053339123	0.233356365	0.310850028
CEBPD	8q11.21	-0.053338168	0.23336474	0.310850028
POMT1	9q34.13	-0.053322327	0.233503789	0.311014717
ATG4B	2q37.3	-0.053308109	0.233628649	0.311160485
ENTPD8	9q34.3	-0.053293603	0.233756076	0.311309653
FOXD4L1	2q14.1	-0.053278325	0.233890346	0.311467913
ZNF217	20q13.2	-0.053274328	0.233925484	0.311489234
NEK1	4q33	0.053272992	0.233937229	0.311489234
TMBIM6	12q13.12	0.053268125	0.233980017	0.31152297
GLMN	1p22.1	-0.053266598	0.233993442	0.31152297
MYMK	9q34.2	0.053249007	0.234148154	0.311708379
OVGP1	1p13.2	-0.05324675	0.234168014	0.311714252
TRPC7	5q31.1	0.05324378	0.234194142	0.311728468
RBM33	7q36.3	0.053209533	0.234495584	0.312109121
DEFB105A	8p23.1	-0.053185985	0.234703016	0.312364606
SUPT16H	14q11.2	-0.053172126	0.23482516	0.312506555
HEATR1	1q43	-0.053167355	0.234867221	0.312541918
BNIP1	5q35.1	-0.053161629	0.234917701	0.31258848
PRDM14	8q13.3	0.053157159	0.234957118	0.312620315
UBC	12q24.31	-0.05315075	0.235013636	0.312674896
PARD6G	18q23	-0.053137295	0.235132329	0.312812188
ACSM2A	16p12.3	0.053108154	0.235389541	0.313118163
TEX43	5q23.2	-0.053107722	0.235393356	0.313118163
SCAND2P	15q25.2	-0.053098552	0.235474336	0.313205235
MPZ	1q23.3	-0.053079229	0.235645038	0.313411628
ZNF564	19p13.2	-0.053070974	0.235717997	0.313488003
ATN1	12p13.31	0.05306563	0.235765233	0.313530159
LMAN1L	15q24.1	-0.053048561	0.235916151	0.313710183
PATL1	11q12.1	0.053021352	0.236156867	0.314009583
MYO5A	15q21.2	0.05301658	0.236199097	0.31404504
ZC3H12C	11q22.3	-0.053011046	0.23624809	0.314089485
NRDE2	14q32.11	0.053002554	0.236323271	0.314168739
RPS6KA6	Xq21.1	-0.05299227	0.236414345	0.314269108
TTI1	20q11.23	0.052987189	0.236459347	0.314291322
OR8D2	11q24.2	0.052986866	0.236462206	0.314291322
RAET1G	6q25.1	0.052960471	0.236696103	0.314581483
KIF14	1q32.1	-0.05295608	0.236735028	0.314599974
OR1E2	17p13.2	0.052955384	0.236741197	0.314599974
ABCC2	10q24.2	-0.052952121	0.236770127	0.3146177
CHST4	16q22.2	0.052922367	0.237034034	0.314947637
GOLT1B	12p12.1	0.052906935	0.237170996	0.315108871
ERCC4	16p13.12	-0.052887277	0.237345542	0.315302297
FOXD4L6	9p11.2	-0.052887019	0.237347831	0.315302297
EIF5A2	3q26.2	0.052857504	0.237610074	0.315629892
KIAA1143	3p21.31	0.052852542	0.237654183	0.315667704
LOC440896	9p11.2	0.052828317	0.237869604	0.315933044
SLC35C2	20q13.12	0.052805497	0.238072657	0.316181923

STK39	2q24.3	-0.052790228	0.238208581	0.316341623
CST5	20p11.21	0.052781784	0.238283779	0.316420662
CELSR3	3p21.31	0.052774674	0.23834711	0.316471559
TPM3P9	19q13.42	0.052773959	0.238353474	0.316471559
ADPRHL2	1p34.3	0.052768757	0.238399817	0.316512264
GUF1	4p12	-0.052756924	0.238505255	0.316617244
TMC1	9q21.13	-0.052756362	0.23851027	0.316617244
SLC22A10	11q12.3	-0.052742512	0.238633721	0.316760285
LRIT1	10q23.1	0.052722668	0.238810689	0.316974134
CPSF4L	17q25.1	0.052720924	0.238826241	0.316974134
EPM2AIP1	3p22.2	-0.052709402	0.23892904	0.317089714
CAMK2G	10q22.2	0.052695565	0.239052531	0.317232738
SNORA10	16p13.3	-0.05267548	0.239231864	0.317449845
FRA10AC1	10q23.33	0.052662357	0.239349091	0.317584516
RTCB	22q12.3	-0.052650237	0.239457383	0.317707314
CD300LD	17q25.1	0.052636939	0.239576251	0.317844127
GALT	9p13.3	0.05262743	0.23966127	0.317936018
HERC2P2	15q11.2	0.052611494	0.239803808	0.318098614
RAET1E	6q25.1	0.052609788	0.239819074	0.318098614
MTFR1	8q13.1	-0.05260844	0.239831127	0.318098614
SPTBN4	19q13.2	0.052593936	0.239960924	0.318249851
SERPINB4	18q21.33	0.05256735	0.240198952	0.318544601
C14ORF177	14q32.2	-0.052561011	0.240255734	0.318598965
FAM222B	17q11.2	0.052556338	0.240297601	0.318633545
IGFL4	19q13.32	0.052523589	0.240591119	0.319001786
SWAP70	11p15.4	0.052515495	0.240663707	0.319077066
TREH	11q23.3	0.052511134	0.240702823	0.319107961
MKRN2	3p25.2	-0.052503757	0.240768992	0.319174713
CFAP157	9q34.11	-0.052501333	0.240790745	0.319182581
LOC100129534	1p36.32	0.052486199	0.240926552	0.319341624
PNMA6A	Xq28	0.052468068	0.241089326	0.319536388
RNF25	2q35	-0.052460338	0.241158742	0.319607399
FAT2	5q33.1	0.052452704	0.241227316	0.319677284
CCL15	17q12	0.052430598	0.241425961	0.319919521
FMO5	1q21.1	0.052423313	0.241491451	0.31998529
SIMC1	5q35.2	-0.052412434	0.241589266	0.320093881
CACNA1I	22q13.1	-0.052396523	0.241732383	0.320262475
MAPK8IP3	16p13.3	0.052381611	0.241866562	0.320419207
GOLGA6C	15q24.2	0.052374646	0.241929256	0.320481222
VCX	Xp22.31	0.052349006	0.24216014	0.320766015
CANT1	17q25.3	0.052345254	0.242193937	0.320789725
PPP2CB	8p12	0.052342868	0.24221543	0.320797135
PZP	12p13.31	0.052338551	0.242254327	0.320827595
SSTR1	14q21.1	0.052336266	0.242274917	0.320833807
FMR1-AS1	Xq27.3	-0.05231549	0.242462169	0.321060707
CHTF8	16q22.1	0.05231195	0.242494089	0.321081905
PIIP5K2	5q21.1	0.052295059	0.242646415	0.321262516
LRP3	19q13.11	-0.052275688	0.242821199	0.321460717
GALP	19q13.43	0.052274937	0.242827975	0.321460717
TBRG1	11q24.2	0.052267099	0.242898718	0.321533274
MORF4	4q34.1	0.052263279	0.242933201	0.321557827
SDF2L1	22q11.21	0.052259083	0.242971084	0.321574876
P2RX6P	22q11.21	-0.052258323	0.242977954	0.321574876
SIPA1L3	19q13.13-q13.2	-0.052233509	0.243202068	0.321850376
CLPTM1	19q13.32	0.052215664	0.243363331	0.322042669
FKBP15	9q32	0.052212706	0.243390071	0.322056935
PSKH2	8q21.3	0.052190879	0.243587437	0.322278419
GTF2H2B	5q13.2	-0.052190662	0.243589397	0.322278419

ARMC2	6q21	0.052188086	0.243612703	0.322288122
NME9	3q22.3	0.052184529	0.243644874	0.322309553
MRNIP	5q35.3	0.052160699	0.243860526	0.322573684
ZNF860	3p23-p22.3	0.052138655	0.244060121	0.322816543
SLC39A5	12q13.3	0.052131493	0.244124999	0.322881192
TAS2R16	7q31.32 7q31	0.052117572	0.244251128	0.323026839
SLC17A2	6p22.2	-0.052105201	0.244363253	0.323153948
CHRFAM7A	15q13.2	-0.05209953	0.244414663	0.323200753
ASPRV1	2p13.3	0.052087315	0.244525423	0.323326028
EFCAB3	17q23.2	-0.052069406	0.244687883	0.323507949
PCNT	21q22.3	0.052068614	0.24469507	0.323507949
KRTAP10-9	21q22.3	0.05206188	0.24475618	0.323567541
DBP	19q13.33	-0.05204924	0.244870909	0.323698006
NUP54	4q21.1	-0.052042369	0.244933288	0.323759257
FRY	13q13.1	-0.052026242	0.245079751	0.323931636
IKZF2	2q34	0.052010974	0.24521847	0.324093758
DAZ1	Yq11.223	0.051990565	0.24540398	0.324311287
SPANXN5	Xp11.22	0.051989331	0.245415202	0.324311287
UBA5	3q22.1	-0.051985304	0.245451815	0.324338431
ASIC4	2q35	0.051970831	0.245583447	0.324491119
CYP4F8	19p13.12	-0.051925701	0.245994224	0.3250126
LINC00964	8q24.13	0.051908372	0.24615208	0.32519987
VPREB1	22q11.22	0.051903924	0.246192607	0.325232119
PIWIL3	22q11.23	0.0518799	0.246411598	0.325480456
CFAP36	2p16.1	-0.051879762	0.246412851	0.325480456
NR3C1	5q31.3	0.051859723	0.246595623	0.325700554
MANEAL	1p34.3	0.051855907	0.246630436	0.325725215
DEFB104A	8p23.1	-0.051849627	0.246687739	0.325779574
H3F3B	17q25.1	-0.051847699	0.246705331	0.325781485
SOCS6	18q22.2	-0.051842546	0.24675236	0.325822266
SVOP	12q24.11	-0.051838567	0.246788677	0.325848898
PRICKLE4	6p21.1	0.051824701	0.246915266	0.32599471
FAM182A	20p11.1	0.051791297	0.247220417	0.326376238
CPA2	7q32.2	-0.051771309	0.247403131	0.326576963
WRNIP1	6p25.2	-0.051770308	0.247412287	0.326576963
AARS	16q22.1	-0.051769354	0.247421013	0.326576963
LINC00336	6p21.31	0.051741856	0.247672548	0.326887589
ACOT2	14q24.3	-0.051737672	0.247710835	0.326916739
SBSN	19q13.12	-0.051730202	0.247779201	0.326978863
CSRP2	12q21.2	-0.051728988	0.247790315	0.326978863
SLC38A1	12q13.11	-0.051721259	0.247861077	0.327050851
RIC1	9p24.1	0.051708472	0.24797817	0.32718396
SLFN5	17q12	0.051705322	0.248007012	0.32720062
LETM2	8p11.23	0.051702173	0.248035856	0.327217282
DCST2	1q21.3	-0.051674609	0.248288441	0.327529087
BHLHB9	Xq22.1	-0.051660903	0.2484141	0.32767343
HNRNPCL2	1p36.21	0.051657756	0.248442955	0.32769007
CHD1	5q15-q21.1	-0.051653792	0.248479308	0.327716599
CALM2	2p21	-0.051627836	0.248717443	0.328009234
FAM171B	2q32.1	0.051623065	0.248761235	0.328045547
SGSM1	22q11.23	0.051616294	0.248823384	0.328106062
FGFR1OP2	12p11.23	0.051566286	0.249282774	0.328649057
SH3GL1	19p13.3	-0.051566286	0.249282774	0.328649057
TANGO2	22q11.21	0.051565427	0.249290668	0.328649057
NIBAN1	1q25.3	-0.051564377	0.249300318	0.328649057
NLRP8	19q13.43	0.051561697	0.249324952	0.328660061
DUSP16	12p13.2	0.051551973	0.249414363	0.328756446
NOSIP	19q13.33	0.051549682	0.249435435	0.328762746

DIO1	1p32.3	0.051533494	0.249584323	0.328937499
RMDN3	15q15.1	-0.051507885	0.249820008	0.329221323
SPAG9	17q21.33	0.051506549	0.249832307	0.329221323
PRRG2	19q13.33	-0.051494429	0.249943897	0.329346865
HTATSF1	Xq26.3	-0.05148775	0.250005418	0.32940642
FBXO16	8p21.1	0.051457733	0.250281996	0.329749308
LINC00467	1q32.3	-0.051448148	0.250370366	0.3298442
C16ORF78	16q12.1	0.051443957	0.250409003	0.329852134
CKAP5	11p11.2	-0.051443949	0.250409081	0.329852134
POGK	1q24.1	-0.05143536	0.250488283	0.329934926
TESK1	9p13.3	-0.051425722	0.250577187	0.330030485
C5ORF51	5p13.1	0.051409404	0.250727758	0.330207246
NKX6-2	10q26.3	-0.051403144	0.250785537	0.330261787
KANSL1	17q21.31	-0.05139385	0.250871343	0.330343419
FAM183A	1p34.2	0.051392883	0.250880266	0.330343419
BORCS6	17p13.1	0.051371806	0.251074926	0.330546635
ZNF473	19q13.33	0.051371806	0.251074926	0.330546635
IPO11	5q12.1	-0.051370852	0.251083742	0.330546635
MIR17HG	13q31.3	-0.051361882	0.25116662	0.330634172
GPS2	17p13.1	-0.051358637	0.251196602	0.33065207
NKX2-4	20p11.22	-0.051353211	0.251246749	0.330682552
PPID	4q32.1	-0.051351862	0.251259219	0.330682552
AGPAT2	9q34.3	-0.051350812	0.251268922	0.330682552
TRA2A	7p15.3	-0.051319226	0.251560993	0.331045343
TBL3	16p13.3	-0.051311306	0.251634269	0.331120177
MORC2-AS1	22q12.2	0.051307202	0.251672237	0.331148544
CTDNEP1	17p13.1	0.051275616	0.251964634	0.331511662
SNAR-F	19q13.33	-0.051255061	0.252155038	0.331740547
KIF2B	17q22	0.051224193	0.252441173	0.332095341
MIMT1	19q13.43	0.051212121	0.252553126	0.332220961
SNORA38	6p21.33	0.051196402	0.252698965	0.33236283
ADPGK	15q24.1	-0.051195936	0.252703291	0.33236283
RTN4R	22q11.21	0.051195171	0.252710387	0.33236283
ETNPPL	4q25	0.051193038	0.252730184	0.332367204
TM9SF4	20q11.21	0.051182861	0.252824641	0.332469758
GRXCR2	5q32	-0.051153898	0.253093602	0.33280176
LHX3	9q34.3	0.051141552	0.25320831	0.332930898
ABRAXAS2	10q26.13	0.051139251	0.25322969	0.332937315
CDX2	13q12.2	0.051129192	0.253323183	0.333038537
LRFN2	6p21.2-p21.1	-0.051127209	0.253341615	0.333041072
PGC	6p21.1	0.05111924	0.253415706	0.33311677
UBQLN3	11p15.4	0.051115733	0.253448319	0.333137939
MAGED4B	Xp11.22	0.051113391	0.253470095	0.333144861
G6PC2	2q31.1	0.051108946	0.253511427	0.333177484
XYLT2	17q21.33	-0.051107093	0.253528668	0.333178443
METTL16	17p13.3	0.051087435	0.253711547	0.333397064
OCLNP1	5q13.2	0.05108559	0.253728713	0.33339791
RP9	7p14.3	-0.051068445	0.253888299	0.333585883
ZNF605	12q24.33	0.051045542	0.25410158	0.333844377
FAM131C	1p36.13	-0.051023464	0.254307301	0.334092906
ZFYVE27	10q24.2	0.051003745	0.254491139	0.334312656
SLC19A2	1q24.2	-0.050979984	0.254712786	0.33458204
DDHD2	8p11.23	-0.050965193	0.254850826	0.334741575
AP3M2	8p11.21	-0.050949543	0.254996938	0.33491169
MAP3K13	3q27.2	0.050918052	0.255291119	0.335276244
SNORA6	3p22.1	-0.050904408	0.255418653	0.335421906
EXOC3-AS1	5p15.33	-0.050889378	0.255559196	0.335572755
NF2	22q12.2	-0.050888567	0.255566782	0.335572755

HDHD2	18q21.1	-0.050873774	0.255705154	0.335732598
MYO3A	10p12.1	0.050838746	0.256033026	0.336141212
SNHG3	1p35.3	-0.050824439	0.256167029	0.336295263
GOLIM4	3q26.2	-0.05079667	0.256427256	0.336614988
NCBP3	17p13.2	0.050716129	0.257183036	0.337585149
AQP7	9p13.3	0.050691402	0.257415387	0.33786816
FBXW5	9q34.3	0.050687979	0.257447565	0.337888417
KCNH5	14q23.2	0.050684131	0.257483731	0.33790608
DHDH	19q13.33	-0.050681682	0.257506762	0.33790608
ATG5	6q21	-0.050681203	0.257511259	0.33790608
SUOX	12q13.2	-0.050678531	0.257536381	0.33791707
SLC25A31	4q28.1	0.050663646	0.257676369	0.338073075
PRMT2	21q22.3	-0.050661545	0.257696123	0.338073075
CCDC107	9p13.3	0.050660545	0.257705537	0.338073075
R3HCC1	8p21.3	0.050653625	0.257770634	0.338136489
VAPB	20q13.32	0.050649714	0.257807434	0.33816278
CHCHD7	8q12.1	-0.050646182	0.257840669	0.338184391
RSPH6A	19q13.32	-0.050642877	0.257871767	0.338203197
FLRT1	11q13.1	-0.050635118	0.257944791	0.338276983
SLC34A3	9q34.3	-0.050624124	0.25804829	0.338390723
CHST1	11p11.2	0.050580719	0.258457186	0.338904904
LCE2D	1q21.3	0.050576212	0.25849967	0.338938586
SLC9C1	3q13.2	-0.050563094	0.258623354	0.339078726
ZNF24	18q12.2	-0.050559058	0.258661407	0.339106584
FBXO5	6q25.2	-0.050552854	0.25871992	0.339139227
MAPK11	22q13.33	0.050552854	0.25871992	0.339139227
LOC728743	7q36.1	0.050537589	0.258863938	0.33930597
CELA2B	1p36.21	0.050527558	0.258958601	0.339398835
C15ORF39	15q24.2	-0.050526517	0.258968426	0.339398835
ALDH18A1	10q24.1	0.050516784	0.259060296	0.339496982
HEMK1	3p21.31	0.050515019	0.259076963	0.339496982
OR52E6	11p15.4	0.050512904	0.259096932	0.339501103
EFCAB2	1q44	0.050504473	0.259176542	0.339583367
TMEM125	1p34.2	0.050500942	0.259209887	0.339605007
OR4C15	11q11	0.050495785	0.259258595	0.339646769
PKIA	8q21.13	0.050491113	0.259302729	0.339682535
OR52M1	11p15.4	0.050463855	0.259560329	0.339997915
MIPEP	13q12.12	0.050461817	0.259579587	0.340001071
SLC46A2	9q32	0.050458956	0.259606642	0.340013653
FAM86B1	8p23.1	-0.050457237	0.259622893	0.340013653
KCTD21	11q14.1	-0.050430422	0.259876512	0.34030437
PRSS57	19p13.3	0.050430201	0.259878603	0.34030437
DUSP8	11p15.5	-0.050367822	0.260469257	0.341051551
BAGE2	21p11.2	0.050366372	0.260483002	0.341051551
PCGF5	10q23.32	-0.050349977	0.260638396	0.341232868
BAIAP3	16p13.3	0.050328411	0.260842911	0.341478468
RCAN1	21q22.12	-0.050323926	0.260885457	0.341491042
C20ORF96	20p13	0.05032383	0.260886362	0.341491042
GNAL	18p11.21	0.050313429	0.260985051	0.341598063
KRT31	17q21.2	-0.050305355	0.261061669	0.341676185
ANKRD26P1	16q11.2	0.050303478	0.261079484	0.341677341
DEFB123	20q11.21	-0.050299815	0.261114256	0.341700686
UNC13C	15q21.3	0.050286033	0.261245109	0.341839807
OR51B2	11p15.4	0.050285049	0.261254448	0.341839807
FAM102B	1p13.3	0.050275545	0.261344713	0.341923643
LGALS2	22q13.1	0.050274734	0.26135241	0.341923643
AKR1D1	7q33	0.05026368	0.261457421	0.342023024
ODF3	11p15.5	0.05026317	0.261462271	0.342023024

TTY16	Yp11.2	-0.050240809	0.261674784	0.342278828
VPS33A	12q24.31	-0.050238996	0.261692015	0.342279179
HSBP1L1	18q23	-0.05020865	0.261980617	0.342634446
ZNF212	7q36.1	-0.050186989	0.262186766	0.342881837
UGT2B11	4q13.2	-0.050159274	0.26245068	0.343176122
HOXA13	7p15.2	0.050158033	0.262462503	0.343176122
APOC1P1	19q13.32	0.050158	0.262462813	0.343176122
CARTPT	5q13.2	-0.050151141	0.262528158	0.343239323
SNAR-E	19q13.32	-0.050115192	0.262870827	0.343665074
SNAR-C3	19q13.33	-0.050093777	0.263075108	0.34390986
SNORA69	Xq24	-0.050073991	0.263263934	0.344115543
TRIM13	13q14.2	0.050073717	0.263266552	0.344115543
PYGO1	15q21.3	0.05005722	0.263424067	0.344294681
GPT	8q24.3	-0.05005579	0.263437726	0.344294681
FAM149A	4q35.1	0.05003779	0.263609672	0.34449709
GAA	17q25.3	-0.050028199	0.263701328	0.344594554
SSX2	Xp11.22	-0.050008501	0.263889623	0.34481828
ID4	6p22.3	0.05000272	0.263944909	0.34486819
ACTR1B	2q11.2	-0.049990696	0.264059911	0.344996112
TTC1	5q33.3	0.049987165	0.264093688	0.345017903
OMG	17q11.2	0.049983505	0.264128704	0.345041311
PHACTR2-AS1	6q24.2	0.049968859	0.264268857	0.34520205
LOC391343	2p25.3	0.049957545	0.264377163	0.345321171
PNMA5	Xq28	-0.049953024	0.264420445	0.34535535
ATXN7	3p14.1	0.049937734	0.264566878	0.345517979
TSGA10	2q11.2	-0.049936447	0.264579206	0.345517979
GOLGA8B	15q14	-0.049928191	0.264658294	0.345598895
SLC45A4	8q24.3	0.04992113	0.264725956	0.345664881
ARL2	11q13.1	-0.049916645	0.264768937	0.345698634
CRYGD	2q33.3	0.049909528	0.264837147	0.34576532
MMADHC	2q23.2	-0.049904335	0.26488693	0.345807942
SNX18	5q11.2	0.049894792	0.264978423	0.345905006
OSR2	8q22.2	0.049888685	0.265036989	0.345959079
PNKP	19q13.33	0.049879238	0.265127602	0.346054972
CLTRN	Xp22.2	0.049875803	0.265160546	0.346075587
PIP5K1P1	6p24.3	0.04985847	0.265326866	0.346270264
TTC23	15q26.3	-0.049849942	0.265408728	0.346354699
GPATCH1	19q13.11	-0.049836868	0.265534247	0.346496092
KRT26	17q21.2	-0.049831983	0.265581159	0.346515851
MPHOSPH6	16q23.3	-0.049831715	0.265583733	0.346515851
FOXN3	14q31.3-q32.11	0.049801083	0.265878031	0.346856853
KCNC1	11p15.1	0.049800933	0.265879469	0.346856853
FAM234A	16p13.3	0.04979617	0.265925256	0.346878559
CALCA	11p15.2	-0.049795626	0.265930487	0.346878559
LINC00114	21q22.2	-0.049783382	0.266048197	0.347009668
HMG2P46	15q21.1	0.049772455	0.266153278	0.347124289
SSR4	Xq28	0.049749076	0.266378208	0.347395196
PTGER4P2-CDK2	9q13	-0.049740399	0.266461716	0.347468864
SLC25A46	5q22.1	0.049739628	0.266469135	0.347468864
MVD	16q24.2	-0.049737147	0.266493019	0.347477554
SH3YL1	2p25.3	-0.049724169	0.266617971	0.347618016
RCHY1	4q21.1	0.049660233	0.267234131	0.348398859
ZFAT	8q24.22	0.049643725	0.267393388	0.34858065
DIPK1A	1p22.1	0.049642198	0.26740812	0.34858065
PABPC1L2B	Xq13.2	0.049619946	0.267622892	0.348822532
HLTF	3q24	0.049619391	0.267628249	0.348822532
KRTAP21-1	21q22.11	0.049612439	0.26769537	0.348887481
LRRC59	17q21.33	-0.049582556	0.267984033	0.34924114

SNORA71A	20q11.23	-0.049521308	0.268576338	0.349977678
SNORA75	2q37.1	-0.049520528	0.26858389	0.349977678
TTLL13P	15q26.1	-0.049504355	0.268740445	0.350159065
SLC23A3	2q35	0.049502274	0.268760594	0.350162708
SATB2-AS1	2q33.1	-0.049495816	0.268823129	0.350200408
PIH1D3	Xq22.3	0.049494384	0.268836995	0.350200408
PHEX	Xp22.11	-0.049493909	0.268841594	0.350200408
KPNA7	7q22.1	-0.04948274	0.268949782	0.350318722
SAMD7	3q26.2	-0.049477645	0.268999139	0.350360397
ITPK1-AS1	14q32.12	-0.049445451	0.269311167	0.350744161
ZFP37	9q32	-0.04942892	0.269471485	0.350930306
ZNF575	19q13.31	0.049412315	0.269632591	0.351117453
CALHM1	10q24.33	0.049402555	0.269727307	0.351218128
PDCD6	5p15.33	-0.049398383	0.269767813	0.351248206
HOXD13	2q31.1	-0.04938658	0.269882405	0.351374737
MBD4	3q21.3	-0.049384737	0.269900301	0.351375366
DCTD	4q35.1	0.049382352	0.269923457	0.351382842
STAM	10p12.33	-0.049376625	0.269979074	0.351432572
SPATA25	20q13.12	-0.049360952	0.270131334	0.351608088
XKRY2	Yq11.222	-0.049334364	0.270389751	0.351912494
APIG2	14q11.2	-0.049333302	0.270400081	0.351912494
SNORA78	16p13.3	-0.049311455	0.270612546	0.352166295
DEFB118	20q11.21	-0.049231831	0.271387892	0.353152529
LSMEM2	3p21.31	-0.049206006	0.271639699	0.353457408
PRMT6	1p13.3	-0.049201804	0.271680684	0.353487944
FAM27E5	17p11.2	0.049198268	0.271715171	0.353510021
CRB2	9q33.3	0.049189489	0.271800821	0.353598656
EIF3IP1	7q31.1	-0.049173969	0.271952288	0.3537729
DIP2A	21q22.3	0.049156571	0.272122138	0.353957912
DNAH3	16p12.3	-0.049155808	0.272129593	0.353957912
SVIP	11p14.3	0.049140444	0.272279652	0.354130267
OCA2	15q12-q13.1	0.049137426	0.272309133	0.354145785
C17ORF97	17p13.3	0.049112676	0.272551009	0.354437508
GUSBP4	6p11.2	-0.049099602	0.272678842	0.354580896
PTMAP11	9q22.33	-0.049091293	0.272760098	0.354663704
KCNH1	1q32.2	-0.049050289	0.273161344	0.355152111
FUS	16p11.2	-0.049049312	0.273170916	0.355152111
ZMYND8	20q13.12	0.049047117	0.273192405	0.355157167
CD200R1L	3q13.2	0.049033243	0.273328274	0.355310909
FANCA	16q24.3	-0.049019634	0.273461589	0.355461312
ZNF76	6p21.31	0.048964764	0.273999562	0.356137659
ESPN	1p36.31	0.048956366	0.274081959	0.356221811
METRNL	17q25.3	0.048953312	0.274111925	0.356237814
LINC01465	12q14.1	-0.048947636	0.274167639	0.356281993
LRP6	12p13.2	0.048946251	0.274181232	0.356281993
MYBPHL	1p13.3	0.048941229	0.274230531	0.35632311
TMEM255A	Xq24	0.048906172	0.274574819	0.35674749
KCNJ10	1q23.2	0.048902928	0.274606686	0.356765923
GPR3	1p36.11	-0.048896869	0.274666231	0.35682031
MAN1A2	1p12	0.048885655	0.274776447	0.356940512
CTTN	11q13.3	0.04887344	0.274896533	0.357073521
H2AFB1	Xq28	0.048858785	0.27504066	0.357237737
KRTAP13-1	21q22.11	0.048847413	0.275152536	0.35733265
CTDSPL	3p22.2	0.048846102	0.275165439	0.35733265
AKR7A2	1p36.13	0.048845957	0.275166859	0.35733265
ANKRD22	10q23.31	0.048831834	0.275305847	0.357490134
KCNK15	20q13.12	0.048825941	0.275363857	0.357542453
SNORA5A	7p13	-0.048810286	0.275517995	0.357719575

ACSL3	2q36.1	0.048803206	0.275587726	0.357787088
DMRTA2	1p32.3	-0.048792526	0.275692941	0.35790066
OR4D1	17q22	0.048779044	0.275825791	0.358050089
ZNF688	16p11.2	-0.048761505	0.27599868	0.358251471
BBC3	19q13.32	0.04875931	0.276020321	0.358256516
APOL1	22q12.3	-0.048697283	0.276632383	0.35902784
GRK3	22q12.1	0.048684591	0.276757734	0.359167427
MLLT3	9p21.3	-0.048671708	0.27688501	0.359309492
DNMT3A	2p23.3	0.048649474	0.277104771	0.35957155
FXD4	10q11.21	-0.048641383	0.277184773	0.359652233
ATAD3C	1p36.33	0.048633061	0.277267074	0.35973589
TSPAN18	11p11.2	-0.048611112	0.277484209	0.359994461
SLC23A1	5q31.2	0.048605309	0.277541641	0.360045823
USP11	Xp11.3	0.048602715	0.277567317	0.360055984
KARS	16q23.1	-0.048595558	0.277638161	0.360124732
OR4D6	11q12.1	0.048593344	0.277660077	0.360130009
SLC26A6	3p21.31	-0.048569029	0.277900863	0.360419148
TIMD4	5q33.3	0.048561812	0.277972365	0.360488711
FTCD	21q22.3	-0.048497145	0.278613551	0.361297015
ANKS4B	16p12.2	0.048475668	0.278826722	0.361523085
WASF2	1p36.11	0.048473316	0.278850073	0.361523085
LINC02112	5p15.31-p15.2	-0.048472757	0.278855622	0.361523085
ECHDC1	6q22.33	0.048472362	0.278859548	0.361523085
OR51M1	11p15.4	0.048464963	0.278933015	0.361595099
ZSCAN21	7q22.1	-0.048453563	0.279046246	0.361718648
RAPGEF4	2q31.1	0.048451417	0.279067563	0.361723044
KLHL40	3p22.1	0.048435934	0.279221397	0.361882422
TMEM79	1q22	-0.048435432	0.279226389	0.361882422
KLC1	14q32.33	0.04843276	0.279252943	0.361893594
WASH2P	2q14.1	-0.048426653	0.279313645	0.361949014
HIST1H4A	6p22.2	-0.04840722	0.279506845	0.362176114
GSG1L	16p12.1	0.048398365	0.27959492	0.36225179
ZNF419	19q13.43	0.048397738	0.279601151	0.36225179
UNC119B	12q24.31	0.048392776	0.279650512	0.362292481
CMTM8	3p22.3	-0.048373977	0.279837568	0.362511542
ZNF622	5p15.1	0.048366725	0.279909755	0.362569578
PPP6R2	22q13.33	-0.048365866	0.279918304	0.362569578
SYCP3	12q23.2	0.04836016	0.279975107	0.3625822
AFDN-DT	6q27	0.048359762	0.279979069	0.3625822
HIF1A	14q23.2	0.048359472	0.279981954	0.3625822
SEC1P	19q13.33	0.048333715	0.280238472	0.362891108
ACBD3	1q42.12	0.048329985	0.28027563	0.362915935
FSHR	2p16.3	0.048316629	0.280408726	0.363064977
NCOA1	2p23.3	0.048300594	0.280568563	0.363248623
PCAT18	18q11.2	0.048290697	0.280667248	0.363349273
SLC5A12	11p14.2	0.048288858	0.280685591	0.363349273
OR14A16	1q44	0.048287381	0.280700323	0.363349273
ARHGEF19	1p36.13	0.048281032	0.28076365	0.363407934
PRRC2C	1q24.3	0.048278073	0.280793159	0.363422818
OR12D3	6p22.1	0.048274203	0.280831774	0.363449485
SARS2	19q13.2	-0.048251068	0.281062644	0.363724946
LINC01881	2q37.3	0.048249256	0.281080731	0.363725027
PARN	16p13.12	0.048242479	0.281148382	0.363789241
BSND	1p32.3	0.048217398	0.281398868	0.364090008
HADHA	2p23.3	-0.048203927	0.281533471	0.36424081
KNCN	1p33	0.048190467	0.281668004	0.364391502
PCNP	3q12.3	-0.048177112	0.281801528	0.36454087
MUC21	6p21.33	0.04817215	0.281851153	0.364581693

C17ORF98	17q12	-0.048152529	0.28204742	0.364812184
HDAC3	5q31.3	-0.048143426	0.282138513	0.364906618
OGFOD3	17q25.3	0.048111649	0.282456655	0.365294677
CCDC83	11q14.1-q14.2	-0.048095414	0.282619294	0.36548159
CRB1	1q31.3	0.048092812	0.282645361	0.365491876
PMS2CL	7p22.1	0.048076818	0.282805648	0.365667561
NIBAN3	19p13.11	0.04807564	0.282817465	0.365667561
TMPRSS13	11q23.3	-0.048073669	0.282837215	0.365669667
TINAG	6p12.1	-0.048051514	0.283059375	0.36591721
PLAA	9p21.2	-0.048050958	0.283064951	0.36591721
DLGAP1	18p11.31	-0.048047997	0.283094645	0.365932153
ACMSD	2q21.3	-0.048040714	0.28316771	0.366003152
CRYGB	2q33.3	-0.048032102	0.283254121	0.366068445
ZBTB43	9q33.3	-0.048032063	0.283254507	0.366068445
NCOR1P1	20p11.1	0.048014333	0.283432464	0.366274972
ZFP3	17p13.2	-0.048005153	0.283524628	0.366370612
TMEM242	6q25.3	0.048002577	0.2835505	0.366375694
SRSF11	1p31.1	0.048001145	0.283564874	0.366375694
STK24	13q32.2	0.04797872	0.283790129	0.366622261
FAM86HP	3q22.1	-0.047978529	0.283792047	0.366622261
ABCC4	13q32.1	-0.047974903	0.283828483	0.366645859
OR8H3	11q12.1	-0.047954636	0.28403218	0.366885506
LMLN	3q29	0.047950378	0.284074987	0.366917312
UBA3	3p14.1	-0.047942649	0.284152709	0.366994208
RSU1P2	10q11.21	0.047926385	0.284316291	0.36718198
ZBTB38	3q23	-0.047905814	0.284523284	0.367419431
CYP2C8	10q23.33	0.047904494	0.28453657	0.367419431
ASB15	7q31.32	-0.047879686	0.284786339	0.367718424
SLC35G3	17q12	-0.047870118	0.284882713	0.367819327
LOC730668	22q13.31	-0.047858569	0.284999069	0.367946015
SPHK2	19q13.33	-0.047843882	0.285147084	0.368113557
AGO2	8q24.3	-0.047830999	0.285276958	0.36825766
CEP89	19q13.11	0.04781745	0.285413598	0.368410477
DEAF1	11p15.5	-0.047807047	0.285518533	0.368522354
SCGB3A2	5q32	-0.047798626	0.285603502	0.368608446
ANGPTL8	19p13.2	0.047787839	0.28571236	0.368725359
AMT	3p21.31	0.047784813	0.285742908	0.3687412
HIRA	22q11.21	0.047761242	0.285980894	0.369024713
LOC286238	9q22.1	0.047736351	0.28623236	0.369307162
NEUROG1	5q31.1	-0.047735953	0.286236385	0.369307162
TMEM170B	6p24.2	0.047726843	0.286328454	0.369383234
IZUMO2	19q13.33	0.047726497	0.286331956	0.369383234
TRIM33	1p13.2	0.047714483	0.286453407	0.369516288
OR51G1	11p15.4	-0.047701795	0.286581715	0.369658171
CERS1	19p13.11	0.047697539	0.286624769	0.369690074
RFPL3	22q12.3	0.047690099	0.286700027	0.369763508
CUL9	6p21.1	0.047687573	0.286725581	0.369772832
GNB5	15q21.2	-0.04768347	0.286767098	0.36980274
ID1	20q11.21	0.047677744	0.286825036	0.369853818
DYRK4	12p13.32	-0.047669442	0.286909059	0.369938524
MEAF6	1p34.3	0.047657705	0.287027879	0.370068083
ZNF416	19q13.43	0.047654842	0.287056865	0.370081809
CITED1	Xq13.1	-0.047640914	0.287197909	0.37021767
STOML1	15q24.1	-0.047639383	0.28721342	0.37021767
CYP2J2	1p32.1	-0.047639001	0.287217287	0.37021767
CAPN10	2q37.3	0.047636806	0.287239518	0.370217719
COMMD9	11p13	0.047635375	0.287254018	0.370217719
PDCL2	4q12	-0.047624632	0.287362859	0.37031639

ART5	11p15.4	0.047624195	0.28736728	0.37031639
WWTR1	3q25.1	0.047606365	0.287547985	0.370519097
ANKRD7	7q31.31	0.047604772	0.287564128	0.370519097
MOGAT3	7q22.1	0.04760324	0.287579667	0.370519097
SCYL3	1q24.2	-0.047554262	0.288076472	0.371135487
SOCS4	14q22.3	-0.047537374	0.288247912	0.37131234
FRG2DP	16p11.1	-0.047537114	0.288250548	0.37131234
PCF11	11q14.1	-0.047514946	0.28847569	0.371578638
PIK3C3	18q12.3	-0.047501778	0.28860948	0.371718518
MCF2L	13q34	-0.047500632	0.288621128	0.371718518
WDR54	2p13.1	-0.047496911	0.28865895	0.371743503
TTC13	1q42.2	-0.04748775	0.288752065	0.371839688
MTMR2	11q21	0.047477921	0.288851992	0.371944633
TBP	6q27	-0.04745998	0.289034442	0.37215582
ANLN	7p14.2	-0.047443853	0.289198519	0.372343324
OR6Q1	11q12.1	0.047437712	0.28926102	0.372400033
ARNTL2	12p11.23	-0.047434502	0.289293693	0.372418337
TAGLN3	3q13.2	0.04741347	0.289507808	0.372667201
VPS9D1	16q24.3	0.047411885	0.289523946	0.372667201
ZNF767P	7q36.1	-0.047397381	0.289671684	0.372833582
GTF2IRD2	7q11.23	-0.047392609	0.289720293	0.372872363
CPXM2	10q26.13	0.047390033	0.289746544	0.372873602
SPINT1	15q15.1	0.047388888	0.289758211	0.372873602
KRTAP4-3	17q21.2	0.047383552	0.28981258	0.372919783
FBXO43	8q22.2	-0.047350812	0.290146341	0.373324173
SLC7A6OS	16q22.1	0.047347854	0.290176511	0.373324173
NCOA4	10q11.22	0.047347282	0.29018235	0.373324173
ANKRD30A	10p11.21	0.047307149	0.290591867	0.373827189
GPR32	19q13.33	-0.047299605	0.290668888	0.373902434
KLF11	2p25.1	0.047297278	0.290692646	0.37390916
PAGE5	Xp11.21	0.047290802	0.290758775	0.373970381
TTY14	Yq11.222	0.047271065	0.290960393	0.374205849
SCARNA11	12p13.31	0.0472673	0.290998867	0.374231479
TMPRSS7	3q13.2	0.047254813	0.291126482	0.374371736
PRR18	6q27	0.047240674	0.291271028	0.374533746
MAN2A2	15q26.1	-0.047215688	0.291526577	0.37483846
ITGA2B	17q21.31	-0.047210444	0.29158023	0.37488356
SLC17A4	6p22.2	-0.047200442	0.29168259	0.37499127
EAF1	3p25.1	0.047163013	0.292065825	0.375460043
POU1F1	3p11.2	0.047147741	0.292222292	0.375637256
GTPBP6	Xp22.33 and Yp11	-0.047136484	0.292337656	0.375761613
ECT2L	6q24.1	-0.047118403	0.292523025	0.375961447
RRP36	6p21.1	-0.047117685	0.292530387	0.375961447
KRTAP13-2	21q22.11	0.047115707	0.292550671	0.375963571
PTF1A	10p12.2	0.047108909	0.292620385	0.376029214
PRR15L	17q21.32	-0.047106138	0.292648807	0.37604179
TOX4	14q11.2	-0.047097454	0.292737888	0.376132304
PRSS50	3p21.31	0.047095061	0.292762449	0.376139912
NOC3L	10q23.33	-0.047083808	0.292877908	0.376261446
FAM86B2	8p23.1	-0.047082208	0.292894336	0.376261446
GNG5	1p22.3	0.047076461	0.292953323	0.376313266
YTHDF3	8q12.3	0.047066345	0.293057161	0.37642269
NUDT7	16q23.1	-0.047058856	0.293134065	0.376497504
NPTN	15q24.1	0.047051841	0.293206105	0.376566063
SLC35G5	8p23.1	0.047045116	0.293275176	0.376630801
E2F8	11p15.1	-0.04703056	0.293424712	0.376798858
NCKIPSD	3p21.31	-0.047024358	0.293488452	0.376856727
CPXCR1	Xq21.31	-0.047011737	0.29361817	0.376999303

CYP2F1	19q13.2	-0.046999379	0.293745232	0.377138451
SRD5A3	4q12	-0.046988764	0.293854401	0.37725461
MYORG	9p13.3	-0.04696338	0.294115559	0.377565868
TFG	3q12.2	-0.046954219	0.29420985	0.377662886
CA12	15q22.2	-0.046937329	0.294383751	0.377862077
MID1	Xp22.2	-0.046930267	0.294456476	0.377911118
TAF12	1p35.3	0.046929982	0.294459413	0.377911118
HIST1H4I	6p22.1	0.046924116	0.294519832	0.37796462
CCS	11q13.2	0.046903549	0.294731749	0.378203839
IFNA6	9p21.3	0.046902387	0.294743722	0.378203839
CHST9	18q11.2	-0.046894326	0.294826807	0.378286396
LOC150776	2q21.1	-0.046886848	0.2949039	0.378361254
ESR2	14q23.2-q23.3	0.046878546	0.294989503	0.37844702
ZNF681	19p12	0.046862372	0.295156317	0.378636957
OR9Q1	11q12.1	0.046834494	0.295443998	0.378981911
FAM173A	16p13.3	-0.046790085	0.295902649	0.379546119
POLR2J3	7q22.1	-0.046776916	0.296038747	0.379696554
ZNF630	Xp11.23	0.046772528	0.296084111	0.379730601
KIAA1549L	11p13	0.046733974	0.296482838	0.380217806
ZNF621	3p22.1	0.046729108	0.296533196	0.38025822
RB1CC1	8q11.23	-0.046721283	0.296614176	0.380337895
LMX1B	9q33.3	0.046714052	0.296689013	0.380409683
HES4	1p36.33	0.046703247	0.296800881	0.38052894
LDOC1	Xq27.1	0.046673855	0.29710531	0.380895048
PRRC2B	9q34.13	-0.046650667	0.297345639	0.381178937
ATXN3	14q32.12	0.046588927	0.297986148	0.381975764
PRSS37	7q34	-0.046565848	0.298225812	0.382258696
CD38	4p15.32	0.046560202	0.298284458	0.382309583
BRD1	22q13.33	-0.046527566	0.29862363	0.382719989
RCOR3	1q32.2-q32.3	-0.046519837	0.298703997	0.382798677
TBC1D22A	22q13.31	-0.046510485	0.298801252	0.382883582
HCFC1	Xq28	0.046509817	0.298808199	0.382883582
LRRK2	12q12	0.046507527	0.29883202	0.382889792
FBXO46	19q13.32	-0.046503233	0.298876688	0.38292271
AIP	11q13.2	0.046499129	0.298919375	0.382953086
FBH1	10p15.1	0.046479758	0.29912095	0.383175588
IYD	6q25.1	-0.046478789	0.299131029	0.383175588
UOX	1p31.1	0.046475406	0.299166248	0.383196377
ZNF324	19q13.43	0.046466398	0.29926002	0.383292158
PRKCE	2p21	0.046456569	0.299362363	0.383398366
CTRB1	16q23.1	0.046454785	0.299380943	0.383398366
ERC2-IT1	3p14.3	0.046441642	0.299517833	0.38354933
BCL2L14	12p13.2	0.046384903	0.300109279	0.384282324
NR2C1	12q22	-0.046352077	0.300451822	0.38469653
SRRM5	19q13.31	-0.046349882	0.300474734	0.384701456
YIPF2	19p13.2	0.046346351	0.300511594	0.384724239
GABRA3	Xq28	-0.046336895	0.300610324	0.384826222
PTPN18	2q21.1	0.046331655	0.300665046	0.384871858
MYO18B	22q12.1	-0.046318689	0.300800479	0.385020797
SBSPON	8q21.11	-0.04629463	0.301051896	0.385318167
FGG	4q32.1	0.046288987	0.301110882	0.38536922
SNORA26	4q12	0.04628286	0.301174943	0.385418848
KBTD7	13q14.11	0.046281511	0.301189045	0.385418848
CHAT	10q11.23	-0.046279798	0.30120696	0.385418848
SLC26A10	12q13.3	-0.046262997	0.301382664	0.385619223
RBL1	20q11.23	-0.046255219	0.301464035	0.385698882
APOBEC3F	22q13.1	0.046246821	0.3015519	0.385786838
MAGEB4	Xp21.2	0.046240688	0.301616077	0.38584448

