
Supplementary Table 1 MMP28 siRNAs' sequence

siRNA	Sense 5'-3'	Antisense 5'-3'
siRNA-1	GCGUAAGAAACGCUUUGCAAATT	UUUGCAAAGCGUUUCUUACGCTT
siRNA-2	GCAUCCUAGAGAAGUACGGATT	UCCGUACUUCUCUAGGAAUGCTT
siRNA-3	CUGAAACGCAGGGCCCUAAAUTT	AUUUAGGGCCUGCGUUUCAGTT

Supplementary Table 2 Most differential survival gene (Disease Free Survival) top 20 in PAAD

Gene Symbol	Gene ID	P-value
NAIP	ENSG00000249437.7	4.88e-7
RP11-54H7.4	ENSG00000275216.1	1.30e-6
NSUN6	ENSG00000241058.3	4.53e-6
ZNF775	ENSG00000196456.8	5.76e-6
RP11-2B6.2	ENSG00000269929.1	1.37e-5
HIST1H1B	ENSG00000184357.4	1.46e-5
RP11-258C19.7	ENSG00000270189.1	1.52e-5
LINC00641	ENSG00000258441.1	1.77e-5
AQP4-AS1	ENSG00000260372.6	1.96e-5
COL9A2	ENSG00000049089.13	2.46e-5
RP11-111K18.2	ENSG00000261019.1	2.47e-5
CH17-340M24.3	ENSG00000197180.2	2.52e-5
RP11-130F10.1	ENSG00000250131.1	2.68e-5
S100A16	ENSG00000188643.10	2.68e-5
RP11-16N11.2	ENSG00000260572.1	2.75e-5
RP11-710F7.3	ENSG00000249635.1	2.79e-5
MMP28	ENSG00000271447.5	2.85e-5
RP11-269C23.5	ENSG00000277831.1	2.87e-5
SPRN	ENSG00000203772.7	2.89e-5
FKBP1A	ENSG00000088832.14	3.16e-5

Supplementary Table 3 MMP28 correlated genes from LinkedOmics

Query	Statistic	P-value	FDR (BH)
A1BG	-0.09482	0.208048	0.307584
A1CF	-0.23064	0.001953	0.006108
A2BP1	-0.24626	0.000921	0.003198
A2LD1	0.255155	0.000588	0.002181
A2ML1	0.4395	8.38E-10	1.82E-08
A2M	-0.03126	0.678716	0.763725
A4GALT	0.182717	0.01464	0.034168
A4GNT	0.10927	0.146523	0.231887
AAA1	0.213291	0.004255	0.011925
AAAS	-0.12174	0.105488	0.178407
AACSL	-0.11666	0.120957	0.198524
AACS	-0.23847	0.001348	0.004439
AADACL2	0.063254	0.401575	0.514254
AADACL3	-0.08135	0.280392	0.388786
AADACL4	-0.0723	0.337503	0.449867
AADAC	0.265161	0.000348	0.001394
AADAT	-0.10779	0.152101	0.239025
AAGAB	0.080969	0.282636	0.391294
AAK1	-0.37602	2.31E-07	2.43E-06
AAMP	0.330781	6.49E-06	4.47E-05
AANAT	-0.01807	0.810811	0.866086
AARS2	-0.13219	0.078587	0.140074
AARSD1	0.059751	0.428207	0.540321
AARS	-0.16659	0.026248	0.055918
AASDHPPT	-0.38647	9.91E-08	1.15E-06
AASDH	-0.46669	5.17E-11	1.57E-09
AASS	0.02004	0.790618	0.851926
AATF	0.399969	3.18E-08	4.27E-07
AATK	0.06886	0.361074	0.474222
ABAT	-0.2374	0.001419	0.004642
ABCA10	-0.27376	0.000218	0.00093
ABCA11P	-0.1723	0.021458	0.047068
ABCA12	0.360165	7.89E-07	7.08E-06
ABCA13	0.364128	5.84E-07	5.44E-06
ABCA17P	-0.07518	0.318558	0.43027
ABCA1	-0.27463	0.000207	0.000893
ABCA2	-0.15586	0.037759	0.075933
ABCA3	-0.3419	3.00E-06	2.27E-05
ABCA4	0.067468	0.370887	0.484075
ABCA5	-0.44984	2.99E-10	7.43E-09
ABCA6	-0.10876	0.14842	0.234263
ABCA7	0.201837	0.006898	0.018026
ABCA8	-0.16608	0.026719	0.05678
ABCA9	-0.24285	0.00109	0.003698
ABCB10	-0.16935	0.023835	0.051549
ABCB11	0.20766	0.005413	0.01464
ABCB1	-0.25239	0.000677	0.002456
ABCB4	-0.18244	0.014792	0.034447
ABCB5	-0.12868	0.086926	0.15218
ABCB6	-0.11802	0.11664	0.19298
ABCB7	0.063976	0.396216	0.508984
ABCB8	-0.0129	0.864265	0.90591

ABCB9	0.071605	0.342206	0.454481
ABCC10	0.135218	0.071924	0.130181
ABCC11	0.110651	0.141458	0.225435
ABCC12	-0.24709	0.000884	0.003094
ABCC13	0.178345	0.017229	0.039155
ABCC1	0.120897	0.107944	0.181797
ABCC2	-0.1438	0.055503	0.104765
ABCC3	0.510403	3.39E-13	1.78E-11
ABCC4	-0.21964	0.003221	0.009384
ABCC5	-0.07872	0.296241	0.406232
ABCC6P1	0.030303	0.688025	0.77139
ABCC6P2	-0.02786	0.712032	0.790507
ABCC6	-0.02815	0.709164	0.78812
ABCC8	-0.18022	0.016075	0.036952
ABCC9	-0.33273	5.68E-06	3.98E-05
ABCD1	0.042624	0.572122	0.671894
ABCD2	-0.29852	5.18E-05	0.00027
ABCD3	-0.0636	0.399016	0.511616
ABCD4	0.15798	0.035195	0.071615
ABCE1	-0.09491	0.207601	0.306992
ABCF1	0.009561	0.89921	0.929627
ABCF2	-0.14843	0.048001	0.092846
ABCF3	-0.06777	0.368743	0.482244
ABCG1	-0.01674	0.824503	0.875767
ABCG2	-0.23263	0.001779	0.005643
ABCG4	-0.00745	0.921354	0.945452
ABCG5	-0.1613	0.031482	0.065193
ABCG8	-0.01141	0.879868	0.916628
ABHD10	-0.25729	0.000526	0.001985
ABHD11	0.325587	9.22E-06	6.05E-05
ABHD12B	-0.09264	0.218738	0.320308
ABHD12	-0.06281	0.404914	0.5175
ABHD13	-0.08168	0.278406	0.386628
ABHD14A	-0.1694	0.023785	0.051452
ABHD14B	0.25125	0.000717	0.002588
ABHD15	-0.22979	0.002032	0.006319
ABHD1	-0.12004	0.110481	0.185187
ABHD2	0.219932	0.00318	0.009281
ABHD3	0.120098	0.11031	0.184979
ABHD4	0.242616	0.001102	0.003734
ABHD5	-0.00026	0.997217	0.997799
ABHD6	-0.28406	0.000122	0.000565
ABHD8	-0.07892	0.295054	0.40497
ABI1	0.222934	0.00278	0.008279
ABI2	-0.26144	0.000424	0.001648
ABI3BP	-0.08211	0.275866	0.383802
ABI3	-0.00138	0.985432	0.989849
ABL1	-0.32812	7.78E-06	5.22E-05
ABL2	-0.17643	0.018481	0.041513
ABLIM1	0.015962	0.832517	0.881138
ABLIM2	-0.16764	0.025306	0.054173
ABLIM3	0.548594	2.24E-15	1.87E-13
ABO	0.354651	1.19E-06	1.01E-05
ABP1	0.43728	1.04E-09	2.18E-08

ABRA	-0.10222	0.17455	0.266907
ABR	-0.15906	0.033942	0.069473
ABT1	-0.01876	0.803702	0.861571
ABTB1	0.265709	0.000337	0.001356
ABTB2	0.425915	3.08E-09	5.67E-08
ACAA1	0.332562	5.75E-06	4.02E-05
ACAA2	-0.01697	0.822129	0.873998
ACACA	-0.02491	0.741368	0.81353
ACACB	-0.45142	2.55E-10	6.41E-09
ACAD10	-0.15452	0.039455	0.078831
ACAD11	0.048169	0.523147	0.628705
ACAD8	-0.13005	0.083582	0.147357
ACAD9	0.179075	0.016771	0.038279
ACADL	-0.04105	0.586403	0.68487
ACADM	-0.46351	7.25E-11	2.12E-09
ACADSB	-0.35641	1.05E-06	9.03E-06
ACADS	0.194734	0.009194	0.022969
ACADVL	-0.11082	0.140857	0.224622
ACAN	0.009314	0.901795	0.931326
ACAP1	0.059631	0.429137	0.54108
ACAP2	-0.11351	0.131383	0.212357
ACAP3	-0.0452	0.549115	0.651557
ACAT1	-0.43227	1.69E-09	3.34E-08
ACAT2	0.213197	0.004273	0.011965
ACBD3	0.034629	0.646313	0.736356
ACBD4	0.171908	0.021763	0.04763
ACBD5	0.066688	0.376454	0.489287
ACBD6	0.227876	0.002219	0.006826
ACBD7	0.01322	0.860971	0.903415
ACCN1	-0.16504	0.027703	0.058506
ACCN2	0.00678	0.928426	0.950489
ACCN3	0.01505	0.841956	0.888365
ACCN4	-0.07971	0.290209	0.399651
ACCN5	-0.05795	0.442249	0.554044
ACCSL	-0.02753	0.715311	0.792901
ACCS	0.160697	0.032129	0.066331
ACD	0.155577	0.03811	0.076513
ACE2	0.116736	0.120711	0.198259
ACER1	-0.10302	0.171194	0.262765
ACER2	0.011899	0.874742	0.913116
ACER3	-0.00402	0.957577	0.970933
ACE	-0.04967	0.510262	0.616763
ACHE	0.147281	0.049782	0.095627
ACIN1	-0.00235	0.975139	0.982893
ACLY	-0.36987	3.75E-07	3.72E-06
ACMSD	-0.05465	0.468723	0.578799
ACN9	-0.03795	0.614981	0.710068
AC01	-0.08137	0.280269	0.388722
AC02	-0.03739	0.620262	0.714373
ACOT11	0.306909	3.09E-05	0.000173
ACOT12	-0.24051	0.001221	0.004081
ACOT13	-0.18206	0.015008	0.034861
ACOT1	-0.03741	0.620035	0.714153
ACOT2	-0.11349	0.131464	0.212469

ACOT4	0.416533	7.33E-09	1.21E-07
ACOT6	-0.07159	0.34229	0.454532
ACOT7	0.091762	0.223147	0.325286
ACOT8	0.093275	0.215574	0.316581
ACOT9	0.510631	3.29E-13	1.74E-11
ACOX1	-0.04479	0.552769	0.654754
ACOX2	-0.12796	0.088717	0.154604
ACOX3	0.093966	0.212181	0.312479
ACOXL	-0.28653	0.000106	0.000498
ACP1	0.064564	0.391877	0.50459
ACP2	-0.0924	0.219928	0.321661
ACP5	0.205006	0.00605	0.016088
ACP6	0.409812	1.34E-08	2.03E-07
ACPL2	0.17864	0.017042	0.038789
ACPP	0.018619	0.805159	0.862035
ACPT	0.03491	0.643643	0.733863
ACRBP	-0.30486	3.51E-05	0.000193
ACRC	-0.03547	0.638314	0.729723
ACRV1	0.056035	0.457534	0.568475
ACR	-0.12747	0.089967	0.156356
ACSBG1	0.004448	0.953015	0.967994
ACSBG2	-0.14836	0.04812	0.093021
ACSF2	0.437815	9.88E-10	2.11E-08
ACSF3	0.127455	0.089998	0.156395
ACSL1	-0.25543	0.000579	0.002155
ACSL3	0.064905	0.389378	0.501861
ACSL4	-0.05825	0.439941	0.551781
ACSL5	0.539673	7.66E-15	5.80E-13
ACSL6	-0.46621	5.44E-11	1.65E-09
ACSM1	0.178699	0.017006	0.038714
ACSM2A	-0.13087	0.081644	0.144689
ACSM2B	-0.06561	0.384203	0.496973
ACSM3	0.082091	0.275997	0.383938
ACSM4	-0.08707	0.247807	0.353036
ACSM5	-0.19136	0.010503	0.02577
ACSS1	-0.02265	0.764151	0.831919
ACSS2	0.079407	0.292058	0.401666
ACSS3	-0.02308	0.759795	0.828551
ACTA1	-0.07199	0.339601	0.451842
ACTA2	0.225871	0.002433	0.007385
ACTBL2	0.274563	0.000208	0.000895
ACTB	0.535835	1.29E-14	9.21E-13
ACTC1	-0.13344	0.075787	0.135892
ACTG1	0.387633	9.01E-08	1.07E-06
ACTG2	0.167218	0.025683	0.054861
ACTL6A	0.293872	6.85E-05	0.000343
ACTL6B	-0.33863	3.78E-06	2.78E-05
ACTL7A	-0.06727	0.372264	0.485308
ACTL7B	-0.02237	0.766884	0.833894
ACTL8	0.085121	0.258602	0.365032
ACTL9	0.054727	0.468116	0.578188
ACTN1	0.197204	0.008329	0.021137
ACTN2	0.015978	0.832349	0.881138
ACTN3	-0.01172	0.876656	0.914582

ACTN4	0.406539	1.79E-08	2.61E-07
ACTR10	-0.12658	0.092244	0.159653
ACTR1A	0.020851	0.78235	0.845433
ACTR1B	0.148153	0.048429	0.093464
ACTR2	0.095208	0.206176	0.305327
ACTR3B	-0.38213	1.41E-07	1.58E-06
ACTR3C	-0.11194	0.136853	0.219564
ACTR3	0.277526	0.000176	0.000777
ACTR5	0.10372	0.168275	0.259351
ACTR6	-0.34586	2.26E-06	1.77E-05
ACTR8	-0.14461	0.054127	0.102618
ACTRT1	0.111064	0.139968	0.223471
ACTRT2	-0.01497	0.842777	0.888946
ACVR1B	-0.08831	0.241116	0.345474
ACVR1C	-0.26559	0.00034	0.001363
ACVR1	0.244699	0.000995	0.003423
ACVR2A	0.03776	0.616789	0.711382
ACVR2B	-0.45186	2.43E-10	6.15E-09
ACVRL1	-0.09774	0.194319	0.290898
ACY1	0.59443	2.18E-18	4.36E-16
ACY3	0.259143	0.000478	0.001828
ACYP1	0.176911	0.018161	0.040902
ACYP2	-0.22127	0.002995	0.00884
ADAD2	-0.04789	0.525544	0.630898
ADAL	-0.2218	0.002925	0.008655
ADAM10	0.165585	0.027183	0.05758
ADAM11	-0.07361	0.328816	0.440754
ADAM12	0.104483	0.165149	0.255313
ADAM15	0.484784	7.03E-12	2.62E-10
ADAM17	0.095363	0.205432	0.304536
ADAM18	0.074824	0.320887	0.432737
ADAM19	0.134892	0.072618	0.131161
ADAM20	0.072441	0.336581	0.448854
ADAM21P1	0.092414	0.21986	0.321586
ADAM21	0.028226	0.708402	0.787626
ADAM22	-0.13121	0.080846	0.143467
ADAM23	-0.18968	0.011217	0.027261
ADAM28	0.414159	9.09E-09	1.46E-07
ADAM29	-0.18717	0.012359	0.029595
ADAM2	-0.15954	0.033402	0.068566
ADAM30	-0.0179	0.812522	0.867305
ADAM32	0.17712	0.018022	0.040654
ADAM33	0.073905	0.326881	0.438935
ADAM5P	0.084469	0.262276	0.369207
ADAM6	0.137651	0.066909	0.122482
ADAM7	0.029205	0.698775	0.779861
ADAM8	0.550802	1.64E-15	1.41E-13
ADAM9	0.359075	8.56E-07	7.58E-06
ADAMDEC1	-0.06221	0.409415	0.5215
ADAMTS10	0.160638	0.032193	0.06645
ADAMTS12	0.105154	0.162437	0.251963
ADAMTS13	-0.01767	0.814932	0.869079
ADAMTS14	0.338549	3.80E-06	2.79E-05
ADAMTS15	0.02962	0.694703	0.776456

ADAMTS16	-0.14582	0.052123	0.099404
ADAMTS17	-0.00115	0.987889	0.991388
ADAMTS18	-0.27216	0.000238	0.001004
ADAMTS19	-0.18469	0.013589	0.032085
ADAMTS1	-0.16082	0.031994	0.066087
ADAMTS20	0.072692	0.334906	0.447099
ADAMTS2	-0.09795	0.193344	0.289714
ADAMTS3	-0.11674	0.12071	0.198259
ADAMTS4	0.015019	0.842285	0.888617
ADAMTS5	-0.08919	0.236438	0.34037
ADAMTS6	0.224575	0.002581	0.007768
ADAMTS7	0.279523	0.000158	0.000707
ADAMTS8	0.026809	0.722419	0.798364
ADAMTS9	0.032168	0.66992	0.757094
ADAMTSL1	-0.08235	0.274473	0.382508
ADAMTSL2	-0.03192	0.672359	0.758818
ADAMTSL3	-0.28572	0.000111	0.00052
ADAMTSL4	0.448053	3.58E-10	8.68E-09
ADAMTSL5	0.663028	6.63E-24	5.96E-21
ADAP1	0.42598	3.06E-09	5.65E-08
ADAP2	-0.07393	0.32673	0.438791
ADARB1	-0.20358	0.006419	0.01694
ADARB2	-0.20054	0.007274	0.018827
ADAR	-0.02974	0.693499	0.775461
ADAT1	-0.12442	0.097995	0.167859
ADAT2	0.073901	0.32691	0.438944
ADAT3	0.15426	0.039792	0.079349
ADA	0.359492	8.30E-07	7.39E-06
ADCK1	-0.16082	0.03199	0.066086
ADCK2	-0.09308	0.216537	0.317783
ADCK4	0.091012	0.226968	0.329544
ADCK5	0.296281	5.93E-05	0.000303
ADCY10	-0.13345	0.075764	0.135862
ADCY1	-0.45047	2.80E-10	7.02E-09
ADCY2	-0.22276	0.002802	0.008335
ADCY3	-0.02403	0.750167	0.820636
ADCY4	-0.04664	0.536423	0.639954
ADCY5	-0.00994	0.895181	0.926819
ADCY6	-0.10853	0.149286	0.235443
ADCY7	0.206153	0.005767	0.015458
ADCY8	-0.24674	0.000899	0.003138
ADCY9	-0.32076	1.27E-05	7.99E-05
ADCYAP1R1	-0.29456	6.58E-05	0.000331
ADCYAP1	-0.11655	0.121305	0.198891
ADC	-0.00208	0.978069	0.984993
ADD1	-0.21413	0.004104	0.011578
ADD2	-0.20221	0.006793	0.017796
ADD3	0.177271	0.017923	0.040486
ADH1A	-0.25649	0.000549	0.002059
ADH1B	-0.15776	0.035451	0.072076
ADH1C	0.292544	7.41E-05	0.000366
ADH4	-0.0854	0.25705	0.363453
ADH5	-0.01664	0.825538	0.876446
ADH6	-0.10668	0.15641	0.244591

ADH7	0.10955	0.145485	0.230533
ADHFE1	-0.04277	0.570822	0.670754
ADI1	0.263292	0.000384	0.001516
ADIG	0.004619	0.95121	0.96696
ADIPOQ	-0.21594	0.003792	0.010808
ADIPOR1	0.161426	0.031346	0.064959
ADIPOR2	-0.16433	0.028388	0.059743
ADK	0.124278	0.098369	0.168282
ADM2	0.33861	3.78E-06	2.78E-05
ADM	0.263321	0.000383	0.001514
ADNP2	-0.38385	1.23E-07	1.40E-06
ADNP	-0.31342	2.04E-05	0.000121
ADORA1	0.117359	0.118728	0.195808
ADORA2A	-0.28829	9.53E-05	0.000455
ADORA2B	0.419316	5.69E-09	9.69E-08
ADORA3	0.003842	0.959407	0.97219
ADO	0.078382	0.298348	0.408328
ADPGK	0.146442	0.051112	0.097792
ADPRHL1	0.134247	0.074009	0.133236
ADPRHL2	0.282737	0.000131	0.000603
ADPRH	-0.13044	0.082651	0.14608
ADRA1A	-0.24096	0.001195	0.004005
ADRA1B	-0.05031	0.504805	0.611745
ADRA1D	-0.04653	0.5374	0.64081
ADRA2A	0.289231	9.02E-05	0.000434
ADRA2B	0.094152	0.211273	0.311491
ADRA2C	-0.06049	0.422477	0.534694
ADRB1	-0.37117	3.39E-07	3.40E-06
ADRB2	-0.17335	0.020667	0.045653
ADRB3	0.052006	0.490557	0.599116
ADRBK1	0.239089	0.001308	0.004328
ADRBK2	-0.21211	0.004477	0.012445
ADRM1	0.221471	0.002969	0.00877
ADSL	-0.02356	0.754915	0.824461
ADSSL1	-0.17532	0.019245	0.042991
ADSS	0.380113	1.66E-07	1.83E-06
AEBP1	0.2794	0.000159	0.000711
AEBP2	-0.05683	0.451134	0.561935
AEN	-0.24799	0.000845	0.002974
AES	0.0773	0.305089	0.415484
AFAP1L1	-0.04871	0.518514	0.624352
AFAP1L2	0.541446	6.02E-15	4.65E-13
AFAP1	0.173565	0.020506	0.045367
AFARP1	0.139878	0.062572	0.11569
AFF1	-0.24898	0.000804	0.002861
AFF2	-0.12839	0.087659	0.153165
AFF3	-0.21726	0.003578	0.010266
AFF4	-0.20172	0.006931	0.018097
AFG3L1	0.073006	0.332818	0.445063
AFG3L2	-0.00496	0.947559	0.964534
AFMID	0.274224	0.000212	0.000909
AFM	-0.29681	5.75E-05	0.000295
AFP	-0.05551	0.461739	0.571997
AFTPH	-0.07079	0.34774	0.460208

AG2	0.044862	0.552097	0.654193
AGAP11	0.171412	0.022151	0.048351
AGAP1	-0.14797	0.048705	0.093905
AGAP2	-0.00797	0.915927	0.941552
AGAP3	-0.06266	0.406047	0.51843
AGAP4	0.154216	0.039849	0.079425
AGAP5	0.085987	0.253772	0.359925
AGAP6	0.077135	0.306127	0.416411
AGAP7	0.011	0.884138	0.919574
AGAP8	0.125536	0.094984	0.163507
AGA	-0.17923	0.016676	0.038122
AGBL1	0.117703	0.117644	0.194311
AGBL2	0.213455	0.004225	0.011855
AGBL3	-0.18303	0.01447	0.033817
AGBL4	-0.44519	4.77E-10	1.12E-08
AGBL5	0.02294	0.761171	0.829636
AGER	0.077273	0.30526	0.415493
AGFG1	0.194341	0.009339	0.023287
AGFG2	0.003071	0.967549	0.977934
AGGF1	-0.24588	0.000939	0.003251
AGK	-0.02653	0.72522	0.800922
AGL	-0.08511	0.258647	0.365059
AGMAT	0.169857	0.023408	0.050744
AGPAT1	-0.04649	0.537778	0.641105
AGPAT2	0.309637	2.60E-05	0.000149
AGPAT3	0.004868	0.94858	0.965182
AGPAT4	0.002322	0.975462	0.983119
AGPAT5	-0.1375	0.067216	0.122942
AGPAT6	-0.03962	0.599496	0.696173
AGPAT9	-0.04648	0.537841	0.641142
AGPHD1	-0.0107	0.887236	0.921487
AGPS	0.155879	0.037732	0.075887
AGR2	0.378979	1.82E-07	1.98E-06
AGR3	0.409327	1.40E-08	2.10E-07
AGRN	0.467373	4.80E-11	1.48E-09
AGRP	0.321138	1.24E-05	7.83E-05
AGTPBP1	-0.43555	1.23E-09	2.52E-08
AGTR1	-0.24896	0.000805	0.002862
AGTR2	-0.23531	0.001568	0.005062
AGTRAP	0.382053	1.42E-07	1.59E-06
AGT	-0.16898	0.024147	0.052059
AGXT2L1	0.135448	0.071438	0.129467
AGXT2L2	0.213147	0.004282	0.011983
AGXT2	-0.06193	0.411507	0.523592
AGXT	-0.01451	0.847509	0.892746
AHCTF1	-0.09726	0.196524	0.293509
AHCYL1	-0.20617	0.005763	0.015452
AHCYL2	0.188366	0.011803	0.028441
AHCY	-0.01865	0.804838	0.86194
AHDC1	0.11052	0.141931	0.226007
AHI1	-0.4632	7.49E-11	2.18E-09
AHNAK2	0.564888	2.15E-16	2.40E-14
AHNAK	0.26485	0.000353	0.001415
AHRR	0.047052	0.532842	0.636903

AHR	0.345373	2.34E-06	1.82E-05
AHSA1	0.085591	0.255969	0.362418
AHSA2	0.265774	0.000336	0.001352
AHSG	0.322691	1.12E-05	7.17E-05
AHSP	-0.02071	0.783742	0.846638
AICDA	-0.00091	0.990375	0.992914
AIDA	0.285117	0.000115	0.000535
AIF1L	-0.19059	0.010824	0.026433
AIF1	0.096676	0.199233	0.296905
AIFM1	-0.28705	0.000102	0.000486
AIFM2	0.254821	0.000598	0.002211
AIFM3	0.019892	0.792125	0.852845
AIG1	-0.10904	0.147381	0.23294
AIM1L	0.70427	5.53E-28	1.21E-24
AIM1	0.240982	0.001194	0.004002
AIM2	0.051021	0.498816	0.606169
AIMP1	0.134255	0.073993	0.13323
AIMP2	0.289258	9.00E-05	0.000434
AIPL1	0.157101	0.036238	0.073397
AIP	0.327603	8.05E-06	5.37E-05
AIRE	0.019872	0.792327	0.852977
AJAP1	-0.11091	0.140519	0.224209
AK1	0.086267	0.25222	0.35811
AK2	0.283412	0.000126	0.000583
AK3L1	0.388582	8.32E-08	9.95E-07
AK3	-0.21574	0.003826	0.010898
AK5	-0.11678	0.120563	0.198123
AK7	-0.06673	0.376121	0.489047
AKAP10	-0.2219	0.002913	0.008625
AKAP11	-0.23125	0.001898	0.005963
AKAP12	-0.07818	0.299628	0.40974
AKAP13	0.024264	0.747839	0.818814
AKAP14	0.034918	0.643561	0.733854
AKAP1	0.177304	0.017901	0.040446
AKAP2	-0.18731	0.012293	0.029446
AKAP3	-0.31849	1.47E-05	9.10E-05
AKAP4	-0.02026	0.788354	0.849996
AKAP5	0.050483	0.503365	0.610497
AKAP6	-0.38142	1.50E-07	1.67E-06
AKAP7	-0.05073	0.501291	0.608392
AKAP8L	0.056067	0.457273	0.5683
AKAP8	0.258724	0.000488	0.001864
AKAP9	-0.37084	3.48E-07	3.48E-06
AKD1	-0.41338	9.76E-09	1.55E-07
AKIRIN1	-0.35829	9.09E-07	7.97E-06
AKIRIN2	-0.19762	0.00819	0.020847
AKNAD1	-0.00673	0.928996	0.950941
AKNA	-0.20243	0.006733	0.017666
AKR1A1	0.153338	0.041005	0.081394
AKR1B10	0.475638	1.95E-11	6.51E-10
AKR1B15	0.281867	0.000138	0.00063
AKR1B1	-0.14853	0.047852	0.092612
AKR1C1	0.154364	0.039656	0.079156
AKR1C2	0.35997	8.01E-07	7.17E-06

AKR1C3	0.442641	6.15E-10	1.40E-08
AKR1C4	-0.16617	0.026633	0.056635
AKR1CL1	-0.01039	0.890561	0.923847
AKR1D1	-0.01864	0.80492	0.861982
AKR1E2	0.151337	0.043748	0.086017
AKR7A2	-0.08075	0.283918	0.392793
AKR7A3	0.204342	0.006219	0.016487
AKR7L	0.171068	0.022424	0.048866
AKT1S1	0.030054	0.69046	0.773506
AKT1	0.114608	0.127679	0.207421
AKT2	0.13853	0.065168	0.11975
AKT3	-0.28997	8.63E-05	0.000418
AKTIP	-0.1722	0.021539	0.047201
ALAD	0.020788	0.782996	0.845971
ALAS1	0.340273	3.36E-06	2.52E-05
ALAS2	-0.11428	0.128789	0.208949
ALB	-0.05296	0.48264	0.591867
ALCAM	0.106332	0.157757	0.246152
ALDH16A1	0.140866	0.060722	0.112723
ALDH18A1	-0.00533	0.94366	0.961999
ALDH1A1	-0.17914	0.016729	0.038203
ALDH1A2	0.048026	0.524386	0.629734
ALDH1A3	0.202607	0.006683	0.017546
ALDH1B1	0.016267	0.829368	0.879305
ALDH1L1	0.255438	0.000579	0.002155
ALDH1L2	-0.18448	0.013695	0.032277
ALDH2	0.213165	0.004279	0.011978
ALDH3A1	0.481418	1.03E-11	3.67E-10
ALDH3A2	-0.10927	0.146527	0.231887
ALDH3B1	0.710577	1.14E-28	3.75E-25
ALDH3B2	0.291485	7.90E-05	0.000387
ALDH4A1	-0.06965	0.355546	0.46861
ALDH5A1	-0.35577	1.10E-06	9.42E-06
ALDH6A1	-0.32833	7.67E-06	5.16E-05
ALDH7A1	0.232757	0.001769	0.005617
ALDH8A1	-0.05743	0.446372	0.557691
ALDH9A1	-0.36932	3.91E-07	3.85E-06
ALDOA	0.43062	1.98E-09	3.82E-08
ALDOB	0.074098	0.325619	0.437686
ALDOC	0.22424	0.00262	0.007867
ALG10B	-0.04097	0.587138	0.685648
ALG10	0.011721	0.876598	0.914571
ALG11	0.164182	0.028531	0.059987
ALG12	-0.07035	0.350729	0.463405
ALG13	-0.13356	0.07552	0.135548
ALG14	-0.12871	0.086844	0.15205
ALG1L2	0.246158	0.000926	0.003213
ALG1L	0.296836	5.74E-05	0.000294
ALG1	0.009057	0.904495	0.933383
ALG2	-0.38538	1.08E-07	1.25E-06
ALG3	0.312323	2.19E-05	0.000128
ALG5	0.079698	0.290283	0.399726
ALG6	0.01445	0.848179	0.89324
ALG8	0.253013	0.000656	0.002387

ALG9	-0.21776	0.003502	0.010076
ALKBH1	-0.2643	0.000364	0.001449
ALKBH2	0.233472	0.00171	0.005458
ALKBH3	0.103481	0.169265	0.260491
ALKBH4	-0.10122	0.178809	0.271836
ALKBH5	-0.48953	4.08E-12	1.62E-10
ALKBH6	0.250646	0.000739	0.002657
ALKBH7	0.06892	0.360652	0.473793
ALKBH8	-0.01759	0.815731	0.869573
ALK	-0.39465	5.01E-08	6.40E-07
ALLC	-0.14222	0.058254	0.108918
ALMS1P	-0.24354	0.001054	0.00359
ALMS1	-0.23497	0.001593	0.005136
ALOX12B	-0.07765	0.302904	0.413191
ALOX12P2	0.275053	0.000203	0.000875
ALOX12	-0.09084	0.227863	0.330626
ALOX15B	0.155533	0.038165	0.076602
ALOX15	-0.27275	0.00023	0.000975
ALOX5AP	0.204067	0.006291	0.016651
ALOX5	0.386409	9.96E-08	1.16E-06
ALOXE3	0.200946	0.007155	0.018542
ALPI	0.040737	0.589266	0.68724
ALPK1	0.383899	1.22E-07	1.39E-06
ALPK2	0.186835	0.012519	0.029934
ALPK3	-0.15332	0.041033	0.08144
ALPL	-0.24964	0.000778	0.002779
ALPPL2	0.310866	2.41E-05	0.000139
ALPP	0.386878	9.58E-08	1.12E-06
ALS2CL	0.66368	5.78E-24	5.44E-21
ALS2CR11	-0.15969	0.03324	0.068325
ALS2CR12	-0.06607	0.380881	0.493612
ALS2CR4	-0.25971	0.000464	0.001779
ALS2CR8	-0.12962	0.084634	0.148866
ALS2	-0.12979	0.084229	0.148272
ALX1	-0.00748	0.921062	0.945348
ALX3	-0.22361	0.002696	0.008064
ALX4	-0.03745	0.619715	0.713911
AMAC1L2	0.059901	0.427046	0.539165
AMAC1L3	-0.08361	0.267153	0.374791
AMAC1	-0.04742	0.529625	0.634101
AMACR	-0.35316	1.33E-06	1.11E-05
AMBN	-0.17157	0.022026	0.048132
AMBP	0.012141	0.87222	0.911637
AMBRA1	0.243379	0.001062	0.003616
AMD1	-0.29231	7.52E-05	0.000371
AMDHD1	-0.26878	0.000286	0.001179
AMDHD2	0.229834	0.002027	0.006307
AMELX	0.119977	0.110672	0.185444
AMELY	-0.02814	0.709233	0.788152
AMFR	0.189001	0.011516	0.027859
AMHR2	-0.15691	0.036467	0.073785
AMH	-0.04486	0.552144	0.654209
AMICA1	0.121119	0.107294	0.180887
AMIGO1	-0.36963	3.82E-07	3.77E-06

AMIG02	0.328784	7.44E-06	5.02E-05
AMIG03	-0.24891	0.000807	0.002867
AMMECR1L	0.133727	0.075145	0.134986
AMMECR1	0.078689	0.296457	0.406333
AMN1	-0.16718	0.025713	0.054921
AMN	0.463708	7.10E-11	2.08E-09
AMOTL1	-0.14578	0.052182	0.099503
AMOTL2	0.193895	0.009506	0.023643
AMOT	-0.17265	0.021189	0.046602
AMPD1	-0.03875	0.607602	0.703314
AMPD2	-0.07511	0.319064	0.430778
AMPD3	-0.11129	0.139174	0.222458
AMPH	-0.30384	3.74E-05	0.000204
AMTN	0.000509	0.994622	0.996386
AMT	0.138359	0.065504	0.120289
AMY1A	-0.14118	0.06015	0.111825
AMY2A	-0.09546	0.204978	0.303932
AMY2B	-0.12182	0.105265	0.178103
AMZ1	0.016261	0.829429	0.879322
AMZ2P1	-0.25683	0.000539	0.002028
AMZ2	-0.32175	1.19E-05	7.56E-05
ANAPC10	-0.06201	0.410925	0.523019
ANAPC11	0.187389	0.012256	0.029375
ANAPC13	-0.095	0.207154	0.306469
ANAPC16	-0.12151	0.106168	0.179326
ANAPC1	-0.0955	0.204792	0.303724
ANAPC2	-0.14312	0.056667	0.106514
ANAPC4	0.070718	0.348235	0.460663
ANAPC5	-0.32404	1.02E-05	6.62E-05
ANAPC7	-0.04987	0.508541	0.615153
ANGEL1	-0.56768	1.42E-16	1.68E-14
ANGEL2	-0.11929	0.112752	0.188069
ANGPT1	-0.16358	0.029129	0.061102
ANGPT2	0.05879	0.435682	0.547195
ANGPT4	0.050734	0.501236	0.608362
ANGPTL1	-0.13306	0.07662	0.137161
ANGPTL2	0.113123	0.132724	0.214069
ANGPTL3	-0.30779	2.92E-05	0.000165
ANGPTL4	0.300265	4.66E-05	0.000247
ANGPTL5	-0.3627	6.51E-07	6.00E-06
ANGPTL6	-0.04464	0.554051	0.655761
ANGPTL7	-0.05633	0.455152	0.56612
ANG	0.117354	0.118746	0.19582
ANK1	0.190816	0.01073	0.026234
ANK2	-0.40115	2.87E-08	3.91E-07
ANK3	-0.16466	0.028068	0.059183
ANKAR	0.013435	0.858728	0.90173
ANKDD1A	-0.007	0.926094	0.948806
ANKFN1	0.476722	1.73E-11	5.86E-10
ANKFY1	-0.43655	1.12E-09	2.32E-08
ANKHD1-EI	-0.25039	0.000749	0.002687
ANKHD1	-0.17249	0.021317	0.046836
ANKH	-0.40427	2.19E-08	3.10E-07
ANKIB1	-0.05688	0.450779	0.561634

ANKK1	0.112388	0.135278	0.217513
ANKLE1	-0.11946	0.112238	0.187497
ANKLE2	0.130067	0.083551	0.147315
ANKMY1	0.392523	5.99E-08	7.44E-07
ANKMY2	0.109291	0.146445	0.231813
ANKRA2	-0.14766	0.049188	0.094725
ANKRD10	0.480352	1.16E-11	4.08E-10
ANKRD11	-0.09602	0.202309	0.300741
ANKRD12	-0.23078	0.00194	0.006075
ANKRD13A	-0.23014	0.001998	0.006227
ANKRD13B	0.066361	0.378803	0.491437
ANKRD13C	-0.25348	0.00064	0.002342
ANKRD13D	0.298084	5.32E-05	0.000276
ANKRD16	-0.12285	0.102315	0.173916
ANKRD17	-0.31926	1.40E-05	8.71E-05
ANKRD19	0.079658	0.290531	0.399983
ANKRD1	0.204844	0.006091	0.01618
ANKRD20A3	-0.03936	0.601972	0.698269
ANKRD20A4	-0.04024	0.593855	0.691205
ANKRD20B	0.031227	0.679028	0.763945
ANKRD22	0.448541	3.41E-10	8.35E-09
ANKRD23	-0.05377	0.475909	0.585629
ANKRD24	0.088988	0.237513	0.341421
ANKRD26P1	-0.26299	0.00039	0.001537
ANKRD26	-0.28374	0.000124	0.000573
ANKRD27	0.152074	0.04272	0.084281
ANKRD28	-0.00503	0.94683	0.964133
ANKRD29	-0.10275	0.172328	0.264144
ANKRD2	0.224482	0.002592	0.007794
ANKRD30A	-0.02413	0.749235	0.819842
ANKRD30B	-0.15322	0.041169	0.081677
ANKRD31	-0.10534	0.161689	0.25102
ANKRD32	-0.28123	0.000143	0.00065
ANKRD33	0.170282	0.023058	0.050061
ANKRD34A	0.19251	0.01004	0.024783
ANKRD34B	0.04321	0.56685	0.66694
ANKRD34C	-0.2128	0.004346	0.012136
ANKRD35	0.313802	2.00E-05	0.000118
ANKRD36BF	-0.19684	0.008452	0.021401
ANKRD36B	0.065665	0.38384	0.496764
ANKRD36	0.21951	0.00324	0.009429
ANKRD37	0.108603	0.149018	0.235077
ANKRD39	0.047694	0.527262	0.632359
ANKRD40	-0.02002	0.790818	0.852002
ANKRD42	0.104407	0.165459	0.255648
ANKRD43	-0.22252	0.002832	0.008413
ANKRD44	-0.24773	0.000856	0.003008
ANKRD45	-0.11822	0.116017	0.192207
ANKRD46	-0.49559	2.02E-12	8.75E-11
ANKRD49	0.025462	0.735842	0.809083
ANKRD50	0.168704	0.02438	0.052509
ANKRD52	-0.44201	6.54E-10	1.47E-08
ANKRD53	-0.23753	0.001411	0.004621
ANKRD54	-0.19687	0.00844	0.021378

ANKRD55	-0.03002	0.69082	0.77368
ANKRD56	0.152824	0.041696	0.08254
ANKRD57	0.242519	0.001108	0.003748
ANKRD58	0.10804	0.15115	0.237795
ANKRD5	-0.29428	6.69E-05	0.000336
ANKRD6	-0.00938	0.901125	0.931029
ANKRD7	-0.44389	5.43E-10	1.26E-08
ANKRD9	0.31525	1.82E-05	0.000109
ANKS1A	-0.15143	0.043613	0.085785
ANKS1B	-0.3384	3.84E-06	2.82E-05
ANKS3	0.266525	0.000323	0.001308
ANKS4B	0.050005	0.507416	0.614167
ANKS6	0.203926	0.006328	0.016735
ANKZF1	0.19647	0.008578	0.021662
ANLN	0.395425	4.69E-08	6.03E-07
ANO10	0.105309	0.161815	0.251157
ANO1	0.618473	3.62E-20	1.08E-17
ANO2	-0.13737	0.067474	0.123346
ANO3	-0.32446	9.94E-06	6.46E-05
ANO4	0.11769	0.117685	0.194352
ANO5	-0.16659	0.026248	0.055918
ANO6	0.162782	0.029933	0.062555
ANO7	0.279644	0.000157	0.000703
ANO8	0.298378	5.22E-05	0.000272
ANO9	0.405038	2.05E-08	2.92E-07
ANP32A	0.179072	0.016773	0.038279
ANP32B	0.141587	0.059401	0.110676
ANP32C	0.10941	0.146005	0.231245
ANP32D	-0.08991	0.232642	0.336388
ANP32E	0.100701	0.181072	0.274601
ANPEP	-0.05686	0.450953	0.561758
ANTXR1	0.18037	0.015984	0.036783
ANTXR2	0.41661	7.28E-09	1.20E-07
ANTXRL	0.131725	0.079655	0.141683
ANUBL1	-0.45258	2.26E-10	5.75E-09
ANXA10	0.448956	3.27E-10	8.06E-09
ANXA11	0.607767	2.35E-19	5.87E-17
ANXA13	0.106426	0.157385	0.24565
ANXA1	0.380716	1.59E-07	1.75E-06
ANXA2P1	0.492202	3.00E-12	1.23E-10
ANXA2P2	0.594902	2.02E-18	4.12E-16
ANXA2P3	0.334271	5.11E-06	3.63E-05
ANXA2	0.643432	3.48E-22	2.05E-19
ANXA3	0.582355	1.51E-17	2.33E-15
ANXA4	0.318007	1.52E-05	9.35E-05
ANXA5	0.347009	2.08E-06	1.65E-05
ANXA6	-0.22177	0.002929	0.008665
ANXA7	-0.06755	0.370272	0.483493
ANXA8L1	0.234061	0.001663	0.00533
ANXA8L2	0.568484	1.26E-16	1.51E-14
ANXA8	0.570127	9.86E-17	1.21E-14
ANXA9	0.166701	0.02615	0.055744
AOAH	-0.20742	0.005469	0.014762
AOC2	-0.18067	0.015808	0.036433

AOC3	0.054861	0.467023	0.577145
AOX1	-0.31068	2.43E-05	0.00014
AOX2P	-0.14874	0.047534	0.092129
AP1AR	-0.15016	0.045435	0.088787
AP1B1	-0.27676	0.000184	0.000806
AP1G1	-0.13276	0.077292	0.138139
AP1G2	0.384657	1.15E-07	1.32E-06
AP1M1	0.150501	0.044939	0.087957
AP1M2	0.390886	6.87E-08	8.40E-07
AP1S1	0.312596	2.16E-05	0.000126
AP1S2	-0.25372	0.000633	0.002317
AP1S3	0.587227	6.98E-18	1.18E-15
AP2A1	0.245559	0.000954	0.003297
AP2A2	-0.23043	0.001972	0.006161
AP2B1	0.289956	8.64E-05	0.000419
AP2M1	0.253842	0.000629	0.002306
AP2S1	0.290827	8.21E-05	0.0004
AP3B1	-0.11	0.14384	0.228348
AP3B2	-0.29071	8.26E-05	0.000402
AP3D1	-0.14172	0.059155	0.110273
AP3M1	-0.33437	5.07E-06	3.61E-05
AP3M2	0.337572	4.06E-06	2.96E-05
AP3S1	0.176924	0.018152	0.040891
AP3S2	-0.20698	0.005569	0.014997
AP4B1	0.377412	2.07E-07	2.20E-06
AP4E1	-0.06807	0.366611	0.480122
AP4M1	0.110934	0.140436	0.22412
AP4S1	-0.2196	0.003228	0.009399
APAF1	-0.17074	0.022684	0.049345
APBA1	-0.49852	1.43E-12	6.44E-11
APBA2	0.145747	0.052236	0.099577
APBA3	0.041286	0.584259	0.68281
APBB1IP	0.078024	0.300568	0.410713
APBB1	-0.28847	9.43E-05	0.000451
APBB2	-0.1133	0.1321	0.213294
APBB3	-0.06218	0.409635	0.521713
APC2	-0.15149	0.043534	0.085655
APCDD1L	0.182127	0.014968	0.034772
APCDD1	0.181852	0.015124	0.03508
APCS	0.123555	0.100359	0.171063
APC	-0.36099	7.41E-07	6.72E-06
APEH	0.199599	0.007559	0.01947
APEX1	0.119356	0.112542	0.187861
APEX2	0.257788	0.000513	0.001942
APH1A	0.441493	6.89E-10	1.53E-08
APH1B	-0.27279	0.00023	0.000974
API5	-0.32969	6.99E-06	4.75E-05
APIP	-0.12748	0.08994	0.156321
APITD1	-0.29376	6.90E-05	0.000345
APLF	0.12842	0.087573	0.153042
APLNR	-0.03526	0.640297	0.73144
APLN	-0.0856	0.255904	0.362365
APLP1	-0.28674	0.000104	0.000493
APLP2	0.413518	9.64E-09	1.53E-07

APOA1BP	0.069138	0.359134	0.472183
APOA1	0.035339	0.639567	0.730774
APOA2	0.03775	0.616883	0.711433
APOA4	0.062946	0.403874	0.516505
APOA5	-0.03639	0.629657	0.722318
APOB48R	0.112846	0.133683	0.215317
APOBEC1	0.348273	1.90E-06	1.52E-05
APOBEC2	-0.00877	0.907495	0.935531
APOBEC3A	0.019145	0.799761	0.859103
APOBEC3B	0.106291	0.157916	0.246284
APOBEC3C	0.264695	0.000356	0.001425
APOBEC3D	0.165728	0.027049	0.057345
APOBEC3F	-0.09159	0.223999	0.326192
APOBEC3G	0.037606	0.618227	0.712734
APOBEC3H	0.066405	0.378492	0.49116
APOBEC4	-0.2733	0.000223	0.00095
APOB	-0.09852	0.190738	0.286488
APOC1P1	0.051856	0.491813	0.600389
APOC1	0.253793	0.00063	0.00231
APOC2	0.190268	0.010963	0.026726
APOC3	-0.03544	0.638571	0.729898
APOC4	0.089882	0.232813	0.336573
APOD	0.174285	0.019981	0.044391
APOE	0.089518	0.234717	0.338731
APOF	-0.25855	0.000493	0.00188
APOH	-0.19621	0.008667	0.021848
APOL1	0.578792	2.63E-17	3.74E-15
APOL2	0.402941	2.46E-08	3.44E-07
APOL3	0.055946	0.458244	0.568901
APOL4	0.180955	0.015639	0.036089
APOL5	0.000422	0.995544	0.996921
APOL6	0.014777	0.844794	0.890598
APOLD1	-0.26816	0.000296	0.001214
APOM	0.089185	0.23647	0.340391
APOOL	-0.32338	1.07E-05	6.88E-05
APOO	-0.30124	4.39E-05	0.000235
APPBP2	-0.37375	2.77E-07	2.84E-06
APPL1	-0.33047	6.63E-06	4.55E-05
APPL2	-0.30072	4.53E-05	0.000241
APP	-0.10593	0.159347	0.247967
APRT	0.42779	2.58E-09	4.85E-08
APTXX	-0.02949	0.696021	0.777578
AQP10	0.002032	0.978528	0.985204
AQP11	-0.14221	0.05828	0.108956
AQP12A	-0.17379	0.020343	0.045055
AQP12B	-0.01707	0.821125	0.873257
AQP1	-0.00237	0.974954	0.982759
AQP2	0.302365	4.09E-05	0.000221
AQP3	-0.09924	0.187532	0.282555
AQP4	-0.30264	4.03E-05	0.000218
AQP5	0.509876	3.62E-13	1.87E-11
AQP6	0.297533	5.50E-05	0.000284
AQP7P1	0.080526	0.285284	0.394195
AQP7P3	-0.00315	0.966697	0.977323

AQP7	-0.21854	0.003382	0.009777
AQP8	-0.11237	0.135326	0.217556
AQP9	0.121954	0.104875	0.177566
AQPEP	-0.08378	0.266231	0.373657
AQR	0.049306	0.513377	0.619486
ARAF	0.062728	0.405513	0.518031
ARAP1	-0.04981	0.509092	0.61563
ARAP2	0.261242	0.000428	0.001664
ARAP3	0.359912	8.04E-07	7.20E-06
ARCN1	-0.07431	0.324223	0.436254
ARC	-0.15418	0.039901	0.079505
AREG	0.435947	1.18E-09	2.44E-08
ARF1	0.23863	0.001338	0.004409
ARF3	-0.2777	0.000175	0.000771
ARF4	0.189156	0.011447	0.027723
ARF5	0.126069	0.093579	0.16144
ARF6	0.379848	1.70E-07	1.86E-06
ARFGAP1	0.020244	0.788538	0.850055
ARFGAP2	0.003877	0.959039	0.972066
ARFGAP3	-0.13307	0.076606	0.137149
ARFGEF1	-0.0105	0.889332	0.923124
ARFGEF2	-0.29502	6.40E-05	0.000323
ARFIP1	0.131297	0.080647	0.143165
ARFIP2	-0.08711	0.247612	0.352809
ARFRP1	0.231503	0.001876	0.005903
ARG1	-0.26096	0.000434	0.001687
ARG2	-0.36025	7.84E-07	7.04E-06
ARGFXP2	0.083918	0.265415	0.372856
ARGFX	0.110314	0.142682	0.226982
ARGLU1	0.146586	0.050881	0.097417
ARHGAP10	-0.02927	0.698097	0.779324
ARHGAP11A	0.197075	0.008372	0.02124
ARHGAP11E	0.152515	0.042116	0.083288
ARHGAP12	0.197576	0.008205	0.02088
ARHGAP15	-0.03444	0.6481	0.737736
ARHGAP17	-0.15375	0.040453	0.080475
ARHGAP18	-0.04291	0.56955	0.669537
ARHGAP19	-0.28861	9.35E-05	0.000448
ARHGAP1	0.220559	0.003092	0.009064
ARHGAP20	-0.1307	0.082049	0.145223
ARHGAP21	0.276577	0.000186	0.000813
ARHGAP22	0.129479	0.084969	0.149363
ARHGAP23	0.281857	0.000138	0.00063
ARHGAP24	-0.27129	0.000249	0.001045
ARHGAP25	-0.03309	0.661058	0.749485
ARHGAP26	0.296874	5.72E-05	0.000294
ARHGAP27	0.642586	4.10E-22	2.32E-19
ARHGAP28	-0.23206	0.001827	0.005771
ARHGAP29	-0.01399	0.852974	0.897166
ARHGAP30	0.046519	0.537499	0.64085
ARHGAP31	-0.11703	0.119783	0.197103
ARHGAP32	0.341266	3.14E-06	2.36E-05
ARHGAP33	-0.02503	0.740116	0.812607
ARHGAP36	-0.17431	0.019963	0.044375

ARHGAP39	-0.12549	0.095098	0.163647
ARHGAP42	0.258886	0.000484	0.00185
ARHGAP4	0.103892	0.167567	0.258441
ARHGAP5	-0.04576	0.544186	0.647106
ARHGAP6	0.032969	0.662198	0.750605
ARHGAP8	0.509054	4.00E-13	2.06E-11
ARHGAP9	0.033499	0.657109	0.745835
ARHGDIA	0.327195	8.28E-06	5.50E-05
ARHGDIB	0.229747	0.002036	0.006328
ARHGDIG	-0.06119	0.417182	0.529552
ARHGEF10I	-0.1839	0.014	0.032852
ARHGEF10	0.215753	0.003824	0.010891
ARHGEF11	-0.23868	0.001335	0.0044
ARHGEF12	-0.05972	0.428428	0.54051
ARHGEF15	-0.24273	0.001096	0.003717
ARHGEF16	0.432031	1.73E-09	3.41E-08
ARHGEF17	0.015999	0.832135	0.881058
ARHGEF18	0.361004	7.40E-07	6.71E-06
ARHGEF19	0.249158	0.000797	0.00284
ARHGEF1	0.257872	0.000511	0.001935
ARHGEF2	0.417045	7.00E-09	1.16E-07
ARHGEF33	-0.24532	0.000965	0.003331
ARHGEF35	0.308357	2.82E-05	0.00016
ARHGEF37	-0.22644	0.00237	0.007219
ARHGEF38	0.175406	0.019186	0.042877
ARHGEF3	-0.08781	0.24382	0.348486
ARHGEF4	0.002039	0.978446	0.985172
ARHGEF5	0.426152	3.02E-09	5.57E-08
ARHGEF6	-0.15334	0.040999	0.081389
ARHGEF7	0.076826	0.308074	0.418483
ARHGEF9	-0.30192	4.21E-05	0.000226
ARID1A	-0.34932	1.76E-06	1.42E-05
ARID1B	-0.29414	6.74E-05	0.000338
ARID2	-0.32378	1.04E-05	6.73E-05
ARID3A	-0.29362	6.95E-05	0.000347
ARID3B	-0.03609	0.632488	0.724445
ARID3C	0.080636	0.284625	0.393551
ARID4A	-0.08676	0.249504	0.354992
ARID4B	-0.10043	0.182262	0.276024
ARID5A	0.124524	0.0977	0.167411
ARID5B	-0.223	0.002771	0.008257
ARIH1	-0.1009	0.180216	0.273533
ARIH2	-0.27436	0.000211	0.000904
ARL10	-0.19573	0.008837	0.022207
ARL11	0.071721	0.341424	0.453778
ARL13A	0.079754	0.289946	0.399443
ARL13B	-0.27069	0.000258	0.001076
ARL14	0.570923	8.75E-17	1.09E-14
ARL15	-0.2702	0.000265	0.001102
ARL16	0.207967	0.005343	0.014491
ARL17A	-0.03971	0.598691	0.695524
ARL17B	0.037065	0.623287	0.717104
ARL1	-0.40746	1.65E-08	2.42E-07
ARL2BP	0.083897	0.265535	0.372995

ARL2	0.075951	0.313632	0.424574
ARL3	-0.23529	0.00157	0.005068
ARL4A	0.024084	0.749645	0.820155
ARL4C	0.306802	3.11E-05	0.000174
ARL4D	0.300938	4.47E-05	0.000238
ARL5A	-0.2547	0.000601	0.002221
ARL5B	-0.04286	0.569982	0.669946
ARL5C	-0.23786	0.001388	0.004556
ARL6IP1	0.321596	1.20E-05	7.62E-05
ARL6IP4	-0.03756	0.618618	0.713061
ARL6IP5	0.193209	0.009767	0.0242
ARL6IP6	0.213476	0.004222	0.011849
ARL6	-0.27476	0.000206	0.000888
ARL8A	0.337153	4.19E-06	3.04E-05
ARL8B	0.07831	0.298792	0.408795
ARL9	-0.04198	0.577978	0.67703
ARMC10	0.378561	1.89E-07	2.04E-06
ARMC1	-0.25562	0.000574	0.002138
ARMC2	-0.5521	1.37E-15	1.21E-13
ARMC3	-0.10279	0.172143	0.263934
ARMC4	-0.34467	2.46E-06	1.91E-05
ARMC5	-0.14045	0.06149	0.113943
ARMC6	-0.11184	0.137186	0.21992
ARMC7	0.247832	0.000852	0.002995
ARMC8	-0.10312	0.170773	0.262269
ARMC9	0.107867	0.15181	0.238643
ARMCX1	-0.24788	0.00085	0.002989
ARMCX2	-0.253	0.000656	0.002388
ARMCX3	-0.49495	2.18E-12	9.29E-11
ARMCX5	-0.16774	0.025215	0.054008
ARMCX6	0.03126	0.678712	0.763725
ARMS2	-0.10157	0.17733	0.269982
ARNT2	-0.56168	3.45E-16	3.63E-14
ARNTL2	0.281908	0.000138	0.000629
ARNTL	-0.13188	0.079295	0.141108
ARNT	-0.09572	0.203742	0.302508
ARPC1A	0.292926	7.25E-05	0.000359
ARPC1B	0.533551	1.74E-14	1.22E-12
ARPC2	0.493649	2.53E-12	1.07E-10
ARPC3	0.326369	8.75E-06	5.77E-05
ARPC4	0.390996	6.81E-08	8.34E-07
ARPC5L	0.226334	0.002382	0.007248
ARPC5	0.457923	1.30E-10	3.57E-09
ARPM1	0.23777	0.001394	0.004572
ARPP19	-0.12809	0.088393	0.154147
ARPP21	-0.20997	0.004908	0.013484
ARR3	-0.03096	0.681641	0.766318
ARRB1	-0.01217	0.871886	0.911337
ARRB2	-0.22148	0.002968	0.00877
ARRDC1	0.453536	2.05E-10	5.29E-09
ARRDC2	0.417084	6.98E-09	1.16E-07
ARRDC3	0.046752	0.535458	0.639072
ARRDC4	-0.25432	0.000613	0.002259
ARRDC5	0.055979	0.457981	0.568815

ARSA	-0.04431	0.557038	0.658351
ARSB	-0.30633	3.20E-05	0.000179
ARSD	0.182511	0.014754	0.034392
ARSE	0.051238	0.49699	0.604545
ARSF	-0.10026	0.182982	0.276881
ARSG	-0.39465	5.00E-08	6.40E-07
ARSH	0.06752	0.370518	0.483733
ARSI	0.214864	0.003975	0.011267
ARSJ	-0.1558	0.037828	0.076057
ARSK	-0.36838	4.21E-07	4.09E-06
ART1	-0.02679	0.722623	0.798499
ART3	-0.12122	0.106994	0.180459
ART4	-0.15956	0.033379	0.068533
ART5	0.109819	0.144494	0.229201
ARTN	0.119003	0.113617	0.189176
ARV1	0.20511	0.006024	0.016027
ARVCF	-0.20526	0.005987	0.015956
ARX	-0.19549	0.008922	0.02237
AR	-0.10809	0.150952	0.23754
AS3MT	-0.13153	0.080099	0.142345
ASAH1	-0.13296	0.076849	0.137502
ASAH2B	-0.11607	0.122867	0.201024
ASAH2	-0.10976	0.144692	0.229459
ASAM	-0.00463	0.951125	0.96696
ASAP1IT1	0.016906	0.822774	0.874472
ASAP1	-0.09019	0.231232	0.334727
ASAP2	0.537258	1.06E-14	7.81E-13
ASAP3	-0.00209	0.977873	0.984845
ASB10	-0.0955	0.204773	0.303719
ASB11	-0.13079	0.081826	0.144933
ASB12	0.036302	0.630463	0.722921
ASB13	-0.01106	0.883506	0.919062
ASB14	-0.14844	0.047987	0.092829
ASB15	-0.14594	0.051919	0.099077
ASB16	-0.27903	0.000162	0.000723
ASB17	-0.06068	0.421082	0.53327
ASB18	0.078753	0.296061	0.406098
ASB1	-0.18295	0.014513	0.033894
ASB2	-0.03058	0.685309	0.76949
ASB3	0.022272	0.767926	0.834752
ASB4	-0.29859	5.16E-05	0.000269
ASB5	-0.16598	0.026812	0.05695
ASB6	0.069305	0.357969	0.471051
ASB7	-0.11165	0.137865	0.220791
ASB8	-0.42417	3.63E-09	6.58E-08
ASB9	-0.08534	0.257353	0.363727
ASCC1	0.097435	0.195713	0.292534
ASCC2	0.14025	0.06187	0.114585
ASCC3	-0.29831	5.25E-05	0.000273
ASCL1	-0.32318	1.08E-05	6.96E-05
ASCL2	-0.16353	0.029174	0.061164
ASCL3	0.14663	0.050811	0.097311
ASCL4	-0.08512	0.258609	0.365032
ASF1A	-0.31954	1.38E-05	8.56E-05

ASF1B	0.469037	4.01E-11	1.27E-09
ASFMR1	-0.024	0.750474	0.82088
ASGR1	-0.14051	0.061392	0.113804
ASGR2	-0.24837	0.000829	0.002929
ASH1L	-0.238	0.001379	0.004531
ASH2L	0.113458	0.131573	0.212611
ASIP	0.116651	0.120986	0.198554
ASL	0.380357	1.63E-07	1.80E-06
ASMTL	-0.09074	0.228342	0.331223
ASMT	-0.06538	0.385893	0.498605
ASNA1	-0.00648	0.931581	0.952873
ASNSD1	-0.29799	5.35E-05	0.000278
ASNS	-0.30497	3.49E-05	0.000192
ASPA	-0.13454	0.073384	0.132266
ASPDH	-0.19602	0.008735	0.022
ASPG	0.325243	9.43E-06	6.17E-05
ASPHD1	0.237503	0.001412	0.004622
ASPHD2	0.323162	1.08E-05	6.97E-05
ASPH	0.276874	0.000183	0.000802
ASPM	0.331763	6.07E-06	4.22E-05
ASPN	0.131152	0.080984	0.143648
ASPRV1	-0.16328	0.029425	0.061636
ASPSCR1	-0.01536	0.838768	0.886209
ASRGL1	-0.16031	0.03255	0.067057
ASS1	0.255752	0.00057	0.002126
ASTE1	-0.06368	0.398412	0.511073
ASTL	0.043281	0.56621	0.666645
ASTN1	-0.34366	2.65E-06	2.03E-05
ASTN2	-0.49308	2.71E-12	1.13E-10
ASXL1	-0.3427	2.83E-06	2.16E-05
ASXL2	-0.18462	0.013625	0.032151
ASXL3	-0.38025	1.65E-07	1.81E-06
ASZ1	-0.04476	0.552999	0.654869
ATAD1	0.07628	0.311532	0.422338
ATAD2B	-0.05313	0.481184	0.590533
ATAD2	-0.01387	0.854215	0.897945
ATAD3A	0.155205	0.038579	0.077306
ATAD3B	0.151817	0.043077	0.084866
ATAD3C	-0.12779	0.089163	0.155261
ATAD5	0.066409	0.378457	0.491158
ATCAY	-0.28189	0.000138	0.00063
ATE1	-0.18699	0.012444	0.029768
ATF1	-0.3079	2.90E-05	0.000164
ATF2	-0.1623	0.030432	0.063424
ATF3	0.029951	0.691459	0.773967
ATF4	0.01041	0.890312	0.923663
ATF5	-0.00571	0.939743	0.959343
ATF6B	0.123655	0.100081	0.170716
ATF6	-0.14171	0.059175	0.11029
ATF7IP2	0.327057	8.35E-06	5.55E-05
ATF7IP	-0.1338	0.07499	0.134769
ATF7	-0.0421	0.576834	0.67601
ATG10	-0.06796	0.367412	0.481012
ATG12	0.106429	0.157375	0.24565

ATG16L1	0.496251	1.87E-12	8.18E-11
ATG16L2	0.080395	0.286072	0.395082
ATG2A	0.071723	0.341406	0.453778
ATG2B	-0.52503	5.34E-14	3.40E-12
ATG3	0.063675	0.398442	0.511079
ATG4A	-0.25826	0.0005	0.001903
ATG4B	0.226404	0.002375	0.00723
ATG4C	-0.2384	0.001352	0.004449
ATG4D	-0.07094	0.346694	0.459117
ATG5	-0.11409	0.129412	0.209702
ATG7	0.307342	3.01E-05	0.000169
ATG9A	0.036333	0.630168	0.722666
ATG9B	0.331741	6.08E-06	4.22E-05
ATHL1	0.378446	1.90E-07	2.05E-06
ATIC	0.409649	1.36E-08	2.05E-07
ATL1	-0.23136	0.001889	0.005939
ATL2	0.067579	0.370101	0.483411
ATL3	0.163983	0.028727	0.060359
ATMIN	-0.11593	0.123309	0.20158
ATM	-0.18235	0.014843	0.034526
ATN1	-0.20088	0.007174	0.01859
ATOH1	-0.09917	0.187819	0.282858
ATOH7	-0.09961	0.185889	0.280422
ATOH8	-0.31783	1.54E-05	9.45E-05
ATOX1	0.111881	0.137058	0.219768
ATP10A	0.260941	0.000435	0.001688
ATP10B	0.317359	1.59E-05	9.69E-05
ATP10D	-0.31295	2.11E-05	0.000124
ATP11A	0.11441	0.128343	0.208295
ATP11B	0.231585	0.001869	0.005885
ATP11C	0.047696	0.527247	0.632359
ATP12A	-0.04179	0.579646	0.678541
ATP13A1	-0.0325	0.666752	0.754124
ATP13A2	-0.10797	0.151423	0.238149
ATP13A3	-0.11944	0.112285	0.187558
ATP13A4	-0.0596	0.429382	0.541251
ATP13A5	-0.04222	0.575748	0.675057
ATP1A1	0.10789	0.151719	0.238538
ATP1A2	-0.1644	0.028315	0.059622
ATP1A3	-0.26784	0.000301	0.00123
ATP1A4	-0.06209	0.410297	0.522355
ATP1B1	0.184436	0.01372	0.03232
ATP1B2	-0.31651	1.68E-05	0.000101
ATP1B3	0.392795	5.85E-08	7.31E-07
ATP1B4	0.018004	0.811469	0.866601
ATP2A1	0.309021	2.70E-05	0.000154
ATP2A2	-0.24058	0.001217	0.004068
ATP2A3	-0.33834	3.85E-06	2.82E-05
ATP2B1	-0.44661	4.14E-10	9.86E-09
ATP2B2	-0.31558	1.78E-05	0.000107
ATP2B3	-0.31345	2.04E-05	0.000121
ATP2B4	0.250011	0.000764	0.002732
ATP2C1	0.176594	0.018372	0.041296
ATP2C2	0.239322	0.001294	0.004291

ATP4A	-0.20134	0.007039	0.018332
ATP4B	-0.09768	0.194594	0.291204
ATP5A1	-0.39606	4.44E-08	5.73E-07
ATP5B	-0.13613	0.07	0.127281
ATP5C1	0.192975	0.009858	0.024394
ATP5D	0.139968	0.062401	0.115491
ATP5EP2	-0.06474	0.390557	0.50325
ATP5E	0.091171	0.226153	0.328651
ATP5F1	0.028184	0.708817	0.787905
ATP5G1	0.034516	0.647385	0.737232
ATP5G2	0.003133	0.966897	0.977426
ATP5G3	0.205103	0.006026	0.01603
ATP5H	0.209249	0.00506	0.013835
ATP5I	0.084378	0.262793	0.369776
ATP5J2	0.202744	0.006645	0.017464
ATP5J	0.015208	0.840322	0.887161
ATP5L2	0.021499	0.775768	0.840596
ATP5L	0.054366	0.47106	0.581143
ATP5O	0.239833	0.001262	0.0042
ATP5SL	0.125353	0.095471	0.164203
ATP5S	-0.22415	0.002631	0.007892
ATP6AP1L	0.063592	0.399058	0.511637
ATP6AP1	-0.35969	8.18E-07	7.30E-06
ATP6AP2	-0.25855	0.000493	0.00188
ATP6VOA1	-0.29261	7.38E-05	0.000365
ATP6VOA2	-0.2075	0.005449	0.014717
ATP6VOA4	-0.01367	0.856273	0.899726
ATP6VOB	-0.08822	0.241626	0.346099
ATP6VOC	0.171189	0.022328	0.048705
ATP6VOD1	-0.11936	0.11254	0.187861
ATP6VOD2	0.160151	0.032725	0.067366
ATP6VOE1	0.174015	0.020177	0.044743
ATP6VOE2	-0.34599	2.24E-06	1.75E-05
ATP6V1A	-0.193	0.009848	0.024374
ATP6V1B1	0.27548	0.000198	0.000858
ATP6V1B2	-0.3012	4.40E-05	0.000235
ATP6V1C1	-0.34012	3.40E-06	2.54E-05
ATP6V1C2	-0.0023	0.975717	0.983325
ATP6V1D	0.106836	0.155785	0.243844
ATP6V1E1	0.066613	0.376995	0.489636
ATP6V1E2	-0.21481	0.003984	0.011285
ATP6V1F	0.141087	0.060316	0.112073
ATP6V1G1	-0.32035	1.30E-05	8.18E-05
ATP6V1G2	-0.29291	7.25E-05	0.000359
ATP6V1G3	0.047461	0.529283	0.633768
ATP6V1H	-0.06037	0.423445	0.53568
ATP7A	-0.17571	0.018974	0.042482
ATP7B	0.134511	0.073437	0.13235
ATP8A1	-0.31529	1.81E-05	0.000109
ATP8A2	-0.37442	2.62E-07	2.71E-06
ATP8B1	0.068383	0.364422	0.477699
ATP8B2	-0.35367	1.28E-06	1.07E-05
ATP8B3	0.295188	6.33E-05	0.00032
ATP8B4	-0.11895	0.113781	0.189418

ATP8B5P	0.276448	0.000187	0.000818
ATP9A	-0.41044	1.27E-08	1.94E-07
ATP9B	-0.37978	1.71E-07	1.87E-06
ATPAF1	-0.31728	1.59E-05	9.73E-05
ATPAF2	-0.20097	0.007149	0.018534
ATPBD4	0.171897	0.021771	0.047643
ATPIF1	0.126026	0.093691	0.161619
ATRIP	0.024423	0.746241	0.817335
ATRNL1	-0.36276	6.48E-07	5.98E-06
ATRN	-0.49841	1.45E-12	6.51E-11
ATRX	-0.20262	0.006678	0.017537
ATR	0.089001	0.237442	0.341421
ATXN10	-0.27899	0.000162	0.000724
ATXN1L	-0.20377	0.006368	0.016828
ATXN1	-0.08675	0.249564	0.355052
ATXN2L	0.212983	0.004312	0.012053
ATXN2	-0.15796	0.035217	0.071652
ATXN3L	0.087213	0.247038	0.352118
ATXN3	0.020024	0.790779	0.852002
ATXN7L1	-0.10793	0.151564	0.238335
ATXN7L2	-0.101	0.179769	0.273074
ATXN7L3B	-0.18224	0.014903	0.034651
ATXN7L3	0.191319	0.010521	0.025808
ATXN7	-0.1752	0.019328	0.043132
ATXN8OS	-0.05732	0.447236	0.558417
AUH	-0.33768	4.04E-06	2.94E-05
AUP1	0.376605	2.20E-07	2.33E-06
AURKAIP1	0.156811	0.036589	0.073978
AURKAPS1	0.068513	0.363502	0.476777
AURKA	0.229695	0.002041	0.00634
AURKB	0.315539	1.78E-05	0.000107
AURKC	0.040556	0.590925	0.688606
AUTS2	-0.09476	0.208326	0.307903
AVEN	0.224051	0.002643	0.007923
AVIL	-0.00697	0.92647	0.948943
AVL9	0.091942	0.222234	0.324337
AVPI1	0.38557	1.07E-07	1.23E-06
AVPRIA	-0.09578	0.203444	0.302133
AVPR1B	-0.28527	0.000114	0.000532
AVPR2	-0.01495	0.842948	0.889079
AWAT1	-0.21339	0.004237	0.011881
AWAT2	-0.12991	0.08392	0.14786
AXIN1	0.24788	0.00085	0.002989
AXIN2	-0.11255	0.13472	0.216775
AXL	0.302093	4.16E-05	0.000224
AZGP1	0.121521	0.106123	0.179265
AZI1	0.078143	0.299829	0.409931
AZI2	-0.31965	1.37E-05	8.51E-05
AZIN1	-0.04692	0.533961	0.637805
AZU1	0.172196	0.021539	0.047201
B2M	0.32374	1.04E-05	6.75E-05
B3GALNT1	0.015409	0.838242	0.885817
B3GALNT2	-0.33487	4.90E-06	3.50E-05
B3GALT1	-0.38379	1.24E-07	1.40E-06

B3GALT2	-0.28557	0.000112	0.000524
B3GALT4	0.384477	1.17E-07	1.34E-06
B3GALT5	0.347561	2.00E-06	1.59E-05
B3GALT6	-0.05105	0.498574	0.606024
B3GALTL	0.220913	0.003044	0.008955
B3GAT1	-0.31554	1.78E-05	0.000107
B3GAT2	0.036012	0.633195	0.725002
B3GAT3	0.061146	0.417479	0.529895
B3GNT1	-0.39087	6.88E-08	8.41E-07
B3GNT2	0.191346	0.01051	0.025785
B3GNT3	0.529851	2.85E-14	1.89E-12
B3GNT4	0.079939	0.288822	0.398175
B3GNT5	0.275204	0.000201	0.00087
B3GNT6	0.281106	0.000144	0.000653
B3GNT7	0.34901	1.80E-06	1.45E-05
B3GNT8	-0.06534	0.386205	0.498943
B3GNT9	0.049576	0.511072	0.617323
B3GNTL1	0.295518	6.21E-05	0.000315
B4GALNT1	0.053665	0.476802	0.586373
B4GALNT2	-0.16036	0.032492	0.066976
B4GALNT3	0.11309	0.132838	0.214184
B4GALNT4	-0.22161	0.00295	0.008723
B4GALT1	0.247006	0.000888	0.003104
B4GALT2	0.223944	0.002656	0.007956
B4GALT3	0.025079	0.739674	0.812347
B4GALT4	0.416593	7.29E-09	1.20E-07
B4GALT5	0.285171	0.000114	0.000534
B4GALT6	-0.4367	1.10E-09	2.29E-08
B4GALT7	0.041365	0.583541	0.682169
B9D1	-0.38535	1.09E-07	1.25E-06
B9D2	-0.01756	0.816055	0.869761
BAALC	-0.10273	0.172387	0.264186
BAAT	0.069029	0.359892	0.473014
BACE1	-0.38881	8.17E-08	9.79E-07
BACE2	0.36449	5.68E-07	5.32E-06
BACH1	0.122722	0.10269	0.174464
BACH2	-0.23764	0.001403	0.004598
BAD	0.331343	6.25E-06	4.33E-05
BAG1	0.125982	0.093808	0.161788
BAG2	-0.18034	0.016002	0.036807
BAG3	0.310518	2.46E-05	0.000141
BAG4	0.032793	0.663891	0.75202
BAG5	-0.07793	0.301158	0.411349
BAGE2	-0.27115	0.000251	0.001053
BAGE	-0.072	0.339568	0.451828
BAHCC1	-0.14582	0.052125	0.099404
BAHD1	-0.22147	0.002969	0.00877
BAI1	0.121647	0.105759	0.178741
BAI2	0.114707	0.12735	0.207005
BAI3	-0.3533	1.32E-06	1.10E-05
BAIAP2L1	0.50334	8.02E-13	3.74E-11
BAIAP2L2	0.322125	1.16E-05	7.41E-05
BAIAP2	0.24132	0.001174	0.003943
BAIAP3	-0.08004	0.288226	0.397477

BAK1	0.387064	9.44E-08	1.11E-06
BAMBI	-0.11908	0.113367	0.188857
BANF1	0.266681	0.00032	0.001298
BANF2	-0.20896	0.005124	0.013988
BANK1	0.189596	0.011253	0.027323
BANP	-0.02469	0.743582	0.815238
BAP1	-0.00936	0.901333	0.931092
BARD1	0.048844	0.517334	0.623234
BARHL1	-0.03932	0.60229	0.698598
BARHL2	-0.04565	0.545167	0.647961
BARX1	0.229085	0.002099	0.006506
BARX2	0.345114	2.39E-06	1.85E-05
BASE	-0.15607	0.037498	0.075455
BASP1	0.058145	0.440747	0.552556
BAT1	0.08625	0.252315	0.358193
BAT2L1	-0.48965	4.03E-12	1.61E-10
BAT2L2	0.054301	0.471594	0.581632
BAT2	-0.23028	0.001986	0.006197
BAT3	-0.02211	0.769595	0.835969
BAT4	-0.11679	0.120555	0.198123
BAT5	-0.23946	0.001285	0.004268
BATF2	0.319268	1.40E-05	8.71E-05
BATF3	-0.0485	0.520307	0.6259
BATF	0.583126	1.34E-17	2.08E-15
BAX	0.195037	0.009084	0.022716
BAZ1A	0.279377	0.000159	0.000711
BAZ1B	-0.3498	1.70E-06	1.38E-05
BAZ2A	-0.15541	0.038323	0.076847
BAZ2B	-0.08738	0.246127	0.351098
BBC3	0.368816	4.07E-07	3.98E-06
BBOX1	0.065055	0.388281	0.500888
BBS10	-0.29953	4.87E-05	0.000257
BBS12	-0.15114	0.044028	0.086474
BBS1	-0.13197	0.079082	0.140772
BBS2	-0.05556	0.461396	0.5717
BBS4	-0.22728	0.002281	0.006989
BBS5	-0.35162	1.49E-06	1.22E-05
BBS7	-0.16254	0.030181	0.06298
BBS9	-0.20815	0.005301	0.014395
BBX	-0.15734	0.035949	0.072912
BCAM	-0.15737	0.035919	0.072863
BCAN	0.208661	0.005188	0.01413
BCAP29	-0.14705	0.050145	0.09622
BCAP31	0.161468	0.031302	0.064894
BCAR1	0.349162	1.78E-06	1.43E-05
BCAR3	0.31512	1.83E-05	0.00011
BCAR4	-0.03944	0.601213	0.697552
BCAS1	0.437639	1.01E-09	2.13E-08
BCAS2	-0.09775	0.194273	0.29085
BCAS3	-0.13906	0.064134	0.11807
BCAS4	0.24697	0.000889	0.003109
BCAT1	0.109047	0.147352	0.232913
BCAT2	-0.08637	0.251672	0.357557
BCCIP	0.08536	0.257261	0.363622

BCDIN3D	-0.29927	4.95E-05	0.00026
BCHE	-0.10654	0.156925	0.245125
BCKDHA	-0.16198	0.030757	0.063999
BCKDHB	-0.28925	9.01E-05	0.000434
BCKDK	0.187818	0.012055	0.028985
BCL10	0.437761	9.93E-10	2.11E-08
BCL11A	-0.31262	2.15E-05	0.000126
BCL11B	0.182242	0.014904	0.034651
BCL2A1	0.190937	0.01068	0.026136
BCL2L10	-0.08861	0.23952	0.343827
BCL2L11	-0.23528	0.00157	0.00507
BCL2L12	0.412631	1.04E-08	1.64E-07
BCL2L13	-0.18539	0.013231	0.031354
BCL2L14	0.403956	2.25E-08	3.18E-07
BCL2L15	0.506583	5.41E-13	2.70E-11
BCL2L1	0.513224	2.39E-13	1.30E-11
BCL2L2	-0.33569	4.63E-06	3.33E-05
BCL2	-0.25094	0.000729	0.002622
BCL3	0.313627	2.02E-05	0.000119
BCL6B	-0.19373	0.009568	0.023778
BCL6	0.246079	0.00093	0.003224
BCL7A	-0.24201	0.001135	0.003834
BCL7B	0.073217	0.331418	0.443551
BCL7C	0.411421	1.16E-08	1.80E-07
BCL8	-0.12939	0.085192	0.149688
BCL9L	0.408707	1.48E-08	2.20E-07
BCL9	-0.28738	0.0001	0.000477
BCLAF1	-0.38747	9.13E-08	1.08E-06
BCM01	0.301331	4.36E-05	0.000234
BCO2	0.118055	0.116543	0.192896
BCORL1	0.00136	0.985621	0.989849
BCORL2	-0.00919	0.903062	0.932245
BCOR	-0.41775	6.56E-09	1.10E-07
BCR	0.172316	0.021447	0.047053
BCS1L	0.274434	0.00021	0.000901
BCYRN1	-0.04236	0.574548	0.67417
BDH1	0.073613	0.328805	0.440754
BDH2	0.457515	1.36E-10	3.69E-09
BDKRB1	0.07864	0.296755	0.406649
BDKRB2	0.022766	0.762928	0.831192
BDNFOS	-0.14056	0.061282	0.113634
BDNF	0.148561	0.047807	0.092544
BDP1	-0.20794	0.005349	0.014505
BEAN	0.564904	2.15E-16	2.40E-14
BECN1	0.08133	0.280491	0.388868
BEGAIN	-0.11604	0.122952	0.201129
BEND2	-0.2348	0.001606	0.005167
BEND3	-0.42026	5.22E-09	8.98E-08
BEND4	-0.28542	0.000113	0.000528
BEND5	-0.214	0.004127	0.011632
BEND6	-0.01356	0.857394	0.900569
BEND7	0.078986	0.29463	0.404528
BEST1	-0.18436	0.013758	0.032384
BEST2	-0.07351	0.329496	0.441516

BEST3	0.046762	0.535369	0.639005
BEST4	0.411799	1.12E-08	1.75E-07
BET1L	-0.01953	0.795858	0.855892
BET1	-0.1924	0.010084	0.024875
BET3L	0.026248	0.727997	0.803091
BEX1	-0.23275	0.00177	0.005619
BEX2	-0.30454	3.58E-05	0.000196
BEX4	-0.32534	9.37E-06	6.14E-05
BEX5	-0.21458	0.004024	0.011385
BFAR	0.365982	5.07E-07	4.81E-06
BFSP1	0.015948	0.832665	0.881242
BFSP2	-0.03924	0.60306	0.699203
BGLAP	0.043801	0.561555	0.662466
BGN	0.241663	0.001155	0.003891
BHLHA15	-0.25884	0.000485	0.001855
BHLHB9	-0.49288	2.77E-12	1.16E-10
BHLHE22	-0.12249	0.103332	0.175359
BHLHE23	0.052797	0.483976	0.593019
BHLHE40	0.449442	3.11E-10	7.72E-09
BHLHE41	0.210688	0.004759	0.013133
BHMT2	-0.04444	0.555854	0.657345
BHMT	-0.15171	0.043233	0.085139
BICC1	0.059196	0.432511	0.544293
BICD1	0.102187	0.174689	0.26703
BICD2	-0.12936	0.085269	0.149771
BID	0.369719	3.79E-07	3.75E-06
BIK	0.574675	4.95E-17	6.80E-15
BIN1	0.225678	0.002455	0.007443
BIN2	0.002639	0.972114	0.981223
BIN3	0.359371	8.38E-07	7.44E-06
BIRC2	0.06543	0.385543	0.498292
BIRC3	0.391476	6.54E-08	8.04E-07
BIRC5	0.372518	3.05E-07	3.10E-06
BIRC6	-0.19383	0.009529	0.023692
BIRC7	0.510834	3.21E-13	1.71E-11
BIRC8	0.097845	0.19383	0.290341
BIVM	-0.21601	0.003781	0.010784
BLCAP	0.253355	0.000644	0.002354
BLID	0.117117	0.119497	0.196777
BLK	-0.06269	0.405771	0.51826
BLMH	-0.41514	8.32E-09	1.35E-07
BLM	0.0818	0.27771	0.385852
BLNK	0.19416	0.009406	0.023431
BLOC1S1	0.069047	0.359766	0.47288
BLOC1S2	-0.01536	0.838792	0.886209
BLOC1S3	0.176865	0.018191	0.040965
BLVRA	0.154727	0.039188	0.078353
BLVRB	0.514755	1.97E-13	1.09E-11
BLZF1	0.329856	6.91E-06	4.70E-05
BMF	-0.03723	0.621788	0.715838
BMI1	-0.2028	0.00663	0.017434
BMP10	-0.08734	0.24632	0.351247
BMP15	-0.06847	0.363828	0.47711
BMP1	0.331586	6.15E-06	4.27E-05

BMP2K	-0.19047	0.010878	0.026552
BMP2	0.252674	0.000667	0.002425
BMP3	0.104664	0.164414	0.254431
BMP4	0.513851	2.21E-13	1.21E-11
BMP5	-0.13472	0.07299	0.131653
BMP6	-0.36382	5.98E-07	5.55E-06
BMP7	0.076784	0.308339	0.418783
BMP8A	0.132231	0.078495	0.139972
BMP8B	-0.02959	0.695004	0.776617
BMPER	-0.30807	2.87E-05	0.000162
BMPR1A	-0.1742	0.020046	0.044483
BMPR1B	0.099918	0.184506	0.278697
BMPR2	0.01648	0.827169	0.877588
BMS1P4	-0.05088	0.49997	0.607162
BMS1P5	0.096542	0.19986	0.297605
BMS1	0.17892	0.016867	0.038448
BMX	0.056115	0.456886	0.56792
BNC1	-0.22461	0.002576	0.007757
BNC2	0.06454	0.392053	0.50475
BNIP1	-0.19805	0.008049	0.020556
BNIP2	0.231243	0.001899	0.005965
BNIP3L	0.051399	0.49564	0.603534
BNIP3	-0.37272	3.00E-07	3.06E-06
BNIPL	0.067067	0.373742	0.486817
BOC	-0.13275	0.077315	0.138155
BOD1L	-0.24573	0.000946	0.003272
BOD1	-0.22414	0.002632	0.007894
BOK	0.42395	3.70E-09	6.68E-08
BOLA1	0.11715	0.119391	0.196687
BOLA2	0.345262	2.36E-06	1.84E-05
BOLA3	0.085284	0.257684	0.364012
BOLL	-0.04686	0.534492	0.638151
BOP1	0.131995	0.079033	0.140705
BPESC1	0.031292	0.678398	0.763671
BPGM	0.065754	0.38319	0.496052
BPHL	-0.00877	0.907472	0.935531
BPIL1	-0.1732	0.020777	0.045833
BPIL2	-0.03516	0.641257	0.732325
BPI	0.249339	0.00079	0.002816
BPNT1	0.399788	3.23E-08	4.33E-07
BPTF	-0.39587	4.51E-08	5.82E-07
BPY2	0.067825	0.368358	0.481867
BRAF	-0.14888	0.047329	0.091815
BRAP	-0.35841	9.00E-07	7.92E-06
BRCA1	0.08304	0.270468	0.378261
BRCA2	0.159635	0.033299	0.06841
BRCC3	0.096882	0.198271	0.295694
BRD1	-0.19558	0.008888	0.022295
BRD2	-0.32235	1.14E-05	7.31E-05
BRD3	-0.27939	0.000159	0.000711
BRD4	-0.05964	0.429097	0.54108
BRD7P3	-0.08228	0.274871	0.382795
BRD7	0.084589	0.261601	0.368414
BRD8	-0.31035	2.49E-05	0.000143

BRD9	0.083858	0.265758	0.373205
BRDT	-0.1434	0.056188	0.105866
BREA2	0.217923	0.003476	0.010006
BRE	0.192576	0.010014	0.024729
BRF1	-0.17806	0.01741	0.039481
BRF2	-0.06736	0.371662	0.484683
BRI3BP	-0.09942	0.186706	0.281482
BRI3	0.463333	7.39E-11	2.15E-09
BRIP1	0.128723	0.08682	0.152021
BRIX1	0.060992	0.418654	0.530943
BRMS1L	-0.28776	9.83E-05	0.000468
BRMS1	0.303568	3.80E-05	0.000207
BRP44L	-0.19782	0.008125	0.020716
BRP44	-0.09622	0.20135	0.299428
BRPF1	-0.11516	0.125839	0.205114
BRPF3	-0.4674	4.79E-11	1.48E-09
BRS3	-0.18762	0.012149	0.029165
BRSK1	-0.21045	0.004808	0.013249
BRSK2	-0.40253	2.55E-08	3.54E-07
BRWD1	-0.15552	0.038178	0.07662
BRWD3	-0.10342	0.169523	0.260786
BSCL2	-0.14737	0.049639	0.095427
BSDC1	-0.24438	0.001011	0.003465
BSG	0.169243	0.023921	0.051678
BSND	-0.04692	0.533957	0.637805
BSN	-0.40605	1.87E-08	2.71E-07
BSPRY	0.02825	0.708166	0.787453
BST1	0.241297	0.001176	0.003946
BST2	0.399082	3.43E-08	4.57E-07
BSX	0.018461	0.80678	0.86322
BTAF1	-0.16425	0.028463	0.05987
BTBD10	0.451946	2.41E-10	6.10E-09
BTBD11	-0.08746	0.245684	0.350541
BTBD12	-0.13111	0.081075	0.143796
BTBD16	0.446766	4.08E-10	9.73E-09
BTBD17	-0.28075	0.000147	0.000665
BTBD18	-0.09212	0.221348	0.323284
BTBD19	0.088189	0.241768	0.346253
BTBD1	-0.19865	0.007857	0.020117
BTBD2	0.119849	0.111055	0.18596
BTBD3	-0.52306	6.88E-14	4.22E-12
BTBD6	-0.19313	0.009798	0.024268
BTBD7	-0.15423	0.039833	0.079401
BTBD8	-0.14993	0.045764	0.08927
BTBD9	-0.41079	1.23E-08	1.88E-07
BTC	-0.06231	0.40863	0.520803
BTD	-0.19925	0.007667	0.0197
BTF3L1	0.044197	0.558018	0.659161
BTF3L4	-0.16707	0.025811	0.055111
BTF3	0.288007	9.68E-05	0.000462
BTG1	-0.29062	8.31E-05	0.000404
BTG2	-0.26977	0.000271	0.001124
BTG3	0.087978	0.242901	0.347574
BTG4	0.119313	0.112673	0.188017

BTK	0.069393	0.357359	0.470529
BTLA	-0.12862	0.087081	0.152357
BTN1A1	0.018663	0.804702	0.861887
BTN2A1	0.004703	0.950318	0.966397
BTN2A2	0.012408	0.869429	0.909971
BTN2A3	0.234116	0.001659	0.005319
BTN3A1	0.042721	0.571253	0.671139
BTN3A2	0.105146	0.16247	0.25198
BTN3A3	0.032943	0.662452	0.750849
BTNL2	-0.11672	0.120759	0.198297
BTNL3	0.161271	0.03151	0.065245
BTNL8	0.181206	0.015494	0.0358
BTNL9	-0.17568	0.018998	0.04252
BTRC	-0.40223	2.61E-08	3.61E-07
BUB1B	0.357672	9.51E-07	8.29E-06
BUB1	0.342559	2.86E-06	2.18E-05
BUB3	0.21887	0.003333	0.009655
BUD13	0.110567	0.141761	0.225769
BUD31	0.186152	0.012851	0.030591
BVES	-0.32528	9.41E-06	6.16E-05
BYSL	-0.03582	0.63502	0.726714
BZRAP1	-0.191	0.010653	0.026078
BZW1	0.213834	0.004157	0.011697
BZW2	0.335923	4.56E-06	3.28E-05
C10orf105	-0.15519	0.038597	0.077327
C10orf107	-0.09073	0.228402	0.331286
C10orf108	-0.0598	0.427841	0.539962
C10orf10	0.028268	0.70799	0.787346
C10orf110	0.095086	0.206759	0.306022
C10orf111	-0.22578	0.002443	0.00741
C10orf113	0.114165	0.12917	0.20943
C10orf114	-0.1153	0.125389	0.204473
C10orf116	0.430467	2.01E-09	3.87E-08
C10orf118	-0.21067	0.004764	0.013144
C10orf119	0.04917	0.514545	0.620555
C10orf11	0.020806	0.782809	0.845815
C10orf120	-0.18451	0.013682	0.032254
C10orf125	0.207903	0.005357	0.01452
C10orf128	-0.08329	0.269042	0.376666
C10orf129	-0.19526	0.009002	0.022538
C10orf12	0.141979	0.058694	0.109584
C10orf131	-0.1139	0.130072	0.210581
C10orf137	-0.27805	0.000171	0.000758
C10orf140	-0.28782	9.79E-05	0.000466
C10orf18	-0.22156	0.002957	0.008741
C10orf25	-0.1665	0.026332	0.056085
C10orf26	0.10889	0.14794	0.2336
C10orf27	0.013253	0.860621	0.903095
C10orf28	0.118512	0.115126	0.191111
C10orf2	-0.13295	0.076875	0.137502
C10orf32	-0.29817	5.29E-05	0.000275
C10orf35	0.058118	0.440958	0.552742
C10orf40	0.024709	0.743373	0.815142
C10orf41	-0.01455	0.847096	0.892502

C10orf46	0.051548	0.494389	0.602564
C10orf47	0.464461	6.55E-11	1.95E-09
C10orf4	-0.13511	0.072162	0.13054
C10orf50	-0.00534	0.94361	0.961999
C10orf53	-0.31436	1.93E-05	0.000115
C10orf54	0.233959	0.001671	0.005349
C10orf55	0.440006	7.97E-10	1.74E-08
C10orf57	0.041361	0.583573	0.682169
C10orf58	0.118574	0.114936	0.190859
C10orf62	-0.09174	0.223275	0.325449
C10orf67	0.022037	0.770306	0.836557
C10orf68	-0.12319	0.101382	0.172569
C10orf71	-0.2599	0.000459	0.001765
C10orf72	-0.01094	0.884811	0.919946
C10orf75	-0.24016	0.001243	0.004144
C10orf76	-0.18477	0.013545	0.031992
C10orf78	0.413225	9.89E-09	1.56E-07
C10orf79	-0.21557	0.003854	0.010959
C10orf81	0.232692	0.001774	0.005629
C10orf82	-0.07606	0.312962	0.423841
C10orf84	-0.00686	0.927539	0.949925
C10orf88	-0.258	0.000507	0.001924
C10orf90	-0.05328	0.479953	0.589504
C10orf91	0.291566	7.86E-05	0.000385
C10orf93	-0.26797	0.000299	0.001224
C10orf95	0.100778	0.180739	0.27418
C10orf96	0.077306	0.305053	0.415484
C10orf99	0.247247	0.000877	0.003073
C11orf10	0.161089	0.031706	0.065565
C11orf16	-0.15853	0.034549	0.070496
C11orf17	0.18426	0.013811	0.032485
C11orf1	0.277108	0.000181	0.000792
C11orf20	0.040961	0.587226	0.685697
C11orf21	-0.06246	0.407559	0.519772
C11orf24	0.141711	0.059178	0.11029
C11orf2	-0.05427	0.471844	0.581835
C11orf30	-0.22958	0.002052	0.00637
C11orf31	0.306714	3.13E-05	0.000175
C11orf34	-0.05299	0.482354	0.591599
C11orf35	0.241916	0.001141	0.003851
C11orf36	-0.19512	0.009053	0.022652
C11orf41	0.229409	0.002068	0.006414
C11orf42	0.001184	0.987491	0.99115
C11orf45	0.131606	0.079929	0.142107
C11orf46	-0.26086	0.000437	0.001693
C11orf48	0.341875	3.00E-06	2.27E-05
C11orf49	0.122658	0.10287	0.174696
C11orf51	-0.02	0.790976	0.852079
C11orf52	0.127655	0.089492	0.155667
C11orf53	0.249661	0.000777	0.002778
C11orf54	0.074127	0.325428	0.437518
C11orf57	-0.05765	0.44465	0.556266
C11orf58	-0.2812	0.000143	0.000651
C11orf59	0.255574	0.000575	0.002142

C11orf61 0.133118 0.076495 0.136974
C11orf63 0.031483 0.676549 0.76237
C11orf65 -0.10142 0.177982 0.270807
C11orf66 0.039166 0.603723 0.699849
C11orf67 0.267585 0.000305 0.001245
C11orf68 0.38536 1.09E-07 1.25E-06
C11orf70 0.052352 0.487668 0.596361
C11orf71 -0.17627 0.018592 0.041726
C11orf73 0.269917 0.000269 0.001116
C11orf74 0.17921 0.016687 0.03813
C11orf75 0.190086 0.011041 0.026884
C11orf80 0.515394 1.82E-13 1.02E-11
C11orf82 0.258545 0.000493 0.00188
C11orf83 0.23636 0.001491 0.004843
C11orf84 -0.11695 0.120024 0.197401
C11orf85 -0.00667 0.92959 0.951325
C11orf86 0.555619 8.29E-16 7.80E-14
C11orf87 -0.03572 0.635946 0.727563
C11orf88 -0.054 0.474063 0.583839
C11orf90 0.259737 0.000463 0.001777
C11orf92 0.060191 0.424802 0.537052
C11orf93 0.087237 0.246909 0.351985
C11orf94 -0.00487 0.948523 0.965182
C11orf95 -0.22341 0.002721 0.008127
C11orf9 0.451314 2.57E-10 6.47E-09
C12orf10 -0.05978 0.427945 0.540024
C12orf11 -0.02909 0.699912 0.780777
C12orf12 -0.05845 0.438381 0.550105
C12orf23 -0.41392 9.29E-09 1.48E-07
C12orf24 -0.33723 4.16E-06 3.03E-05
C12orf26 -0.23413 0.001658 0.005316
C12orf27 -0.08599 0.25376 0.359925
C12orf29 -0.39445 5.09E-08 6.48E-07
C12orf32 -0.02246 0.766021 0.833335
C12orf34 -0.50545 6.21E-13 3.01E-11
C12orf35 0.250864 0.000731 0.002631
C12orf36 0.512267 2.69E-13 1.45E-11
C12orf39 -0.33443 5.06E-06 3.60E-05
C12orf40 0.006811 0.928101 0.950205
C12orf41 -0.27188 0.000241 0.001016
C12orf42 -0.24178 0.001149 0.003873
C12orf43 -0.12418 0.098624 0.168659
C12orf44 -0.06048 0.422587 0.5348
C12orf45 0.22207 0.00289 0.008567
C12orf47 0.119755 0.111336 0.186322
C12orf48 0.135061 0.072258 0.130671
C12orf49 -0.09498 0.207273 0.306622
C12orf4 -0.26784 0.000301 0.00123
C12orf50 -0.09674 0.198945 0.296543
C12orf51 -0.33655 4.36E-06 3.16E-05
C12orf52 -0.24896 0.000805 0.002862
C12orf53 0.092084 0.221518 0.323484
C12orf54 0.020354 0.787413 0.849295
C12orf56 0.307545 2.97E-05 0.000167

C12orf57	-0.21661	0.003683	0.010534
C12orf59	0.097097	0.197273	0.294469
C12orf5	-0.14862	0.047716	0.092387
C12orf60	-0.1291	0.085889	0.150631
C12orf61	-0.11963	0.111705	0.186812
C12orf62	-0.12166	0.105718	0.178688
C12orf63	-0.28546	0.000112	0.000527
C12orf65	-0.3761	2.29E-07	2.42E-06
C12orf66	-0.27215	0.000238	0.001005
C12orf68	-0.11913	0.11324	0.188692
C12orf69	-0.04595	0.542498	0.645565
C12orf70	0.432132	1.71E-09	3.38E-08
C12orf71	-0.0694	0.357283	0.470461
C12orf72	-0.36307	6.33E-07	5.85E-06
C12orf73	-0.16959	0.023633	0.05118
C12orf74	-0.13361	0.075403	0.135387
C12orf75	0.055555	0.461402	0.5717
C12orf76	-0.23493	0.001597	0.005145
C12orf77	-0.01214	0.872265	0.911637
C13orf15	-0.08558	0.25605	0.362455
C13orf16	0.095019	0.207082	0.306431
C13orf18	-0.03514	0.641416	0.732422
C13orf1	-0.04562	0.545366	0.64812
C13orf23	0.01601	0.832023	0.881025
C13orf26	-0.0475	0.528904	0.63354
C13orf27	-0.12633	0.092891	0.160506
C13orf29	0.230254	0.001988	0.0062
C13orf30	-0.08731	0.246536	0.351528
C13orf31	0.032665	0.665119	0.752881
C13orf33	-0.16925	0.023915	0.051674
C13orf34	0.26773	0.000303	0.001236
C13orf35	-0.07402	0.32616	0.438174
C13orf36	-0.25013	0.000759	0.002719
C13orf37	0.150291	0.045242	0.088471
C13orf38	0.040422	0.592153	0.689509
C13orf39	-0.02588	0.731647	0.805959
C14orf101	-0.2507	0.000737	0.00265
C14orf102	-0.36185	6.94E-07	6.35E-06
C14orf104	-0.27634	0.000189	0.000823
C14orf105	0.196476	0.008576	0.021662
C14orf106	-0.10092	0.180108	0.27347
C14orf109	-0.18918	0.011436	0.027699
C14orf115	0.09999	0.184189	0.278366
C14orf118	-0.03699	0.623959	0.71771
C14orf119	0.364118	5.84E-07	5.45E-06
C14orf126	-0.3311	6.35E-06	4.38E-05
C14orf128	0.083175	0.269686	0.377407
C14orf129	0.254726	0.000601	0.002219
C14orf132	-0.34817	1.91E-06	1.53E-05
C14orf135	-0.20983	0.004937	0.013549
C14orf138	0.038023	0.614334	0.709445
C14orf139	-0.18874	0.011632	0.028092
C14orf142	-0.22334	0.00273	0.008149
C14orf143	0.149602	0.04625	0.090021

C14orf145 -0.14564 0.052417 0.099855
C14orf147 -0.15892 0.03411 0.069774
C14orf148 -0.19532 0.008983 0.0225
C14orf149 0.002386 0.974786 0.982687
C14orf153 0.117979 0.11678 0.193175
C14orf156 0.14152 0.059525 0.110864
C14orf159 0.16975 0.023497 0.050913
C14orf162 -0.19816 0.008014 0.020472
C14orf165 -0.03041 0.686953 0.770463
C14orf166 -0.17334 0.02067 0.045653
C14orf166 0.25306 0.000654 0.002383
C14orf167 -0.18335 0.014296 0.033458
C14orf169 -0.06355 0.399372 0.511873
C14orf174 -0.35938 8.37E-07 7.43E-06
C14orf176 0.32115 1.24E-05 7.83E-05
C14orf178 -0.27785 0.000173 0.000765
C14orf179 0.068986 0.360198 0.473298
C14orf180 -0.24807 0.000842 0.002964
C14orf181 0.191288 0.010534 0.025831
C14orf182 0.296876 5.72E-05 0.000294
C14orf183 0.01869 0.804429 0.861689
C14orf184 0.196157 0.008686 0.021891
C14orf19 -0.04642 0.53839 0.64172
C14orf1 0.281181 0.000144 0.000652
C14orf21 -0.1585 0.034592 0.070576
C14orf23 0.081278 0.280797 0.38921
C14orf28 -0.00636 0.932859 0.953842
C14orf2 0.01476 0.84497 0.89069
C14orf33 -0.13916 0.063948 0.117815
C14orf34 0.452902 2.19E-10 5.59E-09
C14orf37 -0.13859 0.065054 0.119563
C14orf39 -0.19411 0.009423 0.023471
C14orf43 0.034958 0.643184 0.73379
C14orf45 -0.25769 0.000515 0.00195
C14orf48 -0.13954 0.063212 0.116676
C14orf49 -0.06842 0.364175 0.477438
C14orf4 -0.29589 6.07E-05 0.000309
C14orf50 0.266594 0.000322 0.001304
C14orf53 -0.1454 0.052806 0.10047
C14orf64 -0.20886 0.005145 0.014033
C14orf68 -0.09879 0.18955 0.284997
C14orf70 -0.12938 0.085209 0.149704
C14orf72 0.024958 0.740882 0.813132
C14orf73 0.479572 1.26E-11 4.38E-10
C14orf79 0.053735 0.476228 0.585815
C14orf80 0.252191 0.000684 0.00248
C14orf86 -0.00717 0.924345 0.947636
C14orf93 -0.23628 0.001497 0.004859
C15orf17 -0.07479 0.321085 0.432915
C15orf21 0.005547 0.941418 0.960656
C15orf23 0.220512 0.003099 0.009082
C15orf24 0.061432 0.415304 0.527608
C15orf26 -0.42138 4.70E-09 8.21E-08
C15orf27 -0.1108 0.140931 0.224704

C15orf28 0.015311 0.83925 0.886503
C15orf29 0.20613 0.005772 0.01547
C15orf2 -0.22217 0.002877 0.008532
C15orf32 0.026175 0.728724 0.803535
C15orf33 -0.41104 1.20E-08 1.85E-07
C15orf34 -0.06898 0.360204 0.473298
C15orf37 -0.20664 0.00565 0.015186
C15orf38 -0.13644 0.06936 0.126256
C15orf39 0.206373 0.005714 0.015338
C15orf40 -0.06684 0.375369 0.48839
C15orf41 0.186087 0.012883 0.030649
C15orf42 0.303871 3.73E-05 0.000203
C15orf43 0.006504 0.931336 0.9527
C15orf44 0.013406 0.859035 0.901896
C15orf48 0.372015 3.17E-07 3.21E-06
C15orf50 -0.36047 7.71E-07 6.95E-06
C15orf51 -0.02782 0.712413 0.790841
C15orf52 0.505156 6.44E-13 3.11E-11
C15orf53 -0.10814 0.150752 0.237263
C15orf54 -0.06998 0.353288 0.466132
C15orf55 0.241624 0.001157 0.003897
C15orf56 -0.01981 0.792973 0.853367
C15orf57 0.209512 0.005004 0.013706
C15orf58 0.156153 0.037393 0.075314
C15orf59 -0.11862 0.114783 0.190676
C15orf5 0.099919 0.184503 0.278697
C15orf60 -0.0119 0.87471 0.913116
C15orf61 -0.27716 0.00018 0.000791
C15orf62 0.324423 9.96E-06 6.47E-05
C15orf63 0.142912 0.057036 0.107056
C16orf11 -0.19338 0.009703 0.024074
C16orf13 0.263245 0.000385 0.001519
C16orf3 -0.00967 0.89802 0.928937
C16orf42 0.245733 0.000946 0.003272
C16orf45 -0.02556 0.734872 0.808356
C16orf46 0.025397 0.736489 0.809602
C16orf48 0.178287 0.017266 0.039217
C16orf52 -0.07256 0.335791 0.447978
C16orf53 -0.09949 0.186423 0.28112
C16orf54 -0.14263 0.057536 0.107871
C16orf55 0.126747 0.091813 0.159018
C16orf57 0.482283 9.32E-12 3.37E-10
C16orf58 0.036385 0.629681 0.722318
C16orf59 0.226786 0.002333 0.007126
C16orf5 -0.46748 4.75E-11 1.47E-09
C16orf61 0.151745 0.043177 0.085055
C16orf62 -0.05192 0.491298 0.599872
C16orf63 -0.23459 0.001623 0.005215
C16orf68 -0.02831 0.70758 0.787067
C16orf70 -0.05499 0.465968 0.576094
C16orf71 -0.18457 0.013649 0.0322
C16orf72 -0.08943 0.235164 0.339129
C16orf73 -0.22617 0.0024 0.007296
C16orf74 0.368827 4.07E-07 3.98E-06

C16orf75 0.353368 1.31E-06 1.09E-05
C16orf78 0.004146 0.956193 0.969977
C16orf79 0.059212 0.432389 0.544174
C16orf7 0.291711 7.79E-05 0.000382
C16orf80 -0.03803 0.614301 0.709445
C16orf81 0.01092 0.884972 0.920055
C16orf82 -0.04885 0.517313 0.623234
C16orf86 0.102024 0.17538 0.267796
C16orf87 0.14346 0.056081 0.105715
C16orf88 0.311021 2.38E-05 0.000138
C16orf89 -0.10644 0.157313 0.245634
C16orf90 -0.16438 0.028336 0.059653
C16orf91 0.145936 0.051928 0.099085
C16orf92 -0.22669 0.002343 0.007149
C16orf93 0.121324 0.106697 0.180111
C17orf10C -0.1975 0.008231 0.020925
C17orf101 -0.27711 0.000181 0.000792
C17orf102 -0.0991 0.188154 0.283255
C17orf103 -0.32805 7.81E-06 5.24E-05
C17orf104 -0.03125 0.678835 0.763775
C17orf105 -0.07244 0.336609 0.448857
C17orf106 0.17757 0.017727 0.040102
C17orf107 -0.40701 1.72E-08 2.51E-07
C17orf108 -0.24638 0.000916 0.003183
C17orf28 -0.00957 0.899067 0.929528
C17orf37 0.204075 0.006289 0.016649
C17orf39 -0.43098 1.91E-09 3.70E-08
C17orf42 0.048358 0.521521 0.627094
C17orf44 -0.15304 0.041403 0.082067
C17orf46 0.082273 0.274933 0.382853
C17orf47 0.11372 0.130677 0.211336
C17orf48 -0.14748 0.049464 0.095156
C17orf49 0.022503 0.765588 0.833031
C17orf50 0.393119 5.70E-08 7.13E-07
C17orf51 -0.52124 8.69E-14 5.20E-12
C17orf53 0.34067 3.27E-06 2.46E-05
C17orf54 -0.26211 0.000409 0.0016
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C17orf57 0.087592 0.24498 0.349863
C17orf58 -0.1989 0.007777 0.019933
C17orf59 -0.16732 0.025587 0.054698
C17orf60 0.274383 0.00021 0.000903
C17orf61 -0.04731 0.530625 0.634951
C17orf62 0.095848 0.203125 0.301773
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C17orf64 -0.05595 0.458251 0.568901
C17orf65 0.020351 0.787447 0.849295
C17orf66 -0.06438 0.393223 0.505861
C17orf67 0.148657 0.047661 0.092316
C17orf68 -0.43554 1.23E-09 2.52E-08
C17orf69 0.007623 0.919557 0.944279
C17orf70 0.088748 0.238783 0.342942
C17orf71 -0.29577 6.12E-05 0.000311

C17orf72 -0.11283 0.133739 0.21539
C17orf73 0.281747 0.000139 0.000634
C17orf74 0.001137 0.987977 0.991388
C17orf75 -0.15687 0.036519 0.073867
C17orf76 -0.23923 0.001299 0.004306
C17orf77 0.188744 0.011631 0.028092
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C17orf79 -0.14922 0.04682 0.090927
C17orf80 -0.41819 6.31E-09 1.06E-07
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C17orf85 -0.31688 1.64E-05 9.94E-05
C17orf86 -0.06799 0.367203 0.480801
C17orf87 -0.08355 0.267545 0.375128
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C17orf89 -0.15631 0.037203 0.075004
C17orf90 0.143764 0.055557 0.104837
C17orf91 -0.0352 0.640894 0.731957
C17orf93 0.229284 0.00208 0.006449
C17orf95 -0.089 0.237453 0.341421
C17orf96 -0.07391 0.326859 0.438934
C17orf97 -0.21813 0.003444 0.009932
C17orf98 -0.05069 0.501587 0.608677
C17orf99 0.249259 0.000793 0.002827
C18orf10 0.041032 0.586574 0.685029
C18orf16 -0.35368 1.28E-06 1.07E-05
C18orf18 -0.31081 2.42E-05 0.000139
C18orf19 0.02862 0.704518 0.784588
C18orf1 -0.121 0.107652 0.181367
C18orf20 -0.06301 0.403405 0.516072
C18orf21 -0.16031 0.032552 0.067057
C18orf22 -0.01125 0.881477 0.917683
C18orf25 -0.31878 1.45E-05 8.95E-05
C18orf26 -0.15969 0.033237 0.068325
C18orf2 -0.11027 0.142834 0.227169
C18orf32 -0.38739 9.19E-08 1.08E-06
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C18orf45 0.211032 0.00469 0.012963
C18orf54 0.007743 0.918293 0.94329
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C18orf56 0.076691 0.308927 0.419302
C18orf62 -0.0896 0.234279 0.338296
C18orf8 0.119577 0.111875 0.187001
C19orf10 0.07867 0.296572 0.406433
C19orf12 -0.15508 0.038738 0.07756
C19orf18 -0.02514 0.739032 0.811778
C19orf20 0.072891 0.333582 0.445783
C19orf21 0.605357 3.54E-19 8.46E-17
C19orf22 0.353348 1.31E-06 1.10E-05
C19orf23 -0.17871 0.017001 0.038712
C19orf24 0.183223 0.014364 0.033589
C19orf25 0.058566 0.437436 0.549058
C19orf26 -0.28416 0.000121 0.000562
C19orf28 0.05925 0.432095 0.544011

C19orf29	0.080721	0.28412	0.392991
C19orf2	-0.03759	0.618364	0.712851
C19orf30	-0.23012	0.002001	0.006234
C19orf33	0.665961	3.57E-24	3.72E-21
C19orf34	0.109848	0.144387	0.22905
C19orf35	-0.00842	0.911158	0.937714
C19orf36	0.023854	0.751957	0.822184
C19orf38	0.051353	0.496024	0.603696
C19orf39	0.010234	0.892155	0.924896
C19orf40	0.1563	0.037212	0.075004
C19orf41	-0.00031	0.996716	0.997537
C19orf42	0.121741	0.105489	0.178407
C19orf43	0.166402	0.026423	0.056242
C19orf44	-0.08555	0.256223	0.362596
C19orf45	0.027861	0.712002	0.790507
C19orf46	0.030414	0.686946	0.770463
C19orf47	0.143801	0.055493	0.104765
C19orf48	0.113774	0.130494	0.211144
C19orf50	0.279006	0.000162	0.000724
C19orf51	0.276035	0.000192	0.000835
C19orf52	0.252092	0.000687	0.002491
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C19orf54	0.390903	6.86E-08	8.40E-07
C19orf55	-0.00034	0.996355	0.997465
C19orf56	0.105336	0.161707	0.251028
C19orf57	0.066847	0.375319	0.488357
C19orf59	0.281907	0.000138	0.000629
C19orf60	0.154119	0.039975	0.079644
C19orf61	0.313983	1.97E-05	0.000117
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C19orf63	-0.18655	0.012656	0.030199
C19orf66	0.36991	3.74E-07	3.71E-06
C19orf69	-0.09325	0.215681	0.316691
C19orf6	0.132025	0.078966	0.14061
C19orf70	0.218951	0.003321	0.009626
C19orf71	-0.01201	0.87353	0.912573
C19orf73	-0.09565	0.204071	0.302905
C19orf75	-0.00284	0.969941	0.979502
C19orf76	-0.01153	0.878639	0.915926
C19orf77	0.150278	0.045261	0.0885
C1D	0.001598	0.983111	0.988159
C1GALT1C1	0.080756	0.283911	0.392793
C1GALT1	0.296938	5.70E-05	0.000293
C1QA	0.058787	0.435702	0.547195
C1QBP	-0.26935	0.000277	0.001146
C1QB	0.028412	0.706568	0.786368
C1QC	0.017972	0.811803	0.866799
C1QL1	-0.27548	0.000198	0.000858
C1QL2	-0.1275	0.089872	0.156259
C1QL3	0.049964	0.507769	0.614519
C1QL4	-0.1798	0.016328	0.03746
C1QTNF1	0.020335	0.787608	0.849376
C1QTNF2	0.060894	0.419407	0.531626
C1QTNF3	0.236898	0.001454	0.004741

C1QTNF4	0.003904	0.958754	0.971877
C1QTNF6	0.257063	0.000532	0.002006
C1QTNF7	-0.03255	0.666269	0.753664
C1QTNF8	-0.13226	0.078436	0.139881
C1QTNF9B	-0.18785	0.012038	0.028959
C1QTNF9	-0.29728	5.58E-05	0.000287
C1RL	0.148727	0.047555	0.092146
C1R	0.118123	0.116333	0.192596
C1S	0.088237	0.241512	0.345962
Clorf100	-0.00924	0.902556	0.931917
Clorf101	-0.12769	0.089393	0.155507
Clorf103	-0.05118	0.497485	0.604961
Clorf104	0.226273	0.002389	0.007264
Clorf105	0.136522	0.069199	0.125998
Clorf106	0.520757	9.24E-14	5.50E-12
Clorf107	0.116259	0.122249	0.200179
Clorf109	-0.38483	1.13E-07	1.30E-06
Clorf110	0.176934	0.018146	0.040881
Clorf111	-0.18616	0.012848	0.030586
Clorf112	0.239433	0.001287	0.004272
Clorf113	0.485137	6.75E-12	2.55E-10
Clorf114	-0.24411	0.001024	0.003505
Clorf115	0.070006	0.353122	0.465975
Clorf116	0.536068	1.25E-14	9.03E-13
Clorf122	-0.11123	0.139369	0.222732
Clorf123	0.161945	0.030798	0.064031
Clorf124	-0.13966	0.062995	0.116308
Clorf125	0.313196	2.07E-05	0.000122
Clorf126	0.318175	1.50E-05	9.26E-05
Clorf127	-0.16195	0.030789	0.064031
Clorf128	-0.14992	0.04578	0.089284
Clorf129	0.073185	0.331632	0.443807
Clorf130	0.124643	0.097379	0.166933
Clorf131	0.124708	0.097202	0.166659
Clorf133	0.346156	2.21E-06	1.74E-05
Clorf135	0.194963	0.009111	0.022772
Clorf141	-0.14173	0.059148	0.110273
Clorf144	-0.09041	0.230091	0.333394
Clorf146	-0.07558	0.31602	0.42731
Clorf14	-0.03772	0.617145	0.711611
Clorf150	-0.19122	0.010564	0.025894
Clorf151	0.062786	0.405075	0.51764
Clorf152	-0.02581	0.732345	0.806381
Clorf156	0.131843	0.079382	0.141237
Clorf157	0.031559	0.675813	0.761801
Clorf158	-0.22885	0.002122	0.006569
Clorf159	0.264278	0.000364	0.00145
Clorf161	-0.06059	0.421737	0.533989
Clorf162	0.028982	0.700961	0.781664
Clorf163	-0.11363	0.130975	0.211784
Clorf168	-0.32801	7.83E-06	5.24E-05
Clorf170	0.62121	2.22E-20	7.08E-18
Clorf172	0.187673	0.012122	0.029116
Clorf173	-0.27998	0.000154	0.000691

Clorf174	0.21447	0.004043	0.011435
Clorf175	0.263697	0.000376	0.001488
Clorf177	0.463186	7.50E-11	2.18E-09
Clorf180	0.01544	0.837916	0.885673
Clorf182	-0.04312	0.567667	0.667562
Clorf183	-0.45489	1.78E-10	4.70E-09
Clorf185	-0.03037	0.687403	0.770736
Clorf186	0.12025	0.109855	0.184325
Clorf187	0.100214	0.183206	0.277143
Clorf189	-0.04748	0.5291	0.633663
Clorf190	0.050752	0.501087	0.608219
Clorf192	-0.10551	0.161023	0.250143
Clorf194	-0.26068	0.000441	0.001707
Clorf198	0.17041	0.022955	0.049858
Clorf200	0.004994	0.947248	0.964367
Clorf201	0.015208	0.840322	0.887161
Clorf203	-0.39342	5.55E-08	6.97E-07
Clorf204	-0.06393	0.396581	0.509319
Clorf210	0.091642	0.223753	0.325954
Clorf212	0.065247	0.386881	0.49962
Clorf213	-0.00448	0.952693	0.967792
Clorf216	0.012195	0.87165	0.911292
Clorf21	-0.04823	0.522588	0.628148
Clorf220	0.111353	0.138932	0.222144
Clorf223	-0.19026	0.010966	0.026727
Clorf226	-0.03466	0.646054	0.736152
Clorf227	-0.11709	0.119592	0.196839
Clorf228	0.030884	0.682364	0.766968
Clorf229	-0.23045	0.00197	0.006155
Clorf230	-0.28092	0.000146	0.000659
Clorf25	-0.1258	0.094288	0.162465
Clorf26	-0.15866	0.0344	0.070287
Clorf27	0.05541	0.462574	0.572901
Clorf31	0.181419	0.015371	0.035566
Clorf35	0.248329	0.000831	0.002932
Clorf38	0.017421	0.817464	0.870765
Clorf43	0.099718	0.185392	0.2798
Clorf49	0.097627	0.194828	0.291482
Clorf50	0.039522	0.600434	0.69705
Clorf51	0.184016	0.013939	0.032736
Clorf52	0.031975	0.671787	0.758474
Clorf53	0.306243	3.22E-05	0.00018
Clorf54	0.186582	0.012641	0.030168
Clorf55	-0.13701	0.06821	0.124473
Clorf56	-0.12656	0.092303	0.159709
Clorf57	0.195234	0.009012	0.022561
Clorf58	-0.01524	0.839976	0.886938
Clorf59	0.244896	0.000986	0.003394
Clorf61	-0.09114	0.226298	0.328813
Clorf63	0.229757	0.002035	0.006327
Clorf64	-0.05659	0.453087	0.564048
Clorf65	0.101561	0.177356	0.27
Clorf66	0.155988	0.037597	0.075621
Clorf68	-0.06418	0.394724	0.507395

C1orf69	-0.11655	0.121312	0.198891
C1orf70	0.098462	0.191017	0.28677
C1orf74	-0.11836	0.115593	0.191756
C1orf77	0.153994	0.040139	0.079931
C1orf83	-0.04869	0.518625	0.624409
C1orf84	-0.04006	0.595485	0.692817
C1orf85	0.078598	0.297016	0.406872
C1orf86	0.168528	0.02453	0.052799
C1orf87	-0.22603	0.002416	0.007338
C1orf88	-0.28613	0.000108	0.000508
C1orf89	-0.23892	0.001319	0.004357
C1orf91	0.146816	0.050514	0.096808
C1orf92	0.079476	0.291634	0.40125
C1orf93	0.522885	7.04E-14	4.30E-12
C1orf94	0.11843	0.115379	0.191482
C1orf95	-0.21576	0.003823	0.010891
C1orf96	-0.42121	4.78E-09	8.32E-08
C1orf97	0.072935	0.333293	0.445548
C1orf9	-0.30627	3.22E-05	0.00018
C20orf103	0.318001	1.52E-05	9.35E-05
C20orf106	0.109084	0.147216	0.232733
C20orf107	0.078316	0.298757	0.408776
C20orf108	-0.25785	0.000511	0.001937
C20orf111	0.174224	0.020025	0.044451
C20orf112	0.1133	0.132114	0.213294
C20orf114	0.317252	1.60E-05	9.74E-05
C20orf117	-0.49271	2.83E-12	1.17E-10
C20orf118	0.13813	0.065955	0.121006
C20orf11	-0.08814	0.24201	0.346474
C20orf123	0.060182	0.424876	0.537111
C20orf12	-0.21962	0.003224	0.009392
C20orf132	-0.46044	1.00E-10	2.81E-09
C20orf134	0.164422	0.028296	0.059594
C20orf135	0.091976	0.222067	0.324149
C20orf141	-0.09942	0.186701	0.281482
C20orf144	-0.17338	0.020644	0.04562
C20orf151	0.262677	0.000397	0.00156
C20orf152	-0.15066	0.044713	0.087574
C20orf160	-0.17424	0.020014	0.044436
C20orf165	-0.04393	0.560405	0.661382
C20orf166	0.074832	0.320836	0.432697
C20orf173	-0.05331	0.479736	0.589284
C20orf177	-0.20208	0.006828	0.017872
C20orf186	-0.19507	0.009071	0.02269
C20orf191	0.02129	0.77789	0.842388
C20orf194	-0.17846	0.017158	0.039012
C20orf195	0.199402	0.00762	0.019594
C20orf196	-0.24551	0.000956	0.003303
C20orf197	-0.05906	0.433541	0.545153
C20orf199	0.204261	0.00624	0.016534
C20orf200	0.037839	0.616047	0.710884
C20orf201	-0.1788	0.016944	0.0386
C20orf202	-0.04933	0.51315	0.619288
C20orf203	0.014537	0.847284	0.892557

C20orf20	0.281747	0.000139	0.000634
C20orf24	0.32109	1.24E-05	7.85E-05
C20orf26	-0.37916	1.80E-07	1.96E-06
C20orf27	0.121904	0.105019	0.177765
C20orf29	-0.31249	2.17E-05	0.000127
C20orf30	-0.29986	4.77E-05	0.000252
C20orf3	-0.34853	1.87E-06	1.49E-05
C20orf43	0.010752	0.886725	0.92116
C20orf46	-0.08883	0.238372	0.342519
C20orf4	-0.06776	0.368799	0.482258
C20orf54	0.562259	3.17E-16	3.42E-14
C20orf56	-0.34956	1.73E-06	1.40E-05
C20orf70	-0.12124	0.106955	0.180432
C20orf72	0.150162	0.04543	0.088786
C20orf7	-0.03146	0.676782	0.762541
C20orf85	0.096117	0.201854	0.300133
C20orf94	-0.31163	2.29E-05	0.000133
C20orf96	-0.08239	0.274248	0.382351
C21orf119	-0.03542	0.63884	0.730029
C21orf121	0.015088	0.841567	0.888191
C21orf122	-0.17976	0.016353	0.037505
C21orf125	0.140763	0.060913	0.113024
C21orf128	-0.06676	0.375975	0.488946
C21orf129	0.497692	1.57E-12	6.96E-11
C21orf130	0.176734	0.018279	0.041125
C21orf131	0.03173	0.674153	0.760408
C21orf15	-0.04679	0.535097	0.638766
C21orf29	-0.34283	2.81E-06	2.15E-05
C21orf2	-0.05413	0.472993	0.582776
C21orf33	-0.05464	0.468853	0.578829
C21orf34	-0.01754	0.81629	0.869965
C21orf45	0.096267	0.201148	0.299241
C21orf49	-0.19701	0.008392	0.021276
C21orf54	0.016083	0.831266	0.880373
C21orf56	0.036295	0.630527	0.722935
C21orf57	-0.05835	0.43912	0.550857
C21orf58	-0.25978	0.000462	0.001774
C21orf59	0.158637	0.034431	0.070327
C21orf62	-0.05806	0.441388	0.553178
C21orf63	0.215354	0.003891	0.01105
C21orf67	0.013887	0.854034	0.897851
C21orf70	0.223916	0.002659	0.007963
C21orf71	-0.03432	0.649218	0.738431
C21orf7	-0.19022	0.010984	0.026769
C21orf81	0.142412	0.05792	0.108406
C21orf82	0.07475	0.321366	0.433206
C21orf84	0.146276	0.051378	0.098217
C21orf88	0.184437	0.013719	0.03232
C21orf90	-0.11689	0.12022	0.197675
C21orf91	-0.04934	0.513113	0.619281
C21orf94	-0.19843	0.007926	0.020275
C21orf96	0.201359	0.007035	0.018327
C21orf99	0.06512	0.387808	0.500556
C22orf13	-0.05002	0.50732	0.614126

C22orf15	-0.1531	0.041322	0.081923
C22orf23	-0.09221	0.220867	0.322723
C22orf24	-0.10833	0.150053	0.236369
C22orf25	-0.1963	0.008638	0.021792
C22orf26	-0.23687	0.001455	0.004745
C22orf27	-0.02964	0.694501	0.776274
C22orf28	-0.07611	0.312601	0.423606
C22orf29	-0.30521	3.43E-05	0.00019
C22orf30	-0.33304	5.56E-06	3.91E-05
C22orf31	-0.25765	0.000516	0.001954
C22orf32	-0.16195	0.030798	0.064031
C22orf33	0.027729	0.713312	0.791468
C22orf34	-0.11423	0.128938	0.209105
C22orf36	0.26241	0.000402	0.001578
C22orf39	-0.30774	2.93E-05	0.000165
C22orf40	0.029841	0.692542	0.774673
C22orf41	0.175284	0.019271	0.043029
C22orf42	-0.29608	6.00E-05	0.000306
C22orf43	-0.01741	0.817595	0.870792
C22orf45	-0.19504	0.009084	0.022716
C22orf46	-0.0956	0.204306	0.303185
C22orf9	0.117888	0.117066	0.193562
C2CD2L	-0.11391	0.130046	0.210557
C2CD2	0.038132	0.613315	0.708724
C2CD3	-0.15003	0.045623	0.089075
C2CD4A	-0.24288	0.001088	0.003693
C2CD4B	-0.15864	0.034429	0.070327
C2CD4C	-0.06836	0.364606	0.477889
C2CD4D	0.018216	0.809292	0.865015
C2orf14	-0.31726	1.60E-05	9.74E-05
C2orf15	-0.08533	0.257454	0.363843
C2orf16	0.086735	0.249647	0.355072
C2orf18	0.165139	0.027605	0.058349
C2orf24	0.28373	0.000124	0.000574
C2orf27A	0.276814	0.000184	0.000804
C2orf27B	-0.14977	0.045998	0.089607
C2orf28	0.084633	0.261348	0.368162
C2orf29	0.4059	1.90E-08	2.74E-07
C2orf34	0.252967	0.000657	0.002391
C2orf39	-0.14098	0.060506	0.112342
C2orf3	-0.26785	0.000301	0.00123
C2orf40	-0.0584	0.438703	0.550438
C2orf42	-0.29387	6.85E-05	0.000343
C2orf43	-0.03461	0.646529	0.73655
C2orf44	-0.0716	0.342232	0.454486
C2orf47	0.222196	0.002874	0.008526
C2orf48	0.234061	0.001663	0.00533
C2orf49	0.236841	0.001458	0.004751
C2orf50	-0.0409	0.587749	0.686108
C2orf51	-0.10114	0.179173	0.272263
C2orf52	-0.21595	0.003791	0.010807
C2orf53	0.030577	0.685357	0.76949
C2orf54	0.264323	0.000363	0.001449
C2orf55	0.059957	0.426607	0.538714

C2orf56	0.328086	7.79E-06	5.23E-05
C2orf57	-0.01319	0.861304	0.903668
C2orf58	-0.15167	0.04328	0.085215
C2orf60	0.154964	0.038885	0.077794
C2orf61	0.266758	0.000319	0.001294
C2orf62	-0.11746	0.118415	0.19534
C2orf63	-0.0768	0.30823	0.418666
C2orf64	0.096302	0.200984	0.299049
C2orf65	0.118719	0.11449	0.190325
C2orf66	-0.27504	0.000203	0.000876
C2orf67	0.091491	0.224521	0.326751
C2orf68	0.183025	0.014471	0.033817
C2orf69	-0.2392	0.001302	0.00431
C2orf70	-0.04323	0.566691	0.66685
C2orf71	-0.06029	0.424029	0.536315
C2orf72	-0.11693	0.120104	0.197516
C2orf73	-0.19164	0.01039	0.025512
C2orf74	-0.01276	0.865781	0.906969
C2orf76	-0.22014	0.003151	0.009207
C2orf77	-0.26815	0.000296	0.001215
C2orf78	0.093871	0.212644	0.313116
C2orf79	0.143826	0.05545	0.104695
C2orf7	-0.22967	0.002043	0.006346
C2orf80	-0.16039	0.032466	0.066942
C2orf81	-0.05216	0.489304	0.59788
C2orf82	0.227678	0.00224	0.006884
C2orf83	-0.01717	0.820023	0.872489
C2orf84	-0.03347	0.657359	0.745976
C2orf85	-0.1392	0.063859	0.117673
C2orf86	-0.18689	0.012493	0.029876
C2orf88	0.074021	0.326121	0.438162
C2orf89	0.368382	4.21E-07	4.09E-06
C2	0.04397	0.560037	0.660987
C3AR1	-0.03002	0.690753	0.773659
C3P1	0.097078	0.197363	0.294541
C3orf10	0.213306	0.004253	0.011919
C3orf14	-0.24366	0.001047	0.00357
C3orf15	-0.24541	0.000961	0.003318
C3orf16	0.039633	0.599409	0.696154
C3orf17	0.006667	0.929617	0.951325
C3orf18	-0.26167	0.000418	0.001631
C3orf19	0.033077	0.661155	0.749551
C3orf1	0.214203	0.004091	0.011547
C3orf20	-0.16566	0.027114	0.05746
C3orf21	0.233797	0.001684	0.005385
C3orf22	-0.00352	0.96278	0.974709
C3orf23	0.230791	0.001939	0.006072
C3orf24	0.24849	0.000824	0.002916
C3orf26	-0.0426	0.57237	0.672093
C3orf27	0.011307	0.880925	0.917438
C3orf30	-0.05413	0.472985	0.582776
C3orf31	0.303737	3.76E-05	0.000205
C3orf32	-0.26451	0.00036	0.001437
C3orf33	-0.28296	0.00013	0.000597