AKAP7	6q23.2	-0.046235656	0.301668747	0.385887394
CORT	1p36.22	-0.046214131	0.301894108	0.386151192
SLC7A5P2	16p12.2	0.046188413	0.302163503	0.386471277
ZNF165	6p22.1	0.046180309	0.302248431	0.386555399
IGBP1P1	14q13.2	-0.046173605	0.30231869	0.386620752
SNORA40	11q21	0.04616539	0.302404809	0.386706378
PRAMEF13	1p36.21	0.046161996	0.302440396	0.386727378
C22ORF23	22q13.1	0.046139466	0.302676671	0.387004976
SH3BGRL2	6q14.1	0.046112747	0.302957045	0.387338923
CYP3A7	7q22.1	0.046105278	0.303035443	0.38741461
LIMK1	7q11.23	0.046076198	0.303340837	0.387780472
KRTAP3-2	17q21.2	0.046065207	0.303456314	0.38789645
HOXA3	7p15.2	0.046062124	0.303488716	0.38789645
TRPM4	19q13.33	-0.046062075	0.303489229	0.38789645
ASAH2B	10q11.23	-0.046045071	0.303667949	0.388100294
MAPT	17q21.31	-0.046040222	0.30371893	0.388140867
MYBBP1A	17p13.2	-0.04603526	0.303771105	0.388182961
FCSK	16q22.1	0.046028008	0.303847372	0.388255834
CHP1	15q15.1	-0.046016652	0.303966816	0.388383864
ABCD3	1p21.3	0.046005296	0.30408629	0.388511919
PHF2P1	13q12.11	0.046000301	0.304138854	0.388554475
ZNF280A	22q11.22	-0.045987442	0.304274202	0.3886545
LINC02209	8p12	-0.045986789	0.304281069	0.3886545
EDA	Xq13.1	0.045986069	0.304288653	0.3886545
FBXL14	12p13.33	-0.045985543	0.304294189	0.3886545
CCDC90B	11q14.1	-0.0459781	0.304372553	0.388729984
ST6GAL2	2q12.3	-0.045969325	0.304464952	0.388823383
MMP24	20q11.22	0.045956248	0.304602685	0.38897466
C1ORF146	1p22.1	-0.045951461	0.304653111	0.389014436
DCTN1-AS1	2p13.1	0.045931322	0.304865338	0.389260798
UBE2L6	11q12.1	0.045925901	0.304922476	0.38930912
MOSPD3	7q22.1	0.045915691	0.305030124	0.389421921
HOXA10	7p15.2	-0.045896605	0.305231404	0.389630872
TNRC6A	16p12.1	0.04589651	0.305232411	0.389630872
RPRD2	1q21.2	-0.045869981	0.305512336	0.389963529
GPRC5C	17q25.1	-0.045859866	0.305619115	0.390062051
PPM1A	14q23.1	0.045859007	0.305628182	0.390062051
TBC1D25	Xp11.23	0.045835628	0.305875082	0.390352471
FAM217A	6p25.2	-0.045833539	0.305897147	0.390355943
WIF1	12q14.3	-0.045828184	0.305953712	0.390378754
NAV1	1q32.1	-0.045828184	0.305953714	0.390378754
GAGE4	Xp11.4-p11.2	0.045817048	0.306071384	0.390504202
DYNC2LI1	2p21	0.045797457	0.306278466	0.390743704
SIX3	2p21	0.045793957	0.306315466	0.390766202
FARP2	2q37.3	-0.045737624	0.306911478	0.391501783
RNH1	11p15.5	-0.045723501	0.307061023	0.391667786
MAVS	20p13	0.04571434	0.307158051	0.391766785
TMEM38A	19p13.11	0.045700122	0.307308686	0.391927157
ETFBKMT	12p11.21	0.045697021	0.307341538	0.391927157
TMEM87B	2q13	-0.045696973	0.307342055	0.391927157
TFF1	21q22.3	-0.045691443	0.307400652	0.391977109
GAGE2E	Xp11.23	0.04568816	0.307435444	0.391990835
TP53BP1	15q15.3	0.045686762	0.307450267	0.391990835
OR52W1	11p15.4	0.045675712	0.307567398	0.392115398
CACNA1S	1q32.1	0.045659269	0.30774176	0.392306051
NEMP2	2q32.2	0.045657943	0.307755825	0.392306051
ERCC6L2	9q22.32	-0.045655844	0.307778092	0.392309653
CDHR5	11p15.5	-0.045639709	0.307949258	0.392503037

TOGARAM2	2p23.2	0.045631797	0.308033214	0.392585247
WDR47	1p13.3	0.045618627	0.308173001	0.392738599
PNLDC1	6q25.3	0.045608527	0.308280234	0.392850448
DNMT3B	20q11.21	-0.045597824	0.30839389	0.392970467
CCDC144NL	17p11.2	0.045593153	0.308443503	0.393008868
ATAD2	8q24.13	-0.045580647	0.308576355	0.393153319
KRT34	17q21.2	-0.045574452	0.30864219	0.393212371
SLC44A5	1p31.1	0.045572536	0.308662543	0.393213476
POLR2B	4q12	-0.045566429	0.308727449	0.393271333
PCNX2	1q42.2	0.045558031	0.308816708	0.393341836
APC	5q22.2	-0.045557554	0.30882178	0.393341836
HNRNPCL1	1p36.21	0.045545015	0.308955094	0.393486798
SLC27A3	1q21.3	-0.045539138	0.309017593	0.393541559
PRAMEF9	1p36.21	0.045528401	0.309131796	0.393662155
S100A10	1q21.3	0.045500775	0.30942575	0.394011624
C22ORF31	22q12.1	-0.045495457	0.309482357	0.39405884
YTHDF2	1p35.3	0.045493523	0.309502951	0.394060197
SSUH2	3p25.3	0.045491298	0.309526641	0.394065494
ZNF180	19q13.31	0.045485603	0.309587278	0.394117828
MPC1	6q27	-0.045480354	0.309643166	0.394164108
TWSG1	18p11.22	0.04547167	0.309735649	0.394256965
CHMP1A	16q24.3	0.045469285	0.30976106	0.394264439
LRRC36	16q22.1	0.045467286	0.309782348	0.394266666
OR4F17	19p13.3	0.045462606	0.309832207	0.394305254
STX8	17p13.1	0.045417945	0.310308229	0.394886155
PRDM7	16q24.3	0.045415347	0.310335932	0.394896505
HIST1H2AB	6p22.2	-0.045404109	0.310455799	0.394983238
LACRT	12q13.2	-0.045403451	0.310462815	0.394983238
LRRC30	18p11.23	0.045403451	0.310462815	0.394983238
SYNGR4	19q13.33	-0.045394567	0.3105576	0.395078919
TFPI	2q32.1	0.045390462	0.310601399	0.395109729
EML1	14q32.2	0.045370232	0.310817321	0.395341089
SLITRK4	Xq27.3	0.04536975	0.310822458	0.395341089
MAGEC2	Xq27.2	0.045351415	0.311018237	0.395565172
CCDC32	15q15.1	0.045342176	0.311116923	0.395665746
SFTA3	14q13.3	0.045338076	0.311160726	0.395696515
GALNT7	4q34.1	-0.045309254	0.31146874	0.396063249
INSM2	14q13.2	0.045298534	0.311583354	0.396184026
SPACA5	Xp11.23	-0.045294514	0.311626336	0.396197937
SNORA74B	5q35.1	-0.045293839	0.311633562	0.396197937
DDX11	12p11.21	0.04526593	0.311932108	0.396552511
CYB5B	16q22.1	-0.045256197	0.312036275	0.396659947
ADAM15	1q21.3	-0.045246845	0.312136379	0.396762204
CIZ1	9q34.11	-0.045223465	0.31238673	0.397055419
KRTAP12-2	21q22.3	0.045211812	0.312511564	0.397189069
SEPTIN14	7p11.2	0.045209415	0.312537247	0.397196694
ZNRF3	22q12.1	-0.04520333	0.312602445	0.397254533
C3ORF52	3q13.2	0.045193215	0.31271085	0.39736727
SYDE2	1p22.3	-0.045189016	0.312755856	0.397399434
RBM41	Xq22.3	0.045163537	0.313029049	0.397713051
PPP1R21	2p16.3	-0.045161247	0.313053614	0.397713051
ZNF248	10p11.21	0.045160484	0.313061802	0.397713051
BTF3P11	13q22.3	-0.045148846	0.313186652	0.397837667
NXF3	Xq22.1	0.045147664	0.313199325	0.397837667
SRSF12	6q15	-0.045122122	0.313473451	0.398160809
USP33	1p31.1	0.045108953	0.313614846	0.398314811
CPNE2	16q13	-0.045106568	0.313640465	0.398314811
SPINT3	20q13.12	-0.045105315	0.313653914	0.398314811

PLEKHH1	14q24.1	-0.045089963	0.313818814	0.398499141
HS6ST1	2q14.3	-0.045073359	0.313997229	0.39870061
RBP3	10q11.22	0.045062563	0.314113275	0.398822864
MED4	13q14.2	-0.045050315	0.314244956	0.398964953
CEP63	3q22.2	-0.045036811	0.314390182	0.399124221
SYN2	3p25.2	-0.045028062	0.314484298	0.399218586
CFAP126	1q23.3	0.045021161	0.314558543	0.399287717
ATG4A	Xq22.3	0.045001598	0.314769077	0.399529827
ADGRF1	6p12.3 6	-0.044996068	0.314828613	0.399580261
HDAC11	3p25.1	0.04499196	0.314872837	0.399611256
RAD50	5q31.1	-0.044985471	0.314942708	0.399674794
ZNF555	19p13.3	-0.044972589	0.315081453	0.399808406
IRF9	14q12	0.044972016	0.31508762	0.399808406
SLC30A6	2p22.3	-0.044969107	0.31511896	0.399823032
ZNF324B	19q13.43	0.04496066	0.315209956	0.399912625
CTF1	16p11.2	-0.044958656	0.315231548	0.399912625
ARHGAP44	17p12	0.044957034	0.315249027	0.399912625
ZNF552	19q13.43	-0.04492583	0.315585381	0.400302701
FSCN3	7q32.1	0.044924827	0.315596197	0.400302701
WBP11P1	18q12.1	-0.044908416	0.31577318	0.400502011
SEL1L3	4p15.2	0.04490121	0.315850927	0.400575441
UPK3BL1	7q22.1	-0.044896724	0.315899317	0.400611634
TTY11	Yp11.2	0.044837022	0.316543921	0.401399757
ADAM18	8p11.22	0.044835481	0.316560569	0.401399757
SUN3	7p12.3	-0.044830713	0.316612089	0.40142908
TRPM3	9q21.12-q21.13	-0.044829659	0.316623482	0.40142908
LINC00909	18q22.3	-0.044799962	0.316944494	0.401810828
OR4F5	1p36.33	-0.044789318	0.317059604	0.401931508
OR2AG1	11p15.4	0.044772619	0.317240251	0.402135249
KRTAP8-1	21q22.11	-0.04476881	0.317281465	0.402162229
SLC45A3	1q32.1	0.04475826	0.317395627	0.402281663
MRFAP1L1	4p16.1	0.044752916	0.317453469	0.4023194
TCAM1P	17q23.3	0.044751826	0.317465276	0.4023194
MSH4	1p31.1	0.04473476	0.317650043	0.402528273
SPATC1L	21q22.3	-0.044730777	0.317693171	0.402557645
GATB	4q31.3	-0.044712837	0.317887499	0.402778591
GABRG1	4p12	-0.044683244	0.318208225	0.403159652
AICDA	12p13.31	0.044673356	0.31831543	0.403270157
SLC35A4	5q31.3	0.044642126	0.318654197	0.403641679
CLUHP3	16p11.2	-0.044641363	0.318662481	0.403641679
LOC154761	7q35	0.04464079	0.318668694	0.403641679
HMBOX1	8p21.1-p12	0.044637595	0.318703363	0.403660253
UPK2	11q23.3	0.044633397	0.318748929	0.403680426
VTCN1	1p13.1-p12	-0.044632441	0.3187593	0.403680426
RBMXL3	Xq23	0.044627895	0.318808649	0.403717586
SMIM1	1p36.32	0.04460577	0.319048868	0.40399643
SAP30	4q34.1	-0.044594126	0.319175329	0.404112407
CEP350	1q25.2	0.044593649	0.319180512	0.404112407
PRSS45P	3p21.31	0.044587117	0.319251478	0.404176898
EXOC1	4q12	0.044583725	0.319288331	0.404198195
NRN1L	16q22.1	-0.044558902	0.319558119	0.404514353
DDHD1	14q22.1	0.044541069	0.319752017	0.40473441
ACSL6	5q31.1	0.044525951	0.319916468	0.404917167
CGN	1q21.3	0.044512632	0.320061386	0.405075182
SIRT2	19q13.2	-0.044510246	0.320087348	0.405082634
CDX4	Xq13.2	-0.044506932	0.320123419	0.405102876
KRTAP5-2	11p15.5	0.044491183	0.320294854	0.405294404
C21ORF62-AS1	21q22.11	0.044457652	0.320660073	0.405731102

PANK2	20p13	-0.044454326	0.320696304	0.405751503
FTH1	11q12.3	-0.044446692	0.320779496	0.405831314
CDHR3	7q22.3	0.044443639	0.320812777	0.405847974
PADI3	1p36.13	0.044432124	0.320938295	0.40598131
SORBS3	8p21.3	0.044402223	0.321264372	0.406368317
ZNF16	8q24.3	0.04439812	0.321309138	0.406399466
SLC25A51P4	11p15.1	-0.044382728	0.321477099	0.406582127
LINC02347	12q24.32	0.044381193	0.321493851	0.406582127
FAM53A	4p16.3	-0.044367777	0.321640299	0.406741843
ARL2BP	16q13	-0.044365007	0.321670535	0.406754489
SNORA12	10q24.31	-0.044363168	0.321690614	0.406754489
CYP4Z1	1p33	0.044350429	0.321829726	0.40690489
GATAD2A	19p13.11	-0.044347353	0.32186332	0.406921867
APOBEC4	1q25.3	0.044341938	0.321922473	0.406971156
ZIC5	13q32.3	-0.044326079	0.322095734	0.407164682
FAM3C	7q31.31	-0.044315481	0.322211564	0.407275898
ZSCAN16	6p22.1	-0.044314335	0.32222408	0.407275898
HBM	16p13.3	0.044309109	0.322281213	0.407322598
GRIN1	9q34.3	0.044300543	0.322374854	0.40741543
RPRD1B	20q11.23	0.044296872	0.322414993	0.40744064
SLC22A24	11q12.3	-0.044294168	0.322444561	0.407452489
ACVR2A	2q22.3-q23.1	-0.044291147	0.322477603	0.407457717
POC5	5q13.3	-0.044290097	0.322489083	0.407457717
MBOAT4	8p12	0.04428747	0.322517819	0.407468512
MRGPRX3	11p15.1	0.044278341	0.322617665	0.407569139
ZFH3	16q22.2-q22.3	0.044274733	0.322657131	0.407593479
ZNF530	19q13.43	0.044267386	0.322737521	0.407669511
TECTB	10q25.2	-0.044237119	0.323068795	0.40806242
GPATCH11	2p22.2	-0.04423494	0.323092649	0.408067007
SLC17A5	6q13	0.044214233	0.323319437	0.408327884
FGF7P3	9p12	-0.044195911	0.323520184	0.408555841
CDV3	3q22.1	0.044185319	0.323636277	0.408676873
OR9A2	7q34	0.04416813	0.323824723	0.408889249
PATE4	11q24.2	-0.044142543	0.324105378	0.409218021
FMO4	1q24.3	0.04413875	0.324146991	0.409224155
LRRTM3	10q21.3	0.044138083	0.324154309	0.409224155
KIF16B	20p12.1	0.044136556	0.324171075	0.409224155
SAMD13	1p31.1	-0.044126154	0.324285225	0.409342647
LCE1C	1q21.3	0.044122348	0.324327004	0.409369777
CEP41	7q32.2	0.044118329	0.324371117	0.409399848
PIAS1	15q23	0.044111745	0.324443403	0.409465472
SRR	17p13.3	0.044104588	0.324521987	0.409539035
FEZ2	2p22.2	-0.044092659	0.324652988	0.409678734
KRT72	12q13.13	-0.044088231	0.324701625	0.409714487
SRARP	1p36.13	0.044084697	0.324740447	0.409737852
PATE1	11q24.2	0.044077351	0.324821159	0.409814065
TMUB1	7q36.1	-0.044074242	0.32485532	0.409831541
PRMT7	16q22.1	-0.044053057	0.325088156	0.410099643
SPAG11B	8p23.1	-0.044033784	0.325300073	0.410341324
NAA11	4q21.21	-0.043975873	0.325937381	0.411119541
PIP4K2C	12q13.3	-0.043969368	0.32600902	0.4111842
POU4F1	13q31.1	0.043965498	0.32605164	0.411212252
RBM11	Yq11.223	0.043958201	0.326132025	0.411287927
DNAJC28	21q22.11	0.043951479	0.326206082	0.411355614
ZNF543	19q13.43	0.043946179	0.326264473	0.411403536
CSNK1G2	19p13.3	-0.043934919	0.326388566	0.411534296
SNORA32	11q21	-0.04390936	0.326670354	0.411863859
DCC	18q21.2	-0.043906945	0.326696983	0.4118717

NXNL1	19p13.11	-0.043882707	0.326964361	0.412183035
CTBP2	10q26.13	0.043867834	0.327128504	0.412364199
ASMTL	Xp22.33 and Yp11	0.043864876	0.327161158	0.4123796
IL17C	16q24.2	0.043856828	0.327249998	0.412465816
CCDC196	14q23.3	-0.043837952	0.327458454	0.412702776
GXYLT1	12q12	0.043833348	0.32750784	0.41271745
S100A9	1q21.3	0.043833194	0.327511003	0.41271745
PGM5P2	9p11.2	0.043830131	0.327544845	0.412734322
LINC00930	15q26.1	0.043817503	0.327684367	0.412884348
HMG5	Xq21.1	0.043811628	0.327749288	0.412940365
CARHSP1	16p13.2	0.043808574	0.327783037	0.412957102
SSR2	1q22	-0.043779183	0.328107982	0.413340677
PITX2	4q25	-0.043775488	0.328148842	0.413347878
DHRS7C	17p13.1	0.043774962	0.328154666	0.413347878
XRCC6P5	Xq22.1	0.043755342	0.328371715	0.413595458
GPX6	6p22.1	0.043749584	0.328435432	0.413649893
RNF114	20q13.13	-0.0437371	0.328573607	0.413798091
NSD2	4p16.3	-0.04372145	0.328746874	0.413990462
TEX37	2p11.2	0.043706008	0.328917892	0.414166326
KDM4D	11q21	0.043705134	0.328927575	0.414166326
SLC30A10	1q41	0.043698371	0.329002496	0.414234814
GORAB	1q24.2	0.043690913	0.329085125	0.414305757
ANKLE1	19p13.11	-0.043689579	0.329099905	0.414305757
CCSAP	1q42.13	-0.043681752	0.329186644	0.414373902
CFL2	14q13.1	0.043680989	0.329195105	0.414373902
AASDH	4q12	-0.043676408	0.329245873	0.414411955
AMOT	Xq23	0.043672686	0.329287125	0.414438028
MAGEA11	Xq28	-0.043640482	0.329644236	0.414861609
LINC01126	2p21	-0.043636924	0.329683703	0.414885403
RAD1	5p13.2	0.043624401	0.329822656	0.415034383
MYH7B	20q11.22	-0.043615471	0.329921751	0.415108647
ZNF300	5q33.1	-0.043614	0.329938079	0.415108647
GGA1	22q13.1	-0.043613522	0.329943386	0.415108647
BAIAP2L2	22q13.1	-0.043593769	0.330162681	0.415352751
USP37	2q35	-0.043592337	0.330178575	0.415352751
PRM2	16p13.13	0.043586738	0.330240759	0.415405078
PAIP1	5p12	0.043582031	0.330293031	0.415444933
VN1R1	19q13.43	0.043569296	0.330434499	0.415596969
RPS28	19p13.2	-0.043526493	0.330910259	0.416169405
NXPH4	12q13.3	-0.043517427	0.331011079	0.416270259
ZBTB2	6q25.1	0.043512179	0.331069458	0.416317729
OSTN	3q28	0.043501813	0.331184774	0.416436787
SATL1	Xq21.1	-0.043493189	0.33128074	0.4165315
SOCS7	17q12	-0.043484219	0.331380571	0.416631062
NPIB3	16p12.2	0.043481356	0.331412436	0.416645166
FLJ44635	Xq13.1	0.043478782	0.331441094	0.416655235
C19ORF44	19p13.11	0.043472672	0.331509106	0.416714773
DEFA4	8p23.1	0.043467698	0.331564488	0.416758428
LMNTD1	12p12.1	0.043456099	0.331693657	0.416894818
LYPD4	19q13.2	0.043432241	0.331959436	0.417202881
LRRTM2	5q31.2	-0.043416854	0.33213092	0.417392404
TSNAX-DISC1	1q42.2	0.043399503	0.332324355	0.417609488
DBNDD1	16q24.3	-0.043386693	0.332467224	0.417763007
SNORA70	Xq28	-0.043374002	0.332608793	0.417914872
ANXA2P2	9p13.3	0.043363122	0.332730194	0.418041379
KLHDC4	16q24.2	-0.043294033	0.333501775	0.418984704
MARK3	14q32.32-q32.33	-0.043280674	0.333651108	0.419137899
KIR3DL3	19q13.42	0.043279408	0.333665256	0.419137899

SPINK14	5q32	-0.043273489	0.333731432	0.419194932
SMARCD1	12q13.12	-0.043223513	0.334290527	0.41985969
ATAD3A	1p36.33	0.043222463	0.334302277	0.41985969
ENGASE	17q25.3	-0.043214257	0.334394146	0.419948934
SFT2D1	6q27	0.043192309	0.334639924	0.420225424
RAI1	17p11.2	0.043190877	0.334655957	0.420225424
RPL10L	14q21.2	-0.043182362	0.334751345	0.420293277
DEFB107A	8p23.1	-0.043181747	0.334758235	0.420293277
RPL5	1p22.1	-0.043180476	0.334772479	0.420293277
GAGE2B	Xp11.23	0.043175911	0.334823621	0.42032558
PRH2	12p13.2	0.0431723	0.334864085	0.42032558
HIST1H3G	6p22.2	-0.043170995	0.334878712	0.42032558
DYDC1	10q23.1	0.043170743	0.334881528	0.42032558
PRAC1	17q21.32	0.043124797	0.335396659	0.420945962
ZBTB34	9q33.3	-0.043110337	0.335558877	0.421118805
NF1P2	15q11.2	0.043108801	0.335576113	0.421118805
NOP53	19q13.33	0.043101653	0.335656323	0.421172971
TVP23C	17p12	-0.043100413	0.335670246	0.421172971
TRIM32	9q33.1	-0.043097645	0.335701305	0.421172971
SLC30A4	15q21.1 15q21.1	0.043097408	0.335703971	0.421172971
LOC100130331	1q43	-0.043095656	0.335723635	0.421172971
KRBA2	17p13.1	0.043093018	0.335753241	0.421183926
HMGCS2	1p12	-0.043077806	0.335924021	0.421371966
PAN2	12q13.3	-0.043036381	0.336389356	0.421911964
DNASE1	16p13.3	-0.043034759	0.336407588	0.421911964
PKNOX1	21q22.3	0.0430339	0.336417241	0.421911964
HIST1H2BI	6p22.2	-0.043021319	0.33655866	0.422063091
MMP21	10q26.2	0.043016107	0.33661726	0.422085373
DDX11L2	2q14.1	-0.043016018	0.336618262	0.422085373
MST1P2	1p36.13	-0.042986569	0.336949467	0.422474418
DICER1	14q32.13	-0.042969392	0.337142747	0.422690493
DDX3X	Xp11.4	0.042958322	0.337267343	0.422820434
ARL6	3q11.2	-0.042950211	0.33735866	0.422908641
OR10G7	11q24.2	-0.042944032	0.337428241	0.422969591
AP2B1	17q12	0.04292874	0.337600459	0.423159182
ANKRD65	1p36.33	0.04292416	0.337652057	0.423197569
CAND2	3p25.2	-0.042898299	0.337943467	0.423536502
NKPD1	19q13.32	-0.042896392	0.337964968	0.423537143
LENG1	19q13.42	0.042868384	0.338280766	0.423886336
DRAP1	11q13.1	0.042867953	0.338285621	0.423886336
EBNA1BP2	1p34.2	-0.04286075	0.338366877	0.423961826
VAMP8	2p11.2	-0.042855262	0.338428789	0.424013072
OR51E2	11p15.4	-0.042844679	0.338548196	0.424136341
FAM170A	5q23.1	0.042841146	0.338588059	0.424159698
CSNK1A1P1	15q14	0.042839302	0.338608879	0.424159698
POLR2M	15q21.3	-0.04282253	0.338798191	0.424370496
FTHL17	Xp21.2	0.04280581	0.338986988	0.424580623
DPH2	1p34.1	-0.042791613	0.339147356	0.42475512
ARMCX3	Xq22.1	0.042752201	0.339592793	0.425286599
SEPSECS	4p15.2	0.042748765	0.339631637	0.425308849
TSKU	11q13.5	-0.042746284	0.339659693	0.425317589
TRAF3	14q32.32	0.042741943	0.339708783	0.425352663
SSX6P	Xp11.23	-0.04271851	0.33997386	0.425658158
NEIL2	8p23.1	-0.042714316	0.340021314	0.425691159
DCAF8	1q23.2	-0.042668702	0.340537726	0.426292905
BNC1	15q25.2	0.04266813	0.340544211	0.426292905
SMOC2	6q27	0.042664504	0.340585287	0.426317877
PXT1	6p21.31	0.042638787	0.340876684	0.42665616

SYNPR	3p14.2	0.042632928	0.340943096	0.426712816
MT4	16q13	0.042617061	0.341122975	0.426911468
RNF141	11p15.4 11p15	-0.042599136	0.341326271	0.4271394
FREM1	9p22.3	-0.042587314	0.3414604	0.427280753
TCAF2	7q35	0.042568123	0.341678193	0.427526772
OR4F4	15q26.3	0.042557013	0.34180431	0.427658059
ASTL	2q11.2	-0.04254989	0.341885195	0.427732739
TTY23	Yp11.2	-0.042524502	0.342173559	0.428066972
STAT5B	17q21.2	0.042506191	0.342381645	0.428300739
KCTD19	16q22.1	0.042497729	0.342477827	0.428394499
KCNJ9	1q23.2	-0.0424878	0.342590717	0.428509148
SPTBN5	15q15.1	0.042477658	0.342706043	0.428626828
EIF4G2	11p15.4	0.042460577	0.342900341	0.428843259
DNAJB4	1p31.1	-0.042456092	0.342951369	0.428880496
SGMS1	10q11.23	-0.042448458	0.343038237	0.428962545
ADA	20q13.12	-0.042439297	0.343142498	0.429066332
OBSCN	1q42.13	0.042421261	0.343347819	0.429269866
PTPN13	4q21.3	-0.042421261	0.343347819	0.429269866
C5ORF24	5q31.1	0.04241544	0.343414103	0.429326138
TFF2	21q22.3	0.042389599	0.343708457	0.42966751
CCDC38	12q23.1	-0.042379161	0.343827398	0.429789573
TMEM120B	12q24.31	0.042369635	0.34393597	0.429898658
KRT27	17q21.2	0.04234562	0.344209784	0.43021426
MLANA	9p24.1	0.042329488	0.344393793	0.430417587
DDX39B	6p21.33	0.042326312	0.344430033	0.430436219
TAS2R41	7q35	0.04231155	0.344598477	0.430620057
FAM27B	9q21.11	0.042270924	0.345062334	0.431173004
ARHGAP5-AS1	14q12	-0.042244103	0.345368773	0.431529193
ZFAT-AS1	8q24.22	-0.042238372	0.345434285	0.431584326
NWD2	4p14	0.042202918	0.345839682	0.432064075
SNORA84	9q22.31	-0.042198876	0.345885922	0.432095092
CRK	17p13.3	0.042188229	0.346007734	0.432220506
STARD3	17q12	-0.042180213	0.346099462	0.432308328
ZNF570	19q13.12	0.042172293	0.346190113	0.432394794
NKX6-3	8p11.21	0.042159001	0.346342274	0.43255807
C7ORF57	7p12.3	0.042151443	0.346428819	0.432639383
DNMT1	19p13.2	-0.042145096	0.3465015	0.432703371
S100G	Xp22.2	0.042124611	0.346736158	0.432969612
SECISBP2	9q22.2	-0.042110456	0.346898366	0.433145358
GABPB1-IT1	15q21.2	-0.042096047	0.347063539	0.433324783
C16ORF92	16p11.2	0.042094077	0.347086125	0.433326172
RAB34	17q11.2	0.042076484	0.34728786	0.433551207
ZNF19	16q22.2	0.042063029	0.347442202	0.433717055
CPD	17q11.2	0.04202858	0.34783756	0.434183726
CYP11B1	8q24.3	-0.042013681	0.348008643	0.43437041
SETD1B	12q24.31	0.042007109	0.348084119	0.434437743
CAPN15	16p13.3	-0.041999857	0.348167426	0.434514842
TUBB2B	6p25.2	0.041995286	0.348219932	0.434553495
STAG3L2	7q11.23	-0.041990077	0.348279789	0.434591557
DBNL	7p13	0.041988883	0.348293506	0.434591557
BTNL8	5q35.3	0.041983544	0.348354857	0.434641233
RAB6A	11q13.4	-0.041971992	0.348487618	0.434774722
C16ORF89	16p13.3	0.041970485	0.348504937	0.434774722
ZNF302	19q13.11	-0.041964644	0.348572083	0.434831606
ANAPC16	10q22.1	-0.041955102	0.348681797	0.434941583
OR10Q1	11q12.1	0.041945744	0.348789409	0.435048924
ASAH2	10q11.23	0.041941137	0.348842396	0.435081294
HEXD	17q25.3	-0.041939738	0.348858483	0.435081294

ZNF623	8q24.3	0.041933631	0.348928735	0.435142015
HNF1A-AS1	12q24.31	-0.041904747	0.349261104	0.435510949
ITLN2	1q23.3	-0.04190417	0.349267738	0.435510949
CYB561D2	3p21.31	-0.0418988	0.349329558	0.435561119
VPS35L	16p12.3	0.041896749	0.349353166	0.435563641
UHRF2	9p24.1	0.041894029	0.349384488	0.43557578
PGK2	6p12.3	0.041868635	0.349676919	0.435913421
CARS2	13q34	0.04186645	0.34970209	0.43591787
CCDC6	10q21.2	0.04183205	0.350098513	0.43638507
RNU11	1p35.3	-0.041828927	0.350134512	0.436402984
KRTAP19-5	21q22.11	0.041823244	0.350200042	0.436457702
HOXD11	2q31.1	-0.041813098	0.350317039	0.436576552
ACAA1	3p22.2	-0.041811007	0.350341144	0.43657963
OR8B8	11q24.2	0.041774324	0.350764376	0.437080051
LRRC61	7q36.1	0.04172436	0.35134135	0.437771973
ERICH6	3q25.1	-0.041722481	0.351363065	0.437771998
FITM2	20q13.12	0.041719302	0.351399788	0.437790722
LBP	20q11.23	-0.041696004	0.351669073	0.438099161
SH2D6	2p11.2	-0.041680011	0.351853981	0.438279909
FAM221B	9p13.3	-0.041679698	0.351857601	0.438279909
HIST1H2BA	6p22.2	0.041662701	0.352054197	0.438497725
SLC26A4-AS1	7q22.3	0.041609555	0.352669372	0.439216708
SULT1A2	16p11.2	-0.041608705	0.352679212	0.439216708
CBLIF	11q12.1	-0.041607191	0.352696741	0.439216708
AP4E1	15q21.2	0.041601546	0.35276213	0.439271029
SHISA6	17p12	0.041599038	0.352791184	0.4392801
COL4A5	Xq22.3	0.041588855	0.35290915	0.439399873
OR2T2	1q44	-0.041579892	0.353013007	0.439485612
PRLHR	10q26.11	0.041579153	0.353021572	0.439485612
SMAD4	18q21.2	-0.041577021	0.353046278	0.439489256
DMRTC1B	Xq13.1	0.041565262	0.353182573	0.439631802
MTAP	9p21.3	0.041554214	0.353310654	0.439745244
BZW1	2q33.1	0.041553642	0.353317293	0.439745244
PSMB2	1p34.3	0.04155097	0.353348274	0.439756681
CEACAM1	19q13.2	0.041539996	0.353475537	0.439863224
NEXMIF	Xq13.3	-0.041539828	0.353477478	0.439863224
BAZ1A	14q13.1-q13.2	-0.041525777	0.353640469	0.440026931
DHX32	10q26.2	0.041524727	0.353652647	0.440026931
SCARNA2	1p13.3	-0.041517124	0.353740866	0.440085815
SNORA54	11p15.4	-0.041516813	0.353744474	0.440085815
OR8G2P	11q24.2	-0.041512733	0.353791825	0.440085815
FAM53C	5q31.2	-0.041512322	0.35379659	0.440085815
FABP6	5q33.3	0.041511251	0.353809018	0.440085815
OR2D2	11p15.4	0.041463746	0.354360583	0.440733316
PANX3	11q24.2	0.041462654	0.354373262	0.440733316
ATL2	2p22.2-p22.1	-0.041433118	0.354716481	0.441132988
TCERG1	5q32	-0.041407783	0.355011041	0.441472102
CNOT9	2q35	-0.041396666	0.355140346	0.441605684
N4BP2L2-IT2	13q13.1	0.041372809	0.355417925	0.441923612
GUCD1	22q11.23	0.041323186	0.355995737	0.442614786
LPP	3q27.3-q28	-0.041301143	0.356252603	0.442898934
GALNT11	7q36.1 7q36.1	0.041299807	0.356268174	0.442898934
ZNF574	19q13.2	0.041292936	0.356348263	0.442971206
WFDC10A	20q13.12	0.041270033	0.356615313	0.443275866
OR52J3	11p15.4	-0.041267393	0.356646103	0.443286832
ZKSCAN2	16p12.1	0.041262113	0.356707686	0.443336068
IFNL2	19q13.2	0.041251809	0.356827896	0.443458158
NPHS2	1q25.2	0.041243274	0.35692748	0.443540259

CPS1-IT1	2q34	-0.04124238	0.356937919	0.443540259
POLG	15q26.1	0.041236157	0.357010536	0.443603177
SPATA20	17q21.33	-0.041223847	0.357154223	0.443754391
GNAI1	7q21.11	-0.041209724	0.357319118	0.443931934
EPB41L4A	5q22.1-q22.2	0.041189303	0.357557632	0.444200914
ST3GAL1	8q24.22	0.04118539	0.35760334	0.444230349
GPBP1	5q11.2	0.041175752	0.357715953	0.444321708
ABCB9	12q24.31	-0.041174416	0.357731564	0.444321708
RPL32P3	3q21.3	-0.041172985	0.357748292	0.444321708
DEUP1	11q21	-0.041171558	0.357764959	0.444321708
IDI2	10p15.3	0.041169073	0.357794003	0.444330432
OPTC	1q32.1	0.041149897	0.358018153	0.444581434
FAM13B	5q31.2	0.041123267	0.358329584	0.444940784
SMG1P2	16p11.2	-0.041113725	0.358441225	0.445052023
TM2D3	15q26.3	-0.041109717	0.35848812	0.445082863
KDM4C	9p24.1	-0.041097216	0.358634414	0.445237101
ZCWPW1	7q22.1	-0.041088438	0.358737165	0.445337266
TPH1	11p15.1	0.041080371	0.358831606	0.445427102
EZH1	17q21.2	0.041074218	0.358903647	0.445489125
GNG13	16p13.3	0.041070759	0.358944153	0.445511998
FBRSL1	12q24.33	-0.041052461	0.359158474	0.445750591
MS4A1	11q12.2	0.041022039	0.35951497	0.446165595
SLC2A4	17p13.1	0.041014958	0.359597982	0.446217336
OR2M4	1q44	0.04101471	0.359600888	0.446217336
METTL15	11p14.1	-0.041010569	0.359649448	0.446244115
AHSA2P	2p15	-0.041008947	0.359668457	0.446244115
PPAN-P2RY11	19p13.2	-0.041005562	0.35970815	0.446244115
EPHA5	4q13.1-q13.2	-0.041005325	0.359710926	0.446244115
SERHL	22q13.2	-0.040972304	0.360098266	0.446697173
HESX1	3p14.3	0.040964384	0.360191212	0.446785006
PACRG	6q26	-0.040958376	0.360261731	0.446845011
SREK1	5q12.3	0.040954076	0.3603122	0.44688014
ALS2	2q33.1	0.040951644	0.360340753	0.446888086
MT1IP	16q13	0.040937083	0.3605117	0.447072615
SPINT4	20q13.12	0.040923141	0.360675438	0.447248182
TGIF2LX	Xq21.31	0.040918249	0.360732907	0.447291958
C11ORF87	11q22.3	-0.040896432	0.36098924	0.447582297
SSH2	17q11.2	0.040888805	0.361078887	0.447654557
GABRA5	15q12	0.040887699	0.361091889	0.447654557
TCEANC2	1p32.3	0.040881933	0.361159662	0.447711072
CADM4	19q13.31	0.040878593	0.361198927	0.447732241
CT47A10	Xq24	0.040871325	0.361284384	0.447785706
JADE2	5q31.1	0.04087115	0.36128644	0.447785706
KRTAP10-8	21q22.3	-0.040866922	0.361336162	0.447819826
BPESC1	3q23	0.040855908	0.361465692	0.447952846
KIR2DL1	19q13.42	0.040844527	0.361599568	0.448091236
SNRPB2	20p12.1	-0.040839755	0.361655714	0.448133291
PCSK6	15q26.3	0.040824868	0.361830892	0.448322828
BBS4	15q24.1	0.040809886	0.362007247	0.448513798
AASDHPPT	11q22.3	-0.040786888	0.362278062	0.448821771
VHL	3p25.3	0.040781068	0.362346617	0.448879144
RNF5P1	8p11.22	0.04077353	0.362435428	0.448961603
ZNF337	20p11.21	-0.040768566	0.362493905	0.449006477
HNRNPR	1p36.12	-0.040754157	0.362663714	0.449189239
LANCL3	Xp21.1	-0.040739543	0.362835984	0.449348529
SOHLH1	9q34.3	-0.040739469	0.362836857	0.449348529
MORC2	22q12.2	-0.040732495	0.362919082	0.449422777
SREK1IP1	5q12.3	-0.040719708	0.36306988	0.44957664

UVSSA	4p16.3	0.040718181	0.363087889	0.44957664
TCEANC	Xp22.2	0.040691748	0.363399748	0.449929866
SQOR	15q21.1	-0.040690222	0.363417755	0.449929866
SPATA31A1	9p12	0.040667816	0.36368224	0.450229688
CBFA2T2	20q11.21-q11.22	0.040661021	0.36376248	0.450301398
PKN1	19p13.12	-0.04061951	0.364252864	0.450869023
LOC145474	14q24.2	-0.040618423	0.364265706	0.450869023
SPHAR	1q42.13	0.040612544	0.364335199	0.450927379
TMEM89	3p21.31	0.040593368	0.364561905	0.451180293
POLR3GL	1q21.1	0.0405905	0.364595814	0.451194587
ARHGAP32	11q24.3	0.040586874	0.364638697	0.451217451
CCDC57	17q25.3	-0.040585156	0.364659011	0.451217451
SPANXN2	Xq27.3	0.040549611	0.365079548	0.451710111
GNAT3	7q21.11	0.040545456	0.365128721	0.451743253
NOTCH3	19p13.12	-0.040543264	0.365154667	0.451747656
STRN4	19q13.32	0.040533721	0.365267631	0.451859706
C4ORF19	4p14	0.040512537	0.365518489	0.452142315
TTC17	11p12-p11.2	-0.040490302	0.365781892	0.452440407
CPT2	1p32.3	-0.040477801	0.365930038	0.452595908
LRRC3B	3p24.1	0.040472034	0.365998393	0.452652707
BAGE	21p11.1	0.040452119	0.366234512	0.452916972
C1ORF116	1q32.1	0.040440394	0.366373567	0.453061172
ATP8B3	19p13.3	0.040434859	0.366439219	0.453114591
MXD1	2p13.3	0.040413388	0.366693975	0.453401821
REXO1L6P	8q21.2	0.040408591	0.36675091	0.453444434
TMEM254-AS1	10q22.3	-0.040405086	0.36679251	0.453459893
ANXA9	1q21.3	0.040403751	0.366808357	0.453459893
SPDYE2	7q22.1	0.040392872	0.366937507	0.453591763
ZNF442	19p13.2	-0.040390869	0.366961293	0.45359338
PPIAP80	7p15.1	-0.040385754	0.36702202	0.453640316
TNFRSF18	1p36.33	-0.040383138	0.367053085	0.453640316
CT45A6	Xq26.3	-0.040381991	0.367066707	0.453640316
SCN1A	2q24.3	0.040344352	0.367513844	0.454165097
GPR19	12p13.1	0.040324833	0.367745853	0.454423979
LY6K	8q24.3	0.040312522	0.367892234	0.454577025
TTR	18q12.1	-0.040297356	0.368072615	0.454772061
DIS3L2	2q37.1	-0.040284562	0.368224821	0.454932264
PRKY	Yp11.2	0.040278871	0.368292539	0.454988071
IQCH	15q23	0.040262137	0.368491707	0.455205892
TBC1D28	17p11.2	0.040260267	0.368513972	0.455205892
COX18	4q13.3	-0.040255648	0.368568955	0.455245942
CHRNA4	20q13.33	-0.040249149	0.368646332	0.455313645
FCN3	1p36.11	0.040239998	0.368755303	0.455410017
POLA1	Xp22.11-p21.3	-0.040238806	0.368769497	0.455410017
ZNF670	1q44	-0.040226973	0.368910436	0.455556189
NBN	8q21.3	0.040209748	0.369115664	0.455780187
CT45A1	Xq26.3	-0.040207957	0.369137004	0.455780187
MBD1	18q21.1	-0.040186941	0.3693875	0.456061574
REG1A	2p12	-0.040176645	0.369510254	0.456169782
SSX5	Xp11.23	0.040175798	0.369520355	0.456169782
CNOT3	19q13.42	0.040167618	0.369617907	0.456262295
BAX	19q13.33	-0.0401544	0.369775564	0.456428989
CTAG2	Xq28	-0.040117721	0.370213286	0.456941336
SPERT	13q14.13	-0.040104715	0.370368578	0.457105049
KRTAP13-4	21q22.11	0.040079982	0.370663991	0.457441666
SLC18A3	10q11.23	-0.04006944	0.37078996	0.457569141
DUSP2	2q11.2	0.040066512	0.370824942	0.457584328
ZNF451	6p12.1	0.040053725	0.370977774	0.457744925

KRT33B	17q21.2	-0.040047646	0.371050451	0.457806607
FAM226B	Xq13.1	-0.040012345	0.371472614	0.458299455
RPL7L1	6p21.1	0.039994179	0.371689981	0.458539593
AGBL2	11p11.2	-0.039989599	0.37174479	0.458579173
TMEM131L	4q31.3	0.03997977	0.371862441	0.458696265
SPDL1	5q35.1	-0.039972899	0.371944708	0.458769699
CSAG2	Xq28	0.039967687	0.372007112	0.458818624
BEND4	4p13	0.039953168	0.37218099	0.459005024
SPINK2	4q12	0.039946675	0.372258766	0.459072886
ZNF821	16q22.2	0.039940358	0.372334433	0.45913814
CEP295	11q21	-0.039852089	0.373392874	0.460415204
LINC00092	9q22.32	-0.039849614	0.373422574	0.460423691
ARL8A	1q32.1	-0.039846745	0.373457013	0.460438019
OR8D1	11q24.2	0.039832463	0.373628463	0.460593761
1-Dec	9q33.1	0.039832419	0.373628984	0.460593761
TREML5P	6p21.1	-0.039822389	0.373749417	0.46071408
BCAR4	16p13.13	-0.039798999	0.374030367	0.461032238
WNT11	11q13.5	-0.03976172	0.374478411	0.461556307
PRAMEF4	1p36.21	-0.039756719	0.374538537	0.461602219
NUP153	6p22.3	-0.039722595	0.374948993	0.462079866
SIN3B	19p13.11	0.039718873	0.374993775	0.462106832
WFDC6	20q13.12	0.039699473	0.375227268	0.462366331
KRTAP4-4	17q21.2	0.039691893	0.375318517	0.462450531
DFFB	1p36.32	0.039670159	0.375580247	0.462744768
RAB21	12q21.1	-0.039655319	0.375759016	0.462936759
EIF3C	16p11.2	-0.039647829	0.375849265	0.463019677
PPP5C	19q13.32	-0.039644154	0.375893549	0.463045963
TRIM40	6p22.1	0.039637727	0.375971002	0.463113103
HMGN4	6p22.2	-0.039622969	0.376148899	0.463303951
ANKRD20A8P	2q11.1	-0.039617592	0.376213727	0.463355517
SPATA32	17q21.31	0.039611585	0.376286164	0.463416449
SFTA2	6p21.33	0.039593719	0.376501639	0.463653519
TMEM39A	3q13.33	0.03958747	0.376577022	0.463718053
SPSB3	16p13.3	0.039576115	0.376714039	0.463840505
CHRNA2	1q21.3	-0.039575419	0.376722436	0.463840505
ZNF785	16p11.2	0.03957058	0.376780831	0.4638841
LMO7	13q22.2	0.039567908	0.376813078	0.463895498
ST7-AS2	7q31.2	0.039557257	0.376941643	0.464025465
TRMT44	4p16.1	-0.039543765	0.377104532	0.464197666
APC2	19p13.3	-0.039540808	0.377140241	0.464213306
AKIRIN2	6q15	0.039523821	0.377345402	0.464437503
H1FNT	12q13.11	0.03951897	0.377404001	0.464481296
IL1RL2	2q12.1	0.03950768	0.377540408	0.464620839
TBX18	6q14.3	0.039496293	0.377678016	0.464761842
NBPF1	1p36.13	0.039482215	0.377848191	0.464942902
SNX25	4q35.1	0.03947668	0.377915107	0.464996887
SEPTIN7P9	10p11.1	0.03945049	0.378231846	0.465358236
C3ORF49	3p14.1	0.039427913	0.378505027	0.465665951
NINL	20p11.21	0.039422287	0.378573116	0.465721325
TOMM40L	1q23.3	-0.039405874	0.37877181	0.465937355
PTOV1	19q13.33	0.039389842	0.378965946	0.46614775
SUN1	7p22.3	0.039384593	0.379029516	0.466197526
HCLS1	3q13.33	0.039372665	0.379174017	0.466346833
LINC00928	15q26.1	-0.039356286	0.379372487	0.466555021
GABRG3	15q12	0.03935488	0.379389531	0.466555021
INHBE	12q13.3	0.039331727	0.379670201	0.466871723
SAT1	Xp22.11	-0.039308061	0.37995722	0.467196194
TMEM213	7q34	0.039302671	0.380022613	0.46724813

TTLL8	22q13.33	0.039280299	0.380294093	0.467553434
GFRA4	20p13	0.039253452	0.380620025	0.467925642
SNAPC3	9p22.3	-0.039236158	0.380830078	0.468155354
DEPDC5	22q12.2-q12.3	-0.03923172	0.380883996	0.468193114
ARIH2	3p21.31	0.039221223	0.381011536	0.468312789
CXCL14	5q31.1	0.039219887	0.38102777	0.468312789
EMC2	8q23.1	-0.039216452	0.381069517	0.468335574
PKD2L2	5q31.2	0.039209784	0.381150548	0.468386846
DNAH2	17p13.1	0.039209199	0.381157659	0.468386846
TBC1D15	12q21.1	-0.039206099	0.381195344	0.46840463
HBB	11p15.4	0.039175323	0.38156954	0.468835885
BEND2	Xp22.13	0.039172227	0.381607195	0.468853603
DUPD1	10q22.2	0.039159948	0.381756559	0.469008561
LYZL1	10p12.1-p11.23	0.039152942	0.381841796	0.469084719
ADAM30	1p12	0.039140078	0.38199835	0.469232262
TMEM219	16p11.2	0.039139251	0.382008405	0.469232262
TMEM247	2p21	-0.039134364	0.382067895	0.469265986
MBD3L1	19p13.2	-0.039133174	0.38208237	0.469265986
TVP23B	17p11.2	-0.039129995	0.382121073	0.469284957
SNX3	6q21	0.039127228	0.382154762	0.469297769
HIST1H4L	6p22.1	0.039112055	0.382339502	0.469496064
STMN4	8p21.2	-0.039097518	0.382516549	0.469684887
KPTN	19q13.32	0.039077511	0.382760288	0.469955574
SLX4IP	20p12.2	0.039071689	0.382831236	0.470014086
DAOA	13q33.2 13q34	0.039051794	0.383073746	0.47028321
SPTSSB	3q26.1	-0.039034434	0.383285421	0.470514449
SNAP29	22q11.21	-0.039016628	0.38350262	0.470752441
C2ORF72	2q37.1	-0.03900556	0.383637671	0.47087101
OR4F29	1p36.33	-0.039004887	0.383645883	0.47087101
OR2AT4	11q13.4	-0.038997327	0.383738142	0.4709556
SH2D5	1p36.12	0.038987065	0.383863388	0.471069117
OR4Q3	14q11.2	0.038985924	0.383877326	0.471069117
UBE3C	7q36.3	-0.038956605	0.384235329	0.471479763
SGSM3	22q13.1	0.038938569	0.384455658	0.471721435
C3ORF14	3p14.2	-0.038934275	0.384508129	0.471725044
NKX1-2	10q26.13	0.038933418	0.384518598	0.471725044
DCDC2B	1p35.2	0.038932589	0.384528731	0.471725044
MED21	12p11.23	-0.038921679	0.384662068	0.471859931
CEP250	20q11.22	0.038917624	0.384711628	0.471892039
UBE3B	12q24.11	0.038914522	0.38474955	0.471909869
FAM187B	19q13.12	0.038909454	0.384811495	0.471957161
MALAT1	11q13.1	-0.03890412	0.384876712	0.472008458
CXXC4	4q24	0.038894829	0.384990316	0.472119088
NANOG	12p13.31	0.038888271	0.385070517	0.472188743
PNPLA3	22q13.31	0.038886141	0.385096568	0.472191994
HORMAD2	22q12.2	0.03888159	0.385152233	0.472231553
SNORA71E	20q11.23	-0.038858892	0.385429934	0.472535377
PLSCR5	3q24	-0.038857509	0.385446866	0.472535377
MAML3	4q31.1	-0.038849631	0.385543274	0.472623346
BEX4	Xq22.1	0.038847818	0.385565466	0.472623346
KBTD6	13q14.11	0.038812988	0.385991935	0.473117369
MIOS	7p21.3	0.038783882	0.386348519	0.473525679
YAF2	12q12	-0.038780161	0.38639413	0.473552818
TXNDC16	14q22.1	-0.038769759	0.386521623	0.4736803
KRTAP5-3	11p15.5	0.03876447	0.386586468	0.473730998
CSNK2A2	16q21	-0.038762507	0.386610532	0.473731718
TRAF2	9q34.3	0.038760026	0.386640951	0.473740224
RANBP9	6p23	0.038748765	0.386779026	0.473880629

COA7	1p32.3	-0.038744376	0.38683286	0.473917812
TET2	4q24	-0.038735692	0.386939371	0.474019522
SCARNA21	17p13.1	-0.038696587	0.387419229	0.47457856
DLK2	6p21.1	-0.038666698	0.387786239	0.474999303
ZNF74	22q11.21	-0.038641315	0.388098094	0.47535244
C1ORF229	1q44	-0.038625976	0.388286623	0.475508185
OR5W2	11q12.1	-0.038625217	0.388295945	0.475508185
OR6C74	12q13.2	-0.038625217	0.388295945	0.475508185
PLIN5	19p13.3	0.038618794	0.388374906	0.475576019
SH3GL2	9p22.2	0.038611719	0.388461892	0.475653673
KRTAP10-11	21q22.3	-0.038598422	0.388625409	0.475825019
KCNQ5	6q13	-0.038595082	0.388666497	0.475846453
TNFRSF11A	18q21.33	0.038591598	0.388709351	0.475868781
RPS4Y1	Yp11.2	0.038589765	0.388731898	0.475868781
CLASP2	3p22.3	0.038581005	0.388839655	0.475971817
GALK2	15q21.1-q21.2	-0.038570031	0.388974684	0.476108222
DIRC3	2q35	-0.038559519	0.389104059	0.47623769
CSAG1	Xq28	0.0385148	0.389654702	0.476882717
LINC00113	21q21.3	0.038506917	0.389751814	0.476960404
EMSY	11q13.5	0.03850581	0.389765452	0.476960404
TRNP1	1p36.11	0.038502947	0.389800725	0.476974642
HS1BP3	2p24.1	-0.038436911	0.390614901	0.477933876
ZBTB44	11q24.3	0.038433762	0.390653753	0.477933876
VCX2	Xp22.31	-0.038433604	0.390655699	0.477933876
INCA1	17p13.2	0.038417826	0.390850401	0.478143088
C1QTNF12	1p36.33	0.03840488	0.391010194	0.478309572
TMEFF2	2q32.3	0.038397906	0.391096285	0.478382764
LINC00461	5q14.3	0.038396193	0.391117441	0.478382764
TDGF1P3	Xq23	0.038390987	0.391181719	0.478432384
STRN	2p22.2	-0.03836286	0.39152912	0.478828249
CIDEB	14q12	0.038360188	0.391562131	0.478839601
ZNF202	11q24.1	-0.038347496	0.391718959	0.479002355
SMIM21	18q23	0.038318747	0.39207434	0.479407871
WWP1	8q21.3	0.038298065	0.392330122	0.479691562
SARM1	17q11.2	0.038294153	0.392378521	0.479721671
DAPP1	4q23	-0.038270773	0.392667807	0.480046267
TGM7	15q15.2-q15.3	0.038258824	0.39281571	0.480183236
SLC7A4	22q11.21	-0.038257877	0.392827437	0.480183236
C20ORF204	20q13.33	-0.038248062	0.392948951	0.480302676
TAF11	6p21.31	-0.038234606	0.393115569	0.48047723
CATSPER4	1p36.11	-0.038220466	0.393290723	0.480662195
SLC30A9	4p13	0.038203593	0.393499779	0.480888568
OR11H6	14q11.2	-0.038192916	0.393632096	0.480997963
OTUB2	14q32.12	0.038192523	0.393636967	0.480997963
TTN	2q31.2	0.038183458	0.393749341	0.481106143
PNP	14q11.2	0.038166949	0.39395403	0.481327099
TTC9B	19q13.2	0.03816174	0.394018632	0.481376883
DSC2	18q12.1	-0.038152349	0.394135109	0.481490033
SAMD5	6q24.3	-0.038141948	0.394264132	0.481598032
ATIC	2q35	-0.038141375	0.394271247	0.481598032
LOC440040	11p11.12	-0.038133702	0.394366441	0.481685153
CAMK1D	10p13	0.038130782	0.394402677	0.481700255
ADGRL3	4q13.1	-0.038117901	0.394562548	0.481866347
IQCF2	3p21.2	0.038115451	0.394592956	0.481874319
SCRIB	8q24.3	-0.038108739	0.394676277	0.481946904
FAM47C	Xp21.1	0.038102502	0.394753709	0.482012289
CDY2B	Yq11.222	0.038094845	0.394848788	0.482099213
C6ORF120	6q27	-0.0380866	0.394951177	0.482195051

PDX1	13q12.2	0.038066329	0.395202983	0.482473288
MBOAT1	6p22.3	-0.038051006	0.395393392	0.482676543
RAB11FIP3	16p13.3	0.038042799	0.395495393	0.482771855
DEFB109A	8p23.1	0.038020544	0.395772081	0.483068225
UTP25	1q32.2	0.038019419	0.395786063	0.483068225
CLCA3P	1p22.3	0.038014865	0.395842701	0.483088002
HOXD9	2q31.1	0.038014266	0.395850147	0.483088002
SCARNA8	9p22.1	0.038010013	0.395903048	0.483123343
SNAP23	15q15.1-q15.2	0.038002911	0.39599139	0.483201926
CLDN12	7q21.13	0.037949185	0.396660034	0.483988562
SNORA49	12q24.33	-0.03793893	0.39678774	0.48411511
LINC00235	16p13.3	-0.037923146	0.396984357	0.484325716
CBX7	22q13.1	0.037912255	0.397120047	0.484461969
TRIB3	20p13	-0.037902522	0.397241344	0.484580648
GOSR2	17q21.32	-0.037892216	0.397369801	0.484708046
ATP6V0B	1p34.1	0.037882196	0.397494713	0.484831105
THOC6	16p13.3	-0.037869218	0.397656539	0.484999172
EGFL7	9q34.3	-0.037859961	0.397771983	0.485106594
C7ORF66	7q31.1	0.037858301	0.397792696	0.485106594
PEX13	2p15	0.037841926	0.397996979	0.485326386
ZNF595	4p16.3	0.037811158	0.398375715	0.485712773
EPS8L3	1p13.3	0.037811469	0.398377096	0.485712773
DPPA2	3q13.13	0.037810752	0.39838605	0.485712773
OR10H3	19p13.12	0.037806296	0.398441683	0.48572401
LINC00474	9q33.1	-0.037806158	0.398443408	0.48572401
ZGLP1	19p13.2	-0.037800224	0.398517499	0.485784983
OR51F2	11p15.4	-0.037787755	0.398673224	0.485927967
TMEM252	9q21.11	0.037786975	0.398682958	0.485927967
OR10AG1	11q12.1	0.037784915	0.398708697	0.485929987
CPN1	10q24.2	-0.03776055	0.399013096	0.486230356
CNNM3	2q11.2	-0.037759859	0.399021733	0.486230356
ADAD1	4q27	0.037759151	0.399030582	0.486230356
BABAM2-AS1	2p23.2	0.037757474	0.399051535	0.486230356
DTWD1	15q21.2	0.037735907	0.399321117	0.486495116
OR1D2	17p13.3	0.037735486	0.399326382	0.486495116
WDR88	19q13.11	-0.03773403	0.399344584	0.486495116
ANKRD52	12q13.3	0.037732376	0.39936526	0.486495116
OR1K1	9q33.2	0.037716598	0.399562557	0.486698859
ARMC12	6p21.31	-0.037713348	0.399603204	0.486698859
OR51S1	11p15.4	-0.03771258	0.399612809	0.486698859
GATD1	11p15.5	-0.037711287	0.39962899	0.486698859
LGALS13	19q13.2	-0.037703866	0.399721811	0.486782525
OR8K5	11q12.1	-0.037676864	0.400059676	0.487164577
CCDC15	11q24.2	0.037667104	0.400181848	0.487283944
SNORA64	16p13.3	-0.037662217	0.400243026	0.48732903
SEPTIN5	22q11.21	0.037652885	0.400359863	0.487441878
LINC01096	4p15.33	0.037639844	0.400523186	0.487611305
AP3S1	5q22.3-q23.1	0.037635566	0.40057676	0.487647107
TXNRD3NB	3q21.3	-0.037617005	0.400809294	0.48790075
XIRP2	2q24.3	0.037569145	0.401409247	0.488601593
CDC42SE1	1q21.3	0.037561848	0.401500762	0.488683508
OR7A10	19p13.12	-0.037533048	0.401862098	0.489093804
DACH1	13q21.33	-0.03751194	0.402127048	0.48938675
WASH5P	19p13.3	0.037500966	0.402264837	0.489524916
SMCO4	11q21	-0.037486366	0.402448201	0.489648845
TONSL	8q24.3	-0.037485793	0.402455393	0.489648845
CD300LG	17q21.31	0.037485247	0.402462251	0.489648845
OR6C68	12q13.2	-0.037485129	0.402463737	0.489648845

SOGA1	20q11.23	0.037482453	0.402497346	0.489660212
OR2B3	6p22.1	-0.037422526	0.403250553	0.490546956
SYNE4	19q13.12	0.037418375	0.403302746	0.490580874
PRB4	12p13.2	0.03741375	0.40336092	0.490622061
LINC00111	21q22.3	-0.037403692	0.403487433	0.490746363
TACR3	4q24	0.037392346	0.403630189	0.490877946
PSTK	10q26.13	-0.037391226	0.403644272	0.490877946
C5ORF52	5q33.3	0.037345873	0.404215186	0.49154262
DOCK3	3p21.2	0.037341794	0.404266555	0.49156484
OTUD5	Xp11.23	0.037340554	0.404282179	0.49156484
DNTTIP1	20q13.12	0.037334877	0.404353683	0.491622159
ETV7	6p21.31	0.037325381	0.404473304	0.491737969
KRTAP4-7	17q21.2	0.037314847	0.404606027	0.491817225
OR5L2	11q12.1	-0.037314614	0.40460896	0.491817225
ELOA2	18q21.1	-0.037314404	0.404611613	0.491817225
TRIM43	2q11.1	0.037284471	0.404988896	0.492246171
PFDN4	20q13.2	-0.037266407	0.40521668	0.492493368
RNFT1	17q23.1	-0.03723902	0.405562181	0.492883598
RNASE9	14q11.2	0.037235782	0.405603044	0.492903573
GPRASP2	Xq22.1	0.037226233	0.405723556	0.493020332
USP44	12q22	0.037220157	0.405800251	0.493083836
HOXC8	12q13.13	0.037218124	0.405825903	0.493085315
RNF220	1p34.1	0.03721211	0.405901835	0.493147879
CCDC96	4p16.1	0.037208961	0.405941592	0.493166489
GALNT8	12p13.32	0.037197321	0.40608856	0.493315336
CEACAM6	19q13.2	-0.037178424	0.406327242	0.493575573
AHCYL2	7q32.1	0.037162965	0.40652256	0.493783106
DRD3	3q13.31	0.037103873	0.407269673	0.494660812
SRSF8	11q21	0.03709817	0.407341816	0.494718658
AMY2A	1p21.1	0.037087723	0.407474004	0.494849417
FLJ13224	12p11.21	-0.037084709	0.407512137	0.494865945
KIR3DL2	19q13.42	0.037076249	0.407619208	0.494966181
OR5E1P	11p15.4	0.037064433	0.407768772	0.495103552
ARL5B	10p12.31	-0.037063435	0.407781408	0.495103552
TXNDC12	1p32.3	-0.037060763	0.407815235	0.495114379
CD3EAP	19q13.32	0.037058854	0.407839398	0.495114379
TSPY1	Yp11.2	-0.037045714	0.408005784	0.495271886
KDM1B	6p22.3	-0.037044731	0.408018229	0.495271886
FGA	4q31.3	0.037033621	0.408158948	0.495412897
MAP2K4	17p12	-0.037004938	0.408522348	0.495824159
BCL11A	2p16.1	-0.036982799	0.408802977	0.496134918
BPIFB6	20q11.21	0.036979753	0.408841599	0.49615195
SNORA52	11p15.5	-0.036965096	0.40902746	0.496347653
LCE1E	1q21.3	-0.036949064	0.409230815	0.496564559
RNFT2	12q24.22	-0.036937567	0.409376687	0.496711693
GAGE2A	Xp11.23	0.03692123	0.409584013	0.496933369
PCNAP1	4q23	-0.036919174	0.409610117	0.496935162
NKX2-6	8p21.2	0.036898305	0.409875057	0.497220283
STPG2	4q22.3-q23	-0.036896781	0.409894415	0.497220283
NKAPD1	11q23.1	-0.036881838	0.410084193	0.49742059
RHBDD2	7q11.23	-0.036874157	0.410181763	0.497509034
ELK1	Xp11.23	0.036869337	0.410242997	0.497553398
MRPL43	10q24.31	-0.036843095	0.410576482	0.49792793
PRIMPOL	4q35.1	-0.036812749	0.410962311	0.498365894
CCDC28A	6q24.1	0.036804733	0.411064265	0.498459576
GPR148	2q21.1	-0.0368007	0.411115564	0.498471792
PCGF6	10q24.33	-0.036800057	0.411123744	0.498471792
ACOX1	17q25.1	-0.036797767	0.411152879	0.498477166

TSPAN16	19p13.2	-0.036774513	0.411448764	0.498805924
PAPPA2	1q25.2	-0.036765231	0.411566912	0.498919183
KCNV1	8q23.2	-0.036760055	0.4116328	0.498969079
SYT2	1q32.1	-0.036740225	0.41188529	0.49924515
CHRNA3	15q25.1	-0.036694764	0.412464464	0.499917137
POU2F3	11q23.3	0.036682206	0.412624543	0.500081121
CNOT8	5q33.2	0.036678961	0.412665918	0.500101229
OR10P1	12q13.2	0.036675763	0.412706687	0.5001206
WDR25	14q32.2	0.036664074	0.412855735	0.500271175
DPP9	19p13.3	0.036657394	0.412940926	0.500344359
TSPEAR-AS2	21q22.3	-0.036644543	0.413104857	0.500512933
CREBZF	11q14.1	0.036634301	0.413235524	0.500641189
SHISA7	19q13.42	0.0366202	0.413415475	0.500803079
WDR31	9q32	0.03661994	0.413418787	0.500803079
INE1	Xp11.3	0.036597562	0.413704459	0.501119051
TMEM54	1p35.1	-0.036586206	0.413849466	0.501264608
MAGEA12	Xq28	0.036579576	0.413934139	0.501337075
GOLGA2P10	15q25.2	-0.036521316	0.414678651	0.502190789
PPY	17q21.31	0.036520523	0.414688791	0.502190789
RGS21	1q31.2	0.036516981	0.414734077	0.502214278
YARS	1p35.1	0.036515113	0.414757963	0.502214278
DBX2	12q12	0.036508486	0.414842707	0.502286751
DACH2	Xq21.2	0.036499721	0.414954816	0.502392347
CELSR1	22q13.31	0.03645843	0.415483164	0.503001845
SFR1	10q25.1	-0.036434001	0.415795938	0.503332952
HIST1H2BH	6p22.2	-0.036433172	0.415806547	0.503332952
NOC4L	12q24.33	-0.036416156	0.416024498	0.503559432
PPIAL4E	1q21.1	0.036414642	0.416043885	0.503559432
TEKT4P2	21p11.2	-0.03641272	0.416068507	0.503559432
CKB	14q32.33	-0.036409571	0.416108851	0.503578056
SNORA25	11q21	-0.036378456	0.416507604	0.504030401
TAS2R20	12p13.2	-0.036347258	0.416907651	0.504484259
LGALS9B	17p11.2	-0.036341234	0.416984922	0.504547505
CFC1B	2q21.1	0.036329439	0.417136241	0.504700336
TMEM144	4q32.1	0.036323019	0.417218607	0.504769727
BPIFA3	20q11.21	0.036297586	0.417545033	0.505129994
CUEDC1	17q22	-0.036295918	0.417566451	0.505129994
SCTR	2q14.2	0.036293656	0.417595488	0.505134838
PIGR	1q32.1	0.036276069	0.417821319	0.505377713
RBM1A3P	Yp11.2	0.036272021	0.417873309	0.505410304
CALN1	7q11.22	0.036264453	0.417970522	0.505497583
MAP3K11	11q13.1	0.036256269	0.418075653	0.505594427
SYT10	12p11.1	0.036236292	0.418332352	0.505874545
GP6	19q13.42	0.036233397	0.418369567	0.505880898
FBXL5	4p15.32	-0.036231982	0.418387745	0.505880898
SQLE	8q24.13	-0.036216332	0.418588922	0.50609382
SLFN13	17q12	0.036207458	0.418703029	0.506201452
XCL2	1q24.2	0.036198822	0.418814076	0.50630537
ZNF668	16p11.2	0.036190043	0.418926992	0.506411536
HERC6	4q22.1	0.036174058	0.41913263	0.506629767
WNT3	17q21.31-q21.32	-0.036167188	0.419221037	0.506706277
IBA57	1q42.13	-0.036160985	0.419300858	0.506764993
PCP2	19p13.2	-0.03615951	0.419319842	0.506764993
TBX1	22q11.21	0.036143284	0.419528693	0.506987035
SLC51B	15q22.31	-0.036131904	0.419675207	0.50713367
REG1CP	2p12	0.036129956	0.419700297	0.50713367
PRSS21	16p13.3	0.03612058	0.419821028	0.50722123
CTDP1	18q23	0.036118806	0.419843879	0.50722123

DLG5-AS1	10q22.3	0.036118473	0.419848169	0.50722123
GBAP1	1q22	0.036098957	0.42009956	0.507467144
LRRC42	1p32.3	0.036098767	0.420102019	0.507467144
RPA2	1p35.3	0.036092087	0.420188087	0.507540728
TBC1D22B	6p21.2	0.036074337	0.420416831	0.507779716
ECHDC3	10p14	0.036070997	0.420459882	0.507779716
MAGEA1	Xq28	-0.036070877	0.420461434	0.507779716
MC4R	18q21.32	0.036063715	0.420553757	0.507860817
ATP13A1	19p13.11	-0.036058401	0.42062227	0.507913159
MRTFB	16p13.12	0.036055347	0.420661643	0.507930307
TJAP1	6p21.1	0.036048286	0.4207527	0.508009856
DUSP11	2p13.1	-0.036038743	0.420875768	0.508128044
MED16	19p13.3	-0.036034831	0.420926232	0.508158566
NR2E1	6q21	0.036028487	0.42100806	0.508226947
PACRGL	4p15.31	0.036018608	0.421135511	0.50835039
ORMDL3	17q21.1	-0.036015364	0.421177374	0.508370513
HIST1H1D	6p22.2	0.036002697	0.421340839	0.508508854
SEPHS1	10p13	-0.036002577	0.421342388	0.508508854
IFNA17	9p21.3	-0.035995143	0.421438327	0.508594223
RIMS2	8q22.3	0.035966578	0.421807136	0.509008862
STT3B	3p23	-0.035964406	0.42183519	0.509012277
POU6F2	7p14.1	0.035954515	0.421962945	0.509117962
IL1RN	2q14.1	-0.035953718	0.421973235	0.509117962
HOOK1	1p32.1	0.035947324	0.422055829	0.509187168
HBA2	16p13.3	0.03593635	0.422197615	0.509327774
SEPTIN7P2	7p12.3	-0.035932916	0.422241995	0.509350862
CX3CL1	16q21	0.035927857	0.422307365	0.509399265
ZNF516	18q23	0.035890355	0.422792188	0.50995359
TSIX	Xq13.2	0.035885026	0.422861097	0.510006221
OR5B17	11q12.1	0.035860719	0.423175542	0.510354965
DNAJB7	22q13.2	-0.035857887	0.423212184	0.510368652
ABCC10	6p21.1	0.035849894	0.423315619	0.510462882
LRRC26	9q34.3	0.035839033	0.423456185	0.510601874
ZNF12	7p22.1	0.035814872	0.423768988	0.510924681
ACAD10	12q24.12	-0.035814444	0.423774537	0.510924681
CYP20A1	2q33.2	-0.035805234	0.423893807	0.511037945
PLAAT5	11q12.3	0.035798237	0.423984433	0.511116666
SIX4	14q23.1	-0.03578987	0.424092819	0.511216786
GNRHR2	1q21.1	-0.035742443	0.424707507	0.511927172
ALDH8A1	6q23.3	0.035708568	0.425146876	0.512426163
ARG2	14q24.1	-0.035692249	0.425358627	0.512650764
SHOX2	3q25.32	0.035685141	0.425450884	0.512714862
SLC7A5P1	16p11.2	0.035684236	0.425462628	0.512714862
TMEM225	11q24.1	0.035680822	0.42550694	0.512737641
LINC00298	2p25.1	0.035661092	0.425763088	0.512997719
RABEP1	17p13.2	-0.035660281	0.425773616	0.512997719
DYNC1H1	14q32.31	0.035656941	0.425816987	0.513019343
CNKSR2	Xp22.12	-0.035639597	0.426042252	0.513260096
DDX6	11q23.3	0.035592337	0.426656406	0.513969292
TMEM174	5q13.2	0.0355794	0.42682462	0.514128139
AKAP4	Xp11.22	0.035576555	0.426861615	0.514128139
TCF23	2p23.3	0.035576318	0.426864703	0.514128139
MIIP	1p36.22	0.035566954	0.426986485	0.514244122
ZMAT3	3q26.32	0.035558938	0.427090751	0.514326977
KLF3-AS1	4p14	-0.035557746	0.427106257	0.514326977
AGTR2	Xq23	0.035551288	0.427190274	0.514368005
GTF2IRD2B	7q11.23	0.035551208	0.427191307	0.514368005
TTY1B	Yp11.2	-0.035533475	0.427422053	0.514615132

CSAG3	Xq28	0.035526405	0.427514072	0.514695213
PDXDC2P-NPIPE	16q22.1	0.035513133	0.427686842	0.514872496
LEMD3	12q14.3	0.035502827	0.427821029	0.515003313
MIEF2	17p11.2	-0.035481738	0.428095691	0.51527995
QARS	3p21.31	0.035481261	0.428101906	0.51527995
SNCB	5q35.2	-0.035460304	0.428374947	0.51557784
CCDC146	7q11.23	0.035456736	0.428421442	0.515603046
OR52B4	11p15.4	0.035452666	0.428474482	0.515636127
PI4KAP1	22q11.21	-0.035449006	0.42852218	0.515662775
OR5B21	11q12.1	0.035432886	0.428732322	0.515884885
CYB5D1	17p13.1	-0.035428776	0.428785905	0.515908793
AFG1L	6q21	0.03542744	0.428803324	0.515908793
SHH	7q36.3	-0.035419443	0.428907606	0.515989821
TKTL1	Xq28	0.035418353	0.428921813	0.515989821
ZW10	11q23.2	-0.035408545	0.429049725	0.516097136
COX19	7p22.3	-0.035407591	0.429062172	0.516097136
PATE2	11q24.2	-0.035401636	0.429139848	0.516159802
OMP	11q13.5	-0.035396673	0.429204596	0.51620691
ATG16L2	11q13.4	0.035393659	0.429243916	0.516223433
HIST1H2AL	6p22.1	-0.035383278	0.429379364	0.516355553
TRIM41	5q35.3	0.035373047	0.429512881	0.516485336
SPDYC	11q13.1	-0.03536103	0.429669727	0.516643155
C6ORF223	6p21.1	0.03533354	0.430028669	0.517043944
IGLL3P	22q11.23	0.035324909	0.430141403	0.517148676
RBBP5	1q32.1	0.035314264	0.430280464	0.517285045
THAP1	8p11.21	0.035305294	0.430397665	0.51739512
SLITRK3	3q26.1	0.035301337	0.430449373	0.517426454
LOC90784	2p11.2	-0.035294701	0.430536086	0.517499861
USP45	6q16.2	0.035287258	0.43063337	0.517585965
SCARNA20	17q23.2	0.035251176	0.431105143	0.518089801
EIF4E1B	5q35.2	0.035249542	0.431126511	0.518089801
TNNI3K	1p31.1	-0.035249307	0.431129587	0.518089801
COMMD6	13q22.2	-0.035246129	0.431171155	0.518108899
IL36G	2q14.1	-0.035227492	0.431414977	0.518371015
LINC00200	10p15.3	-0.035221606	0.431491999	0.518407242
MRGPRG-AS1	11p15.4	0.035221261	0.431496508	0.518407242
NKX2-3	10q24.2	-0.035217609	0.431544309	0.518433804
CMA1	14q12	0.035202787	0.4317383	0.518635978
MEP1B	18q12.1	-0.035156191	0.432348502	0.519338081
ECD	10q22.2	0.035150416	0.432424163	0.519371637
PODXL2	3q21.3	-0.03515013	0.432427914	0.519371637
SMAD1	4q31.21	0.035123983	0.432770578	0.519752261
CDRT15	17p12	-0.035117748	0.432852318	0.519819492
ZNF157	Xp11.3	0.035107939	0.432980917	0.519909191
LOC100133920	2q11.1	-0.035106646	0.432997868	0.519909191
C4ORF36	4q21.3	-0.03510385	0.433034539	0.519909191
PKDREJ	22q13.31	-0.03510237	0.433053946	0.519909191
INO80	15q15.1	0.035102226	0.433055834	0.519909191
AMER3	2q21.1	0.035099395	0.433092952	0.51992282
DNER	2q36.3	0.035081805	0.433323662	0.520168839
CUTA	6p21.32	0.035078178	0.433371243	0.52019501
OR10V1	11q12.1	0.035075375	0.433408025	0.520208217
PI4KB	1q21.3	-0.035071881	0.433453861	0.520232289
SMARCA4	19p13.2	-0.035056612	0.433654223	0.520413206
PCDH20	13q21.2	0.035056463	0.43365618	0.520413206
SNORA41	2q33.3	0.03502235	0.434104009	0.520919647
VPS26B	11q25	-0.035002982	0.434358377	0.521193892
BCS1L	2q35	-0.034994966	0.434463681	0.52128925

TBC1D21	15q24.1	0.034978945	0.434674193	0.521510823
FRMD7	Xq26.2	0.034973201	0.434749684	0.521570385
COX8C	14q32.12	-0.034968191	0.434815536	0.521618376
ISL2	15q24.3	-0.034963171	0.434881512	0.52166651
CSH2	17q23.3	0.034960536	0.434916157	0.521677057
TELO2	16p13.3	-0.034957177	0.434960311	0.521684628
SLC10A5	8q21.13	0.034956123	0.434974175	0.521684628
OR1N1	9q33.2	0.034945213	0.435117619	0.521825653
GNL2	1p34.3	0.034933511	0.435271498	0.521953963
C20ORF144	20q11.22	0.034933143	0.435276342	0.521953963
TINF2	14q12	0.034907269	0.435616714	0.522331075
LGALS9	17q11.2	-0.034899253	0.435722193	0.522426508
TWISTNB	7p21.1	-0.034891428	0.435825175	0.522518936
SPEM2	17p13.1	-0.034867347	0.436142194	0.52286795
LIPI	21q11.2	-0.034851961	0.436344807	0.523079776
SNORA70B	2p15	0.034841943	0.436476752	0.523206866
PDHA2	4q22.3	0.034819989	0.436766015	0.523522508
POTEG	14q11.2	0.034805508	0.436956867	0.52372016
FAM98B	15q14	-0.03478584	0.43721616	0.523999816
CAMK2N2	3q27.1	0.03476685	0.437466596	0.524268823
RPP30	10q23.31	-0.034763366	0.43751255	0.524292758
POM121L12	7p12.1	0.034745683	0.437745838	0.524541168
TXLNGY	Yq11.222-q11.223	0.034741067	0.437806743	0.524582998
NMU	4q12	-0.034738983	0.43783425	0.524584807
FAM74A3	9q21.11	0.034734093	0.437898779	0.524630972
ENTPD4	8p21.3	0.034718515	0.438104393	0.524831593
SEMA4D	9q22.2	-0.034717465	0.438118251	0.524831593
TTYH2	17q25.1	0.034693513	0.438434514	0.525161687
FLJ42627	16p13.3	0.034692655	0.438445856	0.525161687
OR8B2	11q24.2	0.034679543	0.438619032	0.525337931
ABHD2	15q26.1	-0.034672233	0.438715607	0.525422412
ZNF653	19p13.2	-0.034668942	0.438759092	0.525429766
GPR89B	1q21.2	-0.034666699	0.438788722	0.525429766
ROBO2	3p12.3	-0.034665856	0.438799862	0.525429766
BPIFA2	20q11.21	-0.034657342	0.438912366	0.525533296
CAMSAP2	1q32.1	-0.034639693	0.439145638	0.525780405
ANXA8L1	10q11.22	0.034637785	0.439170857	0.525780405
HSP90AB4P	15q21.3	0.034630065	0.439272922	0.52587084
INSL4	9p24.1	-0.034628129	0.439298516	0.52587084
HMGCL	1p36.11	0.034621275	0.439389136	0.525948118
LINC01566	16p11.1	0.034603919	0.439618672	0.526191659
UPF2	10p14	0.034599136	0.43968194	0.526236172
RAB24	5q35.3	0.034589117	0.439814495	0.526363602
DTWD2	5q23.1	-0.034569984	0.440067666	0.52663536
NUCB2	11p15.1	-0.034560393	0.440194615	0.526736898
GFER	16p13.3	-0.03455963	0.44020472	0.526736898
ISCU	12q23.3	-0.034551423	0.440313362	0.526824069
PTHLH	12p11.22	-0.034550183	0.440329786	0.526824069
SRCAP	16p11.2	0.034521745	0.440706368	0.527243362
TJP3	19p13.3	0.034517119	0.440767653	0.52728542
OR5H1	3q11.2	-0.034474975	0.441326135	0.527922229
PTTG2	4p14	-0.034459936	0.441525516	0.528109677
STK16	2q35	-0.034458096	0.441549921	0.528109677
PCDHA8	5q31.3	0.034457234	0.441561349	0.528109677
FUNDC2	Xq28	-0.034421356	0.442037249	0.528617033
C1ORF87	1p32.1	0.034421304	0.442037951	0.528617033
FOXL2NB	3q22.3	0.03439887	0.442335669	0.528941717
PRCD	17q25.1	0.034387766	0.442483075	0.52908663

PNPLA1	6p21.31	0.034372592	0.442684553	0.529266736
PEBP4	8p21.3	0.034372472	0.442686157	0.529266736
MYO5C	15q21.2	-0.03436515	0.442783391	0.529351624
ARGLU1	13q33.3	0.034348164	0.443009022	0.529589991
CC2D2A	4p15.32	0.034310184	0.443513759	0.530161966
CUX1	7q22.1	-0.034304936	0.443583535	0.530213965
ZNF580	19q13.42	0.034301023	0.443635554	0.530244734
LOC100130449	2q37.3	-0.034286368	0.443830442	0.530446251
TAS2R13	12p13.2	0.034255865	0.444236209	0.530899761
IPO9	1q32.1	0.034247298	0.444350212	0.531004555
ZIM3	19q13.43	0.034239654	0.444451952	0.531094685
HPYR1	8q24.22	0.034228526	0.444600072	0.531240221
TUBA3C	13q12.11	-0.034225511	0.444640221	0.531256736
ZNF286A	17p12	0.034215807	0.44476941	0.531379628
ACADL	2q34	0.034208681	0.444864312	0.531461545
UBA6	4q13.2	-0.034149772	0.445649185	0.532367683
TGIF2LY	Yp11.2	0.034132092	0.445884907	0.532617744
MROH2B	5p13.1	0.03412055	0.446038827	0.532770066
MBIP	14q13.3	-0.034113319	0.446135265	0.532853714
SMG9	19q13.31	0.034108834	0.446195091	0.532893628
WRN	8p12	0.034105494	0.446239646	0.532915299
MAGT1	Xq21.1	0.034073622	0.44666495	0.533363502
TTYT9B	Yq11.222	0.034072956	0.446673834	0.533363502
GPD1	12q13.12	0.034071427	0.446694246	0.533363502
CHD6	20q12	-0.034067133	0.446751567	0.533400383
CCDC17	1p34.1	0.034048908	0.446994889	0.533659322
PASD1	Xq28	-0.034046186	0.447031236	0.533671142
CACNG3	16p12.1	0.034040053	0.447113137	0.533706109
PACS2	14q32.33	0.034040031	0.447113424	0.533706109
MAB21L3	1p13.1	-0.034031908	0.447221922	0.533804044
TRPM2	21q22.3	0.034029153	0.447258723	0.533816394
LGALS4	19q13.2	0.03400479	0.447584224	0.534173295
MAGEA9B	Xq28	0.033988198	0.447805972	0.534406334
SLF1	5q15	-0.033966839	0.448091522	0.534715483
NYAP1	7q22.1	-0.033941692	0.448427855	0.535085192
CTXN2	15q21.1	-0.033932801	0.448546802	0.535195478
ZNF383	19q13.12	-0.033927046	0.448623799	0.535250743
DUXA	19q13.43	-0.033925374	0.44864617	0.535250743
RNF43	17q22	-0.033902856	0.448947542	0.535578625
TTC8	14q31.3	0.033900613	0.448977572	0.535582787
OR13J1	9p13.3	-0.033876991	0.44929385	0.535900467
PPP1R15B	1q32.1	0.033876756	0.449296997	0.535900467
MAGEB2	Xp21.2	0.033858601	0.449540178	0.536158831
DND1	5q31.3	-0.033816447	0.450105076	0.536800847
FRG2C	3p12.3	-0.033809684	0.450195739	0.536877242
MTX3	5q14.1	0.033806618	0.45023685	0.53689454
P4HB	17q25.3	0.033799652	0.450330257	0.536974192
RIIAD1	1q21.3	0.033788759	0.450476329	0.53711663
ANGEL1	14q24.3	-0.033780089	0.450592622	0.537223546
CRTC2	1q21.3	0.033777561	0.450626533	0.537232234
ZMAT4	8p11.21	-0.0337698	0.45073065	0.537324617
UGT2B15	4q13.2	-0.033767529	0.450761123	0.5373292
LOC400710	19q13.33	0.033753856	0.45094459	0.537516149
TCEA2	20q13.33	0.033746308	0.451045884	0.537605132
KCNK16	6p21.2	0.033735355	0.4511929	0.537748599
GPRC6A	6q22.1	-0.03371657	0.451445116	0.538017423
DNHD1	11p15.4	0.033711764	0.451509655	0.53806256
RFPL2	22q12.3	0.033700797	0.451656947	0.538206303

OR3A4P	17p13.3	0.03369683	0.451710227	0.538238009
SPATA5	4q28.1	0.033685331	0.451864711	0.538390293
ARF6	14q21.3	-0.03365842	0.452226338	0.538789353
HULC	6p24.3	0.033651828	0.452314955	0.538863118
SLC16A8	22q13.1	0.033648689	0.452357147	0.538881567
DMAC2	19q13.2	0.033643534	0.452426457	0.538932318
TMCO5A	15q14	0.03361998	0.452743189	0.539255386
LTBR	12p13.31	-0.033619391	0.452751115	0.539255386
GUCY2C	12p12.3	0.033615251	0.452806789	0.539277336
MYO5B	18q21.1	-0.033614047	0.452822993	0.539277336
CCDC14	3q21.1	0.033610898	0.452865354	0.539295956
HBP1	7q22.3	0.033577212	0.453318618	0.539803871
AKAP10	17p11.2	0.033572727	0.453378987	0.5398439
SFI1	22q12.2	-0.033565284	0.453479184	0.539931346
CNGA1	4p12	-0.033560037	0.453549821	0.539983588
BNIP2	15q22.2	-0.03355221	0.4536552	0.540077185
SLFNL1	1p34.2	0.033538521	0.453839545	0.540264773
C1ORF174	1p36.32	-0.033534366	0.453895519	0.540299532
ZPBP2	17q21.1	0.033523095	0.45404734	0.540407407
RNF222	17p13.1	-0.033522688	0.454052825	0.540407407
TAF1A	1q41	-0.033521674	0.454066484	0.540407407
C11ORF86	11q13.2	0.033508646	0.454242013	0.540565524
APBA1	9q21.12	-0.033507837	0.454252916	0.540565524
HNRNPH2	Xq22.1	-0.033494191	0.454436818	0.54075248
SYNE2	14q23.2	0.033487034	0.454533287	0.54083538
ZNF256	19q13.43	0.033478159	0.454652925	0.540945836
SNORA36A	Xq28	0.033475421	0.454689837	0.540957857
LINC01102	2q12.1	0.033471861	0.45473784	0.540980072
CGB1	19q13.33	0.03347006	0.454762127	0.540980072
ABCC13	21q11.2	0.033444792	0.455102896	0.541337454
CCDC134	22q13.2	0.033443806	0.455116205	0.541337454
KRTAP5-6	11p15.5	-0.033436651	0.455212728	0.541420349
SSTR5-AS1	16p13.3	0.033425088	0.45536873	0.541573974
GSC2	22q11.21	0.033399421	0.455715153	0.541954035
TTC26	7q34	0.033364697	0.456184043	0.542479687
SCARNA3	1q25.1	-0.033361595	0.456225948	0.542497549
AQP4	18q11.2	0.033348554	0.456402119	0.542675055
POM121L10P	22q11.23	0.033338675	0.456535609	0.542801794
FGGY	1p32.1	0.033329294	0.456662385	0.542920536
H1FX-AS1	3q21.3	0.033324999	0.456720423	0.542950082
CYP4X1	1p33 1	0.033323473	0.45674105	0.542950082
MRPS10	6p21.1	0.033303433	0.45701197	0.543240136
RPL29P2	17p13.1	-0.033290718	0.457183904	0.543412499
PRAMEF11	1p36.21	-0.033286796	0.457236943	0.543443532
ZNF500	16p13.3	0.033274328	0.457405595	0.543611962
OR5K3	3q11.2	0.033246706	0.457779333	0.544024097
SLC26A1	4p16.3	-0.033227474	0.458039654	0.544301406
ARHGDI A	17q25.3	-0.03313615	0.459276931	0.545739558
KRTAP7-1	21q22.11	-0.03312808	0.459386349	0.545837434
NHLRC1	6p22.3	-0.033117924	0.45952409	0.545968948
GCGR	17q25.3	0.033112393	0.459599095	0.546025913
AGAP2-AS1	12q14.1	-0.033106472	0.459679411	0.546075342
GGA3	17q25.1	-0.03310361	0.459718246	0.546075342
GK2	4q21.21	-0.033103341	0.459721885	0.546075342
GABRA4	4p12	0.033093803	0.459851285	0.546196896
TLX2	2p13.1	-0.0330907	0.459893384	0.54621475
PLCXD2	3q13.2	-0.033085002	0.459970707	0.546274433
SCARNA4	1q22	-0.033073956	0.460120617	0.546420312

DGCR8	22q11.21	0.033070974	0.460161094	0.546436221
TSPAN5	4q23	-0.033067538	0.460207723	0.546459435
CARD11	7p22.2	-0.033057137	0.460348922	0.546594934
MMGT1	Xq26.3	0.033018107	0.460878959	0.547167706
TDRG1	6p21.2	-0.033017381	0.460888825	0.547167706
PHF24	9p13.3	0.033015626	0.460912665	0.547167706
FAM71A	1q32.3	0.033008608	0.461008019	0.547227986
CELF1	11p11.2	0.033007897	0.46101768	0.547227986
ANKRD66	6p12.3	0.033000058	0.461124191	0.547322219
LOC341056	11q24.1	-0.032995205	0.461190142	0.547368302
EN2	7q36.3	0.032964042	0.461613746	0.547838839
ANKRD37	4q35.1	-0.032945201	0.461869963	0.548110679
FBXO25	8p23.3	-0.032940239	0.461937457	0.548143095
LINC00173	12q24.22	-0.032939199	0.461951607	0.548143095
ADAT2	6q24.2	-0.032924875	0.462146462	0.548342063
LIG1	19q13.33	-0.032909703	0.462352923	0.548554776
B3GALT5	21q22.2	0.032894947	0.462553756	0.548760788
NR1D1	17q21.1	0.032880693	0.462747808	0.548958731
PAX3	2q36.1	0.032868399	0.462915207	0.549125034
CREG2	2q11.2	0.032865639	0.462952798	0.549137345
FAM13A	4q22.1	0.03285989	0.463031098	0.549197938
OR10T2	1q23.1	-0.032856507	0.463077168	0.549220299
ERCC1	19q13.32	-0.032852733	0.463128582	0.549248996
THOC2	Xq25	-0.032848534	0.463185778	0.549284545
LINC00596	14q11.2	-0.032844836	0.463236155	0.549312004
AP3M1	10q22.2	0.032842284	0.463270919	0.549320947
TCOF1	5q32-q33.1	-0.032817616	0.463607071	0.549687237
CARD14	17q25.3	-0.032810077	0.463709825	0.549752177
ATP6V1B1	2p13.3	0.0328096	0.463716329	0.549752177
BIN3	8p21.3	0.032786984	0.464024672	0.55008541
TCTE3	6q27	-0.032779255	0.46413007	0.550178035
OR8G5	11q24.2	-0.03276372	0.464341958	0.550396873
TOB2P1	6p22.1	0.032760264	0.464389105	0.550420426
MIP	12q13.3	-0.03274945	0.464536652	0.550562968
NCOA5	20q13.12	-0.032742277	0.464634526	0.550646625
KRTAP27-1	21q22.11	-0.032727504	0.464836149	0.550853221
OSBPL1A	18q11.2	-0.032703676	0.465161447	0.551206344
HOXA7	7p15.2	0.03269776	0.465242238	0.551269708
SLC6A5	11p15.1	0.032695745	0.465269752	0.551269939
TBC1D3G	17q12	0.032687573	0.46538136	0.551369802
PCMT1	6q25.1	0.032681728	0.465461197	0.551432014
PSMD1	2q37.1	0.032676861	0.465527678	0.551478397
RNF5	6p21.32	0.032669704	0.465625454	0.551561845
C2ORF88	2q32.2	0.032657776	0.465788439	0.551711762
NAPA	19q13.32-q13.33	0.03265644	0.465806695	0.551711762
LRRC24	8q24.3	-0.032631423	0.466148628	0.55208435
NMI	2q23.3	0.03261951	0.466311507	0.552212889
USP29	19q13.43	-0.032619482	0.46631189	0.552212889
PPP2R5C	14q32.31	-0.032604433	0.466517692	0.552424184
STX4	16p11.2	0.03259594	0.466633857	0.552503079
RBAK	7p22.1	-0.032595558	0.466639079	0.552503079
TOR1B	9q34.11	-0.032573228	0.466944579	0.552803013
ZNF430	19p12	-0.032573037	0.466947191	0.552803013
ZNF395	8p21.1	0.032561777	0.467101289	0.552953004
FLJ37201	10q23.31	-0.032554477	0.467201196	0.553026482
LINC02716	11p11.2	-0.032553237	0.467218171	0.553026482
ZNF124	1q44	-0.032546222	0.4673142	0.553107703
ZNF620	3p22.1	-0.032525038	0.467604252	0.553418545