C3orf34	-0.2486	0.00082	0.002903
C3orf35	0.178887	0.016888	0.038485
C3orf36	-0.18454	0.013668	0.032238
C3orf37	0.356825	1.01E-06	8.77E-06
C3orf38	0.061724	0.413087	0.525095
C3orf39	-0.22348	0.002712	0.008106
C3orf42	-0.19858	0.007878	0.020164
C3orf43	-0.04286	0.569999	0.669946
C3orf45	0.120163	0.110116	0.184732
C3orf47	-0.10818	0.150624	0.237099
C3orf48	0.035207	0.640816	0.731957
C3orf49	-0.066	0.381396	0.494118
C3orf50	-0.13358	0.075472	0.135474
C3orf51	-0.13734	0.067537	0.123415
C3orf52	0.409753	1.35E-08	2.04E-07
C3orf54	-0.05882	0.435476	0.54698
C3orf55	0.369104	3.98E-07	3.91E-06
C3orf57	0.172624	0.021212	0.046632
C3orf58	0.067382	0.371497	0.484564
C3orf59	-0.17574	0.018955	0.042447
C3orf62	-0.19268	0.009975	0.024646
C3orf63	-0.28937	8.94E-05	0.000431
C3orf64	-0.00742	0.921689	0.94566
C3orf65	0.19279	0.00993	0.024554
C3orf66	-0.18559	0.013131	0.031164
C3orf67	-0.12307	0.101724	0.173076
C3orf70	-0.21669	0.003669	0.010501
C3orf71	-0.20737	0.005478	0.014785
C3orf72	0.120355	0.109545	0.183898
C3orf74	0.152231	0.042505	0.083933
C3orf75	-0.16934	0.023843	0.051553
C3orf77	-0.17669	0.01831	0.041177
C3orf79	-0.09061	0.229054	0.332062
C3	0.173392	0.020635	0.045605
C4A	0.086655	0.250086	0.355617
C4BPA	0.050099	0.506619	0.613503
C4BPB	0.372595	3.03E-07	3.09E-06
C4orf10	0.184417	0.013729	0.032332
C4orf12	-0.37106	3.42E-07	3.42E-06
C4orf14	-0.01989	0.79213	0.852845
C4orf17	0.026957	0.720958	0.797284
C4orf19	0.154656	0.03928	0.078512
C4orf21	-0.06666	0.376687	0.489428
C4orf22	-0.08096	0.2827	0.391355
C4orf23	0.133967	0.074619	0.134151
C4orf26	0.279963	0.000154	0.000692
C4orf27	-0.06338	0.40062	0.51324
C4orf29	-0.13021	0.08322	0.146823
C4orf31	0.260692	0.000441	0.001706
C4orf32	-0.13929	0.063693	0.117487
C4orf33	0.278565	0.000166	0.000739
C4orf34	-0.1552	0.038583	0.077306
C4orf35	0.035335	0.639603	0.730774
C4orf36	0.081205	0.281232	0.389677

C4orf37	-0.07767	0.302747	0.413006
C4orf38	0.414025	9.21E-09	1.47E-07
C4orf39	-0.22506	0.002524	0.007626
C4orf3	0.015335	0.839003	0.886335
C4orf40	-0.08684	0.249048	0.354599
C4orf41	-0.19112	0.010603	0.025972
C4orf42	-0.23001	0.002011	0.006263
C4orf43	0.253446	0.000641	0.002345
C4orf44	-0.11281	0.133802	0.215464
C4orf45	0.011969	0.874006	0.912829
C4orf46	-0.32748	8.12E-06	5.40E-05
C4orf47	-0.05341	0.478893	0.588468
C4orf48	0.140143	0.062071	0.114925
C4orf49	-0.28112	0.000144	0.000653
C4orf50	-0.24174	0.00115	0.003879
C4orf51	-0.07015	0.35213	0.464914
C4orf52	0.090825	0.227929	0.330698
C4orf6	0.047336	0.530366	0.634796
C4orf7	0.117039	0.119746	0.197058
C5AR1	0.001358	0.985644	0.989849
C5orf13	0.158618	0.034453	0.070365
C5orf15	0.032845	0.663388	0.751652
C5orf20	-0.07013	0.352287	0.465038
C5orf22	-0.09523	0.206068	0.305243
C5orf23	0.318933	1.43E-05	8.87E-05
C5orf24	-0.12981	0.084171	0.148198
C5orf25	-0.06122	0.416907	0.529305
C5orf27	-0.18226	0.014891	0.034635
C5orf28	-0.04906	0.515448	0.62153
C5orf30	0.192361	0.010099	0.02491
C5orf32	0.31938	1.39E-05	8.65E-05
C5orf33	-0.28176	0.000139	0.000634
C5orf34	0.139232	0.063805	0.117586
C5orf35	0.065425	0.385579	0.498296
C5orf36	-0.2208	0.003059	0.008982
C5orf38	-0.15899	0.034026	0.069623
C5orf39	0.061189	0.417152	0.529547
C5orf40	-0.15204	0.042762	0.084339
C5orf41	-0.18316	0.014398	0.033666
C5orf42	-0.27412	0.000213	0.000913
C5orf43	0.193562	0.009632	0.023921
C5orf44	-0.17625	0.018607	0.041753
C5orf45	-0.02889	0.7019	0.782382
C5orf46	0.396841	4.16E-08	5.40E-07
C5orf47	-0.1321	0.078795	0.140369
C5orf48	-0.20428	0.006234	0.016521
C5orf49	-0.24519	0.000971	0.00335
C5orf4	-0.03753	0.618975	0.713389
C5orf51	-0.23681	0.00146	0.004757
C5orf52	-0.15471	0.039205	0.078373
C5orf53	-0.25427	0.000615	0.002263
C5orf54	-0.28164	0.00014	0.000637
C5orf55	-0.27871	0.000165	0.000734
C5orf56	-0.10129	0.178542	0.271492

C5orf58	0.056545	0.453443	0.564371
C5orf60	-0.06301	0.403381	0.516072
C5orf62	0.179739	0.016364	0.03752
C5	-0.46147	8.99E-11	2.55E-09
C6orf103	-0.18885	0.011582	0.027997
C6orf105	0.341374	3.11E-06	2.35E-05
C6orf106	-0.06318	0.402154	0.514839
C6orf108	0.090223	0.23104	0.334523
C6orf10	0.070306	0.351052	0.463677
C6orf114	0.289798	8.72E-05	0.000422
C6orf115	0.275395	0.000199	0.000862
C6orf118	-0.26784	0.000301	0.00123
C6orf120	-0.41032	1.28E-08	1.95E-07
C6orf122	-0.40882	1.47E-08	2.18E-07
C6orf123	-0.18492	0.013471	0.031837
C6orf124	0.061888	0.411841	0.523882
C6orf125	0.294231	6.71E-05	0.000337
C6orf126	-0.16108	0.031712	0.065567
C6orf127	0.030769	0.683484	0.76791
C6orf129	0.100149	0.183492	0.277504
C6orf130	-0.30223	4.13E-05	0.000223
C6orf132	0.514549	2.02E-13	1.12E-11
C6orf134	0.18832	0.011824	0.028481
C6orf136	0.036557	0.628058	0.720958
C6orf138	-0.16382	0.028883	0.060642
C6orf141	0.317544	1.57E-05	9.60E-05
C6orf142	-0.01217	0.871884	0.911337
C6orf145	0.221023	0.003029	0.008916
C6orf146	-0.14107	0.06035	0.112115
C6orf147	0.363978	5.91E-07	5.50E-06
C6orf150	0.128639	0.087028	0.152306
C6orf153	-0.01108	0.883324	0.918969
C6orf154	-0.28136	0.000142	0.000646
C6orf155	0.221906	0.002911	0.008622
C6orf15	0.2829	0.00013	0.000598
C6orf162	-0.35323	1.32E-06	1.10E-05
C6orf163	-0.30367	3.78E-05	0.000206
C6orf164	-0.0455	0.546453	0.64906
C6orf165	-0.32682	8.49E-06	5.62E-05
C6orf167	-0.17484	0.019585	0.043621
C6orf168	-0.38601	1.03E-07	1.19E-06
C6orf170	-0.20412	0.006276	0.016617
C6orf174	-0.35062	1.60E-06	1.31E-05
C6orf176	-0.27664	0.000185	0.000811
C6orf182	-0.12072	0.10845	0.182429
C6orf186	-0.05825	0.439881	0.551741
C6orf191	-0.07863	0.296792	0.40665
C6orf192	-0.18422	0.013834	0.032527
C6orf195	0.009593	0.898871	0.929422
C6orf1	0.120122	0.110237	0.184903
C6orf201	-0.1397	0.062906	0.116177
C6orf203	-0.10772	0.15239	0.239326
C6orf204	-0.21952	0.003238	0.009424
C6orf208	-0.32409	1.02E-05	6.61E-05

C6orf211	-0.11478	0.127102	0.206738
C6orf217	-0.35017	1.65E-06	1.35E-05
C6orf218	0.293644	6.95E-05	0.000346
C6orf221	0.00189	0.980022	0.986207
C6orf222	0.213128	0.004286	0.011991
C6orf223	0.46487	6.27E-11	1.87E-09
C6orf225	-0.33633	4.43E-06	3.21E-05
C6orf226	0.041379	0.583412	0.682142
C6orf227	0.276766	0.000184	0.000806
C6orf25	-0.04252	0.573036	0.672715
C6orf26	-0.02662	0.724295	0.800079
C6orf27	-0.19431	0.009348	0.023308
C6orf35	-0.23821	0.001365	0.004488
C6orf41	-0.13186	0.07935	0.141191
C6orf47	0.151987	0.042841	0.084468
C6orf48	-0.10222	0.174554	0.266907
C6orf52	0.045173	0.549341	0.651786
C6orf57	-0.14908	0.047021	0.09129
C6orf58	-0.29763	5.47E-05	0.000283
C6orf59	-0.05157	0.494216	0.602453
C6orf62	-0.28659	0.000105	0.000496
C6orf64	-0.45271	2.23E-10	5.68E-09
C6orf70	-0.13593	0.070434	0.12793
C6orf72	-0.31077	2.42E-05	0.000139
C6orf81	-0.20889	0.005138	0.014018
C6orf89	-0.48765	5.07E-12	1.96E-10
C6orf94	-0.04814	0.523369	0.62886
C6orf97	0.047166	0.531848	0.635992
C6	-0.02688	0.721695	0.797876
C7orf10	0.423895	3.72E-09	6.71E-08
C7orf11	0.102118	0.174982	0.267313
C7orf13	-0.10287	0.171822	0.263523
C7orf16	0.047238	0.531225	0.635477
C7orf23	0.386793	9.65E-08	1.13E-06
C7orf25	-0.10113	0.179224	0.272301
C7orf26	-0.29031	8.46E-05	0.000411
C7orf27	0.053926	0.474664	0.584361
C7orf28A	0.195671	0.008857	0.022236
C7orf28B	0.160441	0.032407	0.066835
C7orf29	-0.26985	0.00027	0.00112
C7orf30	0.089588	0.234352	0.338378
C7orf31	-0.16814	0.024865	0.05338
C7orf33	-0.13317	0.076373	0.136793
C7orf34	-0.01196	0.874103	0.912834
C7orf36	-0.17895	0.01685	0.038415
C7orf40	0.087893	0.243359	0.348027
C7orf41	-0.45709	1.42E-10	3.82E-09
C7orf42	-0.01663	0.825652	0.876446
C7orf43	0.033354	0.658498	0.74701
C7orf44	-0.13907	0.064127	0.118067
C7orf45	-0.06746	0.370945	0.484098
C7orf46	-0.00805	0.915054	0.94078
C7orf47	0.300901	4.48E-05	0.000239
C7orf49	-0.15055	0.044863	0.087835

C7orf4	0.106545	0.156921	0.245125
C7orf50	-0.01411	0.851739	0.896362
C7orf51	-0.15719	0.036135	0.073218
C7orf52	-0.23884	0.001324	0.004371
C7orf53	-0.0082	0.913545	0.939597
C7orf54	0.008213	0.913352	0.939516
C7orf55	-0.22036	0.00312	0.009135
C7orf57	0.034272	0.649717	0.738872
C7orf58	-0.0296	0.694898	0.776542
C7orf59	0.142058	0.058552	0.109372
C7orf60	-0.232	0.001833	0.005783
C7orf61	0.196288	0.008641	0.021796
C7orf63	-0.25304	0.000655	0.002385
C7orf64	-0.27848	0.000167	0.000742
C7orf65	0.001636	0.982712	0.988009
C7orf68	0.163009	0.029701	0.062149
C7orf69	-0.03619	0.631505	0.723696
C7orf70	-0.03928	0.602677	0.698907
C7orf71	0.001598	0.98311	0.988159
C7orf72	-0.08926	0.236055	0.340017
C7	-0.20651	0.005681	0.015261
C8A	-0.09773	0.19436	0.290937
C8B	-0.01782	0.813339	0.867849
C8G	-0.05045	0.503655	0.610774
C8ORFK29	-0.0125	0.868441	0.909177
C8orf12	-0.16951	0.0237	0.051297
C8orf22	0.088746	0.238797	0.342942
C8orf30A	0.116638	0.121026	0.198586
C8orf31	0.489166	4.26E-12	1.67E-10
C8orf33	-0.05156	0.494269	0.602459
C8orf34	-0.09939	0.186855	0.281664
C8orf37	-0.32533	9.38E-06	6.14E-05
C8orf38	-0.19297	0.00986	0.024395
C8orf39	-0.12796	0.088717	0.154604
C8orf40	0.261046	0.000432	0.00168
C8orf41	0.004606	0.951346	0.966989
C8orf42	-0.49514	2.13E-12	9.12E-11
C8orf44	0.053394	0.479036	0.588571
C8orf45	-0.28881	9.24E-05	0.000444
C8orf46	0.005016	0.947023	0.964187
C8orf47	0.158758	0.034293	0.070096
C8orf48	-0.23221	0.001815	0.005741
C8orf4	0.246453	0.000912	0.003175
C8orf51	0.027726	0.713338	0.791468
C8orf55	0.246468	0.000912	0.003174
C8orf56	-0.10168	0.176851	0.269419
C8orf58	0.437489	1.02E-09	2.15E-08
C8orf59	0.174367	0.019922	0.044297
C8orf71	-0.12532	0.095553	0.164287
C8orf73	0.606428	2.95E-19	7.20E-17
C8orf74	0.349225	1.77E-06	1.43E-05
C8orf75	0.086024	0.253561	0.359756
C8orf76	0.058839	0.4353	0.546828
C8orf77	0.147198	0.049912	0.095849

C8orf79	-0.21934	0.003264	0.009487
C8orf80	-0.08797	0.242946	0.347605
C8orf83	-0.22086	0.003051	0.008964
C8orf84	-0.11785	0.11718	0.193706
C8orf85	-0.146	0.051827	0.09894
C8orf86	-0.37723	2.10E-07	2.23E-06
C9orf100	0.274324	0.000211	0.000905
C9orf102	-0.27101	0.000253	0.00106
C9orf103	-0.03198	0.671774	0.758474
C9orf106	-0.15987	0.03304	0.067941
C9orf109	-0.0186	0.805364	0.86213
C9orf110	-0.02688	0.72176	0.797903
C9orf114	0.032641	0.665359	0.75302
C9orf116	0.019459	0.796552	0.856452
C9orf117	-0.17191	0.021757	0.047623
C9orf119	-0.18931	0.01138	0.027578
C9orf11	0.262805	0.000394	0.001551
C9orf122	0.119488	0.112144	0.187372
C9orf123	-0.0095	0.899805	0.930178
C9orf125	0.099104	0.188126	0.283234
C9orf128	-0.01847	0.806675	0.863206
C9orf129	-0.124	0.099127	0.169328
C9orf130	-0.37097	3.44E-07	3.44E-06
C9orf131	-0.122	0.104736	0.177346
C9orf135	-0.21796	0.003471	0.009996
C9orf139	-0.14425	0.054723	0.10355
C9orf140	0.355656	1.11E-06	9.48E-06
C9orf142	0.155307	0.038449	0.077069
C9orf144E	-0.17149	0.022087	0.048232
C9orf144	-0.08078	0.283782	0.392687
C9orf150	0.230413	0.001974	0.006165
C9orf152	0.285139	0.000114	0.000535
C9orf153	-0.20039	0.007318	0.018922
C9orf156	-0.34954	1.73E-06	1.40E-05
C9orf163	-0.14962	0.046229	0.089992
C9orf167	0.528765	3.28E-14	2.16E-12
C9orf169	0.492686	2.83E-12	1.17E-10
C9orf16	0.262589	0.000399	0.001566
C9orf170	-0.07686	0.307843	0.418356
C9orf171	-0.04194	0.578316	0.677305
C9orf172	-0.21503	0.003946	0.011193
C9orf173	-0.11289	0.133524	0.215097
C9orf21	-0.26254	0.000399	0.001568
C9orf23	0.071614	0.342145	0.454479
C9orf24	-0.11332	0.13204	0.213226
C9orf25	-0.30553	3.37E-05	0.000187
C9orf30	0.036338	0.630123	0.722657
C9orf37	-0.01648	0.827216	0.877588
C9orf3	0.120828	0.108147	0.182015
C9orf40	-0.29992	4.76E-05	0.000252
C9orf41	-0.26879	0.000286	0.001178
C9orf43	-0.2988	5.09E-05	0.000266
C9orf44	-0.14285	0.057142	0.107213
C9orf45	-0.34308	2.76E-06	2.11E-05

C9orf46	0.077306	0.305049	0.415484
C9orf47	-0.03508	0.642009	0.732942
C9orf4	-0.40026	3.10E-08	4.18E-07
C9orf50	-0.06275	0.405334	0.517938
C9orf53	0.078429	0.298059	0.408103
C9orf57	0.073324	0.33071	0.442764
C9orf5	-0.21348	0.004221	0.011848
C9orf64	-0.17798	0.017463	0.039583
C9orf66	-0.03749	0.619314	0.713697
C9orf68	0.174911	0.019534	0.043532
C9orf69	0.123206	0.101331	0.172526
C9orf6	-0.007	0.926107	0.948806
C9orf70	-0.01528	0.839557	0.886712
C9orf71	-0.15734	0.035951	0.072912
C9orf72	-0.25049	0.000745	0.002677
C9orf78	-0.22379	0.002674	0.008004
C9orf79	0.02623	0.728179	0.803158
C9orf7	-0.04884	0.517366	0.623235
C9orf80	-0.40747	1.65E-08	2.42E-07
C9orf82	-0.20866	0.005189	0.01413
C9orf84	0.148898	0.047298	0.091764
C9orf85	-0.1563	0.037214	0.075004
C9orf86	-0.04755	0.528479	0.633342
C9orf89	0.405804	1.91E-08	2.76E-07
C9orf91	-0.49586	1.96E-12	8.50E-11
C9orf93	-0.1254	0.095347	0.164033
C9orf95	0.035611	0.636992	0.728549
C9orf96	-0.06697	0.374444	0.487463
C9orf98	0.039049	0.604805	0.70098
C9orf9	-0.08787	0.243488	0.348162
C9	0.004134	0.95632	0.970006
CA10	-0.30721	3.03E-05	0.00017
CA11	-0.12713	0.09083	0.157564
CA12	0.37753	2.05E-07	2.19E-06
CA13	0.411197	1.19E-08	1.83E-07
CA14	0.44694	4.01E-10	9.58E-09
CA1	0.090701	0.228566	0.331475
CA2	0.197559	0.00821	0.020884
CA3	0.13804	0.066135	0.121278
CA4	-0.10599	0.159118	0.247709
CA5A	0.309555	2.62E-05	0.000149
CA5BP	0.100354	0.18259	0.276458
CA5B	-0.32897	7.34E-06	4.96E-05
CA6	-0.0623	0.408732	0.520865
CA7	0.14347	0.056064	0.105703
CA8	-0.40307	2.43E-08	3.41E-07
CA9	0.409777	1.35E-08	2.04E-07
CAB39L	-0.17242	0.021366	0.046917
CAB39	0.2201	0.003156	0.009219
CABC1	-0.24416	0.001022	0.003498
CABIN1	-0.28489	0.000116	0.000542
CABLES1	0.169914	0.023361	0.050658
CABLES2	-0.19009	0.01104	0.026884
CABP1	-0.09443	0.209898	0.309879

CABP4	0.55426	1.01E-15	9.30E-14
CABP5	-0.01398	0.853081	0.89723
CABP7	-0.11823	0.116013	0.192207
CABYR	-0.0198	0.793078	0.853367
CACHD1	-0.12999	0.083726	0.147571
CACNA1A	-0.34525	2.36E-06	1.84E-05
CACNA1B	-0.41023	1.29E-08	1.97E-07
CACNA1C	-0.25844	0.000496	0.001887
CACNA1D	-0.29377	6.89E-05	0.000344
CACNA1E	0.028354	0.707137	0.786751
CACNA1F	0.270979	0.000254	0.001061
CACNA1G	-0.263	0.00039	0.001537
CACNA1H	-0.284	0.000122	0.000566
CACNA1I	-0.1661	0.026698	0.056749
CACNA1S	-0.08462	0.261405	0.36819
CACNA2D1	-0.29585	6.09E-05	0.000309
CACNA2D2	-0.41498	8.45E-09	1.37E-07
CACNA2D3	-0.16464	0.028081	0.059204
CACNA2D4	0.235545	0.00155	0.005013
CACNB1	0.458704	1.20E-10	3.30E-09
CACNB2	-0.5398	7.52E-15	5.74E-13
CACNB3	0.455436	1.69E-10	4.47E-09
CACNB4	-0.24641	0.000914	0.00318
CACNG1	-0.11236	0.135374	0.217615
CACNG2	-0.31996	1.34E-05	8.36E-05
CACNG3	-0.06222	0.409342	0.521474
CACNG4	0.049857	0.508679	0.615244
CACNG5	-0.26393	0.000371	0.001474
CACNG6	0.19675	0.008482	0.02147
CACNG7	-0.24083	0.001202	0.004025
CACNG8	0.127393	0.090156	0.156587
CACYBP	0.082456	0.27386	0.381924
CADM1	-0.25996	0.000458	0.001761
CADM2	-0.16345	0.029255	0.06132
CADM3	-0.08447	0.262261	0.369207
CADM4	-0.2389	0.00132	0.004359
CADPS2	-0.10355	0.168989	0.260106
CADPS	-0.30749	2.98E-05	0.000168
CAD	-0.01745	0.817147	0.870626
CAGE1	-0.16793	0.025051	0.053738
CALB1	-0.11664	0.121024	0.198586
CALB2	0.405261	2.01E-08	2.88E-07
CALCA	-0.08677	0.249428	0.35491
CALCB	-0.11936	0.11254	0.187861
CALCOCO1	-0.0683	0.364991	0.478286
CALCOCO2	-0.11456	0.127856	0.207657
CALCRL	-0.21512	0.003931	0.011152
CALCR	-0.26811	0.000296	0.001216
CALD1	0.06248	0.407376	0.519625
CALHM1	-0.00317	0.966492	0.977194
CALHM2	0.131765	0.079562	0.141531
CALHM3	0.409091	1.43E-08	2.14E-07
CALM1	-0.38917	7.93E-08	9.55E-07
CALM2	0.329718	6.98E-06	4.74E-05

CALM3	0.187716	0.012102	0.029085
CALML3	-0.17857	0.017089	0.038877
CALML4	0.332003	5.97E-06	4.17E-05
CALML5	0.13255	0.077771	0.13882
CALML6	-0.0332	0.659983	0.74848
CALN1	-0.06581	0.382766	0.495634
CALR3	-0.07022	0.351679	0.464412
CALR	0.134047	0.074445	0.13387
CALU	0.082188	0.275428	0.383381
CALY	-0.19076	0.010753	0.02628
CAMK1D	-0.1544	0.039614	0.079092
CAMK1G	0.02045	0.786431	0.848755
CAMK1	0.017064	0.821146	0.873257
CAMK2A	-0.00749	0.920948	0.945329
CAMK2B	-0.23063	0.001954	0.00611
CAMK2D	-0.2448	0.00099	0.003409
CAMK2G	0.083141	0.269883	0.37763
CAMK2N1	0.460793	9.65E-11	2.72E-09
CAMK2N2	-0.32704	8.37E-06	5.55E-05
CAMK4	-0.00106	0.988829	0.991989
CAMKK1	-0.4099	1.33E-08	2.02E-07
CAMKK2	0.117757	0.117474	0.19405
CAMKV	-0.13897	0.064318	0.118342
CAMLG	-0.02797	0.710974	0.789554
CAMP	0.080389	0.286113	0.395111
CAMSAP1L1	0.070926	0.346814	0.459213
CAMSAP1	-0.26523	0.000346	0.001389
CAMTA1	-0.04881	0.517611	0.623416
CAMTA2	-0.36865	4.12E-07	4.02E-06
CAND1	-0.33005	6.82E-06	4.65E-05
CAND2	-0.32329	1.07E-05	6.92E-05
CANT1	0.129601	0.084673	0.148908
CANX	-0.29321	7.13E-05	0.000354
CAP1	0.36917	3.96E-07	3.89E-06
CAP2	-0.10315	0.170658	0.262186
CAPG	0.591502	3.52E-18	6.66E-16
CAPN10	0.227369	0.002272	0.006968
CAPN11	-0.01005	0.894111	0.926196
CAPN12	0.452402	2.30E-10	5.84E-09
CAPN13	0.253126	0.000652	0.002376
CAPN14	0.196707	0.008496	0.021501
CAPN1	0.576952	3.49E-17	4.83E-15
CAPN2	0.514907	1.94E-13	1.08E-11
CAPN3	0.165766	0.027013	0.057288
CAPN5	0.583523	1.26E-17	1.97E-15
CAPN6	0.001088	0.988501	0.991811
CAPN7	-0.43822	9.50E-10	2.04E-08
CAPN8	0.597069	1.42E-18	2.95E-16
CAPN9	0.330375	6.67E-06	4.58E-05
CAPNS1	0.465015	6.18E-11	1.84E-09
CAPNS2	0.14367	0.055718	0.1051
CAPRIN1	0.075918	0.313845	0.424806
CAPRIN2	0.306085	3.25E-05	0.000181
CAPS2	-0.39193	6.29E-08	7.77E-07

CAPSL	-0.30265	4.02E-05	0.000218
CAPS	0.329902	6.89E-06	4.69E-05
CAPZA1	0.394601	5.03E-08	6.41E-07
CAPZA2	0.002475	0.97384	0.982171
CAPZA3	0.386739	9.70E-08	1.13E-06
CAPZB	0.179667	0.016407	0.037603
CARD10	0.248761	0.000813	0.002886
CARD11	0.57776	3.08E-17	4.29E-15
CARD14	0.156096	0.037463	0.075415
CARD16	0.313883	1.99E-05	0.000118
CARD17	-0.01288	0.864555	0.905973
CARD18	0.082746	0.272171	0.380186
CARD6	0.407754	1.61E-08	2.37E-07
CARD8	-0.17575	0.018944	0.04243
CARD9	0.089057	0.237147	0.341094
CARHSP1	0.115991	0.123116	0.201315
CARKD	-0.15861	0.034467	0.070387
CARM1	0.172676	0.021173	0.04657
CARNS1	0.405202	2.02E-08	2.88E-07
CARS2	0.330798	6.49E-06	4.46E-05
CARS	0.204213	0.006253	0.016561
CARTPT	-0.21626	0.003739	0.010682
CASC1	-0.23085	0.001934	0.00606
CASC2	-0.26446	0.000361	0.00144
CASC3	-0.27122	0.00025	0.001049
CASC4	-0.00507	0.946465	0.963933
CASC5	0.225514	0.002473	0.007488
CASD1	-0.52874	3.29E-14	2.16E-12
CASKIN1	-0.35175	1.47E-06	1.21E-05
CASKIN2	-0.19041	0.010904	0.026603
CASK	0.130195	0.083246	0.146856
CASP10	0.37569	2.37E-07	2.49E-06
CASP12	-0.18453	0.013672	0.032241
CASP14	0.233163	0.001735	0.005524
CASP1	0.27983	0.000155	0.000696
CASP2	0.126979	0.091216	0.158144
CASP3	0.107513	0.153167	0.240432
CASP4	0.435133	1.28E-09	2.61E-08
CASP5	-0.07443	0.323473	0.435492
CASP6	0.311383	2.33E-05	0.000135
CASP7	0.140825	0.060798	0.112842
CASP8AP2	-0.26431	0.000364	0.001449
CASP8	0.370995	3.43E-07	3.44E-06
CASP9	-0.04835	0.521607	0.627159
CASQ1	-0.05376	0.476042	0.585693
CASQ2	-0.0089	0.906097	0.9345
CASR	0.045965	0.542354	0.645473
CASS4	-0.10368	0.168439	0.259528
CAST	0.38038	1.63E-07	1.80E-06
CASZ1	0.086292	0.252081	0.357946
CATSPER1	0.562135	3.23E-16	3.47E-14
CATSPER2F	0.085105	0.258692	0.365072
CATSPER2	0.110251	0.142912	0.22722
CATSPER3	-0.18203	0.015025	0.034897

CATSPER4	0.110072	0.143563	0.228018
CATSPERB	0.274216	0.000212	0.000909
CATSPERG	0.059191	0.432555	0.544313
CAT	0.021409	0.776678	0.841444
CAV1	0.161775	0.030976	0.064341
CAV2	0.414894	8.51E-09	1.38E-07
CAV3	-0.08514	0.258477	0.36495
CBARA1	0.258068	0.000505	0.001918
CBFA2T2	-0.49201	3.07E-12	1.25E-10
CBFA2T3	-0.36654	4.85E-07	4.62E-06
CBFB	0.171105	0.022394	0.048812
CBLB	0.047314	0.530561	0.634914
CBLC	0.533622	1.73E-14	1.22E-12
CBLL1	-0.28836	9.49E-05	0.000453
CBLN1	-0.29073	8.26E-05	0.000402
CBLN2	-0.15075	0.044579	0.087339
CBLN3	0.038875	0.606415	0.702351
CBLN4	-0.14131	0.059908	0.111452
CBL	-0.02773	0.71331	0.791468
CBR1	0.29318	7.14E-05	0.000355
CBR3	0.318227	1.50E-05	9.24E-05
CBR4	-0.2657	0.000338	0.001357
CBS	-0.09586	0.203053	0.30171
CBWD1	-0.14715	0.04998	0.095942
CBWD2	0.115516	0.12467	0.203469
CBWD3	0.034652	0.646096	0.736152
CBWD5	-0.22322	0.002744	0.008186
CBWD6	-0.0188	0.803342	0.861364
CBX1	-0.2242	0.002625	0.007877
CBX2	-0.31306	2.09E-05	0.000123
CBX3	0.340165	3.39E-06	2.53E-05
CBX4	0.04225	0.575503	0.67487
CBX5	-0.5686	1.24E-16	1.50E-14
CBX6	-0.42061	5.05E-09	8.75E-08
CBX7	-0.40631	1.83E-08	2.66E-07
CBX8	-0.02494	0.741066	0.813244
CBY1	-0.07225	0.33784	0.450196
CC2D1A	0.189338	0.011366	0.027554
CC2D1B	0.225826	0.002438	0.007396
CC2D2A	-0.09082	0.227967	0.330728
CC2D2B	0.037198	0.622041	0.716004
CCAR1	-0.0857	0.255346	0.361718
CCBE1	-0.14628	0.051377	0.098217
CCBL1	0.371679	3.25E-07	3.28E-06
CCBL2	0.279659	0.000156	0.000702
CCBP2	-0.20285	0.006615	0.017397
CCDC101	0.019546	0.795661	0.855752
CCDC102A	0.255859	0.000567	0.002116
CCDC102B	-0.18084	0.015704	0.036223
CCDC103	-0.15503	0.038804	0.077654
CCDC104	-0.12268	0.102813	0.174614
CCDC105	-0.02551	0.735404	0.808781
CCDC106	-0.04832	0.52186	0.627387
CCDC107	0.127903	0.088865	0.154849

CCDC108	-0.02126	0.778145	0.842612
CCDC109A	0.412728	1.03E-08	1.62E-07
CCDC109B	0.265815	0.000336	0.001349
CCDC110	-0.45482	1.80E-10	4.73E-09
CCDC111	-0.38649	9.90E-08	1.15E-06
CCDC112	-0.2464	0.000915	0.003181
CCDC113	-0.15518	0.03861	0.077338
CCDC114	0.076747	0.308572	0.419044
CCDC115	0.351134	1.54E-06	1.26E-05
CCDC116	-0.00507	0.946459	0.963933
CCDC117	-0.44041	7.66E-10	1.69E-08
CCDC11	-0.3564	1.05E-06	9.04E-06
CCDC120	0.398732	3.54E-08	4.69E-07
CCDC121	-0.40204	2.66E-08	3.67E-07
CCDC122	-0.18741	0.012248	0.02937
CCDC123	0.149044	0.047079	0.091384
CCDC124	0.215207	0.003916	0.011116
CCDC125	0.089277	0.235986	0.339943
CCDC126	-0.40931	1.40E-08	2.11E-07
CCDC127	-0.0386	0.60892	0.704592
CCDC129	0.015631	0.83594	0.884045
CCDC12	0.261172	0.00043	0.00167
CCDC130	0.198279	0.007975	0.020388
CCDC132	-0.21155	0.004588	0.01272
CCDC134	-0.19449	0.009284	0.023163
CCDC135	-0.17511	0.019393	0.043249
CCDC136	-0.08357	0.267407	0.374988
CCDC137	0.152067	0.042731	0.084295
CCDC138	0.172629	0.021208	0.046632
CCDC13	-0.28667	0.000105	0.000495
CCDC140	0.087504	0.245456	0.350343
CCDC141	-0.25165	0.000703	0.002541
CCDC142	-0.05712	0.448861	0.559931
CCDC144A	-0.10693	0.1554	0.243338
CCDC144B	-0.19395	0.009484	0.0236
CCDC144C	-0.05235	0.487647	0.596361
CCDC144NI	-0.22731	0.002278	0.006981
CCDC146	0.13358	0.075469	0.135474
CCDC147	-0.02854	0.705308	0.785284
CCDC148	-0.05199	0.490728	0.599287
CCDC149	-0.54244	5.25E-15	4.09E-13
CCDC14	0.209697	0.004965	0.013615
CCDC150	0.114963	0.126498	0.205924
CCDC151	-0.23216	0.001819	0.005749
CCDC152	-0.12771	0.08936	0.155478
CCDC153	0.497771	1.56E-12	6.91E-11
CCDC154	-0.01612	0.830937	0.880166
CCDC155	-0.18871	0.011649	0.028125
CCDC157	-0.07413	0.325426	0.437518
CCDC158	-0.34498	2.41E-06	1.87E-05
CCDC159	0.105386	0.161507	0.250756
CCDC15	0.176613	0.01836	0.041274
CCDC160	0.107229	0.154261	0.241804
CCDC163P	-0.16816	0.024852	0.053358

CCDC17	0.142008	0.058642	0.109519
CCDC18	0.165417	0.027341	0.057891
CCDC19	0.079503	0.291468	0.401106
CCDC21	-0.16224	0.030494	0.063526
CCDC22	0.073775	0.327735	0.439603
CCDC23	-0.06173	0.413045	0.525076
CCDC24	0.161816	0.030933	0.064277
CCDC25	-0.09013	0.231497	0.335062
CCDC27	-0.08269	0.272471	0.380497
CCDC28A	-0.22451	0.002588	0.007785
CCDC28B	-0.11435	0.128538	0.208593
CCDC30	-0.28928	8.99E-05	0.000433
CCDC33	0.116573	0.121236	0.198815
CCDC34	0.005968	0.936979	0.957213
CCDC36	0.002259	0.976128	0.983589
CCDC37	-0.0485	0.520301	0.6259
CCDC38	-0.17084	0.022603	0.049212
CCDC39	-0.13295	0.076865	0.137502
CCDC3	-0.26794	0.000299	0.001226
CCDC40	-0.28005	0.000153	0.000689
CCDC41	-0.34662	2.14E-06	1.69E-05
CCDC42B	0.393686	5.43E-08	6.84E-07
CCDC42	-0.06184	0.412207	0.524246
CCDC43	0.252037	0.000689	0.002497
CCDC45	0.099674	0.185586	0.280007
CCDC46	-0.31985	1.35E-05	8.41E-05
CCDC47	-0.1654	0.027359	0.057911
CCDC48	-0.1565	0.036972	0.074639
CCDC50	0.154326	0.039705	0.079235
CCDC51	0.292882	7.27E-05	0.00036
CCDC52	0.246179	0.000925	0.00321
CCDC53	0.067757	0.368833	0.482258
CCDC54	0.032125	0.670335	0.757441
CCDC55	0.012582	0.867615	0.908602
CCDC56	-0.11495	0.126525	0.205951
CCDC57	0.05781	0.443386	0.555082
CCDC58	0.316679	1.66E-05	0.000101
CCDC59	-0.07918	0.293448	0.403214
CCDC60	-0.15655	0.036901	0.074502
CCDC61	0.363732	6.02E-07	5.59E-06
CCDC62	-0.4195	5.59E-09	9.54E-08
CCDC63	0.170606	0.022795	0.049572
CCDC64B	0.482089	9.53E-12	3.43E-10
CCDC64	-0.04808	0.523916	0.629361
CCDC65	-0.34268	2.84E-06	2.17E-05
CCDC66	-0.25553	0.000576	0.002146
CCDC67	-0.15765	0.035584	0.072293
CCDC68	0.364594	5.63E-07	5.29E-06
CCDC69	-0.14541	0.052789	0.100449
CCDC6	0.266484	0.000324	0.00131
CCDC70	0.166422	0.026405	0.056209
CCDC71	-0.01256	0.867837	0.908738
CCDC72	-0.03021	0.688966	0.772226
CCDC73	0.13926	0.063752	0.117559

CCDC74A	0.345227	2.37E-06	1.84E-05
CCDC74B	0.03581	0.635106	0.726728
CCDC75	-0.2346	0.001622	0.005213
CCDC76	-0.04342	0.564992	0.665604
CCDC77	-0.23789	0.001386	0.004552
CCDC78	0.171779	0.021863	0.047814
CCDC79	-0.03472	0.64542	0.735592
CCDC7	-0.16046	0.03239	0.066808
CCDC80	0.020382	0.787126	0.849134
CCDC81	0.110616	0.141585	0.225557
CCDC82	0.05683	0.451163	0.561935
CCDC83	-0.13539	0.071556	0.129633
CCDC84	0.25881	0.000486	0.001857
CCDC85A	-0.11641	0.121775	0.199551
CCDC85B	0.222535	0.00283	0.00841
CCDC85C	-0.09231	0.220365	0.322133
CCDC86	-0.00873	0.907946	0.935747
CCDC87	-0.28638	0.000106	0.000501
CCDC88A	0.004938	0.947838	0.964718
CCDC88B	0.398995	3.46E-08	4.60E-07
CCDC88C	0.202852	0.006615	0.017397
CCDC89	-0.08863	0.239399	0.343682
CCDC8	0.09429	0.210601	0.3108
CCDC90A	-0.09134	0.225315	0.327674
CCDC90B	0.273191	0.000225	0.000955
CCDC91	-0.19797	0.008076	0.020611
CCDC92	-0.26689	0.000317	0.001286
CCDC93	-0.30999	2.54E-05	0.000146
CCDC94	0.016631	0.825607	0.876446
CCDC96	-0.18655	0.012658	0.030201
CCDC97	-0.04524	0.548792	0.651253
CCDC99	0.052433	0.486993	0.59583
CCDC9	0.247545	0.000864	0.003033
CCHCR1	0.288751	9.27E-05	0.000445
CCIN	-0.09229	0.220476	0.322272
CCKAR	-0.27457	0.000208	0.000895
CCKBR	-0.18635	0.012754	0.030397
CCK	0.24812	0.00084	0.002958
CCL11	-0.00726	0.923347	0.946809
CCL13	0.159349	0.03362	0.068928
CCL14-CCI	-0.03797	0.614857	0.709978
CCL14	-0.18756	0.012173	0.029216
CCL15	0.063557	0.39932	0.511839
CCL16	-0.23202	0.001831	0.00578
CCL17	0.170765	0.022667	0.049319
CCL18	0.19582	0.008804	0.022147
CCL19	0.044176	0.558202	0.659263
CCL1	-0.04912	0.515	0.621066
CCL20	0.331873	6.03E-06	4.20E-05
CCL21	-0.02626	0.727901	0.80303
CCL22	0.21611	0.003764	0.010743
CCL23	-0.06	0.426286	0.538516
CCL24	0.019344	0.797731	0.857487
CCL25	-0.03502	0.642618	0.733499

CCL26	-0.07818	0.299607	0.40974
CCL27	-0.01244	0.869118	0.909838
CCL28	0.221108	0.003017	0.008894
CCL2	-0.08219	0.27541	0.383381
CCL3L1	-0.04837	0.521428	0.62702
CCL3L3	-0.27488	0.000205	0.000882
CCL3	-0.06508	0.388079	0.500742
CCL4L2	-0.06983	0.354335	0.467326
CCL4	-0.12202	0.104674	0.177287
CCL5	0.018757	0.803746	0.861571
CCL7	0.223287	0.002736	0.008164
CCL8	-0.13936	0.063554	0.117276
CCM2	-0.02542	0.736231	0.809375
CCNA1	-0.33323	5.49E-06	3.86E-05
CCNA2	0.303693	3.77E-05	0.000205
CCNB1IP1	-0.11522	0.125658	0.204879
CCNB1	0.301031	4.44E-05	0.000237
CCNB2	0.429103	2.28E-09	4.35E-08
CCNB3	0.046873	0.534407	0.638097
CCNC	-0.26362	0.000377	0.001493
CCND1	0.3813	1.51E-07	1.68E-06
CCND2	-0.40576	1.92E-08	2.77E-07
CCND3	0.003233	0.96584	0.976806
CCNDBP1	0.236597	0.001475	0.004798
CCNE1	0.263821	0.000373	0.001481
CCNE2	0.113055	0.132958	0.214323
CCNF	0.189906	0.011118	0.027049
CCNG1	-0.09419	0.211078	0.311342
CCNG2	0.172868	0.021027	0.046318
CCNH	0.067128	0.373305	0.48644
CCNI2	0.359309	8.41E-07	7.47E-06
CCNI	-0.21688	0.00364	0.010427
CCNJL	0.002521	0.973355	0.981896
CCNJ	-0.11855	0.115007	0.190944
CCNK	0.186066	0.012893	0.030662
CCNL1	0.172925	0.020984	0.046243
CCNL2	0.183504	0.014212	0.033294
CCNO	0.316409	1.69E-05	0.000102
CCNT1	-0.27762	0.000176	0.000773
CCNT2	-0.05748	0.445991	0.557355
CCNYL1	0.17907	0.016774	0.038279
CCNY	-0.1802	0.016087	0.036972
CCPG1	-0.31247	2.17E-05	0.000127
CCR10	0.032658	0.665194	0.752922
CCR1	-0.00982	0.896509	0.927902
CCR2	-0.06857	0.36312	0.47634
CCR3	0.001875	0.980182	0.986267
CCR4	-0.06973	0.355029	0.46796
CCR5	-0.04688	0.534355	0.638097
CCR6	0.000409	0.995672	0.996932
CCR7	-0.03264	0.665395	0.75302
CCR8	-0.05641	0.454528	0.565557
CCR9	0.229755	0.002035	0.006327
CCRL1	0.383343	1.28E-07	1.45E-06

CCRL2	0.331794	6.06E-06	4.21E-05
CCRN4L	-0.22307	0.002763	0.008238
CCS	0.279168	0.000161	0.000719
CCT2	-0.11224	0.135791	0.218107
CCT3	0.126171	0.093311	0.161076
CCT4	0.063705	0.398219	0.510959
CCT5	0.128031	0.088545	0.154372
CCT6A	-0.01789	0.812636	0.867332
CCT6B	-0.12125	0.106922	0.180399
CCT6P1	0.035514	0.637907	0.729469
CCT7	0.088532	0.239932	0.344248
CCT8L2	0.039451	0.601088	0.697448
CCT8	0.116886	0.120233	0.197679
CD101	0.094921	0.207551	0.306964
CD109	0.207722	0.005398	0.014607
CD14	-0.0355	0.638072	0.729572
CD151	0.480481	1.14E-11	4.03E-10
CD160	-0.24894	0.000806	0.002864
CD163L1	-0.03346	0.657485	0.746075
CD163	-0.08792	0.243193	0.347824
CD164L2	0.248677	0.000817	0.002895
CD164	-0.01894	0.801848	0.860462
CD177	0.157943	0.035238	0.071687
CD180	0.062478	0.407391	0.519625
CD19	-0.02718	0.718793	0.795468
CD1A	0.311111	2.37E-05	0.000137
CD1B	-0.06704	0.373909	0.486971
CD1C	0.136769	0.068693	0.125239
CD1D	-0.02539	0.736561	0.809602
CD1E	0.085316	0.257504	0.363871
CD200R1L	-0.05107	0.498377	0.605822
CD200R1	-0.25951	0.000469	0.001796
CD200	-0.29506	6.38E-05	0.000322
CD207	0.268062	0.000297	0.001219
CD209	-0.2845	0.000119	0.000553
CD226	-0.14998	0.045698	0.089169
CD22	0.008953	0.905581	0.934162
CD244	-0.06123	0.416862	0.529282
CD247	-0.05531	0.463396	0.573632
CD248	0.14189	0.058853	0.10982
CD24	0.246082	0.000929	0.003224
CD274	-0.12232	0.103825	0.17606
CD276	0.207618	0.005422	0.014659
CD27	0.041682	0.580658	0.679605
CD28	-0.06189	0.411814	0.523881
CD2AP	0.293469	7.02E-05	0.00035
CD2BP2	0.209827	0.004937	0.013549
CD2	#####	0.999967	0.999967
CD300A	0.129845	0.084083	0.148095
CD300C	0.127488	0.089916	0.156301
CD300E	-0.1701	0.02321	0.050369
CD300LB	0.003247	0.965689	0.976806
CD300LD	0.072234	0.337969	0.450263
CD300LF	0.227225	0.002287	0.007004

CD300LG	-0.34218	2.94E-06	2.24E-05
CD302	-0.29194	7.69E-05	0.000378
CD320	-0.23349	0.001709	0.005455
CD33	0.046325	0.539195	0.642407
CD34	-0.17242	0.021367	0.046917
CD36	-0.2743	0.000211	0.000906
CD37	0.075761	0.314849	0.42593
CD38	0.024205	0.748434	0.819239
CD3D	0.060048	0.425909	0.538108
CD3EAP	0.15565	0.038018	0.076346
CD3E	-0.01002	0.894438	0.926369
CD3G	-0.06562	0.38417	0.496963
CD40LG	-0.09152	0.224381	0.326662
CD40	0.255182	0.000587	0.002179
CD44	0.228983	0.002109	0.006532
CD46	-0.00091	0.990403	0.992914
CD47	0.179224	0.016679	0.038123
CD48	-0.00763	0.919453	0.944279
CD4	0.00962	0.898587	0.929269
CD52	0.110162	0.143236	0.227608
CD53	0.024992	0.74054	0.812847
CD55	0.31484	1.87E-05	0.000112
CD58	0.561371	3.61E-16	3.78E-14
CD59	0.376841	2.16E-07	2.30E-06
CD5L	-0.17301	0.02092	0.046111
CD5	-0.07686	0.307878	0.418356
CD63	0.116383	0.121847	0.199652
CD68	0.293625	6.95E-05	0.000347
CD69	-0.0034	0.964118	0.975694
CD6	-0.00436	0.953957	0.968504
CD70	0.287733	9.84E-05	0.000468
CD72	0.081743	0.278044	0.38618
CD74	0.147582	0.049311	0.094907
CD79A	0.050758	0.501034	0.608201
CD79B	-0.04706	0.532746	0.636873
CD7	0.025587	0.73459	0.808155
CD80	0.185388	0.013232	0.031354
CD81	-0.03859	0.609101	0.704678
CD82	0.346485	2.16E-06	1.70E-05
CD83	-0.03128	0.678533	0.763722
CD84	-0.07853	0.297448	0.407407
CD86	0.079751	0.289961	0.399443
CD8A	-0.09339	0.215032	0.315931
CD8B	-0.05174	0.49276	0.601212
CD93	-0.19393	0.009492	0.023615
CD96	-0.05708	0.449139	0.56018
CD97	0.492672	2.84E-12	1.17E-10
CD99L2	-0.4312	1.87E-09	3.64E-08
CD99	-0.10425	0.166102	0.256542
CD9	0.263909	0.000372	0.001475
CDADC1	-0.23645	0.001485	0.004826
CDAN1	-0.05279	0.484026	0.593044
CDA	0.436004	1.18E-09	2.43E-08
CDC123	0.230371	0.001977	0.006175

CDC14A	-0.11005	0.143649	0.228135
CDC14B	0.014279	0.849952	0.894939
CDC14C	-0.10739	0.153626	0.240999
CDC16	0.203453	0.006453	0.017025
CDC20B	0.177042	0.018074	0.040734
CDC20	0.417879	6.49E-09	1.09E-07
CDC23	-0.09367	0.213648	0.314336
CDC25A	-0.00125	0.98677	0.990678
CDC25B	0.009487	0.899985	0.9302
CDC25C	0.40292	2.46E-08	3.45E-07
CDC26	-0.00844	0.910947	0.937657
CDC27	-0.09073	0.228434	0.331308
CDC34	0.107443	0.153434	0.240752
CDC37L1	-0.14736	0.049652	0.095444
CDC37	0.397939	3.78E-08	4.96E-07
CDC40	-0.45134	2.57E-10	6.46E-09
CDC42BPA	0.115951	0.123249	0.201499
CDC42BPB	0.117544	0.118144	0.195023
CDC42BPG	0.216555	0.003692	0.010553
CDC42EP1	0.392076	6.22E-08	7.69E-07
CDC42EP2	0.440283	7.76E-10	1.70E-08
CDC42EP3	-0.12651	0.092423	0.159878
CDC42EP4	0.055683	0.460365	0.570765
CDC42EP5	0.370799	3.49E-07	3.48E-06
CDC42SE1	0.279086	0.000162	0.000722
CDC42SE2	-0.26049	0.000445	0.001722
CDC42	0.159673	0.033256	0.068344
CDC45	0.33504	4.85E-06	3.46E-05
CDC5L	-0.29898	5.04E-05	0.000264
CDC6	0.353763	1.27E-06	1.07E-05
CDC73	0.052814	0.483836	0.592953
CDC7	0.030476	0.686341	0.769938
CDCA2	0.380505	1.61E-07	1.78E-06
CDCA3	0.208524	0.005219	0.0142
CDCA4	0.328074	7.80E-06	5.23E-05
CDCA5	0.370372	3.60E-07	3.58E-06
CDCA7L	0.161467	0.031302	0.064894
CDCA7	0.278865	0.000164	0.000729
CDCA8	0.293771	6.89E-05	0.000344
CDCP1	0.397466	3.94E-08	5.15E-07
CDCP2	0.046314	0.539295	0.642488
CDH10	-0.22629	0.002386	0.007258
CDH11	0.153859	0.040316	0.08025
CDH12	-0.2618	0.000416	0.001623
CDH13	-0.069	0.360085	0.473206
CDH15	0.088001	0.242778	0.347424
CDH16	0.156099	0.03746	0.075415
CDH17	0.153686	0.040544	0.080631
CDH18	-0.23844	0.00135	0.004444
CDH19	-0.12356	0.100331	0.17104
CDH1	0.294917	6.44E-05	0.000325
CDH20	-0.00062	0.993415	0.995428
CDH22	-0.0851	0.258711	0.365072
CDH23	-0.11912	0.113258	0.188706

CDH24	0.197569	0.008207	0.020883
CDH26	0.012886	0.864445	0.905973
CDH2	-0.02734	0.717183	0.794575
CDH3	0.605061	3.72E-19	8.76E-17
CDH4	-0.25287	0.000661	0.002403
CDH5	-0.23373	0.001689	0.005398
CDH6	-0.03884	0.606771	0.702641
CDH7	-0.24158	0.001159	0.003902
CDH8	-0.30204	4.18E-05	0.000225
CDH9	-0.12304	0.101804	0.173197
CDHR1	-0.14196	0.058736	0.109654
CDHR2	0.356232	1.06E-06	9.14E-06
CDHR3	-0.32221	1.15E-05	7.37E-05
CDHR4	0.2193	0.00327	0.009502
CDHR5	0.331132	6.34E-06	4.38E-05
CDIPT	0.022696	0.763636	0.831643
CDK10	0.205769	0.00586	0.015668
CDK11A	0.139041	0.064175	0.118133
CDK11B	0.210992	0.004698	0.012981
CDK12	-0.03793	0.615195	0.710236
CDK13	-0.21785	0.003487	0.010036
CDK14	0.01138	0.880159	0.916865
CDK15	-0.08682	0.249155	0.35465
CDK16	0.21258	0.004388	0.012226
CDK17	-0.31478	1.87E-05	0.000112
CDK18	0.507679	4.73E-13	2.41E-11
CDK19	-0.25943	0.000471	0.001803
CDK1	0.398318	3.66E-08	4.82E-07
CDK20	-0.14437	0.054529	0.103251
CDK2AP1	0.065129	0.387742	0.500503
CDK2AP2	0.397526	3.92E-08	5.12E-07
CDK2	0.293077	7.18E-05	0.000357
CDK3	0.067633	0.369717	0.483038
CDK4	-0.01451	0.847571	0.892765
CDK5R1	-0.08955	0.23457	0.338576
CDK5R2	-0.22145	0.002972	0.008777
CDK5RAP1	-0.04885	0.517326	0.623234
CDK5RAP2	-0.17058	0.022814	0.049602
CDK5RAP3	0.228261	0.00218	0.006725
CDK5	0.079526	0.291329	0.400971
CDK6	0.275449	0.000198	0.00086
CDK7	0.379855	1.70E-07	1.86E-06
CDK8	-0.06094	0.419041	0.531298
CDK9	-0.05481	0.467444	0.577558
CDKAL1	-0.22081	0.003058	0.00898
CDKL1	0.036169	0.631718	0.723857
CDKL2	-0.33457	5.01E-06	3.57E-05
CDKL3	-0.25029	0.000753	0.002699
CDKL4	-0.03149	0.676453	0.762306
CDKL5	-0.1617	0.031059	0.064485
CDKN1A	0.222863	0.002789	0.008301
CDKN1B	-0.20773	0.005396	0.014603
CDKN1C	0.182166	0.014946	0.034725
CDKN2AIPN	-0.29806	5.33E-05	0.000277

CDKN2AIP	-0.0844	0.26269	0.369684
CDKN2A	0.122772	0.102547	0.174237
CDKN2BAS	0.013261	0.860546	0.903064
CDKN2B	0.173371	0.020651	0.045625
CDKN2C	-0.0625	0.407245	0.51954
CDKN2D	0.227046	0.002306	0.007052
CDKN3	0.25323	0.000649	0.002367
CDNF	-0.2545	0.000608	0.002242
CDO1	-0.2952	6.33E-05	0.00032
CDON	-0.22078	0.003062	0.008989
CDR1	-0.13988	0.062572	0.11569
CDR2L	0.559548	4.70E-16	4.73E-14
CDR2	0.107826	0.151965	0.238829
CDRT15P	-0.10823	0.150416	0.236809
CDRT15	0.032689	0.664893	0.752673
CDRT1	0.402289	2.60E-08	3.60E-07
CDRT4	-0.2514	0.000712	0.002569
CDS1	0.233871	0.001678	0.005367
CDS2	-0.29422	6.71E-05	0.000337
CDSN	0.518334	1.26E-13	7.27E-12
CDT1	0.292014	7.65E-05	0.000377
CDV3	0.005735	0.939439	0.959131
CDX1	0.034858	0.644133	0.734302
CDX2	0.11516	0.125844	0.205114
CDY2B	-0.19172	0.010357	0.025442
CDYL2	-0.23783	0.00139	0.004561
CDYL	-0.01827	0.808711	0.864555
CEACAM16	-0.12071	0.108483	0.182456
CEACAM18	0.203413	0.006464	0.017051
CEACAM19	-0.09365	0.213728	0.31443
CEACAM1	0.371779	3.23E-07	3.26E-06
CEACAM20	0.073046	0.33255	0.444755
CEACAM21	0.044354	0.556614	0.657967
CEACAM22F	0.104592	0.164707	0.254825
CEACAM3	0.112	0.136637	0.219235
CEACAM4	0.011159	0.882476	0.918328
CEACAM5	0.461312	9.14E-11	2.59E-09
CEACAM6	0.518959	1.16E-13	6.76E-12
CEACAM7	0.15275	0.041797	0.082715
CEACAM8	0.129817	0.084153	0.148191
CEBPA	0.019651	0.794586	0.85485
CEBPB	0.388652	8.28E-08	9.90E-07
CEBPD	0.035997	0.633342	0.725129
CEBPE	0.077131	0.306152	0.416415
CEBPG	0.055366	0.462925	0.573192
CEBPZ	0.016233	0.829715	0.879437
CECR1	-0.13989	0.062557	0.115683
CECR2	-0.27039	0.000262	0.001093
CECR4	-0.22562	0.002461	0.007459
CECR5	-0.1086	0.149019	0.235077
CECR6	-0.34604	2.23E-06	1.75E-05
CECR7	-0.12136	0.106597	0.179974
CELA1	-0.12083	0.108145	0.182015
CELA2A	-0.09207	0.221574	0.323541

CELA2B	-0.08702	0.248101	0.353403
CELA3A	-0.02094	0.781461	0.844774
CELA3B	-0.05714	0.448693	0.559847
CELF1	-0.03179	0.673598	0.759998
CELF2	-0.22866	0.002141	0.006622
CELF3	-0.23274	0.00177	0.005619
CELF4	-0.30495	3.49E-05	0.000192
CELF5	-0.30464	3.56E-05	0.000195
CELF6	-0.22275	0.002803	0.008339
CELP	-0.11964	0.111673	0.186774
CELSR1	0.340572	3.29E-06	2.47E-05
CELSR2	-0.28985	8.69E-05	0.000421
CELSR3	-0.07587	0.314158	0.425141
CEL	-0.10494	0.16331	0.25304
CEMP1	0.182212	0.014921	0.034686
CEND1	-0.12986	0.084057	0.148075
CENPA	0.337619	4.05E-06	2.96E-05
CENPBD1	-0.30091	4.48E-05	0.000239
CENPB	0.016394	0.828051	0.878313
CENPC1	-0.20694	0.00558	0.015022
CENPE	0.303809	3.75E-05	0.000204
CENPF	0.335048	4.84E-06	3.46E-05
CENPH	0.174298	0.019971	0.044385
CENPI	0.165074	0.027668	0.058452
CENPJ	0.0576	0.445045	0.556525
CENPK	0.388458	8.41E-08	1.00E-06
CENPL	0.089545	0.234576	0.338576
CENPM	0.324725	9.77E-06	6.36E-05
CENPN	0.130838	0.081722	0.144786
CENPO	0.037928	0.615221	0.710236
CENPP	0.055651	0.460624	0.570915
CENPQ	-0.20605	0.005791	0.015509
CENPT	0.147567	0.049335	0.094934
CENPV	0.134563	0.073325	0.132172
CENPW	0.282778	0.000131	0.000602
CEP110	-0.27114	0.000251	0.001053
CEP120	-0.36238	6.67E-07	6.13E-06
CEP135	-0.17959	0.016451	0.037686
CEP152	0.053914	0.474759	0.584441
CEP164	-0.22102	0.003029	0.008916
CEP170L	-0.11163	0.137958	0.220872
CEP170	-0.02221	0.76852	0.835094
CEP192	-0.13059	0.0823	0.14555
CEP250	-0.30005	4.72E-05	0.00025
CEP290	-0.20373	0.006379	0.016847
CEP350	-0.21947	0.003246	0.009442
CEP55	0.389787	7.53E-08	9.12E-07
CEP57	-0.03451	0.647418	0.737232
CEP63	-0.24151	0.001163	0.003914
CEP68	-0.26385	0.000373	0.00148
CEP70	0.149344	0.046631	0.090631
CEP72	0.211946	0.00451	0.012533
CEP76	-0.29735	5.56E-05	0.000287
CEP78	-0.22733	0.002276	0.006979

CEP97	-0.38122	1.52E-07	1.69E-06
CEPT1	0.097475	0.195528	0.292353
CER1	-0.19764	0.008183	0.020838
CERCAM	-0.00705	0.925578	0.948555
CERKL	-0.30664	3.14E-05	0.000176
CERK	-0.40263	2.52E-08	3.52E-07
CES1	0.120538	0.109002	0.183159
CES2	0.221466	0.002969	0.00877
CES3	0.205148	0.006014	0.016008
CES4	0.011507	0.878839	0.916038
CES7	-0.21405	0.004118	0.011612
CES8	-0.25945	0.00047	0.001801
CETN1	0.025343	0.737028	0.810026
CETN2	-0.07378	0.327713	0.439603
CETN3	-0.14175	0.059116	0.110247
CETN4P	-0.16872	0.024367	0.052487
CETP	-0.21796	0.00347	0.009994
CFB	0.324759	9.74E-06	6.35E-05
CFC1B	-0.12268	0.102802	0.17461
CFDP1	0.305063	3.47E-05	0.000191
CFD	-0.06759	0.370045	0.483371
CFHR1	-0.03047	0.686381	0.76994
CFHR2	0.064504	0.392316	0.504986
CFHR3	0.10799	0.151338	0.238053
CFHR4	-0.01885	0.80277	0.860985
CFHR5	-0.02727	0.717839	0.795014
CFH	0.144065	0.055042	0.104054
CFI	0.248687	0.000816	0.002895
CFL1	0.494739	2.23E-12	9.50E-11
CFL2	-0.24422	0.001019	0.00349
CFLAR	0.28465	0.000118	0.000548
CFLP1	-0.16527	0.027483	0.058134
CFP	-0.09171	0.223404	0.325565
CFTR	0.196749	0.008482	0.02147
CG030	0.240395	0.001228	0.0041
CGA	-0.14078	0.06089	0.112991
CGB1	0.398803	3.51E-08	4.66E-07
CGB2	0.397828	3.82E-08	5.00E-07
CGB5	0.492711	2.83E-12	1.17E-10
CGB7	0.548433	2.29E-15	1.90E-13
CGB8	0.467795	4.59E-11	1.43E-09
COB	0.485627	6.39E-12	2.43E-10
CGGBP1	-0.09511	0.206644	0.305908
CGNL1	-0.27696	0.000182	0.000799
CGN	0.454624	1.83E-10	4.80E-09
CGREF1	0.161046	0.031752	0.065628
CGRRF1	-0.26607	0.000331	0.001334
CH25H	-0.07841	0.298153	0.408147
CHAC1	0.058299	0.439532	0.551339
CHAC2	0.07687	0.307794	0.418332
CHADL	0.055197	0.464298	0.574389
CHAD	-0.11871	0.114526	0.19037
CHAF1A	0.258283	0.0005	0.001902
CHAF1B	0.004065	0.95705	0.97058

CHAT	-0.03491	0.64361	0.733863
CHCHD10	0.164384	0.028333	0.059653
CHCHD1	0.223101	0.002759	0.008227
CHCHD2	0.10055	0.18173	0.27543
CHCHD3	-0.01192	0.874569	0.913059
CHCHD4	0.007872	0.916946	0.942259
CHCHD5	0.205919	0.005823	0.015589
CHCHD6	0.043752	0.561986	0.662857
CHCHD7	0.071707	0.341515	0.453839
CHCHD8	0.356693	1.02E-06	8.86E-06
CHD1L	-0.00512	0.945897	0.963586
CHD1	-0.09103	0.22688	0.329465
CHD2	-0.17915	0.016725	0.038198
CHD3	-0.2197	0.003213	0.009366
CHD4	-0.20669	0.005638	0.015163
CHD5	-0.28175	0.000139	0.000634
CHD6	-0.50664	5.38E-13	2.70E-11
CHD7	-0.18424	0.01382	0.032501
CHD8	-0.24941	0.000787	0.002809
CHD9	-0.14434	0.054576	0.103313
CHDH	-0.11754	0.118156	0.195026
CHEK1	0.13626	0.06974	0.126856
CHEK2	0.302076	4.17E-05	0.000224
CHERP	0.014385	0.848855	0.893846
CHFR	0.038114	0.613482	0.708875
CHGA	-0.1717	0.021922	0.047932
CHGB	-0.22855	0.002152	0.006649
CHI3L1	0.220647	0.00308	0.009031
CHI3L2	-0.08152	0.279375	0.387743
CHIA	-0.04239	0.574256	0.673908
CHIC1	-0.35521	1.14E-06	9.74E-06
CHIC2	0.136308	0.069641	0.126686
CHID1	-0.21551	0.003865	0.010987
CHIT1	0.149249	0.046773	0.090845
CHKA	0.172461	0.021336	0.046867
CHKB-CPT1	0.107005	0.155126	0.242967
CHKB	0.26634	0.000326	0.001318
CHL1	-0.20834	0.00526	0.014298
CHML	0.233745	0.001688	0.005395
CHMP1A	0.471061	3.22E-11	1.03E-09
CHMP1B	0.142714	0.057386	0.10762
CHMP2A	0.379118	1.80E-07	1.96E-06
CHMP2B	0.407158	1.70E-08	2.48E-07
CHMP4A	0.265078	0.000349	0.001399
CHMP4B	0.468386	4.31E-11	1.35E-09
CHMP4C	0.400075	3.15E-08	4.24E-07
CHMP5	0.175833	0.01889	0.042331
CHMP6	0.109309	0.146378	0.231762
CHMP7	0.076945	0.307324	0.417808
CHM	-0.33749	4.09E-06	2.98E-05
CHN1	-0.15638	0.03711	0.074841
CHN2	-0.16378	0.028929	0.060727
CHODL	-0.11844	0.115346	0.191443
CHORDC1	-0.0631	0.402749	0.5154

CHP2	0.055704	0.460195	0.570598
CHPF2	-0.06816	0.366013	0.479402
CHPF	0.2136	0.004199	0.011799
CHPT1	0.235607	0.001546	0.005001
CHP	0.46029	1.02E-10	2.85E-09
CHRAC1	0.254891	0.000596	0.002205
CHRD1	-0.19749	0.008232	0.020925
CHRD2	-0.13902	0.064211	0.11819
CHRD	0.043911	0.560567	0.661533
CHRFAM7A	0.027311	0.717445	0.794777
CHRM1	-0.13221	0.078533	0.140015
CHRM2	-0.097	0.197739	0.295056
CHRM3	-0.32359	1.05E-05	6.81E-05
CHRM4	-0.33242	5.80E-06	4.06E-05
CHRM5	-0.16796	0.025026	0.053696
CHRNA10	-0.03178	0.673703	0.760074
CHRNA1	0.20022	0.00737	0.019041
CHRNA2	-0.19501	0.009095	0.022739
CHRNA3	-0.08854	0.239906	0.344235
CHRNA4	-0.18465	0.013607	0.032115
CHRNA5	0.279403	0.000159	0.000711
CHRNA6	-0.01049	0.889443	0.92315
CHRNA7	-0.08538	0.257132	0.363484
CHRNA9	-0.15197	0.042861	0.084491
CHRN1	-0.06598	0.381523	0.494251
CHRN2	-0.36254	6.59E-07	6.07E-06
CHRN3	-0.17018	0.023139	0.05022
CHRN4	0.069737	0.35498	0.467927
CHRN	-0.08127	0.280843	0.389247
CHRE	-0.11519	0.125736	0.204989
CHRN	0.220355	0.003121	0.009135
CHST10	-0.19272	0.009958	0.024618
CHST11	0.244797	0.00099	0.003409
CHST12	-0.09714	0.197087	0.294262
CHST13	0.066629	0.376877	0.489578
CHST14	0.054552	0.469544	0.579596
CHST15	0.122019	0.10469	0.177298
CHST1	0.057509	0.445766	0.557174
CHST2	-0.12648	0.092504	0.159963
CHST3	0.106561	0.156856	0.245113
CHST4	0.365781	5.14E-07	4.88E-06
CHST5	-0.07409	0.325696	0.43776
CHST6	0.299699	4.82E-05	0.000255
CHST7	-0.26235	0.000404	0.001582
CHST8	-0.15875	0.034301	0.070105
CHST9	-0.14103	0.060423	0.11222
CHSY1	-0.0437	0.562423	0.663209
CHSY3	0.113824	0.130325	0.210923
CHTF18	0.219208	0.003284	0.009531
CHTF8	-0.01814	0.810068	0.865572
CHUK	-0.27544	0.000198	0.00086
CHURC1	-0.09335	0.215182	0.316099
CIAO1	-0.05172	0.492987	0.601386
CIAPIN1	0.188773	0.011618	0.028072

CIB1	0.456744	1.47E-10	3.95E-09
CIB2	-0.0481	0.523729	0.629213
CIB3	0.098041	0.192934	0.289153
CIB4	-0.30903	2.70E-05	0.000154
CIC	-0.07016	0.35205	0.46484
CIDEA	-0.208	0.005335	0.014472
CIDEB	-0.1022	0.174641	0.266977
CIDECF	0.181935	0.015077	0.035008
CIDEC	0.336113	4.50E-06	3.25E-05
CIITA	0.16511	0.027633	0.05839
CILP2	0.131599	0.079946	0.142114
CILP	0.000246	0.997401	0.997876
CINP	0.092919	0.217339	0.318652
CIR1	0.112302	0.135579	0.217909
CIRBP	-0.23983	0.001262	0.0042
CIRH1A	0.213319	0.00425	0.011915
CISD1	-0.23163	0.001865	0.005874
CISD2	-0.0931	0.216464	0.3177
CISD3	0.217566	0.003531	0.010148
CISH	-0.25472	0.000601	0.00222
CITED1	-0.11027	0.142847	0.227172
CITED2	-0.46724	4.87E-11	1.49E-09
CITED4	0.294399	6.64E-05	0.000334
CIT	0.083599	0.267242	0.374864
CIZ1	-0.14638	0.051214	0.097959
CKAP2L	0.28379	0.000124	0.000572
CKAP2	-0.05217	0.489226	0.597822
CKAP4	-0.16707	0.025817	0.055119
CKAP5	-0.08294	0.271063	0.378906
CKB	-0.05688	0.45074	0.561622
CKLF	0.59483	2.05E-18	4.13E-16
CKMT1A	0.320503	1.29E-05	8.11E-05
CKMT1B	0.320123	1.32E-05	8.28E-05
CKMT2	0.226233	0.002393	0.007276
CKM	0.11634	0.121987	0.199832
CKS1B	0.402671	2.52E-08	3.51E-07
CKS2	0.345628	2.30E-06	1.80E-05
CLASP1	-0.23912	0.001306	0.004321
CLASP2	-0.41409	9.15E-09	1.46E-07
CLCA1	-0.08945	0.235074	0.339048
CLCA2	0.011489	0.87902	0.916068
CLCA3P	0.12721	0.090624	0.157248
CLCA4	0.223311	0.002733	0.008156
CLCC1	-0.21114	0.004668	0.012913
CLCF1	0.514774	1.97E-13	1.09E-11
CLCN1	0.558742	5.29E-16	5.18E-14
CLCN2	0.075117	0.318992	0.43071
CLCN3	-0.15705	0.036295	0.07349
CLCN4	-0.39856	3.59E-08	4.74E-07
CLCN5	-0.42545	3.22E-09	5.90E-08
CLCN6	-0.16002	0.032866	0.067613
CLCN7	-0.02008	0.790211	0.851626
CLCNKA	-0.13191	0.079221	0.140988
CLCNKB	-0.02358	0.754739	0.824405

CLC	-0.13681	0.068613	0.125127
CLDN10	0.308138	2.86E-05	0.000162
CLDN11	0.150217	0.045349	0.088636
CLDN12	0.061807	0.412451	0.524486
CLDN14	0.231724	0.001857	0.005854
CLDN15	0.042065	0.577179	0.676334
CLDN16	0.08401	0.264887	0.37225
CLDN18	0.377386	2.07E-07	2.21E-06
CLDN19	-0.12643	0.092625	0.160115
CLDN1	0.385897	1.04E-07	1.20E-06
CLDN20	-0.02832	0.707439	0.786988
CLDN22	0.177657	0.017671	0.039998
CLDN23	0.513407	2.33E-13	1.27E-11
CLDN25	0.085056	0.258963	0.365324
CLDN2	0.24645	0.000913	0.003175
CLDN3	-0.17258	0.021243	0.046688
CLDN4	0.464521	6.51E-11	1.94E-09
CLDN5	-0.02784	0.712224	0.790676
CLDN6	0.040823	0.588481	0.686556
CLDN7	0.301157	4.41E-05	0.000236
CLDN8	-0.05165	0.493494	0.601802
CLDN9	0.123966	0.099225	0.169452
CLDND1	0.067732	0.369014	0.482368
CLDND2	-0.04417	0.558274	0.659263
CLEC10A	-0.08378	0.266229	0.373657
CLEC11A	0.193888	0.009508	0.023647
CLEC12A	0.048663	0.518896	0.624612
CLEC12B	-0.01252	0.868293	0.909119
CLEC14A	-0.16995	0.023328	0.050607
CLEC16A	0.06498	0.388831	0.501353
CLEC17A	-0.08805	0.242499	0.34705
CLEC18A	0.041863	0.579007	0.677954
CLEC18B	-0.01801	0.811414	0.866589
CLEC18C	-0.00645	0.931882	0.953089
CLEC1A	-0.20624	0.005746	0.015414
CLEC1B	0.085623	0.255792	0.362245
CLEC2A	-0.11949	0.112132	0.187366
CLEC2B	0.110847	0.140748	0.224486
CLEC2D	0.026543	0.725065	0.800795
CLEC2L	-0.02538	0.736639	0.809643
CLEC3A	-0.13476	0.072905	0.131559
CLEC3B	-0.2071	0.005542	0.014936
CLEC4A	0.019645	0.794647	0.85487
CLEC4C	-0.17896	0.01684	0.0384
CLEC4D	-0.18845	0.011766	0.028361
CLEC4E	-0.12254	0.103197	0.175175
CLEC4F	-0.10207	0.175171	0.267539
CLEC4GP1	-0.02614	0.729102	0.803861
CLEC4G	-0.13707	0.06808	0.124282
CLEC4M	-0.02344	0.756112	0.825358
CLEC5A	0.234036	0.001665	0.005334
CLEC6A	-0.12964	0.084576	0.148778
CLEC7A	0.051785	0.492401	0.600959
CLEC9A	-0.19735	0.008281	0.021028

CLECL1	0.043411	0.565047	0.665628
CLGN	-0.34076	3.25E-06	2.44E-05
CLIC1	0.587624	6.56E-18	1.13E-15
CLIC2	-0.09252	0.219315	0.320907
CLIC3	0.711509	8.97E-29	3.55E-25
CLIC4	0.018071	0.810781	0.866086
CLIC5	0.069769	0.354756	0.467694
CLIC6	0.256542	0.000547	0.002054
CLINT1	0.255597	0.000574	0.00214
CLIP1	-0.19056	0.010838	0.026465
CLIP2	0.020054	0.790476	0.851818
CLIP3	-0.27208	0.000239	0.001008
CLIP4	0.08347	0.267982	0.375581
CLK1	0.077285	0.305181	0.415493
CLK2P	0.184153	0.013867	0.032594
CLK2	0.291839	7.73E-05	0.00038
CLK3	0.066804	0.375621	0.488654
CLK4	-0.10926	0.146548	0.231902
CLUU10S	0.164064	0.028647	0.060211
CLUU1	0.002685	0.971625	0.980901
CLMN	0.165224	0.027524	0.058204
CLN3	0.214722	0.003999	0.011323
CLN5	0.001949	0.979406	0.985789
CLN6	0.281536	0.000141	0.00064
CLN8	-0.17234	0.02143	0.047026
CLNK	-0.19772	0.008158	0.020792
CLNS1A	0.250053	0.000762	0.002727
CLOCK	-0.13843	0.065366	0.12007
CLP1	0.075477	0.316669	0.428053
CLPB	-0.11744	0.118464	0.195404
CLPP	0.130284	0.083033	0.146598
CLPS	-0.06695	0.374566	0.487537
CLPTM1L	-0.18945	0.011318	0.027457
CLPTM1	-0.02719	0.718607	0.795395
CLPX	-0.07923	0.293152	0.402891
CLRN10S	0.058967	0.434299	0.545848
CLRN1	0.019178	0.799433	0.85885
CLRN2	-0.2368	0.00146	0.004757
CLRN3	0.156421	0.037063	0.074776
CLSPN	0.135349	0.071648	0.129775
CLSTN1	0.139073	0.064113	0.118061
CLSTN2	-0.27606	0.000192	0.000834
CLSTN3	-0.35205	1.44E-06	1.19E-05
CLTA	0.116281	0.122176	0.200075
CLTB	0.587048	7.19E-18	1.20E-15
CLTCL1	-0.13993	0.062475	0.11558
CLTC	-0.17334	0.020674	0.045657
CLUAP1	-0.20862	0.005198	0.014149
CLUL1	-0.34272	2.83E-06	2.16E-05
CLU	-0.14739	0.049613	0.095414
CLVS1	0.017976	0.811753	0.866799
CLVS2	-0.15826	0.034864	0.071022
CLYBL	0.195019	0.00909	0.02273
CMA1	-0.25807	0.000505	0.001918

CMAH	-0.15923	0.033753	0.069165
CMAS	-0.06494	0.389132	0.501629
CMBL	0.134985	0.072421	0.130877
CMC1	0.247081	0.000884	0.003095
CMIP	-0.27877	0.000165	0.000732
CMKLR1	-0.11842	0.115411	0.191519
CMPK1	0.242868	0.001089	0.003695
CMPK2	0.253313	0.000646	0.002358
CMTM1	0.32707	8.35E-06	5.54E-05
CMTM2	0.232416	0.001797	0.00569
CMTM3	0.348653	1.85E-06	1.48E-05
CMTM4	-0.29376	6.90E-05	0.000345
CMTM5	-0.13227	0.078404	0.139848
CMTM6	0.185561	0.013145	0.031184
CMTM7	0.479847	1.23E-11	4.27E-10
CMTM8	-0.27105	0.000253	0.001057
CMYA5	-0.00886	0.906591	0.934776
CN5H6.4	-0.29902	5.03E-05	0.000264
CNBD1	-0.037	0.623878	0.717659
CNBP	0.10013	0.183575	0.277566
CNDP1	-0.00805	0.915088	0.94078
CNDP2	0.058432	0.438488	0.550204
CNFN	0.187688	0.012115	0.029106
CNGA1	0.148163	0.048413	0.093443
CNGA2	-0.14467	0.054014	0.102433
CNGA3	-0.28856	9.38E-05	0.000449
CNGA4	0.043671	0.562716	0.663475
CNGB1	0.122073	0.104535	0.177082
CNGB3	-0.10867	0.148772	0.234744
CNIH2	-0.20576	0.005863	0.01567
CNIH3	0.031406	0.677298	0.762824
CNIH4	0.454399	1.88E-10	4.90E-09
CNIH	0.040823	0.588482	0.686556
CNKS1	0.456897	1.45E-10	3.90E-09
CNKS2	-0.31015	2.52E-05	0.000144
CNKS3	-0.41824	6.28E-09	1.06E-07
CNN1	0.090998	0.227038	0.329622
CNN2	0.496227	1.87E-12	8.19E-11
CNN3	-0.14372	0.055634	0.104962
CNNM1	0.218139	0.003443	0.00993
CNNM2	-0.16782	0.025146	0.053884
CNNM3	-0.36187	6.93E-07	6.34E-06
CNNM4	0.4389	8.89E-10	1.91E-08
CNOT10	0.087003	0.248183	0.353496
CNOT1	-0.04719	0.531676	0.635863
CNOT2	-0.03128	0.678559	0.763722
CNOT3	-0.01211	0.872566	0.911855
CNOT4	-0.35085	1.57E-06	1.29E-05
CNOT6L	-0.51917	1.13E-13	6.61E-12
CNOT6	0.034961	0.643157	0.73379
CNOT7	-0.26155	0.000421	0.00164
CNOT8	0.105618	0.160579	0.249567
CNO	0.296861	5.73E-05	0.000294
CNPY1	0.059023	0.43386	0.545366

CNPY2	-0.23158	0.001869	0.005886
CNPY3	-0.0352	0.640897	0.731957
CNPY4	-0.02812	0.709457	0.788312
CNP	-0.08736	0.246263	0.351246
CNR1	-0.12314	0.101506	0.172765
CNR2	-0.10277	0.172244	0.264068
CNRIP1	-0.13925	0.063761	0.117559
CNST	-0.43914	8.68E-10	1.88E-08
CNTD1	-0.01728	0.818912	0.871707
CNTD2	-0.09283	0.217786	0.319213
CNTFR	-0.23433	0.001643	0.005275
CNTF	-0.08122	0.281135	0.38957
CNTLN	-0.19558	0.008888	0.022295
CNTN1	-0.16695	0.025921	0.055316
CNTN2	-0.13267	0.07751	0.138479
CNTN3	0.032546	0.666266	0.753664
CNTN4	-0.10476	0.164021	0.253922
CNTN5	-0.32789	7.90E-06	5.28E-05
CNTN6	-0.11916	0.113142	0.188577
CNTNAP1	-0.06825	0.365343	0.478682
CNTNAP2	0.041633	0.581104	0.679968
CNTNAP3	-0.00991	0.895528	0.927081
CNTNAP4	-0.34984	1.70E-06	1.37E-05
CNTNAP5	-0.31393	1.98E-05	0.000117
CNTROB	-0.16339	0.029312	0.061413
COASY	0.210287	0.004842	0.013336
COBLL1	-0.03278	0.664	0.752087
COBL	-0.08745	0.245759	0.350623
COBRA1	0.12228	0.103943	0.176245
COCH	-0.1972	0.008329	0.021137
COG1	-0.35332	1.31E-06	1.10E-05
COG2	0.023142	0.759132	0.828015
COG3	-0.1172	0.119239	0.19647
COG4	0.333384	5.43E-06	3.83E-05
COG5	-0.19691	0.008427	0.02135
COG6	-0.24226	0.001122	0.003791
COG7	0.101623	0.17709	0.269679
COG8	-0.09421	0.21101	0.311301
COIL	-0.11473	0.127275	0.206934
COL10A1	0.371138	3.40E-07	3.40E-06
COL11A1	0.355945	1.08E-06	9.31E-06
COL11A2	0.112111	0.136249	0.218705
COL12A1	0.192631	0.009992	0.02468
COL13A1	0.124369	0.098122	0.167953
COL14A1	-0.16581	0.026971	0.057205
COL15A1	-0.04941	0.51246	0.618606
COL16A1	0.122325	0.103814	0.176056
COL17A1	0.689423	1.95E-26	3.21E-23
COL18A1	0.199745	0.007514	0.019368
COL19A1	-0.23336	0.00172	0.005481
COL1A1	0.248174	0.000837	0.002951
COL1A2	0.21971	0.003211	0.009362
COL20A1	-0.02724	0.718125	0.795092
COL21A1	-0.20112	0.007104	0.018445

COL22A1	0.197658	0.008177	0.02083
COL23A1	0.052995	0.482331	0.591599
COL24A1	-0.07946	0.291704	0.401312
COL25A1	-0.36767	4.45E-07	4.29E-06
COL27A1	-0.02257	0.764937	0.832463
COL28A1	-0.11424	0.128924	0.2091
COL29A1	-0.01189	0.874838	0.913168
COL2A1	-0.27211	0.000238	0.001007
COL3A1	0.163615	0.029092	0.06103
COL4A1	0.064991	0.388751	0.501347
COL4A2	0.134235	0.074035	0.13327
COL4A3BP	-0.20518	0.006006	0.015992
COL4A3	0.010004	0.894559	0.926369
COL4A4	-0.00859	0.909439	0.936628
COL4A5	0.154713	0.039206	0.078373
COL4A6	-0.08899	0.237498	0.341421
COL5A1	0.244427	0.001009	0.003458
COL5A2	0.169134	0.024013	0.051838
COL5A3	0.106662	0.156462	0.244614
COL6A1	0.162321	0.030407	0.063405
COL6A2	0.148216	0.048332	0.093305
COL6A3	0.139743	0.062828	0.116064
COL6A4P2	0.328676	7.49E-06	5.05E-05
COL6A6	-0.17979	0.01633	0.037462
COL7A1	0.413871	9.33E-09	1.49E-07
COL8A1	0.148329	0.048159	0.093054
COL8A2	0.339309	3.60E-06	2.66E-05
COL9A1	0.114617	0.127651	0.207392
COL9A2	0.215593	0.00385	0.010953
COL9A3	0.009838	0.896299	0.927782
COLEC10	0.003246	0.965702	0.976806
COLEC11	-0.04331	0.565916	0.666436
COLEC12	0.09184	0.222752	0.324782
COLQ	-0.07447	0.323159	0.435148
COMMD10	-0.31839	1.48E-05	9.15E-05
COMMD1	0.205421	0.005946	0.015854
COMMD2	0.154295	0.039746	0.07929
COMMD3	0.159079	0.033925	0.069445
COMMD4	0.255363	0.000581	0.002161
COMMD5	0.294765	6.50E-05	0.000327
COMMD6	0.245002	0.00098	0.003377
COMMD7	0.241475	0.001166	0.003919
COMMD8	-0.2433	0.001066	0.003627
COMMD9	-0.07718	0.305848	0.416136
COMP	0.361578	7.09E-07	6.47E-06
COMTD1	0.093643	0.213764	0.314459
COMT	0.315621	1.78E-05	0.000107
COPA	-0.1146	0.127697	0.207433
COPB1	-0.06888	0.360954	0.474095
COPB2	-0.1307	0.082044	0.145223
COPE	0.031454	0.676828	0.762541
COPG2	0.017758	0.813994	0.868278
COPG	0.06565	0.383946	0.496836
COPS2	-0.06097	0.418837	0.531141

COP3	-0.47915	1.32E-11	4.55E-10
COP4	-0.40436	2.17E-08	3.08E-07
COP5	0.171839	0.021816	0.047731
COP6	0.112284	0.135639	0.217988
COP7A	-0.06456	0.391878	0.50459
COP7B	0.327805	7.94E-06	5.30E-05
COP8	0.076486	0.310223	0.420763
COPZ1	-0.09343	0.214787	0.31566
COPZ2	0.18153	0.015307	0.035439
COQ10A	-0.43507	1.29E-09	2.62E-08
COQ10B	0.213932	0.004139	0.011655
COQ2	-0.02473	0.743204	0.815047
COQ3	-0.18532	0.013265	0.031418
COQ4	-0.04462	0.554229	0.655933
COQ5	-0.07685	0.307945	0.418394
COQ6	-0.05795	0.442278	0.554045
COQ7	-0.25852	0.000494	0.001881
COQ9	0.135763	0.070774	0.128418
CORIN	0.224095	0.002638	0.007909
COR01A	0.019994	0.791091	0.852156
COR01B	0.428393	2.44E-09	4.61E-08
COR01C	0.216723	0.003664	0.010489
COR02A	0.546052	3.19E-15	2.58E-13
COR02B	-0.28337	0.000127	0.000584
COR06	0.167926	0.025054	0.053739
COR07	-0.01224	0.871184	0.911085
CORT	-0.22398	0.002652	0.007946
COTL1	0.454249	1.91E-10	4.97E-09
COX10	-0.38662	9.79E-08	1.14E-06
COX11	-0.0874	0.246024	0.350976
COX15	0.027435	0.716221	0.793554
COX16	0.067144	0.373191	0.486356
COX17	0.078901	0.295152	0.404992
COX18	-0.21592	0.003796	0.010817
COX19	-0.05373	0.476231	0.585815
COX4I1	0.213716	0.004178	0.011753
COX4I2	-0.01874	0.80388	0.861571
COX4NB	0.297319	5.57E-05	0.000287
COX5A	0.205159	0.006011	0.016004
COX5B	0.212793	0.004348	0.012139
COX6A1	0.084775	0.260548	0.367167
COX6A2	-0.24195	0.001139	0.003845
COX6B1	0.309472	2.63E-05	0.00015
COX6B2	0.601065	7.29E-19	1.60E-16
COX6C	0.124378	0.098097	0.167946
COX7A1	0.090852	0.227787	0.330564
COX7A2L	-0.05808	0.441246	0.553068
COX7A2	-0.01891	0.802135	0.86063
COX7B2	0.014989	0.84259	0.888844
COX7B	0.229614	0.002048	0.006361
COX7C	0.100343	0.182637	0.276508
COX8A	0.107718	0.152378	0.239326
COX8C	-0.2026	0.006684	0.017546
CP110	-0.18024	0.016063	0.036934

CPA1	-0.05302	0.482166	0.591571
CPA2	-0.08065	0.284551	0.393476
CPA3	-0.04137	0.583488	0.682169
CPA4	0.070466	0.349959	0.46248
CPA5	-0.2325	0.00179	0.00567
CPA6	0.220434	0.00311	0.009107
CPAMD8	0.02187	0.772001	0.83757
CPB1	-0.03436	0.648921	0.738221
CPB2	-0.14719	0.049919	0.095853
CPD	-0.10442	0.165423	0.255612
CPEB1	-0.34365	2.65E-06	2.03E-05
CPEB2	-0.11023	0.142988	0.227324
CPEB3	-0.35439	1.21E-06	1.03E-05
CPEB4	-0.42432	3.58E-09	6.50E-08
CPE	-0.45256	2.27E-10	5.75E-09
CPLX1	-0.14326	0.056424	0.106158
CPLX2	-0.20048	0.007294	0.018871
CPLX3	-0.11117	0.139582	0.222998
CPLX4	-0.07759	0.303256	0.413615
CPM	-0.08544	0.256824	0.363212
CPN1	-0.1909	0.010695	0.026165
CPN2	0.021825	0.772455	0.837925
CPNE1	0.164234	0.02848	0.059898
CPNE2	0.023149	0.759066	0.827988
CPNE3	-0.18052	0.015895	0.036603
CPNE4	-0.2202	0.003142	0.009185
CPNE5	0.104809	0.163827	0.253642
CPNE6	-0.00465	0.950916	0.966906
CPNE7	0.302357	4.10E-05	0.000221
CPNE8	0.17539	0.019197	0.042897
CPNE9	-0.05955	0.42979	0.541627
CPOX	0.326426	8.72E-06	5.75E-05
CPO	-0.13743	0.067355	0.123163
CPPED1	-0.02799	0.71077	0.789465
CPS1	0.066019	0.381275	0.493994
CPSF1	0.072282	0.337649	0.449971
CPSF2	-0.10415	0.166518	0.257023
CPSF3L	0.181309	0.015434	0.035695
CPSF3	0.260487	0.000445	0.001722
CPSF4L	-0.20632	0.005726	0.015366
CPSF4	0.019893	0.792122	0.852845
CPSF6	-0.08911	0.236866	0.340786
CPSF7	-0.12533	0.095544	0.164286
CPT1A	0.037452	0.619666	0.713911
CPT1B	0.166733	0.026121	0.055695
CPT1C	-0.2367	0.001468	0.004777
CPT2	-0.19937	0.00763	0.019618
CPVL	-0.09715	0.19703	0.294199
CPXCR1	-0.13021	0.083204	0.146815
CPXM1	0.089513	0.234747	0.338749
CPXM2	0.129603	0.084669	0.148908
CPZ	0.285255	0.000114	0.000532
CP	0.217627	0.003522	0.010125
CR1L	-0.2581	0.000504	0.001916

CR1	-0.04184	0.579179	0.678075
CR2	-0.05924	0.432196	0.544042
CRABP1	-0.00226	0.976084	0.983589
CRABP2	0.510328	3.42E-13	1.79E-11
CRADD	-0.44784	3.66E-10	8.83E-09
CRAMP1L	-0.2181	0.003449	0.009941
CRAT	-0.20835	0.005257	0.014294
CRB1	-0.27247	0.000234	0.00099
CRB2	-0.13578	0.070738	0.128363
CRB3	0.272106	0.000238	0.001007
CRBN	-0.21538	0.003887	0.011041
CRCP	-0.10079	0.180678	0.274108
CRCT1	0.441258	7.05E-10	1.56E-08
CREB1	-0.04082	0.588554	0.686556
CREB3L1	0.358068	9.24E-07	8.09E-06
CREB3L2	-0.44582	4.48E-10	1.05E-08
CREB3L3	0.186217	0.012819	0.030541
CREB3L4	0.142109	0.05846	0.10922
CREB3	0.160324	0.032536	0.067045
CREB5	0.043248	0.566503	0.666778
CREBBP	-0.23908	0.001309	0.00433
CREBL2	-0.46372	7.09E-11	2.08E-09
CREBZF	0.061037	0.418315	0.530581
CREG1	-0.04309	0.567926	0.667826
CREG2	0.466697	5.16E-11	1.57E-09
CRELD1	-0.01542	0.838128	0.885817
CRELD2	-0.18246	0.014782	0.034428
CREM	-0.16504	0.027696	0.058498
CRHBP	-0.33935	3.59E-06	2.66E-05
CRHR1	-0.13088	0.081619	0.144657
CRHR2	-0.1272	0.09064	0.157252
CRH	-0.05322	0.480474	0.589934
CRIM1	-0.04477	0.552872	0.654837
CRIP1	0.555185	8.82E-16	8.23E-14
CRIP2	0.178834	0.016921	0.038552
CRIP3	-0.19234	0.010109	0.024927
CRIPAK	-0.00711	0.924982	0.948125
CRIPT	0.095602	0.204293	0.303185
CRISP1	0.053156	0.481002	0.590473
CRISP2	-0.00325	0.965684	0.976806
CRISP3	0.137322	0.06757	0.123448
CRISPLD1	-0.08539	0.257086	0.363453
CRISPLD2	-0.01803	0.811215	0.866471
CRKL	-0.43344	1.51E-09	3.01E-08
CRK	-0.27401	0.000215	0.000918
CRLF1	0.138192	0.065832	0.120825
CRLF2	-0.09255	0.219183	0.320802
CRLF3	0.15865	0.034416	0.070311
CRLS1	0.174633	0.019731	0.043922
CRMP1	-0.27447	0.000209	0.0009
CRNKL1	-0.25464	0.000603	0.002227
CRNN	-0.01715	0.820222	0.872649
CROCCL1	-0.00442	0.953337	0.968272
CROCCL2	-0.03455	0.647093	0.73704

CROCC	0.102125	0.174952	0.267309
CROT	0.029466	0.696208	0.777699
CRP	0.166773	0.026084	0.055628
CRTAC1	-0.09516	0.206416	0.305651
CRTAM	0.011274	0.881275	0.91761
CRTAP	0.176492	0.018441	0.041434
CRTC1	-0.25425	0.000615	0.002264
CRTC2	0.253122	0.000652	0.002376
CRTC3	-0.18372	0.014094	0.033033
CRX	0.060739	0.420592	0.532785
CRY1	-0.34776	1.97E-06	1.57E-05
CRY2	-0.31495	1.85E-05	0.000111
CRYAA	-0.0269	0.72155	0.797759
CRYAB	-0.05338	0.479143	0.588629
CRYBA1	-0.10878	0.148343	0.234162
CRYBA2	-0.1256	0.094828	0.163253
CRYBA4	-0.01874	0.803965	0.861571
CRYBB1	-0.04149	0.582445	0.681293
CRYBB2	-0.11487	0.126795	0.206273
CRYBB3	0.199228	0.007674	0.019712
CRYBG3	0.063561	0.399288	0.511832
CRYGB	-0.19627	0.008646	0.021804
CRYGC	-0.26514	0.000348	0.001395
CRYGD	-0.17519	0.019333	0.043136
CRYGN	0.014711	0.845476	0.89108
CRYGS	0.174581	0.019768	0.043995
CRYL1	0.084929	0.25968	0.366178
CRYM	0.015243	0.839962	0.886938
CRYZL1	0.147846	0.048901	0.09422
CRYZ	0.281947	0.000137	0.000628
CSAD	-0.04723	0.531321	0.635553
CSAG1	0.025268	0.737774	0.810711
CSAG2	0.064086	0.395403	0.508203
CSAG3	0.094618	0.209013	0.308711
CSDAP1	0.208572	0.005208	0.014175
CSDA	0.306693	3.13E-05	0.000175
CSDC2	0.027242	0.718132	0.795092
CSDE1	-0.10272	0.172425	0.264223
CSE1L	-0.09694	0.197982	0.295352
CSF1R	-0.06192	0.411605	0.523649
CSF1	-0.03273	0.664501	0.752482
CSF2RA	0.090031	0.232039	0.335601
CSF2RB	-0.03493	0.643442	0.73379
CSF2	0.427553	2.64E-09	4.95E-08
CSF3R	0.06858	0.363035	0.476295
CSF3	-0.15689	0.036492	0.07382
CSGALNACT	-0.29344	7.03E-05	0.00035
CSGALNACT	0.007609	0.919707	0.944279
CSH2	0.000424	0.995514	0.996921
CSK	0.118871	0.114023	0.189741
CSMD1	-0.11747	0.118378	0.195318
CSMD2	-0.02223	0.768365	0.834999
CSMD3	-0.32045	1.30E-05	8.13E-05
CSN1S1	-0.27543	0.000198	0.00086

CSN2	-0.18123	0.015482	0.035782
CSN3	-0.09862	0.190323	0.285933
CSNK1A1L	-0.09138	0.225066	0.327383
CSNK1A1P	-0.15324	0.041133	0.081623
CSNK1A1	0.056041	0.457481	0.568445
CSNK1D	-0.17987	0.016281	0.037379
CSNK1E	0.097253	0.196553	0.293531
CSNK1G1	-0.30248	4.07E-05	0.00022
CSNK1G2	0.163427	0.029279	0.061364
CSNK1G3	-0.07052	0.349568	0.46218
CSNK2A1P	-0.17054	0.022845	0.049658
CSNK2A1	-0.0158	0.834191	0.882526
CSNK2A2	0.0105	0.889372	0.923124
CSNK2B	0.185271	0.013291	0.031463
CSPG4	0.157141	0.03619	0.073308
CSPG5	-0.11976	0.111329	0.186322
CSPP1	-0.21611	0.003764	0.010742
CSRNP1	-0.06133	0.416115	0.528469
CSRNP2	-0.29598	6.04E-05	0.000308
CSRNP3	-0.20833	0.005261	0.014299
CSRP1	0.135292	0.071767	0.129968
CSRP2BP	-0.30096	4.46E-05	0.000238
CSRP2	0.144168	0.054867	0.103772
CSRP3	-0.00975	0.897204	0.928427
CST11	-0.03793	0.615233	0.710236
CST1	0.48873	4.48E-12	1.74E-10
CST2	0.371528	3.29E-07	3.31E-06
CST3	-0.01142	0.879718	0.91652
CST4	0.572433	6.96E-17	9.00E-15
CST5	0.279893	0.000154	0.000694
CST6	0.489629	4.04E-12	1.61E-10
CST7	0.055659	0.460558	0.570869
CST9L	0.057082	0.449158	0.56018
CST9	0.247494	0.000866	0.003038
CSTA	0.443351	5.73E-10	1.31E-08
CSTB	0.572351	7.05E-17	9.05E-15
CSTF1	-0.35321	1.32E-06	1.10E-05
CSTF2T	-0.26157	0.000421	0.001639
CSTF2	0.237093	0.00144	0.004703
CSTF3	-0.12817	0.088195	0.153885
CSTL1	0.047641	0.527718	0.632737
CSTT	0.191758	0.010342	0.025407
CS	-0.2318	0.00185	0.005836
CT45A1	-0.11781	0.117321	0.193858
CT45A4	-0.06391	0.396733	0.509448
CT45A5	-0.02765	0.714111	0.791926
CT62	0.14584	0.052084	0.099345
CTAG1B	-0.07332	0.33075	0.442764
CTAG2	-0.02448	0.745632	0.816895
CTAGE1	-0.12546	0.095176	0.163767
CTAGE4	0.409556	1.37E-08	2.07E-07
CTAGE5	-0.01119	0.882188	0.918125
CTAGE6	0.262061	0.00041	0.001604
CTAGE9	0.382748	1.34E-07	1.51E-06

CTBP1	-0.01236	0.869933	0.910306
CTBP2	0.314136	1.95E-05	0.000116
CTBS	-0.26024	0.000451	0.001741
CTCFL	0.091371	0.225135	0.32746
CTCF	-0.13023	0.083154	0.14676
CTDP1	-0.20734	0.005485	0.014801
CTDSP1	0.475402	2.01E-11	6.66E-10
CTDSP2	-0.25508	0.00059	0.002187
CTDSPL2	-0.05055	0.502753	0.609904
CTDSPL	0.279561	0.000157	0.000706
CTF1	0.136604	0.06903	0.12576
CTGF	-0.02881	0.702605	0.782986
CTHRC1	0.280201	0.000152	0.000684
CTH	-0.12251	0.103282	0.175298
CTLA4	0.069172	0.3589	0.472053
CTNNA1	0.506501	5.47E-13	2.72E-11
CTNNA2	-0.20708	0.005546	0.014941
CTNNA3	-0.07336	0.3305	0.442649
CTNNAL1	0.111646	0.137892	0.220797
CTNNB1	0.23747	0.001414	0.004628
CTNNBIP1	-0.00971	0.897597	0.92859
CTNNBL1	0.224324	0.002611	0.007845
CTNND1	0.313377	2.05E-05	0.000121
CTNND2	-0.17732	0.017889	0.040423
CTNS	-0.36963	3.82E-07	3.77E-06
CTPS2	0.057617	0.444912	0.556394
CTPS	0.012932	0.863966	0.90574
CTR9	-0.32413	1.02E-05	6.59E-05
CTRB1	-0.0231	0.759576	0.828362
CTRB2	-0.01985	0.792594	0.853124
CTRC	-0.05551	0.461757	0.571997
CTRL	-0.12708	0.09095	0.157745
CTSA	0.185459	0.013196	0.031283
CTSB	0.280943	0.000145	0.000659
CTSC	0.196502	0.008567	0.021654
CTSD	0.36773	4.43E-07	4.28E-06
CTSE	0.559507	4.73E-16	4.73E-14
CTSF	-0.10666	0.156453	0.244614
CTSG	-0.16964	0.02359	0.051108
CTSH	0.434279	1.39E-09	2.81E-08
CTSK	0.162813	0.029901	0.0625
CTSL1	-0.02445	0.745969	0.817174
CTSL2	0.382794	1.34E-07	1.51E-06
CTSL3	-0.07727	0.305263	0.415493
CTS0	-0.09636	0.200697	0.298749
CTSS	0.228592	0.002147	0.006638
CTSW	0.008139	0.914134	0.939994
CTSZ	0.271904	0.000241	0.001016
CTTNBP2NL	0.229033	0.002104	0.006519
CTTNBP2	-0.2491	0.000799	0.002847
CTTN	0.61837	3.69E-20	1.09E-17
CTU1	0.045953	0.542466	0.645565
CTU2	0.131647	0.079834	0.141969
CTXN1	0.072201	0.338189	0.450375

CTXN2	-0.33497	4.87E-06	3.48E-05
CTXN3	-0.12409	0.098882	0.168982
CUBN	-0.28294	0.00013	0.000597
CUEDC1	0.006571	0.930633	0.952108
CUEDC2	0.018809	0.80321	0.86127
CUL1	-0.3225	1.13E-05	7.25E-05
CUL2	-0.11733	0.118827	0.195922
CUL3	-0.0645	0.392339	0.504986
CUL4A	0.269768	0.000271	0.001124
CUL4B	-0.2851	0.000115	0.000536
CUL5	-0.24364	0.001048	0.003572
CUL7	-0.3029	3.96E-05	0.000215
CUL9	-0.17819	0.017329	0.039337
CUTA	0.0038	0.959847	0.972536
CUTC	-0.03419	0.65053	0.739583
CUX1	0.158581	0.034496	0.070432
CUX2	-0.30874	2.75E-05	0.000156
CUZD1	-0.08045	0.285766	0.394742
CWC15	0.320171	1.32E-05	8.27E-05
CWC22	0.056981	0.44996	0.560815
CWC25	0.014175	0.851042	0.895753
CWC27	0.092503	0.219417	0.320985
CWF19L1	-0.06824	0.365401	0.478682
CWF19L2	-0.00457	0.951737	0.967243
CWH43	0.156571	0.03688	0.074475
CX3CL1	0.137646	0.066919	0.122489
CX3CR1	-0.11789	0.117073	0.193562
CXADRP2	0.027657	0.714024	0.791888
CXADRP3	-0.09413	0.211399	0.311606
CXADR	0.087828	0.243705	0.348371
CXCL10	0.092587	0.218994	0.320603
CXCL11	0.08922	0.236287	0.340207
CXCL12	-0.29118	8.04E-05	0.000393
CXCL13	-0.07162	0.342124	0.454479
CXCL14	0.447884	3.64E-10	8.80E-09
CXCL16	0.250751	0.000736	0.002644
CXCL17	0.462524	8.05E-11	2.32E-09
CXCL1	0.170538	0.02285	0.049664
CXCL2	0.083571	0.267405	0.374988
CXCL3	0.274983	0.000203	0.000878
CXCL5	0.337715	4.02E-06	2.94E-05
CXCL6	0.213464	0.004224	0.011852
CXCL9	-0.02104	0.780461	0.843877
CXCR1	-0.04673	0.535616	0.639207
CXCR2P1	-0.1344	0.073683	0.132733
CXCR2	-0.10587	0.159571	0.248239
CXCR3	0.230266	0.001987	0.006199
CXCR4	0.074958	0.32002	0.431833
CXCR5	-0.02825	0.708119	0.787445
CXCR6	-0.11709	0.119592	0.196839
CXCR7	0.11211	0.136251	0.218705
CXXC1	-0.20407	0.006291	0.016651
CXXC4	-0.4862	5.98E-12	2.29E-10
CXXC5	-0.06	0.426314	0.538516

CXorf1	-0.27295	0.000228	0.000967
CXorf21	-0.01855	0.805839	0.862498
CXorf22	-0.05756	0.445343	0.556721
CXorf23	0.079313	0.292627	0.402225
CXorf26	0.301579	4.30E-05	0.000231
CXorf27	0.093861	0.212692	0.313163
CXorf30	-0.07608	0.312833	0.423783
CXorf36	-0.16014	0.032734	0.067377
CXorf38	0.278372	0.000168	0.000746
CXorf40A	-0.14141	0.059726	0.111155
CXorf40B	-0.12953	0.084841	0.14915
CXorf41	-0.01234	0.870143	0.910333
CXorf42	-0.30034	4.64E-05	0.000246
CXorf48	-0.07532	0.31771	0.42936
CXorf49B	0.286094	0.000108	0.000509
CXorf50B	-0.18162	0.015253	0.035326
CXorf56	-0.18813	0.011913	0.028692
CXorf57	-0.40814	1.56E-08	2.30E-07
CXorf58	-0.29839	5.22E-05	0.000272
CXorf59	-0.0043	0.954525	0.968782
CXorf61	0.095503	0.204766	0.303719
CXorf64	0.064715	0.390768	0.503423
CXorf65	0.14831	0.048189	0.093091
CYB561D1	-0.40136	2.82E-08	3.86E-07
CYB561D2	-0.18739	0.012257	0.029375
CYB561	-0.06151	0.414709	0.526921
CYB5A	-0.10543	0.161334	0.250508
CYB5B	0.356139	1.07E-06	9.20E-06
CYB5D1	-0.50669	5.34E-13	2.69E-11
CYB5D2	-0.36201	6.86E-07	6.28E-06
CYB5R1	0.074575	0.322503	0.434328
CYB5R2	0.417872	6.49E-09	1.09E-07
CYB5R3	0.019091	0.800316	0.859518
CYB5R4	-0.14852	0.047873	0.092635
CYB5RL	-0.38019	1.65E-07	1.82E-06
CYBASC3	-0.07415	0.325259	0.437401
CYBA	0.498894	1.36E-12	6.19E-11
CYBB	-0.0012	0.987353	0.991062
CYBRD1	0.160385	0.032469	0.066942
CYC1	0.02044	0.786536	0.848804
CYCSP52	-0.06053	0.422188	0.534397
CYCS	-0.09331	0.215422	0.316382
CYFIP1	0.280779	0.000147	0.000664
CYFIP2	-0.31512	1.83E-05	0.00011
CYGB	0.064967	0.388924	0.50144
CYHR1	0.070509	0.349663	0.462216
CYLC2	-0.04993	0.508025	0.614716
CYLD	-0.25117	0.00072	0.002598
CYMP	0.394491	5.07E-08	6.46E-07
CYP11A1	0.045837	0.543484	0.646466
CYP11B1	0.039191	0.603487	0.699616
CYP11B2	0.076991	0.30703	0.417437
CYP17A1	0.096712	0.199065	0.296678
CYP19A1	-0.05281	0.483862	0.592953

CYP1A1	-0.07183	0.340713	0.453017
CYP1A2	-0.06764	0.369684	0.483036
CYP1B1	0.012413	0.869374	0.909971
CYP20A1	-0.20777	0.005386	0.014581
CYP21A2	0.010258	0.891899	0.924679
CYP24A1	0.197653	0.008179	0.020831
CYP26A1	0.296929	5.70E-05	0.000293
CYP26B1	-0.10482	0.163798	0.253637
CYP26C1	0.0701	0.35247	0.465208
CYP27A1	0.03642	0.629347	0.722019
CYP27B1	0.226486	0.002366	0.007209
CYP27C1	0.413026	1.01E-08	1.58E-07
CYP2A13	0.165253	0.027497	0.058158
CYP2A6	0.010005	0.894552	0.926369
CYP2A7	-0.03947	0.600873	0.697378
CYP2B6	0.185496	0.013177	0.031247
CYP2B7P1	0.158589	0.034487	0.07042
CYP2C18	0.503866	7.52E-13	3.55E-11
CYP2C19	0.391461	6.55E-08	8.05E-07
CYP2C8	-0.14874	0.047541	0.092129
CYP2C9	0.482615	8.98E-12	3.26E-10
CYP2D6	0.107282	0.154054	0.241536
CYP2D7P1	0.144114	0.054959	0.103936
CYP2E1	-0.05397	0.474319	0.584016
CYP2F1	0.111703	0.137688	0.220636
CYP2J2	0.404746	2.10E-08	2.99E-07
CYP2R1	0.256567	0.000546	0.002052
CYP2S1	0.510088	3.52E-13	1.82E-11
CYP2U1	-0.40998	1.32E-08	2.01E-07
CYP2W1	0.421515	4.64E-09	8.12E-08
CYP39A1	-0.31186	2.26E-05	0.000131
CYP3A43	-0.12051	0.109072	0.18326
CYP3A4	0.014818	0.84436	0.890283
CYP3A5	0.416117	7.62E-09	1.25E-07
CYP3A7	0.111604	0.138041	0.220969
CYP46A1	-0.38176	1.46E-07	1.62E-06
CYP4A11	0.009498	0.899872	0.930178
CYP4A22	-0.00217	0.977091	0.984158
CYP4B1	0.248216	0.000836	0.002946
CYP4F11	0.434747	1.33E-09	2.70E-08
CYP4F12	0.623646	1.43E-20	4.80E-18
CYP4F22	0.293004	7.22E-05	0.000358
CYP4F2	0.182836	0.014575	0.03403
CYP4F3	0.331895	6.02E-06	4.19E-05
CYP4F8	0.177061	0.018062	0.040719
CYP4V2	-0.2024	0.006739	0.01768
CYP4X1	0.108941	0.147751	0.233358
CYP4Z1	-0.11018	0.143171	0.227552
CYP4Z2P	-0.03357	0.656434	0.745225
CYP51A1	0.106229	0.158161	0.246588
CYP7A1	-0.05814	0.440754	0.552556
CYP7B1	-0.11886	0.114046	0.189763
CYP8B1	-0.17786	0.017539	0.039728
CYR61	0.001368	0.98554	0.989849

CYS1	0.134798	0.07282	0.131454
CYSLTR1	-0.15444	0.039552	0.078977
CYSLTR2	-0.1825	0.014759	0.0344
CYTH1	0.247993	0.000845	0.002974
CYTH2	0.355688	1.10E-06	9.47E-06
CYTH3	0.140483	0.061433	0.113861
CYTH4	-0.01828	0.808684	0.864555
CYTIP	0.017415	0.81753	0.870769
CYTL1	-0.07187	0.34042	0.452739
CY TSA	-0.53426	1.59E-14	1.13E-12
CY TSB	0.240682	0.001211	0.004052
CYYR1	-0.21687	0.003641	0.010427
CYorf15A	-0.06636	0.378805	0.491437
CYorf15B	-0.03885	0.606604	0.702516
D2HGDH	0.255264	0.000584	0.002171
D4S234E	-0.14932	0.046674	0.090697
DAAM1	-0.24758	0.000863	0.003029
DAAM2	-0.1221	0.104465	0.176978
DAB1	-0.29341	7.04E-05	0.000351
DAB2IP	0.062746	0.405379	0.517961
DAB2	-0.0655	0.385017	0.497765
DACH1	-0.2142	0.004092	0.011549
DACH2	-0.17322	0.020765	0.045812
DACT1	0.027949	0.711135	0.789689
DACT2	-0.16215	0.030582	0.063696
DACT3	0.165141	0.027603	0.058349
DAD1L	0.047783	0.526486	0.631758
DAD1	0.142463	0.05783	0.108289
DAG1	0.174022	0.020172	0.044737
DAGLA	-0.10916	0.146916	0.232373
DAGLB	0.301579	4.30E-05	0.000231
DAK	0.32833	7.67E-06	5.16E-05
DALRD3	0.214843	0.003978	0.011275
DAND5	0.29089	8.18E-05	0.000399
DAO	-0.08353	0.267641	0.37521
DAP3	0.205055	0.006037	0.016057
DAPK1	0.294591	6.56E-05	0.00033
DAPK2	-0.11366	0.13088	0.211648
DAPK3	0.119611	0.11177	0.186877
DAPL1	-0.01174	0.876366	0.914424
DAPP1	0.494943	2.18E-12	9.29E-11
DAP	-0.06678	0.375827	0.488823
DARC	-0.09591	0.202833	0.301432
DARS2	0.119315	0.112668	0.188017
DARS	0.210161	0.004868	0.013392
DAXX	0.147372	0.049638	0.095427
DAZ1	-0.06292	0.404077	0.516731
DAZ2	-0.07262	0.335398	0.447549
DAZ3	-0.05971	0.4285	0.540552
DAZAP1	0.222335	0.002856	0.008478
DAZAP2	-0.06056	0.421949	0.534162
DAZL	-0.18303	0.01447	0.033817
DBC1	-0.19126	0.010545	0.025851
DBF4B	-0.17169	0.02193	0.047942

DBF4	-0.02936	0.697222	0.778573
DBH	-0.09795	0.193367	0.289714
DBI	0.322759	1.11E-05	7.15E-05
DBN1	0.207131	0.005535	0.014918
DBNDD1	0.265111	0.000348	0.001397
DBNDD2	0.398552	3.59E-08	4.74E-07
DBNL	0.295803	6.10E-05	0.00031
DBP	0.098489	0.190898	0.286645
DBR1	-0.05605	0.457396	0.568375
DBT	-0.10329	0.17006	0.261491
DBX1	0.020743	0.783449	0.846368
DBX2	-0.05287	0.483374	0.592465
DCAF10	-0.42654	2.91E-09	5.40E-08
DCAF11	-0.30789	2.90E-05	0.000164
DCAF12L1	0.044919	0.551593	0.653825
DCAF12L2	-0.15987	0.033033	0.067935
DCAF12	-0.15388	0.040291	0.080209
DCAF13	0.03362	0.655949	0.744931
DCAF15	0.280363	0.00015	0.000678
DCAF16	-0.29758	5.48E-05	0.000284
DCAF17	-0.11751	0.118247	0.195128
DCAF4L1	-0.03985	0.59743	0.694385
DCAF4L2	-0.21302	0.004306	0.012041
DCAF4	0.155663	0.038002	0.076328
DCAF5	-0.05637	0.45483	0.565862
DCAF6	-0.00566	0.940221	0.959782
DCAF7	-0.35949	8.30E-07	7.39E-06
DCAF8L1	-0.17187	0.021791	0.047681
DCAF8L2	-0.0632	0.401991	0.514664
DCAF8	-0.10089	0.18026	0.273571
DCAKD	-0.2018	0.006909	0.018051
DCBLD1	0.2387	0.001333	0.004398
DCBLD2	0.309274	2.66E-05	0.000152
DCC	-0.27613	0.000191	0.000831
DCDC1	-0.27107	0.000252	0.001056
DCDC2B	0.02839	0.706785	0.786537
DCDC2	-0.06348	0.399905	0.512424
DCHS1	-0.11784	0.117218	0.193738
DCHS2	-0.0628	0.404957	0.517523
DCI	0.128821	0.086578	0.151692
DCK	-0.3111	2.37E-05	0.000137
DCLK1	-0.1673	0.025608	0.054731
DCLK2	-0.2728	0.000229	0.000973
DCLK3	-0.11358	0.131158	0.212061
DCLRE1A	-0.35781	9.42E-07	8.23E-06
DCLRE1B	0.096646	0.199375	0.297074
DCLRE1C	0.154849	0.039032	0.078064
DCN	0.075039	0.319495	0.431242
DCP1A	-0.18756	0.012176	0.029216
DCP1B	-0.33987	3.46E-06	2.58E-05
DCP2	-0.0788	0.295743	0.405746
DCPS	0.157009	0.036349	0.073576
DCST1	0.268289	0.000294	0.001206
DCST2	0.355733	1.10E-06	9.44E-06

DCTD	0.181165	0.015517	0.035845
DCTN1	-0.04509	0.550094	0.652484
DCTN2	-0.03252	0.666525	0.753911
DCTN3	-0.14145	0.059651	0.111047
DCTN4	-0.4428	6.05E-10	1.38E-08
DCTN5	0.358411	9.00E-07	7.92E-06
DCTN6	0.063639	0.398711	0.511292
DCTPP1	0.317434	1.58E-05	9.65E-05
DCT	-0.33374	5.30E-06	3.75E-05
DCUN1D1	-0.06325	0.401638	0.514277
DCUN1D2	-0.03542	0.638806	0.730029
DCUN1D3	-0.05315	0.481072	0.590522
DCUN1D4	-0.05945	0.430558	0.542456
DCUN1D5	-0.03544	0.638578	0.729898
DCXR	0.002055	0.978281	0.985106
DCX	-0.32435	1.00E-05	6.50E-05
DDA1	0.415951	7.73E-09	1.27E-07
DDAH1	0.063165	0.402243	0.514919
DDAH2	0.429059	2.29E-09	4.36E-08
DDB1	-0.10774	0.152297	0.23925
DDB2	0.089385	0.235416	0.339344
DDC	-0.22085	0.003052	0.008967
DDHD1	-0.21544	0.003876	0.011015
DDHD2	-0.04967	0.510258	0.616763
DDI1	-0.20779	0.005382	0.01457
DDI2	-0.21743	0.003552	0.010197
DDIT3	0.10647	0.157215	0.245534
DDIT4L	0.246711	0.000901	0.003141
DDIT4	0.386827	9.63E-08	1.13E-06
DDN	-0.16208	0.030658	0.06384
DDOST	-0.08592	0.254142	0.360321
DDO	-0.10451	0.16506	0.255234
DDR1	0.271286	0.000249	0.001045
DDR2	-0.07731	0.305027	0.415484
DRGK1	-0.06501	0.388598	0.501183
DDTL	0.069639	0.355653	0.468689
DDT	0.030092	0.690084	0.773172
DDX10	0.132774	0.077265	0.138116
DDX11L2	0.036712	0.626608	0.719958
DDX11	0.170855	0.022594	0.049199
DDX12	0.172434	0.021357	0.046907
DDX17	-0.08915	0.236672	0.340609
DDX18	0.192424	0.010074	0.024855
DDX19A	0.034935	0.643406	0.73379
DDX19B	0.465217	6.05E-11	1.81E-09
DDX1	0.027078	0.71976	0.796225
DDX20	-0.17489	0.019546	0.043554
DDX21	-0.06504	0.388416	0.500981
DDX23	-0.10517	0.162374	0.251885
DDX24	-0.31883	1.44E-05	8.93E-05
DDX25	-0.34628	2.19E-06	1.73E-05
DDX26B	-0.0134	0.85911	0.901896
DDX27	0.236529	0.001479	0.004812
DDX28	-0.02119	0.778918	0.842902

DDX31	-0.28367	0.000125	0.000576
DDX39	0.316107	1.72E-05	0.000104
DDX3X	-0.23262	0.001781	0.005644
DDX3Y	-0.05636	0.4549	0.565913
DDX41	0.255668	0.000572	0.002135
DDX42	-0.15741	0.035871	0.072779
DDX43	0.032689	0.664888	0.752673
DDX46	-0.17242	0.02137	0.046917
DDX47	0.119039	0.113508	0.189011
DDX49	0.120366	0.109512	0.183877
DDX4	0.076238	0.311801	0.422673
DDX50	-0.08308	0.270249	0.378008
DDX51	-0.22659	0.002354	0.007179
DDX52	0.142247	0.058214	0.108863
DDX53	-0.08502	0.25919	0.365591
DDX54	0.067401	0.371361	0.484418
DDX55	-0.07387	0.327138	0.439082
DDX56	0.094094	0.211554	0.311812
DDX58	0.232623	0.00178	0.005643
DDX59	-0.11505	0.126225	0.205599
DDX5	-0.25083	0.000733	0.002635
DDX60L	0.441482	6.90E-10	1.53E-08
DDX60	0.332534	5.76E-06	4.03E-05
DDX6	-0.27925	0.00016	0.000716
DEAF1	-0.09058	0.229183	0.332199
1-Dec	-0.06184	0.412181	0.524246
DECR1	0.148856	0.04736	0.091868
DECR2	0.27041	0.000262	0.001092
DEDD2	0.292004	7.66E-05	0.000377
DEDD	0.339916	3.45E-06	2.57E-05
DEF6	0.289029	9.12E-05	0.000439
DEF8	-0.0912	0.226016	0.328525
DEFA1B	0.005349	0.94351	0.961996
DEFA4	0.022679	0.763812	0.831742
DEFA5	-0.08781	0.24378	0.348454
DEFA6	-0.0718	0.340868	0.453192
DEFB103B	0.123341	0.100953	0.171956
DEFB109P1	0.150132	0.045473	0.088843
DEFB109P1	0.045077	0.550191	0.65256
DEFB119	-0.01158	0.878055	0.915366
DEFB124	-0.08945	0.23507	0.339048
DEFB126	-0.00982	0.896458	0.927897
DEFB131	-0.04649	0.537742	0.641101
DEFB132	-0.32358	1.05E-05	6.81E-05
DEFB1	0.400174	3.12E-08	4.21E-07
DEFB4A	-0.03279	0.663903	0.75202
DEGS1	-0.10328	0.170083	0.261506
DEGS2	0.238855	0.001323	0.004369
DEK	-0.10921	0.14674	0.232186
DEM1	-0.00145	0.984637	0.98929
DENND1A	-0.44662	4.14E-10	9.86E-09
DENND1B	0.122795	0.102483	0.174158
DENND1C	-0.13226	0.078431	0.139881
DENND2A	-0.3113	2.34E-05	0.000135

DENND2C	0.04163	0.581123	0.679968
DENND2D	0.211247	0.004647	0.012859
DENND3	0.210414	0.004815	0.013267
DENND4A	-0.29785	5.40E-05	0.00028
DENND4B	-0.14934	0.046643	0.090646
DENND4C	-0.23483	0.001604	0.005161
DENND5A	-0.26241	0.000402	0.001578
DENND5B	-0.36797	4.35E-07	4.21E-06
DENR	-0.21919	0.003287	0.009539
DEPDC1B	0.401787	2.72E-08	3.74E-07
DEPDC1	0.27205	0.000239	0.001009
DEPDC4	-0.23555	0.00155	0.005011
DEPDC5	-0.34108	3.18E-06	2.39E-05
DEPDC6	0.005112	0.946005	0.963646
DEPDC7	0.094221	0.210937	0.311251
DERA	0.251132	0.000722	0.0026
DERL1	0.028237	0.708291	0.787548
DERL2	-0.25316	0.000651	0.002373
DERL3	0.111865	0.137115	0.219841
DES	0.08049	0.285503	0.394462
DET1	-0.30124	4.39E-05	0.000235
DEXI	0.034992	0.642864	0.733568
DFFA	-0.0219	0.771679	0.837431
DFFB	-0.06987	0.354035	0.466993
DFNA5	0.169337	0.023842	0.051553
DFNB31	-0.40344	2.35E-08	3.32E-07
DFNB59	0.180668	0.015808	0.036433
DGAT1	0.346999	2.08E-06	1.65E-05
DGAT2L6	-0.05348	0.478336	0.587967
DGAT2	0.022548	0.765135	0.832588
DGCR10	-0.11804	0.116588	0.192954
DGCR11	0.18466	0.013603	0.03211
DGCR14	-0.02786	0.712026	0.790507
DGCR2	0.123414	0.10075	0.171641
DGCR5	-0.13061	0.082256	0.145485
DGCR6L	-0.1029	0.17167	0.263373
DGCR6	-0.19222	0.010156	0.025028
DGCR8	-0.11769	0.117688	0.194352
DGCR9	-0.0661	0.380711	0.493488
DGKA	0.526651	4.32E-14	2.79E-12
DGKB	-0.13523	0.071907	0.130162
DGKD	-0.07209	0.338968	0.451151
DGKE	-0.31782	1.54E-05	9.45E-05
DGKG	0.067123	0.373345	0.486454
DGKH	0.190783	0.010744	0.026262
DGKI	-0.05943	0.430688	0.542586
DGKK	-0.20742	0.005468	0.014762
DGKQ	0.199197	0.007684	0.01973
DGKZ	-0.09753	0.195256	0.292013
DGUOK	0.382973	1.32E-07	1.49E-06
DHCR24	0.358956	8.64E-07	7.65E-06
DHCR7	0.309142	2.68E-05	0.000153
DHDDS	-0.02194	0.771278	0.837291
DHDH	0.189538	0.011278	0.027374

DHDPSL	-0.044	0.559747	0.660724
DHFRL1	-0.25785	0.000511	0.001937
DHFR	0.161064	0.031732	0.065601
DHH	-0.12163	0.105815	0.178805
DHODH	0.132201	0.078564	0.140058
DHPS	-0.02767	0.713846	0.79181
DHRS11	0.168724	0.024363	0.052484
DHRS12	0.05559	0.461115	0.571453
DHRS13	-0.01915	0.799763	0.859103
DHRS1	0.44242	6.29E-10	1.42E-08
DHRS2	-0.0469	0.534148	0.637933
DHRS3	0.440401	7.67E-10	1.69E-08
DHRS4L1	-0.24426	0.001017	0.003484
DHRS4L2	0.014075	0.852075	0.896602
DHRS4	-0.06937	0.357518	0.470614
DHRS7B	-0.03927	0.602721	0.698907
DHRS7C	-0.09656	0.199774	0.297532
DHRS7	0.212483	0.004406	0.012272
DHRS9	0.519151	1.13E-13	6.61E-12
DHRSX	-0.10632	0.157794	0.246186
DHTKD1	-0.20371	0.006384	0.016857
DHX15	0.007904	0.916609	0.942099
DHX16	0.014927	0.843229	0.889233
DHX29	-0.19391	0.009499	0.023629
DHX30	-0.11443	0.128276	0.208219
DHX32	0.27352	0.000221	0.000941
DHX33	-0.29067	8.29E-05	0.000403
DHX34	0.14332	0.056324	0.106031
DHX35	-0.14724	0.049852	0.095753
DHX36	-0.21399	0.004129	0.011634
DHX37	-0.03993	0.596684	0.693842
DHX38	0.055232	0.464012	0.574142
DHX40P1	-0.0134	0.859101	0.901896
DHX40	-0.29766	5.46E-05	0.000282
DHX57	-0.38016	1.66E-07	1.82E-06
DHX58	0.447556	3.76E-10	9.06E-09
DHX8	0.171621	0.021986	0.048055
DHX9	-0.12493	0.096599	0.165826
DIABLO	-0.04028	0.593451	0.690775
DIAPH1	0.392926	5.79E-08	7.23E-07
DIAPH2	0.170967	0.022504	0.049025
DIAPH3	0.339198	3.63E-06	2.68E-05
DICER1	-0.36173	7.01E-07	6.40E-06
DID01	-0.13513	0.072106	0.130474
DIMT1L	-0.10645	0.157274	0.245593
DI01	-0.1461	0.051665	0.098708
DI02	0.156864	0.036524	0.07387
DI030S	0.43703	1.07E-09	2.24E-08
DI03	0.222956	0.002777	0.008274
DIP2A	-0.01929	0.798276	0.858026
DIP2B	-0.20232	0.006762	0.01773
DIP2C	-0.11493	0.126603	0.206044
DIRAS1	-0.34714	2.06E-06	1.63E-05
DIRAS2	-0.15737	0.035919	0.072863

DIRAS3	-0.15782	0.035388	0.071977
DIRC1	-0.03457	0.64692	0.736921
DIRC2	0.059622	0.429204	0.54113
DIRC3	0.234363	0.00164	0.005266
DIS3L2	0.309943	2.55E-05	0.000146
DIS3L	-0.46504	6.16E-11	1.84E-09
DIS3	0.201223	0.007074	0.018391
DISC1	0.03206	0.670961	0.757888
DISC2	0.189124	0.011461	0.02775
DISP1	-0.03551	0.637958	0.729484
DISP2	-0.11295	0.133307	0.214799
DIXDC1	-0.21876	0.00335	0.009694
DKC1	-0.1493	0.046702	0.090741
DKFZP434F	-0.28887	9.21E-05	0.000442
DKFZP434K	0.175541	0.019091	0.042686
DKFZP434I	-0.05501	0.465824	0.575988
DKFZP586I	-0.31708	1.62E-05	9.83E-05
DKFZP686I	-0.07736	0.304739	0.415236
DKFZp434J	0.261727	0.000417	0.001628
DKFZp434I	-0.11646	0.121586	0.199274
DKFZp566F	-0.08189	0.277182	0.385185
DKFZp686A	-0.02716	0.718921	0.795542
DKFZp686C	-0.14865	0.047673	0.09233
DKFZp761E	0.179861	0.016289	0.037393
DKFZp779M	-0.21003	0.004894	0.013453
DKK1	0.502944	8.41E-13	3.90E-11
DKK2	-0.06459	0.391673	0.504393
DKK3	0.11067	0.141387	0.22534
DKK4	0.336034	4.52E-06	3.26E-05
DKKL1	-0.05812	0.440951	0.552742
DLAT	-0.06266	0.406	0.518419
DLC1	-0.29368	6.93E-05	0.000346
DLD	-0.25384	0.000628	0.002306
DLEC1	0.155445	0.038275	0.076767
DLEU1	-0.07844	0.29796	0.407995
DLEU2L	-0.03573	0.635876	0.727524
DLEU2	0.012586	0.867577	0.908602
DLEU7	0.192052	0.010223	0.025155
DLG1	-0.04241	0.574059	0.673716
DLG2	-0.25064	0.00074	0.002657
DLG3	0.174235	0.020017	0.044438
DLG4	-0.33204	5.96E-06	4.16E-05
DLG5	0.143796	0.055503	0.104765
DLGAP1	-0.30589	3.29E-05	0.000183
DLGAP2	-0.13097	0.081406	0.144318
DLGAP3	-0.30028	4.65E-05	0.000247
DLGAP4	-0.16516	0.027585	0.05832
DLGAP5	0.407357	1.67E-08	2.44E-07
DLK1	-0.01887	0.802598	0.860938
DLK2	-0.20158	0.006972	0.018183
DLL1	-0.27428	0.000211	0.000907
DLL3	-0.29315	7.15E-05	0.000355
DLL4	-0.16674	0.026111	0.05568
DLST	0.232095	0.001825	0.005764

DLX1	-0.09789	0.193622	0.290052
DLX2	-0.05076	0.501042	0.608201
DLX3	0.262579	0.000399	0.001567
DLX4	0.299523	4.87E-05	0.000257
DLX5	0.260605	0.000443	0.001712
DLX6AS	0.057818	0.443321	0.555036
DLX6	0.028889	0.70187	0.782382
DMAP1	-0.11406	0.129511	0.209845
DMBT1	0.283473	0.000126	0.000581
DMBX1	0.506402	5.53E-13	2.75E-11
DMC1	0.07724	0.305467	0.415713
DMD	-0.34592	2.25E-06	1.76E-05
DMGDH	-0.31759	1.56E-05	9.57E-05
DMKN	0.307262	3.02E-05	0.00017
DMP1	-0.00039	0.995898	0.997058
DMPK	-0.03053	0.685771	0.769823
DMRT1	0.110393	0.142391	0.226593
DMRT2	-0.23546	0.001556	0.00503
DMRT3	-0.05592	0.458421	0.56904
DMRTA1	0.195717	0.008841	0.022207
DMRTA2	0.122171	0.104255	0.176698
DMRTB1	-0.04507	0.550297	0.652646
DMRTC1B	-0.28927	8.99E-05	0.000434
DMRTC1	-0.17721	0.017961	0.04054
DMRTC2	-0.09182	0.222856	0.324886
DMTF1	-0.12744	0.090036	0.15642
DMWD	0.08358	0.267349	0.37496
DMXL1	-0.37518	2.47E-07	2.58E-06
DMXL2	-0.41885	5.93E-09	1.01E-07
DNA2	0.042182	0.576118	0.675291
DNAH10	-0.28646	0.000106	0.0005
DNAH11	-0.00333	0.964846	0.976223
DNAH12	-0.15158	0.043414	0.085454
DNAH14	0.084561	0.261758	0.368609
DNAH17	0.124981	0.096467	0.165667
DNAH1	0.075163	0.318691	0.430421
DNAH2	0.360276	7.82E-07	7.03E-06
DNAH3	0.412102	1.09E-08	1.71E-07
DNAH5	-0.11975	0.111367	0.186356
DNAH6	-0.39136	6.60E-08	8.11E-07
DNAH7	-0.33915	3.64E-06	2.69E-05
DNAH8	-0.0678	0.368517	0.482044
DNAH9	-0.2951	6.37E-05	0.000322
DNAI1	-0.33938	3.58E-06	2.66E-05
DNAI2	-0.35492	1.17E-06	9.92E-06
DNAJA1	-0.19403	0.009456	0.023537
DNAJA2	0.181471	0.015341	0.035504
DNAJA3	0.004147	0.956192	0.969977
DNAJA4	0.268422	0.000292	0.001199
DNAJB11	0.137632	0.066946	0.122517
DNAJB12	0.016937	0.822448	0.874218
DNAJB13	0.413712	9.47E-09	1.51E-07
DNAJB14	-0.0864	0.251504	0.357427
DNAJB1	0.269034	0.000282	0.001164