FARS2	6p25.1	-0.032499798	0.467949975	0.553795234
C2ORF50	2p25.1	0.032462975	0.468454602	0.554359923
SPANXN4	Xq27.3	-0.032452618	0.468596584	0.554483187
MOGAT1	2q36.1	0.032449925	0.468633508	0.554483187
ZNF345	19q13.12	0.032448219	0.468656901	0.554483187
B3GALNT1	3q26.1	-0.03244736	0.468668677	0.554483187
CARF	2q33.2	0.032444688	0.468705315	0.554494023
DCAF4L1	4p13	-0.032424079	0.468987958	0.554795873
OR7C2	19p13.12	-0.032410843	0.469169542	0.554969194
SPATA31A3	9q21.11	0.03240939	0.469189477	0.554969194
CCDC148	2q24.1	-0.032403003	0.469277104	0.555040307
SLC52A3	20p13	-0.032394112	0.469399109	0.55515207
VILL	3p22.2	0.032378367	0.469615217	0.555375108
TMEM115	3p21.31	-0.032367393	0.46976587	0.555520716
BRSK2	11p15.5	0.032343635	0.470092111	0.555873935
ANXA11	10q22.3	0.032341437	0.470122303	0.555877063
TFIP11	22q12.1	0.032339146	0.470153761	0.555881686
ATP6AP1	Xq28	0.03231653	0.470464462	0.556216451
MAPK3	16p11.2	0.032302598	0.470655921	0.556410208
LCE4A	1q21.3	0.032254094	0.471322799	0.55716595
SNRNP27	2p13.3	-0.032248205	0.471403809	0.55722907
RPL9	4p14	-0.03223809	0.471542961	0.557349986
ZNF282	7q36.1	-0.032236754	0.471561342	0.557349986
MCU	10q22.1	-0.032221008	0.471777997	0.557573398
OXSR1	3p22.2	-0.032208698	0.47194742	0.557740966
CER1	9p22.3	-0.032204749	0.472001778	0.557772539
MED10	5p15.31	0.032199442	0.472074838	0.557826208
RBMY1E	Yq11.223	0.032183378	0.472296012	0.558054879
PGAM1	10q24.1	-0.032176348	0.472392808	0.558136569
LINC01341	1q44	-0.03216669	0.472525826	0.558261044
KLB	4p14	-0.032146716	0.47280099	0.558553432
AFM	4q13.3	-0.032141104	0.472878319	0.558612083
PTPN9	15q24.2	0.032097908	0.473473732	0.559282704
NDRG2	14q11.2	-0.032095808	0.473502681	0.55928416
RAB2A	8q12.1-q12.2	0.032072238	0.473827759	0.559635374
FZD7	2q33.1	0.032065749	0.473917276	0.559708341
MICU3	8p22	0.03205406	0.474078551	0.559866044
GAGE12D	Xp11.23	0.032050823	0.474123219	0.559886028
SLC6A18	5p15.33	-0.032042749	0.474234635	0.559984826
ABCD1	Xq28	0.032025193	0.474476956	0.560216301
SIX2	2p21	-0.032024525	0.474486188	0.560216301
STYX	14q22.1	-0.032018322	0.474571821	0.560284623
ADAMTSL5	19p13.3	-0.032003531	0.474776056	0.560492952
ADSSL1	14q32.33	0.031997423	0.474860399	0.560559728
UGCG	9q31.3	0.03198998	0.474963203	0.560648288
LINC00698	3p14.2	0.031979586	0.475106786	0.560781851
BEX5	Xq22.1	0.031977766	0.475131934	0.560781851
KRTAP20-2	21q22.11	0.031917826	0.475960407	0.561726814
KIAA1191	5q35.2	-0.031914784	0.476002474	0.561737536
FAM95B1	9p11.2	0.031911638	0.476045982	0.561737536
UGGT1	2q14.3	0.031909249	0.476079018	0.561737536
RBMY1F	Yq11.223	0.031909117	0.476080844	0.561737536
HIST1H1A	6p22.2	-0.031903394	0.476160003	0.56178804
ST7-AS1	7q31.2	0.031901997	0.476179327	0.56178804
CRYBA2	2q35	0.031895644	0.4762672	0.561858862
RNF148	7q31.32	-0.031883094	0.476440827	0.562030834
FUZ	19q13.33	0.031876041	0.476538421	0.5621131
PROP1	5q35.3	-0.031870397	0.476616515	0.562133133

CEP57	11q21	-0.031868979	0.476636141	0.562133133
TSSK1B	5q22.2	0.031868774	0.476638977	0.562133133
NEK5	13q14.3	0.031862603	0.476724393	0.562201013
PPP2R5E	14q23.2	-0.031858005	0.476788026	0.562243196
ZNF791	19p13.13	-0.031822698	0.477276866	0.562786763
SLC35G2	3q22.3	0.031773075	0.477964372	0.563564513
ACTRT2	1p36.32	-0.031763108	0.47810253	0.563694476
ADAM7	8p21.2	0.031757577	0.478179205	0.563751939
H3F3AP5	Xp11.22	-0.031749361	0.478293116	0.563853292
SPAG17	1p12	0.031734531	0.478498771	0.564062782
PPP1R14D	15q15.1	-0.031690833	0.479105006	0.564744431
OR10G8	11q24.2	-0.031672402	0.479360834	0.565012983
KHDC1L	6q13	0.031651302	0.479653792	0.565293443
OR13C3	9q31.1	-0.031650298	0.47966773	0.565293443
TTBK2	15q15.2	-0.031649212	0.47968282	0.565293443
POU5F1B	8q24.21	0.031644155	0.479753049	0.565299523
SPIN1	9q22.1	0.031643772	0.479758361	0.565299523
MIR9-3HG	15q26.1	0.03164215	0.479780892	0.565299523
ASB14	3p14.3	0.031640772	0.479800036	0.565299523
HSD17B13	4q22.1	0.031626975	0.479991675	0.565492294
MFSD4A	1q32.1	-0.031618389	0.480110968	0.56559646
MYO15A	17p11.2	-0.031616576	0.480136149	0.56559646
SDK1	7p22.2	-0.031603311	0.480320478	0.565780569
PBOV1	6q23.3	0.031580832	0.480632931	0.566115568
MYEF2	15q21.1	-0.031562755	0.48088428	0.566378561
SPEF1	20p13	0.031560366	0.480917506	0.566384636
SAXO1	9p22.1	-0.031550611	0.481053178	0.566511356
MTRF1	13q14.11	-0.031542906	0.481160342	0.566604491
ADAT3	19p13.3	-0.03153136	0.481320976	0.566760575
PLA2G4A	1q31.1	-0.031511511	0.481597174	0.567052712
GCN1	12q24.23	0.03150674	0.481663581	0.567097812
PDE6C	10q23.33	0.0315027	0.481719807	0.567130921
MLN	6p21.31	0.031499254	0.481767774	0.567154303
FZD5	2q33.3	-0.031483933	0.481981063	0.567372294
GSX1	13q12.2	0.031478481	0.482056981	0.567420022
ANKRD31	5q13.3	0.031476872	0.482079384	0.567420022
CTRL	16q22.1	-0.031474963	0.482105965	0.567420022
HGFAC	4p16.3	0.031441519	0.48257181	0.567935178
ZNF502	3p21.31	-0.031435695	0.482652953	0.567997547
MRFAP1	4p16.1	0.031409691	0.483015369	0.568390899
CHST2	3q24	-0.031393277	0.483244193	0.568627009
SIX1	14q23.1	-0.031389174	0.483301408	0.568661173
LINC01011	6p25.2	0.031382876	0.483389224	0.568720109
ZNF136	19p13.2	-0.03138154	0.483407865	0.568720109
HES1	3q29	-0.03136818	0.483594194	0.568906153
GAGE2D	Xp11.23	0.031351947	0.483820643	0.56913937
ATXN7L2	1p13.3	0.031331822	0.484101474	0.569436528
TNNI3	19q13.42	-0.031316902	0.484309738	0.569648298
DMTF1	7q21.12	-0.031305771	0.484465134	0.569797863
ANO8	19p13.11	0.031301095	0.484530422	0.569841437
UBE2G2	21q22.3	0.031290121	0.484683667	0.569988445
NDFIP1	5q31.3	0.031284109	0.484767631	0.570053964
MAGEA6	Xq28	-0.031252054	0.485215444	0.570547313
SNX12	Xq13.1	-0.031239927	0.485384933	0.570713353
IFNLR1	1p36.11	-0.031197748	0.485974633	0.571369949
ZNF513	2p23.3	-0.031195935	0.485999991	0.571369949
TAOK1	17q11.2	0.031170647	0.486353739	0.571752525
PSORS1C2	6p21.33	0.031162501	0.48646771	0.571845741

PLAC9P1	2q21.1	0.031160929	0.486489708	0.571845741
HEPACAM	11q24.2	0.031148417	0.486664819	0.572018254
TPRX1	19q13.33	-0.031139758	0.486786017	0.572122592
HAPLN2	1q23.1	0.031138024	0.486810293	0.572122592
PKLR	1q22	-0.031134989	0.486852782	0.572139205
ITPRID1	7p14.3	0.0311254	0.486987035	0.572263649
ZNF691	1p34.2	-0.031121884	0.487036253	0.572288159
PINX1	8p23.1	-0.031080469	0.487616347	0.572936431
PIIP5K1	15q15.3	-0.03106396	0.487847682	0.573139182
GJB4	1p34.3	0.031062474	0.487868498	0.573139182
GPC5	13q31.3	-0.031060883	0.487890796	0.573139182
NADK2	5p13.2	-0.031060047	0.487902516	0.573139182
GDF1	19p13.11	0.031056572	0.487951218	0.573163027
POLDIP3	22q13.2	-0.03105394	0.487988116	0.573173003
CCDC74B	2q21.1	0.031045448	0.488107158	0.573279456
KRT71	12q13.13	-0.031042217	0.488152443	0.573299275
ACTL7A	9q31.3	0.031004815	0.488676945	0.573881864
CUEDC2	10q24.32	0.030988668	0.488903478	0.574114483
EHMT2	6p21.33	0.030970632	0.48915657	0.574378261
OSBP2	22q12.2	0.03096777	0.489196749	0.574392017
STARD10	11q13.4	0.030960422	0.489299885	0.574479687
HSPA1A	6p21.33	-0.030956032	0.489361505	0.574518606
PAXBP1	21q22.11	-0.030947062	0.489487435	0.574633019
BCL2L12	19q13.33	-0.030944295	0.48952629	0.574645201
ZNF343	20p13	-0.030941336	0.489567826	0.574660529
LYPD8	1q44	-0.030934501	0.489663806	0.574739759
TEX47	7q21.13	-0.030930974	0.489713345	0.574764473
CCDC120	Xp11.23	-0.030928072	0.489754091	0.574778864
PRR3	6p21.33	-0.030901734	0.490124053	0.575179603
DEFB119	20q11.21	-0.030896923	0.490191659	0.575225488
TRIM31	6p22.1	0.030891279	0.490270964	0.575285095
CAMKMT	2p21	-0.030882458	0.490394918	0.575397084
EXD1	15q15.1	0.030880387	0.490424029	0.575397784
SNORA79	14q31.1	0.030862313	0.490678083	0.575662386
HMGB1P1	20q13.31	-0.030857456	0.490746357	0.575709013
GGT7	20q11.22	0.03083923	0.491002643	0.575976185
ZBTB12	6p21.33	-0.030811842	0.491387879	0.576394583
FOXR1	11q23.3	-0.030768644	0.491995839	0.577074171
FRG1	4q35.2	-0.030747048	0.492299934	0.57739729
APOC3	11q23.3	-0.030740417	0.492393325	0.577449862
EIF3H	8q23.3-q24.11	-0.030737791	0.492430302	0.577449862
HIGD1C	12q13.12	0.030736672	0.492446067	0.577449862
FAM138D	12p13.33	0.030735738	0.492459224	0.577449862
LCN12	9q34.3	-0.030729339	0.492549356	0.577521991
STX5	11q12.3	0.030710643	0.492812764	0.577797268
CDH9	5p14.1	-0.030641275	0.493790737	0.578910253
ITGA6	2q31.1	0.030635971	0.493865561	0.578964339
MAMSTR	19q13.33	0.030619415	0.494099143	0.57920452
AGAP6	10q11.23	0.030602476	0.494338191	0.579451081
EPM2A	6q24.3	0.030574517	0.494732897	0.579880061
C11ORF16	11p15.4	0.030568735	0.494814538	0.579942067
CA1	8q21.2	0.030564752	0.494870797	0.579965353
ANKRD20A3	9q21.11	-0.030563258	0.494891888	0.579965353
GPR87	3q25.1	0.030556767	0.494983565	0.580039103
OR9K2	12q13.2	-0.03054822	0.495104296	0.580146889
IFNG	12q15	0.030536507	0.495269767	0.580298686
ELF4	Xq26.1	-0.030534819	0.495293612	0.580298686
GRB10	7p12.1	0.030531097	0.495346195	0.580298686

OR2F1	7q35	0.030530908	0.495348871	0.580298686
METTL21EP	13q33.1	0.03051054	0.495636698	0.580602167
DUSP27	1q24.1	0.030504155	0.495726957	0.58067419
LINC00893	Xq28	-0.030499034	0.495799344	0.580725271
KRTAP10-1	21q22.3	-0.030491283	0.495908923	0.580771418
VWC2	7p12.2	-0.030490262	0.495923347	0.580771418
LCE3C	1q21.3	0.03049014	0.495925086	0.580771418
F13B	1q31.3	-0.030479058	0.496081777	0.580921204
FIGLA	2p13.3	0.030466349	0.4962615	0.581097941
ASB11	Xp22.2	-0.03046418	0.496292175	0.581100139
SERPINF2	17p13.3	-0.030441396	0.496614488	0.581422704
JAG2	14q32.33	0.030440633	0.49662529	0.581422704
LINC00305	18q22.1	-0.030428991	0.496790018	0.581581816
AADAT	4q33	-0.030416585	0.496965597	0.581753613
TEX38	1p33	0.030412271	0.497026665	0.581791349
UBE2DNL	Xq21.1	0.030404177	0.497141242	0.581891713
TUBGCP6	22q13.33	0.030401985	0.497172273	0.581892142
MST1L	1p36.13	0.030400077	0.497199282	0.581892142
HYMAI	6q24.2	0.030397005	0.497242774	0.581909293
ANP32AP1	15q14	-0.030384142	0.497424908	0.582088681
CHODL-AS1	21q21.1	-0.030380417	0.497477661	0.582116655
NEUROD4	12q13.2	-0.030374339	0.49756374	0.582183619
HPGD	4q34.1	0.030370876	0.497612793	0.582207256
PCDH15	10q21.1	-0.03036803	0.497653107	0.582220666
NUDT13	10q22.2	0.030355989	0.497823667	0.582386445
LCE1D	1q21.3	0.030342373	0.498016584	0.582578357
SCEL	13q22.3	-0.030320968	0.498319939	0.582899429
USP15	12q14.1	-0.030280793	0.498889577	0.583531926
ZNF26	12q24.33	-0.030276308	0.498953191	0.583572506
SNORA71C	20q11.23	0.030271602	0.499019947	0.583616756
KDSR	18q21.33	0.030236133	0.499523202	0.584171469
SLC28A2	15q21.1	-0.030226722	0.499656782	0.584293823
SLC13A1	7q31.32	0.030223534	0.499702033	0.584312877
OR10G2	14q11.2	0.03021433	0.499832693	0.584431794
PLRG1	4q31.3	-0.030210082	0.499893014	0.584468458
CT47B1	Xq24	0.03020367	0.49998405	0.584541028
CD46	1q32.2	-0.030201112	0.500020381	0.584549637
FIZ1	19q13.42	0.030193574	0.500127428	0.584640908
FOSL1	11q13.1	-0.030167712	0.500494774	0.585036439
OR11I	19p13.12	0.030150934	0.500733178	0.58528121
OLAH	10p13	0.030142861	0.500847914	0.585381411
CGRRF1	14q22.2	-0.030121813	0.501147103	0.585697173
SLAIN2	4p11	0.030109407	0.501323498	0.585869397
GSTO2	10q25.1	-0.030102631	0.501419845	0.58588082
NCAN	19p13.11	0.030101669	0.501433533	0.58588082
LHX2	9q33.3	-0.030101024	0.501442709	0.58588082
PAGE4	Xp11.23	0.030100552	0.50144941	0.58588082
EFHB	3p24.3	0.03009725	0.501496373	0.585901767
SSTR5	16p13.3	0.030078368	0.501764964	0.586181625
NANOGNB	12p13.31	-0.030034895	0.502383623	0.586870391
DNAJC17	15q15.1	-0.030030871	0.502440911	0.586903337
RUNDC3A	17q21.31	-0.030025624	0.502515602	0.586956607
VWA3A	16p12.2	0.030016969	0.502638838	0.587066569
SERPINC1	1q25.1	-0.030011674	0.502714237	0.58712065
GALR1	18q23	0.030008834	0.502754681	0.587133903
LINC00635	3q13.12	0.029998813	0.502897404	0.587266592
DEFB1	8p23.1	0.029995563	0.502943689	0.587286655
SPNS1	16p11.2	0.02997266	0.503269973	0.587633653

OR13C2	9q31.1	-0.029942495	0.503699893	0.588101611
UCA1	19p13.12	0.029924518	0.50395618	0.588366799
SUCLG2	3p14.1	0.029904144	0.504246743	0.588671971
CEACAM18	19q13.41	0.029877666	0.504624481	0.589078873
LINC01551	14q12	0.029855821	0.504936231	0.589389892
HID1	17q25.1	-0.029854904	0.504949326	0.589389892
SMPX	Xp22.12	0.029849459	0.505027039	0.589434588
PPP6R3	11q13.2	-0.029848128	0.505046039	0.589434588
OR5H2	3q11.2	-0.029831468	0.505283901	0.589678089
TREML4	6p21.1	-0.029823163	0.505402495	0.589782381
LPAR1	9q31.3	-0.029816447	0.505498406	0.589860194
RBP2	3q23	0.029811319	0.50557164	0.589911537
CASP9	1p36.21	0.029799365	0.505742391	0.590076653
PKD2L1	10q24.31	0.029793771	0.505822315	0.590103016
C14ORF93	14q11.2	-0.029791731	0.505851455	0.590103016
PPP1R1B	17q12	0.029791643	0.505852717	0.590103016
PLAC8L1	5q32	0.029776491	0.506069221	0.590321452
RNF128	Xq22.3	0.029757855	0.506335573	0.590586144
EFCAB13	17q21.32	0.029756519	0.50635467	0.590586144
OR5AC2	3q11.2	-0.029733599	0.506682354	0.590934182
FRRS1	1p21.2	0.029717966	0.506905916	0.591160751
WDR26	1q42.11-q42.12	0.029702889	0.507121588	0.591365452
DMKN	19q13.12	0.029701076	0.507147527	0.591365452
GADD45G	9q22.2	-0.02969955	0.50716936	0.591365452
FAM118A	22q13.31	-0.029686953	0.507349597	0.59154143
TMEM138	11q12.2	0.02968304	0.507405584	0.591572526
C7ORF33	7q36.1	0.02967782	0.507480294	0.591625446
TRH	3q22.1	-0.029667412	0.507629245	0.591764907
SPATA31B1P	9q21.32	-0.029661072	0.50772	0.591816257
LIPM	10q23.31	0.029660237	0.507731951	0.591816257
JOSD2	19q13.33	0.029656321	0.507788017	0.591847421
C10ORF53	10q11.23	-0.029648489	0.507900142	0.591943916
IGSF8	1q23.2	0.029635995	0.508079041	0.592099359
SLC5A2	16p11.2	-0.029635076	0.5080922	0.592099359
ATAT1	6p21.33	0.029613951	0.508394757	0.592417728
TOM1L2	17p11.2	-0.029611566	0.508428931	0.59242334
SLC10A4	4p11	0.029591138	0.508721611	0.592730146
NR1H2	19q13.33	0.029584274	0.508819973	0.592810522
BRD3	9q34.2	-0.029564711	0.509100362	0.593102951
KCTD2	17q25.1	0.029559463	0.509175602	0.59315636
RBFOX1	16p13.3	0.029547371	0.509348964	0.593324063
OR2F2	7q35	0.029529841	0.509600351	0.59358263
FBXO15	18q22.3	-0.029524203	0.509681219	0.593610698
TRIM52	5q35.3	0.029524059	0.509683282	0.593610698
WASH3P	15q26.3	-0.029520433	0.509735297	0.593637014
PATE3	11q24.2	0.029513783	0.509830692	0.593713847
DDX27	20q13.13	-0.029476155	0.510370644	0.59430834
RPP38-DT	10p13	-0.02945842	0.510625245	0.594570503
PRM3	16p13.13	0.02941358	0.511269243	0.595282417
GNA15	19p13.3	0.029411742	0.511295647	0.595282417
RNF38	9p13.2	-0.029368228	0.511921031	0.595976143
SLC22A6	11q12.3	0.029360757	0.512028434	0.596066791
TEX44	2q37.1	-0.029353436	0.512133711	0.596154955
SF1	11q13.1	-0.029350478	0.512176236	0.596170066
EFCAB5	17q11.2	-0.029345141	0.512252997	0.596225023
GPNMB	7p15.3	0.029315266	0.512682726	0.596690779
NR1I2	3q13.33	0.029312546	0.512721865	0.596701915
MAGEA10	Xq28	0.029290659	0.513036829	0.597034035

MOSPD1	Xq26.3	0.029285588	0.513109807	0.597084528
AQP10	1q21.3	0.029275994	0.51324791	0.597210793
KLK2	19q13.33	0.029271226	0.513316558	0.597256232
TAAR9	6q23.2	0.029257977	0.513507314	0.597443733
IFITM5	11p15.5	0.02924658	0.513671439	0.597594915
B4GALT2	1p34.1	0.029244841	0.513696486	0.597594915
RNPC3	1p21.1	0.029241024	0.513751462	0.597624417
HIST1H2BB	6p22.2	-0.029206335	0.514251218	0.598171278
HSF1	8q24.3	0.029181001	0.514616362	0.598561506
BAIAP2L1	7q21.3-q22.1	-0.029173939	0.514718164	0.598645409
HOXB8	17q21.32	-0.029142886	0.515165961	0.599131689
OR6X1	11q24.1	-0.029118156	0.515522725	0.599512049
GOLGA6D	15q24.2	0.029114808	0.51557103	0.599533672
COPZ2	17q21.32	-0.029102083	0.515754666	0.599712655
ZNF787	19q13.43	-0.029092826	0.515888265	0.599802067
ATAD3B	1p36.33	0.029092636	0.51589101	0.599802067
DNAI2	17q25.1	0.029065372	0.516284625	0.600225122
CASTOR3	7q22.1	-0.029060954	0.516348422	0.600264708
ATP11AUN	13q34	0.029056	0.516419965	0.600313294
FABP12	8q21.13	0.029051053	0.516491412	0.600361763
NELFE	6p21.33	0.029011046	0.517069393	0.600998979
FADS2	11q12.2	0.028985376	0.51744042	0.60139559
RAG2	11p12	0.028963636	0.517754756	0.60172627
LINC-PINT	7q32.3	0.028959515	0.517814344	0.601760864
VPS37B	12q24.31	-0.028920772	0.518374801	0.60237749
DDX21	10q22.1	-0.028898156	0.518702109	0.602723129
EGFEM1P	3q26.2	0.028886171	0.518875601	0.602890007
RNF219	13q31.1	0.028879834	0.518967348	0.60295085
SPAM1	7q31.32	0.028876935	0.519009328	0.60295085
SNORA58	3q22.1	-0.028875125	0.519035533	0.60295085
TRIM26	6p22.1	-0.028874299	0.519047486	0.60295085
OR2G3	1q44	0.028870836	0.51909763	0.602961326
RGR	10q23.1	-0.028869549	0.519116265	0.602961326
LINC00950	9p13.3	-0.028865521	0.519174594	0.602966105
PEX3	6q24.2	-0.028865138	0.519180142	0.602966105
FAM222A	12q24.11	-0.028849011	0.519413714	0.603169548
PHIP	6q14.1	-0.028848916	0.519415097	0.603169548
TAS2R9	12p13.2	-0.028845304	0.519467414	0.60319559
ANXA8	10q11.22	0.028832789	0.519648723	0.603371402
DLX1	2q31.1	-0.028817687	0.519867543	0.603590745
OR2A12	7q35	-0.028793414	0.520219352	0.603964462
ABCA7	19p13.3	0.028782785	0.520373448	0.604108608
MOB2	11p15.5	-0.028736885	0.521039159	0.604846642
SETD2	3p21.31	0.028716845	0.521329938	0.60514938
APOBEC3C	22q13.1	0.028700623	0.521565393	0.605387866
DEFB125	20p13	0.028675027	0.521936992	0.605784341
CCDC178	18q12.1	0.028670347	0.522004955	0.605828377
KLHL17	1p36.33	0.02866207	0.522125161	0.605933036
OR2M5	1q44	0.028653524	0.522249288	0.606039768
KLK15	19q13.33	-0.028651603	0.522277197	0.606039768
RANGRF	17p13.1	-0.028636782	0.522492503	0.606254742
CA10	17q21.33-q22	0.02861136	0.522861928	0.606643537
FUT8-AS1	14q23.3	0.028609586	0.522887707	0.606643537
SYT9	11p15.4	0.028603764	0.522972334	0.60664992
PDCD4	10q25.2	-0.028603574	0.5229751	0.60664992
DCAF13P3	15q21.2	0.028601718	0.52300207	0.60664992
GPR155	2q31.1	0.028598898	0.523043071	0.60664992
RNF216P1	7p22.1	0.028597276	0.523066653	0.60664992

NSUN7	4p14	-0.028596798	0.523073589	0.60664992
HOXB3	17q21.32	0.028591932	0.523144341	0.606697107
SNORD97	11p15.4	0.028579779	0.52332103	0.606867137
CORO1B	11q13.2	-0.028575709	0.523380214	0.606900893
ENDOU	12q13.11	0.028539038	0.523913612	0.607484501
CCDC66	3p14.3	-0.028522175	0.524158983	0.607734091
RP2	Xp11.3	0.028497841	0.524513164	0.608109804
HMGA2	12q14.3	0.028495646	0.524545116	0.60811191
PDCD4-AS1	10q25.2	-0.028490589	0.524618748	0.608162332
CHL1	3p26.3	0.02848534	0.524695164	0.608215976
NTN5	19q13.33	0.028482229	0.524740462	0.608221752
CHRNA10	11p15.4	-0.028480858	0.52476043	0.608221752
TMEM178A	2p22.1	0.028477897	0.524803535	0.608236778
NAB2	12q13.3	-0.028474843	0.524848013	0.608253391
POLL	10q24.32	0.028447265	0.525249697	0.608683951
CALCOCO2	17q21.32	-0.028425889	0.525561145	0.608976537
BMS1	10q11.21	0.028425794	0.525562535	0.608976537
RTP1	3q27.3	-0.028422407	0.525611889	0.608998754
TERT	5p15.33	-0.028413153	0.525746763	0.609120051
TMEM192	4q32.3	0.028402701	0.525899116	0.609261584
MIOX	22q13.33	0.028394109	0.526024358	0.609371693
CRYBG3	3q11.2	0.028365293	0.526444555	0.609815861
MIDN	19p13.3	0.028363671	0.526468216	0.609815861
FGF19	11q13.3	-0.028352963	0.526624403	0.609960273
RAP1B	12q15	0.028350979	0.526653345	0.609960273
KLLN	10q23.31	0.028335759	0.526875395	0.610182426
DNAAF5	7p22.3	0.028320156	0.527103082	0.610411082
TMEM87A	15q15.1	-0.02829525	0.527466635	0.610797041
SNORA27	13q12.2	-0.028292881	0.527501222	0.610802041
S100A8	1q21.3	0.028285898	0.527603174	0.610885039
ITIH2	10p14	-0.028261431	0.527960494	0.611263688
GRK6	5q35.3	0.028240952	0.52825965	0.611574956
APMAP	20p11.21	0.028237994	0.528302872	0.61157522
GNRHR	4q13.2	-0.028236788	0.528320494	0.61157522
C5ORF34	5p12	0.028217191	0.528606871	0.611871626
MLF1	3q25.32	-0.028209557	0.528718453	0.61196568
CCDC18	1p22.1	0.028205358	0.528779828	0.612001615
SCRT1	8q24.3	-0.028202299	0.528824544	0.612012239
SCGB1D2	11q12.3	0.028200581	0.528849666	0.612012239
FBLL1	5q34	0.028194373	0.528940424	0.612082166
TMEM207	3q28	-0.028172177	0.529264976	0.612397649
KATNA1	6q25.1	0.028171577	0.529273749	0.612397649
ZNRF2P1	7p14.3	0.028158408	0.529466358	0.612585382
JUND	19p13.11	-0.028144476	0.529670172	0.612771714
GGA2	16p12.2	-0.028140086	0.529734395	0.612771714
OR4A5	11q11	-0.028139718	0.529739782	0.612771714
KRTAP13-3	21q22.11	-0.028139097	0.529748875	0.612771714
EHF	11p13	-0.028118329	0.530052778	0.613083653
PPP1R8	1p35.3	-0.028116516	0.530079315	0.613083653
HBZ	16p13.3	0.02810318	0.530274518	0.613274272
ADAM32	8p11.22	-0.028081455	0.530592598	0.613606971
ZPBP	7p12.2	-0.0280776	0.530649041	0.61363475
POLR2J2	7q22.1	0.028074386	0.530696114	0.61363475
GRK1	13q34	0.028073585	0.530707848	0.61363475
FBN2	5q23.3	-0.028064318	0.530843569	0.613756511
PLEKHF2	8q22.1	-0.028006298	0.531693705	0.614704209
TRIM49D2	11q14.3	0.028001567	0.531763061	0.614749173
TMEM268	9q32	0.027988835	0.531949719	0.614929731

KLHL29	2p24.1	0.02797872	0.53209804	0.615065953
PCA3	9q21.2	0.027966946	0.532270705	0.615230299
FBXO3	11p13	-0.027962402	0.532337356	0.615272095
GABARAPL1	12p13.2	-0.027944557	0.532599127	0.615539392
MUCL1	12q13.2	0.02794087	0.532653222	0.615566655
CERS5	12q13.12	0.027927571	0.532848359	0.615756903
SLC38A6	14q23.1	-0.027910871	0.533093449	0.61600485
CCDC142	2p13.1	0.027895508	0.533318981	0.616230172
SPTB	14q23.3	-0.027888065	0.533428262	0.616321151
ZFP62	5q35.3	-0.0278769	0.533592206	0.616475273
LYPD2	8q24.3	-0.027847784	0.534019852	0.616934023
TASOR2	10p15.1	0.027827564	0.534316942	0.617241904
RAB27B	18q21.2	0.027817544	0.534464193	0.617376665
LEF1	4q25	0.027804089	0.534661962	0.617569761
ZNF131	5p12	-0.02778968	0.534873798	0.617779083
MAP2K1	15q22.31	-0.027787008	0.534913083	0.617789097
LRRIQ3	1p31.1	-0.027778136	0.535043539	0.617904399
DPP3	11q13.2	-0.027765346	0.53523163	0.618086246
IL21	4q27	0.027760421	0.535304059	0.618134512
GPKOW	Xp11.23	0.027757139	0.535352337	0.618154888
KLHL36	16q24.1	0.027754039	0.535397938	0.618172168
HPR	16q22.2	0.027739146	0.535617029	0.618389748
ASCL1	12q23.2	0.027722203	0.535866343	0.618642195
VPS26A	10q22.1	-0.027716583	0.535949058	0.618702291
DSCR8	21q22.13	0.027706286	0.536100616	0.618841848
LILRP2	19q13.42	0.027693172	0.536293664	0.619029279
ZNF479	7p11.2	0.027680869	0.536474806	0.619202946
NDRG3	20q11.23	-0.027657037	0.53682579	0.619547981
SNORA68	19p13.11	0.027656401	0.536835147	0.619547981
ZCCHC2	18q21.33	-0.027653315	0.536880609	0.619565013
XRCC5	2q35	0.027628313	0.537248957	0.619954636
ZNF714	19p12	-0.02762087	0.537358643	0.620045749
TDRP	8p23.3	-0.027607319	0.537558355	0.620240725
NXNL2	9q22.1	0.027596073	0.53772414	0.62038854
RLN2	9p24.1	-0.027594457	0.537747953	0.62038854
CAPNS1	19q13.12	-0.027587375	0.537852365	0.620473524
ZC3H10	12q13.2	-0.027573682	0.53805427	0.620670961
PPWD1	5q12.3	-0.027565904	0.538168973	0.62076779
MSH3	5q14.1	0.027563423	0.538205565	0.620774513
MUC7	4q13.3	0.027540004	0.53855101	0.62113745
CATSPER2	15q15.3	-0.027519718	0.538850349	0.621411658
GALNT14	2p23.1	-0.027519718	0.538850349	0.621411658
BARD1	2q35	-0.027507026	0.539037652	0.621592135
ZNF547	19q13.43	0.02749004	0.539288402	0.62182363
COL28A1	7p21.3	0.027487094	0.539331888	0.62182363
ZNF140	12q24.33	-0.027486986	0.539333485	0.62182363
ATMIN	16q23.2	0.027485078	0.539361663	0.62182363
ZFYVE19	15q15.1	-0.027479829	0.539439156	0.621877441
BAHD1	15q15.1	0.027473054	0.539539201	0.621957242
ZNF780B	19q13.2	0.027468951	0.539599795	0.62196358
AVP	20p13	0.027468507	0.539606343	0.62196358
NPPA	1p36.22	0.02746265	0.53969285	0.62202776
OPLAH	8q24.3	0.027457976	0.539761868	0.622071777
OR2M2	1q44	0.027421992	0.540293479	0.622648893
CABP7	22q12.2	0.027370089	0.541060727	0.623497482
IGFALS	16p13.3	0.027366731	0.54111038	0.623519094
KRTAP5-5	11p15.5	0.027357226	0.541250951	0.62364546
OR5AR1	11q12.1	0.027341799	0.541479142	0.623872766

KRT37	17q21.2	0.027337812	0.541538129	0.623905104
TSGA13	7q32.2	-0.027326212	0.541709749	0.624067197
OAZ3	1q21.3	0.027296992	0.542142195	0.624520117
AGMAT	1p36.21	-0.027295465	0.542164796	0.624520117
VCX3A	Xp22.31	-0.027289111	0.542258859	0.624592815
OR51B5	11p15.4	-0.027284219	0.542331276	0.62463884
WIPI1	17q24.2	0.027281533	0.542371049	0.62463884
SNORA11E	Xp11.22	0.027280139	0.542391683	0.62463884
HIST1H3C	6p22.2	-0.027273957	0.542483209	0.624708593
ZXDB	Xp11.21	-0.027266741	0.542590058	0.624791246
DPY19L2	12q14.2	-0.027264928	0.542616908	0.624791246
DNAJA1	9p21.1	-0.027256054	0.542748338	0.624872895
SMARCAD1	4q22.3	-0.027255958	0.542749751	0.624872895
FBXO38	5q32	0.027248516	0.542859986	0.624964152
FKBP8	19p13.11	-0.027240022	0.5429858	0.625062815
CLEC4M	19p13.2	-0.027238548	0.543007639	0.625062815
AIPL1	17p13.2	0.027231377	0.543113868	0.625149435
MS4A6E	11q12.2	0.027222394	0.543246965	0.625266969
RAD51AP2	2p24.2	0.027202642	0.543539674	0.625568191
GPR75	2p16.2	-0.027190114	0.543725364	0.625746214
EPB41L4A-DT	5q22.2	-0.02718792	0.54375789	0.625747959
NSMCE2	8q24.13	0.027172078	0.54399276	0.625982545
GNE	9p13.3	-0.0271612	0.544154073	0.626092124
NTF4	19q13.33	0.027159244	0.544183074	0.626092124
AGER	6p21.32	0.02715786	0.544203604	0.626092124
SMARCA5	4q31.21	-0.027157287	0.544212095	0.626092124
PTP4A1	6q12	-0.027126942	0.544662212	0.626574242
VPS45	1q21.2	-0.027117017	0.544809473	0.626707921
SEMA6A	5q23.1	-0.027110337	0.544908595	0.626786214
PRAMEF18	1p36.21	0.027102517	0.545024652	0.626883975
C16ORF58	16p11.2	-0.027087626	0.545245679	0.627102454
SLC7A1	13q12.3	0.027085335	0.545279676	0.627105812
IRF2BPL	14q24.3	-0.027080087	0.54535759	0.627130452
FAM49B	8q24.21	-0.027079705	0.545363257	0.627130452
DAZ4	Yq11.23	0.027075873	0.545420146	0.62716013
PRKAG2	7q36.1	-0.027069113	0.54552052	0.627239805
SHROOM2	Xp22.2	-0.027065964	0.545567278	0.627257826
SLC16A6	17q24.2	0.02705709	0.545699053	0.627373586
MYL6B	12q13.2	-0.027045256	0.545874799	0.627538349
RAB4A	1q42.13	-0.027043252	0.545904563	0.627538349
OR4A47	11p11.2	0.027033778	0.546045293	0.627664367
OR2B6	6p22.1	-0.027030465	0.546094502	0.627685176
SIGIRR	11p15.5	0.027015388	0.546318516	0.62788034
GOLGA6L6	15q11.2	0.027014848	0.546326528	0.62788034
PIK3R4	3q22.1	-0.0270026	0.546508532	0.628053743
LINC00312	3p25.3	0.026994156	0.546634027	0.628162188
TARM1	19q13.42	0.026991327	0.546676084	0.628174745
OR5K4	3q11.2	0.02695393	0.547232075	0.628777818
COG8	16q22.1	0.026943818	0.54738246	0.628914801
SPDYE1	7p13	-0.02693294	0.547544259	0.629064883
SNORA1	11q21	0.026910411	0.547879428	0.629414118
DUX4L2	4q35.2	0.026902213	0.548001407	0.629518411
ACD	16q22.1	-0.026887325	0.548222987	0.629737101
FBXO4	5p13.1	0.026875397	0.548400544	0.629905202
CASR	3q13.33-q21.1	0.02686827	0.548506646	0.629991212
EIF1AY	Yq11.223	0.026863646	0.548575484	0.630034417
CSN3	4q13.3	0.02685408	0.548717917	0.630162134
ALG5	13q13.3	0.026850109	0.54877706	0.630194189

OR6S1	14q11.2	0.026836282	0.548982978	0.630394783
CYP4F22	19p13.12	-0.026826299	0.549131671	0.630529645
ARRDC4	15q26.2	0.026821385	0.549204879	0.630558268
PSENE1	19q13.12	-0.026820431	0.549219095	0.630558268
FAM98A	2p22.3	-0.026814801	0.549302974	0.630618689
MEIOB	16p13.3	0.026806578	0.549425491	0.630723461
DIS3	13q21.33	-0.026788749	0.549691171	0.630992556
FAM181B	11q14.1	0.026782779	0.549780153	0.6310588
YPEL5	2p23.1	0.026773195	0.549923017	0.631186881
ZNF266	19p13.2	-0.026762984	0.550075236	0.631325684
FOXN4	12q24.11	-0.026751685	0.550243709	0.631483126
ALPI	2q37.1	0.026743484	0.550365997	0.631587549
PPP4R2	3p13	0.026731684	0.55054198	0.631722272
NPY6R	5q31.2	0.026731414	0.550546007	0.631722272
SH2D3A	19p13.3	0.026710023	0.550865106	0.63205248
PAX4	7q32.1	-0.026706817	0.550912941	0.632071425
LHFPL3	7q22.2-q22.3	-0.026702352	0.550979555	0.632111913
SRPK3	Xq28	-0.026683494	0.551260975	0.632398811
IL12A	3q25.33	0.026681394	0.551292308	0.632398811
TMEM82	1p36.21	0.02667028	0.551458204	0.632519637
GNRH2	20p13	0.026668951	0.551478035	0.632519637
CABP2	11q13.2	0.026668038	0.551491674	0.632519637
ZNF330	4q31.21	0.02665582	0.551674072	0.632692873
MYCBP2	13q22.3	0.02665353	0.551708266	0.63269613
DGCR9	22q11.21	-0.026646809	0.551808613	0.632750008
TMED10P1	8q24.3	0.026644465	0.551843618	0.632750008
PERM1	1p36.33	0.026644083	0.551849318	0.632750008
TMEM30CP	3q12.1	0.026636852	0.551957303	0.632837865
FAM151A	-	0.026624334	0.552144263	0.633016254
DHX29	5q11.2	0.026610301	0.552353874	0.633196032
OR52K2	11p15.4	0.026609635	0.552363832	0.633196032
PLA2G2E	1p36.13	-0.026592993	0.552612482	0.633445084
CYP11B2	8q24.3	-0.026588663	0.552677177	0.633483258
ACYP2	2p16.2	-0.026581101	0.552790189	0.633576805
WRAP73	1p36.32	0.02657423	0.552892876	0.633658507
ZNF738	19p12	0.02656965	0.552961339	0.633681312
CMBL	5p15.2	-0.026567455	0.552994145	0.633681312
FABP5	8q21.13	-0.026566596	0.553006983	0.633681312
IKBKE	1q32.1	-0.026551137	0.553238086	0.633910132
IL37	2q14.1	0.026541033	0.553389152	0.634017964
TSC22D4	7q22.1	-0.02654064	0.553395035	0.634017964
SCPEP1	17q22	-0.026522032	0.553673315	0.634300773
BPY2	Yq11.223	0.026517979	0.553733393	0.634334202
OR14J1	6p22.1	0.026510051	0.553852512	0.634434028
ZNF518A	10q24.1	-0.02649827	0.554028757	0.634599892
PIM3	22q13.33	0.026491686	0.554127273	0.634676708
TSSK3	1p35.1	0.026488585	0.554173669	0.634693822
FAM90A7P	8p23.1	-0.026460955	0.554587176	0.635119743
FAM47E	4q21.1	0.026458668	0.554621408	0.635119743
TMEM171	5q13.2	-0.026457428	0.554639978	0.635119743
RBMY3AP	Yp11.2	-0.026450835	0.554738668	0.635175248
CASP8AP2	6q15	0.026449984	0.554751404	0.635175248
PARK7	1p36.23	0.026442541	0.554862841	0.63523763
ARGFX	3q13.33	-0.02644214	0.554868847	0.63523763
COX7B2	4p12	0.026435101	0.554974249	0.635322254
SCGB2A1	11q12.3	-0.026424557	0.555132137	0.635449721
NEURL2	20q13.12	0.026422692	0.55516006	0.635449721
HNRNPA0	5q31.2	-0.026421356	0.555180067	0.635449721

ACTR5	20q11.23	0.026411194	0.555332272	0.635587881
NPC1L1	7p13	-0.026401928	0.555471078	0.635710689
ZNF669	1q44	-0.026389962	0.555650345	0.635879788
OR2T35	1q44	0.026384382	0.555733946	0.635939395
AP1B1	22q12.2	-0.026371353	0.555929187	0.63612674
PPM1F	22q11.22	0.026360761	0.556087937	0.636272312
NR2E3	15q23	0.026351434	0.556227741	0.636396189
CTXN3	5q23.2	-0.026330832	0.556536597	0.636713459
B3GAT2	6q13	0.026290291	0.557144643	0.637372966
ACADM	1p31.1	0.026278789	0.557317211	0.637534241
DLST	14q24.3	0.026268006	0.557479019	0.637683188
CRY1	12q23.3	0.026263807	0.557542029	0.637719114
NEUROD2	17q12	-0.026241286	0.557880065	0.638059631
FTH1P3	2p23.3	-0.02623976	0.557902975	0.638059631
BLOC1S3	19q13.32	-0.026231171	0.558031912	0.638170924
OR13C5	9q31.1	0.026225244	0.558120897	0.638236517
SCARNA5	2q37.1	-0.026211858	0.558321915	0.63843021
GOLGA2P7	15q25.2	0.026207314	0.558390145	0.63847205
SCGB3A1	5q35.3	-0.026199637	0.558505448	0.638546433
BCHE	3q26.1	0.026196054	0.55855927	0.638546433
CLK3	15q24.1	-0.026195386	0.558569304	0.638546433
STOML3	13q13.3	-0.026194556	0.558581775	0.638546433
TAS2R7	12p13.2	-0.026172242	0.558916994	0.638893447
TLK1	2q31.1	-0.026166567	0.559002266	0.638954725
TOE1	1p34.1	0.026153971	0.559191558	0.639134888
KIR2DL4	19q13.42	0.026108945	0.559868444	0.6398723
NHLH1	1q23.2	0.026101284	0.559983656	0.639967729
ZNF566	19q13.12	-0.026090321	0.560148534	0.640111029
TCP10	6q27	0.026088729	0.56017249	0.640111029
PRAMEF2	1p36.21	0.026082195	0.560270771	0.640187083
C9ORF152	9q31.3	-0.026058599	0.560625779	0.640556457
MAP3K15	Xp22.12	-0.026050906	0.560741539	0.640623812
SCX	8q24.3	-0.026050462	0.560748223	0.640623812
STOX1	10q22.1	-0.026043658	0.560850627	0.640704529
KCNIP2	10q24.32	0.026030489	0.56104884	0.640894681
SLC25A52	18q12.1	0.026027914	0.561087597	0.640902673
C8ORF86	8p11.22	-0.025979068	0.561823134	0.641706516
TMEM135	11q14.2	-0.025965312	0.562030351	0.641906862
PRAMEF17	1p36.21	-0.025956055	0.562169825	0.64202982
SH3GL3	15q25.2	0.025944114	0.562349764	0.642198975
PMCHL2	5q13.2	-0.025927777	0.562595988	0.642443803
GOLGA2P5	12q23.1	0.025925424	0.562631449	0.64244794
ZNF689	16p11.2	-0.025919317	0.56272351	0.642516704
AHSP	16p11.2	0.025904814	0.562942157	0.642708439
SNX1	15q22.31	0.025903953	0.562955134	0.642708439
KMT5C	19q13.42	-0.025882482	0.563278909	0.642995236
SNX8	7p22.3	0.025881242	0.563297619	0.642995236
HECTD1	14q12	0.025880955	0.563301937	0.642995236
IGSF3	1p13.1	0.025876756	0.563365264	0.643031148
WASH8P	12p13.33	-0.025857289	0.563658919	0.64332994
SPINK4	9p13.3	-0.025830457	0.564063799	0.643720571
BCAS1	20q13.2	-0.025830379	0.564064975	0.643720571
ERICH1	8p23.3	0.025817019	0.564266616	0.64391427
JKAMP	14q23.1	0.025809624	0.564378244	0.643986089
POLD4	11q13.2	-0.025808622	0.564393379	0.643986089
SLC25A51P1	6q12	-0.025786307	0.5647303	0.64433409
PHAX	5q23.2	0.025777894	0.564857332	0.644442591
ARFGAP2	11p11.2	0.025771787	0.564949569	0.644506426