DNAJB2	0.084143	0.264132	0.371396
DNAJB3	0.353713	1.28E-06	1.07E-05
DNAJB4	-0.19895	0.007761	0.019901
DNAJB5	-0.15117	0.043983	0.086402
DNAJB6	-0.14829	0.048214	0.09313
DNAJB7	-0.02167	0.773983	0.839097
DNAJB8	0.076854	0.307896	0.418356
DNAJB9	-0.50872	4.17E-13	2.13E-11
DNAJC10	-0.06801	0.367017	0.480622
DNAJC11	-0.0727	0.334849	0.447053
DNAJC12	-0.36978	3.78E-07	3.74E-06
DNAJC13	0.130702	0.082042	0.145223
DNAJC14	-0.27311	0.000226	0.000959
DNAJC15	0.264797	0.000354	0.001418
DNAJC16	-0.29094	8.15E-05	0.000398
DNAJC17	0.377039	2.13E-07	2.27E-06
DNAJC18	-0.46689	5.05E-11	1.55E-09
DNAJC19	0.022437	0.766258	0.833489
DNAJC1	0.086134	0.252956	0.359
DNAJC21	-0.20682	0.005608	0.01509
DNAJC22	0.200229	0.007367	0.019036
DNAJC24	-0.105	0.163065	0.252719
DNAJC25-C	-0.20329	0.006498	0.017128
DNAJC25	-0.26847	0.000291	0.001196
DNAJC27	-0.4234	3.90E-09	7.00E-08
DNAJC28	-0.24843	0.000827	0.002923
DNAJC2	0.15803	0.035137	0.071503
DNAJC30	-0.25484	0.000597	0.002208
DNAJC3	-0.10908	0.147226	0.232733
DNAJC4	0.14735	0.049673	0.095455
DNAJC5B	0.106427	0.157384	0.24565
DNAJC5G	-0.0176	0.815577	0.869573
DNAJC5	-0.37211	3.15E-07	3.19E-06
DNAJC6	-0.50487	6.66E-13	3.20E-11
DNAJC7	0.056993	0.449866	0.560785
DNAJC8	0.030097	0.690039	0.773166
DNAJC9	0.165436	0.027323	0.057859
DNAL1	-0.37111	3.40E-07	3.41E-06
DNAL4	0.057436	0.446346	0.557691
DNALI1	-0.25993	0.000458	0.001763
DNASE1L1	0.231075	0.001914	0.006005
DNASE1L2	0.098309	0.191712	0.287626
DNASE1L3	-0.27051	0.00026	0.001087
DNASE1	-0.29126	8.00E-05	0.000391
DNASE2B	-0.19888	0.007782	0.019944
DNASE2	0.075618	0.315767	0.427085
DND1	0.137006	0.068209	0.124473
DNER	-0.17895	0.016851	0.038415
DNHD1	-0.01843	0.807107	0.863342
DNLZ	0.062225	0.409295	0.521448
DNM1L	-0.22865	0.002142	0.006624
DNM1P35	0.118622	0.114788	0.190676
DNM1	-0.16948	0.023721	0.051335
DNM2	0.506325	5.58E-13	2.76E-11

DNM3	-0.11039	0.142388	0.226593
DNMBP	0.322519	1.13E-05	7.24E-05
DNMT1	-0.10157	0.17732	0.269982
DNMT3A	0.036087	0.632488	0.724445
DNMT3B	-0.01369	0.856051	0.899644
DNMT3L	-0.02775	0.713084	0.791364
DNPEP	0.247645	0.00086	0.00302
DNTTIP1	0.403698	2.30E-08	3.25E-07
DNTTIP2	0.289125	9.07E-05	0.000437
DNTT	-0.08531	0.257541	0.363882
DOC2A	0.021923	0.771463	0.837308
DOC2B	-0.28532	0.000113	0.000531
DOCK10	-0.27781	0.000174	0.000767
DOCK11	-0.14763	0.049241	0.094809
DOCK1	-0.00728	0.923125	0.946729
DOCK2	-0.00485	0.948779	0.965307
DOCK3	-0.22111	0.003017	0.008894
DOCK4	-0.3084	2.81E-05	0.000159
DOCK5	0.420434	5.13E-09	8.87E-08
DOCK6	0.40776	1.61E-08	2.37E-07
DOCK7	-0.11298	0.133217	0.21469
DOCK8	-0.15478	0.039122	0.078229
DOCK9	0.023805	0.75245	0.822632
DOHH	0.095224	0.206097	0.305248
DOK1	0.351437	1.51E-06	1.24E-05
DOK2	0.041077	0.586163	0.68467
DOK3	0.039539	0.600276	0.696956
DOK4	0.628415	5.99E-21	2.38E-18
DOK5	0.228235	0.002183	0.006729
DOK6	-0.11322	0.132383	0.213658
DOK7	0.278711	0.000165	0.000734
DOLK	-0.19463	0.009231	0.023053
DOLPP1	0.066282	0.379378	0.492084
DOM3Z	-0.19803	0.008055	0.020568
DONSON	0.160121	0.032759	0.067413
DOPEY1	-0.42528	3.27E-09	5.98E-08
DOPEY2	-0.17454	0.019799	0.044053
DOT1L	-0.02463	0.74417	0.815699
DPAGT1	0.064003	0.396011	0.508786
DPCD	0.175029	0.01945	0.04336
DPCR1	0.608007	2.25E-19	5.78E-17
DPEP1	-0.04439	0.556312	0.65769
DPEP2	0.091975	0.222072	0.324149
DPEP3	-0.101	0.179775	0.273074
DPF1	-0.23338	0.001717	0.005478
DPF2	0.04753	0.52868	0.633468
DPF3	-0.06747	0.370846	0.484066
DPH1	-0.42897	2.31E-09	4.39E-08
DPH2	-0.05424	0.472068	0.581963
DPH3B	-0.11255	0.134709	0.216775
DPH3	-0.22087	0.003049	0.008962
DPH5	-0.30528	3.42E-05	0.000189
DPM1	0.076145	0.312396	0.423365
DPM2	0.029995	0.691037	0.773688

DPM3	-0.02889	0.701885	0.782382
DPP10	-0.27894	0.000163	0.000726
DPP3	0.455621	1.65E-10	4.39E-09
DPP4	-0.2264	0.002375	0.00723
DPP6	-0.25434	0.000613	0.002258
DPP7	#####	0.999374	0.999425
DPP8	-0.14882	0.047421	0.09195
DPP9	0.255666	0.000572	0.002135
DPPA2	0.022203	0.768623	0.835143
DPPA3	0.02818	0.708851	0.787905
DPPA4	-0.14528	0.053009	0.100798
DPPA5	0.130369	0.082829	0.146316
DPRXP4	0.019257	0.798623	0.858205
DPRX	-0.09919	0.18776	0.282812
DPT	-0.23632	0.001494	0.004851
DPY19L1	0.329913	6.89E-06	4.69E-05
DPY19L2P1	-0.24702	0.000887	0.003103
DPY19L2P2	-0.21816	0.00344	0.009924
DPY19L2P4	-0.33133	6.25E-06	4.33E-05
DPY19L2	-0.15804	0.035126	0.071496
DPY19L3	-0.33456	5.01E-06	3.57E-05
DPY19L4	-0.10624	0.158111	0.246535
DPY30	0.305291	3.42E-05	0.000189
DPYD	0.091433	0.224819	0.327073
DPYSL2	-0.18605	0.012904	0.03068
DPYSL3	-0.00683	0.927939	0.950159
DPYSL4	-0.02988	0.69217	0.774457
DPYSL5	-0.21011	0.004879	0.013418
DPYS	-0.24876	0.000813	0.002886
DQX1	0.311393	2.33E-05	0.000135
DR1	0.060176	0.424919	0.537132
DRAM1	0.153194	0.041198	0.08171
DRAM2	0.192096	0.010205	0.025121
DRAP1	0.276161	0.00019	0.00083
DRD1	0.001023	0.989184	0.992195
DRD2	-0.11076	0.141059	0.224871
DRD3	-0.16723	0.025675	0.054856
DRD4	0.325939	9.00E-06	5.92E-05
DRD5	-0.12065	0.108667	0.182688
DRG1	-0.10368	0.168443	0.259528
DRG2	-0.0833	0.268937	0.376572
DRGX	0.041618	0.581233	0.680037
DRP2	0.082868	0.271465	0.37936
DSC1	-0.04356	0.563709	0.664369
DSC2	0.137666	0.066879	0.122439
DSC3	0.113044	0.132996	0.214368
DSCAML1	-0.24079	0.001205	0.004033
DSCAM	-0.33298	5.59E-06	3.92E-05
DSCC1	0.122066	0.104554	0.177099
DSCR10	0.026515	0.725349	0.800975
DSCR3	0.091126	0.226386	0.328916
DSCR4	-0.12526	0.09571	0.164489
DSCR6	0.188355	0.011808	0.028449
DSCR8	-0.14117	0.060154	0.111825

DSCR9	-0.08728	0.246649	0.351664
DSEL	-0.12728	0.090457	0.157041
DSE	-0.08273	0.272247	0.380265
DSG1	-0.16661	0.026234	0.0559
DSG2	0.238816	0.001326	0.004375
DSG3	0.380983	1.55E-07	1.72E-06
DSG4	-0.07604	0.313076	0.423908
DSN1	0.052385	0.487397	0.596176
DSPP	0.025671	0.733749	0.80759
DSP	-0.0857	0.255386	0.361748
DSTN	-0.06826	0.365299	0.478658
DSTYK	-0.41539	8.14E-09	1.33E-07
DST	-0.18733	0.012286	0.029433
DTD1	0.028752	0.703221	0.78354
DTHD1	-0.12078	0.108294	0.182185
DTL	0.31792	1.53E-05	9.40E-05
DTNA	-0.4445	5.11E-10	1.19E-08
DTNBP1	-0.10674	0.156158	0.244293
DTNB	0.029704	0.693875	0.775718
DTWD1	-0.13047	0.08259	0.146011
DTWD2	-0.09981	0.18498	0.279264
DTX1	0.237857	0.001388	0.004556
DTX2	0.410188	1.30E-08	1.98E-07
DTX3L	0.256489	0.000548	0.002059
DTX3	-0.13596	0.070372	0.127862
DTX4	0.34331	2.71E-06	2.08E-05
DTYMK	0.360639	7.61E-07	6.88E-06
DULLARD	-0.12356	0.100337	0.17104
DUOX1	0.438086	9.62E-10	2.06E-08
DUOX2	0.363747	6.01E-07	5.58E-06
DUOXA1	0.467553	4.71E-11	1.46E-09
DUOXA2	0.365274	5.35E-07	5.05E-06
DUPD1	-0.10313	0.170738	0.262269
DUS1L	0.091188	0.226065	0.328571
DUS2L	0.259972	0.000458	0.00176
DUS3L	0.021705	0.773669	0.838965
DUS4L	0.026053	0.729939	0.804487
DUSP10	0.312501	2.17E-05	0.000127
DUSP11	0.229904	0.002021	0.006291
DUSP12	0.020344	0.787514	0.849322
DUSP13	-0.00959	0.898955	0.92946
DUSP14	0.158323	0.034795	0.070909
DUSP15	-0.19351	0.00965	0.02396
DUSP16	-0.34313	2.75E-06	2.10E-05
DUSP18	-0.02657	0.72484	0.800636
DUSP19	-0.28852	9.40E-05	0.00045
DUSP1	-0.0618	0.412501	0.524486
DUSP21	-0.00307	0.967607	0.977943
DUSP22	0.031261	0.678701	0.763725
DUSP23	0.338472	3.82E-06	2.80E-05
DUSP26	-0.22154	0.002959	0.008746
DUSP27	0.096306	0.200965	0.299049
DUSP28	-0.01338	0.859272	0.902003
DUSP2	0.059115	0.433144	0.544812

DUSP3	0.022237	0.768282	0.834955
DUSP4	0.318186	1.50E-05	9.26E-05
DUSP5P	0.29924	4.96E-05	0.00026
DUSP5	0.123979	0.099189	0.169407
DUSP6	0.245518	0.000956	0.003303
DUSP7	0.41037	1.28E-08	1.95E-07
DUSP8	-0.2417	0.001153	0.003884
DUSP9	0.026392	0.726567	0.802028
DUT	0.034449	0.648025	0.737736
DUXA	-0.09882	0.189417	0.284875
DVL1	0.351472	1.51E-06	1.24E-05
DVL2	-0.40004	3.16E-08	4.24E-07
DVL3	0.019076	0.80047	0.859591
DVWA	0.23166	0.001862	0.005867
DYDC1	-0.07902	0.2944	0.404325
DYDC2	0.075017	0.319637	0.431346
DYM	-0.29492	6.43E-05	0.000325
DYNC1H1	-0.20529	0.005979	0.015935
DYNC1I1	-0.21905	0.003308	0.00959
DYNC1I2	0.219803	0.003198	0.009328
DYNC1LI1	-0.12847	0.087448	0.152898
DYNC1LI2	0.016808	0.823777	0.875114
DYNC2H1	0.07017	0.351988	0.464788
DYNC2LI1	-0.06792	0.367668	0.481241
DYNLL1	0.121663	0.105713	0.178688
DYNLL2	-0.30094	4.47E-05	0.000238
DYNLRB1	0.169856	0.023409	0.050744
DYNLRB2	-0.22518	0.002511	0.007591
DYNLT1	0.307592	2.96E-05	0.000167
DYNLT3	0.072806	0.33415	0.446421
DYRK1A	-0.18375	0.014079	0.033005
DYRK1B	-0.09709	0.1973	0.294469
DYRK2	-0.18548	0.013184	0.031258
DYRK3	-0.33394	5.23E-06	3.70E-05
DYRK4	-0.18612	0.012865	0.030616
DYSFIP1	0.070796	0.347702	0.460205
DYSF	-0.0473	0.530656	0.634951
DYTN	-0.17383	0.02031	0.044994
DYX1C1	-0.01093	0.884822	0.919946
DZIP1L	0.126889	0.091447	0.158453
DZIP1	-0.079	0.294551	0.404476
DZIP3	-0.42282	4.12E-09	7.34E-08
E2F1	0.266297	0.000327	0.00132
E2F2	0.152961	0.041511	0.08224
E2F3	0.126556	0.092309	0.159709
E2F4	0.146002	0.051821	0.09894
E2F5	-0.26798	0.000299	0.001224
E2F6	-0.27938	0.000159	0.000711
E2F7	0.347617	1.99E-06	1.58E-05
E2F8	0.368241	4.25E-07	4.13E-06
E4F1	0.132029	0.078956	0.140605
EAF1	-0.22285	0.00279	0.008303
EAF2	-0.0263	0.727508	0.802681
EAPP	-0.04276	0.570906	0.670812

EARS2	0.059344	0.431363	0.543264
EBAG9	-0.16468	0.028047	0.059144
EBF1	-0.30133	4.36E-05	0.000234
EBF2	-0.15034	0.045172	0.08836
EBF3	-0.15726	0.036048	0.073065
EBF4	-0.07101	0.346267	0.458674
EBI3	-0.09591	0.202835	0.301432
EBNA1BP2	0.086545	0.250688	0.356396
EBPL	0.272877	0.000229	0.00097
EBP	0.371539	3.29E-07	3.31E-06
ECD	0.170904	0.022555	0.049125
ECE1	-0.02226	0.768001	0.834787
ECE2	-0.26035	0.000449	0.001732
ECEL1	-0.02077	0.783142	0.846082
ECH1	0.265104	0.000349	0.001397
ECHDC1	-0.1133	0.132106	0.213294
ECHDC2	0.110746	0.141113	0.224921
ECHDC3	-0.17182	0.021832	0.047761
ECHS1	0.19948	0.007596	0.019544
ECM1	0.539675	7.66E-15	5.80E-13
ECM2	-0.04492	0.551622	0.653825
ECSCR	-0.13925	0.063773	0.117568
ECSIT	0.001137	0.987979	0.991388
ECT2L	-0.25342	0.000642	0.002348
ECT2	0.362573	6.57E-07	6.06E-06
EDA2R	-0.25836	0.000498	0.001895
EDARADD	-0.20581	0.00585	0.015648
EDAR	0.315942	1.74E-05	0.000105
EDA	-0.37434	2.64E-07	2.73E-06
EDC3	-0.12785	0.088999	0.155027
EDC4	0.024873	0.74173	0.813747
EDDM3A	-0.11905	0.113479	0.188995
EDDM3B	0.0003	0.99683	0.997537
EDEM1	-0.1024	0.173779	0.266009
EDEM2	0.057008	0.449746	0.560736
EDEM3	-0.09881	0.189457	0.284913
EDF1	0.037122	0.622755	0.716648
EDIL3	-0.03443	0.648248	0.737784
EDN1	0.239603	0.001276	0.004242
EDN2	0.209699	0.004965	0.013615
EDN3	-0.0795	0.291489	0.401107
EDNRA	0.234821	0.001605	0.005163
EDNRB	-0.35346	1.30E-06	1.09E-05
EEA1	-0.31694	1.63E-05	9.91E-05
EED	0.243269	0.001068	0.00363
EEF1A1P9	-0.16954	0.023673	0.051255
EEF1A1	-0.16263	0.030087	0.062822
EEF1A2	-0.08515	0.258435	0.364916
EEF1B2	0.076388	0.310847	0.421497
EEF1DP3	0.083054	0.270384	0.37817
EEF1D	0.166113	0.02669	0.056743
EEF1E1	-0.12631	0.092954	0.160596
EEF1G	0.092667	0.218598	0.320141
EEF2K	0.072668	0.335068	0.447195

EEF2	-0.27749	0.000177	0.000778
EEFSEC	0.120314	0.109666	0.184071
EEPD1	0.301431	4.34E-05	0.000233
EFCAB10	-0.1783	0.017255	0.039197
EFCAB1	0.229544	0.002055	0.006378
EFCAB2	-0.22453	0.002586	0.007781
EFCAB3	-0.04113	0.585655	0.684206
EFCAB4A	0.295448	6.23E-05	0.000316
EFCAB4B	-0.18774	0.012091	0.02906
EFCAB5	-0.19336	0.00971	0.024081
EFCAB6	-0.36433	5.75E-07	5.37E-06
EFCAB7	-0.22118	0.003008	0.008871
EFEMP1	0.000588	0.993788	0.995701
EFEMP2	0.223424	0.002719	0.008123
EFHA1	0.04866	0.51892	0.624612
EFHA2	-0.27643	0.000188	0.000819
EFHB	-0.17521	0.019319	0.043117
EFHC1	-0.33943	3.57E-06	2.65E-05
EFHC2	-0.11685	0.120358	0.197852
EFHD1	0.004476	0.952718	0.967792
EFHD2	0.440244	7.79E-10	1.71E-08
EFNA1	0.30019	4.68E-05	0.000248
EFNA2	0.318597	1.46E-05	9.04E-05
EFNA3	0.442067	6.51E-10	1.46E-08
EFNA4	0.558963	5.12E-16	5.06E-14
EFNA5	0.368519	4.16E-07	4.06E-06
EFNB1	0.669437	1.70E-24	1.87E-21
EFNB2	0.496317	1.85E-12	8.14E-11
EFNB3	-0.34064	3.28E-06	2.46E-05
EFR3A	-0.02781	0.712543	0.790897
EFR3B	-0.37889	1.84E-07	1.99E-06
EFS	0.168977	0.024146	0.052059
EFTUD1	-0.00256	0.972964	0.981702
EFTUD2	0.265935	0.000333	0.001342
EGFL6	0.180489	0.015914	0.036641
EGFL7	-0.13347	0.075703	0.135827
EGFL8	0.116691	0.120857	0.198391
EGFLAM	-0.12485	0.096823	0.166167
EGFR	0.104544	0.1649	0.255103
EGF	0.062601	0.406464	0.518844
EGLN1	-0.12846	0.087468	0.152912
EGLN2	0.130419	0.082711	0.146159
EGLN3	0.273463	0.000221	0.000943
EGOT	0.36849	4.17E-07	4.06E-06
EGR1	-0.04328	0.566192	0.666645
EGR2	0.081094	0.281889	0.390505
EGR3	-0.12711	0.090876	0.15763
EGR4	0.035018	0.642612	0.733499
EHBP1L1	0.495528	2.03E-12	8.79E-11
EHBP1	0.086905	0.248718	0.354154
EHD1	0.524801	5.50E-14	3.46E-12
EHD2	0.511242	3.05E-13	1.63E-11
EHD3	-0.142	0.058654	0.109531
EHD4	0.400519	3.03E-08	4.10E-07

EHF	0.109758	0.144718	0.229484
EHHADH	0.036545	0.628175	0.721009
EHMT1	-0.08217	0.275533	0.383474
EHMT2	0.044016	0.559632	0.660627
EI24	0.231489	0.001877	0.005905
EID1	-0.35732	9.77E-07	8.50E-06
EID2B	-0.27588	0.000194	0.000841
EID2	-0.20185	0.006894	0.01802
EID3	-0.38802	8.72E-08	1.04E-06
EIF1AD	0.328603	7.53E-06	5.07E-05
EIF1AX	-0.0403	0.59326	0.690594
EIF1AY	-0.06861	0.362802	0.47608
EIF1B	-0.19528	0.008997	0.02253
EIF1	-0.07787	0.301542	0.411668
EIF2AK1	0.03786	0.615852	0.710701
EIF2AK2	0.28053	0.000149	0.000672
EIF2AK3	-0.3942	5.20E-08	6.60E-07
EIF2AK4	-0.09189	0.222521	0.324573
EIF2A	0.062371	0.408194	0.520415
EIF2B1	-0.02997	0.691284	0.773859
EIF2B2	0.18023	0.016068	0.036941
EIF2B3	-0.11673	0.120716	0.198259
EIF2B4	0.117208	0.119209	0.196436
EIF2B5	0.153623	0.040628	0.080749
EIF2C1	-0.36329	6.23E-07	5.76E-06
EIF2C2	0.078014	0.300633	0.410745
EIF2C3	-0.26642	0.000325	0.001312
EIF2C4	-0.12297	0.101985	0.173446
EIF2S1	0.169817	0.023441	0.050803
EIF2S2	0.142947	0.056975	0.106963
EIF2S3	0.225443	0.002481	0.007508
EIF3A	-0.21475	0.003995	0.011311
EIF3B	0.097551	0.195179	0.291941
EIF3CL	0.126659	0.092041	0.159343
EIF3C	0.042167	0.576253	0.675409
EIF3D	0.063	0.403474	0.516127
EIF3E	0.006182	0.934726	0.955208
EIF3F	0.127442	0.090033	0.15642
EIF3G	0.147041	0.050158	0.096228
EIF3H	0.171517	0.022069	0.048198
EIF3IP1	0.003948	0.95829	0.971506
EIF3I	0.229189	0.002089	0.006476
EIF3J	0.084816	0.260316	0.366969
EIF3K	0.121282	0.106819	0.180271
EIF3L	-0.30042	4.61E-05	0.000245
EIF3M	0.347035	2.08E-06	1.64E-05
EIF4A1	-0.04321	0.566869	0.66694
EIF4A2	0.072002	0.339527	0.451804
EIF4A3	0.023665	0.753862	0.823766
EIF4B	-0.39017	7.29E-08	8.85E-07
EIF4E1B	-0.13105	0.081214	0.144017
EIF4E2	0.436985	1.07E-09	2.24E-08
EIF4E3	-0.21836	0.003409	0.009846
EIF4EBP1	0.156572	0.036879	0.074475

EIF4EBP2	0.00031	0.996724	0.997537
EIF4EBP3	0.457396	1.38E-10	3.73E-09
EIF4ENIF1	-0.27273	0.00023	0.000976
EIF4E	-0.14614	0.051602	0.098615
EIF4G1	0.079073	0.294098	0.404022
EIF4G2	-0.19305	0.009828	0.024328
EIF4G3	-0.13578	0.070733	0.128363
EIF4H	-0.09679	0.198719	0.296273
EIF5A2	0.255902	0.000565	0.002112
EIF5AL1	-0.02057	0.785182	0.847731
EIF5A	0.017221	0.819531	0.87224
EIF5B	0.028412	0.706573	0.786368
EIF5	-0.30544	3.39E-05	0.000187
EIF6	0.432748	1.61E-09	3.20E-08
ELAC1	-0.43766	1.00E-09	2.13E-08
ELAC2	-0.26286	0.000393	0.001546
ELANE	-0.08761	0.244882	0.34975
ELAVL1	-0.09505	0.206936	0.306238
ELAVL2	-0.1368	0.068631	0.125141
ELAVL3	-0.21185	0.004528	0.012577
ELAVL4	-0.351	1.56E-06	1.28E-05
ELF1	0.054745	0.467972	0.578102
ELF2	-0.32957	7.05E-06	4.78E-05
ELF3	0.475728	1.94E-11	6.45E-10
ELF4	0.297712	5.44E-05	0.000282
ELF5	0.073049	0.332531	0.444755
ELFN1	-0.16276	0.029952	0.062582
ELFN2	0.043485	0.564385	0.665007
ELK1	0.031697	0.674477	0.760686
ELK3	-0.00168	0.982224	0.987668
ELK4	-0.00373	0.960602	0.973083
ELL2	-0.49784	1.55E-12	6.89E-11
ELL3	0.228381	0.002168	0.006694
ELL	-0.0273	0.717532	0.794828
ELM01	-0.5102	3.47E-13	1.81E-11
ELM02	-0.56798	1.36E-16	1.62E-14
ELM03	0.493432	2.60E-12	1.10E-10
ELMOD1	-0.09342	0.214881	0.315751
ELMOD2	-0.09564	0.204099	0.302923
ELMOD3	0.047797	0.526367	0.63173
ELN	0.102934	0.171539	0.263212
ELOF1	0.087723	0.244271	0.349041
ELOVL1	0.479292	1.30E-11	4.50E-10
ELOVL2	-0.39065	7.01E-08	8.54E-07
ELOVL3	0.084122	0.264249	0.371534
ELOVL4	-0.35175	1.47E-06	1.21E-05
ELOVL5	-0.29781	5.41E-05	0.00028
ELOVL6	0.28967	8.79E-05	0.000425
ELOVL7	0.050973	0.499226	0.606519
ELP2P	-0.31731	1.59E-05	9.72E-05
ELP2	-0.30876	2.75E-05	0.000156
ELP3	-0.08167	0.278448	0.38666
ELP4	-0.17338	0.020647	0.045621
ELSPBP1	0.055584	0.461168	0.571482

ELTD1	-0.21539	0.003884	0.011036
EMB	0.220838	0.003054	0.008969
EMCN	-0.23055	0.001961	0.006132
EMD	-0.03157	0.675718	0.761782
EME1	0.266974	0.000315	0.001281
EME2	0.045579	0.545754	0.648483
EMG1	0.119613	0.111765	0.186877
EMID1	-0.17638	0.018517	0.04157
EMID2	-0.14745	0.04951	0.095225
EMILIN1	0.184864	0.013498	0.031893
EMILIN2	-0.02286	0.762006	0.830279
EMILIN3	-0.01529	0.839458	0.886675
EML1	-0.42318	3.98E-09	7.13E-08
EML2	0.392608	5.95E-08	7.41E-07
EML3	0.262902	0.000392	0.001543
EML4	0.127021	0.091109	0.157978
EML5	-0.47442	2.24E-11	7.34E-10
EML6	-0.40685	1.75E-08	2.54E-07
EMP1	0.220691	0.003074	0.009019
EMP2	0.303523	3.81E-05	0.000207
EMP3	0.42192	4.47E-09	7.87E-08
EMR1	-0.14736	0.049663	0.095451
EMR2	-0.10297	0.17137	0.263014
EMR3	0.036552	0.628107	0.720972
EMR4P	-0.02961	0.694815	0.776493
EMX1	0.146565	0.050915	0.097466
EMX2OS	0.074759	0.321306	0.433154
EMX2	0.131682	0.079753	0.141845
EN1	0.163526	0.029181	0.06117
EN2	0.182374	0.01483	0.0345
ENAH	-0.05431	0.471504	0.581557
ENAM	-0.21436	0.004063	0.011483
ENC1	0.314397	1.92E-05	0.000114
ENDOD1	0.439041	8.76E-10	1.90E-08
ENDOG	0.049878	0.508502	0.615149
ENDOU	0.070977	0.346464	0.458874
ENGASE	0.162763	0.029952	0.062582
ENG	-0.06736	0.371626	0.484683
ENHO	-0.30085	4.49E-05	0.000239
ENKUR	-0.00187	0.980255	0.986291
ENO1	0.299531	4.87E-05	0.000257
ENO2	0.013093	0.86229	0.904367
ENO3	0.041715	0.580357	0.679293
ENOPH1	-0.13039	0.082774	0.146245
ENOSF1	-0.02124	0.778431	0.842679
ENOX1	-0.14721	0.049895	0.095825
ENOX2	-0.38822	8.58E-08	1.02E-06
ENPEP	-0.13601	0.070258	0.12768
ENPP1	-0.21592	0.003796	0.010817
ENPP2	-0.38292	1.33E-07	1.49E-06
ENPP3	-0.26001	0.000457	0.001758
ENPP4	-0.28893	9.18E-05	0.000441
ENPP5	-0.20127	0.007061	0.018366
ENPP6	-0.08054	0.285221	0.394182

ENPP7	-0.07115	0.345313	0.457656
ENSA	0.014902	0.843494	0.889465
ENTHD1	0.211673	0.004563	0.012663
ENTPD1	-0.0161	0.831076	0.880266
ENTPD2	0.296129	5.98E-05	0.000306
ENTPD3	0.010506	0.889308	0.923124
ENTPD4	-0.11201	0.136605	0.219202
ENTPD5	0.038852	0.606628	0.702516
ENTPD6	0.040039	0.595674	0.692956
ENTPD7	-0.11036	0.142526	0.22677
ENTPD8	0.232508	0.00179	0.005669
ENY2	0.152883	0.041617	0.082424
EOMES	-0.17404	0.020157	0.044714
EP300	-0.18793	0.012003	0.028882
EP400NL	-0.00594	0.937289	0.95748
EP400	-0.38221	1.41E-07	1.57E-06
EPAS1	-0.40106	2.89E-08	3.93E-07
EPB41L1	0.567232	1.52E-16	1.79E-14
EPB41L2	-0.22352	0.002707	0.008094
EPB41L3	-0.41344	9.70E-09	1.54E-07
EPB41L4A	0.056281	0.455555	0.566515
EPB41L4B	-0.25332	0.000645	0.002357
EPB41L5	-0.42246	4.25E-09	7.53E-08
EPB41	-0.1291	0.085881	0.150631
EPB42	-0.19332	0.009723	0.024108
EPB49	0.048199	0.522893	0.628476
EPC1	-0.29611	5.99E-05	0.000306
EPC2	-0.37405	2.70E-07	2.79E-06
EPCAM	0.236882	0.001455	0.004744
EPDR1	0.283586	0.000125	0.000578
EPGN	0.114011	0.12969	0.210031
EPHA10	-0.04641	0.538447	0.641748
EPHA1	0.435896	1.19E-09	2.45E-08
EPHA2	0.676437	3.70E-25	4.30E-22
EPHA3	-0.05405	0.473647	0.583436
EPHA4	0.177477	0.017788	0.040231
EPHA5	-0.29466	6.53E-05	0.000329
EPHA6	-0.05442	0.470604	0.5807
EPHA7	-0.05599	0.457858	0.568735
EPHA8	0.012679	0.866607	0.907642
EPHB1	-0.18419	0.01385	0.032561
EPHB2	0.110571	0.141746	0.225767
EPHB3	0.171347	0.022202	0.048452
EPHB4	0.418656	6.04E-09	1.02E-07
EPHB6	0.233442	0.001713	0.005464
EPHX1	-0.0842	0.263832	0.371106
EPHX2	-0.34338	2.70E-06	2.07E-05
EPHX3	0.224364	0.002606	0.007832
EPHX4	0.582138	1.56E-17	2.37E-15
EPM2AIP1	-0.28737	0.000101	0.000477
EPM2A	-0.44222	6.41E-10	1.45E-08
EPN1	0.276743	0.000184	0.000807
EPN2	-0.06914	0.35914	0.472183
EPN3	0.404304	2.18E-08	3.10E-07

EPOR	-0.0973	0.196327	0.293282
EPO	-0.1134	0.131762	0.2129
EPPK1	0.316627	1.66E-05	0.000101
EPR1	0.306055	3.26E-05	0.000181
EPRS	-0.15428	0.039762	0.0793
EPS15L1	0.055962	0.458115	0.568875
EPS15	-0.09464	0.208885	0.308583
EPS8L1	0.648534	1.28E-22	8.70E-20
EPS8L2	0.444648	5.04E-10	1.18E-08
EPS8L3	0.478872	1.37E-11	4.68E-10
EPS8	0.339715	3.50E-06	2.60E-05
EPSTI1	0.43033	2.03E-09	3.91E-08
EPT1	-0.2293	0.002078	0.006444
EPX	-0.23997	0.001254	0.00418
EPYC	0.230317	0.001982	0.006189
ERAL1	0.122643	0.102911	0.17475
ERAP1	-0.07033	0.350864	0.463478
ERAP2	0.091023	0.226913	0.329488
ERAS	-0.16462	0.028099	0.059224
ERBB2IP	0.187559	0.012176	0.029216
ERBB2	0.558135	5.77E-16	5.62E-14
ERBB3	0.31666	1.66E-05	0.000101
ERBB4	-0.29733	5.57E-05	0.000287
ERC1	-0.4178	6.53E-09	1.09E-07
ERC2	-0.17044	0.02293	0.049815
ERCC1	0.213892	0.004146	0.011672
ERCC2	0.241878	0.001143	0.003856
ERCC3	0.044756	0.553037	0.654875
ERCC4	-0.41041	1.27E-08	1.94E-07
ERCC5	0.348993	1.80E-06	1.45E-05
ERCC6L	0.289587	8.83E-05	0.000427
ERCC6	-0.17942	0.016555	0.037884
ERCC8	-0.17582	0.018896	0.042339
EREG	0.489688	4.01E-12	1.61E-10
ERF	0.175822	0.018898	0.042339
ERGIC1	0.151616	0.043357	0.085359
ERGIC2	0.025486	0.735596	0.808902
ERGIC3	0.047554	0.528474	0.633342
ERG	-0.24857	0.000821	0.002906
ERH	0.067837	0.368269	0.481783
ERI1	0.154073	0.040035	0.079748
ERI2	0.117122	0.119479	0.196777
ERI3	-0.10012	0.183617	0.277609
ERICH1	0.290568	8.33E-05	0.000405
ERLEC1	-0.34187	3.01E-06	2.27E-05
ERLIN1	0.167051	0.025832	0.055145
ERLIN2	0.018571	0.805651	0.86239
ERMAP	-0.30603	3.26E-05	0.000181
ERMN	0.135752	0.070798	0.128449
ERMP1	-0.04456	0.554775	0.656383
ERN1	-0.37373	2.77E-07	2.84E-06
ERN2	0.531398	2.32E-14	1.59E-12
ERO1LB	-0.32699	8.39E-06	5.56E-05
ERO1L	0.330353	6.68E-06	4.58E-05

ERP27	0.006873	0.927451	0.949885
ERP29	-0.31343	2.04E-05	0.000121
ERP44	-0.13847	0.06528	0.119935
ERRFI1	0.046609	0.536713	0.640145
ERVFRDE1	-0.14599	0.051848	0.098971
ESAM	0.020313	0.787835	0.849482
ESCO1	0.068755	0.361807	0.474995
ESCO2	0.361527	7.12E-07	6.49E-06
ESD	0.168017	0.024975	0.053598
ESF1	-0.21773	0.003505	0.010085
ESM1	0.093588	0.214033	0.314739
ESPL1	0.293375	7.06E-05	0.000351
ESPNL	0.085394	0.25707	0.363453
ESPNP	0.266971	0.000315	0.001281
ESPN	0.400554	3.02E-08	4.09E-07
ESR1	-0.19794	0.008086	0.020632
ESR2	-0.13028	0.083048	0.146612
ESRP1	0.282879	0.00013	0.000599
ESRP2	0.368335	4.22E-07	4.10E-06
ESRRA	0.39385	5.36E-08	6.76E-07
ESRRB	-0.24522	0.00097	0.003346
ESRRG	-0.16917	0.02398	0.051779
ESX1	-0.08282	0.271715	0.379657
ESYT1	-0.26062	0.000442	0.001711
ESYT2	0.111562	0.138188	0.221175
ESYT3	0.272325	0.000236	0.000997
ETAA1	0.001224	0.987059	0.990867
ETF1	-0.04355	0.563763	0.664393
ETFA	0.261916	0.000413	0.001614
ETFB	0.116246	0.12229	0.200211
ETFDH	-0.29256	7.41E-05	0.000366
ETHE1	0.508788	4.13E-13	2.12E-11
ETNK1	-0.14473	0.05392	0.102266
ETNK2	-0.12634	0.092882	0.160503
ETS1	-0.12609	0.093521	0.161368
ETS2	0.263916	0.000371	0.001475
ETV1	-0.18331	0.014317	0.0335
ETV2	-0.07996	0.28871	0.398058
ETV3L	-0.08271	0.272405	0.380432
ETV3	-0.06788	0.367942	0.481419
ETV4	0.273236	0.000224	0.000953
ETV5	-0.14231	0.058108	0.108707
ETV6	0.291959	7.68E-05	0.000378
ETV7	0.354145	1.24E-06	1.04E-05
EVC2	0.076483	0.310242	0.420763
EVC	0.061984	0.411114	0.523192
EVI2A	0.021087	0.779949	0.843416
EVI2B	0.011342	0.880562	0.917158
EVI5L	0.08972	0.233659	0.337598
EVI5	-0.0027	0.971484	0.980809
EVL	-0.17262	0.021213	0.046632
EVPLL	0.232486	0.001791	0.005672
EVPL	0.59754	1.31E-18	2.82E-16
EVX1	0.18443	0.013722	0.032322

EWSR1	-0.08921	0.236359	0.340282
EXD1	0.102971	0.171386	0.263018
EXD2	-0.34418	2.55E-06	1.97E-05
EXD3	0.26342	0.000381	0.001507
EXO1	0.29624	5.95E-05	0.000304
EXOC1	0.350291	1.64E-06	1.34E-05
EXOC2	-0.33966	3.51E-06	2.61E-05
EXOC3L2	-0.15887	0.034166	0.069874
EXOC3L	-0.11357	0.131197	0.21209
EXOC3	0.027581	0.714772	0.792437
EXOC4	0.086341	0.25181	0.357708
EXOC5	-0.31212	2.22E-05	0.000129
EXOC6B	-0.0171	0.820753	0.873168
EXOC6	-0.10347	0.169302	0.260507
EXOC7	-0.11288	0.133549	0.215119
EXOC8	-0.08399	0.265012	0.372342
EXOG	-0.28461	0.000118	0.00055
EXOSC10	0.077996	0.300741	0.410836
EXOSC1	0.271891	0.000241	0.001016
EXOSC2	0.016721	0.824679	0.875884
EXOSC3	-0.05066	0.501869	0.608981
EXOSC4	0.154464	0.039526	0.078933
EXOSC5	0.311851	2.26E-05	0.000131
EXOSC6	0.04233	0.574777	0.674264
EXOSC7	0.368665	4.12E-07	4.02E-06
EXOSC8	0.166855	0.026009	0.055487
EXOSC9	-0.03687	0.625112	0.718661
EXPH5	0.245895	0.000938	0.00325
EXT1	0.198489	0.007907	0.020236
EXT2	0.073499	0.329558	0.441569
EXTL1	0.081011	0.282388	0.391032
EXTL2	-0.08945	0.235059	0.339048
EXTL3	-0.32885	7.40E-06	5.00E-05
EYA1	-0.21323	0.004268	0.011955
EYA2	0.277919	0.000173	0.000763
EYA3	-0.10196	0.175652	0.267984
EYA4	-0.06369	0.398335	0.511038
EYS	-0.36064	7.61E-07	6.88E-06
EZH1	-0.14852	0.047862	0.092624
EZH2	0.247251	0.000877	0.003073
EZR	0.5935	2.54E-18	4.93E-16
F10	-0.23018	0.001995	0.00622
F11R	0.42104	4.85E-09	8.44E-08
F11	-0.06666	0.376639	0.4894
F12	0.338267	3.87E-06	2.84E-05
F13A1	0.020394	0.787011	0.849134
F13B	-0.04688	0.534347	0.638097
F2RL1	0.425829	3.11E-09	5.71E-08
F2RL2	0.073402	0.330198	0.442337
F2RL3	-0.0974	0.195889	0.292761
F2R	-0.00418	0.955871	0.969811
F2	-0.16479	0.027936	0.058936
F3	0.390592	7.04E-08	8.57E-07
F5	-0.02166	0.77413	0.839097

F7	-0.41541	8.12E-09	1.32E-07
F8A1	-0.0125	0.868438	0.909177
F8	-0.34677	2.12E-06	1.67E-05
F9	0.018972	0.801538	0.860308
FA2H	0.57795	2.99E-17	4.20E-15
FAAH2	-0.01892	0.802105	0.86063
FAAH	0.234788	0.001607	0.005169
FABP12	-0.16538	0.027378	0.057941
FABP1	0.21926	0.003276	0.009512
FABP2	-0.08758	0.245043	0.349879
FABP3	0.276546	0.000186	0.000814
FABP4	-0.13362	0.075386	0.135368
FABP5L3	-0.20647	0.00569	0.015282
FABP5	0.011652	0.877323	0.915037
FABP6	0.262006	0.000411	0.001607
FABP7	-0.02188	0.771924	0.837532
FADD	0.515093	1.89E-13	1.05E-11
FADS1	-0.23565	0.001542	0.004992
FADS2	-0.1934	0.009693	0.024056
FADS3	-0.08991	0.232673	0.336395
FADS6	-0.09586	0.203069	0.301712
FAF1	0.098498	0.190855	0.286601
FAF2	-0.07491	0.320349	0.43213
FAHD1	0.126787	0.09171	0.158854
FAHD2A	-0.03147	0.676673	0.762467
FAHD2B	-0.1416	0.059384	0.110655
FAH	0.22074	0.003067	0.009003
FAIM2	-0.08202	0.276409	0.384314
FAIM3	-0.13779	0.066629	0.12205
FAIM	0.024661	0.743852	0.815486
FAM100A	0.052306	0.488053	0.596684
FAM100B	0.41085	1.22E-08	1.88E-07
FAM101A	0.552915	1.22E-15	1.10E-13
FAM101B	-0.11846	0.115302	0.191386
FAM102A	0.202769	0.006638	0.017448
FAM102B	-0.04697	0.533536	0.637509
FAM103A1	0.026388	0.726613	0.802028
FAM104A	-0.07335	0.330543	0.442649
FAM104B	-0.2962	5.96E-05	0.000304
FAM105A	-0.44456	5.08E-10	1.18E-08
FAM105B	-0.17579	0.018922	0.042389
FAM106A	-0.13223	0.078508	0.139984
FAM106C	-0.07403	0.326065	0.438136
FAM107A	-0.29937	4.92E-05	0.000259
FAM107B	0.064599	0.391618	0.504354
FAM108A1	0.086788	0.249358	0.354861
FAM108B1	-0.39244	6.03E-08	7.48E-07
FAM108C1	0.482227	9.38E-12	3.39E-10
FAM109A	0.260421	0.000447	0.001727
FAM109B	0.266872	0.000317	0.001287
FAM10A4	-0.26782	0.000301	0.001231
FAM110A	0.437919	9.78E-10	2.09E-08
FAM110B	-0.3294	7.13E-06	4.83E-05
FAM110C	0.143208	0.056519	0.106297

FAM111A	0.412928	1.02E-08	1.60E-07
FAM111B	0.399703	3.25E-08	4.35E-07
FAM113A	-0.08509	0.258778	0.365115
FAM113B	0.359568	8.25E-07	7.35E-06
FAM114A1	-0.01113	0.882815	0.918584
FAM114A2	-0.2643	0.000364	0.001449
FAM115A	-0.27879	0.000164	0.000732
FAM115C	-0.14028	0.061808	0.114481
FAM116A	0.113723	0.130667	0.211336
FAM116B	0.165607	0.027162	0.057543
FAM117A	-0.34831	1.89E-06	1.51E-05
FAM117B	-0.07932	0.292577	0.402212
FAM118A	0.025112	0.739341	0.812072
FAM118B	0.262043	0.00041	0.001605
FAM119A	0.04696	0.533644	0.637599
FAM119B	0.049611	0.510774	0.617134
FAM120AOS	-0.04875	0.518168	0.624049
FAM120A	0.120682	0.108575	0.182596
FAM120B	-0.45904	1.16E-10	3.22E-09
FAM120C	-0.52414	5.99E-14	3.72E-12
FAM122A	-0.41686	7.12E-09	1.18E-07
FAM122B	-0.07223	0.337964	0.450263
FAM122C	-0.01659	0.82599	0.87667
FAM123A	-0.3581	9.22E-07	8.07E-06
FAM123B	-0.20004	0.007425	0.019171
FAM123C	-0.32488	9.66E-06	6.30E-05
FAM124A	-0.1647	0.028025	0.059105
FAM124B	-0.00277	0.970732	0.9802
FAM125A	0.462065	8.44E-11	2.42E-09
FAM125B	-0.42592	3.08E-09	5.67E-08
FAM126A	-0.23304	0.001746	0.005549
FAM126B	0.155467	0.038247	0.076727
FAM127A	0.17718	0.017983	0.040578
FAM127B	0.18399	0.013953	0.032757
FAM127C	0.005022	0.946959	0.964171
FAM128A	0.30539	3.40E-05	0.000188
FAM128B	0.151224	0.043908	0.086272
FAM129A	-0.01692	0.822603	0.874336
FAM129B	0.452012	2.40E-10	6.07E-09
FAM129C	-0.1192	0.113026	0.188447
FAM131A	-0.08753	0.245335	0.350246
FAM131B	0.046922	0.533977	0.637805
FAM131C	-0.12936	0.085259	0.149765
FAM132A	0.417663	6.62E-09	1.10E-07
FAM133A	-0.16196	0.030777	0.064022
FAM133B	-0.28938	8.94E-05	0.000431
FAM134A	-0.05739	0.446702	0.557891
FAM134B	-0.31348	2.04E-05	0.00012
FAM134C	-0.00332	0.964868	0.976223
FAM135A	-0.01037	0.89074	0.923847
FAM135B	-0.33989	3.46E-06	2.58E-05
FAM136A	0.258069	0.000505	0.001918
FAM136B	0.143024	0.056841	0.10676
FAM138B	-0.13604	0.070194	0.127575

FAM138D	-0.01276	0.865737	0.906969
FAM138E	0.010517	0.889195	0.923124
FAM138F	0.011492	0.878997	0.916068
FAM13AOS	0.064061	0.395582	0.5083
FAM13A	-0.00349	0.963091	0.974894
FAM13B	-0.26882	0.000285	0.001176
FAM13C	-0.22729	0.00228	0.006987
FAM149A	0.133152	0.076419	0.136864
FAM149B1	0.159216	0.033771	0.069186
FAM150A	0.365506	5.25E-07	4.97E-06
FAM150B	-0.09661	0.199555	0.297296
FAM151A	-0.07203	0.339351	0.4516
FAM151B	-0.11916	0.113127	0.188566
FAM153A	0.077232	0.305514	0.415748
FAM153B	0.059884	0.427174	0.539259
FAM153C	-0.11729	0.118939	0.196057
FAM154A	-0.11662	0.121075	0.198634
FAM154B	-0.41127	1.18E-08	1.82E-07
FAM155A	0.069838	0.354278	0.467282
FAM155B	-0.24897	0.000804	0.002861
FAM156A	0.08833	0.241012	0.345398
FAM157A	-0.13578	0.070735	0.128363
FAM157B	-0.13123	0.080802	0.143401
FAM158A	0.086373	0.251634	0.357557
FAM159A	0.157543	0.03571	0.072518
FAM160A1	0.073616	0.328783	0.440754
FAM160A2	0.34817	1.91E-06	1.53E-05
FAM160B1	-0.31878	1.45E-05	8.95E-05
FAM160B2	0.253177	0.00065	0.002372
FAM161A	-0.26952	0.000275	0.001137
FAM161B	-0.09192	0.222365	0.324433
FAM162A	0.214305	0.004072	0.011501
FAM162B	0.020512	0.785807	0.848267
FAM163A	-0.37044	3.59E-07	3.57E-06
FAM163B	-0.04427	0.55732	0.658606
FAM164A	0.072792	0.334241	0.446483
FAM164C	-0.20115	0.007096	0.018427
FAM165B	-0.20729	0.005498	0.014833
FAM166A	-0.15271	0.041845	0.082777
FAM166B	-0.18869	0.011657	0.028142
FAM167A	-0.31765	1.56E-05	9.54E-05
FAM167B	-0.03743	0.619903	0.714042
FAM168A	-0.23167	0.001861	0.005864
FAM168B	-0.41079	1.23E-08	1.88E-07
FAM169A	-0.48082	1.10E-11	3.89E-10
FAM169B	0.174566	0.019779	0.044013
FAM170A	-0.0789	0.295175	0.404996
FAM170B	-0.06789	0.36788	0.481417
FAM171A1	-0.24842	0.000827	0.002923
FAM171A2	-0.11137	0.138858	0.22208
FAM171B	-0.32951	7.08E-06	4.80E-05
FAM172A	-0.48814	4.79E-12	1.86E-10
FAM173A	0.248333	0.000831	0.002932
FAM173B	-0.33899	3.68E-06	2.72E-05

FAM174A	-0.29584	6.09E-05	0.000309
FAM174B	-0.28948	8.88E-05	0.000429
FAM175A	-0.25846	0.000495	0.001887
FAM175B	0.006619	0.930122	0.951732
FAM176A	0.102251	0.174415	0.266776
FAM176B	0.290421	8.41E-05	0.000409
FAM177A1	0.266894	0.000317	0.001286
FAM177B	-0.00757	0.92017	0.944628
FAM178A	-0.32859	7.53E-06	5.07E-05
FAM178B	0.217452	0.003549	0.010192
FAM179A	-0.11643	0.121706	0.199454
FAM179B	-0.37295	2.94E-07	3.01E-06
FAM180A	#####	0.999007	0.999108
FAM180B	-0.15679	0.036611	0.074002
FAM181A	-0.01344	0.85864	0.901686
FAM181B	-0.03615	0.63188	0.724
FAM182A	-0.11987	0.110997	0.185881
FAM182B	-0.06423	0.39435	0.50708
FAM183A	-0.28735	0.000101	0.000478
FAM183B	0.040739	0.589248	0.68724
FAM184A	-0.43419	1.40E-09	2.83E-08
FAM184B	-0.25093	0.000729	0.002623
FAM185A	0.202193	0.006798	0.017803
FAM186A	-0.11081	0.140886	0.22465
FAM186B	-0.18715	0.012368	0.029608
FAM187B	0.107749	0.152259	0.239216
FAM188A	-0.1841	0.013894	0.032649
FAM188B	0.05373	0.476271	0.585829
FAM189A1	-0.18609	0.012881	0.030649
FAM189A2	-0.12897	0.086203	0.151089
FAM189B	0.266774	0.000319	0.001293
FAM18A	-0.12695	0.091283	0.158225
FAM18B2	-0.1789	0.016882	0.038477
FAM18B	-0.23714	0.001437	0.004694
FAM190A	-0.04112	0.585788	0.684314
FAM190B	-0.26423	0.000365	0.001453
FAM192A	0.337959	3.96E-06	2.89E-05
FAM193A	-0.37736	2.08E-07	2.21E-06
FAM193B	0.114269	0.128819	0.208963
FAM194A	-0.16197	0.030774	0.064022
FAM194B	0.03241	0.667578	0.754886
FAM195A	0.154503	0.039476	0.078864
FAM195B	0.004807	0.94922	0.965678
FAM196A	-0.18753	0.01219	0.029243
FAM196B	0.04479	0.552742	0.654754
FAM198A	0.029105	0.699749	0.78064
FAM198B	-0.06919	0.358774	0.471954
FAM199X	-0.03358	0.656348	0.74517
FAM19A1	-0.31923	1.40E-05	8.72E-05
FAM19A2	-0.35868	8.82E-07	7.78E-06
FAM19A3	0.028071	0.709926	0.788745
FAM19A4	-0.37009	3.68E-07	3.66E-06
FAM19A5	0.003879	0.959017	0.972066
FAM200A	-0.2069	0.005588	0.015043

FAM200B	-0.24351	0.001055	0.003595
FAM20A	-0.07222	0.338039	0.450279
FAM20B	-0.13031	0.082981	0.146519
FAM20C	-0.03109	0.680342	0.765032
FAM21A	-0.10321	0.170402	0.261873
FAM21B	-0.01409	0.851877	0.89644
FAM21C	-0.19779	0.008134	0.020733
FAM22A	-0.19707	0.008375	0.021241
FAM22D	-0.35215	1.43E-06	1.19E-05
FAM22F	0.162475	0.030248	0.063099
FAM22G	0.021154	0.779271	0.843098
FAM23A	-0.22877	0.00213	0.00659
FAM24B	0.251915	0.000693	0.002511
FAM25A	0.471715	3.00E-11	9.67E-10
FAM25B	0.404886	2.07E-08	2.96E-07
FAM26D	-0.12593	0.093932	0.161957
FAM26E	0.016939	0.822436	0.874218
FAM26F	-0.01537	0.838688	0.886193
FAM27A	0.131341	0.080545	0.142996
FAM27B	0.017591	0.81572	0.869573
FAM27C	0.12054	0.108995	0.183159
FAM32A	0.432653	1.63E-09	3.23E-08
FAM35A	-0.0674	0.371341	0.484418
FAM35B2	-0.06239	0.408021	0.520262
FAM35B	-0.10736	0.153738	0.241157
FAM36A	0.072099	0.338874	0.451074
FAM38A	0.429542	2.19E-09	4.19E-08
FAM38B	-0.03107	0.680525	0.765194
FAM3A	0.061125	0.417639	0.52994
FAM3B	0.081173	0.281423	0.389914
FAM3C	0.299791	4.79E-05	0.000253
FAM3D	0.343612	2.66E-06	2.04E-05
FAM40A	-0.17153	0.022055	0.04819
FAM40B	0.372769	2.99E-07	3.05E-06
FAM41C	-0.09304	0.216724	0.317991
FAM43A	0.078688	0.296458	0.406333
FAM43B	0.110746	0.141112	0.224921
FAM45A	0.050504	0.503184	0.610383
FAM45B	-0.08087	0.283218	0.391989
FAM46A	-0.41326	9.86E-09	1.56E-07
FAM46B	0.066617	0.376963	0.489636
FAM46C	-0.47638	1.80E-11	6.07E-10
FAM46D	-0.1282	0.08812	0.15378
FAM47A	-0.05148	0.494946	0.603048
FAM47B	-0.01832	0.808206	0.864254
FAM47C	-0.1235	0.100524	0.171312
FAM47E	-0.23083	0.001936	0.006063
FAM48A	0.221633	0.002947	0.008716
FAM48B1	0.010911	0.885066	0.920087
FAM48B2	-0.08411	0.264322	0.371585
FAM49A	0.068679	0.362344	0.475573
FAM49B	0.158545	0.034537	0.070486
FAM50A	0.079897	0.289077	0.398426
FAM50B	-0.09901	0.18857	0.283817

FAM53A	-0.07588	0.314079	0.425092
FAM53B	-0.38403	1.21E-07	1.38E-06
FAM53C	-0.3421	2.96E-06	2.25E-05
FAM54A	0.196482	0.008574	0.021661
FAM54B	-0.27851	0.000167	0.000741
FAM55A	-0.17952	0.016497	0.03777
FAM55B	-0.14008	0.06219	0.115134
FAM55C	-0.39439	5.12E-08	6.50E-07
FAM55D	-0.23069	0.001949	0.006096
FAM57A	-0.07278	0.334316	0.446531
FAM57B	-0.30682	3.11E-05	0.000174
FAM58A	-0.02036	0.787348	0.849281
FAM58B	-0.07938	0.292233	0.401851
FAM59A	-0.07057	0.349266	0.461922
FAM5B	-0.36715	4.63E-07	4.45E-06
FAM5C	-0.21415	0.0041	0.011571
FAM60A	0.146284	0.051365	0.09821
FAM63A	-0.04613	0.540898	0.64401
FAM63B	0.049877	0.508507	0.615149
FAM64A	0.352541	1.39E-06	1.15E-05
FAM65A	0.284298	0.00012	0.000559
FAM65B	-0.14335	0.056265	0.10596
FAM65C	-0.1171	0.119547	0.196813
FAM66A	-0.19427	0.009366	0.023349
FAM66C	-0.21573	0.003827	0.010898
FAM66D	-0.04412	0.558705	0.65969
FAM66E	-0.06661	0.376981	0.489636
FAM69A	-0.07812	0.299976	0.410074
FAM69B	-0.3908	6.92E-08	8.44E-07
FAM69C	0.272887	0.000228	0.000969
FAM70A	-0.1674	0.025517	0.054554
FAM70B	-0.022	0.770647	0.836744
FAM71A	0.024272	0.747758	0.818774
FAM71C	-0.04366	0.56277	0.6635
FAM71D	0.220002	0.00317	0.009256
FAM71E1	0.076632	0.309298	0.419742
FAM71E2	0.137942	0.066328	0.121576
FAM71F1	-0.33095	6.42E-06	4.42E-05
FAM71F2	-0.10744	0.153444	0.240752
FAM72A	0.249357	0.000789	0.002814
FAM72B	0.341543	3.08E-06	2.32E-05
FAM72D	0.316737	1.65E-05	0.0001
FAM73A	-0.21811	0.003447	0.009937
FAM73B	0.030905	0.682156	0.76681
FAM74A1	-0.01057	0.888684	0.9227
FAM74A3	-0.18796	0.01199	0.028853
FAM74A4	-0.05299	0.482369	0.591599
FAM75A2	0.078479	0.297751	0.407795
FAM75A3	0.009613	0.898658	0.929269
FAM75A5	0.061313	0.41621	0.528555
FAM75C1	0.141024	0.060432	0.112225
FAM76A	-0.06768	0.369413	0.482737
FAM76B	-0.00094	0.990087	0.992798
FAM78A	-0.08903	0.23727	0.341221

FAM78B	-0.08501	0.259232	0.3656
FAM7A2	0.001984	0.97903	0.985559
FAM7A3	0.051657	0.493477	0.601802
FAM81A	0.121065	0.10745	0.181089
FAM81B	0.195741	0.008832	0.022199
FAM82A1	0.003198	0.966212	0.977083
FAM82A2	0.33861	3.78E-06	2.78E-05
FAM82B	0.047892	0.525546	0.630898
FAM83A	0.631119	3.63E-21	1.63E-18
FAM83B	0.374499	2.61E-07	2.70E-06
FAM83C	0.167811	0.025156	0.053898
FAM83D	0.222303	0.00286	0.008487
FAM83E	0.427818	2.58E-09	4.84E-08
FAM83F	-0.03826	0.612083	0.707631
FAM83G	0.035925	0.634019	0.725778
FAM83H	0.518912	1.17E-13	6.78E-12
FAM84A	-0.04671	0.535795	0.639358
FAM84B	0.173456	0.020587	0.045511
FAM86A	0.288419	9.45E-05	0.000452
FAM86B1	0.123612	0.1002	0.170866
FAM86B2	-0.04985	0.508749	0.615253
FAM86C	0.165611	0.027158	0.057543
FAM86D	0.127756	0.089237	0.155305
FAM89A	-0.01925	0.798659	0.858205
FAM89B	0.332731	5.68E-06	3.98E-05
FAM8A1	-0.367	4.68E-07	4.49E-06
FAM90A1	0.137392	0.067429	0.123275
FAM90A7	0.027936	0.711266	0.789789
FAM91A1	0.039003	0.605226	0.701344
FAM92A1	-0.42589	3.09E-09	5.68E-08
FAM92A3	0.1541	0.04	0.079685
FAM92B	-0.27139	0.000248	0.00104
FAM95B1	0.033633	0.655821	0.744828
FAM96A	-0.03427	0.64969	0.738872
FAM96B	0.288286	9.53E-05	0.000455
FAM98A	0.08074	0.284003	0.392883
FAM98B	-0.2543	0.000614	0.00226
FAM98C	0.248959	0.000805	0.002862
FAM99A	-0.15245	0.042209	0.08346
FAM99B	0.021726	0.773455	0.838871
FAM9A	-0.02498	0.740681	0.812957
FAM9B	0.0717	0.341561	0.453869
FAM9C	-0.16324	0.029463	0.061701
FANCA	0.424342	3.57E-09	6.50E-08
FANCB	0.167555	0.025382	0.054289
FANCC	-0.35473	1.18E-06	1.00E-05
FANCD2	0.295701	6.14E-05	0.000312
FANCE	0.012222	0.871373	0.911235
FANCF	-0.03014	0.689601	0.772719
FANCG	0.021655	0.774175	0.8391
FANCI	0.258694	0.000489	0.001867
FANCL	0.238537	0.001344	0.004428
FANCM	-0.22382	0.00267	0.007993
FANK1	0.316296	1.70E-05	0.000103

FAP	0.227812	0.002226	0.006846
FAR1	0.218258	0.003425	0.009888
FAR2	0.116977	0.119941	0.19733
FARP1	0.26155	0.000421	0.00164
FARP2	0.222637	0.002817	0.008376
FARS2	-0.07161	0.342142	0.454479
FARSA	0.160196	0.032676	0.067278
FARSB	0.270423	0.000261	0.001091
FASLG	-0.19946	0.007601	0.019556
FASN	-0.10656	0.156881	0.245113
FASTKD1	-0.12805	0.088498	0.154304
FASTKD2	0.028191	0.708751	0.787882
FASTKD3	-0.30179	4.24E-05	0.000228
FASTKD5	-0.27897	0.000163	0.000725
FASTK	0.075207	0.31841	0.4301
FAS	0.138809	0.064624	0.11885
FAT1	0.166459	0.026371	0.056149
FAT2	0.128279	0.087924	0.153546
FAT3	-0.03114	0.679918	0.764685
FAT4	-0.15133	0.043764	0.086041
FATE1	0.043162	0.56728	0.667225
FAU	0.274025	0.000215	0.000917
FBF1	-0.22707	0.002303	0.007046
FBLIM1	0.308264	2.84E-05	0.000161
FBLL1	-0.24324	0.001069	0.003635
FBLN1	0.039925	0.596717	0.693842
FBLN2	0.100141	0.183525	0.277512
FBLN5	-0.16838	0.02466	0.053037
FBLN7	-0.11929	0.11275	0.188069
FBL	0.19026	0.010966	0.026727
FBN1	0.04966	0.510358	0.616805
FBN2	-0.00313	0.966886	0.977426
FBN3	0.064526	0.392159	0.504821
FBP1	0.436284	1.15E-09	2.38E-08
FBP2	0.059046	0.433685	0.545239
FBRSL1	-0.14896	0.0472	0.091585
FBR	0.130128	0.083404	0.147122
FBXL12	0.417984	6.43E-09	1.08E-07
FBXL13	0.036195	0.631476	0.723696
FBXL14	-0.24143	0.001168	0.003925
FBXL15	0.042478	0.573445	0.6731
FBXL16	-0.34581	2.27E-06	1.78E-05
FBXL17	-0.37739	2.07E-07	2.21E-06
FBXL18	-0.30509	3.46E-05	0.000191
FBXL19	0.429816	2.13E-09	4.10E-08
FBXL20	-0.02171	0.773611	0.838948
FBXL21	-0.27722	0.00018	0.000789
FBXL22	-0.01095	0.88465	0.919946
FBXL2	0.078454	0.297902	0.407956
FBXL3	-0.10784	0.151904	0.238773
FBXL4	-0.43388	1.45E-09	2.90E-08
FBXL5	-0.35543	1.12E-06	9.61E-06
FBXL6	0.360803	7.52E-07	6.80E-06
FBXL7	-0.04932	0.513275	0.619401

FBXL8	0.239136	0.001305	0.00432
FBX010	-0.44838	3.47E-10	8.47E-09
FBX011	-0.10582	0.159788	0.248478
FBX015	-0.34077	3.25E-06	2.44E-05
FBX016	-0.19312	0.009802	0.024275
FBX017	-0.15831	0.034805	0.070909
FBX018	-0.14687	0.050437	0.096688
FBX021	-0.33116	6.32E-06	4.37E-05
FBX0220S	0.267585	0.000305	0.001245
FBX022	0.11784	0.117217	0.193738
FBX024	0.05562	0.460873	0.571188
FBX025	-0.14409	0.055001	0.103986
FBX027	-0.18502	0.01342	0.03173
FBX028	0.158947	0.034076	0.06971
FBX02	0.076702	0.30886	0.419263
FBX030	-0.36727	4.59E-07	4.41E-06
FBX031	-0.32202	1.17E-05	7.45E-05
FBX032	0.203836	0.006351	0.016793
FBX033	-0.45284	2.20E-10	5.62E-09
FBX034	0.250339	0.000751	0.002694
FBX036	-0.13927	0.06374	0.117559
FBX038	-0.06678	0.375806	0.488823
FBX039	0.23943	0.001287	0.004272
FBX03	-0.092	0.221952	0.324045
FBX040	-0.12247	0.103412	0.175466
FBX041	-0.15194	0.042904	0.084567
FBX042	-0.07473	0.321469	0.433285
FBX043	-0.03203	0.671288	0.758127
FBX044	-0.04248	0.573466	0.6731
FBX045	-0.07606	0.312943	0.423841
FBX046	0.192351	0.010103	0.024917
FBX047	0.092324	0.220312	0.322079
FBX048	-0.29848	5.19E-05	0.000271
FBX04	0.009286	0.902086	0.931498
FBX05	-0.34052	3.30E-06	2.48E-05
FBX06	0.164852	0.02788	0.058837
FBX07	-0.13301	0.076742	0.137355
FBX08	-0.22543	0.002482	0.00751
FBX09	-0.47467	2.17E-11	7.18E-10
FBXW10	0.324582	9.86E-06	6.42E-05
FBXW11	-0.31482	1.87E-05	0.000112
FBXW12	-0.22203	0.002895	0.008581
FBXW2	-0.32836	7.65E-06	5.15E-05
FBXW4	-0.0155	0.837297	0.885148
FBXW5	0.082328	0.274607	0.382508
FBXW7	-0.25099	0.000727	0.002617
FBXW8	-0.42093	4.90E-09	8.52E-08
FBXW9	0.254652	0.000603	0.002226
FCAMR	-0.02507	0.739768	0.81236
FCAR	-0.1417	0.059205	0.11033
FCER1A	0.057179	0.448388	0.559649
FCER1G	0.145893	0.051998	0.099209
FCER2	-0.08177	0.277901	0.386061
FCF1	0.024821	0.74225	0.814227

FCGBP	-0.07964	0.290612	0.400067
FCGR1A	0.066088	0.380771	0.493503
FCGR1B	0.073753	0.327884	0.439744
FCGR1C	0.062715	0.405607	0.518119
FCGR2A	0.030289	0.688166	0.771431
FCGR2B	0.217521	0.003538	0.010163
FCGR2C	0.132326	0.07828	0.139664
FCGR3A	0.093384	0.215035	0.315931
FCGR3B	-0.13472	0.072988	0.131653
FCGRT	0.193362	0.009708	0.02408
FCH01	0.22339	0.002723	0.008132
FCH02	0.124979	0.096473	0.165667
FCHSD1	0.338686	3.76E-06	2.77E-05
FCHSD2	-0.03669	0.626791	0.720005
FCN1	-0.03466	0.646006	0.736152
FCN2	-0.23636	0.001491	0.004843
FCN3	-0.22561	0.002463	0.007462
FCRL1	-0.09956	0.186105	0.280683
FCRL2	-0.05166	0.493449	0.601802
FCRL3	-0.09828	0.191828	0.287691
FCRL4	0.082031	0.276351	0.38426
FCRL5	0.017386	0.817822	0.870889
FCRL6	-0.09379	0.213051	0.313597
FCRLA	-0.06283	0.404712	0.517309
FCRLB	0.267765	0.000302	0.001235
FDFT1	0.357291	9.79E-07	8.51E-06
FDPSL2A	0.221037	0.003027	0.008914
FDPS	0.261722	0.000417	0.001628
FDX1L	0.039948	0.596509	0.693795
FDX1	0.12937	0.085235	0.149737
FDXACB1	0.032812	0.663709	0.751973
FDXR	0.126146	0.093377	0.161176
FECH	-0.40132	2.83E-08	3.86E-07
FEM1A	-0.36688	4.73E-07	4.53E-06
FEM1B	-0.39848	3.61E-08	4.77E-07
FEM1C	0.048638	0.519104	0.624758
FEN1	0.181873	0.015112	0.035069
FER1L4	0.550045	1.83E-15	1.55E-13
FER1L5	-0.04601	0.541946	0.645219
FER1L6	0.288802	9.25E-05	0.000444
FERD3L	0.021679	0.773931	0.839097
FERMT1	0.465203	6.06E-11	1.81E-09
FERMT2	-0.11504	0.126246	0.205616
FERMT3	0.252785	0.000663	0.002411
FER	0.05744	0.446317	0.557691
FES	0.175309	0.019253	0.042994
FETUB	0.152253	0.042475	0.083899
FEV	-0.19788	0.008105	0.02067
FEZ1	0.099691	0.18551	0.279935
FEZ2	0.399106	3.42E-08	4.56E-07
FEZF1	0.161912	0.030833	0.06409
FEZF2	-0.23954	0.00128	0.004253
FFAR1	-0.07186	0.34045	0.452739
FFAR2	-0.38417	1.20E-07	1.37E-06

FFAR3	-0.11696	0.119992	0.197398
FGA	0.035629	0.636823	0.728398
FGB	-0.02829	0.707739	0.787155
FGD1	-0.22029	0.00313	0.009155
FGD2	0.20965	0.004975	0.013636
FGD3	0.029412	0.696739	0.778116
FGD4	0.118212	0.116054	0.192247
FGD5	0.134903	0.072595	0.131131
FGD6	0.392561	5.97E-08	7.42E-07
FGF10	-0.26588	0.000334	0.001345
FGF11	0.174838	0.019585	0.043621
FGF12	-0.3018	4.24E-05	0.000228
FGF13	-0.42828	2.47E-09	4.65E-08
FGF14	-0.21745	0.003549	0.010193
FGF16	-0.04323	0.566626	0.666813
FGF17	-0.15754	0.035713	0.072518
FGF18	0.125381	0.095397	0.16409
FGF19	0.375552	2.40E-07	2.52E-06
FGF1	-0.03486	0.644139	0.734302
FGF20	0.295285	6.30E-05	0.000319
FGF21	-0.09983	0.18491	0.27918
FGF22	-0.00136	0.985593	0.989849
FGF23	0.125263	0.095712	0.164489
FGF2	0.181088	0.015562	0.035924
FGF3	0.210805	0.004736	0.013077
FGF4	0.047683	0.527354	0.632415
FGF5	0.044539	0.55497	0.656535
FGF6	-0.00476	0.949686	0.965903
FGF7	-0.21612	0.003762	0.010739
FGF8	0.189134	0.011457	0.027742
FGF9	-0.13872	0.064788	0.119141
FGFBP1	0.615253	6.40E-20	1.83E-17
FGFBP2	-0.16146	0.031308	0.0649
FGFBP3	-0.2734	0.000222	0.000946
FGFR10P2	-0.24269	0.001099	0.003724
FGFR10P	-0.04722	0.531357	0.635558
FGFR1	-0.34646	2.17E-06	1.70E-05
FGFR2	0.137713	0.066785	0.122301
FGFR3	0.027702	0.713572	0.79155
FGFR4	0.071146	0.345313	0.457656
FGFRL1	0.367108	4.64E-07	4.46E-06
FGGY	-0.09623	0.201325	0.299428
FGG	0.161155	0.031635	0.065441
FGL1	-0.24843	0.000827	0.002923
FGL2	-0.13285	0.077096	0.137863
FGR	0.071715	0.341463	0.4538
FHAD1	-0.04259	0.572444	0.67214
FHDC1	-0.06026	0.424302	0.536566
FHIT	0.128009	0.088598	0.154438
FHL1	-0.32242	1.14E-05	7.28E-05
FHL2	0.483588	8.05E-12	2.95E-10
FHL3	0.340634	3.28E-06	2.46E-05
FHL5	-0.08272	0.272315	0.380333
FHOD1	0.265899	0.000334	0.001344

FHOD3	0.188833	0.011591	0.028017
FH	0.018636	0.804978	0.86199
FIBCD1	0.266467	0.000324	0.00131
FIBIN	0.144566	0.054193	0.102705
FIBP	0.283325	0.000127	0.000585
FICD	-0.46196	8.54E-11	2.44E-09
FIG4	-0.33606	4.52E-06	3.25E-05
FIGF	-0.36786	4.38E-07	4.24E-06
FIGLA	-0.15568	0.037983	0.076308
FIGNL1	-0.16505	0.027693	0.058498
FIGNL2	-0.17073	0.022698	0.04937
FIGN	-0.29607	6.00E-05	0.000306
FILIP1L	-0.06575	0.383187	0.496052
FILIP1	-0.22716	0.002294	0.007022
FIP1L1	0.05263	0.485356	0.594305
FIS1	0.017183	0.819919	0.872489
FITM1	-0.21364	0.004192	0.011782
FITM2	-0.45464	1.83E-10	4.80E-09
FIZ1	-0.10481	0.163816	0.253642
FJX1	0.128213	0.088088	0.153765
FKBP10	0.239728	0.001269	0.004219
FKBP11	-0.3012	4.40E-05	0.000235
FKBP14	-0.02999	0.691123	0.773723
FKBP15	-0.10808	0.150981	0.237567
FKBP1AP1	0.024241	0.748067	0.819018
FKBP1A	0.1787	0.017005	0.038714
FKBP1B	0.386808	9.64E-08	1.13E-06
FKBP2	-0.06758	0.370124	0.483411
FKBP3	0.018525	0.806119	0.862659
FKBP4	-0.05483	0.467315	0.577435
FKBP5	-0.18493	0.013465	0.031827
FKBP6	0.035486	0.638171	0.729644
FKBP7	-0.02065	0.784378	0.847002
FKBP8	0.10937	0.14615	0.231439
FKBP9L	-0.13744	0.067324	0.123116
FKBP9	0.010861	0.885584	0.920444
FKBPL	0.145253	0.053047	0.100831
FKRP	-0.21258	0.004387	0.012226
FKSG29	-0.02855	0.705233	0.785251
FKSG83	0.004375	0.953785	0.968428
FKTN	-0.29776	5.42E-05	0.000281
FLAD1	0.2444	0.00101	0.003462
FLCN	-0.37893	1.83E-07	1.99E-06
FLG2	-0.16791	0.02507	0.053768
FLG	-0.22649	0.002366	0.007209
FLI1	-0.14949	0.046413	0.090288
FLII	0.242533	0.001107	0.003746
FLJ10038	-0.20818	0.005294	0.014378
FLJ10213	0.035677	0.636369	0.72792
FLJ10357	-0.03788	0.615691	0.710598
FLJ10661	0.083894	0.265552	0.372995
FLJ11235	-0.06258	0.406652	0.519019
FLJ12825	0.342372	2.90E-06	2.21E-05
FLJ13197	-0.01875	0.803777	0.861571

FLJ13224 -0.27595 0.000193 0.000838
FLJ14107 0.165688 0.027085 0.057405
FLJ16779 0.43676 1.09E-09 2.28E-08
FLJ22536 0.227605 0.002247 0.006902
FLJ23867 0.563399 2.68E-16 2.95E-14
FLJ25328 -0.01832 0.808222 0.864254
FLJ25363 0.091964 0.222123 0.3242
FLJ25758 -0.04571 0.54462 0.647428
FLJ26850 -0.26995 0.000268 0.001115
FLJ30679 -0.08816 0.241905 0.346375
FLJ32063 -0.06845 0.363956 0.477246
FLJ33360 -0.06059 0.421758 0.533989
FLJ33630 -0.04866 0.518897 0.624612
FLJ34503 -0.17518 0.019341 0.043147
FLJ35024 -0.44501 4.86E-10 1.14E-08
FLJ35220 0.394419 5.11E-08 6.49E-07
FLJ35390 -0.38959 7.65E-08 9.25E-07
FLJ35776 0.246716 0.000901 0.003141
FLJ36000 -0.08976 0.233437 0.337327
FLJ36031 0.182392 0.01482 0.03449
FLJ36777 -0.39608 4.44E-08 5.73E-07
FLJ37201 -0.20335 0.006482 0.017091
FLJ37307 -0.07396 0.326541 0.438597
FLJ37453 -0.3027 4.01E-05 0.000217
FLJ37543 -0.27987 0.000155 0.000695
FLJ39582 -0.15115 0.044006 0.086438
FLJ39609 -0.08925 0.23612 0.340085
FLJ39653 -0.05694 0.450285 0.56109
FLJ39739 -0.04172 0.580295 0.67926
FLJ40292 -0.00185 0.980397 0.986333
FLJ40330 -0.22235 0.002854 0.008474
FLJ40434 -0.12089 0.107976 0.181821
FLJ40504 -0.16118 0.031603 0.065392
FLJ40852 0.045722 0.544493 0.647393
FLJ41941 -0.16841 0.024637 0.052993
FLJ42289 -0.08135 0.280344 0.388746
FLJ42393 0.183872 0.014016 0.032878
FLJ42627 0.024582 0.744653 0.816002
FLJ42709 0.261053 0.000432 0.001679
FLJ42875 -0.00404 0.95732 0.970722
FLJ43390 -0.18618 0.012839 0.030574
FLJ43663 0.024796 0.742502 0.814458
FLJ43859 0.067132 0.373278 0.486437
FLJ43860 0.014759 0.844971 0.89069
FLJ43950 -0.01295 0.863759 0.905657
FLJ44054 -0.07259 0.335608 0.447764
FLJ44606 0.102125 0.17495 0.267309
FLJ44635 -0.1131 0.132794 0.214147
FLJ45079 -0.04455 0.554914 0.656508
FLJ45244 -0.06375 0.397895 0.510709
FLJ45340 0.085783 0.254904 0.361277
FLJ45445 0.0503 0.504913 0.611812
FLJ45983 0.266894 0.000317 0.001286
FLJ46111 0.264375 0.000362 0.001446

FLJ46321	-0.01362	0.856807	0.900144
FLJ46361	0.024145	0.749038	0.819763
FLJ90757	-0.09882	0.189407	0.284875
FLNA	0.196116	0.0087	0.021921
FLNB	0.551044	1.59E-15	1.38E-13
FLNC	0.166068	0.026731	0.0568
FLOT1	0.152184	0.042569	0.084042
FLOT2	0.317448	1.58E-05	9.65E-05
FLRT1	-0.09623	0.201327	0.299428
FLRT2	-0.06125	0.416653	0.529084
FLRT3	0.317147	1.61E-05	9.80E-05
FLT1	-0.23693	0.001452	0.004736
FLT3LG	0.22068	0.003076	0.009021
FLT3	-0.10429	0.165928	0.256294
FLT4	-0.1671	0.025785	0.055062
FLVCR1	-0.33622	4.47E-06	3.23E-05
FLVCR2	0.248577	0.000821	0.002905
FLYWCH1	0.007114	0.924914	0.948121
FLYWCH2	-0.01498	0.842711	0.888923
FMN1	0.210254	0.004849	0.013351
FMN2	-0.33023	6.74E-06	4.61E-05
FMNL1	0.060816	0.420003	0.532135
FMNL2	-0.1505	0.044938	0.087957
FMNL3	-0.09634	0.200813	0.298899
FMO1	0.135058	0.072264	0.130671
FMO2	-0.01609	0.831236	0.880373
FMO3	0.032089	0.670683	0.757747
FMO4	0.210161	0.004868	0.013392
FMO5	0.14612	0.051629	0.098648
FMO6P	-0.05342	0.478858	0.588462
FMO9P	0.040522	0.591241	0.688787
FMOD	-0.01612	0.8309	0.880166
FMR1NB	-0.1049	0.163452	0.25324
FMR1	-0.15493	0.038929	0.077874
FN1	0.220595	0.003087	0.009051
FN3KRP	0.131585	0.079977	0.142154
FN3K	-0.22811	0.002195	0.006761
FNBP1L	-0.03991	0.596866	0.693935
FNBP1	-0.17785	0.017546	0.039738
FNBP4	0.137625	0.066961	0.122522
FNDC1	0.170435	0.022934	0.049817
FNDC3A	-0.44637	4.24E-10	1.00E-08
FNDC3B	0.157263	0.036044	0.073065
FNDC4	0.373865	2.74E-07	2.82E-06
FNDC5	-0.298	5.35E-05	0.000278
FNDC7	-0.09523	0.206078	0.305243
FNDC8	-0.07946	0.29172	0.401312
FNIP1	-0.18891	0.011558	0.027947
FNIP2	-0.21947	0.003246	0.009442
FNTA	0.184502	0.013685	0.032257
FNTB	-0.08029	0.286704	0.395817
FOLH1B	-0.10153	0.177495	0.27017
FOLH1	-0.14083	0.060797	0.112842
FOLR1	0.275036	0.000203	0.000876

FOLR2	-0.14595	0.05191	0.099069
FOLR3	0.050903	0.499817	0.607088
FOLR4	-0.19256	0.01002	0.02474
FOSB	-0.09958	0.186008	0.280559
FOSL1	0.458252	1.26E-10	3.46E-09
FOSL2	0.221673	0.002942	0.008702
FOS	0.194822	0.009162	0.022892
FOXA1	0.248598	0.00082	0.002903
FOXA2	-0.2383	0.001359	0.004471
FOXA3	0.187992	0.011974	0.028822
FOXB1	-0.28186	0.000138	0.00063
FOXC1	0.394893	4.90E-08	6.28E-07
FOXC2	0.159188	0.033802	0.069221
FOXD1	0.409394	1.39E-08	2.10E-07
FOXD2	0.337118	4.20E-06	3.04E-05
FOXD3	0.039519	0.600462	0.69705
FOXD4L1	0.076567	0.309713	0.420223
FOXD4L2	0.175931	0.018822	0.042194
FOXD4L3	-0.01682	0.823633	0.875102
FOXD4L5	0.202603	0.006684	0.017546
FOXD4L6	-0.02707	0.719854	0.796285
FOXD4	-0.00796	0.916062	0.941585
FOX E1	0.044701	0.553526	0.655337
FOX E3	0.116671	0.120921	0.198481
FOX F1	-0.01233	0.870192	0.910337
FOX F2	0.320316	1.31E-05	8.19E-05
FOX G1	-0.05959	0.429478	0.541303
FOX H1	0.355228	1.14E-06	9.73E-06
FOX I1	0.129752	0.084308	0.148359
FOX I2	-0.09959	0.185944	0.280483
FOX I3	-0.05514	0.464752	0.574843
FOX J1	0.030553	0.685586	0.769659
FOX J2	-0.10055	0.18172	0.27543
FOX J3	-0.32545	9.31E-06	6.10E-05
FOX K1	-0.41583	7.82E-09	1.28E-07
FOX K2	-0.22593	0.002427	0.007368
FOX L1	0.591374	3.59E-18	6.66E-16
FOX L2	0.108428	0.149677	0.235984
FOX M1	0.219974	0.003174	0.009265
FOX N1	0.141349	0.059835	0.111348
FOX N2	0.060089	0.425589	0.537841
FOX N3	-0.31447	1.91E-05	0.000114
FOX N4	-0.27081	0.000256	0.00107
FOX O1	-0.11412	0.129328	0.209617
FOX O3B	-0.24378	0.001041	0.003553
FOX O3	-0.19988	0.007474	0.019278
FOX O4	-0.14387	0.055376	0.104586
FOX P1	0.062952	0.403835	0.516488
FOX P2	-0.31378	2.00E-05	0.000118
FOX P3	0.034361	0.648864	0.738199
FOX P4	-0.33973	3.49E-06	2.60E-05
FOX Q1	0.572586	6.80E-17	8.85E-15
FOX R1	0.028666	0.704069	0.78422
FOX R2	0.047656	0.527593	0.632625

FOXRED1	-0.00478	0.949464	0.965777
FOXRED2	-0.47406	2.32E-11	7.60E-10
FOXSI	0.372666	3.01E-07	3.07E-06
FPGS	0.386545	9.85E-08	1.15E-06
FPGT	-0.00513	0.945801	0.963554
FPR1	-0.01506	0.841824	0.888272
FPR2	-0.03048	0.686265	0.769919
FPR3	-0.03542	0.638834	0.730029
FRAS1	0.116007	0.123066	0.20125
FRAT1	-0.11309	0.132831	0.214184
FRAT2	0.174986	0.01948	0.043418
FREM1	-0.09363	0.21384	0.314525
FREM2	0.103862	0.167692	0.258594
FRG1B	-0.18152	0.015314	0.035451
FRG1	0.076336	0.311179	0.42189
FRG2B	-0.07371	0.328178	0.440108
FRG2C	0.048864	0.517169	0.623234
FRG2	-0.07469	0.321754	0.433522
FRK	0.119398	0.112416	0.18773
FRMD1	-0.05291	0.483029	0.592189
FRMD3	-0.11735	0.118769	0.195842
FRMD4A	-0.21021	0.004858	0.013371
FRMD4B	0.236441	0.001486	0.004827
FRMD5	0.371331	3.34E-07	3.36E-06
FRMD6	0.244792	0.000991	0.003409
FRMD7	0.134126	0.074273	0.133657
FRMD8	0.333779	5.29E-06	3.74E-05
FRMPD1	-0.26034	0.000449	0.001733
FRMPD2L1	-0.00879	0.907307	0.935455
FRMPD2	-0.30365	3.78E-05	0.000206
FRMPD4	-0.20785	0.00537	0.014544
FRRS1	0.344039	2.58E-06	1.98E-05
FRS2	-0.35195	1.45E-06	1.20E-05
FRS3	0.101146	0.179145	0.272242
FRYL	-0.14258	0.057619	0.107996
FRY	-0.09921	0.187652	0.282715
FRZB	-0.12978	0.084244	0.148281
FSCB	0.035204	0.640848	0.731957
FSCN1	0.429707	2.16E-09	4.13E-08
FSCN2	0.186425	0.012718	0.030317
FSCN3	-0.12728	0.090446	0.157036
FSD1L	-0.50429	7.15E-13	3.38E-11
FSD1	-0.16036	0.0325	0.066984
FSD2	-0.10179	0.17636	0.268877
FSHB	-0.24227	0.001121	0.003791
FSHR	-0.06298	0.40359	0.516209
FSIP1	-0.28621	0.000108	0.000506
FSTL1	0.08673	0.249674	0.355072
FSTL3	0.39688	4.14E-08	5.39E-07
FSTL4	-0.29065	8.30E-05	0.000404
FSTL5	-0.0675	0.370638	0.483858
FST	-0.10586	0.159606	0.248273
FTCD	-0.23579	0.001533	0.004962
FTH1	0.27442	0.00021	0.000901

FTHL17	-0.11983	0.111113	0.186041
FTHL3	0.196358	0.008616	0.021743
FTL	0.186681	0.012594	0.030083
FTO	-0.3103	2.49E-05	0.000143
FTSJ1	0.394612	5.02E-08	6.41E-07
FTSJ2	-0.11655	0.121308	0.198891
FTSJ3	0.050391	0.504141	0.611138
FTSJD1	-0.03781	0.616352	0.711121
FTSJD2	-0.31536	1.81E-05	0.000108
FUBP1	-0.03	0.690956	0.77368
FUBP3	-0.29737	5.55E-05	0.000286
FUCA1	0.089554	0.234532	0.338562
FUCA2	-0.09557	0.204427	0.30332
FUK	0.064218	0.394427	0.507146
FUNDC1	0.091047	0.22679	0.329386
FUNDC2P2	-0.21978	0.003202	0.009337
FUNDC2	-0.26674	0.000319	0.001294
FURIN	-0.17421	0.020037	0.044469
FUS	0.030287	0.688179	0.771431
FUT10	0.051338	0.49615	0.603696
FUT11	-0.13264	0.077561	0.138544
FUT1	-0.32407	1.02E-05	6.61E-05
FUT2	0.532342	2.05E-14	1.41E-12
FUT3	0.538712	8.73E-15	6.51E-13
FUT4	0.30245	4.07E-05	0.00022
FUT5	0.076534	0.309921	0.420385
FUT6	0.411843	1.12E-08	1.74E-07
FUT7	-0.05922	0.432312	0.544146
FUT8	0.143239	0.056465	0.106226
FUT9	0.073862	0.327166	0.439082
FUZ	0.173715	0.020396	0.045164
FXC1	-0.19322	0.009762	0.02419
FXN	-0.42049	5.10E-09	8.83E-08
FXR1	-0.01507	0.841773	0.888272
FXR2	-0.56479	2.18E-16	2.43E-14
FXYD1	-0.09168	0.22354	0.325715
FXYD2	-0.09025	0.230918	0.334396
FXYD3	0.53113	2.40E-14	1.64E-12
FXYD4	0.132149	0.078682	0.140218
FXYD5	0.591154	3.72E-18	6.81E-16
FXYD6	-0.26773	0.000303	0.001236
FXYD7	-0.00854	0.909884	0.936988
FYB	-0.05573	0.460017	0.570449
FYC01	-0.19362	0.009608	0.023874
FYN	-0.2823	0.000135	0.000617
FYTTD1	-0.20186	0.006892	0.018018
FZD10	0.034424	0.64827	0.737784
FZD1	-0.05702	0.449669	0.560675
FZD2	0.459747	1.08E-10	3.00E-09
FZD3	-0.29032	8.46E-05	0.000411
FZD4	-0.28111	0.000144	0.000653
FZD5	0.161814	0.030936	0.064277
FZD6	0.148192	0.048369	0.093367
FZD7	0.181863	0.015117	0.035073

FZD8	0.04751	0.528858	0.63354
FZD9	-0.24593	0.000936	0.003246
FZR1	0.237119	0.001438	0.004698
GOS2	0.328176	7.75E-06	5.20E-05
G2E3	-0.09417	0.211172	0.311435
G3BP1	-0.03665	0.627157	0.7203
G3BP2	-0.24295	0.001085	0.003683
G6PC2	-0.00586	0.938105	0.958116
G6PC3	-0.18951	0.01129	0.027396
G6PC	-0.00896	0.905503	0.934162
G6PD	0.235571	0.001549	0.005008
GAA	-0.11227	0.135688	0.218049
GAB1	-0.12139	0.106498	0.179821
GAB2	-0.27801	0.000172	0.000759
GAB3	-0.09039	0.230183	0.333502
GAB4	-0.08832	0.241075	0.345461
GABARAPL1	-0.26184	0.000415	0.00162
GABARAPL2	-0.07914	0.293703	0.403507
GABARAPL3	-0.22113	0.003014	0.008888
GABARAP	-0.31664	1.66E-05	0.000101
GABBR1	0.010946	0.8847	0.919946
GABBR2	-0.28627	0.000107	0.000505
GABPA	-0.25564	0.000573	0.002136
GABPB1	-0.10452	0.164993	0.255187
GABPB2	0.154036	0.040083	0.079835
GABRA1	-0.26396	0.000371	0.001472
GABRA2	-0.16574	0.027036	0.057326
GABRA3	-0.07932	0.292603	0.402219
GABRA4	0.034445	0.648062	0.737736
GABRA5	-0.2203	0.003128	0.009151
GABRA6	0.05567	0.46047	0.57082
GABRB1	-0.2746	0.000208	0.000894
GABRB2	-0.08928	0.235955	0.339922
GABRB3	-0.37246	3.06E-07	3.11E-06
GABRD	0.148419	0.048023	0.092879
GABRE	0.284746	0.000117	0.000546
GABRG1	-0.20934	0.005041	0.01379
GABRG2	-0.27407	0.000214	0.000915
GABRG3	-0.26194	0.000412	0.001612
GABRP	0.379609	1.73E-07	1.89E-06
GABRQ	-0.19747	0.008238	0.020936
GABRR1	-0.19697	0.008406	0.021303
GABRR2	-0.08258	0.273131	0.381177
GABRR3	-0.14815	0.048441	0.093477
GAD1	0.137911	0.066391	0.121669
GAD2	-0.12066	0.108629	0.182656
GADD45A	0.228963	0.002111	0.006537
GADD45B	-0.02327	0.757858	0.82699
GADD45GIF	0.25639	0.000551	0.002065
GADD45G	-0.31763	1.56E-05	9.55E-05
GADL1	-0.25085	0.000732	0.002632
GAGE10	-0.14751	0.049422	0.095083
GAGE12D	-0.10733	0.153871	0.241326
GAGE12J	-0.16089	0.031915	0.065944

GAGE1	-0.02566	0.733886	0.807696
GAGE2A	-0.06914	0.359121	0.472183
GAGE2C	-0.09288	0.217552	0.318893
GAGE2D	-0.11961	0.111778	0.186877
GAGE4	-0.08784	0.243651	0.34832
GAGE8	-0.16197	0.030776	0.064022
GAK	0.158314	0.034805	0.070909
GAL3ST1	0.234234	0.00165	0.005293
GAL3ST2	0.045713	0.544579	0.647423
GAL3ST3	-0.05099	0.499116	0.606442
GAL3ST4	0.147533	0.049387	0.095025
GALC	-0.05876	0.435939	0.547406
GALE	0.485213	6.69E-12	2.53E-10
GALK1	0.121066	0.107447	0.181089
GALK2	0.08386	0.265746	0.373205
GALM	0.329647	7.01E-06	4.76E-05
GALNS	0.084899	0.259848	0.366389
GALNT10	0.244134	0.001023	0.003502
GALNT11	-0.39366	5.44E-08	6.85E-07
GALNT12	0.304772	3.53E-05	0.000194
GALNT13	-0.26257	0.000399	0.001568
GALNT14	0.328553	7.55E-06	5.08E-05
GALNT1	-0.12341	0.100761	0.171645
GALNT2	0.00175	0.981502	0.987193
GALNT3	0.328686	7.48E-06	5.05E-05
GALNT4	0.223178	0.002749	0.0082
GALNT5	0.524995	5.36E-14	3.41E-12
GALNT6	0.321535	1.21E-05	7.65E-05
GALNT7	0.205972	0.005811	0.015556
GALNT8	-0.16858	0.024484	0.052717
GALNT9	0.049766	0.509455	0.616007
GALNTL1	-0.25319	0.00065	0.002371
GALNTL2	-0.08816	0.241902	0.346375
GALNTL4	-0.09791	0.193549	0.289964
GALNTL5	-0.04207	0.577149	0.676334
GALNTL6	-0.20131	0.007049	0.018341
GALP	-0.0134	0.859064	0.901896
GALR1	-0.32751	8.10E-06	5.39E-05
GALR2	0.074812	0.320964	0.432811
GALR3	-0.20801	0.005333	0.014469
GALT	-0.03746	0.619618	0.713911
GAL	0.106155	0.158454	0.24687
GAMT	-0.22214	0.002881	0.008545
GANAB	-0.20708	0.005546	0.014941
GANC	0.317451	1.58E-05	9.65E-05
GAN	0.279345	0.000159	0.000713
GAP43	0.010172	0.892806	0.925331
GAPDHS	-0.1091	0.147172	0.232721
GAPDH	0.237941	0.001383	0.004542
GAPT	0.038304	0.611713	0.707287
GAPVD1	-0.35722	9.84E-07	8.55E-06
GAR1	0.232171	0.001818	0.005747
GARNL3	-0.2459	0.000938	0.003249
GARS	-0.08767	0.244583	0.349384

GART	0.235613	0.001545	0.005
GAS1	0.046173	0.540534	0.643693
GAS2L1	0.174608	0.019749	0.043958
GAS2L2	0.598131	1.19E-18	2.58E-16
GAS2L3	-0.12294	0.10207	0.173576
GAS2	-0.32499	9.59E-06	6.26E-05
GAS5	0.261875	0.000414	0.001617
GAS6	0.29909	5.00E-05	0.000263
GAS7	-0.11281	0.133807	0.215464
GAS8	-0.04091	0.587734	0.686108
GAST	-0.09019	0.231214	0.334726
GATA1	0.031854	0.672958	0.759363
GATA2	-0.13598	0.070316	0.127774
GATA3	0.346227	2.20E-06	1.73E-05
GATA4	0.295306	6.29E-05	0.000318
GATA5	0.124169	0.098669	0.168689
GATA6	0.201193	0.007083	0.018409
GATAD1	0.056638	0.452702	0.56364
GATAD2A	0.321848	1.18E-05	7.51E-05
GATAD2B	-0.18691	0.012482	0.029853
GATC	-0.24101	0.001192	0.003997
GATM	-0.00961	0.898651	0.929269
GATSL1	-0.36083	7.50E-07	6.79E-06
GATSL2	-0.42018	5.25E-09	9.04E-08
GATSL3	0.284306	0.00012	0.000558
GATS	-0.29579	6.11E-05	0.00031
GBA2	-0.09435	0.210295	0.310396
GBA3	-0.00635	0.932986	0.953923
GBAP1	0.083098	0.27013	0.377922
GBAS	-0.34246	2.88E-06	2.20E-05
GBA	-0.09012	0.231549	0.335092
GBE1	-0.12405	0.09899	0.169123
GBF1	-0.23263	0.00178	0.005643
GBGT1	0.157174	0.036151	0.073243
GBP1	0.15663	0.036808	0.074375
GBP2	0.423551	3.85E-09	6.92E-08
GBP3	0.219451	0.003249	0.009448
GBP4	0.152209	0.042534	0.083981
GBP5	-0.0063	0.933511	0.954311
GBP6	0.243975	0.001031	0.003525
GBP7	-0.04124	0.584717	0.683223
GBX1	-0.27197	0.00024	0.001013
GBX2	-0.09193	0.222314	0.324382
GCAT	-0.17591	0.018839	0.042227
GCA	0.111651	0.137875	0.220791
GCC1	-0.23209	0.001825	0.005764
GCC2	-0.05712	0.448823	0.559931
GCDH	-0.03139	0.677488	0.76295
GCET2	0.142615	0.05756	0.107895
GCFC1	-0.12934	0.085307	0.149823
GCGR	0.05147	0.495042	0.603079
GCG	0.143642	0.055768	0.105176
GCH1	-0.42412	3.65E-09	6.60E-08
GCHFR	0.270363	0.000262	0.001094

GCKR	0.491109	3.40E-12	1.38E-10
GCK	-0.19795	0.008082	0.020624
GCLC	-0.28946	8.90E-05	0.00043
GCLM	-0.20551	0.005924	0.015812
GCM1	0.101885	0.17597	0.268345
GCM2	-0.13996	0.062419	0.115515
GCN1L1	-0.23588	0.001526	0.004942
GCNT1	0.012354	0.869994	0.910322
GCNT2	0.29505	6.39E-05	0.000322
GCNT3	0.426408	2.94E-09	5.45E-08
GCNT4	-0.2314	0.001885	0.00593
GCNT7	-0.02958	0.695065	0.776641
GCOM1	0.325864	9.05E-06	5.95E-05
GCSH	0.114683	0.12743	0.207119
GC	-0.15603	0.037548	0.075539
GDAP1L1	-0.24446	0.001007	0.003454
GDAP1	-0.42701	2.78E-09	5.19E-08
GDAP2	0.159226	0.033759	0.06917
GDA	0.273334	0.000223	0.000949
GDE1	0.210524	0.004793	0.013218
GDEP	0.033498	0.657122	0.745835
GDF10	-0.19543	0.008941	0.02241
GDF11	-0.32015	1.32E-05	8.27E-05
GDF15	0.062417	0.407848	0.520073
GDF1	-0.21354	0.004209	0.011819
GDF2	0.012004	0.873646	0.912646
GDF3	0.139201	0.063865	0.117674
GDF5	0.246862	0.000894	0.003123
GDF6	-0.02389	0.751622	0.821863
GDF7	-0.17275	0.021118	0.046491
GDF9	-0.2118	0.004538	0.012599
GDI1	-0.14392	0.055292	0.104467
GDI2	0.026295	0.72753	0.802681
GDNF	-0.1119	0.13698	0.219679
GDPD1	-0.34758	2.00E-06	1.58E-05
GDPD2	0.43586	1.19E-09	2.46E-08
GDPD3	0.484056	7.63E-12	2.82E-10
GDPD4	-0.11056	0.141771	0.225769
GDPD5	0.094377	0.210177	0.310245
GEFT	0.026361	0.726881	0.802204
GEMIN4	-0.30462	3.56E-05	0.000195
GEMIN5	-0.25089	0.00073	0.002627
GEMIN6	0.327295	8.22E-06	5.46E-05
GEMIN7	0.185617	0.013117	0.031133
GEMIN8P4	-0.01653	0.826665	0.877192
GEMIN8	-0.03712	0.622781	0.716648
GEM	-0.02943	0.696552	0.777995
GEN1	0.054549	0.469562	0.579596
GET4	0.12529	0.095639	0.164406
GFAP	-0.07929	0.292744	0.402358
GFER	0.124258	0.098425	0.168361
GFI1B	0.15402	0.040105	0.079871
GFI1	-0.20218	0.006802	0.01781
GFM1	-0.07431	0.32426	0.436274

GF2	-0.35796	9.31E-07	8.14E-06
GFOD1	-0.00189	0.979976	0.986207
GFOD2	-0.31017	2.52E-05	0.000144
GFPT1	-0.04557	0.545803	0.648483
GFPT2	0.107093	0.154784	0.242471
GFRA1	-0.24909	0.0008	0.002847
GFRA2	-0.2251	0.002521	0.007618
GFRA3	-0.13283	0.077147	0.137942
GFRA4	0.100737	0.180918	0.274409
GFRA5	-0.0875	0.245495	0.35035
GGA1	0.066102	0.380671	0.493488
GGA2	-0.44316	5.84E-10	1.33E-08
GGA3	0.057853	0.443048	0.554834
GGCT	0.114917	0.12665	0.206105
GGCX	0.044413	0.556086	0.65754
GGH	-0.03928	0.60265	0.698907
GGNBP1	0.033944	0.652853	0.741926
GGNBP2	0.132399	0.078113	0.13938
GGN	0.21566	0.003839	0.010927
GGPS1	0.12476	0.097061	0.166475
GGT1	0.206281	0.005736	0.015391
GGT3P	0.179584	0.016458	0.037697
GGT5	0.119539	0.111988	0.187158
GGT6	0.295239	6.31E-05	0.00032
GGT7	-0.04792	0.525321	0.630705
GGT8P	0.148358	0.048115	0.093021
GGTA1	-0.17434	0.019944	0.044342
GGTLC1	0.152319	0.042384	0.08376
GGTLC2	0.227709	0.002237	0.006876
GH1	-0.074	0.326277	0.438302
GH2	0.022319	0.767448	0.83437
GHDC	0.267894	0.0003	0.001228
GHITM	-0.12628	0.093033	0.160695
GHRHR	0.006502	0.931356	0.9527
GHRH	-0.21281	0.004345	0.012134
GHRLOS	0.026929	0.721238	0.797504
GHRL	-0.04402	0.559618	0.660627
GHR	-0.36527	5.35E-07	5.05E-06
GHSR	-0.03409	0.651462	0.74043
GIF	-0.07096	0.346571	0.458985
GIGYF1	-0.08296	0.270911	0.378747
GIGYF2	-0.25381	0.000629	0.002308
GIMAP1	-0.15582	0.037808	0.076024
GIMAP2	0.142332	0.058062	0.10863
GIMAP4	-0.15905	0.033957	0.069495
GIMAP5	-0.22956	0.002053	0.006374
GIMAP6	-0.30083	4.50E-05	0.00024
GIMAP7	-0.25715	0.00053	0.001998
GIMAP8	-0.27831	0.000169	0.000748
GIN1	-0.31806	1.52E-05	9.33E-05
GIN5	0.253174	0.00065	0.002372
GIN2	0.281224	0.000143	0.00065
GIN3	0.151269	0.043845	0.086165
GIN4	0.214929	0.003963	0.011238

GIPC1	0.589682	4.71E-18	8.55E-16
GIPC2	0.290036	8.60E-05	0.000417
GIPC3	-0.07891	0.295092	0.40497
GIPR	0.000177	0.99813	0.998534
GIP	0.009233	0.902646	0.931961
GIT1	0.077862	0.301579	0.411668
GIT2	-0.28114	0.000144	0.000653
GIYD2	0.366794	4.76E-07	4.55E-06
GJA10	0.042259	0.575422	0.674846
GJA1	-0.03145	0.676854	0.762541
GJA3	-0.19681	0.008462	0.021425
GJA4	-0.05427	0.471858	0.581835
GJA5	-0.12778	0.089165	0.155261
GJA8	-0.19106	0.010628	0.026022
GJA9	0.435769	1.21E-09	2.47E-08
GJB1	0.293093	7.18E-05	0.000356
GJB2	0.51807	1.30E-13	7.47E-12
GJB3	0.633699	2.24E-21	1.03E-18
GJB4	0.602487	5.74E-19	1.32E-16
GJB5	0.493263	2.65E-12	1.12E-10
GJB6	0.288675	9.31E-05	0.000446
GJB7	-0.25611	0.000559	0.002091
GJC1	-0.09538	0.205354	0.304464
GJC2	0.401795	2.71E-08	3.74E-07
GJC3	-0.17005	0.023252	0.050449
GJD2	-0.16819	0.024822	0.053305
GJD3	-0.11522	0.125643	0.20487
GJD4	-0.06697	0.37446	0.487463
GK2	0.011187	0.882179	0.918125
GK3P	-0.25476	0.0006	0.002216
GK5	0.040525	0.591211	0.688787
GKAP1	-0.44787	3.65E-10	8.80E-09
GKN1	0.259985	0.000457	0.00176
GKN2	0.186213	0.012822	0.030542
GK	-0.28164	0.00014	0.000637
GLA	-0.0236	0.754483	0.824262
GLB1L2	0.230487	0.001967	0.006148
GLB1L3	-0.2205	0.0031	0.009085
GLB1L	-0.18262	0.014692	0.034276
GLB1	-0.22181	0.002924	0.008655
GLCCI1	-0.45491	1.78E-10	4.70E-09
GLCE	-0.10484	0.163714	0.253564
GLDC	-0.10343	0.16949	0.260757
GLDN	0.166987	0.02589	0.055256
GLE1	-0.18516	0.013346	0.031574
GLG1	-0.19462	0.009235	0.023058
GLI1	0.248613	0.000819	0.002902
GLI2	0.378185	1.94E-07	2.09E-06
GLI3	0.017216	0.819572	0.87224
GLI4	0.212456	0.004412	0.012285
GLIPR1L1	-0.01089	0.885328	0.920231
GLIPR1L2	-0.28721	0.000101	0.000481
GLIPR1	0.057278	0.447597	0.558797
GLIPR2	0.095662	0.20401	0.302837

GLIS1	0.280017	0.000153	0.00069
GLIS2	0.197038	0.008384	0.02126
GLIS3	-0.06866	0.362494	0.475707
GLMN	0.033409	0.657971	0.746498
GL01	-0.08571	0.255303	0.361682
GLOD4	-0.15436	0.039665	0.079162
GLOD5	0.287901	9.75E-05	0.000464
GLP1R	-0.14173	0.059134	0.110271
GLP2R	-0.14544	0.052744	0.100382
GLRA1	-0.19959	0.007561	0.019472
GLRA2	-0.25199	0.000691	0.002503
GLRA3	-0.27509	0.000202	0.000874
GLRA4	-0.09538	0.205367	0.304464
GLRB	-0.11997	0.110692	0.185463
GLRX2	0.369841	3.76E-07	3.72E-06
GLRX3	0.271877	0.000241	0.001016
GLRX5	-0.01577	0.834476	0.882688
GLRX	-0.0054	0.942976	0.96165
GLS2	-0.32783	7.93E-06	5.30E-05
GLS	-0.13965	0.063004	0.116314
GLT1D1	-0.16627	0.026543	0.056472
GLT25D1	0.29887	5.07E-05	0.000266
GLT25D2	0.067722	0.369081	0.482399
GLT6D1	0.015279	0.839583	0.886712
GLT8D1	-0.20161	0.006964	0.018167
GLT8D2	0.034398	0.648517	0.737932
GLTPD1	0.351625	1.49E-06	1.22E-05
GLTPD2	0.013676	0.856223	0.899726
GLTP	-0.03125	0.678838	0.763775
GLTSCR1	0.066377	0.378687	0.491349
GLTSCR2	0.096573	0.199713	0.297463
GLUD1	0.297356	5.56E-05	0.000286
GLUD2	-0.08884	0.238306	0.34246
GLUL	-0.02556	0.734895	0.808356
GLYATL1	-0.11443	0.128286	0.208219
GLYATL2	-0.11673	0.120741	0.198284
GLYATL3	-0.24793	0.000848	0.002982
GLYAT	-0.22024	0.003137	0.009171
GLYCTK	-0.06744	0.371066	0.484198
GLYR1	-0.13468	0.073069	0.131782
GM2A	-0.014	0.852883	0.897166
GMCL1L	-0.26372	0.000375	0.001488
GMCL1	-0.18409	0.013903	0.032666
GMDS	0.125688	0.094581	0.162884
GMEB1	-0.06133	0.416052	0.528422
GMEB2	-0.0705	0.349723	0.46223
GMFB	-0.15283	0.041689	0.082534
GMFG	0.026122	0.729258	0.803944
GMIP	0.327765	7.97E-06	5.31E-05
GML	0.012967	0.863602	0.90555
GMNN	-0.05712	0.448832	0.559931
GMPPA	0.163978	0.028731	0.060362
GMPPB	-0.09477	0.208286	0.307868
GMPR2	0.169204	0.023954	0.051728

GMPR	-0.09765	0.19471	0.291328
GMPS	0.25496	0.000594	0.002199
GNA11	-0.18847	0.011757	0.028341
GNA12	-0.42621	3.00E-09	5.54E-08
GNA13	-0.02055	0.785445	0.847969
GNA14	-0.18336	0.014289	0.033446
GNA15	0.579133	2.49E-17	3.62E-15
GNAI1	-0.25319	0.00065	0.002371
GNAI2	0.126141	0.09339	0.161184
GNAI3	0.26564	0.000339	0.00136
GNAL	-0.31409	1.96E-05	0.000116
GNAO1	-0.34446	2.50E-06	1.93E-05
GNAQ	-0.1237	0.099947	0.170522
GNASAS	-0.03132	0.678158	0.763444
GNAS	-0.29725	5.60E-05	0.000288
GNAT1	-0.25599	0.000563	0.002103
GNAT2	-0.27768	0.000175	0.000772
GNAT3	0.052674	0.484994	0.593971
GNAZ	-0.38487	1.13E-07	1.30E-06
GNB1L	0.164258	0.028456	0.05986
GNB1	-0.0379	0.61546	0.710372
GNB2L1	0.051096	0.49819	0.605631
GNB2	0.20831	0.005266	0.014308
GNB3	-0.18041	0.015958	0.036734
GNB4	-0.04948	0.511904	0.618047
GNB5	-0.18721	0.012341	0.029554
GNE	-0.06982	0.354396	0.467376
GNG10	-0.19886	0.007789	0.019957
GNG11	-0.08942	0.235216	0.339153
GNG12	0.167944	0.025039	0.053718
GNG13	0.121845	0.105187	0.178019
GNG2	-0.40647	1.80E-08	2.62E-07
GNG3	-0.12435	0.098165	0.168003
GNG4	-0.36138	7.20E-07	6.55E-06
GNG5	0.434164	1.41E-09	2.83E-08
GNG7	-0.24568	0.000948	0.00328
GNG8	0.086436	0.251291	0.35715
GNGT1	0.027204	0.718508	0.795375
GNGT2	0.072972	0.333041	0.445301
GNL1	0.029006	0.700724	0.781506
GNL2	0.205647	0.00589	0.015732
GNL3L	-0.09223	0.22077	0.32263
GNL3	0.152059	0.042741	0.084306
GNLY	-0.02189	0.771845	0.837532
GNMT	-0.17906	0.016779	0.038285
GNPAT	0.209878	0.004927	0.013527
GNPDA1	0.049694	0.510063	0.616616
GNPDA2	-0.35489	1.17E-06	9.94E-06
GNPNAT1	0.062689	0.405801	0.51826
GNPTAB	-0.21466	0.00401	0.011348
GNPTG	0.079363	0.292325	0.40195
GNRH1	0.355156	1.15E-06	9.77E-06
GNRH2	-0.22659	0.002354	0.007179
GNRHR2	-0.02191	0.771608	0.83742

GNRHR	-0.02834	0.707312	0.786902
GNS	-0.32164	1.20E-05	7.60E-05
GOLGA1	-0.2854	0.000113	0.000528
GOLGA2B	-0.10452	0.165013	0.255198
GOLGA2	-0.14882	0.047415	0.091946
GOLGA3	-0.33026	6.73E-06	4.60E-05
GOLGA4	-0.21545	0.003875	0.011012
GOLGA5	-0.07145	0.343266	0.455553
GOLGA6A	0.141109	0.060276	0.112009
GOLGA6B	0.096055	0.202146	0.300521
GOLGA6C	0.020027	0.790747	0.852002
GOLGA6D	-0.03908	0.604482	0.700647
GOLGA6L1C	0.063439	0.400198	0.512766
GOLGA6L1	0.028297	0.707706	0.787155
GOLGA6L5	0.023767	0.752835	0.822836
GOLGA6L6	0.032902	0.662845	0.751166
GOLGA6L9	0.142678	0.057449	0.107726
GOLGA7B	-0.08288	0.271421	0.379325
GOLGA7	-0.06172	0.413142	0.525132
GOLGA8A	0.104844	0.163688	0.253564
GOLGA8B	0.03029	0.68815	0.771431
GOLGA8C	-0.29187	7.72E-05	0.000379
GOLGA8DP	-0.23078	0.001941	0.006075
GOLGA8E	-0.34646	2.17E-06	1.70E-05
GOLGA8F	0.00274	0.971044	0.980465
GOLGA8G	-0.06107	0.418026	0.530351
GOLGA9P	-0.1999	0.007466	0.019261
GOLGB1	0.014474	0.847932	0.89305
GOLIM4	-0.16241	0.030317	0.06323
GOLM1	0.263746	0.000375	0.001486
GOLPH3L	0.12889	0.086409	0.151419
GOLPH3	-0.33249	5.78E-06	4.04E-05
GOLT1A	0.059124	0.433075	0.544795
GOLT1B	-0.19523	0.009016	0.022567
GON4L	0.010468	0.889707	0.923375
GOPC	-0.25807	0.000505	0.001918
GORAB	0.064409	0.393016	0.505752
GORASP1	0.01051	0.88926	0.923124
GORASP2	0.084858	0.260079	0.366662
GOSR1	-0.23718	0.001434	0.004686
GOSR2	-0.16464	0.028085	0.059205
GOT1L1	0.016166	0.830414	0.879758
GOT1	-0.15108	0.044106	0.086583
GOT2	0.036558	0.628049	0.720958
GP1BA	-0.13164	0.079848	0.141976
GP2	-0.05904	0.433704	0.545239
GP5	-0.095	0.20715	0.306469
GP6	0.309314	2.66E-05	0.000151
GP9	-0.29395	6.82E-05	0.000342
GPA33	0.262293	0.000405	0.001586
GPAA1	0.003815	0.959694	0.972431
GPAM	-0.38583	1.04E-07	1.21E-06
GPAT2	0.141192	0.060123	0.111809
GPATCH1	0.157	0.03636	0.07359

GPATCH2	0.129747	0.08432	0.148367
GPATCH3	-0.18462	0.013622	0.032148
GPATCH4	0.101246	0.178714	0.271712
GPATCH8	-0.07472	0.321567	0.433358
GPBAR1	0.027264	0.717915	0.795014
GPBP1L1	0.139376	0.063528	0.117238
GPBP1	-0.13501	0.072369	0.130807
GPC1	0.437461	1.02E-09	2.16E-08
GPC2	0.002607	0.972449	0.981333
GPC3	-0.19424	0.009376	0.023368
GPC4	0.189188	0.011433	0.027695
GPC5	-0.00485	0.948807	0.965307
GPC6	-0.20176	0.006921	0.018077
GPCPD1	0.029264	0.698189	0.77936
GPD1L	0.040917	0.58762	0.686048
GPD1	-0.08683	0.249148	0.35465
GPD2	0.150758	0.044571	0.087336
GPER	0.020902	0.781832	0.845083
GPHA2	-0.1442	0.054817	0.103698
GPHN	-0.23336	0.001719	0.00548
GPIHBP1	-0.16892	0.024195	0.052158
GPI	0.187978	0.011981	0.028834
GPKOW	0.199093	0.007716	0.019802
GPLD1	-0.49073	3.55E-12	1.43E-10
GPM6A	-0.07267	0.33503	0.447195
GPM6B	-0.26225	0.000406	0.001589
GPN1	0.27047	0.000261	0.001089
GPN2	0.012208	0.871515	0.911286
GPN3	-0.27301	0.000227	0.000964
GPNMB	0.088871	0.238133	0.342286
GPR107	-0.26976	0.000271	0.001124
GPR108	0.306537	3.16E-05	0.000177
GPR109A	0.151067	0.04413	0.086612
GPR109B	0.067625	0.369772	0.483078
GPR110	0.571856	7.60E-17	9.69E-15
GPR111	0.133377	0.075918	0.13609
GPR112	-0.17386	0.020287	0.044958
GPR113	-0.44226	6.38E-10	1.44E-08
GPR114	-0.14568	0.052352	0.099755
GPR115	0.422129	4.39E-09	7.73E-08
GPR116	-0.25239	0.000677	0.002455
GPR119	-0.25034	0.000751	0.002694
GPR120	-0.02686	0.721962	0.797991
GPR123	-0.11881	0.114215	0.189965
GPR124	-0.05011	0.506505	0.613402
GPR125	0.027087	0.71967	0.796215
GPR126	0.393871	5.35E-08	6.75E-07
GPR128	0.196473	0.008577	0.021662
GPR12	-0.13145	0.08029	0.142633
GPR132	0.421678	4.57E-09	8.02E-08
GPR133	-0.21884	0.003337	0.009663
GPR135	-0.3703	3.63E-07	3.60E-06
GPR137B	0.113175	0.132547	0.213837
GPR137C	-0.26774	0.000303	0.001236

GPR137	0.141328	0.059874	0.111409
GPR141	-0.1017	0.176769	0.269356
GPR142	-0.40649	1.80E-08	2.62E-07
GPR143	0.051586	0.494067	0.602324
GPR144	-0.08837	0.240807	0.345203
GPR146	-0.04325	0.566528	0.666778
GPR148	-0.44227	6.38E-10	1.44E-08
GPR149	-0.21927	0.003275	0.009511
GPR150	-0.21708	0.003608	0.010343
GPR151	-0.1457	0.052307	0.099703
GPR152	0.291592	7.84E-05	0.000385
GPR153	0.207922	0.005353	0.014512
GPR155	-0.40958	1.37E-08	2.06E-07
GPR156	-0.07577	0.314813	0.425911
GPR157	0.092592	0.218969	0.320591
GPR158	-0.35554	1.11E-06	9.54E-06
GPR15	-0.15279	0.041744	0.082618
GPR160	0.184514	0.013679	0.03225
GPR161	0.176848	0.018203	0.040987
GPR162	-0.23025	0.001988	0.0062
GPR171	-0.08113	0.281681	0.390244
GPR172A	0.325555	9.24E-06	6.06E-05
GPR172B	0.156365	0.037132	0.07487
GPR173	-0.21743	0.003553	0.010197
GPR174	-0.19067	0.010792	0.026368
GPR176	-0.10839	0.149812	0.23614
GPR179	-0.29442	6.63E-05	0.000333
GPR17	-0.0441	0.558857	0.65983
GPR180	-0.06367	0.39849	0.511107
GPR182	-0.11508	0.126116	0.205455
GPR183	0.073422	0.330061	0.442183
GPR18	-0.12539	0.095368	0.164055
GPR19	-0.26254	0.0004	0.001568
GPR1	0.308818	2.74E-05	0.000156
GPR20	0.385789	1.05E-07	1.21E-06
GPR21	0.10005	0.183925	0.278032
GPR22	-0.08874	0.238835	0.342971
GPR25	0.037671	0.617618	0.712115
GPR26	-0.01739	0.817787	0.870889
GPR27	-0.12403	0.099048	0.169207
GPR31	-0.15817	0.034974	0.071215
GPR32	0.018104	0.810445	0.865835
GPR34	-0.19649	0.008573	0.02166
GPR35	0.523677	6.36E-14	3.93E-12
GPR37L1	0.265074	0.000349	0.001399
GPR37	-0.26439	0.000362	0.001445
GPR39	0.530136	2.74E-14	1.85E-12
GPR3	-0.09381	0.212944	0.313463
GPR44	-0.24161	0.001158	0.0039
GPR45	-0.13532	0.071703	0.129864
GPR4	-0.0915	0.224457	0.326714
GPR50	-0.13124	0.080782	0.143379
GPR52	-0.04164	0.581014	0.679942
GPR55	-0.13931	0.063665	0.117446

GPR56	0.233725	0.00169	0.005399
GPR61	-0.15287	0.041632	0.082438
GPR62	-0.12564	0.094717	0.16309
GPR63	-0.1351	0.072181	0.130562
GPR64	-0.2942	6.72E-05	0.000337
GPR65	-0.04477	0.552923	0.654857
GPR68	0.145642	0.052407	0.099846
GPR6	-0.30279	3.99E-05	0.000216
GPR75	-0.4304	2.02E-09	3.89E-08
GPR77	0.27139	0.000248	0.00104
GPR78	0.334299	5.10E-06	3.62E-05
GPR81	0.199603	0.007558	0.01947
GPR82	-0.01986	0.792476	0.853044
GPR83	-0.24909	0.0008	0.002847
GPR84	0.121185	0.107099	0.180606
GPR85	-0.02671	0.723359	0.799179
GPR87	0.533786	1.69E-14	1.19E-12
GPR88	-0.0367	0.626674	0.719958
GPR89A	0.094442	0.209865	0.309877
GPR89B	0.045355	0.547735	0.650192
GPR89C	0.03039	0.687176	0.770569
GPR97	-0.01663	0.825591	0.876446
GPR98	-0.41972	5.48E-09	9.37E-08
GPRASP1	-0.32372	1.04E-05	6.75E-05
GPRASP2	-0.45787	1.31E-10	3.57E-09
GPRC5A	0.611434	1.25E-19	3.38E-17
GPRC5B	0.241073	0.001189	0.003986
GPRC5C	0.121423	0.106408	0.179685
GPRC5D	0.409359	1.40E-08	2.10E-07
GPRC6A	-0.15	0.04566	0.08913
GPRIN1	-0.09877	0.189619	0.28507
GPRIN2	0.257479	0.000521	0.001968
GPRIN3	-0.47442	2.23E-11	7.34E-10
GPS1	-0.00562	0.940662	0.960076
GPS2	-0.22824	0.002182	0.006728
GPSM1	-0.02225	0.768144	0.834851
GPSM2	0.263332	0.000383	0.001514
GPSM3	0.111615	0.137999	0.220919
GPT2	-0.1114	0.138769	0.221971
GPT	0.243006	0.001082	0.003674
GPX1	0.454472	1.86E-10	4.87E-09
GPX2	0.374008	2.71E-07	2.79E-06
GPX3	-0.3359	4.57E-06	3.28E-05
GPX4	0.231687	0.00186	0.005862
GPX5	-0.11964	0.111674	0.186774
GPX7	-0.04462	0.554272	0.655945
GPX8	0.312478	2.17E-05	0.000127
GRAMD1A	0.055245	0.463909	0.574087
GRAMD1B	0.080727	0.284083	0.392967
GRAMD1C	-0.01757	0.815971	0.869719
GRAMD2	0.193563	0.009632	0.023921
GRAMD3	0.128121	0.088319	0.15406
GRAMD4	-0.2408	0.001204	0.004031
GRAP2	-0.30153	4.31E-05	0.000231

GRAPL	-0.11116	0.139612	0.223014
GRAP	-0.07494	0.320163	0.431949
GRASP	-0.08102	0.282336	0.391
GRB10	-0.17923	0.016676	0.038122
GRB14	-0.17822	0.017306	0.039299
GRB2	-0.10598	0.159147	0.247734
GRB7	0.424759	3.44E-09	6.26E-08
GREB1L	0.379866	1.70E-07	1.86E-06
GREB1	-0.07678	0.308359	0.418783
GREM1	0.179535	0.016488	0.037756
GREM2	0.107148	0.154571	0.242233
GRHL1	0.280394	0.00015	0.000677
GRHL2	0.402316	2.59E-08	3.60E-07
GRHL3	0.163407	0.0293	0.061394
GRHPR	-0.00139	0.985266	0.989821
GRIA1	-0.34007	3.41E-06	2.55E-05
GRIA2	-0.31489	1.86E-05	0.000111
GRIA3	-0.3199	1.34E-05	8.39E-05
GRIA4	-0.05479	0.467642	0.577767
GRID1	-0.01897	0.801574	0.860308
GRID2IP	0.305351	3.40E-05	0.000188
GRID2	0.027813	0.71248	0.790872
GRIK1	-0.24151	0.001164	0.003914
GRIK2	-0.23309	0.001742	0.00554
GRIK3	-0.11976	0.111337	0.186322
GRIK4	-0.24109	0.001188	0.003984
GRIK5	-0.25432	0.000613	0.002259
GRIN1	-0.16859	0.024479	0.052712
GRIN2A	-0.00261	0.972438	0.981333
GRIN2B	-0.00456	0.951871	0.96733
GRIN2C	-0.12035	0.109564	0.183915
GRIN2D	0.174765	0.019637	0.043726
GRIN3A	-0.25115	0.000721	0.0026
GRIN3B	0.164821	0.02791	0.058891
GRINA	0.095014	0.207105	0.306442
GRINL1A	-0.21366	0.004188	0.011775
GRIP1	0.019218	0.799017	0.858496
GRIP2	-0.26838	0.000292	0.001201
GRIPAP1	0.0018	0.980979	0.986818
GRK1	-0.21755	0.003533	0.010152
GRK4	-0.38373	1.24E-07	1.41E-06
GRK5	-0.1037	0.168337	0.259427
GRK6	-0.00534	0.943594	0.961999
GRK7	-0.07825	0.299136	0.409209
GRLF1	-0.44816	3.54E-10	8.62E-09
GRM1	-0.35207	1.44E-06	1.19E-05
GRM2	0.082009	0.276478	0.384355
GRM3	-0.0236	0.754537	0.824275
GRM4	-0.21243	0.004417	0.012296
GRM5	0.025891	0.731558	0.805959
GRM6	-0.09469	0.208666	0.308313
GRM7	-0.32804	7.82E-06	5.24E-05
GRM8	0.051301	0.496461	0.603976
GRN	0.270358	0.000262	0.001094

GRPEL1	0.147036	0.050166	0.096234
GRPEL2	-0.13972	0.062865	0.116122
GRPR	-0.31161	2.30E-05	0.000133
GRP	0.37214	3.14E-07	3.19E-06
GRRP1	-0.1839	0.014003	0.032855
GRSF1	-0.33181	6.05E-06	4.21E-05
GRTP1	0.490194	3.78E-12	1.52E-10
GRWD1	0.146801	0.050539	0.096837
GRXCR2	-0.10239	0.173832	0.266067
GSC	0.239505	0.001282	0.004261
GSDMA	-0.04068	0.589764	0.68774
GSDMB	0.614374	7.47E-20	2.11E-17
GSDMC	0.250096	0.00076	0.002722
GSDMD	0.339427	3.57E-06	2.65E-05
GSG1L	0.043171	0.567202	0.667173
GSG1	-0.11622	0.12238	0.200342
GSG2	0.150459	0.044999	0.088056
GSK3A	0.096716	0.199045	0.29667
GSK3B	-0.02088	0.782055	0.845278
GSN	0.176679	0.018316	0.041184
GSPT1	0.003387	0.964213	0.975694
GSPT2	0.136376	0.069501	0.126467
GSR	-0.11631	0.122099	0.199982
GSS	0.316312	1.70E-05	0.000103
GSTA1	0.168345	0.024689	0.053088
GSTA2	-0.0495	0.511704	0.617947
GSTA3	-0.13307	0.0766	0.137149
GSTA4	-0.48542	6.54E-12	2.49E-10
GSTA5	-0.04219	0.57605	0.675251
GSTCD	-0.26383	0.000373	0.00148
GSTK1	0.396305	4.35E-08	5.64E-07
GSTM1	0.144601	0.054135	0.102623
GSTM2P1	-0.0175	0.816608	0.870162
GSTM2	0.00561	0.940753	0.960076
GSTM3	0.126804	0.091667	0.158794
GSTM4	0.201709	0.006934	0.018099
GSTM5	0.073875	0.327081	0.439082
GSTO1	0.364286	5.77E-07	5.38E-06
GSTO2	0.239413	0.001288	0.004275
GSTP1	0.581315	1.78E-17	2.64E-15
GSTT1	-0.01375	0.85541	0.899153
GSTT2	-0.12036	0.109521	0.183877
GSTTP1	0.093524	0.214346	0.315104
GSTTP2	0.02184	0.772298	0.8378
GSTZ1	-0.0252	0.738502	0.811285
GSX2	0.092928	0.217294	0.31861
GTDC1	0.26371	0.000376	0.001488
GTF2A1L	0.138025	0.066163	0.121308
GTF2A1	-0.22295	0.002778	0.008274
GTF2A2	-0.02242	0.766422	0.833544
GTF2B	0.358368	9.03E-07	7.93E-06
GTF2E1	0.089716	0.233683	0.337608
GTF2E2	0.366335	4.93E-07	4.69E-06
GTF2F1	-0.02274	0.763164	0.831358

GTF2F2	0.407565	1.64E-08	2.40E-07
GTF2H1	-0.00453	0.952103	0.967515
GTF2H2B	-0.0877	0.244396	0.349158
GTF2H2C	-0.04436	0.556598	0.657967
GTF2H2	-0.07671	0.308795	0.419232
GTF2H3	-0.20463	0.006144	0.016315
GTF2H4	0.152101	0.042683	0.084216
GTF2H5	-0.13487	0.072668	0.131228
GTF2IP1	-0.27051	0.00026	0.001086
GTF2IRD1	0.477444	1.60E-11	5.44E-10
GTF2IRD2E	-0.11826	0.115897	0.192144
GTF2IRD2F	-0.17654	0.018407	0.041366
GTF2IRD2	-0.15993	0.032969	0.067817
GTF2I	-0.2405	0.001222	0.004082
GTF3A	0.140022	0.062299	0.115314
GTF3C1	-0.28376	0.000124	0.000573
GTF3C2	0.11293	0.133391	0.2149
GTF3C3	-0.01894	0.801839	0.860462
GTF3C4	-0.25849	0.000494	0.001883
GTF3C5	-0.04195	0.578194	0.677202
GTF3C6	-0.00059	0.99375	0.995701
GTPBP10	0.059365	0.431195	0.543086
GTPBP1	0.080525	0.28529	0.394195
GTPBP2	0.264221	0.000365	0.001454
GTPBP3	0.193305	0.00973	0.024123
GTPBP4	0.093551	0.214214	0.314981
GTPBP5	-0.13975	0.062815	0.116053
GTPBP8	0.079745	0.290002	0.39945
GTSE1	0.303369	3.85E-05	0.000209
GTSF1L	0.003724	0.96065	0.973083
GTSF1	0.043746	0.562043	0.662879
GUCA1A	0.182578	0.014717	0.034322
GUCA1B	0.066859	0.375231	0.488275
GUCA1C	-0.17885	0.016914	0.03854
GUCA2A	-0.07457	0.322528	0.434328
GUCA2B	0.053455	0.478532	0.588171
GUCY1A2	-0.14927	0.04674	0.090808
GUCY1A3	-0.09264	0.218744	0.320308
GUCY1B2	0.376513	2.22E-07	2.35E-06
GUCY1B3	-0.12398	0.09919	0.169407
GUCY2C	-0.15659	0.036863	0.074471
GUCY2D	0.033493	0.657171	0.745847
GUCY2E	0.067466	0.370902	0.484075
GUCY2F	-0.04315	0.567349	0.667267
GUCY2GP	0.170812	0.022629	0.049251
GUF1	-0.27427	0.000212	0.000907
GUK1	0.479969	1.21E-11	4.23E-10
GULP1	0.16288	0.029832	0.06239
GUSBL1	-0.16716	0.025731	0.054953
GUSBL2	-0.27801	0.000172	0.000759
GUSBP1	-0.27378	0.000217	0.000929
GUSBP3	-0.24876	0.000813	0.002886
GUSB	-0.12319	0.101371	0.172565
GVIN1	-0.14558	0.052516	0.100025