FMR1NB	Xq27.3-q28	-0.02576996	0.564977163	0.644506426
RAB29	1q32.1	0.025766539	0.56502884	0.644528941
KIAA0100	17q11.2	0.02576005	0.565126855	0.644604308
CAPZA1	1p13.2	0.025747167	0.565321469	0.644789844
S100A14	1q21.3	0.025742396	0.565393556	0.644835617
ZNF425	7q36.1	0.02573858	0.565451211	0.644864925
TEX13A	Xq22.3	0.025730266	0.565576843	0.64497175
SCGN	6p22.2	0.025726832	0.565628735	0.644994476
OR6N2	1q23.1	0.025704151	0.565971534	0.645348905
ACTL10	20q11.22	0.025688384	0.566209891	0.645584213
GGPS1	1q42.3	-0.02568514	0.566258947	0.645603667
USP42	7p22.1	0.025678842	0.566354179	0.645675761
PROK1	1p13.3	0.025672671	0.566447489	0.645745658
CLDN18	3q22.3	0.02566816	0.566515709	0.645786944
OFD1	Xp22.2	-0.025656798	0.56668755	0.645946341
IGSF1	Xq26.1	-0.025651346	0.566770019	0.646003853
GJB1	Xq13.1	0.025626894	0.56713995	0.646388989
EXT1	8q24.11	-0.025580647	0.567839917	0.647150214
DHRS3	1p36.21	-0.025577785	0.567883261	0.647163061
CWC22	2q31.3	-0.02556099	0.568137576	0.647416318
DMP1	4q22.1	-0.025555685	0.568217907	0.647471293
TBC1D3H	17q12	-0.025544817	0.568382514	0.64760951
DMRTA1	9p21.3	0.025543439	0.568403391	0.64760951
IQCJ	3q25.32	-0.025537448	0.568494133	0.647676328
OR4D10	11q12.1	0.025526126	0.568665659	0.647835168
OR10H1	19p13.12	0.025516928	0.568805026	0.647957357
ATOH1	4q22.2	-0.025510717	0.568899147	0.648027992
ADAMTS17	15q26.3	0.025472959	0.569471445	0.648612443
MAP1S	19p13.11	-0.025472624	0.569476518	0.648612443
TTC28	22q12.1	0.025465181	0.56958937	0.648704363
AP5S1	20p13	0.025431782	0.570095888	0.649244592
COG5	7q22.3	-0.025427106	0.570166818	0.649259191
SCARNA22	4p16.3	0.025426695	0.570173058	0.649259191
LAYN	11q23.1	0.025414414	0.570359362	0.649434689
CXADRP3	18p11.21	0.025402228	0.570544264	0.649600075
BARHL1	9q34.13	-0.025400598	0.570568994	0.649600075
CDCP1	3p21.31	0.025393611	0.570675028	0.64968414
NIPAL2	8q22.2	0.025371377	0.571012505	0.650031668
RTKN	2p13.1	-0.025359448	0.571193595	0.650201136
NELL2	12q12	-0.025351242	0.5713182	0.650306293
OPN1MW	Xq28	0.025341273	0.571469581	0.650441913
CNIH2	11q13.2	0.02532853	0.571663105	0.650625482
ZNF629	16p11.2	-0.025283775	0.572343059	0.651362618
C6ORF15	6p21.33	-0.025277279	0.572441782	0.651416229
WIPI2	7p22.1	0.025276427	0.57245473	0.651416229
DNAH9	17p12	-0.025267205	0.572594899	0.651538991
FKBPL	6p21.32	-0.025247227	0.572898615	0.651845301
PTPN11	12q24.13	0.025245032	0.572931985	0.651845301
ZNF260	19q13.12	0.025243123	0.572961004	0.651845301
CYP2W1	7p22.3	0.02523522	0.573081184	0.651945271
KAT14	20p11.23	-0.025227856	0.573193168	0.652035906
RINL	19q13.2	-0.025219839	0.573315086	0.652137831
TMED2	12q24.31	-0.025170981	0.574058415	0.652945624
GEMIN5	5q33.2	-0.025168309	0.574099079	0.652945624
CHKB-CPT1B	22q13.33	-0.025166782	0.574122316	0.652945624
AQR	15q14	-0.025157239	0.574267558	0.653015867
HPS6	10q24.32	0.02515638	0.57428063	0.653015867
VIP	6q25.2	0.025156345	0.574281163	0.653015867

VMP1	17q23.1	-0.025143689	0.574473831	0.653184836
OR52B2	11p15.4	-0.025142331	0.574494497	0.653184836
HIST1H3A	6p22.2	0.025128075	0.574711551	0.653394804
HSFY1P1	22q11.1	0.025119021	0.574849421	0.65351473
TRPC4	13q13.3	0.025111293	0.574967123	0.653611716
PLIN1	15q26.1	-0.025108516	0.575009416	0.653622973
PRG3	11q12.1	0.025085176	0.575364942	0.653990264
SPDYE5	7q11.23	-0.025058862	0.575765905	0.654409158
SLC30A5	5q13.1-q13.2	-0.025052556	0.575862001	0.654481516
OR1L4	9q33.2	0.024999506	0.576670805	0.655363831
PCDH19	Xq22.1	-0.024989098	0.576829555	0.655507326
AQP7P3	9q21.11	0.024980219	0.576964991	0.655624313
LINC00293	8q11.1	-0.024933884	0.577672035	0.656390787
E2F3	6p22.3	0.024930315	0.577726505	0.656391999
REEP1	2p11.2	-0.024929552	0.577738158	0.656391999
NKAIN3	8q12.3	-0.024907423	0.578075994	0.656738852
ULBP1	6q25.1	0.024904645	0.578118407	0.656750061
RESP18	2q35	0.024889923	0.578343221	0.656968467
CXCR2P1	2q35	0.024886153	0.578400787	0.656996874
EXOC8	1q42.2	-0.024878403	0.578519169	0.657094355
RPL13AP6	10q25.2	-0.024864805	0.57872687	0.657281959
RB1	13q14.2	0.024863325	0.578749485	0.657281959
NUP160	11p11.2	0.024853973	0.57889236	0.657407222
OR5T2	11q12.1	0.024818847	0.579429164	0.657979803
GTDC1	2q22.3	0.024816375	0.579466944	0.657985676
CHD7	8q12.2	-0.024793282	0.579819993	0.658349518
ZMYND12	1p34.2	0.024752153	0.580449019	0.659026656
SRSF5	14q24.1	-0.02474032	0.580630051	0.659195105
NXF1	11q12.3	0.024738125	0.580663633	0.659196143
CBLN2	18q22.3	0.024726971	0.580834315	0.659352815
RERGL	12p12.3	0.024723898	0.580881341	0.659369105
ARL13A	Xq22.1	-0.024710535	0.581085858	0.659564153
EGR4	2p13.2	0.024700332	0.581242019	0.65968113
C14ORF178	14q24.3	0.02469953	0.581254299	0.65968113
EXD2	14q24.1	-0.02468588	0.581463274	0.659881188
FAM181A-AS1	14q32.12	0.02468061	0.581543964	0.659935646
HIST2H2BA	1p11.2	0.024665841	0.581770108	0.660155148
ITM2B	13q14.2	-0.02465749	0.581898012	0.660263157
AK2	1p35.1	0.024648138	0.58204125	0.660388551
C9ORF135	9q21.12	0.024635623	0.582232961	0.660568926
GPALPP1	13q14.12	0.024630389	0.582313154	0.660622766
THAP3	1p36.31	0.024610826	0.582612903	0.660925667
NEDD1	12q23.1	0.024605864	0.582688948	0.660974775
YBX3	12p13.2	-0.024592695	0.582890782	0.66116656
SHPK	17p13.2	-0.024585634	0.582999017	0.661252159
ZC3HAV1	7q34	0.024576759	0.583135075	0.661369305
BAIAP2-DT	17q25.3	0.024562922	0.583347224	0.661572733
TMPPE	3p22.3	-0.02453897	0.583714546	0.661952108
ATP6V0A4	7q34	-0.024536752	0.583748569	0.661953492
MAP3K10	19q13.2	0.024505859	0.584222498	0.662453685
DNAL4	22q13.1	0.024499559	0.584319177	0.662526082
RAX2	19p13.3	-0.024490509	0.584458049	0.662646307
ASB3	2p16.2	-0.024485913	0.584528597	0.662689059
CPA1	7q32.2	-0.024471107	0.584755853	0.662909458
AJUBA	14q11.2	0.024467495	0.584811295	0.662935067
MAP2	2q34	-0.024463869	0.584866964	0.662960929
RO60	1q31.2	0.024461293	0.584906519	0.662968525
SNAPC4	9q34.3	-0.024450986	0.585064752	0.663081689

SRP72	4q12	0.024450509	0.585072078	0.663081689
C15ORF62	15q15.1	-0.024447742	0.585114571	0.663092605
CXADR	21q21.1	0.024443925	0.585173183	0.663121787
LOC100133050	5q21.1	0.024441535	0.585209877	0.663126129
NFE2L1	17q21.32	0.024436482	0.585287485	0.66317683
NUDCD3	7p13	0.024431138	0.585369554	0.663195248
FNTB	14q23.3	-0.024430947	0.585372485	0.663195248
KRTAP10-10	21q22.3	0.024429003	0.585402337	0.663195248
LINC00488	3q13.13	0.024417728	0.585575524	0.663354208
ZNF607	19q13.12	0.024415488	0.585609931	0.663355944
GOLGA2	9q34.11	0.024412052	0.585662702	0.663378483
MFSD4A-AS1	1q32.1	-0.024378915	0.586171848	0.663917923
SEPHS1P1	7q11.21	-0.024363846	0.586403445	0.66414296
EIF3B	7p22.3	-0.0243276	0.586960697	0.664736778
IVL	1q21.3	-0.024313095	0.587183759	0.664952078
DACT2	6q27	-0.02430034	0.587379947	0.665136922
TMTC4	13q32.3	-0.024276547	0.587746005	0.665514092
CATSPER2P1	15q15.3	-0.024268626	0.587867881	0.665614744
DNAJB8	3q21.3	0.024263124	0.587952544	0.665657105
VSIG8	1q23.2	0.024261908	0.587971269	0.665657105
ACKR1	1q23.2	0.024245437	0.588224766	0.665904297
TC2N	14q32.12	0.024243433	0.588255612	0.665904297
PTX4	16p13.3	-0.024196697	0.588975225	0.666681498
CHKA	11q13.2	0.024188181	0.589106391	0.666792565
TDRD1	10q25.3	0.024182487	0.589194112	0.66685445
BDNF-AS	11p14.1	-0.024175871	0.589296019	0.666924926
WDR89	14q23.2	-0.024174154	0.589322481	0.666924926
LINC00705	10p15.1	0.024158772	0.589559479	0.667155715
GDE1	16p12.3	0.024155545	0.589610659	0.667176218
PARP9	3q21.1	0.024132929	0.589957734	0.66753152
SNORA11D	Xp11.22	0.024110034	0.590310677	0.667893421
TRAPPC1	17p13.1	-0.024106114	0.590371112	0.667924348
SLC40A1	2q32.2	-0.024087697	0.59065511	0.668208189
PRKACA	19p13.12	-0.024085311	0.590691902	0.668212349
CSNK2A3	11p15.4	-0.024066035	0.590989219	0.668511209
NVL	1q42.11	-0.024046091	0.591296911	0.66882177
FAM174A	5q21.1	0.024030155	0.591542824	0.66906242
LCE3D	1q21.3	-0.024027604	0.591582189	0.669069442
OSR1	2p24.1	0.024016795	0.591749014	0.66922061
RAB9A	Xp22.2	-0.02399895	0.592024476	0.669494615
DZIP1L	3q22.3	0.023995515	0.592077513	0.669517071
TRIM21	11p15.4	0.023991507	0.592139392	0.669543649
TMX1	14q22.1	-0.023989694	0.592167377	0.669543649
DGCR11	22q11.21	0.023970418	0.592465043	0.669842677
GABRB3	15q12	0.023964406	0.592557886	0.669910112
ST8SIA3	18q21.31	-0.023955909	0.59268913	0.670008339
LINS1	15q26.3	-0.023954481	0.592711178	0.670008339
OCM	7p22.1	0.023943873	0.592875053	0.670156044
RFK	9q21.13	0.023941599	0.592910183	0.670158213
TAF4	20q13.33	-0.023939309	0.592945565	0.670160667
LINC00265	7p14.1	-0.023899802	0.593556054	0.670813084
RXFP2	13q13.1	0.023885328	0.593779794	0.671000446
CHRM5	15q14	0.023884775	0.593788343	0.671000446
LINC00410	13q31.3	0.023882273	0.593827018	0.671006574
DYTN	2q33.3	0.023834578	0.594564571	0.671802367
ANXA2	15q22.2	0.023801417	0.595077624	0.672344422
DNAJC5	20q13.33	0.023799127	0.595113065	0.672346819
SNRNP200	2q11.2	0.023789298	0.595265176	0.67248102

LINC00917	16q24.1	-0.023761834	0.595690292	0.672923607
TMOD1	9q22.33	0.023758475	0.595742299	0.672944685
RAB4B	19q13.2	-0.02374397	0.595966888	0.673160696
ACRV1	11q24.2	0.023709637	0.59649864	0.673723612
TIGAR	12p13.32	0.023706372	0.596549224	0.673743034
CAPZA3	12p12.3	0.023689888	0.596804619	0.673993755
PAGE1	Xp11.23	0.023672983	0.597066584	0.674224817
GYS2	12p12.1	-0.023672373	0.597076043	0.674224817
KIAA0930	22q13.31	-0.02366782	0.597146609	0.674266769
TMEM25	11q23.3	0.023660567	0.597259019	0.674355961
CCDC174	3p25.1	-0.023652456	0.597384751	0.674460185
ATG16L1	2q37.1	-0.023642818	0.597534167	0.674591135
C11ORF65	11q22.3	-0.023633562	0.597677672	0.674715398
PMCHL1	5p14.3	0.023628524	0.597755787	0.674728444
ZNF567	19q13.12	-0.023628504	0.597756102	0.674728444
SLC8A2	19q13.32	-0.023616572	0.597941133	0.674899548
MYH11	16p13.11	-0.0236119	0.598013594	0.674943583
SETD7	4q31.1	0.023607606	0.598080195	0.674980999
SLC9B2	4q24	-0.023598826	0.598216368	0.675096923
ANO7	2q37.3	0.023594295	0.598286662	0.675101261
CRTAP	3p22.3	-0.02359291	0.598308144	0.675101261
TERB1	16q22.1	0.023591173	0.59833508	0.675101261
NR2F1-AS1	5q15	0.023589952	0.598354034	0.675101261
LRTOMT	11q13.4	-0.023583081	0.598460625	0.675183772
C11ORF58	11p15.2	-0.023573347	0.598611643	0.675316394
ATXN8OS	13q21.33	-0.023562366	0.598782047	0.67547087
OR5D14	11q11	-0.023559634	0.598824431	0.675480921
TNNC2	20q13.12	0.023518899	0.599456736	0.676156371
ATG10	5q14.1-q14.2	-0.023511702	0.59956849	0.676244623
HACD1	10p12.33	0.023507885	0.59962776	0.676273469
SPOPL	2q22.1	0.023505738	0.599661092	0.676273469
OR4S2	11q11	0.023500784	0.599738022	0.676322429
C17ORF78	17q12	0.023476246	0.600119141	0.676714397
SPATA31D1	9q21.32	0.023444449	0.600613148	0.677233612
SPATA31D3	9q21.32	-0.023441985	0.600651447	0.677238954
PDK3	Xp22.11	0.023421142	0.600975388	0.67756634
LINC00479	21q22.3	0.023397582	0.601341648	0.677941399
LOC641367	19p12	0.023391227	0.601440462	0.678014921
WDR97	8q24.3	-0.023381062	0.601598519	0.678134056
TTL1	22q13.2	-0.023380108	0.601613354	0.678134056
PTK6	20q13.33	-0.023340029	0.602236778	0.678798857
NOBOX	7q35	0.023331962	0.602362297	0.678902413
MDM1	12q15	-0.02332352	0.602493653	0.679012535
TUT7	9q21.33	0.023306821	0.602753549	0.6792675
TRPC5	Xq23	0.023304226	0.602793939	0.679275082
DNM1P35	15q24.2	0.023299664	0.602864948	0.679317165
CA13	8q21.2	-0.023212634	0.6042203	0.680785554
SNORA44	1p35.3	0.023211655	0.604235556	0.680785554
GSK3A	19q13.2	0.023206623	0.604313976	0.680835896
PRRT1	6p21.32	0.023197748	0.604452273	0.680953685
ASB17	1p31.1	-0.023185563	0.604642179	0.681129601
COL20A1	20q13.33	-0.02317363	0.604828176	0.681284824
AGAP4	10q11.22	0.023169883	0.604886586	0.681284824
RAB1A	2p14	-0.023168452	0.6049089	0.681284824
CDKL4	2p22.1	-0.023168059	0.60491502	0.681284824
SPDYE6	7q22.1	-0.023159817	0.60504352	0.681388217
KRTAP26-1	21q22.11	0.023157839	0.605074358	0.681388217
CELF6	15q23	0.023153756	0.605138015	0.681421876

PREPL	2p21	0.023139729	0.605356753	0.681623104
VPS37C	11q12.2	0.023137964	0.605384275	0.681623104
RFX6	6q22.1	0.023113557	0.605764951	0.682013667
CECR2	22q11.1-q11.21	0.023101367	0.605955112	0.682189701
CNOT1	16q21	0.023084476	0.606218653	0.682412606
ADAMTS20	12q12	-0.023084343	0.606220743	0.682412606
TMOD3	15q21.2	0.02306396	0.606538841	0.682732598
CSNK1D	17q25.3	-0.023037049	0.606958924	0.683167343
PHYH	10p13	0.023026457	0.607124311	0.683315381
SNORA31	13q14.13	-0.023018904	0.607242254	0.683365397
DGKD	2q37.1	-0.023017105	0.607270345	0.683365397
ECPAS	9q31.3	-0.023017105	0.607270345	0.683365397
SNORA71B	20q11.23	-0.023014754	0.607307056	0.683368599
ATG12	5q22.3	-0.022999022	0.607552763	0.683589859
SLC35G6	17p13.1	0.022997827	0.607571441	0.683589859
PNLIP	10q25.3	0.022971153	0.607988143	0.684020558
PITPNC1	17q24.2	0.022962712	0.608120037	0.684130804
TAAR8	6q23.2	-0.022946077	0.608380004	0.68438511
TFCP2	12q13.12-q13.13	-0.022942912	0.608429477	0.684388345
SPINK9	5q32	0.022941553	0.608450712	0.684388345
SLAIN1	13q22.3	-0.022923587	0.608731546	0.684666064
CALHM4	6q22.1	-0.022908606	0.608965765	0.684891326
PITHD1	1p36.11	0.022898967	0.609116488	0.684940028
LEPROTL1	8p12	0.022898394	0.609125442	0.684940028
ZNF101	19p13.11	-0.022898204	0.609128426	0.684940028
TBCB	19q13.12	-0.022897154	0.609144841	0.684940028
WBP4	13q14.11	-0.022892192	0.609222441	0.684941311
PAF1	19q13.2	-0.022892001	0.609225426	0.684941311
OGT	Xq13.1	0.022890569	0.609247811	0.684941311
PRAMEF5	1p36.21	0.022879798	0.609416283	0.685092545
TCFL5	20q13.33	-0.022868049	0.609600058	0.685260964
PFN4	2p23.3	-0.022860065	0.609724952	0.68536318
C3ORF22	3q21.3	0.022853307	0.609830679	0.685443841
GOLGA6L10	15q25.2	-0.022850013	0.609882218	0.685463589
FDXACB1	11q23.1	0.022831405	0.610173397	0.685752658
THSD7B	2q22.1	-0.022824762	0.610277361	0.685823512
SNORA71D	20q11.23	-0.022823033	0.610304416	0.685823512
SMARCA2	9p24.3	-0.022817759	0.610386967	0.685878083
CDC73	1q31.2	-0.022791898	0.610791796	0.686294763
CES2	16q22.1	0.022770714	0.611123515	0.686629255
SCNN1D	1p36.33	0.022765658	0.611202687	0.686679975
CROCCP2	1p36.13	0.022753346	0.611395525	0.686856654
RETNLB	3q13.13	-0.022751271	0.611428023	0.686856654
ASAP2	2p25.1 2p24	0.022736551	0.611658618	0.687077446
ZNF107	7q11.21	-0.022719183	0.611930732	0.687344851
FAM172A	5q15	-0.022716225	0.611977087	0.687358657
MAPK1	22q11.22	-0.022695613	0.612300116	0.687683199
MAGI2	7q21.11	0.022677148	0.612589551	0.687969977
GNL3L	Xp11.22	0.022672138	0.612668102	0.688019902
GUCY2F	Xq22.3-q23	0.022657998	0.612889799	0.688210457
RAF1	3p25.2	-0.022656965	0.612905998	0.688210457
ZNF497	19q13.43	0.022652194	0.612980816	0.68825617
ERBB2	17q12	0.022645705	0.613082576	0.688330793
ZNF346	5q35.2	-0.022643605	0.6131155	0.688330793
CCDC85B	11q13.1	0.022633204	0.613278634	0.688475636
NPFF	12q13.13	0.02262209	0.613452955	0.688633021
SLN	11q22.3	0.022618628	0.613507271	0.688655683
BAALC	8q22.3	0.022611924	0.613612445	0.688735429

TUT1	11q12.3	-0.02260658	0.613696285	0.688791219
METTL25	12q21.31	0.022599232	0.613811573	0.688882298
HIST1H2BJ	6p22.1	-0.022585872	0.614021211	0.689079251
BFAR	16p13.12	0.022562016	0.614395635	0.689461101
SERPINA7	Xq22.3	-0.022556429	0.614483339	0.689521175
SLC22A18AS	11p15.4	0.022529571	0.614905015	0.689955977
ITGB8	7p21.1	0.022517737	0.615090855	0.690111295
LARGE2	11p11.2	-0.022516401	0.615111836	0.690111295
PPP1R16A	8q24.3	0.022504855	0.61529319	0.690276382
HEATR5B	2p22.2	0.022499511	0.615377131	0.690319011
FAM183BP	7p14.1	0.02249808	0.615399608	0.690319011
FAHD2B	2q11.2	-0.0224893	0.61553753	0.690435343
PRPH	12q13.12	-0.022485249	0.615601176	0.690468352
TRIM66	11p15.4	0.022477849	0.61571744	0.690560372
BROX	1q41	-0.022470215	0.615837392	0.690656519
COBL	7p12.1	0.022449794	0.616158316	0.690978029
ALX1	12q21.31	-0.022445514	0.61622558	0.690992268
SNHG28	1q23.2	0.022443305	0.616260307	0.690992268
BARX1	9q22.32	-0.02244245	0.616273742	0.690992268
RNF145	5q33.3	0.022437197	0.616356305	0.691036638
PPT1	1p34.2	0.022435575	0.616381805	0.691036638
GTF2B	1p22.2	-0.022423552	0.616570816	0.691210139
CRX	19q13.33	-0.022419546	0.616633788	0.691242331
OR5V1	6p22.1	-0.022404419	0.616871649	0.691455143
SNORD22	11q12.3	0.022401194	0.616922353	0.691455143
RMDN1	8q21.3	0.022400935	0.616926429	0.691455143
ADGRF3	2p23.3	-0.022396881	0.61699019	0.691475065
SNORD15A	11q13.4	-0.022395447	0.617012737	0.691475065
MMP27	11q22.2	-0.022387257	0.617141549	0.691581013
FGF3	11q13.3	0.022378653	0.617276866	0.691694241
FEM1B	15q23	-0.022365627	0.617481771	0.691858784
ZFP41	8q24.3	0.022364959	0.617492279	0.691858784
DEFB109B	8p23.1	0.022334451	0.617972306	0.692358179
ZFP69	1p34.2	-0.022330702	0.618031315	0.692379208
OR7G2	19p13.2	0.022328898	0.618059699	0.692379208
TAS2R42	12p13.2	0.022325067	0.618119991	0.69240831
OR2C1	16p13.3	0.022305405	0.618429484	0.692716545
VN1R4	19q13.42	0.022284372	0.618760629	0.693048997
PRAMEF14	1p36.21	0.022280033	0.618828947	0.693087047
OAT	10q26.13	0.022262757	0.619101009	0.693353273
LINC00638	14q32.33	0.022250066	0.619300914	0.693538661
RTP4	3q27.3	-0.022237278	0.619502349	0.693725744
ZNF92	7q11.21	-0.022214185	0.619866208	0.694094679
OR13D1	9q31.1	0.022202589	0.620048956	0.694260786
SLC25A40	7q21.12	-0.022198058	0.620120363	0.694302214
ZNF696	8q24.3	-0.022185272	0.620321898	0.694489324
PI4K2B	4p15.2	0.022180118	0.620403145	0.694511641
HOXD8	2q31.1	-0.022179641	0.620410666	0.694511641
HELT	4q35.1	-0.022171441	0.620539931	0.694617811
ZHX2	8q24.13	0.022164563	0.620648368	0.694700655
PLSCR2	3q24	0.022156198	0.620780268	0.694809752
MUS81	11q13.1	0.02215254	0.620837955	0.694835779
SLC35A5	3q13.2	-0.022149868	0.620880089	0.694844397
ALDOB	9q31.1	-0.022145248	0.620952934	0.694887381
ZCCHC17	1p35.2	0.022137176	0.621080243	0.694991306
CHIT1	1q32.1	0.022122576	0.621310529	0.695210445
EXOC1L	4q12	0.022117355	0.621392875	0.695264032
CDK10	16q24.3	0.022097192	0.621710984	0.69558139

ZNF784	19q13.42	0.02208307	0.621933826	0.695792131
SVIL	10p11.23	0.022066274	0.622198908	0.696031556
GPR26	10q26.13	-0.022065139	0.622216821	0.696031556
FOXD2	1p33	0.022060549	0.622289274	0.696045308
KIAA0895L	16q22.1	-0.022059212	0.62231037	0.696045308
FABP2	4q26	-0.022057804	0.622332595	0.696045308
CACNA1F	Xp11.23	0.022050716	0.622444493	0.696131876
OR4A16	11q11	0.022039179	0.622626628	0.696296981
RPL11	1p36.11	-0.022035451	0.62268549	0.696324217
NOS1	12q24.22	-0.022026629	0.622824792	0.696441399
HNRNPLL	2p22.1	0.022016557	0.622983847	0.696580654
CLDN1	3q28	0.021988501	0.623426977	0.696997352
GPR119	Xq26.1	-0.021986449	0.623459402	0.696997352
CPSF7	11q12.2	-0.021986402	0.623460142	0.696997352
CTR9	11p15.4	-0.021984016	0.62349783	0.697000871
OR2G6	1q44	0.021965788	0.623785821	0.697233842
CHML	1q43	0.021965312	0.62379334	0.697233842
SLC38A8	16q23.3	0.021964265	0.623809891	0.697233842
KISS1R	19p13.3	-0.021945512	0.62410625	0.697526448
RRH	4q25	0.021903739	0.624766602	0.698225812
SENP1	12q13.11	-0.021893265	0.62493222	0.698372225
MRPL23-AS1	11p15.5	-0.021890023	0.624983492	0.698390845
KRT36	17q21.2	-0.021886662	0.625036645	0.698411565
ASZ1	7q31.2	0.021880235	0.625138285	0.698486459
ACOT7	1p36.31	0.021855858	0.625523885	0.698878604
RPRM	2q23.3	-0.021832116	0.625899541	0.699259597
SBDS	7q11.21	0.021826753	0.625984403	0.699315687
SLC2A11	22q11.23	0.021819787	0.626094647	0.699400126
WDR45	Xp11.23	0.021799556	0.626414854	0.699719089
GTF3C6	6q21	-0.021766252	0.626942142	0.700230837
LCN6	9q34.3	-0.021766237	0.626942392	0.700230837
CYMP	1p13.3	-0.021759381	0.627050956	0.700313329
CAPNS2	16q12.2	-0.02174439	0.627288386	0.700539727
AMBP	9q32	0.021734348	0.627447452	0.700678591
LINC00301	11q12.2	-0.021725329	0.627590332	0.700799364
TERB2	15q21.1	-0.02172014	0.627672526	0.700852363
DAG1	3p21.31	-0.021701362	0.627970067	0.701145796
NCMAP	1p36.11	0.021683899	0.628246822	0.701415991
PTAR1	9q21.12	0.021663287	0.628573552	0.701741948
ZAN	7q22.1	-0.02165841	0.628650872	0.701789442
TNFRSF13C	22q13.2	-0.02164153	0.628918512	0.702049381
PRPF38A	1p32.3	0.021626643	0.629154584	0.702274054
TTY4C	Yq11.23	0.021623211	0.62920902	0.702295968
ACOT1	14q24.3	-0.02162025	0.629255977	0.702309533
DYRK1B	19q13.2	0.021616146	0.629321067	0.702343334
NLGN3	Xq13.1	0.021599447	0.629585966	0.702600112
OR6C1	12q13.2	0.021589852	0.629738188	0.702731123
OR7A17	19p13.12	-0.021587379	0.629777424	0.702736045
VTIIA	10q25.2	0.02158456	0.629822145	0.702747087
BCL2L15	1p13.2	0.021545541	0.630441373	0.703399119
OPN5	6p12.3	0.021530132	0.630685971	0.703633118
TBC1D13	9q34.11	-0.02152072	0.630835416	0.703725413
ELOVL1	1p34.2	-0.021520529	0.630838446	0.703725413
PNMT	17q12	-0.02150546	0.631077715	0.703953412
TRIM65	17q25.1	-0.021497817	0.631199089	0.704049883
BPIFA4P	20q11.21	-0.021491166	0.63130472	0.704128783
SCARNA6	2q37.1	-0.021488165	0.631352387	0.704143029
MOGS	2p13.1	-0.021476823	0.631532535	0.70430502

SPAG11A	8p23.1	-0.021449095	0.631973055	0.704757352
RIF1	2q23.3	-0.021440657	0.632107147	0.704867934
NLGN1	3q26.31	-0.02143659	0.632171772	0.704901044
RHPN1	8q24.3	0.021412601	0.632553041	0.705287204
ATE1	10q26.13	0.021406112	0.632656192	0.705363241
TCF20	22q13.2 22q13.3	-0.021403536	0.632697151	0.705369934
GTF2IRD1P1	7q11.21	-0.0213771	0.633117462	0.705794318
CAPS2	12q21.1-q21.2	0.021375194	0.633147765	0.705794318
CPLX1	4p16.3	0.021370804	0.633217579	0.705827123
OR51V1	11p15.4	-0.021368945	0.633247149	0.705827123
DGKQ	4p16.3	0.021361262	0.633369341	0.70588703
EHBP1	2p15	-0.021361166	0.633370859	0.70588703
ANXA2P3	10q21.3	0.021312643	0.634142785	0.706708304
GABARAPL2	16q23.1	0.021304101	0.634278719	0.706820758
SETX	9q34.13	0.021292363	0.634465521	0.706989881
OR10H5	19p13.12	-0.021283746	0.634602682	0.707103674
HSP90AB2P	4p15.33	0.021266599	0.634875648	0.707368765
ARFIP1	4q31.3	-0.021242742	0.63525551	0.707752922
LRP5	11q13.2	-0.021236253	0.635358847	0.707828972
SAG	2q37.1	-0.021220918	0.635603072	0.708061962
JPT2	16p13.3	-0.021212587	0.635735782	0.708160386
GTSF1L	20q13.12	0.021210965	0.635761611	0.708160386
ADM2	22q13.33	-0.021192547	0.636055035	0.708448118
TGIF2	20q11.23	0.021189875	0.636097607	0.70845643
C4ORF48	4p16.3	-0.021186204	0.636156105	0.70848248
OR5T1	11q12.1	0.021173745	0.636354632	0.708664466
CABLES2	20q13.33	0.021152373	0.636695263	0.709004675
C8G	9q34.3	-0.02113574	0.636960406	0.70926079
ARMS2	10q26.13	-0.021111491	0.63734703	0.709652139
OR51B6	11p15.4	-0.021098795	0.63754951	0.709838422
ERICH3	1p31.1	-0.021090876	0.63767581	0.709939871
ZNF484	9q22.31	-0.021086481	0.637745907	0.709978741
OPN1LW	Xq28	-0.021084202	0.637782254	0.709980036
TAS2R30	12p13.2	0.021073821	0.637947859	0.710125212
HIST1H4K	6p22.1	-0.021070201	0.6380056	0.710150312
TUBA3D	2q21.1	0.021017612	0.638844797	0.711045182
GSAP	7q11.23	-0.021014672	0.638891732	0.711058202
ZFYVE9	1p32.3	-0.020952454	0.639885215	0.712098917
CDNF	10p13	-0.020951691	0.639897401	0.712098917
LOC392196	8p23.1	0.020947276	0.639967925	0.712138125
CLLU1OS	12q22	0.020935848	0.640150485	0.712301993
BLOC1S6	15q21.1	0.020924494	0.640331883	0.71246455
TMEM208	16q22.1	0.020913233	0.640511807	0.712625448
PRTFDC1	10p12.1	0.020903309	0.640670401	0.712762599
OR1A2	17p13.3	-0.020898658	0.640744734	0.712805998
ERAS	Xp11.23	-0.020869873	0.641204832	0.713255038
SCNN1B	16p12.2	0.020867333	0.641245441	0.713255038
FAM83A-AS1	8q24.13	0.020866772	0.641254418	0.713255038
ASIC3	7q36.1	-0.020863574	0.641305536	0.713263147
YTHDF1	20q13.33	-0.020861894	0.641332402	0.713263147
KRTAP5-10	11q13.4	-0.020851754	0.641494532	0.713404142
BRD2	6p21.32	0.020845671	0.641591789	0.713472981
PTPN6	12p13.31	0.02083861	0.641704712	0.713559232
KBTD4	11p11.2	0.02083527	0.641758125	0.713579303
ATAD1	10q23.31	0.020820479	0.641994688	0.713803009
LOC650293	4p16.1	0.020797637	0.642360076	0.714169916
CLEC3B	3p21.31	0.020790801	0.64246945	0.714252164
OR10J3	1q23.2	0.020786119	0.642544362	0.714296093

ODF2	9q34.11	-0.020772765	0.642758042	0.714494273
OR10AD1	12q13.11	0.020763077	0.642913092	0.71462726
POLR3B	12q23.3	0.02075702	0.643010032	0.714695645
CCDC70	13q14.3	0.020741161	0.643263871	0.714938403
RTP3	3p21.31	-0.020736384	0.643340357	0.714984032
ZNF815P	7p22.1	0.020730587	0.643433161	0.715047789
PAIP2B	2p13.3	0.020727438	0.643483577	0.715050949
NAT8	2p13.1	-0.020725982	0.643506875	0.715050949
OC90	8q24.22	0.020702193	0.643887803	0.715434831
OR1L1	9q33.2	-0.020696536	0.643978404	0.715484164
RAB6C	2q21.1	0.020694992	0.644003116	0.715484164
MTG2	20q13.33	0.0206844	0.644172768	0.715633246
CHURC1	14q23.3	0.020677339	0.644285879	0.715719502
PAPOLB	7p22.1	0.020671415	0.644380773	0.715785512
SPICE1	3q13.2	-0.020667414	0.64444486	0.715800811
L3MBTL1	20q13.12	0.020666126	0.644465491	0.715800811
UPK3B	7q11.2	-0.020661117	0.644545753	0.715850556
PEX2	8q21.13	0.02064308	0.644834739	0.716132096
QPCTL	19q13.32	0.0206385	0.644908138	0.716174196
OR1J4	9q33.2	0.020631937	0.645013304	0.716251567
RLIM	Xq13.2	0.02062743	0.645085535	0.716292358
AMIGO3	3p21.31	-0.020624377	0.645134476	0.716307285
TKTL2	4q32.2	0.020615449	0.645277561	0.716426735
SHBG	17p13.1	0.020608143	0.645394681	0.716517345
MRAP	21q22.11	0.020604002	0.645461056	0.716551612
GNAT1	3p21.31	-0.02058819	0.645714554	0.716793595
CRYGC	2q33.3	0.020578476	0.645870315	0.716927063
SNHG32	6p21.33	-0.020575041	0.645925385	0.716948754
SCAMP4	19p13.3	0.020564926	0.646087594	0.717089355
YME1L1	10p12.1	0.020550994	0.646311041	0.717297905
SBF2	11p15.4	0.020547749	0.646363081	0.717316209
CUL5	11q22.3	-0.020544123	0.646421246	0.717341307
LPA	6q25.3-q26	0.020541905	0.646456827	0.717341343
MFSD1	3q25.32	0.020518071	0.646839176	0.717726148
MYO1A	12q13.3	-0.020514453	0.646897228	0.717751095
MAGI1	3p14.1	0.020510246	0.64696473	0.717786523
RPEL1	10q24.33	0.020497841	0.647163799	0.717967909
CRNKL1	20p11.23	-0.020489921	0.64729091	0.718069449
OR6C4	12q13.2	-0.020484111	0.647384149	0.718133404
OR6K3	1q23.1	0.020480155	0.64744765	0.718164365
TIA1	2p13.3	0.020464728	0.647695284	0.718399557
TSPAN8	12q21.1	0.020446471	0.647988391	0.718685157
NPBWR2	20q13.33	0.020442817	0.648047072	0.718710738
HARS	5q31.3	-0.020431233	0.648233078	0.718877516
OR5M3	11q12.1	-0.020425919	0.648318412	0.71893264
FBP2	9q22.32	0.020408063	0.648605209	0.71921115
LIN37	19q13.12	0.020394971	0.648815511	0.719404813
LRP4	11p11.2	0.020372355	0.649178874	0.719768159
OR6K2	1q23.1	0.020351917	0.649507314	0.720092748
TMEM254	10q22.3	0.020346303	0.649597535	0.720153206
C1ORF141	1p31.3	0.020320623	0.650010336	0.720571256
NEK9	14q24.3	-0.020291528	0.650478155	0.72099655
C1QTNF9B	13q12.12	-0.020290421	0.650495967	0.72099655
SWT1	1q25.3	0.020290097	0.650501174	0.72099655
LOC401127	4p14	-0.020287475	0.650543346	0.720998435
OR2L2	1q44	0.020285548	0.650574335	0.720998435
NRCAM	7q31.1	-0.020275688	0.65073292	0.721134581
GTF2H4	6p21.33	-0.020264236	0.650917112	0.721216355

PRPF4B	6p25.2	-0.020262519	0.650944743	0.721216355
ZNF846	19p13.2	-0.020261565	0.650960086	0.721216355
ZBTB21	21q22.3	-0.020260515	0.65097698	0.721216355
KCNJ14	19q13.33	0.02025999	0.650985415	0.721216355
LINC00847	5q35.3	0.020248491	0.651170412	0.721381704
EN1	2q14.2	0.020245057	0.651225658	0.721403302
LMTK2	7q21.3	-0.020239903	0.651308593	0.721455568
MALL	2q13	-0.020234272	0.651399184	0.72151631
RUFY3	4q13.3	-0.020231505	0.651443714	0.721526028
SNORA24	4q26	0.020226724	0.651520644	0.721571628
ASMTL-AS1	Xp22.33 and Yp11	0.020211752	0.651761593	0.721798869
TTYT6B	Yq11.223	0.020208839	0.651808475	0.721811175
SERPINE3	13q14.3	-0.020192992	0.652063563	0.722054032
DEFB129	20p13	-0.020188043	0.652143226	0.722102621
APPL1	3p14.3	-0.020183267	0.652220107	0.722148123
PGBD2	1q44	-0.020177494	0.652313062	0.722195106
INTS8	8q22.1	0.020174058	0.652368372	0.722195106
ADRM1	20q13.33	-0.020173963	0.652369909	0.722195106
CAPN8	1q41	0.020170496	0.652425731	0.722217282
THRB	3p24.2	-0.020158409	0.652620357	0.722393099
TAS2R39	7q34	0.02013655	0.652972383	0.72273537
IL17F	6p12.2	0.020134761	0.653001202	0.72273537
ZNF483	9q31.3	-0.02012458	0.653165196	0.722868693
CFHR4	1q31.3	0.020122835	0.653193307	0.722868693
PI4KA	22q11.21	0.02011852	0.653262818	0.722905972
DEFB131A	4p16.1	0.020115959	0.653304075	0.722911983
RAB35	12q24.23	0.020100675	0.653550314	0.723144804
BLOC1S4	4p16.1	0.02009161	0.653696388	0.723266773
OR2AK2	1q44	-0.020076565	0.653938828	0.723495346
LINC00319	21q22.3	0.020062839	0.65416006	0.72370043
IRAK1BP1	6q14.1	-0.020056493	0.654262357	0.723773921
NEUROD6	7p14.3	0.020053077	0.654317407	0.723795141
KRTAP4-12	17q21.2	-0.020024338	0.654780762	0.724267993
CYP4A11	1p33	-0.020020716	0.654839164	0.724292891
HSD17B11	4q22.1	0.020008779	0.655031654	0.724428729
GPR151	5q32	0.020008648	0.655033777	0.724428729
PRG1	19q13.31	0.020004406	0.65510218	0.724464673
GNG3	11q12.3	-0.01998424	0.655427455	0.724784668
XKR6	8p23.1	0.019977394	0.655537889	0.724867064
ZFP91	11q12.1	-0.019963929	0.655755126	0.725067544
SLC16A7	12q14.1	-0.019951142	0.655961444	0.725255929
WNT9A	1q42.13	-0.019947373	0.656022268	0.72528344
CAND1	12q14.3-q15	-0.019913257	0.656572883	0.725852419
CUL4A	13q34	0.01990505	0.656705364	0.725948092
PRAMEF22	1p36.21	0.019903439	0.656731375	0.725948092
LINC00470	18p11.32	0.019871163	0.65725252	0.726484367
SNORA50A	16q21	-0.019865723	0.657340378	0.726541682
ARR3	Xq13.1	0.019852621	0.657551991	0.726735767
GMFB	14q22.2	0.01984789	0.657628411	0.726780421
HSD17B7P2	10p11.1	-0.019844264	0.657686986	0.726782771
SLC25A47	14q32.2	-0.019843257	0.657703255	0.726782771
WFIKKN1	16p13.3	-0.019841069	0.657738587	0.726782771
PRDX3	10q26.11	-0.019833671	0.657858098	0.726875024
ACBD4	17q21.31	0.019830332	0.657912048	0.726894832
PABPC1L2A	Xq13.2	0.019822641	0.658036299	0.726970243
BSG	19p13.3	-0.019821648	0.658052355	0.726970243
HEATR3	16q12.1	-0.019818308	0.658106319	0.726990059
NUMBL	19q13.2	0.019793783	0.658502626	0.727373655