GXYLT1	-0.40976	1.35E-08	2.04E-07
GXYLT2	-0.04529	0.548346	0.650801
GYG1	-0.34557	2.31E-06	1.80E-05
GYG2	-0.35549	1.12E-06	9.58E-06
GYLTL1B	-0.07331	0.330786	0.442764
GYP A	-0.12437	0.098122	0.167953
GYPB	-0.06182	0.412328	0.524366
GYPC	-0.03314	0.660511	0.748993
GYPE	-0.11893	0.113853	0.189506
GYS1	0.292797	7.30E-05	0.000362
GYS2	-0.05496	0.466209	0.576346
GZF1	-0.47723	1.64E-11	5.55E-10
GZMA	-0.04624	0.539967	0.643173
GZMB	-0.0293	0.697794	0.779118
GZMH	-0.10773	0.152316	0.23925
GZMK	-0.05847	0.438227	0.549947
GZMM	-0.09397	0.212163	0.312476
H19	0.134166	0.074185	0.133528
H1F0	0.369318	3.91E-07	3.85E-06
H1FNT	-0.28896	9.16E-05	0.00044
H1F00	0.121632	0.105801	0.178798
H1FX	0.082583	0.273119	0.381177
H2AFB1	-0.03426	0.649807	0.738931
H2AFJ	0.250466	0.000746	0.002679
H2AFV	-0.44006	7.93E-10	1.73E-08
H2AFX	0.279125	0.000161	0.00072
H2AFY2	0.04544	0.546981	0.649532
H2AFY	0.16195	0.030793	0.064031
H2AFZ	0.167849	0.025122	0.053849
H2BFM	-0.08048	0.285566	0.394514
H2BFWT	-0.04921	0.514212	0.620229
H2BFXP	-0.04655	0.537185	0.640592
H3F3A	0.197381	0.008269	0.02101
H3F3B	0.205826	0.005846	0.015641
H3F3C	0.136694	0.068846	0.125494
H6PD	0.008447	0.910899	0.937657
HAAO	-0.16321	0.029494	0.061748
HABP2	0.017419	0.817482	0.870765
HABP4	-0.25315	0.000651	0.002373
HACE1	-0.38452	1.16E-07	1.33E-06
HACL1	-0.18109	0.015562	0.035924
HADHA	0.038651	0.608491	0.704137
HADHB	-0.08202	0.276435	0.384323
HADH	-0.11117	0.139591	0.222998
HAGHL	0.344623	2.47E-06	1.91E-05
HAGH	-0.22127	0.002996	0.00884
HAL	-0.00698	0.926371	0.948943
HAMP	0.277449	0.000177	0.00078
HAND1	-0.05042	0.503905	0.610985
HAND2	0.118782	0.114295	0.190049
HA01	-0.28526	0.000114	0.000532
HA02	-0.11751	0.118245	0.195128
HAP1	-0.17558	0.019066	0.042644
HAPLN1	0.157527	0.035729	0.072537

HAPLN2	-0.07398	0.326412	0.438454
HAPLN3	0.388881	8.12E-08	9.75E-07
HAPLN4	0.238784	0.001328	0.004381
HAR1A	-0.17642	0.018488	0.041524
HAR1B	-0.20151	0.006991	0.018226
HARBI1	0.116174	0.122523	0.200544
HARS2	0.284754	0.000117	0.000546
HARS	-0.0217	0.773737	0.838993
HAS1	-0.18643	0.012713	0.030309
HAS2AS	-0.10416	0.16646	0.256954
HAS2	-0.03277	0.664122	0.75214
HAS3	0.393064	5.72E-08	7.16E-07
HAT1	-0.10172	0.176694	0.269262
HAUS1	-0.18184	0.015129	0.035087
HAUS2	0.050169	0.506026	0.612897
HAUS3	-0.27415	0.000213	0.000912
HAUS4	0.1102	0.143096	0.227458
HAUS5	0.10607	0.158787	0.247272
HAUS6	-0.30418	3.66E-05	0.0002
HAUS7	0.029471	0.696163	0.777692
HAUS8	0.249949	0.000766	0.00274
HAVCR1	0.1439	0.055324	0.104508
HAVCR2	0.148318	0.048176	0.093075
HAX1	-0.10137	0.178192	0.271023
HBA1	-0.11776	0.117476	0.19405
HBA2	-0.12006	0.110438	0.185132
HBBP1	0.073594	0.328929	0.440876
HBB	-0.19802	0.008058	0.020571
HBD	0.044339	0.556747	0.658046
HBE1	-0.0503	0.504955	0.611825
HBEGF	0.368087	4.31E-07	4.17E-06
HBG1	-0.06874	0.361943	0.475141
HBG2	0.018451	0.806874	0.863233
HBM	-0.11093	0.140441	0.22412
HBP1	-0.15515	0.038645	0.077399
HBQ1	-0.12029	0.109726	0.18414
HBS1L	-0.33602	4.53E-06	3.26E-05
HBXIP	0.290091	8.57E-05	0.000416
HBZ	-0.07968	0.290382	0.399806
HCCS	0.109531	0.145554	0.230624
HCFC1R1	0.445497	4.63E-10	1.09E-08
HCFC1	-0.31906	1.42E-05	8.81E-05
HCFC2	-0.32075	1.27E-05	7.99E-05
HCG11	0.013372	0.859388	0.90204
HCG18	-0.12105	0.107484	0.181119
HCG22	0.027521	0.715365	0.792916
HCG26	0.342196	2.94E-06	2.24E-05
HCG27	0.162815	0.029899	0.0625
HCG2P7	-0.13406	0.074425	0.13387
HCG4P6	0.055199	0.464277	0.574389
HCG4	0.137021	0.068179	0.124438
HCG9	-0.22456	0.002583	0.007772
HCK	0.067932	0.367601	0.481196
HCLS1	-0.06595	0.381747	0.494508

HCN1	-0.30916	2.68E-05	0.000153
HCN2	-0.21811	0.003447	0.009937
HCN3	0.049658	0.510376	0.616805
HCN4	-0.24226	0.001122	0.003791
HCP5	0.282528	0.000133	0.000609
HCRTR1	-0.09597	0.202529	0.301045
HCRTR2	-0.05642	0.454472	0.565523
HCRT	0.089107	0.236882	0.340786
HCST	0.094727	0.208485	0.308092
HDAC10	0.17664	0.018342	0.041238
HDAC11	0.101522	0.177524	0.270193
HDAC1	0.237262	0.001429	0.004671
HDAC2	-0.19087	0.01071	0.026194
HDAC3	0.009157	0.903439	0.932488
HDAC4	-0.47191	2.94E-11	9.48E-10
HDAC5	-0.30366	3.78E-05	0.000206
HDAC6	-0.17795	0.017481	0.039608
HDAC7	0.401617	2.76E-08	3.78E-07
HDAC8	0.033933	0.652953	0.741998
HDAC9	0.034104	0.651321	0.740312
HDC	-0.1355	0.071332	0.129299
HDDC2	-0.08371	0.266621	0.374151
HDDC3	-0.00264	0.972142	0.981223
HDGFL1	0.02061	0.784801	0.847412
HDGFRP2	0.175689	0.018989	0.042505
HDGFRP3	-0.19167	0.010376	0.02548
HDGF	0.34048	3.32E-06	2.48E-05
HDHD1A	0.221004	0.003031	0.008922
HDHD2	-0.47661	1.76E-11	5.92E-10
HDHD3	0.318599	1.46E-05	9.04E-05
HDLBP	0.004176	0.955883	0.969811
HDX	-0.05027	0.505132	0.612002
HEATR1	0.132538	0.077798	0.138855
HEATR2	-0.01455	0.847146	0.892507
HEATR3	-0.2111	0.004677	0.012935
HEATR4	-0.14226	0.058182	0.108814
HEATR5A	-0.20965	0.004974	0.013636
HEATR5B	-0.22597	0.002422	0.007355
HEATR6	-0.23898	0.001316	0.004346
HEATR7A	0.138664	0.064907	0.119315
HEATR7B2	-0.15657	0.036886	0.07448
HEBP1	0.26379	0.000374	0.001483
HEBP2	0.370544	3.56E-07	3.54E-06
HECA	-0.04044	0.592015	0.689388
HECTD1	-0.08356	0.267457	0.375031
HECTD2	-0.30954	2.62E-05	0.000149
HECTD3	0.262541	0.0004	0.001568
HECW1	0.027587	0.714714	0.792416
HECW2	-0.41313	9.98E-09	1.57E-07
HEG1	-0.15342	0.040896	0.081211
HELB	-0.20222	0.00679	0.01779
HELLS	0.3089	2.73E-05	0.000155
HELQ	-0.40041	3.06E-08	4.13E-07
HELT	0.044719	0.553369	0.655189

HELZ	-0.39367	5.44E-08	6.84E-07
HEMGN	-0.21263	0.004379	0.012208
HEMK1	0.037912	0.61537	0.710331
HEPACAM2	-0.23747	0.001415	0.004628
HEPACAM	-0.17355	0.020521	0.04539
HEPHL1	0.158538	0.034545	0.070495
HEPH	0.291452	7.91E-05	0.000387
HEPN1	-0.13645	0.06935	0.126249
HERC1	-0.48369	7.95E-12	2.92E-10
HERC2P2	0.083812	0.266019	0.373492
HERC2P4	-0.06949	0.356677	0.469819
HERC2	-0.39353	5.50E-08	6.92E-07
HERC3	0.019048	0.800759	0.859807
HERC4	0.260166	0.000453	0.001746
HERC5	0.024541	0.745064	0.816408
HERC6	0.242101	0.001131	0.00382
HERPUD1	-0.31104	2.38E-05	0.000137
HERPUD2	-0.10605	0.158863	0.24737
HES1	0.481284	1.04E-11	3.71E-10
HES2	0.242812	0.001092	0.003704
HES3	-0.12123	0.106969	0.180432
HES4	0.346119	2.22E-06	1.74E-05
HES5	0.071282	0.344389	0.456737
HES6	-0.13048	0.08256	0.145972
HES7	0.129689	0.08446	0.148587
HESRG	0.080541	0.285195	0.394174
HESX1	0.097231	0.196653	0.293658
HEXA	-0.08208	0.276063	0.383971
HEXB	-0.09239	0.219974	0.321705
HEXDC	-0.0558	0.459393	0.569961
HEXIM1	0.326951	8.41E-06	5.57E-05
HEXIM2	0.074254	0.324596	0.436667
HEY1	-0.32009	1.33E-05	8.30E-05
HEY2	-0.11747	0.118382	0.195318
HEYL	-0.02292	0.761346	0.829698
HFE2	0.059112	0.433167	0.544812
HFE	0.11819	0.116123	0.192329
HFM1	-0.31288	2.12E-05	0.000124
HGC6.3	-0.08795	0.243026	0.347653
HGD	0.052072	0.490004	0.598551
HGFAC	0.047631	0.527809	0.632808
HGF	-0.12464	0.097392	0.166941
HGSNAT	0.063739	0.397968	0.510769
HGS	0.281226	0.000143	0.00065
HHATL	-0.05016	0.506128	0.612983
HHAT	0.023953	0.75096	0.82123
HHEX	-0.01729	0.818841	0.871706
HHIPL1	0.164	0.02871	0.060331
HHIPL2	-0.12051	0.109091	0.183276
HHIP	0.269436	0.000276	0.001142
HHLA1	-0.0981	0.192668	0.288842
HHLA2	0.320425	1.30E-05	8.14E-05
HHLA3	0.141324	0.05988	0.111411
HIAT1	-0.18146	0.015345	0.035509

HIATL1	0.023979	0.750705	0.821085
HIATL2	-0.01356	0.857448	0.900577
HIBADH	-0.09301	0.21688	0.318144
HIBCH	0.124321	0.098252	0.168124
HIC1	0.08291	0.271217	0.379067
HIC2	-0.32811	7.78E-06	5.22E-05
HIF1AN	-0.23923	0.0013	0.004307
HIF1A	-0.08478	0.260519	0.367151
HIF3A	0.14183	0.058962	0.109993
HIGD1A	0.152235	0.042499	0.083928
HIGD1B	-0.01707	0.821082	0.873257
HIGD1C	0.058537	0.437664	0.549309
HIGD2A	0.074682	0.321808	0.43355
HIGD2B	0.031391	0.677443	0.762943
HILS1	0.014106	0.851757	0.896362
HINFP	0.101895	0.175929	0.268304
HINT1	-0.01815	0.809988	0.865534
HINT2	-0.07687	0.307792	0.418332
HINT3	-0.42848	2.42E-09	4.58E-08
HIP1R	-0.11259	0.134584	0.21661
HIP1	-0.00874	0.90781	0.93573
HIPK1	-0.17821	0.017314	0.039311
HIPK2	-0.54333	4.65E-15	3.67E-13
HIPK3	-0.21781	0.003493	0.010054
HIPK4	0.085775	0.254946	0.361299
HIRA	-0.51077	3.24E-13	1.72E-11
HIRIP3	-0.34974	1.71E-06	1.38E-05
HIST1H1A	0.112506	0.134866	0.216992
HIST1H1B	0.141819	0.058982	0.110019
HIST1H1C	0.376631	2.20E-07	2.33E-06
HIST1H1D	0.18478	0.013541	0.031988
HIST1H1E	0.071422	0.343443	0.455696
HIST1H1T	0.156576	0.036873	0.074475
HIST1H2AA	0.024719	0.743278	0.815083
HIST1H2AE	0.065833	0.38262	0.495477
HIST1H2AC	0.351661	1.48E-06	1.22E-05
HIST1H2AL	0.148793	0.047457	0.092009
HIST1H2AF	0.063726	0.39807	0.510828
HIST1H2AG	0.224316	0.002611	0.007847
HIST1H2AH	-0.03222	0.669378	0.756628
HIST1H2AJ	0.228374	0.002169	0.006695
HIST1H2AK	-0.0304	0.687108	0.770537
HIST1H2AL	0.1733	0.020704	0.045706
HIST1H2AM	0.343132	2.75E-06	2.10E-05
HIST1H2BA	-0.04735	0.530211	0.634687
HIST1H2BE	-0.01363	0.856683	0.900061
HIST1H2BC	0.203521	0.006435	0.016979
HIST1H2BI	0.404462	2.15E-08	3.06E-07
HIST1H2BF	0.210047	0.004892	0.013447
HIST1H2BG	0.038327	0.611499	0.707122
HIST1H2BH	0.102209	0.174594	0.266946
HIST1H2BI	0.105883	0.159527	0.248189
HIST1H2BJ	-0.08841	0.240589	0.344965
HIST1H2BK	0.307306	3.01E-05	0.000169

HIST1H2BF	0.345746	2.28E-06	1.78E-05
HIST1H2BL	0.04234	0.574687	0.674253
HIST1H2BM	0.035908	0.634184	0.725925
HIST1H2BN	0.172195	0.02154	0.047201
HIST1H2BC	0.294946	6.43E-05	0.000324
HIST1H3A	-0.17203	0.021671	0.047461
HIST1H3B	0.048063	0.524069	0.629506
HIST1H3C	0.077274	0.30525	0.415493
HIST1H3D	0.230737	0.001944	0.006083
HIST1H3E	0.015906	0.833098	0.881653
HIST1H3F	0.108138	0.150775	0.23728
HIST1H3G	0.130807	0.081793	0.144887
HIST1H3H	0.368722	4.10E-07	4.01E-06
HIST1H3I	0.066198	0.379979	0.492767
HIST1H3J	0.070529	0.349528	0.462157
HIST1H4A	-0.05314	0.481167	0.590533
HIST1H4B	-0.0577	0.444246	0.555893
HIST1H4C	-0.04324	0.566617	0.666813
HIST1H4D	0.013094	0.862284	0.904367
HIST1H4E	0.097677	0.194598	0.291204
HIST1H4F	0.067012	0.374134	0.4872
HIST1H4G	0.09228	0.220536	0.322336
HIST1H4H	0.290745	8.25E-05	0.000402
HIST1H4I	0.157594	0.035649	0.072412
HIST1H4J	0.238123	0.001371	0.004506
HIST1H4K	0.022717	0.763425	0.831551
HIST1H4L	-0.05918	0.432649	0.544398
HIST2H2AA	0.363004	6.36E-07	5.88E-06
HIST2H2AE	0.08942	0.235232	0.339153
HIST2H2AC	0.038214	0.612558	0.708098
HIST2H2BA	0.055823	0.459238	0.56984
HIST2H2BE	0.177666	0.017665	0.03999
HIST2H2BF	0.244727	0.000994	0.003419
HIST2H3C	0.084524	0.261967	0.36885
HIST2H3D	0.107734	0.152317	0.23925
HIST2H4A	0.241709	0.001152	0.003884
HIST3H2A	0.30966	2.60E-05	0.000149
HIST3H2BE	0.23945	0.001286	0.004269
HIST3H3	0.172905	0.020999	0.046266
HIST4H4	-0.04226	0.575431	0.674846
HIVEP1	-0.21714	0.003598	0.010317
HIVEP2	-0.12912	0.085849	0.150614
HIVEP3	-0.11207	0.136406	0.218918
HJURP	0.411614	1.14E-08	1.77E-07
HK1	0.324667	9.80E-06	6.39E-05
HK2	0.491347	3.31E-12	1.35E-10
HK3	0.213569	0.004205	0.01181
HKDC1	0.50357	7.80E-13	3.65E-11
HKR1	0.016867	0.823171	0.874751
HLA-A	0.245443	0.000959	0.003313
HLA-B	0.328044	7.82E-06	5.24E-05
HLA-C	0.221046	0.003026	0.008911
HLA-DMA	0.191133	0.010598	0.025965
HLA-DMB	0.083655	0.266919	0.374517

HLA-DOA	0.004524	0.952214	0.967529
HLA-DOB	0.108431	0.149665	0.235984
HLA-DPA1	-0.00178	0.981156	0.986895
HLA-DPB1	0.041248	0.584599	0.683127
HLA-DPB2	0.071985	0.339642	0.451866
HLA-DQA1	0.003031	0.967968	0.978158
HLA-DQA2	0.113112	0.13276	0.21411
HLA-DQB1	0.064394	0.39313	0.505782
HLA-DQB2	0.226317	0.002384	0.007252
HLA-DRA	0.080124	0.287707	0.396952
HLA-DRB1	0.083339	0.268737	0.376345
HLA-DRB5	0.077425	0.304304	0.414729
HLA-DRB6	0.094898	0.20766	0.307056
HLA-E	0.132497	0.077891	0.139009
HLA-F	0.360051	7.96E-07	7.13E-06
HLA-G	0.187616	0.012149	0.029165
HLA-H	0.178626	0.017052	0.038805
HLA-J	0.225932	0.002426	0.007368
HLA-L	0.21622	0.003746	0.0107
HLCS	-0.15343	0.04089	0.081211
HLF	-0.2822	0.000135	0.00062
HLTF	-0.44461	5.06E-10	1.18E-08
HLX	0.127528	0.089815	0.156172
HM13	-0.06775	0.368873	0.482258
HMBOX1	-0.02025	0.788494	0.850054
HMBS	0.263731	0.000375	0.001487
HMCN1	0.004988	0.947313	0.964383
HMG20A	-0.10618	0.158353	0.24677
HMG20B	0.305282	3.42E-05	0.000189
HMGA1	0.493208	2.67E-12	1.12E-10
HMGA2	0.322143	1.16E-05	7.40E-05
HMGB1	0.243652	0.001048	0.003572
HMGB2	0.196125	0.008697	0.021917
HMGB3L1	0.096292	0.201034	0.299092
HMGB3	-0.14802	0.048635	0.093788
HMGB4	-0.10237	0.173916	0.266157
HMGCLL1	-0.20646	0.005693	0.015287
HMGCL	0.144339	0.054577	0.103313
HMGCR	-0.02421	0.748372	0.819239
HMGCS1	0.207837	0.005372	0.014548
HMGCS2	0.116952	0.120022	0.197401
HMGN1	0.247425	0.000869	0.003048
HMGN2	-0.28262	0.000132	0.000607
HMGN3	-0.21162	0.004573	0.012687
HMGN4	0.191934	0.01027	0.02525
HMGN5	-0.19706	0.008377	0.021245
HMGXB3	-0.01812	0.810282	0.865754
HMGXB4	-0.00324	0.965783	0.976806
HMHA1	0.234847	0.001603	0.005159
HMHBI	0.051971	0.490852	0.599402
HMMR	0.329293	7.18E-06	4.86E-05
HMOX1	0.043568	0.563633	0.664319
HMOX2	0.287464	1.00E-04	0.000475
HMP19	-0.17946	0.016534	0.037845

HMSD	0.197711	0.00816	0.020793
HMX1	-0.13379	0.074998	0.134771
HMX2	-0.01781	0.813435	0.867857
HMX3	-0.03969	0.598861	0.695639
HN1L	0.179135	0.016734	0.038209
HN1	0.63515	1.70E-21	8.21E-19
HNF1A	-0.06741	0.371321	0.484418
HNF1B	0.329057	7.30E-06	4.94E-05
HNF4A	0.112092	0.136314	0.218788
HNF4G	0.197661	0.008177	0.02083
HNMT	0.336162	4.48E-06	3.24E-05
HNRNPA0	-0.1452	0.053143	0.101004
HNRNPA1L2	-0.0983	0.191773	0.287652
HNRNPA1	-0.014	0.852878	0.897166
HNRNPA2B1	0.10965	0.145116	0.23006
HNRNPA3P1	0.151313	0.043782	0.086064
HNRNPA3	0.094164	0.211216	0.311452
HNRNPAB	0.305163	3.44E-05	0.00019
HNRNPC	0.211545	0.004588	0.01272
HNRNPD	0.328009	7.84E-06	5.24E-05
HNRNPF	0.299458	4.89E-05	0.000257
HNRNPH1	-0.12507	0.096234	0.1653
HNRNPH2	-0.30693	3.09E-05	0.000173
HNRNPH3	-0.11933	0.112611	0.187944
HNRNPK	-0.12518	0.095925	0.164813
HNRNPL	0.211259	0.004644	0.012854
HNRNPM	-0.0983	0.191742	0.287649
HNRNPR	-0.08797	0.242958	0.347605
HNRNPUL1	-0.09876	0.189687	0.285151
HNRNPUL2	0.157262	0.036045	0.073065
HNRNPU	-0.01204	0.873261	0.912388
HNRPDL	0.125654	0.094673	0.163028
HNRPLL	-0.07972	0.290131	0.399599
HOMER1	-0.22341	0.002721	0.008127
HOMER2	0.031594	0.675475	0.761638
HOMER3	0.434163	1.41E-09	2.83E-08
HOMEZ	0.092793	0.217967	0.319383
HOOK1	-0.26015	0.000453	0.001747
HOOK2	0.173567	0.020505	0.045367
HOOK3	0.026015	0.730321	0.804846
HOPX	0.263841	0.000373	0.00148
HORMAD1	-0.09758	0.195045	0.291763
HORMAD2	-0.10604	0.158919	0.247439
HOTAIR	0.142859	0.05713	0.107201
HOXA10	0.260071	0.000455	0.001753
HOXA11AS	0.298339	5.24E-05	0.000273
HOXA11	0.25683	0.000539	0.002028
HOXA13	0.278038	0.000171	0.000759
HOXA1	0.067561	0.370226	0.483479
HOXA2	0.022332	0.767317	0.834294
HOXA3	0.288931	9.18E-05	0.000441
HOXA4	0.085685	0.255447	0.361808
HOXA5	-0.00349	0.963111	0.974894
HOXA6	0.083416	0.268297	0.375864

HOXA7	-0.04885	0.517291	0.623234
HOXA9	0.179246	0.016665	0.038106
HOXB13	0.088296	0.241192	0.345554
HOXB1	0.107909	0.151649	0.238446
HOXB2	0.193397	0.009695	0.024057
HOXB3	0.349963	1.68E-06	1.36E-05
HOXB4	0.146917	0.050354	0.096557
HOXB5	0.459949	1.05E-10	2.94E-09
HOXB6	0.435163	1.28E-09	2.61E-08
HOXB7	0.39502	4.85E-08	6.23E-07
HOXB8	0.261767	0.000416	0.001625
HOXB9	0.330727	6.52E-06	4.48E-05
HOXC10	0.015773	0.834477	0.882688
HOXC11	0.161183	0.031605	0.065392
HOXC12	0.010802	0.88621	0.920835
HOXC13	-0.14947	0.046446	0.090334
HOXC4	0.397954	3.78E-08	4.96E-07
HOXC5	0.406188	1.85E-08	2.68E-07
HOXC6	0.266661	0.000321	0.001299
HOXC8	0.245421	0.00096	0.003316
HOXC9	0.228344	0.002172	0.006702
HOXD10	0.116574	0.121232	0.198815
HOXD11	0.142358	0.058016	0.108565
HOXD12	0.066276	0.379415	0.4921
HOXD13	0.012411	0.869393	0.909971
HOXD1	-0.18577	0.013038	0.030961
HOXD3	-0.04412	0.55868	0.65969
HOXD4	0.078724	0.296238	0.406232
HOXD8	-0.06373	0.398049	0.510828
HOXD9	0.053669	0.476773	0.586373
HP1BP3	-0.02847	0.706003	0.785887
HPCAL1	0.359832	8.09E-07	7.23E-06
HPCAL4	-0.29466	6.54E-05	0.000329
HPCA	-0.25426	0.000615	0.002264
HPDL	0.416478	7.37E-09	1.21E-07
HPD	-0.24461	0.001	0.003434
HPGDS	0.248417	0.000827	0.002923
HPGD	0.313849	1.99E-05	0.000118
HPN	-0.20239	0.006742	0.017685
HPRT1	0.062862	0.404508	0.517116
HPR	-0.12857	0.087189	0.152533
HPS1	0.298622	5.15E-05	0.000269
HPS3	0.093633	0.21381	0.314504
HPS4	0.099159	0.187882	0.282932
HPS5	-0.11783	0.117253	0.193762
HPS6	-0.00376	0.960268	0.972863
HPSE2	-0.02561	0.734362	0.808067
HPSE	0.055019	0.465738	0.575918
HPVC1	0.060048	0.425904	0.538108
HPX	-0.00372	0.960642	0.973083
HPYR1	-0.08849	0.240136	0.34444
HP	0.093708	0.213445	0.314084
HRASLS2	0.60151	6.77E-19	1.52E-16
HRASLS5	0.050411	0.50397	0.611006

HRASLS	-0.42908	2.29E-09	4.36E-08
HRAS	0.103661	0.168519	0.25962
HRCT1	0.10201	0.175439	0.267825
HRC	-0.08058	0.284942	0.393934
HRG	0.08373	0.266489	0.373992
HRH1	0.449877	2.98E-10	7.43E-09
HRH2	-0.20938	0.005031	0.013768
HRH3	-0.27625	0.00019	0.000827
HRH4	-0.03082	0.682947	0.767481
HRK	0.146843	0.050472	0.096745
HRNBP3	-0.10584	0.159715	0.248403
HRNR	-0.20305	0.006561	0.017279
HRSP12	-0.07483	0.320819	0.432697
HR	0.291382	7.94E-05	0.000389
HS1BP3	0.181143	0.01553	0.035858
HS2ST1	-0.17659	0.018374	0.041296
HS3ST1	0.564637	2.23E-16	2.47E-14
HS3ST2	0.117682	0.117712	0.194375
HS3ST3A1	0.051772	0.492512	0.601058
HS3ST3B1	-0.28312	0.000128	0.000592
HS3ST4	-0.22565	0.002458	0.007451
HS3ST5	0.111742	0.137552	0.220435
HS3ST6	-0.18673	0.012572	0.030038
HS6ST1	-0.10992	0.144106	0.228695
HS6ST2	-0.18522	0.013317	0.031515
HS6ST3	-0.26972	0.000272	0.001126
HSBP1L1	0.405749	1.92E-08	2.77E-07
HSBP1	0.092689	0.218487	0.320074
HSCB	-0.08266	0.272679	0.380707
HSD11B1L	0.091313	0.225431	0.327818
HSD11B1	-0.00254	0.973122	0.981761
HSD11B2	0.381361	1.50E-07	1.67E-06
HSD17B10	-0.06473	0.390653	0.503308
HSD17B11	0.341389	3.11E-06	2.34E-05
HSD17B12	0.017723	0.814354	0.868557
HSD17B13	-0.01309	0.862361	0.904393
HSD17B14	-0.1623	0.030428	0.063422
HSD17B1	-0.10092	0.180119	0.27347
HSD17B2	0.466807	5.10E-11	1.56E-09
HSD17B3	-0.11792	0.116958	0.19341
HSD17B4	-0.15758	0.035669	0.072444
HSD17B6	0.234867	0.001601	0.005155
HSD17B7P2	0.190813	0.010732	0.026235
HSD17B7	0.110894	0.140581	0.22429
HSD17B8	0.228037	0.002203	0.006782
HSD3B1	0.005142	0.945691	0.963525
HSD3B2	0.022415	0.766478	0.833544
HSD3B7	0.327628	8.04E-06	5.36E-05
HSDL1	-0.21183	0.004533	0.012588
HSDL2	-0.24824	0.000835	0.002944
HSF1	0.246854	0.000894	0.003124
HSF2BP	0.210153	0.004869	0.013394
HSF2	-0.45575	1.63E-10	4.34E-09
HSF4	0.135941	0.070404	0.127897

HSF5	-0.25929	0.000474	0.001815
HSFX2	-0.20995	0.004911	0.01349
HSFY2	-0.02166	0.774089	0.839097
HSH2D	0.489387	4.15E-12	1.65E-10
HSN2	0.05592	0.458455	0.569047
HSP90AA1	-0.02635	0.727025	0.802287
HSP90AB1	-0.16263	0.030089	0.062822
HSP90AB2F	-0.21139	0.004618	0.012792
HSP90AB4F	0.163929	0.028779	0.060457
HSP90B1	-0.31265	2.15E-05	0.000126
HSP90B3P	-0.34733	2.03E-06	1.61E-05
HSPA12A	-0.03791	0.615388	0.710331
HSPA12B	-0.04898	0.516193	0.622391
HSPA13	-0.36241	6.65E-07	6.12E-06
HSPA14	-0.07524	0.318165	0.429916
HSPA1A	0.149599	0.046254	0.090021
HSPA1B	0.140601	0.061214	0.113518
HSPA1L	-0.33143	6.21E-06	4.31E-05
HSPA2	-0.05036	0.504446	0.611395
HSPA4L	-0.33043	6.65E-06	4.56E-05
HSPA4	-0.02032	0.787723	0.849408
HSPA5	-0.1057	0.160257	0.249149
HSPA6	0.168554	0.024509	0.052763
HSPA7	0.254427	0.00061	0.00225
HSPA8	-0.228	0.002206	0.00679
HSPA9	-0.21444	0.004049	0.011449
HSPB11	0.292533	7.42E-05	0.000366
HSPB1	0.422325	4.31E-09	7.61E-08
HSPB2	0.129228	0.085579	0.150235
HSPB3	-0.02215	0.769123	0.835593
HSPB6	-0.09009	0.231734	0.335324
HSPB7	0.087729	0.244243	0.349039
HSPB8	-0.13985	0.06263	0.115763
HSPB9	0.134974	0.072445	0.130908
HSPBAP1	0.21868	0.003362	0.009721
HSPBP1	0.150295	0.045237	0.08847
HSPC072	0.065275	0.386673	0.499417
HSPC157	-0.25543	0.000579	0.002155
HSPC159	0.047998	0.524624	0.629943
HSPD1	0.036049	0.632846	0.724729
HSPE1	0.185087	0.013384	0.031653
HSPG2	0.192202	0.010163	0.025042
HSPH1	0.09258	0.219032	0.320635
HTATIP2	0.439307	8.54E-10	1.85E-08
HTATSF1	-0.34489	2.42E-06	1.88E-05
HTA	-0.02895	0.701282	0.781909
HTN1	-0.12172	0.105535	0.178455
HTR1A	0.01015	0.893035	0.925331
HTR1B	0.372948	2.95E-07	3.01E-06
HTR1D	0.40578	1.92E-08	2.77E-07
HTR1E	-0.25955	0.000468	0.001792
HTR1F	-0.18782	0.012053	0.028984
HTR2A	-0.18171	0.015203	0.035227
HTR2B	0.238984	0.001315	0.004346

HTR2C	-0.00194	0.979451	0.985789
HTR3A	0.211908	0.004517	0.012551
HTR3B	0.052098	0.489786	0.598359
HTR3C	0.219099	0.0033	0.00957
HTR3D	-0.02427	0.747762	0.818774
HTR3E	0.171662	0.021954	0.047991
HTR4	-0.23694	0.001451	0.004734
HTR5A	-0.12119	0.107082	0.180591
HTR6	0.000489	0.994835	0.9965
HTR7P1	-0.07413	0.325394	0.437518
HTR7	-0.04192	0.578519	0.677503
HTRA1	0.121011	0.107611	0.181313
HTRA2	0.195933	0.008764	0.022055
HTRA3	0.369646	3.82E-07	3.77E-06
HTRA4	0.125273	0.095684	0.16447
HTT	-0.4653	5.99E-11	1.80E-09
HULC	0.045164	0.549422	0.651843
HUNK	-0.05465	0.468719	0.578799
HUS1B	0.207935	0.00535	0.014506
HUS1	-0.15107	0.044126	0.086612
HUWE1	-0.32795	7.87E-06	5.26E-05
HVCN1	0.125172	0.095954	0.164848
HYAL1	0.281573	0.00014	0.000639
HYAL2	0.136055	0.070166	0.127536
HYAL3	0.198215	0.007996	0.020434
HYAL4	0.197221	0.008323	0.021126
HYDIN	-0.16828	0.024748	0.053175
HYI	-0.11886	0.114061	0.189772
HYLS1	-0.16373	0.028975	0.060797
HYMAI	-0.10358	0.168867	0.259979
HYOU1	-0.36228	6.72E-07	6.17E-06
IAH1	0.402345	2.59E-08	3.60E-07
IAPP	0.023244	0.758109	0.827218
IARS2	0.199022	0.007739	0.019847
IARS	-0.32085	1.26E-05	7.95E-05
IBSP	0.251368	0.000713	0.002574
IBTK	-0.27797	0.000172	0.000761
ICA1L	-0.38357	1.26E-07	1.42E-06
ICA1	0.060544	0.422088	0.534305
ICAM1	0.150671	0.044694	0.087547
ICAM2	0.130424	0.0827	0.146153
ICAM3	0.005501	0.941908	0.960908
ICAM4	0.120362	0.109523	0.183877
ICAM5	0.304423	3.61E-05	0.000197
ICK	-0.10443	0.165346	0.255533
ICMT	-0.03278	0.664063	0.752115
ICOSLG	0.004251	0.955089	0.969205
ICOS	-0.01506	0.841818	0.888272
ICT1	0.119657	0.111634	0.186739
ID1	0.579069	2.52E-17	3.63E-15
ID2B	-0.04887	0.517101	0.623219
ID2	-0.11415	0.129217	0.209471
ID3	0.080268	0.286837	0.395946
ID4	-0.27195	0.00024	0.001013

IDE	-0.06075	0.420471	0.532667
IDH1	0.230929	0.001927	0.006041
IDH2	-0.11861	0.114817	0.190705
IDH3A	-0.39106	6.77E-08	8.30E-07
IDH3B	-0.03445	0.64798	0.737736
IDH3G	0.109866	0.144321	0.229001
IDI1	0.00916	0.90341	0.932488
IDI2	-0.15105	0.044158	0.08665
IDO1	-0.03778	0.616622	0.711299
IDO2	-0.0895	0.234801	0.338787
IDS	-0.33122	6.30E-06	4.36E-05
IDUA	0.257355	0.000524	0.001979
IER2	0.387923	8.79E-08	1.04E-06
IER3IP1	-0.3444	2.51E-06	1.94E-05
IER3	0.371693	3.25E-07	3.28E-06
IER5L	0.31937	1.39E-05	8.65E-05
IER5	0.200974	0.007146	0.018531
IFFO1	-0.28385	0.000123	0.000571
IFFO2	0.104725	0.164167	0.254089
IFI16	0.275329	0.0002	0.000864
IFI27L1	0.051192	0.497383	0.604911
IFI27L2	0.176322	0.018556	0.041649
IFI27	0.609591	1.71E-19	4.58E-17
IFI30	0.207547	0.005439	0.014691
IFI35	0.453347	2.09E-10	5.37E-09
IFI44L	0.352101	1.44E-06	1.19E-05
IFI44	0.486354	5.88E-12	2.25E-10
IFI6	0.301094	4.43E-05	0.000237
IFIH1	0.246458	0.000912	0.003175
IFIT1B	0.044443	0.555819	0.657343
IFIT1	0.260848	0.000437	0.001694
IFIT2	0.270823	0.000256	0.001069
IFIT3	0.30029	4.65E-05	0.000247
IFIT5	0.023506	0.75546	0.824965
IFITM1	0.304143	3.67E-05	0.0002
IFITM2	0.446135	4.34E-10	1.03E-08
IFITM3	0.383852	1.23E-07	1.40E-06
IFITM4P	0.214286	0.004076	0.011507
IFITM5	0.100914	0.180147	0.273471
IFLTD1	-0.22004	0.003165	0.009242
IFNA13	0.298936	5.05E-05	0.000265
IFNA14	0.047559	0.528429	0.633342
IFNA1	0.283632	0.000125	0.000577
IFNA21	-0.208	0.005335	0.014472
IFNA2	0.035033	0.642472	0.733417
IFNA4	-0.01094	0.884777	0.919946
IFNA5	-0.00624	0.934162	0.95478
IFNA6	0.040605	0.590481	0.688357
IFNA7	-0.01943	0.796897	0.856777
IFNA8	0.269659	0.000273	0.001129
IFNAR1	0.012289	0.870672	0.910742
IFNAR2	0.184399	0.013739	0.032348
IFNB1	0.156816	0.036582	0.073973
IFNE	0.339427	3.57E-06	2.65E-05

IFNGR1	0.002225	0.976481	0.983895
IFNGR2	0.348399	1.88E-06	1.51E-05
IFNG	-0.03859	0.609023	0.704629
IFNK	0.01314	0.861801	0.904036
IFNW1	-0.11144	0.138616	0.221781
IFRD1	-0.27944	0.000158	0.00071
IFRD2	0.274105	0.000214	0.000914
IFT122	-0.04445	0.555788	0.657343
IFT140	-0.08557	0.256098	0.362492
IFT172	0.043312	0.565934	0.666436
IFT20	-0.14662	0.050822	0.097322
IFT27	-0.08012	0.287743	0.396954
IFT46	0.031845	0.673043	0.759415
IFT52	-0.21245	0.004412	0.012285
IFT57	-0.26793	0.000299	0.001226
IFT74	-0.31049	2.47E-05	0.000142
IFT80	-0.1248	0.096953	0.166318
IFT81	-0.27857	0.000166	0.000739
IFT88	-0.15089	0.044379	0.087024
IGBP1	0.067729	0.369033	0.482368
IGDCC3	0.023775	0.752753	0.822827
IGDCC4	0.062908	0.404159	0.516769
IGF1R	-0.19112	0.010605	0.025972
IGF1	-0.19033	0.010936	0.026672
IGF2AS	0.116958	0.120003	0.197399
IGF2BP1	0.099839	0.184857	0.279121
IGF2BP2	0.436817	1.09E-09	2.27E-08
IGF2BP3	0.27194	0.000241	0.001014
IGF2R	-0.31975	1.36E-05	8.46E-05
IGF2	0.117246	0.119086	0.196268
IGFALS	-0.08615	0.252893	0.358937
IGFBP1	0.204133	0.006274	0.016614
IGFBP2	-0.11658	0.121229	0.198815
IGFBP3	0.417399	6.78E-09	1.13E-07
IGFBP4	0.136084	0.070105	0.127461
IGFBP5	0.162728	0.029988	0.06265
IGFBP6	0.442374	6.31E-10	1.43E-08
IGFBP7	0.09507	0.206833	0.306109
IGFBPL1	-0.23111	0.001911	0.005999
IGFL1	0.314063	1.96E-05	0.000117
IGFL2	0.479919	1.22E-11	4.24E-10
IGFL3	0.31195	2.25E-05	0.000131
IGFL4	-0.15501	0.038831	0.077702
IGFN1	-0.18554	0.013155	0.031202
IGHMBP2	0.092538	0.219239	0.320843
IGJ	0.073836	0.32734	0.439198
IGLL1	-0.04466	0.553914	0.655639
IGLL3	-0.11853	0.115061	0.191018
IGLON5	0.318772	1.45E-05	8.95E-05
IGSF10	-0.20665	0.005647	0.01518
IGSF11	0.078912	0.295081	0.40497
IGSF1	-0.17995	0.016234	0.037287
IGSF21	-0.19119	0.010575	0.025918
IGSF22	0.21072	0.004753	0.01312

IGSF3	0.38343	1.27E-07	1.44E-06
IGSF5	0.123088	0.101661	0.172998
IGSF6	0.052549	0.486032	0.594838
IGSF8	0.189241	0.01141	0.027642
IGSF9B	0.229472	0.002062	0.006397
IGSF9	0.540382	6.96E-15	5.33E-13
IHH	0.443526	5.63E-10	1.30E-08
IKBIP	-0.12215	0.104326	0.176788
IKBKAP	-0.51215	2.73E-13	1.46E-11
IKBKB	0.428842	2.34E-09	4.44E-08
IKBKE	0.237675	0.001401	0.004591
IKBKG	0.195716	0.008841	0.022207
IKZF1	-0.08914	0.236724	0.340634
IKZF2	0.189607	0.011249	0.027319
IKZF3	-0.14701	0.05021	0.096309
IKZF4	-0.43743	1.03E-09	2.16E-08
IKZF5	-0.33584	4.58E-06	3.29E-05
IK	0.031948	0.672039	0.758673
IL10RA	-0.08466	0.261201	0.367981
IL10RB	0.373037	2.93E-07	2.99E-06
IL10	-0.08081	0.283608	0.392502
IL11RA	-0.10713	0.154649	0.242335
IL11	0.177595	0.017711	0.040076
IL12A	-0.17618	0.018653	0.041842
IL12B	-0.02348	0.755684	0.825073
IL12RB1	0.057581	0.445198	0.55661
IL12RB2	-0.33357	5.36E-06	3.78E-05
IL13RA1	-0.10859	0.149086	0.235165
IL13RA2	-0.31227	2.20E-05	0.000128
IL13	-0.18537	0.013241	0.031368
IL15RA	0.393452	5.54E-08	6.95E-07
IL15	0.183707	0.014104	0.033051
IL16	-0.05217	0.489194	0.59782
IL17A	-0.17371	0.020402	0.045172
IL17B	0.078205	0.299445	0.409547
IL17C	0.143688	0.055688	0.105054
IL17D	-0.07151	0.342852	0.455125
IL17F	-0.04993	0.508019	0.614716
IL17RA	0.086021	0.253582	0.359757
IL17RB	-0.12446	0.097866	0.167651
IL17RC	0.047708	0.52714	0.632346
IL17RD	0.004618	0.951214	0.96696
IL17REL	-0.02672	0.723306	0.799165
IL17RE	0.374997	2.51E-07	2.62E-06
IL18BP	0.023159	0.758959	0.827988
IL18R1	-0.08759	0.245019	0.34987
IL18RAP	-0.15823	0.034902	0.071086
IL18	0.544642	3.88E-15	3.09E-13
IL19	0.072615	0.335424	0.447549
IL1A	0.378725	1.86E-07	2.01E-06
IL1B	-0.08215	0.27563	0.383554
IL1F10	0.099855	0.184785	0.279054
IL1F5	0.226891	0.002322	0.007095
IL1F6	0.097131	0.197115	0.294281

IL1F7	0.232327	0.001805	0.005711
IL1F8	0.293912	6.83E-05	0.000342
IL1F9	0.119295	0.112729	0.188062
IL1R1	-0.03493	0.643412	0.73379
IL1R2	0.529917	2.82E-14	1.89E-12
IL1RAPL1	-0.27	0.000268	0.001112
IL1RAPL2	0.238959	0.001317	0.00435
IL1RAP	0.38879	8.18E-08	9.80E-07
IL1RL1	-0.19588	0.008782	0.022096
IL1RL2	-0.12776	0.089219	0.155303
IL1RN	0.736149	1.18E-31	1.17E-27
IL20RA	0.086728	0.249686	0.355072
IL20RB	0.561105	3.75E-16	3.86E-14
IL20	-0.11168	0.137768	0.22071
IL21R	0.074425	0.323481	0.435492
IL21	-0.22194	0.002907	0.008613
IL22RA1	0.255191	0.000586	0.002179
IL22RA2	0.149844	0.045894	0.08947
IL22	-0.07053	0.349493	0.462142
IL23A	0.231275	0.001896	0.005959
IL23R	-0.19004	0.011059	0.026924
IL24	-0.11295	0.133329	0.214817
IL25	0.00725	0.923485	0.946901
IL26	-0.19197	0.010258	0.025225
IL27RA	0.059406	0.430876	0.542788
IL27	0.15112	0.044054	0.086516
IL28A	0.151346	0.043736	0.086001
IL28B	0.240175	0.001242	0.004141
IL28RA	-0.11215	0.136093	0.218505
IL29	0.164866	0.027867	0.058815
IL2RA	0.081266	0.280871	0.389259
IL2RB	-0.12061	0.108788	0.182854
IL2RG	0.418897	5.91E-09	1.00E-07
IL2	-0.1555	0.038206	0.076667
IL31RA	0.243389	0.001061	0.003614
IL31	0.090948	0.227294	0.329897
IL32	0.383108	1.31E-07	1.47E-06
IL33	-0.22475	0.002561	0.007714
IL34	0.133665	0.075283	0.135209
IL3RA	-0.08261	0.272981	0.381074
IL3	-0.03275	0.664272	0.752266
IL4I1	0.238422	0.001351	0.004447
IL4R	0.262162	0.000408	0.001596
IL4	-0.13432	0.073862	0.13303
IL5RA	-0.11916	0.113124	0.188566
IL5	-0.09401	0.211949	0.312302
IL6R	-0.30229	4.11E-05	0.000222
IL6ST	-0.2274	0.002268	0.006958
IL6	-0.14689	0.050395	0.09662
IL7R	-0.05351	0.478122	0.587813
IL7	0.166104	0.026698	0.056749
IL8	0.203593	0.006416	0.016934
IL9R	0.021422	0.776547	0.841348
ILDRI	0.248134	0.000839	0.002956

ILDR2	-0.06465	0.39121	0.503895
ILF2	0.00588	0.93791	0.957967
ILF3	-0.08342	0.268268	0.37585
ILKAP	0.144232	0.054758	0.103597
ILK	0.251957	0.000692	0.002506
ILVBL	0.120941	0.107815	0.18161
IMMP1L	-0.21546	0.003874	0.01101
IMMP2L	-0.10964	0.145137	0.230063
IMMT	-0.06087	0.419565	0.53177
IMP3	0.168202	0.024813	0.053298
IMP4	0.28089	0.000146	0.00066
IMP5	-0.00805	0.915051	0.94078
IMPA1	-0.04073	0.589349	0.687295
IMPA2	0.004387	0.953654	0.968351
IMPACT	-0.11077	0.141011	0.224813
IMPAD1	-0.27447	0.000209	0.0009
IMPDH1	0.144745	0.053893	0.102233
IMPDH2	0.1277	0.089377	0.155493
IMPG1	-0.06106	0.41816	0.530441
IMPG2	-0.20106	0.007122	0.018482
INADL	0.261797	0.000416	0.001623
INA	-0.30619	3.23E-05	0.00018
INCA1	-0.19215	0.010184	0.025079
INCENP	0.179393	0.016575	0.037916
INE1	0.188819	0.011598	0.028029
INE2	-0.20205	0.006836	0.017886
INF2	0.546532	2.99E-15	2.43E-13
ING1	0.2818	0.000139	0.000632
ING2	-0.06939	0.357396	0.470548
ING3	-0.4347	1.34E-09	2.71E-08
ING4	-0.02766	0.714037	0.791888
ING5	-0.23306	0.001744	0.005545
INGX	-0.01683	0.823514	0.875023
INHA	-0.07055	0.349352	0.461986
INHBA	0.151742	0.043182	0.085056
INHBB	0.101922	0.175814	0.268168
INHBC	-0.06844	0.364049	0.477336
INHBE	0.01785	0.813051	0.867588
INMT	0.0367	0.626714	0.719958
IN080B	0.256396	0.000551	0.002065
IN080C	0.164722	0.028005	0.059069
IN080D	0.029362	0.697227	0.778573
IN080E	0.31077	2.42E-05	0.000139
IN080	-0.02097	0.781183	0.844566
INPP1	0.349869	1.69E-06	1.37E-05
INPP4A	-0.22907	0.002101	0.00651
INPP4B	0.534458	1.55E-14	1.10E-12
INPP5A	0.212832	0.004341	0.012123
INPP5B	-0.19906	0.007726	0.019821
INPP5D	-0.02111	0.779766	0.843311
INPP5E	-0.05696	0.450131	0.560934
INPP5F	0.068682	0.362322	0.475573
INPP5J	-0.12955	0.084796	0.149085
INPP5K	-0.27609	0.000191	0.000833

INPPL1	0.124897	0.096693	0.165974
INS-IGF2	0.007809	0.917606	0.94278
INSC	0.248349	0.00083	0.002931
INSIG1	-0.00286	0.969785	0.979394
INSIG2	0.375507	2.41E-07	2.52E-06
INSL3	0.153763	0.040443	0.08047
INSL4	-0.06533	0.386294	0.499026
INSL5	-0.24159	0.001159	0.003902
INSL6	0.07418	0.325079	0.437197
INSM1	-0.33465	4.98E-06	3.55E-05
INSM2	-0.26171	0.000418	0.001629
INSRR	-0.10596	0.159223	0.247833
INSR	-0.16986	0.023403	0.050743
INS	0.19832	0.007962	0.020359
INTS10	-0.21184	0.00453	0.012581
INTS12	0.02706	0.719937	0.796332
INTS1	-0.05176	0.492597	0.601086
INTS2	-0.27464	0.000207	0.000893
INTS3	-0.10681	0.155904	0.243953
INTS4L1	0.077458	0.304097	0.414505
INTS4L2	0.096539	0.199874	0.297605
INTS4	0.259126	0.000478	0.001829
INTS5	0.050719	0.501368	0.608448
INTS6	-0.08182	0.277579	0.385696
INTS7	-0.13331	0.076061	0.136297
INTS8	0.058591	0.437241	0.548883
INTS9	-0.02094	0.781406	0.84476
INTU	0.01874	0.803919	0.861571
INVS	-0.4444	5.16E-10	1.20E-08
IP6K1	-0.43118	1.87E-09	3.65E-08
IP6K2	0.052239	0.48861	0.597254
IP6K3	-0.10756	0.152993	0.240217
IPCEF1	-0.14295	0.056963	0.106959
IPMK	-0.23353	0.001705	0.005444
IP011	-0.22746	0.002262	0.006941
IP013	-0.33412	5.16E-06	3.66E-05
IP04	-0.1652	0.02755	0.058252
IP05	-0.18256	0.014727	0.034341
IP07	-0.09382	0.212888	0.313405
IP08	-0.24377	0.001042	0.003553
IP09	-0.14846	0.047962	0.09279
IPPK	-0.31687	1.64E-05	9.95E-05
IPP	-0.20868	0.005185	0.014123
IPW	-0.30732	3.01E-05	0.000169
IQCA1	0.047494	0.528991	0.633572
IQCB1	0.142447	0.057858	0.108321
IQCC	-0.24188	0.001143	0.003856
IQCD	-0.20788	0.005364	0.014531
IQCE	0.01888	0.802485	0.860906
IQCF1	0.200854	0.007182	0.018603
IQCF3	0.08234	0.274541	0.382508
IQCF5	0.098983	0.18867	0.283924
IQCF6	-0.04377	0.561803	0.662715
IQCG	-0.34201	2.98E-06	2.26E-05

IQCH	-0.19128	0.010537	0.025836
IQCJ	0.124754	0.097079	0.16649
IQCK	0.034151	0.650869	0.739884
IQGAP1	0.111929	0.13689	0.219597
IQGAP2	0.054066	0.473518	0.583349
IQGAP3	0.46764	4.67E-11	1.45E-09
IQSEC1	-0.29123	8.02E-05	0.000392
IQSEC2	0.076728	0.308695	0.419125
IQSEC3	-0.35495	1.17E-06	9.91E-06
IQUB	-0.32741	8.16E-06	5.42E-05
IRAK1BP1	-0.36818	4.27E-07	4.14E-06
IRAK1	0.19957	0.007568	0.019486
IRAK2	0.440938	7.28E-10	1.61E-08
IRAK3	0.129868	0.084029	0.148038
IRAK4	-0.29494	6.43E-05	0.000324
IREB2	-0.29856	5.17E-05	0.00027
IRF1	0.166531	0.026304	0.056031
IRF2BP1	-0.1422	0.058293	0.10896
IRF2BP2	-0.23427	0.001647	0.005286
IRF2	0.034997	0.64281	0.733568
IRF3	0.368685	4.11E-07	4.02E-06
IRF4	-0.02123	0.778457	0.842679
IRF5	0.204492	0.006181	0.016398
IRF6	0.224766	0.002559	0.00771
IRF7	0.347179	2.06E-06	1.63E-05
IRF8	0.082252	0.275052	0.382966
IRF9	0.424266	3.60E-09	6.52E-08
IRGC	0.175193	0.019334	0.043136
IRGM	-0.04551	0.546383	0.649056
IRGQ	-0.19632	0.00863	0.021774
IRS1	0.212701	0.004365	0.012179
IRS2	-0.2954	6.25E-05	0.000317
IRS4	-0.08399	0.265011	0.372342
IRX1	-0.22647	0.002367	0.007211
IRX2	-0.18438	0.013748	0.032363
IRX3	0.203355	0.006479	0.017087
IRX4	-0.22475	0.00256	0.007714
IRX5	0.436126	1.16E-09	2.41E-08
IRX6	-0.08808	0.242375	0.346897
ISCA1P1	-0.38415	1.20E-07	1.37E-06
ISCA1	-0.46686	5.07E-11	1.55E-09
ISCA2	0.114672	0.127466	0.20716
ISCU	-0.31917	1.41E-05	8.75E-05
ISG15	0.471047	3.23E-11	1.03E-09
ISG20L2	-0.01138	0.880188	0.916865
ISG20	0.343706	2.64E-06	2.03E-05
ISL1	-0.27875	0.000165	0.000732
ISL2	0.274768	0.000206	0.000887
ISLR2	0.213969	0.004132	0.011642
ISLR	0.338964	3.69E-06	2.72E-05
ISM1	0.294654	6.54E-05	0.000329
ISM2	-0.06854	0.363288	0.476528
ISOC1	-0.07934	0.292467	0.402116
ISOC2	0.201591	0.006968	0.018175

ISPD	-0.1847	0.013585	0.032079
ISX	0.000138	0.998537	0.99874
ISY1	0.252514	0.000673	0.002441
ISYNA1	-0.06615	0.380327	0.49312
ITCH	-0.13434	0.073816	0.132961
ITFG1	-0.17812	0.017375	0.039423
ITFG2	-0.3061	3.25E-05	0.000181
ITFG3	0.171803	0.021844	0.047782
ITGA10	0.071965	0.339778	0.452016
ITGA11	0.241127	0.001186	0.003978
ITGA1	-0.05806	0.44139	0.553178
ITGA2B	-0.11516	0.125856	0.205116
ITGA2	0.414113	9.13E-09	1.46E-07
ITGA3	0.635199	1.69E-21	8.21E-19
ITGA4	-0.18961	0.011246	0.027316
ITGA5	0.117371	0.118692	0.195764
ITGA6	0.443501	5.65E-10	1.30E-08
ITGA7	-0.27731	0.000179	0.000786
ITGA8	-0.17547	0.019143	0.042797
ITGA9	-0.23595	0.001521	0.004929
ITGAD	-0.21148	0.004602	0.012753
ITGAE	-0.30432	3.63E-05	0.000198
ITGAL	-0.00437	0.953867	0.968462
ITGAM	0.173858	0.020291	0.044962
ITGAV	0.115344	0.125236	0.204303
ITGAX	0.211552	0.004586	0.01272
ITGB1BP1	0.243921	0.001034	0.003532
ITGB1BP2	0.245474	0.000958	0.003309
ITGB1BP3	-0.1187	0.114538	0.190374
ITGB1	0.241516	0.001163	0.003914
ITGB2	0.200098	0.007407	0.019126
ITGB3BP	0.133526	0.07559	0.135653
ITGB3	0.04083	0.588417	0.686556
ITGB4	0.629643	4.77E-21	1.97E-18
ITGB5	0.4579	1.31E-10	3.57E-09
ITGB6	0.561989	3.30E-16	3.52E-14
ITGB7	0.306561	3.16E-05	0.000176
ITGB8	0.107152	0.154556	0.242229
ITGBL1	0.081658	0.278544	0.386766
ITIH1	-0.19652	0.008562	0.021647
ITIH2	0.19876	0.007821	0.020036
ITIH3	0.223048	0.002766	0.008242
ITIH4	0.040574	0.590758	0.688506
ITIH5L	-0.14411	0.054967	0.103936
ITIH5	-0.0268	0.722531	0.798442
ITK	-0.07815	0.299811	0.409931
ITLN1	0.010674	0.887546	0.921761
ITLN2	-0.17273	0.021132	0.046504
ITM2A	-0.29238	7.49E-05	0.000369
ITM2B	0.232716	0.001772	0.005624
ITM2C	-0.13664	0.068966	0.125667
ITPA	0.387766	8.91E-08	1.06E-06
ITPK1	0.373275	2.87E-07	2.94E-06
ITPKA	0.471231	3.17E-11	1.01E-09

ITPKB	-0.09031	0.230573	0.33397
ITPKC	0.441711	6.74E-10	1.51E-08
ITPR1	-0.31963	1.37E-05	8.52E-05
ITPR2	-0.23606	0.001513	0.004906
ITPR3	0.431518	1.81E-09	3.54E-08
ITPRIPL1	-0.12918	0.085705	0.150402
ITPRIPL2	0.234832	0.001604	0.005161
ITPRIP	0.085156	0.258406	0.364901
ITSN1	0.105694	0.16028	0.249164
ITSN2	-0.01914	0.799799	0.859103
IVD	0.048609	0.519353	0.624981
IVL	0.246267	0.000921	0.003197
IVNS1ABP	0.1909	0.010695	0.026165
IWS1	0.322264	1.15E-05	7.35E-05
IYD	0.294577	6.57E-05	0.000331
IZUM01	-0.21469	0.004004	0.011335
JAG1	0.297911	5.37E-05	0.000279
JAG2	0.079149	0.293631	0.403436
JAGN1	0.152154	0.042611	0.08409
JAK1	-0.13926	0.063745	0.117559
JAK2	-0.13911	0.064048	0.117967
JAK3	-0.05915	0.432843	0.544573
JAKMIP1	-0.23774	0.001396	0.004578
JAKMIP2	-0.3346	5.00E-06	3.56E-05
JAKMIP3	-0.2322	0.001816	0.005742
JAM2	-0.13838	0.065472	0.120242
JAM3	-0.06594	0.381874	0.49464
JARID2	-0.20879	0.00516	0.014066
JAZF1	-0.17671	0.018292	0.041146
JDP2	0.103382	0.169673	0.260956
JHDM1D	-0.10637	0.157607	0.245957
JKAMP	-0.10608	0.158766	0.247258
JMJD1C	-0.06672	0.376202	0.489087
JMJD4	0.023366	0.756872	0.826142
JMJD5	-0.38939	7.78E-08	9.38E-07
JMJD6	-0.01639	0.828076	0.878313
JMJD7-PLA	0.17648	0.018449	0.041446
JMJD8	0.015962	0.832522	0.881138
JMY	-0.48958	4.06E-12	1.62E-10
JOSD1	0.268125	0.000296	0.001216
JOSD2	0.314619	1.89E-05	0.000113
JPH1	-0.06419	0.394599	0.507314
JPH2	0.22843	0.002163	0.006682
JPH3	-0.26369	0.000376	0.001488
JPH4	-0.1688	0.0243	0.052355
JRKL	0.302748	4.00E-05	0.000217
JRK	-0.07558	0.315995	0.427306
JSRP1	0.006854	0.927649	0.949989
JTB	0.025639	0.734071	0.807854
JUB	0.322739	1.11E-05	7.15E-05
JUNB	0.408966	1.45E-08	2.16E-07
JUND	0.111022	0.14012	0.223681
JUN	0.08944	0.23513	0.339104
JUP	0.627894	6.59E-21	2.55E-18

KAAG1	0.083979	0.265067	0.372394
KAL1	0.083371	0.268552	0.376141
KALRN	0.162708	0.030008	0.062672
KANK1	-0.42645	2.93E-09	5.43E-08
KANK2	0.17691	0.018161	0.040902
KANK3	-0.16262	0.0301	0.062831
KANK4	0.224961	0.002536	0.007653
KARS	0.364606	5.63E-07	5.29E-06
KAT2A	0.207233	0.005511	0.01486
KAT2B	-0.34974	1.71E-06	1.38E-05
KAT5	0.008726	0.907969	0.935747
KATNA1	-0.06408	0.395475	0.508239
KATNAL1	-0.20085	0.007182	0.018603
KATNAL2	-0.48494	6.91E-12	2.59E-10
KATNB1	-0.01175	0.87627	0.914373
KAZALD1	0.077732	0.302387	0.412658
KAZ	0.198162	0.008013	0.02047
KBTBD10	-0.28824	9.56E-05	0.000456
KBTBD11	0.162531	0.030189	0.062991
KBTBD12	0.248239	0.000835	0.002944
KBTBD13	0.053249	0.480232	0.58971
KBTBD2	0.041605	0.581358	0.680102
KBTBD3	-0.19537	0.008963	0.02246
KBTBD4	-0.27131	0.000249	0.001044
KBTBD5	0.034418	0.648327	0.737784
KBTBD6	-0.42841	2.44E-09	4.60E-08
KBTBD7	-0.36043	7.74E-07	6.97E-06
KBTBD8	-0.17705	0.01807	0.040734
KC6	-0.17475	0.019645	0.043736
KCMF1	0.245385	0.000962	0.003321
KCNA10	0.122418	0.10355	0.175668
KCNA1	-0.31639	1.69E-05	0.000102
KCNA2	-0.35819	9.15E-07	8.03E-06
KCNA3	-0.28795	9.72E-05	0.000463
KCNA4	-0.23649	0.001482	0.00482
KCNA5	-0.2723	0.000236	0.000998
KCNA6	-0.32626	8.81E-06	5.81E-05
KCNA7	0.400973	2.92E-08	3.96E-07
KCNAB1	-0.22493	0.00254	0.007663
KCNAB2	-0.04456	0.554739	0.656383
KCNAB3	-0.02771	0.713533	0.79155
KCNB1	-0.42243	4.27E-09	7.55E-08
KCNB2	-0.31239	2.18E-05	0.000128
KCNC1	-0.29851	5.18E-05	0.00027
KCNC2	-0.20137	0.007031	0.01832
KCNC3	-0.21624	0.003743	0.010693
KCNC4	0.021899	0.771704	0.837431
KCND1	-0.04456	0.554753	0.656383
KCND2	0.092033	0.221779	0.323817
KCND3	-0.18553	0.013161	0.031211
KCNE1L	0.069482	0.356742	0.469873
KCNE1	-0.03606	0.632701	0.724605
KCNE2	-0.03815	0.613104	0.708564
KCNE3	0.280568	0.000149	0.000671

KCNE4	-0.0671	0.373535	0.486612
KCNF1	-0.08694	0.248546	0.353961
KCNG1	-0.21387	0.004151	0.011683
KCNG2	-0.26857	0.000289	0.001192
KCNG3	-0.24753	0.000865	0.003034
KCNG4	0.022847	0.762107	0.830344
KCNH1	-0.29637	5.90E-05	0.000302
KCNH2	-0.29854	5.17E-05	0.00027
KCNH3	-0.3396	3.53E-06	2.62E-05
KCNH4	0.047526	0.528714	0.63347
KCNH5	-0.20456	0.006164	0.016363
KCNH6	-0.34761	1.99E-06	1.58E-05
KCNH7	-0.36865	4.12E-07	4.02E-06
KCNH8	0.092823	0.217819	0.319238
KCNIP1	-0.08882	0.238416	0.342519
KCNIP2	-0.04806	0.524125	0.629536
KCNIP3	0.048434	0.520865	0.626495
KCNIP4	-0.14953	0.04636	0.090193
KCNJ10	-0.18847	0.011753	0.028339
KCNJ11	-0.27929	0.00016	0.000714
KCNJ12	-0.14547	0.052686	0.10029
KCNJ13	-0.00171	0.981932	0.987475
KCNJ14	0.024704	0.743422	0.815151
KCNJ15	0.254252	0.000615	0.002264
KCNJ16	-0.07896	0.294805	0.40474
KCNJ1	-0.0389	0.606224	0.702213
KCNJ2	-0.46746	4.76E-11	1.47E-09
KCNJ3	-0.3211	1.24E-05	7.85E-05
KCNJ4	-0.01789	0.812626	0.867332
KCNJ5	-0.28459	0.000118	0.00055
KCNJ6	-0.34053	3.30E-06	2.47E-05
KCNJ8	-0.2942	6.72E-05	0.000337
KCNJ9	0.035992	0.633389	0.725141
KCNK10	-0.08735	0.246266	0.351246
KCNK12	-0.28733	0.000101	0.000478
KCNK13	-0.13473	0.072958	0.131632
KCNK15	0.336441	4.40E-06	3.18E-05
KCNK16	-0.06933	0.357784	0.470839
KCNK17	-0.10119	0.17895	0.271975
KCNK18	0.05031	0.504827	0.611745
KCNK1	0.547363	2.66E-15	2.17E-13
KCNK2	-0.15693	0.036447	0.073752
KCNK3	-0.36681	4.75E-07	4.54E-06
KCNK4	0.100168	0.183405	0.277415
KCNK5	0.395069	4.83E-08	6.20E-07
KCNK6	0.424339	3.57E-09	6.50E-08
KCNK7	0.330668	6.54E-06	4.50E-05
KCNK9	-0.14052	0.061357	0.113752
KCNMA1	-0.39757	3.91E-08	5.11E-07
KCNMB1	0.139232	0.063806	0.117586
KCNMB2	-0.27437	0.00021	0.000904
KCNMB3	0.055299	0.46347	0.573687
KCNMB4	0.169105	0.024038	0.05188
KCNN1	-0.06392	0.396633	0.509353

KCNN2	-0.42294	4.07E-09	7.26E-08
KCNN3	-0.38156	1.48E-07	1.65E-06
KCNN4	0.705129	4.47E-28	1.10E-24
KCNQ1DN	0.060411	0.423107	0.535354
KCNQ10T1	0.147586	0.049304	0.094903
KCNQ1	0.226626	0.002351	0.007169
KCNQ2	-0.15131	0.04379	0.086064
KCNQ3	-0.0678	0.368552	0.482057
KCNQ4	0.299004	5.03E-05	0.000264
KCNQ5	-0.17194	0.021735	0.047586
KCNRG	-0.13687	0.068496	0.124936
KCNS1	0.350626	1.60E-06	1.31E-05
KCNS2	-0.1063	0.157876	0.24626
KCNS3	0.188051	0.011947	0.028764
KCNT1	-0.09299	0.216999	0.318271
KCNT2	-0.24953	0.000782	0.002794
KCNU1	-0.18058	0.015858	0.036522
KCNV1	-0.13041	0.082721	0.146164
KCNV2	-0.18556	0.013143	0.031184
KCP	0.682409	9.73E-26	1.40E-22
KCTD10	-0.0723	0.337546	0.449895
KCTD11	0.330413	6.66E-06	4.57E-05
KCTD12	-0.38732	9.24E-08	1.09E-06
KCTD13	0.021512	0.775627	0.84049
KCTD14	0.394282	5.16E-08	6.56E-07
KCTD15	0.011281	0.881196	0.917576
KCTD16	-0.36103	7.39E-07	6.71E-06
KCTD17	0.008693	0.90831	0.935784
KCTD18	-0.23124	0.001899	0.005966
KCTD19	-0.20718	0.005523	0.01489
KCTD1	0.288488	9.42E-05	0.00045
KCTD20	-0.17807	0.017405	0.039478
KCTD21	0.18609	0.012882	0.030649
KCTD2	-0.22482	0.002552	0.007695
KCTD3	0.075048	0.31944	0.431224
KCTD4	-0.21723	0.003584	0.010277
KCTD5	0.352666	1.38E-06	1.15E-05
KCTD6	-0.1813	0.015438	0.035697
KCTD7	-0.14228	0.058162	0.108787
KCTD8	-0.21932	0.003267	0.009496
KCTD9	0.296338	5.91E-05	0.000303
KDELC1	0.060255	0.424309	0.536566
KDELC2	0.029709	0.693826	0.775718
KDELR1	0.144108	0.054969	0.103936
KDELR2	0.12516	0.095986	0.164888
KDELR3	0.331952	5.99E-06	4.18E-05
KDM1A	0.120922	0.107869	0.181686
KDM1B	-0.24945	0.000785	0.002803
KDM2A	0.188642	0.011677	0.028183
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KDM3A	0.266015	0.000332	0.001337
KDM3B	-0.09318	0.216027	0.317152
KDM4A	-0.22608	0.002409	0.007322
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KDM4C	-0.20741	0.005469	0.014762
KDM4DL	-0.13982	0.062686	0.115857
KDM4D	-0.20837	0.005253	0.014285
KDM5A	-0.23324	0.001729	0.005507
KDM5B	0.268985	0.000283	0.001167
KDM5C	-0.1835	0.014217	0.033296
KDM5D	-0.04417	0.558276	0.659263
KDM6A	-0.22716	0.002294	0.007022
KDM6B	-0.33037	6.68E-06	4.58E-05
KDR	-0.32583	9.07E-06	5.96E-05
KDSR	-0.08505	0.259014	0.365368
KEAP1	0.150966	0.044274	0.086834
KEL	-0.10374	0.168206	0.259285
KERA	0.255096	0.000589	0.002186
KGFLP1	-0.31744	1.58E-05	9.65E-05
KGFLP2	-0.40765	1.63E-08	2.39E-07
KHDC1L	-0.10407	0.166848	0.257446
KHDC1	0.072617	0.335408	0.447549
KHDRBS1	0.100886	0.180269	0.273571
KHDRBS2	-0.28403	0.000122	0.000565
KHDRBS3	-0.15148	0.043554	0.085679
KHK	-0.06922	0.358578	0.471726
KHNYN	-0.08234	0.274528	0.382508
KHSRP	-0.13256	0.077753	0.1388
KIAA0020	0.106159	0.158439	0.246865
KIAA0040	0.16374	0.028967	0.060786
KIAA0087	-0.34883	1.82E-06	1.47E-05
KIAA0090	-0.23608	0.001512	0.004903
KIAA0100	-0.33348	5.40E-06	3.81E-05
KIAA0101	0.436879	1.08E-09	2.26E-08
KIAA0114	-0.2703	0.000263	0.001097
KIAA0125	-0.01037	0.890765	0.923847
KIAA0141	-0.08309	0.270193	0.377956
KIAA0146	-0.00449	0.952555	0.967776
KIAA0174	0.284898	0.000116	0.000542
KIAA0182	-0.52478	5.51E-14	3.46E-12
KIAA0195	-0.2963	5.92E-05	0.000303
KIAA0196	-0.03158	0.675563	0.761693
KIAA0226	-0.14575	0.052224	0.099564
KIAA0232	-0.32519	9.47E-06	6.19E-05
KIAA0240	-0.39924	3.38E-08	4.52E-07
KIAA0247	-0.05273	0.484556	0.593509
KIAA0284	0.289569	8.84E-05	0.000427
KIAA0317	-0.24965	0.000778	0.002779
KIAA0319I	-0.20001	0.007435	0.019191
KIAA0319	-0.32609	8.91E-06	5.87E-05
KIAA0355	-0.34136	3.11E-06	2.35E-05
KIAA0368	-0.43774	9.96E-10	2.12E-08
KIAA0391	0.090633	0.228916	0.331934
KIAA0406	-0.28336	0.000127	0.000585
KIAA0408	-0.19585	0.008795	0.022127
KIAA0415	0.121732	0.105514	0.178434
KIAA0427	-0.16161	0.031151	0.064635
KIAA0430	-0.19944	0.007609	0.019573

KIAA0467 -0.20846 0.005233 0.014235
KIAA0494 -0.01522 0.840174 0.8871
KIAA0495 0.035004 0.642749 0.733568
KIAA0513 -0.14735 0.049666 0.095451
KIAA0528 -0.41107 1.20E-08 1.84E-07
KIAA0556 -0.00044 0.995368 0.996913
KIAA0562 -0.18608 0.012889 0.030654
KIAA0564 -0.15951 0.033444 0.06863
KIAA0586 -0.3124 2.18E-05 0.000127
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KIAA0652 -0.23991 0.001258 0.004189
KIAA0664F 0.019406 0.7971 0.856948
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KIAA0748 -0.02686 0.721921 0.797991
KIAA0753 -0.24734 0.000873 0.003061
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KIAA0776 -0.38521 1.10E-07 1.27E-06
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KIAA0892 -0.19912 0.007707 0.019781
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KIAA0913 -0.20298 0.006582 0.017321
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KIAA0947 -0.48373 7.92E-12 2.92E-10
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KIAA1012 -0.32434 1.00E-05 6.50E-05
KIAA1024 -0.12592 0.09397 0.162001
KIAA1033 -0.13987 0.062595 0.115722
KIAA1045 -0.30078 4.51E-05 0.00024
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KIAA1109 -0.28151 0.000141 0.000641
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KIAA1191 -0.01083 0.885909 0.920642
KIAA1199 0.431623 1.80E-09 3.51E-08
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KIAA1211 0.121569 0.105983 0.17906
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KIAA1244 -0.38119 1.53E-07 1.69E-06
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KIAA1274 -0.06254 0.406921 0.519261
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KIAA1377 -0.37988 1.70E-07 1.86E-06
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KIAA1407	0.092354	0.220161	0.321907
KIAA1409	-0.38065	1.59E-07	1.76E-06
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KIAA1430	-0.11156	0.138193	0.221175
KIAA1432	-0.15426	0.039795	0.079349
KIAA1462	-0.12814	0.088271	0.153989
KIAA1467	-0.29292	7.25E-05	0.000359
KIAA1468	-0.23986	0.001261	0.004197
KIAA1486	-0.33511	4.82E-06	3.45E-05
KIAA1522	0.385115	1.11E-07	1.27E-06
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KIAA1529	-0.34894	1.81E-06	1.46E-05
KIAA1530	0.094468	0.20974	0.309715
KIAA1539	0.493164	2.68E-12	1.12E-10
KIAA1543	0.161668	0.031089	0.064528
KIAA1549	-0.38701	9.48E-08	1.11E-06
KIAA1586	-0.37815	1.95E-07	2.10E-06
KIAA1598	-0.15914	0.033855	0.069309
KIAA1609	0.519819	1.04E-13	6.13E-12
KIAA1614	-0.13142	0.080366	0.142731
KIAA1632	-0.48474	7.06E-12	2.63E-10
KIAA1644	-0.20404	0.006298	0.016668
KIAA1671	-0.08912	0.236808	0.340729
KIAA1683	-0.17078	0.022655	0.0493
KIAA1704	0.115778	0.123811	0.202267
KIAA1712	-0.09398	0.212091	0.312441
KIAA1715	-0.00618	0.934795	0.955229
KIAA1731	0.023659	0.753922	0.82377
KIAA1737	-0.18768	0.012121	0.029116
KIAA1751	-0.19554	0.008904	0.022326
KIAA1755	0.202015	0.006848	0.017913
KIAA1797	-0.3624	6.66E-07	6.12E-06
KIAA1804	-0.02413	0.749183	0.81983
KIAA1826	-0.33581	4.59E-06	3.30E-05
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KIAA1875	0.109174	0.146879	0.232333
KIAA1908	-0.56126	3.66E-16	3.81E-14
KIAA1919	-0.20461	0.006151	0.016331
KIAA1949	0.295332	6.28E-05	0.000318
KIAA1958	-0.35489	1.17E-06	9.94E-06
KIAA1967	0.024898	0.741486	0.813615
KIAA1984	0.103215	0.170368	0.261842
KIAA2013	0.024688	0.743585	0.815238
KIAA2018	-0.26315	0.000387	0.001526
KIAA2022	-0.33135	6.25E-06	4.33E-05
KIAA2026	-0.29064	8.30E-05	0.000404
KIDINS22C	-0.24558	0.000953	0.003294
KIF11	0.317256	1.60E-05	9.74E-05
KIF12	-0.06896	0.360365	0.473479
KIF13A	-0.19063	0.010809	0.026404
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KIF15	0.2978	5.41E-05	0.00028
KIF16B	-0.19756	0.008209	0.020884

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KIF19	-0.31075	2.42E-05	0.00014
KIF1A	-0.30518	3.44E-05	0.00019
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KIF20A	0.383985	1.22E-07	1.38E-06
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KIF21A	-0.26596	0.000333	0.00134
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KIF25	-0.08035	0.286319	0.395369
KIF26A	-0.18543	0.013212	0.031318
KIF26B	0.354075	1.24E-06	1.05E-05
KIF27	-0.30774	2.93E-05	0.000165
KIF2A	-0.17315	0.020813	0.045897
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KIF3A	-0.39181	6.36E-08	7.84E-07
KIF3B	-0.43934	8.51E-10	1.85E-08
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KIF5A	-0.34767	1.98E-06	1.58E-05
KIF5B	-0.07805	0.300385	0.41052
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KIF9	-0.08136	0.280287	0.388722
KIFAP3	-0.20521	0.005999	0.015979
KIFC1	0.408668	1.49E-08	2.20E-07
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KILLIN	-0.35723	9.83E-07	8.54E-06
KIN	0.109944	0.144033	0.228599
KIR2DL1	-0.16904	0.024091	0.051961
KIR2DL3	0.009443	0.900447	0.930517
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KIR3DL1	-0.16014	0.032738	0.067378
KIR3DL2	-0.08602	0.253599	0.359757
KIR3DL3	0.05236	0.487607	0.59636
KIR3DP1	-0.04335	0.565596	0.666156
KIR3DX1	-0.02827	0.707934	0.787328
KIRREL2	-0.26067	0.000441	0.001708
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KISS1R	-0.24584	0.00094	0.003256
KISS1	0.308934	2.72E-05	0.000155
KITLG	0.189006	0.011514	0.027857
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KLC2	-0.14295	0.056976	0.106963
KLC3	0.068345	0.364686	0.477938
KLC4	0.141722	0.059157	0.110273
KLF10	-0.16117	0.031622	0.06542
KLF11	-0.22091	0.003044	0.008955
KLF12	-0.20571	0.005873	0.015692
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KLF1	-0.02006	0.790411	0.851795
KLF2	0.423235	3.96E-09	7.10E-08
KLF3	0.283845	0.000123	0.000571
KLF4	0.266973	0.000315	0.001281
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KLF6	0.27371	0.000218	0.000932
KLF7	0.119302	0.112705	0.188039
KLF8	0.092274	0.220564	0.322353
KLF9	-0.3638	5.99E-07	5.56E-06
KLHDC10	-0.39092	6.85E-08	8.39E-07
KLHDC1	-0.35196	1.45E-06	1.20E-05
KLHDC2	-0.27778	0.000174	0.000768
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KLHDC4	0.170092	0.023214	0.050372
KLHDC5	-0.48637	5.87E-12	2.25E-10
KLHDC7A	0.237615	0.001405	0.004603
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KLHL10	-0.09858	0.190504	0.286161
KLHL11	-0.38263	1.36E-07	1.52E-06
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KLHL15	-0.53622	1.22E-14	8.88E-13
KLHL17	0.184262	0.01381	0.032485
KLHL18	-0.14115	0.060203	0.111884
KLHL1	-0.13079	0.081842	0.144941
KLHL20	0.032164	0.669952	0.757094
KLHL21	-0.03633	0.63023	0.722696
KLHL22	-0.42017	5.26E-09	9.04E-08
KLHL23	-0.19012	0.011025	0.026854
KLHL24	-0.20213	0.006814	0.017838
KLHL25	0.126226	0.093168	0.1609
KLHL26	-0.10267	0.172632	0.2645
KLHL28	-0.23431	0.001644	0.005278
KLHL29	-0.20552	0.005921	0.015807
KLHL2	-0.30603	3.26E-05	0.000181
KLHL30	0.48684	5.56E-12	2.14E-10
KLHL31	-0.04704	0.532916	0.636922
KLHL32	-0.50735	4.93E-13	2.50E-11

KLHL33	-0.0696	0.355928	0.468989
KLHL34	-0.19978	0.007504	0.019348
KLHL35	0.09729	0.196382	0.293319
KLHL36	0.233882	0.001677	0.005365
KLHL38	-0.22172	0.002936	0.008686
KLHL3	-0.05381	0.475608	0.585341
KLHL4	-0.08981	0.233186	0.337014
KLHL5	-0.20524	0.005992	0.015967
KLHL6	-0.00658	0.930516	0.952037
KLHL7	-0.05937	0.431132	0.543041
KLHL8	-0.4038	2.28E-08	3.23E-07
KLHL9	-0.37168	3.25E-07	3.28E-06
KLK10	0.566855	1.61E-16	1.86E-14
KLK11	0.483866	7.80E-12	2.88E-10
KLK12	-0.09189	0.222504	0.324573
KLK13	0.057637	0.444754	0.556266
KLK14	-0.06952	0.356486	0.46963
KLK15	-0.10229	0.174247	0.266602
KLK1	0.033415	0.657914	0.746476
KLK2	0.166022	0.026774	0.056885
KLK3	0.086933	0.248564	0.353962
KLK4	0.305328	3.41E-05	0.000189
KLK5	0.056246	0.455837	0.566794
KLK6	0.417212	6.89E-09	1.15E-07
KLK7	0.479451	1.28E-11	4.44E-10
KLK8	0.444595	5.06E-10	1.18E-08
KLK9	0.433967	1.43E-09	2.88E-08
KLKB1	-0.21016	0.004868	0.013392
KLKP1	0.321741	1.19E-05	7.56E-05
KLRA1	-0.055	0.465915	0.576065
KLRAQ1	0.047018	0.533134	0.637144
KLRB1	-0.04733	0.530426	0.634824
KLRC1	-0.10788	0.151766	0.238593
KLRC2	-0.10031	0.182791	0.276692
KLRC3	-0.13443	0.073611	0.132615
KLRC4	-0.23463	0.00162	0.005207
KLRD1	-0.19763	0.008187	0.020845
KLRF1	-0.15298	0.041486	0.0822
KLRG1	-0.22751	0.002257	0.006927
KLRG2	-0.08054	0.285178	0.394174
KLRK1	-0.16384	0.028864	0.06061
KL	-0.34884	1.82E-06	1.47E-05
KMO	0.01541	0.838229	0.885817
KNCN	-0.22825	0.002181	0.006727
KNDC1	-0.04695	0.53376	0.637661
KNG1	0.075044	0.31946	0.431224
KNTC1	0.204349	0.006218	0.016485
KPNA1	0.043372	0.565393	0.665996
KPNA2	0.041167	0.585339	0.68391
KPNA3	-0.02696	0.720933	0.797284
KPNA4	0.202663	0.006667	0.017516
KPNA5	-0.33873	3.75E-06	2.76E-05
KPNA6	-0.30935	2.65E-05	0.000151
KPNA7	0.471659	3.02E-11	9.72E-10

KPNB1	-0.07841	0.298192	0.408171
KPRP	0.073332	0.330659	0.442744
KPTN	0.06009	0.425582	0.537841
KRAS	0.201313	0.007048	0.01834
KRBA1	-0.20016	0.007389	0.019085
KRBA2	-0.52438	5.80E-14	3.62E-12
KRCC1	-0.0241	0.749469	0.820008
KREMEN1	-0.40737	1.67E-08	2.44E-07
KREMEN2	0.185916	0.012967	0.030805
KRI1	0.188009	0.011966	0.028807
KRIT1	-0.24634	0.000918	0.003189
KRR1	-0.2173	0.003573	0.010254
KRT10	-0.11672	0.120773	0.198303
KRT12	0.128006	0.088607	0.15444
KRT13	0.608735	1.99E-19	5.17E-17
KRT14	0.483546	8.09E-12	2.96E-10
KRT15	0.601264	7.05E-19	1.57E-16
KRT16	0.697501	2.88E-27	5.70E-24
KRT17	0.566051	1.81E-16	2.06E-14
KRT18	0.425774	3.12E-09	5.73E-08
KRT19	0.70833	2.01E-28	5.67E-25
KRT1	-0.12066	0.108647	0.18267
KRT20	0.085307	0.257555	0.363882
KRT222	-0.30768	2.94E-05	0.000166
KRT23	0.275695	0.000195	0.000849
KRT24	-0.15925	0.033732	0.069136
KRT25	-0.03643	0.629245	0.721943
KRT27	-0.10043	0.18226	0.276024
KRT28	0.064066	0.39555	0.508293
KRT2	-0.04921	0.51417	0.620216
KRT31	-0.00206	0.978237	0.985106
KRT32	0.124068	0.098945	0.169075
KRT33A	-0.16618	0.026623	0.056619
KRT33B	0.203625	0.006407	0.016913
KRT34	0.064944	0.389091	0.501622
KRT35	-0.01193	0.874426	0.913026
KRT36	0.016006	0.832059	0.881025
KRT37	0.090084	0.231763	0.335324
KRT38	-0.01871	0.804189	0.861571
KRT39	-0.1561	0.037463	0.075415
KRT3	0.209591	0.004987	0.013669
KRT40	-0.25987	0.00046	0.001768
KRT4	0.365404	5.30E-07	5.00E-06
KRT5	0.268324	0.000293	0.001204
KRT6A	0.48129	1.04E-11	3.71E-10
KRT6B	0.426085	3.03E-09	5.60E-08
KRT6C	0.44034	7.72E-10	1.70E-08
KRT71	0.039862	0.597295	0.694269
KRT72	-0.08714	0.247437	0.352585
KRT73	-0.08323	0.269369	0.377045
KRT74	0.059263	0.431992	0.543917
KRT75	-0.01509	0.841509	0.888178
KRT76	0.066648	0.376743	0.489462
KRT77	0.051431	0.495373	0.60332

KRT78	0.332722	5.69E-06	3.98E-05
KRT79	0.404323	2.18E-08	3.09E-07
KRT7	0.586442	7.91E-18	1.31E-15
KRT80	0.369773	3.78E-07	3.74E-06
KRT81	0.109206	0.146762	0.232203
KRT82	0.078416	0.298138	0.408147
KRT83	0.144616	0.054109	0.102594
KRT84	0.07152	0.342777	0.455057
KRT85	-0.10766	0.152601	0.239639
KRT86	0.114638	0.127579	0.207327
KRT8	0.512141	2.73E-13	1.46E-11
KRT9	0.360361	7.77E-07	7.00E-06
KRTAP1-1	-0.02178	0.772949	0.838414
KRTAP1-3	0.017881	0.81273	0.867339
KRTAP1-5	0.015261	0.839777	0.88687
KRTAP10-1	-0.07872	0.296272	0.406247
KRTAP10-10	0.019768	0.793399	0.853665
KRTAP10-1	-0.05261	0.485563	0.594485
KRTAP10-10	0.156152	0.037394	0.075314
KRTAP10-2	-0.06529	0.386594	0.499347
KRTAP10-3	-0.18189	0.0151	0.035055
KRTAP10-4	-0.15364	0.040606	0.080729
KRTAP10-6	-0.13338	0.07591	0.136087
KRTAP11-1	-0.02586	0.731829	0.806104
KRTAP12-1	-0.04709	0.532499	0.636655
KRTAP12-2	-0.09335	0.215215	0.316124
KRTAP13-2	-0.11022	0.143018	0.227352
KRTAP2-1	0.06201	0.410918	0.523019
KRTAP2-2	0.009496	0.899883	0.930178
KRTAP21-2	-0.05093	0.499545	0.606831
KRTAP3-1	0.029846	0.692487	0.774673
KRTAP3-2	-0.17831	0.01725	0.039194
KRTAP3-3	-0.29864	5.14E-05	0.000269
KRTAP4-11	-0.06254	0.406889	0.519253
KRTAP4-12	-0.08439	0.262747	0.369739
KRTAP4-1	0.001803	0.980944	0.986818
KRTAP4-2	-0.00257	0.972816	0.981603
KRTAP4-3	0.033767	0.654539	0.743586
KRTAP4-7	-0.05142	0.495458	0.603375
KRTAP4-8	-0.14319	0.056554	0.106342
KRTAP4-9	-0.05455	0.469592	0.579596
KRTAP5-10	0.14698	0.050256	0.096387
KRTAP5-11	0.003983	0.95792	0.971181
KRTAP5-1	0.138159	0.065899	0.120924
KRTAP5-2	-0.06914	0.359086	0.472183
KRTAP5-3	0.099874	0.184703	0.278952
KRTAP5-4	-0.0813	0.280685	0.389082
KRTAP5-5	-0.24255	0.001106	0.003744
KRTAP5-6	0.015874	0.833424	0.881904
KRTAP5-7	0.107467	0.153341	0.240648
KRTAP5-8	0.125997	0.093768	0.161738
KRTAP5-9	0.228945	0.002113	0.006542
KRTAP7-1	-0.20567	0.005884	0.01572
KRTAP8-1	-0.01037	0.890769	0.923847

KRTCAP2	0.196277	0.008645	0.021803
KRTCAP3	0.530239	2.70E-14	1.84E-12
KRTDAP	0.13911	0.06404	0.117962
KSR1	-0.36398	5.91E-07	5.50E-06
KSR2	-0.40164	2.75E-08	3.78E-07
KTELC1	-0.14956	0.046312	0.090117
KTI12	-0.16463	0.02809	0.05921
KTN1	-0.01681	0.823711	0.875114
KYNU	0.461106	9.34E-11	2.64E-09
KY	-0.0176	0.815636	0.869573
L1CAM	-0.09644	0.20033	0.298225
L1TD1	0.075563	0.31612	0.427386
L2HGDH	-0.19514	0.009045	0.022635
L3MBTL2	-0.12082	0.108173	0.182044
L3MBTL3	0.196489	0.008571	0.02166
L3MBTL4	-0.01513	0.841091	0.887831
L3MBTL	0.06843	0.364087	0.477355
LACE1	-0.1213	0.106754	0.180192
LACTB2	0.283485	0.000126	0.000581
LACTB	0.244677	0.000996	0.003425
LAD1	0.556033	7.81E-16	7.43E-14
LAG3	-0.0896	0.234273	0.338296
LAGE3	-0.04144	0.582823	0.681655
LAIR1	0.054188	0.472514	0.582367
LAIR2	0.011933	0.874385	0.913026
LALBA	0.04671	0.535828	0.639359
LAMA1	-0.19756	0.008209	0.020884
LAMA2	0.026201	0.728465	0.803339
LAMA3	0.522641	7.26E-14	4.39E-12
LAMA4	0.040461	0.591794	0.689253
LAMA5	0.233119	0.001739	0.005533
LAMB1	-0.13993	0.062477	0.11558
LAMB2L	-0.01148	0.879136	0.916068
LAMB2	0.398957	3.47E-08	4.61E-07
LAMB3	0.62441	1.25E-20	4.32E-18
LAMB4	-0.44317	5.83E-10	1.33E-08
LAMC1	0.038767	0.607416	0.703182
LAMC2	0.580071	2.15E-17	3.18E-15
LAMC3	-0.05148	0.494966	0.603048
LAMP1	0.03366	0.655567	0.744583
LAMP2	-0.29819	5.28E-05	0.000275
LAMP3	0.179703	0.016385	0.037562
LANCL1	-0.11719	0.119252	0.196474
LANCL2	-0.5008	1.09E-12	4.98E-11
LANCL3	0.49909	1.33E-12	6.06E-11
LAP3	0.022068	0.76999	0.836352
LAPTM4A	0.270186	0.000265	0.001102
LAPTM4B	0.030882	0.682385	0.766968
LAPTM5	0.082339	0.274542	0.382508
LARGE	-0.27333	0.000223	0.000949
LARP1B	-0.24092	0.001197	0.004009
LARP1	-0.19949	0.007591	0.019536
LARP4B	0.088811	0.238449	0.342542
LARP4	-0.34556	2.31E-06	1.80E-05

LARP6	0.010145	0.893089	0.925331
LARP7	-0.14066	0.061108	0.113342
LARS2	-0.15724	0.03607	0.0731
LARS	-0.25533	0.000582	0.002165
LAS1L	0.049732	0.509742	0.616303
LASP1	0.301796	4.24E-05	0.000228
LASS1	-0.25614	0.000559	0.002088
LASS2	0.180844	0.015705	0.036223
LASS3	-0.3246	9.85E-06	6.41E-05
LASS4	-0.32909	7.28E-06	4.93E-05
LASS5	0.00873	0.907926	0.935747
LASS6	-0.0671	0.373527	0.486612
LAT2	-0.13213	0.078717	0.140254
LATS1	-0.22903	0.002105	0.00652
LATS2	0.156615	0.036826	0.074405
LAT	0.071256	0.34457	0.456855
LAX1	-0.15224	0.042487	0.083913
LAYN	0.195666	0.008858	0.022238
LBH	0.083032	0.27051	0.378266
LBP	-0.09873	0.189824	0.285313
LBR	0.096786	0.198717	0.296273
LBX1	0.034514	0.647412	0.737232
LBX2	0.422526	4.23E-09	7.51E-08
LBXCOR1	-0.13144	0.080311	0.142647
LCA5L	-0.31185	2.26E-05	0.000131
LCA5	-0.17759	0.017712	0.040076
LCAT	0.333225	5.49E-06	3.86E-05
LCE1A	0.045373	0.547576	0.650065
LCE1B	-0.0071	0.925067	0.94813
LCE1C	0.078907	0.295115	0.40497
LCE1D	-0.09973	0.185361	0.279775
LCE1E	0.192649	0.009986	0.024667
LCE1F	-0.03406	0.651719	0.74068
LCE2A	-0.05344	0.478687	0.588325
LCE2C	0.049635	0.510566	0.61696
LCE3A	0.01664	0.825511	0.876446
LCE3D	0.15964	0.033293	0.06841
LCE3E	0.143124	0.056666	0.106514
LCE5A	-0.06672	0.376237	0.4891
LCK	0.131598	0.079947	0.142114
LCLAT1	0.007012	0.925989	0.948806
LCMT1	-0.07408	0.325726	0.437769
LCMT2	-0.20618	0.00576	0.015446
LCN10	-0.20933	0.005043	0.013792
LCN12	-0.04375	0.56199	0.662857
LCN15	-0.06282	0.404797	0.517384
LCN1	0.032723	0.664569	0.752516
LCN2	0.443068	5.89E-10	1.35E-08
LCN6	-0.19928	0.007658	0.01968
LCN8	-0.10031	0.182801	0.276692
LCNL1	0.131207	0.080855	0.14347
LCORL	-0.07458	0.322492	0.434328
LCOR	-0.12533	0.09552	0.164259
LCP1	-0.06519	0.387319	0.500023

LCP2	-0.04474	0.553187	0.655013
LCTL	-0.03476	0.645049	0.735255
LCT	-0.0661	0.380698	0.493488
LDB1	-0.15008	0.045543	0.088947
LDB2	-0.25675	0.000541	0.002035
LDB3	-0.16264	0.030081	0.062818
LDHAL6A	-0.13375	0.075105	0.134939
LDHAL6B	0.304679	3.55E-05	0.000195
LDHA	0.504491	6.98E-13	3.32E-11
LDHB	-0.15702	0.036331	0.073547
LDHC	0.00441	0.953415	0.968302
LDHD	0.322346	1.14E-05	7.31E-05
LDLRAD1	-0.02816	0.709099	0.788092
LDLRAD2	0.431851	1.76E-09	3.46E-08
LDLRAD3	-0.05234	0.48777	0.596411
LDLRAP1	-0.26359	0.000378	0.001495
LDLR	0.531754	2.21E-14	1.52E-12
LDL1L	-0.24428	0.001016	0.003482
LDL1	-0.20577	0.005859	0.015668
LEAP2	0.00503	0.946873	0.964133
LECT1	-0.07191	0.340164	0.452469
LECT2	0.086165	0.252787	0.358812
LEF1	0.306312	3.21E-05	0.000179
LEFTY1	0.116923	0.120114	0.197516
LEFTY2	0.032427	0.667418	0.754791
LEKR1	-0.18538	0.013237	0.031363
LEMD1	0.636847	1.23E-21	6.43E-19
LEMD2	-0.03594	0.633862	0.72564
LEMD3	-0.32456	9.88E-06	6.43E-05
LENEP	0.071136	0.345384	0.457718
LENG1	-0.00168	0.982277	0.987672
LENG8	0.132686	0.077465	0.138411
LENG9	0.270908	0.000255	0.001065
LEO1	-0.08516	0.25838	0.364891
LEPRE1	-0.01421	0.850697	0.895484
LEPREL1	0.434207	1.40E-09	2.83E-08
LEPREL2	-0.09336	0.215157	0.316086
LEPROTL1	0.099176	0.187806	0.282858
LEPROT	-0.11381	0.130364	0.210961
LEPR	-0.15478	0.03912	0.078229
LEP	-0.21352	0.004213	0.01183
LETM1	0.028409	0.706594	0.786368
LETM2	0.405716	1.93E-08	2.78E-07
LETMD1	-0.14862	0.047717	0.092387
LFNG	0.42362	3.82E-09	6.88E-08
LGALS12	-0.04639	0.538596	0.641771
LGALS13	0.027261	0.717938	0.795014
LGALS14	0.077289	0.305156	0.415493
LGALS1	0.373985	2.71E-07	2.80E-06
LGALS2	0.043255	0.566442	0.666756
LGALS3BP	0.414134	9.12E-09	1.46E-07
LGALS3	0.593734	2.45E-18	4.79E-16
LGALS4	0.420866	4.93E-09	8.56E-08
LGALS7B	0.166446	0.026382	0.056168

LGALS7	0.220375	0.003118	0.009129
LGALS8	0.177967	0.01747	0.039594
LGALS9B	0.102	0.17548	0.267867
LGALS9C	0.307156	3.04E-05	0.000171
LGALS9	0.543307	4.66E-15	3.67E-13
LGI1	-0.17855	0.017096	0.038889
LGI2	-0.43025	2.05E-09	3.94E-08
LGI3	-0.22501	0.002531	0.007642
LGI4	0.026464	0.725857	0.801401
LGMN	0.202285	0.006772	0.017752
LGR4	0.10836	0.149934	0.236264
LGR5	0.198929	0.007768	0.019912
LGR6	0.536592	1.16E-14	8.48E-13
LGSN	-0.16047	0.032373	0.066778
LGTN	0.006223	0.934295	0.954866
LHB	0.479204	1.32E-11	4.54E-10
LHCGR	-0.07384	0.327297	0.439195
LHFPL1	-0.39589	4.51E-08	5.81E-07
LHFPL2	0.064075	0.395483	0.508239
LHFPL3	-0.01238	0.869766	0.91018
LHFPL4	-0.19814	0.00802	0.020483
LHFPL5	-0.17201	0.021682	0.047475
LHFP	-0.11513	0.125958	0.205231
LHPP	0.104395	0.165506	0.255702
LHX1	0.226514	0.002363	0.007202
LHX2	-0.21592	0.003796	0.010817
LHX3	-0.05374	0.476199	0.585815
LHX4	-0.2019	0.00688	0.017992
LHX5	0.018826	0.803033	0.861147
LHX6	-0.20244	0.00673	0.01766
LHX8	-0.19865	0.007855	0.020115
LHX9	0.173126	0.020833	0.045937
LIAS	-0.28515	0.000114	0.000535
LIFR	-0.36153	7.12E-07	6.49E-06
LIF	0.394842	4.93E-08	6.30E-07
LIG1	0.088363	0.240834	0.345216
LIG3	-0.13664	0.068951	0.125652
LIG4	-0.14825	0.048274	0.09321
LILRA1	-0.19726	0.008309	0.021095
LILRA2	0.10153	0.17749	0.27017
LILRA3	-0.0148	0.844504	0.890388
LILRA4	0.090054	0.231918	0.3355
LILRA5	0.059633	0.429116	0.54108
LILRA6	0.044817	0.552495	0.654546
LILRB1	-0.08246	0.273832	0.381913
LILRB2	-0.06555	0.38464	0.497425
LILRB3	0.089475	0.234944	0.338935
LILRB4	0.069645	0.35561	0.468664
LILRB5	-0.22024	0.003137	0.009171
LILRP2	0.030515	0.685954	0.769919
LIM2	0.010221	0.892287	0.924939
LIMA1	0.261057	0.000432	0.001679
LIMCH1	-0.37678	2.17E-07	2.31E-06
LIMD1	-0.21565	0.00384	0.010929

LIMD2	0.023571	0.754813	0.824441
LIME1	0.539502	7.84E-15	5.90E-13
LIMK1	0.295232	6.32E-05	0.00032
LIMK2	0.027745	0.713148	0.791391
LIMS1	0.047052	0.53284	0.636903
LIMS2	0.163905	0.028804	0.060495
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LIMS3	-0.0043	0.954594	0.968802
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LIN37	0.120055	0.110439	0.185132
LIN52	-0.3745	2.61E-07	2.70E-06
LIN54	-0.37147	3.31E-07	3.32E-06
LIN7A	-0.18993	0.011107	0.027024
LIN7B	-0.19691	0.008427	0.02135
LIN7C	-0.0204	0.786983	0.849134
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LIPG	0.018708	0.80424	0.861579
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LLGL1	-0.12344	0.100689	0.171551
LLGL2	0.22191	0.002911	0.008622
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LMBR1	-0.33562	4.66E-06	3.34E-05
LMBRD1	-0.26717	0.000312	0.001269
LMBRD2	-0.30553	3.37E-05	0.000187
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LPAR4	-0.04757	0.528339	0.633327
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LPAR6	0.361342	7.22E-07	6.57E-06
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LPCAT2	0.443429	5.69E-10	1.31E-08
LPCAT3	-0.09304	0.216727	0.317991
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LPIN1	0.035312	0.639823	0.730984
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LPPR3	-0.10931	0.146389	0.231762
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LRRC14B	-0.15808	0.03508	0.07141
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LRRC36	-0.07942	0.291949	0.401544
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LRRC37A3	-0.36062	7.63E-07	6.89E-06
LRRC37A4	-0.21106	0.004685	0.012951
LRRC37A	-0.04267	0.57172	0.671569
LRRC37B2	-0.26637	0.000326	0.001316

LRRC37B	-0.22694	0.002317	0.007082
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LRRC3B	-0.01863	0.805015	0.86199
LRRC3	0.077174	0.305883	0.416136
LRRC40	-0.10257	0.173072	0.265092
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LRRC42	0.307929	2.90E-05	0.000164
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LRRC45	0.190388	0.010912	0.026618
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LRRC47	-0.20608	0.005785	0.015496
LRRC48	-0.35513	1.15E-06	9.78E-06
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LRRC8D	-0.20033	0.007337	0.01896
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LRRN1	0.392232	6.14E-08	7.60E-07
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LRRTM3	-0.00628	0.933696	0.954402
LRRTM4	-0.21224	0.004452	0.012381
LRSAM1	-0.0382	0.612651	0.708164
LRTM1	-0.21356	0.004207	0.011815

LRTM2	-0.08419	0.26387	0.371134
LRTOMT	-0.10292	0.171611	0.263302
LRWD1	-0.08053	0.285279	0.394195
LSAMP	-0.06225	0.409085	0.521215
LSG1	0.01792	0.812335	0.867188
LSM10	-0.11279	0.133875	0.215555
LSM11	-0.06998	0.353269	0.466132
LSM12	0.340078	3.41E-06	2.55E-05
LSM14A	-0.11807	0.116488	0.192828
LSM14B	-0.22973	0.002037	0.006332
LSM1	0.244742	0.000993	0.003417
LSM2	0.121232	0.106964	0.180432
LSM3	0.074349	0.323978	0.436014
LSM4	0.311633	2.29E-05	0.000133
LSM5	0.089555	0.234525	0.338562
LSM6	-0.05866	0.436668	0.548233
LSM7	0.209512	0.005004	0.013706
LSMD1	-0.11192	0.136906	0.219597
LSP1	0.201256	0.007064	0.018373
LSR	0.515175	1.87E-13	1.05E-11
LSS	-0.09691	0.198156	0.295544
LST-3TM12	0.240486	0.001223	0.004084
LST1	0.165947	0.026844	0.057009
LTA4H	-0.13458	0.073279	0.132114
LTA	-0.01764	0.815258	0.869333
LTB4R2	-0.12683	0.091599	0.158689
LTB4R	0.00553	0.941602	0.960795
LTBP1	0.161531	0.031234	0.064782
LTBP2	0.11454	0.127908	0.207724
LTBP3	0.019373	0.797434	0.857214
LTBP4	0.205619	0.005897	0.015749
LTBR	0.130214	0.083199	0.146815
LTB	0.150355	0.04515	0.088326
LTC4S	0.12226	0.104	0.176327
LTF	0.119059	0.113446	0.188955
LTK	0.30748	2.98E-05	0.000168
LTV1	-0.29465	6.54E-05	0.000329
LUC7L2	-0.12579	0.094317	0.162498
LUC7L3	0.080282	0.286755	0.395859
LUC7L	0.108354	0.149958	0.236265
LUM	0.15447	0.03952	0.078928
LUZP1	-0.03493	0.643467	0.73379
LUZP2	0.330084	6.81E-06	4.64E-05
LUZP4	-0.00092	0.990282	0.992893
LUZP6	-0.01816	0.809855	0.865485
LXN	-0.02744	0.716125	0.793554
LY6D	0.463404	7.33E-11	2.14E-09
LY6E	0.569771	1.04E-16	1.26E-14
LY6G5B	0.019805	0.793021	0.853367
LY6G5C	-0.1982	0.007999	0.020438
LY6G6C	0.412066	1.10E-08	1.71E-07
LY6G6D	-0.06698	0.374369	0.487409
LY6G6E	0.040868	0.588072	0.686358
LY6G6F	0.065105	0.387914	0.500596

LY6H	-0.16514	0.027608	0.058349
LY6K	-0.01815	0.80994	0.865529
LY75	0.453118	2.14E-10	5.49E-09
LY86	0.108264	0.150299	0.236643
LY96	0.10524	0.162092	0.251508
LY9	-0.06889	0.36086	0.474003
LYAR	0.04986	0.508649	0.615244
LYG1	0.18408	0.013906	0.032669
LYG2	-0.04011	0.594978	0.692268
LYL1	0.106408	0.157458	0.245744
LYNX1	0.172145	0.021579	0.047281
LYN	0.088549	0.239844	0.34417
LYPD1	0.229514	0.002058	0.006386
LYPD2	0.387258	9.29E-08	1.09E-06
LYPD3	0.261462	0.000423	0.001647
LYPD4	-0.02113	0.779553	0.843219
LYPD5	0.330243	6.73E-06	4.60E-05
LYPD6B	0.401318	2.83E-08	3.86E-07
LYPD6	0.258121	0.000504	0.001915
LYPLA1	0.053632	0.47708	0.586642
LYPLA2P1	0.341832	3.01E-06	2.28E-05
LYPLA2	0.424328	3.58E-09	6.50E-08
LYPLAL1	0.054934	0.466431	0.576522
LYRM1	-0.18225	0.014902	0.034651
LYRM2	-0.44144	6.92E-10	1.54E-08
LYRM4	-0.09253	0.2193	0.320907
LYRM5	-0.3398	3.48E-06	2.59E-05
LYRM7	-0.4128	1.03E-08	1.61E-07
LYSMD1	0.013166	0.861534	0.903862
LYSMD2	-0.25112	0.000722	0.002601
LYSMD3	-0.25308	0.000653	0.002381
LYSMD4	0.244106	0.001025	0.003505
LYST	-0.2069	0.00559	0.015044
LYVE1	-0.24306	0.001079	0.003665
LYZL2	0.05893	0.434587	0.546106
LYZL4	0.034368	0.648803	0.738172
LYZL6	0.000121	0.998725	0.998877
LYZ	0.191607	0.010403	0.025538
LZIC	-0.20825	0.005279	0.01434
LZTFL1	-0.42566	3.16E-09	5.79E-08
LZTR1	0.001493	0.984223	0.989099
LZTS1	0.05521	0.464196	0.574334
LZTS2	0.224731	0.002563	0.007719
M6PR	-0.03612	0.632138	0.724212
MAB21L1	0.007361	0.922314	0.946093
MAB21L2	0.208623	0.005197	0.014148
MACC1	0.420057	5.31E-09	9.11E-08
MACF1	-0.1409	0.060666	0.112629
MACROD1	0.254729	0.000601	0.002219
MACROD2	0.058695	0.436426	0.547964
MAD1L1	0.186046	0.012903	0.03068
MAD2L1BP	0.026899	0.721531	0.797759
MAD2L1	0.118601	0.114851	0.190734
MAD2L2	-0.05077	0.500965	0.608183

MADCAM1	-0.03554	0.637621	0.729184
MADD	-0.2577	0.000515	0.00195
MAEA	0.031629	0.675134	0.761297
MAEL	0.19569	0.00885	0.022223
MAF1	0.066895	0.374974	0.488037
MAFA	0.078214	0.299392	0.409503
MAFB	-0.16901	0.02412	0.052018
MAFF	0.414427	8.88E-09	1.43E-07
MAFG	-0.17671	0.018292	0.041146
MAFK	0.215608	0.003848	0.010948
MAF	0.066772	0.37585	0.488823
MAGEA10	0.099844	0.184835	0.279109
MAGEA11	-0.10666	0.156476	0.244617
MAGEA12	0.009423	0.900655	0.930683
MAGEA1	-0.20123	0.007072	0.01839
MAGEA2	-0.01617	0.830418	0.879758
MAGEA3	0.01271	0.866281	0.907445
MAGEA4	-0.01169	0.876972	0.914816
MAGEA5	0.157784	0.035425	0.072039
MAGEA6	-0.05251	0.486329	0.595128
MAGEA8	0.036261	0.630845	0.723191
MAGEA9B	-0.02851	0.705582	0.785463
MAGEB16	0.123079	0.101684	0.173023
MAGEB18	0.006812	0.928088	0.950205
MAGEB1	0.008714	0.908097	0.935767
MAGEB2	-0.1415	0.059552	0.110904
MAGEB3	0.042731	0.571163	0.671075
MAGEB4	-0.1045	0.165099	0.255271
MAGEB6	0.05208	0.489941	0.59851
MAGEC1	-0.0848	0.260414	0.367029
MAGEC2	0.036609	0.627573	0.720694
MAGEC3	-0.25977	0.000462	0.001775
MAGED1	-0.35562	1.11E-06	9.50E-06
MAGED2	-0.30389	3.73E-05	0.000203
MAGED4B	-0.29885	5.08E-05	0.000266
MAGED4	-0.20545	0.005939	0.015842
MAGEE1	-0.34149	3.09E-06	2.33E-05
MAGEE2	-0.2276	0.002248	0.006902
MAGEF1	-0.08231	0.274733	0.382629
MAGEH1	-0.37682	2.17E-07	2.30E-06
MAGEL2	-0.05464	0.468843	0.578829
MAGI1	-0.12698	0.09122	0.158144
MAGI2	-0.26803	0.000298	0.001221
MAGI3	0.061977	0.411164	0.523222
MAGIX	0.081577	0.279024	0.387377
MAGOHB	0.062625	0.406283	0.518647
MAGOH	0.155739	0.037907	0.076184
MAGT1	-0.07049	0.349765	0.462255
MAG	-0.06192	0.411578	0.523649
MAK16	-0.03557	0.637422	0.728999
MAK	-0.23265	0.001778	0.005641
MAL2	0.48266	8.94E-12	3.26E-10
MALAT1	0.095256	0.205945	0.305137
MALL	0.653453	4.76E-23	3.49E-20

MALT1	-0.12143	0.106384	0.179659
MAL	-0.00633	0.933156	0.954047
MAMDC2	-0.07471	0.321626	0.433403
MAMDC4	0.111181	0.13955	0.222969
MAML1	-0.23501	0.001591	0.00513
MAML2	0.030408	0.687003	0.770463
MAML3	-0.33374	5.30E-06	3.75E-05
MAMLD1	-0.29872	5.12E-05	0.000268
MAMSTR	0.16842	0.024624	0.052972
MAN1A1	-0.44596	4.42E-10	1.04E-08
MAN1A2	-0.24646	0.000912	0.003175
MAN1B1	0.0063	0.933482	0.954311
MAN1C1	-0.23331	0.001723	0.00549
MAN2A1	-0.16134	0.031435	0.065111
MAN2A2	-0.4851	6.78E-12	2.55E-10
MAN2B1	0.116612	0.12111	0.198675
MAN2B2	-0.04818	0.523059	0.628637
MAN2C1	0.129241	0.085548	0.150193
MANBAL	0.149999	0.045667	0.089134
MANBA	0.18262	0.014694	0.034276
MANEAL	-0.14863	0.047707	0.092386
MANEA	-0.33654	4.37E-06	3.16E-05
MANF	0.088849	0.238249	0.342404
MANSC1	0.149803	0.045955	0.089563
MAOA	-0.06287	0.404455	0.517081
MAOB	0.23448	0.001631	0.00524
MAP1A	-0.1978	0.008131	0.020728
MAP1B	-0.30309	3.91E-05	0.000212
MAP1D	-0.16065	0.032184	0.066438
MAP1LC3A	-0.04691	0.534071	0.637879
MAP1LC3B2	0.015766	0.834549	0.882716
MAP1LC3B	0.118405	0.115456	0.191577
MAP1LC3C	-0.11219	0.135957	0.218311
MAP1S	0.189341	0.011365	0.027554
MAP2K1	-0.01792	0.812333	0.867188
MAP2K2	0.100917	0.180133	0.27347
MAP2K3	0.193595	0.009619	0.023895
MAP2K4	-0.44816	3.54E-10	8.62E-09
MAP2K5	-0.22769	0.002238	0.006881
MAP2K6	-0.27694	0.000182	0.000799
MAP2K7	0.037572	0.618539	0.713011
MAP2	-0.36523	5.37E-07	5.06E-06
MAP3K10	-0.11613	0.122662	0.200705
MAP3K11	0.26905	0.000282	0.001163
MAP3K12	-0.22984	0.002027	0.006307
MAP3K13	0.145022	0.05343	0.101452
MAP3K14	-0.21985	0.003192	0.009311
MAP3K15	-0.30611	3.25E-05	0.000181
MAP3K1	0.0578	0.443465	0.555145
MAP3K2	-0.04673	0.535635	0.639207
MAP3K3	-0.28999	8.62E-05	0.000418
MAP3K4	-0.38513	1.11E-07	1.27E-06
MAP3K5	0.014264	0.850113	0.895036
MAP3K6	0.463993	6.89E-11	2.03E-09

MAP3K7	-0.2225	0.002835	0.00842
MAP3K8	0.110883	0.14062	0.224322
MAP3K9	-0.1061	0.15866	0.247133
MAP4K1	0.00542	0.942758	0.961528
MAP4K2	0.1089	0.147903	0.23356
MAP4K3	0.044204	0.557951	0.659161
MAP4K4	0.431724	1.78E-09	3.49E-08
MAP4K5	0.027435	0.716215	0.793554
MAP4	0.185951	0.01295	0.030774
MAP6D1	-0.29034	8.45E-05	0.000411
MAP6	-0.24535	0.000964	0.003326
MAP7D1	0.298051	5.33E-05	0.000277
MAP7D2	-0.42031	5.19E-09	8.96E-08
MAP7D3	-0.21307	0.004296	0.012017
MAP7	-0.13511	0.072158	0.13054
MAP9	-0.21475	0.003994	0.011311
MAPK10	-0.38001	1.68E-07	1.84E-06
MAPK11	-0.14435	0.054566	0.103312
MAPK12	-0.17587	0.018862	0.042273
MAPK13	0.106496	0.157113	0.245399
MAPK14	-0.02087	0.782145	0.845328
MAPK15	0.26474	0.000355	0.001422
MAPK1IP1I	-0.10548	0.161135	0.250297
MAPK1	-0.28167	0.00014	0.000636
MAPK3	0.369681	3.80E-07	3.76E-06
MAPK4	-0.32357	1.05E-05	6.81E-05
MAPK6	0.00221	0.976646	0.983961
MAPK7	0.110022	0.143748	0.228256
MAPK8IP1	-0.38774	8.93E-08	1.06E-06
MAPK8IP2	-0.27539	0.000199	0.000862
MAPK8IP3	0.084765	0.260603	0.367217
MAPK8	-0.25227	0.000681	0.00247
MAPK9	-0.30957	2.61E-05	0.000149
MAPKAP1	-0.10895	0.147734	0.233349
MAPKAPK2	0.083376	0.268528	0.376133
MAPKAPK3	0.262492	0.000401	0.001572
MAPKAPK5	-0.15968	0.033247	0.068332
MAPKBP1	-0.26723	0.000311	0.001266
MAPKSP1	-0.10624	0.158115	0.246535
MAPRE1	-0.21697	0.003625	0.010389
MAPRE2	-0.41424	9.03E-09	1.45E-07
MAPRE3	-0.18678	0.012548	0.029988
MAPT	-0.32138	1.22E-05	7.72E-05
10-Mar	-0.20997	0.004907	0.013484
11-Mar	-0.40656	1.79E-08	2.61E-07
1-Mar	-0.09223	0.220809	0.322663
2-Mar	0.145262	0.053032	0.100831
3-Mar	-0.09351	0.214425	0.315198
4-Mar	-0.29187	7.72E-05	0.000379
5-Mar	0.084165	0.264004	0.371269
6-Mar	-0.21935	0.003263	0.009487
7-Mar	0.083786	0.266168	0.373622
8-Mar	-0.4005	3.04E-08	4.10E-07
9-Mar	0.07367	0.328425	0.44035

MARCKSL1	0.355692	1.10E-06	9.47E-06
MARCKS	-0.07322	0.331379	0.443528
MARCO	0.373896	2.73E-07	2.82E-06
MARK1	-0.46823	4.38E-11	1.37E-09
MARK2	0.210209	0.004858	0.013371
MARK3	0.003	0.968295	0.978318
MARK4	0.102221	0.174543	0.266907
MARS2	-0.11924	0.112899	0.188251
MARS	-0.28866	9.32E-05	0.000447
MARVELD1	0.201027	0.007131	0.0185
MARVELD2	0.022597	0.764639	0.83223
MARVELD3	0.203054	0.00656	0.017278
MAS1L	-0.16262	0.0301	0.062831
MAS1	-0.14786	0.04888	0.094196
MASP1	0.130655	0.082153	0.145346
MASP2	-0.32203	1.17E-05	7.44E-05
MAST1	-0.25617	0.000558	0.002086
MAST2	0.179661	0.016411	0.037607
MAST3	-0.27294	0.000228	0.000967
MAST4	-0.22754	0.002254	0.006918
MASTL	0.119769	0.111297	0.186302
MAT1A	-0.08104	0.282214	0.390901
MAT2A	0.144628	0.05409	0.102567
MAT2B	0.183264	0.014341	0.033544
MATK	0.004062	0.957087	0.97058
MATN1	-0.05253	0.486201	0.595008
MATN2	-0.06114	0.417526	0.529905
MATN3	0.304848	3.51E-05	0.000193
MATN4	-0.04004	0.595658	0.692956
MATR3	-0.35304	1.34E-06	1.12E-05
MAVS	-0.43061	1.98E-09	3.82E-08
MAX	0.16256	0.03016	0.062943
MAZ	0.049561	0.511203	0.617428
MBD1	-0.35555	1.11E-06	9.54E-06
MBD2	0.207889	0.005361	0.014524
MBD3L1	-0.22218	0.002875	0.008529
MBD3	-0.02436	0.746893	0.817959
MBD4	0.026944	0.721081	0.797375
MBD5	-0.20834	0.005259	0.014296
MBD6	0.052731	0.484518	0.593499
MBIP	0.028841	0.70235	0.78279
MBL1P	-0.00844	0.911008	0.937657
MBL2	-0.04439	0.556269	0.65769
MBLAC1	-0.19246	0.010062	0.02483
MBLAC2	-0.33522	4.79E-06	3.43E-05
MBNL1	-0.08204	0.276291	0.38423
MBNL2	0.075152	0.318765	0.430491
MBNL3	-0.06385	0.397129	0.509858
MBOAT1	0.465701	5.74E-11	1.74E-09
MBOAT2	0.528696	3.31E-14	2.17E-12
MBOAT4	-0.15239	0.042287	0.083586
MBOAT7	0.181724	0.015196	0.035223
MBP	-0.44385	5.45E-10	1.26E-08
MBTD1	-0.14975	0.046026	0.089641

MBTPS1	-0.17971	0.016382	0.037558
MBTPS2	-0.31225	2.20E-05	0.000129
MB	0.158377	0.034732	0.070804
MC1R	0.110488	0.142049	0.226177
MC2R	0.01243	0.869197	0.909873
MC3R	-0.27189	0.000241	0.001016
MC4R	-0.10829	0.150198	0.236504
MC5R	0.034446	0.648055	0.737736
MCAM	-0.10419	0.166335	0.256801
MCART1	-0.47778	1.54E-11	5.25E-10
MCART2	-0.25617	0.000558	0.002086
MCART3P	-0.13519	0.07199	0.130288
MCART6	-0.29176	7.77E-05	0.000381
MCAT	0.046166	0.540594	0.643723
MCCC1	-0.1897	0.011209	0.027246
MCCC2	0.088109	0.242196	0.346695
MCCD1	-0.02715	0.719022	0.795542
MCC	-0.12696	0.091259	0.158197
MCEE	-0.1167	0.12084	0.198381
MCF2L2	-0.39825	3.68E-08	4.85E-07
MCF2L	-0.372	3.17E-07	3.21E-06
MCF2	-0.02263	0.764263	0.831959
MCFD2	-0.06388	0.396898	0.509627
MCHR1	0.021562	0.775122	0.840034
MCHR2	-0.08837	0.240799	0.345203
MCL1	0.116377	0.121867	0.199668
MCM10	0.319772	1.36E-05	8.45E-05
MCM2	0.191502	0.010446	0.02564
MCM3APAS	0.024606	0.744411	0.815864
MCM3AP	-0.20967	0.004971	0.013631
MCM3	0.071864	0.340459	0.452739
MCM4	0.167559	0.025378	0.054289
MCM5	0.17531	0.019252	0.042994
MCM6	0.176754	0.018266	0.041105
MCM7	0.157306	0.035993	0.072982
MCM8	-0.03589	0.634347	0.726028
MCM9	-0.08131	0.280623	0.389024
MCOLN1	-0.15939	0.03357	0.068838
MCOLN2	0.027453	0.716041	0.793532
MCOLN3	-0.37948	1.75E-07	1.91E-06
MCPH1	-0.06786	0.3681	0.481593
MCRS1	-0.02744	0.716198	0.793554
MCTP1	-0.10807	0.151044	0.237646
MCTP2	-0.12831	0.087846	0.153451
MCTS1	0.059704	0.428567	0.540564
MDC1	-0.46393	6.93E-11	2.04E-09
MDFIC	0.180655	0.015816	0.036437
MDFI	0.504856	6.67E-13	3.20E-11
MDGA1	-0.14323	0.056472	0.106229
MDGA2	0.006974	0.926384	0.948943
MDH1B	-0.29259	7.39E-05	0.000366
MDH1	0.056067	0.457279	0.5683
MDH2	-0.00821	0.913345	0.939516
MDK	0.378643	1.87E-07	2.03E-06

MDM1	-0.34246	2.88E-06	2.20E-05
MDM2	-0.23332	0.001723	0.005489
MDM4	0.044282	0.557254	0.658566
MDN1	-0.37784	2.00E-07	2.14E-06
MDP1	-0.06135	0.415896	0.528259
MDS2	-0.11557	0.124491	0.20326
ME1	-0.43291	1.59E-09	3.16E-08
ME2	-0.44184	6.65E-10	1.49E-08
ME3	0.109097	0.147166	0.232721
MEA1	0.090352	0.230371	0.333751
MEAF6	-0.25665	0.000544	0.002045
MECOM	0.385315	1.09E-07	1.26E-06
MECP2	-0.42521	3.29E-09	6.02E-08
MECR	0.370812	3.48E-07	3.48E-06
MED10	-0.07757	0.303412	0.413788
MED11	-0.08524	0.257952	0.364338
MED12L	-0.28733	0.000101	0.000478
MED12	-0.21316	0.004279	0.011978
MED13L	-0.3917	6.42E-08	7.90E-07
MED13	-0.2933	7.09E-05	0.000353
MED14	-0.15929	0.033684	0.069051
MED15	0.378721	1.86E-07	2.01E-06
MED16	0.006725	0.929012	0.950941
MED17	-0.00247	0.973876	0.982171
MED18	0.155688	0.037971	0.076297
MED19	0.271488	0.000247	0.001036
MED1	-0.11605	0.122915	0.201085
MED20	-0.24388	0.001036	0.003537
MED21	-0.06419	0.394618	0.507314
MED22	-0.29515	6.35E-05	0.000321
MED23	-0.43509	1.29E-09	2.62E-08
MED24	-0.07313	0.331975	0.444236
MED25	0.149834	0.045909	0.089492
MED26	0.037783	0.616575	0.711286
MED27	-0.1399	0.062533	0.115661
MED28	-0.14334	0.056287	0.105982
MED29	-0.0699	0.353852	0.466782
MED30	0.057405	0.446595	0.557817
MED31	-0.33526	4.77E-06	3.42E-05
MED4	0.240927	0.001197	0.004009
MED6	0.108185	0.150597	0.237075
MED7	0.248776	0.000812	0.002884
MED8	0.040588	0.590635	0.68843
MED9	-0.41131	1.18E-08	1.81E-07
MEF2A	-0.10899	0.14756	0.23318
MEF2B	0.171379	0.022177	0.048403
MEF2C	-0.09833	0.191634	0.287553
MEF2D	-0.10519	0.162289	0.251774
MEFV	-0.07013	0.352267	0.465038
MEG3	-0.09295	0.217184	0.318494
MEG8	-0.27464	0.000207	0.000893
MEGF10	0.053817	0.475557	0.585314
MEGF11	0.021142	0.779391	0.843181
MEGF6	0.467377	4.80E-11	1.48E-09

MEGF8	-0.33926	3.61E-06	2.67E-05
MEGF9	-0.42009	5.30E-09	9.10E-08
MEI1	0.006048	0.936144	0.956556
MEIG1	-0.13097	0.081406	0.144318
MEIS1	0.099057	0.188338	0.283489
MEIS2	-0.06229	0.408828	0.520921
MEIS3P1	0.006515	0.931219	0.952658
MEIS3	-0.01742	0.817456	0.870765
MELK	0.372115	3.15E-07	3.19E-06
MEMO1	0.283594	0.000125	0.000578
MEN1	0.169274	0.023896	0.05164
MEOX1	0.046264	0.539735	0.642934
MEOX2	-0.01291	0.864242	0.90591
MEP1A	-0.10632	0.157804	0.246186
MEP1B	-0.25113	0.000721	0.0026
MEPCE	-0.00809	0.914645	0.940471
MEPE	0.015074	0.841708	0.888272
MERTK	-0.26302	0.00039	0.001536
MESDC1	0.068238	0.365439	0.478682
MESDC2	-0.02316	0.758989	0.827988
MESP1	-0.16621	0.026602	0.056586
MESP2	0.059295	0.431744	0.543639
MESTIT1	-0.29392	6.83E-05	0.000342
MEST	-0.03098	0.681461	0.766159
METAP1	0.270536	0.00026	0.001085
METAP2	-0.35649	1.04E-06	8.98E-06
METRNL	0.453441	2.07E-10	5.34E-09
METRNL	0.048501	0.520287	0.6259
METT10D	-0.53949	7.85E-15	5.90E-13
METT11D1	0.196846	0.008449	0.021398
METT5D1	-0.0087	0.908215	0.935784
METTLL10	-0.06412	0.395136	0.507892
METTLL11A	0.158229	0.034903	0.071086
METTLL11B	0.242346	0.001117	0.003777
METTLL12	-0.01553	0.836971	0.88494
METTLL13	0.07669	0.308931	0.419302
METTLL14	-0.34572	2.28E-06	1.79E-05
METTLL1	0.129462	0.08501	0.149421
METTLL2A	0.037121	0.622764	0.716648
METTLL2B	-0.14568	0.052345	0.099755
METTLL3	-0.23611	0.001509	0.004895
METTLL4	-0.06366	0.39859	0.511202
METTLL5	0.331522	6.17E-06	4.28E-05
METTLL6	-0.00844	0.910989	0.937657
METTLL7A	-0.33552	4.69E-06	3.36E-05
METTLL7B	0.352225	1.42E-06	1.18E-05
METTLL8	0.102358	0.173964	0.266211
METTLL9	-0.0145	0.847671	0.892823
MET	0.502655	8.71E-13	4.03E-11
MEX3A	0.195697	0.008847	0.022219
MEX3B	-0.03881	0.607051	0.702923
MEX3C	-0.17747	0.017793	0.040237
MEX3D	0.344216	2.54E-06	1.96E-05
MFAP1	0.005735	0.939435	0.959131

MFAP2	0.371895	3.20E-07	3.24E-06
MFAP3L	-0.11831	0.115762	0.191973
MFAP3	-0.21168	0.004561	0.012661
MFAP4	-0.02605	0.729954	0.804487
MFAP5	0.266833	0.000318	0.001289
MFF	0.109875	0.144288	0.228967
MFGES	0.209575	0.004991	0.013674
MFHAS1	-0.08176	0.27792	0.386061
MFI2	0.448049	3.58E-10	8.68E-09
MFN1	0.07683	0.308049	0.418483
MFN2	-0.17335	0.020669	0.045653
MFNG	-0.00106	0.988823	0.991989
MFRP	0.210727	0.004752	0.013119
MFSD10	0.373404	2.84E-07	2.91E-06
MFSD11	0.028369	0.706996	0.786683
MFSD1	-0.14252	0.057721	0.108135
MFSD2A	0.360578	7.65E-07	6.90E-06
MFSD2B	0.488751	4.47E-12	1.74E-10
MFSD3	0.096609	0.199544	0.297296
MFSD4	0.191032	0.01064	0.026049
MFSD5	0.256845	0.000538	0.002027
MFSD6L	-0.02683	0.72223	0.798243
MFSD6	-0.10168	0.176851	0.269419
MFSD7	0.434089	1.42E-09	2.85E-08
MFSD8	-0.1825	0.014762	0.0344
MFSD9	0.1278	0.089126	0.15522
MGAM	-0.18136	0.015405	0.035636
MGAT1	-0.21072	0.004753	0.01312
MGAT2	0.027777	0.712838	0.79118
MGAT3	0.309939	2.55E-05	0.000146
MGAT4A	-0.41359	9.57E-09	1.52E-07
MGAT4B	0.532547	1.99E-14	1.38E-12
MGAT4C	-0.30615	3.24E-05	0.000181
MGAT5B	-0.19951	0.007586	0.019527
MGAT5	-0.15436	0.039658	0.079156
MGA	-0.28798	9.70E-05	0.000463
MGC12916	-0.10657	0.156826	0.245113
MGC12982	0.370952	3.45E-07	3.45E-06
MGC14436	-0.22188	0.002915	0.008629
MGC15885	-0.01908	0.800469	0.859591
MGC16025	-0.13966	0.062989	0.116308
MGC16121	0.05998	0.426431	0.538596
MGC16142	-0.23022	0.001991	0.006209
MGC16275	-0.26113	0.00043	0.001673
MGC16384	-0.08571	0.255298	0.361682
MGC16703	-0.35527	1.14E-06	9.71E-06
MGC21881	-0.27976	0.000156	0.000699
MGC23270	-0.26014	0.000453	0.001747
MGC23284	-0.21953	0.003237	0.009423
MGC27382	0.010414	0.890269	0.923663
MGC2752	-0.22674	0.002338	0.007135
MGC2889	-0.33857	3.79E-06	2.79E-05
MGC29506	0.072129	0.338675	0.450852
MGC34034	-0.00385	0.959352	0.972184