HIST1H2BN	6p22.1	-0.019792358	0.658525661	0.727373655
DKK1	10q21.1	-0.01978987	0.658565859	0.727378241
SAMD10	20q13.33	-0.019780232	0.658721638	0.727510478
ZNF485	10q11.21	-0.019768495	0.65891137	0.727680195
UBE2J2	1p36.33	0.019764678	0.658973076	0.727708515
NCOA3	20q13.12	0.01974607	0.659273925	0.728000905
IFI27	14q32.12	-0.019741012	0.659355704	0.728023458
ZNF205	16p13.3	0.019740344	0.659366506	0.728023458
CFHR5	1q31.3	-0.019687674	0.660218396	0.728924168
FAF1	1p32.3	0.019680034	0.660342	0.729020747
TRIM49	11q14.3	0.019676248	0.660403261	0.729048493
NRIP3	11p15.4	0.01966114	0.660647732	0.729237968
DPPA2P3	3q29	-0.019659346	0.660676765	0.729237968
HRH3	20q13.33	0.019656914	0.660716124	0.729237968
ERLIN1	10q24.31	0.019654842	0.660749655	0.729237968
OR10J5	1q23.2	-0.019654475	0.660755588	0.729237968
IL12B	5q33.3	0.01964918	0.660841282	0.729292657
SMC1A	Xp11.22	0.019607701	0.661512734	0.729993736
SPATA48	7p12.2	-0.019591129	0.661781075	0.730249921
TFAMP1	7p22.3	0.019588582	0.661822322	0.730255503
LCORL	4p15.31	0.019524871	0.662854379	0.731354284
CYP2D7	22q13.2	-0.019519432	0.662942512	0.731411534
CCNF	16p13.3	-0.01950693	0.663145108	0.731595054
CARS	11p15.4	0.019500155	0.663254917	0.731676196
RAB39B	Xq28	0.019490422	0.663412677	0.731810223
FAM71B	5q33.3	-0.019482975	0.663533402	0.731903384
DEXI	16p13.13	-0.019474867	0.663664834	0.731976868
NCDN	1p34.3	0.01947439	0.663672569	0.731976868
ATP6V1H	8q11.23	-0.019466469	0.66380098	0.732078481
LANCL2	7p11.2	-0.019462557	0.663864415	0.732108429
HSD17B4	5q23.1	0.019451965	0.664036166	0.732257817
SPATA31A6	9p11.2	0.019444694	0.664154073	0.732347817
KIF27	9q21.32	0.019414415	0.664645159	0.73284928
NXF2	Xq22.1	0.019400286	0.664874364	0.733061949
TAX1BP1	7p15.2	0.019391464	0.665017497	0.733179702
GON4L	1q22	-0.019387552	0.665080978	0.73320963
RIT2	18q12.3	-0.019383078	0.665153565	0.733243185
SCARNA14	15q22.31	0.019381197	0.66518409	0.733243185
DPRXP4	17q11.2	-0.019363794	0.665466496	0.733514416
PACSN2	22q13.2	0.019355393	0.665602846	0.733624636
LINC01098	4q34.3	0.019351686	0.665663016	0.733650882
GGACT	13q32.3	-0.019341747	0.665824351	0.733788617
TAF1	Xq13.1	0.019339457	0.665861528	0.733789513
UCMA	10p13	-0.019324088	0.666111022	0.734024373
TEX33	22q12.3	-0.019287302	0.666708367	0.734642502
NUDT16P1	3q22.1	-0.019284395	0.666755577	0.734654406
SPINT2	19q13.2	0.019265024	0.667070233	0.734960974
NUTM2A-AS1	10q23.2	0.019252523	0.667273318	0.735144589
PLG	6q26	0.019247882	0.667348724	0.735187525
CCDC126	7p15.3	-0.019233819	0.667577216	0.735399096
TRPV6	7q34	-0.019230488	0.66763134	0.735418572
USP16	21q21.3	-0.019206623	0.668019206	0.735805652
SLC36A3	5q33.1	0.019201117	0.668108688	0.735864048
MLLT10	10p12.31	-0.019198082	0.668158022	0.735878219
OR4K2	14q11.2	-0.019184606	0.668377088	0.735969556
OR5B3	11q12.1	-0.019184606	0.668377088	0.735969556
SNORD115-7	15q11.2	-0.019184606	0.668377088	0.735969556
PDLIM1	10q23.33	-0.019184006	0.668386842	0.735969556

OR4S1	11p11.2	-0.019177892	0.668486244	0.736038846
B3GNT4	12q24.31	0.019163681	0.668717317	0.736253096
DENND6A	3p14.3	-0.019153279	0.668886458	0.73639914
CYP2B7P	19q13.2	0.019146418	0.668998045	0.736481809
CSNK1A1L	13q13.3	0.019141447	0.66907889	0.736519499
FAAH	1p33	0.019139824	0.66910528	0.736519499
RACK1	5q35.3	-0.019091633	0.669889235	0.737342217
SNRNP70	19q13.33	-0.019087816	0.669951345	0.73735528
CELF3	1q21.3	0.019086413	0.669974184	0.73735528
PPCS	1p34.2	-0.019080946	0.67006315	0.737412975
PABPN1L	16q24.3	0.019068478	0.670266051	0.737596043
RSRC2	12q24.31	-0.019064341	0.670333376	0.737629905
GLOD5	Xp11.23	0.019045266	0.670643874	0.737931334
USF3	3q13.2	0.019033996	0.670827346	0.738092967
SLURP1	8q24.3	0.019008716	0.671238965	0.738505593
OOEP	6q13	0.019003799	0.671319033	0.738553417
KCNRG	13q14.2	-0.01900136	0.671358755	0.738556851
PIP4K2B	17q12	0.018988573	0.671567013	0.73874568
STAG1	3q22.3	0.018983229	0.671654054	0.738801153
SNORD89	2q11.2	0.018978613	0.671729241	0.738843582
H2BFM	Xq22.2	-0.018945169	0.672274095	0.739402571
CGB2	19q13.33	0.018928183	0.672550889	0.739666688
EDDM3B	14q11.2	0.018911391	0.672824563	0.739927345
C1GALT1C1L	2p21	0.018889145	0.673187188	0.740261747
IFT74	9p21.2	0.018885989	0.673238646	0.740261747
OR1M1	19p13.2	0.018885986	0.673238693	0.740261747
WSB1	17q11.1	0.018857123	0.673709312	0.740693938
FLJ30679	16q24.1	-0.018856057	0.673726698	0.740693938
KDM4B	19p13.3	-0.018852971	0.673777021	0.740693938
NIPSNAP3B	9q31.1	0.018852876	0.673778578	0.740693938
FEM1C	5q22.3	0.018835461	0.674062607	0.740946327
IFNA7	9p21.3	0.018834296	0.674081604	0.740946327
TRPV1	17p13.2	-0.018812606	0.674435435	0.741294877
OR8H2	11q12.1	0.018802122	0.674606477	0.741442489
MAJIN	11q13.1	0.018795473	0.674714966	0.741470456
PELI1	2p14	-0.018795429	0.674715687	0.741470456
UHMK1	1q23.3	0.018793807	0.674742157	0.741470456
OR5L1	11q12.1	-0.018787265	0.674848908	0.741547381
GPR107	9q34.11	0.018769473	0.675139263	0.741790691
ROPN1B	3q21.2	0.018769192	0.675143854	0.741790691
MACC1	7p21.1	0.018766228	0.675192218	0.741803439
FASN	17q25.3	0.018762221	0.675257634	0.741834919
C9ORF116	9q34.3	0.018739986	0.675620583	0.742193247
ZBED4	22q13.33	0.018734261	0.675714059	0.742255525
HEPN1	11q24.2	-0.018726852	0.675835015	0.74234585
NAP1L1	12q21.2	0.018724718	0.675869862	0.74234585
OR6M1	11q24.1	-0.018720837	0.675933228	0.74237504
NDST4	4q26	0.018716184	0.676009206	0.742405894
ARNTL	11p15.3	0.018712599	0.676067753	0.742405894
OR4L1	14q11.2	0.018712357	0.676071694	0.742405894
PII6	6p21.2	0.018700106	0.676271762	0.742585182
GUCA1C	3q13.13	-0.018688882	0.676455081	0.742746059
RIC8B	12q23.3	-0.018683112	0.676549328	0.742809124
TMEM158	3p21.31	-0.018679581	0.676607001	0.742824245
RHOXF2B	Xq24	0.018677761	0.676636724	0.742824245
G3BP2	4q21.1	-0.018665553	0.676836153	0.74300276
PDZK1	1q21.1	0.018639078	0.677268724	0.743402632
BEX1	Xq22.1 Xq22	0.018638749	0.677274096	0.743402632

ZNF733P	7q11.21	0.018632529	0.677375744	0.743473763
OR2D3	11p15.4	0.018622423	0.677540897	0.743614585
GUSBP5	4q31.21	0.01860219	0.677871608	0.743937085
MRPL20-AS1	1p36.33	0.018567836	0.678433253	0.744504906
PRPS1L1	7p21.1	0.01856603	0.678462794	0.744504906
OR7D2	19p13.2	-0.018554103	0.678657825	0.744678426
RABGAP1L	1q25.1	-0.018551137	0.67870634	0.744691166
MED29	19q13.2	0.018542262	0.678851483	0.744777988
TMPRSS2	21q22.3	0.018541785	0.678859286	0.744777988
SSX2IP	1p22.3	-0.018493929	0.679642167	0.745556683
USP1	1p31.3	0.018493881	0.679642955	0.745556683
LOC728024	8p11.23	-0.018490685	0.679695249	0.745573518
RPE	2q34	-0.018475941	0.679936529	0.745716014
PI4KAP2	22q11.21	0.018474986	0.679952146	0.745716014
GUK1	1q42.13	0.018473269	0.679980257	0.745716014
SPG11	15q21.1	-0.018472887	0.679986504	0.745716014
ATAD2B	2p24.1-p23.3	-0.018471455	0.68000993	0.745716014
C11ORF94	11p11.2	0.018461345	0.680175405	0.745856945
ALG1	16p13.3	-0.018456378	0.680256705	0.745879021
GAGE1	Xp11.23	0.018452752	0.680316061	0.745879021
UNC79	14q32.12	0.018452052	0.68032751	0.745879021
PRSS16	6p22.1	0.018451082	0.680343389	0.745879021
RP9P	7p14.3	0.018441778	0.680495703	0.746005476
CCDC125	5q13.2	-0.01843109	0.680670676	0.746156757
TCL1A	14q32.13	0.01838405	0.681440985	0.746960597
C20ORF173	20q11.22	-0.018376311	0.681567755	0.747030311
ZNF837	19q13.43	-0.018375647	0.681578624	0.747030311
FASTKD3	5p15.31	0.018367107	0.681718522	0.747143062
PRKCSH	19p13.2	0.018355989	0.681900658	0.747302089
BAMBI	10p12.1	0.018335854	0.682230567	0.747622376
C1ORF210	1p34.2	-0.018332991	0.682277479	0.747622376
SLC5A6	2p23.3	-0.018331369	0.682304063	0.747622376
RBCK1	20p13	0.018328888	0.682344721	0.74762633
NEURL4	17p13.1	0.018322304	0.682452626	0.74770396
CSN1S2AP	4q13.3	0.018310871	0.682639996	0.74786864
TBC1D8	2q11.2	-0.018286805	0.683034487	0.748260202
GSPT2	Xp11.22	0.018282606	0.683103322	0.748272352
VWA8	13q14.11	0.018281605	0.683119742	0.748272352
OR4A15	11q11	-0.018272428	0.683270187	0.748396521
PDE9A	21q22.3	0.018266861	0.683361476	0.748455885
RBFOX3	17q25.3	0.018259559	0.683481208	0.748546393
NPY2R	4q32.1	-0.018252513	0.683596742	0.748632295
ARID3A	19p13.3	-0.018248539	0.683661919	0.748663041
ARPC5	1q25.3	-0.018240714	0.683790249	0.748762938
NTSR2	2p25.1	-0.018198312	0.6844858	0.749483909
SYNM	15q26.3	0.018162178	0.685078743	0.750092456
TCEAL3	Xq22.2	-0.018147005	0.68532778	0.750324414
GPR61	1p13.3	0.018136686	0.685497162	0.750469142
MAGEA5	Xq28	0.018124465	0.685697788	0.750617404
HCRT	17q21.2	0.018123528	0.685713177	0.750617404
WDR87	19q13.13	0.01812164	0.685744181	0.750617404
SPANXN3	Xq27.3	0.018101611	0.686073055	0.750936655
NNT	5p12	-0.018092134	0.68622867	0.751034947
RASGRP1	15q14	0.01808994	0.686264715	0.751034947
ANP32C	4q32.3	0.018087713	0.686301284	0.751034947
STOM	9q33.2	0.018087077	0.686311731	0.751034947
B4GALT3	1q23.3	0.018074767	0.686513914	0.751215458
FAM177B	1q41	0.018068604	0.686615138	0.751285483

MCCD1	6p21.33	0.018064081	0.686689441	0.751300263
CCDC154	16p13.3	0.018063249	0.68670311	0.751300263
TMCO2	1p34.2	-0.018059493	0.686764802	0.751327023
IL10RB	21q22.11	0.018051578	0.686894831	0.751428537
RNF17	13q12.12	0.018036739	0.687138626	0.751654488
TRPM5	11p15.5	-0.018027745	0.687286413	0.751775397
KAAG1	6p22.3	-0.018012304	0.687540166	0.752012197
OR5K1	3q11.2	0.017953142	0.688512702	0.753035112
C8A	1p32.2	0.017941171	0.688709552	0.753209585
CCDC91	12p11.22	0.017928096	0.688924586	0.753403925
OR10G3	14q11.2	0.017905103	0.689302788	0.753776673
SEMA4F	2p13.1	0.017901567	0.689360947	0.753797017
SERPIND1	22q11.21	0.01789943	0.689396102	0.753797017
MAPK1IP1L	14q22.3	-0.01788754	0.689591726	0.753917544
ACBD7	10p13	0.017887444	0.689593296	0.753917544
NSG1	4p16.3	0.017885917	0.689618416	0.753917544
SCFD1	14q12	0.017879619	0.689722042	0.753952571
KIF9	3p21.31	0.017879428	0.689725182	0.753952571
SPATA3	2q37.1	0.017872912	0.689832411	0.754028938
PUSL1	1p36.33	-0.017867882	0.689915178	0.754078561
SART1	11q13.1	-0.017848606	0.690232405	0.754384429
SLC41A1	1q32.1	-0.017842307	0.690336066	0.75445686
SOCS2	12q22	0.017834864	0.690458581	0.754549889
TTLL10	1p36.33	0.017825379	0.690614721	0.754679652
SCARNA23	Xp22.11	-0.017821464	0.690679157	0.754709195
HLCS	21q22.13	0.017815111	0.690783756	0.754782619
FAM50A	Xq28	-0.017802228	0.690995857	0.754973491
PRR11	17q22	0.017768638	0.691549006	0.755518363
MTREX	5q11.2	0.017767397	0.691569438	0.755518363
TUBA4A	2q35	0.017759191	0.691704608	0.755621993
SLC25A32	8q22.3	-0.017757091	0.691739188	0.755621993
PCDHB1	5q31.3	-0.017748231	0.691885136	0.755740509
APOA4	11q23.3	-0.017735658	0.69209226	0.75589075
CARMIL1	6p22.2	0.017735334	0.692097602	0.75589075
HSD11B1L	19p13.3	0.017726173	0.692248533	0.756014675
ZNF514	2q11.1	-0.01771539	0.692426208	0.756167791
SPO11	20q13.31	-0.017702286	0.692642136	0.756362664
ZFP30	19q13.12	-0.017699931	0.692680957	0.756364125
CCDC114	19q13.33	-0.017690771	0.692831921	0.756488033
OR14I1	1q44	-0.017667624	0.693213451	0.756829824
PSG7	19q13.31	0.017667229	0.693219963	0.756829824
OR1C1	1q44	-0.017659194	0.693352414	0.756933476
RALYL	8q21.2	0.017650587	0.693494326	0.757047444
TTY20	Yp11.2	-0.017579658	0.694664092	0.758258927
PRKAA2	1p32.2	-0.017578739	0.69467926	0.758258927
DENND4B	1q21.3	0.017565475	0.6948981	0.75845677
PRR32	Xq25	0.017558413	0.695014615	0.758542913
CYP2E1	10q26.3	0.017541332	0.695296487	0.758809508
LRIT3	4q25	0.017530682	0.695472252	0.758960282
XPR1	1q25.3	-0.01752425	0.6955784	0.759016369
SP2	17q21.32	-0.01752301	0.695598876	0.759016369
C11ORF54	11q21	-0.017515948	0.695715435	0.759099272
MT1X	16q13	-0.017513849	0.695750089	0.759099272
GOLGA6L1	15q11.2	0.017511334	0.695791598	0.759103517
EPHA8	1p36.12	-0.017501659	0.695951309	0.759236713
ZXDC	3q21.3	-0.01746604	0.696539425	0.759837228
PRKDC	8q11.21	0.01742911	0.697149376	0.760461498
CLPSL2	6p21.31	0.017424321	0.697228485	0.760465421

CLDN5	22q11.21	0.017423384	0.697243959	0.760465421
GPANK1	6p21.33	0.017422048	0.69726603	0.760465421
OSGEP	14q11.2	0.017410502	0.69745679	0.76063236
HIST1H2AC	6p22.2	0.017391512	0.69777056	0.760933427
SMNDC1	10q25.2	-0.017359926	0.698292574	0.761442755
PRKN	6q26	0.017358685	0.698313079	0.761442755
ZNF433	19p13.2	0.017354486	0.698382482	0.761477285
REG1B	2p12	0.017349781	0.698460266	0.761520949
CARD16	11q22.3	0.017346661	0.698511831	0.761536023
KCNH7	2q24.2	0.017334791	0.698708058	0.761708801
DHRS2	14q11.2	-0.017330584	0.69877762	0.761743482
WNT8A	5q31.2	-0.017316924	0.699003468	0.761915016
FAM180B	11p11.2	0.017316203	0.699015391	0.761915016
ESF1	20p12.1	0.017314216	0.699048249	0.761915016
SLC22A13	3p22.2	0.017273832	0.699716134	0.762601775
MRGPRG	11p15.4	0.017248409	0.700136705	0.763018933
OR52E8	11p15.4	0.017242418	0.700235824	0.76304508
RHBG	1q22	-0.017242388	0.700236325	0.76304508
FOXD1	5q13.2	-0.017238257	0.700304682	0.763078361
RPS2P32	7p15.3	-0.017224611	0.700530485	0.763247276
FAM238C	10p12.1	-0.017222924	0.700558393	0.763247276
DLL3	19q13.2	-0.017222031	0.700573173	0.763247276
ZSWIM1	20q13.12	-0.017210345	0.700766573	0.763416761
TMEM123	11q22.2	0.017206384	0.700832122	0.763446955
ZKSCAN5	7q22.1	0.017198464	0.700963215	0.763536573
SLC25A45	11q13.1	-0.017196841	0.700990067	0.763536573
EPB41L3	18p11.31	0.017184722	0.701190675	0.763713857
PPP3R2	9q31.1	-0.017170707	0.701422688	0.763925325
SNORA80A	21q22.11	-0.01716015	0.70159748	0.764074454
RIPK4	21q22.3	-0.017156667	0.701655154	0.764096025
PGLYRP1	19q13.32	0.017097671	0.702632238	0.76511877
FNBP4	11p11.2	-0.017077463	0.702967038	0.765438611
UTP20	12q23.2	-0.017075363	0.703001823	0.765438611
VEZF1	17q22	0.01706792	0.703125156	0.765531592
CCNDBP1	15q15.2	-0.017064007	0.703189988	0.765560872
LOC401052	3p25.3	0.017037765	0.703624893	0.765993025
PCNX3	11q13.1	0.017033948	0.70368816	0.766020573
MYBPC3	11p11.2	0.017029169	0.703767379	0.766036571
XAGE5	Xp11.22	-0.017028481	0.703778779	0.766036571
DSP	6p24.3	-0.017025169	0.703833681	0.766055008
LINC00934	12q24.23	0.017019185	0.703932868	0.766121641
FBXW8	12q24.22	0.017002839	0.704203861	0.766375241
GPR50	Xq28	0.016991946	0.704384465	0.766530449
MAST1	19p13.13	-0.016975929	0.704650062	0.766778127
SCARNA9L	Xp22.12	0.016965809	0.704817898	0.766919405
DKFZP434H168	16q13	-0.016960749	0.704901806	0.766969349
PSEN1	14q24.2	-0.016930887	0.705397138	0.767466914
LGI1	10q23.33	0.016915523	0.70565204	0.767702853
ZBED5	11p15.4	0.016906076	0.705808781	0.76783198
OR9G9	11q11	0.016899028	0.705925728	0.767917805
TFAP2E	1p34.3	-0.016887516	0.706116771	0.768084218
ZBTB48	1p36.31	-0.016881742	0.706212591	0.768147039
INPP5K	17p13.3	0.016876589	0.706298114	0.768198655
TPT1	13q14.13	0.016863898	0.706508771	0.768386358
GPX1	3p21.31	0.016857695	0.706611731	0.768418034
OR4K14	14q11.2	0.016856976	0.706623673	0.768418034
HHLA1	8q24.22	-0.016855261	0.706652136	0.768418034
RAPGEF5	7p15.3	-0.016847293	0.7067844	0.768520444

TPTE	21p11.2	0.016841745	0.706876505	0.768579179
AGGF1	5q13.3	0.016821624	0.707210592	0.768883909
MAGEA3	Xq28	-0.016820276	0.707232976	0.768883909
FKBP1AP1	19q13.43	0.016817902	0.70727239	0.768885333
OR2Z1	19p13.2	0.016810991	0.707387149	0.768968663
PPP1R1C	2q31.3-q32.1	0.016799294	0.7075814	0.769138389
TMEM74B	20p13	0.016786364	0.707796155	0.769330385
OPRK1	8q11.23	0.016780957	0.707885957	0.769386552
TSPYL6	2p16.2	-0.016770961	0.708052008	0.769492297
URAD	13q12.2	0.016770509	0.708059516	0.769492297
EPGN	4q13.3	0.016767347	0.70811205	0.769507946
OR11L1	1q44	0.016760459	0.708226472	0.769590844
RRAGA	9p22.1	0.016755875	0.708302631	0.769632158
KLHL5	4p14	-0.016746618	0.708456421	0.769757814
KIF2C	1p34.1	0.016737076	0.708614979	0.769888638
OR7E24	19p13.2	0.016733168	0.708679912	0.769917732
SLC25A43	Xq24	0.016698428	0.709257269	0.770503495
TAAR6	6q23.2	-0.016673031	0.70967946	0.77092064
OR5AP2	11q12.1	-0.016663169	0.709843413	0.771057233
BCYRN1	2p21	0.016644602	0.710152142	0.771351064
EEF1D	8q24.3	-0.016639931	0.710229818	0.771393912
SLC6A6	3p25.1	-0.016610922	0.7107123	0.7718764
SORL1	11q24.1	0.016578381	0.711253644	0.772422759
C2ORF74	2p15	0.0165759	0.711294925	0.77242602
DGAT1	8q24.3	0.016567121	0.711441005	0.772543079
C1QTNF9	13q12.12	0.016548507	0.711750764	0.77282508
SNORA14A	7q11.23	0.016545509	0.711800647	0.77282508
ZNF512B	20q13.33	0.016544218	0.711822131	0.77282508
CWC27	5q12.3	-0.01654231	0.711853895	0.77282508
VWC2L	2q34-q35	-0.016534122	0.711990164	0.772931435
OR10J1	1q23.2	0.016526416	0.712118433	0.773029096
TIGD6	5q32	0.016512489	0.712350263	0.773239158
FBXL19-AS1	16p11.2	-0.016489539	0.712732355	0.773612296
IDH3G	Xq28	-0.01648429	0.712819752	0.77365217
KRT82	12q13.13	0.016482728	0.71284577	0.77365217
ITPKB	1q42.12	-0.016470835	0.713043808	0.773819856
MSS51	10q22.2	-0.016466827	0.713110553	0.773819856
SEMA4B	15q26.1	0.016466541	0.71311532	0.773819856
AGPS	2q31.2	-0.016457189	0.713271067	0.773933166
CLCN3	4q33	0.016453945	0.713325104	0.773933166
MLXIPL	7q11.23	-0.016452322	0.713352123	0.773933166
SP9	2q31.1	0.016449561	0.713398116	0.773933166
C10ORF120	10q26.13	-0.016448757	0.713411508	0.773933166
SRRM4	12q24.23	0.016442502	0.713515689	0.774004574
DCAF4L2	8q21.3	0.016427351	0.713768073	0.774236734
CEACAM19	19q13.31	-0.016418828	0.71391007	0.774349135
ASCL3	11p15.4	0.016389232	0.714403196	0.77484236
OR10A7	12q13.2	0.01638407	0.714489219	0.77489401
OR10G4	11q24.2	-0.016375673	0.714629155	0.775004123
LRRC56	11p15.5	0.016362144	0.714854636	0.775206991
GTF3C1	16p12.1	-0.016357182	0.714937346	0.775255022
RNF31	14q12	0.016346685	0.71511232	0.775392486
OR6P1	1q23.1	-0.016344967	0.715140966	0.775392486
AK1	9q34.11	-0.016331131	0.715371628	0.775600907
RPN1	3q21.3	-0.01630527	0.715802819	0.776010892
NR1H3	11p11.2	0.016303839	0.715826688	0.776010892
KRTAP3-3	17q21.2	0.016293044	0.716006708	0.77616435
SMG1P1	16p12.2	0.016275449	0.716300147	0.776440732

SLC2A2	3q26.2	-0.016241647	0.716864032	0.777010222
NEURL1	10q24.33	0.016226161	0.717122412	0.777248531
FRAT1	10q24.1	-0.016223203	0.717171774	0.777260284
CNTNAP5	2q14.3	-0.016216418	0.717284995	0.777341242
SCD5	4q21.22	0.016212611	0.71734853	0.777368347
SCGB2A2	11q12.3	0.016208386	0.717419025	0.777402991
GOLGA5	14q32.12	-0.01620574	0.717463191	0.777409104
C8ORF74	8p23.1	0.016200919	0.717543641	0.777454528
HMGN1	21q22.2	-0.016168714	0.718081197	0.777956875
USP53	4q26	0.016168524	0.718084383	0.777956875
THEM4	1q21.3	-0.016163848	0.718162443	0.777990258
TLE1	9q21.32	0.016160031	0.718226168	0.777990258
OR6W1P	7q34	0.01615975	0.71823086	0.777990258
SPRR2G	1q21.3	-0.016148522	0.718418319	0.778151543
FAM197Y2	Yp11.2	0.01612499	0.718811248	0.778535354
WEE2-AS1	7q34	0.016090846	0.719381519	0.779111189
ZFX	Xp22.11	0.016084787	0.719482736	0.77917899
TNRC6C	17q25.3	0.016076246	0.719625419	0.779291689
REG3G	2p12	0.016049588	0.720070823	0.779732178
TRAPPC6B	14q21.1	0.016039316	0.720242472	0.779876198
FAM217B	20q13.33	-0.016026147	0.72046255	0.78007264
ACSM1	16p12.3	0.016021654	0.720537633	0.780112077
IPO4	14q12	-0.016018704	0.720586952	0.780123617
TUG1	22q12.2	-0.015999809	0.720902775	0.780423664
CXORF66	Xq27.1	0.01598324	0.721179765	0.780681642
RHOT2	16p13.3	-0.01597915	0.721248155	0.780713793
ALDH4A1	1p36.13	0.015933201	0.72201651	0.781503576
NSMF	9q34.3	0.015906673	0.722460253	0.781941936
USP17L6P	4p16.1	0.015865539	0.723148475	0.782644842
GDF2	10q11.22	-0.015858715	0.723262683	0.782726465
RILP	17p13.3	0.01585581	0.723311287	0.782737087
IFT22	7q22.1	-0.01583119	0.723723355	0.783141011
OR2W1	6p22.1	0.015828661	0.723765694	0.783144831
CDC20B	5q11.2	0.015811741	0.724048929	0.783409294
ZNF490	19p13.2-p13.13	-0.015796264	0.724308053	0.783621627
OR6C76	12q13.2	0.015795381	0.72432284	0.783621627
MCHR2	6q16.2	0.015768803	0.724767883	0.784061069
DLEU2	13q14.2	-0.015763151	0.724862546	0.784074868
HBS1L	6q23.3	0.015758952	0.724932867	0.784074868
RAB11B	19p13.2	-0.015758952	0.724932867	0.784074868
SNX6	14q13.1	-0.015758761	0.724936063	0.784074868
ANP32D	12q13.11	-0.015741589	0.725223681	0.784343909
TRAFD1	12q24.13	-0.015733664	0.725356438	0.784445445
ANKRD46	8q22.3	-0.015730515	0.72540919	0.784456445
FBXO7	22q12.3	0.015728416	0.725444359	0.784456445
HIST1H4F	6p22.2	0.015718902	0.725603746	0.784586754
SNORA18	11q21	-0.015700521	0.725911708	0.784877691
ANK3	10q21.2	-0.015679462	0.7262646	0.785194098
AGAP7P	10q11.22	0.015678414	0.726282167	0.785194098
GNL1	6p21.33	0.015673259	0.726368552	0.78524542
FRMD8	11q13.1	-0.015647876	0.726794006	0.785628099
DPH1	17p13.3	-0.015647494	0.726800404	0.785628099
ACO1	9p21.1	-0.015635184	0.727006765	0.785809069
MEIOC	17q21.31	0.015622732	0.727215525	0.785992613
LHX8	1p31.1	0.015606703	0.727484288	0.786240986
OR8K3	11q12.1	0.015602698	0.727551436	0.786271446
GTF2I	7q11.23	-0.015595486	0.72767237	0.786360026
OR11G2	14q11.2	0.015555752	0.728338797	0.787038052

EPO	7q22.1	0.015541443	0.728578838	0.787255281
OR51Q1	11p15.4	-0.015516703	0.72899394	0.787661636
XPO5	6p21.1	-0.015507217	0.729153117	0.787791441
ANKFN1	17q22	-0.015496509	0.7293328	0.787939188
GGNBP1	6p21.31	-0.015494414	0.729367961	0.787939188
SMC5	9q21.12	-0.015482597	0.729566305	0.788111267
ZNF581	19q13.42	-0.015479257	0.729622363	0.788129633
KCNE1	21q22.12	0.015471529	0.72975208	0.788227557
SNORA28	14q32.32	0.015461042	0.729928107	0.78837549
MYH3	17p13.1	-0.015437555	0.730322417	0.788759156
BCL2L2	14q11.2	0.015385643	0.731194194	0.789658423
KRTAP19-8	21q22.11	0.015360835	0.731610931	0.790066198
CT47A6	Xq24	0.015352183	0.731756284	0.790180877
CCDC87	11q13.2	-0.015335976	0.732028598	0.790432634
CHST14	15q15.1	0.01533125	0.732108007	0.790476081
PDE4C	19p13.11	0.01532686	0.73218177	0.790513426
CELA3A	1p36.12	0.015302767	0.73258667	0.790908267
CBLL2	Xp22.11	-0.015289241	0.732814028	0.791111399
TSPY2	Yp11.2	0.015285479	0.732877261	0.791137337
B3GNT2	2p15	-0.015283107	0.732917122	0.791138045
TOX3	16q12.1	0.015271125	0.733118553	0.791313146
BANF2	20p12.1	-0.015262258	0.733267628	0.791431722
SELENOS	15q26.3	-0.015244125	0.733572501	0.79171843
ALKAL2	2p25.3	0.015239529	0.733649792	0.791759501
LRR1Q4	3q26.2	0.015233037	0.733758964	0.791834971
ZDHHC6	10q25.2	0.015223036	0.73392714	0.791889575
DAND5	19p13.13	0.015221796	0.733947987	0.791889575
MLH1	3p22.2	0.01522151	0.733952812	0.791889575
RNF2	1q25.3	-0.015218981	0.733995341	0.791889575
XPO4	13q12.11	0.01521836	0.734005778	0.791889575
NUCKS1	1q32.1	0.015210821	0.734132568	0.79198402
IKBKB	8p11.21	-0.015206145	0.734211214	0.791998032
SRSF6	20q13.11	-0.015205382	0.734224054	0.791998032
ARHGAP28	18p11.31	0.015202806	0.734267391	0.792002442
CAPZA2	7q31.2	0.015172937	0.734769837	0.792502033
CA14	1q21.2	-0.015162967	0.734937581	0.792640591
EEF1AKMT2	10q26.13	-0.015157001	0.735037961	0.792706484
TRAPPC3	1p34.3	-0.015147744	0.735193713	0.792832083
NEFL	8p21.2	0.015143136	0.735271264	0.792873342
ATP6V1A	3q13.31	0.015115776	0.735731702	0.793300404
TEX45	19p13.2	-0.015114931	0.735745927	0.793300404
ANKRD36B	2q11.2	-0.015099268	0.73600958	0.79354228
ELOA3	18q21.1	0.015095284	0.736076644	0.793551033
CCAR1	10q21.3	-0.015092969	0.736115601	0.793551033
ZNF431	19p12	0.015091777	0.736135675	0.793551033
RALGAPA1	14q13.2	0.015055848	0.736740579	0.794160692
KRT38	17q21.2	0.015052462	0.736797596	0.794179728
CCN3	8q24.12	-0.015046974	0.736890022	0.794236927
CUL4B	Xq24	-0.015038004	0.737041081	0.794343498
EIF4E2	2q37.1	-0.015032946	0.737126257	0.794343498
BMP15	Xp11.22	0.015030251	0.737171642	0.794343498
CNPY3	6p21.1	0.015029606	0.737182507	0.794343498
PFKP	10p15.2	-0.015029415	0.737185722	0.794343498
GALNT18	11p15.4	0.015019586	0.737351266	0.794479453
TRPM8	2q37.1	0.014996547	0.737739362	0.794855176
LRRC14	8q24.3	-0.014984756	0.737938003	0.795026746
TOP2B	3p24.2	-0.01494105	0.738674452	0.795777682
ARHGEF16	1p36.32	0.014914235	0.739126409	0.79622207

FAM122C	Xq26.3	0.014906697	0.739253488	0.796316454
RORA	15q22.2	0.014902784	0.739319443	0.79634499
C16ORF87	16q11.2	-0.014842952	0.740328312	0.797389112
ZNF192P1	6p22.1	0.014835367	0.740456233	0.797484326
KRTAP4-11	17q21.2	0.014829428	0.740556396	0.797549635
PPP1R3A	7q31.1	0.014814235	0.740812685	0.79778307
RIMS1	6q13	0.014807057	0.740933756	0.797870872
NR1H4	12q23.1	0.01480188	0.741021097	0.797922343
HIGD1B	17q21.31	0.014785934	0.741290123	0.798169436
ZNF420	19q13.12	0.014776153	0.741455162	0.798304541
PAK4	19q13.2	-0.014770141	0.741556612	0.798371172
DDX20	1p13.2	0.014757211	0.741774807	0.798563477
TMEM230	20p13-p12.3	-0.014718038	0.742435982	0.799232632
SBK1	16p12.1	0.014701243	0.742719513	0.799495202
TECRL	4q13.1	-0.014690336	0.742903667	0.799650776
ARHGDI6	16p13.3	-0.01467096	0.743230825	0.799943015
CYP2A13	19q13.2	-0.014669561	0.743254452	0.799943015
KHDC3L	6q13	0.014634424	0.743847885	0.800539012
RPUSD4	11q24.2	-0.014627192	0.743970044	0.80062778
KCNA4	11p14.1	-0.014622598	0.744047638	0.800668584
TEKT4	2q11.1	0.014611637	0.744232813	0.800789373
TMEM64	8q21.3	0.014611256	0.744239254	0.800789373
MROH8	20q11.23	0.0145978	0.744466575	0.800991257
AUTS2	7q11.22	-0.014584154	0.744697143	0.801196612
SDHA	5p15.33	0.014576139	0.744832593	0.801299616
GHRHR	7p14.3	0.01454905	0.745290394	0.801715536
C3ORF38	3p11.1	-0.01454856	0.745298664	0.801715536
OSTCP1	6q25.3	0.014529095	0.745627687	0.802026711
METTL18	1q24.2	0.014516592	0.745839035	0.802211283
TJP1	15q13.1	0.014506763	0.746005204	0.802347245
TPPA	8q12.3	-0.014496108	0.746185351	0.802498225
KCNJ4	22q13.1	0.01448349	0.746398708	0.802684903
USP32	17q23.1-q23.2	-0.014475463	0.746534442	0.80278809
TCEAL6	Xq22.1	-0.014467877	0.74666273	0.802883258
PTPN20	10q11.22	-0.014451852	0.746933756	0.803131895
SSX8P	Xp11.22	0.014431435	0.747279102	0.803395541
C10ORF95	10q24.32	-0.014431186	0.747283312	0.803395541
LRRC73	6p21.1	0.014430041	0.747302683	0.803395541
IRAK1	Xq28	-0.014427941	0.747338208	0.803395541
VSIG2	11q24.2	-0.014421529	0.747446685	0.803469351
HIST1H2AA	6p22.2	0.014403694	0.74774842	0.803750885
NCCRP1	19q13.2	0.014394637	0.747901654	0.803872775
OR8H1	11q12.1	-0.014379062	0.748165199	0.804113212
CRYZL1	21q22.11	-0.014373119	0.748265779	0.804136134
RAB40AL	Xq22.1	0.014373092	0.748266227	0.804136134
BRWD3	Xq21.1	0.014366486	0.748378023	0.804213448
UPP1	7p12.3	0.014359997	0.748487844	0.804288631
DSCR4	21q22.13	0.014333552	0.74893545	0.804713858
OR13H1	Xq26.2	-0.014331174	0.748975709	0.804713858
KRTAP24-1	21q22.11	-0.01432955	0.749003206	0.804713858
IQCF3	3p21.2	-0.014307363	0.749378818	0.805074544
PPP1R9A	7q21.3	0.014290622	0.749662269	0.805336186
TMEM61	1p32.3	0.014274228	0.749939888	0.805591536
NXF5	Xq22.1	0.01426143	0.750156622	0.805781459
OR4X2	11p11.2	0.01425563	0.750254865	0.805844091
KSR1	17q11.2	0.01425226	0.750311934	0.805862493
CFHR3	1q31.3	-0.014248962	0.750367802	0.80587218
ZXDA	Xp11.21	-0.014247012	0.750400825	0.80587218

PRO0611	1p35.2	-0.014242929	0.750469994	0.805903571
UEVLD	11p15.1	0.014231267	0.750667537	0.80607281
TAC3	12q13.3	0.01422786	0.750725248	0.806075095
OR2K2	9q31.3	0.014226425	0.750749558	0.806075095
CTCF	16q22.1	0.014219434	0.750868001	0.806159372
OR9A4	7q34	0.014214374	0.750953723	0.806208511
ZDHHC16	10q24.1	0.01420178	0.751167102	0.806394688
LCE3E	1q21.3	0.014191603	0.751339536	0.806536892
POU3F3	2q12.1	0.014188155	0.751397972	0.806556714
TSNARE1	8q24.3	-0.01418403	0.751467858	0.806588824
MPZL2	11q23.3	-0.014167999	0.75173954	0.806837518
FRK	6q22.1	-0.014149868	0.752046837	0.807124408
DGKK	Xp11.22	0.014118305	0.752581869	0.807655669
RAP1GAP2	17p13.3	0.014111124	0.752703613	0.807743364
MYT1L-AS1	2p25.3	-0.014098701	0.752914258	0.807926445
USH2A	1q41	0.014089264	0.753074269	0.808055178
SNORA20	6q25.3	-0.014082117	0.753195461	0.808142245
ZNF90	19p12	-0.014058067	0.753603331	0.808536878
PDYN	20p13	0.014055587	0.753645395	0.80853902
TRIM48	11q11	0.01404306	0.753857867	0.80869716
CYP1A1	15q24.1	0.014042171	0.753872951	0.80869716
CCDC27	1p36.32	-0.014037847	0.753946306	0.808732857
OXR1	8q23.1	0.014032779	0.75403227	0.808782075
KLHDC2	14q21.3	0.014027149	0.75412778	0.808841526
OR2Y1	5q35.3	0.014017336	0.754294259	0.808977085
CLRN2	4p15.32	0.014004527	0.754511581	0.809167155
HTR7P1	12p13.1	-0.013995563	0.754663677	0.809241995
C1ORF189	1q21.3	-0.013993747	0.754694493	0.809241995
LCE6A	1q21.3	0.013991902	0.754725786	0.809241995
LENG9	19q13.42	-0.013989837	0.754760831	0.809241995
EIF2B3	1p34.1	0.013988597	0.754781882	0.809241995
AWAT1	Xq13.1	0.013970252	0.755093193	0.809532756
KYNU	2q22.2	0.013947325	0.755482316	0.809906904
GDI1	Xq28	-0.013940788	0.755593276	0.809982826
INTS6	13q14.3	-0.01392342	0.755888101	0.81025583
ACTR10	14q23.1	-0.013914832	0.756033907	0.810369075
PLXNB3	Xq28	-0.013909583	0.756123014	0.810421538
SYT1	12q21.2	0.013899563	0.756293138	0.810560826
TMEM189-UBE2	20q13.13	-0.013881506	0.756599754	0.810846377
RGS20	8q11.23	0.013868503	0.756820584	0.811039967
FBRS	16p11.2	0.013861488	0.756939715	0.811121421
DHX37	12q24.31	0.013859294	0.756976986	0.811121421
MAP2K3	17p11.2	-0.013847556	0.757176349	0.811291964
KRTAP10-5	21q22.3	-0.013838127	0.757336502	0.81141768
RNF39	6p22.1	-0.013835914	0.757374102	0.81141768
PCGF2	17q12	0.01382265	0.75759943	0.81160938
BUB3	10q26.13	0.013820646	0.757633474	0.81160938
RBM39	20q11.22	-0.013816924	0.757696701	0.811634023
AFG3L1P	16q24.3	0.013792208	0.758116628	0.81195801
SS18	18q11.2	-0.013792208	0.758116628	0.81195801
STRN3	14q12	-0.013792018	0.758119871	0.81195801
ENTPD5	14q24.3	0.013782093	0.75828851	0.812095523
CCAR2	8p21.3	0.013773314	0.758437701	0.812212194
SNORA38B	17q24.2	0.013765112	0.758577097	0.812318364
KIN	10p14	0.013758237	0.758693941	0.812400374
NUTM2G	9q22.33	0.01375192	0.75880129	0.812472208
INSL5	1p31.3	0.013746378	0.758895499	0.812529966
KRTAP5-11	11q13.4	0.01372545	0.759251246	0.812851375

PDE6D	2q37.1	-0.013723978	0.759276255	0.812851375
WBP2	17q25.1	0.013698643	0.759706991	0.813269356
SLC25A42	19p13.11	-0.013689338	0.759865196	0.813395565
MLLT11	1q21.3	0.013685712	0.759926857	0.813418419
AADACL4	1p36.21	0.013676208	0.760088469	0.813548254
C1ORF52	1p22.3	-0.013665482	0.760270884	0.813700337
SCARB1	12q24.31	0.013653553	0.760473752	0.813874296
CIR1	2q31.1	-0.013647828	0.760571135	0.813935348
PRSS58	7q34	0.013613772	0.761150451	0.814512115
SPACA9	9q34.13	-0.013595725	0.76145749	0.81479747
RNF175	4q31.3	0.01358666	0.761611736	0.814919308
STAT6	12q13.3	-0.013582842	0.761676692	0.814945598
UFC1	1q23.3	-0.013578262	0.761754636	0.81498578
VPS4A	16q22.1	-0.013571296	0.761873179	0.815066138
C18ORF54	18q21.2	-0.013569101	0.761910529	0.815066138
MMAA	4q31.21	-0.013553451	0.762176869	0.815307837
TMEM237	2q33.1	-0.013546198	0.762300305	0.815396653
OR7D4	19p13.2	0.013538825	0.762425814	0.815487676
KLHL32	6q16.1	0.013522762	0.762699238	0.815736891
ARF1	1q42.13	-0.013519193	0.762759993	0.815758633
SLC4A7	3p24.1	0.013506119	0.762982557	0.815940924
GPX5	6p22.1	-0.01350443	0.763011311	0.815940924
TSPY3	Yp11.2	0.013496719	0.763142599	0.816038074
HIST1H2BC	6p22.2	-0.013488561	0.763281506	0.816143361
CRIPAK	4p16.3	0.013478541	0.763452118	0.816282535
TRIM60	4q32.3	-0.013467122	0.763646569	0.816404669
TSPAN31	12q14.1	0.013465754	0.763669868	0.816404669
ANKK1	11q23.2	0.013464705	0.763687722	0.816404669
ATPCKMT	5p15.2	-0.013459169	0.763782	0.816420689
SMURF2	17q23.3-q24.1	0.013459074	0.763783625	0.816420689
EML6	2p16.1	-0.013448195	0.763968898	0.816574092
FBXL4	6q16.1-q16.2	-0.013444951	0.764024157	0.816574092
DDX23	12q13.12	-0.013443519	0.764048537	0.816574092
COPB2	3q23	0.013438843	0.764128178	0.816603976
ZC3H3	8q24.3	0.013437126	0.764157435	0.816603976
MIR7-3HG	19p13.3	-0.013421553	0.764422693	0.816828982
NPRL3	16p13.3	0.013410311	0.764614208	0.816828982
OR1S2	11q12.1	-0.013407517	0.764661803	0.816828982
FAM224B	Yq11.222	0.013404103	0.764719974	0.816828982
FAM136BP	6p25.2	0.013400327	0.764784297	0.816828982
TSTD2	9q22.33	0.013379965	0.765131223	0.816828982
CRLS1	20p12.3	-0.013368323	0.765329597	0.816828982
GATA4	8p23.1	0.013368246	0.765330914	0.816828982
PFN3	5q35.3	-0.013364771	0.765390132	0.816828982
RNASE10	14q11.2	0.01334979	0.765645444	0.816828982
ERI3	1p34.1	-0.013339505	0.765820734	0.816828982
PDZD9	16p12.2	0.013328172	0.766013893	0.816828982
TEKT5	16p13.13	-0.01332492	0.766069326	0.816828982
SEC14L3	22q12.2	-0.01332439	0.766078358	0.816828982
MAGEC1	Xq27.2	0.013316736	0.76620883	0.816828982
PHF12	17q11.2	-0.013307918	0.766359146	0.816828982
CNTNAP3	9p12	0.01330391	0.766427471	0.816828982
ACTR3BP2	2p11.1	0.013296496	0.766553864	0.816828982
C11ORF40	11p15.4	0.013296496	0.766553864	0.816828982
DEFB127	20p13	0.013296496	0.766553864	0.816828982
KRTAP15-1	21q22.11	0.013296496	0.766553864	0.816828982
OR10K1	1q23.1	0.013296496	0.766553864	0.816828982
OR10X1	1q23.1	0.013296496	0.766553864	0.816828982