MGC3771	-0.23255	0.001786	0.00566
MGC42105	-0.39074	6.96E-08	8.48E-07
MGC4473	-0.0462	0.540301	0.643454
MGC45800	0.072441	0.336584	0.448854
MGC57346	0.039643	0.599316	0.696086
MGC70857	0.266471	0.000324	0.00131
MGC72080	0.070505	0.349688	0.462216
MGC87042	0.187869	0.012031	0.028946
MGEA5	0.030002	0.690968	0.77368
MGLL	0.465896	5.62E-11	1.71E-09
MGMT	0.38556	1.07E-07	1.23E-06
MGP	-0.00286	0.969766	0.979394
MGRN1	0.031164	0.679641	0.764418
MGST1	0.392345	6.08E-08	7.54E-07
MGST2	0.321255	1.23E-05	7.78E-05
MGST3	0.317189	1.60E-05	9.78E-05
MIA2	-0.06377	0.397759	0.510567
MIA3	-0.2942	6.72E-05	0.000337
MIAT	-0.00861	0.909187	0.936466
MIA	0.413274	9.85E-09	1.56E-07
MIB1	-0.17259	0.021235	0.046675
MIB2	0.078332	0.298661	0.408673
MICAL1	-0.02365	0.753969	0.82377
MICAL2	0.173915	0.02025	0.044888
MICAL3	-0.16908	0.024061	0.051913
MICALCL	0.284205	0.000121	0.000561
MICALL1	0.222395	0.002848	0.008458
MICALL2	0.43759	1.01E-09	2.14E-08
MICA	0.436079	1.17E-09	2.42E-08
MICB	0.19759	0.0082	0.020871
MID1IP1	0.118344	0.115644	0.191809
MID1	-0.22691	0.00232	0.00709
MID2	-0.35795	9.32E-07	8.15E-06
MIDN	0.345427	2.33E-06	1.82E-05
MIER1	0.031216	0.679141	0.763986
MIER2	0.218684	0.003361	0.009721
MIER3	-0.23708	0.001441	0.004705
MIF4GD	-0.08218	0.2755	0.383454
MIF	0.207891	0.00536	0.014524
MIIP	0.252573	0.000671	0.002436
MIMT1	-0.27645	0.000187	0.000818
MINA	0.022257	0.768082	0.83483
MINK1	-0.29725	5.60E-05	0.000288
MINPP1	-0.34499	2.41E-06	1.87E-05
MIOS	-0.27418	0.000213	0.00091
MIOX	0.313746	2.00E-05	0.000119
MIPEP	0.276618	0.000186	0.000812
MIPOL1	0.145111	0.053282	0.10121
MIP	-0.01117	0.88237	0.918267
MIR155HG	0.150815	0.044489	0.0872
MIR17HG	0.186633	0.012617	0.030123
MIS12	-0.48016	1.18E-11	4.15E-10
MITD1	0.428733	2.36E-09	4.48E-08
MITF	0.292177	7.58E-05	0.000373

MIXL1	-0.02809	0.70976	0.788605
MKI67IP	0.292295	7.53E-05	0.000371
MKI67	0.348269	1.90E-06	1.52E-05
MKKS	-0.35326	1.32E-06	1.10E-05
MKL1	0.248907	0.000807	0.002867
MKL2	-0.29597	6.04E-05	0.000308
MKLN1	-0.18452	0.013675	0.032246
MKNK1	-0.1817	0.015208	0.035234
MKNK2	0.158874	0.034159	0.069866
MKRN1	-0.13068	0.082091	0.145258
MKRN2	-0.11834	0.115661	0.191821
MKRN3	0.010991	0.884234	0.919625
MKS1	-0.19579	0.008815	0.022168
MKX	-0.02718	0.718752	0.795466
MLANA	-0.25801	0.000507	0.001923
MLC1	0.102099	0.175062	0.267393
MLEC	-0.48539	6.56E-12	2.49E-10
MLF1IP	0.299616	4.85E-05	0.000256
MLF1	-0.14458	0.054169	0.102668
MLF2	-0.09298	0.217047	0.318318
MLH1	-0.30614	3.24E-05	0.000181
MLH3	-0.03946	0.601031	0.697448
MLKL	0.505628	6.08E-13	2.95E-11
MLL2	-0.40274	2.50E-08	3.50E-07
MLL3	-0.35479	1.18E-06	9.99E-06
MLL4	-0.06566	0.383897	0.496805
MLL5	-0.1153	0.125372	0.204463
MLLT10	-0.2563	0.000554	0.002074
MLLT11	-0.00576	0.939218	0.959055
MLLT1	-0.01821	0.809328	0.865015
MLLT3	-0.01399	0.852925	0.897166
MLLT4	-0.21092	0.004713	0.01302
MLLT6	-0.04161	0.581334	0.680102
MLL	-0.1863	0.012781	0.030456
MLNR	-0.06558	0.38445	0.497261
MLN	-0.07291	0.333445	0.445629
MLPH	0.502981	8.37E-13	3.89E-11
MLST8	-0.02772	0.71342	0.791515
MLXIPL	-0.01981	0.793016	0.853367
MLXIP	-0.40735	1.67E-08	2.44E-07
MLX	0.297503	5.51E-05	0.000285
MLYCD	-0.29977	4.80E-05	0.000254
MMAA	0.118186	0.116137	0.192336
MMAB	-0.18617	0.012844	0.03058
MMACHC	-0.04328	0.566252	0.666651
MMADHC	0.188748	0.01163	0.028092
MMD2	-0.36237	6.67E-07	6.13E-06
MMD	0.067295	0.372118	0.485246
MMEL1	0.557536	6.29E-16	6.10E-14
MME	0.130534	0.082438	0.145768
MMGT1	-0.32819	7.74E-06	5.20E-05
MMP10	0.266764	0.000319	0.001294
MMP11	0.480702	1.11E-11	3.94E-10
MMP12	0.286702	0.000105	0.000494

MMP13	0.302617	4.03E-05	0.000218
MMP14	0.384341	1.18E-07	1.35E-06
MMP15	0.1795	0.016509	0.037792
MMP16	-0.21471	0.004002	0.011328
MMP17	0.153233	0.041147	0.081641
MMP19	0.067755	0.368852	0.482258
MMP1	0.351221	1.53E-06	1.26E-05
MMP20	-0.042	0.577732	0.676781
MMP21	-0.13412	0.074277	0.133657
MMP23A	0.020982	0.781019	0.844435
MMP23B	0.293627	6.95E-05	0.000347
MMP24	-0.24688	0.000893	0.003122
MMP25	-0.02293	0.761248	0.829636
MMP26	-0.27096	0.000254	0.001062
MMP27	-0.08088	0.283187	0.391974
MMP28	1	1.00E-31	1.00E-27
MMP2	0.190472	0.010875	0.02655
MMP3	0.058879	0.434986	0.546572
MMP7	0.482377	9.23E-12	3.34E-10
MMP8	0.234233	0.00165	0.005293
MMP9	0.312171	2.21E-05	0.000129
MMRN1	-0.30453	3.58E-05	0.000196
MMRN2	-0.20423	0.006249	0.016556
MMS19	0.132568	0.07773	0.138772
MN1	0.057402	0.446615	0.557817
MNAT1	0.144778	0.053837	0.102147
MND1	0.284004	0.000122	0.000566
MNDA	0.020664	0.784255	0.846932
MNS1	0.133347	0.075986	0.136186
MNT	-0.15242	0.042239	0.083499
MNX1	-0.02489	0.741541	0.81363
MOAP1	-0.37761	2.03E-07	2.17E-06
MOB2	0.175608	0.019045	0.042612
MOBKL1A	-0.41186	1.12E-08	1.74E-07
MOBKL1B	0.156384	0.037108	0.074841
MOBKL2A	-0.03499	0.642835	0.733568
MOBKL2B	0.111099	0.139842	0.223327
MOBKL2C	-0.07932	0.292576	0.402212
MOBKL3	0.068787	0.361583	0.474856
MOBP	-0.02271	0.76347	0.831553
MOCOS	0.414119	9.13E-09	1.46E-07
MOCS1	-0.20673	0.005628	0.015138
MOCS2	-0.33908	3.66E-06	2.70E-05
MOCS3	-0.25545	0.000579	0.002155
MOGAT1	0.169592	0.023629	0.051176
MOGAT2	0.277414	0.000178	0.000781
MOGAT3	0.315493	1.79E-05	0.000108
MOGS	0.051842	0.491927	0.600492
MOG	-0.13502	0.072351	0.130787
MON1A	0.025049	0.73997	0.812492
MON1B	0.063687	0.398358	0.511038
MON2	-0.40895	1.45E-08	2.16E-07
MORC1	-0.0505	0.503241	0.610383
MORC2	0.15541	0.03832	0.076847

MORC3	-0.01882	0.803052	0.861147
MORC4	0.036577	0.627878	0.720864
MORF4L1	-0.01388	0.854093	0.897865
MORF4L2	-0.17329	0.02071	0.045715
MORF4	-0.15377	0.040439	0.08047
MORN1	-0.21316	0.004279	0.011978
MORN2	-0.17852	0.017119	0.038931
MORN3	-0.18401	0.013941	0.032736
MORN4	-0.27149	0.000247	0.001036
MORN5	-0.20095	0.007153	0.018541
MOSC1	0.102145	0.174865	0.267257
MOSC2	0.149938	0.045757	0.089265
MOSPD1	-0.02246	0.766041	0.833335
MOSPD2	-0.17081	0.02263	0.049251
MOSPD3	0.377455	2.06E-07	2.20E-06
MOV10L1	0.0073	0.922955	0.946603
MOV10	0.219175	0.003289	0.009542
MOXD1	0.051114	0.498035	0.605481
MPDU1	-0.09665	0.199377	0.297074
MPDZ	-0.26736	0.000309	0.001259
MPEG1	-0.15367	0.040568	0.080672
MPG	0.362848	6.44E-07	5.94E-06
MPHOSPH1C	-0.00016	0.998329	0.99859
MPHOSPH6	0.181265	0.015459	0.035741
MPHOSPH8	-0.21414	0.004102	0.011575
MPHOSPH9	-0.41907	5.82E-09	9.90E-08
MPI	-0.08388	0.265641	0.373093
MPL	-0.22565	0.002458	0.007451
MPND	0.208838	0.005149	0.014043
MPO	0.02901	0.700684	0.781506
MPP1	-0.26242	0.000402	0.001577
MPP2	-0.31711	1.61E-05	9.82E-05
MPP3	0.334091	5.17E-06	3.67E-05
MPP4	-0.0722	0.338186	0.450375
MPP5	0.089611	0.234231	0.338276
MPP6	-0.24452	0.001004	0.003446
MPP7	-0.17842	0.017184	0.039058
MPPE1	0.149994	0.045675	0.089141
MPPED1	-0.25891	0.000484	0.001848
MPPED2	-0.28169	0.000139	0.000636
MPRIP	0.208914	0.005133	0.014007
MPST	0.339084	3.66E-06	2.70E-05
MPV17L2	0.076093	0.312723	0.423663
MPV17L	-0.13264	0.077577	0.138562
MPV17	0.272074	0.000239	0.001008
MPZL1	0.274832	0.000205	0.000885
MPZL2	0.553064	1.19E-15	1.08E-13
MPZL3	0.091594	0.223997	0.326192
MPZ	-0.22711	0.002299	0.007036
MR1	0.309378	2.64E-05	0.000151
MRAP2	-0.13635	0.069563	0.126557
MRAP	-0.30722	3.03E-05	0.00017
MRAS	0.018717	0.804149	0.861571
MRC1	-0.12629	0.092995	0.160643

MRC2	0.209744	0.004955	0.013595
MRE11A	0.039779	0.598064	0.694944
MREG	0.309884	2.56E-05	0.000147
MRFAP1L1	-0.18418	0.013854	0.032567
MRFAP1	-0.10862	0.148937	0.234986
MRGPRD	-0.10306	0.171028	0.262571
MRGPRE	-0.18159	0.015274	0.035366
MRGPRF	0.021666	0.774067	0.839097
MRGPRX2	-0.14738	0.049627	0.095422
MRGPRX3	0.102812	0.172052	0.263814
MRGPRX4	-0.10225	0.174435	0.266786
MRI1	0.236283	0.001497	0.004858
MRM1	0.120678	0.108587	0.182601
MRO	-0.30844	2.80E-05	0.000159
MRP63	0.11556	0.124525	0.203299
MRPL10	0.271857	0.000242	0.001017
MRPL11	0.332847	5.64E-06	3.95E-05
MRPL12	0.153124	0.041292	0.08188
MRPL13	0.201512	0.006991	0.018226
MRPL14	0.338588	3.79E-06	2.78E-05
MRPL15	0.197932	0.008087	0.020632
MRPL16	0.354083	1.24E-06	1.05E-05
MRPL17	0.18734	0.012279	0.02942
MRPL18	-0.0742	0.324974	0.437086
MRPL19	0.054725	0.46813	0.578188
MRPL1	0.009373	0.901175	0.931029
MRPL20	0.018539	0.805977	0.862553
MRPL21	0.266136	0.00033	0.00133
MRPL22	0.169852	0.023413	0.050747
MRPL23	0.201335	0.007042	0.018333
MRPL24	0.151005	0.044218	0.086734
MRPL27	0.113024	0.133064	0.21446
MRPL28	0.262026	0.000411	0.001606
MRPL2	0.082597	0.273039	0.381102
MRPL30	0.108441	0.149628	0.235944
MRPL32	0.125751	0.094416	0.16263
MRPL33	-0.12453	0.09769	0.167409
MRPL34	-0.01239	0.869593	0.91005
MRPL35	-0.07466	0.321921	0.433658
MRPL36	-0.03666	0.627103	0.720279
MRPL37	0.222571	0.002826	0.008397
MRPL38	0.020912	0.781731	0.84502
MRPL39	0.100212	0.183211	0.277143
MRPL3	0.157024	0.03633	0.073547
MRPL40	0.004321	0.954352	0.968782
MRPL41	0.141184	0.060137	0.111814
MRPL42P5	0.052581	0.485767	0.594624
MRPL42	-0.22429	0.002614	0.007854
MRPL43	0.055991	0.457888	0.568736
MRPL44	0.214313	0.004071	0.011499
MRPL45	-0.01037	0.890714	0.923847
MRPL46	0.104818	0.163792	0.253637
MRPL47	0.205759	0.005863	0.01567
MRPL48	0.23228	0.001809	0.005722

MRPL49	0.153713	0.040508	0.080576
MRPL4	0.199222	0.007676	0.019715
MRPL50	-0.03118	0.679478	0.764321
MRPL51	-0.04574	0.544375	0.647292
MRPL52	0.303866	3.73E-05	0.000203
MRPL53	0.136888	0.068449	0.124862
MRPL54	-0.06082	0.419943	0.532135
MRPL55	0.168281	0.024745	0.053174
MRPL9	0.201317	0.007047	0.01834
MRPS10	0.1817	0.01521	0.035234
MRPS11	-0.00761	0.919704	0.944279
MRPS12	0.272056	0.000239	0.001009
MRPS14	0.136798	0.068633	0.125141
MRPS15	0.113079	0.132876	0.214209
MRPS16	0.072551	0.335848	0.448023
MRPS17	0.164957	0.027779	0.058642
MRPS18A	0.169334	0.023844	0.051553
MRPS18B	-0.02193	0.771405	0.837291
MRPS18C	-0.00973	0.897452	0.928587
MRPS21	0.348545	1.86E-06	1.49E-05
MRPS22	0.245171	0.000972	0.003352
MRPS23	0.07437	0.323838	0.435855
MRPS24	0.058239	0.44	0.551809
MRPS25	0.15658	0.036869	0.074475
MRPS26	-0.12776	0.089237	0.155305
MRPS27	0.018726	0.80406	0.861571
MRPS28	-0.13479	0.072842	0.131482
MRPS2	-0.08708	0.247753	0.352985
MRPS30	0.244472	0.001006	0.003453
MRPS31	0.067496	0.370689	0.483892
MRPS33	-0.10429	0.165929	0.256294
MRPS34	0.211539	0.004589	0.012722
MRPS35	0.06858	0.363035	0.476295
MRPS36	0.18938	0.011348	0.02752
MRPS5	0.298128	5.30E-05	0.000276
MRPS6	0.395504	4.66E-08	6.00E-07
MRPS7	-0.06186	0.412035	0.524095
MRPS9	0.091296	0.225515	0.327917
MRRF	0.193965	0.009479	0.023593
MRS2P2	-0.0855	0.25647	0.362841
MRS2	-0.30546	3.38E-05	0.000187
MRT04	0.083179	0.269659	0.377397
MRV11	0.191865	0.010298	0.025306
MS4A10	-0.01927	0.798457	0.858164
MS4A12	0.061128	0.417618	0.52994
MS4A14	0.066662	0.37664	0.4894
MS4A15	-0.11584	0.123595	0.201964
MS4A1	-0.08286	0.271526	0.379418
MS4A2	-0.06744	0.37107	0.484198
MS4A3	-0.10835	0.149963	0.236265
MS4A4A	-0.05005	0.507063	0.61389
MS4A6A	-0.03349	0.657221	0.745862
MS4A6E	-0.05596	0.458171	0.568901
MS4A7	-0.11817	0.11618	0.192391

MS4A8B	-0.08684	0.249084	0.354602
MSC	0.132946	0.07688	0.137502
MSGN1	0.0928	0.217931	0.319355
MSH2	-0.02156	0.775173	0.840044
MSH3	-0.13924	0.063781	0.117572
MSH4	-0.06152	0.414638	0.526864
MSH5	0.225059	0.002525	0.007627
MSH6	-0.26994	0.000269	0.001115
MSI1	-0.4131	1.00E-08	1.58E-07
MSI2	-0.28854	9.39E-05	0.000449
MSL1	0.173814	0.020324	0.045019
MSL2	-0.28682	0.000104	0.000491
MSL3L2	0.375631	2.38E-07	2.50E-06
MSL3	-0.08935	0.235601	0.339586
MSLNL	0.413041	1.01E-08	1.58E-07
MSLN	0.661048	1.00E-23	8.26E-21
MSMB	0.12363	0.100151	0.170797
MSMP	-0.2342	0.001652	0.005298
MSN	0.259609	0.000466	0.001787
MSR1	0.058757	0.435942	0.547406
MSRA	0.224188	0.002627	0.00788
MSRB2	0.164084	0.028627	0.060174
MSRB3	0.040813	0.588574	0.686556
MST1P2	0.16121	0.031576	0.065353
MST1P9	0.171519	0.022067	0.048198
MST1R	0.625641	9.96E-21	3.58E-18
MST1	0.013673	0.856253	0.899726
MST4	0.316892	1.63E-05	9.94E-05
MSTN	-0.1106	0.141648	0.225629
MSTO1	-0.03207	0.670838	0.757817
MSTO2P	-0.00041	0.995622	0.996932
MSX1	0.065101	0.38794	0.500596
MSX2P1	-0.19966	0.007541	0.019429
MSX2	0.458702	1.20E-10	3.30E-09
MT1A	-0.10098	0.179845	0.273137
MT1B	-0.09942	0.186733	0.281501
MT1DP	-0.08651	0.250879	0.356641
MT1E	-0.00494	0.947823	0.964718
MT1F	-0.17274	0.021123	0.046492
MT1G	-0.00542	0.942741	0.961528
MT1H	-0.01005	0.894051	0.926182
MT1IP	0.007607	0.919724	0.944279
MT1L	-0.04577	0.544111	0.647056
MT1M	-0.05296	0.482647	0.591867
MT1X	-0.0449	0.551728	0.653873
MT2A	-0.0111	0.883051	0.918734
MT3	-0.28291	0.00013	0.000598
MTA1	-0.04937	0.512853	0.619043
MTA2	0.347829	1.96E-06	1.56E-05
MTA3	0.021252	0.77827	0.842612
MTAP	0.073879	0.327055	0.439079
MTBP	0.009639	0.898387	0.929165
MTCH1	-0.18998	0.011087	0.026986
MTCH2	0.064622	0.391452	0.504174

MTCP1NB	-0.18614	0.012859	0.030607
MTCP1	0.06358	0.399153	0.511725
MTDH	0.011614	0.877715	0.915156
MTERFD1	0.072943	0.333235	0.4455
MTERFD2	-0.22551	0.002474	0.007489
MTERFD3	-0.34825	1.90E-06	1.52E-05
MTERF	-0.02118	0.778962	0.842902
MTF1	-0.40782	1.60E-08	2.36E-07
MTF2	0.016134	0.830744	0.880056
MTFMT	0.077255	0.305371	0.41561
MTFR1	-0.01621	0.82997	0.879641
MTG1	0.048944	0.516475	0.622617
MTHFD1L	0.233759	0.001687	0.005393
MTHFD1	0.327888	7.90E-06	5.28E-05
MTHFD2L	-0.23961	0.001276	0.004242
MTHFD2	-0.03803	0.614227	0.709405
MTHFR	-0.29324	7.11E-05	0.000354
MTHFSD	0.178571	0.017086	0.038875
MTHFS	0.163319	0.029388	0.061566
MTIF2	0.105145	0.162473	0.25198
MTIF3	0.163412	0.029294	0.061388
MTL5	0.235492	0.001554	0.005024
MTM1	-0.1497	0.046109	0.089784
MTMR10	-0.11313	0.132693	0.214036
MTMR11	0.434342	1.38E-09	2.80E-08
MTMR12	-0.46907	4.00E-11	1.26E-09
MTMR14	0.364607	5.63E-07	5.29E-06
MTMR15	-0.34942	1.75E-06	1.41E-05
MTMR1	-0.07922	0.293224	0.402948
MTMR2	0.135674	0.070961	0.128721
MTMR3	-0.38298	1.32E-07	1.49E-06
MTMR4	-0.29705	5.66E-05	0.000291
MTMR6	-0.21989	0.003186	0.009297
MTMR7	-0.37881	1.85E-07	2.00E-06
MTMR8	0.081457	0.279737	0.388155
MTMR9L	0.056748	0.451822	0.562686
MTMR9	-0.15226	0.042462	0.083896
MTNR1A	-0.18376	0.014075	0.032999
MTNR1B	-0.35048	1.62E-06	1.32E-05
MT01	-0.35557	1.11E-06	9.53E-06
MTOR	-0.1756	0.019051	0.04262
MTP18	0.374713	2.56E-07	2.67E-06
MTPAP	0.022014	0.770539	0.836744
MTRF1L	-0.33399	5.21E-06	3.69E-05
MTRF1	0.225282	0.002499	0.007557
MTRR	-0.40912	1.43E-08	2.14E-07
MTR	-0.03053	0.685828	0.769844
MTSS1L	-0.13882	0.064611	0.118836
MTSS1	-0.25457	0.000605	0.002234
MTTP	-0.08058	0.284988	0.39397
MTUS1	-0.04697	0.533525	0.637509
MTUS2	-0.34457	2.48E-06	1.92E-05
MTVR2	0.11241	0.135201	0.217461
MTX1	0.287461	1.00E-04	0.000475

MTX2	0.238713	0.001332	0.004396
MTX3	-0.15568	0.037984	0.076308
MUC12	0.158682	0.03438	0.070253
MUC13	0.160626	0.032205	0.066468
MUC15	0.052662	0.485093	0.594057
MUC16	0.383125	1.30E-07	1.47E-06
MUC17	0.447646	3.73E-10	8.99E-09
MUC1	0.572952	6.43E-17	8.48E-15
MUC20	0.493365	2.62E-12	1.11E-10
MUC21	0.417701	6.59E-09	1.10E-07
MUC2	0.032717	0.664618	0.752529
MUC4	0.453733	2.01E-10	5.21E-09
MUC5B	0.350802	1.58E-06	1.29E-05
MUC6	0.150597	0.044802	0.087731
MUC7	-0.07287	0.333721	0.445933
MUCL1	-0.13094	0.081486	0.144447
MUDENG	-0.23986	0.001261	0.004197
MUL1	0.06877	0.361702	0.474889
MUM1L1	0.096458	0.200251	0.298131
MUM1	-0.11337	0.131862	0.213008
MURC	0.114246	0.128897	0.209073
MUS81	0.324251	1.01E-05	6.54E-05
MUSK	-0.18983	0.011153	0.027117
MUSTN1	-0.00032	0.996577	0.997536
MUTED	-0.09302	0.216852	0.318144
MUTYH	0.199063	0.007726	0.019821
MUT	-0.30924	2.67E-05	0.000152
MVD	0.380994	1.55E-07	1.72E-06
MVK	0.012864	0.86468	0.906056
MVP	0.588677	5.54E-18	9.69E-16
MX1	0.371718	3.24E-07	3.27E-06
MX2	0.358801	8.74E-07	7.72E-06
MXD1	0.365325	5.33E-07	5.03E-06
MXD3	0.352907	1.35E-06	1.13E-05
MXD4	-0.39971	3.25E-08	4.35E-07
MXI1	0.055757	0.459773	0.57029
MXRA5	0.39086	6.89E-08	8.41E-07
MXRA7	-0.32699	8.39E-06	5.56E-05
MXRA8	0.326751	8.53E-06	5.64E-05
MYADML2	-0.13503	0.072331	0.130773
MYADML	0.10746	0.153367	0.24067
MYADM	0.037468	0.61951	0.713881
MYBBP1A	-0.28744	0.0001	0.000476
MYBL1	-0.02494	0.741063	0.813244
MYBL2	0.341702	3.04E-06	2.30E-05
MYBPC1	0.10544	0.161293	0.250464
MYBPC2	-0.02912	0.699566	0.780521
MYBPC3	0.179046	0.016789	0.038304
MYBPHL	-0.07164	0.341961	0.45437
MYBPH	0.004921	0.948021	0.964855
MYB	0.153611	0.040642	0.08077
MYCBP2	-0.29554	6.20E-05	0.000315
MYCBPAP	-0.13779	0.066622	0.122048
MYCBP	0.149974	0.045703	0.08917

MYCL1	0.013365	0.859456	0.902063
MYCNOS	-0.11269	0.134222	0.216062
MYCN	-0.11614	0.12264	0.200686
MYCT1	-0.23008	0.002004	0.006243
MYC	0.080041	0.288206	0.397477
MYD88	0.525587	4.97E-14	3.19E-12
MYEF2	-0.27899	0.000162	0.000724
MYEOV2	0.119281	0.112772	0.188086
MYEOV	0.57283	6.55E-17	8.58E-15
MYF5	-0.0464	0.538572	0.641771
MYF6	-0.1389	0.064449	0.118571
MYH10	-0.36299	6.37E-07	5.88E-06
MYH11	0.119914	0.110861	0.185682
MYH13	0.106552	0.156893	0.245113
MYH14	0.550206	1.79E-15	1.53E-13
MYH15	0.173913	0.020251	0.044888
MYH16	0.408865	1.46E-08	2.17E-07
MYH1	-0.19904	0.007733	0.019835
MYH2	-0.05165	0.493517	0.601802
MYH3	-0.13069	0.082073	0.145253
MYH4	-0.05134	0.496103	0.603696
MYH6	-0.32105	1.25E-05	7.87E-05
MYH7B	-0.08663	0.250229	0.355795
MYH7	-0.27003	0.000267	0.00111
MYH8	-0.07337	0.330432	0.442591
MYH9	0.12742	0.090087	0.156481
MYL10	0.257752	0.000514	0.001945
MYL12A	0.489324	4.18E-12	1.65E-10
MYL12B	0.544747	3.82E-15	3.06E-13
MYL1	0.075092	0.319153	0.430868
MYL2	0.240013	0.001251	0.004171
MYL3	-0.03722	0.621831	0.715846
MYL4	0.161239	0.031544	0.065295
MYL5	0.158084	0.035073	0.071402
MYL6B	-0.14705	0.050149	0.09622
MYL6	0.246195	0.000924	0.003208
MYL7	-0.23984	0.001262	0.004199
MYL9	0.227402	0.002268	0.006958
MYLIP	-0.44923	3.18E-10	7.88E-09
MYLK2	-0.04427	0.557371	0.658627
MYLK3	-0.02462	0.744275	0.815769
MYLK4	-0.18897	0.011528	0.027878
MYLK	0.040136	0.594777	0.692116
MYLPF	-0.01169	0.876924	0.914813
MYNN	-0.03781	0.61636	0.711121
MYO10	-0.23136	0.001888	0.005937
MYO15A	0.057316	0.447301	0.558462
MYO15B	0.180071	0.016163	0.037142
MYO16	-0.26631	0.000327	0.001319
MYO18A	-0.01839	0.807465	0.863634
MYO18B	-0.14842	0.048027	0.092879
MYO19	0.428671	2.38E-09	4.50E-08
MYO1A	0.184885	0.013487	0.031871
MYO1B	-0.43113	1.88E-09	3.66E-08

MY01C	0.268534	0.00029	0.001193
MY01D	0.199507	0.007587	0.019528
MY01E	0.393785	5.39E-08	6.79E-07
MY01F	0.058237	0.440018	0.551809
MY01G	0.119784	0.111251	0.18624
MY01H	-0.03188	0.672701	0.759116
MY03A	-0.12319	0.10137	0.172565
MY03B	-0.1101	0.143448	0.227858
MY05A	-0.25378	0.00063	0.00231
MY05B	0.241324	0.001174	0.003943
MY05C	0.285166	0.000114	0.000534
MY06	0.108946	0.14773	0.233349
MY07A	0.147173	0.049951	0.095896
MY07B	0.241114	0.001186	0.00398
MY09A	-0.18374	0.014088	0.033022
MY09B	0.174393	0.019903	0.044266
MYOCD	-0.10447	0.165186	0.255345
MYOC	-0.19941	0.007619	0.019594
MYOD1	0.046206	0.540239	0.643419
MYOF	0.42249	4.24E-09	7.53E-08
MYOG	0.161678	0.031079	0.064513
MYOM1	0.139928	0.062478	0.11558
MYOM2	-0.08662	0.250296	0.355863
MYOM3	0.375248	2.46E-07	2.57E-06
MYOT	-0.07495	0.320079	0.431882
MYOZ1	0.000797	0.991579	0.993791
MYOZ2	-0.12115	0.107207	0.180771
MYOZ3	0.171258	0.022273	0.048601
MYPN	0.135816	0.070663	0.128275
MYPOP	0.164336	0.02838	0.059732
MYRIP	-0.40562	1.94E-08	2.79E-07
MYSM1	-0.10838	0.14987	0.236194
MYST1	-0.01256	0.867801	0.908738
MYST2	-0.32663	8.60E-06	5.68E-05
MYST3	-0.20618	0.00576	0.015446
MYST4	-0.36024	7.85E-07	7.05E-06
MYT1L	-0.20145	0.007007	0.018265
MYT1	-0.35684	1.01E-06	8.77E-06
MZF1	0.003412	0.963952	0.975596
N4BP1	0.124175	0.098652	0.168677
N4BP2L1	0.027286	0.717695	0.794964
N4BP2L2	0.049491	0.511793	0.617952
N4BP2	-0.42875	2.36E-09	4.48E-08
N4BP3	0.246313	0.000919	0.003192
N6AMT1	-0.01596	0.832521	0.881138
N6AMT2	-0.18201	0.015034	0.034913
NAA10	0.100276	0.182932	0.276826
NAA11	0.00161	0.982986	0.988133
NAA15	-0.05411	0.473153	0.582936
NAA16	-0.17324	0.020749	0.045785
NAA20	-0.25479	0.000599	0.002213
NAA25	-0.25128	0.000716	0.002584
NAA30	-0.35035	1.63E-06	1.33E-05
NAA35	-0.10674	0.15617	0.244293

NAA38	0.297937	5.37E-05	0.000279
NAA40	-0.10681	0.155889	0.243949
NAA50	0.174254	0.020004	0.044424
NAAA	-0.14902	0.047113	0.091432
NAALAD2	-0.10201	0.175437	0.267825
NAALADL1	0.197356	0.008278	0.021024
NAALADL2	0.260407	0.000447	0.001728
NAB1	0.3117	2.28E-05	0.000132
NAB2	0.036293	0.630548	0.722935
NACA2	0.109592	0.145328	0.230303
NACAD	-0.1603	0.032565	0.067078
NACAP1	0.139917	0.062498	0.115607
NACA	0.121294	0.106784	0.180228
NACC1	0.280742	0.000147	0.000665
NACC2	-0.14321	0.056513	0.106297
NADK	0.105475	0.16115	0.2503
NADSYN1	0.421231	4.77E-09	8.31E-08
NAE1	-0.09675	0.198878	0.296466
NAF1	-0.28203	0.000137	0.000626
NAGA	0.109082	0.147224	0.232733
NAGK	0.0103	0.891459	0.924369
NAGLU	-0.09515	0.206442	0.305667
NAGPA	0.019057	0.800664	0.859752
NAGS	0.548309	2.33E-15	1.93E-13
NAIF1	0.097293	0.196365	0.293317
NAIP	-0.21858	0.003377	0.009763
NALCN	-0.1661	0.026704	0.056754
NAMPT	0.098639	0.190218	0.285797
NANOG	0.063847	0.397166	0.509873
NANOS1	-0.34491	2.42E-06	1.88E-05
NANOS2	-0.03384	0.653884	0.742969
NANOS3	0.133499	0.075648	0.135741
NANP	-0.24712	0.000882	0.00309
NANS	0.271835	0.000242	0.001018
NAP1L1	-0.2441	0.001025	0.003505
NAP1L2	-0.39372	5.42E-08	6.83E-07
NAP1L3	-0.28419	0.000121	0.000561
NAP1L4	0.240785	0.001205	0.004033
NAP1L5	-0.41711	6.96E-09	1.16E-07
NAP1L6	-0.24868	0.000816	0.002895
NAPA	-0.07277	0.334392	0.446593
NAPB	-0.36068	7.59E-07	6.86E-06
NAPEPLD	0.148542	0.047835	0.092589
NAPG	0.155474	0.038239	0.076723
NAPRT1	0.506213	5.66E-13	2.78E-11
NAPSA	-0.02344	0.756099	0.825358
NAPSB	0.148025	0.048626	0.09378
NARFL	0.20486	0.006087	0.016171
NARF	0.070837	0.347418	0.459891
NARG2	-0.32206	1.17E-05	7.43E-05
NARS2	-0.29022	8.51E-05	0.000413
NARS	-0.38888	8.12E-08	9.75E-07
NASP	0.213596	0.0042	0.011799
NAT10	0.17952	0.016497	0.03777

NAT14	-0.05242	0.487112	0.595939
NAT15	-0.00866	0.908711	0.936122
NAT1	0.224574	0.002581	0.007768
NAT2	0.197021	0.00839	0.021273
NAT6	0.186609	0.012628	0.030144
NAT8B	0.033376	0.658292	0.746819
NAT8L	-0.29518	6.34E-05	0.00032
NAT8	-0.11711	0.119516	0.196779
NAT9	0.058866	0.43509	0.546599
NAV1	0.021041	0.780419	0.843877
NAV2	0.049348	0.513016	0.619202
NAV3	-0.01075	0.88678	0.92116
NBAS	-0.24764	0.00086	0.003021
NBEAL1	-0.03959	0.599834	0.696484
NBEAL2	0.302023	4.18E-05	0.000225
NBEA	-0.38409	1.20E-07	1.37E-06
NBL1	0.370721	3.51E-07	3.50E-06
NBLA00301	0.066707	0.376317	0.489173
NBN	-0.16885	0.024251	0.052266
NBPF10	0.008644	0.908833	0.936198
NBPF14	-0.07752	0.303715	0.414127
NBPF15	0.226706	0.002342	0.007146
NBPF16	0.058215	0.440195	0.551995
NBPF1	-0.33328	5.47E-06	3.85E-05
NBPF22P	0.124467	0.097854	0.167646
NBPF3	-0.31398	1.97E-05	0.000117
NBPF4	0.030037	0.690627	0.773649
NBPF6	0.021854	0.772156	0.837692
NBPF7	-0.13403	0.074488	0.133927
NBPF9	-0.10545	0.161252	0.250435
NBR1	-0.00506	0.946562	0.963933
NBR2	0.156719	0.036699	0.074171
NCALD	-0.48639	5.85E-12	2.25E-10
NCAM1	-0.38733	9.23E-08	1.09E-06
NCAM2	-0.11659	0.121186	0.198783
NCAN	-0.1774	0.017839	0.040327
NCAPD2	-0.11487	0.126793	0.206273
NCAPD3	-0.07076	0.34795	0.460379
NCAPG2	0.061231	0.416833	0.529279
NCAPG	0.356045	1.07E-06	9.25E-06
NCAPH2	0.10453	0.164959	0.255174
NCAPH	0.327799	7.95E-06	5.30E-05
NCBP1	-0.23917	0.001304	0.004315
NCBP2	0.098986	0.188658	0.283924
NCCRP1	0.132922	0.076932	0.137584
NCDN	-0.32249	1.13E-05	7.25E-05
NCEH1	0.231893	0.001842	0.005811
NCF1B	0.025726	0.733201	0.807077
NCF1C	0.01597	0.832441	0.881138
NCF1	0.066344	0.378931	0.491569
NCF2	0.279966	0.000154	0.000692
NCF4	0.13524	0.071878	0.130122
NCK1	0.289702	8.77E-05	0.000424
NCK2	0.173321	0.020688	0.045676

NCKAP1L	-0.00506	0.946579	0.963933
NCKAP1	0.033454	0.657536	0.746091
NCKAP5L	-0.04676	0.535347	0.639005
NCKAP5	-0.14343	0.05614	0.105786
NCKIPSD	0.038041	0.614167	0.709405
NCLN	0.144732	0.053915	0.102266
NCL	0.097451	0.195635	0.29247
NCOA1	-0.36111	7.35E-07	6.67E-06
NCOA2	-0.1649	0.027836	0.058756
NCOA3	-0.12672	0.091892	0.159112
NCOA4	-0.10525	0.162068	0.251508
NCOA5	-0.49529	2.09E-12	9.00E-11
NCOA6	-0.18108	0.015568	0.035934
NCOA7	-0.10502	0.162966	0.252586
NCOR1	-0.28635	0.000107	0.000502
NCOR2	-0.01031	0.891367	0.924369
NCR1	-0.21343	0.00423	0.011865
NCR2	0.015703	0.835199	0.883308
NCR3	-0.05836	0.439027	0.550776
NCRNA0002	-0.19106	0.010628	0.026022
NCRNA0002	0.010085	0.89371	0.925926
NCRNA0003	0.047517	0.528799	0.633534
NCRNA0005	0.017086	0.820919	0.873256
NCRNA0005	-0.02889	0.701865	0.782382
NCRNA0008	-0.325	9.59E-06	6.26E-05
NCRNA0008	0.133631	0.075356	0.135328
NCRNA0008	-0.31505	1.84E-05	0.00011
NCRNA0008	-0.09005	0.231938	0.335504
NCRNA0009	-0.07745	0.304121	0.414509
NCRNA0009	0.378079	1.96E-07	2.11E-06
NCRNA0009	-0.32076	1.27E-05	7.99E-05
NCRNA0009	0.043853	0.561084	0.662064
NCRNA0010	0.155185	0.038604	0.077333
NCRNA0010	0.041088	0.586059	0.684589
NCRNA0011	-0.02883	0.702424	0.782829
NCRNA0011	0.168003	0.024987	0.053618
NCRNA0011	-0.00219	0.976887	0.984084
NCRNA0011	0.192897	0.009888	0.02446
NCRNA0011	-0.20099	0.007141	0.018519
NCRNA0011	0.158363	0.034748	0.070829
NCRNA0011	0.239932	0.001256	0.004186
NCRNA0011	-0.05414	0.472917	0.582755
NCRNA0012	-0.02267	0.763915	0.831809
NCRNA0015	0.409079	1.43E-08	2.14E-07
NCRNA0015	-0.32101	1.25E-05	7.88E-05
NCRNA0015	0.015463	0.837683	0.88551
NCRNA0016	0.179083	0.016766	0.038274
NCRNA0016	-0.06393	0.396521	0.509275
NCRNA0016	0.139797	0.062726	0.115909
NCRNA0016	-0.06425	0.394213	0.506969
NCRNA0016	-0.25794	0.000509	0.001929
NCRNA0016	0.248652	0.000818	0.002898
NCRNA0017	-0.29101	8.12E-05	0.000397
NCRNA0017	-0.14514	0.053238	0.101166

NCRNA0017	0.048816	0.517576	0.623412
NCRNA0017	-0.08303	0.270503	0.378266
NCRNA0017	0.02125	0.778291	0.842612
NCRNA001E	-0.21899	0.003315	0.00961
NCRNA001E	-0.11243	0.135136	0.217392
NCRNA001E	0.030007	0.690913	0.77368
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NCRNA002C	0.000157	0.998337	0.99859
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NCRNA002C	-0.10514	0.162511	0.25202
NCRNA002C	0.146467	0.051071	0.097724
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NCRNA002I	0.008244	0.913028	0.939296
NCRNA002E	-0.01359	0.857167	0.900474
NCRNA002E	-0.19933	0.007642	0.019644
NCS1	-0.18188	0.015105	0.03506
NCSTN	-0.07796	0.300989	0.411146
NDC80	0.326096	8.91E-06	5.87E-05
NDE1	0.3482	1.91E-06	1.52E-05
NDEL1	-0.19639	0.008605	0.021718
NDFIP1	-0.22799	0.002208	0.006794
NDFIP2	0.259722	0.000464	0.001778
NDNL2	-0.25513	0.000588	0.002184
NDN	-0.09165	0.223694	0.325892
NDOR1	0.272042	0.000239	0.001009
NDP	0.269104	0.000281	0.00116
NDRG1	-0.03623	0.63118	0.723449
NDRG2	0.013156	0.861636	0.90392
NDRG3	-0.2564	0.000551	0.002065
NDRG4	-0.20433	0.006223	0.016494
NDST1	-0.45799	1.29E-10	3.55E-09
NDST2	-0.3778	2.00E-07	2.15E-06
NDST3	-0.11026	0.142863	0.22718
NDST4	-0.2517	0.000701	0.002535
NDUFA10	0.17509	0.019407	0.043274
NDUFA11	0.11092	0.140487	0.224176
NDUFA12	0.122887	0.102223	0.173779
NDUFA13	0.091588	0.224027	0.326208
NDUFA1	0.025598	0.734482	0.808126
NDUFA2	0.082501	0.273598	0.381694
NDUFA3	0.027589	0.714697	0.792416
NDUFA4L2	0.017278	0.818939	0.871707
NDUFA4	0.283401	0.000126	0.000583
NDUFA5	-0.29872	5.12E-05	0.000268
NDUFA6	0.016868	0.82316	0.874751
NDUFA7	0.078909	0.295104	0.40497
NDUFA8	-0.05047	0.503437	0.610547
NDUFA9	-0.10175	0.176536	0.269054
NDUFAB1	0.111862	0.137126	0.219841
NDUFAB1	0.054152	0.472813	0.582663
NDUFAB2	-0.00081	0.991421	0.993683

NDUFAF3	0.135017	0.072352	0.130787
NDUFAF4	-0.19069	0.010784	0.026353
NDUFB10	0.157225	0.036089	0.073133
NDUFB11	0.012892	0.864382	0.905973
NDUFB1	0.017807	0.81349	0.867869
NDUFB2	-0.04405	0.559298	0.660312
NDUFB3	0.291487	7.89E-05	0.000387
NDUFB4	0.23899	0.001315	0.004345
NDUFB5	0.12774	0.089278	0.155349
NDUFB6	-0.07806	0.300316	0.410482
NDUFB7	0.173256	0.020736	0.045768
NDUFB8	0.000337	0.996441	0.997472
NDUFB9	0.111372	0.138865	0.22208
NDUFC1	0.014704	0.845544	0.891092
NDUFC2	0.165131	0.027613	0.058354
NDUFS1	0.016279	0.829243	0.879267
NDUFS2	0.192111	0.010199	0.02511
NDUFS3	0.204305	0.006229	0.016509
NDUFS4	0.091663	0.223648	0.325849
NDUFS5	0.121267	0.106862	0.180313
NDUFS6	0.049607	0.510804	0.617134
NDUFS7	0.060813	0.420025	0.532135
NDUFS8	0.212597	0.004385	0.012221
NDUFV1	0.161468	0.031301	0.064894
NDUFV2	0.149062	0.047052	0.091342
NDUFV3	-0.06208	0.41037	0.522413
NEAT1	0.373836	2.75E-07	2.82E-06
NEBL	0.005423	0.942726	0.961528
NEB	-0.06667	0.376559	0.489366
NECAB1	-0.07952	0.291382	0.401015
NECAB2	-0.16203	0.030706	0.063921
NECAB3	-0.12776	0.089216	0.155303
NECAP1	-0.36662	4.82E-07	4.60E-06
NECAP2	0.3269	8.44E-06	5.59E-05
NEDD1	-0.16636	0.026462	0.056313
NEDD4L	-0.1425	0.057765	0.108198
NEDD4	0.009451	0.900362	0.930486
NEDD8	0.218243	0.003427	0.009893
NEDD9	-0.13347	0.075712	0.135831
NEFH	-0.04468	0.553703	0.655506
NEFL	-0.26458	0.000358	0.001432
NEFM	-0.22133	0.002987	0.008821
NEGR1	-0.25418	0.000618	0.002271
NEIL1	0.162304	0.030424	0.063421
NEIL2	-0.13326	0.076185	0.136506
NEIL3	0.195773	0.008821	0.022177
NEK10	-0.27552	0.000197	0.000857
NEK11	-0.0115	0.8789	0.916054
NEK1	-0.32381	1.04E-05	6.72E-05
NEK2	0.374528	2.60E-07	2.70E-06
NEK3	0.192056	0.010221	0.025155
NEK4	-0.3053	3.41E-05	0.000189
NEK5	-0.12349	0.100528	0.171312
NEK6	0.229899	0.002021	0.006291

NEK7	0.248425	0.000827	0.002923
NEK8	0.063418	0.400355	0.512934
NEK9	-0.34246	2.88E-06	2.20E-05
NELF	0.110623	0.14156	0.225557
NELL1	-0.18693	0.012475	0.029838
NELL2	-0.15139	0.043681	0.085902
NENF	-0.08976	0.233429	0.337327
NEO1	-0.20116	0.007093	0.018425
NES	-0.10898	0.14762	0.233243
NET1	0.495226	2.11E-12	9.05E-11
NETO1	0.030602	0.685115	0.769349
NETO2	-0.29209	7.62E-05	0.000375
NEU1	-0.27169	0.000244	0.001025
NEU2	0.17735	0.017871	0.040387
NEU3	-0.23933	0.001294	0.004291
NEU4	-0.09105	0.226785	0.329386
NEURL1B	-0.18247	0.014779	0.034426
NEURL2	-0.11377	0.130518	0.211165
NEURL3	0.17084	0.022606	0.049215
NEURL4	-0.42316	3.99E-09	7.14E-08
NEURL	-0.35357	1.29E-06	1.08E-05
NEUROD1	-0.17934	0.016606	0.037982
NEUROD2	-0.09012	0.231552	0.335092
NEUROD4	-0.29717	5.62E-05	0.000289
NEUROG2	-0.0629	0.404236	0.516835
NEUROG3	-0.0416	0.581393	0.680103
NEXN	-0.05276	0.484278	0.593278
NF1P1	-0.04057	0.590815	0.688518
NF1	-0.10752	0.153148	0.240432
NF2	-0.3544	1.21E-06	1.03E-05
NFAM1	-0.05122	0.49718	0.604702
NFASC	-0.44879	3.33E-10	8.18E-09
NFAT5	0.011452	0.879406	0.916291
NFATC1	-0.19641	0.008598	0.021701
NFATC2IP	0.275739	0.000195	0.000847
NFATC2	-0.33801	3.94E-06	2.88E-05
NFATC3	-0.1285	0.087366	0.152789
NFATC4	0.130027	0.083646	0.147443
NFE2L1	-0.24208	0.001132	0.003824
NFE2L2	0.158314	0.034805	0.070909
NFE2L3	0.394073	5.26E-08	6.65E-07
NFE2	0.219649	0.00322	0.009383
NFIA	0.001292	0.986347	0.990354
NFIB	-0.01457	0.846934	0.892379
NFIC	-0.23922	0.0013	0.004307
NFIL3	-0.08969	0.233828	0.337794
NFIX	0.008925	0.905883	0.934376
NFKB1	-0.05652	0.453615	0.564492
NFKB2	0.375064	2.49E-07	2.60E-06
NFKBIA	0.022653	0.764073	0.831919
NFKBIB	0.348602	1.86E-06	1.49E-05
NFKBID	0.083589	0.267298	0.374915
NFKBIE	0.358745	8.78E-07	7.75E-06
NFKBIL1	0.099426	0.186691	0.281482

NFKBIL2	0.322898	1.10E-05	7.08E-05
NFKBIZ	0.155074	0.038745	0.07756
NFRKB	0.147608	0.04927	0.094847
NFS1	-0.14032	0.061738	0.114372
NFU1	-0.11506	0.126175	0.205534
NFX1	-0.19618	0.00868	0.021878
NFXL1	-0.26636	0.000326	0.001316
NFYA	0.090337	0.230446	0.333834
NFYB	-0.29221	7.56E-05	0.000373
NFYC	-0.13805	0.066121	0.121265
NGB	-0.09242	0.219839	0.321578
NGDN	-0.03023	0.688698	0.771969
NGEF	0.553678	1.09E-15	1.00E-13
NGFRAP1	-0.29811	5.31E-05	0.000276
NGFR	-0.11242	0.135171	0.21743
NGF	-0.06305	0.403088	0.515734
NGLY1	0.011724	0.876571	0.914571
NGRN	-0.00774	0.918291	0.94329
NHEDC1	-0.30619	3.23E-05	0.00018
NHEDC2	0.37862	1.88E-07	2.03E-06
NHEG1	-0.24707	0.000885	0.003097
NHEJ1	0.247237	0.000877	0.003074
NHLH1	0.142955	0.05696	0.106959
NHLH2	-0.14173	0.059149	0.110273
NHLRC1	-0.11014	0.143305	0.227681
NHLRC2	-0.15953	0.033419	0.068594
NHLRC3	0.043814	0.561435	0.662399
NHLRC4	0.023151	0.759043	0.827988
NHP2L1	0.00778	0.91791	0.943044
NHP2	0.174274	0.019989	0.044396
NHSL1	-0.07334	0.330629	0.442734
NHSL2	-0.30407	3.69E-05	0.000201
NHS	0.325881	9.04E-06	5.94E-05
NICN1	-0.10358	0.168839	0.259957
NID1	-0.05241	0.487228	0.596007
NID2	-0.01954	0.795684	0.855752
NIF3L1	0.199071	0.007723	0.019818
NINJ1	0.075476	0.316678	0.428053
NINJ2	0.325019	9.58E-06	6.26E-05
NINL	-0.08501	0.259233	0.3656
NIN	-0.19572	0.008838	0.022207
NIP7	0.332785	5.66E-06	3.97E-05
NIPA1	0.114274	0.128801	0.208952
NIPA2	0.2549	0.000595	0.002205
NIPAL1	0.100947	0.180005	0.273359
NIPAL2	-0.00479	0.949379	0.96574
NIPAL3	-0.18066	0.015812	0.036434
NIPAL4	0.218878	0.003332	0.009654
NIPBL	-0.36117	7.31E-07	6.64E-06
NIPSNAP1	-0.09444	0.209885	0.309879
NIPSNAP3A	0.020477	0.78616	0.848525
NIPSNAP3E	-0.29536	6.27E-05	0.000318
NISCH	-0.17746	0.017797	0.040242
NIT1	0.27907	0.000162	0.000722

NIT2	0.282163	0.000136	0.000621
NKAIN1	-0.197	0.008396	0.021283
NKAIN2	-0.27645	0.000187	0.000818
NKAIN3	0.133253	0.076195	0.136512
NKAIN4	0.45275	2.22E-10	5.66E-09
NKAPL	-0.23092	0.001927	0.006042
NKAP	-0.06398	0.396203	0.508984
NKD1	0.286901	0.000103	0.000489
NKD2	0.296312	5.92E-05	0.000303
NKG7	-0.07079	0.347751	0.460208
NKIRAS1	-0.36837	4.21E-07	4.09E-06
NKIRAS2	0.356347	1.05E-06	9.07E-06
NKPD1	0.039211	0.603307	0.699449
NKRF	-0.22118	0.003007	0.008871
NKTR	0.042465	0.573562	0.673173
NKX1-2	-0.10054	0.181782	0.275488
NKX2-1	0.076008	0.313271	0.424144
NKX2-2	-0.25941	0.000471	0.001804
NKX2-3	-0.0607	0.420855	0.533016
NKX2-4	-0.23991	0.001257	0.004189
NKX2-5	0.0593	0.431703	0.543622
NKX2-6	-0.0761	0.312683	0.423637
NKX2-8	0.223897	0.002662	0.007969
NKX3-1	0.222933	0.00278	0.008279
NKX3-2	0.374932	2.52E-07	2.63E-06
NKX6-1	-0.17152	0.022068	0.048198
NKX6-2	0.152841	0.041674	0.082513
NKX6-3	-0.09583	0.20323	0.301883
NLE1	0.048338	0.521688	0.627218
NLGN1	-0.31164	2.29E-05	0.000133
NLGN2	-0.12522	0.095835	0.164686
NLGN3	0.057727	0.444042	0.555735
NLGN4X	-0.3286	7.53E-06	5.07E-05
NLGN4Y	-0.10316	0.170616	0.262142
NLK	-0.41687	7.11E-09	1.18E-07
NLN	0.082791	0.271907	0.379871
NLRC3	-0.20207	0.006831	0.017877
NLRC4	-0.06094	0.419078	0.53131
NLRC5	0.146798	0.050544	0.096837
NLRP10	0.081892	0.277167	0.385185
NLRP11	-0.18599	0.012929	0.030731
NLRP12	0.143791	0.055511	0.10477
NLRP13	0.077491	0.303894	0.414284
NLRP14	-0.13644	0.069376	0.126273
NLRP1	0.187826	0.012051	0.028983
NLRP2	0.220873	0.003049	0.008962
NLRP3	-0.0257	0.733425	0.807278
NLRP4	-0.12428	0.09837	0.168282
NLRP5	-0.12268	0.102802	0.17461
NLRP6	0.015989	0.832243	0.881125
NLRP7	0.124322	0.098251	0.168124
NLRP8	-0.04434	0.556708	0.658039
NLRP9	-0.05759	0.445138	0.55657
NLRX1	0.237518	0.001411	0.004621

NMBR	-0.14613	0.051618	0.098637
NMB	0.338685	3.76E-06	2.77E-05
NMD3	0.10243	0.173659	0.265846
NME1-NME2	0.224463	0.002594	0.007799
NME1	0.221179	0.003008	0.008871
NME2P1	0.193235	0.009757	0.024181
NME2	0.404091	2.22E-08	3.15E-07
NME3	0.159486	0.033466	0.068667
NME4	0.101982	0.17556	0.267952
NME5	-0.26348	0.00038	0.001503
NME6	0.13277	0.077275	0.138121
NME7	0.022642	0.764184	0.831919
NMI	0.413578	9.58E-09	1.52E-07
NMNAT1	-0.22552	0.002472	0.007485
NMNAT2	-0.11514	0.125903	0.20516
NMNAT3	-0.25113	0.000722	0.0026
NMRAL1	0.294279	6.69E-05	0.000336
NMT1	-0.08024	0.287035	0.396191
NMT2	-0.02578	0.732657	0.806657
NMUR1	-0.05401	0.473999	0.583797
NMUR2	0.253373	0.000644	0.002352
NMU	0.658735	1.62E-23	1.28E-20
NNAT	0.019895	0.792096	0.852845
NNMT	0.237874	0.001387	0.004554
NNT	-0.12874	0.086787	0.151977
NOB1	0.327174	8.29E-06	5.51E-05
NOC2L	0.078017	0.300613	0.410745
NOC3L	0.062387	0.408077	0.520299
NOC4L	0.132778	0.077256	0.138112
NOD1	0.217528	0.003537	0.010161
NOD2	0.398331	3.66E-08	4.82E-07
NODAL	0.277221	0.00018	0.000789
NOG	0.400445	3.05E-08	4.12E-07
NOL10	0.212928	0.004323	0.012078
NOL11	-0.20453	0.00617	0.016376
NOL12	0.170759	0.022671	0.049324
NOL3	0.303359	3.85E-05	0.000209
NOL4	-0.26587	0.000335	0.001346
NOL6	-0.08004	0.288228	0.397477
NOL7	0.015971	0.832429	0.881138
NOL8	-0.17977	0.016345	0.037491
NOL9	-0.2974	5.54E-05	0.000286
NOLC1	-0.05548	0.462046	0.572287
NOM1	-0.13462	0.073206	0.132007
NOMO1	-0.32532	9.38E-06	6.14E-05
NOMO2	-0.2467	0.000901	0.003142
NOMO3	-0.20279	0.006632	0.017437
NONO	-0.21915	0.003293	0.009551
NOP10	0.437537	1.02E-09	2.15E-08
NOP14	-0.1154	0.125059	0.204053
NOP16	0.327971	7.85E-06	5.25E-05
NOP2	-0.01843	0.807096	0.863342
NOP56	-0.20521	0.005999	0.015979
NOP58	0.263935	0.000371	0.001474

NOS1AP	-0.10357	0.168882	0.259982
NOS1	-0.28597	0.000109	0.000512
NOS2	-0.11178	0.137428	0.220255
NOS3	0.016185	0.830209	0.879698
NOSIP	0.171778	0.021864	0.047814
NOSTRIN	0.097781	0.194121	0.290667
NOTCH1	-0.05899	0.434134	0.545675
NOTCH2NL	0.433104	1.56E-09	3.10E-08
NOTCH2	0.213953	0.004135	0.011648
NOTCH3	0.201044	0.007126	0.01849
NOTCH4	-0.2153	0.0039	0.011073
NOTO	-0.06353	0.399527	0.512039
NOTUM	0.14053	0.061347	0.113743
NOVA1	-0.33488	4.90E-06	3.50E-05
NOVA2	-0.2648	0.000354	0.001418
NOV	-0.05759	0.445132	0.55657
NOX1	0.102015	0.175419	0.267825
NOX4	0.29953	4.87E-05	0.000257
NOX5	-0.07368	0.328385	0.440325
NOXA1	0.263931	0.000371	0.001474
NOXO1	0.249727	0.000775	0.002769
NPAS1	0.314977	1.85E-05	0.000111
NPAS2	0.42246	4.26E-09	7.53E-08
NPAS3	-0.49779	1.56E-12	6.91E-11
NPAS4	-0.16844	0.024605	0.052942
NPAT	-0.14493	0.053584	0.101715
NPBWR1	0.109853	0.144368	0.229039
NPBWR2	-0.09913	0.187994	0.283079
NPB	0.245116	0.000975	0.00336
NPC1L1	0.134118	0.07429	0.133668
NPC1	0.136431	0.069386	0.12628
NPC2	0.143966	0.055212	0.104334
NPDC1	0.008326	0.912174	0.938564
NPEPL1	0.187386	0.012257	0.029375
NPEPPS	0.167411	0.02551	0.054544
NPFFR1	-0.05396	0.474383	0.584052
NPFFR2	-0.06878	0.361653	0.474856
NPFF	0.150814	0.044491	0.0872
NPHP1	-0.25562	0.000574	0.002138
NPHP3	0.021971	0.770979	0.837012
NPHP4	-0.24847	0.000825	0.002919
NPHS1	-0.2743	0.000211	0.000906
NPHS2	-0.04543	0.547103	0.649598
NPIPL3	0.312952	2.11E-05	0.000124
NPIP	-0.11883	0.114144	0.189879
NPLOC4	-0.10185	0.176132	0.268551
NPL	0.039794	0.597921	0.694874
NPM1	0.102824	0.172002	0.263758
NPM2	-0.04371	0.562375	0.663192
NPM3	0.235101	0.001583	0.00511
NPNT	-0.04491	0.55166	0.653831
NPPA	-0.11027	0.142834	0.227169
NPPB	-0.20102	0.007134	0.018506
NPPC	-0.04052	0.591254	0.688787

NPR1	-0.3561	1.07E-06	9.22E-06
NPR2	0.138012	0.06619	0.121346
NPR3	0.251876	0.000695	0.002515
NPRL2	-0.00255	0.973075	0.981761
NPRL3	0.004867	0.948587	0.965182
NPSR1	0.473709	2.42E-11	7.87E-10
NPS	0.009971	0.894911	0.926588
NPTN	-0.02119	0.778951	0.842902
NPTX1	0.351782	1.47E-06	1.21E-05
NPTX2	-0.12236	0.103716	0.175921
NPTXR	-0.16679	0.026073	0.05561
NPW	-0.14596	0.051888	0.099038
NPY1R	-0.16647	0.026357	0.056125
NPY2R	-0.11685	0.120334	0.197829
NPY5R	-0.25663	0.000544	0.002045
NPY6R	0.038368	0.611124	0.706729
NPY	-0.03877	0.607353	0.703149
NQ01	0.523796	6.26E-14	3.88E-12
NQ02	0.127762	0.08922	0.155303
NR0B1	-0.20163	0.006957	0.018152
NR0B2	0.035289	0.640037	0.731186
NR1D1	0.260858	0.000437	0.001693
NR1D2	-0.27742	0.000178	0.000781
NR1H2	0.273832	0.000217	0.000927
NR1H3	0.43542	1.25E-09	2.55E-08
NR1H4	0.11826	0.115905	0.192144
NR1I2	0.441087	7.17E-10	1.59E-08
NR1I3	0.025823	0.732238	0.80633
NR2C1	0.03122	0.679103	0.763986
NR2C2AP	0.348571	1.86E-06	1.49E-05
NR2C2	-0.28616	0.000108	0.000507
NR2E1	0.145489	0.052659	0.100248
NR2E3	0.151011	0.044209	0.08673
NR2F1	0.080781	0.283762	0.392687
NR2F2	-0.03207	0.67086	0.757817
NR2F6	0.295608	6.18E-05	0.000313
NR3C1	-0.04535	0.547805	0.650237
NR3C2	-0.21394	0.004137	0.011653
NR4A1	-0.15647	0.037005	0.074689
NR4A2	-0.04929	0.513473	0.619564
NR4A3	-0.19762	0.008189	0.020847
NR5A1	0.115551	0.124556	0.203332
NR5A2	-0.04804	0.52423	0.629586
NR6A1	0.057141	0.448687	0.559847
NRADDP	0.413164	9.95E-09	1.57E-07
NRAP	-0.10322	0.170336	0.261812
NRARP	0.042692	0.571513	0.671406
NRAS	0.10947	0.145782	0.230948
NRBF2	0.155788	0.037846	0.076076
NRBP1	0.251702	0.000701	0.002535
NRBP2	0.295986	6.04E-05	0.000308
NRCAM	-0.42255	4.22E-09	7.50E-08
NRD1	-0.11238	0.135288	0.217513
NRF1	-0.40184	2.70E-08	3.73E-07

NRG1	-0.12862	0.08707	0.152352
NRG2	-0.33451	5.03E-06	3.58E-05
NRG3	0.259802	0.000462	0.001773
NRG4	0.110847	0.140749	0.224486
NRGN	-0.02295	0.761029	0.829535
NRIP1	-0.03671	0.626577	0.719958
NRIP2	-0.26869	0.000287	0.001184
NRIP3	0.226392	0.002376	0.00723
NRK	-0.05423	0.472169	0.582014
NRL	-0.25906	0.00048	0.001835
NRM	0.386863	9.60E-08	1.12E-06
NRN1L	0.004121	0.95646	0.970098
NRN1	-0.33334	5.45E-06	3.84E-05
NRP1	-0.19748	0.008235	0.020931
NRP2	0.401049	2.90E-08	3.93E-07
NRSN1	-0.16638	0.026444	0.05628
NRSN2	-0.42676	2.85E-09	5.30E-08
NRTN	-0.24445	0.001008	0.003456
NRXN1	-0.29032	8.46E-05	0.000411
NRXN2	0.101907	0.175876	0.268244
NRXN3	-0.20079	0.007201	0.018644
NSA2	-0.10229	0.174262	0.266604
NSD1	-0.34617	2.21E-06	1.74E-05
NSDHL	0.291739	7.78E-05	0.000382
NSFL1C	0.020005	0.790971	0.852079
NSF	-0.2249	0.002544	0.007673
NSL1	-0.37209	3.15E-07	3.19E-06
NSMAF	-0.11478	0.127099	0.206738
NSMCE1	0.25754	0.000519	0.001963
NSMCE2	0.205901	0.005828	0.015598
NSMCE4A	0.053967	0.474325	0.584016
NSUN2	0.023929	0.751207	0.821455
NSUN3	0.110441	0.142217	0.226407
NSUN4	-0.06232	0.408572	0.520762
NSUN5P1	0.161879	0.030868	0.064156
NSUN5P2	0.15376	0.040447	0.08047
NSUN5	0.349233	1.77E-06	1.43E-05
NSUN6	-0.13021	0.083208	0.146815
NSUN7	0.025433	0.736134	0.809354
NT5C1A	-0.26297	0.000391	0.001538
NT5C1B	-0.00241	0.974486	0.982585
NT5C2	0.212378	0.004427	0.012318
NT5C3L	-0.13691	0.068414	0.12481
NT5C3	0.028799	0.702763	0.783118
NT5C	0.371882	3.20E-07	3.24E-06
NT5DC1	-0.16134	0.031436	0.065111
NT5DC2	0.142622	0.057548	0.107883
NT5DC3	-0.18429	0.013795	0.032455
NT5E	0.291663	7.81E-05	0.000383
NT5M	-0.31708	1.62E-05	9.83E-05
NTAN1	0.295086	6.37E-05	0.000322
NTF3	0.213587	0.004201	0.011802
NTF4	0.60282	5.43E-19	1.26E-16
NTHL1	0.22715	0.002295	0.007024

NTM	0.338143	3.91E-06	2.86E-05
NTN1	-0.15565	0.038017	0.076346
NTN3	-0.25811	0.000504	0.001916
NTN4	0.039775	0.598101	0.694944
NTN5	-0.06591	0.382076	0.49487
NTNG1	0.021434	0.776423	0.84126
NTNG2	0.009802	0.896684	0.927986
NTRK1	-0.08595	0.253993	0.360188
NTRK2	-0.30496	3.49E-05	0.000192
NTRK3	-0.1292	0.085657	0.150344
NTSR1	0.374722	2.56E-07	2.67E-06
NTSR2	-0.14962	0.046227	0.089992
NTS	-0.03865	0.608456	0.704137
NUAK1	-0.04328	0.566213	0.666645
NUAK2	-0.46028	1.02E-10	2.85E-09
NUB1	-0.05958	0.429513	0.541312
NUBP1	-0.08918	0.236492	0.340398
NUBP2	0.124816	0.096911	0.16629
NUBPL	-0.21929	0.003272	0.009502
NUCB1	-0.14487	0.053684	0.101877
NUCB2	-0.50125	1.03E-12	4.73E-11
NUCKS1	-0.17621	0.018632	0.041801
NUDCD1	-0.05698	0.450002	0.560815
NUDCD2	-0.03174	0.674041	0.760358
NUDCD3	0.048427	0.520922	0.626507
NUDC	0.123324	0.101001	0.172023
NUDT10	-0.12497	0.096492	0.165685
NUDT11	-0.20941	0.005025	0.013755
NUDT12	-0.05575	0.45984	0.570337
NUDT13	0.236947	0.00145	0.004733
NUDT14	0.097502	0.195401	0.292185
NUDT15	0.180649	0.015819	0.036441
NUDT16L1	-0.09218	0.22106	0.322934
NUDT16P1	0.19789	0.008101	0.020662
NUDT16	-0.04365	0.562924	0.663641
NUDT17	0.019024	0.801005	0.859978
NUDT18	0.03434	0.649064	0.738342
NUDT19	0.016346	0.828547	0.878764
NUDT1	0.280466	0.000149	0.000674
NUDT21	0.054266	0.471876	0.581835
NUDT22	0.31654	1.67E-05	0.000101
NUDT2	0.012111	0.872525	0.911855
NUDT3	-0.03689	0.624885	0.718446
NUDT4	-0.09464	0.208895	0.308583
NUDT5	0.27993	0.000154	0.000693
NUDT6	0.13586	0.070571	0.12812
NUDT7	-0.0621	0.410269	0.522352
NUDT8	0.445449	4.65E-10	1.09E-08
NUDT9P1	-0.35223	1.42E-06	1.18E-05
NUDT9	-0.40265	2.52E-08	3.52E-07
NUF2	0.355142	1.15E-06	9.78E-06
NUFIP1	0.079604	0.290859	0.400379
NUFIP2	0.144304	0.054636	0.103415
NUMA1	0.161377	0.031398	0.065053

NUMBL	0.154211	0.039855	0.079428
NUMB	0.232334	0.001804	0.00571
NUP107	0.066871	0.375144	0.488194
NUP133	-0.1405	0.061397	0.113804
NUP153	-0.38516	1.10E-07	1.27E-06
NUP155	-0.17634	0.018541	0.041621
NUP160	-0.1425	0.057763	0.108198
NUP188	-0.22399	0.00265	0.007941
NUP205	-0.26086	0.000437	0.001693
NUP210L	-0.10509	0.162698	0.25223
NUP210	-0.27832	0.000169	0.000748
NUP214	-0.37947	1.75E-07	1.91E-06
NUP35	0.01751	0.816549	0.870146
NUP37	0.191162	0.010586	0.02594
NUP43	-0.14499	0.053485	0.101546
NUP50	-0.10919	0.146802	0.232248
NUP54	-0.01404	0.852467	0.896951
NUP62CL	0.204926	0.00607	0.016129
NUP62	0.004768	0.949632	0.965898
NUP85	0.209936	0.004915	0.013496
NUP88	-0.3337	5.32E-06	3.76E-05
NUP93	0.35408	1.24E-06	1.05E-05
NUP98	-0.05514	0.464738	0.574843
NUPL1	-0.1774	0.017837	0.040327
NUPL2	-0.18851	0.011735	0.028299
NUPR1	0.255422	0.00058	0.002156
NUS1	-0.23538	0.001563	0.005048
NUSAP1	0.361886	6.93E-07	6.34E-06
NUTF2	0.412539	1.05E-08	1.65E-07
NVL	0.005235	0.944713	0.962704
NWD1	-0.02716	0.718981	0.795542
NXF1	-0.06616	0.380267	0.493075
NXF2B	-0.40033	3.08E-08	4.16E-07
NXF2	-0.38021	1.65E-07	1.82E-06
NXF3	0.330247	6.73E-06	4.60E-05
NXF4	-0.12673	0.091853	0.159065
NXF5	-0.37158	3.28E-07	3.30E-06
NXNL1	-0.07623	0.311821	0.422673
NXNL2	0.381967	1.43E-07	1.60E-06
NXN	-0.05175	0.49268	0.601151
NXPH1	-0.31934	1.39E-05	8.67E-05
NXPH2	-0.08418	0.263906	0.371157
NXPH3	-0.04923	0.514022	0.620075
NXPH4	-0.27383	0.000217	0.000927
NXT1	0.06736	0.371658	0.484683
NXT2	0.063355	0.400825	0.513469
NYNRIN	0.126927	0.09135	0.158327
NYX	-0.03782	0.616247	0.711074
OAF	0.292549	7.41E-05	0.000366
OAS1	0.503491	7.87E-13	3.68E-11
OAS2	0.391549	6.50E-08	8.00E-07
OAS3	0.308656	2.77E-05	0.000157
OASL	0.558751	5.28E-16	5.18E-14
OAT	-0.27348	0.000221	0.000943

OAZ1	0.068146	0.366085	0.479465
OAZ2	-0.40227	2.61E-08	3.61E-07
OAZ3	-0.00998	0.894769	0.926538
OBFC1	0.48499	6.87E-12	2.58E-10
OBFC2A	0.254917	0.000595	0.002203
OBFC2B	-0.01438	0.848869	0.893846
OBP2A	0.228117	0.002195	0.00676
OBP2B	0.118748	0.114399	0.190191
OBSCN	0.184416	0.01373	0.032332
OBSL1	-0.01888	0.802523	0.860906
OC90	-0.10621	0.158229	0.246597
OCA2	-0.05359	0.477452	0.587026
OCEL1	0.47518	2.06E-11	6.81E-10
OCIAD1	-0.13898	0.064289	0.118299
OCIAD2	0.570609	9.17E-17	1.13E-14
OCLM	0.157411	0.035867	0.072779
OCLN	0.179845	0.016299	0.037412
OCM2	-0.03112	0.680106	0.764853
OCM	-0.03329	0.659118	0.74767
OCRL	-0.31786	1.54E-05	9.43E-05
ODAM	0.322069	1.16E-05	7.43E-05
ODC1	-0.24581	0.000942	0.00326
ODF1	0.018244	0.809005	0.864764
ODF2L	-0.02988	0.692164	0.774457
ODF2	-0.26648	0.000324	0.00131
ODF3B	0.305083	3.46E-05	0.000191
ODF3L1	-0.23164	0.001864	0.005871
ODF3L2	-0.09326	0.215647	0.316665
ODF3	0.077178	0.305854	0.416136
ODF4	0.09553	0.204636	0.303606
ODZ1	-0.17725	0.017933	0.0405
ODZ2	-0.15566	0.038002	0.076328
ODZ3	-0.15429	0.039751	0.07929
ODZ4	-0.01854	0.80597	0.862553
OFD1	0.161432	0.031339	0.064952
OGDHL	-0.30997	2.55E-05	0.000146
OGDH	-0.13461	0.073215	0.132011
OGFOD1	0.260387	0.000448	0.001729
OGFOD2	-0.02245	0.766075	0.833335
OGFRL1	0.014262	0.850134	0.895036
OGFR	0.165575	0.027192	0.057593
OGG1	0.058831	0.435365	0.546875
OGN	-0.08309	0.270151	0.377924
OGT	0.055335	0.463179	0.573435
OIP5	0.359297	8.42E-07	7.47E-06
OIT3	-0.22416	0.002631	0.007891
OLA1	0.156791	0.036612	0.074002
OLAH	-0.05762	0.444903	0.556394
OLFM1	-0.27765	0.000175	0.000772
OLFM2	-0.07787	0.301516	0.411668
OLFM3	-0.21482	0.003983	0.011285
OLFM4	0.332508	5.77E-06	4.03E-05
OLFML1	0.046399	0.538549	0.641771
OLFML2A	-0.10213	0.174938	0.267309

OLFML2B	0.120075	0.110378	0.185062
OLFML3	-0.02211	0.769566	0.835969
OLIG1	-0.07224	0.337901	0.450247
OLIG2	0.097123	0.197152	0.294314
OLIG3	0.039157	0.603804	0.699901
OLR1	0.27507	0.000202	0.000875
OMA1	0.103124	0.170745	0.262269
OMD	0.048656	0.518952	0.624612
OMG	0.115395	0.125069	0.204053
OMP	0.259003	0.000481	0.00184
ONECUT1	-0.01911	0.800088	0.859367
ONECUT2	0.195985	0.008746	0.02202
ONECUT3	0.492997	2.73E-12	1.14E-10
OOEP	0.03262	0.66556	0.753164
OPA1	-0.08102	0.282345	0.391
OPA3	-0.12878	0.086676	0.151797
OPALIN	0.02682	0.722317	0.798296
OPCML	0.168904	0.024209	0.05218
OPHN1	-0.3364	4.41E-06	3.19E-05
OPLAH	0.401096	2.88E-08	3.92E-07
OPN1LW	-0.12417	0.098676	0.168689
OPN1MW	-0.15095	0.044301	0.08688
OPN1SW	-0.05134	0.496148	0.603696
OPN3	0.331226	6.30E-06	4.36E-05
OPN4	-0.0073	0.922913	0.946603
OPN5	-0.05924	0.432202	0.544042
OPRD1	-0.30269	4.01E-05	0.000217
OPRK1	-0.132	0.079014	0.140682
OPRL1	0.006035	0.936273	0.956591
OPRM1	-0.20218	0.0068	0.017807
OPTC	0.077685	0.30268	0.412943
OPTN	0.257439	0.000522	0.001972
OR10A2	0.088079	0.242357	0.346896
OR10A3	0.024135	0.749139	0.819828
OR10A4	-0.07068	0.34847	0.460944
OR10A5	0.023677	0.753744	0.823683
OR10A6	-0.01994	0.79168	0.852652
OR10AD1	-0.09104	0.226819	0.329401
OR10G2	0.070876	0.347157	0.459606
OR10G3	-0.05933	0.43144	0.543326
OR10G4	-0.2134	0.004235	0.011877
OR10G7	-0.08582	0.254723	0.361068
OR10G8	-0.10618	0.158365	0.24677
OR10G9	-0.00097	0.989781	0.992542
OR10H1	0.327006	8.38E-06	5.56E-05
OR10H2	0.117114	0.119505	0.196777
OR10H5	0.17651	0.018429	0.041411
OR10J1	0.013574	0.857287	0.900552
OR10P1	0.035426	0.638743	0.730029
OR10Q1	0.029838	0.692573	0.774673
OR10V1	-0.14145	0.059657	0.111047
OR10W1	0.00904	0.904676	0.933521
OR11A1	-0.08338	0.268493	0.376111
OR11G2	0.047409	0.529738	0.634197

OR11H12	-0.07235	0.337199	0.449554
OR11H4	-0.20669	0.005639	0.015163
OR11H6	-0.06901	0.360056	0.473199
OR12D2	-0.13528	0.071783	0.129981
OR12D3	-0.06891	0.36074	0.473877
OR13A1	-0.17771	0.017635	0.039927
OR13C2	-0.28838	9.48E-05	0.000453
OR13C5	-0.16498	0.027753	0.0586
OR13D1	0.030074	0.69026	0.773326
OR13F1	-0.00761	0.919734	0.944279
OR13G1	-0.05793	0.442409	0.554174
OR13H1	0.004221	0.95541	0.969481
OR13J1	0.181306	0.015436	0.035695
OR14I1	-0.25817	0.000503	0.001912
OR1A2	0.107472	0.153323	0.240638
OR1B1	0.023584	0.754682	0.824388
OR1C1	-0.05313	0.4812	0.590533
OR1D4	-0.07991	0.289016	0.398397
OR1E1	0.046162	0.540624	0.643723
OR1E2	0.078912	0.295084	0.40497
OR1F1	-0.10615	0.15849	0.246887
OR1F2P	0.015012	0.842356	0.888644
OR1G1	0.036212	0.631313	0.72356
OR1J1	0.004631	0.951076	0.96696
OR1J2	0.051385	0.495756	0.603561
OR1J4	0.027467	0.715903	0.793424
OR1K1	-0.12234	0.103777	0.176009
OR1L3	-0.03626	0.630819	0.723191
OR1L4	-0.04775	0.526792	0.632048
OR1L6	-0.07222	0.338095	0.450322
OR1L8	-0.13764	0.066928	0.122495
OR1N1	-0.04184	0.579235	0.678101
OR1N2	-0.12447	0.097843	0.167642
OR1Q1	-0.07468	0.321819	0.43355
OR2A12	0.086094	0.253179	0.359291
OR2A14	0.158553	0.034528	0.070486
OR2A1	-0.02725	0.718085	0.795092
OR2A25	-0.07579	0.314634	0.425697
OR2A2	-0.00202	0.978637	0.985264
OR2A4	0.084264	0.263441	0.370635
OR2A5	0.069737	0.354978	0.467927
OR2A7	0.321899	1.18E-05	7.49E-05
OR2A9P	0.070931	0.346782	0.459202
OR2AE1	-0.08766	0.2446	0.349384
OR2AG1	-0.0165	0.826913	0.877408
OR2AG2	-0.06165	0.41363	0.525684
OR2AK2	-0.01015	0.89307	0.925331
OR2AT4	-0.01329	0.860248	0.902799
OR2B11	-0.00361	0.961842	0.974009
OR2B2	0.11894	0.113809	0.189449
OR2B6	0.242047	0.001134	0.003828
OR2C1	-0.36448	5.68E-07	5.32E-06
OR2C3	-0.17149	0.022089	0.048232
OR2D2	-0.11224	0.135788	0.218107

OR2D3	0.030782	0.68336	0.76783
OR2F1	-0.02558	0.734676	0.808205
OR2F2	-0.00414	0.956275	0.970006
OR2G2	0.038147	0.613177	0.708606
OR2G3	-0.0118	0.875824	0.914003
OR2G6	0.051541	0.494447	0.602564
OR2H1	-0.12749	0.08992	0.156301
OR2H2	-0.04322	0.566773	0.666906
OR2J2	0.042603	0.572316	0.672069
OR2J3	-0.02652	0.725303	0.800968
OR2K2	-0.15685	0.036539	0.073894
OR2L13	-0.32193	1.18E-05	7.48E-05
OR2L1P	-0.06274	0.405439	0.51797
OR2L2	-0.10678	0.155994	0.244075
OR2L3	-0.05653	0.453585	0.56449
OR2M4	-0.04577	0.544103	0.647056
OR2S2	0.079588	0.290951	0.400478
OR2T10	-0.23085	0.001934	0.006061
OR2T11	0.002936	0.968972	0.978673
OR2T2	-0.04667	0.536167	0.639687
OR2T33	-0.13478	0.072854	0.131491
OR2T3	0.027998	0.710652	0.789463
OR2T4	-0.24328	0.001067	0.003629
OR2T5	-0.0487	0.518597	0.624409
OR2T8	-0.10595	0.159278	0.24788
OR2W3	-0.18446	0.013709	0.032307
OR2W5	0.017065	0.821135	0.873257
OR2Z1	0.10668	0.156392	0.244582
OR3A1	-0.1422	0.058289	0.10896
OR3A2	-0.19041	0.010904	0.026603
OR3A3	-0.09838	0.191368	0.287197
OR3A4	-0.09018	0.231272	0.334761
OR4A47	-0.15515	0.038649	0.077399
OR4C6	0.088607	0.239535	0.343827
OR4D10	-0.07383	0.327344	0.439198
OR4D1	-0.11499	0.1264	0.205799
OR4D5	-0.14608	0.051694	0.098754
OR4D6	-0.0753	0.31784	0.429506
OR4E2	-0.01837	0.807661	0.863794
OR4F21	-0.02323	0.758207	0.827279
OR4F29	0.062913	0.404124	0.516759
OR4K14	0.050914	0.49972	0.607007
OR4N2	-0.20052	0.007282	0.018842
OR4N3P	-0.1042	0.166313	0.256787
OR4N4	0.007662	0.919147	0.94402
OR51A7	-0.11001	0.143801	0.228304
OR51B2	0.088417	0.240547	0.344929
OR51B4	-0.06913	0.359197	0.472227
OR51B5	-0.10247	0.173488	0.265625
OR51B6	0.091222	0.225893	0.32837
OR51E1	-0.00576	0.939139	0.959024
OR51E2	0.092683	0.218514	0.320077
OR51I1	-0.02619	0.728577	0.803418
OR51M1	-0.00529	0.944158	0.96236

OR51Q1	-0.07268	0.334993	0.447185
OR51S1	-0.01671	0.824779	0.875943
OR52B2	0.077328	0.304915	0.415391
OR52B4	-0.10056	0.181683	0.275421
OR52B6	0.047716	0.527068	0.632303
OR52D1	0.034469	0.647833	0.737663
OR52H1	0.022726	0.763338	0.831502
OR52I1	-0.06494	0.389147	0.501629
OR52I2	-0.20925	0.00506	0.013835
OR52K1	0.103733	0.16822	0.259286
OR52K2	0.051003	0.498974	0.606324
OR52L1	0.051233	0.497036	0.604564
OR52N1	-0.04345	0.564652	0.665282
OR52N2	0.156107	0.037449	0.07541
OR52N4	-0.01877	0.803652	0.861571
OR52N5	-0.02423	0.748144	0.819056
OR52R1	-0.0906	0.229101	0.332105
OR52W1	-0.14357	0.055888	0.10538
OR56A5	-0.02476	0.742827	0.814764
OR56B1	0.017815	0.813412	0.867857
OR56B4	0.01219	0.871705	0.911292
OR5AK2	-0.04943	0.51235	0.61851
OR5AN1	0.095574	0.204428	0.30332
OR5AP2	0.026133	0.729142	0.803861
OR5AU1	-0.0865	0.250959	0.356729
OR5B12	0.003053	0.967735	0.978023
OR5B21	-0.09829	0.191802	0.287674
OR5B2	0.003174	0.966456	0.977194
OR5C1	0.017965	0.811874	0.866799
OR5E1P	0.134045	0.07445	0.13387
OR5K1	-0.03192	0.672353	0.758818
OR5K2	-0.11494	0.126564	0.205999
OR5M11	0.045463	0.546781	0.649372
OR5P2	0.009933	0.895305	0.926899
OR5P3	0.000856	0.990951	0.993313
OR6A2	0.184436	0.01372	0.03232
OR6B1	0.096301	0.200989	0.299049
OR6B2	0.026114	0.729339	0.803986
OR6B3	-0.12924	0.085543	0.150193
OR6C70	0.052149	0.489364	0.597893
OR6F1	-0.12941	0.08514	0.14961
OR6K3	-0.06994	0.353578	0.466452
OR6M1	-0.07075	0.348008	0.460409
OR6N1	0.038882	0.606352	0.702319
OR6S1	-0.02961	0.694766	0.776483
OR6T1	-0.20809	0.005316	0.014431
OR6W1P	0.013749	0.855466	0.899165
OR7A5	-0.11333	0.132005	0.213188
OR7C1	-0.06471	0.390824	0.503463
OR7D2	-0.05306	0.481833	0.591199
OR7D4	-0.00861	0.909239	0.93647
OR7E156P	-0.0774	0.304455	0.414878
OR7E24	0.090949	0.227293	0.329897
OR7E37P	-0.23104	0.001916	0.006013

OR7E5P	-0.08189	0.277191	0.385185
OR7E91P	0.433674	1.48E-09	2.95E-08
OR8A1	-0.05636	0.454934	0.56592
OR8D4	-0.10368	0.168429	0.259528
OR8G5	0.055949	0.45822	0.568901
OR8S1	0.091514	0.224405	0.326662
OR9A2	0.055998	0.45783	0.568735
OR9A4	-0.01736	0.818139	0.87109
OR9G4	-0.15001	0.045655	0.089129
OR9G9	-0.0328	0.663838	0.75202
OR9I1	-0.05526	0.46382	0.574049
OR9Q1	-0.00843	0.91109	0.937693
ORAI1	0.186486	0.012688	0.03026
ORAI2	-0.35125	1.53E-06	1.25E-05
ORAI3	0.417222	6.89E-09	1.15E-07
ORAOV1	0.117571	0.11806	0.194917
ORC1L	0.169072	0.024066	0.051913
ORC2L	0.218776	0.003347	0.009688
ORC3L	-0.29413	6.75E-05	0.000338
ORC4L	0.221295	0.002992	0.008832
ORC5L	-0.18404	0.013929	0.03272
ORC6L	0.322933	1.10E-05	7.07E-05
ORM1	0.077754	0.302248	0.412524
ORM2	0.069815	0.354435	0.467396
ORMDL1	-0.01701	0.821669	0.873673
ORMDL2	0.331849	6.04E-06	4.20E-05
ORMDL3	-0.04225	0.57552	0.67487
OS9	-0.28102	0.000145	0.000656
OSBP2	0.003385	0.964235	0.975694
OSBPL10	0.345058	2.39E-06	1.86E-05
OSBPL11	-0.00204	0.978442	0.985172
OSBPL1A	0.012201	0.871586	0.911292
OSBPL2	0.164467	0.028252	0.059526
OSBPL3	0.548172	2.38E-15	1.96E-13
OSBPL5	0.251837	0.000696	0.00252
OSBPL6	-0.40273	2.50E-08	3.50E-07
OSBPL7	0.512963	2.47E-13	1.33E-11
OSBPL8	-0.18911	0.011467	0.02776
OSBPL9	-0.00086	0.990952	0.993313
OSBP	-0.10196	0.175648	0.267984
OSCAR	0.358806	8.74E-07	7.72E-06
OSCP1	-0.31273	2.14E-05	0.000125
OSGEPL1	-0.13324	0.076221	0.136535
OSGEP	0.191395	0.01049	0.025745
OSGIN1	0.428711	2.37E-09	4.49E-08
OSGIN2	-0.06246	0.407541	0.519772
OSMR	0.144385	0.054498	0.103212
OSM	0.218792	0.003345	0.009683
OSR1	-0.04684	0.534668	0.638322
OSR2	0.129809	0.084172	0.148198
OST4	0.337168	4.18E-06	3.04E-05
OSTBETA	-0.13763	0.06696	0.122522
OSTCL	-0.09885	0.189279	0.28471
OSTC	0.016069	0.831409	0.880478

OSTF1	0.355346	1.13E-06	9.66E-06
OSTM1	-0.2017	0.006937	0.018103
OSTN	-0.08238	0.274281	0.382351
OSTalpha	0.109177	0.146868	0.232333
OTC	-0.12041	0.109376	0.183709
OTOA	0.028743	0.703312	0.783564
OTOF	0.038098	0.613636	0.708958
OTOL1	-0.12133	0.106686	0.180109
OTOP1	0.011934	0.87438	0.913026
OTOP2	0.177225	0.017953	0.04053
OTOP3	-0.20467	0.006135	0.016293
OTOR	0.18271	0.014644	0.034172
OTOS	0.056253	0.45578	0.566759
OTP	-0.15849	0.034607	0.070592
OTUB1	0.358374	9.03E-07	7.93E-06
OTUB2	-0.01058	0.888553	0.922613
OTUD1	0.003568	0.9623	0.974372
OTUD3	-0.21106	0.004684	0.012949
OTUD4	-0.13846	0.065308	0.119975
OTUD5	-0.09042	0.230021	0.333316
OTUD6A	-0.0978	0.194018	0.290557
OTUD6B	0.007469	0.921175	0.945398
OTUD7A	-0.45368	2.02E-10	5.23E-09
OTUD7B	0.095486	0.204845	0.30378
OTX1	0.334006	5.21E-06	3.69E-05
OTX2	-0.1262	0.093224	0.160968
OVCA2	-0.09359	0.214024	0.314739
OVCH1	-0.11318	0.132522	0.213831
OVCH2	0.03313	0.660649	0.749063
OVGP1	0.056787	0.451508	0.562331
OVOL1	0.469391	3.86E-11	1.22E-09
OVOL2	0.361934	6.90E-07	6.31E-06
OXA1L	0.025737	0.733095	0.807049
OXCT1	-0.20116	0.007094	0.018425
OXCT2	-0.13025	0.083105	0.146686
OXER1	-0.02417	0.748754	0.819498
OXGR1	-0.26273	0.000396	0.001556
OXNAD1	-0.00354	0.962633	0.974659
OXR1	0.154317	0.039717	0.079242
OXSM	0.175546	0.019088	0.042684
OXSR1	0.345516	2.32E-06	1.81E-05
OXTR	0.104437	0.165337	0.255533
OXT	0.182786	0.014602	0.034086
P2RX1	-0.11866	0.114666	0.190522
P2RX2	-0.06066	0.421221	0.533378
P2RX3	-0.04587	0.54319	0.64622
P2RX4	-0.15642	0.037069	0.074781
P2RX5	-0.23922	0.0013	0.004307
P2RX6	-0.23699	0.001447	0.004724
P2RX7	-0.15648	0.036992	0.074671
P2RY10	-0.09216	0.221142	0.32303
P2RY11	0.104748	0.164074	0.253985
P2RY12	-0.21371	0.004179	0.011753
P2RY13	-0.14447	0.054357	0.102965

P2RY14	-0.16162	0.031137	0.064613
P2RY1	-0.06119	0.417121	0.529542
P2RY2	0.643886	3.18E-22	1.97E-19
P2RY4	-0.00392	0.958567	0.971738
P2RY6	0.250944	0.000728	0.002622
P2RY8	-0.19117	0.010584	0.025937
P4HA1	0.234881	0.0016	0.005153
P4HA2	-0.02912	0.699603	0.780521
P4HA3	0.151825	0.043066	0.084853
P4HB	-0.08516	0.258359	0.364887
P4HTM	-0.15455	0.039422	0.07878
P704P	0.091145	0.226286	0.328813
PA2G4P4	0.052923	0.48293	0.592105
PA2G4	0.169599	0.023622	0.051173
PAAF1	0.034194	0.650462	0.739549
PABPC1L2A	-0.28868	9.31E-05	0.000446
PABPC1L2E	-0.27518	0.000201	0.00087
PABPC1L	0.145409	0.05279	0.100449
PABPC1P2	-0.02044	0.786563	0.848804
PABPC1	0.202892	0.006604	0.017376
PABPC3	0.059374	0.431125	0.543041
PABPC4L	-0.05008	0.50682	0.613708
PABPC4	-0.11824	0.115975	0.192197
PABPC5	-0.22359	0.002699	0.00807
PABPN1L	-0.21021	0.004857	0.013371
PABPN1	0.128375	0.087683	0.153194
PACRGL	-0.0838	0.266114	0.373572
PACRG	-0.30989	2.56E-05	0.000146
PACS1	0.320668	1.28E-05	8.03E-05
PACS2	0.011435	0.879592	0.916437
PACSIN1	-0.40211	2.64E-08	3.65E-07
PACSIN2	-0.07558	0.315982	0.427306
PACSIN3	0.27827	0.000169	0.00075
PADI1	0.62839	6.01E-21	2.38E-18
PADI2	0.061501	0.414773	0.526967
PADI3	0.349907	1.69E-06	1.37E-05
PADI4	-0.16908	0.024063	0.051913
PADI6	-0.13499	0.072405	0.13086
PAEP	0.207448	0.005461	0.014749
PAF1	0.008691	0.908336	0.935784
PAFAH1B1	-0.51312	2.42E-13	1.31E-11
PAFAH1B2	-0.07969	0.290335	0.399769
PAFAH1B3	0.232935	0.001754	0.005572
PAFAH2	0.067901	0.367817	0.481382
PAG1	-0.14249	0.057773	0.108203
PAGE1	-0.04013	0.594814	0.692118
PAGE2B	0.063799	0.397522	0.510296
PAGE2	-0.03214	0.670232	0.757367
PAGE4	0.100532	0.181813	0.275492
PAGE5	-0.07661	0.309471	0.419948
PAH	-0.11584	0.123612	0.201976
PAICS	0.156804	0.036597	0.073986
PAIP1	-0.08452	0.261964	0.36885
PAIP2B	-0.44407	5.34E-10	1.24E-08

PAIP2	-0.50474	6.77E-13	3.23E-11
PAK1IP1	-0.05769	0.444318	0.555931
PAK1	0.332236	5.88E-06	4.11E-05
PAK2	0.104697	0.164281	0.254245
PAK3	-0.40479	2.09E-08	2.98E-07
PAK4	0.237189	0.001434	0.004685
PAK6	0.143979	0.055188	0.1043
PAK7	-0.27579	0.000194	0.000845
PALB2	0.304395	3.61E-05	0.000197
PALLD	0.034514	0.647407	0.737232
PALM2-AKA	-0.25426	0.000615	0.002264
PALM2	-0.40005	3.16E-08	4.24E-07
PALM3	0.333037	5.56E-06	3.91E-05
PALMD	-0.14653	0.050976	0.09756
PALM	-0.01904	0.80082	0.859826
PAMR1	0.087497	0.245497	0.35035
PAM	-0.1436	0.055832	0.105285
PAN2	-0.23111	0.00191	0.005998
PAN3	0.10729	0.154025	0.24151
PANK1	-0.37874	1.86E-07	2.01E-06
PANK2	-0.1654	0.027358	0.057911
PANK3	0.021712	0.773602	0.838948
PANK4	-0.2841	0.000121	0.000564
PANX1	0.239761	0.001267	0.004213
PANX2	0.039942	0.596564	0.693795
PANX3	0.054238	0.472106	0.581973
PAOX	0.143129	0.056656	0.106514
PAPD4	0.093711	0.213428	0.314082
PAPD5	-0.31341	2.05E-05	0.000121
PAPD7	-0.28683	0.000104	0.000491
PAPLN	0.089681	0.233864	0.337821
PAPL	-0.11416	0.129181	0.209431
PAPOLA	-0.37615	2.29E-07	2.41E-06
PAPOLB	-0.26181	0.000415	0.001622
PAPOLG	-0.11652	0.121416	0.199044
PAPPA2	-0.22675	0.002337	0.007134
PAPPA	-0.09397	0.21215	0.312476
PAPSS1	-0.08514	0.258503	0.364961
PAPSS2	-0.41846	6.15E-09	1.04E-07
PAQR3	-0.20382	0.006356	0.016801
PAQR4	0.434834	1.32E-09	2.68E-08
PAQR5	0.265063	0.000349	0.001399
PAQR6	0.18984	0.011147	0.027108
PAQR7	0.094177	0.211152	0.311429
PAQR8	0.135569	0.071182	0.129069
PAQR9	0.193776	0.009551	0.02374
PAR-SN	-0.28108	0.000144	0.000654
PAR1	-0.18453	0.013669	0.032238
PAR4	-0.27096	0.000254	0.001062
PAR5	-0.29959	4.85E-05	0.000256
PARD3B	-0.08048	0.28558	0.394514
PARD3	0.035092	0.641907	0.732899
PARD6A	-0.11839	0.1155	0.191634
PARD6B	0.397402	3.96E-08	5.17E-07

PARD6G	0.064891	0.389481	0.501962
PARG	-0.06267	0.40597	0.518414
PARK2	-0.36723	4.60E-07	4.42E-06
PARK7	-0.08233	0.274595	0.382508
PARL	0.145363	0.052865	0.100573
PARM1	-0.31777	1.54E-05	9.47E-05
PARN	0.27499	0.000203	0.000878
PARP10	0.254816	0.000598	0.002211
PARP11	-0.48532	6.61E-12	2.50E-10
PARP12	0.44707	3.95E-10	9.48E-09
PARP14	0.312103	2.22E-05	0.00013
PARP15	0.081359	0.280317	0.388736
PARP16	0.070831	0.34746	0.459915
PARP1	-0.18172	0.015201	0.035226
PARP2	-0.01738	0.817862	0.870889
PARP3	0.503591	7.78E-13	3.65E-11
PARP4	0.472572	2.74E-11	8.87E-10
PARP6	0.003787	0.95999	0.972631
PARP8	0.222929	0.00278	0.008279
PARP9	0.223068	0.002763	0.008238
PARS2	-0.19208	0.010213	0.025136
PART1	-0.3166	1.67E-05	0.000101
PARVA	0.123648	0.100101	0.170726
PARVB	-0.14183	0.058958	0.109993
PARVG	0.100617	0.181441	0.275139
PASD1	-0.0563	0.455377	0.566365
PASK	-0.09092	0.227427	0.330066
PATE1	-0.08354	0.267606	0.375187
PATE2	-0.09887	0.189197	0.284613
PATE3	0.002617	0.972342	0.981333
PATE4	-0.08577	0.254959	0.361299
PATL1	0.373679	2.78E-07	2.85E-06
PATL2	-0.02836	0.707042	0.78669
PATZ1	-0.34281	2.81E-06	2.15E-05
PAWR	0.139712	0.062887	0.116153
PAX1	0.046593	0.536853	0.640274
PAX2	-0.07523	0.318231	0.429923
PAX3	0.024836	0.742103	0.81411
PAX4	0.052903	0.483096	0.592235
PAX5	-0.15105	0.044154	0.08665
PAX6	-0.28479	0.000117	0.000545
PAX7	0.07711	0.306284	0.416554
PAX8	0.353816	1.27E-06	1.07E-05
PAX9	0.289489	8.88E-05	0.000429
PAXIP1	-0.20286	0.006612	0.017393
PBK	0.346181	2.21E-06	1.74E-05
PBLD	-0.02715	0.719014	0.795542
PBOV1	-0.20118	0.007086	0.018413
PBRM1	-0.29572	6.13E-05	0.000311
PBX1	-0.20924	0.005063	0.013839
PBX2	-0.0394	0.60155	0.697862
PBX3	-0.44716	3.92E-10	9.40E-09
PBX4	0.438979	8.82E-10	1.91E-08
PBXIP1	-0.15775	0.035467	0.072101

PCA3	-0.12303	0.101829	0.173225
PCBD1	-0.04036	0.59269	0.690053
PCBD2	0.181637	0.015246	0.035313
PCBP1	0.330251	6.73E-06	4.60E-05
PCBP2	-0.38666	9.76E-08	1.14E-06
PCBP3	-0.25757	0.000519	0.001961
PCBP4	0.233956	0.001672	0.005349
PCCA	-0.20185	0.006895	0.018021
PCCB	-0.18852	0.011732	0.028295
PCDH10	-0.2997	4.82E-05	0.000255
PCDH11X	-0.12521	0.095864	0.164722
PCDH11Y	-0.11999	0.110623	0.185378
PCDH12	-0.12019	0.110045	0.184628
PCDH15	-0.28266	0.000132	0.000606
PCDH17	-0.25993	0.000459	0.001764
PCDH18	-0.06796	0.367401	0.481012
PCDH19	-0.12425	0.09845	0.168389
PCDH1	0.56042	4.14E-16	4.22E-14
PCDH20	0.135402	0.071534	0.129622
PCDH7	0.276566	0.000186	0.000814
PCDH8	-0.20941	0.005027	0.013757
PCDH9	-0.20047	0.007296	0.018874
PCDHA10	0.049601	0.510856	0.617159
PCDHA11	-0.18974	0.011188	0.027199
PCDHA12	-0.05552	0.461723	0.571997
PCDHA13	-0.13005	0.083599	0.147374
PCDHA1	-0.37056	3.55E-07	3.54E-06
PCDHA2	-0.26932	0.000278	0.001148
PCDHA3	-0.27357	0.00022	0.000939
PCDHA4	-0.17559	0.019058	0.04263
PCDHA5	-0.30687	3.10E-05	0.000174
PCDHA6	-0.22485	0.002549	0.007688
PCDHA7	-0.20869	0.005182	0.014117
PCDHA8	-0.33877	3.74E-06	2.75E-05
PCDHA9	-0.17695	0.018138	0.040868
PCDHAC1	-0.12184	0.105205	0.178034
PCDHAC2	-0.09187	0.222592	0.324621
PCDHB10	-0.00862	0.909067	0.936391
PCDHB11	-0.10365	0.168572	0.259648
PCDHB12	-0.09109	0.226557	0.329141
PCDHB13	-0.04095	0.587328	0.685747
PCDHB14	0.124409	0.098014	0.167877
PCDHB15	-0.10999	0.143872	0.228379
PCDHB16	-0.07385	0.327216	0.439116
PCDHB17	-0.08253	0.273458	0.381525
PCDHB18	-0.10512	0.162588	0.252098
PCDHB19P	-0.0172	0.819693	0.872322
PCDHB1	-0.40983	1.34E-08	2.03E-07
PCDHB2	0.112557	0.134686	0.216756
PCDHB3	-0.19295	0.009866	0.024407
PCDHB4	-0.21466	0.00401	0.011349
PCDHB5	-0.28814	9.61E-05	0.000459
PCDHB6	-0.19976	0.007509	0.019358
PCDHB7	-0.03354	0.656683	0.745422

PCDHB8	-0.03601	0.633194	0.725002
PCDHB9	0.293809	6.88E-05	0.000344
PCDHGA10	0.026238	0.728104	0.803158
PCDHGA11	-0.10682	0.155845	0.2439
PCDHGA12	-0.23683	0.001458	0.004751
PCDHGA1	-0.19008	0.011041	0.026884
PCDHGA2	-0.27446	0.000209	0.0009
PCDHGA3	-0.20827	0.005276	0.014331
PCDHGA4	-0.13733	0.067564	0.123448
PCDHGA5	-0.1785	0.017134	0.038961
PCDHGA6	-0.27955	0.000157	0.000706
PCDHGA7	-0.21764	0.003519	0.010119
PCDHGA8	-0.01307	0.862513	0.904504
PCDHGA9	-0.15356	0.040713	0.080895
PCDHGB1	-0.14453	0.054262	0.102805
PCDHGB2	-0.01121	0.881962	0.917987
PCDHGB3	-0.1931	0.00981	0.024291
PCDHGB4	-0.15855	0.034532	0.070486
PCDHGB5	-0.04479	0.552759	0.654754
PCDHGB6	-0.23075	0.001943	0.006082
PCDHGB7	-0.0245	0.745492	0.816787
PCDHGB8P	0.030745	0.683719	0.76813
PCDHGC3	0.105046	0.162873	0.252462
PCDHGC4	-0.11836	0.115582	0.191754
PCDHGC5	0.1407	0.06103	0.11322
PCDP1	0.076563	0.309738	0.420223
PCF11	-0.19344	0.009678	0.024027
PCGEM1	-0.23916	0.001304	0.004315
PCGF1	0.245661	0.000949	0.003282
PCGF2	0.145116	0.053275	0.101206
PCGF3	0.088173	0.241854	0.346351
PCGF5	-0.24456	0.001002	0.003439
PCGF6	-0.11239	0.135279	0.217513
PCID2	0.08327	0.269138	0.376748
PCIF1	-0.11555	0.124566	0.203333
PCK1	-0.10716	0.154533	0.242211
PCK2	-0.07636	0.31105	0.421744
PCLO	-0.31487	1.86E-05	0.000111
PCM1	-0.25279	0.000663	0.002411
PCMT1	-0.39914	3.41E-08	4.55E-07
PCMTD1	-0.19598	0.00875	0.022026
PCMTD2	-0.29692	5.71E-05	0.000293
PCNAP1	-0.06467	0.391085	0.503766
PCNA	0.087922	0.243199	0.347824
PCNP	-0.23697	0.001449	0.004728
PCNT	-0.25737	0.000524	0.001978
PCNXL2	0.01399	0.852959	0.897166
PCNXL3	0.111341	0.138975	0.222193
PCNX	-0.37419	2.67E-07	2.76E-06
PCOLCE2	0.227623	0.002245	0.006897
PCOLCE	0.205483	0.00593	0.015824
PCOTH	0.170912	0.022549	0.049116
PCP2	0.082384	0.274282	0.382351
PCP4L1	0.007486	0.921004	0.945338

PCP4	-0.20704	0.005555	0.014961
PCSK1N	-0.15536	0.038383	0.076952
PCSK1	-0.41345	9.70E-09	1.54E-07
PCSK2	-0.16757	0.025366	0.054283
PCSK4	0.235438	0.001558	0.005034
PCSK5	0.25561	0.000574	0.002139
PCSK6	0.51024	3.46E-13	1.80E-11
PCSK7	0.391175	6.71E-08	8.23E-07
PCSK9	0.317288	1.59E-05	9.73E-05
PCTP	0.231774	0.001852	0.005841
PCYOX1L	-0.09368	0.213581	0.31426
PCYOX1	-0.2729	0.000228	0.000969
PCYT1A	0.031504	0.676347	0.76223
PCYT1B	-0.18932	0.011376	0.02757
PCYT2	0.42297	4.06E-09	7.25E-08
PC	0.121126	0.107272	0.180866
PDAP1	0.165346	0.027408	0.057991
PDCD10	0.330123	6.79E-06	4.63E-05
PDCD11	-0.0983	0.191773	0.287652
PDCD1LG2	-0.02832	0.707469	0.786988
PDCD1	-0.01577	0.834478	0.882688
PDCD2L	0.087589	0.244996	0.349863
PDCD2	-0.1448	0.053795	0.102076
PDCD4	-0.39121	6.69E-08	8.21E-07
PDCD5	0.171521	0.022065	0.048198
PDCD6IP	0.318278	1.49E-05	9.21E-05
PDCD6	0.15447	0.039519	0.078928
PDCD7	-0.16236	0.030369	0.063332
PDCL2	0.200401	0.007316	0.018918
PDCL3	0.049622	0.510681	0.617061
PDCL	-0.30459	3.57E-05	0.000196
PDC	0.053277	0.480006	0.589506
PDDC1	0.25687	0.000538	0.002024
PDE10A	-0.39956	3.29E-08	4.41E-07
PDE11A	0.241415	0.001169	0.003927
PDE12	-0.1584	0.034702	0.070749
PDE1A	-0.11396	0.129856	0.210283
PDE1B	-0.03573	0.635859	0.727524
PDE1C	-0.47012	3.57E-11	1.14E-09
PDE2A	-0.30534	3.41E-05	0.000189
PDE3A	-0.22812	0.002194	0.006759
PDE3B	-0.35632	1.05E-06	9.08E-06
PDE4A	0.394706	4.98E-08	6.37E-07
PDE4B	-0.30668	3.13E-05	0.000175
PDE4C	0.6364	1.34E-21	6.82E-19
PDE4DIP	-0.33723	4.16E-06	3.03E-05
PDE4D	-0.14967	0.046142	0.089841
PDE5A	-0.16035	0.032507	0.066992
PDE6A	0.128816	0.086591	0.151702
PDE6B	-0.10061	0.181491	0.275172
PDE6C	-0.20807	0.00532	0.014438
PDE6D	0.214604	0.00402	0.011373
PDE6G	0.00743	0.921591	0.945646
PDE6H	-0.10176	0.176493	0.269018

PDE7A	0.105447	0.161262	0.250435
PDE7B	-0.29388	6.85E-05	0.000343
PDE8A	-0.25088	0.000731	0.002628
PDE8B	-0.24064	0.001214	0.00406
PDE9A	-0.12585	0.094167	0.162285
PDF	0.270042	0.000267	0.00111
PDGFA	-0.11061	0.141592	0.225557
PDGFB	0.111916	0.136935	0.219624
PDGFC	0.341374	3.11E-06	2.35E-05
PDGFD	-0.14803	0.048619	0.093777
PDGFRA	-0.06307	0.402944	0.515617
PDGFRB	0.151087	0.044102	0.086583
PDGFRL	-0.10939	0.146072	0.231333
PDHA1	-0.11756	0.1181	0.194967
PDHB	-0.04949	0.511781	0.617952
PDHX	-0.18932	0.011373	0.027567
PDIA2	0.005193	0.945152	0.963075
PDIA3P	0.005389	0.943086	0.961713
PDIA3	0.062293	0.408779	0.520892
PDIA4	0.029852	0.692433	0.774673
PDIA5	-0.0504	0.504105	0.611132
PDIA6	-0.03977	0.598121	0.694944
PDIK1L	-0.28702	0.000103	0.000486
PDILT	-0.07792	0.301206	0.411386
PDK1	0.180435	0.015946	0.036711
PDK2	-0.23205	0.001829	0.005774
PDK3	-0.34413	2.56E-06	1.97E-05
PDK4	-0.3962	4.39E-08	5.68E-07
PDLIM1	0.392101	6.21E-08	7.68E-07
PDLIM2	0.358202	9.14E-07	8.02E-06
PDLIM3	0.091474	0.224611	0.326794
PDLIM4	0.28411	0.000121	0.000563
PDLIM5	0.096226	0.201341	0.299428
PDLIM7	0.550975	1.60E-15	1.38E-13
PDP1	0.16354	0.029167	0.061164
PDP2	-0.21238	0.004426	0.012318
PDPK1	-0.367	4.68E-07	4.49E-06
PDPN	0.178435	0.017172	0.039039
PDPR	-0.2229	0.002785	0.00829
PDRG1	-0.05326	0.480173	0.589675
PDS5A	-0.35496	1.16E-06	9.90E-06
PDS5B	-0.21551	0.003864	0.010986
PDSS1	0.080431	0.285857	0.39484
PDSS2	-0.28522	0.000114	0.000533
PDX1	-0.01126	0.881418	0.917683
PDXDC1	-0.03256	0.666117	0.753579
PDXDC2	0.186084	0.012885	0.030649
PDXK	0.181607	0.015263	0.035345
PDXP	-0.47193	2.93E-11	9.48E-10
PDYN	0.010608	0.888235	0.92238
PDZD11	0.299064	5.01E-05	0.000263
PDZD2	-0.28232	0.000135	0.000616
PDZD3	0.454115	1.93E-10	5.03E-09
PDZD4	-0.2554	0.00058	0.002158

PDZD7	0.305511	3.37E-05	0.000187
PDZD8	0.030027	0.690718	0.773659
PDZD9	0.018969	0.801572	0.860308
PDZK1IP1	0.516058	1.68E-13	9.47E-12
PDZK1P1	-0.09468	0.208724	0.308376
PDZK1	-0.10212	0.174967	0.26731
PDZRN3	-0.19766	0.008176	0.02083
PDZRN4	-0.05436	0.471113	0.581147
PEA15	0.267717	0.000303	0.001237
PEAR1	0.078707	0.296347	0.406265
PEBP1	-0.20762	0.005421	0.014659
PEBP4	-0.19215	0.010184	0.025079
PECAM1	-0.15696	0.036409	0.073682
PECI	-0.24855	0.000822	0.002908
PECR	0.263592	0.000378	0.001495
PEF1	0.040486	0.591573	0.689076
PEG10	-0.3941	5.24E-08	6.64E-07
PEG3AS	-0.198	0.008065	0.020587
PEG3	-0.34488	2.43E-06	1.88E-05
PELI1	0.379882	1.70E-07	1.86E-06
PELI2	-0.08965	0.234033	0.338039
PELI3	-0.25978	0.000462	0.001774
PELO	0.037139	0.622592	0.716555
PELP1	-0.28297	0.00013	0.000596
PEMT	-0.30268	4.02E-05	0.000217
PENK	-0.24677	0.000898	0.003134
PEPD	-0.03144	0.67697	0.762584
PER1	-0.08636	0.251681	0.357557
PER2	-0.11864	0.114733	0.190618
PER3	-0.0652	0.387222	0.499947
PER4	0.06867	0.362407	0.475624
PERP	0.465491	5.87E-11	1.76E-09
PES1	0.069169	0.358922	0.472053
PET112L	-0.13958	0.063129	0.116534
PEX10	-0.02473	0.743147	0.81503
PEX11A	0.123603	0.100225	0.170894
PEX11B	0.340485	3.31E-06	2.48E-05
PEX11G	0.155472	0.038241	0.076723
PEX12	-0.24004	0.00125	0.004167
PEX13	0.334523	5.02E-06	3.58E-05
PEX14	0.228617	0.002145	0.006631
PEX16	0.167885	0.025091	0.0538
PEX19	-0.07153	0.342684	0.454965
PEX1	-0.23946	0.001285	0.004268
PEX26	-0.10148	0.177714	0.270463
PEX2	0.040771	0.588957	0.686961
PEX3	-0.36397	5.91E-07	5.50E-06
PEX5L	-0.31484	1.87E-05	0.000112
PEX5	-0.36011	7.92E-07	7.11E-06
PEX6	-0.26752	0.000306	0.001249
PEX7	-0.25747	0.000521	0.001969
PF4V1	0.099306	0.187226	0.282202
PF4	0.181225	0.015483	0.035782
PFAS	-0.41704	7.00E-09	1.16E-07

PFDN1	0.318166	1.50E-05	9.26E-05
PFDN2	0.366857	4.74E-07	4.53E-06
PFDN4	0.195621	0.008874	0.022275
PFDN5	-0.05764	0.444723	0.556266
PFDN6	0.274446	0.00021	0.0009
PFKFB1	-0.05377	0.47596	0.585629
PFKFB2	0.019269	0.798496	0.858164
PFKFB3	0.110163	0.143231	0.227608
PFKFB4	-0.18872	0.011641	0.02811
PFKL	0.267295	0.00031	0.001262
PFKM	-0.34924	1.77E-06	1.43E-05
PFKP	0.314497	1.91E-05	0.000114
PFN1	0.28795	9.72E-05	0.000463
PFN2	-0.29761	5.47E-05	0.000283
PFN3	0.090613	0.22902	0.332061
PFN4	0.02797	0.710924	0.789543
PGA3	-0.10232	0.174114	0.266419
PGA4	-0.10897	0.147644	0.233262
PGA5	-0.1244	0.098037	0.167892
PGAM1	0.254026	0.000623	0.002287
PGAM2	-0.17278	0.02109	0.046436
PGAM4	0.01202	0.873477	0.912566
PGAM5	-0.16474	0.027993	0.059049
PGAP1	-0.40741	1.66E-08	2.43E-07
PGAP2	0.159177	0.033814	0.069239
PGAP3	0.186474	0.012694	0.030271
PGBD1	-0.25748	0.000521	0.001968
PGBD2	-0.04084	0.588311	0.686496
PGBD3	-0.2486	0.00082	0.002903
PGBD4	-0.03945	0.601087	0.697448
PGBD5	-0.36052	7.68E-07	6.93E-06
PGCP	-0.2127	0.004366	0.012179
PGC	0.213033	0.004303	0.012036
PGD	0.097826	0.193915	0.290447
PGF	0.073567	0.329105	0.441082
PGGT1B	-0.03088	0.682442	0.766968
PGK1	0.245576	0.000953	0.003294
PGK2	0.06498	0.388827	0.501353
PGLS	0.285269	0.000114	0.000532
PGLYRP1	-0.07938	0.292195	0.401827
PGLYRP2	-0.00031	0.996768	0.997537
PGLYRP3	0.178071	0.017404	0.039478
PGLYRP4	0.095206	0.206182	0.305327
PGM1	0.182403	0.014814	0.034483
PGM2L1	0.323574	1.05E-05	6.81E-05
PGM2	0.173834	0.020309	0.044994
PGM3	-0.29175	7.77E-05	0.000382
PGM5P2	-0.08261	0.272961	0.381074
PGM5	-0.22946	0.002063	0.0064
PGPEP1L	-0.03259	0.665837	0.753347
PGPEP1	-0.19316	0.009787	0.024246
PGP	0.095818	0.203268	0.301916
PGRMC1	-0.02543	0.736171	0.809354
PGRMC2	-0.16952	0.023685	0.051274

PGR	-0.13385	0.074879	0.134581
PGS1	-0.14512	0.05327	0.101206
PHACTR1	-0.39038	7.17E-08	8.71E-07
PHACTR2	-0.04998	0.50761	0.614364
PHACTR3	0.348509	1.87E-06	1.50E-05
PHACTR4	-0.18005	0.016176	0.037164
PHAX	-0.24263	0.001102	0.003733
PHB2	-0.16728	0.025626	0.054764
PHB	0.228468	0.00216	0.006673
PHC1	-0.13806	0.06609	0.121231
PHC2	0.12371	0.09993	0.170507
PHC3	-0.07749	0.303894	0.414284
PHEX	-0.29884	5.08E-05	0.000266
PHF10	-0.41996	5.36E-09	9.17E-08
PHF11	0.422178	4.37E-09	7.70E-08
PHF12	-0.10257	0.173059	0.265092
PHF13	0.14824	0.048295	0.093242
PHF14	0.006965	0.926484	0.948943
PHF15	-0.30501	3.48E-05	0.000191
PHF16	-0.22501	0.00253	0.007641
PHF17	-0.33856	3.79E-06	2.79E-05
PHF19	-0.03645	0.629111	0.721831
PHF1	0.051043	0.49863	0.606055
PHF20L1	-0.11996	0.110724	0.1855
PHF20	-0.25382	0.000629	0.002308
PHF21A	-0.21897	0.003319	0.00962
PHF21B	-0.24883	0.00081	0.002878
PHF23	-0.16498	0.027753	0.0586
PHF2	-0.3763	2.26E-07	2.39E-06
PHF3	-0.29752	5.50E-05	0.000284
PHF5A	0.162126	0.030609	0.063746
PHF6	-0.04726	0.530992	0.635237
PHF7	-0.19659	0.008536	0.021589
PHF8	-0.35163	1.49E-06	1.22E-05
PHGDH	0.025889	0.731575	0.805959
PHGR1	0.260743	0.000439	0.001703
PHIP	-0.33721	4.17E-06	3.03E-05
PHKA1	-0.20119	0.007084	0.018411
PHKA2	-0.2426	0.001103	0.003736
PHKB	-0.08837	0.240782	0.345203
PHKG1	-0.05042	0.503922	0.610985
PHKG2	0.34151	3.08E-06	2.33E-05
PHLDA1	0.288671	9.32E-05	0.000446
PHLDA2	0.597254	1.37E-18	2.92E-16
PHLDA3	0.51789	1.33E-13	7.62E-12
PHLDB1	0.218005	0.003463	0.009981
PHLDB2	-0.25577	0.000569	0.002124
PHLDB3	-0.16005	0.032835	0.067563
PHLPP1	-0.26838	0.000292	0.001201
PHLPP2	-0.41741	6.77E-09	1.13E-07
PHOSPH01	0.033915	0.653126	0.742151
PHOSPH02	-0.12462	0.097453	0.167031
PHOX2A	-0.06961	0.355878	0.468955
PHOX2B	-0.1189	0.113946	0.189629

PHPT1	-0.10168	0.176839	0.269419
PHRF1	0.055373	0.46287	0.57316
PHTF1	-0.07287	0.33374	0.445933
PHTF2	-0.25023	0.000755	0.002706
PHYHD1	0.270372	0.000262	0.001093
PHYHIPL	-0.26855	0.00029	0.001192
PHYHIP	0.26159	0.00042	0.001638
PHYH	-0.10636	0.157662	0.246024
PI15	0.050865	0.500134	0.607285
PI16	-0.09865	0.190147	0.285712
PI3	0.474877	2.13E-11	7.03E-10
PI4K2A	-0.10699	0.155196	0.243058
PI4K2B	-0.15978	0.033132	0.068117
PI4KAP1	-0.10525	0.162043	0.25149
PI4KAP2	-0.01633	0.828748	0.878883
PI4KA	-0.5005	1.13E-12	5.15E-11
PI4KB	-0.21664	0.003678	0.010523
PIAS1	-0.02523	0.738193	0.811037
PIAS2	-0.51059	3.31E-13	1.75E-11
PIAS3	0.389592	7.65E-08	9.25E-07
PIAS4	-0.24711	0.000883	0.003092
PIBF1	0.204987	0.006055	0.016098
PICALM	0.202385	0.006744	0.017689
PICK1	0.027273	0.717819	0.795014
PID1	-0.20955	0.004996	0.013687
PIF1	0.352114	1.44E-06	1.19E-05
PIGA	0.126867	0.091503	0.158537
PIGB	0.369224	3.94E-07	3.88E-06
PIGC	0.323299	1.07E-05	6.91E-05
PIGF	0.028867	0.702087	0.782541
PIGG	0.010981	0.884337	0.919685
PIGH	-0.08694	0.248515	0.353943
PIGK	-0.3804	1.63E-07	1.80E-06
PIGL	-0.003	0.968324	0.978318
PIGM	-0.08603	0.253526	0.359732
PIGN	-0.31702	1.62E-05	9.86E-05
PIGO	-0.09372	0.213382	0.314038
PIGP	-0.25513	0.000588	0.002184
PIGQ	0.146071	0.051708	0.098771
PIGR	0.258029	0.000506	0.001922
PIGS	0.164582	0.02814	0.059304
PIGT	-0.25694	0.000536	0.002018
PIGU	-0.05025	0.505299	0.612129
PIGV	-0.01703	0.821527	0.873615
PIGW	0.085091	0.25877	0.365115
PIGX	-0.1669	0.025973	0.055416
PIGY	-0.19673	0.008489	0.021486
PIGZ	-0.08594	0.254028	0.360211
PIH1D1	0.254077	0.000621	0.002282
PIH1D2	0.029722	0.693705	0.775647
PIK3AP1	0.01107	0.883401	0.919001
PIK3C2A	-0.20079	0.007201	0.018644
PIK3C2B	0.294108	6.76E-05	0.000339
PIK3C2G	0.433726	1.47E-09	2.94E-08

PIK3C3	-0.37021	3.65E-07	3.62E-06
PIK3CA	-0.05042	0.503871	0.610985
PIK3CB	0.104834	0.163726	0.253564
PIK3CD	-0.02798	0.710839	0.789492
PIK3CG	-0.0206	0.784873	0.847443
PIK3IP1	0.105232	0.162126	0.251539
PIK3R1	-0.20855	0.005214	0.014189
PIK3R2	-0.10363	0.168656	0.259755
PIK3R3	-0.30886	2.73E-05	0.000155
PIK3R4	-0.1188	0.114242	0.189993
PIK3R5	-0.03271	0.664729	0.752612
PIK3R6	0.216129	0.003761	0.010738
PIKFYVE	-0.32323	1.08E-05	6.94E-05
PILRA	0.069362	0.357575	0.470652
PILRB	0.005232	0.944739	0.962704
PIM1	0.310992	2.39E-05	0.000138
PIM2	-0.15538	0.038352	0.076899
PIM3	0.277877	0.000173	0.000764
PIN1L	-0.11136	0.138912	0.222129
PIN1	0.047213	0.531439	0.635618
PIN4	0.128242	0.088015	0.153666
PINK1	-0.11183	0.137254	0.220012
PINX1	0.102433	0.173646	0.265846
PION	0.025294	0.737517	0.810474
PIP4K2A	0.047013	0.533181	0.637162
PIP4K2B	-0.23922	0.0013	0.004307
PIP4K2C	0.130928	0.08151	0.144476
PIP5K1A	-0.01686	0.823272	0.874812
PIP5K1B	-0.09489	0.20769	0.307078
PIP5K1C	-0.07587	0.314128	0.425129
PIP5K1P1	-0.00295	0.968787	0.97861
PIP5KL1	0.228092	0.002197	0.006766
PIPOX	-0.33437	5.08E-06	3.61E-05
PIPSL	0.158764	0.034285	0.070088
PIP	0.0895	0.234814	0.338787
PIRT	-0.17796	0.017476	0.039602
PIR	-0.19994	0.007454	0.019234
PISD	-0.32001	1.33E-05	8.34E-05
PITPNA	-0.43515	1.28E-09	2.61E-08
PITPNB	0.161115	0.031677	0.065515
PITPNC1	-0.06498	0.388822	0.501353
PITPNM1	0.364441	5.70E-07	5.33E-06
PITPNM2	-0.26232	0.000404	0.001584
PITPNM3	0.416216	7.55E-09	1.24E-07
PITRM1	-0.10554	0.160889	0.249994
PITX1	0.664458	4.91E-24	4.85E-21
PITX2	0.009741	0.897317	0.928496
PITX3	0.114766	0.127152	0.206802
PIWIL1	0.066039	0.381129	0.493869
PIWIL2	-0.05887	0.43502	0.546581
PIWIL3	-0.06331	0.401194	0.513909
PIWIL4	0.264657	0.000357	0.001427
PJA1	0.056391	0.454674	0.565703
PJA2	-0.35063	1.60E-06	1.31E-05

PKD1L1	-0.15545	0.038269	0.076762
PKD1L2	0.349716	1.71E-06	1.38E-05
PKD1L3	-0.23399	0.001669	0.005342
PKD1	-0.25246	0.000675	0.002448
PKD2L1	0.066093	0.380735	0.493488
PKD2L2	0.073322	0.330725	0.442764
PKD2	-0.15288	0.041623	0.082429
PKDCC	0.074408	0.323594	0.435586
PKDREJ	-0.02069	0.784028	0.846763
PKHD1L1	-0.31033	2.49E-05	0.000143
PKHD1	0.155348	0.038398	0.076975
PKIA	0.15554	0.038156	0.076599
PKIB	-0.08843	0.240504	0.344893
PKIG	-0.27242	0.000234	0.000992
PKLR	-0.05905	0.433659	0.545239
PKM2	0.571575	7.93E-17	1.00E-14
PKMYT1	0.431643	1.79E-09	3.51E-08
PKN1	0.221053	0.003025	0.00891
PKN2	0.109125	0.147061	0.232583
PKN3	0.388501	8.38E-08	1.00E-06
PKNOX1	-0.22089	0.003047	0.008958
PKNOX2	-0.07653	0.30992	0.420385
PKP1	0.342099	2.96E-06	2.25E-05
PKP2	0.169515	0.023693	0.051287
PKP3	0.548639	2.23E-15	1.87E-13
PKP4	0.24393	0.001034	0.003531
PL-5283	-0.10274	0.172364	0.264171
PLA1A	-0.24205	0.001134	0.003828
PLA2G10	0.484292	7.43E-12	2.76E-10
PLA2G12A	-0.48243	9.17E-12	3.33E-10
PLA2G12B	-0.07433	0.324099	0.436116
PLA2G15	0.264367	0.000363	0.001446
PLA2G16	0.58159	1.70E-17	2.57E-15
PLA2G1B	-0.11297	0.133237	0.214703
PLA2G2A	-0.18282	0.014581	0.034041
PLA2G2C	-0.01122	0.881829	0.917938
PLA2G2D	-0.08545	0.256747	0.363156
PLA2G2F	0.326205	8.85E-06	5.83E-05
PLA2G3	0.216599	0.003684	0.010536
PLA2G4A	0.271663	0.000244	0.001026
PLA2G4C	-0.28013	0.000152	0.000686
PLA2G4D	0.369824	3.76E-07	3.73E-06
PLA2G4E	0.178182	0.017333	0.039338
PLA2G4F	0.358022	9.27E-07	8.11E-06
PLA2G5	-0.12497	0.096502	0.165688
PLA2G6	-0.16226	0.030469	0.063487
PLA2G7	0.090539	0.229404	0.332495
PLA2R1	0.376907	2.15E-07	2.29E-06
PLAA	-0.20996	0.00491	0.013488
PLAC1L	0.010774	0.886504	0.921067
PLAC1	0.312667	2.15E-05	0.000126
PLAC2	-0.12863	0.08704	0.152312
PLAC4	0.131185	0.080907	0.143536
PLAC8L1	-0.08015	0.287551	0.396819

PLAC8	0.484261	7.46E-12	2.76E-10
PLAC9	-0.04282	0.570378	0.670271
PLAG1	0.145624	0.052437	0.099884
PLAGL1	-0.14789	0.048839	0.094127
PLAGL2	-0.4698	3.70E-11	1.17E-09
PLAT	0.500452	1.13E-12	5.17E-11
PLAUR	0.520121	1.00E-13	5.92E-12
PLAU	0.39261	5.95E-08	7.41E-07
PLB1	0.244894	0.000986	0.003394
PLBD1	0.607867	2.31E-19	5.85E-17
PLBD2	-0.41015	1.30E-08	1.98E-07
PLCB1	-0.3396	3.53E-06	2.62E-05
PLCB2	0.240623	0.001215	0.004062
PLCB3	0.605337	3.55E-19	8.46E-17
PLCB4	-0.21218	0.004464	0.012414
PLCD1	0.259903	0.000459	0.001765
PLCD3	0.712102	7.71E-29	3.55E-25
PLCD4	-0.09631	0.200963	0.299049
PLCE1	0.045984	0.542187	0.645389
PLCG1	-0.29125	8.00E-05	0.000391
PLCG2	0.052617	0.485471	0.594408
PLCH1	0.143341	0.056287	0.105982
PLCH2	0.289053	9.11E-05	0.000438
PLCL1	-0.31589	1.74E-05	0.000105
PLCL2	-0.30415	3.67E-05	0.0002
PLCXD1	0.106851	0.155727	0.243792
PLCXD2	-0.0093	0.901946	0.931433
PLCXD3	-0.20225	0.006782	0.017771
PLCZ1	0.240911	0.001198	0.004011
PLD1	0.06488	0.389561	0.502032
PLD2	0.314007	1.97E-05	0.000117
PLD3	-0.1594	0.033557	0.068828
PLD4	0.09735	0.196104	0.293015
PLD5	-0.30672	3.13E-05	0.000175
PLD6	-0.44916	3.20E-10	7.92E-09
PLDN	-0.41496	8.46E-09	1.37E-07
PLEC	0.527275	3.99E-14	2.58E-12
PLEK2	0.589164	5.12E-18	9.13E-16
PLEKHA1	0.064825	0.389966	0.502521
PLEKHA2	0.228428	0.002164	0.006682
PLEKHA3	-0.13197	0.079086	0.140772
PLEKHA4	0.256434	0.00055	0.002062
PLEKHA5	0.23391	0.001675	0.005359
PLEKHA6	0.188331	0.011819	0.028472
PLEKHA7	0.403648	2.31E-08	3.26E-07
PLEKHA8	0.003622	0.961732	0.973997
PLEKHA9	0.312698	2.14E-05	0.000126
PLEKHB1	-0.28198	0.000137	0.000627
PLEKHB2	0.062529	0.407003	0.519331
PLEKHF1	0.257277	0.000527	0.001986
PLEKHF2	-0.03951	0.600535	0.697052
PLEKHG1	0.074121	0.325469	0.437543
PLEKHG2	0.190295	0.010951	0.026701
PLEKHG3	0.106722	0.15623	0.244348

PLEKHG4B	-0.02373	0.753232	0.823214
PLEKHG4	-0.08012	0.287748	0.396954
PLEKHG5	0.246437	0.000913	0.003176
PLEKHG6	0.187147	0.01237	0.02961
PLEKHG7	-0.0449	0.551771	0.653885
PLEKHH1	0.032983	0.662062	0.750494
PLEKHH2	0.160616	0.032217	0.066484
PLEKHH3	0.161535	0.03123	0.06478
PLEKHJ1	0.207609	0.005424	0.014663
PLEKHM1P	0.388819	8.16E-08	9.79E-07
PLEKHM1	0.358376	9.03E-07	7.93E-06
PLEKHM2	-0.16541	0.027345	0.057892
PLEKHM3	-0.4023	2.60E-08	3.60E-07
PLEKHN1	0.638288	9.38E-22	5.15E-19
PLEKHO1	0.117519	0.118223	0.195121
PLEKHO2	0.027661	0.713982	0.791888
PLEK	-0.04319	0.567047	0.6671
PLGLA	-0.00888	0.906348	0.934661
PLGLB2	-0.11192	0.136907	0.219597
PLG	0.00056	0.994078	0.995941
PLIN1	-0.19188	0.010293	0.025297
PLIN2	0.10573	0.160134	0.248977
PLIN3	0.484848	6.98E-12	2.61E-10
PLIN4	-0.03675	0.626259	0.719729
PLIN5	0.090216	0.231077	0.334552
PLK1S1	-0.44836	3.47E-10	8.48E-09
PLK1	0.411351	1.17E-08	1.81E-07
PLK2	-0.04503	0.550626	0.652919
PLK3	0.352996	1.35E-06	1.12E-05
PLK4	0.192485	0.01005	0.024804
PLK5P	0.119304	0.112699	0.188039
PLLP	0.517333	1.43E-13	8.16E-12
PLN	-0.00248	0.973743	0.982171
PLOD1	0.191119	0.010604	0.025972
PLOD2	0.050869	0.5001	0.607281
PLOD3	0.121825	0.105245	0.178086
PLP1	-0.06774	0.368966	0.482344
PLP2	0.322636	1.12E-05	7.19E-05
PLRG1	-0.06087	0.419602	0.53177
PLS1	0.332925	5.61E-06	3.94E-05
PLS3	0.264268	0.000365	0.001451
PLSCR1	0.205424	0.005945	0.015854
PLSCR2	-0.22711	0.002299	0.007035
PLSCR3	0.257263	0.000527	0.001987
PLSCR4	-0.25873	0.000488	0.001864
PLSCR5	-0.05328	0.479974	0.589504
PLTP	0.01766	0.815006	0.869111
PLUNC	-0.03051	0.685994	0.769919
PLVAP	-0.28115	0.000144	0.000653
PLXDC1	0.126602	0.092187	0.159583
PLXDC2	0.023312	0.757423	0.826561
PLXNA1	0.202161	0.006807	0.01782
PLXNA2	-0.01624	0.82961	0.87942
PLXNA3	0.085057	0.25896	0.365324

PLXNA4	-0.12867	0.086943	0.152196
PLXNB1	0.036027	0.633061	0.724933
PLXNB2	0.220937	0.00304	0.008947
PLXNB3	0.308112	2.86E-05	0.000162
PLXNC1	-0.25964	0.000466	0.001785
PLXND1	-0.08875	0.238785	0.342942
PM2OD1	-0.17247	0.021328	0.046855
PM2OD2	-0.45494	1.77E-10	4.69E-09
PMAIP1	0.146505	0.051011	0.097618
PMCHL1	-0.09738	0.195977	0.29287
PMCHL2	-0.11167	0.137815	0.220768
PMCH	0.040866	0.588094	0.686358
PMEPA1	0.402577	2.54E-08	3.53E-07
PMF1	0.066213	0.379875	0.492664
PMFBP1	-0.16585	0.026931	0.057138
PML	0.555356	8.61E-16	8.07E-14
PMM1	-0.4374	1.03E-09	2.17E-08
PMM2	0.240546	0.001219	0.004074
PMP22	0.049279	0.513612	0.619656
PMP2	-0.11647	0.121562	0.199251
PMPCA	-0.13457	0.073309	0.132156
PMPCB	-0.06221	0.409376	0.521484
PMS1	-0.1337	0.075203	0.135077
PMS2CL	-0.08206	0.276159	0.384075
PMS2L11	0.293517	7.00E-05	0.000349
PMS2L1	0.130654	0.082155	0.145346
PMS2L2	0.114528	0.127949	0.207774
PMS2L3	0.10902	0.147455	0.233038
PMS2L4	-0.18219	0.014931	0.034701
PMS2L5	0.027048	0.720052	0.796415
PMS2	-0.17143	0.022133	0.048318
PMVK	0.159211	0.033776	0.069189
PNCK	0.176398	0.018505	0.041553
PNKD	0.388183	8.60E-08	1.02E-06
PNKP	0.289369	8.94E-05	0.000431
PNLDC1	-0.09691	0.198144	0.295544
PNLIPRP1	-0.07156	0.342482	0.454727
PNLIPRP2	-0.06357	0.399255	0.511823
PNLIPRP3	-0.04284	0.57019	0.670091
PNLIP	-0.07004	0.352906	0.465721
PNMA1	0.026358	0.726908	0.802204
PNMA2	-0.15273	0.041821	0.082755
PNMA3	-0.20451	0.006177	0.016392
PNMA5	0.030483	0.686268	0.769919
PNMA6A	0.011983	0.873862	0.912727
PNMAL1	-0.27901	0.000162	0.000724
PNMAL2	-0.00385	0.959281	0.972162
PNMT	0.105612	0.160605	0.249573
PNN	0.073094	0.332232	0.44446
PN01	0.034682	0.645808	0.735993
PNOC	0.038791	0.607193	0.703005
PNPLA1	0.234995	0.001591	0.005131
PNPLA2	0.314696	1.88E-05	0.000112
PNPLA3	0.409725	1.35E-08	2.04E-07

PNPLA4	-0.08441	0.26262	0.369612
PNPLA5	-0.12249	0.103347	0.175369
PNPLA6	0.092356	0.220154	0.321907
PNPLA7	-0.20643	0.005701	0.015306
PNPLA8	-0.24509	0.000976	0.003363
PNPO	0.057506	0.44579	0.557174
PNPT1	0.137499	0.067214	0.122942
PNP	0.462781	7.83E-11	2.26E-09
PNRC1	-0.17116	0.022354	0.048747
PNRC2	-0.05702	0.449635	0.560669
POC1A	0.431474	1.82E-09	3.56E-08
POC1B	0.138236	0.065747	0.120702
POC5	-0.12212	0.104414	0.176921
PODNL1	0.388289	8.53E-08	1.02E-06
PODN	0.056155	0.45657	0.567598
PODXL2	-0.25706	0.000532	0.002006
PODXL	0.22084	0.003054	0.008969
POF1B	0.398389	3.64E-08	4.80E-07
POFUT1	-0.39946	3.32E-08	4.44E-07
POFUT2	0.008167	0.913839	0.93982
POGK	0.138026	0.066162	0.121308
POGZ	-0.07188	0.340351	0.452687
POLA1	-0.31325	2.07E-05	0.000122
POLA2	0.134956	0.072483	0.130953
POLB	0.462747	7.86E-11	2.27E-09
POLD1	0.246399	0.000915	0.003181
POLD2	-0.0162	0.83004	0.879641
POLD3	0.082334	0.274573	0.382508
POLD4	0.551246	1.54E-15	1.34E-13
POLDIP2	0.135466	0.0714	0.129409
POLDIP3	-0.18136	0.015404	0.035636
POLE2	0.272225	0.000237	0.001001
POLE3	0.0863	0.252041	0.357933
POLE4	0.379568	1.74E-07	1.90E-06
POLE	0.018615	0.805193	0.862035
POLG2	0.017389	0.8178	0.870889
POLG	0.030485	0.686246	0.769919
POLH	-0.28114	0.000144	0.000653
POLI	-0.23236	0.001802	0.005705
POLK	-0.13589	0.070502	0.128023
POLL	0.017602	0.8156	0.869573
POLM	0.18908	0.011481	0.027791
POLN	-0.24045	0.001225	0.004091
POLQ	0.359123	8.53E-07	7.56E-06
POLR1A	-0.13781	0.066599	0.122029
POLR1B	-0.17573	0.018962	0.042459
POLR1C	0.014218	0.850588	0.895463
POLR1D	0.175021	0.019456	0.043368
POLR1E	-0.1834	0.014269	0.03341
POLR2A	-0.27203	0.000239	0.001009
POLR2B	-0.30749	2.98E-05	0.000168
POLR2C	-0.08558	0.256034	0.362455
POLR2D	0.160375	0.03248	0.066958
POLR2E	0.127226	0.090581	0.157202

POLR2F	0.040813	0.588576	0.686556
POLR2G	0.205463	0.005935	0.015835
POLR2H	0.400143	3.13E-08	4.22E-07
POLR2I	0.062697	0.405743	0.518258
POLR2J2	-0.06315	0.402336	0.515005
POLR2J3	0.109715	0.144876	0.229714
POLR2J4	-0.06021	0.424645	0.536957
POLR2J	0.086364	0.251686	0.357557
POLR2K	-0.03728	0.621285	0.715384
POLR2L	0.074295	0.324328	0.436335
POLR3A	-0.39388	5.34E-08	6.75E-07
POLR3B	-0.43854	9.21E-10	1.98E-08
POLR3C	0.078453	0.297911	0.407956
POLR3D	0.033815	0.654081	0.743151
POLR3E	-0.03853	0.609582	0.705069
POLR3F	-0.4045	2.15E-08	3.05E-07
POLR3GL	0.10145	0.177834	0.270624
POLR3G	0.082352	0.274469	0.382508
POLR3H	-0.35598	1.08E-06	9.29E-06
POLR3K	0.058393	0.438792	0.550515
POLRMT	0.060407	0.423145	0.535368
POM121C	-0.35848	8.95E-07	7.89E-06
POM121L1C	-0.14045	0.061495	0.113943
POM121L1F	0.075234	0.318235	0.429923
POM121L2	-0.01653	0.826648	0.877192
POM121L4F	-0.19973	0.007519	0.019374
POM121L8F	-0.08513	0.258545	0.364993
POM121L9F	0.011632	0.877532	0.915042
POM121	-0.34405	2.57E-06	1.98E-05
POMC	-0.19337	0.009707	0.02408
POMGNT1	-0.25367	0.000634	0.002321
POMP	0.409159	1.42E-08	2.13E-07
POMT1	-0.30242	4.08E-05	0.00022
POMT2	-0.34648	2.16E-06	1.70E-05
POMZP3	0.112193	0.135961	0.218311
PON1	-0.25807	0.000505	0.001918
PON2	0.240585	0.001217	0.004068
PON3	0.079065	0.294147	0.404062
POP1	-0.03368	0.655382	0.744458
POP4	0.126136	0.093403	0.161193
POP5	0.092947	0.217199	0.318494
POP7	0.145256	0.053042	0.100831
POPDC2	-0.06928	0.358146	0.471226
POPDC3	-0.26245	0.000402	0.001576
PORCN	0.277281	0.000179	0.000787
POR	0.143308	0.056345	0.106051
POSTN	0.204509	0.006176	0.016391
POT1	-0.1171	0.119565	0.196827
POTEB	0.061987	0.411092	0.523192
POTEC	0.023034	0.760227	0.828889
POTEE	0.025054	0.739924	0.812487
POTEF	-0.10059	0.181571	0.275273
POTEG	-0.11403	0.129643	0.209976
POTEH	-0.01688	0.82306	0.874728

POU1F1	0.053991	0.474128	0.583882
POU2AF1	0.065522	0.384878	0.497683
POU2F1	-0.11267	0.134296	0.216164
POU2F2	-0.08226	0.27498	0.382892
POU2F3	0.510348	3.41E-13	1.79E-11
POU3F1	-0.0259	0.731457	0.805919
POU3F2	-0.22644	0.00237	0.007219
POU3F3	-0.15148	0.043541	0.085661
POU3F4	0.016579	0.826148	0.876785
POU4F1	0.018954	0.801719	0.860417
POU4F2	-0.16995	0.023333	0.050612
POU4F3	-0.25623	0.000556	0.00208
POU5F1B	0.393288	5.62E-08	7.04E-07
POU5F1	0.56632	1.74E-16	1.99E-14
POU5F2	0.055131	0.464831	0.574904
POU6F1	-0.14978	0.045991	0.089607
POU6F2	-0.48483	6.99E-12	2.61E-10
PP14571	0.109643	0.145142	0.230063
PPA1	0.318216	1.50E-05	9.25E-05
PPA2	0.078132	0.299899	0.409998
PPAN-P2RY	-0.14004	0.062264	0.11526
PPAN	0.16281	0.029903	0.0625
PPAP2A	-0.20944	0.00502	0.013744
PPAP2B	-0.29612	5.99E-05	0.000306
PPAP2C	0.485795	6.26E-12	2.39E-10
PPAPDC1A	0.385587	1.07E-07	1.23E-06
PPAPDC1B	-0.24902	0.000802	0.002856
PPAPDC2	-0.19313	0.009796	0.024266
PPAPDC3	0.014729	0.845292	0.890981
PPARA	-0.18749	0.01221	0.029288
PPARD	0.31957	1.37E-05	8.55E-05
PPARGC1A	-0.21937	0.00326	0.009479
PPARGC1B	0.079995	0.288487	0.397806
PPARG	0.633696	2.24E-21	1.03E-18
PPAT	-0.17258	0.021247	0.046692
PPBPL2	0.109625	0.145207	0.230129
PPBP	0.081249	0.28097	0.389369
PPCDC	0.160785	0.032033	0.066154
PPCS	0.050257	0.505278	0.612129
PPDPF	0.301233	4.39E-05	0.000235
PPEF1	0.233644	0.001696	0.005418
PPEF2	0.025107	0.739387	0.812077
PPFIA1	0.04925	0.51386	0.619918
PPFIA2	0.086838	0.249086	0.354602
PPFIA3	-0.21761	0.003524	0.010128
PPFIA4	0.33109	6.36E-06	4.38E-05
PPFIBP1	0.059241	0.432162	0.544042
PPFIBP2	0.118668	0.114644	0.190518
PPHLN1	0.029318	0.697661	0.779013
PPIAL4C	0.285831	0.00011	0.000516
PPIAL4D	-0.12983	0.084113	0.148134
PPIAL4E	0.024995	0.740512	0.812847
PPIAL4G	0.273661	0.000219	0.000934
PPIA	0.378947	1.83E-07	1.99E-06

PPIB	0.01224	0.871178	0.911085
PPIC	0.360327	7.79E-07	7.01E-06
PPID	-0.2105	0.004797	0.013226
PIEL	-0.14988	0.045847	0.089389
PIE	0.039805	0.597822	0.6948
PIF	-0.02995	0.691457	0.773967
PIG	0.045202	0.549088	0.651557
PIH	0.224526	0.002587	0.007782
PIIL1	-0.10048	0.182017	0.275738
PIIL2	-0.15302	0.041425	0.082087
PIIL3	0.197461	0.008243	0.020945
PIIL4	-0.26002	0.000456	0.001758
PIIL5	0.175057	0.01943	0.043321
PIIL6	-0.34672	2.12E-06	1.68E-05
PIIP5K1	-0.00788	0.916811	0.942208
PIIP5K2	-0.2264	0.002376	0.00723
PPL	0.392331	6.09E-08	7.54E-07
PPM1A	-0.38262	1.36E-07	1.52E-06
PPM1B	-0.1944	0.009316	0.023237
PPM1D	-0.42486	3.40E-09	6.21E-08
PPM1E	-0.3437	2.64E-06	2.03E-05
PPM1F	-0.12587	0.094091	0.162169
PPM1G	0.330764	6.50E-06	4.47E-05
PPM1H	-0.25629	0.000554	0.002074
PPM1J	0.559505	4.73E-16	4.73E-14
PPM1K	-0.37259	3.03E-07	3.09E-06
PPM1L	-0.13989	0.062543	0.115668
PPM1M	0.130347	0.082882	0.146392
PPM1N	0.501467	1.00E-12	4.62E-11
PPME1	0.180794	0.015734	0.036269
PPOX	0.010152	0.893014	0.925331
PPP1CA	0.490033	3.85E-12	1.55E-10
PPP1CB	0.091489	0.224532	0.326751
PPP1CC	-0.16808	0.024917	0.053487
PPP1R10	-0.27234	0.000235	0.000996
PPP1R11	0.212637	0.004377	0.012205
PPP1R12A	-0.22676	0.002336	0.007133
PPP1R12B	0.010289	0.891574	0.924439
PPP1R12C	0.066645	0.376762	0.489462
PPP1R13B	-0.02431	0.747399	0.818467
PPP1R13L	0.588807	5.42E-18	9.58E-16
PPP1R14A	0.201755	0.006921	0.018077
PPP1R14B	0.452963	2.17E-10	5.56E-09
PPP1R14C	0.056543	0.453461	0.564371
PPP1R14D	0.421605	4.61E-09	8.07E-08
PPP1R15A	0.297289	5.58E-05	0.000287
PPP1R15B	0.002531	0.973255	0.981845
PPP1R16A	0.180199	0.016086	0.036972
PPP1R16B	-0.26726	0.00031	0.001264
PPP1R1A	-0.21227	0.004448	0.012372
PPP1R1B	0.311713	2.28E-05	0.000132
PPP1R1C	0.392581	5.96E-08	7.41E-07
PPP1R2P1	0.071227	0.344762	0.457079
PPP1R2P3	-0.09449	0.209609	0.309544

PPP1R2P9	-0.06284	0.404679	0.5173
PPP1R2	0.064363	0.393355	0.505998
PPP1R3A	-0.13606	0.07016	0.127536
PPP1R3B	0.31803	1.52E-05	9.34E-05
PPP1R3C	0.03229	0.66874	0.756027
PPP1R3D	0.162486	0.030237	0.063083
PPP1R3E	-0.26149	0.000422	0.001645
PPP1R3F	-0.35013	1.66E-06	1.35E-05
PPP1R3G	0.561961	3.31E-16	3.52E-14
PPP1R7	0.391942	6.29E-08	7.77E-07
PPP1R8	-0.1881	0.011926	0.028718
PPP1R9A	-0.19198	0.010253	0.025217
PPP1R9B	-0.01465	0.846131	0.891581
PPP2CA	0.085381	0.257145	0.363484
PPP2CB	0.105801	0.159855	0.248563
PPP2R1A	0.189514	0.011289	0.027396
PPP2R1B	-0.23645	0.001485	0.004826
PPP2R2A	0.280923	0.000146	0.000659
PPP2R2B	-0.20544	0.00594	0.015843
PPP2R2C	0.085729	0.255204	0.36162
PPP2R2D	-0.1051	0.162645	0.252168
PPP2R3A	0.162868	0.029845	0.062408
PPP2R3B	-0.14738	0.049626	0.095422
PPP2R3C	-0.2237	0.002685	0.008035
PPP2R4	-0.00727	0.923284	0.946809
PPP2R5A	0.018109	0.810392	0.865825
PPP2R5B	0.077862	0.301575	0.411668
PPP2R5C	-0.29648	5.86E-05	0.0003
PPP2R5D	-0.12374	0.099854	0.170393
PPP2R5E	-0.11675	0.120666	0.198243
PPP3CA	0.295863	6.08E-05	0.000309
PPP3CB	-0.50611	5.73E-13	2.80E-11
PPP3CC	0.070978	0.346461	0.458874
PPP3R1	0.116029	0.122995	0.201183
PPP3R2	0.005365	0.943342	0.961925
PPP4C	0.453577	2.04E-10	5.28E-09
PPP4R1L	0.261622	0.000419	0.001635
PPP4R1	0.341976	2.98E-06	2.26E-05
PPP4R2	-0.11682	0.120449	0.197969
PPP4R4	-0.4025	2.55E-08	3.55E-07
PPP5C	0.014034	0.852498	0.896951
PPP6C	-0.42674	2.85E-09	5.31E-08
PPPDE1	0.185929	0.012961	0.030794
PPPDE2	0.348082	1.93E-06	1.53E-05
PPRC1	0.067992	0.367171	0.480793
PPT1	-0.21887	0.003334	0.009655
PPT2	-0.29966	4.83E-05	0.000255
PPTC7	-0.14394	0.055259	0.104414
PPWD1	-0.19572	0.00884	0.022207
PPY2	-0.14792	0.048791	0.094052
PPYR1	0.404768	2.10E-08	2.99E-07
PPY	0.017778	0.813797	0.868149
PQBP1	0.018465	0.806736	0.86322
PQLC1	-0.18253	0.014745	0.03438

PQLC2	-0.10203	0.175349	0.267771
PQLC3	0.381087	1.54E-07	1.71E-06
PRAC	0.0698	0.35454	0.467472
PRAF2	-0.06695	0.374546	0.487537
PRAM1	0.200963	0.00715	0.018534
PRAMEF10	0.004878	0.948478	0.965182
PRAMEF11	-0.09839	0.191354	0.287197
PRAMEF12	-0.30006	4.72E-05	0.00025
PRAMEF1	-0.21401	0.004126	0.01163
PRAMEF20	-0.17117	0.022341	0.048728
PRAMEF22	0.020475	0.786176	0.848525
PRAMEF2	-0.1501	0.045515	0.088907
PRAMEF4	-0.13352	0.075592	0.135653
PRAMEF6	-0.16455	0.028169	0.059359
PRAMEF8	-0.24834	0.000831	0.002932
PRAME	-0.00295	0.968811	0.97861
PRAP1	0.229591	0.00205	0.006367
PRB1	0.314021	1.97E-05	0.000117
PRB2	0.244607	0.001	0.003434
PRB3	0.114299	0.128716	0.208865
PRB4	0.137677	0.066856	0.122408
PRC1	0.247035	0.000886	0.003101
PRCC	0.169924	0.023353	0.050645
PRCD	-0.09816	0.192395	0.288475
PRCP	-0.18172	0.0152	0.035226
PRDM10	-0.10599	0.159115	0.247709
PRDM11	-0.23108	0.001913	0.006004
PRDM12	-0.07207	0.339052	0.451233
PRDM13	-0.07161	0.342152	0.454479
PRDM14	-0.12011	0.110262	0.184928
PRDM15	-0.11792	0.116962	0.19341
PRDM16	0.067562	0.370221	0.483479
PRDM1	0.092668	0.218592	0.320141
PRDM2	-0.14656	0.050916	0.097466
PRDM4	-0.38403	1.21E-07	1.38E-06
PRDM5	-0.13078	0.081846	0.144941
PRDM6	0.209251	0.00506	0.013835
PRDM7	-0.02584	0.732075	0.806196
PRDM8	0.334192	5.14E-06	3.65E-05
PRDM9	0.035702	0.636132	0.727733
PRDX1	0.396842	4.16E-08	5.40E-07
PRDX2	-0.09835	0.191515	0.287396
PRDX3	-0.2193	0.003271	0.009502
PRDX4	-0.27147	0.000247	0.001037
PRDX5	0.510146	3.50E-13	1.81E-11
PRDX6	0.286926	0.000103	0.000489
PRDXDD1P	0.148828	0.047403	0.091942
PREB	-0.09751	0.195354	0.292136
PRELID1	0.259813	0.000461	0.001772
PRELID2	0.440793	7.38E-10	1.63E-08
PRELP	0.187529	0.01219	0.029243
PREPL	-0.43954	8.35E-10	1.82E-08
PREP	0.136203	0.069859	0.127048
PREX1	-0.26748	0.000307	0.001251

PREX2	-0.18999	0.011082	0.026978
PRF1	-0.14979	0.045978	0.089592
PRG1	0.031564	0.675764	0.76179
PRG2	0.135123	0.072125	0.130497
PRG3	0.136861	0.068504	0.124941
PRG4	-0.1046	0.16467	0.254787
PRH1	-0.19887	0.007787	0.019954
PRH2	0.073351	0.33053	0.442649
PRHOXNB	-0.12109	0.107382	0.18102
PRIC285	0.335478	4.70E-06	3.37E-05
PRICKLE1	-0.00218	0.976973	0.98409
PRICKLE2	-0.22485	0.002549	0.007688
PRICKLE3	0.366135	5.01E-07	4.76E-06
PRICKLE4	0.326642	8.59E-06	5.68E-05
PRIM1	-0.24521	0.00097	0.003347
PRIM2	0.119141	0.113198	0.188637
PRIMA1	-0.06579	0.382936	0.495789
PRINS	0.098233	0.192059	0.287994
PRKAA1	0.098074	0.192782	0.288969
PRKAA2	-0.00921	0.902848	0.932122
PRKAB1	0.071194	0.34499	0.45732
PRKAB2	-0.05465	0.468744	0.578799
PRKACA	-0.25283	0.000662	0.002407
PRKACB	-0.06824	0.365433	0.478682
PRKACG	0.051395	0.495671	0.603535
PRKAG1	-0.22349	0.002711	0.008103
PRKAG2	-0.2017	0.006938	0.018103
PRKAG3	0.02822	0.708456	0.787643
PRKAR1A	-0.40173	2.73E-08	3.75E-07
PRKAR1B	-0.16547	0.027294	0.057804
PRKAR2A	-0.30157	4.30E-05	0.000231
PRKAR2B	-0.4157	7.91E-09	1.29E-07
PRKCA	0.114039	0.129594	0.209956
PRKCB	-0.11618	0.122493	0.200512
PRKCDBP	0.450697	2.74E-10	6.87E-09
PRKCD	0.201976	0.006859	0.017939
PRKCE	-0.37058	3.55E-07	3.53E-06
PRKCG	0.02708	0.719732	0.796225
PRKCH	-0.07403	0.326036	0.438127
PRKCI	0.378547	1.89E-07	2.04E-06
PRKCQ	-0.05612	0.456835	0.567892
PRKCSH	-0.0625	0.407226	0.51954
PRKCZ	0.215565	0.003855	0.010962
PRKD1	-0.19532	0.008983	0.0225
PRKD2	0.400811	2.96E-08	4.01E-07
PRKD3	-0.0618	0.412494	0.524486
PRKDC	-0.15885	0.034182	0.069891
PRKG1	-0.05436	0.47108	0.581143
PRKG2	-0.31284	2.12E-05	0.000125
PRKRA	0.191317	0.010522	0.025808
PRKRIP1	0.034439	0.648121	0.737736
PRKRIR	-0.17708	0.018047	0.040695
PRKX	0.005301	0.944017	0.962266
PRKY	-0.02271	0.763511	0.831553

PRLHR	-0.26255	0.000399	0.001568
PRLH	-0.01717	0.820026	0.872489
PRLR	-0.49066	3.58E-12	1.44E-10
PRL	-0.19643	0.00859	0.021685
PRM1	-0.02378	0.752685	0.822799
PRMT10	-0.43526	1.27E-09	2.59E-08
PRMT1	0.153202	0.041187	0.081696
PRMT2	0.040898	0.587802	0.686108
PRMT3	0.069359	0.357594	0.470652
PRMT5	0.115342	0.125243	0.204303
PRMT6	-0.17964	0.016426	0.037633
PRMT7	0.225087	0.002522	0.007619
PRMT8	-0.28675	0.000104	0.000493
PRND	0.183014	0.014477	0.033827
PRNP	-0.11866	0.114665	0.190522
PRO0611	-0.0378	0.616414	0.711142
PRO0628	0.125429	0.095269	0.163913
PRO1768	-0.07502	0.319636	0.431346
PROCA1	0.094204	0.211018	0.311301
PROCR	0.150304	0.045224	0.088452
PROC	0.178576	0.017083	0.038873
PRODH2	-0.36559	5.22E-07	4.94E-06
PRODH	0.087505	0.245451	0.350343
PROK1	-0.03979	0.597967	0.694887
PROK2	-0.19821	0.007996	0.020434
PROKR1	-0.06234	0.408464	0.520722
PROKR2	-0.04497	0.551148	0.653499
PROL1	-0.10054	0.181798	0.27549
PROM1	0.253653	0.000635	0.002323
PROM2	0.537149	1.08E-14	7.89E-13
PROP1	-0.14257	0.057644	0.108023
PROS1	0.009802	0.896684	0.927986
PROSC	0.003459	0.963449	0.975136
PROX1	-0.40062	3.00E-08	4.07E-07
PROX2	-0.22822	0.002185	0.006734
PROZ	-0.31193	2.25E-05	0.000131
PRPF18	0.200202	0.007376	0.019052
PRPF19	0.081341	0.280426	0.388806
PRPF31	0.163752	0.028955	0.060774
PRPF38A	0.152721	0.041835	0.082769
PRPF38B	-0.03899	0.605365	0.701464
PRPF39	-0.0532	0.480643	0.590068
PRPF3	0.135946	0.070392	0.127888
PRPF40A	0.195328	0.008979	0.022497
PRPF40B	0.004878	0.948471	0.965182
PRPF4B	-0.2518	0.000697	0.002524
PRPF4	-0.17958	0.016463	0.037704
PRPF6	0.011509	0.878817	0.916038
PRPF8	-0.5823	1.52E-17	2.33E-15
PRPH2	-0.06567	0.383808	0.496755
PRPH	-0.14606	0.051726	0.098786
PRPS1L1	-0.17991	0.016262	0.037344
PRPS1	-0.44851	3.42E-10	8.37E-09
PRPS2	0.236905	0.001453	0.00474

PRPSAP1	-0.15855	0.034537	0.070486
PRPSAP2	-0.40563	1.94E-08	2.79E-07
PRR11	0.089045	0.237209	0.341157
PRR12	0.101941	0.175732	0.268086
PRR13	0.390117	7.33E-08	8.89E-07
PRR14	0.288762	9.27E-05	0.000445
PRR15L	0.342189	2.94E-06	2.24E-05
PRR15	0.560464	4.12E-16	4.22E-14
PRR16	-0.00319	0.966276	0.977097
PRR18	-0.31056	2.45E-05	0.000141
PRR19	0.113333	0.132003	0.213188
PRR22	0.089341	0.235648	0.339604
PRR23A	0.066527	0.377614	0.490303
PRR23B	0.042653	0.571861	0.671654
PRR24	0.322672	1.12E-05	7.18E-05
PRR25	0.091181	0.226101	0.328599
PRR3	-0.12535	0.095486	0.164215
PRR4	0.026416	0.726328	0.801831
PRR5-ARHC	0.427415	2.68E-09	5.00E-08
PRR5L	0.335905	4.56E-06	3.28E-05
PRR5	0.186721	0.012574	0.03004
PRR7	0.066423	0.378363	0.491089
PRRC1	-0.11778	0.117418	0.194003
PRRG1	0.35033	1.64E-06	1.33E-05
PRRG2	0.252541	0.000672	0.002439
PRRG3	-0.14153	0.05951	0.110848
PRRG4	0.2162	0.003749	0.010708
PRRT1	-0.23628	0.001497	0.004858
PRRT2	-0.00703	0.925794	0.948728
PRRT3	-0.32334	1.07E-05	6.90E-05
PRRT4	-0.22045	0.003107	0.009102
PRRX1	0.121687	0.105644	0.178609
PRRX2	0.357242	9.82E-07	8.54E-06
PRSS12	0.37476	2.55E-07	2.66E-06
PRSS16	0.266686	0.00032	0.001298
PRSS1	-0.06232	0.408567	0.520762
PRSS21	0.285991	0.000109	0.000512
PRSS22	0.538848	8.57E-15	6.42E-13
PRSS23	0.115017	0.126317	0.205692
PRSS27	0.175753	0.018945	0.04243
PRSS30P	0.153541	0.040735	0.08093
PRSS33	0.283827	0.000123	0.000571
PRSS35	-0.21948	0.003244	0.009439
PRSS36	0.355428	1.12E-06	9.61E-06
PRSS37	0.01884	0.802894	0.861071
PRSS38	0.044204	0.557951	0.659161
PRSS3	0.098923	0.18894	0.284286
PRSS41	0.073616	0.328785	0.440754
PRSS42	-0.00821	0.913384	0.939516
PRSS45	0.006043	0.93619	0.956556
PRSS48	0.077713	0.302508	0.412793
PRSS50	0.029782	0.693119	0.775168
PRSS53	0.317808	1.54E-05	9.45E-05
PRSS54	-0.06087	0.419585	0.53177

PRSS55	0.190185	0.010998	0.026793
PRSS8	0.48872	4.48E-12	1.74E-10
PRSSL1	-0.18191	0.015092	0.035039
PRTFDC1	0.091885	0.222526	0.324573
PRTG	-0.06924	0.358459	0.471602
PRTN3	-0.00848	0.910501	0.937379
PRUNE2	-0.37309	2.91E-07	2.98E-06
PRUNE	-0.26001	0.000457	0.001758
PRX	-0.10362	0.168693	0.259773
PRY2	-0.12765	0.089506	0.155676
PSAPL1	0.267339	0.000309	0.00126
PSAP	-0.25303	0.000655	0.002385
PSAT1	-0.2251	0.00252	0.007616
PSCA	0.651924	6.48E-23	4.58E-20
PSD2	0.070505	0.349689	0.462216
PSD3	0.079425	0.291948	0.401544
PSD4	0.315505	1.79E-05	0.000108
PSD	-0.17484	0.019581	0.043621
PSEN1	0.431778	1.77E-09	3.48E-08
PSEN2	-0.05131	0.496399	0.603937
PSENEN	0.305691	3.33E-05	0.000185
PSG10	-0.03057	0.685416	0.769512
PSG11	0.010717	0.887097	0.921391
PSG1	-0.12128	0.106834	0.180282
PSG2	-0.15638	0.03711	0.074841
PSG3	-0.04897	0.51623	0.622397
PSG4	0.018267	0.808766	0.864555
PSG5	-0.01556	0.836657	0.884661
PSG6	0.079053	0.294219	0.404104
PSG7	-0.04781	0.526293	0.63168
PSG8	-0.16385	0.028862	0.06061
PSG9	0.091929	0.222302	0.324382
PSIMCT-1	-0.1577	0.035522	0.07219
PSIP1	-0.41773	6.58E-09	1.10E-07
PSKH1	-0.45872	1.20E-10	3.30E-09
PSMA1	0.214407	0.004054	0.011463
PSMA2	0.201343	0.007039	0.018332
PSMA3	0.225324	0.002495	0.007544
PSMA4	0.277111	0.000181	0.000792
PSMA5	0.399267	3.38E-08	4.51E-07
PSMA6	0.200832	0.007188	0.018616
PSMA7	0.167555	0.025382	0.054289
PSMA8	-0.15498	0.038869	0.07777
PSMB10	0.456375	1.53E-10	4.10E-09
PSMB11	-0.17522	0.019318	0.043117
PSMB1	0.020326	0.7877	0.849408
PSMB2	0.14603	0.051776	0.098871
PSMB3	0.312278	2.20E-05	0.000128
PSMB4	0.190831	0.010724	0.026223
PSMB5	-0.10197	0.175628	0.267984
PSMB6	-0.07457	0.322509	0.434328
PSMB7	0.06824	0.365426	0.478682
PSMB8	0.44302	5.92E-10	1.35E-08
PSMB9	0.37219	3.13E-07	3.18E-06

PSMC1	0.208063	0.005321	0.014439
PSMC2	0.056976	0.450001	0.560815
PSMC3IP	0.036579	0.627856	0.720864
PSMC3	0.290998	8.13E-05	0.000397
PSMC4	0.27299	0.000227	0.000965
PSMC5	0.047621	0.527896	0.632874
PSMC6	0.185284	0.013284	0.031456
PSMD10	-0.20129	0.007056	0.018356
PSMD11	0.141488	0.059581	0.110948
PSMD12	0.019864	0.792412	0.853022
PSMD13	0.279707	0.000156	0.000701
PSMD14	0.225829	0.002438	0.007396
PSMD1	0.227334	0.002275	0.006978
PSMD2	0.091684	0.22354	0.325715
PSMD3	0.076067	0.312889	0.4238
PSMD4	0.305459	3.38E-05	0.000187
PSMD5	-0.03049	0.686232	0.769919
PSMD6	-0.13839	0.065438	0.12019
PSMD7	0.238914	0.00132	0.004358
PSMD8	0.175707	0.018977	0.042483
PSMD9	0.08362	0.267122	0.374775
PSME1	0.38263	1.36E-07	1.52E-06
PSME2	0.32914	7.26E-06	4.91E-05
PSME3	0.197354	0.008278	0.021024
PSME4	0.141942	0.058761	0.109689
PSMF1	-0.02977	0.693243	0.775262
PSMG1	0.091894	0.22248	0.324573
PSMG2	0.258683	0.000489	0.001868
PSMG3	0.298449	5.20E-05	0.000271
PSMG4	0.305309	3.41E-05	0.000189
PSORS1C1	0.522967	6.96E-14	4.26E-12
PSORS1C2	0.55653	7.27E-16	6.95E-14
PSORS1C3	0.376596	2.21E-07	2.33E-06
PSPC1	0.032007	0.671476	0.758297
PSPH	-0.36729	4.58E-07	4.41E-06
PSPN	-0.18175	0.01518	0.035198
PSRC1	0.215351	0.003891	0.011051
PSTK	-0.18349	0.01422	0.033299
PSTPIP1	0.04871	0.518487	0.624352
PSTPIP2	0.172412	0.021374	0.046919
PTAFR	0.102507	0.173334	0.265417
PTAR1	-0.32682	8.49E-06	5.62E-05
PTBP1	0.150038	0.045611	0.089059
PTBP2	-0.10505	0.162842	0.252433
PTCD1	0.100142	0.183522	0.277512
PTCD2	-0.01745	0.817175	0.870626
PTCD3	-0.13563	0.071054	0.128872
PTCH1	-0.27303	0.000227	0.000963
PTCH2	-0.04084	0.588316	0.686496
PTCHD1	-0.17771	0.017633	0.039927
PTCHD2	-0.24026	0.001237	0.004127
PTCHD3	0.021178	0.779022	0.842921
PTCRA	0.085725	0.255223	0.361621
PTDSS1	0.0435	0.564247	0.664884

PTDSS2	-0.17669	0.018311	0.041177
PTENP1	-0.06045	0.422831	0.53504
PTEN	-0.11274	0.134036	0.215799
PTER	0.21815	0.003441	0.009927
PTF1A	-0.14712	0.050036	0.096023
PTGDR	-0.13476	0.072912	0.131559
PTGDS	0.087482	0.245574	0.350436
PTGER1	0.284144	0.000121	0.000562
PTGER2	0.102868	0.171817	0.263523
PTGER3	-0.12001	0.110567	0.1853
PTGER4	-0.18267	0.014667	0.034221
PTGES2	0.012883	0.864478	0.905973
PTGES3	-0.0071	0.925014	0.948125
PTGES	0.481279	1.04E-11	3.71E-10
PTGFRN	0.267657	0.000304	0.00124
PTGFR	-0.2643	0.000364	0.001449
PTGIR	0.147617	0.049256	0.094828
PTGIS	0.165867	0.026918	0.057129
PTGR1	0.177351	0.01787	0.040387
PTGR2	0.023975	0.750747	0.821085
PTGS1	-0.08545	0.25674	0.363156
PTGS2	0.311146	2.36E-05	0.000137
PTH1R	0.09184	0.222751	0.324782
PTH2R	-0.02561	0.734387	0.808067
PTH2	-0.09415	0.211264	0.311491
PTHLH	0.278273	0.000169	0.00075
PTH	-0.07673	0.308658	0.419104
PTK2B	0.05406	0.473563	0.583369
PTK2	-0.01802	0.811295	0.866509
PTK6	0.584501	1.08E-17	1.72E-15
PTK7	0.196037	0.008728	0.021985
PTMA	0.454684	1.82E-10	4.79E-09
PTMS	-0.11225	0.135762	0.218098
PTN	-0.0644	0.393055	0.505752
PTOV1	-0.00877	0.907522	0.935531
PTP4A1	-0.12089	0.107965	0.181817
PTP4A2	0.146068	0.051714	0.098772
PTP4A3	-0.12195	0.10489	0.177576
PTPDC1	-0.32157	1.20E-05	7.63E-05
PTPLAD1	-0.11705	0.119723	0.197037
PTPLAD2	0.143884	0.055351	0.104548
PTPLA	-0.1021	0.17505	0.267393
PTPLB	-0.09631	0.200965	0.299049
PTPMT1	0.189661	0.011225	0.027271
PTPN11	-0.35573	1.10E-06	9.44E-06
PTPN12	0.36246	6.63E-07	6.10E-06
PTPN13	-0.2575	0.000521	0.001967
PTPN14	0.253831	0.000629	0.002307
PTPN18	0.281515	0.000141	0.000641
PTPN1	-0.12837	0.087704	0.153217
PTPN20A	0.101395	0.178071	0.270901
PTPN20B	0.094936	0.207476	0.306876
PTPN21	-0.17871	0.016998	0.03871
PTPN22	0.263163	0.000387	0.001525

PTPN23	0.087963	0.242983	0.347616
PTPN2	0.199169	0.007692	0.019749
PTPN3	-0.10832	0.150102	0.236391
PTPN4	0.133459	0.075736	0.135838
PTPN5	-0.10622	0.158212	0.246597
PTPN6	-0.07239	0.336922	0.449215
PTPN7	0.101212	0.178861	0.271893
PTPN9	0.074846	0.320745	0.432634
PTPRA	-0.32996	6.87E-06	4.68E-05
PTPRB	-0.26647	0.000324	0.00131
PTPRCAP	-0.00871	0.908094	0.935767
PTPRC	-0.07107	0.345842	0.458173
PTPRD	-0.28661	0.000105	0.000496
PTPRE	0.237487	0.001413	0.004625
PTPRF	0.100848	0.180433	0.2738
PTPRG	-0.14534	0.052909	0.100618
PTPRH	0.457271	1.39E-10	3.77E-09
PTPRJ	-0.26001	0.000457	0.001758
PTPRK	0.140452	0.061492	0.113943
PTPRM	-0.28112	0.000144	0.000653
PTPRN2	-0.37443	2.62E-07	2.71E-06
PTPRN	-0.25117	0.00072	0.002598
PTPRO	0.103517	0.169112	0.260276
PTPRQ	-0.25441	0.000611	0.002251
PTPRR	0.333902	5.24E-06	3.71E-05
PTPRS	-0.33258	5.74E-06	4.02E-05
PTPRT	-0.24658	0.000907	0.00316
PTPRU	0.420273	5.21E-09	8.98E-08
PTPRVP	0.051463	0.495101	0.603101
PTPRZ1	-0.1724	0.021383	0.046934
PTRF	0.195812	0.008807	0.02215
PTRH1	0.093008	0.216899	0.318148
PTRH2	0.203223	0.006515	0.017165
PTS	0.067888	0.367909	0.481417
PTTG1IP	0.578864	2.60E-17	3.72E-15
PTTG1	0.341261	3.14E-06	2.36E-05
PTTG2	0.007	0.92611	0.948806
PTTG3P	0.20994	0.004914	0.013495
PTX3	-0.24129	0.001176	0.003948
PTX4	-0.0103	0.891424	0.924369
PUF60	0.162002	0.030739	0.063975
PUM1	-0.16822	0.024797	0.053269
PUM2	-0.15359	0.040667	0.080811
PURA	-0.2447	0.000995	0.003423
PURB	-0.24822	0.000836	0.002946
PURG	0.10289	0.171725	0.263436
PUS10	0.091417	0.224899	0.327164
PUS1	0.154642	0.039297	0.078539
PUS3	-0.0664	0.378539	0.491189
PUS7L	-0.29286	7.28E-05	0.00036
PUS7	-0.05916	0.432769	0.544513
PUSL1	0.163532	0.029174	0.061164
PVALB	0.095244	0.206	0.305195
PVRIG	-0.12411	0.098831	0.16891

PVRL1	0.030721	0.683947	0.768342
PVRL2	0.31901	1.42E-05	8.83E-05
PVRL3	0.125511	0.095051	0.16358
PVRL4	0.584374	1.10E-17	1.74E-15
PVR	-0.03637	0.629828	0.722406
PVT1	0.384636	1.15E-07	1.32E-06
PWP1	-0.0773	0.305084	0.415484
PWP2	0.139307	0.06366	0.117446
PWRN1	-0.20227	0.006777	0.017762
PWRN2	-0.06249	0.407309	0.519588
PWWP2A	-0.16767	0.025277	0.054136
PWWP2B	0.189861	0.011138	0.027093
PXDNL	0.166635	0.026209	0.055853
PXDN	0.039701	0.59878	0.695587
PXK	-0.35181	1.47E-06	1.21E-05
PXMP2	-0.07471	0.321644	0.433403
PXMP4	-0.22678	0.002334	0.007126
PXN	0.244624	0.000999	0.003432
PXT1	0.0455	0.546453	0.64906
PYCARD	0.480348	1.16E-11	4.08E-10
PYCR1	0.185678	0.013086	0.031064
PYCR2	0.196222	0.008664	0.021843
PYCRL	0.156272	0.037246	0.075062
PYDC1	0.010901	0.885169	0.920114
PYGB	0.35225	1.42E-06	1.18E-05
PYGL	0.163242	0.029465	0.061701
PYGM	-0.02085	0.78237	0.845433
PYG01	-0.15624	0.037292	0.075146
PYG02	0.153082	0.041348	0.081967
PYHIN1	-0.11952	0.112042	0.187232
PYROXD1	-0.07707	0.306561	0.416886
PYROXD2	0.314091	1.96E-05	0.000116
PYY2	-0.2726	0.000232	0.000983
PYY	0.039941	0.596571	0.693795
PZP	-0.14938	0.046583	0.090564
ProSAPiP1	0.209102	0.005092	0.013913
QARS	0.160263	0.032603	0.06714
QDPR	-0.39453	5.06E-08	6.45E-07
QKI	-0.04728	0.530843	0.635098
QPCTL	0.289402	8.93E-05	0.000431
QPCT	-0.09433	0.210394	0.310519
QPRT	0.036458	0.628997	0.721743
QRFPR	-0.02016	0.789366	0.850854
QRFP	-0.14116	0.060186	0.111864
QRICH1	-0.10887	0.148	0.233675
QRICH2	-0.24328	0.001067	0.003629
QRSL1	-0.22675	0.002337	0.007133
QSER1	-0.03061	0.685075	0.769348
QSOX1	0.327529	8.09E-06	5.39E-05
QSOX2	-0.45479	1.80E-10	4.74E-09
QTRT1	-0.04308	0.568039	0.667919
QTRTD1	0.122455	0.103446	0.175508
R3HCC1	-0.10411	0.16667	0.257198
R3HDM1	-0.29136	7.95E-05	0.000389

R3HDM2	-0.29686	5.73E-05	0.000294
R3HDM1	0.130345	0.082887	0.146392
RAB10	0.264798	0.000354	0.001418
RAB11A	0.38002	1.68E-07	1.84E-06
RAB11B	0.089498	0.234824	0.338787
RAB11FIP1	0.284373	0.00012	0.000556
RAB11FIP2	-0.24144	0.001167	0.003923
RAB11FIP3	-0.45734	1.38E-10	3.74E-09
RAB11FIP4	0.065044	0.388361	0.500943
RAB11FIP5	0.431162	1.88E-09	3.65E-08
RAB12	0.022055	0.770124	0.836405
RAB13	0.246539	0.000909	0.003165
RAB14	-0.1203	0.10972	0.18414
RAB15	-0.0654	0.385732	0.498462
RAB17	0.023152	0.759031	0.827988
RAB18	-0.22025	0.003135	0.009168
RAB19	-0.08329	0.269018	0.37666
RAB1A	0.085653	0.255624	0.362033
RAB1B	0.374674	2.57E-07	2.68E-06
RAB20	0.356607	1.03E-06	8.91E-06
RAB21	-0.21435	0.004065	0.011486
RAB22A	0.001278	0.98649	0.990447
RAB23	-0.11821	0.116066	0.19225
RAB24	0.040472	0.591694	0.689177
RAB25	0.479354	1.29E-11	4.48E-10
RAB26	-0.28521	0.000114	0.000533
RAB27A	-0.16763	0.025319	0.054195
RAB27B	0.315078	1.84E-05	0.00011
RAB28	-0.26746	0.000307	0.001252
RAB2A	-0.11403	0.12962	0.209969
RAB2B	-0.21298	0.004312	0.012053
RAB30	-0.2325	0.001791	0.00567
RAB31	0.160809	0.032007	0.066107
RAB32	0.296799	5.75E-05	0.000295
RAB33A	-0.03894	0.605859	0.701831
RAB33B	-0.27282	0.000229	0.000972
RAB34	0.289266	9.00E-05	0.000434
RAB35	-0.16199	0.03075	0.063991
RAB36	-0.47197	2.92E-11	9.46E-10
RAB37	-0.0841	0.264403	0.371672
RAB38	0.383196	1.30E-07	1.46E-06
RAB39B	-0.38173	1.46E-07	1.63E-06
RAB39	-0.44168	6.76E-10	1.51E-08
RAB3A	-0.24178	0.001149	0.003873
RAB3B	-0.25506	0.000591	0.002189
RAB3C	-0.38951	7.71E-08	9.30E-07
RAB3D	-0.17403	0.020165	0.044727
RAB3GAP1	-0.04715	0.532008	0.636145
RAB3GAP2	-0.15156	0.043442	0.085501
RAB3IL1	0.130096	0.083481	0.147231
RAB3IP	-0.26597	0.000333	0.00134
RAB40AL	-0.02125	0.77831	0.842612
RAB40A	0.017757	0.814005	0.868278
RAB40B	-0.03219	0.669675	0.756868

RAB40C	0.006825	0.92796	0.950159
RAB41	-0.0925	0.219409	0.320985
RAB42	0.273199	0.000225	0.000955
RAB43	0.195104	0.009059	0.022665
RAB4A	-0.0438	0.561558	0.662466
RAB4B	0.111687	0.137747	0.220694
RAB5A	0.169249	0.023916	0.051674
RAB5B	-0.04317	0.567181	0.667173
RAB5C	0.270212	0.000265	0.001101
RAB6A	0.178337	0.017234	0.039162
RAB6B	-0.22046	0.003105	0.009099
RAB6C	0.069429	0.35711	0.470296
RAB7A	0.195591	0.008885	0.022293
RAB7L1	0.103783	0.168014	0.259029
RAB8A	0.468845	4.10E-11	1.29E-09
RAB8B	-0.00186	0.980308	0.986293
RAB9A	0.239909	0.001258	0.004189
RAB9B	-0.29369	6.92E-05	0.000346
RABAC1	0.09626	0.201181	0.299267
RABEP1	-0.46202	8.49E-11	2.43E-09
RABEP2	0.143984	0.05518	0.104294
RABEPK	-0.05629	0.455515	0.5665
RABGAP1L	0.056576	0.453193	0.564145
RABGAP1	-0.1032	0.170415	0.261873
RABGEF1	-0.21191	0.004517	0.012551
RABGGTA	0.030171	0.68931	0.772504
RABGGTB	-0.20118	0.007087	0.018413
RABIF	0.24629	0.00092	0.003195
RABL2A	0.098044	0.192919	0.289152
RABL2B	-0.18558	0.013137	0.031173
RABL3	-0.20923	0.005064	0.013839
RABL5	-0.2077	0.005404	0.014621
RAC1	0.552552	1.28E-15	1.15E-13
RAC2	0.402021	2.66E-08	3.67E-07
RAC3	-0.05258	0.485738	0.594624
RACGAP1P	0.162072	0.030665	0.063849
RACGAP1	0.205861	0.005838	0.015622
RAD17	-0.28644	0.000106	0.0005
RAD18	0.150856	0.044431	0.087108
RAD1	-0.41446	8.85E-09	1.43E-07
RAD21L1	-0.05161	0.493886	0.602177
RAD21	-0.16594	0.026853	0.057022
RAD23A	0.33962	3.52E-06	2.62E-05
RAD23B	-0.22818	0.002188	0.006743
RAD50	-0.06998	0.353319	0.466141
RAD51AP1	0.177927	0.017496	0.039635
RAD51AP2	0.005631	0.940535	0.960034
RAD51C	-0.2772	0.00018	0.000789
RAD51L1	0.26059	0.000443	0.001713
RAD51L3	-0.18984	0.011149	0.02711
RAD51	0.421856	4.50E-09	7.91E-08
RAD52	-0.19921	0.00768	0.019723
RAD54B	0.140758	0.060922	0.11303
RAD54L2	-0.27225	0.000237	0.001

RAD54L	0.35963	8.21E-07	7.33E-06
RAD9A	0.255958	0.000564	0.002106
RAD9B	-0.0799	0.289048	0.398413
RADIL	-0.31672	1.65E-05	0.0001
RAE1	-0.12481	0.096921	0.166292
RAET1E	0.342678	2.84E-06	2.17E-05
RAET1G	0.261226	0.000428	0.001665
RAET1K	0.055342	0.463124	0.573402
RAET1L	0.337476	4.09E-06	2.98E-05
RAF1	0.080325	0.286498	0.395587
RAG1AP1	0.313739	2.00E-05	0.000119
RAG1	0.119607	0.111782	0.186877
RAG2	-0.10366	0.168529	0.25962
RAGE	0.148264	0.048259	0.093191
RAI14	0.099647	0.185707	0.280169
RAI1	-0.07311	0.332139	0.444395
RAI2	-0.23516	0.001579	0.005096
RALA	0.353695	1.28E-06	1.07E-05
RALBP1	0.240697	0.001211	0.00405
RALB	0.504658	6.84E-13	3.26E-11
RALGAPA1	-0.44609	4.36E-10	1.03E-08
RALGAPA2	-0.23015	0.001998	0.006226
RALGAPB	-0.25206	0.000688	0.002494
RALGDS	-0.15962	0.033318	0.068435
RALGPS1	-0.14953	0.046357	0.090193
RALGPS2	0.082309	0.274718	0.382629
RALYL	-0.05819	0.440426	0.552228
RALY	0.352543	1.39E-06	1.15E-05
RAMP1	0.060118	0.425364	0.537659
RAMP2	-0.16392	0.02879	0.060472
RAMP3	-0.14512	0.053271	0.101206
RANBP10	-0.23303	0.001746	0.005549
RANBP17	-0.00365	0.961423	0.973733
RANBP1	0.110406	0.142345	0.226557
RANBP2	-0.44732	3.86E-10	9.27E-09
RANBP3L	-0.1439	0.055325	0.104508
RANBP3	-0.10215	0.174863	0.267257
RANBP6	-0.19936	0.007632	0.019619
RANBP9	-0.16765	0.025295	0.054165
RANGAP1	0.14879	0.047461	0.092009
RANGRF	-0.07144	0.343328	0.455605
RAN	0.028532	0.705382	0.785284
RAP1A	0.066888	0.375019	0.488063
RAP1B	0.038184	0.612833	0.708333
RAP1GAP2	-0.41813	6.34E-09	1.07E-07
RAP1GAP	-0.11822	0.11602	0.192207
RAP1GDS1	0.05125	0.496889	0.604459
RAP2A	-0.32814	7.77E-06	5.22E-05
RAP2B	0.38282	1.34E-07	1.50E-06
RAP2C	0.161087	0.031708	0.065565
RAPGEF1	-0.41582	7.82E-09	1.28E-07
RAPGEF2	-0.33108	6.36E-06	4.39E-05
RAPGEF3	0.17991	0.01626	0.037343
RAPGEF4	-0.40225	2.61E-08	3.61E-07

RAPGEF5	-0.08541	0.256958	0.36335
RAPGEF6	-0.26941	0.000276	0.001143
RAPGEFL1	0.61969	2.92E-20	8.87E-18
RAPH1	0.334108	5.17E-06	3.66E-05
RAPSN	0.109862	0.144334	0.229003
RARA	0.328894	7.38E-06	4.98E-05
RARB	0.13568	0.070948	0.128709
RARG	0.555826	8.05E-16	7.61E-14
RARRES1	0.113762	0.130536	0.211178
RARRES2	0.163172	0.029537	0.061831
RARRES3	0.49193	3.09E-12	1.26E-10
RARS2	-0.25256	0.000671	0.002437
RARS	0.227323	0.002277	0.00698
RASA1	0.099875	0.184697	0.278952
RASA2	0.073868	0.327126	0.439082
RASA3	0.378404	1.91E-07	2.06E-06
RASA4P	-0.27836	0.000168	0.000747
RASA4	-0.35196	1.45E-06	1.20E-05
RASAL1	0.524793	5.50E-14	3.46E-12
RASAL2	0.125619	0.094764	0.163157
RASAL3	0.030655	0.684598	0.768986
RASD1	-0.34678	2.12E-06	1.67E-05
RASD2	-0.00664	0.929947	0.951603
RASEF	0.224986	0.002533	0.007648
RASGEF1A	-0.0368	0.625738	0.719339
RASGEF1B	-0.24975	0.000774	0.002766
RASGEF1C	-0.16311	0.0296	0.061951
RASGRF1	-0.12438	0.098083	0.167937
RASGRF2	-0.05161	0.493836	0.602153
RASGRP1	0.03204	0.671158	0.758023
RASGRP2	-0.03548	0.638268	0.729713
RASGRP3	-0.00241	0.974581	0.982631
RASGRP4	-0.06858	0.363038	0.476295
RASIP1	-0.21762	0.003522	0.010125
RASL10A	0.002184	0.976917	0.984084
RASL10B	-0.15691	0.036473	0.07379
RASL11A	-0.05983	0.427582	0.539704
RASL11B	0.063483	0.399872	0.512415
RASL12	0.036701	0.626707	0.719958
RASSF10	0.11915	0.113169	0.188605
RASSF1	0.140672	0.061082	0.113306
RASSF2	-0.09697	0.197859	0.295213
RASSF3	0.00935	0.901424	0.931111
RASSF4	-0.07787	0.301517	0.411668
RASSF5	0.257525	0.00052	0.001965
RASSF6	0.165231	0.027518	0.058196
RASSF7	0.429306	2.24E-09	4.27E-08
RASSF8	-0.07133	0.344037	0.456392
RASSF9	0.151308	0.043789	0.086064
RAVER1	0.096951	0.197954	0.295333
RAVER2	-0.18597	0.012942	0.030759
RAX2	0.07619	0.312109	0.423005
RAX	0.032858	0.663269	0.751561
RB1CC1	-0.27716	0.00018	0.000791

RB1	-0.07948	0.291629	0.40125
RBAK	-0.3926	5.95E-08	7.41E-07
RBBP4	-0.2551	0.000589	0.002185
RBBP5	-0.24601	0.000933	0.003234
RBBP6	-0.23219	0.001817	0.005744
RBBP7	0.157653	0.03558	0.072293
RBBP8	0.154229	0.039831	0.079401
RBBP9	-0.21851	0.003386	0.009787
RBCK1	0.177295	0.017907	0.040454
RBKS	0.025594	0.734526	0.80813
RBL1	-0.20609	0.005781	0.01549
RBL2	-0.2521	0.000687	0.00249
RBM10	-0.17364	0.020449	0.045255
RBM11	-0.35459	1.20E-06	1.01E-05
RBM12B	-0.14402	0.055117	0.104185
RBM12	-0.26647	0.000324	0.00131
RBM14	-0.21773	0.003506	0.010085
RBM15B	-0.22841	0.002165	0.006685
RBM15	0.037028	0.62364	0.717457
RBM16	-0.39268	5.91E-08	7.37E-07
RBM17	0.060924	0.419176	0.5314
RBM18	-0.37608	2.30E-07	2.42E-06
RBM19	-0.21164	0.004569	0.012679
RBM20	-0.35732	9.76E-07	8.50E-06
RBM22	-0.05712	0.448873	0.559931
RBM23	-0.45335	2.09E-10	5.37E-09
RBM24	-0.22332	0.002731	0.008152
RBM25	0.000485	0.994876	0.9965
RBM26	-0.16722	0.025679	0.05486
RBM27	-0.17563	0.019027	0.04258
RBM28	-0.20227	0.006777	0.017762
RBM33	-0.02126	0.778204	0.842612
RBM34	0.313583	2.02E-05	0.00012
RBM38	-0.08233	0.274583	0.382508
RBM39	-0.01603	0.831788	0.880832
RBM3	0.199788	0.007501	0.019344
RBM41	0.23687	0.001456	0.004745
RBM42	0.316047	1.73E-05	0.000104
RBM43	0.043598	0.563364	0.664082
RBM44	0.22606	0.002412	0.007329
RBM45	0.127234	0.090563	0.157184
RBM46	-0.02748	0.71577	0.79332
RBM47	0.077057	0.306616	0.416932
RBM4B	-0.20973	0.004958	0.013602
RBM4	-0.03875	0.607537	0.70328
RBM5	-0.1009	0.180213	0.273533
RBM6	-0.03327	0.659304	0.747839
RBM7	0.000335	0.996463	0.997472
RBM8A	0.245127	0.000974	0.003359
RBM9	-0.13012	0.083436	0.147165
RBMS1	0.254871	0.000596	0.002207
RBMS2	0.233451	0.001712	0.005463
RBMS3	-0.04331	0.565935	0.666436
RBMX2	-0.01856	0.805724	0.862423

RBMXL1	0.081365	0.280281	0.388722
RBMXL2	0.000822	0.991314	0.993626
RBMXL3	0.031408	0.677277	0.762824
RBMX	-0.21003	0.004895	0.013453
RBMX1A1	-0.11088	0.140624	0.224322
RBP1	0.165909	0.026879	0.057072
RBP2	0.032273	0.668905	0.75617
RBP3	0.336094	4.51E-06	3.25E-05
RBP4	0.107514	0.153162	0.240432
RBP5	-0.16835	0.024688	0.053088
RBP7	-0.23452	0.001627	0.00523
RBPJL	-0.10963	0.145193	0.230126
RBPJ	-0.27775	0.000174	0.000769
RBPMS2	-0.0046	0.95139	0.966989
RBPMS	0.339557	3.54E-06	2.63E-05
RBX1	0.237518	0.001411	0.004621
RC3H1	-0.27182	0.000242	0.001019
RC3H2	-0.1903	0.010948	0.026698
RCAN1	-0.18119	0.015503	0.035818
RCAN2	-0.31378	2.00E-05	0.000118
RCAN3	-0.15317	0.041231	0.081767
RCBTB1	-0.31552	1.79E-05	0.000107
RCBTB2	0.021202	0.778779	0.842902
RCC1	0.362229	6.75E-07	6.19E-06
RCC2	0.31641	1.69E-05	0.000102
RCCD1	0.25338	0.000644	0.002351
RCE1	0.477404	1.61E-11	5.45E-10
RCHY1	-0.4728	2.67E-11	8.67E-10
RCL1	-0.0951	0.206686	0.305937
RCN1	-0.08851	0.240026	0.344332
RCN2	-0.05737	0.446864	0.558023
RCN3	0.183951	0.013974	0.032797
RCOR1	0.226301	0.002386	0.007257
RCOR2	0.081751	0.277996	0.38614
RCOR3	-0.06506	0.38827	0.500888
RCS1	-0.10854	0.149255	0.235413
RCVRN	-0.05191	0.491373	0.599926
RD3	-0.07109	0.345679	0.457987
RDBP	0.150083	0.045544	0.088947
RDH10	0.199945	0.007453	0.019234
RDH11	-0.24999	0.000764	0.002734
RDH12	-0.20134	0.007041	0.018333
RDH13	0.471297	3.14E-11	1.01E-09
RDH14	-0.02228	0.767848	0.834713
RDH16	0.004398	0.953542	0.968331
RDH5	0.139324	0.063629	0.117402
RDH8	-0.11038	0.142431	0.226638
RDM1	0.33671	4.32E-06	3.13E-05
RDX	-0.1365	0.069252	0.126083
REC8	-0.05276	0.48425	0.593278
RECK	-0.23281	0.001764	0.005602
RECQL4	0.23585	0.001528	0.004949
RECQL5	0.215708	0.003831	0.010906
RECQL	0.012837	0.864952	0.906293

REEP1	0.033695	0.65523	0.744328
REEP2	-0.26149	0.000422	0.001645
REEP3	0.264316	0.000364	0.001449
REEP4	0.243959	0.001032	0.003527
REEP5	-0.15212	0.042651	0.084161
REEP6	0.191886	0.01029	0.025291
REG1A	0.091613	0.223903	0.3261
REG1B	-0.00746	0.921264	0.945408
REG1P	-0.04944	0.512255	0.618435
REG3A	-0.01219	0.871674	0.911292
REG3G	-0.0413	0.584132	0.682702
REG4	0.251776	0.000698	0.002527
RELA	0.515279	1.85E-13	1.04E-11
RELB	0.359818	8.10E-07	7.24E-06
RELL1	0.076738	0.308627	0.41909
RELL2	0.155615	0.038061	0.076424
RELN	-0.27522	0.000201	0.000869
RELT	0.251452	0.00071	0.002563
REL	-0.06299	0.403523	0.516157
REM1	0.013136	0.861838	0.904036
REM2	-0.19927	0.007661	0.019688
RENBP	0.143859	0.055393	0.104604
REN	0.078605	0.29697	0.406836
REP15	0.003582	0.962156	0.974276
REPIN1	-0.30753	2.97E-05	0.000167
REPS1	-0.372	3.17E-07	3.21E-06
REPS2	0.365041	5.45E-07	5.13E-06
RER1	0.287741	9.84E-05	0.000468
RERE	-0.23079	0.001939	0.006072
RERGL	-0.03508	0.642019	0.732942
REG	-0.00017	0.998239	0.99859
RESP18	-0.10553	0.160934	0.250044
REST	-0.03355	0.656576	0.745343
RETNLB	-0.09754	0.195221	0.291983
RETN	0.311748	2.28E-05	0.000132
RETSAT	0.366553	4.85E-07	4.62E-06
RET	-0.39726	4.01E-08	5.23E-07
REV1	0.027603	0.714557	0.792332
REV3L	-0.49601	1.92E-12	8.36E-11
REX01L1	-0.03041	0.686965	0.770463
REX01	0.10362	0.168687	0.259773
REX02	0.286533	0.000106	0.000498
REX04	-0.09461	0.209074	0.308778
RFC1	-0.4389	8.89E-10	1.91E-08
RFC2	0.115585	0.124445	0.203218
RFC3	-0.01294	0.863864	0.905681
RFC4	0.229613	0.002048	0.006361
RFC5	-0.10261	0.172887	0.264869
RFESD	-0.30147	4.33E-05	0.000232
RFFL	0.136654	0.068929	0.125623
RFK	-0.13429	0.073914	0.133112
RFNG	0.154849	0.039031	0.078064
RFPL1S	-0.22363	0.002694	0.008058
RFPL1	-0.21868	0.003361	0.009721

RFPL2	-0.28686	0.000104	0.00049
RFPL3S	-0.05275	0.484323	0.593297
RFPL3	-0.00072	0.992425	0.994538
RFPL4A	-0.24094	0.001196	0.004007
RFPL4B	-0.01186	0.875104	0.913397
RFT1	-0.02357	0.754869	0.824456
RFTN1	0.042201	0.575944	0.675207
RFTN2	-0.09045	0.229851	0.333095
RFWD2	0.330505	6.62E-06	4.54E-05
RFWD3	-0.056	0.457777	0.568706
RFX1	-0.00533	0.943707	0.961999
RFX2	-0.34567	2.29E-06	1.79E-05
RFX3	-0.3521	1.44E-06	1.19E-05
RFX4	-0.08679	0.249321	0.354834
RFX5	-0.0419	0.578682	0.677613
RFX6	-0.26029	0.00045	0.001736
RFX7	-0.13702	0.068173	0.124438
RFX8	0.276038	0.000192	0.000835
RFXANK	0.321038	1.25E-05	7.87E-05
RFXAP	-0.47324	2.54E-11	8.27E-10
RG9MTD1	0.078763	0.296002	0.406046
RG9MTD2	-0.31628	1.70E-05	0.000103
RG9MTD3	-0.22869	0.002137	0.006612
RGAG1	-0.3363	4.44E-06	3.21E-05
RGAG4	-0.3021	4.16E-05	0.000224
RGL1	-0.32502	9.58E-06	6.26E-05
RGL2	0.049935	0.508009	0.614716
RGL3	0.102549	0.173156	0.265178
RGL4	-0.13063	0.082203	0.145405
RGMA	-0.06265	0.406061	0.51843
RGMB	-0.3301	6.80E-06	4.64E-05
RGNEF	-0.02921	0.69869	0.779811
RGN	-0.13314	0.076438	0.136885
RGP1	-0.20607	0.005786	0.015498
RGPD1	-0.26915	0.00028	0.001158
RGPD3	-0.41148	1.16E-08	1.79E-07
RGPD4	-0.27512	0.000202	0.000873
RGPD5	-0.29279	7.31E-05	0.000362
RGPD6	-0.36942	3.88E-07	3.83E-06
RGPD8	-0.00149	0.984247	0.989099
RGR	-0.18624	0.01281	0.030523
RGS10	0.215004	0.003951	0.011205
RGS11	-0.13449	0.073488	0.132409
RGS12	0.150565	0.044847	0.087812
RGS13	0.059843	0.427493	0.539627
RGS14	0.232602	0.001782	0.005647
RGS16	0.131933	0.079177	0.140922
RGS17	-0.20583	0.005845	0.01564
RGS18	-0.1419	0.058827	0.109782
RGS19	0.262567	0.000399	0.001568
RGS1	0.165696	0.027078	0.057395
RGS20	0.209029	0.005108	0.013953
RGS21	0.080693	0.284284	0.393162
RGS22	-0.36924	3.94E-07	3.87E-06

RGS2	-0.09779	0.194069	0.290611
RGS3	0.368098	4.30E-07	4.17E-06
RGS4	-0.19659	0.008538	0.021592
RGS5	-0.15104	0.044168	0.086661
RGS6	0.167744	0.025214	0.054008
RGS7BP	-0.30391	3.72E-05	0.000203
RGS7	-0.3406	3.29E-06	2.46E-05
RGS8	0.049089	0.515234	0.62131
RGS9BP	0.067056	0.373825	0.486893
RGS9	-0.24466	0.000997	0.003426
RGSL1	-0.14568	0.052353	0.099755
RHAG	-0.05972	0.428426	0.54051
RHBDD1	0.001877	0.980162	0.986267
RHBDD2	-0.09343	0.214825	0.315692
RHBDD3	-0.08247	0.273775	0.381887
RHBDF1	0.586103	8.35E-18	1.36E-15
RHBDF2	0.419539	5.57E-09	9.52E-08
RHBDL1	0.18005	0.016176	0.037164
RHBDL2	0.565262	2.04E-16	2.30E-14
RHBDL3	-0.42039	5.15E-09	8.89E-08
RHBG	-0.05668	0.452391	0.563324
RHCE	-0.38196	1.43E-07	1.60E-06
RHCG	0.091363	0.225173	0.327492
RHD	-0.04476	0.55299	0.654869
RHEBL1	0.101127	0.179225	0.272301
RHEB	-0.025	0.740464	0.812847
RHOA	0.363659	6.05E-07	5.61E-06
RHOBTB1	0.089633	0.234116	0.338135
RHOBTB2	0.00222	0.976541	0.983905
RHOBTB3	-0.26797	0.000299	0.001224
RHOB	0.228379	0.002169	0.006694
RHOC	0.615774	5.84E-20	1.70E-17
RHOD	0.626097	9.16E-21	3.35E-18
RHOF	0.55655	7.25E-16	6.95E-14
RHOG	0.374448	2.62E-07	2.71E-06
RHOH	-0.12593	0.093936	0.161957
RHOJ	-0.16976	0.023485	0.050892
RHOQ	-0.14977	0.046	0.089607
RHOT1	-0.23121	0.001902	0.005973
RHOT2	0.210497	0.004798	0.013226
RHOU	-0.1272	0.090642	0.157252
RHOV	0.457863	1.31E-10	3.57E-09
RHOXF1	-0.08425	0.263518	0.370717
RHOXF2B	-0.16947	0.023729	0.051342
RHO	0.230474	0.001968	0.006151
RHPN1	0.199903	0.007466	0.019261
RHPN2	0.446996	3.98E-10	9.54E-09
RIBC1	-0.20844	0.005238	0.014245
RIBC2	-0.14982	0.045926	0.089515
RIC3	-0.26072	0.00044	0.001704
RIC8A	0.029902	0.691943	0.774351
RIC8B	-0.47915	1.32E-11	4.55E-10
RICH2	-0.10132	0.178408	0.27133
RICTOR	-0.221	0.003032	0.008922

RIF1	-0.11376	0.130554	0.211189
RILPL1	-0.048	0.524574	0.629922
RILPL2	0.095758	0.203554	0.302273
RILP	0.320235	1.31E-05	8.23E-05
RIMBP2	-0.33838	3.84E-06	2.82E-05
RIMBP3C	-0.31242	2.18E-05	0.000127
RIMBP3	-0.3134	2.05E-05	0.000121
RIMKLA	-0.14624	0.051432	0.09831
RIMKLB	0.172331	0.021435	0.047033
RIMS1	-0.27534	0.000199	0.000864
RIMS2	-0.36712	4.64E-07	4.46E-06
RIMS3	-0.05179	0.492378	0.600959
RIMS4	-0.04551	0.546361	0.649056
RIN1	0.386395	9.97E-08	1.16E-06
RIN2	-0.18769	0.012114	0.029106
RIN3	0.203999	0.006309	0.016686
RING1	0.075394	0.317206	0.428737
RINL	0.083421	0.268264	0.37585
RINT1	-0.32375	1.04E-05	6.74E-05
RIOK1	-0.3171	1.61E-05	9.83E-05
RIOK2	-0.31361	2.02E-05	0.000119
RIOK3	0.358741	8.78E-07	7.75E-06
RIPK1	-0.12731	0.090357	0.156895
RIPK2	0.313899	1.98E-05	0.000118
RIPK3	0.492717	2.82E-12	1.17E-10
RIPK4	0.379256	1.78E-07	1.94E-06
RIPPLY1	0.044197	0.55801	0.659161
RIPPLY2	-0.3295	7.08E-06	4.80E-05
RIT1	0.210498	0.004798	0.013226
RIT2	-0.06563	0.384068	0.496929
RLBP1	-0.06427	0.394052	0.506795
RLF	-0.07067	0.348532	0.460994
RLIM	-0.17982	0.016312	0.037428
RLN1	-0.35788	9.37E-07	8.19E-06
RLN2	-0.2886	9.35E-05	0.000448
RLN3	-0.17821	0.017315	0.039311
RLTPR	-0.21492	0.003965	0.011242
RMI1	-0.37431	2.65E-07	2.73E-06
RMND1	0.035396	0.639028	0.730202
RMND5A	0.101926	0.175795	0.268161
RMND5B	-0.04815	0.523355	0.62886
RMRP	-0.00467	0.950637	0.966672
RMST	-0.12216	0.104285	0.176734
RNASE10	0.155759	0.037882	0.076142
RNASE11	-0.00684	0.927812	0.950106
RNASE13	0.178027	0.017432	0.039525
RNASE1	0.098419	0.191215	0.287011
RNASE2	0.227094	0.002301	0.007039
RNASE3	0.1975	0.00823	0.020925
RNASE4	-0.00937	0.901178	0.931029
RNASE6	-0.03066	0.684582	0.768986
RNASE7	0.171072	0.022421	0.048865
RNASE8	0.011854	0.87521	0.91346
RNASE9	0.132076	0.078849	0.14044

RNASEH1	0.172504	0.021303	0.04681
RNASEH2A	0.348022	1.93E-06	1.54E-05
RNASEH2B	-0.03062	0.68493	0.769246
RNASEH2C	0.071935	0.33998	0.452255
RNASEK	-0.19243	0.010073	0.024853
RNASEL	0.290898	8.17E-05	0.000399
RNASEN	-0.31188	2.26E-05	0.000131
RNASET2	0.320911	1.26E-05	7.93E-05
RND1	0.126565	0.092285	0.159696
RND2	-0.41427	9.01E-09	1.45E-07
RND3	0.249367	0.000789	0.002813
RNF103	0.263714	0.000375	0.001488
RNF10	-0.11589	0.123453	0.201783
RNF111	-0.12822	0.088067	0.153742
RNF112	0.125898	0.094026	0.162085
RNF113A	0.099709	0.185431	0.279838
RNF113B	0.145494	0.052651	0.100242
RNF114	-0.08717	0.24727	0.352397
RNF115	-0.24514	0.000974	0.003356
RNF11	-0.18501	0.013426	0.031741
RNF121	0.194866	0.009146	0.022855
RNF122	0.02898	0.700983	0.781664
RNF123	-0.11826	0.115916	0.192147
RNF125	-0.26152	0.000422	0.001642
RNF126P1	0.07899	0.294608	0.404527
RNF126	0.315607	1.78E-05	0.000107
RNF128	0.309572	2.61E-05	0.000149
RNF130	-0.21097	0.004702	0.01299
RNF133	-0.08241	0.274114	0.382225
RNF135	0.415132	8.33E-09	1.35E-07
RNF138P1	-0.27831	0.000169	0.000748
RNF138	-0.39704	4.09E-08	5.32E-07
RNF139	0.045712	0.544583	0.647423
RNF13	-0.02656	0.724904	0.800662
RNF141	0.019566	0.795459	0.855603
RNF144A	-0.03465	0.646067	0.736152
RNF144B	-0.04336	0.565518	0.666104
RNF145	-0.03672	0.626494	0.719956
RNF146	-0.36754	4.49E-07	4.33E-06
RNF148	-0.09209	0.221486	0.323462
RNF149	0.573996	5.49E-17	7.49E-15
RNF14	-0.27992	0.000154	0.000693
RNF150	-0.38139	1.50E-07	1.67E-06
RNF151	-0.03647	0.628875	0.721644
RNF152	-0.0442	0.558023	0.659161
RNF157	-0.25765	0.000516	0.001954
RNF160	-0.1535	0.040791	0.081024
RNF165	-0.08554	0.256273	0.362641
RNF166	-0.08346	0.26805	0.37565
RNF167	-0.32904	7.31E-06	4.94E-05
RNF168	-0.06217	0.409714	0.52178
RNF169	-0.05525	0.463894	0.574087
RNF170	0.173487	0.020564	0.04547
RNF175	-0.02968	0.694125	0.775941

RNF17	0.01583	0.833881	0.882292
RNF180	-0.34327	2.72E-06	2.09E-05
RNF181	0.38926	7.87E-08	9.48E-07
RNF182	-0.39634	4.34E-08	5.62E-07
RNF183	0.344472	2.50E-06	1.93E-05
RNF185	-0.21019	0.004862	0.013381
RNF186	-0.11712	0.1195	0.196777
RNF187	0.16852	0.024538	0.05281
RNF19A	-0.04248	0.57345	0.6731
RNF19B	0.142137	0.05841	0.109148
RNF207	0.436923	1.08E-09	2.25E-08
RNF208	0.136624	0.068989	0.125697
RNF20	-0.42109	4.83E-09	8.41E-08
RNF212	-0.21145	0.004606	0.012763
RNF213	0.164455	0.028264	0.059538
RNF214	0.002488	0.973705	0.982171
RNF215	0.266784	0.000319	0.001293
RNF216L	-0.24925	0.000793	0.002828
RNF216	-0.45766	1.34E-10	3.64E-09
RNF217	-0.00551	0.941859	0.960908
RNF219	0.073432	0.329999	0.442131
RNF220	-0.13924	0.063792	0.117582
RNF222	-0.0855	0.256461	0.362841
RNF24	0.130825	0.081752	0.144827
RNF25	0.249637	0.000778	0.002779
RNF26	0.134866	0.072676	0.131229
RNF2	0.14689	0.050397	0.09662
RNF31	-0.02039	0.78707	0.849134
RNF32	-0.00838	0.911626	0.93805
RNF34	-0.24956	0.000781	0.00279
RNF38	-0.27871	0.000165	0.000734
RNF39	0.512217	2.71E-13	1.45E-11
RNF40	0.121769	0.105407	0.178299
RNF41	-0.36592	5.09E-07	4.83E-06
RNF43	0.166191	0.026617	0.056612
RNF44	0.042334	0.574746	0.674264
RNF4	-0.2993	4.94E-05	0.00026
RNF5P1	0.037288	0.621203	0.715331
RNF5	0.304535	3.58E-05	0.000196
RNF6	-0.15522	0.038563	0.077283
RNF7	0.464436	6.57E-11	1.95E-09
RNF8	0.022935	0.761226	0.829636
RNFT1	-0.19219	0.010169	0.025051
RNFT2	-0.16183	0.030919	0.064256
RNGTT	-0.31418	1.95E-05	0.000116
RNH1	0.273432	0.000222	0.000944
RNLS	-0.04695	0.533709	0.637639
RNMTL1	-0.26203	0.00041	0.001606
RNMT	-0.18241	0.014811	0.034481
RNPC3	0.05597	0.458058	0.568839
RNPEPL1	0.465766	5.70E-11	1.73E-09
RNPEP	0.4157	7.91E-09	1.29E-07
RNPS1	0.157477	0.035789	0.072643
RNU11	0.012949	0.863795	0.905657

RNU4ATAC	-0.10319	0.170455	0.261914
RNU6ATAC	-0.02726	0.717941	0.795014
ROBLD3	0.326682	8.57E-06	5.66E-05
ROB01	-0.05134	0.49617	0.603696
ROB02	-0.04558	0.545785	0.648483
ROB03	0.336971	4.24E-06	3.07E-05
ROB04	-0.24459	0.001001	0.003436
ROCK1	-0.07524	0.318217	0.429923
ROCK2	-0.14244	0.057877	0.108347
ROD1	0.231027	0.001918	0.006016
ROGDI	-0.06019	0.424788	0.537052
ROM1	-0.00328	0.96538	0.976641
ROM01	0.161449	0.031321	0.064921
ROPN1B	0.180806	0.015727	0.036257
ROPN1L	-0.32743	8.14E-06	5.42E-05
ROPN1	0.097656	0.194696	0.291328
ROR1	-0.10418	0.166381	0.256852
ROR2	0.016662	0.825285	0.8764
RORA	-0.20206	0.006836	0.017886
RORB	-0.17421	0.020037	0.044469
RORC	0.033584	0.656291	0.745149
ROS1	0.139094	0.064072	0.117999
RP1-177G6	-0.11452	0.127973	0.207797
RP1L1	0.395334	4.72E-08	6.07E-07
RP1	0.417896	6.48E-09	1.09E-07
RP2	-0.0497	0.510039	0.616616
RP9P	0.036141	0.631982	0.724076
RP9	-0.01206	0.873079	0.912295
RPA1	-0.43122	1.87E-09	3.64E-08
RPA2	-0.19042	0.010898	0.026596
RPA3	0.144231	0.054759	0.103597
RPA4	0.060316	0.423843	0.536149
RPAIN	-0.21848	0.003392	0.009801
RPAP1	-0.04581	0.54369	0.646633
RPAP2	-0.06269	0.405823	0.51826
RPAP3	-0.18148	0.015337	0.035501
RPE65	-0.10093	0.180071	0.27344
RPE	0.296262	5.94E-05	0.000303
RPF1	0.065645	0.383985	0.496854
RPF2	0.003023	0.968054	0.978195
RPGRIP1L	-0.22505	0.002526	0.007628
RPGRIP1	-0.03093	0.681901	0.766567
RPGR	-0.45713	1.42E-10	3.81E-09
RPH3AL	-0.33651	4.38E-06	3.17E-05
RPH3A	-0.12784	0.089024	0.155057
RPIA	0.22863	0.002144	0.006628
RPL10A	0.035683	0.636307	0.727891
RPL10L	-0.19228	0.010133	0.024977
RPL10	0.059966	0.426542	0.538701
RPL11	0.039933	0.596647	0.693842
RPL12	0.101571	0.177316	0.269982
RPL13AP17	0.146408	0.051166	0.097887
RPL13AP20	0.190916	0.010689	0.026155
RPL13AP3	0.002396	0.974677	0.982678

RPL13AP6	-0.09512	0.206613	0.305897
RPL13A	-0.01045	0.889859	0.923472
RPL13P5	0.017421	0.817467	0.870765
RPL13	0.154321	0.039712	0.079239
RPL14	0.183563	0.014181	0.033228
RPL15	-0.12787	0.088951	0.154957
RPL17	-0.26949	0.000275	0.001139
RPL18A	0.099943	0.184399	0.278599
RPL18	0.1083	0.150161	0.236464
RPL19P12	-0.07836	0.298463	0.408458
RPL19	0.116289	0.122151	0.200051
RPL21P44	-0.09511	0.206651	0.305908
RPL21	0.042663	0.571776	0.671595
RPL22L1	0.2055	0.005926	0.015815
RPL22	-0.02085	0.782338	0.845433
RPL23AP32	-0.05398	0.474197	0.583931
RPL23AP52	-0.27281	0.000229	0.000973
RPL23AP64	0.00386	0.959213	0.972162
RPL23AP7	0.178982	0.016829	0.038382
RPL23AP82	0.008194	0.913558	0.939597
RPL23A	0.112012	0.136596	0.219202
RPL23P8	0.138221	0.065775	0.120743
RPL23	0.12172	0.105549	0.178463
RPL24	0.119169	0.113112	0.188566
RPL26L1	0.148341	0.048142	0.093046
RPL26	-0.15579	0.037839	0.07607
RPL27A	0.192335	0.01011	0.024927
RPL27	0.141043	0.060397	0.112182
RPL28	0.250402	0.000749	0.002687
RPL29P2	-0.00643	0.932138	0.953302
RPL29	0.182931	0.014522	0.033912
RPL30	0.097432	0.195723	0.292534
RPL31P11	-0.08718	0.247221	0.352353
RPL31	0.110178	0.143178	0.227552
RPL32P3	0.172237	0.021508	0.047161
RPL32	0.111315	0.13907	0.22231
RPL34	0.085443	0.256798	0.363201
RPL35A	0.088784	0.238595	0.342727
RPL35	0.11713	0.119455	0.196761
RPL36AL	0.111129	0.139737	0.223177
RPL36A	0.212774	0.004352	0.012145
RPL36	0.172696	0.021158	0.046548
RPL37A	0.085263	0.257806	0.364158
RPL37	0.141562	0.059448	0.110742
RPL38	0.034978	0.642995	0.733674
RPL39L	0.345603	2.30E-06	1.80E-05
RPL39	0.147309	0.049736	0.095549
RPL3L	-0.17044	0.022926	0.049815
RPL3	-0.25113	0.000722	0.0026
RPL41	-0.00173	0.981729	0.987371
RPL4	-0.05547	0.462049	0.572287
RPL5	-0.15054	0.044886	0.08787
RPL6	-0.25451	0.000607	0.002241
RPL7A	-0.10312	0.170779	0.262269

RPL7L1	-0.35534	1.13E-06	9.66E-06
RPL7	-0.15645	0.037031	0.074728
RPL8	0.169441	0.023754	0.051392
RPL9	0.019463	0.796515	0.856452
RPLP0P2	0.147791	0.048987	0.094357
RPLP0	-0.00266	0.971911	0.98109
RPLP1	0.201441	0.007011	0.018273
RPLP2	0.158861	0.034175	0.069884
RPN1	0.198972	0.007754	0.019885
RPN2	-0.13231	0.078321	0.139725
RPP14	-0.29427	6.69E-05	0.000336
RPP21	0.163261	0.029446	0.061674
RPP25	0.378776	1.85E-07	2.01E-06
RPP30	0.108719	0.14858	0.234479
RPP38	0.238534	0.001344	0.004428
RPP40	0.036682	0.62689	0.720077
RPPH1	-0.01518	0.840601	0.887361
RPRD1A	-0.40173	2.73E-08	3.75E-07
RPRD1B	-0.2468	0.000897	0.003131
RPRD2	-0.26312	0.000387	0.001528
RPRML	-0.39726	4.01E-08	5.23E-07
RPRM	-0.19707	0.008374	0.021241
RPS10P7	-0.21647	0.003705	0.010589
RPS10	0.003615	0.961802	0.974009
RPS11	0.098786	0.189556	0.284997
RPS12	-0.0399	0.596918	0.693953
RPS13	0.103298	0.170021	0.261451
RPS14	0.072293	0.337576	0.449904
RPS15AP1C	0.142459	0.057836	0.10829
RPS15A	0.10643	0.157373	0.24565
RPS15	0.095269	0.205882	0.305112
RPS16	0.161771	0.030981	0.064344
RPS17	0.047291	0.53076	0.635036
RPS18	0.146808	0.050527	0.096824
RPS19BP1	0.101641	0.177012	0.269602
RPS19	0.201725	0.00693	0.018094
RPS20	0.11648	0.121535	0.199223
RPS21	0.111655	0.13786	0.220791
RPS23	-0.02929	0.697889	0.77916
RPS24	0.159275	0.033704	0.069085
RPS25	0.128087	0.088403	0.154151
RPS26P11	0.005079	0.946354	0.963933
RPS26	-0.02525	0.737993	0.810862
RPS27A	0.152945	0.041532	0.082272
RPS27L	0.244569	0.001002	0.003439
RPS27	-0.06548	0.385148	0.49787
RPS28	-0.01746	0.817113	0.870626
RPS29	0.082031	0.27635	0.38426
RPS2P32	0.106558	0.156868	0.245113
RPS2	0.178417	0.017184	0.039058
RPS3A	-0.18513	0.013362	0.031606
RPS3	0.164458	0.028261	0.059538
RPS4X	-0.05725	0.447796	0.55901
RPS4Y1	-0.02611	0.729377	0.803986

RPS4Y2	0.004571	0.951712	0.967243
RPS5	0.001946	0.979437	0.985789
RPS6KA1	0.461832	8.65E-11	2.47E-09
RPS6KA2	-0.21216	0.004469	0.012424
RPS6KA3	-0.21404	0.004119	0.011612
RPS6KA4	0.602032	6.20E-19	1.41E-16
RPS6KA5	-0.30217	4.14E-05	0.000223
RPS6KA6	-0.32304	1.09E-05	7.02E-05
RPS6KB1	-0.15216	0.042596	0.084069
RPS6KB2	0.153879	0.040289	0.080209
RPS6KC1	-0.18645	0.012706	0.030295
RPS6KL1	0.006477	0.931622	0.952873
RPS6	-0.05591	0.45854	0.56911
RPS7	0.036108	0.632295	0.724308
RPS8	0.073815	0.327477	0.439347
RPS9	0.025333	0.737128	0.810091
RPSAP52	0.382133	1.41E-07	1.58E-06
RPSAP58	0.072737	0.334605	0.446818
RPSAP9	-0.08208	0.276065	0.383971
RPSA	0.07728	0.305214	0.415493
RPTN	0.275739	0.000195	0.000847
RPTOR	-0.29755	5.49E-05	0.000284
RPUSD1	0.147471	0.049483	0.095183
RPUSD2	0.01666	0.825311	0.8764
RPUSD3	0.087943	0.243086	0.347713
RPUSD4	0.2207	0.003073	0.009017
RQCD1	-0.14303	0.056837	0.10676
RRAD	0.411036	1.20E-08	1.85E-07
RRAGA	-0.28686	0.000104	0.00049
RRAGB	-0.10484	0.163706	0.253564
RRAGC	-0.08434	0.26302	0.37007
RRAGD	-0.13257	0.077722	0.13877
RRAS2	0.274237	0.000212	0.000908
RRAS	0.681156	1.29E-25	1.70E-22
RRBP1	-0.01421	0.850631	0.895463
RREB1	-0.00964	0.898358	0.929165
RRH	-0.06652	0.377633	0.490303
RRM1	0.025767	0.732795	0.806764
RRM2B	-0.35255	1.39E-06	1.15E-05
RRM2	0.395217	4.77E-08	6.13E-07
RRN3P1	0.264215	0.000366	0.001454
RRN3P2	0.12394	0.099295	0.169555
RRN3P3	0.317691	1.55E-05	9.52E-05
RRN3	-0.05568	0.460388	0.570765
RRP12	-0.00761	0.919697	0.944279
RRP15	0.045146	0.549584	0.651958
RRP1B	-0.09567	0.203991	0.302832
RRP1	0.256272	0.000555	0.002076
RRP7A	0.135628	0.071057	0.128872
RRP7B	0.143748	0.055585	0.104879
RRP8	0.167829	0.025139	0.053875
RRP9	0.36688	4.73E-07	4.53E-06
RRS1	0.15272	0.041837	0.082769
RS1	-0.17607	0.018728	0.041996

RSAD1	-0.18424	0.013822	0.032503
RSAD2	0.301778	4.25E-05	0.000228
RSBN1L	-0.25421	0.000617	0.002267
RSBN1	-0.39244	6.03E-08	7.48E-07
RSC1A1	-0.1542	0.039873	0.079457
RSF1	-0.0359	0.634278	0.72599
RSL1D1	0.06655	0.377444	0.490122
RSL24D1	0.006289	0.933599	0.954352
RSPH10B2	-0.27145	0.000247	0.001038
RSPH1	-0.02573	0.733168	0.807077
RSPH3	0.004305	0.954519	0.968782
RSPH4A	-0.34824	1.90E-06	1.52E-05
RSPH6A	-0.05783	0.443259	0.554993
RSPH9	-0.26888	0.000284	0.001173
RSP01	-0.19731	0.008293	0.021055
RSP02	0.004402	0.953494	0.968331
RSP03	-0.14241	0.05792	0.108406
RSP04	-0.24894	0.000806	0.002863
RSPRY1	-0.13867	0.064888	0.119302
RSRC1	-0.13258	0.077707	0.138756
RSRC2	-0.06372	0.398092	0.510828
RSU1	0.182432	0.014798	0.034454
RTBDN	-0.14663	0.050804	0.097307
RTCD1	0.093532	0.214308	0.315096
RTDR1	-0.20534	0.005965	0.015903
RTEL1	0.136958	0.068306	0.124637
RTF1	0.08351	0.267756	0.375291
RTKN2	0.428164	2.49E-09	4.70E-08
RTKN	0.338789	3.73E-06	2.75E-05
RTL1	-0.06709	0.373584	0.486643
RTN1	-0.31081	2.42E-05	0.000139
RTN2	0.226395	0.002376	0.00723
RTN3	0.170864	0.022587	0.04919
RTN4IP1	-0.12323	0.101264	0.172427
RTN4RL1	-0.22212	0.002883	0.008548
RTN4RL2	-0.17828	0.017271	0.039223
RTN4R	0.423353	3.92E-09	7.03E-08
RTN4	0.166277	0.026538	0.056468
RTP1	0.077349	0.304779	0.415263
RTP2	0.282489	0.000133	0.000611
RTP3	-0.01562	0.836016	0.884079
RTP4	0.522655	7.25E-14	4.39E-12
RTTN	-0.29596	6.04E-05	0.000308
RUFY1	0.278683	0.000165	0.000735
RUFY2	-0.08245	0.273898	0.38195
RUFY3	-0.31268	2.14E-05	0.000126
RUFY4	0.293652	6.94E-05	0.000346
RUNDC1	-0.08909	0.23696	0.340863
RUNDC2A	-0.23552	0.001552	0.005017
RUNDC2C	0.097437	0.195701	0.292534
RUNDC3A	-0.25634	0.000553	0.00207
RUNDC3B	-0.35403	1.25E-06	1.05E-05
RUNX1T1	-0.17966	0.016413	0.037607
RUNX1	0.387601	9.03E-08	1.07E-06

RUNX2	0.216653	0.003676	0.010517
RUNX3	0.010013	0.894465	0.926369
RUSC1	0.279313	0.00016	0.000714
RUSC2	0.062155	0.409826	0.521855
RUVBL1	0.238068	0.001374	0.004517
RUVBL2	0.20622	0.00575	0.015424
RWDD1	-0.13216	0.078654	0.14018
RWDD2A	-0.41422	9.05E-09	1.45E-07
RWDD2B	0.146001	0.051823	0.09894
RWDD3	0.012217	0.871424	0.911239
RWDD4A	-0.16682	0.02604	0.055545
RXFP1	-0.31904	1.42E-05	8.81E-05
RXFP2	0.072224	0.338036	0.450279
RXFP3	-0.2999	4.76E-05	0.000252
RXFP4	0.256966	0.000535	0.002016
RXRA	-0.31114	2.37E-05	0.000137
RXRB	-0.17536	0.019215	0.042928
RXRG	-0.10784	0.15193	0.238794
RYBP	-0.22836	0.00217	0.006697
RYK	0.292125	7.60E-05	0.000374
RYR1	0.120261	0.109823	0.184288
RYR2	-0.25131	0.000715	0.002581
RYR3	-0.25373	0.000632	0.002316
S100A10	0.647491	1.57E-22	1.03E-19
S100A11	0.654756	3.66E-23	2.78E-20
S100A12	-0.27235	0.000235	0.000996
S100A13	0.427482	2.66E-09	4.97E-08
S100A14	0.551343	1.52E-15	1.33E-13
S100A16	0.613284	9.04E-20	2.48E-17
S100A1	-0.06871	0.362118	0.47534
S100A2	0.554346	9.94E-16	9.23E-14
S100A3	0.395465	4.67E-08	6.01E-07
S100A4	0.420013	5.33E-09	9.14E-08
S100A5	0.495323	2.08E-12	8.99E-11
S100A6	0.661065	9.99E-24	8.26E-21
S100A7A	-0.07184	0.340597	0.452892
S100A7	-0.02083	0.782573	0.845606
S100A8	0.003721	0.960682	0.973083
S100A9	0.101653	0.176963	0.269547
S100B	-0.08382	0.265973	0.373454
S100G	0.020522	0.785706	0.848204
S100PBP	-0.10051	0.181912	0.27562
S100P	0.589298	5.01E-18	9.01E-16
S100Z	-0.20473	0.006121	0.016256
S1PR1	-0.25032	0.000752	0.002696
S1PR2	-0.04547	0.546756	0.649372
S1PR3	0.088508	0.240062	0.344359
S1PR4	0.118071	0.116493	0.192828
S1PR5	0.048105	0.523706	0.629213
SAA1	0.042328	0.574798	0.674264
SAA2	0.072403	0.33684	0.449135
SAA3P	-0.05089	0.499961	0.607162
SAA4	0.086328	0.251884	0.357761
SAAL1	0.155239	0.038536	0.077236

SAC3D1	0.185062	0.013397	0.031681
SACM1L	-0.3659	5.10E-07	4.84E-06
SACS	-0.12814	0.088258	0.153981
SAE1	0.25158	0.000705	0.002549
SAFB2	-0.22132	0.002989	0.008823
SAFB	-0.1345	0.073454	0.132368
SAGE1	-0.00097	0.989766	0.992542
SAG	0.035812	0.63509	0.726728
SALL1	-0.04658	0.536975	0.64038
SALL2	-0.39437	5.13E-08	6.51E-07
SALL3	-0.28288	0.00013	0.000599
SALL4	-0.04319	0.567072	0.6671
SAMD10	0.431053	1.90E-09	3.68E-08
SAMD11	-0.0517	0.493148	0.601536
SAMD12	0.380011	1.68E-07	1.84E-06
SAMD13	0.257205	0.000529	0.001992
SAMD14	0.268388	0.000292	0.001201
SAMD1	0.118024	0.11664	0.19298
SAMD3	-0.11825	0.115937	0.192151
SAMD4A	-0.01524	0.839971	0.886938
SAMD4B	-0.03001	0.690914	0.77368
SAMD5	-0.21372	0.004177	0.011752
SAMD7	-0.00727	0.923304	0.946809
SAMD8	-0.02801	0.710522	0.789363
SAMD9L	0.334054	5.19E-06	3.68E-05
SAMD9	0.420627	5.04E-09	8.74E-08
SAMHD1	-0.23487	0.001601	0.005155
SAMM50	0.103017	0.171194	0.262765
SAMSN1	0.031931	0.672205	0.758816
SAP130	0.020392	0.787022	0.849134
SAP18	0.19666	0.008513	0.021534
SAP30BP	0.20334	0.006483	0.017094
SAP30L	-0.33021	6.75E-06	4.61E-05
SAP30	-0.10361	0.168728	0.259805
SAPS1	0.128888	0.086415	0.151419
SAPS2	-0.24812	0.00084	0.002958
SAPS3	0.010599	0.888334	0.922434
SAR1A	0.114457	0.128188	0.20811
SAR1B	-0.0863	0.252037	0.357933
SARDH	-0.09595	0.202626	0.301167
SARM1	-0.3199	1.34E-05	8.39E-05
SARNP	0.286624	0.000105	0.000496
SARS2	0.11026	0.142877	0.227184
SARS	-0.0489	0.516896	0.623086
SART1	0.303205	3.89E-05	0.000211
SART3	-0.29298	7.22E-05	0.000358
SASH1	-0.36141	7.18E-07	6.54E-06
SASH3	0.001572	0.983387	0.988386
SASS6	-0.03264	0.665351	0.75302
SAT1	0.321953	1.17E-05	7.47E-05
SAT2	-0.29864	5.14E-05	0.000269
SATB1	-0.23843	0.001351	0.004447
SATB2	0.09746	0.195598	0.292436
SATL1	-0.16575	0.027023	0.057304

SAV1	0.023349	0.757045	0.82624
SBDSP1	-0.19268	0.009973	0.024645
SBDS	0.032602	0.665733	0.753316
SBF1P1	-0.04057	0.59077	0.688506
SBF1	0.066032	0.381176	0.493898
SBF2	-0.1216	0.105901	0.178936
SBK1	-0.19647	0.008579	0.021662
SBK2	-0.30479	3.52E-05	0.000193
SBN01	-0.24293	0.001085	0.003685
SBN02	0.430809	1.94E-09	3.76E-08
SBSN	0.137618	0.066976	0.122537
SC4MOL	0.337892	3.98E-06	2.90E-05
SC5DL	-0.08498	0.259388	0.365792
SC65	0.051457	0.495156	0.60313
SCAF1	0.189374	0.011351	0.027523
SCAI	-0.35154	1.50E-06	1.23E-05
SCAMP1	-0.24371	0.001045	0.003564
SCAMP2	0.293005	7.21E-05	0.000358
SCAMP3	0.138515	0.065198	0.119795
SCAMP4	0.016233	0.829713	0.879437
SCAMP5	-0.3293	7.18E-06	4.86E-05
SCAND1	0.083822	0.265964	0.373454
SCAND2	-0.12638	0.092773	0.160331
SCAND3	-0.12262	0.102971	0.174836
SCAPER	-0.31005	2.53E-05	0.000145
SCAP	-0.13748	0.06725	0.122994
SCARA3	0.079013	0.294467	0.404388
SCARA5	-0.17488	0.019554	0.043567
SCARB1	0.023063	0.759926	0.828606
SCARB2	-0.28305	0.000129	0.000594
SCARF1	-0.12582	0.094231	0.162381
SCARF2	0.218849	0.003337	0.009661
SCARNA10	-0.10951	0.145642	0.230745
SCARNA11	-0.19253	0.010031	0.024763
SCARNA12	-0.11601	0.123066	0.20125
SCARNA15	-0.13136	0.0805	0.142943
SCARNA16	-0.10421	0.166278	0.256753
SCARNA17	0.056706	0.452154	0.563065
SCARNA18	-0.00641	0.932322	0.953391
SCARNA1	-0.02453	0.745201	0.816512
SCARNA20	0.061613	0.413929	0.526019
SCARNA21	-0.05248	0.486624	0.595415
SCARNA22	-0.21292	0.004323	0.012079
SCARNA2	0.057166	0.448488	0.559732
SCARNA3	0.016185	0.830212	0.879698
SCARNA4	0.055709	0.46016	0.570591
SCARNA5	0.059072	0.433479	0.545129
SCARNA6	0.182522	0.014748	0.034382
SCARNA7	0.121787	0.105356	0.178228
SCARNA8	-0.05894	0.434548	0.546091
SCARNA9L	0.143105	0.056698	0.106534
SCARNA9	-0.0406	0.590503	0.688357
SCCPDH	0.272382	0.000235	0.000994
SCD5	-0.18379	0.01406	0.032967

SCD	0.097093	0.197293	0.294469
SCEL	0.620686	2.44E-20	7.66E-18
SCFD1	-0.17123	0.022294	0.048642
SCFD2	-0.13986	0.062605	0.115729
SCG2	-0.35696	1.00E-06	8.71E-06
SCG3	-0.24159	0.001159	0.003902
SCG5	-0.23851	0.001345	0.004432
SCGB1A1	0.093462	0.214654	0.315487
SCGB1C1	-0.19624	0.008656	0.021826
SCGB1D1	-0.19267	0.009977	0.024649
SCGB1D2	-0.29799	5.35E-05	0.000278
SCGB1D4	0.118671	0.114636	0.190518
SCGB2A1	-0.09105	0.226793	0.329386
SCGB2A2	-0.10294	0.171504	0.263179
SCGB3A1	0.088204	0.241687	0.346163
SCGB3A2	-0.00406	0.957131	0.97058
SCGBL	-0.16207	0.030668	0.063849
SCGN	-0.17274	0.021123	0.046492
SCHIP1	-0.04506	0.550375	0.6527
SCIN	-0.06847	0.36379	0.477091
SCLT1	-0.10689	0.155594	0.243603
SCLY	-0.03786	0.615821	0.710701
SCMH1	-0.2681	0.000297	0.001217
SCML1	-0.02896	0.701224	0.781888
SCML2	-0.56229	3.16E-16	3.42E-14
SCML4	-0.21136	0.004624	0.012807
SCN10A	-0.02515	0.738934	0.811715
SCN11A	-0.27344	0.000222	0.000944
SCN1A	-0.13065	0.082165	0.14535
SCN1B	-0.19981	0.007495	0.01933
SCN2A	-0.12997	0.083792	0.147661
SCN2B	-0.05593	0.458362	0.569003
SCN3A	-0.28502	0.000115	0.000538
SCN3B	-0.34927	1.77E-06	1.43E-05
SCN4A	-0.26853	0.00029	0.001193
SCN4B	-0.10833	0.150065	0.236369
SCN5A	0.1423	0.058119	0.108717
SCN7A	-0.11143	0.138669	0.221848
SCN8A	-0.44348	5.66E-10	1.30E-08
SCN9A	-0.0506	0.502384	0.609494
SCNM1	0.371389	3.33E-07	3.34E-06
SCNN1A	0.416941	7.07E-09	1.17E-07
SCNN1B	-0.20893	0.00513	0.014002
SCNN1D	0.10512	0.162575	0.252098
SCNN1G	-0.05799	0.441975	0.553771
SC01	-0.3221	1.16E-05	7.41E-05
SC02	0.261935	0.000413	0.001613
SCOC	-0.15881	0.034229	0.06998
SCP2	0.086373	0.251636	0.357557
SCPEP1	-0.25661	0.000545	0.002047
SCRG1	-0.01163	0.877559	0.915042
SCRIB	0.207674	0.005409	0.014632
SCRN1	-0.27501	0.000203	0.000877
SCRN2	0.225592	0.002464	0.007466

SCRN3	-0.18997	0.011089	0.026988
SCRT1	-0.20314	0.006537	0.01722
SCRT2	-0.19943	0.007612	0.019579
SCTR	0.172718	0.02114	0.046515
SCT	0.377763	2.01E-07	2.15E-06
SCUBE1	-0.13346	0.07573	0.135838
SCUBE2	0.131805	0.079471	0.141381
SCUBE3	0.071284	0.344377	0.456737
SCXB	0.149893	0.045821	0.089356
SCYL1	0.212648	0.004375	0.012201
SCYL2	-0.19454	0.009267	0.023125
SCYL3	0.070863	0.347242	0.459688
SDAD1	-0.20153	0.006986	0.018218
SDC1	0.542581	5.15E-15	4.03E-13
SDC2	-0.21696	0.003627	0.010392
SDC3	-0.10524	0.162085	0.251508
SDC4P	0.063061	0.403015	0.515673
SDC4	0.48183	9.81E-12	3.52E-10
SDCBP2	0.623383	1.50E-20	4.95E-18
SDCBP	0.021212	0.778676	0.842869
SDCCAG1	-0.13406	0.074415	0.133868
SDCCAG3	0.110297	0.142742	0.22706
SDCCAG8	0.095308	0.205694	0.304856
SDF2L1	-0.14386	0.055397	0.104604
SDF2	0.250222	0.000755	0.002706
SDF4	-0.03088	0.682452	0.766968
SDHAF1	0.057747	0.443879	0.555629
SDHAF2	0.032598	0.665773	0.753319
SDHAP1	0.243851	0.001038	0.003542
SDHAP2	0.268526	0.00029	0.001193
SDHAP3	-0.08057	0.285046	0.394022
SDHA	0.132141	0.0787	0.140237
SDHB	0.049919	0.508147	0.614826
SDHC	0.175311	0.019252	0.042994
SDHD	0.115105	0.126026	0.205325
SDK1	-0.41932	5.68E-09	9.69E-08
SDK2	-0.39043	7.14E-08	8.68E-07
SDPR	-0.25584	0.000567	0.002117
SDR16C5	0.553073	1.19E-15	1.08E-13
SDR39U1	-0.12658	0.092238	0.159653
SDR42E1	0.283821	0.000123	0.000571
SDR9C7	-0.05421	0.472338	0.582187
SDSL	-0.15217	0.042582	0.08405
SDS	0.176827	0.018217	0.041014
SEBOX	-0.1511	0.044084	0.086557
SEC11A	0.052566	0.485887	0.594697
SEC11C	-0.48731	5.27E-12	2.04E-10
SEC13	0.046793	0.535104	0.638766
SEC14L1	-0.30296	3.95E-05	0.000214
SEC14L2	0.520139	1.00E-13	5.92E-12
SEC14L3	-0.24636	0.000917	0.003186
SEC14L4	0.231494	0.001877	0.005904
SEC14L5	-0.28447	0.000119	0.000553
SEC16A	-0.38974	7.56E-08	9.15E-07

SEC16B	0.300251	4.66E-05	0.000247
SEC1	0.32898	7.34E-06	4.96E-05
SEC22A	0.085294	0.257632	0.363965
SEC22B	-0.14937	0.04659	0.09057
SEC22C	-0.20727	0.005501	0.014841
SEC23A	0.102128	0.174936	0.267309
SEC23B	-0.45578	1.63E-10	4.34E-09
SEC23IP	-0.05491	0.466632	0.576699
SEC24A	-0.12289	0.102225	0.173779
SEC24B	-0.13296	0.076858	0.137502
SEC24C	0.010263	0.891854	0.924679
SEC24D	-0.24683	0.000895	0.003126
SEC31A	-0.15086	0.044431	0.087108
SEC31B	-0.01709	0.820925	0.873256
SEC61A1	-0.12201	0.104723	0.17734
SEC61A2	-0.26348	0.00038	0.001503
SEC61B	-0.2058	0.005853	0.015653
SEC61G	-0.00886	0.906601	0.934776
SEC62	-0.2321	0.001824	0.005763
SEC63	-0.47609	1.86E-11	6.22E-10
SECISBP2I	-0.28473	0.000117	0.000546
SECISBP2	-0.32495	9.62E-06	6.28E-05
SECTM1	0.16027	0.032595	0.067131
SEH1L	-0.07757	0.303425	0.413788
SEL1L2	0.007148	0.924556	0.947803
SEL1L3	0.220323	0.003125	0.009145
SEL1L	-0.28192	0.000138	0.000629
SELENBP1	0.319459	1.38E-05	8.61E-05
SELE	-0.18863	0.011682	0.028185
SELK	-0.15161	0.043368	0.085371
SELL	0.024456	0.745913	0.817157
SELM	-0.01911	0.800169	0.859406
SELO	0.034422	0.648283	0.737784
SELPLG	0.40819	1.55E-08	2.29E-07
SELP	-0.14344	0.056115	0.105758
SELS	0.127425	0.090076	0.156476
SELT	-0.11904	0.113493	0.189003
SELV	-0.08192	0.276981	0.384974
SEMA3A	0.064327	0.393624	0.506312
SEMA3B	0.529864	2.84E-14	1.89E-12
SEMA3C	0.343751	2.63E-06	2.02E-05
SEMA3D	-0.14044	0.061519	0.113977
SEMA3E	-0.18712	0.012382	0.029635
SEMA3F	0.288494	9.41E-05	0.00045
SEMA3G	-0.29812	5.31E-05	0.000276
SEMA4A	0.135165	0.072037	0.130362
SEMA4B	0.428053	2.52E-09	4.74E-08
SEMA4C	0.2211	0.003018	0.008895
SEMA4D	-0.22648	0.002366	0.00721
SEMA4F	-0.11503	0.126269	0.205636
SEMA4G	0.367291	4.58E-07	4.41E-06
SEMA5A	-0.30728	3.02E-05	0.00017
SEMA5B	-0.06755	0.370285	0.483493
SEMA6A	-0.23422	0.001651	0.005296

SEMA6B	-0.06938	0.357457	0.470597
SEMA6C	-0.10041	0.182356	0.276145
SEMA6D	-0.28704	0.000102	0.000486
SEMA7A	0.506017	5.80E-13	2.83E-11
SEMG1	0.14331	0.056342	0.106051
SEMG2	0.054647	0.46877	0.578799
SENP1	-0.36842	4.20E-07	4.08E-06
SENP2	-0.1034	0.169609	0.260891
SENP3	-0.42655	2.90E-09	5.40E-08
SENP5	-0.08589	0.254299	0.360518
SENP6	-0.38276	1.34E-07	1.51E-06
SENP7	-0.14833	0.048156	0.093054
SENP8	-0.24728	0.000876	0.003069
15-Sep	0.072917	0.333408	0.44561
SEPHS1	-0.32038	1.30E-05	8.16E-05
SEPHS2	0.181859	0.015119	0.035074
SEPN1	-0.15342	0.040897	0.081211
SEPP1	-0.4761	1.86E-11	6.22E-10
SEPSECS	-0.17083	0.022612	0.049222
10-Sep	0.240239	0.001238	0.004129
11-Sep	0.09027	0.230793	0.33424
12-Sep	-0.03323	0.659692	0.748221
14-Sep	0.055389	0.46274	0.573071
1-Sep	-0.12945	0.085046	0.149457
2-Sep	0.070291	0.351155	0.463781
3-Sep	-0.24135	0.001173	0.003939
4-Sep	0.001999	0.978877	0.985455
5-Sep	-0.3512	1.54E-06	1.26E-05
6-Sep	0.015582	0.836445	0.884485
SEPT7L	-0.10631	0.157836	0.246217
SEPT7P2	-0.30426	3.64E-05	0.000199
7-Sep	-0.06834	0.364701	0.477938
8-Sep	0.138292	0.065636	0.12052
9-Sep	0.375694	2.37E-07	2.49E-06
SEPW1	0.384828	1.13E-07	1.30E-06
SEPX1	-0.08153	0.279322	0.387709
SERAC1	-0.20762	0.005422	0.014659
SERBP1	0.06557	0.384525	0.497325
SERF1A	-0.196	0.008743	0.022014
SERF2	0.271411	0.000248	0.00104
SERGEF	-0.22893	0.002114	0.006545
SERHL2	0.054726	0.468124	0.578188
SERHL	0.053011	0.482204	0.591574
SERINC1	-0.36464	5.62E-07	5.28E-06
SERINC2	0.561142	3.73E-16	3.86E-14
SERINC3	-0.12251	0.103287	0.175298
SERINC4	0.121053	0.107486	0.181119
SERINC5	-0.07683	0.308067	0.418483
SERP1	-0.10239	0.173844	0.266067
SERP2	-0.22497	0.002535	0.007651
SERPINA1C	-0.34371	2.64E-06	2.03E-05
SERPINA11	-0.21821	0.003432	0.009905
SERPINA12	-0.14976	0.046023	0.089641
SERPINA13	-0.0631	0.402709	0.515382

SERPINA1	-0.07539	0.317237	0.42875
SERPINA3	0.212758	0.004355	0.012152
SERPINA4	0.387254	9.29E-08	1.09E-06
SERPINA5	0.188635	0.01168	0.028185
SERPINA6	-0.12621	0.093221	0.160968
SERPINA7	-0.13806	0.066102	0.121242
SERPINA9	-0.04059	0.590571	0.688397
SERPINB10	0.049574	0.511085	0.617323
SERPINB11	0.237978	0.00138	0.004535
SERPINB12	0.158411	0.034692	0.070737
SERPINB13	0.123266	0.101163	0.172285
SERPINB1	0.402982	2.45E-08	3.43E-07
SERPINB2	0.436414	1.13E-09	2.35E-08
SERPINB3	0.413103	1.00E-08	1.58E-07
SERPINB4	0.300528	4.58E-05	0.000244
SERPINB5	0.627802	6.70E-21	2.55E-18
SERPINB6	0.357176	9.87E-07	8.57E-06
SERPINB7	0.410707	1.24E-08	1.90E-07
SERPINB8	0.306822	3.11E-05	0.000174
SERPINB9	0.206749	0.005624	0.015129
SERPINC1	0.030485	0.686249	0.769919
SERPIND1	-0.12576	0.094404	0.162622
SERPINE1	0.072546	0.335879	0.448035
SERPINE2	-0.31295	2.11E-05	0.000124
SERPINE3	-0.21131	0.004635	0.012831
SERPINF1	0.038534	0.609581	0.705069
SERPINF2	-0.30174	4.26E-05	0.000229
SERPING1	0.181148	0.015527	0.035858
SERPINH1	0.293109	7.17E-05	0.000356
SERPINI1	-0.36615	5.00E-07	4.76E-06
SERPINI2	-0.13707	0.068071	0.124276
SERTAD1	0.368483	4.18E-07	4.06E-06
SERTAD2	0.047088	0.532532	0.636655
SERTAD3	0.408987	1.44E-08	2.16E-07
SERTAD4	0.10532	0.161772	0.25111
SESN1	-0.42181	4.52E-09	7.94E-08
SESN2	-0.30022	4.67E-05	0.000248
SESN3	-0.23314	0.001737	0.005528
SESTD1	0.153395	0.040929	0.081267
SETBP1	-0.46317	7.51E-11	2.18E-09
SETD1A	-0.05166	0.493447	0.601802
SETD1B	-0.3017	4.27E-05	0.000229
SETD2	-0.20685	0.005599	0.015068
SETD3	0.098905	0.189018	0.284383
SETD4	0.258448	0.000495	0.001887
SETD5	-0.07493	0.320172	0.431949
SETD6	-0.1243	0.098321	0.168227
SETD7	-0.16016	0.032717	0.067356
SETD8	0.101408	0.178016	0.270838
SETDB1	-0.0043	0.954525	0.968782
SETDB2	-0.24911	0.000799	0.002847
SETMAR	-0.17359	0.020491	0.045343
SETX	-0.27668	0.000185	0.000809
SET	0.031638	0.675049	0.761245

SEZ6L2	-0.13797	0.06628	0.121501
SEZ6L	-0.24406	0.001027	0.003513
SEZ6	-0.30578	3.31E-05	0.000184
SF1	-0.17982	0.016312	0.037428
SF3A1	-0.31782	1.54E-05	9.45E-05
SF3A2	0.232021	0.001831	0.00578
SF3A3	-0.20574	0.005867	0.01568
SF3B14	0.363884	5.95E-07	5.53E-06
SF3B1	0.135539	0.071245	0.129165
SF3B2	0.174454	0.019859	0.044178
SF3B3	-0.02613	0.729128	0.803861
SF3B4	0.364484	5.68E-07	5.32E-06
SF3B5	-0.05857	0.437401	0.549049
SF4	0.084084	0.264465	0.371733
SFI1	-0.02165	0.774231	0.839115
SFMBT1	-0.1132	0.132461	0.213749
SFMBT2	-0.29417	6.73E-05	0.000338
SFN	0.627363	7.26E-21	2.71E-18
SFPQ	-0.1563	0.037209	0.075004
SFRP1	-0.29952	4.87E-05	0.000257
SFRP2	0.188986	0.011523	0.027868
SFRP4	0.106431	0.157367	0.24565
SFRP5	0.163214	0.029493	0.061748
SFRS11	0.001455	0.984624	0.98929
SFRS12IP1	-0.04663	0.536492	0.639997
SFRS12	-0.14305	0.05679	0.106685
SFRS13A	-0.00386	0.959252	0.972162
SFRS13B	-0.32883	7.41E-06	5.00E-05
SFRS14	-0.23273	0.001771	0.005622
SFRS15	-0.03689	0.624889	0.718446
SFRS16	0.125292	0.095633	0.164406
SFRS17A	-0.08609	0.253214	0.359316
SFRS18	-0.17398	0.0202	0.044784
SFRS1	0.064486	0.392453	0.505101
SFRS2B	-0.1919	0.010285	0.025282
SFRS2IP	-0.25682	0.000539	0.002028
SFRS2	0.24191	0.001141	0.003851
SFRS3	0.236482	0.001483	0.004821
SFRS4	0.212852	0.004337	0.012115
SFRS5	-0.03249	0.666791	0.754126
SFRS6	-0.24435	0.001013	0.00347
SFRS7	0.304168	3.66E-05	0.0002
SFRS8	-0.07267	0.335053	0.447195
SFRS9	-0.10004	0.183954	0.278054
SFT2D1	0.310468	2.47E-05	0.000142
SFT2D2	-0.00461	0.951314	0.966989
SFT2D3	0.060724	0.420705	0.532895
SFTA1P	0.065385	0.385871	0.498605
SFTA2	0.679094	2.05E-25	2.53E-22
SFTA3	0.000525	0.994446	0.99626
SFTPA1	0.005836	0.938373	0.958341
SFTPA2	0.35484	1.17E-06	9.97E-06
SFTPB	-0.08985	0.233006	0.336827
SFTPC	-0.21966	0.003219	0.00938

SFTPD	-0.04587	0.543212	0.64622
SFXN1	-0.07135	0.343963	0.456355
SFXN2	-0.03192	0.672349	0.758818
SFXN3	0.53338	1.78E-14	1.25E-12
SFXN4	-0.01129	0.881098	0.917522
SFXN5	-0.28426	0.00012	0.000559
SGCA	0.176056	0.018737	0.042012
SGCB	-0.11943	0.112332	0.187622
SGCD	-0.12061	0.108793	0.182854
SGCE	-0.36891	4.04E-07	3.96E-06
SGCG	0.021129	0.779518	0.843219
SGCZ	-0.17283	0.021055	0.046368
SGEF	-0.46618	5.45E-11	1.66E-09
SGIP1	0.02686	0.72192	0.797991
SGK196	-0.19529	0.008992	0.022519
SGK1	-0.11451	0.128019	0.207853
SGK223	0.367675	4.45E-07	4.29E-06
SGK269	-0.11272	0.134107	0.215894
SGK2	0.192859	0.009903	0.024494
SGK3	-0.35895	8.64E-07	7.65E-06
SGK494	0.153025	0.041425	0.082087
SGMS1	-0.40858	1.50E-08	2.22E-07
SGMS2	0.209087	0.005095	0.013921
SGOL1	0.311312	2.34E-05	0.000135
SGOL2	0.104505	0.165062	0.255234
SGPL1	0.000785	0.991702	0.993863
SGPP1	-0.21323	0.004266	0.011951
SGPP2	0.338004	3.94E-06	2.88E-05
SGSH	-0.26366	0.000377	0.00149
SGSM1	-0.45993	1.06E-10	2.94E-09
SGSM2	-0.33755	4.07E-06	2.97E-05
SGSM3	0.098704	0.189923	0.285432
SGTA	0.020195	0.78903	0.850539
SGTB	-0.32675	8.53E-06	5.64E-05
SH2B1	0.107108	0.154727	0.242401
SH2B2	0.091624	0.223847	0.326067
SH2B3	-0.26861	0.000289	0.001189
SH2D1A	-0.05036	0.504363	0.611333
SH2D1B	0.106831	0.155805	0.243857
SH2D2A	0.259837	0.000461	0.00177
SH2D3A	0.587646	6.53E-18	1.13E-15
SH2D3C	-0.18863	0.011682	0.028185
SH2D4A	0.516767	1.53E-13	8.73E-12
SH2D4B	0.169228	0.023934	0.051697
SH2D5	0.159787	0.03313	0.068117
SH2D6	0.146936	0.050324	0.09651
SH2D7	0.098136	0.192498	0.288608
SH3BGRL2	-0.00352	0.962833	0.974713
SH3BGRL3	0.490863	3.50E-12	1.42E-10
SH3BGRL	-0.1189	0.113926	0.189611
SH3BGR	-0.23464	0.001618	0.005204
SH3BP1	0.220906	0.003045	0.008955
SH3BP2	0.300431	4.61E-05	0.000245
SH3BP4	0.11533	0.125284	0.204352

SH3BP5L	0.019015	0.801098	0.860031
SH3BP5	-0.0561	0.457017	0.568046
SH3D19	0.083145	0.269861	0.377625
SH3D20	0.496746	1.76E-12	7.77E-11
SH3GL1	0.363522	6.12E-07	5.67E-06
SH3GL2	-0.20922	0.005067	0.013847
SH3GL3	-0.35484	1.17E-06	9.97E-06
SH3GLB1	0.12284	0.102357	0.173973
SH3GLB2	0.197892	0.008101	0.020662
SH3KBP1	0.321322	1.22E-05	7.75E-05
SH3PXD2A	-0.08424	0.263604	0.370812
SH3PXD2B	0.065357	0.386073	0.498805
SH3RF1	0.258129	0.000504	0.001915
SH3RF2	0.559577	4.68E-16	4.73E-14
SH3RF3	-0.17764	0.017679	0.040013
SH3TC1	0.104523	0.164986	0.255187
SH3TC2	0.396949	4.12E-08	5.36E-07
SH3YL1	0.168194	0.02482	0.053305
SHANK1	-0.1732	0.020781	0.045837
SHANK2	-0.0074	0.921883	0.945749
SHANK3	-0.23495	0.001595	0.005139
SHARPIN	0.350042	1.67E-06	1.36E-05
SHBG	-0.36075	7.55E-07	6.83E-06
SHB	0.377827	2.00E-07	2.14E-06
SHC1	0.250409	0.000748	0.002686
SHC2	0.008164	0.91387	0.93982
SHC3	0.063498	0.399757	0.5123
SHC4	-0.19457	0.009254	0.023102
SHCBP1	0.367672	4.45E-07	4.29E-06
SHD	-0.2994	4.91E-05	0.000258
SHE	-0.27743	0.000177	0.000781
SHFM1	0.290737	8.25E-05	0.000402
SHF	0.376811	2.17E-07	2.30E-06
SHH	0.29747	5.52E-05	0.000285
SHISA2	0.225561	0.002468	0.007474
SHISA3	-0.12819	0.08814	0.153802
SHISA4	0.263143	0.000387	0.001526
SHISA5	0.47454	2.21E-11	7.27E-10
SHISA6	-0.0435	0.564245	0.664884
SHISA7	-0.33022	6.75E-06	4.61E-05
SHISA9	-0.28008	0.000153	0.000688
SHKBP1	0.368822	4.07E-07	3.98E-06
SHMT1	-0.05579	0.459543	0.570112
SHMT2	-0.06216	0.409783	0.521835
SHOC2	-0.11391	0.130023	0.210536
SHOX2	0.121557	0.10602	0.179106
SHOX	0.130324	0.082937	0.146454
SHPK	-0.36673	4.78E-07	4.56E-06
SHPRH	-0.32088	1.26E-05	7.94E-05
SHQ1	-0.14346	0.05608	0.105715
SHROOM1	0.311252	2.35E-05	0.000136
SHROOM2	-0.1874	0.012251	0.029374
SHROOM3	0.234236	0.00165	0.005293
SHROOM4	-0.18261	0.014701	0.034287

SIAE	-0.03752	0.61902	0.7134
SIAH1	0.142767	0.057291	0.107484
SIAH2	0.2417	0.001153	0.003884
SIAH3	-0.20497	0.006059	0.016104
SIDT1	0.025906	0.731406	0.805907
SIDT2	-0.45521	1.73E-10	4.57E-09
SIGIRR	0.217977	0.003468	0.00999
SIGLEC10	-0.067	0.374256	0.487326
SIGLEC11	-0.10387	0.167656	0.258558
SIGLEC12	0.17739	0.017845	0.040336
SIGLEC14	0.056997	0.44983	0.560785
SIGLEC15	0.345766	2.28E-06	1.78E-05
SIGLEC16	-0.03662	0.627432	0.720574
SIGLEC1	0.122719	0.102698	0.174464
SIGLEC5	-0.00131	0.986145	0.990252
SIGLEC6	-0.07056	0.34928	0.461922
SIGLEC7	0.050071	0.506853	0.613711
SIGLEC8	-0.09238	0.220045	0.321784
SIGLEC9	0.051025	0.498785	0.606169
SIGLECP3	-0.00353	0.962751	0.974709
SIGMAR1	0.203004	0.006574	0.017309
SIK1	0.19658	0.00854	0.021594
SIK2	-0.454	1.96E-10	5.08E-09
SIK3	-0.5254	5.09E-14	3.26E-12
SIKE1	0.034245	0.64997	0.739032
SIL1	-0.12011	0.11027	0.184928
SILV	0.13464	0.073161	0.131936
SIM1	-0.14833	0.04816	0.093054
SIM2	0.384377	1.18E-07	1.35E-06
SIN3A	-0.18886	0.011581	0.027997
SIN3B	-0.08176	0.277917	0.386061
SIP1	0.104419	0.165409	0.255611
SIPA1L1	0.109775	0.144656	0.229424
SIPA1L2	-0.19577	0.00882	0.022177
SIPA1L3	-0.15835	0.034767	0.07086
SIPA1	0.313939	1.98E-05	0.000117
SIRPA	-0.04357	0.563593	0.664312
SIRPB1	0.024583	0.744641	0.816002
SIRPB2	0.052592	0.485678	0.594589
SIRPD	-0.04226	0.575421	0.674846
SIRPG	0.005269	0.94435	0.962506
SIRT1	-0.33451	5.03E-06	3.58E-05
SIRT2	-0.04135	0.583656	0.682226
SIRT3	0.011477	0.879145	0.916068
SIRT4	-0.19713	0.008352	0.021192
SIRT5	0.045664	0.545008	0.647811
SIRT6	0.322448	1.14E-05	7.27E-05
SIRT7	0.551473	1.49E-15	1.31E-13
SIT1	-0.02193	0.771399	0.837291
SIVA1	0.06161	0.413946	0.526019
SIX1	0.26986	0.00027	0.001119
SIX2	0.036593	0.627721	0.720822
SIX3	-0.08788	0.243418	0.348087
SIX4	0.156644	0.036791	0.074349

SIX5	0.190843	0.010719	0.026213
SIX6	-0.03191	0.672451	0.758878
SI	-0.03229	0.668708	0.756027
SKA1	0.188467	0.011757	0.028341
SKA2	-0.05426	0.471967	0.581874
SKA3	0.429388	2.22E-09	4.24E-08
SKAP1	0.071608	0.342181	0.454479
SKAP2	0.242749	0.001095	0.003714
SKIL	0.10564	0.160494	0.249459
SKINTL	0.026069	0.729783	0.804388
SKIV2L2	-0.03856	0.609352	0.704928
SKIV2L	0.169276	0.023894	0.05164
SKI	-0.04398	0.559995	0.660977
SKP1	0.007871	0.916956	0.942259
SKP2	-0.12619	0.093258	0.161
SLA2	-0.184	0.013946	0.032743
SLAIN1	-0.21295	0.004318	0.012068
SLAIN2	-0.04487	0.552033	0.654155
SLAMF1	-0.0242	0.748435	0.819239
SLAMF6	0.021299	0.777797	0.842333
SLAMF7	0.18637	0.012744	0.030377
SLAMF8	0.042544	0.572844	0.67257
SLAMF9	0.401464	2.79E-08	3.83E-07
SLA	0.017916	0.81237	0.867188
SLBP	0.095341	0.205538	0.30467
SLC10A1	0.047326	0.530454	0.634824
SLC10A2	-0.00086	0.990877	0.993313
SLC10A3	0.422598	4.20E-09	7.48E-08
SLC10A4	-0.14812	0.048477	0.093529
SLC10A5	-0.05603	0.457589	0.568507
SLC10A6	-0.3361	4.50E-06	3.25E-05
SLC10A7	-0.12644	0.0926	0.160087
SLC11A1	0.331961	5.99E-06	4.18E-05
SLC11A2	-0.33372	5.31E-06	3.75E-05
SLC12A1	-0.39622	4.38E-08	5.68E-07
SLC12A2	0.116024	0.12301	0.201191
SLC12A3	-0.06718	0.372957	0.486114
SLC12A4	0.308043	2.88E-05	0.000163
SLC12A5	-0.37176	3.23E-07	3.26E-06
SLC12A6	0.072832	0.333977	0.44622
SLC12A7	0.008506	0.910276	0.937197
SLC12A8	0.071163	0.345202	0.45757
SLC12A9	0.302551	4.05E-05	0.000219
SLC13A1	-0.17704	0.018074	0.040734
SLC13A2	0.064234	0.394305	0.507055
SLC13A3	0.12736	0.090242	0.156722
SLC13A4	0.19751	0.008226	0.020919
SLC13A5	0.37841	1.91E-07	2.06E-06
SLC14A1	0.095866	0.203043	0.30171
SLC14A2	-0.34126	3.14E-06	2.36E-05
SLC15A1	0.364301	5.76E-07	5.38E-06
SLC15A2	0.13887	0.064505	0.118664
SLC15A3	0.262191	0.000407	0.001594
SLC15A4	0.138637	0.064959	0.119399