OR10Z1	1q23.1	0.013296496	0.766553864	0.816828982
OR1S1	11q12.1	0.013296496	0.766553864	0.816828982
OR2M7	1q44	0.013296496	0.766553864	0.816828982
OR2T27	1q44	0.013296496	0.766553864	0.816828982
OR2T6	1q44	0.013296496	0.766553864	0.816828982
OR4B1	11p11.2	0.013296496	0.766553864	0.816828982
OR4C13	11p11.12	0.013296496	0.766553864	0.816828982
OR4C45	11p11.12	0.013296496	0.766553864	0.816828982
OR4C46	11q11	0.013296496	0.766553864	0.816828982
OR4D11	11q12.1	0.013296496	0.766553864	0.816828982
OR4K13	14q11.2	0.013296496	0.766553864	0.816828982
OR4K5	14q11.2	0.013296496	0.766553864	0.816828982
OR4X1	11p11.2	0.013296496	0.766553864	0.816828982
OR51F1	11p15.4	0.013296496	0.766553864	0.816828982
OR52A1	11p15.4	0.013296496	0.766553864	0.816828982
OR5AS1	11q12.1	0.013296496	0.766553864	0.816828982
OR5F1	11q12.1	0.013296496	0.766553864	0.816828982
OR5H15	3q11.2	0.013296496	0.766553864	0.816828982
OR5I1	11q12.1	0.013296496	0.766553864	0.816828982
OR5M9	11q12.1	0.013296496	0.766553864	0.816828982
OR5R1	11q12.1	0.013296496	0.766553864	0.816828982
OR6Y1	1q23.1	0.013296496	0.766553864	0.816828982
OR7G1	19p13.2	0.013296496	0.766553864	0.816828982
OR8I2	11q12.1	0.013296496	0.766553864	0.816828982
OR8J1	11q12.1	0.013296496	0.766553864	0.816828982
OR8J3	11q12.1	0.013296496	0.766553864	0.816828982
OR8K1	11q12.1	0.013296496	0.766553864	0.816828982
PISRT1	3q23	0.013296496	0.766553864	0.816828982
TAAR2	6q23.2	0.013296496	0.766553864	0.816828982
TAAR5	6q23.2	0.013296496	0.766553864	0.816828982
TTY12	Yp11.2	0.013296496	0.766553864	0.816828982
TTC41P	12q23.3	0.013287163	0.766712983	0.816955396
TBC1D9	4q31.21	-0.013279672	0.766840716	0.817015618
ZBTB25	14q23.3	0.013279099	0.766850479	0.817015618
TAS2R38	7q34	-0.013268233	0.767035766	0.817169881
FBXO6	1p36.22	-0.013228332	0.767716233	0.817851646
FANCD2OS	3p25.3	0.013219275	0.767870712	0.817971624
PTK2	8q24.3	0.013216976	0.767909929	0.817971624
CRCT1	1q21.3	0.013208198	0.768059669	0.818051715
REEP5	5q22.2	-0.013207815	0.768066197	0.818051715
MYH7	14q11.2	0.0131786	0.768564627	0.818539379
CT45A4	Xq26.3	0.013151126	0.769033419	0.818995428
SNORA3A	11p15.4	0.013132645	0.769348826	0.819288087
SNORA2A	12q13.11	0.013129351	0.769405047	0.81930472
ACTRT1	Xq25	-0.01312222	0.769526756	0.819391082
GHSR	3q26.31	0.013099575	0.769913282	0.819718609
ACSM6	10q23.33	-0.01309944	0.769915595	0.819718609
IRX6	16q12.2	-0.01309569	0.769979602	0.819743504
SYCN	19q13.2	0.013090829	0.770062592	0.819788606
LINC00115	1p36.33	0.013082043	0.770212586	0.819905032
POLM	7p13	0.013067825	0.770455347	0.82012019
HEPACAM2	7q21.2	-0.013059577	0.770596174	0.820226827
HYAL6P	7q31.32	-0.013050958	0.770743342	0.820340202
TP53	17p13.1	0.01303223	0.77106316	0.820637316
PRAMEF8	1p36.21	-0.013028036	0.771134801	0.820670278
ELOVL5	6p12.1	-0.013021065	0.771253844	0.820753682
MEST	7q32.2	-0.013015054	0.771356525	0.820819666
MAU2	19p13.11	-0.013011618	0.771415202	0.820838819

ANKUB1	3q25.1	-0.013002385	0.771572908	0.820951697
INTS3	1q21.3	-0.013000644	0.771602651	0.820951697
ARHGEF11	1q23.1	-0.012984422	0.771879774	0.82117556
PLEKHA8	7p14.3	-0.012983563	0.771894446	0.82117556
OR5T3	11q12.1	-0.01298064	0.771944384	0.821185393
KIAA1586	6p12.1	-0.012961328	0.772274316	0.82146716
GLRA2	Xp22.2	-0.012959957	0.772297746	0.82146716
SRI	7q21.12	0.012957988	0.772331383	0.82146716
SERPINB10	18q22.1	0.012953591	0.772406521	0.821503778
TMEM33	4p13	-0.012946633	0.772525419	0.821586931
GOT1L1	8p11.23	-0.012933589	0.772748316	0.821749677
SCARNA9	11q21	-0.012932911	0.772759893	0.821749677
OR5D13	11q11	0.012925167	0.772892247	0.82179706
ZYG11A	1p32.3	0.012924018	0.772911882	0.82179706
ASAP1-IT1	8q24.21	-0.01292217	0.772943453	0.82179706
STX11	6q24.2	-0.012920772	0.772967352	0.82179706
SRP54	14q13.2	-0.012900446	0.773314754	0.822123093
ZNF597	16p13.3	-0.012893385	0.773435458	0.822208098
IGHMBP2	11q13.3	0.012890808	0.7734795	0.822211602
VPREB3	22q11.23 22q11	-0.012882792	0.773616524	0.822287965
IQSEC2	Xp11.22	-0.012881838	0.773632837	0.822287965
CES5A	16q12.2	0.012872851	0.773786467	0.822407939
GPN2	1p36.11	-0.012862801	0.77395829	0.822547234
RNASEL	1q25.3	-0.01285426	0.774104323	0.822659107
SNORA8	11q21	-0.012838132	0.774380074	0.822899184
SNORA16B	1q32.3	-0.01283619	0.774413282	0.822899184
CLK2P1	7p15.3	0.01283317	0.774464927	0.822899184
ZNF705A	12p13.31	0.012831508	0.77449335	0.822899184
REG3A	2p12	-0.012810313	0.774855811	0.823240953
LYZL6	17q12	0.012788094	0.775235852	0.823601361
ZNF517	8q24.3	-0.012764225	0.775644157	0.823950988
TEX261	2p13.3	0.012764081	0.775646611	0.823950988
MICALL1	22q13.1	0.012743756	0.77599436	0.824277001
LRRC37A2	17q21.31	-0.012711131	0.776549545	0.824823311
SLC6A9	1p34.1	-0.012704726	0.776662229	0.82487022
C17ORF64	17q23.2	0.012703953	0.776675463	0.82487022
RNASE11	14q11.2	0.012695406	0.776821737	0.824962751
PRSS42P	3p21.31	-0.012694085	0.776844353	0.824962751
PRDM5	4q27	0.012685976	0.776983143	0.825066718
SLC25A3P1	1p32.3	0.012669122	0.777271629	0.825329626
IFI35	17q21.31	-0.01266207	0.777392337	0.825414363
DRICH1	22q11.23	-0.012655996	0.777496316	0.82548133
LINC00314	21q21.3	0.012620123	0.778110507	0.826089962
LOC100128288	17p13.1	-0.012605769	0.778356315	0.826307454
EMP1	12p13.1	-0.012580958	0.778781227	0.82671505
BRI3	7q21.3	-0.01256693	0.779021495	0.826926604
LINC01547	21q22.3	-0.012552807	0.779263418	0.827115473
STARD4	5q22.1	0.012551757	0.7792814	0.827115473
SNORD10	17p13.1	0.012526023	0.779722265	0.827539872
HIST1H4G	6p22.2	0.01249618	0.780233618	0.828039033
DNM2	19p13.2	0.012490207	0.780335985	0.828069243
ZNRD1ASP	6p22.1	-0.01248973	0.780344156	0.828069243
INS	11p15.5	-0.012469501	0.780690846	0.828326503
STYXL1	7q11.23	-0.012467686	0.780721949	0.828326503
WWOX	16q23.1-q23.2	0.012466541	0.780741576	0.828326503
SLC13A4	7q33	-0.012465311	0.780762655	0.828326503
ALMS1P1	2p13.1	0.012463609	0.780791834	0.828326503
OR4K1	14q11.2	0.012438814	0.781216848	0.828733823

KAT6B	10q22.2	-0.012434859	0.781284637	0.828762167
ANXA2P1	4q31.3	-0.012422454	0.781497311	0.828944188
PRR14L	22q12.2	-0.012419019	0.781556208	0.828963087
RAB19	7q34	0.012406552	0.781769953	0.829146214
TOB2	22q13.2	-0.012402796	0.78183435	0.829170934
LINC00442	13q12.11	0.012391261	0.782032134	0.829337105
PTH2	19q13.33	0.012379209	0.782238806	0.829512684
CRISP1	6p12.3	-0.01236954	0.782404621	0.829644921
RFX5	1q21.3	-0.012354796	0.782657487	0.829869446
PDZD3	11q23.3	-0.012341398	0.782887294	0.830069499
IL13	5q31.1	-0.012332111	0.783046595	0.830194779
MGST3	1q24.1	-0.012328363	0.783110888	0.830219324
UBQLN2	Xp11.21	0.01230985	0.783428477	0.830512384
TTY7	Yp11.2	0.012305552	0.783502229	0.830527278
ZNF561	19p13.2	-0.012302312	0.783557814	0.830527278
CREM	10p11.21	-0.012301835	0.783566001	0.830527278
APBA3	19p13.3	-0.01229568	0.783671599	0.830595577
TTY2	Yp11.2	0.012260187	0.784280638	0.831197426
ZNF408	11p11.2	-0.012245342	0.784535406	0.831423768
SRCIN1	17q12	0.012241668	0.784598457	0.83144692
ATP1A1-AS1	1p13.1	0.01223203	0.784763882	0.831578553
ZNF875	19q13.12	0.012226352	0.784861345	0.831638158
PDE6A	5q32	-0.012220627	0.784959609	0.831698606
ANGPTL5	11q22.1	-0.012178095	0.785689792	0.832428558
PTPDC1	9q22.32	-0.012174822	0.785745993	0.832444395
CA7	16q22.1	-0.012159375	0.786011234	0.832681682
GPR139	16p12.3	-0.012154026	0.786103087	0.832735272
DNASE2B	1p31.1-p22.3	0.012131307	0.786493244	0.833104839
PDK2	17q21.33	-0.012126822	0.786570275	0.833109385
USF2	19q13.12	-0.012126249	0.786580108	0.833109385
OR51B4	11p15.4	-0.012120089	0.786685911	0.833177715
ZNF7	8q24.3	-0.01210955	0.786866943	0.833325708
GLIS3-AS1	9p24.2	0.012103193	0.786976131	0.833397604
FABP5P3	7q36.1	0.012092899	0.787152967	0.833541127
ARHGEF38	4q24	-0.012083862	0.787308221	0.833661782
ZNF177	19p13.2	0.01207825	0.787404631	0.83372012
ITGB1BP2	Xq13.1	-0.012074767	0.78746447	0.833739731
ODF1	8q22.3	0.012071118	0.787527165	0.833762364
SCARNA18	5q14.2	-0.012033328	0.788176503	0.834406046
DCAF12L1	Xq25	-0.012028842	0.7882536	0.834443888
MOCOS	18q12.2	-0.01200334	0.788691885	0.834844465
GYPB	4q31.21	-0.01200201	0.788714747	0.834844465
KLK14	19q13.41	0.011975326	0.789173417	0.835286147
MST1	3p21.31	-0.011967555	0.789307014	0.835383732
CATSPERD	19p13.3	-0.011959043	0.789453348	0.835494788
CCDC122	13q14.11	-0.011940549	0.789771322	0.835787471
PSD3	8p22	0.011923468	0.790065044	0.836054461
GDI2	10p15.1	-0.011917838	0.790161862	0.836098745
PDE6B	4p16.3	0.011916215	0.79018976	0.836098745
RHOD	11q13.2	0.011912207	0.790258684	0.83612783
YBX3P1	16p11.2	-0.011905814	0.790368638	0.836200322
SPIC	12q23.2	0.011901076	0.79045012	0.836242685
OR10W1	11q12.1	0.011877783	0.790850755	0.836622668
PDS5A	4p14	0.011864112	0.791085901	0.836827553
HIP1R	12q24.31	0.011853425	0.791269759	0.836978166
SSC4D	7q11.23	0.011835723	0.791574294	0.837256404
ALS2CL	3p21.31	0.011823652	0.791781996	0.837432197
DNMT3L	21q22.3	0.011814528	0.791938978	0.837530728

NOX3	6q25.3	-0.011813413	0.791958165	0.837530728
TULP1	6p21.31	-0.011809939	0.792017949	0.837546626
CLEC2D	12p13.31	0.011807715	0.79205621	0.837546626
CLN3	16p12.1	-0.011791302	0.792338662	0.837801397
TMSB4Y	Yq11.221	-0.011773172	0.792650676	0.838028327
SYNJ2BP	14q24.2	-0.011772694	0.792658916	0.838028327
ZNRF4	19p13.3	0.011770536	0.79269605	0.838028327
AKR7A2P1	1p13.2	-0.01176918	0.792719396	0.838028327
RABL2B	22q13.33	0.011748742	0.793071192	0.838356309
PHF19	9q33.2	-0.011743302	0.793164825	0.838411367
GALNT1	18q12.2	0.01171811	0.79359853	0.838825872
H3F3C	12p11.21	0.011697879	0.793946849	0.839150087
TM4SF4	3q25.1	-0.011659431	0.794608955	0.839805903
FOXR2	Xp11.21	0.011622396	0.795246862	0.840436076
MYOT	5q31.2	-0.011616424	0.795349748	0.840500789
UCN	2p23.3	-0.011606728	0.795516789	0.840633289
ADK	10q22.2 10q11-q24	-0.011602357	0.795592088	0.840668835
ZBTB18	1q44	0.011588997	0.795822264	0.84086802
RXFP1	4q32.1	0.011576814	0.796032181	0.841035329
TMEM8B	9p13.3	0.01157497	0.796063966	0.841035329
ARL17B	17q21.31	0.011565896	0.796220324	0.84115648
GSTT1	22q11.23	0.011556509	0.796382077	0.841259339
PFAS	17p13.1	-0.011555407	0.796401068	0.841259339
LOC100287704	7q11.21	0.011549661	0.796500093	0.841319901
C8ORF37	8q22.1	0.011545196	0.796577033	0.841357129
OGDH	7p13	-0.011539566	0.796674065	0.841415574
TAS2R4	7q34	-0.011531177	0.796818657	0.841524241
UTP11	1p34.3	0.011508934	0.797202041	0.841885073
RNASEH2B	13q14.3	-0.011501109	0.797336928	0.841983456
ADCY5	3q21.1	0.011494764	0.797446318	0.842036036
ARID2	12q12	-0.01149338	0.797470176	0.842036036
PEX6	6p21.1	-0.011478302	0.797730109	0.842266422
CLPB	11q13.4	0.01146666	0.797930832	0.842412795
GOLGA6A	15q24.1	0.011465419	0.797952235	0.842412795
DEFA5	8p23.1	0.011451486	0.798192468	0.842622328
STKLD1	9q34.2	0.011444841	0.798307065	0.842699218
HIST3H2BB	1q42.13	-0.011435859	0.798461948	0.842818625
TANGO6	16q22.1	-0.011418947	0.798753606	0.843066079
CTCFL	20q13.31	0.01141742	0.798779938	0.843066079
FOXD2-AS1	1p33	0.011404919	0.798995543	0.843249533
OR5AU1	14q11.2	0.011393757	0.79918807	0.843408612
LINC00240	6p22.2	0.01138383	0.79935931	0.84354521
THAP8	19q13.12	-0.011345803	0.800015346	0.844193362
ESRRG	1q41	-0.011322357	0.80041989	0.844552443
ACER2	9p22.1	-0.01132123	0.800439341	0.844552443
VSTM5	11q21	-0.011305382	0.800712832	0.844788469
TFAP2B	6p12.3	0.011303415	0.800746769	0.844788469
MBD3L5	19p13.2	-0.011296421	0.800867483	0.844871651
OTUD6A	Xq13.1	0.011288922	0.800996903	0.844964008
TMC6	17q25.3	0.0112697	0.801328677	0.845259865
NPDC1	9q34.3	-0.011266264	0.801387975	0.845259865
BTNL2	6p21.32	0.011265392	0.801403029	0.845259865
C11ORF42	11p15.4	-0.011252283	0.801629312	0.84545434
MAP4K2	11q13.1	-0.011245366	0.801748731	0.845536095
NUTF2	16q22.1	-0.011227712	0.802053511	0.845813316
TTC36	11q23.3	0.011213312	0.802302137	0.846031293
ZNF133	20p11.23	-0.011204905	0.802447299	0.846113311
RBM15	1p13.3	-0.011203951	0.802463777	0.846113311

SMAP1	6q13	-0.011186201	0.802770276	0.846392256
FAM74A4	9q12	-0.011176803	0.802932574	0.846519144
TCP10L2	6q27	0.011173274	0.802993533	0.846539183
TMEM185A	Xq28	0.011143927	0.803500392	0.847029276
PATJ	1p31.3	-0.011139442	0.803577863	0.847066693
LINC02203	15q11.2	0.011130627	0.803730142	0.847182958
INGX	Xq13.1	0.011125057	0.803826348	0.847240108
CALB2	16q22.2	0.011122265	0.803874581	0.847246692
HBE1	11p15.4	-0.011118466	0.803940222	0.847271621
NECAP1	12p13.31	0.011111959	0.804052625	0.847345828
USP26	Xq26.2	0.011098772	0.804280458	0.847541666
CCDC183	9q34.3	0.011084955	0.804519181	0.847748959
FOXD4L5	9q21.11	0.01106925	0.80479056	0.847990638
LOC729609	Xp22.12	-0.011044379	0.80522037	0.848399219
SNORA4	3q27.3	-0.011035847	0.80536782	0.848430459
LINC00923	15q26.2	-0.01103575	0.8053695	0.848430459
ACSM2B	16p12.3	-0.011035365	0.805376156	0.848430459
OR10A4	11p15.4	-0.011028538	0.805494161	0.848482356
GRIPAP1	Xp11.23	0.011027602	0.805510328	0.848482356
BCKDK	16p11.2	0.011025216	0.805551563	0.848482356
CYP4F35P	18p11.21	0.011019944	0.805642691	0.84853405
CCDC166	8q24.3	-0.011016525	0.805701786	0.848552001
RANBP6	9p24.1	-0.010992008	0.806125602	0.848954049
DAD1	14q11.2	-0.010983324	0.806275728	0.849067838
YY2	Xp22.12	0.010978983	0.806350784	0.849102566
GPR179	17q12	-0.01097283	0.806457154	0.849130993
VCX3B	Xp22.31	0.010972554	0.806461939	0.849130993
OR52A5	11p15.4	-0.010952289	0.806812314	0.849455582
APCS	1q23.2	0.01093744	0.807069092	0.849672303
CEP290	12q21.32	0.010935515	0.807102369	0.849672303
LOC153910	6q24.2	0.010924701	0.80728939	0.849824852
CDR2L	17q25.1	-0.01092206	0.807335055	0.84982859
FRAS1	4q21.21	0.010906506	0.807604068	0.850067419
C6ORF47	6p21.33	0.010894673	0.807808732	0.850178794
EGLN2	19q13.2	0.010894482	0.807812033	0.850178794
FABP9	8q21.13	0.01089147	0.807864129	0.850178794
G6PC	17q21.31	0.010890645	0.807878407	0.850178794
TMEM202	15q23-q24.1	0.01088122	0.808041424	0.850306002
ABCG1	21q22.3	0.010867762	0.808274224	0.850506626
OR6C6	12q13.2	-0.010859826	0.808411514	0.850606734
ST7-OT4	7q31.2	-0.010843083	0.808701193	0.850867166
DHX57	2p22.1	-0.010835604	0.808830593	0.850958944
TNNC1	3p21.1	0.010827793	0.808965735	0.851056752
MYH6	14q11.2	-0.010795607	0.809522703	0.851598302
NAXD	13q34	0.010781783	0.809761942	0.851805569
FAAP100	17q25.3	-0.010765942	0.810036114	0.852049559
OR4K15	14q11.2	-0.0107469	0.810365728	0.852332295
OR51I1	11p15.4	0.010745533	0.810389386	0.852332295
SFTPA2	10q22.3	-0.010741514	0.810458961	0.852361045
TYW3	1p31.1	0.010733115	0.810604351	0.852469523
PPP2R2B	5q32	-0.010710308	0.810999203	0.85284032
KIAA2026	9p24.1	0.010705823	0.811076857	0.852877535
ATP1B4	Xq24	-0.0107	0.811177678	0.852939105
GM2A	5q33.1	0.010692559	0.811306526	0.853030137
CEP170B	14q32.33	-0.010665553	0.811774175	0.853477366
ZC3H18	16q24.2	-0.010587971	0.813118007	0.854845695
SNORA65	9q33.3	0.010580876	0.813240942	0.854930397
KIR3DP1	19q13.42	0.010573215	0.813373679	0.855025394

DPPA3	12p13.31	-0.010558885	0.813621968	0.855241844
LINC01591	8q24.22	0.010535749	0.81402288	0.855618694
TAF9B	Xq21.1	-0.010529952	0.814123347	0.855654277
FAM92A	8q22.1	-0.010528902	0.814141539	0.855654277
RAB9BP1	5q21.2-q21.3	0.010520678	0.814284072	0.855759507
CNTROB	17p13.1	0.01051392	0.814401193	0.855797846
SVOPL	7q34	-0.010513679	0.814405374	0.855797846
VPS28	8q24.3	-0.010476322	0.815052897	0.856433681
GYS1	19q13.33	0.010458955	0.815353981	0.856705441
TMEM132B	12q24.31-q24.32	0.010454634	0.815428894	0.85673331
TRDN	6q22.31	-0.010452527	0.815465419	0.85673331
KCNV2	9p24.2	0.010438946	0.815700881	0.856931136
ONECUT3	19p13.3	0.010434287	0.815781658	0.856931136
SOCS1	16p13.13	-0.01043214	0.815818896	0.856931136
ZNF527	19q13.12	-0.010430327	0.815850325	0.856931136
PGAM4	Xq21.1	0.01042942	0.815866048	0.856931136
SNORA66	1p22.1	0.010400242	0.816372015	0.857407622
NEO1	15q24.1	0.010398359	0.81640468	0.857407622
ZNF740	12q13.13	-0.010393683	0.816485772	0.85744816
GPR135	14q23.1	-0.010389007	0.816566856	0.857484642
PRM1	16p13.13	0.010386779	0.816605499	0.857484642
C14ORF180	14q32.33	0.010360439	0.81706236	0.857883131
RPGR	Xp11.4	0.010359997	0.817070018	0.857883131
OR2H2	6p22.1	-0.01034891	0.817262334	0.858040408
CCNT1	12q13.11-q13.12	0.010321349	0.817740453	0.858497716
GPR6	6q21	0.010309292	0.81794965	0.858672666
ZAR1	4p11	-0.010304771	0.818028085	0.858710333
LMF1	16p13.3	0.010292292	0.818244604	0.85889294
DCDC1	11p13	-0.010281588	0.818430352	0.859043229
SNORA48	17p13.1	-0.010250677	0.81896678	0.859561565
PIH1D1	19q13.33	-0.010245103	0.819063504	0.859597234
FAM120B	6q27	-0.010241382	0.819128096	0.859597234
SP7	12q13.13	0.010239074	0.819168143	0.859597234
STARD5	15q25.1	0.010238901	0.819171159	0.859597234
TRIM42	3q23	0.010233523	0.8192645	0.859650478
AKAIN1	18p11.31	0.010222952	0.819447985	0.859798299
STEAP1B	7p15.3	-0.010219624	0.819505739	0.85981419
OR4C12	11p11.12	0.010215064	0.8195849	0.859843018
KLK9	19q13.41	0.010211144	0.819652949	0.859843018
SPATA31D5P	9q21.32	-0.010210677	0.819661048	0.859843018
HPS5	11p15.1	0.010206933	0.81972605	0.859866505
ZNF512	2p23.3	0.010198726	0.819868514	0.859971242
LGALS17A	19q13.2	0.01019318	0.819964802	0.860027534
USP46	4q12	-0.010142901	0.82083776	0.860898397
FAM71F2	7q32.1	-0.010124667	0.821154404	0.861185734
CEACAM16	19q13.31-q13.32	0.010114276	0.821334876	0.86133024
FAR2P1	2q21.1	0.01010463	0.821502393	0.861380426
FAM181A	14q32.12	0.010104383	0.821506693	0.861380426
RLN3	19p13.12	0.010104147	0.821510793	0.861380426
HSPA8	11q24.1	0.01009223	0.821717773	0.861535724
STK38	6p21.31	0.010090703	0.821744293	0.861535724
MPP5	14q23.3	0.010075053	0.822016133	0.861775953
YOD1	1q32.1	0.010061502	0.822251524	0.861977947
CDKN1B	12p13.1	0.010054727	0.822369226	0.862056551
SP1	12q13.13	0.010049002	0.822468695	0.862116035
LINC01300	8q24.3	-0.010042169	0.822587403	0.862195679
RPL13P5	12p13.31	0.010038696	0.822647743	0.862214138
NDRG1	8q24.22	0.010021519	0.822946187	0.862482139

PARG	10q11.23	-0.010015316	0.823053963	0.862550295
SNAPC2	19p13.2	0.010000334	0.823314298	0.862757997
GADL1	3p24.1-p23	0.009998989	0.823337665	0.862757997
SCGB1C1	11p15.5	0.009980583	0.82365754	0.86304837
LRRC19	9p21.2	0.009976407	0.823730107	0.86307959
ZBED9	6p22.1	-0.009969178	0.823855749	0.863166416
RC3H2	9q33.2	0.009965408	0.823921269	0.863190244
TP53INP2	20q11.22	0.009961304	0.823992587	0.863220144
RNF40	16p11.2	-0.009951857	0.824156789	0.863347342
UBTFL1	11q14.3	0.009925498	0.824614975	0.863782474
OR10R2	1q23.1	-0.009919029	0.82472743	0.863854005
ANKHD1	5q31.3	-0.009916645	0.824768882	0.863854005
SLC25A6	Xp22.33 and Yp11	-0.009911778	0.824853489	0.863861011
LOC100192426	18p11.23	0.00990994	0.824885441	0.863861011
FUT5	19p13.3	-0.009906745	0.824940981	0.863861011
LOC643923	11q22.3	0.00990641	0.82494681	0.863861011
FOXJ1	17q25.1	0.009903	0.825006097	0.863878264
CFHR2	1q31.3	-0.009871993	0.825545207	0.864397921
DMRTC1	Xq13.1	0.009854767	0.825844755	0.8646667
GMEB2	20q13.33	-0.009840494	0.826092959	0.864881696
RWDD3	1p21.3	0.009824463	0.826371775	0.865128718
GAS8	16q24.3	0.009819405	0.826459739	0.865159424
MXN1	7q36.3	0.009817747	0.82648858	0.865159424
CCDC25	8p21.1	-0.009813202	0.826567623	0.865159424
PURA	5q31.3	0.009812916	0.826572602	0.865159424
DDX46	5q31.1	-0.009809671	0.826629035	0.865173615
SLMAP	3p14.3	0.009804328	0.826721985	0.865226023
TET1	10q21.3	-0.009780853	0.827130331	0.865602685
HNF4G	8q21.13	0.009778706	0.827167678	0.865602685
OR7E5P	11q12.1	0.009768891	0.827338412	0.865736456
SCARNA7	3q25.33	-0.009756448	0.827554892	0.86591808
ADPRM	17p13.1	0.009742587	0.827796063	0.866125519
ACVR2B	3p22.2	-0.009730944	0.827998635	0.866216006
SPACA3	17q11.2	-0.00972866	0.828038381	0.866216006
TTBK1	6p21.1	-0.009728083	0.828048429	0.866216006
CCDC183-AS1	9q34.3	0.009727748	0.828054252	0.866216006
TAF6	7q22.1	-0.009709855	0.828365611	0.866496794
MTMR10	15q13.3	-0.009702126	0.828500123	0.866592576
INSL6	9p24.1	0.009697321	0.828583742	0.86662435
JARID2	6p22.3	-0.009693824	0.828644604	0.86662435
TBC1D29P	17q11.2	0.009692977	0.828659341	0.86662435
ECHDC2	1p32.3	-0.009684663	0.828804038	0.866730757
LCN15	9q34.3	0.009676197	0.828951372	0.866803305
ZNF436-AS1	1p36.12	-0.00967574	0.828959323	0.866803305
CDKN2A-DT	9p21.3	-0.00967138	0.829035213	0.866837741
GNB3	12p13.31	0.009666675	0.829117106	0.86687845
UROC1	3q21.3	0.009624627	0.829849056	0.867598782
MOK	14q32.31	-0.009598779	0.830299074	0.868024299
FAM74A1	9p12	-0.009594253	0.830377864	0.868041296
FOXN3-AS2	14q32.11	-0.009592904	0.830401366	0.868041296
ZNF705D	8p23.1	0.00958971	0.830456974	0.868054456
LOC154449	6q27	0.009578543	0.830651424	0.868212736
RFXAP	13q13.3	0.009568767	0.830821643	0.868345675
OR6K6	1q23.1	-0.009556161	0.831041172	0.868530133
KRTAP12-1	21q22.3	-0.009543679	0.831258545	0.868712319
ASB10	7q36.1	0.009531431	0.831471863	0.868890249
SH2D1B	1q23.3	-0.00951013	0.831842883	0.869210915
DEFA6	8p23.1	-0.009508867	0.831864869	0.869210915

NBEAL2	3p21.31	-0.009494477	0.832115537	0.869427816
WNT3A	1q42.13	-0.009470431	0.832534444	0.869789512
SDR16C6P	8q12.1	-0.009469657	0.832547917	0.869789512
RPS4Y2	Yq11.223	-0.009459652	0.832722242	0.869926596
LRP12	8q22.3	-0.009451726	0.832860329	0.87002581
HORMAD1	1q21.3	0.009446754	0.832946955	0.870071261
C3ORF79	3q25.2	0.009439035	0.83308146	0.870166716
SSR1	6p24.3	0.009389317	0.833947861	0.871026599
FAM71C	12q23.1	-0.009361385	0.834434711	0.871489987
TRUB1	10q25.3	0.009356681	0.834516697	0.871530506
GJD4	10p11.21	-0.009334705	0.834899788	0.871885464
TERF2	16q22.1	0.00932958	0.834989129	0.871907628
DEDD2	19q13.2	-0.00932853	0.835007429	0.871907628
RXFP4	1q22	-0.009308446	0.835357588	0.872228126
SSX4	Xp11.23	-0.009291127	0.835659543	0.872498263
DEFB108B	11q13.4	-0.009276625	0.835912414	0.872708587
PRH1	12p13.2	0.009274614	0.835947484	0.872708587
CFAP299	4q21.21	0.009263702	0.836137767	0.87286208
DCPS	11q24.2	-0.009250376	0.836370169	0.873059523
CFD	19p13.3	-0.009231004	0.836708018	0.873367013
ZNF546	19q13.2	-0.009210392	0.837067535	0.873672726
SLC35E4	22q12.2	-0.009207434	0.837119136	0.873672726
C1ORF122	1p34.3	-0.009206766	0.837130787	0.873672726
ZNF84	12q24.33	0.009194551	0.837343854	0.873849899
SPACA7	13q34	-0.00915853	0.837972257	0.874376944
RGPD4-AS1	2q12.3	-0.009156031	0.838015865	0.874376944
GLRA1	5q33.1	0.009154457	0.83804333	0.874376944
USP17L9P	4p16.1	-0.009153324	0.838063093	0.874376944
RALY	20q11.22	0.009153184	0.838065537	0.874376944
GP1BA	17p13.2	-0.009128424	0.83849756	0.874782456
CRTC3	15q26.1	0.009098552	0.839018841	0.875281042
FAM186A	12q13.12	-0.009077227	0.839391013	0.875624031
TPTE2P1	13q12.13	0.009072431	0.839474727	0.87566609
MYOM2	8p23.3	0.009063721	0.839626741	0.875779387
KLC3	19q13.32	-0.009036811	0.840096479	0.876224058
EIF2B2	14q24.3	0.00902097	0.840373015	0.876438919
ANGPTL3	1p31.3	-0.009020034	0.840389348	0.876438919
IL5	5q31.1	-0.00898999	0.840913904	0.876927216
LOC652276	16p13.3	0.008988239	0.840944475	0.876927216
POTEA	8p11.1	-0.008982761	0.841040118	0.876981632
RNF14	5q31.3	0.008970012	0.841262729	0.87716843
MTURN	7p14.3	-0.008964191	0.841364376	0.877229087
OR6C75	12q13.2	-0.008952387	0.841570505	0.877398668
GNAT2	1p13.3	-0.008945588	0.841689248	0.877450221
HIGD2B	15q24.1	-0.008944576	0.841706919	0.877450221
RDX	11q22.3	-0.008941766	0.841755991	0.877456047
SEC14L4	22q12.2	0.008935629	0.841863171	0.877522441
CENPT	16q22.1	0.008930983	0.841944314	0.87756169
COPB1	11p15.2	0.008926498	0.842022645	0.877598004
OR51A4	11p15.4	-0.008918216	0.84216728	0.877703416
CATSPERG	19q13.2	0.008911278	0.842288462	0.877784376
SLC35B3	6p24.3	0.008893957	0.842591012	0.878054329
MAPK9	5q35.3	0.008878975	0.842852721	0.878281697
ESD	13q14.2	0.008864757	0.843101111	0.878417894
TAS2R3	7q34	-0.008864228	0.843110336	0.878417894
ZC2HC1B	6q24.2	-0.008864018	0.843114019	0.878417894
ATXN3L	Xp22.2	0.008849043	0.843375643	0.878645109
GDF11	12q13.2	0.008845194	0.843442881	0.878655695

CIB1	15q26.1	-0.008843476	0.843472891	0.878655695
ARL5C	17q12	0.008839197	0.843547659	0.878688221
LPIN1	2p25.1	0.008833743	0.843642955	0.878742125
PAGE2B	Xp11.21	0.008822522	0.843839013	0.878900973
AGR3	7p21.1	0.008818184	0.84391482	0.878934563
SYT17	16p12.3	-0.008805687	0.844133179	0.879116609
RBM12B-AS1	8q22.1	0.008801012	0.844214882	0.879156324
GDPD1	17q22	-0.008777823	0.844620128	0.879532953
PAQR6	1q22	0.008772288	0.844716858	0.87958829
FAM81B	5q15	0.008769278	0.844769471	0.879597686
MADCAM1	19p13.3	0.008751237	0.845084786	0.879880599
NCS1	9q34.11	0.008736121	0.845348994	0.880110275
KTN1	14q22.3	-0.008719708	0.845635906	0.880319901
FGF6	12p13.32	0.008719612	0.845637592	0.880319901
LOC93622	4p16.1	-0.008711406	0.845781039	0.880423811
TRIP4	15q22.31	0.00869003	0.846154736	0.88076738
HBG1	11p15.4	0.008675108	0.846415631	0.880993501
IL20RB	3q22.3	0.008669704	0.846510114	0.8810464
SCN3A	2q24.3	-0.008664886	0.846594372	0.88108865
CNTLN	9p22.2	0.008650715	0.846842163	0.881301083
SNORA59B	17p11.2	-0.00860554	0.847632168	0.882077743
PRR14	16p11.2	-0.008579908	0.848080491	0.882481286
CSHL1	17q23.3	0.008576472	0.848140594	0.882481286
HGD	3q13.33	0.008575868	0.848151151	0.882481286
TMEM104	17q25.1	0.008557864	0.848466085	0.88276345
PSMF1	20p13	-0.008531145	0.848933519	0.883196022
KRT40	17q21.2	-0.008529095	0.848969386	0.883196022
CUTALP	9q33.2	-0.00852375	0.849062904	0.883247776
INTS9	8p21.1	0.00851998	0.849128856	0.883270848
SSBP4	19p13.11	-0.008515304	0.849210666	0.883310414
NEFM	8p21.2	-0.008504368	0.849402016	0.883463908
TUBA3E	2q21.1	-0.008478354	0.849857203	0.88389179
GSTK1	7q34	-0.008431997	0.850668498	0.884689977
HIST3H3	1q42.13	-0.008427457	0.850747946	0.884727005
PDZK1P1	1q21.2	0.008413202	0.850997464	0.884940882
HSD3B1	1p12	0.008405563	0.851131171	0.885019534
CLCA4	1p22.3	0.00840387	0.851160815	0.885019534
CSNK1G3	5q23.2	-0.00839917	0.851243087	0.885059473
NP1A1	16p13.11	0.008395925	0.851299882	0.885072921
CATSPERE	1q44	0.008370718	0.851741153	0.885469622
B3GALT5-AS1	21q22.2	0.008365092	0.851839662	0.885469622
IFNA2	9p21.3	0.008363762	0.851862936	0.885469622
LINC00889	Xq26.3	-0.00836273	0.851881014	0.885469622
KLK1	19q13.33	0.008361597	0.85190085	0.885469622
CCDC160	Xq26.2	-0.008328024	0.852488674	0.886034971
SNTG1	8q11.21	0.008312656	0.85275778	0.886237355
SCN5A	3p22.2	0.008311887	0.852771234	0.886237355
LALBA	12q13.11	-0.008295148	0.853064373	0.886479588
SMYD2	1q32.3	-0.008291624	0.853126085	0.886479588
2-Mar	19p13.2	0.008291051	0.853136112	0.886479588
TMEM132A	11q12.2	0.008271393	0.853480389	0.88675468
MDK	11p11.2	-0.008270916	0.853488746	0.88675468
HIST1H3D	6p22.2	0.008261231	0.853658381	0.886885264
LRWD1	7q22.1	0.008251258	0.853833052	0.887021064
ZNF544	19q13.43	0.008246583	0.853914954	0.887060481
MX1	21q22.3	-0.008240284	0.854025273	0.887129414
LRRC46	17q21.32	-0.008228213	0.854236724	0.887303384
MFSD4B	6q21	0.008223012	0.854327831	0.887352342

CHRM2	7q33	0.008203225	0.854674473	0.887621694
LEFTY1	1q42.12	0.008203187	0.854675133	0.887621694
GLI1	12q13.3	0.00816337	0.855372738	0.888300472
ANKRD20A4	9q13	-0.008146442	0.85566936	0.888562784
PCSK1N	Xp11.23	0.00812159	0.856104874	0.888942075
NGEF	2q37.1	0.008120572	0.856122716	0.888942075
KIAA1522	1p35.1	0.008115371	0.856213863	0.888990972
PLCXD1	Xp22.33 and Yp11	0.008106305	0.856372742	0.889002483
CACNB1	17q12	0.008104778	0.856399501	0.889002483
F2RL2	5q13.3	-0.008104731	0.856400334	0.889002483
IFT80	3q25.33	0.008104683	0.856401173	0.889002483
TOP3A	17p11.2	-0.008097812	0.856521591	0.889053636
MBD3L2	19p13.2	-0.008096844	0.856538567	0.889053636
CYCSP52	1q23.1	0.008073497	0.856947776	0.889422803
LRRC29	16q22.1	-0.008071522	0.856982385	0.889422803
RAB1B	11q13.2	0.008045805	0.857433198	0.889814918
PHGR1	15q15.1	-0.008044938	0.857448391	0.889814918
OR5D16	11q12.1	-0.00804094	0.857518485	0.889831121
MGAT2	14q21.3	-0.008037789	0.857573719	0.889831121
MAGEA2	Xq28	-0.008036501	0.857596295	0.889831121
CBARP	19p13.3	0.008032636	0.857664053	0.88985567
YIF1B	19q13.2	0.008025574	0.857787855	0.889938361
NUDT9P1	10q23.32	-0.008018793	0.857906738	0.890015941
IFNA10	9p21.3	-0.008003473	0.858175343	0.89024883
CTAG1B	Xq28	-0.007997038	0.858288165	0.890320099
RTP2	3q27.3	-0.007984126	0.858514572	0.890509178
EHMT1-IT1	9q34.3	0.007976812	0.85864282	0.890596426
PHOSPHO1	17q21.32	0.007969136	0.858777415	0.890690247
LGALS8	1q43	0.007951142	0.859092974	0.890946188
SHOX	Xp22.33 and Yp11	-0.007950029	0.859112489	0.890946188
MOSMO	16p12.2	-0.007946847	0.859168281	0.890958258
OR5AN1	11q12.1	0.007919619	0.859645814	0.891407651
OR4C16	11q11	0.007901189	0.859969075	0.891697033
TFAP2C	20q13.31	0.007849226	0.860880604	0.892596327
DTX3	12q13.3	-0.007843309	0.860984403	0.892658082
ZNF793	19q13.12	-0.007817162	0.861443152	0.893087822
EGFL8	6p21.32	-0.007794356	0.861843328	0.893456795
ANKRD13D	11q13.2	-0.007788725	0.861942138	0.893513325
FAM156A	Xp11.22	0.0077809	0.862079452	0.893609763
TRIM28	19q13.43	-0.007768972	0.86228878	0.893780835
GLYATL1	11q12.1	-0.007750327	0.862615996	0.894018087
HINFP	11q23.3	0.007749791	0.862625401	0.894018087
CYP4F30P	2q21.1	0.007746146	0.862689385	0.894018087
ZMPSTE24	1p34.2	0.007743398	0.862737613	0.894018087
CRYM	16p12.2	0.007743308	0.862739195	0.894018087
MBTPS2	Xp22.12	0.007723549	0.863085992	0.894331531
MYF5	12q21.31	0.007720632	0.863137185	0.894338653
FOXD4L3	9q21.11	-0.007702693	0.863452082	0.894618996
LRRC69	8q21.3	-0.007684173	0.86377719	0.89490989
CST9L	20p11.21	-0.007665736	0.86410085	0.895199253
FFAR2	19q13.12	0.007659518	0.864210028	0.895266397
ZNF233	19q13.31	0.007655796	0.864275368	0.895288123
TMEM88B	1p36.33	0.007632366	0.864686751	0.895668289
TM4SF19	3q29	-0.007594246	0.865356123	0.896315635
PTH	11p15.3	0.007568855	0.865802028	0.896728652
POLR2K	8q22.2	-0.00756266	0.865910841	0.896728652
HSP90AB1	6p21.1	0.007561419	0.865932628	0.896728652
SMARCC1	3p21.31	0.007561419	0.865932628	0.896728652

MAGED4	Xp11.22	-0.007556839	0.866013077	0.89676594
RNF113B	13q32.2	-0.007535223	0.866392733	0.897092296
OR1N2	9q33.2	0.007533833	0.866417155	0.897092296
TMEM98	17q11.2	0.007528401	0.866512558	0.897145044
GAS8-AS1	16q24.3	0.007513867	0.866767868	0.897363337
BBS2	16q13	-0.007511129	0.866815959	0.897367086
MAGEE1	Xq13.3	0.007491853	0.867154586	0.897671594
HBG2	11p15.4	-0.007456035	0.86778386	0.898276932
TCP10L	21q22.11	-0.007442804	0.868016345	0.898471497
HEATR4	14q24.3	-0.007437368	0.868111857	0.89852427
PRB2	12p13.2	0.007422782	0.86836816	0.898743453
SSU72	1p36.33	-0.007402056	0.868732367	0.899074287
IGSF5	21q22.2	0.007390352	0.868938053	0.899241036
IQCC	1p35.2	-0.007382208	0.86908119	0.899343043
RILPL1	12q24.31	0.007379059	0.869136538	0.899354197
OR2T4	1q44	0.007363666	0.869407071	0.899588005
PXMP4	20q11.22	-0.007327337	0.870045627	0.900198066
SLX1B	16p11.2	0.007325047	0.870085886	0.900198066
SRSF10	1p36.11	-0.00731999	0.870174792	0.900243893
C4ORF46	4q32.1	-0.007317175	0.870224275	0.900248931
LMF2	22q13.33	-0.007283727	0.87081228	0.900811042
TAS2R8	12p13.2	0.007280751	0.870864601	0.900818986
NHLRC2	10q25.3	-0.007268077	0.871087432	0.901003295
CASTOR2	7q11.23	0.007265501	0.871132733	0.901003968
GKN2	2p13.3	0.007251873	0.871372345	0.901164956
VPS54	2p15-p14	0.007251569	0.871377701	0.901164956
RSRP1	1p36.11	-0.007215879	0.872005277	0.90176777
MIS18BP1	14q21.2	0.007210344	0.872102609	0.901822207
ZFP14	19q13.12	-0.007205191	0.87219323	0.9018697
INKA1	3p21.31	0.007195267	0.872367765	0.901971617
EDN1	6p24.1	0.007194503	0.872381191	0.901971617
LCE1B	1q21.3	-0.007178097	0.87266973	0.902223715
CCDC159	19p13.2	-0.007145645	0.873240529	0.902747372
TARS	5p13.3	0.007144214	0.873265707	0.902747372
ARL13B	3q11.1-q11.2	-0.007113963	0.873797836	0.903251192
TYW1B	7q11.22-q11.23	0.007071117	0.874551642	0.903984099
RFX3	9p24.2	0.007052699	0.874875696	0.904272738
RPL23AP82	22q13.33	0.007022163	0.875413034	0.904781787
OR13C9	9q31.1	-0.007008271	0.875657504	0.904988107
WSCD2	12q23.3	-0.006981548	0.876127809	0.905427792
LRRC34	3q26.2	0.006978887	0.876174638	0.905429816
MYBPC1	12q23.2	0.00695627	0.876572708	0.905794791
MDM4	1q32.1	0.006939142	0.87687421	0.906059946
ARFGEF1	8q13.2	-0.006931221	0.877013632	0.906157608
BTBD18	11q12.1	0.006911186	0.877366319	0.9064756
CELA3B	1p36.12	-0.006904207	0.877489194	0.906556135
RAPGEF4-AS1	2q31.1	0.006891167	0.877718762	0.906732154
ANKRD26	10p12.1	-0.006889424	0.877749437	0.906732154
VAX1	10q25.3	0.006870459	0.878083337	0.907030645
PRKAG3	2q35	-0.00686126	0.878245317	0.907151528
ALDH3B2	11q13.2	-0.006853544	0.878381171	0.907245414
LCN9	9q34.3	0.006842482	0.878575954	0.907400152
CFAP97	4q35.1	0.006833027	0.878742437	0.907525648
TBC1D3P2	17q23.2	0.006791028	0.879482045	0.908242999
FAM118B	11q24.2	-0.006782451	0.879633107	0.908312733
FABP1	2p11.2	-0.006782083	0.879639597	0.908312733
CCZ1B	7p22.1	-0.006765083	0.879938994	0.90846481
OCM2	7q21.3	-0.006763466	0.87996749	0.90846481