SLC16A10	-0.11457	0.127824	0.207622
SLC16A11	-0.24303	0.00108	0.00367
SLC16A12	-0.26702	0.000314	0.001279
SLC16A13	0.016184	0.830228	0.879698
SLC16A14	-0.17057	0.022821	0.049611
SLC16A1	0.360832	7.50E-07	6.79E-06
SLC16A2	-0.07292	0.333397	0.44561
SLC16A3	0.544282	4.08E-15	3.24E-13
SLC16A4	0.303228	3.88E-05	0.000211
SLC16A5	0.645459	2.34E-22	1.49E-19
SLC16A6	-0.18739	0.012254	0.029375
SLC16A7	-0.06568	0.383717	0.49667
SLC16A8	0.183547	0.014189	0.033244
SLC16A9	-0.07977	0.289827	0.399327
SLC17A1	-0.21135	0.004627	0.012814
SLC17A2	-0.1902	0.010991	0.02678
SLC17A3	-0.18032	0.016013	0.036827
SLC17A4	-0.04484	0.552304	0.65436
SLC17A5	-0.09234	0.220216	0.321963
SLC17A6	0.000702	0.992577	0.99464
SLC17A7	0.010374	0.890683	0.923847
SLC17A8	-0.14158	0.059418	0.110697
SLC17A9	0.373752	2.76E-07	2.84E-06
SLC18A1	-0.27425	0.000212	0.000908
SLC18A2	-0.21162	0.004574	0.012688
SLC18A3	-0.11879	0.114263	0.190012
SLC19A1	0.336173	4.48E-06	3.24E-05
SLC19A2	-0.0894	0.23535	0.339298
SLC19A3	0.151984	0.042846	0.08447
SLC1A1	0.233035	0.001746	0.005549
SLC1A2	-0.28306	0.000129	0.000593
SLC1A3	-0.00972	0.897504	0.92859
SLC1A4	-0.46211	8.41E-11	2.41E-09
SLC1A5	0.290092	8.57E-05	0.000416
SLC1A6	0.027194	0.718603	0.795395
SLC1A7	0.001325	0.985998	0.990154
SLC20A1	0.36685	4.74E-07	4.53E-06
SLC20A2	0.176745	0.018271	0.041113
SLC22A10	-0.26941	0.000276	0.001143
SLC22A11	0.14757	0.049329	0.094933
SLC22A12	-0.12921	0.08563	0.15031
SLC22A13	0.234045	0.001665	0.005332
SLC22A14	0.19298	0.009856	0.024392
SLC22A15	-0.01338	0.859307	0.902003
SLC22A16	-0.22025	0.003136	0.00917
SLC22A17	-0.28101	0.000145	0.000656
SLC22A18A	0.442441	6.27E-10	1.42E-08
SLC22A18	0.455807	1.62E-10	4.33E-09
SLC22A1	-0.0402	0.594216	0.691584
SLC22A20	0.40147	2.79E-08	3.83E-07
SLC22A23	-0.1967	0.008499	0.021504
SLC22A25	-0.01827	0.808751	0.864555
SLC22A2	-0.05597	0.458048	0.568839
SLC22A3	0.460765	9.68E-11	2.72E-09

SLC22A4	-0.17061	0.02279	0.049565
SLC22A5	-0.18062	0.015834	0.036471
SLC22A6	-0.08486	0.260077	0.366662
SLC22A7	-0.12182	0.105273	0.178103
SLC22A8	-0.21046	0.004805	0.013244
SLC22A9	-0.15023	0.045329	0.088615
SLC23A1	0.13509	0.072196	0.130578
SLC23A2	-0.5327	1.95E-14	1.36E-12
SLC23A3	0.496082	1.90E-12	8.31E-11
SLC24A1	-0.03197	0.671783	0.758474
SLC24A2	0.057645	0.444694	0.556266
SLC24A3	-0.1696	0.023626	0.051175
SLC24A4	-0.09398	0.21212	0.31246
SLC24A5	-0.13449	0.07349	0.132409
SLC24A6	0.374657	2.57E-07	2.68E-06
SLC25A10	0.28035	0.00015	0.000678
SLC25A11	-0.30026	4.66E-05	0.000247
SLC25A12	-0.10998	0.143901	0.228407
SLC25A13	0.000304	0.996783	0.997537
SLC25A14	-0.27893	0.000163	0.000726
SLC25A15	0.013462	0.858444	0.901528
SLC25A16	0.072661	0.335117	0.44723
SLC25A17	-0.15153	0.043484	0.085566
SLC25A18	-0.12849	0.087407	0.152846
SLC25A19	0.217944	0.003473	0.009999
SLC25A1	0.219744	0.003207	0.009349
SLC25A20	-0.02874	0.703321	0.783564
SLC25A21	-0.0712	0.344933	0.457275
SLC25A22	-0.04545	0.546877	0.649448
SLC25A23	0.246543	0.000908	0.003165
SLC25A24	0.237513	0.001411	0.004621
SLC25A25	-0.03797	0.614867	0.709978
SLC25A26	0.213158	0.00428	0.011979
SLC25A27	-0.27507	0.000202	0.000875
SLC25A28	0.08209	0.276003	0.383938
SLC25A29	0.152256	0.04247	0.083899
SLC25A2	0.234055	0.001664	0.005331
SLC25A30	-0.05084	0.50033	0.607486
SLC25A31	-0.05711	0.448928	0.559964
SLC25A32	-0.28065	0.000148	0.000668
SLC25A33	-0.28144	0.000141	0.000643
SLC25A34	-0.18771	0.012105	0.029088
SLC25A35	-0.14376	0.055557	0.104837
SLC25A36	-0.06084	0.4198	0.531987
SLC25A37	0.422502	4.24E-09	7.52E-08
SLC25A38	-0.16125	0.031532	0.065283
SLC25A39	0.265908	0.000334	0.001344
SLC25A3	-0.14184	0.058949	0.109989
SLC25A40	-0.18541	0.013221	0.031335
SLC25A41	0.078415	0.298146	0.408147
SLC25A42	-0.27482	0.000205	0.000885
SLC25A43	0.248676	0.000817	0.002895
SLC25A44	-0.24868	0.000817	0.002895
SLC25A45	-0.27726	0.000179	0.000787

SLC25A46 -0.17871 0.016998 0.03871
SLC25A4 -0.27407 0.000214 0.000915
SLC25A5 -0.10099 0.179816 0.273115
SLC25A6 -0.18221 0.014924 0.03469
SLC26A10 0.073862 0.327169 0.439082
SLC26A11 -0.46744 4.77E-11 1.47E-09
SLC26A1 -0.01535 0.838872 0.886246
SLC26A2 -0.43394 1.44E-09 2.88E-08
SLC26A3 -0.04755 0.528473 0.633342
SLC26A4 -0.20897 0.00512 0.013982
SLC26A5 0.146388 0.051197 0.097937
SLC26A6 0.162716 0.03 0.062663
SLC26A7 -0.00971 0.897595 0.92859
SLC26A8 0.04591 0.542845 0.645901
SLC26A9 0.372579 3.03E-07 3.09E-06
SLC27A1 0.301427 4.34E-05 0.000233
SLC27A2 0.012876 0.864554 0.905973
SLC27A3 -0.12829 0.0879 0.153518
SLC27A4 0.102205 0.174609 0.266949
SLC27A5 -0.15385 0.040328 0.080266
SLC27A6 -0.06323 0.401728 0.514359
SLC28A1 -0.13994 0.062445 0.115552
SLC28A2 0.051469 0.495053 0.603079
SLC28A3 0.114903 0.126695 0.206152
SLC29A1 0.09079 0.228108 0.330908
SLC29A2 0.383354 1.28E-07 1.45E-06
SLC29A3 0.211478 0.004601 0.012753
SLC29A4 -0.34653 2.16E-06 1.70E-05
SLC2A10 0.264378 0.000362 0.001446
SLC2A11 -0.32451 9.91E-06 6.44E-05
SLC2A12 -0.14935 0.04662 0.090619
SLC2A13 -0.34603 2.23E-06 1.75E-05
SLC2A14 0.013956 0.85331 0.897423
SLC2A1 0.527351 3.95E-14 2.56E-12
SLC2A2 -0.04417 0.558248 0.659263
SLC2A3 0.149011 0.047129 0.091454
SLC2A4RG 0.267869 0.0003 0.001229
SLC2A4 -0.16649 0.026343 0.056101
SLC2A5 0.202989 0.006578 0.017316
SLC2A6 0.111526 0.138317 0.221356
SLC2A7 -0.07034 0.350787 0.463451
SLC2A8 -0.1204 0.109415 0.183759
SLC2A9 0.053394 0.479034 0.588571
SLC30A10 0.212359 0.00443 0.012326
SLC30A1 0.029825 0.692699 0.774741
SLC30A2 0.037203 0.622 0.715999
SLC30A3 -0.04292 0.569417 0.66942
SLC30A4 -0.45765 1.34E-10 3.64E-09
SLC30A5 -0.25165 0.000703 0.002541
SLC30A6 -0.0822 0.275336 0.383332
SLC30A7 0.093993 0.212049 0.312402
SLC30A8 0.011964 0.874059 0.912834
SLC30A9 -0.32973 6.97E-06 4.74E-05
SLC31A1 -0.2925 7.43E-05 0.000367

SLC31A2	-0.13654	0.069172	0.125983
SLC32A1	-0.28757	9.94E-05	0.000472
SLC33A1	-0.24942	0.000787	0.002808
SLC34A1	0.23307	0.001743	0.005543
SLC34A2	0.267129	0.000313	0.001272
SLC34A3	0.034131	0.651065	0.740064
SLC35A1	0.219852	0.003191	0.009311
SLC35A2	0.268906	0.000284	0.001172
SLC35A3	0.247612	0.000861	0.003024
SLC35A4	-0.0538	0.475681	0.585395
SLC35A5	-0.15765	0.035582	0.072293
SLC35B1	-0.1191	0.113327	0.188805
SLC35B2	0.163548	0.029158	0.061155
SLC35B3	-0.06912	0.359253	0.472269
SLC35B4	-0.27567	0.000196	0.00085
SLC35C1	0.411869	1.12E-08	1.74E-07
SLC35C2	0.187258	0.012318	0.029502
SLC35D1	0.022004	0.770645	0.836744
SLC35D2	0.162316	0.030412	0.063409
SLC35D3	-0.08704	0.247994	0.353276
SLC35E1	-0.06551	0.384939	0.49773
SLC35E2	-0.25103	0.000725	0.002611
SLC35E3	-0.24698	0.000889	0.003108
SLC35E4	0.345225	2.37E-06	1.84E-05
SLC35F1	-0.23752	0.001411	0.004621
SLC35F2	0.489281	4.20E-12	1.66E-10
SLC35F3	-0.22915	0.002093	0.006488
SLC35F4	-0.15943	0.033531	0.068787
SLC35F5	0.040452	0.59188	0.689272
SLC36A1	0.082661	0.272665	0.380707
SLC36A2	-0.01768	0.814836	0.869024
SLC36A3	-0.03941	0.601488	0.697831
SLC36A4	-0.44026	7.78E-10	1.71E-08
SLC37A1	0.20082	0.007192	0.018623
SLC37A2	0.170239	0.023094	0.050132
SLC37A3	-0.03204	0.671121	0.758023
SLC37A4	-0.15871	0.034352	0.070203
SLC38A10	-0.09704	0.197557	0.294807
SLC38A11	-0.15618	0.037359	0.075259
SLC38A1	-0.03865	0.60847	0.704137
SLC38A2	-0.17725	0.017939	0.040507
SLC38A3	-0.07113	0.345455	0.457782
SLC38A4	-0.30672	3.12E-05	0.000175
SLC38A5	0.368845	4.06E-07	3.98E-06
SLC38A6	0.077709	0.30253	0.412795
SLC38A7	-0.03495	0.643228	0.73379
SLC38A8	-0.18529	0.013282	0.031453
SLC38A9	0.097318	0.196251	0.293191
SLC39A10	0.179886	0.016274	0.037367
SLC39A11	0.387521	9.09E-08	1.08E-06
SLC39A12	-0.14915	0.046918	0.091099
SLC39A13	0.213696	0.004182	0.011759
SLC39A14	-0.12847	0.087452	0.152898
SLC39A1	0.449844	2.99E-10	7.43E-09

SLC39A2	0.100608	0.181478	0.275172
SLC39A3	0.015404	0.838296	0.885826
SLC39A4	0.50509	6.49E-13	3.13E-11
SLC39A5	0.025851	0.73196	0.806159
SLC39A6	-0.44995	2.95E-10	7.38E-09
SLC39A7	-0.07893	0.294967	0.404934
SLC39A8	-0.23129	0.001895	0.005957
SLC39A9	-0.2097	0.004965	0.013615
SLC3A1	0.122555	0.103161	0.175129
SLC3A2	-0.10287	0.171808	0.263523
SLC40A1	0.106212	0.158229	0.246597
SLC41A1	-0.40629	1.83E-08	2.66E-07
SLC41A2	0.19327	0.009744	0.024151
SLC41A3	0.078698	0.2964	0.406309
SLC43A1	-0.21257	0.00439	0.01223
SLC43A2	-0.39295	5.78E-08	7.22E-07
SLC43A3	0.087143	0.24742	0.352585
SLC44A1	0.331211	6.31E-06	4.36E-05
SLC44A2	0.587578	6.60E-18	1.13E-15
SLC44A3	0.091515	0.224399	0.326662
SLC44A4	0.427938	2.55E-09	4.79E-08
SLC44A5	-0.07742	0.304327	0.414732
SLC45A1	-0.20036	0.00733	0.018946
SLC45A2	-0.23402	0.001667	0.005337
SLC45A3	0.507994	4.56E-13	2.32E-11
SLC45A4	0.219273	0.003274	0.009509
SLC46A1	-0.43694	1.08E-09	2.25E-08
SLC46A2	-0.02776	0.713023	0.79134
SLC46A3	0.084805	0.260377	0.367025
SLC47A1	0.10142	0.177964	0.2708
SLC47A2	-0.06955	0.356266	0.469371
SLC48A1	-0.25845	0.000496	0.001887
SLC4A10	-0.21269	0.004367	0.01218
SLC4A11	0.541012	6.38E-15	4.91E-13
SLC4A1AP	0.011484	0.87908	0.916068
SLC4A1	-0.15258	0.042029	0.083125
SLC4A2	0.053601	0.477329	0.586912
SLC4A3	-0.03231	0.668511	0.755855
SLC4A4	0.021129	0.779525	0.843219
SLC4A5	-0.07513	0.318891	0.430603
SLC4A7	-0.08887	0.238163	0.342305
SLC4A8	-0.39861	3.57E-08	4.72E-07
SLC4A9	0.205086	0.00603	0.016038
SLC5A10	0.060818	0.419987	0.532135
SLC5A11	-0.03367	0.655498	0.744547
SLC5A12	-0.20498	0.006058	0.016102
SLC5A1	0.217046	0.003613	0.010355
SLC5A2	0.247761	0.000855	0.003004
SLC5A3	0.157708	0.035515	0.072183
SLC5A4	-0.22728	0.002281	0.006988
SLC5A5	0.1941	0.009428	0.023481
SLC5A6	-0.01495	0.843006	0.889093
SLC5A7	-0.10977	0.144658	0.229424
SLC5A8	-0.18859	0.011701	0.028228

SLC5A9	-0.1326	0.07766	0.138683
SLC6A10P	0.153037	0.041408	0.08207
SLC6A11	0.039242	0.603017	0.699195
SLC6A12	0.269778	0.000271	0.001124
SLC6A13	-0.28143	0.000142	0.000644
SLC6A14	0.51815	1.29E-13	7.42E-12
SLC6A15	-0.1074	0.15359	0.240962
SLC6A16	-0.25401	0.000623	0.002288
SLC6A17	-0.21512	0.003931	0.011152
SLC6A18	-0.16817	0.02484	0.053339
SLC6A19	0.001043	0.988975	0.992085
SLC6A1	0.145185	0.05316	0.101028
SLC6A20	0.470692	3.36E-11	1.07E-09
SLC6A2	-0.18967	0.011222	0.027271
SLC6A3	-0.06835	0.364616	0.477889
SLC6A4	-0.27344	0.000222	0.000944
SLC6A5	-0.18435	0.013767	0.0324
SLC6A6	0.142124	0.058434	0.109183
SLC6A7	0.167856	0.025116	0.053849
SLC6A8	0.201116	0.007105	0.018445
SLC6A9	-0.00166	0.982461	0.987806
SLC7A10	-0.28231	0.000135	0.000616
SLC7A11	0.248363	0.00083	0.00293
SLC7A13	0.025845	0.732019	0.806179
SLC7A14	-0.27919	0.000161	0.000718
SLC7A1	-0.27789	0.000173	0.000764
SLC7A2	-0.40259	2.53E-08	3.53E-07
SLC7A3	0.110822	0.140841	0.224614
SLC7A4	0.232004	0.001832	0.005783
SLC7A5P1	0.055105	0.465043	0.575095
SLC7A5P2	0.153793	0.040403	0.080408
SLC7A5	0.001467	0.984498	0.989251
SLC7A60S	0.242366	0.001116	0.003775
SLC7A6	-0.06792	0.367684	0.481241
SLC7A7	0.369543	3.85E-07	3.79E-06
SLC7A8	-0.3299	6.89E-06	4.69E-05
SLC7A9	-0.18239	0.014819	0.03449
SLC8A1	-0.37994	1.69E-07	1.85E-06
SLC8A2	-0.2538	0.00063	0.00231
SLC8A3	-0.39618	4.40E-08	5.68E-07
SLC9A10	-0.13045	0.082627	0.146064
SLC9A11	0.065809	0.382792	0.495635
SLC9A1	0.408233	1.54E-08	2.28E-07
SLC9A2	0.393528	5.50E-08	6.92E-07
SLC9A3R1	0.167452	0.025473	0.054472
SLC9A3R2	0.283083	0.000129	0.000593
SLC9A3	0.165856	0.026928	0.057138
SLC9A4	0.316994	1.62E-05	9.88E-05
SLC9A5	0.146837	0.050481	0.096754
SLC9A6	-0.19783	0.008122	0.020709
SLC9A7	-0.16834	0.024697	0.053088
SLC9A8	0.020691	0.783977	0.846763
SLC9A9	-0.16843	0.024617	0.052963
SLC01A2	-0.03232	0.668428	0.755804

SLC01B1	0.207249	0.005507	0.014852
SLC01B3	0.286822	0.000104	0.000491
SLC01C1	-0.1969	0.00843	0.021354
SLC02A1	-0.1124	0.135221	0.217476
SLC02B1	-0.1321	0.078792	0.140369
SLC03A1	0.208321	0.005264	0.014303
SLC04A1	0.43175	1.77E-09	3.48E-08
SLC04C1	-0.12262	0.102988	0.17485
SLC05A1	-0.32195	1.17E-05	7.47E-05
SLC06A1	-0.04563	0.54528	0.648057
SLED1	0.061943	0.411424	0.52352
SLFN11	-0.08766	0.244608	0.349384
SLFN12L	-0.08811	0.242199	0.346695
SLFN12	0.275758	0.000195	0.000847
SLFN13	0.389538	7.69E-08	9.29E-07
SLFN14	-0.07276	0.334477	0.446677
SLFN5	0.091477	0.224593	0.326791
SLFNL1	0.012392	0.869596	0.91005
SLIT1	-0.24839	0.000828	0.002927
SLIT2	-0.16431	0.028405	0.059773
SLIT3	-0.24467	0.000996	0.003425
SLITRK1	-0.27682	0.000184	0.000804
SLITRK2	-0.35948	8.31E-07	7.39E-06
SLITRK3	0.081024	0.282311	0.391
SLITRK4	0.011807	0.875706	0.913929
SLITRK5	0.063299	0.401238	0.513932
SLITRK6	-0.06326	0.401515	0.51422
SLK	0.316727	1.65E-05	0.0001
SLMAP	0.184661	0.013603	0.03211
SLM01	0.137293	0.067628	0.123524
SLM02	0.123744	0.099835	0.170376
SLN	0.149421	0.046517	0.090453
SLPI	0.62368	1.42E-20	4.80E-18
SLTM	-0.10726	0.154131	0.241638
SLU7	-0.2088	0.005159	0.014066
SLURP1	0.43749	1.02E-09	2.15E-08
SMAD1	-0.26931	0.000278	0.001148
SMAD2	-0.28281	0.000131	0.000601
SMAD3	0.506325	5.58E-13	2.76E-11
SMAD4	-0.44479	4.97E-10	1.16E-08
SMAD5OS	-0.24424	0.001018	0.003486
SMAD5	-0.40881	1.47E-08	2.18E-07
SMAD6	0.401292	2.84E-08	3.87E-07
SMAD7	-0.11631	0.12207	0.199951
SMAD9	-0.35939	8.36E-07	7.43E-06
SMAGP	0.513688	2.25E-13	1.23E-11
SMAP1	-0.09172	0.223353	0.325515
SMAP2	-0.33485	4.91E-06	3.50E-05
SMARCA1	-0.17638	0.018516	0.04157
SMARCA2	-0.42753	2.65E-09	4.96E-08
SMARCA4	0.168818	0.024282	0.052322
SMARCA5	-0.28221	0.000135	0.00062
SMARCAD1	-0.31895	1.43E-05	8.86E-05
SMARCAL1	0.219999	0.00317	0.009256

SMARCB1	-0.11958	0.111856	0.186985
SMARCC1	-0.04066	0.589952	0.687878
SMARCC2	-0.11972	0.111437	0.186457
SMARCD1	-0.17917	0.016709	0.038168
SMARCD2	0.120393	0.10943	0.183768
SMARCD3	-0.16256	0.030157	0.062943
SMARCE1	-0.12475	0.097092	0.166498
SMC1A	-0.3358	4.60E-06	3.30E-05
SMC1B	-0.1176	0.117965	0.194777
SMC2	-0.24334	0.001064	0.003622
SMC3	-0.29632	5.92E-05	0.000303
SMC4	0.16201	0.03073	0.063963
SMC5	-0.08257	0.273188	0.38123
SMC6	0.048848	0.517301	0.623234
SMCHD1	-0.1844	0.01374	0.032348
SMCP	-0.12553	0.094992	0.163508
SMCR5	-0.2087	0.00518	0.014113
SMCR7L	-0.39411	5.24E-08	6.64E-07
SMCR7	-0.05063	0.502087	0.609171
SMCR8	-0.58136	1.76E-17	2.64E-15
SMEK1	-0.15964	0.033297	0.06841
SMEK2	-0.05994	0.426706	0.538805
SMEK3P	0.030577	0.685349	0.76949
SMG1	-0.01541	0.838209	0.885817
SMG5	0.101788	0.176384	0.268894
SMG6	-0.46072	9.72E-11	2.73E-09
SMG7	0.127441	0.090033	0.15642
SMN1	-0.07127	0.344485	0.456773
SMN2	0.002612	0.972396	0.981333
SMNDC1	0.187443	0.01223	0.029332
SMOC1	-0.28879	9.25E-05	0.000444
SMOC2	-0.03953	0.600316	0.696961
SMOX	0.407584	1.64E-08	2.40E-07
SMO	0.149569	0.046298	0.090099
SMPD1	-0.27277	0.00023	0.000975
SMPD2	-0.04313	0.567592	0.667512
SMPD3	0.233377	0.001718	0.005478
SMPD4	0.120865	0.108039	0.181895
SMPDL3A	-0.17526	0.019285	0.043056
SMPDL3B	0.291251	8.01E-05	0.000391
SMPX	0.320569	1.29E-05	8.07E-05
SMR3A	-0.01699	0.821932	0.873905
SMR3B	-0.01868	0.804531	0.861752
SMS	0.374655	2.57E-07	2.68E-06
SMTNL1	0.101291	0.178519	0.271479
SMTNL2	-0.11885	0.114099	0.18982
SMTN	0.077803	0.301943	0.412137
SMU1	-0.24861	0.000819	0.002902
SMUG1	0.288687	9.31E-05	0.000446
SMURF1	0.362075	6.83E-07	6.25E-06
SMURF2	0.004983	0.947371	0.964392
SMYD1	-0.05531	0.463359	0.573622
SMYD2	0.053071	0.481704	0.591078
SMYD3	0.270254	0.000264	0.001099

SMYD4	-0.48199	9.64E-12	3.47E-10
SMYD5	0.327557	8.08E-06	5.38E-05
SNAI1	-0.00984	0.896283	0.927782
SNAI2	0.239203	0.001301	0.00431
SNAI3	-0.06674	0.376093	0.489042
SNAP23	0.30244	4.08E-05	0.00022
SNAP25	-0.41763	6.63E-09	1.11E-07
SNAP29	-0.02298	0.760767	0.829295
SNAP47	-0.12553	0.095002	0.163509
SNAP91	-0.31037	2.48E-05	0.000143
SNAPC1	0.032581	0.66593	0.75341
SNAPC2	0.356953	1.00E-06	8.71E-06
SNAPC3	-0.08236	0.274401	0.382491
SNAPC4	-0.11226	0.135734	0.218077
SNAPC5	-0.08646	0.251155	0.356983
SNAPIN	0.318186	1.50E-05	9.26E-05
SNAR-B2	-0.10833	0.150059	0.236369
SNCAIP	-0.01122	0.881868	0.917938
SNCA	-0.46351	7.25E-11	2.12E-09
SNCB	-0.17227	0.021481	0.047108
SNCG	0.335261	4.77E-06	3.42E-05
SND1	-0.32254	1.13E-05	7.23E-05
SNED1	-0.12959	0.084695	0.148921
SNF8	0.159231	0.033754	0.069165
SNHG10	0.010858	0.885626	0.920444
SNHG11	0.132057	0.078891	0.140502
SNHG12	0.316427	1.68E-05	0.000102
SNHG1	0.200462	0.007298	0.018875
SNHG3-RCC	-0.17818	0.017333	0.039338
SNHG3	0.135283	0.071787	0.129981
SNHG4	0.209016	0.005111	0.013959
SNHG5	0.02243	0.766329	0.833519
SNHG6	-0.02488	0.741655	0.81371
SNHG7	-0.17896	0.016841	0.0384
SNHG8	-0.10406	0.166864	0.257446
SNHG9	-0.12775	0.089246	0.155307
SNIP1	-0.21931	0.003269	0.009498
SNN	-0.2614	0.000425	0.001651
SNORA10	-0.06551	0.384991	0.497765
SNORA11B	-0.00415	0.95616	0.969977
SNORA11D	-0.03773	0.617066	0.711603
SNORA11E	-0.18966	0.011223	0.027271
SNORA11	-0.04391	0.560602	0.661535
SNORA12	-0.25286	0.000661	0.002404
SNORA13	-0.08241	0.274159	0.38226
SNORA14A	-0.01645	0.827508	0.877804
SNORA14B	0.006601	0.930318	0.951884
SNORA15	0.050984	0.499132	0.606442
SNORA16A	-0.00162	0.982925	0.988122
SNORA16B	0.01581	0.834093	0.882469
SNORA18	0.055877	0.458804	0.569373
SNORA1	0.124891	0.096709	0.165985
SNORA20	-0.0148	0.844558	0.890397
SNORA21	0.063688	0.398348	0.511038

SNORA22	-0.0625	0.407226	0.51954
SNORA23	-0.02444	0.746063	0.817224
SNORA24	0.136669	0.068897	0.125575
SNORA25	0.045296	0.548256	0.650733
SNORA26	-0.05996	0.426591	0.538714
SNORA27	0.11463	0.127608	0.207357
SNORA28	-0.11061	0.141588	0.225557
SNORA29	0.151254	0.043865	0.086196
SNORA2A	-0.02553	0.735184	0.808584
SNORA2B	-0.14829	0.048221	0.093136
SNORA31	0.222606	0.002821	0.008386
SNORA32	0.107111	0.154716	0.242401
SNORA34	-0.00194	0.97951	0.985791
SNORA36A	-0.02111	0.77968	0.843309
SNORA36B	0.087349	0.246298	0.351247
SNORA37	0.020085	0.790158	0.851616
SNORA38B	0.021734	0.773382	0.838838
SNORA38	-0.05364	0.477041	0.58663
SNORA39	0.057719	0.444105	0.55577
SNORA3	0.03976	0.59824	0.695041
SNORA40	0.023717	0.75334	0.823287
SNORA41	0.090487	0.229673	0.332861
SNORA42	0.00875	0.907712	0.935677
SNORA44	0.050384	0.504202	0.611174
SNORA45	0.183369	0.014285	0.03344
SNORA46	0.009343	0.901493	0.931111
SNORA47	-0.04544	0.547017	0.649535
SNORA48	-0.06841	0.364249	0.477503
SNORA49	0.047787	0.526451	0.631754
SNORA4	-0.03017	0.689371	0.772504
SNORA50	0.012051	0.873156	0.912327
SNORA52	0.054567	0.46942	0.579493
SNORA53	-0.07975	0.289977	0.399443
SNORA54	-0.02239	0.766703	0.833743
SNORA55	-0.0328	0.663808	0.75202
SNORA56	0.022563	0.764985	0.83247
SNORA57	0.131161	0.080962	0.143621
SNORA59B	0.042678	0.571636	0.671511
SNORA5A	0.00945	0.900371	0.930486
SNORA5C	0.065198	0.387236	0.499947
SNORA61	0.00517	0.945395	0.963273
SNORA62	0.034415	0.64835	0.737784
SNORA63	-0.04142	0.583006	0.681829
SNORA64	-0.0013	0.986284	0.990341
SNORA65	-0.03144	0.676969	0.762584
SNORA66	-0.01198	0.873845	0.912727
SNORA67	0.010908	0.885096	0.920087
SNORA68	0.029149	0.699319	0.780292
SNORA6	0.019502	0.796112	0.856072
SNORA70	0.001629	0.982788	0.988034
SNORA71A	0.072232	0.337982	0.450263
SNORA71B	0.016174	0.830323	0.879752
SNORA71C	0.077902	0.301328	0.411467
SNORA71D	0.009344	0.901487	0.931111

SNORA72	0.069551	0.356264	0.469371
SNORA74A	0.009755	0.897177	0.928427
SNORA74B	-0.0783	0.298853	0.40885
SNORA75	-0.01873	0.804034	0.861571
SNORA76	-0.04201	0.577703	0.676781
SNORA77	0.059593	0.429426	0.541272
SNORA78	0.0163	0.829028	0.879134
SNORA79	-0.07523	0.31826	0.429927
SNORA7B	-0.00563	0.940566	0.960034
SNORA80	-0.00138	0.98543	0.989849
SNORA81	0.204366	0.006213	0.016476
SNORA84	0.061354	0.415893	0.528259
SNORA8	0.330591	6.58E-06	4.52E-05
SNORA9	0.007764	0.918074	0.943162
SNORD10	-0.04859	0.519513	0.625135
SNORD115-	-0.22558	0.002466	0.00747
SNORD115-	-0.34404	2.58E-06	1.98E-05
SNORD116-	-0.33783	3.99E-06	2.91E-05
SNORD116-	-0.21982	0.003196	0.009322
SNORD116-	-0.24667	0.000903	0.003147
SNORD15A	0.102862	0.171843	0.263535
SNORD15B	0.031915	0.67236	0.758818
SNORD17	0.052368	0.487539	0.596314
SNORD1C	-0.02138	0.777011	0.841666
SNORD22	0.028688	0.703849	0.784031
SNORD89	0.078399	0.298241	0.408211
SNORD94	0.044919	0.551598	0.653825
SNORD97	0.049669	0.510279	0.616763
SNPH	-0.3683	4.24E-07	4.11E-06
SNRK	-0.11095	0.140391	0.224077
SNRNP200	-0.21051	0.004796	0.013225
SNRNP25	-0.1592	0.033788	0.069204
SNRNP27	0.023766	0.752844	0.822836
SNRNP35	-0.06728	0.372207	0.485279
SNRNP40	-0.15619	0.037341	0.07523
SNRNP48	-0.20878	0.005162	0.01407
SNRNP70	0.136523	0.069197	0.125998
SNRPA1	0.195143	0.009045	0.022635
SNRPA	0.364098	5.85E-07	5.45E-06
SNRPB2	0.069418	0.357188	0.470368
SNRPB	0.221066	0.003023	0.008906
SNRPC	0.142532	0.057707	0.108119
SNRPD1	0.231672	0.001861	0.005864
SNRPD2	0.242709	0.001097	0.00372
SNRPD3	0.189622	0.011242	0.027309
SNRPE	0.210528	0.004792	0.013218
SNRPF	0.057576	0.445239	0.556626
SNRPG	0.315334	1.81E-05	0.000109
SNRPN	-0.20246	0.006724	0.017648
SNTA1	-0.14507	0.053358	0.101336
SNTB1	0.132408	0.078091	0.139354
SNTB2	0.061797	0.412532	0.524491
SNTG1	-0.35694	1.01E-06	8.71E-06
SNTG2	-0.34189	3.00E-06	2.27E-05

SNTN	0.258131	0.000504	0.001915
SNUPN	0.12705	0.091033	0.157874
SNURF	-0.13494	0.072518	0.131005
SNW1	-0.01131	0.880906	0.917438
SNX10	-0.10899	0.147568	0.23318
SNX11	0.012348	0.870055	0.910333
SNX12	-0.04958	0.511028	0.617323
SNX13	-0.41222	1.08E-08	1.69E-07
SNX14	-0.20087	0.007178	0.018599
SNX15	0.206329	0.005724	0.015365
SNX16	-0.19845	0.00792	0.020263
SNX17	0.038095	0.613661	0.708958
SNX18	-0.16785	0.02512	0.053849
SNX19	-0.14718	0.049932	0.09587
SNX1	-0.08833	0.241013	0.345398
SNX20	0.009167	0.903343	0.932486
SNX21	0.29194	7.69E-05	0.000378
SNX22	-0.19376	0.009555	0.023749
SNX24	0.111371	0.13887	0.22208
SNX25	-0.41867	6.03E-09	1.02E-07
SNX27	0.073948	0.3266	0.438646
SNX29	-0.30449	3.59E-05	0.000196
SNX2	-0.16221	0.030523	0.063581
SNX30	-0.44826	3.51E-10	8.55E-09
SNX31	-0.01861	0.805231	0.862035
SNX32	-0.10731	0.153932	0.241384
SNX33	0.398895	3.49E-08	4.63E-07
SNX3	-0.1443	0.054642	0.103416
SNX4	-0.21601	0.003782	0.010784
SNX5	0.080069	0.288041	0.39733
SNX6	0.164438	0.02828	0.059567
SNX7	0.407959	1.58E-08	2.33E-07
SNX8	0.236567	0.001477	0.004805
SNX9	0.062054	0.410587	0.522657
SOAT1	-0.33155	6.16E-06	4.28E-05
SOAT2	-0.03658	0.627859	0.720864
SOBP	-0.35	1.68E-06	1.36E-05
SOCS1	-0.01992	0.791884	0.852779
SOCS2	-0.44864	3.38E-10	8.28E-09
SOCS3	0.098661	0.190117	0.285688
SOCS4	-0.18603	0.012913	0.030696
SOCS5	-0.10647	0.157224	0.245534
SOCS6	-0.12108	0.107395	0.181027
SOCS7	-0.41427	9.00E-09	1.45E-07
SOD1	0.207578	0.005431	0.014678
SOD2	-0.11387	0.130175	0.210732
SOD3	-0.16039	0.032462	0.066942
SOHLH1	-0.1173	0.118925	0.19605
SOHLH2	0.094128	0.211392	0.311606
SOLH	0.137102	0.068014	0.124184
SON	-0.25497	0.000593	0.002198
SORBS1	-0.25519	0.000587	0.002179
SORBS2	-0.20174	0.006925	0.018085
SORBS3	0.108423	0.149697	0.235997

SORCS1	-0.30985	2.57E-05	0.000147
SORCS2	0.05017	0.506015	0.612897
SORCS3	-0.11211	0.136235	0.218705
SORD	0.344453	2.50E-06	1.93E-05
SORL1	-0.13473	0.07297	0.13164
SORT1	-0.0929	0.217431	0.318763
SOS1	-0.16422	0.028498	0.059929
SOS2	-0.36217	6.78E-07	6.21E-06
SOSTDC1	0.124733	0.097134	0.166557
SOST	0.053004	0.482258	0.591574
SOX10	0.048664	0.518881	0.624612
SOX11	0.321879	1.18E-05	7.50E-05
SOX12	-0.27865	0.000166	0.000736
SOX13	0.127259	0.090499	0.157086
SOX14	0.014943	0.843067	0.889109
SOX15	0.048049	0.524182	0.629567
SOX17	-0.13617	0.069917	0.127142
SOX18	-0.04661	0.53667	0.640132
SOX1	-0.11614	0.12264	0.200686
SOX21	0.530156	2.73E-14	1.85E-12
SOX20T	-0.23011	0.002002	0.006235
SOX2	-0.0828	0.271842	0.379806
SOX30	-0.10347	0.169328	0.260526
SOX3	-0.12375	0.099816	0.170358
SOX4	0.253958	0.000625	0.002294
SOX5	-0.37932	1.77E-07	1.93E-06
SOX6	-0.12393	0.099319	0.169582
SOX7	0.223057	0.002764	0.00824
SOX8	0.08343	0.268215	0.375828
SOX9	0.325251	9.43E-06	6.17E-05
SP100	0.445856	4.47E-10	1.05E-08
SP110	0.375499	2.41E-07	2.52E-06
SP140L	0.296216	5.95E-05	0.000304
SP140	0.057328	0.447203	0.558411
SP1	0.257651	0.000516	0.001954
SP2	-0.24673	0.0009	0.003139
SP3	0.03671	0.626626	0.719958
SP4	-0.488	4.87E-12	1.89E-10
SP5	-0.01445	0.848203	0.89324
SP6	0.424002	3.69E-09	6.66E-08
SP7	-0.0321	0.670597	0.757693
SP8	-0.19596	0.008755	0.022035
SP9	-0.05581	0.459311	0.569895
SPA17	0.002789	0.970526	0.980042
SPACA3	-0.03746	0.619601	0.713911
SPACA4	0.365873	5.11E-07	4.84E-06
SPACA5	-0.01282	0.865145	0.906447
SPAG11B	0.031546	0.675932	0.761892
SPAG16	0.183378	0.01428	0.033432
SPAG17	0.363648	6.06E-07	5.62E-06
SPAG1	0.089913	0.232651	0.336388
SPAG4	0.27804	0.000171	0.000759
SPAG5	0.320067	1.33E-05	8.31E-05
SPAG6	-0.38821	8.58E-08	1.02E-06

SPAG7	-0.04423	0.557713	0.658991
SPAG8	-0.20368	0.006393	0.016877
SPAG9	-0.09771	0.19445	0.291049
SPAM1	-0.07146	0.343189	0.455481
SPANXA2	-0.05264	0.485263	0.594227
SPANXB2	0.021372	0.777056	0.841669
SPANXC	0.003204	0.966147	0.977067
SPANXE	-0.04439	0.556294	0.65769
SPANXN3	0.025007	0.740392	0.812847
SPANXN5	-0.09183	0.222784	0.324805
SPARCL1	-0.10946	0.145835	0.231014
SPARC	0.114717	0.127316	0.206972
SPAST	-0.18035	0.015995	0.036793
SPATA12	0.344383	2.51E-06	1.94E-05
SPATA13	-0.18926	0.011402	0.027626
SPATA16	-0.12095	0.107777	0.181563
SPATA17	-0.10198	0.175576	0.267952
SPATA18	-0.11107	0.139963	0.223471
SPATA19	0.076105	0.312647	0.423618
SPATA1	-0.20375	0.006375	0.016838
SPATA20	0.163015	0.029695	0.062143
SPATA21	-0.01982	0.792905	0.853367
SPATA22	-0.13692	0.068386	0.124771
SPATA24	-0.14459	0.05416	0.102661
SPATA2L	0.136235	0.069793	0.126939
SPATA2	-0.17603	0.018753	0.042044
SPATA3	-0.12749	0.089915	0.156301
SPATA4	-0.32649	8.68E-06	5.73E-05
SPATA5L1	0.123763	0.099783	0.170316
SPATA5	0.012909	0.864204	0.90591
SPATA6	-0.09479	0.208173	0.307745
SPATA7	-0.38462	1.15E-07	1.32E-06
SPATA8	-0.05334	0.47948	0.589006
SPATA9	-0.10496	0.163211	0.252926
SPATC1	0.002274	0.975962	0.983522
SPATS1	-0.09409	0.211574	0.311818
SPATS2L	0.523426	6.56E-14	4.04E-12
SPATS2	-0.28703	0.000103	0.000486
SPC24	0.394586	5.03E-08	6.42E-07
SPC25	0.122202	0.104166	0.176593
SPCS1	0.009285	0.902103	0.931498
SPCS2	-0.05968	0.428717	0.540688
SPCS3	-0.16088	0.031928	0.065964
SPDEF	0.479646	1.25E-11	4.35E-10
SPDYA	0.166728	0.026125	0.055698
SPDYC	0.103971	0.167242	0.25798
SPDYE1	-0.089	0.237467	0.341421
SPDYE2	-0.07013	0.352295	0.465038
SPDYE3	0.051502	0.494771	0.602884
SPDYE4	0.009359	0.901322	0.931092
SPDYE5	-0.14343	0.056132	0.105781
SPDYE6	-0.03358	0.656285	0.745149
SPDYE7P	0.029505	0.695824	0.777401
SPDYE8P	0.100554	0.181716	0.27543

SPEF1	-0.15961	0.033325	0.068438
SPEF2	-0.30944	2.63E-05	0.00015
SPEG	-0.05992	0.426928	0.539051
SPEM1	-0.10207	0.175185	0.26754
SPEN	-0.20123	0.007073	0.01839
SPERT	0.08681	0.249234	0.354736
SPESP1	-0.08401	0.264889	0.37225
SPG11	0.084503	0.262088	0.368994
SPG20	-0.05004	0.507125	0.613927
SPG21	0.283114	0.000129	0.000592
SPG7	0.2438	0.00104	0.00355
SPHAR	0.020703	0.783858	0.846717
SPHK1	0.255896	0.000566	0.002112
SPHK2	0.081446	0.279804	0.388188
SPHKAP	-0.01681	0.823743	0.875114
SPI1	0.140233	0.061902	0.114632
SPIB	0.096537	0.199883	0.297605
SPIC	-0.0744	0.323632	0.435607
SPIN1	-0.17524	0.019302	0.043089
SPIN2A	0.209363	0.005036	0.013779
SPIN2B	0.051714	0.492995	0.601386
SPIN3	-0.12845	0.087504	0.152934
SPIN4	0.160216	0.032655	0.06724
SPINK13	0.297085	5.65E-05	0.00029
SPINK14	-0.14345	0.056107	0.105753
SPINK1	0.045377	0.547542	0.650065
SPINK2	-0.23398	0.00167	0.005345
SPINK4	0.022593	0.764681	0.83223
SPINK5	0.408616	1.49E-08	2.21E-07
SPINK6	0.022193	0.768727	0.835209
SPINK7	0.358883	8.69E-07	7.68E-06
SPINK8	-0.02631	0.727367	0.802621
SPINK9	-0.18002	0.016192	0.037197
SPINLW1	0.212387	0.004425	0.012316
SPINT1	0.441487	6.89E-10	1.53E-08
SPINT2	0.257369	0.000524	0.001978
SPINT3	0.117769	0.117437	0.194018
SPINT4	0.042303	0.57502	0.674484
SPIRE1	-0.20807	0.00532	0.014438
SPIRE2	0.243829	0.001039	0.003545
SPNS1	0.152794	0.041737	0.082613
SPNS2	0.164977	0.02776	0.058608
SPNS3	0.217981	0.003467	0.009989
SPN	0.037157	0.622427	0.716406
SPO11	0.102277	0.174305	0.266649
SPOCD1	0.422281	4.33E-09	7.63E-08
SPOCK1	0.119553	0.111948	0.187107
SPOCK2	-0.33121	6.31E-06	4.36E-05
SPOCK3	-0.21156	0.004584	0.012715
SPON1	0.029848	0.692468	0.774673
SPON2	0.236454	0.001485	0.004826
SPOPL	-0.02922	0.698648	0.779807
SPOP	-0.34748	2.01E-06	1.60E-05
SPP1	0.233301	0.001724	0.005492

SPP2	0.004802	0.949275	0.965684
SPPL2A	0.119385	0.112455	0.18778
SPPL2B	0.033584	0.656291	0.745149
SPPL3	-0.14634	0.05127	0.098038
SPRED1	0.129982	0.083755	0.147608
SPRED2	0.023652	0.753991	0.82377
SPRED3	-0.09215	0.221167	0.323043
SPRN	-0.12079	0.108259	0.182157
SPRR1A	0.498087	1.50E-12	6.72E-11
SPRR1B	0.567126	1.54E-16	1.81E-14
SPRR2A	0.224265	0.002617	0.00786
SPRR2B	0.046336	0.539103	0.642337
SPRR2C	0.148739	0.047537	0.092129
SPRR2D	0.246514	0.00091	0.003168
SPRR2E	0.187075	0.012404	0.029681
SPRR2F	0.044587	0.554538	0.65622
SPRR2G	0.062635	0.406206	0.518582
SPRR3	0.550049	1.83E-15	1.55E-13
SPRR4	0.203711	0.006384	0.016857
SPRY1	-0.2397	0.00127	0.004223
SPRY2	0.07873	0.2962	0.406232
SPRY3	-0.18954	0.011276	0.027372
SPRY4	0.047536	0.528631	0.633453
SPRYD3	-0.36548	5.27E-07	4.98E-06
SPRYD4	-0.16955	0.02366	0.051231
SPRYD5	-0.13165	0.079837	0.141969
SPR	0.205595	0.005903	0.015763
SPSB1	0.205718	0.005873	0.015692
SPSB2	0.167899	0.025078	0.053778
SPSB3	0.211865	0.004525	0.012571
SPSB4	0.05478	0.467683	0.577781
SPTA1	-0.24401	0.001029	0.003519
SPTAN1	0.251544	0.000707	0.002553
SPTBN1	0.230842	0.001935	0.006061
SPTBN2	0.367216	4.61E-07	4.43E-06
SPTBN4	-0.30002	4.73E-05	0.00025
SPTBN5	0.316821	1.64E-05	9.97E-05
SPTB	-0.4012	2.86E-08	3.90E-07
SPTLC1	0.051384	0.495764	0.603561
SPTLC2	0.125051	0.096278	0.165361
SPTLC3	0.29489	6.45E-05	0.000325
SPTY2D1	0.045692	0.544763	0.64756
SPZ1	0.022499	0.765627	0.833031
SQLE	0.256484	0.000549	0.002059
SQRDL	0.403677	2.31E-08	3.26E-07
SQSTM1	0.230328	0.001981	0.006187
SR140	0.063112	0.402633	0.515324
SRA1	0.219165	0.00329	0.009545
SRBD1	-0.42643	2.94E-09	5.44E-08
SRCAP	0.239718	0.001269	0.004221
SRCIN1	-0.30222	4.13E-05	0.000223
SRCRB4D	0.043688	0.562561	0.663332
SRC	0.396611	4.24E-08	5.50E-07
SRD5A1	0.120085	0.11035	0.18503

SRD5A2	0.0788	0.295771	0.405757
SRD5A3	0.477972	1.51E-11	5.16E-10
SREBF1	0.012542	0.86803	0.908892
SREBF2	-0.02037	0.787252	0.849224
SRFBP1	0.00737	0.922216	0.946042
SRF	-0.1876	0.012155	0.029177
SRGAP1	-0.08958	0.234376	0.338387
SRGAP2	0.292832	7.29E-05	0.000361
SRGAP3	-0.37539	2.43E-07	2.54E-06
SRGN	-0.03208	0.670797	0.757817
SRI	0.418369	6.20E-09	1.05E-07
SRL	0.082553	0.273292	0.381348
SRMS	0.243218	0.00107	0.003638
SRM	0.006377	0.932671	0.9537
SRP14	0.108788	0.148322	0.234146
SRP19	-0.11574	0.123952	0.202464
SRP54	-0.26096	0.000434	0.001687
SRP68	-0.1246	0.097498	0.167093
SRP72	-0.24297	0.001084	0.00368
SRP9	0.011599	0.877875	0.915268
SRPK1	0.269716	0.000272	0.001126
SRPK2	-0.34809	1.93E-06	1.53E-05
SRPK3	0.118761	0.114359	0.190141
SRPRB	-0.17213	0.021591	0.047302
SRPR	-0.33059	6.58E-06	4.52E-05
SRPX2	0.269418	0.000276	0.001143
SRPX	-0.11972	0.111455	0.186472
SRRD	0.128026	0.088556	0.154377
SRRM1	0.082141	0.275706	0.383634
SRRM2	0.002202	0.976726	0.983991
SRRM3	-0.19418	0.0094	0.023419
SRRM4	-0.33082	6.48E-06	4.46E-05
SRRM5	0.223487	0.002711	0.008104
SRRT	0.103119	0.170769	0.262269
SRR	-0.40967	1.36E-08	2.05E-07
SRXN1	-0.07459	0.322433	0.434318
SRY	-0.18908	0.011482	0.027791
SS18L1	-0.22151	0.002964	0.008758
SS18L2	0.147966	0.048716	0.093918
SS18	-0.2076	0.005427	0.014667
SSBP1	0.267714	0.000303	0.001237
SSBP2	-0.25617	0.000558	0.002086
SSBP3	-0.00551	0.941793	0.960908
SSBP4	-0.02476	0.742864	0.814764
SSB	0.177777	0.017593	0.03984
SSC5D	0.113476	0.131511	0.212529
SSFA2	0.148698	0.0476	0.092206
SSH1	-0.23096	0.001924	0.006033
SSH2	-0.30058	4.57E-05	0.000243
SSH3	0.625145	1.09E-20	3.85E-18
SSNA1	0.185362	0.013245	0.031373
SSPN	0.056632	0.452746	0.563659
SSPO	-0.22731	0.002278	0.006981
SSR1	-0.4216	4.61E-09	8.07E-08

SSR2	0.067636	0.369691	0.483036
SSR3	-0.09361	0.213934	0.314639
SSR4	-0.26303	0.000389	0.001535
SSRP1	0.192691	0.009969	0.024638
SSSCA1	0.296263	5.94E-05	0.000303
SSTR1	-0.21302	0.004306	0.012041
SSTR2	-0.45587	1.61E-10	4.31E-09
SSTR3	-0.25015	0.000758	0.002716
SSTR4	-0.15336	0.040981	0.081362
SSTR5	-0.1592	0.03379	0.069204
SST	0.023487	0.755652	0.825073
SSU72	0.095668	0.203978	0.302832
SSX1	0.010012	0.894482	0.926369
SSX2IP	-0.39798	3.77E-08	4.95E-07
SSX2	-0.00592	0.937444	0.957589
SSX3	0.04735	0.530247	0.634691
SSX4	-0.10422	0.166216	0.256678
SSX5	-0.15605	0.037524	0.075499
SSX6	-0.13857	0.065085	0.119608
SSX8	-0.01875	0.803764	0.861571
ST13	-0.33932	3.60E-06	2.66E-05
ST14	0.490941	3.47E-12	1.41E-10
ST18	-0.3505	1.62E-06	1.32E-05
ST20	0.03377	0.654517	0.743586
ST3GAL1	0.316186	1.71E-05	0.000103
ST3GAL2	-0.17726	0.01793	0.040497
ST3GAL3	-0.2673	0.00031	0.001262
ST3GAL4	0.185178	0.013338	0.03156
ST3GAL5	0.00179	0.981077	0.986867
ST3GAL6	0.010532	0.889036	0.923018
ST5	0.21563	0.003844	0.010939
ST6GAL1	0.053135	0.481179	0.590533
ST6GAL2	0.170988	0.022488	0.048995
ST6GALNAC	0.492466	2.91E-12	1.20E-10
ST6GALNAC	0.212283	0.004445	0.012365
ST6GALNAC	-0.35835	9.04E-07	7.94E-06
ST6GALNAC	-0.26047	0.000446	0.001722
ST6GALNAC	-0.35885	8.71E-07	7.70E-06
ST6GALNAC	-0.40308	2.43E-08	3.41E-07
ST7L	-0.21938	0.003259	0.009477
ST7OT1	-0.16194	0.030807	0.064044
ST7OT2	-0.0651	0.387928	0.500596
ST7OT3	-0.09897	0.188729	0.283992
ST7OT4	-0.11565	0.124237	0.202912
ST7	-0.25828	0.0005	0.001902
ST8SIA1	-0.23155	0.001872	0.005892
ST8SIA2	0.333077	5.55E-06	3.90E-05
ST8SIA3	-0.13209	0.07882	0.140401
ST8SIA4	-0.1455	0.052645	0.100242
ST8SIA5	-0.23491	0.001598	0.005147
ST8SIA6	-0.22472	0.002564	0.007722
STAB1	-0.129	0.086138	0.150988
STAB2	-0.23918	0.001302	0.004312
STAC2	0.188674	0.011663	0.028152

STAC3	0.165849	0.026935	0.057141
STAC	0.206155	0.005766	0.015458
STAG1	-0.21168	0.004561	0.012661
STAG2	-0.34177	3.03E-06	2.29E-05
STAG3L1	-0.01178	0.87598	0.914119
STAG3L2	-0.07998	0.288597	0.39793
STAG3L3	0.029439	0.696478	0.777956
STAG3L4	-0.17333	0.02068	0.045665
STAG3	-0.13723	0.067749	0.123722
STAM2	-0.09391	0.21246	0.312867
STAMBPL1	0.169477	0.023725	0.051339
STAMPB	0.516609	1.56E-13	8.86E-12
STAM	-0.01015	0.893061	0.925331
STAP1	-0.05904	0.433768	0.545285
STAP2	0.442017	6.54E-10	1.47E-08
STARD10	0.167003	0.025876	0.055233
STARD13	-0.26481	0.000354	0.001418
STARD3NL	-0.28263	0.000132	0.000607
STARD3	0.130713	0.082015	0.145202
STARD4	-0.05802	0.441762	0.553574
STARD5	-0.03017	0.689364	0.772504
STARD6	0.028982	0.70096	0.781664
STARD7	-0.27758	0.000176	0.000775
STARD8	-0.14526	0.053043	0.100831
STAR	-0.123	0.101909	0.17333
STAT1	0.155043	0.038785	0.077632
STAT2	0.131356	0.080508	0.142944
STAT3	-0.17311	0.020842	0.04595
STAT4	-0.26417	0.000366	0.001457
STAT5A	0.175115	0.019389	0.043244
STAT5B	-0.2894	8.93E-05	0.000431
STAT6	0.388488	8.39E-08	1.00E-06
STATH	0.099288	0.187305	0.2823
STAU1	0.137798	0.066614	0.122045
STAU2	-0.18091	0.015663	0.03614
STBD1	-0.21308	0.004295	0.012015
STC1	-0.10702	0.155082	0.242917
STC2	-0.3532	1.33E-06	1.11E-05
STEAP1	0.351501	1.50E-06	1.23E-05
STEAP2	0.141189	0.060128	0.111809
STEAP3	0.494634	2.26E-12	9.60E-11
STEAP4	-0.0836	0.26721	0.374844
STH	-0.11001	0.143792	0.228304
STIL	0.253518	0.000639	0.002337
STIM1	-0.16823	0.024789	0.053257
STIM2	-0.30138	4.35E-05	0.000233
STIP1	0.119466	0.11221	0.187465
STK10	0.047705	0.527168	0.632346
STK11IP	0.027532	0.715253	0.792898
STK11	0.110437	0.142233	0.226414
STK16	0.08099	0.282509	0.391147
STK17A	0.108923	0.147816	0.233441
STK17B	0.054688	0.468435	0.578529
STK19	0.110327	0.142634	0.226924

STK24	0.533049	1.86E-14	1.30E-12
STK25	0.189054	0.011493	0.027812
STK31	0.269749	0.000271	0.001124
STK32A	0.026457	0.725925	0.801431
STK32B	-0.0987	0.189932	0.285432
STK32C	0.03495	0.643263	0.73379
STK33	-0.24095	0.001196	0.004006
STK35	-0.38898	8.05E-08	9.69E-07
STK36	0.168056	0.024941	0.053531
STK38L	0.255253	0.000585	0.002172
STK38	0.349148	1.78E-06	1.44E-05
STK39	0.421788	4.53E-09	7.95E-08
STK3	0.261766	0.000416	0.001625
STK40	-0.26265	0.000397	0.001562
STK4	-0.08757	0.245084	0.349912
STL	-0.12646	0.092551	0.16003
STMN1	-0.00933	0.901649	0.931223
STMN2	0.143153	0.056614	0.106446
STMN3	-0.18296	0.014509	0.033888
STMN4	-0.18856	0.011715	0.028256
STOML1	0.187064	0.01241	0.02969
STOML2	0.089234	0.236215	0.340173
STOML3	-0.03049	0.686211	0.769919
STOM	-0.17724	0.017946	0.040519
STON1-GTF	-0.16916	0.023995	0.051804
STON1	-0.03755	0.618724	0.713141
STON2	0.184334	0.013773	0.03241
STOX1	-0.34603	2.23E-06	1.75E-05
STOX2	-0.14656	0.050922	0.097467
STRA13	0.205515	0.005923	0.015809
STRA6	0.437382	1.03E-09	2.17E-08
STRA8	0.106146	0.158488	0.246887
STRADA	-0.07971	0.290183	0.399643
STRADB	-0.12821	0.088103	0.153765
STRAP	-0.26064	0.000442	0.001709
STRBP	-0.25005	0.000762	0.002728
STRC	0.177997	0.017451	0.039565
STRN3	-0.08976	0.233459	0.337334
STRN4	0.267876	0.0003	0.001229
STRN	-0.019	0.801245	0.860142
STS	0.370484	3.57E-07	3.56E-06
STT3A	-0.03896	0.605632	0.701651
STT3B	-0.15233	0.042363	0.083726
STUB1	0.152009	0.04281	0.084425
STX10	0.347624	1.99E-06	1.58E-05
STX11	-0.00295	0.96886	0.97861
STX12	-0.20273	0.006648	0.017469
STX16	-0.05621	0.456105	0.567056
STX17	-0.20936	0.005037	0.013779
STX18	0.045137	0.54966	0.652008
STX19	0.370764	3.50E-07	3.49E-06
STX1A	0.173685	0.020419	0.045198
STX1B	0.237132	0.001437	0.004696
STX2	-0.30416	3.66E-05	0.0002

STX3	0.117462	0.118405	0.195339
STX4	0.538383	9.12E-15	6.76E-13
STX5	0.00891	0.90604	0.93449
STX6	0.287108	0.000102	0.000484
STX7	-0.01629	0.829089	0.879151
STX8	-0.04307	0.568125	0.667981
STXBP1	-0.56985	1.03E-16	1.25E-14
STXBP2	0.543252	4.70E-15	3.69E-13
STXBP3	-0.00097	0.989714	0.992542
STXBP4	-0.27479	0.000206	0.000886
STXBP5L	-0.39214	6.18E-08	7.65E-07
STXBP5	-0.5043	7.14E-13	3.38E-11
STXBP6	0.01665	0.825412	0.876427
STYK1	0.524924	5.41E-14	3.43E-12
STYXL1	0.212694	0.004367	0.01218
STYX	-0.00967	0.898026	0.928937
SUB1	-0.14805	0.048583	0.093715
SUCLA2	-0.16441	0.028303	0.059603
SUCLG1	-0.04758	0.528274	0.633288
SUCLG2	0.259676	0.000465	0.001782
SUCNR1	-0.01225	0.871085	0.911085
SUDS3	-0.1505	0.044946	0.087962
SUFU	0.027187	0.718678	0.795429
SUGT1L1	-0.04853	0.520034	0.625687
SUGT1P1	-0.22351	0.002708	0.008096
SUGT1	0.359293	8.42E-07	7.47E-06
SULF1	0.236545	0.001478	0.004809
SULF2	0.289078	9.10E-05	0.000438
SULT1A1	0.146367	0.051231	0.097973
SULT1A2	0.112468	0.134995	0.217183
SULT1A3	0.318687	1.45E-05	8.99E-05
SULT1B1	0.323458	1.06E-05	6.85E-05
SULT1C2	0.463866	6.98E-11	2.05E-09
SULT1C3	-0.00667	0.929628	0.951325
SULT1C4	-0.17921	0.016687	0.03813
SULT1E1	0.362469	6.63E-07	6.10E-06
SULT2A1	0.041907	0.578611	0.677571
SULT2B1	0.528484	3.41E-14	2.21E-12
SULT4A1	-0.08276	0.272074	0.380077
SULT6B1	-0.0722	0.338203	0.450375
SUMF1	0.194243	0.009375	0.023368
SUMF2	-0.04496	0.55123	0.653528
SUM01P1	0.0602	0.424735	0.537036
SUM01P3	0.270162	0.000265	0.001104
SUM01	0.40538	1.99E-08	2.85E-07
SUM02	0.137196	0.067824	0.123848
SUM03	0.354369	1.22E-06	1.03E-05
SUM04	0.135922	0.070442	0.127933
SUN1	0.156455	0.037022	0.074716
SUN2	0.103396	0.169618	0.260891
SUN3	-0.04238	0.574351	0.673979
SUOX	-0.3874	9.18E-08	1.08E-06
SUPT16H	-0.16163	0.031131	0.064608
SUPT3H	-0.04327	0.566323	0.666655

SUPT4H1	-0.04515	0.549547	0.651952
SUPT5H	0.059513	0.43005	0.54192
SUPT6H	0.011246	0.881564	0.917717
SUPT7L	-0.02198	0.77087	0.836939
SUPV3L1	-0.06894	0.360485	0.473605
SURF1	-0.01899	0.801322	0.860178
SURF2	-0.01735	0.818199	0.871107
SURF4	-0.36434	5.75E-07	5.37E-06
SURF6	0.057245	0.447858	0.559052
SUSD1	-0.0877	0.244379	0.349158
SUSD2	0.249507	0.000783	0.002796
SUSD3	0.093122	0.216331	0.317527
SUSD4	-0.10608	0.158741	0.247238
SUSD5	-0.02639	0.726627	0.802028
SUV39H1	-0.10186	0.176088	0.268505
SUV39H2	-0.18272	0.014641	0.034168
SUV420H1	-0.08235	0.27448	0.382508
SUV420H2	0.119825	0.111128	0.186051
SUZ12P	0.091549	0.224229	0.326478
SUZ12	-0.15774	0.035474	0.072108
SV2A	-0.27601	0.000192	0.000836
SV2B	-0.20844	0.005236	0.014242
SV2C	-0.18621	0.012825	0.030543
SVEP1	-0.05656	0.453317	0.564263
SVIL	0.132644	0.077558	0.138544
SVIP	-0.02412	0.749318	0.819888
SVOPL	0.08076	0.283886	0.392793
SVOP	-0.24651	0.00091	0.003168
SWAP70	-0.03429	0.649554	0.738772
SYAP1	0.053904	0.474841	0.584475
SYBU	-0.20266	0.006669	0.017517
SYCE1L	0.198023	0.008058	0.020571
SYCE1	0.001406	0.985141	0.989746
SYCE2	0.071776	0.341052	0.453376
SYCN	-0.08313	0.269949	0.377695
SYCP1	-0.03291	0.66281	0.751166
SYCP2L	-0.13939	0.063499	0.117196
SYCP2	-0.06775	0.368876	0.482258
SYCP3	0.078065	0.300314	0.410482
SYDE1	0.21081	0.004735	0.013076
SYDE2	-0.27005	0.000267	0.00111
SYF2	0.214081	0.004112	0.011598
SYK	0.252669	0.000667	0.002425
SYMPK	0.244535	0.001003	0.003443
SYN1	-0.1612	0.031586	0.065367
SYN2	-0.14943	0.046503	0.090435
SYN3	-0.22591	0.002429	0.007374
SYNCRIP	-0.12291	0.102157	0.173708
SYNC	0.208791	0.00516	0.014066
SYNE1	-0.43787	9.83E-10	2.10E-08
SYNE2	-0.00886	0.906556	0.934776
SYNGAP1	-0.24255	0.001106	0.003744
SYNGR1	-0.29658	5.82E-05	0.000298
SYNGR2	0.437903	9.80E-10	2.09E-08

SYNGR3	-0.17675	0.018266	0.041105
SYNGR4	-0.18811	0.011918	0.028701
SYNJ1	-0.26546	0.000342	0.001372
SYNJ2BP	-0.20179	0.006912	0.018057
SYNJ2	-0.31985	1.35E-05	8.41E-05
SYNM	-0.22801	0.002206	0.00679
SYNPO2L	0.089227	0.23625	0.340199
SYNPO2	-0.11404	0.129601	0.209956
SYNPO	0.102564	0.173094	0.265104
SYNPR	-0.07711	0.306296	0.416554
SYNRG	-0.33515	4.81E-06	3.44E-05
SYPL1	0.279302	0.00016	0.000714
SYPL2	-0.09847	0.190973	0.286735
SYP	-0.35984	8.09E-07	7.23E-06
SYS1-DBNT	-0.07598	0.313473	0.424388
SYS1	-0.22832	0.002174	0.006708
SYT10	-0.35561	1.11E-06	9.51E-06
SYT11	-0.25505	0.000591	0.00219
SYT12	0.363317	6.21E-07	5.75E-06
SYT13	0.037607	0.618217	0.712734
SYT14L	-0.16295	0.029759	0.062257
SYT14	-0.36006	7.95E-07	7.13E-06
SYT15	-0.16095	0.031851	0.065819
SYT16	-0.06544	0.385499	0.498292
SYT17	0.137301	0.067612	0.123507
SYT1	-0.18576	0.013045	0.030975
SYT2	-0.05989	0.427151	0.539259
SYT3	-0.24042	0.001227	0.004096
SYT4	-0.26665	0.000321	0.0013
SYT5	-0.26465	0.000357	0.001428
SYT6	-0.27513	0.000202	0.000873
SYT7	-0.36127	7.26E-07	6.60E-06
SYT8	0.557088	6.71E-16	6.47E-14
SYT9	-0.26787	0.0003	0.001229
SYTL1	0.295931	6.06E-05	0.000308
SYTL2	0.332894	5.62E-06	3.94E-05
SYTL3	0.020383	0.787119	0.849134
SYTL4	0.350051	1.67E-06	1.36E-05
SYTL5	0.213007	0.004308	0.012044
SYVN1	-0.02588	0.731656	0.805959
TAAR1	-0.20171	0.006934	0.018099
TAAR5	-0.05773	0.444048	0.555735
TAAR6	0.005506	0.941854	0.960908
TAAR8	0.134247	0.07401	0.133236
TAB1	-0.08678	0.249396	0.35489
TAB2	-0.20516	0.006012	0.016004
TAB3	-0.35003	1.67E-06	1.36E-05
TAC1	-0.05896	0.434352	0.54588
TAC3	0.217348	0.003565	0.010232
TAC4	-0.0721	0.338887	0.451074
TACC1	-0.28321	0.000128	0.000589
TACC2	-0.06618	0.380084	0.492871
TACC3	0.296368	5.90E-05	0.000302
TACO1	-0.02201	0.770603	0.836744

TACR1	-0.32536	9.36E-06	6.14E-05
TACR2	0.099241	0.187515	0.282552
TACR3	-0.10303	0.171119	0.262691
TACSTD2	0.562289	3.15E-16	3.42E-14
TADA1	-0.10778	0.15216	0.239098
TADA2A	-0.20522	0.005996	0.015975
TADA2B	-0.34569	2.29E-06	1.79E-05
TADA3	0.247764	0.000855	0.003004
TAF10	0.242679	0.001099	0.003725
TAF11	0.016593	0.825996	0.87667
TAF12	0.157827	0.035375	0.071957
TAF13	-0.1596	0.033343	0.068466
TAF15	0.239342	0.001293	0.004289
TAF1A	0.143117	0.056677	0.106514
TAF1B	0.082201	0.275354	0.383332
TAF1C	0.137681	0.066849	0.122407
TAF1D	0.348664	1.85E-06	1.48E-05
TAF1L	-0.21846	0.003395	0.009807
TAF1	-0.24692	0.000892	0.003116
TAF2	-0.17221	0.021531	0.047201
TAF3	-0.19054	0.010846	0.026481
TAF4B	-0.06669	0.376406	0.489256
TAF4	-0.01217	0.871885	0.911337
TAF5L	0.026207	0.728415	0.803328
TAF5	-0.33123	6.30E-06	4.36E-05
TAF6L	-0.07592	0.313846	0.424806
TAF6	0.101766	0.176478	0.269016
TAF7L	0.074073	0.32578	0.437813
TAF7	0.061061	0.418132	0.530441
TAF8	-0.11702	0.119796	0.197108
TAF9B	-0.50188	9.55E-13	4.40E-11
TAF9	-0.02134	0.777396	0.841991
TAGAP	0.013109	0.86212	0.904284
TAGLN2	0.459418	1.12E-10	3.10E-09
TAGLN3	-0.25162	0.000704	0.002544
TAGLN	0.218761	0.00335	0.009693
TAL1	-0.25438	0.000612	0.002255
TAL2	-0.36523	5.37E-07	5.06E-06
TALD01	0.357312	9.77E-07	8.50E-06
TANC1	0.314607	1.90E-05	0.000113
TANC2	-0.1527	0.041871	0.08282
TANK	0.148824	0.047409	0.091945
TAOK1	-0.17921	0.016687	0.03813
TAOK2	-0.05961	0.429297	0.541213
TAOK3	0.000924	0.990233	0.992893
TAP1	0.341969	2.98E-06	2.26E-05
TAP2	0.293912	6.83E-05	0.000342
TAPBPL	-0.23863	0.001338	0.004409
TAPBP	0.31647	1.68E-05	0.000102
TAPT1	-0.33089	6.45E-06	4.44E-05
TARBP1	0.021395	0.776822	0.841507
TARBP2	-0.02288	0.761739	0.830041
TARDBP	0.037025	0.623666	0.717457
TARM1	-0.12902	0.086089	0.150915

TARP	-0.0837	0.266679	0.374207
TARS2	0.173537	0.020527	0.045398
TARSL2	-0.14782	0.048946	0.094286
TARS	-0.22386	0.002666	0.007983
TAS1R1	0.122896	0.102199	0.173765
TAS1R2	0.036079	0.63257	0.724496
TAS1R3	0.000435	0.9954	0.996913
TAS2R10	-0.13635	0.069555	0.126552
TAS2R13	-0.03168	0.674639	0.760825
TAS2R14	0.011122	0.882863	0.918586
TAS2R19	-0.10029	0.182868	0.276751
TAS2R1	-0.1433	0.056359	0.106057
TAS2R20	-0.03623	0.631179	0.723449
TAS2R30	0.067525	0.370479	0.483714
TAS2R31	-0.1618	0.030954	0.064301
TAS2R38	-0.00717	0.924312	0.947636
TAS2R3	-0.01666	0.825342	0.8764
TAS2R40	-0.13732	0.067574	0.123448
TAS2R41	0.081601	0.278885	0.387212
TAS2R42	-0.05591	0.458563	0.56911
TAS2R43	0.006677	0.929512	0.951325
TAS2R46	-0.04003	0.595748	0.692961
TAS2R4	-0.05791	0.44256	0.554294
TAS2R50	-0.2344	0.001637	0.005258
TAS2R5	0.017072	0.821062	0.873257
TAS2R60	0.047462	0.529278	0.633768
TAS2R7	-0.09737	0.196019	0.292911
TAS2R8	-0.16507	0.027668	0.058452
TAS2R9	-0.04744	0.529456	0.633936
TASP1	-0.10562	0.160589	0.249567
TATDN1	0.136735	0.068762	0.125352
TATDN2	-0.25675	0.000541	0.002035
TATDN3	-0.38765	8.99E-08	1.07E-06
TAT	-0.21142	0.004612	0.012777
TAX1BP1	0.046403	0.538513	0.641771
TAX1BP3	0.457171	1.41E-10	3.80E-09
TAZ	0.281276	0.000143	0.000649
TBC1D10A	0.328296	7.68E-06	5.17E-05
TBC1D10B	0.230279	0.001986	0.006197
TBC1D10C	0.041653	0.580921	0.679873
TBC1D12	-0.17114	0.022363	0.048753
TBC1D13	-0.41669	7.23E-09	1.19E-07
TBC1D14	-0.51956	1.08E-13	6.32E-12
TBC1D15	-0.43179	1.77E-09	3.48E-08
TBC1D16	-0.37838	1.91E-07	2.06E-06
TBC1D17	0.004636	0.951028	0.96696
TBC1D19	-0.35363	1.28E-06	1.08E-05
TBC1D1	0.135789	0.070721	0.128363
TBC1D20	-0.40323	2.40E-08	3.38E-07
TBC1D22A	0.162931	0.029781	0.06229
TBC1D22B	-0.24608	0.000929	0.003224
TBC1D23	-0.07077	0.3479	0.460344
TBC1D24	-0.18556	0.013147	0.031185
TBC1D25	-0.0695	0.356628	0.469786

TBC1D26	0.10308	0.170932	0.262443
TBC1D28	-0.14534	0.052906	0.100618
TBC1D29	-0.03157	0.675716	0.761782
TBC1D2B	-0.14508	0.053329	0.101289
TBC1D2	0.36648	4.88E-07	4.64E-06
TBC1D3B	0.403126	2.42E-08	3.40E-07
TBC1D3C	0.305116	3.45E-05	0.00019
TBC1D3G	0.057921	0.442507	0.554262
TBC1D3H	0.20033	0.007337	0.01896
TBC1D3P2	0.197514	0.008225	0.020919
TBC1D3	0.347596	2.00E-06	1.58E-05
TBC1D4	0.013706	0.855916	0.89959
TBC1D5	-0.26263	0.000398	0.001564
TBC1D7	0.107931	0.151566	0.238335
TBC1D8B	-0.02188	0.771902	0.837532
TBC1D8	-0.11374	0.130626	0.211288
TBC1D9B	-0.08295	0.27096	0.378789
TBC1D9	-0.33366	5.33E-06	3.76E-05
TBCA	-0.02952	0.695638	0.777238
TBCB	0.070453	0.350043	0.46256
TBCCD1	0.209439	0.00502	0.013744
TBCC	-0.21364	0.004191	0.011781
TBCD	-0.03731	0.621015	0.715156
TBCEL	-0.28321	0.000128	0.000589
TBCE	0.223379	0.002725	0.008135
TBCK	-0.08149	0.279545	0.387937
TBK1	-0.15037	0.045131	0.088296
TBKBP1	-0.17039	0.022974	0.049894
TBL1XR1	0.25422	0.000616	0.002267
TBL1X	-0.52039	9.68E-14	5.75E-12
TBL1Y	-0.23782	0.001391	0.004563
TBL2	-0.06363	0.398806	0.51138
TBL3	0.285775	0.00011	0.000518
TBPL1	-0.28793	9.73E-05	0.000464
TBPL2	0.08099	0.28251	0.391147
TBP	-0.2386	0.001339	0.004414
TBR1	-0.05426	0.47191	0.58184
TBRG1	0.235694	0.001539	0.004983
TBRG4	0.238693	0.001334	0.004398
TBX10	-0.04213	0.576598	0.675773
TBX15	0.414354	8.94E-09	1.44E-07
TBX18	0.048882	0.517014	0.623173
TBX19	0.027994	0.710693	0.789463
TBX1	-0.01015	0.893059	0.925331
TBX20	0.055775	0.459626	0.570179
TBX21	-0.15075	0.044584	0.087339
TBX22	-0.18125	0.015468	0.035756
TBX2	0.108359	0.149938	0.236264
TBX3	0.106561	0.156859	0.245113
TBX4	0.199562	0.00757	0.019489
TBX5	0.060301	0.42396	0.536262
TBX6	0.506615	5.39E-13	2.70E-11
TBXA2R	-0.02563	0.734128	0.807872
TBXAS1	0.067687	0.369329	0.482658

TC2N	0.160512	0.03233	0.066704
TCAM1P	0.008157	0.913941	0.939845
TCAP	-0.06439	0.393136	0.505782
TCEA1	-0.07718	0.305866	0.416136
TCEA2	0.036111	0.632264	0.724308
TCEA3	0.147857	0.048884	0.094196
TCEAL1	-0.35945	8.33E-07	7.40E-06
TCEAL2	-0.27237	0.000235	0.000995
TCEAL3	-0.25327	0.000647	0.002363
TCEAL4	-0.17432	0.019953	0.044356
TCEAL5	-0.33931	3.60E-06	2.66E-05
TCEAL6	-0.28448	0.000119	0.000553
TCEAL7	-0.01016	0.892946	0.925331
TCEAL8	-0.28099	0.000145	0.000657
TCEANC	-0.38358	1.26E-07	1.42E-06
TCEB1	0.177094	0.018039	0.040683
TCEB2	0.31505	1.84E-05	0.00011
TCEB3B	-0.08016	0.287473	0.396742
TCEB3C	-0.03965	0.599219	0.696015
TCEB3	-0.39783	3.82E-08	5.00E-07
TCERG1L	-0.11498	0.126443	0.205852
TCERG1	0.166945	0.025928	0.055325
TCF12	-0.00369	0.961028	0.973383
TCF15	0.083997	0.264965	0.372329
TCF19	0.221198	0.003005	0.008867
TCF20	-0.08352	0.26771	0.375279
TCF21	0.078728	0.296215	0.406232
TCF23	-0.09808	0.192733	0.288917
TCF25	0.21132	0.004632	0.012827
TCF3	0.354793	1.18E-06	9.99E-06
TCF4	-0.1117	0.137702	0.22064
TCF7L1	-0.03804	0.61421	0.709405
TCF7L2	0.383747	1.24E-07	1.41E-06
TCF7	0.211198	0.004657	0.012884
TCFL5	-0.35141	1.51E-06	1.24E-05
TCHHL1	0.05114	0.49782	0.605286
TCHH	0.024437	0.746098	0.817224
TCHP	-0.36673	4.78E-07	4.56E-06
TCIRG1	0.416279	7.51E-09	1.23E-07
TCL1A	-0.06789	0.367916	0.481417
TCL1B	-0.06231	0.408666	0.520815
TCL6	-0.1222	0.104176	0.176595
TCN1	0.411116	1.20E-08	1.84E-07
TCN2	0.115754	0.123892	0.202382
TCOF1	-0.03988	0.597097	0.69408
TCP10L2	-0.13867	0.0649	0.119313
TCP10L	-0.03811	0.613529	0.708889
TCP10	-0.1336	0.075422	0.135408
TCP11L1	-0.08922	0.23629	0.340207
TCP11L2	-0.36449	5.68E-07	5.32E-06
TCP11	0.126673	0.092004	0.159293
TCP1	-0.21025	0.004849	0.013351
TCTA	-0.27314	0.000225	0.000958
TCTE1	-0.12829	0.087895	0.153518

TCTE3	-0.05339	0.479097	0.588609
TCTEX1D1	-0.03776	0.61674	0.711382
TCTEX1D2	-0.09061	0.229053	0.332062
TCTEX1D4	-0.0422	0.575996	0.675228
TCTN1	-0.40923	1.41E-08	2.12E-07
TCTN2	-0.17044	0.022928	0.049815
TCTN3	-0.2167	0.003668	0.010497
TDGF1	-0.11829	0.115827	0.192063
TDGF3	-0.19199	0.01025	0.025212
TDG	-0.21885	0.003336	0.009661
TDH	-0.10662	0.15664	0.244854
TD02	0.115142	0.125902	0.20516
TDP1	-0.1158	0.12375	0.202183
TDP2	-0.3375	4.08E-06	2.98E-05
TDRD10	-0.1431	0.056704	0.106534
TDRD12	-0.09198	0.222041	0.324149
TDRD1	-0.05215	0.489375	0.597893
TDRD3	0.05032	0.504742	0.611716
TDRD5	0.022629	0.764315	0.83197
TDRD6	-0.34663	2.14E-06	1.69E-05
TDRD7	0.007956	0.916059	0.941585
TDRD9	-0.30316	3.90E-05	0.000212
TDRG1	-0.10853	0.149302	0.23545
TDRKH	-0.15186	0.043019	0.084778
TEAD1	-0.14979	0.045972	0.089589
TEAD2	0.039885	0.597088	0.69408
TEAD3	0.436859	1.08E-09	2.26E-08
TEAD4	0.210623	0.004773	0.013166
TECPR1	-0.24819	0.000837	0.002949
TECPR2	-0.43863	9.13E-10	1.96E-08
TECR	0.239065	0.00131	0.00433
TECTA	-0.3809	1.56E-07	1.73E-06
TECTB	0.052407	0.487209	0.596007
TEC	0.318953	1.43E-05	8.86E-05
TEDDM1	0.057376	0.446821	0.558004
TEF	-0.23926	0.001298	0.004303
TEKT1	-0.15076	0.044574	0.087336
TEKT2	-0.26066	0.000441	0.001709
TEKT3	-0.12211	0.104437	0.176947
TEKT4	-0.06095	0.419006	0.531288
TEKT5	0.207766	0.005388	0.014584
TEK	-0.24262	0.001102	0.003734
TELO2	0.21108	0.00468	0.012942
TENC1	-0.27028	0.000263	0.001097
TEP1	0.285549	0.000112	0.000525
TEPP	-0.16756	0.025378	0.054289
TERC	-0.07654	0.309915	0.420385
TERF1	-0.23786	0.001388	0.004556
TERF2IP	-0.31692	1.63E-05	9.92E-05
TERF2	-0.08866	0.239273	0.343526
TERT	0.06712	0.373365	0.486454
TESC	0.323298	1.07E-05	6.91E-05
TESK1	0.051542	0.494442	0.602564
TESK2	-0.15312	0.041297	0.081882

TES	0.460012	1.05E-10	2.93E-09
TET1	-0.11329	0.132155	0.213342
TET2	-0.20598	0.005808	0.01555
TET3	0.154252	0.039802	0.079355
TEX101	-0.05706	0.449314	0.560304
TEX10	-0.15781	0.035394	0.071982
TEX11	-0.14838	0.048078	0.092968
TEX12	0.040676	0.589824	0.687769
TEX13A	0.130682	0.082087	0.145258
TEX13B	0.141053	0.060377	0.112156
TEX14	-0.10591	0.159418	0.248039
TEX15	0.037091	0.623043	0.716866
TEX19	-0.01999	0.791139	0.852162
TEX261	-0.26805	0.000298	0.00122
TEX264	0.19163	0.010394	0.025519
TEX2	-0.4496	3.06E-10	7.61E-09
TEX9	-0.11106	0.139967	0.223471
TFAMP1	0.013564	0.857391	0.900569
TFAM	-0.2279	0.002217	0.006822
TFAP2A	0.498329	1.46E-12	6.56E-11
TFAP2B	-0.09973	0.185324	0.279741
TFAP2C	0.128547	0.087255	0.152608
TFAP2D	0.103472	0.169299	0.260507
TFAP2E	0.248301	0.000832	0.002935
TFAP4	0.01115	0.882563	0.91837
TFB1M	0.103896	0.16755	0.258435
TFB2M	-0.15064	0.044742	0.087623
TFCP2L1	0.405785	1.92E-08	2.77E-07
TFCP2	-0.28427	0.00012	0.000559
TFDP1	0.184728	0.013568	0.032043
TFDP2	0.225386	0.002488	0.007523
TFDP3	-0.08722	0.246987	0.35207
TFE3	0.039909	0.596867	0.693935
TFEB	0.072151	0.338528	0.450717
TFEC	0.015837	0.833808	0.882262
TFF1	0.467694	4.64E-11	1.45E-09
TFF2	0.420623	5.04E-09	8.74E-08
TFF3	0.239845	0.001262	0.004199
TFG	0.250227	0.000755	0.002706
TFIP11	0.019238	0.798817	0.858328
TFPI2	0.03003	0.690691	0.773659
TFPI	0.334137	5.16E-06	3.66E-05
TFPT	0.155534	0.038163	0.076602
TFR2	0.095789	0.203408	0.302102
TFRC	0.080621	0.284715	0.393648
TF	-0.14713	0.050024	0.096009
TGDS	0.065622	0.384149	0.496963
TGFA	0.529655	2.92E-14	1.93E-12
TGFB1I1	0.378083	1.96E-07	2.11E-06
TGFB1	0.289971	8.63E-05	0.000418
TGFB2	0.277948	0.000172	0.000762
TGFB3	0.03078	0.683375	0.76783
TGFB1	0.217127	0.0036	0.010321
TGFBR1	-0.04052	0.591296	0.688795

TGFBR2	0.124667	0.097312	0.166833
TGFBR3	-0.20875	0.005168	0.014083
TGFBRAP1	-0.22973	0.002037	0.006332
TGIF1	0.396077	4.44E-08	5.73E-07
TGIF2LX	-0.14148	0.059591	0.110949
TGIF2LY	-0.10945	0.145849	0.231017
TGIF2	0.262952	0.000391	0.00154
TGM1	0.227197	0.00229	0.007012
TGM2	0.402172	2.63E-08	3.63E-07
TGM3	-0.20695	0.005577	0.015016
TGM4	0.122176	0.10424	0.176689
TGM5	0.389921	7.45E-08	9.03E-07
TGM7	0.04452	0.555138	0.656654
TGOLN2	-0.13324	0.076222	0.136535
TGS1	-0.14813	0.04847	0.093525
TG	0.059606	0.429328	0.541217
TH1L	-0.12631	0.09296	0.160596
THADA	0.149416	0.046524	0.090459
THAP10	-0.20875	0.005168	0.014083
THAP11	-0.03951	0.600532	0.697052
THAP1	-0.20984	0.004935	0.013546
THAP2	-0.37583	2.35E-07	2.47E-06
THAP3	0.009642	0.898359	0.929165
THAP4	0.245834	0.000941	0.003257
THAP5	-0.49282	2.79E-12	1.16E-10
THAP6	-0.25339	0.000643	0.002351
THAP7	-0.08587	0.254421	0.360666
THAP8	-0.15613	0.037421	0.075361
THAP9	-0.48459	7.19E-12	2.67E-10
THBD	0.040455	0.591849	0.689272
THBS1	0.028775	0.702995	0.783332
THBS2	0.26905	0.000282	0.001163
THBS3	0.182433	0.014797	0.034454
THBS4	-0.0907	0.228583	0.331475
THEG	-0.11906	0.113443	0.188955
THEM4	-0.26982	0.00027	0.001122
THEM5	-0.11897	0.113719	0.18933
THEMIS	-0.15716	0.036172	0.073278
THG1L	0.181052	0.015583	0.035963
THNSL1	-0.31743	1.58E-05	9.65E-05
THNSL2	0.266095	0.000331	0.001333
THOC1	0.062196	0.409509	0.521587
THOC2	-0.20445	0.006193	0.016428
THOC3	0.248318	0.000831	0.002934
THOC4	0.084719	0.260861	0.367529
THOC5	-0.0286	0.704732	0.784782
THOC6	0.331538	6.17E-06	4.28E-05
THOC7	0.256422	0.00055	0.002063
THOP1	-0.10691	0.155482	0.243448
THPO	-0.01125	0.881484	0.917683
THRAP3	-0.14268	0.057453	0.107726
THRA	-0.23596	0.00152	0.004928
THRB	-0.07134	0.343987	0.456357
THRSP	-0.20194	0.006869	0.017965

THSD1P1	-0.05911	0.433171	0.544812
THSD1	-0.16854	0.024517	0.052777
THSD4	0.173653	0.020441	0.045244
THSD7A	-0.19229	0.010127	0.024965
THSD7B	0.163124	0.029585	0.061926
THTPA	-0.40974	1.35E-08	2.04E-07
THUMPD1	-0.18381	0.014049	0.032947
THUMPD2	0.388658	8.27E-08	9.90E-07
THUMPD3	-0.01043	0.890081	0.923618
THY1	0.151532	0.043475	0.085556
THYN1	0.195325	0.00898	0.022497
TH	0.073315	0.330768	0.442764
TIA1	0.098521	0.19075	0.286488
TIAF1	0.260193	0.000452	0.001744
TIAL1	0.045833	0.543521	0.646471
TIAM1	-0.22889	0.002118	0.006556
TIAM2	0.098595	0.190419	0.286055
TICAM1	0.481667	9.99E-12	3.57E-10
TICAM2	0.187157	0.012365	0.029606
TIE1	-0.13735	0.06751	0.123389
TIFAB	-0.05176	0.492592	0.601086
TIFA	-0.22751	0.002257	0.006927
TIGD1	0.243338	0.001064	0.003622
TIGD2	-0.01164	0.877395	0.915042
TIGD3	-0.10566	0.160424	0.249369
TIGD4	-0.28798	9.70E-05	0.000463
TIGD5	-0.06311	0.402638	0.515324
TIGD6	-0.31704	1.62E-05	9.86E-05
TIGD7	-0.253	0.000656	0.002388
TIGIT	0.021933	0.771365	0.837291
TIMD4	-0.04139	0.583281	0.68207
TIMELESS	-0.1734	0.020631	0.045603
TIMM10	0.221548	0.002958	0.008746
TIMM13	0.033227	0.659717	0.748221
TIMM16	0.19456	0.009258	0.023108
TIMM17A	0.285014	0.000115	0.000538
TIMM17B	0.127768	0.089207	0.155303
TIMM22	-0.38686	9.60E-08	1.12E-06
TIMM44	-0.01392	0.853652	0.897688
TIMM50	0.157768	0.035444	0.072069
TIMM8A	0.136527	0.069188	0.125998
TIMM8B	0.278776	0.000164	0.000732
TIMM9	0.015726	0.834958	0.883102
TIMP1	0.287403	0.0001	0.000477
TIMP2	0.141915	0.058809	0.109758
TIMP3	0.123567	0.100326	0.17104
TIMP4	0.003119	0.967044	0.977474
TINAGL1	0.573097	6.29E-17	8.35E-15
TINAG	0.297892	5.38E-05	0.000279
TINF2	-0.20385	0.006347	0.016784
TIPARP	0.201343	0.007039	0.018332
TIPIN	-0.08411	0.2643	0.37158
TIPRL	0.044672	0.55379	0.655567
TIRAP	-0.22089	0.003047	0.008958

TJAP1	-0.00107	0.988741	0.991989
TJP1	0.206587	0.005662	0.015217
TJP2	0.314179	1.95E-05	0.000116
TJP3	0.504869	6.67E-13	3.20E-11
TK1	0.47577	1.93E-11	6.43E-10
TK2	0.403168	2.41E-08	3.39E-07
TKTL1	-0.17612	0.01869	0.041917
TKTL2	0.263997	0.00037	0.00147
TKT	0.231033	0.001917	0.006016
TLCD1	0.291248	8.01E-05	0.000391
TLE1	-0.08852	0.239985	0.344298
TLE2	-0.24343	0.001059	0.003607
TLE3	0.148372	0.048095	0.092991
TLE4	-0.00104	0.989028	0.992088
TLE6	0.031959	0.671939	0.758603
TLK1	-0.11475	0.127206	0.206857
TLK2	-0.20514	0.006015	0.016009
TLL1	-0.12377	0.099754	0.170281
TLL2	-0.0495	0.511727	0.617947
TLN1	-0.01872	0.804145	0.861571
TLN2	0.156442	0.037038	0.074733
TLR10	-0.07864	0.296771	0.406649
TLR1	0.02069	0.78399	0.846763
TLR2	0.094633	0.208938	0.308624
TLR3	0.250531	0.000744	0.002671
TLR4	-0.18396	0.01397	0.032791
TLR5	0.065262	0.386769	0.499508
TLR6	-0.0059	0.937742	0.957845
TLR7	-0.07424	0.324715	0.436797
TLR8	-0.07815	0.299794	0.409931
TLR9	0.141916	0.058807	0.109758
TLX1NB	0.0621	0.410241	0.522351
TLX1	0.2468	0.000897	0.003131
TLX2	0.191709	0.010362	0.025449
TLX3	-0.09999	0.184205	0.27837
TM2D1	0.059721	0.428439	0.54051
TM2D2	0.295864	6.08E-05	0.000309
TM2D3	-0.21906	0.003306	0.009586
TM4SF18	-0.31087	2.41E-05	0.000139
TM4SF19	0.147888	0.048837	0.094127
TM4SF1	0.622547	1.75E-20	5.66E-18
TM4SF20	0.144962	0.053531	0.101624
TM4SF4	0.139001	0.064252	0.118243
TM4SF5	0.179176	0.016709	0.038168
TM6SF1	-0.15951	0.033439	0.068627
TM6SF2	0.417897	6.48E-09	1.09E-07
TM7SF2	0.161798	0.030952	0.064301
TM7SF3	-0.08095	0.282722	0.391358
TM7SF4	0.179174	0.01671	0.038168
TM9SF1	-0.15184	0.043047	0.084823
TM9SF2	-0.14661	0.050837	0.097342
TM9SF3	0.129598	0.084681	0.148909
TM9SF4	0.03691	0.62474	0.7184
TMBIM1	0.597102	1.41E-18	2.95E-16

TMBIM4	-0.02622	0.728263	0.803206
TMBIM6	-0.08673	0.249669	0.355072
TMC1	0.044959	0.551239	0.653528
TMC2	-0.27434	0.000211	0.000904
TMC3	-0.33035	6.69E-06	4.58E-05
TMC4	0.364855	5.52E-07	5.20E-06
TMC5	0.435829	1.20E-09	2.46E-08
TMC6	0.506917	5.20E-13	2.62E-11
TMC7	0.596043	1.68E-18	3.45E-16
TMC8	0.102713	0.172468	0.264269
TMCC1	0.149922	0.045779	0.089284
TMCC2	-0.32065	1.28E-05	8.04E-05
TMCC3	-0.17035	0.023004	0.049955
TMCO1	0.142933	0.057	0.106998
TMCO2	-0.18663	0.012616	0.030123
TMCO3	-0.17204	0.021662	0.047447
TMCO4	0.25576	0.00057	0.002125
TMCO5A	0.151219	0.043915	0.086276
TMCO6	0.179422	0.016557	0.037884
TMCO7	-0.12079	0.10827	0.18216
TMED10P1	-0.21481	0.003984	0.011285
TMED10	-0.17114	0.022365	0.048753
TMED1	0.040626	0.590288	0.688229
TMED2	-0.28974	8.75E-05	0.000423
TMED3	0.111228	0.139379	0.222732
TMED4	-0.3941	5.24E-08	6.64E-07
TMED5	-0.21365	0.004189	0.011777
TMED6	-0.23444	0.001634	0.005249
TMED7-TIC	-0.14276	0.057302	0.107493
TMED7	-0.17175	0.021882	0.047849
TMED8	-0.43305	1.57E-09	3.12E-08
TMED9	0.118358	0.115603	0.191758
TMEFF1	-0.03142	0.677177	0.762774
TMEFF2	-0.16004	0.032843	0.067573
TMEM100	-0.10006	0.183863	0.27796
TMEM101	0.204027	0.006301	0.016673
TMEM102	0.298377	5.22E-05	0.000272
TMEM104	-0.21261	0.004382	0.012214
TMEM105	0.498829	1.38E-12	6.22E-11
TMEM106A	0.208098	0.005313	0.014426
TMEM106B	-0.17222	0.021525	0.047193
TMEM106C	-0.15915	0.033849	0.069302
TMEM107	-0.32046	1.30E-05	8.13E-05
TMEM108	-0.2166	0.003684	0.010536
TMEM109	0.088472	0.240252	0.344581
TMEM110	-0.03831	0.611669	0.707277
TMEM111	0.200107	0.007404	0.019121
TMEM114	0.302926	3.96E-05	0.000214
TMEM115	0.077049	0.306664	0.416969
TMEM116	-0.16272	0.029998	0.062663
TMEM117	-0.03652	0.628411	0.721238
TMEM119	0.008942	0.9057	0.934236
TMEM11	-0.11935	0.112561	0.187876
TMEM120A	0.360006	7.98E-07	7.15E-06

TMEM120B	-0.12905	0.086023	0.150813
TMEM121	0.025247	0.737993	0.810862
TMEM123	0.293243	7.11E-05	0.000354
TMEM125	0.058184	0.440436	0.552228
TMEM126A	0.299964	4.74E-05	0.000251
TMEM126B	0.214297	0.004074	0.011503
TMEM127	0.20668	0.005641	0.015165
TMEM128	-0.06386	0.397053	0.509793
TMEM129	-0.08532	0.25751	0.363871
TMEM130	0.072145	0.338569	0.450741
TMEM131	-0.24095	0.001196	0.004006
TMEM132A	0.179255	0.01666	0.038098
TMEM132B	-0.22778	0.00223	0.006856
TMEM132C	-0.01736	0.818102	0.87109
TMEM132D	-0.26622	0.000328	0.001325
TMEM132E	-0.02439	0.746623	0.817709
TMEM133	0.412579	1.05E-08	1.64E-07
TMEM134	0.433338	1.52E-09	3.04E-08
TMEM135	0.067193	0.372843	0.485999
TMEM136	-0.00122	0.987124	0.990883
TMEM138	0.244205	0.00102	0.003492
TMEM139	0.579387	2.40E-17	3.51E-15
TMEM140	0.057529	0.445611	0.55702
TMEM141	0.33114	6.34E-06	4.37E-05
TMEM143	0.07667	0.309059	0.419447
TMEM144	0.289635	8.80E-05	0.000426
TMEM145	-0.28425	0.00012	0.000559
TMEM146	0.015043	0.842027	0.888392
TMEM147	0.081536	0.27927	0.387692
TMEM149	-0.0238	0.752541	0.822686
TMEM14A	-0.12825	0.087994	0.153641
TMEM14B	0.048425	0.520938	0.626507
TMEM14C	0.224277	0.002616	0.007858
TMEM14E	-0.06909	0.359444	0.472488
TMEM150A	0.100004	0.184126	0.278293
TMEM150B	0.289013	9.13E-05	0.000439
TMEM150C	-0.3227	1.12E-05	7.17E-05
TMEM151A	-0.083	0.270685	0.378484
TMEM151B	-0.25404	0.000622	0.002286
TMEM154	0.508853	4.10E-13	2.11E-11
TMEM155	-0.12313	0.101548	0.172822
TMEM156	0.00237	0.974956	0.982759
TMEM158	0.283499	0.000126	0.000581
TMEM159	0.439357	8.50E-10	1.85E-08
TMEM160	0.17806	0.017411	0.039481
TMEM161A	0.144403	0.054468	0.103166
TMEM161B	0.074774	0.321211	0.433055
TMEM163	0.065429	0.38555	0.498292
TMEM164	0.011918	0.874541	0.913059
TMEM165	0.256553	0.000547	0.002053
TMEM167A	-0.22464	0.002574	0.00775
TMEM167B	-0.09185	0.222686	0.324734
TMEM168	-0.14555	0.052556	0.100091
TMEM169	0.078232	0.299281	0.409379

TMEM170A	0.074741	0.321423	0.433253
TMEM170B	-0.48888	4.40E-12	1.73E-10
TMEM171	0.465667	5.76E-11	1.74E-09
TMEM173	0.38314	1.30E-07	1.47E-06
TMEM174	0.082491	0.273656	0.381747
TMEM175	-0.12945	0.085034	0.14945
TMEM176A	0.057409	0.446561	0.557817
TMEM176B	0.039625	0.599479	0.696173
TMEM177	0.198939	0.007764	0.019906
TMEM178	0.111496	0.138425	0.221511
TMEM179B	0.398118	3.73E-08	4.90E-07
TMEM179	-0.30958	2.61E-05	0.000149
TMEM17	-0.15231	0.0424	0.083783
TMEM180	0.374469	2.61E-07	2.71E-06
TMEM181	-0.11815	0.116249	0.192489
TMEM182	0.192247	0.010145	0.025003
TMEM183A	0.236717	0.001466	0.004773
TMEM184A	0.198583	0.007877	0.020164
TMEM184B	0.049192	0.514351	0.620358
TMEM184C	-0.15608	0.037487	0.075446
TMEM185A	0.113811	0.13037	0.210961
TMEM185B	0.165902	0.026886	0.05708
TMEM186	0.100469	0.182085	0.275798
TMEM187	0.01167	0.877131	0.914885
TMEM188	-0.0386	0.609011	0.704629
TMEM189-U	0.036475	0.628834	0.72164
TMEM189	0.402778	2.49E-08	3.49E-07
TMEM18	0.052885	0.483247	0.592383
TMEM190	0.001145	0.987895	0.991388
TMEM191A	0.182978	0.014497	0.033865
TMEM192	-0.36054	7.67E-07	6.92E-06
TMEM194A	-0.20848	0.005228	0.014223
TMEM194B	0.221995	0.0029	0.008593
TMEM195	0.386278	1.01E-07	1.17E-06
TMEM196	-0.24383	0.001039	0.003545
TMEM198	-0.32536	9.36E-06	6.14E-05
TMEM199	-0.16561	0.02716	0.057543
TMEM19	-0.08831	0.241119	0.345474
TMEM200A	-0.001	0.989453	0.992414
TMEM200B	0.26708	0.000314	0.001275
TMEM200C	0.011679	0.877041	0.914839
TMEM201	-0.33601	4.53E-06	3.26E-05
TMEM202	-0.08173	0.278106	0.386238
TMEM203	0.018394	0.807468	0.863634
TMEM204	0.095263	0.205912	0.305125
TMEM205	-0.03152	0.676215	0.762168
TMEM206	-0.02771	0.713528	0.79155
TMEM207	0.016619	0.825736	0.876489
TMEM208	0.132757	0.077305	0.13815
TMEM209	-0.37668	2.19E-07	2.32E-06
TMEM20	-0.25986	0.00046	0.001768
TMEM211	-0.05435	0.47121	0.58123
TMEM212	-0.07906	0.29418	0.404079
TMEM213	0.058871	0.435049	0.546582

TMEM214	0.123018	0.101857	0.173258
TMEM215	0.067215	0.372689	0.48583
TMEM216	0.280493	0.000149	0.000673
TMEM217	-0.00961	0.898676	0.929269
TMEM218	-0.04874	0.51827	0.624133
TMEM219	0.388844	8.15E-08	9.77E-07
TMEM220	-0.27099	0.000253	0.001061
TMEM222	0.079813	0.28959	0.399077
TMEM223	0.389829	7.50E-08	9.09E-07
TMEM229A	-0.24011	0.001245	0.004153
TMEM229B	-0.19601	0.008738	0.022006
TMEM22	-0.15294	0.041535	0.082272
TMEM231	-0.31331	2.06E-05	0.000121
TMEM232	-0.2806	0.000148	0.00067
TMEM233	-0.11785	0.117174	0.193706
TMEM25	-0.19355	0.009637	0.023931
TMEM26	0.113174	0.132548	0.213837
TMEM27	-0.19181	0.010321	0.025358
TMEM2	0.157266	0.03604	0.073065
TMEM30A	-0.37351	2.82E-07	2.89E-06
TMEM30B	0.241602	0.001158	0.0039
TMEM31	0.053432	0.478722	0.588332
TMEM33	0.00573	0.939487	0.959131
TMEM35	0.085458	0.256713	0.363156
TMEM37	0.257203	0.000529	0.001992
TMEM38A	0.175546	0.019088	0.042684
TMEM38B	-0.52139	8.52E-14	5.12E-12
TMEM39A	-0.13778	0.066655	0.122073
TMEM39B	-0.2632	0.000386	0.001522
TMEM40	0.418116	6.35E-09	1.07E-07
TMEM41A	0.370652	3.53E-07	3.52E-06
TMEM41B	0.28065	0.000148	0.000668
TMEM42	0.156378	0.037116	0.074845
TMEM43	0.370277	3.63E-07	3.61E-06
TMEM44	0.514203	2.11E-13	1.16E-11
TMEM45A	0.085556	0.256164	0.362538
TMEM45B	0.298911	5.06E-05	0.000265
TMEM47	0.177191	0.017976	0.040567
TMEM48	0.169109	0.024034	0.051878
TMEM49	0.481823	9.82E-12	3.52E-10
TMEM50A	0.361045	7.38E-07	6.70E-06
TMEM50B	0.05103	0.49874	0.606152
TMEM51	0.25676	0.000541	0.002034
TMEM52	-0.02397	0.750786	0.821085
TMEM53	0.157431	0.035843	0.072739
TMEM54	0.446473	4.20E-10	9.95E-09
TMEM55A	-0.17941	0.016565	0.037898
TMEM55B	-0.04224	0.575605	0.67493
TMEM56	-0.25645	0.00055	0.002062
TMEM57	-0.27356	0.00022	0.000939
TMEM59L	-0.24562	0.000951	0.003288
TMEM59	-0.05785	0.443099	0.554863
TMEM5	-0.45405	1.95E-10	5.06E-09
TMEM60	-0.12846	0.087484	0.152914

TMEM61	-0.18238	0.014824	0.034491
TMEM62	0.377864	1.99E-07	2.14E-06
TMEM63A	0.339376	3.58E-06	2.66E-05
TMEM63B	0.321636	1.20E-05	7.60E-05
TMEM63C	-0.26695	0.000316	0.001282
TMEM64	-0.31621	1.71E-05	0.000103
TMEM65	-0.14988	0.045842	0.089387
TMEM66	-0.33202	5.97E-06	4.16E-05
TMEM67	-0.27007	0.000267	0.001109
TMEM68	-0.08415	0.26407	0.371335
TMEM69	0.072964	0.333099	0.445348
TMEM70	-0.34192	2.99E-06	2.27E-05
TMEM71	-0.00706	0.925487	0.948511
TMEM72	-0.36475	5.57E-07	5.24E-06
TMEM74	-0.3062	3.23E-05	0.00018
TMEM79	0.29243	7.47E-05	0.000368
TMEM80	-0.11625	0.122282	0.200211
TMEM81	0.149716	0.046081	0.089738
TMEM82	0.298846	5.08E-05	0.000266
TMEM84	-0.19407	0.009439	0.023502
TMEM85	0.195378	0.008961	0.022458
TMEM86A	0.055374	0.462866	0.57316
TMEM86B	-0.09497	0.207328	0.306681
TMEM87A	0.366887	4.72E-07	4.53E-06
TMEM87B	0.214318	0.00407	0.011498
TMEM88B	0.045849	0.543382	0.646384
TMEM88	-0.27764	0.000175	0.000773
TMEM89	-0.20111	0.007106	0.018446
TMEM8A	0.164283	0.028432	0.059815
TMEM8B	-0.23502	0.00159	0.005128
TMEM8C	-0.06011	0.425439	0.53772
TMEM90A	-0.06397	0.396244	0.508986
TMEM90B	0.009094	0.90411	0.933083
TMEM91	0.06673	0.376156	0.489059
TMEM92	0.630163	4.33E-21	1.83E-18
TMEM93	0.023542	0.755104	0.824622
TMEM95	0.08785	0.243587	0.348253
TMEM97	0.065112	0.387865	0.500596
TMEM98	0.115862	0.123538	0.201888
TMEM99	-0.01951	0.796071	0.856072
TMEM9B	0.168644	0.024431	0.052614
TMEM9	-0.07411	0.325551	0.437624
TMF1	-0.15111	0.044075	0.086548
TMIE	0.134873	0.072659	0.131222
TMIGD1	-0.19333	0.009719	0.024102
TMIGD2	0.066464	0.378062	0.490763
TMLHE	0.013692	0.856059	0.899644
TMOD1	-0.32766	8.02E-06	5.35E-05
TMOD2	-0.4227	4.16E-09	7.42E-08
TMOD3	0.348397	1.88E-06	1.51E-05
TMOD4	0.048143	0.523372	0.62886
TMPO	-0.19271	0.009963	0.024627
TMPPE	0.054943	0.466362	0.576473
TMPRSS11A	0.092181	0.221029	0.322914

TMPRSS11E 0.009033 0.904748 0.933547
TMPRSS11E 0.126485 0.092491 0.159954
TMPRSS11I 0.165698 0.027077 0.057395
TMPRSS11F 0.104131 0.166584 0.25709
TMPRSS12 -0.12732 0.090345 0.156888
TMPRSS13 0.104742 0.1641 0.254006
TMPRSS15 0.038665 0.608365 0.704116
TMPRSS2 0.261453 0.000423 0.001647
TMPRSS3 0.433521 1.50E-09 2.99E-08
TMPRSS4 0.620123 2.70E-20 8.34E-18
TMPRSS5 0.198397 0.007937 0.020301
TMPRSS6 -0.23579 0.001532 0.004962
TMPRSS7 0.109331 0.146297 0.231653
TMPRSS9 -0.16829 0.024735 0.053159
TMSB10 0.538139 9.43E-15 6.96E-13
TMSB15A -0.04061 0.590426 0.688348
TMSB15B 0.114716 0.127319 0.206972
TMSB4Y -0.12405 0.098983 0.169123
TMSL3 0.467941 4.52E-11 1.41E-09
TMTC1 -0.3826 1.36E-07 1.52E-06
TMTC2 0.078054 0.300382 0.41052
TMTC3 -0.25615 0.000558 0.002088
TMTC4 0.118552 0.115002 0.190944
TMUB1 0.202347 0.006755 0.017715
TMUB2 0.367808 4.40E-07 4.25E-06
TMX1 -0.09095 0.227284 0.329897
TMX2 0.114626 0.12762 0.207359
TMX3 -0.38893 8.09E-08 9.72E-07
TMX4 -0.52442 5.78E-14 3.61E-12
TNC 0.017885 0.812693 0.867339
TNFAIP1 0.18066 0.015812 0.036434
TNFAIP2 0.448674 3.36E-10 8.26E-09
TNFAIP3 -0.07671 0.308827 0.419247
TNFAIP6 0.20042 0.00731 0.018906
TNFAIP8L1 0.153893 0.040271 0.080186
TNFAIP8L2 0.051933 0.49117 0.599752
TNFAIP8L3 -0.12907 0.085971 0.150763
TNFAIP8 0.241504 0.001164 0.003914
TNFRSF10A 0.425147 3.31E-09 6.05E-08
TNFRSF10E 0.516703 1.54E-13 8.78E-12
TNFRSF10C 0.208889 0.005138 0.014018
TNFRSF10I 0.310201 2.51E-05 0.000144
TNFRSF11A 0.220154 0.003149 0.009201
TNFRSF11E 0.143388 0.056206 0.105891
TNFRSF12A 0.546312 3.08E-15 2.50E-13
TNFRSF13E -0.00906 0.904451 0.933383
TNFRSF13C 0.023499 0.755532 0.824998
TNFRSF14 0.366662 4.81E-07 4.59E-06
TNFRSF17 0.017223 0.8195 0.87224
TNFRSF18 0.226826 0.002329 0.007114
TNFRSF19 -0.07551 0.316448 0.427801
TNFRSF1A 0.27075 0.000257 0.001073
TNFRSF1B 0.055237 0.463973 0.57413
TNFRSF21 0.506259 5.63E-13 2.78E-11

TNFRSF25	0.216793	0.003653	0.010462
TNFRSF4	0.177111	0.018029	0.040664
TNFRSF6B	0.408145	1.56E-08	2.30E-07
TNFRSF8	0.026744	0.723072	0.79895
TNFRSF9	0.07854	0.297372	0.407331
TNFSF10	0.333271	5.48E-06	3.86E-05
TNFSF11	0.427484	2.66E-09	4.97E-08
TNFSF12-1	0.172198	0.021538	0.047201
TNFSF12	0.120799	0.108231	0.182126
TNFSF13B	0.09658	0.199683	0.297442
TNFSF13	0.292645	7.37E-05	0.000365
TNFSF14	0.008536	0.909965	0.937023
TNFSF15	-0.04746	0.529267	0.633768
TNFSF18	-0.03417	0.650689	0.739722
TNFSF4	0.130571	0.08235	0.145625
TNFSF8	-0.10485	0.163677	0.253564
TNFSF9	0.424282	3.59E-09	6.52E-08
TNF	0.058755	0.435954	0.547406
TNIK	0.254854	0.000597	0.002208
TNIP1	0.419728	5.48E-09	9.37E-08
TNIP2	0.340735	3.26E-06	2.45E-05
TNIP3	-0.19453	0.009268	0.023125
TNK1	0.286048	0.000109	0.00051
TNK2	0.522692	7.21E-14	4.39E-12
TNKS1BP1	0.482994	8.61E-12	3.15E-10
TNKS2	-0.25354	0.000638	0.002335
TNKS	-0.33991	3.45E-06	2.57E-05
TNMD	-0.19974	0.007515	0.019368
TNNC1	0.342955	2.78E-06	2.13E-05
TNNC2	0.35372	1.28E-06	1.07E-05
TNNI1	0.30467	3.55E-05	0.000195
TNNI2	0.478354	1.45E-11	4.95E-10
TNNI3K	-0.11043	0.142274	0.226461
TNNI3	0.23509	0.001584	0.005111
TNNT1	0.400895	2.93E-08	3.98E-07
TNNT2	0.463085	7.58E-11	2.20E-09
TNNT3	-0.17546	0.01915	0.042806
TNN	-0.00582	0.9385	0.95842
TNP1	-0.13228	0.078378	0.139815
TNP2	-0.12609	0.093535	0.161379
TNP01	-0.32067	1.28E-05	8.03E-05
TNP02	-0.27597	0.000193	0.000837
TNP03	-0.08328	0.269095	0.376714
TNRC18	0.042029	0.577505	0.676676
TNRC6A	-0.28382	0.000123	0.000571
TNRC6B	-0.3523	1.42E-06	1.17E-05
TNRC6C	-0.33198	5.98E-06	4.17E-05
TNR	-0.39321	5.66E-08	7.08E-07
TNS1	0.010043	0.894158	0.926196
TNS3	-0.29754	5.50E-05	0.000284
TNS4	0.56708	1.56E-16	1.81E-14
TNXB	-0.14715	0.049987	0.095946
TOB1	0.355003	1.16E-06	9.87E-06
TOB2	0.045922	0.542737	0.64581

TOE1	-0.07379	0.327622	0.439512
TOLLIP	-0.26092	0.000435	0.001689
TOM1L1	0.079773	0.289832	0.399327
TOM1L2	-0.45105	2.64E-10	6.63E-09
TOM1	0.164338	0.028378	0.059732
TOMM20L	-0.16354	0.029171	0.061164
TOMM20	0.107111	0.154716	0.242401
TOMM22	0.130856	0.081679	0.144723
TOMM34	0.135606	0.071104	0.128945
TOMM40L	0.190981	0.010662	0.026095
TOMM40	0.173071	0.020875	0.046017
TOMM5	-0.00543	0.942664	0.961528
TOMM6	0.048243	0.522513	0.628095
TOMM70A	-0.1617	0.031055	0.064485
TOMM7	-0.11502	0.126324	0.205692
TOP1MT	0.347856	1.96E-06	1.56E-05
TOP1P1	0.071579	0.342378	0.454619
TOP1P2	0.173243	0.020746	0.045784
TOP1	-0.00116	0.987772	0.991382
TOP2A	0.331498	6.18E-06	4.29E-05
TOP2B	-0.27005	0.000267	0.00111
TOP3A	-0.47121	3.17E-11	1.02E-09
TOP3B	0.09781	0.193988	0.290533
TOPBP1	-0.01875	0.80385	0.861571
TOPORS	-0.32108	1.24E-05	7.85E-05
TOR1AIP1	-0.18036	0.015992	0.036791
TOR1AIP2	-0.11937	0.112492	0.187826
TOR1A	-0.24879	0.000812	0.002883
TOR1B	-0.06419	0.394635	0.507314
TOR2A	-0.15608	0.037484	0.075446
TOR3A	0.115915	0.123364	0.201653
TOX2	-0.11861	0.114824	0.190705
TOX3	0.120722	0.108457	0.182429
TOX4	-0.03318	0.660171	0.748651
TOX	-0.43106	1.90E-09	3.68E-08
TP53AIP1	0.020253	0.788445	0.850047
TP53BP1	-0.20886	0.005145	0.014033
TP53BP2	0.165881	0.026905	0.057109
TP53I11	0.273787	0.000217	0.000929
TP53I13	0.008891	0.906241	0.934599
TP53I3	0.522293	7.59E-14	4.58E-12
TP53INP1	-0.41427	9.00E-09	1.45E-07
TP53INP2	-0.18666	0.012606	0.030108
TP53RK	-0.07473	0.321528	0.433335
TP53TG1	0.175143	0.01937	0.043206
TP53TG3B	-0.19498	0.009103	0.022755
TP53TG5	-0.04622	0.540098	0.64329
TP53	-0.00997	0.894891	0.926588
TP63	0.319849	1.35E-05	8.41E-05
TP73	0.297261	5.59E-05	0.000288
TPBG	0.405228	2.01E-08	2.88E-07
TPCN1	-0.38616	1.02E-07	1.18E-06
TPCN2	-0.07088	0.347103	0.459566
TPD52L1	0.26723	0.000311	0.001266

TPD52L2	0.171165	0.022347	0.048736
TPD52L3	0.121469	0.106273	0.179488
TPD52	-0.16132	0.031464	0.065162
TPH1	-0.43601	1.18E-09	2.43E-08
TPH2	-0.32946	7.10E-06	4.82E-05
TPI1P2	-0.32085	1.26E-05	7.95E-05
TPI1P3	0.079773	0.289832	0.399327
TPI1	0.155117	0.03869	0.077474
TPK1	0.053488	0.478264	0.587925
TPM1	0.223926	0.002658	0.007961
TPM2	0.326137	8.89E-06	5.86E-05
TPM3	0.336824	4.28E-06	3.11E-05
TPM4	0.469908	3.65E-11	1.16E-09
TPMT	0.060912	0.419271	0.531487
TPO	-0.18621	0.012825	0.030543
TPP1	-0.20656	0.00567	0.015235
TPP2	-0.05017	0.505983	0.612897
TPPP2	-0.01085	0.885704	0.920477
TPPP3	-0.06918	0.358846	0.472016
TPPP	-0.3187	1.45E-05	8.98E-05
TPRA1	0.265677	0.000338	0.001358
TPRG1L	0.142336	0.058055	0.108628
TPRG1	0.456333	1.54E-10	4.11E-09
TPRKB	0.160522	0.032319	0.066689
TPRN	0.00784	0.917282	0.942496
TPRX1	0.034744	0.645221	0.735409
TPRXL	0.312191	2.21E-05	0.000129
TPR	0.065878	0.382295	0.495088
TPSAB1	0.112389	0.135272	0.217513
TPSB2	0.060271	0.424185	0.536478
TPSD1	-0.10798	0.151378	0.238097
TPSG1	-0.17904	0.016791	0.038305
TPST1	-0.29328	7.10E-05	0.000353
TPST2	-0.14834	0.048136	0.093045
TPT1	0.128969	0.086216	0.151098
TPTE2P1	0.06244	0.407675	0.519887
TPTE2P3	-0.03897	0.605498	0.701577
TPTE2	-0.04662	0.536613	0.640103
TPTE	-0.23087	0.001932	0.006056
TPX2	0.385545	1.07E-07	1.23E-06
TRA2A	0.108413	0.149736	0.23604
TRA2B	-0.04444	0.555894	0.657352
TRABD	0.323733	1.04E-05	6.75E-05
TRADD	0.541829	5.71E-15	4.43E-13
TRAF1	-0.05416	0.472783	0.582662
TRAF2	0.183118	0.014421	0.033714
TRAF3IP1	0.049522	0.511534	0.61779
TRAF3IP2	-0.19555	0.008898	0.022315
TRAF3IP3	0.008306	0.912379	0.938727
TRAF3	-0.10896	0.14768	0.233301
TRAF4	0.529704	2.90E-14	1.93E-12
TRAF5	0.179102	0.016754	0.038251
TRAF6	0.013934	0.85354	0.897618
TRAF7	0.195604	0.008881	0.022285

TRAFD1	0.033137	0.660582	0.749031
TRAIIP	0.226926	0.002318	0.007086
TRAK1	0.446577	4.15E-10	9.87E-09
TRAK2	-0.17442	0.019884	0.044228
TRAMIL1	-0.20742	0.005469	0.014762
TRAM1	0.098428	0.191172	0.286969
TRAM2	-0.32868	7.49E-06	5.05E-05
TRANK1	0.01062	0.888117	0.922305
TRAP1	0.093053	0.216673	0.317959
TRAPPC10	-0.0518	0.492291	0.600899
TRAPPC1	-0.02907	0.700061	0.780855
TRAPPC2L	0.227646	0.002243	0.006892
TRAPPC2P1	0.259734	0.000463	0.001777
TRAPPC2	0.082988	0.270767	0.378572
TRAPPC3	0.108736	0.148516	0.234397
TRAPPC4	0.102753	0.172299	0.264132
TRAPPC5	0.193406	0.009692	0.024056
TRAPPC6A	0.394955	4.88E-08	6.26E-07
TRAPPC6B	0.077338	0.304851	0.415332
TRAPPC9	-0.11825	0.115926	0.192148
TRAT1	-0.1141	0.129403	0.209702
TRDMT1	-0.35584	1.09E-06	9.38E-06
TRDN	-0.15937	0.033598	0.068889
TREH	0.096795	0.198676	0.296253
TREM1	0.379285	1.78E-07	1.94E-06
TREM2	0.265551	0.00034	0.001366
TREML1	-0.02111	0.779753	0.843311
TREML2P1	0.089393	0.235373	0.339306
TREML2	0.060044	0.425938	0.53811
TREML3	0.260349	0.000449	0.001732
TREML4	0.012696	0.866422	0.907545
TRERF1	0.214318	0.00407	0.011498
TREX1	0.173007	0.020923	0.046113
TREX2	0.149178	0.046879	0.091033
TRHDE	-0.0644	0.393062	0.505752
TRHR	-0.08882	0.238395	0.342519
TRH	-0.01399	0.852971	0.897166
TRIAP1	-0.03105	0.680736	0.765388
TRIB1	0.168341	0.024692	0.053088
TRIB2	0.353623	1.29E-06	1.08E-05
TRIB3	-0.12865	0.086995	0.152274
TRIL	-0.05281	0.483831	0.592953
TRIM10	0.376278	2.26E-07	2.39E-06
TRIM11	0.313651	2.01E-05	0.000119
TRIM13	0.09378	0.213089	0.313631
TRIM14	0.343402	2.70E-06	2.07E-05
TRIM15	0.474138	2.31E-11	7.56E-10
TRIM16L	0.169945	0.023336	0.050613
TRIM16	0.573614	5.82E-17	7.88E-15
TRIM17	0.189034	0.011501	0.02783
TRIM21	0.403018	2.44E-08	3.43E-07
TRIM22	0.174489	0.019834	0.044127
TRIM23	-0.35344	1.30E-06	1.09E-05
TRIM24	-0.3744	2.63E-07	2.72E-06

TRIM25	-0.24264	0.001101	0.003731
TRIM26	0.205303	0.005975	0.015928
TRIM27	-0.05746	0.446125	0.557487
TRIM28	0.099944	0.184391	0.278599
TRIM29	0.682316	9.94E-26	1.40E-22
TRIM2	-0.12366	0.10007	0.170716
TRIM31	0.515794	1.73E-13	9.76E-12
TRIM32	-0.07369	0.328281	0.440216
TRIM33	-0.17695	0.018137	0.040868
TRIM34	0.355649	1.11E-06	9.48E-06
TRIM35	-0.05402	0.4739	0.583711
TRIM36	-0.11147	0.13851	0.22163
TRIM37	-0.36556	5.23E-07	4.95E-06
TRIM38	0.228438	0.002163	0.006681
TRIM39	-0.32936	7.15E-06	4.84E-05
TRIM3	-0.19199	0.010249	0.025212
TRIM40	0.003384	0.964246	0.975694
TRIM41	0.026374	0.726751	0.802119
TRIM42	-0.09107	0.226667	0.329276
TRIM43	-0.0577	0.444259	0.555893
TRIM44	-0.2144	0.004055	0.011463
TRIM45	0.218467	0.003393	0.009804
TRIM46	-0.12085	0.10808	0.181949
TRIM47	0.480328	1.16E-11	4.08E-10
TRIM49L	0.096865	0.198349	0.295789
TRIM49	-0.09526	0.205921	0.305125
TRIM4	-0.12919	0.085678	0.150368
TRIM50	-0.08006	0.288122	0.397414
TRIM52	-0.05783	0.443245	0.554993
TRIM53	-0.06563	0.384121	0.496963
TRIM54	0.578257	2.85E-17	4.03E-15
TRIM55	-0.12879	0.086662	0.151797
TRIM56	-0.11418	0.129118	0.209362
TRIM58	-0.30091	4.48E-05	0.000239
TRIM59	0.277671	0.000175	0.000772
TRIM5	0.308527	2.79E-05	0.000158
TRIM6-TRI	0.060065	0.425778	0.538045
TRIM61	-0.17159	0.022012	0.048106
TRIM62	-0.12279	0.102509	0.174187
TRIM63	-0.05764	0.44474	0.556266
TRIM65	0.07945	0.291794	0.401386
TRIM66	-0.04096	0.58725	0.685697
TRIM67	-0.36751	4.50E-07	4.34E-06
TRIM68	-0.16228	0.030453	0.063462
TRIM69	0.176787	0.018244	0.041069
TRIM6	0.24246	0.001111	0.003758
TRIM71	-0.13034	0.08291	0.146419
TRIM72	-0.08597	0.253888	0.360065
TRIM74	-0.02586	0.731915	0.806154
TRIM78P	0.214815	0.003983	0.011285
TRIM7	0.492078	3.04E-12	1.24E-10
TRIM8	0.358402	9.01E-07	7.92E-06
TRIM9	-0.33016	6.77E-06	4.62E-05
TRIML1	-0.07009	0.352512	0.465233

TRIML2	-0.09098	0.227156	0.329769
TRIOBP	0.367493	4.51E-07	4.34E-06
TRIO	-0.15503	0.038803	0.077654
TRIP10	0.690987	1.35E-26	2.43E-23
TRIP11	-0.22233	0.002856	0.008478
TRIP12	0.0212	0.778796	0.842902
TRIP13	0.239307	0.001295	0.004294
TRIP4	0.276133	0.000191	0.000831
TRIP6	0.608959	1.91E-19	5.04E-17
TRIT1	-0.12839	0.087637	0.15314
TRMT112	0.305547	3.36E-05	0.000187
TRMT11	0.182474	0.014775	0.034423
TRMT12	0.040137	0.594774	0.692116
TRMT1	0.179832	0.016307	0.037426
TRMT2A	0.05484	0.467198	0.577327
TRMT2B	-0.11671	0.12079	0.198315
TRMT5	-0.12496	0.096522	0.165709
TRMT61A	0.217953	0.003471	0.009996
TRMT61B	0.023842	0.752085	0.822278
TRMT6	-0.10832	0.15009	0.23639
TRMU	-0.17291	0.020994	0.046259
TRNAU1AP	0.202983	0.00658	0.017318
TRNP1	0.357688	9.50E-07	8.29E-06
TRNT1	0.2446	0.001	0.003434
TROAP	0.299988	4.74E-05	0.000251
TROVE2	0.018857	0.80272	0.860978
TRO	-0.25565	0.000573	0.002136
TRPA1	-0.14616	0.051568	0.098561
TRPC1	-0.14777	0.049022	0.094415
TRPC2	0.217652	0.003518	0.010116
TRPC3	0.059216	0.432354	0.544165
TRPC4AP	-0.05526	0.463749	0.573997
TRPC4	-0.23031	0.001983	0.00619
TRPC5	-0.17677	0.018254	0.041087
TRPC6	-0.1398	0.062717	0.115903
TRPC7	-0.30679	3.11E-05	0.000174
TRPM1	-0.0516	0.493939	0.602204
TRPM2	-0.0351	0.641844	0.732869
TRPM3	-0.25486	0.000597	0.002208
TRPM4	0.548868	2.16E-15	1.81E-13
TRPM5	0.08882	0.238404	0.342519
TRPM6	-0.35754	9.61E-07	8.37E-06
TRPM7	-0.2012	0.007079	0.018402
TRPM8	0.220153	0.003149	0.009201
TRPS1	0.147321	0.049718	0.095532
TRPT1	0.236377	0.00149	0.00484
TRPV1	-0.03937	0.601842	0.698159
TRPV2	0.136544	0.069153	0.125962
TRPV3	0.084458	0.262342	0.369273
TRPV4	0.372238	3.11E-07	3.17E-06
TRPV5	-0.06667	0.376565	0.489366
TRPV6	0.193943	0.009487	0.023607
TRRAP	-0.31446	1.91E-05	0.000114
TRUB1	-0.32346	1.06E-05	6.85E-05

TRUB2	-0.02247	0.765925	0.833309
TRY6	-0.06274	0.405423	0.51797
TRYX3	-0.05573	0.459974	0.570431
TSC1	-0.2747	0.000207	0.00089
TSC22D1	0.210822	0.004732	0.013071
TSC22D2	0.114289	0.128752	0.208907
TSC22D3	0.092682	0.218521	0.320077
TSC22D4	0.238193	0.001366	0.004491
TSC2	-0.08107	0.282059	0.390713
TSEN15	0.132193	0.07858	0.140074
TSEN2	0.067421	0.371223	0.484334
TSEN34	0.073077	0.332347	0.444553
TSEN54	0.060665	0.421161	0.533336
TSFM	-0.18325	0.01435	0.033561
TSG101	0.325944	9.00E-06	5.92E-05
TSG1	-0.18948	0.011304	0.027426
TSGA10IP	0.118282	0.115837	0.192064
TSGA10	-0.16757	0.025368	0.054283
TSGA13	-0.22444	0.002597	0.007808
TSGA14	-0.38658	9.83E-08	1.15E-06
TSHB	-0.29954	4.87E-05	0.000257
TSHR	-0.23621	0.001502	0.004874
TSHZ1	-0.46428	6.68E-11	1.97E-09
TSHZ2	-0.05623	0.455964	0.566916
TSHZ3	-0.07791	0.301247	0.4114
TSIX	0.080666	0.28445	0.393364
TSKS	0.145867	0.052039	0.099269
TSKU	0.457902	1.31E-10	3.57E-09
TSLP	0.095335	0.205567	0.304691
TSNARE1	0.148061	0.048571	0.093701
TSNAX-DIS	0.114142	0.129247	0.209503
TSNAXIP1	-0.17281	0.021074	0.046406
TSNAX	-0.24724	0.000877	0.003074
TSN	0.067436	0.371114	0.484224
TSPAN10	0.126448	0.092589	0.160081
TSPAN11	-0.18174	0.015185	0.035201
TSPAN12	-0.23948	0.001284	0.004265
TSPAN13	-0.11418	0.129104	0.209357
TSPAN14	0.334847	4.91E-06	3.50E-05
TSPAN15	0.498129	1.49E-12	6.70E-11
TSPAN16	-0.01675	0.82441	0.875739
TSPAN17	0.278833	0.000164	0.00073
TSPAN18	0.049764	0.509466	0.616007
TSPAN19	-0.31516	1.83E-05	0.00011
TSPAN1	0.571339	8.21E-17	1.03E-14
TSPAN2	-0.03479	0.644771	0.73498
TSPAN31	0.117962	0.116833	0.193246
TSPAN32	0.007404	0.921863	0.945749
TSPAN33	-0.37183	3.22E-07	3.25E-06
TSPAN3	0.2894	8.93E-05	0.000431
TSPAN4	0.154289	0.039753	0.07929
TSPAN5	0.143375	0.056228	0.10592
TSPAN6	0.211316	0.004633	0.012828
TSPAN7	-0.44212	6.47E-10	1.46E-08