PRR23C	3q23	-0.00676311	0.879973751	0.90846481
PTGDR2	11q12.2	-0.006761314	0.880005379	0.90846481
SOX1	13q34	-0.00676094	0.880011975	0.90846481
DIAPH3	13q21.2	0.006749052	0.880221368	0.908634489
MTRF1L	6q25.2	0.006745616	0.880281876	0.908650467
BBS10	12q21.2	0.006725004	0.880644957	0.908978751
PRSS27	16p13.3	-0.006711931	0.880875256	0.909169955
RGPD8	2q14.1	-0.006700304	0.88108007	0.909292606
SDR9C7	12q13.3	0.006700069	0.881084213	0.909292606
ACOT8	20q13.12	-0.006684066	0.881366145	0.909537048
BPTF	17q24.2	0.006675382	0.881519137	0.90964841
OR5H6	3q11.2	0.006669266	0.881626902	0.909713093
PDE6H	12p12.3	-0.00665757	0.881832961	0.909861732
LCE3B	1q21.3	-0.006655972	0.881861131	0.909861732
SCGB1D4	11q12.3	-0.006652543	0.881921547	0.909877545
NRSN2	20p13	0.006624902	0.882408595	0.910312307
MYOC	1q24.3	-0.006623507	0.882433175	0.910312307
CYLC1	Xq21.1	0.006614403	0.882593599	0.91038642
CAMKV	3p21.31	-0.006614309	0.882595249	0.91038642
IMPA1	8q21.13	-0.006607629	0.882712961	0.910461299
TACC1	8p11.22	0.006583391	0.883140112	0.910855319
NDST3	4q26	-0.006547812	0.883767178	0.911455478
ACIN1	14q11.2	0.006535391	0.883986106	0.911634672
SERPINB3	18q21.33	-0.006523989	0.884187084	0.911795338
AKAP14	Xq24	0.006516007	0.884327796	0.91185481
TEC	4p12-p11	-0.006515591	0.884335132	0.91185481
MRGPRX1	11p15.1 11	-0.006487638	0.884827894	0.912316288
OTP	5q14.1	-0.006482618	0.884916396	0.912360921
IRF5	7q32.1	-0.006463344	0.885256184	0.91263159
SBK2	19q13.42	0.006462596	0.885269376	0.91263159
SFTPA1	10q22.3	-0.006460004	0.885315066	0.912632068
VSTM2B	19q12	0.006450597	0.885480936	0.912756427
PARD6G-AS1	18q23	-0.006416785	0.886077109	0.913301754
C3P1	19p13.2	-0.006415459	0.886100488	0.913301754
ZNF146	19q13.12	-0.006393683	0.886484487	0.913618085
C19ORF47	19q13.2	-0.006392919	0.886497949	0.913618085
SLC46A1	17q11.2	0.0063662	0.886969152	0.914057021
FBXW12	3p21.31	0.006349243	0.887268218	0.914318525
FKBP1A	20p13	-0.006323926	0.887714744	0.914731952
PSCA	8q24.3	-0.006311902	0.887926827	0.91490377
HAUS3	4p16.3	-0.006303695	0.888071586	0.915006206
CST9	20p11.21	0.006294566	0.888232626	0.915125404
KLHL21	1p36.31	-0.006277358	0.888536185	0.915391417
TAPT1-AS1	4p15.32	-0.006250066	0.889017664	0.91584069
DDB1	11q12.2	-0.006247203	0.88906817	0.915845965
C12ORF54	12q13.11	0.006227709	0.889412105	0.91615349
TNNT3	11p15.5	-0.006220216	0.889544306	0.916242895
TEAD4	12p13.33	-0.006215139	0.889633877	0.916288383
MCPH1	8p23.1	0.006203307	0.889842664	0.916456649
RBBP9	20p11.23	-0.006196627	0.889960531	0.916491422
ELMOD2	4q31.1	-0.006196245	0.889967264	0.916491422
VTI1B	14q24.1	0.006191855	0.890044723	0.916524417
SNORA11B	14q32.11	-0.006184417	0.890175981	0.916612804
INKA2	1p13.2	-0.006176205	0.890320882	0.91671523
MED20	6p21.1	0.006158074	0.890640839	0.916997882
ASB8	12q13.11	-0.006147005	0.89083619	0.917152218
HIST1H1B	6p22.1	0.006131013	0.891118411	0.91739597
C17ORF50	17q12	0.006121915	0.891278988	0.917490344

SPP1	4q22.1	0.006120667	0.891301017	0.917490344
MBOAT2	2p25.1	0.006114751	0.891405439	0.917511876
LOC389705	9p22.3	0.006114329	0.891412872	0.917511876
TLX3	5q35.1	-0.006106479	0.891551432	0.917607688
LOC145783	15q21.3	-0.00610058	0.891655551	0.917668045
PEG10	7q21.3	0.006095379	0.891747353	0.91771572
GSDMC	8q24.21	-0.006086409	0.891905684	0.917797181
IGSF10	3q25.1	-0.006085741	0.891917475	0.917797181
UBN1	16p13.3	-0.006073526	0.892133082	0.917972233
NBR1	17q21.31	0.006062361	0.892330167	0.918096997
PRLH	2q37.3	-0.006061502	0.89234533	0.918096997
NOL6	9p13.3	0.006045757	0.892623281	0.918299704
IGFBP1	7p12.3	0.006042941	0.892673003	0.918299704
RNF103	2p11.2	-0.006042608	0.892678873	0.918299704
ELMOD3	2p11.2	-0.006031825	0.892869238	0.918448711
SLC41A3	3q21.2-q21.3	-0.006023046	0.893024231	0.918561319
ZNF252P-AS1	8q24.3	-0.006009642	0.893260878	0.9187579
ARHGAP33	19q13.12	0.00600501	0.893342651	0.918795176
YTHDC2	5q22.2	-0.006002243	0.893391511	0.918798598
GSN	9q33.2	-0.005982871	0.89373354	0.919086126
ANKMY1	2q37.3	-0.005981249	0.893762181	0.919086126
DDX4	5q11.2	-0.005971495	0.893934403	0.919198642
HAO1	20p12.3	0.005969892	0.893962701	0.919198642
FAM66D	8p23.1	0.005963326	0.894078655	0.919271027
TSPAN13	7p21.1	-0.005959301	0.89414973	0.919297264
CEND1	11p15.5	-0.005950688	0.894301811	0.919355052
POTEC	18p11.21	-0.005949915	0.894315467	0.919355052
DMBT1P1	10q26.13	0.005948377	0.894342617	0.919355052
UBA6-AS1	4q13.2	-0.005939165	0.894505283	0.919386893
CLSPN	1p34.3	-0.005938259	0.89452129	0.919386893
FBXL16	16p13.3	-0.005936875	0.894545727	0.919386893
AVEN	15q14	0.005936303	0.894555838	0.919386893
CST8	20p11.21	0.005932273	0.894626997	0.9194132
ANO9	11p15.5	0.0059134	0.894960288	0.919668976
KLF8	Xp11.21	0.005913019	0.894967029	0.919668976
MORN2	2p22.1	-0.005905671	0.895096796	0.919755487
LOC100134868	20p11.1	0.005880992	0.895532651	0.920156493
LINC02145	5p15.31	-0.005867382	0.895773046	0.920356634
C4ORF45	4q32.1	-0.005848229	0.896111342	0.920620314
GLRA3	4q34.1	-0.005847686	0.896120928	0.920620314
OR13G1	1q44	0.005840749	0.896243471	0.920699333
CLEC1B	12p13.31-p13.2	-0.005834675	0.896350756	0.920762671
PRR23B	3q23	-0.00581884	0.896630478	0.920973339
FAM99B	11p15.5	-0.005817898	0.896647119	0.920973339
DRAIC	15q23	0.005794934	0.897052795	0.921340499
PTMS	12p13.31	0.005792495	0.897095898	0.921340499
FAHD2CP	2q11.2	-0.005781902	0.897283031	0.921464864
GLB1L2	11q25	-0.005780471	0.89730832	0.921464864
PASK	2q37.3	0.005771883	0.897460052	0.921573782
SNORA62	3p22.1	0.005742347	0.897981892	0.922062721
UBB	17p11.2	-0.005733139	0.898144592	0.922182858
DPRX	19q13.42	-0.005709111	0.898569172	0.92254951
PIBF1	13q21.33-q22.1	-0.005707756	0.898593123	0.92254951
RNF115	1q21.1	-0.005700217	0.898726339	0.922639337
TMEM179	14q32.33	-0.005670854	0.899245245	0.923125085
SLTM	15q22.1	0.005667009	0.899313201	0.923147883
C3ORF84	3p21.31	-0.005651577	0.899585932	0.92338087
RAPSN	11p11.2	0.005644365	0.899713396	0.923464731

GNAS-AS1	20q13.32	-0.005622174	0.900105603	0.923820302
DDX24	14q32.12	-0.005615001	0.90023239	0.923903438
NFRKB	11q24.3	-0.005572536	0.900983019	0.924626778
ADCY10P1	6p21.1	-0.005545244	0.901465493	0.925074867
HOXA4	7p15.2	-0.005526541	0.90179616	0.925367135
MED22	9q34.2	0.005522246	0.901872081	0.925397982
PRODH2	19q13.12	-0.005502469	0.902221756	0.925709707
CCDC105	19p13.12	0.005488478	0.902469124	0.925916337
MTG1	10q26.3	-0.005485889	0.902514913	0.925916337
PELO	5q11.2	0.005482835	0.902568908	0.925924656
SMCHD1	18p11.32	-0.005471193	0.902774764	0.926088758
CASP6	4q25	0.005467853	0.902833823	0.926102263
PNLIPRP2	10q25.3	0.005463877	0.902904126	0.9261273
RNPEP	1q32.1	0.005454207	0.903075124	0.926255613
NOX1	Xq22.1	-0.005439159	0.903341221	0.926441824
NSFL1C	20p13	0.005438748	0.903348497	0.926441824
DPYSL5	2p23.3	0.005434246	0.903428115	0.92647639
PRRT3	3p25.3	0.005429921	0.903504593	0.926507734
LYZL2	10p11.23	-0.005409813	0.903860207	0.926825302
GLYCAM1	12q13.2	-0.005406879	0.903912089	0.926831405
CHMP4C	8q21.13	0.005394947	0.904123117	0.92700068
OR2A5	7q35	0.005385955	0.904282159	0.927116639
OR1L3	9q33.2	0.005373699	0.904498932	0.927291772
FAM228B	2p23.3	-0.005361071	0.904722286	0.927473634
LDHA	11p15.1	-0.005338645	0.905118949	0.927833136
LGSN	6q12	0.005330916	0.905255672	0.927911258
SYT14	1q32.2	-0.005329138	0.905287127	0.927911258
CCHCR1	6p21.33	0.005311926	0.905591599	0.928176193
C7ORF26	7p22.1	-0.005308491	0.905652371	0.928191335
USP20	9q34.11	-0.005281103	0.906136877	0.928640733
DDX17	22q13.1	-0.005274519	0.906253366	0.928712949
RXRA	9q34.2	-0.005253525	0.906624794	0.9290464
PLAAT4	11q12.3	0.005232913	0.906989489	0.929372919
DSPP	4q22.1	-0.005223722	0.907152115	0.92949236
OTC	Xp11.4	-0.005199176	0.907586443	0.929881816
AKT1S1	19q13.33	-0.005197032	0.907624374	0.929881816
KCNK9	8q24.3	0.005178834	0.907946413	0.930152407
ZNF75A	16p13.3	-0.005176897	0.907980678	0.930152407
SNORA3B	11p15.4	-0.005153998	0.908385925	0.93052031
SF3B2	11q13.1	0.005145884	0.908529525	0.930620167
KRTAP9-9	17q21.2	0.005138703	0.908656601	0.930681373
AIG1	6q24.2	0.005137295	0.908681521	0.930681373
FAM76B	11q21	-0.005131379	0.908786229	0.93070106
CTPS1	1p34.2	-0.005130997	0.908792987	0.93070106
LCOR	10q24.1	0.005113152	0.909108816	0.930871314
PRAMEF6	1p36.21	-0.005112257	0.909124663	0.930871314
ING4	12p13.31	0.005111435	0.909139218	0.930871314
HOMER1	5q14.1	0.005110767	0.90915104	0.930871314
IL1R2	2q11.2	0.005108572	0.909189887	0.930871314
OR10G9	11q24.2	0.005075932	0.909767603	0.931415549
TPPP2	14q11.2	0.005068264	0.909903349	0.931507264
FER1L5	2q11.2	0.005061004	0.910031852	0.931591555
SNRNP48	6p24.3	-0.005054369	0.910149297	0.931664519
CCDC39	3q26.33	0.005051173	0.910205884	0.931675181
CLK2	1q22	-0.00503662	0.910463498	0.931891602
CLTB	5q35.2	0.005026505	0.910642565	0.932027608
INPP5J	22q12.2	0.005020111	0.910755752	0.932096177
HIST1H2AD	6p22.2	0.004991694	0.911258854	0.932560051

ZNF563	19p13.2	-0.004989288	0.911301434	0.932560051
JAG1	20p12.2	0.004985662	0.911365638	0.932578458
NSUN4	1p33	0.004982608	0.911419702	0.93258649
NAT1	8p22	-0.004974688	0.911559931	0.932635433
ACSBG2	19p13.3	-0.004974686	0.911559971	0.932635433
AZIN1	8q22.3	-0.004963141	0.911764372	0.932757752
ANKRD23	2q11.2	-0.004962712	0.911771973	0.932757752
GTF2F2	13q14.12-q14.13	-0.004955889	0.911892783	0.93283405
MYLPF	16p11.2	-0.00494842	0.912025029	0.932922038
PROCA1	17q11.2	-0.004942529	0.912129335	0.93298144
FAM168B	2q21.1	-0.004936899	0.912229027	0.933036117
LMTK3	19q13.33	-0.00492311	0.912473193	0.933238548
BLCAP	20q11.23	0.004909989	0.912705541	0.933428874
FLVCR1-DT	1q32.3	-0.004904263	0.912806931	0.933485256
FAM161A	2p15	0.004893289	0.913001266	0.933636677
BTC	4q13.3	-0.004842154	0.913906856	0.934515376
BPIFB2	20q11.21	-0.004813481	0.91441471	0.934987304
HMG2	1p36.11	0.004806642	0.914535847	0.935063785
FAM86B3P	8p23.1	-0.004790849	0.914815585	0.935302411
LRCH3	3q29	-0.004784407	0.914929684	0.935371673
ARHGAP23	17q12	0.004781258	0.914985465	0.935381311
F9	Xq27.1	0.004776106	0.915076731	0.935427222
LINC01734	20q12	0.004751216	0.915517645	0.935830533
ARHGAP12	10p11.22	0.004738698	0.915739397	0.936009791
KRTAP19-4	21q22.11	-0.004717864	0.91610848	0.936339615
PARP6	15q23	-0.004709211	0.916261784	0.936448873
MED18	1p35.3	-0.004693179	0.916545816	0.93669172
ZNF286B	17p11.2	0.004655772	0.917208595	0.937302691
EPHX3	19p13.12	-0.004652241	0.917271159	0.937302691
KIAA1841	2p15	-0.004651573	0.917282995	0.937302691
AP3B1	5q14.1	0.004641363	0.917463919	0.937440094
GLTPD2	17p13.2	0.004631262	0.91764289	0.93754211
RGMB	5q15	0.004630484	0.917656684	0.93754211
LOC374443	12p13.31	-0.004592695	0.918326325	0.938178763
NEUROG3	10q22.1	-0.004580007	0.918551186	0.938360978
ZHX1	8q24.13	-0.004563876	0.918837051	0.93860549
EIF2AK4	15q15.1	-0.004559391	0.918916537	0.93863917
LINC00653	20p11.23	0.004552998	0.91902985	0.938707397
TSC1	9q34.13	0.004548226	0.919114412	0.938746253
POLI	18q21.2	-0.004543264	0.919202358	0.938788561
CAMTA1	1p36.31-p36.23	0.004535916	0.919332588	0.938874047
RNF41	12q13.3	-0.004502994	0.91991611	0.939422428
CFDP1	16q23.1	-0.004495837	0.920042968	0.93950443
BIRC6	2p22.3	0.004479901	0.920325446	0.939745329
FBXO8	4q34.1	-0.004449937	0.920856601	0.940240113
RAD54L2	3p21.2	0.004432665	0.92116279	0.940505158
OR5AK2	11q12.1	0.00441811	0.921420811	0.940720999
DTX2	7q11.23	-0.004404514	0.921661857	0.940919489
C1ORF158	1p36.21	0.004385022	0.922007425	0.941182211
VENTXP7	3p24.3	-0.00438376	0.922029801	0.941182211
HMGB3P1	20q11.22	-0.004382106	0.922059127	0.941182211
IDI2-AS1	10p15.3	-0.004355655	0.922528104	0.941613284
C19ORF33	19q13.2	-0.004322828	0.923110166	0.942159731
LRRC37A	17q21.31	-0.004308037	0.923372446	0.942379758
TP53RK	20q13.12	-0.004302598	0.923468899	0.942430532
ALDH16A1	19q13.33	0.004267004	0.924100103	0.942981413
CRBN	3p26.2	0.004265095	0.924133949	0.942981413
FAM138B	2q14.1	0.004264253	0.924148889	0.942981413

HIST1H2BF	6p22.2	0.004238707	0.924601931	0.943395984
C9ORF57	9q21.13	-0.004221614	0.924905089	0.943657589
UNC45B	17q12	-0.004214034	0.925039532	0.94374704
VWDE	7p21.3	0.004194883	0.925379189	0.944045837
CT45A3	Xq26.3	-0.004187917	0.925502751	0.944099397
SNORD15B	11q13.4	-0.004186648	0.925525262	0.944099397
F11	4q35.2	0.004164989	0.92590943	0.944443532
MYCBPAP	17q21.33	0.004151602	0.926146899	0.944615588
ZNF276	16q24.3	-0.004150202	0.926171733	0.944615588
PLA2G12A	4q25	-0.004145573	0.926253829	0.944651572
CDKL1	14q21.3	-0.004141041	0.926334234	0.944685829
SLC22A12	11q13.1	-0.004110788	0.92687089	0.945185349
LTA4H	12q23.1	-0.004099053	0.927079076	0.945349875
CT47A9	Xq24	-0.004091703	0.927209474	0.945435067
AGBL3	7q33	0.004070389	0.927587589	0.945772824
LINC01134	1p36.32	0.00405526	0.927856	0.945998698
CCL15-CCL14	17q12	0.004051578	0.927921339	0.946017516
CSNK1A1	5q32	-0.004041892	0.928093177	0.946140255
SMIM10L2B	Xq26.3	-0.004039507	0.928135504	0.946140255
ZBTB3	11q12.3	-0.004035881	0.92819984	0.946158041
LOC100268168	5q35.1	-0.004029105	0.928320049	0.946232776
THEMIS	6q22.33	-0.004022616	0.928435187	0.946302336
GSTT2	22q11.23	-0.004015364	0.928563868	0.946385691
OR4F15	15q26.3	0.004009044	0.928676001	0.946452173
NR4A2	2q24.1	-0.004005869	0.928732339	0.946461788
DCUN1D2	13q34	0.004001622	0.928807689	0.946490776
FAM86DP	3p12.3	0.003991793	0.928982093	0.946620696
GRIN2C	17q25.1	-0.003982537	0.92914634	0.946740254
ABCA11P	4p16.3	0.003963165	0.929490084	0.947042686
NEAT1	11q13.1	-0.003951714	0.929693289	0.947201902
OR2T34	1q44	0.003944417	0.929822788	0.947286012
P2RX3	11q12.1	0.003939308	0.929913448	0.947330547
GLCE	15q23	0.003933201	0.930021812	0.947357834
TMEM145	19q13.2	0.003931947	0.930044066	0.947357834
TACR1	2p12	0.003929862	0.930081077	0.947357834
SLC35E1	19p13.11	0.003913448	0.930372364	0.947606699
C2ORF27B	2q21.2	0.003908066	0.930467886	0.947656159
NRBP1	2p23.3	-0.003893504	0.930726316	0.947871521
LINC00628	1q32.1	-0.003885131	0.930874918	0.947936695
ISX	22q12.3	-0.003882352	0.930924237	0.947936695
NME6	3p21.31	0.003881957	0.93093124	0.947936695
PLA2G4E	15q15.1	-0.003868236	0.931174766	0.948136825
TRIM72	16p11.2	-0.00385909	0.931337087	0.948254255
SAGE1	Xq26.3	-0.003848485	0.931525312	0.948398046
MMP15	16q21	-0.003837679	0.931717115	0.948506662
CAT	11p13	0.003834626	0.931771316	0.948506662
DLX4	17q21.33	-0.00383453	0.93177301	0.948506662
SLC38A9	5q11.2	-0.003791874	0.932530158	0.949229522
S100A13	1q21.3	0.003788439	0.932591139	0.949243712
TRIM51	11q12.1	0.003781999	0.932705464	0.949282826
SLC25A35	17p13.1	0.003779755	0.932745287	0.949282826
ZNF2	2q11.1	-0.003778324	0.932770696	0.949282826
EP400P1	12q24.33	0.003768638	0.932942633	0.949409924
OR2V2	5q35.3	0.003758793	0.93311741	0.9495399
DDX53	Xp22.11	-0.003752161	0.933235127	0.949611801
IL17A	6p12.2	-0.003719345	0.933817705	0.95015669
CLIC1	6p21.33	0.003713434	0.933922655	0.950215563
SLC35A2	Xp11.23	0.00370265	0.934114097	0.950362427

SFSWAP	12q24.33	-0.003696925	0.934215749	0.950417928
USP6	17p13.2	-0.003661617	0.934842628	0.951007733
MED13	17q23.2	-0.00365112	0.935029005	0.951149382
DCLRE1C	10p13	-0.003644154	0.935152693	0.951227251
CFAP97D1	17q21.31	-0.003640197	0.935222954	0.951250768
ACOT6	14q24.3	0.003631853	0.935371105	0.951353504
TSPAN17	5q35.2	-0.003628027	0.935439047	0.951374655
KLHL22	22q11.21	0.003620106	0.935579685	0.951469734
RBM3	Xp11.23	-0.003616194	0.935649158	0.951492433
HIST1H2BG	6p22.2	-0.00361066	0.935747431	0.951544417
DPY19L1	7p14.2	0.003561228	0.936625214	0.952281253
IFNA8	9p21.3	0.003560178	0.936643864	0.952281253
LSP1P5	1q21.1	-0.003559892	0.936648939	0.952281253
GTF2IRD2P1	7q11.23	-0.003559224	0.936660802	0.952281253
GNMT	6p21.1	0.003531751	0.937148691	0.952729278
ALKAL1	8q11.23	0.003510035	0.937534371	0.953073353
INA	10q24.33	-0.003496941	0.937766918	0.953261731
ARHGAP36	Xq26.1	-0.003481676	0.938038034	0.953489295
BEND3	6q21	0.003457881	0.93846066	0.953870834
XAGE3	Xp11.22	-0.00345356	0.938537417	0.953875348
CABP5	19q13.33	0.003452308	0.938559643	0.953875348
CLASRP	19q13.32	0.003445953	0.938672529	0.953942031
ACSF3	16q24.3	0.003433834	0.938887792	0.954112744
SV2A	1q21.2	0.003428967	0.938974237	0.95415254
SMR3A	4q13.3	-0.003424745	0.939049223	0.954180687
TMPRSS15	21q21.1	0.003409682	0.93931679	0.954404507
GRID2IP	7p22.1	0.003379154	0.939859071	0.954879068
MVB12B	9q33.3	-0.00337591	0.939916708	0.954879068
HERC2P4	16p11.2	-0.003375397	0.93992581	0.954879068
PDE4D	5q11.2-q12.1	-0.003364077	0.940126911	0.955035287
PRB1	12p13.2	0.003325961	0.940804044	0.95564423
FAM9A	Xp22.31	-0.003325002	0.940821065	0.95564423
SNORA7B	3q21.3	0.003309588	0.941094912	0.955874275
PABPC1P2	2q22.3	0.003303685	0.94119979	0.955932684
NFYC-AS1	1p34.2	-0.003282391	0.941578101	0.956268786
OR6F1	1q44	-0.003270967	0.941781075	0.956426789
SNORA61	1p35.3	-0.003249532	0.942161931	0.956765417
PVALB	22q12.3	0.003243485	0.942269364	0.956796819
MRGPRD	11q13.3	0.003242454	0.942287685	0.956796819
U2SURP	3q23	0.003239259	0.942344462	0.956806325
OAZ2	15q22.31	0.003234296	0.942432631	0.956847702
COMMD7	20q11.21	-0.003227139	0.942559799	0.956928667
BREA2	8q24.3	0.003220652	0.942675071	0.956997547
FLJ42393	3q27.3	-0.003208458	0.942891733	0.957169348
FSHB	11p14.1	-0.003181717	0.943366908	0.957603543
FAM99A	11p15.5	-0.003108397	0.944669866	0.958877928
NAB1	2q32.2	0.003104707	0.944735441	0.958896256
RXRG	1q23.3	-0.003099567	0.94482678	0.95894073
TAF2	8q24.12	0.003092397	0.944954215	0.95898565
KIF13A	6p22.3	0.003091729	0.944966087	0.95898565
ZNF524	19q13.42	-0.003072834	0.945301888	0.9592527
LINC00896	22q11.21	-0.003071573	0.945324307	0.9592527
TM7SF3	12p11.23	0.003060238	0.945525761	0.959408877
SCARNA15	15q25.2	0.00304235	0.945843684	0.959653114
UCKL1	20q13.33	0.003041344	0.945861578	0.959653114
DUSP21	Xp11.3	-0.003034554	0.945982256	0.959727297
BET1	7q21.3	-0.00301596	0.946312742	0.960010892
MAGEB3	Xp21.2	-0.003013474	0.946356939	0.960010892

C6ORF132	6p21.1	0.00301033	0.946412815	0.960019313
ZNF488	10q11.22	-0.0030026	0.946550204	0.960110413
RBMY2FP	Yq11.223	0.002993193	0.946717424	0.960231761
EZR	6q25.3	0.002987809	0.946813113	0.960247769
RAP2B	3q25.2	0.00298695	0.946828379	0.960247769
NUBP1	16p13.13	0.002982847	0.946901316	0.960273478
OR9Q2	11q12.1	-0.002978037	0.946986822	0.960311929
DEFB103A	8p23.1	0.002951199	0.947463885	0.960723825
CHIC1	Xq13.2	0.002949829	0.947488223	0.960723825
PRB3	12p13.2	-0.002930534	0.947831228	0.961023332
PPP1R26	9q34.3	-0.002921774	0.947986946	0.961132924
ADAMTS1	21q21.3	0.002911897	0.948162521	0.961262636
CCT8L2	22q11.1	0.002896789	0.94843111	0.96148663
KLHL9	9p21.3	0.002889138	0.948567119	0.961576203
PRAMEF1	1p36.21	-0.002882179	0.948690834	0.961653304
COL4A6	Xq22.3	-0.002875587	0.948808018	0.961723779
OR10H2	19p13.12	0.002851853	0.949229979	0.962103156
GID8	20q13.33	-0.002843238	0.94938314	0.962210064
ZFAND4	10q11.22	-0.002825202	0.949703794	0.962486709
VAMP7	Xq28 and Yq12	-0.002803063	0.950097413	0.962828006
C1ORF100	1q44	0.002800894	0.950135987	0.962828006
LIN7A	12q21.31	-0.002793235	0.950272157	0.962917639
EIF4B	12q13.13	0.002748193	0.951073029	0.963680776
ZNF461	19q13.12	-0.002736837	0.951274948	0.963836974
SLAMF9	1q23.2	-0.002732447	0.951353002	0.963867662
TMEM163	2q21.3	-0.002723191	0.951517595	0.96398602
RELL1	4p14	0.002694181	0.952033446	0.964460209
GC	4q13.3	-0.002684322	0.952208764	0.96458939
TOP1P2	22q11.23	-0.002681538	0.952258275	0.964591121
LHX4	1q25.2	-0.002656966	0.952695234	0.964985299
IQCF1	3p21.2	-0.002652707	0.952770986	0.965013588
NUDT11	Xp11.22	-0.00264685	0.952875141	0.965070642
EPHB3	3q27.1	0.002639406	0.953007509	0.965156262
KATNAL2	18q21.1	-0.002633395	0.953114422	0.965216096
PITPNA	17p13.3	-0.002628623	0.953199275	0.965253584
ARL14EP	11p14.1	0.002620035	0.953352011	0.96531487
ARMC3	10p12.2	-0.00261984	0.953355471	0.96531487
MRPS6	21q22.11	-0.002616504	0.953414803	0.965326508
LUC7L	16p13.3	-0.002609347	0.953542085	0.965366446
PITRM1	10p15.2	-0.002607629	0.953572633	0.965366446
ZMYM1	1p34.3	0.002604289	0.953632032	0.965366446
CREB3	9p13.3	0.002603526	0.953645609	0.965366446
ZNF449	Xq26.3	-0.002593125	0.953830595	0.965505271
CPEB3	10q23.32	-0.002553713	0.95453153	0.96616632
FADD	11q13.3	0.002523272	0.955072955	0.966634166
SULT6B1	2p22.2	0.002522255	0.955091048	0.966634166
XKRX	Xq22.1	0.002519646	0.955137452	0.966634166
TIFA	4q25	0.002499225	0.955500678	0.966953269
LINC01845	5q33.3	-0.00248155	0.955815058	0.96722291
DCAF16	4p15.31	-0.002473555	0.955957269	0.96731831
CRPPA	7p21.2	-0.002431472	0.956705838	0.96799546
KLK8	19q13.41	-0.00243054	0.956722407	0.96799546
EPHX2	8p21.2-p21.1	-0.002423456	0.956848427	0.968074425
MAP7D2	Xp22.12	0.002414104	0.957014779	0.968101257
LRRC37A6P	10p12.1	0.002412864	0.957036848	0.968101257
ZNF182	Xp11.23	-0.0024121	0.957050431	0.968101257
KRTAP5-1	11p15.5	-0.002411177	0.957066851	0.968101257
KIAA0895	7p14.2	-0.002403225	0.957208301	0.968179898

S100A2	1q21.3	0.002401412	0.957240554	0.968179898
RILPL2	12q24.31	-0.002393206	0.957386543	0.968279022
MMUT	6p12.3	0.002384713	0.957537625	0.968383287
EIF2S3	Xp22.11	0.002373929	0.957729454	0.968528748
MLLT6	17q12	-0.002357802	0.95801635	0.96877033
N6AMT1	21q21.3	-0.002342439	0.958289671	0.968962785
PAX6	11p13	-0.002339958	0.95833381	0.968962785
HHIPL2	1q41	0.002339007	0.958350724	0.968962785
SLC37A3	7q34	-0.002325166	0.95859695	0.969121452
YBX2	17p13.1	0.002324787	0.958603706	0.969121452
RBM27	5q32	0.002278312	0.95943054	0.96990772
SNORA77	1q32.1	-0.002275668	0.959477571	0.96990772
OR6N1	1q23.1	0.002271719	0.959547837	0.969930161
CLCA1	1p22.3	-0.00224508	0.96002179	0.970360634
TOMM34	20q13.12	-0.002229263	0.960303223	0.970596481
SFXN2	10q24.32	-0.002177446	0.961225198	0.971479679
DEFB115	20q11.21	-0.002171232	0.96133576	0.971542761
SNORA67	17p13.1	-0.002154246	0.961638002	0.971799541
VIPR1	3p22.1	0.002120667	0.962235523	0.97235468
NAT8L	4p16.3	0.002114514	0.962345018	0.97241663
HOPX	4q12	-0.002097001	0.962656651	0.972682818
SPPL2A	15q21.2	0.002060835	0.963300248	0.973284383
PLA2G2D	1p36.12	0.002044135	0.963597434	0.973535905
DNAJC5G	2p23.3	0.002041236	0.963649027	0.973539287
PHOX2B	4p13	0.002026014	0.963919922	0.97376421
LINC00685	Xp22.33 and Yp11	-0.002018465	0.964054255	0.973851162
FBXO24	7q22.1	0.002010688	0.964192656	0.973942214
FOXD4	9p24.3	-0.001998096	0.964416766	0.974119828
TREX2	Xq28	0.001962932	0.96504257	0.974703139
MYADML	2p22.3	0.001955325	0.965177966	0.9747911
TSPAN14	10q23.1	0.001949567	0.965280441	0.97479959
ATXN7L1	7q22.3	-0.001949424	0.965282987	0.97479959
GABRR3	3q11.2	0.001943436	0.965389566	0.974858433
GPR137	11q13.1	-0.001937066	0.965502929	0.974924119
OR4F21	8p23.3	0.001906147	0.966053233	0.975430983
RBM25	14q24.2	0.001899563	0.966170408	0.975500484
OVCH1	12p11.22	-0.001894772	0.966255682	0.975532139
RPE65	1p31.3	0.00189237	0.966298449	0.975532139
MLH3	14q24.3	-0.00187313	0.966640885	0.975829027
RCAN3	1p36.11	-0.001852518	0.967007763	0.976150558
CA5A	16q24.2	0.00183443	0.967329714	0.976426707
MTMR8	Xq11.2	-0.001815735	0.967662491	0.976672345
BPIFB1	20q11.21	0.001814776	0.967679565	0.976672345
CYLC2	9q31.1	-0.001811081	0.967745318	0.976672345
CSRP3	11p15.1	0.001809882	0.967766665	0.976672345
TPH2	12q21.1	0.001790355	0.968114252	0.97697097
PAPOLG	2p16.1	0.001787819	0.968159398	0.97697097
OR1B1	9q33.2	0.001783099	0.968243417	0.977006896
SPATA45	1q32.3	0.001775341	0.968381514	0.977080634
SKAP1	17q21.32	-0.001771405	0.968451563	0.977080634
TCEAL8	Xq22.1	-0.001770833	0.968461755	0.977080634
BOP1	8q24.3	0.00174898	0.96885075	0.977424222
NMRK2	19p13.3	0.001725035	0.969276995	0.977805353
SNORA46	16q21	-0.001720246	0.96936225	0.977807922
A1CF	10q11.23	-0.001718441	0.969394377	0.977807922
TRAF6	11p12	-0.001716726	0.969424911	0.977807922
ASL	7q11.21	0.001704416	0.96964405	0.977980071
LOC100129935	19q13.2	-0.001681901	0.970044861	0.978335428

DCX	Xq23	-0.001666128	0.970325653	0.978569711
HPS3	3q24	0.001650214	0.970608961	0.978806508
OR4N4	15q11.2	0.001623165	0.971090502	0.979183941
CDKN2C	1p32.3	-0.001621013	0.971128808	0.979183941
PKN2	1p22.2	0.001621013	0.971128808	0.979183941
WEE2	7q34	0.001615348	0.971229658	0.979236697
LSR	19q13.12	0.0016046	0.971421015	0.979380697
B4GALT6	18q12.1	0.001599733	0.971507658	0.979419116
METTL24	6q21	-0.00158827	0.971711736	0.979575916
ACCS	11p11.2	-0.001573204	0.971979956	0.979731746
LINC01959	5q31.1	-0.001571724	0.972006306	0.979731746
LMAN2L	2q11.2	0.001570532	0.972027526	0.979731746
HINT3	6q22.32	-0.001568433	0.972064902	0.979731746
FAM219A	9p13.3	-0.001565952	0.972109075	0.979731746
PACRG-AS1	6q26	0.001554581	0.972311518	0.979886837
POLD1	19q13.33	0.001545435	0.97247435	0.97998747
CYP3A4	7q22.1	-0.001543517	0.972508503	0.97998747
LRRC74B	22q11.21	0.001537862	0.972609179	0.980039979
BORCS8-MEF2B	19p13.11	0.001527399	0.972795456	0.980178734
TGDS	13q32.1	0.001513467	0.97304351	0.980359216
TNP1	2q35	0.001511881	0.973071745	0.980359216
OR9I1	11q12.1	0.001508143	0.973138297	0.980377319
DCTN4	5q33.1	0.00150297	0.973230402	0.980406448
GNA11	19p13.3	0.001501062	0.973264382	0.980406448
SLC3A1	2p21	0.001477639	0.97368142	0.980777585
ZNF584	19q13.43	0.001474819	0.973731618	0.980779191
GBA2	9p13.3	-0.00147167	0.973787687	0.98078671
BLZF1	1q24.2	0.001446191	0.974241341	0.98119465
APEH	3p21.31	0.00141909	0.974723887	0.981631647
VN1R10P	6p22.1	0.001409381	0.974896766	0.98173278
HEATR6	17q23.1	-0.001406112	0.974954969	0.98173278
BCKDHA	19q13.2	-0.001405253	0.974970262	0.98173278
CTU2	16q24.3	-0.0014001	0.975062015	0.981760195
CLEC19A	16p12.3	-0.001398259	0.975094793	0.981760195
KPNA3	13q14.2	0.001366605	0.975658423	0.982221712
USP28	11q23.2	0.001365651	0.975675415	0.982221712
RARS	5q34	0.001364315	0.975699203	0.982221712
MNT	17p13.3	-0.001354009	0.975882716	0.982357445
DPY19L2P1	7p14.2	0.001310822	0.976651724	0.983082513
LOC285847	6p21.31	-0.001292995	0.976969185	0.983353012
MAGEB1	Xp21.2	-0.001278729	0.977223216	0.983559643
ST7	7q31.2	-0.001274519	0.977298188	0.983564349
TMED4	7p13	0.001272992	0.977325376	0.983564349
OR8B3	11q24.2	0.001259593	0.977563979	0.983755413
OPRPN	4q13.3	0.001237067	0.977965106	0.984099271
CLVS1	8q12.2-q12.3	0.001234927	0.97800321	0.984099271
HFE	6p22.2	0.00121712	0.978320328	0.984369279
ELOVL4	6q14.1	-0.001197509	0.978669547	0.984668627
NAA80	3p21.31	-0.001194933	0.97871543	0.984668627
EXOC5	14q22.3	-0.001182337	0.978939748	0.984845207
MIB1	18q11.2	0.001174416	0.979080797	0.984938003
MESP2	15q26.1	-0.001169624	0.979166134	0.984974747
PRKAR1B	7p22.3	0.001158862	0.979357799	0.98511844
CFAP70	10q22.2	0.001154854	0.979429174	0.985141128
RIMBP2	12q24.33	0.001135011	0.979782548	0.985412107
PHRF1	11p15.5	0.001134242	0.979796249	0.985412107
GH2	17q23.3	-0.001128828	0.979892661	0.985459956
NOLC1	10q24.32	-0.001121836	0.980017176	0.985536061

GSTTP2	22q11.23	0.00111055	0.980218165	0.985642903
RBM15B	3p21.2	0.001110385	0.98022111	0.985642903
JMY	5q14.1	-0.001098838	0.980426745	0.985800552
LCE3A	1q21.3	0.001082256	0.980722062	0.986048355
CFAP52	17p13.1	-0.00106269	0.981070518	0.986349558
PFKFB4	3p21.31	0.001057805	0.981157523	0.986387886
OR13C8	9q31.1	-0.001053511	0.98123399	0.986415618
GKN1	2p13.3	-0.001050716	0.981283771	0.986416519
CRYL1	13q12.11	0.001043872	0.981405651	0.986468088
S100P	4p16.1	0.001042346	0.981432843	0.986468088
LONP2	16q12.1	0.001024596	0.981748955	0.986736672
SDC4P	22q12.2	0.000996509	0.982249191	0.987178206
CCDC71	3p21.31	0.000992533	0.982320002	0.987178206
KRTAP19-7	21q22.11	0.00099169	0.982335021	0.987178206
DHRS1	14q12	0.000988525	0.982391384	0.987185684
GSK3B	3q13.33	0.000976215	0.982610628	0.98735683
SNORA9	7p13	0.000962117	0.982861716	0.987559955
CFAP100	3q21.3	0.000953256	0.983019527	0.987669341
GIGYF1	7q22.1	-0.000943102	0.983200384	0.98780187
EFNA4	1q21.3	-0.000931364	0.983409435	0.98796271
RPS6KA3	Xp22.12	0.000915905	0.983684773	0.988190125
PRAMEF20	1p36.21	0.000911578	0.983761846	0.988218354
GDAP2	1p12	-0.000905217	0.983875131	0.988282954
RASAL1	12q24.13	0.000890903	0.984130076	0.988489836
DISC2	1q42.2	-0.000877512	0.984368594	0.988634109
HPS4	22q12.1	0.000875397	0.984406268	0.988634109
LINC00476	9q22.32	0.000874013	0.984430914	0.988634109
FRG2B	10q26.3	0.000871836	0.984469686	0.988634109
ADH1B	4q23	-0.000840045	0.985035916	0.989153508
HP	16q22.2	0.000826491	0.985277348	0.989346716
WLS	1p31.3	0.000818665	0.985416724	0.989437432
HECTD2-AS1	10q23.32	0.000804011	0.985677739	0.989650268
ZBED3-AS1	5q13.3	0.000788749	0.985949579	0.989873952
SNORA2B	12q13.11	-0.000768174	0.986316057	0.990192623
CDK13	7p14.1	0.000751867	0.986606524	0.990434956
RBM23	14q11.2	0.000745091	0.986727205	0.990506829
CRYGA	2q33.3	-0.000711597	0.987323818	0.991056426
RAC1	7p22.1	0.000706921	0.987407106	0.991090728
LINC01553	10q21.2	-0.000700067	0.987529193	0.991163968
C2ORF73	2p16.2	0.000695204	0.987615804	0.991172896
CIDEA	18p11.21 18	0.000694052	0.987636326	0.991172896
KIF20B	10q23.31	0.000690507	0.987699466	0.991186967
LRRC52	1q24.1	0.000683918	0.987816836	0.991255454
MAPKAPK3	3p21.2	0.000663788	0.988175405	0.991565962
AHDC1	1p36.11-p35.3	-0.000650142	0.988418475	0.99176055
KRT16	17q21.2	-0.000638214	0.98863095	0.991853359
ARHGAP5	14q12	-0.000635351	0.988681944	0.991853359
MKI67	10q26.2	-0.000633251	0.98871934	0.991853359
ANKRD34C	15q25.1	-0.000633036	0.98872318	0.991853359
RNF170	8p11.21	0.000631152	0.988756736	0.991853359
DYNC1H1	7q21.3	0.000627812	0.988816229	0.991863731
CDIP1	16p13.3	-0.000618365	0.98898451	0.991983221
SLX4	16p13.3	0.000605101	0.989220785	0.992170894
DYDC2	10q23.1	-0.000600508	0.989302594	0.99220363
GPR83	11q21	-0.000595138	0.989398244	0.992250245
PITX3	10q24.32	0.000572578	0.989800108	0.992603935
TBPL2	14q22.3	-0.000552362	0.990160214	0.992915716
TSPO2	6p21.1	-0.000538973	0.990398714	0.993070975

UBE2W	8q21.11	-0.000537252	0.990429369	0.993070975
LRRC52-AS1	1q23.3-q24.1	0.000532936	0.990506246	0.993070975
MRS2P2	12q21.1	0.000532619	0.990511894	0.993070975
SFTPC	8p21.3	0.000523036	0.990682599	0.993192774
OR2T11	1q44	-0.000518123	0.990770114	0.993231166
MICU2	13q12.11	-0.000507861	0.990952926	0.993327664
LAMP3	3q27.1	-0.000507193	0.990964825	0.993327664
PRDM10	11q24.3	0.000486008	0.991342196	0.993656576
PPBPP2	4q13.3	-0.000465844	0.991701395	0.99396724
WFDC12	20q13.12	0.000460939	0.991788772	0.994005445
LINC00471	2q37.1	0.000449271	0.991996609	0.994164369
ARHGAP35	19q13.32	-0.00042713	0.992391027	0.994510257
CCT5	5p15.2	-0.000420068	0.992516819	0.994586924
C7ORF13	7q36.3	0.000413865	0.992627313	0.994648254
HCAR2	12q24.31	-0.000396116	0.992943495	0.994915676
HTR1E	6q14.3	-0.000390656	0.993040768	0.99492588
EXOC4	7q33	0.000390009	0.993052289	0.99492588
KCNC2	12q21.1	0.000385288	0.993136389	0.994960738
TRAPPC2B	19q13.43	0.000370351	0.993402472	0.995177902
MRE11	11q21	0.000348689	0.993788354	0.995489199
OR52H1	11p15.4	-0.000347368	0.993811879	0.995489199
ZNF236	18q23	-0.000342868	0.993892049	0.995520086
PRINS	10p12.1	-0.000332574	0.994075423	0.995633393
SPARCL1	4q22.1	0.000330319	0.994115589	0.995633393
MORN5	9q33.2	-0.000328209	0.994153191	0.995633393
GALNT13	2q23.3-q24.1	-0.000315672	0.994376521	0.995807634
IQCF5	3p21.2	-0.000257217	0.995417838	0.99680098
TIGD7	16p13.3	-0.000241429	0.995699084	0.997033139
VWCE	11q12.2	-0.000225541	0.995982125	0.997225095
CUL3	2q36.2	0.000222917	0.996028875	0.997225095
CDKN2B-AS1	9p21.3	-0.000222346	0.99603904	0.997225095
CCDC127	5p15.33	-0.00019782	0.996475963	0.997613041
PABPC1L	20q13.12	-0.000193239	0.996557561	0.997645236
TMEM165	4q12	-0.000184651	0.996710558	0.997748901
DSC1	18q12.1	-0.000176984	0.99684713	0.997836114
SPAG16	2q34	0.000160603	0.997138948	0.998046221
KLHDC3	6p21.1	-0.000159649	0.997155948	0.998046221
OR7C1	19p13.12	0.000143925	0.997436062	0.998277071
LINC00207	22q13.31	-0.000140403	0.997498794	0.998290342
UCKL1-AS1	20q13.33	-0.000134838	0.997597939	0.998340052
ZNF318	6p21.1	-0.000131212	0.997662538	0.998355187
SERPINB1	6p25.2	0.000124246	0.997786635	0.998429858
MYL1	2q34	0.000106261	0.998107017	0.99869824
KREMEN1	22q12.1	0.000103633	0.998153829	0.99869824
ERN2	16p12.2	-8.84156E-05	0.998424924	0.998919954
FOXL2	3q22.3	-8.07602E-05	0.998561301	0.998961056
WDR76	15q15.3	-7.96813E-05	0.998580522	0.998961056
RAG1	11p12	-7.77727E-05	0.998614521	0.998961056
PLA2G12B	10q22.1	7.2332E-05	0.998711445	0.999008489
LINC00589	8p12	-5.72865E-05	0.998979472	0.999224871
OR5H14	3q11.2	-5.46298E-05	0.999026799	0.999224871
HEBP1	12p13.1	-5.13396E-05	0.999085414	0.999233969
ZNF721	4p16.3	4.03655E-05	0.999280911	0.999379962
SOHLH2	13q13.3	-1.11179E-05	0.999801941	0.99985149
PNPLA8	7q31.1	2.09938E-06	0.999962601	0.999962601