TSPAN8	0.388589	8.32E-08	9.95E-07
TSPAN9	0.08909	0.23697	0.340863
TSP02	0.143102	0.056704	0.106534
TSP0	0.613364	8.91E-20	2.48E-17
TSPY2	0.012314	0.870415	0.910521
TSPYL1	-0.46197	8.53E-11	2.44E-09
TSPYL2	-0.39843	3.63E-08	4.79E-07
TSPYL3	-0.30733	3.01E-05	0.000169
TSPYL4	-0.37653	2.22E-07	2.34E-06
TSPYL5	-0.17119	0.022327	0.048705
TSPYL6	0.036369	0.629831	0.722406
TSR1	-0.35971	8.17E-07	7.29E-06
TSR2	-0.19129	0.010534	0.025831
TSSC1	0.248951	0.000805	0.002863
TSSC4	0.072992	0.332908	0.445154
TSSK1B	-0.10016	0.183442	0.277449
TSSK3	-0.01075	0.886778	0.92116
TSSK4	-0.05137	0.495876	0.603598
TSSK6	0.03894	0.605813	0.701818
TSTA3	0.364794	5.55E-07	5.22E-06
TSTD1	0.241015	0.001192	0.003997
TSTD2	-0.438	9.71E-10	2.08E-08
TST	0.345289	2.36E-06	1.83E-05
TTBK1	-0.06679	0.375715	0.488743
TTBK2	-0.25515	0.000588	0.002181
TTC12	-0.04777	0.526616	0.631875
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TTC14	0.159628	0.033307	0.06842
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TTC17	-0.3127	2.14E-05	0.000126
TTC18	-0.28373	0.000124	0.000574
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TTC1	0.192137	0.010189	0.025087
TTC21A	-0.14827	0.048253	0.093188
TTC21B	-0.31295	2.11E-05	0.000124
TTC22	0.284262	0.00012	0.000559
TTC23L	-0.32983	6.93E-06	4.71E-05
TTC23	0.304933	3.49E-05	0.000192
TTC24	-0.11473	0.127275	0.206934
TTC25	-0.30615	3.24E-05	0.000181
TTC26	-0.29141	7.93E-05	0.000388
TTC27	0.242362	0.001116	0.003775
TTC28	-0.24327	0.001068	0.00363
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TTC30A	-0.26203	0.000411	0.001606
TTC30B	-0.22068	0.003075	0.00902
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TTC32	-0.04327	0.566291	0.666655
TTC33	-0.37453	2.60E-07	2.70E-06
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TTC39A	0.023471	0.755815	0.825125
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TTC3	-0.37779	2.01E-07	2.15E-06
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TTC5	-0.30774	2.93E-05	0.000165
TTC7A	0.461026	9.42E-11	2.66E-09
TTC7B	-0.3415	3.09E-06	2.33E-05
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TTC9B	0.025392	0.736537	0.809602
TTC9C	0.418801	5.96E-09	1.01E-07
TTC9	0.412196	1.09E-08	1.69E-07
TTF1	-0.00701	0.925991	0.948806
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TTK	0.277711	0.000175	0.000771
TTLL10	-0.02597	0.73074	0.805264
TTLL11	-0.46114	9.31E-11	2.63E-09
TTLL12	0.459004	1.16E-10	3.22E-09
TTLL13	0.174284	0.019982	0.044391
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TTLL2	-0.11882	0.114177	0.189917
TTLL3	0.188777	0.011616	0.02807
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TTLL8	-0.04364	0.563033	0.663731
TTLL9	-0.17194	0.021738	0.047586
TTL	-0.32197	1.17E-05	7.47E-05
TTN	-0.21724	0.003582	0.010273
TTPAL	-0.24148	0.001165	0.003918
TTPA	-0.08929	0.235894	0.339883
TTR	-0.07355	0.3292	0.441179
TTY10	-0.04197	0.57806	0.677085
TTY14	-0.04017	0.59451	0.691886
TTY15	-0.09161	0.223893	0.3261
TTY1B	-0.05368	0.476698	0.586318
TTY2	-0.03947	0.600886	0.697378
TTY4C	-0.31535	1.81E-05	0.000109
TTY6	-0.018	0.811531	0.866621
TTY7	0.106935	0.155398	0.243338
TTY9B	-0.094	0.212013	0.312373
TYH1	-0.01199	0.873825	0.912727
TYH2	-0.26617	0.000329	0.001328
TYH3	0.354291	1.22E-06	1.03E-05
TUBA1A	-0.20058	0.007261	0.018796
TUBA1B	0.030485	0.686249	0.769919
TUBA1C	0.448922	3.28E-10	8.08E-09
TUBA3C	0.009386	0.901045	0.931029
TUBA3D	-0.09255	0.219195	0.320802
TUBA3E	-0.06444	0.39279	0.505502
TUBA4A	0.411463	1.16E-08	1.79E-07
TUBA4B	-0.04588	0.543095	0.646158
TUBA8	-0.05258	0.485811	0.594641

TUBAL3	0.279469	0.000158	0.000709
TUBB1	-0.45004	2.93E-10	7.33E-09
TUBB2A	0.076209	0.311984	0.422864
TUBB2B	-0.11358	0.131168	0.212061
TUBB2C	0.240268	0.001236	0.004125
TUBB3	0.215728	0.003828	0.010898
TUBB4Q	-0.09149	0.224518	0.326751
TUBB4	-0.04034	0.592886	0.6902
TUBB6	0.121666	0.105703	0.178688
TUBB8	-0.02464	0.744032	0.815638
TUBBP5	-0.05007	0.506898	0.613728
TUBB	0.289773	8.73E-05	0.000423
TUBD1	-0.33803	3.94E-06	2.88E-05
TUBE1	-0.34202	2.97E-06	2.26E-05
TUBG1	0.093195	0.215973	0.317096
TUBG2	-0.06683	0.375456	0.488471
TUBGCP2	0.069783	0.354657	0.467595
TUBGCP3	-0.1093	0.146418	0.231788
TUBGCP4	-0.1693	0.023873	0.051608
TUBGCP5	-0.12972	0.084397	0.148488
TUBGCP6	-0.11927	0.112817	0.188146
TUB	-0.27526	0.0002	0.000867
TUFM	0.182471	0.014776	0.034423
TUFT1	0.461691	8.78E-11	2.50E-09
TUG1	-0.03222	0.669425	0.756628
TULP1	0.008515	0.910181	0.937196
TULP2	-0.04985	0.508736	0.615253
TULP3	-0.12191	0.104995	0.177738
TULP4	-0.39086	6.88E-08	8.41E-07
TUSC1	-0.13129	0.080657	0.143171
TUSC2	-0.02964	0.694475	0.776274
TUSC3	-0.29949	4.88E-05	0.000257
TUSC5	-0.18844	0.011771	0.028368
TUT1	0.054428	0.470555	0.580676
TWF1	-0.03135	0.677867	0.763233
TWF2	0.535786	1.29E-14	9.24E-13
TWIST1	0.291407	7.93E-05	0.000388
TWIST2	-0.05567	0.460489	0.57082
TWISTNB	-0.11676	0.120639	0.198231
TWSG1	0.06574	0.383293	0.496153
TXK	-0.06396	0.396327	0.509059
TXLNA	-0.37774	2.01E-07	2.15E-06
TXLNB	-0.08626	0.252259	0.358139
TXLNG	-0.26604	0.000332	0.001336
TXN2	-0.00312	0.966988	0.977468
TXNDC11	-0.09759	0.195016	0.291743
TXNDC12	0.099683	0.185545	0.279967
TXNDC15	-0.35537	1.13E-06	9.65E-06
TXNDC16	-0.40879	1.47E-08	2.18E-07
TXNDC17	0.288951	9.16E-05	0.00044
TXNDC2	0.038178	0.612888	0.708355
TXNDC3	0.024004	0.750457	0.82088
TXNDC5	-0.29383	6.87E-05	0.000343
TXNDC6	-0.22228	0.002863	0.008496

TXNDC9	0.230263	0.001987	0.006199
TXNIP	0.243962	0.001032	0.003527
TXNL1	-0.25165	0.000703	0.002541
TXNL4A	-0.26127	0.000427	0.001662
TXNL4B	-0.0532	0.480642	0.590068
TXNRD1	-0.11179	0.137394	0.220218
TXNRD2	-0.0597	0.428591	0.540564
TXNRD3IT1	0.027235	0.718202	0.795125
TXN	0.476171	1.84E-11	6.19E-10
TYK2	0.00248	0.973792	0.982171
TYMP	0.390192	7.28E-08	8.84E-07
TYMS	0.237253	0.001429	0.004673
TYRO3	0.212787	0.004349	0.01214
TYROBP	0.169227	0.023935	0.051697
TYRP1	0.131549	0.080061	0.142291
TYR	-0.11133	0.139013	0.222236
TYSND1	0.102506	0.173338	0.265417
TYW1B	-0.24329	0.001066	0.003628
TYW1	-0.19464	0.009229	0.023051
TYW3	-0.2652	0.000347	0.001391
T	-0.09875	0.189709	0.285162
U2AF1L4	-0.03903	0.604987	0.701109
U2AF1	0.163793	0.028914	0.060702
U2AF2	-0.06105	0.418178	0.530441
UACA	0.276059	0.000192	0.000834
UAP1L1	-0.11122	0.139412	0.222767
UAP1	0.051186	0.497433	0.604935
UBA1	0.277137	0.00018	0.000791
UBA2	-0.17355	0.020515	0.045381
UBA3	0.150053	0.045588	0.089024
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UBA5	-0.25793	0.000509	0.00193
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UBA7	0.382077	1.42E-07	1.59E-06
UBAC1	-0.05796	0.44218	0.553993
UBAC2	0.507307	4.95E-13	2.51E-11
UBAP1	0.216589	0.003686	0.010539
UBAP2L	0.014201	0.850767	0.895511
UBAP2	-0.08461	0.261476	0.368263
UBASH3A	-0.09879	0.189523	0.284991
UBASH3B	0.301412	4.34E-05	0.000233
UBB	-0.12597	0.093827	0.161798
UBC	0.277619	0.000176	0.000773
UBD	0.286382	0.000106	0.000501
UBE2A	0.153642	0.040602	0.080729
UBE2B	0.046306	0.539367	0.642535
UBE2CBP	-0.29705	5.66E-05	0.000291
UBE2C	0.406498	1.80E-08	2.62E-07
UBE2D1	0.087347	0.246308	0.351247
UBE2D2	-0.05145	0.495201	0.603147
UBE2D3	-0.0728	0.334174	0.446423
UBE2D4	-0.37339	2.85E-07	2.91E-06
UBE2DNL	-0.09919	0.187724	0.282781
UBE2E1	0.275606	0.000196	0.000853

UBE2E2	-0.01648	0.827175	0.877588
UBE2E3	0.408927	1.45E-08	2.16E-07
UBE2F	-0.1156	0.1244	0.203162
UBE2G1	-0.4401	7.90E-10	1.73E-08
UBE2G2	-0.1429	0.057066	0.107092
UBE2H	0.03731	0.620994	0.715156
UBE2I	0.353425	1.30E-06	1.09E-05
UBE2J1	-0.42706	2.77E-09	5.16E-08
UBE2J2	-0.02591	0.731386	0.805907
UBE2K	-0.09735	0.196121	0.293018
UBE2L3	0.069279	0.35815	0.471226
UBE2L6	0.299771	4.80E-05	0.000254
UBE2MP1	-0.13009	0.083491	0.147236
UBE2M	0.10735	0.153794	0.241225
UBE2NL	-0.08212	0.275803	0.383741
UBE2N	-0.18174	0.015185	0.035201
UBE2O	-0.44807	3.58E-10	8.68E-09
UBE2Q1	0.040897	0.58781	0.686108
UBE2Q2P1	-0.0346	0.646558	0.73655
UBE2Q2	0.062576	0.406653	0.519019
UBE2QL1	-0.26604	0.000331	0.001336
UBE2R2	0.017287	0.81885	0.871706
UBE2S	0.141264	0.05999	0.111594
UBE2T	0.332141	5.92E-06	4.13E-05
UBE2U	-0.02301	0.760482	0.829121
UBE2V1	0.133731	0.075138	0.134984
UBE2V2	-0.05577	0.459701	0.570236
UBE2W	-0.16402	0.028694	0.060303
UBE2Z	0.203358	0.006478	0.017087
UBE3A	-0.21005	0.004891	0.013447
UBE3B	-0.24058	0.001217	0.004068
UBE3C	-0.18458	0.013642	0.032188
UBE4A	-0.00915	0.903522	0.932525
UBE4B	-0.35024	1.65E-06	1.34E-05
UBFD1	-0.29117	8.04E-05	0.000393
UBIAD1	-0.30316	3.90E-05	0.000212
UBL3	-0.30096	4.46E-05	0.000238
UBL4A	0.072169	0.338403	0.450612
UBL4B	0.090021	0.232089	0.335648
UBL5	0.173178	0.020794	0.04586
UBL7	0.05377	0.475943	0.585629
UBLCP1	0.072465	0.336423	0.448731
UBN1	-0.07692	0.307449	0.417921
UBN2	-0.34845	1.88E-06	1.50E-05
UBOX5	-0.26439	0.000362	0.001445
UBP1	-0.17542	0.019178	0.042865
UBQLN1	-0.21817	0.003438	0.00992
UBQLN2	-0.19829	0.00797	0.020378
UBQLN3	0.027011	0.720421	0.796778
UBQLN4	0.311405	2.33E-05	0.000135
UBQLNL	0.255508	0.000577	0.002148
UBR1	-0.10381	0.167884	0.25885
UBR2	-0.21925	0.003278	0.009515
UBR3	-0.36882	4.07E-07	3.98E-06

UBR4	-0.06058	0.421822	0.534037
UBR5	-0.14256	0.057665	0.108052
UBR7	-0.31655	1.67E-05	0.000101
UBTD1	0.243949	0.001033	0.003528
UBTD2	0.089813	0.233175	0.337014
UBTFL1	-0.04053	0.59112	0.688752
UBTF	-0.17231	0.021456	0.047067
UBXN10	0.129167	0.085729	0.15043
UBXN11	0.113549	0.131263	0.21218
UBXN1	0.313729	2.00E-05	0.000119
UBXN2A	0.062332	0.408488	0.520722
UBXN2B	-0.01163	0.877531	0.915042
UBXN4	-0.20292	0.006596	0.017355
UBXN6	0.022984	0.760729	0.829295
UBXN7	-0.23924	0.001299	0.004306
UBXN8	-0.08845	0.240366	0.344719
UCA1	0.496366	1.84E-12	8.11E-11
UCHL1	-0.28552	0.000112	0.000525
UCHL3	0.354035	1.25E-06	1.05E-05
UCHL5	0.02864	0.70432	0.784412
UCK1	-0.31869	1.45E-05	8.99E-05
UCK2	0.259352	0.000473	0.001809
UCKL1AS	-0.12657	0.092272	0.159688
UCKL1	0.04038	0.592535	0.689913
UCMA	-0.13525	0.071849	0.130081
UCN2	0.354365	1.22E-06	1.03E-05
UCN3	-0.16831	0.02472	0.053132
UCN	0.204006	0.006307	0.016684
UCP1	-0.19453	0.009268	0.023125
UCP2	-0.25481	0.000598	0.002211
UCP3	-0.05293	0.482873	0.592095
UEVLD	0.007467	0.921206	0.945398
UFC1	-0.01129	0.881052	0.917522
UFD1L	-0.00024	0.997422	0.997876
UFM1	0.056871	0.450835	0.561669
UFSP1	-0.0777	0.302579	0.412833
UFSP2	-0.11409	0.129411	0.209702
UGCG	-0.10128	0.178571	0.271516
UGDH	-0.09473	0.208452	0.308066
UGGT1	-0.18497	0.013443	0.031779
UGGT2	0.139761	0.062793	0.116023
UGP2	0.174186	0.020052	0.044492
UGT1A10	0.593279	2.63E-18	5.06E-16
UGT1A1	0.297644	5.46E-05	0.000283
UGT1A3	0.075613	0.315794	0.427092
UGT1A4	0.089236	0.236202	0.340173
UGT1A5	0.016736	0.824525	0.875767
UGT1A6	0.552386	1.31E-15	1.17E-13
UGT1A7	0.311088	2.37E-05	0.000137
UGT1A8	0.405668	1.94E-08	2.78E-07
UGT1A9	0.606941	2.70E-19	6.68E-17
UGT2A1	-0.0134	0.859114	0.901896
UGT2A3	0.18036	0.01599	0.036791
UGT2B10	-0.07355	0.329228	0.441186

UGT2B11	-0.16287	0.029847	0.062408
UGT2B15	-0.00839	0.911532	0.938001
UGT2B28	-0.05913	0.433059	0.544795
UGT2B4	-0.21341	0.004234	0.011876
UGT2B7	0.128458	0.087479	0.152914
UGT3A1	-0.13099	0.081357	0.144256
UGT3A2	0.001478	0.984382	0.989185
UGT8	0.172275	0.021479	0.047108
UHMK1	-0.08268	0.272541	0.380568
UHRF1BP1I	-0.26645	0.000324	0.001311
UHRF1BP1	-0.41201	1.10E-08	1.72E-07
UHRF1	0.423488	3.87E-09	6.95E-08
UHRF2	-0.02983	0.692598	0.774673
UIMC1	0.071283	0.344387	0.456737
ULBP1	-0.00667	0.929617	0.951325
ULBP2	0.230189	0.001994	0.006217
ULBP3	0.109694	0.144952	0.229818
ULK1	-0.23377	0.001686	0.00539
ULK2	-0.45382	1.99E-10	5.17E-09
ULK3	0.025476	0.735701	0.808972
ULK4	-0.28667	0.000105	0.000495
UMODL1	-0.11226	0.135731	0.218077
UMOD	-0.1244	0.098042	0.167892
UMPS	0.21347	0.004223	0.01185
UNC119B	-0.58631	8.08E-18	1.33E-15
UNC119	-0.08344	0.268157	0.375773
UNC13A	-0.39395	5.31E-08	6.72E-07
UNC13B	-0.29259	7.39E-05	0.000366
UNC13C	0.075035	0.319522	0.431249
UNC13D	0.573293	6.11E-17	8.16E-15
UNC45A	0.063639	0.398709	0.511292
UNC45B	-0.12185	0.105175	0.178014
UNC50	-0.03546	0.638412	0.729793
UNC5A	0.083308	0.268914	0.376568
UNC5B	0.224793	0.002556	0.007703
UNC5CL	0.180381	0.015978	0.036772
UNC5C	-0.06473	0.390627	0.503307
UNC5D	-0.28785	9.78E-05	0.000466
UNC80	-0.30606	3.26E-05	0.000181
UNC93A	0.028687	0.70386	0.784031
UNC93B1	0.63015	4.34E-21	1.83E-18
UNG	0.045245	0.548709	0.651193
UNKL	-0.09288	0.217536	0.318893
UNK	-0.31094	2.40E-05	0.000138
UOX	-0.18595	0.012951	0.030774
UPB1	-0.21032	0.004834	0.013317
UPF0639	0.077161	0.30596	0.416212
UPF1	0.029416	0.696698	0.778114
UPF2	-0.12386	0.099508	0.16989
UPF3A	-0.09414	0.211334	0.311557
UPF3B	-0.07389	0.327	0.439034
UPK1A	0.099785	0.185094	0.279414
UPK1B	0.135505	0.071318	0.129285
UPK2	0.362513	6.60E-07	6.08E-06

UPK3A	0.040535	0.591118	0.688752
UPK3BL	0.189565	0.011267	0.027352
UPK3B	0.34209	2.96E-06	2.25E-05
UPP1	0.385775	1.05E-07	1.21E-06
UPP2	-0.10724	0.154205	0.241735
UPRT	-0.3596	8.23E-07	7.34E-06
UQCC	-0.22273	0.002805	0.008343
UQCR10	0.066066	0.380936	0.493651
UQCR11	0.090043	0.231973	0.33553
UQCRB	-0.10583	0.159732	0.24841
UQCRC1	0.216901	0.003636	0.010417
UQCRC2	0.172728	0.021133	0.046504
UQCRFS1	0.008956	0.905555	0.934162
UQCRHL	0.126905	0.091407	0.158406
UQCRH	0.161049	0.031748	0.065627
UQCRQ	0.124786	0.096992	0.16637
URB1	-0.12878	0.086672	0.151797
URB2	-0.16295	0.029762	0.062258
URGCP	-0.07871	0.29632	0.406256
URM1	0.162451	0.030272	0.063143
UROC1	-0.11316	0.1326	0.213904
UROD	0.034253	0.6499	0.738995
UROS	0.089824	0.233114	0.336959
USE1	0.144891	0.053648	0.101828
USF1	0.377766	2.01E-07	2.15E-06
USF2	-0.12811	0.088345	0.154091
USH1C	0.226531	0.002361	0.007197
USH1G	-0.12649	0.092468	0.159928
USH2A	-0.35812	9.20E-07	8.06E-06
USHBP1	-0.17901	0.016811	0.038346
USMG5	0.149022	0.047112	0.091432
US01	-0.35315	1.33E-06	1.11E-05
USP10	0.040349	0.592826	0.690171
USP11	-0.32638	8.74E-06	5.77E-05
USP12	-0.2022	0.006796	0.017802
USP13	-0.52992	2.82E-14	1.89E-12
USP14	-0.03676	0.626192	0.719696
USP15	-0.12087	0.108019	0.181877
USP16	-0.36957	3.84E-07	3.78E-06
USP17L2	0.022745	0.763146	0.831358
USP17L6P	0.047843	0.525966	0.631325
USP17	-0.07339	0.330281	0.442418
USP18	0.128562	0.08722	0.152573
USP19	-0.17872	0.016993	0.038708
USP1	-0.24686	0.000894	0.003123
USP20	-0.30034	4.64E-05	0.000246
USP21	0.00789	0.916749	0.942193
USP22	-0.59391	2.38E-18	4.70E-16
USP24	-0.08899	0.237486	0.341421
USP25	-0.02623	0.728165	0.803158
USP26	0.190456	0.010883	0.02656
USP27X	-0.41176	1.13E-08	1.75E-07
USP28	-0.17865	0.017037	0.038782
USP29	-0.03723	0.621777	0.715838

USP2	-0.3419	3.00E-06	2.27E-05
USP30	-0.44215	6.46E-10	1.45E-08
USP31	-0.24291	0.001087	0.003688
USP32	-0.06644	0.378216	0.490931
USP33	-0.18683	0.012522	0.029938
USP34	-0.20727	0.005503	0.014844
USP35	0.059063	0.433553	0.545153
USP36	-0.26968	0.000272	0.001128
USP37	-0.08543	0.256891	0.363281
USP38	-0.28073	0.000147	0.000665
USP39	0.325983	8.98E-06	5.91E-05
USP3	0.201151	0.007095	0.018426
USP40	0.059661	0.428897	0.540881
USP42	-0.37782	2.00E-07	2.14E-06
USP43	0.297431	5.53E-05	0.000286
USP44	-0.2209	0.003046	0.008958
USP45	-0.29778	5.42E-05	0.000281
USP46	-0.36148	7.14E-07	6.51E-06
USP47	-0.2637	0.000376	0.001488
USP48	-0.05852	0.437762	0.549398
USP49	-0.16158	0.031179	0.064686
USP4	0.305267	3.42E-05	0.000189
USP50	0.092753	0.218164	0.319649
USP51	-0.44335	5.73E-10	1.31E-08
USP53	-0.04306	0.568181	0.668007
USP54	0.305459	3.38E-05	0.000187
USP5	-0.19577	0.008823	0.022181
USP6NL	0.165862	0.026923	0.057134
USP6	-0.14123	0.060052	0.111687
USP7	-0.26854	0.00029	0.001193
USP8	-0.23592	0.001523	0.004934
USP9X	-0.30073	4.53E-05	0.000241
USP9Y	-0.07727	0.305251	0.415493
USPL1	-0.18516	0.013347	0.031574
UST	0.222694	0.00281	0.008357
UTF1	0.020662	0.78427	0.846932
UTP11L	-0.13761	0.066999	0.122568
UTP14A	0.110637	0.141506	0.225493
UTP14C	-0.11308	0.132859	0.2142
UTP15	-0.07012	0.352324	0.465046
UTP18	-0.10731	0.153931	0.241384
UTP20	-0.35958	8.25E-07	7.35E-06
UTP23	-0.22568	0.002455	0.007443
UTP3	0.089346	0.235621	0.339589
UTP6	0.202994	0.006577	0.017315
UTRN	-0.26794	0.000299	0.001226
UTS2D	0.04888	0.517032	0.623173
UTS2R	-0.1262	0.093242	0.160985
UTS2	0.211007	0.004695	0.012975
UTY	-0.07604	0.313035	0.423908
UVRAG	-0.0666	0.377066	0.489695
UXS1	0.051382	0.495785	0.603561
UXT	0.045965	0.542356	0.645473
VAC14	0.130274	0.083056	0.146612

VAMP1	-0.06935	0.357643	0.470685
VAMP2	-0.39867	3.55E-08	4.71E-07
VAMP3	0.220104	0.003156	0.009219
VAMP4	-0.0297	0.693886	0.775718
VAMP5	0.154386	0.039628	0.079112
VAMP7	-0.15173	0.043205	0.085093
VAMP8	0.520952	9.02E-14	5.39E-12
VANGL1	0.312591	2.16E-05	0.000126
VANGL2	0.194947	0.009116	0.022784
VAPA	0.031353	0.677811	0.763228
VAPB	-0.3466	2.14E-06	1.69E-05
VARS2	0.128268	0.087952	0.153582
VARS	0.183309	0.014317	0.0335
VASH1	-0.26465	0.000357	0.001428
VASH2	-0.02918	0.699026	0.78001
VASN	0.236783	0.001462	0.004761
VASP	0.637186	1.16E-21	6.19E-19
VAT1L	-0.24664	0.000904	0.003152
VAT1	0.046522	0.537468	0.64085
VAV1	0.260857	0.000437	0.001693
VAV2	0.120494	0.109133	0.183332
VAV3	-0.1729	0.021004	0.046273
VAX1	-0.00241	0.97448	0.982585
VAX2	-0.00524	0.944649	0.962704
VBP1	-0.30084	4.50E-05	0.00024
VCAM1	0.236773	0.001462	0.004762
VCAN	0.177586	0.017717	0.040084
VCL	0.333081	5.55E-06	3.90E-05
VCPIP1	-0.12788	0.088934	0.154941
VCP	-0.10119	0.178955	0.271975
VCX2	0.018457	0.806818	0.86322
VCX3A	-0.00332	0.964926	0.976232
VCX3B	0.004347	0.954079	0.968577
VCX	0.014701	0.845577	0.891092
VDAC1	0.346759	2.12E-06	1.67E-05
VDAC2	0.219599	0.003227	0.009399
VDAC3	0.126378	0.092771	0.160331
VDR	0.426516	2.91E-09	5.41E-08
VEGFA	0.102745	0.172333	0.264144
VEGFB	0.081529	0.279308	0.387709
VEGFC	-0.05082	0.50053	0.607693
VENTXP7	0.07036	0.350687	0.46338
VENTX	0.056992	0.44987	0.560785
VEPH1	0.114024	0.129645	0.209976
VEZF1	-0.23215	0.00182	0.00575
VEZT	0.245103	0.000976	0.003361
VGf	-0.19447	0.009291	0.023177
VGLL1	0.399949	3.18E-08	4.27E-07
VGLL2	-0.00399	0.957886	0.971181
VGLL3	0.089137	0.236725	0.340634
VGLL4	0.323395	1.07E-05	6.88E-05
VHLL	-0.11553	0.124633	0.203425
VHL	-0.14577	0.052195	0.099519
VIL1	0.039592	0.599785	0.696467

VILL	0.729819	6.96E-31	4.59E-27
VIM	0.065487	0.385131	0.49787
VIPAR	0.152252	0.042476	0.083899
VIPR1	-0.09912	0.188037	0.283122
VIPR2	-0.24592	0.000937	0.003247
VIP	-0.05172	0.492951	0.601386
VIT	-0.17428	0.019987	0.044396
VKORC1L1	-0.04135	0.583691	0.682227
VKORC1	-0.02665	0.723981	0.799776
VLDLR	-0.34081	3.24E-06	2.44E-05
VMA21	-0.23672	0.001466	0.004773
VMAC	0.087722	0.244279	0.349041
VM01	0.139689	0.06293	0.116211
VN1R1	0.004465	0.952833	0.96786
VN1R2	-0.17722	0.017955	0.04053
VN1R5	0.01042	0.890209	0.923654
VNN1	0.195609	0.008879	0.022283
VNN2	-0.00448	0.952699	0.967792
VNN3	-0.12064	0.1087	0.182729
VOPP1	-0.09769	0.194528	0.291144
VPRBP	-0.13557	0.071186	0.129069
VPREB1	0.076565	0.309723	0.420223
VPREB3	-0.03117	0.67955	0.764359
VPS11	-0.03174	0.674071	0.760358
VPS13A	-0.13883	0.064578	0.118788
VPS13B	-0.20402	0.006302	0.016673
VPS13C	-0.27312	0.000225	0.000959
VPS13D	-0.23067	0.00195	0.006098
VPS16	-0.13045	0.082646	0.14608
VPS18	-0.0045	0.952513	0.967776
VPS24	0.16598	0.026813	0.05695
VPS25	0.145518	0.052611	0.100185
VPS26A	0.282353	0.000134	0.000615
VPS26B	-0.27721	0.00018	0.000789
VPS28	0.24467	0.000997	0.003425
VPS29	0.11544	0.124919	0.203842
VPS33A	-0.39863	3.57E-08	4.72E-07
VPS33B	0.077751	0.302269	0.412525
VPS35	0.170217	0.023111	0.050165
VPS36	0.020137	0.789625	0.851087
VPS37A	-0.17622	0.018627	0.041794
VPS37B	0.359543	8.27E-07	7.36E-06
VPS37C	0.263689	0.000376	0.001488
VPS37D	-0.08786	0.243532	0.348199
VPS39	-0.10198	0.175577	0.267952
VPS41	-0.20895	0.005125	0.013991
VPS45	0.11783	0.117248	0.193762
VPS4A	0.154529	0.039443	0.078815
VPS4B	-0.10586	0.159631	0.248292
VPS52	0.016971	0.8221	0.873998
VPS53	-0.46556	5.83E-11	1.76E-09
VPS54	-0.3502	1.65E-06	1.35E-05
VPS72	0.19469	0.00921	0.023007
VPS8	-0.07867	0.296562	0.406433

VRK1	0.06453	0.392129	0.504815
VRK2	0.141256	0.060006	0.111613
VRK3	0.084803	0.260392	0.367025
VSIG10L	0.287781	9.81E-05	0.000467
VSIG10	0.213987	0.004129	0.011634
VSIG1	0.441617	6.80E-10	1.52E-08
VSIG2	0.643362	3.53E-22	2.05E-19
VSIG4	0.022419	0.766436	0.833544
VSIG8	-0.12014	0.110177	0.184819
VSNL1	0.167748	0.025211	0.054008
VSTM1	0.152427	0.042236	0.083499
VSTM2A	-0.21674	0.003662	0.010485
VSTM2B	-0.12762	0.089579	0.155791
VSTM2L	0.355997	1.08E-06	9.28E-06
VSX1	-0.08553	0.256303	0.362658
VSX2	-0.1114	0.138766	0.221971
VT A1	-0.15765	0.035588	0.072294
VTCN1	0.190603	0.01082	0.026428
VTI1A	0.216727	0.003664	0.010489
VTI1B	0.201327	0.007044	0.018336
VTN	-0.23296	0.001752	0.005566
VWA1	0.124845	0.096833	0.16617
VWA2	0.346002	2.24E-06	1.75E-05
VWA3A	0.231505	0.001876	0.005903
VWA3B	0.118134	0.116299	0.192556
VWA5A	0.06166	0.413568	0.525639
VWA5B1	0.005971	0.936954	0.957213
VWA5B2	-0.26959	0.000274	0.001133
VWC2L	-0.22496	0.002536	0.007653
VWC2	-0.11115	0.139649	0.223055
VWCE	-0.09523	0.206078	0.305243
VWDE	-0.07127	0.344457	0.456773
VWF	-0.20039	0.007319	0.018922
WAC	-0.31324	2.07E-05	0.000122
WAPAL	-0.09408	0.211616	0.311857
WARS2	0.071432	0.343376	0.455638
WARS	-0.09255	0.219176	0.320802
WASF1	-0.22032	0.003125	0.009145
WASF2	-0.16765	0.025298	0.054165
WASF3	-0.54928	2.04E-15	1.72E-13
WASH2P	0.1005	0.18195	0.275657
WASH3P	0.083513	0.267738	0.375291
WASH5P	0.13073	0.081974	0.145143
WASH7P	0.133863	0.074848	0.134537
WASL	-0.01772	0.814345	0.868557
WAS	0.038293	0.611815	0.707363
WBP11P1	-0.22608	0.00241	0.007322
WBP11	-0.23121	0.001902	0.005972
WBP1	-0.00899	0.90521	0.933975
WBP2NL	0.110135	0.143334	0.227708
WBP2	0.048441	0.520805	0.626462
WBP4	-0.18784	0.012046	0.028974
WBP5	0.039273	0.602734	0.698907
WBSCR16	0.003168	0.96652	0.977194

WBSCR17	0.061362	0.415836	0.52825
WBSCR22	0.089169	0.236557	0.340467
WBSCR26	0.585476	9.22E-18	1.50E-15
WBSCR27	-0.07871	0.29631	0.406256
WBSCR28	0.017021	0.821587	0.873632
WDFY1	0.190651	0.0108	0.026385
WDFY2	-0.43195	1.74E-09	3.43E-08
WDFY3	-0.3104	2.48E-05	0.000142
WDFY4	-0.00749	0.920933	0.945329
WDHD1	0.054959	0.46623	0.576346
WDR11	0.015877	0.8334	0.881904
WDR12	0.134965	0.072463	0.130928
WDR13	0.083799	0.266094	0.373571
WDR16	-0.27333	0.000223	0.000949
WDR17	-0.32097	1.25E-05	7.90E-05
WDR18	0.176129	0.018687	0.041915
WDR19	-0.41529	8.21E-09	1.34E-07
WDR1	0.2307	0.001947	0.006093
WDR20	-0.25876	0.000487	0.001861
WDR24	-0.08859	0.239631	0.34394
WDR25	-0.18709	0.012398	0.029671
WDR26	0.047791	0.526416	0.631751
WDR27	0.016205	0.830004	0.879641
WDR31	-0.37842	1.91E-07	2.06E-06
WDR33	-0.10032	0.18272	0.276612
WDR34	0.116626	0.121066	0.198634
WDR35	-0.39799	3.77E-08	4.95E-07
WDR36	-0.24366	0.001047	0.00357
WDR37	-0.46233	8.21E-11	2.36E-09
WDR38	-0.03129	0.678459	0.763697
WDR3	0.077459	0.304092	0.414505
WDR41	0.01045	0.889894	0.923472
WDR43	0.070776	0.347834	0.460287
WDR44	-0.02313	0.759286	0.828091
WDR45L	0.005448	0.942462	0.961424
WDR45	0.13295	0.076871	0.137502
WDR46	0.181812	0.015146	0.035123
WDR47	-0.10814	0.150751	0.237263
WDR48	-0.25688	0.000537	0.002024
WDR49	-0.23257	0.001785	0.005656
WDR4	0.216367	0.003722	0.010636
WDR52	-0.00871	0.90813	0.935767
WDR53	0.178072	0.017403	0.039478
WDR54	-0.03582	0.635006	0.726714
WDR55	0.333245	5.49E-06	3.86E-05
WDR59	0.00856	0.909709	0.936857
WDR5B	-0.12821	0.088096	0.153765
WDR5	-0.33818	3.89E-06	2.85E-05
WDR60	-0.23755	0.001409	0.004617
WDR61	-0.11532	0.125329	0.204408
WDR62	0.257422	0.000523	0.001973
WDR63	-0.30507	3.46E-05	0.000191
WDR64	0.019967	0.791361	0.852355
WDR65	-0.22073	0.003069	0.009005

WDR66	-0.16416	0.028557	0.060034
WDR67	-0.07862	0.296877	0.406737
WDR69	0.211269	0.004643	0.01285
WDR6	-0.27619	0.00019	0.000829
WDR70	-0.0519	0.49148	0.600021
WDR72	0.186544	0.01266	0.030201
WDR73	-0.15752	0.035733	0.072538
WDR74	0.318768	1.45E-05	8.95E-05
WDR75	0.280882	0.000146	0.00066
WDR76	0.094788	0.208189	0.307747
WDR77	0.18589	0.012981	0.030833
WDR78	-0.34981	1.70E-06	1.38E-05
WDR7	-0.5359	1.27E-14	9.17E-13
WDR81	-0.25903	0.000481	0.001837
WDR82	-0.13151	0.08016	0.142428
WDR83	0.092595	0.218956	0.320591
WDR85	-0.05293	0.482892	0.592095
WDR86	0.064927	0.389215	0.501684
WDR87	-0.28903	9.12E-05	0.000439
WDR88	-0.24846	0.000826	0.00292
WDR89	-0.25066	0.000739	0.002656
WDR8	0.21498	0.003955	0.011214
WDR90	0.198379	0.007943	0.020313
WDR91	-0.11321	0.132433	0.213721
WDR92	-0.23308	0.001742	0.00554
WDR93	-0.09574	0.203642	0.302381
WDSUB1	-0.30044	4.61E-05	0.000245
WDTC1	-0.24663	0.000904	0.003152
WDYHV1	0.123653	0.100087	0.170716
WEE1	-0.00029	0.996914	0.99757
WEE2	-0.22812	0.002194	0.006759
WFDC10A	0.032222	0.6694	0.756628
WFDC10B	0.358759	8.77E-07	7.74E-06
WFDC11	-0.01758	0.815875	0.869663
WFDC12	0.374383	2.63E-07	2.72E-06
WFDC13	0.182988	0.014491	0.033856
WFDC1	0.001231	0.986993	0.990851
WFDC2	0.464408	6.59E-11	1.95E-09
WFDC3	0.365038	5.45E-07	5.13E-06
WFDC5	0.279539	0.000158	0.000706
WFDC6	0.14107	0.060347	0.112115
WFDC8	0.022599	0.764616	0.83223
WFDC9	0.056355	0.454963	0.565921
WFIKKN1	-0.23841	0.001352	0.004449
WFIKKN2	0.074151	0.325274	0.437401
WFS1	0.002391	0.974728	0.982679
WHAMML1	-0.07112	0.345482	0.457787
WHAMML2	-0.10164	0.177035	0.269615
WHAMM	0.119934	0.110801	0.185598
WHSC1L1	0.150232	0.045327	0.088615
WHSC1	-0.09382	0.212885	0.313405
WHSC2	0.178175	0.017337	0.039342
WIBG	0.22245	0.002841	0.008438
WIF1	0.14215	0.058388	0.109116

WIPF1	0.012686	0.866532	0.907612
WIPF2	0.134848	0.072713	0.131285
WIPF3	-0.14364	0.055769	0.105176
WIPI1	-0.13589	0.070516	0.128031
WIPI2	-0.21211	0.004477	0.012445
WISP1	0.041476	0.582531	0.681354
WISP2	-0.00407	0.957	0.97058
WISP3	0.151393	0.04367	0.08589
WIT1	0.021672	0.77401	0.839097
WIZ	0.143283	0.056388	0.106101
WLS	-0.00677	0.928513	0.950528
WNK1	-0.23845	0.00135	0.004444
WNK2	-0.25757	0.000518	0.001961
WNK3	-0.46563	5.79E-11	1.74E-09
WNK4	-0.34018	3.39E-06	2.53E-05
WNT10A	0.538395	9.11E-15	6.76E-13
WNT10B	-0.05064	0.502035	0.609145
WNT11	0.2491	0.000799	0.002847
WNT16	0.014887	0.843652	0.889585
WNT1	-0.08933	0.235732	0.3397
WNT2B	-0.17929	0.016636	0.038047
WNT2	0.315291	1.81E-05	0.000109
WNT3A	0.013667	0.856322	0.89973
WNT3	0.098865	0.1892	0.284613
WNT4	-0.30562	3.35E-05	0.000186
WNT5A	0.249647	0.000778	0.002779
WNT5B	0.176401	0.018502	0.041552
WNT6	0.057151	0.448605	0.559808
WNT7A	0.559043	5.06E-16	5.03E-14
WNT7B	0.474048	2.33E-11	7.60E-10
WNT8A	0.018702	0.804301	0.861599
WNT8B	-0.27175	0.000243	0.001022
WNT9A	-0.13086	0.081661	0.144705
WNT9B	-0.17034	0.023007	0.049956
WRAP53	-0.25771	0.000515	0.001949
WRB	-0.36257	6.58E-07	6.06E-06
WRNIP1	-0.07835	0.298547	0.408545
WRN	-0.16375	0.028959	0.060776
WSB1	0.126238	0.093136	0.160859
WSB2	-0.27898	0.000163	0.000724
WSCD1	-0.35454	1.20E-06	1.02E-05
WSCD2	0.104483	0.165151	0.255313
WT1	0.047094	0.532473	0.636655
WTAP	-0.25644	0.00055	0.002062
WTIP	0.254318	0.000613	0.002259
WWC1	0.158035	0.03513	0.071496
WWC2	0.12384	0.09957	0.169981
WWC3	-0.156	0.037583	0.075603
WVOX	-0.32587	9.05E-06	5.95E-05
WWP1	0.065553	0.384653	0.497425
WWP2	0.115574	0.124478	0.203256
WWTR1	0.08145	0.27978	0.388182
XAB2	0.158462	0.034634	0.07064
XAF1	0.477858	1.53E-11	5.21E-10

XAGE1D	-0.04262	0.572133	0.671894
XAGE2	0.039277	0.602698	0.698907
XAGE3	0.069434	0.357078	0.470285
XBP1	-0.46225	8.28E-11	2.38E-09
XCL1	-0.07446	0.323248	0.435238
XCL2	-0.11517	0.125818	0.205105
XCR1	-0.24751	0.000866	0.003037
XDH	0.566528	1.69E-16	1.94E-14
XG	-0.11334	0.13197	0.213165
XIAP	-0.25149	0.000708	0.002558
XIRP1	0.036972	0.624162	0.717886
XIRP2	-0.03438	0.648731	0.738133
XIST	0.01819	0.809558	0.865214
XKR3	-0.08246	0.273816	0.381913
XKR4	-0.42403	3.68E-09	6.65E-08
XKR5	0.229926	0.002019	0.006286
XKR6	0.097947	0.193363	0.289714
XKR7	-0.36653	4.86E-07	4.62E-06
XKR8	-0.23156	0.001871	0.005891
XKR9	0.312942	2.11E-05	0.000124
XKRX	0.002677	0.971714	0.980941
XKRY2	0.028655	0.704173	0.784292
XK	0.042865	0.569949	0.669946
XPA	-0.04418	0.558188	0.659263
XPC	-0.30579	3.31E-05	0.000184
XPNPEP1	0.144183	0.054841	0.103732
XPNPEP2	-0.21727	0.003578	0.010266
XPNPEP3	-0.18995	0.011099	0.027008
XP01	0.154479	0.039507	0.078918
XP04	-0.22185	0.002919	0.008641
XP05	-0.20625	0.005744	0.015412
XP06	0.005059	0.946569	0.963933
XP07	-0.11338	0.131836	0.212985
XPOT	-0.22343	0.002719	0.008123
XPR1	-0.22279	0.002798	0.008326
XRCC1	0.148703	0.047592	0.092201
XRCC2	0.142757	0.05731	0.107498
XRCC3	0.22423	0.002622	0.007869
XRCC4	0.262397	0.000403	0.001578
XRCC5	0.308434	2.81E-05	0.000159
XRCC6BP1	-0.00541	0.942853	0.961575
XRCC6	0.050957	0.499356	0.606639
XRN1	-0.13395	0.074654	0.134201
XRN2	-0.11942	0.112354	0.187642
XRRA1	0.207212	0.005516	0.014871
XYLB	0.117926	0.116947	0.19341
XYLT1	-0.10023	0.183113	0.277037
XYLT2	0.197355	0.008278	0.021024
YAF2	-0.29259	7.39E-05	0.000366
YAP1	0.326633	8.60E-06	5.68E-05
YARS2	0.213905	0.004144	0.011667
YARS	0.016966	0.822153	0.873998
YBX1	0.085601	0.255913	0.362365
YBX2	-0.15817	0.034974	0.071215

YDJC	0.254498	0.000608	0.002242
YEATS2	0.072447	0.336546	0.448854
YEATS4	-0.30005	4.72E-05	0.00025
YES1	0.120831	0.108136	0.182015
YIF1A	0.193821	0.009534	0.023701
YIF1B	0.238193	0.001366	0.004491
YIPF1	0.259276	0.000475	0.001816
YIPF2	0.016464	0.827337	0.87767
YIPF3	-0.04896	0.516373	0.622531
YIPF4	0.224511	0.002588	0.007785
YIPF5	-0.06005	0.425859	0.538108
YIPF6	-0.13539	0.071555	0.129633
YIPF7	-0.20945	0.005017	0.013739
YJEFN3	0.143301	0.056358	0.106057
YKT6	0.038539	0.609534	0.705069
YLPM1	-0.32013	1.32E-05	8.28E-05
YME1L1	-0.04991	0.508214	0.614869
YOD1	0.342081	2.96E-06	2.25E-05
YPEL1	-0.25505	0.000591	0.002189
YPEL2	-0.31908	1.42E-05	8.80E-05
YPEL3	0.171475	0.022101	0.048254
YPEL4	0.083366	0.268583	0.376157
YPEL5	0.081416	0.279979	0.388376
YRDC	-0.27497	0.000204	0.000878
YSK4	-0.09187	0.222582	0.324621
YTHDC1	-0.31507	1.84E-05	0.00011
YTHDC2	-0.18387	0.014017	0.032878
YTHDF1	-0.05117	0.497565	0.605021
YTHDF2	-0.06505	0.388294	0.500888
YTHDF3	-0.24797	0.000846	0.002977
YWHAB	0.207819	0.005376	0.014557
YWHAE	-0.27671	0.000185	0.000808
YWHAG	0.027225	0.718294	0.795182
YWHAH	0.134756	0.07291	0.131559
YWHAQ	-0.11684	0.120384	0.197878
YWHAZ	0.359909	8.04E-07	7.20E-06
YY1AP1	0.159611	0.033326	0.068438
YY1	0.092196	0.220954	0.322827
YY2	-0.0803	0.286645	0.395763
ZACN	-0.01544	0.837928	0.885673
ZADH2	-0.41601	7.69E-09	1.26E-07
ZAK	0.018087	0.810614	0.865968
ZAN	-0.28991	8.66E-05	0.00042
ZAP70	-0.0505	0.503209	0.610383
ZAR1L	0.047876	0.52568	0.631021
ZAR1	0.239066	0.00131	0.00433
ZBBX	-0.15897	0.034045	0.069653
ZBED1	-0.04235	0.574605	0.674196
ZBED2	0.479922	1.22E-11	4.24E-10
ZBED3	-0.37486	2.53E-07	2.64E-06
ZBED4	-0.1504	0.045086	0.088219
ZBED5	0.005256	0.944489	0.962598
ZBP1	0.282541	0.000133	0.000609
ZBTB10	-0.41434	8.95E-09	1.44E-07

ZBTB11	-0.1706	0.022803	0.049583
ZBTB12	0.01653	0.826651	0.877192
ZBTB16	-0.25432	0.000613	0.002259
ZBTB17	0.153527	0.040754	0.08096
ZBTB1	0.039455	0.601048	0.697448
ZBTB20	-0.10627	0.157984	0.246371
ZBTB22	-0.09909	0.188175	0.283265
ZBTB24	-0.41812	6.35E-09	1.07E-07
ZBTB25	-0.02999	0.691053	0.773688
ZBTB26	-0.13375	0.075102	0.134939
ZBTB2	-0.17401	0.020182	0.04475
ZBTB32	0.026708	0.723426	0.799208
ZBTB33	-0.42128	4.75E-09	8.28E-08
ZBTB34	-0.10622	0.158205	0.246597
ZBTB37	-0.11014	0.143305	0.227681
ZBTB38	-0.08016	0.287474	0.396742
ZBTB39	-0.48263	8.97E-12	3.26E-10
ZBTB3	-0.13429	0.07392	0.133112
ZBTB40	-0.50624	5.64E-13	2.78E-11
ZBTB41	-0.14449	0.054325	0.102914
ZBTB42	-0.02889	0.701904	0.782382
ZBTB43	-0.10324	0.170279	0.261779
ZBTB44	-0.05583	0.459143	0.569758
ZBTB45	0.150786	0.044531	0.08727
ZBTB46	-0.08629	0.252086	0.357946
ZBTB47	0.052224	0.48874	0.597339
ZBTB48	-0.02838	0.70686	0.786576
ZBTB49	-0.28646	0.000106	0.0005
ZBTB4	-0.30493	3.49E-05	0.000192
ZBTB5	-0.2378	0.001392	0.004565
ZBTB6	-0.29203	7.65E-05	0.000376
ZBTB7A	0.445812	4.48E-10	1.05E-08
ZBTB7B	0.328026	7.83E-06	5.24E-05
ZBTB7C	0.429569	2.18E-09	4.18E-08
ZBTB8A	0.019601	0.795099	0.855262
ZBTB8B	-0.31281	2.13E-05	0.000125
ZBTB8OS	0.218927	0.003325	0.009635
ZBTB9	-0.25154	0.000707	0.002553
ZC3H10	-0.38027	1.64E-07	1.81E-06
ZC3H11A	0.03515	0.641355	0.732395
ZC3H12A	0.321446	1.21E-05	7.69E-05
ZC3H12B	-0.27516	0.000201	0.000872
ZC3H12C	-0.30612	3.24E-05	0.000181
ZC3H12D	-0.13816	0.065899	0.120924
ZC3H13	-0.13821	0.065795	0.120768
ZC3H14	-0.40156	2.77E-08	3.80E-07
ZC3H15	0.074232	0.324744	0.436806
ZC3H18	0.113226	0.132369	0.213654
ZC3H3	0.17799	0.017456	0.039571
ZC3H4	-0.12721	0.09062	0.157248
ZC3H6	-0.3865	9.89E-08	1.15E-06
ZC3H7A	-0.30509	3.46E-05	0.000191
ZC3H7B	-0.44899	3.26E-10	8.05E-09
ZC3H8	0.019376	0.797405	0.857214

ZC3HAV1L	-0.06849	0.363701	0.477007
ZC3HAV1	-0.31147	2.32E-05	0.000134
ZC3HC1	-0.12855	0.08725	0.152608
ZC4H2	-0.05428	0.47179	0.581835
ZCCHC10	-0.10423	0.166186	0.256651
ZCCHC11	-0.31311	2.09E-05	0.000123
ZCCHC12	-0.07024	0.351537	0.464256
ZCCHC14	-0.10081	0.1806	0.274032
ZCCHC16	-0.14148	0.059593	0.110949
ZCCHC17	-0.06659	0.377163	0.489789
ZCCHC18	-0.27032	0.000263	0.001095
ZCCHC24	0.088577	0.239694	0.344006
ZCCHC2	-0.27906	0.000162	0.000723
ZCCHC3	-0.38281	1.34E-07	1.50E-06
ZCCHC4	-0.13778	0.066643	0.122064
ZCCHC5	0.057901	0.44267	0.554396
ZCCHC6	0.073759	0.327841	0.439715
ZCCHC7	-0.15845	0.034649	0.070656
ZCCHC8	-0.21959	0.003229	0.009402
ZCCHC9	0.156199	0.037336	0.075227
ZCRB1	-0.0942	0.211042	0.311312
ZCWPW1	-0.08634	0.251837	0.35772
ZCWPW2	-0.44801	3.60E-10	8.71E-09
ZDBF2	-0.34416	2.55E-06	1.97E-05
ZDHHC11	0.098513	0.190789	0.286523
ZDHHC12	0.323198	1.08E-05	6.95E-05
ZDHHC13	0.172089	0.021622	0.047363
ZDHHC14	-0.15507	0.038744	0.07756
ZDHHC15	-0.32555	9.24E-06	6.07E-05
ZDHHC16	0.235447	0.001558	0.005033
ZDHHC17	-0.35092	1.57E-06	1.28E-05
ZDHHC18	0.064058	0.39561	0.508304
ZDHHC19	0.142472	0.057813	0.108268
ZDHHC1	-0.04342	0.564991	0.665604
ZDHHC20	-0.00111	0.988283	0.991643
ZDHHC21	-0.19823	0.007991	0.020427
ZDHHC22	-0.26087	0.000437	0.001693
ZDHHC23	-0.025	0.740451	0.812847
ZDHHC24	0.217432	0.003552	0.010197
ZDHHC2	-0.06915	0.359047	0.472183
ZDHHC3	0.535978	1.26E-14	9.10E-13
ZDHHC4	0.005559	0.941296	0.960582
ZDHHC5	0.446484	4.19E-10	9.95E-09
ZDHHC6	0.364468	5.69E-07	5.32E-06
ZDHHC7	0.528543	3.38E-14	2.20E-12
ZDHHC8P1	-0.14456	0.054208	0.102722
ZDHHC8	0.075571	0.316069	0.427347
ZDHHC9	0.276349	0.000188	0.000822
ZEB1	0.019931	0.791729	0.852658
ZEB2	-0.12058	0.108881	0.182986
ZER1	-0.3435	2.68E-06	2.05E-05
ZFAND1	-0.07132	0.344104	0.456451
ZFAND2A	0.144257	0.054716	0.103546
ZFAND2B	0.174369	0.01992	0.044297

ZFAND3	-0.1743	0.019973	0.044385
ZFAND5	-0.25778	0.000513	0.001942
ZFAND6	0.203257	0.006505	0.017145
ZFATAS	-0.0887	0.239059	0.343244
ZFAT	-0.04445	0.555728	0.657313
ZFC3H1	0.022307	0.767569	0.834455
ZFHX3	-0.20496	0.006061	0.016106
ZFHX4	0.009485	0.9	0.9302
ZFP106	-0.36027	7.83E-07	7.04E-06
ZFP112	-0.02313	0.759261	0.828091
ZFP14	-0.31914	1.41E-05	8.77E-05
ZFP161	-0.29597	6.04E-05	0.000308
ZFP1	-0.26265	0.000397	0.001562
ZFP28	-0.24532	0.000965	0.003331
ZFP2	-0.31543	1.80E-05	0.000108
ZFP30	-0.21071	0.004754	0.013121
ZFP36L1	0.36898	4.02E-07	3.94E-06
ZFP36L2	0.353166	1.33E-06	1.11E-05
ZFP36	0.174072	0.020136	0.044672
ZFP37	-0.16598	0.026811	0.05695
ZFP3	-0.47626	1.83E-11	6.14E-10
ZFP41	-0.18217	0.014945	0.034725
ZFP42	-0.24811	0.00084	0.002959
ZFP57	-0.01454	0.847233	0.892552
ZFP62	0.071021	0.346169	0.458574
ZFP64	-0.09173	0.223301	0.325463
ZFP82	-0.24402	0.001029	0.003518
ZFP90	-0.12481	0.096937	0.166305
ZFP91-CNT	-0.05142	0.495479	0.603375
ZFP91	0.034946	0.643296	0.73379
ZFP92	-0.2364	0.001489	0.004836
ZFPL1	0.33126	6.28E-06	4.35E-05
ZFPM1	0.145344	0.052897	0.100618
ZFPM2	0.100743	0.180889	0.274386
ZFR2	-0.10748	0.153274	0.240581
ZFR	-0.40113	2.87E-08	3.91E-07
ZFX	-0.35689	1.01E-06	8.74E-06
ZFYVE16	-0.20709	0.005545	0.014941
ZFYVE19	0.334884	4.90E-06	3.50E-05
ZFYVE1	-0.21516	0.003924	0.011136
ZFYVE20	-0.22044	0.003109	0.009105
ZFYVE21	0.48926	4.21E-12	1.66E-10
ZFYVE26	-0.21875	0.003351	0.009694
ZFYVE27	-0.01961	0.795037	0.855242
ZFYVE28	-0.04561	0.545495	0.648235
ZFYVE9	-0.43896	8.83E-10	1.91E-08
ZFY	-0.09317	0.216075	0.317176
ZG16B	0.432608	1.63E-09	3.24E-08
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ZGLP1	0.003045	0.967823	0.978061
ZGPAT	0.218118	0.003446	0.009936
ZHX1	-0.27837	0.000168	0.000747
ZHX2	-0.02753	0.715268	0.792898
ZHX3	-0.46816	4.41E-11	1.38E-09

ZIC1	0.04452	0.555135	0.656654
ZIC2	0.252531	0.000672	0.00244
ZIC3	-0.10323	0.170287	0.261779
ZIC4	-0.07611	0.312616	0.423606
ZIC5	0.132799	0.077209	0.13804
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ZIM2	-0.32167	1.20E-05	7.59E-05
ZKSCAN1	-0.33084	6.47E-06	4.45E-05
ZKSCAN2	-0.49805	1.51E-12	6.73E-11
ZKSCAN3	-0.24146	0.001167	0.003921
ZKSCAN4	-0.15607	0.03749	0.075446
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ZMAT3	-0.18941	0.011336	0.027493
ZMAT4	-0.11339	0.13181	0.21296
ZMAT5	-0.0116	0.877915	0.915268
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ZMIZ2	0.17562	0.019037	0.042597
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ZMYM3	-0.20052	0.007281	0.018842
ZMYM4	-0.20755	0.005438	0.014691
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ZMYM6	-0.07033	0.350878	0.463478
ZMYND10	-0.08954	0.234617	0.338611
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ZMYND15	0.130068	0.083549	0.147315
ZMYND17	-0.08462	0.261395	0.36819
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ZMYND8	-0.12673	0.091856	0.159065
ZNF100	-0.23171	0.001858	0.005858
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ZNF16	0.018293	0.808505	0.864463
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ZNF559	-0.29294	7.24E-05	0.000359
ZNF560	-0.11967	0.111596	0.186691

ZNF561	-0.17537	0.01921	0.042923
ZNF562	-0.09655	0.199815	0.29757
ZNF563	-0.04599	0.542122	0.645371
ZNF564	-0.06647	0.378045	0.490763
ZNF565	0.280704	0.000147	0.000666
ZNF566	-0.41322	9.90E-09	1.56E-07
ZNF567	-0.09008	0.231796	0.335348
ZNF568	-0.23986	0.001261	0.004197
ZNF569	-0.27035	0.000263	0.001094
ZNF570	-0.11224	0.135801	0.218107
ZNF571	-0.07693	0.307386	0.417864
ZNF572	-0.03634	0.6301	0.722657
ZNF573	-0.20107	0.007119	0.018477
ZNF574	0.086743	0.249604	0.355058
ZNF575	0.167577	0.025363	0.054283
ZNF576	0.03723	0.621742	0.715838
ZNF577	0.028563	0.705086	0.785132
ZNF578	-0.27879	0.000164	0.000732
ZNF579	0.160314	0.032547	0.067057
ZNF57	0.229806	0.00203	0.006315
ZNF580	0.00851	0.910235	0.937197
ZNF581	0.219582	0.00323	0.009403
ZNF582	-0.27939	0.000159	0.000711
ZNF583	-0.29159	7.85E-05	0.000385
ZNF584	-0.05979	0.427936	0.540024
ZNF585A	-0.00732	0.922754	0.946495
ZNF585B	-0.07176	0.341154	0.453481
ZNF586	0.136403	0.069444	0.126375
ZNF587	0.056975	0.450008	0.560815
ZNF589	-0.15011	0.045507	0.088901
ZNF592	-0.23409	0.001661	0.005324
ZNF593	0.278584	0.000166	0.000738
ZNF594	-0.36879	4.08E-07	3.99E-06
ZNF595	-0.0211	0.779837	0.843341
ZNF596	-0.36029	7.81E-07	7.03E-06
ZNF597	0.051566	0.494234	0.602453
ZNF598	0.075137	0.318859	0.430589
ZNF599	-0.24786	0.000851	0.002991
ZNF600	0.398843	3.50E-08	4.65E-07
ZNF605	-0.27462	0.000208	0.000893
ZNF606	-0.00641	0.932292	0.953391
ZNF607	-0.37384	2.75E-07	2.82E-06
ZNF608	-0.07178	0.34103	0.453376
ZNF609	-0.11166	0.137841	0.220791
ZNF610	-0.11713	0.119455	0.196761
ZNF611	-0.15946	0.033501	0.068733
ZNF613	0.097758	0.194225	0.290801
ZNF614	-0.2646	0.000358	0.001431
ZNF615	-0.20229	0.006772	0.017752
ZNF616	-0.30708	3.06E-05	0.000171
ZNF618	-0.55411	1.03E-15	9.45E-14
ZNF619	-0.22605	0.002413	0.007332
ZNF620	-0.24938	0.000788	0.002812
ZNF621	-0.00026	0.997244	0.997799

ZNF622	-0.10047	0.182063	0.275786
ZNF623	-0.15363	0.040611	0.080733
ZNF624	-0.36159	7.09E-07	6.47E-06
ZNF625	-0.39493	4.89E-08	6.27E-07
ZNF626	-0.11475	0.1272	0.206857
ZNF627	-0.22421	0.002624	0.007876
ZNF628	0.102581	0.173022	0.265056
ZNF629	0.040033	0.59573	0.692961
ZNF630	-0.02335	0.757031	0.82624
ZNF638	-0.2027	0.006658	0.017494
ZNF639	-0.18327	0.014336	0.033535
ZNF641	-0.30759	2.96E-05	0.000167
ZNF642	0.094695	0.208638	0.308295
ZNF643	-0.23595	0.001521	0.004929
ZNF644	-0.22258	0.002825	0.008395
ZNF645	0.007594	0.91986	0.944359
ZNF646	-0.11675	0.120658	0.198243
ZNF648	-0.10138	0.178125	0.270941
ZNF649	-0.03677	0.626054	0.719618
ZNF652	-0.25917	0.000477	0.001826
ZNF653	0.002588	0.972654	0.981489
ZNF654	-0.0047	0.950311	0.966397
ZNF655	-0.09024	0.230936	0.334398
ZNF658	-0.45892	1.17E-10	3.24E-09
ZNF660	-0.31344	2.04E-05	0.000121
ZNF662	0.227629	0.002245	0.006896
ZNF664	-0.42006	5.31E-09	9.11E-08
ZNF665	-0.23588	0.001526	0.004942
ZNF667	-0.33517	4.80E-06	3.44E-05
ZNF668	0.207564	0.005434	0.014685
ZNF669	-0.26407	0.000368	0.001465
ZNF670	-0.13334	0.076005	0.136208
ZNF671	-0.23327	0.001726	0.005498
ZNF672	-0.10025	0.183068	0.27699
ZNF673	-0.11732	0.118857	0.195955
ZNF674	-0.27712	0.000181	0.000792
ZNF675	-0.19385	0.009522	0.023678
ZNF676	-0.03133	0.678073	0.763392
ZNF677	-0.21595	0.00379	0.010807
ZNF678	-0.22698	0.002313	0.007071
ZNF680	-0.05231	0.48805	0.596684
ZNF681	-0.14672	0.05067	0.097059
ZNF682	-0.33004	6.83E-06	4.65E-05
ZNF683	0.095526	0.204657	0.303615
ZNF684	-0.31853	1.47E-05	9.07E-05
ZNF687	-0.14927	0.046749	0.090815
ZNF688	0.046872	0.534415	0.638097
ZNF689	-0.34158	3.07E-06	2.32E-05
ZNF691	-0.03078	0.683335	0.76783
ZNF692	0.168458	0.024591	0.052919
ZNF695	0.274737	0.000206	0.000888
ZNF696	-0.1934	0.009693	0.024056
ZNF697	-0.11099	0.14023	0.223838
ZNF699	-0.234	0.001668	0.005342

ZNF69	0.307828	2.92E-05	0.000165
ZNF700	0.267359	0.000309	0.001259
ZNF701	0.05716	0.448539	0.559761
ZNF702P	0.008282	0.912629	0.938935
ZNF703	0.190334	0.010934	0.02667
ZNF704	-0.22825	0.002182	0.006728
ZNF705A	-0.18767	0.012125	0.029119
ZNF705D	-0.01831	0.808335	0.864328
ZNF706	0.184018	0.013939	0.032736
ZNF707	0.102252	0.174412	0.266776
ZNF708	-0.28906	9.11E-05	0.000438
ZNF709	-0.45573	1.64E-10	4.35E-09
ZNF70	-0.30088	4.49E-05	0.000239
ZNF710	-0.18385	0.014027	0.032899
ZNF711	-0.10434	0.165722	0.256014
ZNF713	-0.376	2.31E-07	2.44E-06
ZNF714	-0.13741	0.067386	0.123207
ZNF716	-0.05248	0.486571	0.595387
ZNF717	-0.13405	0.07443	0.13387
ZNF718	-0.10197	0.175595	0.267959
ZNF71	-0.1896	0.011252	0.027323
ZNF720	-0.11226	0.135738	0.218077
ZNF721	-0.09584	0.203159	0.301801
ZNF727	-0.29223	7.56E-05	0.000372
ZNF732	-0.19087	0.010709	0.026194
ZNF737	-0.32418	1.01E-05	6.57E-05
ZNF738	-0.08293	0.271094	0.378922
ZNF740	-0.55364	1.10E-15	1.00E-13
ZNF746	-0.34033	3.35E-06	2.51E-05
ZNF747	-0.19138	0.010497	0.025759
ZNF749	-0.22325	0.00274	0.008175
ZNF74	-0.384	1.21E-07	1.38E-06
ZNF750	-0.06878	0.361651	0.474856
ZNF75A	-0.2211	0.003018	0.008895
ZNF75D	-0.26977	0.000271	0.001124
ZNF761	-0.19958	0.007565	0.019482
ZNF763	-0.09846	0.191025	0.28677
ZNF764	-0.07161	0.342172	0.454479
ZNF765	-0.15571	0.037947	0.076256
ZNF766	0.052695	0.484816	0.593791
ZNF767	0.012083	0.872824	0.912076
ZNF768	0.214358	0.004063	0.011483
ZNF76	-0.23338	0.001717	0.005478
ZNF770	-0.10357	0.168906	0.259999
ZNF771	-0.07921	0.293235	0.402948
ZNF772	-0.1957	0.008847	0.022219
ZNF773	-0.03744	0.619786	0.713949
ZNF774	0.134045	0.074449	0.13387
ZNF775	-0.16137	0.031408	0.065066
ZNF776	-0.28425	0.00012	0.000559
ZNF777	-0.12598	0.093813	0.161788
ZNF778	-0.31053	2.46E-05	0.000141
ZNF77	-0.18587	0.012989	0.030848
ZNF780A	-0.12926	0.085513	0.150159

ZNF780B	-0.26452	0.00036	0.001437
ZNF781	-0.25414	0.000619	0.002276
ZNF782	-0.30127	4.38E-05	0.000234
ZNF784	0.047168	0.531828	0.635992
ZNF785	-0.0528	0.483925	0.592993
ZNF786	-0.20958	0.00499	0.013674
ZNF787	0.182173	0.014942	0.034725
ZNF788	-0.12979	0.084219	0.148269
ZNF789	0.067028	0.374024	0.487089
ZNF790	0.01298	0.863465	0.905454
ZNF791	-0.23314	0.001738	0.005529
ZNF792	-0.02975	0.693424	0.77542
ZNF793	-0.18763	0.012142	0.029157
ZNF799	-0.06523	0.387023	0.499771
ZNF79	-0.45301	2.17E-10	5.55E-09
ZNF7	0.036903	0.624811	0.718441
ZNF800	-0.24752	0.000865	0.003036
ZNF804A	-0.08829	0.241231	0.345584
ZNF804B	-0.2137	0.004182	0.011759
ZNF805	-0.01471	0.845469	0.89108
ZNF808	-0.02926	0.698208	0.77936
ZNF80	-0.06641	0.378465	0.491158
ZNF813	-0.25252	0.000672	0.002441
ZNF814	-0.21655	0.003692	0.010554
ZNF815	-0.03137	0.677606	0.76304
ZNF816A	0.072337	0.337277	0.449619
ZNF81	-0.21412	0.004105	0.011579
ZNF821	-0.21322	0.004269	0.011956
ZNF823	0.195965	0.008753	0.022032
ZNF826	-0.00697	0.926445	0.948943
ZNF827	-0.20582	0.005847	0.015641
ZNF828	-0.17943	0.016549	0.037875
ZNF829	-0.24139	0.001171	0.003932
ZNF830	0.054395	0.470821	0.580932
ZNF831	-0.28467	0.000118	0.000548
ZNF833	-0.25304	0.000655	0.002385
ZNF835	-0.22583	0.002437	0.007396
ZNF836	-0.1101	0.143452	0.227858
ZNF837	0.017175	0.819995	0.872489
ZNF839	-0.2718	0.000242	0.001019
ZNF83	0.149482	0.046426	0.090304
ZNF841	0.057989	0.441974	0.553771
ZNF843	-0.37582	2.35E-07	2.47E-06
ZNF844	-0.2904	8.42E-05	0.000409
ZNF845	0.001695	0.982084	0.987577
ZNF846	0.185733	0.013058	0.031002
ZNF84	-0.32195	1.17E-05	7.47E-05
ZNF853	-0.26028	0.00045	0.001737
ZNF85	-0.26329	0.000384	0.001516
ZNF860	0.236676	0.001469	0.004781
ZNF862	-0.25634	0.000553	0.00207
ZNF876P	-0.17476	0.019637	0.043726
ZNF878	-0.05438	0.470907	0.581001
ZNF879	-0.14637	0.051231	0.097973

ZNF880	0.057484	0.445967	0.557355
ZNF883	-0.0252	0.738441	0.811264
ZNF8	-0.14297	0.056929	0.106916
ZNF90	0.010425	0.890153	0.923644
ZNF91	-0.29135	7.96E-05	0.000389
ZNF92	-0.26051	0.000445	0.00172
ZNF93	-0.20375	0.006373	0.016838
ZNF98	-0.19195	0.010266	0.025242
ZNF99	-0.16929	0.02388	0.051617
ZNFX1	0.253671	0.000634	0.002321
ZNHIT1	0.26622	0.000328	0.001325
ZNHIT2	0.141168	0.060166	0.111838
ZNHIT3	0.131096	0.081115	0.143853
ZNHIT6	0.067615	0.369843	0.48314
ZNRD1	0.23263	0.001779	0.005643
ZNRF1	0.324073	1.02E-05	6.61E-05
ZNRF2	-0.07233	0.337294	0.449619
ZNRF3	-0.24976	0.000773	0.002766
ZNRF4	-0.04766	0.527572	0.632625
ZP1	-0.06522	0.387065	0.499793
ZP2	-0.13907	0.064117	0.118061
ZP3	0.24594	0.000936	0.003245
ZP4	0.075865	0.314182	0.425145
ZPBP2	0.047501	0.528932	0.63354
ZPBP	-0.21384	0.004156	0.011697
ZPLD1	0.196073	0.008716	0.021957
ZRANB1	-0.46401	6.87E-11	2.03E-09
ZRANB2	0.046683	0.536061	0.639598
ZRANB3	-0.37556	2.40E-07	2.52E-06
ZRSR2	0.107641	0.152674	0.239734
ZSCAN10	-0.00232	0.975463	0.983119
ZSCAN12P1	-0.17347	0.020578	0.045494
ZSCAN12	-0.05574	0.459923	0.570404
ZSCAN16	0.067162	0.373063	0.486221
ZSCAN18	-0.20325	0.006508	0.017149
ZSCAN1	-0.25852	0.000494	0.001881
ZSCAN20	-0.0246	0.744444	0.815864
ZSCAN21	-0.1244	0.098049	0.167892
ZSCAN22	-0.26582	0.000336	0.001349
ZSCAN23	-0.13735	0.06752	0.123395
ZSCAN29	-0.15845	0.034642	0.07065
ZSCAN2	-0.45174	2.46E-10	6.21E-09
ZSCAN4	0.286596	0.000105	0.000496
ZSCAN5A	-0.37515	2.47E-07	2.59E-06
ZSCAN5B	-0.14082	0.060809	0.112852
ZSWIM1	0.132966	0.076834	0.137502
ZSWIM2	-0.26886	0.000285	0.001174
ZSWIM3	-0.10656	0.156857	0.245113
ZSWIM4	0.253957	0.000625	0.002294
ZSWIM5	-0.29607	6.01E-05	0.000306
ZSWIM6	0.118033	0.116613	0.192979
ZSWIM7	-0.19408	0.009436	0.023497
ZUFSP	-0.17389	0.020269	0.044922
ZW10	0.143326	0.056313	0.106021

ZWILCH	0.198679	0.007847	0.020096
ZWINT	0.401152	2.87E-08	3.91E-07
ZXDA	-0.17718	0.017986	0.040581
ZXDB	-0.05493	0.466497	0.576568
ZXDC	-0.29915	4.99E-05	0.000262
ZYG11A	-0.19308	0.009816	0.024302
ZYG11B	-0.26652	0.000323	0.001308
ZYX	0.44906	3.23E-10	8.00E-09
ZZEF1	-0.57142	8.11E-17	1.02E-14
ZZZ3	-0.29738	5.55E-05	0.000286
psiTPTE22	-0.06729	0.372183	0.485279
tAKR	-0.0132	0.861152	0.903556

Supplementary Table 4 MMP28 correlated genes from cBioPortal

Gene	Cytoband	Spearman's Correlation	p-Value	q-Value
KRT19	17q21.2	0.753135396	5.12E-34	1.02E-29
VILL	3p22.2	0.733536292	1.68E-31	1.68E-27
IL1RN	2q14.1	0.726842843	1.08E-30	7.19E-27
ALDH3B1	11q13.2	0.721095139	5.11E-30	2.56E-26
KCNN4	19q13.31	0.695932459	3.00E-27	1.20E-23
PLCD3	17q21.31	0.692578411	6.69E-27	2.23E-23
TRIP10	19p13.3	0.682185676	7.46E-26	2.13E-22
C19ORF33	19q13.2	0.676354278	2.77E-25	6.91E-22
ANXA2	15q22.2	0.675808173	3.12E-25	6.93E-22
CLIC3	9q34.3	0.668206641	1.64E-24	3.28E-21
ALS2CL	3p21.31	0.662584479	5.43E-24	9.87E-21
ANXA2P2	9p13.3	0.656447597	1.95E-23	3.24E-20
KRT16	17q21.2	0.655916723	2.17E-23	3.34E-20
RRAS	19q13.33	0.654639801	2.82E-23	4.03E-20
S100A6	1q21.3	0.649837842	7.46E-23	9.94E-20
PITX1	5q31.1	0.649130965	8.59E-23	1.07E-19
CRYBG2	1p36.11	0.648852342	9.09E-23	1.07E-19
ADAMTSL5	19p13.3	0.644939636	1.97E-22	2.19E-19
EPHA2	1p36.13	0.643981336	2.38E-22	2.51E-19
SH2D3A	19p13.3	0.641683929	3.74E-22	3.73E-19
TRIM29	11q23.3	0.640776181	4.46E-22	4.00E-19
ITGA3	17q21.33	0.640767476	4.46E-22	4.00E-19
KCP	7q32.1	0.640606365	4.60E-22	4.00E-19
MSLN	16p13.3	0.63943883	5.77E-22	4.81E-19
GAS2L2	17q12	0.636708689	9.75E-22	7.79E-19
TMPRSS4	11q23.3	0.634527304	1.48E-21	1.10E-18
SFTA2	6p21.33	0.634515271	1.48E-21	1.10E-18
ARHGAP27	17q21.31	0.631104974	2.81E-21	2.01E-18
S100A11	1q21.3	0.630904107	2.92E-21	2.01E-18
ITGB4	17q25.1	0.630272216	3.29E-21	2.19E-18
EPS8L1	19q13.42	0.628717595	4.39E-21	2.83E-18
PDE4C	19p13.11	0.6282782	4.76E-21	2.97E-18
MST1R	3p21.31	0.628098257	4.92E-21	2.98E-18
RAPGEFL1	17q21.1	0.627181805	5.83E-21	3.43E-18
GJB3	1p34.3	0.62613066	7.08E-21	4.04E-18
JUP	17q21.2	0.621976022	1.51E-20	8.39E-18
LPCAT4	15q14	0.620421401	2.00E-20	1.08E-17
SSH3	11q13.2	0.620302136	2.04E-20	1.08E-17
NMU	4q12	0.619332498	2.43E-20	1.23E-17
SLPI	20q13.12	0.619268512	2.46E-20	1.23E-17
LAMB3	1q32.2	0.619140878	2.52E-20	1.23E-17
COL17A1	10q25.1	0.612282133	8.48E-20	4.04E-17
GIPC1	19p13.12	0.611273617	1.01E-19	4.70E-17
PSCA	8q24.3	0.609610194	1.35E-19	6.14E-17
KRT13	17q21.2	0.609280219	1.43E-19	6.35E-17
NTF4	19q13.33	0.609071267	1.48E-19	6.44E-17
PLEKHN1	1p36.33	0.608059758	1.77E-19	7.51E-17
ERBB2	17q12	0.607078442	2.09E-19	8.71E-17
MISP	19p13.3	0.606002971	2.51E-19	1.03E-16
EFNB1	Xq13.1	0.604398134	3.31E-19	1.32E-16
VASP	19q13.32	0.603393802	3.92E-19	1.51E-16
MALL	2q13	0.603366602	3.94E-19	1.51E-16

PPARG	3p25.2	0.60292093	4.25E-19	1.60E-16
UNC93B1	11q13.2	0.601447911	5.45E-19	2.02E-16
PERM1	1p36.33	0.600364384	6.54E-19	2.38E-16
SFN	1p36.11	0.599460486	7.61E-19	2.71E-16
JPT1	17q25.1	0.598629506	8.74E-19	3.06E-16
P2RY2	11q13.4	0.597112548	1.12E-18	3.88E-16
CAPN1	11q13.1	0.59606637	1.34E-18	4.53E-16
S100A10	1q21.3	0.595649991	1.43E-18	4.77E-16
C10RF116	1q32.1	0.594386207	1.76E-18	5.78E-16
PPP1R13L	19q13.32	0.593955182	1.89E-18	6.10E-16
KRT7	12q13.13	0.591463185	2.84E-18	9.02E-16
CSTB	21q22.3	0.590818739	3.16E-18	9.86E-16
DOK4	16q21	0.590435838	3.36E-18	1.03E-15
CLTB	5q35.2	0.587468876	5.42E-18	1.64E-15
NECTIN4	1q23.3	0.586524484	6.31E-18	1.88E-15
SLC16A5	17q25.1	0.585868223	7.01E-18	2.06E-15
TSPO	22q13.2	0.584690227	8.45E-18	2.45E-15
TMBIM1	2q35	0.584493545	8.72E-18	2.49E-15
SLC44A2	19p13.2	0.584372188	8.89E-18	2.50E-15
MVP	16p11.2	0.584129475	9.24E-18	2.56E-15
UGT1A9	2q37.1	0.583901858	9.58E-18	2.62E-15
KRT15	17q21.2	0.582543469	1.19E-17	3.21E-15
TM4SF1	3q25.1	0.580396711	1.66E-17	4.43E-15
PPP1R3G	6p25.1	0.578634947	2.19E-17	5.76E-15
CAPN8	1q41	0.578465466	2.25E-17	5.84E-15
AP1S3	2q36.1	0.578088841	2.38E-17	6.11E-15
EPB41L1	20q11.23	0.577760341	2.51E-17	6.28E-15
RHBDF1	16p13.3	0.577745695	2.51E-17	6.28E-15
B3GNT3	19p13.11	0.577222606	2.73E-17	6.73E-15
KLK10	19q13.41	0.57681699	2.90E-17	7.08E-15
SCEL	13q22.3	0.576092608	3.25E-17	7.82E-15
SDCBP2	20p13	0.575944176	3.32E-17	7.91E-15
RHOD	11q13.2	0.575488042	3.56E-17	8.30E-15
PKP3	11p15.5	0.575473396	3.57E-17	8.30E-15
VSIG2	11q24.2	0.575276714	3.68E-17	8.46E-15
RAC1	7p22.1	0.574831042	3.94E-17	8.96E-15
PTK6	20q13.33	0.573847635	4.59E-17	1.03E-14
USP22	17p11.2	-0.573326638	4.97E-17	1.10E-14
PADI1	1p36.13	0.573252512	5.02E-17	1.10E-14
PLCB3	11q13.1	0.572956291	5.26E-17	1.14E-14
CBX5	12q13.13	-0.572397631	5.72E-17	1.23E-14
GPR39	2q21.2	0.57110874	6.96E-17	1.48E-14
ANXA11	10q22.3	0.570834641	7.26E-17	1.53E-14
SDC1	2p24.1	0.567585211	1.18E-16	2.47E-14
SCML2	Xp22.13	-0.5670956	1.27E-16	2.63E-14
ID1	20q11.21	0.56669596	1.35E-16	2.76E-14
CTTN	11q13.3	0.566248195	1.45E-16	2.92E-14
RPS6KA4	11q13.1	0.565471931	1.62E-16	3.25E-14
SERPINB5	18q21.33	0.565376548	1.65E-16	3.26E-14
LMO7	13q22.2	0.564155839	1.97E-16	3.87E-14
SIRT7	17q25.3	0.564051221	2.01E-16	3.89E-14
CGB7	19q13.33	0.56399123	2.02E-16	3.89E-14
LIME1	20q13.33	0.563620195	2.14E-16	4.07E-14
CYP4F12	19p13.12	0.563261651	2.25E-16	4.25E-14

GSDMB	17q21.1	0.562764422	2.43E-16	4.53E-14
EZR	6q25.3	0.562467307	2.53E-16	4.69E-14
RHOC	1p13.2	0.560406336	3.43E-16	6.29E-14
COX6B2	19q13.42	0.560337288	3.46E-16	6.30E-14
TNK2	3q29	0.560073651	3.60E-16	6.48E-14
CAPG	2p11.2	0.559872785	3.71E-16	6.62E-14
GPRC5A	12p13.1	0.559253447	4.06E-16	7.18E-14
EVPL	17q25.1	0.558221915	4.72E-16	8.27E-14
ACY1	3p21.2	0.558002218	4.87E-16	8.46E-14
SMCR8	17p11.2	-0.557788798	5.02E-16	8.65E-14
PLEK2	14q23.3-c	0.557123428	5.53E-16	9.45E-14
RARG	12q13.13	0.556269747	6.26E-16	1.06E-13
PTTG1IP	21q22.3	0.555619024	6.87E-16	1.15E-13
LGALS3	14q22.3	0.555332371	7.16E-16	1.19E-13
STXBP2	19p13.2	0.555093842	7.41E-16	1.22E-13
LAD1	1q32.1	0.554782081	7.75E-16	1.27E-13
LEMD1	1q32.1	0.553337825	9.53E-16	1.55E-13
NGEF	2q37.1	0.552771326	1.03E-15	1.67E-13
FAM83A	8q24.13	0.552586951	1.06E-15	1.69E-13
S100A16	1q21.3	0.552574645	1.06E-15	1.69E-13
FXYD5	19q13.12	0.55217082	1.13E-15	1.77E-13
CBLC	19q13.32	0.551808842	1.19E-15	1.84E-13
FGFBP1	4p15.32	0.551781825	1.19E-15	1.84E-13
ARNT2	15q25.1	-0.551561944	1.23E-15	1.89E-13
TMEM92	17q21.33	0.551072333	1.32E-15	2.01E-13
FAM83A-AS1	8q24.13	0.550681758	1.39E-15	2.11E-13
ANXA3	4q21.21	0.550178896	1.49E-15	2.24E-13
EPHX4	1p22.1	0.549722763	1.59E-15	2.38E-13
TINAGL1	1p35.2	0.549231059	1.71E-15	2.53E-13
PLBD1	12p13.1	0.548931852	1.78E-15	2.62E-13
DNM2	19p13.2	0.548463164	1.90E-15	2.78E-13
WNT7A	3p25.1	0.548359491	1.93E-15	2.80E-13
INF2	14q32.33	0.546893897	2.37E-15	3.41E-13
TRAF4	17q11.2	0.546780909	2.41E-15	3.44E-13
MYEOV	11q13.3	0.545929606	2.71E-15	3.82E-13
LOC388242	16p11.2	0.54592932	2.71E-15	3.82E-13
GJB4	1p34.3	0.545863709	2.74E-15	3.83E-13
TRIP6	7q22.1	0.545303706	2.96E-15	4.11E-13
UNC119B	12q24.31	-0.545111209	3.04E-15	4.19E-13
PHLDA2	11p15.4	0.544498148	3.31E-15	4.53E-13
FLNB	3p14.3	0.544458393	3.33E-15	4.53E-13
PLAAT3	11q12.3-c	0.544293097	3.41E-15	4.60E-13
LRRC8E	19p13.2	0.542979097	4.08E-15	5.48E-13
MUC1	1q22	0.542847279	4.16E-15	5.54E-13
MROH6	8q24.3	0.542627581	4.29E-15	5.68E-13
OSBPL7	17q21.32	0.542338836	4.46E-15	5.85E-13
TRIM54	2p23.3	0.542308586	4.48E-15	5.85E-13
FXYD3	19q13.12	0.542144247	4.58E-15	5.95E-13
ZDHHC3	3p21.31	0.542008244	4.67E-15	6.02E-13
MYH14	19q13.33	0.541229887	5.20E-15	6.66E-13
XDH	2p23.1	0.54108133	5.30E-15	6.75E-13
CKLF	16q21	0.540692152	5.59E-15	7.05E-13
PRR15	7p14.3	0.540671228	5.61E-15	7.05E-13
WASF3	13q12.13	-0.540612642	5.66E-15	7.06E-13

C11ORF80	11q13.2	0.540577355	5.68E-15	7.06E-13
LRRRC8A	9q34.11	0.539915887	6.22E-15	7.68E-13
S100P	4p16.1	0.538574687	7.47E-15	9.16E-13
DGKA	12q13.2	0.538461699	7.59E-15	9.24E-13
CNOT6L	4q21.1	-0.53823154	7.83E-15	9.48E-13
CLCN1	7q34	0.538057227	8.01E-15	9.65E-13
CLIC1	6p21.33	0.537687527	8.43E-15	1.01E-12
KLF5	13q22.1	0.53746783	8.68E-15	1.03E-12
SH3RF2	5q32	0.537404294	8.76E-15	1.04E-12
BIK	22q13.2	0.5365179	9.87E-15	1.16E-12
REV3L	6q21	-0.53623334	1.03E-14	1.20E-12
SRI	7q21.12	0.536162199	1.04E-14	1.20E-12
ETHE1	19q13.31	0.536074321	1.05E-14	1.21E-12
ABHD11-AS	7q11.23	0.535846254	1.08E-14	1.24E-12
C11ORF86	11q13.2	0.535794472	1.09E-14	1.24E-12
ARL14	3q25.33	0.535751126	1.09E-14	1.24E-12
SPRR1B	1q21.3	0.535124241	1.19E-14	1.35E-12
BCL2L1	20q11.21	0.534774967	1.25E-14	1.40E-12
CDH3	16q22.1	0.534473668	1.30E-14	1.45E-12
PIAS2	18q21.1	-0.534389973	1.31E-14	1.46E-12
HDAC4	2q37.3	-0.534358588	1.32E-14	1.46E-12
FA2H	16q23.1	0.533749712	1.43E-14	1.57E-12
TRPM4	19q13.33	0.533203607	1.54E-14	1.68E-12
FOXL1	16q24.1	0.53312619	1.56E-14	1.69E-12
TMEM268	9q32	-0.532732827	1.64E-14	1.77E-12
ARMC2	6q21	-0.532672149	1.65E-14	1.78E-12
SOX21	13q32.1	0.532643844	1.66E-14	1.78E-12
FAM83H	8q24.3	0.531994225	1.81E-14	1.93E-12
TDRP	8p23.3	-0.531523445	1.93E-14	2.04E-12
PSORS1C2	6p21.33	0.530341551	2.26E-14	2.37E-12
ABCC3	17q21.33	0.530194798	2.30E-14	2.41E-12
UNC13D	17q25.1	0.530044149	2.35E-14	2.44E-12
UGT1A10	2q37.1	0.529571041	2.50E-14	2.59E-12
FOXQ1	6p25.3	0.529382964	2.56E-14	2.64E-12
STK24	13q32.2	0.529008432	2.69E-14	2.75E-12
PKM	15q23	0.528981232	2.70E-14	2.75E-12
METTL16	17p13.3	-0.528433034	2.90E-14	2.94E-12
TMC7	16p12.3	0.528326324	2.94E-14	2.97E-12
ZNF185	Xq28	0.528135919	3.02E-14	3.03E-12
ZNF740	12q13.13	-0.527886929	3.12E-14	3.12E-12
TSPAN1	1p34.1	0.527759295	3.17E-14	3.15E-12
PRDX5	11q13.1	0.527181805	3.42E-14	3.38E-12
PCDH1	5q31.3	0.527114849	3.45E-14	3.40E-12
CABP4	11q13.2	0.52692026	3.54E-14	3.47E-12
TMEM139	7q34	0.526382525	3.80E-14	3.70E-12
GSTP1	11q13.2	0.526246521	3.87E-14	3.74E-12
KLHL15	Xp22.11	-0.526225598	3.88E-14	3.74E-12
ATG2B	14q32.2	-0.524729563	4.71E-14	4.53E-12
ANXA8	10q11.22	0.52469046	4.73E-14	4.53E-12
TMEM44	3q29	0.524317369	4.97E-14	4.72E-12
TRADD	16q22.1	0.524304815	4.98E-14	4.72E-12
SMAD4	18q21.2	-0.523913544	5.24E-14	4.94E-12
FER1L4	20q11.22	0.523476241	5.54E-14	5.20E-12
ANO1	11q13.3	0.522704162	6.12E-14	5.72E-12

LSR	19q13.12	0.522266859	6.48E-14	6.02E-12
IL20RB	3q22.3	0.522225012	6.51E-14	6.03E-12
TRIM16	17p12	0.521513611	7.14E-14	6.58E-12
WDR7	18q21.31	-0.519126232	9.69E-14	8.89E-12
PRSS22	16p13.3	0.51900069	9.85E-14	8.99E-12
SPECC1L	22q11.23	-0.518241165	1.09E-13	9.86E-12
ZNF24	18q12.2	-0.518188856	1.09E-13	9.88E-12
PPP3CB	10q22.2	-0.517609273	1.18E-13	1.06E-11
ZZEF1	17p13.2	-0.517586257	1.18E-13	1.06E-11
CASD1	7q21.3	-0.517487917	1.19E-13	1.07E-11
GNA15	19p13.3	0.517305882	1.22E-13	1.09E-11
EPM2A	6q24.3	-0.517274496	1.23E-13	1.09E-11
RHBDL2	1p34.3	0.516939719	1.28E-13	1.13E-11
PRRC2B	9q34.13	-0.516326659	1.38E-13	1.21E-11
PLAAT2	11q12.3	0.516261832	1.39E-13	1.22E-11
ZBTB40	1p36.12	-0.516180194	1.41E-13	1.22E-11
BEAN1	16q21	0.515868433	1.47E-13	1.27E-11
ELMO2	20q13.12	-0.515485531	1.54E-13	1.33E-11
CATSPER1	11q13.1	0.514591318	1.72E-13	1.48E-11
TACSTD2	1p32.1	0.514495847	1.74E-13	1.49E-11
CARD11	7p22.2	0.514359843	1.77E-13	1.51E-11
POU5F1	6p21.33	0.5134957	1.98E-13	1.67E-11
USP13	3q26.33	-0.513386898	2.00E-13	1.69E-11
TRIM7	5q35.3	0.512870086	2.14E-13	1.79E-11
NAGS	17q21.31	0.512824054	2.15E-13	1.80E-11
KRT17	17q21.2	0.512564602	2.22E-13	1.85E-11
FAM172A	5q15	-0.511867847	2.42E-13	2.01E-11
MAN1A1	6q22.31	-0.511708828	2.47E-13	2.04E-11
MEAK7	16q24.1	0.511145984	2.65E-13	2.18E-11
CAPNS1	19q13.12	0.510438767	2.89E-13	2.37E-11
ZBTB39	12q13.3	-0.510181407	2.99E-13	2.44E-11
CDR2L	17q25.1	0.509137321	3.40E-13	2.76E-11
PRPF8	17p13.3	-0.509007595	3.45E-13	2.79E-11
ONECUT3	19p13.3	0.508846432	3.52E-13	2.84E-11
HSF2	6q22.31	-0.508700019	3.59E-13	2.88E-11
BAIAP2L1	7q21.3-q2	0.508543092	3.66E-13	2.92E-11
TMEM170B	6p24.2	-0.508492876	3.68E-13	2.93E-11
HS3ST1	4p15.33	0.508306656	3.77E-13	2.99E-11
SEMA3B	3p21.31	0.508032557	3.89E-13	3.08E-11
PML	15q24.1	0.50751156	4.15E-13	3.27E-11
RPGR	Xp11.4	-0.507363003	4.23E-13	3.31E-11
PRXL2B	1p36.32	0.507270939	4.28E-13	3.34E-11
PLEC	8q24.3	0.506350302	4.79E-13	3.72E-11
SLC16A3	17q25.3	0.506185006	4.89E-13	3.78E-11
MUCL3	6p21.33	0.506055129	4.96E-13	3.83E-11
TP53I3	2p23.3	0.506021802	4.98E-13	3.83E-11
PARP11	12p13.32	-0.505580315	5.26E-13	4.03E-11
S100A5	1q21.3	0.505484343	5.32E-13	4.06E-11
MLPH	2q37.3	0.505463143	5.34E-13	4.06E-11
SH2D4A	8p21.3	0.505270646	5.46E-13	4.14E-11
CAPN5	11q13.5	0.504688971	5.86E-13	4.42E-11
TBX6	16p11.2	0.504656804	5.89E-13	4.42E-11
BLVRB	19q13.2	0.504454627	6.03E-13	4.52E-11
FAM120C	Xp11.22	-0.503931538	6.43E-13	4.80E-11

SIK3	11q23.3	-0.50389806	6.46E-13	4.80E-11
KIF1B	1p36.22	-0.50356956	6.72E-13	4.97E-11
LAMC2	1q25.3	0.503464943	6.80E-13	5.02E-11
SPRR3	1q21.3	0.503224842	7.01E-13	5.15E-11
KLK11	19q13.41	0.503053287	7.15E-13	5.24E-11
POLD4	11q13.2	0.502931392	7.26E-13	5.28E-11
FLJ23867	1q25.2	0.502923022	7.27E-13	5.28E-11
HIPK2	7q34	-0.502883267	7.30E-13	5.29E-11
ZKSCAN2	16p12.1	-0.502715879	7.45E-13	5.38E-11
STXBP1	9q34.11	-0.501811981	8.31E-13	5.98E-11
IFI27	14q32.12	0.501609022	8.52E-13	6.10E-11
MTMR12	5p13.3	-0.501443726	8.69E-13	6.18E-11
PPM1J	1p13.2	0.501441634	8.69E-13	6.18E-11
OCIAD2	4p11	0.501284707	8.86E-13	6.26E-11
EFNA4	1q21.3	0.501282615	8.86E-13	6.26E-11
CTSE	1q32.1	0.50077208	9.42E-13	6.63E-11
FUT3	19p13.3	0.500590045	9.63E-13	6.75E-11
HERC1	15q22.31	-0.500493796	9.74E-13	6.81E-11
ANGEL1	14q24.3	-0.500330592	9.93E-13	6.92E-11
TMX4	20p12.3	-0.499970707	1.04E-12	7.20E-11
OSBPL3	7p15.3	0.499372293	1.11E-12	7.71E-11
TSHZ1	18q22.3	-0.499186073	1.14E-12	7.85E-11
CACNB2	10p12.33-	-0.499125395	1.15E-12	7.88E-11
RHOF	12q24.31	0.498993576	1.17E-12	7.98E-11
MYL12B	18p11.31	0.498740401	1.20E-12	8.20E-11
SLC2A1	1p34.2	0.498485134	1.24E-12	8.42E-11
S100A2	1q21.3	0.49839307	1.25E-12	8.49E-11
LY6E	8q24.3	0.497750717	1.35E-12	9.13E-11
LHB	19q13.33	0.497604102	1.38E-12	9.26E-11
LDLR	19p13.2	0.497164857	1.45E-12	9.72E-11
ANXA2P1	4q31.3	0.496570627	1.56E-12	1.04E-10
PLLP	16q13	0.496170987	1.63E-12	1.09E-10
RAB25	1q22	0.496053815	1.65E-12	1.10E-10
TICAM1	19p13.3	0.495913628	1.68E-12	1.11E-10
KLHL42	12p11.22	-0.495827841	1.70E-12	1.12E-10
ITGB6	2q24.2	0.495787031	1.71E-12	1.12E-10
MGAT4B	5q35.3	0.495719038	1.72E-12	1.13E-10
SLC4A11	20p13	0.495610236	1.74E-12	1.14E-10
PSMG3-AS1	17p22.3	-0.495537003	1.76E-12	1.14E-10
PAFAH1B1	17p13.3	-0.49551608	1.76E-12	1.14E-10
TBC1D14	4p16.1	-0.49493022	1.89E-12	1.22E-10
KRT8	12q13.13	0.493743854	2.17E-12	1.40E-10
NAPRT	8q24.3	0.493704099	2.18E-12	1.40E-10
IGSF9	1q23.2	0.492911096	2.39E-12	1.53E-10
EHBP1L1	11q13.1	0.492894357	2.40E-12	1.53E-10
CCDC153	11q23.3	0.492572134	2.49E-12	1.59E-10
PDE1C	7p14.3	-0.492339078	2.56E-12	1.62E-10
GTF2IRD1	7q11.23	0.492254096	2.59E-12	1.64E-10
APOL1	22q12.3	0.492164124	2.61E-12	1.65E-10
DTNA	18q12.1	-0.491754023	2.74E-12	1.72E-10
SERINC2	1p35.2	0.491647312	2.78E-12	1.74E-10
ASAP2	2p25.1 2f	0.491548972	2.81E-12	1.75E-10
CBX6	22q13.1	-0.491205825	2.92E-12	1.82E-10
ELMO1	7p14.2-p1	-0.491191179	2.93E-12	1.82E-10

TJP3	19p13.3	0.491107484	2.96E-12	1.83E-10
OCEL1	19p13.11	0.490682736	3.11E-12	1.92E-10
NPAS3	14q13.1	-0.490515347	3.17E-12	1.95E-10
NUCB2	11p15.1	-0.48986044	3.42E-12	2.09E-10
SDK1	7p22.2	-0.489847886	3.42E-12	2.09E-10
SEMA4B	15q26.1	0.489787207	3.45E-12	2.10E-10
KATNAL2	18q21.1	-0.489552863	3.54E-12	2.15E-10
MYLIP	6p22.3	-0.489427322	3.59E-12	2.17E-10
TWF2	3p21.2	0.489418953	3.60E-12	2.17E-10
SOGA1	20q11.23	-0.489343628	3.63E-12	2.18E-10
MBOAT2	2p25.1	0.489314335	3.64E-12	2.19E-10
KRBA2	17p13.1	-0.489226456	3.68E-12	2.20E-10
NCALD	8q22.3	-0.48920344	3.69E-12	2.20E-10
WNT10A	2q35	0.489169962	3.70E-12	2.20E-10
SELENOP	5p12	-0.488824723	3.85E-12	2.29E-10
IL18	11q23.1	0.488709644	3.91E-12	2.31E-10
MYRF	11q12.2	0.488646873	3.93E-12	2.32E-10
ZCWPW2	3p24.1	-0.488500408	4.00E-12	2.35E-10
ARMCX3	Xq22.1	-0.488115414	4.18E-12	2.45E-10
MAP2K4	17p12	-0.488090306	4.19E-12	2.45E-10
SYT8	11p15.5	0.487977883	4.25E-12	2.48E-10
LINC02693	17p11.2	-0.487828762	4.32E-12	2.51E-10
ULK2	17p11.2	-0.487824577	4.33E-12	2.51E-10
RELA	11q13.1	0.487014835	4.75E-12	2.74E-10
MMEL1	1p36.32	0.486911518	4.80E-12	2.77E-10
PLAC8	4q21.22	0.486544055	5.01E-12	2.88E-10
SYNE1	6q25.2	-0.486305526	5.15E-12	2.95E-10
ZFYVE21	14q32.33	0.486219739	5.20E-12	2.97E-10
SETBP1	18q12.3	-0.486161153	5.24E-12	2.98E-10
VMP1	17q23.1	0.48606909	5.29E-12	3.01E-10
SEC14L2	22q12.2	0.48558994	5.59E-12	3.17E-10
EHD1	11q13.1	0.485317934	5.77E-12	3.25E-10
CD58	1p13.1	0.48529701	5.78E-12	3.25E-10
JMY	5q14.1	-0.484773921	6.14E-12	3.45E-10
CGB5	19q13.33	0.484744463	6.16E-12	3.45E-10
EPG5	18q12.3-c	-0.484472622	6.35E-12	3.55E-10
ACADM	1p31.1	-0.484315695	6.47E-12	3.60E-10
LAMA3	18q11.2	0.484165045	6.58E-12	3.65E-10
RAB8A	19p13.11	0.483907685	6.77E-12	3.75E-10
ARRDC1	9q34.3	0.483798883	6.86E-12	3.79E-10
MYO19	17q12	0.483227669	7.32E-12	4.03E-10
CCDC149	4p15.2	-0.483190007	7.35E-12	4.03E-10
INPP4B	4q31.21	0.48317536	7.36E-12	4.03E-10
TNFRSF12A	16p13.3	0.482968217	7.54E-12	4.12E-10
HES1	3q29	0.482901262	7.59E-12	4.14E-10
SDR16C5	8q12.1	0.482649096	7.82E-12	4.24E-10
ELMO3	16q22.1	0.482522545	7.93E-12	4.29E-10
VAMP8	2p11.2	0.48241165	8.03E-12	4.34E-10
CYSRT1	9q34.3	0.48229177	8.14E-12	4.38E-10
ATG16L1	2q37.1	0.481442889	8.96E-12	4.81E-10
SLC23A2	20p13	-0.481380118	9.02E-12	4.83E-10
TTLL11	9q33.2	-0.481329902	9.07E-12	4.85E-10
PARP3	3p21.2	0.481172975	9.23E-12	4.92E-10
STAMBP	2p13.1	0.481032787	9.38E-12	4.99E-10

SLC23A3	2q35	0.480758689	9.68E-12	5.13E-10
TMEM38B	9q31.2	-0.480723118	9.72E-12	5.14E-10
KCNK1	1q42.2	0.480668717	9.78E-12	5.16E-10
RNF39	6p22.1	0.480624778	9.82E-12	5.17E-10
LGI2	4p15.2	-0.480562007	9.89E-12	5.19E-10
ECM1	1q21.2	0.479760634	1.08E-11	5.66E-10
UBAC2	13q32.3	0.479706233	1.09E-11	5.68E-10
LIFR	5p13.1	-0.479595338	1.10E-11	5.74E-10
ZNF618	9q32	-0.479532568	1.11E-11	5.77E-10
OASL	12q24.31	0.479453058	1.12E-11	5.80E-10
NCOA5	20q13.12	-0.47942795	1.12E-11	5.80E-10
AHNAK2	14q32.33	0.479407026	1.13E-11	5.80E-10
PPM1N	19q13.32	0.479260561	1.15E-11	5.88E-10
SP4	7p15.3	-0.479166405	1.16E-11	5.93E-10
RIC8B	12q23.3	-0.479118281	1.16E-11	5.95E-10
DMBX1	1p33	0.478961476	1.18E-11	6.04E-10
GPRIN3	4q22.1	-0.478860921	1.20E-11	6.09E-10
CGB3	19q13.33	0.478251852	1.28E-11	6.49E-10
PERP	6q23.3	0.478241583	1.28E-11	6.49E-10
TMEM105	17q25.3	0.478123387	1.30E-11	6.56E-10
PHLDA3	1q32.1	0.478099303	1.30E-11	6.56E-10
LINC00520	14q22.3	0.478087369	1.31E-11	6.56E-10
SLC30A4	15q21.1 1	-0.478055364	1.31E-11	6.56E-10
RCHY1	4q21.1	-0.477844036	1.34E-11	6.70E-10
LEXM	1p32.3	0.477647677	1.37E-11	6.84E-10
KLHL32	6q16.1	-0.477555291	1.39E-11	6.89E-10
RCE1	11q13.2	0.477203775	1.44E-11	7.15E-10
TRDMT1	10p13	-0.477143096	1.45E-11	7.18E-10
LPAR5	12p13.31	0.477099157	1.46E-11	7.19E-10
ICE1	5p15.32	-0.476640931	1.53E-11	7.55E-10
PYCARD	16p11.2	0.476383571	1.58E-11	7.75E-10
STX4	16p11.2	0.476333354	1.59E-11	7.76E-10
CLDN23	8p23.1	0.476333354	1.59E-11	7.76E-10
EPS8L2	11p15.5	0.476241291	1.60E-11	7.82E-10
DHRS9	2q31.1	0.475904421	1.66E-11	8.10E-10
ELL2	5q15	-0.475879313	1.67E-11	8.10E-10
NUAK2	1q32.1	-0.475389701	1.76E-11	8.53E-10
MLXIP	12q24.31	-0.475333208	1.77E-11	8.56E-10
ACTB	7p22.1	0.475316469	1.78E-11	8.56E-10
MLEC	12q24.31	-0.475161635	1.81E-11	8.68E-10
FOXRED2	22q12.3	-0.474992154	1.84E-11	8.83E-10
MPHOSPH9	12q24.31	-0.474791287	1.88E-11	9.00E-10
RNF149	2q11.2	0.474764087	1.89E-11	9.01E-10
GPR87	3q25.1	0.474526532	1.94E-11	9.23E-10
AFAP1L2	10q25.3	0.474446049	1.96E-11	9.29E-10
SH3D21	1p34.3	0.474148934	2.02E-11	9.57E-10
LINC00479	21q22.3	0.473977196	2.06E-11	9.73E-10
ZBTB7A	19p13.3	0.47383508	2.09E-11	9.86E-10
GPR35	2q37.3	0.473797418	2.10E-11	9.88E-10
ZNF488	10q11.22	0.47332873	2.21E-11	1.04E-09
RFLNA	12q24.31	0.473247128	2.23E-11	1.05E-09
MSLNL	16p13.3	0.473112969	2.27E-11	1.06E-09
SLC25A51	9p13.2-p1	-0.47288749	2.32E-11	1.08E-09
DIS3L	15q22.31	-0.472824472	2.34E-11	1.09E-09

MYD88	3p22. 2	0. 472730316	2. 36E-11	1. 10E-09
ZNF407	18q22. 3	-0. 472650807	2. 38E-11	1. 10E-09
PM20D2	6q15	-0. 472638252	2. 39E-11	1. 10E-09
SLC39A4	8q24. 3	0. 472634068	2. 39E-11	1. 10E-09
FUT2	19q13. 33	0. 472581759	2. 40E-11	1. 10E-09
CHMP4B	20q11. 22	0. 472506434	2. 42E-11	1. 11E-09
CGB8	19q13. 33	0. 47244819	2. 44E-11	1. 11E-09
BICDL2	16p13. 3	0. 471983345	2. 56E-11	1. 17E-09
CCDC117	22q12. 1	-0. 471861988	2. 60E-11	1. 18E-09
CTNNA1	5q31. 2	0. 471661122	2. 66E-11	1. 21E-09
CHD6	20q12	-0. 471627644	2. 67E-11	1. 21E-09
MIS12	17p13. 2	-0. 471627644	2. 67E-11	1. 21E-09
MGLL	3q21. 3	0. 471460256	2. 72E-11	1. 22E-09
CRIP1	14q32. 33	0. 471441424	2. 72E-11	1. 22E-09
EML2	19q13. 32	0. 471430963	2. 72E-11	1. 22E-09
TECTA	11q23. 3	-0. 471244743	2. 78E-11	1. 25E-09
FAM214B	9p13. 3	0. 471127571	2. 82E-11	1. 26E-09
ING3	7q31. 31	-0. 470853472	2. 90E-11	1. 29E-09
CGB1	19q13. 33	0. 470797053	2. 92E-11	1. 30E-09
PPP1CA	11q13. 2	0. 470725839	2. 94E-11	1. 31E-09
PSORS1C1	6p21. 33	0. 470671683	2. 96E-11	1. 31E-09
SLC52A3	20p13	0. 470598205	2. 98E-11	1. 32E-09
ADORA2B	17p12	0. 470585651	2. 99E-11	1. 32E-09
TUFT1	1q21. 3	0. 470098132	3. 15E-11	1. 39E-09
FADD	11q13. 3	0. 470039546	3. 17E-11	1. 39E-09
CACNB1	17q12	0. 469909819	3. 22E-11	1. 41E-09
TMOD2	15q21. 2	-0. 469893081	3. 22E-11	1. 41E-09
MYO1B	2q32. 3	-0. 469870065	3. 23E-11	1. 41E-09
TMEM54	1p35. 1	0. 469754985	3. 27E-11	1. 42E-09
ST14	11q24. 3	0. 469577135	3. 33E-11	1. 45E-09
MAGEH1	Xp11. 21	-0. 469529011	3. 35E-11	1. 45E-09
TNKS1BP1	11q12. 1	0. 469384638	3. 40E-11	1. 47E-09
TAF9B	Xq21. 1	-0. 469187956	3. 48E-11	1. 50E-09
PAIP2	5q31. 2	-0. 469181679	3. 48E-11	1. 50E-09
AASDH	4q12	-0. 469110539	3. 51E-11	1. 51E-09
MARK1	1q41	-0. 46905823	3. 53E-11	1. 51E-09
PCYT2	17q25. 3	0. 468947335	3. 57E-11	1. 53E-09
FXR2	17p13. 1	-0. 468928504	3. 58E-11	1. 53E-09
RABEP1	17p13. 2	-0. 468482832	3. 75E-11	1. 60E-09
SMAD3	15q22. 33	0. 468390769	3. 79E-11	1. 61E-09
FBXL19	16p11. 2	0. 468235934	3. 86E-11	1. 63E-09
RFXAP	13q13. 3	-0. 468233842	3. 86E-11	1. 63E-09
ABHD17C	15q25. 1	0. 46822338	3. 86E-11	1. 63E-09
TNNT2	1q32. 1	0. 468165954	3. 89E-11	1. 64E-09
FAM184A	6q22. 31	-0. 467995313	3. 96E-11	1. 66E-09
RNF7	3q23	0. 467993221	3. 96E-11	1. 66E-09
LFNG	7p22. 3	0. 467940912	3. 98E-11	1. 67E-09
GLCCI1	7p21. 3	-0. 46763752	4. 11E-11	1. 72E-09
MVB12B	9q33. 3	-0. 467633335	4. 12E-11	1. 72E-09
TBC1D9	4q31. 21	-0. 467595673	4. 13E-11	1. 72E-09
MID2	Xq22. 3	-0. 467491055	4. 18E-11	1. 74E-09
ANKRD46	8q22. 3	-0. 466955412	4. 43E-11	1. 83E-09
SPRR1A	1q21. 3	0. 466943437	4. 43E-11	1. 83E-09
MPZL2	11q23. 3	0. 466903103	4. 45E-11	1. 84E-09

TGFA	2p13.3	0.466867533	4.47E-11	1.84E-09
C6ORF132	6p21.1	0.466836148	4.49E-11	1.84E-09
TRAK1	3p22.1	0.466823593	4.49E-11	1.84E-09
CDK18	1q32.1	0.466821501	4.49E-11	1.84E-09
RNPEPL1	2q37.3	0.466781746	4.51E-11	1.84E-09
RASSF7	11p15.5	0.466503463	4.65E-11	1.90E-09
BATF	14q24.3	0.46647417	4.66E-11	1.90E-09
TMSB10	2p11.2	0.466348628	4.73E-11	1.92E-09
STN1	10q24.33	0.466214718	4.80E-11	1.94E-09
TENT5C	1p12	-0.466204256	4.80E-11	1.94E-09
MVB12A	19p13.11	0.46603059	4.89E-11	1.98E-09
CDC40	6q21	-0.465693721	5.07E-11	2.04E-09
ME2	18q21.2	-0.465622581	5.11E-11	2.05E-09
B4GALT4	3q13.32	0.465612119	5.12E-11	2.05E-09
BIRC7	20q13.33	0.465566773	5.14E-11	2.06E-09
FBXO10	9p13.2	-0.465446823	5.21E-11	2.08E-09
CDIP1	16p13.3	-0.465340113	5.27E-11	2.10E-09
TOP3A	17p11.2	-0.465304543	5.29E-11	2.11E-09
EML1	14q32.2	-0.464894441	5.53E-11	2.19E-09
ELOVL1	1p34.2	0.464869332	5.54E-11	2.19E-09
KRTCAP3	2p23.3	0.464869332	5.54E-11	2.19E-09
TSTD2	9q22.33	-0.464794007	5.58E-11	2.21E-09
BHLHB9	Xq22.1	-0.464658004	5.67E-11	2.23E-09
CIB1	15q26.1	0.464237441	5.93E-11	2.33E-09
FBXO33	14q21.1	-0.464206055	5.95E-11	2.33E-09
ARHGEF26	3q25.2	-0.464201871	5.95E-11	2.33E-09
CST4	20p11.21	0.464180237	5.96E-11	2.33E-09
LANCL3	Xp21.1	0.464133066	5.99E-11	2.34E-09
NET1	10p15.1	0.463793861	6.21E-11	2.42E-09
ATRN	20p13	-0.463674597	6.29E-11	2.45E-09
FAM25A	10q23.2	0.463566584	6.37E-11	2.47E-09
KCTD12	13q22.3	-0.463270772	6.57E-11	2.55E-09
LPAR2	19p13.11	0.463233352	6.60E-11	2.55E-09
KCNJ2	17q24.3	-0.463222648	6.60E-11	2.55E-09
ZHX3	20q12	-0.463164062	6.65E-11	2.56E-09
ADGRF1	6p12.3 6	0.463068473	6.71E-11	2.58E-09
B4GALT6	18q12.1	-0.462992488	6.77E-11	2.60E-09
CNIH4	1q42.11	0.462406629	7.20E-11	2.76E-09
RASAL1	12q24.13	0.462132772	7.42E-11	2.83E-09
LRFN4	11q13.2	0.462059297	7.47E-11	2.85E-09
PRKAR2B	7q22.3	-0.461956772	7.56E-11	2.88E-09
ZRANB1	10q26.13	-0.461634549	7.82E-11	2.97E-09
CYP2U1	4q25	-0.461588517	7.86E-11	2.98E-09
KIF13B	8p12	0.461354173	8.05E-11	3.05E-09
SNX30	9q32	-0.461159584	8.22E-11	3.11E-09
SMAGP	12q13.13	0.46110309	8.27E-11	3.12E-09
USP51	Xp11.21	-0.461094721	8.28E-11	3.12E-09
CERK	22q13.31	-0.461042412	8.32E-11	3.13E-09
PSKH1	16q22.1	-0.460979641	8.38E-11	3.14E-09
ACP6	1q21.2	0.460908501	8.44E-11	3.16E-09
SPATS2L	2q33.1	0.460833176	8.51E-11	3.18E-09
GUK1	1q42.13	0.460682527	8.65E-11	3.22E-09
SNCA	4q22.1	-0.460443998	8.87E-11	3.30E-09
SEC63	6q21	-0.46041052	8.90E-11	3.31E-09

AATF	17q12	0.460220116	9.08E-11	3.37E-09
UGT1A6	2q37.1	0.459930638	9.36E-11	3.46E-09
MAL2	8q24.12	0.459849769	9.44E-11	3.49E-09
ZBTB10	8q21.13	-0.459671918	9.62E-11	3.55E-09
CYP2S1	19q13.2	0.45965518	9.63E-11	3.55E-09
INKA2	1p13.2	-0.459481995	9.81E-11	3.60E-09
DNAJB9	7q31.1 14	-0.459471052	9.82E-11	3.60E-09
STXBP5	6q24.3	-0.4592116	1.01E-10	3.70E-09
BACE1	11q23.3	-0.459017011	1.03E-10	3.76E-09
ZDHHC7	16q24.1	0.45874082	1.06E-10	3.87E-09
TTC7B	14q32.11	-0.458521122	1.09E-10	3.95E-09
CACNB3	12q13.12	0.457964555	1.15E-10	4.18E-09
UBE2J1	6q15	-0.4578976	1.16E-10	4.20E-09
BTBD10	11p15.3	0.457836922	1.17E-10	4.22E-09
HIRA	22q11.21	-0.45731174	1.23E-10	4.45E-09
FKBP1B	2p23.3	0.457274078	1.24E-10	4.46E-09
CHMP1A	16q24.3	0.457251062	1.24E-10	4.46E-09
MBP	18q23	-0.457081581	1.26E-10	4.54E-09
GNG2	14q22.1	-0.456960224	1.28E-10	4.58E-09
IL1R2	2q11.2	0.456822129	1.30E-10	4.64E-09
CNNM4	2q11.2	0.456692403	1.31E-10	4.70E-09
EPHA1	7q34-q35	0.45664661	1.32E-10	4.71E-09
S100A14	1q21.3	0.456502237	1.34E-10	4.77E-09
GRB7	17q12	0.456493629	1.34E-10	4.77E-09
ADAM8	10q26.3	0.456439228	1.35E-10	4.79E-09
SMYD4	17p13.3	-0.456257192	1.37E-10	4.86E-09
INAVA	1q32.1	0.4562551	1.38E-10	4.86E-09
SOX5	12p12.1	-0.456169313	1.39E-10	4.90E-09
EREG	4q13.3	0.455740672	1.45E-10	5.11E-09
CNKSR1	1p36.11	0.455547884	1.48E-10	5.21E-09
CGN	1q21.3	0.455395142	1.50E-10	5.28E-09
GPLD1	6p22.3	-0.455311447	1.52E-10	5.32E-09
CEP97	3q12.3	-0.454953654	1.57E-10	5.51E-09
SAMD10	20q13.33	0.454807189	1.60E-10	5.58E-09
CREB3L2	7q33	-0.454796728	1.60E-10	5.58E-09
TMC6	17q25.3	0.454779989	1.60E-10	5.58E-09
ELF3	1q32.1	0.454662817	1.62E-10	5.64E-09
SESN1	6q21	-0.454551922	1.64E-10	5.69E-09
RAPGEF1	9q34.13	-0.454407549	1.67E-10	5.77E-09
SLC26A2	5q32	-0.454367794	1.67E-10	5.78E-09
BTBD3	20p12.2	-0.454318862	1.68E-10	5.80E-09
CCDC110	4q35.1	-0.454215052	1.70E-10	5.86E-09
MAN2A2	15q26.1	-0.453968154	1.74E-10	6.00E-09
GSTA4	6p12.2	-0.453834244	1.77E-10	6.07E-09
TNFRSF21	6p12.3	0.453771473	1.78E-10	6.10E-09
SDC4	20q13.12	0.45344088	1.84E-10	6.30E-09
ZFP3	17p13.2	-0.453311154	1.87E-10	6.37E-09
TSPAN15	10q22.1	0.453181428	1.89E-10	6.45E-09
SMAD5	5q31.1	-0.453164689	1.89E-10	6.45E-09
RALGAPA1	14q13.2	-0.452905237	1.95E-10	6.61E-09
ST6GALNAC	17q25.1	0.452532798	2.02E-10	6.86E-09
TNFRSF10E	8p21.3	0.452233591	2.08E-10	7.06E-09
ADNP2	18q23	-0.452193836	2.09E-10	7.08E-09
ZIK1	19q13.43	-0.451840228	2.17E-10	7.33E-09

FAM171B	2q32.1	-0.451013747	2.36E-10	7.96E-09
CMTM7	3p22.3	0.450994916	2.37E-10	7.96E-09
TTLL12	22q13.2	0.450984454	2.37E-10	7.96E-09
FECH	18q21.31	-0.450904944	2.39E-10	8.01E-09
ZDHC15	Xq13.3	-0.450712447	2.44E-10	8.15E-09
TBL1X	Xp22.31-1	-0.450210282	2.56E-10	8.57E-09
CORO2A	9q22.33	0.450149603	2.58E-10	8.61E-09
DNAJC18	5q31.2	-0.449990584	2.62E-10	8.73E-09
ZNF286A	17p12	-0.449877597	2.65E-10	8.82E-09
ANKFY1	17p13.2	-0.449517712	2.75E-10	9.13E-09
ARHGAP27F	17q24.1	0.449375432	2.79E-10	9.25E-09
NDST1	5q33.1	-0.449228967	2.83E-10	9.38E-09
PDLIM7	5q35.3	0.449118072	2.87E-10	9.47E-09
FBXL12	19p13.2	0.448950918	2.91E-10	9.61E-09
PROM2	2q11.1	0.448887912	2.93E-10	9.66E-09
FSD1L	9q31.2	-0.448866989	2.94E-10	9.66E-09
KRT14	17q21.2	0.448790873	2.96E-10	9.72E-09
CAPN2	1q41	0.448649384	3.01E-10	9.83E-09
ZNF79	9q33.3	-0.448649384	3.01E-10	9.83E-09
ZNF566	19q13.12	-0.448607537	3.02E-10	9.86E-09
BLMH	17q11.2	-0.448304145	3.11E-10	1.01E-08
BEST4	1p34.1	0.448220451	3.14E-10	1.02E-08
SASH1	6q24.3-q25	-0.448201619	3.15E-10	1.02E-08
WNK3	Xp11.22	-0.448110493	3.17E-10	1.03E-08
ZNF542P	19q13.43	-0.448048877	3.19E-10	1.03E-08
RNF207	1p36.31	0.447814534	3.27E-10	1.06E-08
NRADDP	3p21.31	0.447783398	3.28E-10	1.06E-08
PARP12	7q34	0.447718285	3.30E-10	1.06E-08
AGTPBP1	9q21.33	-0.447693177	3.31E-10	1.07E-08
PPP4C	16p11.2	0.447634591	3.33E-10	1.07E-08
PLIN3	19p13.3	0.44753625	3.36E-10	1.08E-08
CD99L2	Xq28	-0.447404432	3.41E-10	1.09E-08
CD151	11p15.5	0.447069655	3.53E-10	1.13E-08
KLK9	19q13.41	0.447055272	3.53E-10	1.13E-08
ZNF658	9q21.11	-0.446921097	3.58E-10	1.14E-08
FBX09	6p12.1	-0.446908543	3.58E-10	1.14E-08
HK2	2p12	0.446762078	3.64E-10	1.16E-08
ALKBH5	17p11.2 1	-0.446732785	3.65E-10	1.16E-08
CEACAM6	19q13.2	0.446611662	3.69E-10	1.17E-08
EPB41L3	18p11.31	-0.446525642	3.73E-10	1.18E-08
GRTP1	13q34	0.446427301	3.76E-10	1.19E-08
MICALL2	7p22.3	0.446414747	3.77E-10	1.19E-08
GGA2	16p12.2	-0.446398008	3.77E-10	1.19E-08
PHACTR1	6p24.1	-0.446360346	3.79E-10	1.19E-08
SFXN3	10q24.31	0.446339422	3.80E-10	1.19E-08
COPS3	17p11.2	-0.446182495	3.86E-10	1.21E-08
ERN2	16p12.2	0.446111838	3.88E-10	1.22E-08
C6ORF89	6p21.2	-0.446073693	3.90E-10	1.22E-08
SLC35F2	11q22.3	0.445895842	3.97E-10	1.24E-08
WFDC2	20q13.12	0.445782855	4.02E-10	1.25E-08
SH3BGRL3	1p36.11	0.445770301	4.02E-10	1.25E-08
PRMT9	4q31.23	-0.445753562	4.03E-10	1.25E-08
MAP3K4	6q26	-0.445722177	4.04E-10	1.25E-08
GPAM	10q25.2	-0.445550604	4.11E-10	1.27E-08

GDPD3	16p11.2	0.445243027	4.24E-10	1.31E-08
DDA1	19p13.11	0.445077731	4.31E-10	1.33E-08
MED13L	12q24.21	-0.444958467	4.36E-10	1.34E-08
EHD2	19q13.33	0.444941728	4.37E-10	1.34E-08
TNS4	17q21.2	0.444811119	4.43E-10	1.36E-08
PDE3B	11p15.2	-0.444537903	4.55E-10	1.39E-08
MAPRE2	18q12.1-c	-0.444406085	4.61E-10	1.41E-08
ANKFN1	17q22	0.444381902	4.62E-10	1.41E-08
C17ORF50	17q12	0.444372958	4.63E-10	1.41E-08
ZNF271P	18q12.2	-0.444186387	4.71E-10	1.44E-08
CCDC9B	15q15.1	0.444100601	4.75E-10	1.45E-08
DNAJC27	2p23.3	-0.443824409	4.89E-10	1.48E-08
HSH2D	19p13.11	0.443721884	4.94E-10	1.50E-08
ATP2B1	12q21.33	-0.443686314	4.95E-10	1.50E-08
DSTYK	1q32.1	-0.443613081	4.99E-10	1.51E-08
XBP1	22q12.1 2	-0.443552403	5.02E-10	1.52E-08
BRI3	7q21.3	0.443048145	5.28E-10	1.59E-08
TMEM40	3p25.2	0.442465252	5.60E-10	1.68E-08
LGALS9	17q11.2	0.44228025	5.70E-10	1.71E-08
PPM1D	17q23.2	-0.442142155	5.78E-10	1.73E-08
ZFAND4	10q11.22	-0.4421024	5.80E-10	1.74E-08
TNNI2	11p15.5	0.442099482	5.80E-10	1.74E-08
STYK1	12p13.2	0.442071246	5.82E-10	1.74E-08
CNST	1q44	-0.442035445	5.84E-10	1.74E-08
SULT1C2	2q12.3	0.441909088	5.91E-10	1.76E-08
HMGA1	6p21.31	0.441748792	6.01E-10	1.79E-08
POU6F2	7p14.1	-0.441417102	6.21E-10	1.84E-08
RAB11FIP3	16p13.3	-0.441104346	6.41E-10	1.90E-08
CITED2	6q24.1	-0.440993451	6.48E-10	1.92E-08
TBC1D15	12q21.1	-0.440976712	6.49E-10	1.92E-08
THAP5	7q31.1	-0.440702613	6.67E-10	1.97E-08
RSBN1	1p13.2	-0.440472454	6.82E-10	2.01E-08
ATP8B2	1q21.3	-0.439949365	7.18E-10	2.11E-08
CGB2	19q13.33	0.439882259	7.23E-10	2.12E-08
SMIM13	6p24.2	-0.439824054	7.27E-10	2.13E-08
ARHGAP8	22q13.31	0.439779884	7.30E-10	2.14E-08
ABLIM3	5q32	0.439756868	7.32E-10	2.14E-08
EXOC3L4	14q32.32	0.439689913	7.37E-10	2.15E-08
ZBTB24	6q21	-0.439664804	7.39E-10	2.15E-08
EIF6	20q11.22	0.439656435	7.39E-10	2.15E-08
SLC45A3	1q32.1	0.439160547	7.76E-10	2.26E-08
ARHGEF5	7q35	0.43907476	7.83E-10	2.27E-08
ALDOA	16p11.2	0.4388174	8.03E-10	2.33E-08
CNKSR3	6q25.2	-0.438811123	8.03E-10	2.33E-08
NPSR1	7p14.3	0.438756873	8.08E-10	2.34E-08
UBE2G1	17p13.2	-0.438691859	8.13E-10	2.35E-08
ANXA10	4q32.3	0.438583056	8.22E-10	2.37E-08
BEND3	6q21	-0.438354989	8.40E-10	2.42E-08
CTDSP1	2q35	0.438225263	8.51E-10	2.45E-08
ST6GALNAC	9q34.11	-0.438191785	8.54E-10	2.45E-08
DDX19B	16q22.1	0.438152031	8.57E-10	2.46E-08
ACSL5	10q25.2	0.438076706	8.63E-10	2.47E-08
POLB	8p11.21	0.43804532	8.66E-10	2.48E-08
INVS	9q31.1	-0.437969996	8.73E-10	2.49E-08

LBX2	2p13.1	0.437915594	8.77E-10	2.50E-08
ZNF22	10q11.21	-0.437804699	8.87E-10	2.52E-08
A2ML1	12p13.31	0.437442984	9.19E-10	2.61E-08
PLCB1	20p12.3	-0.437306719	9.31E-10	2.64E-08
MFSD10	4p16.3	0.437296257	9.32E-10	2.64E-08
KIAA1586	6p12.1	-0.437262779	9.35E-10	2.65E-08
DNAJC6	1p31.3	-0.437179085	9.43E-10	2.67E-08
GID4	17p11.2 1	-0.437145607	9.46E-10	2.67E-08
PTPRS	19p13.3	-0.437128868	9.47E-10	2.67E-08
TCP11L2	12q23.3	-0.437055636	9.54E-10	2.69E-08
POLR2H	3q27.1	0.436994957	9.60E-10	2.70E-08
CORO1B	11q13.2	0.436942649	9.65E-10	2.71E-08
LDHA	11p15.1	0.436930094	9.66E-10	2.71E-08
TMUB2	17q21.31	0.436852677	9.73E-10	2.72E-08
CYB5D1	17p13.1	-0.436725043	9.86E-10	2.76E-08
LYRM2	6q15	-0.436484422	1.01E-09	2.82E-08
SLC10A3	Xq28	0.436463499	1.01E-09	2.82E-08
ANKRD10	13q34	0.436459314	1.01E-09	2.82E-08
RDH13	19q13.42	0.436371435	1.02E-09	2.84E-08
ISCA1	9q21.33	-0.43633168	1.02E-09	2.84E-08
GPX1	3p21.31	0.436283556	1.03E-09	2.85E-08
CDSN	6p21.33	0.436236345	1.03E-09	2.86E-08
SIK2	11q23.1	-0.436158015	1.04E-09	2.88E-08
CLCF1	11q13.2	0.436149645	1.04E-09	2.88E-08
EFNA3	1q21.3	0.436139184	1.04E-09	2.88E-08
SRBD1	2p21	-0.436099429	1.05E-09	2.88E-08
RGL1	1q25.3	-0.435934133	1.06E-09	2.93E-08
CERS4	19p13.2	-0.435900655	1.07E-09	2.93E-08
SLC35E2B	1p36.33	-0.435839977	1.07E-09	2.94E-08
NXPE3	3q12.3	-0.435829515	1.08E-09	2.94E-08
KLHL30	2q37.3	0.435660034	1.09E-09	2.99E-08
MTRR	5p15.31	-0.435423598	1.12E-09	3.06E-08
ELAC1	18q21.2	-0.435392212	1.12E-09	3.06E-08
ACTN4	19q13.2	0.435323164	1.13E-09	3.08E-08
OTUD7A	15q13.3	-0.435295964	1.13E-09	3.08E-08
TAGLN2	1q23.2	0.435281317	1.13E-09	3.08E-08
DTX2	7q11.23	0.435054524	1.16E-09	3.15E-08
RIPK4	21q22.3	0.434850292	1.18E-09	3.20E-08
NR1I2	3q13.33	0.434779152	1.19E-09	3.22E-08
DMXL2	15q21.2	-0.434469483	1.23E-09	3.32E-08
MFSD2B	2p23.3	0.434452744	1.23E-09	3.32E-08
C10RF109	1p34.3	-0.434291633	1.25E-09	3.36E-08
PTGES	9q34.11	0.434239324	1.26E-09	3.38E-08
CST6	11q13.1	0.434026812	1.28E-09	3.44E-08
FAM32A	19p13.11	0.43392547	1.29E-09	3.47E-08
SIDT2	11q23.3	-0.433923378	1.29E-09	3.47E-08
SLURP1	8q24.3	0.43389644	1.30E-09	3.47E-08
TECPR2	14q32.31	-0.433762266	1.31E-09	3.51E-08
AP1M2	19p13.2	0.433722512	1.32E-09	3.52E-08
CLCN5	Xp11.23	-0.43371205	1.32E-09	3.52E-08
SNX25	4q35.1	-0.433707865	1.32E-09	3.52E-08
C5	9q33.2	-0.433122005	1.40E-09	3.72E-08
GJB5	1p34.3	0.433051771	1.41E-09	3.74E-08
SLC22A20F	11q13.1	0.432933693	1.42E-09	3.78E-08

TMEM134	11q13.2	0.432910677	1.43E-09	3.78E-08
TFAP2A	6p24.3	0.432806059	1.44E-09	3.81E-08
MTMR11	1q21.2	0.432730735	1.45E-09	3.83E-08
BHLHE40	3p26.1	0.432659595	1.46E-09	3.86E-08
PSIP1	9p22.3	-0.432531961	1.48E-09	3.90E-08
ZFYVE9	1p32.3	-0.432329002	1.51E-09	3.97E-08
SLC39A6	18q12.2	-0.432285063	1.52E-09	3.98E-08
PLEKHM1	17q21.31	0.432190907	1.53E-09	4.01E-08
MEGF9	9q33.2	-0.432130228	1.54E-09	4.03E-08
PBX3	9q33.3	-0.432054903	1.55E-09	4.05E-08
SEC11C	18q21.32	-0.432040257	1.55E-09	4.05E-08
EFNB2	13q33.3	0.43203398	1.55E-09	4.05E-08
SOCS2	12q22	-0.431964932	1.56E-09	4.07E-08
ZNF275	Xq28	-0.431845668	1.58E-09	4.11E-08
LNP1	3q12.2	-0.431839391	1.58E-09	4.11E-08
DHRS3	1p36.21	0.431770343	1.59E-09	4.14E-08
C8ORF31	8q24.3	0.431695018	1.60E-09	4.16E-08
N4BP2	4p14	-0.431586216	1.62E-09	4.20E-08
KCNMA1	10q22.3	-0.431330948	1.66E-09	4.30E-08
TMX3	18q22.1	-0.431253531	1.67E-09	4.32E-08
APH1A	1q21.2	0.431153098	1.69E-09	4.36E-08
KRT6A	12q13.13	0.431141703	1.69E-09	4.36E-08
SMCO2	12p11.23	0.431116337	1.70E-09	4.36E-08
ACSL6	5q31.1	-0.431075681	1.70E-09	4.37E-08
CEP120	5q23.2	-0.430902015	1.73E-09	4.44E-08
HECTD2	10q23.32	-0.430832967	1.74E-09	4.47E-08
SYNGR2	17q25.3	0.430592346	1.78E-09	4.56E-08
WDR37	10p15.3	-0.430546314	1.79E-09	4.58E-08
DOCK6	19p13.2	0.430529575	1.79E-09	4.58E-08
SMARCA2	9p24.3	-0.430397757	1.82E-09	4.63E-08
PLPP2	19p13.3	0.430173875	1.86E-09	4.73E-08
SPINT1	15q15.1	0.429996025	1.89E-09	4.80E-08
TSPYL1	6q22.1	-0.429895591	1.91E-09	4.84E-08
ADGRE5	19p13.12	0.429880945	1.91E-09	4.84E-08
TIMM21	18q22.3	-0.429878853	1.91E-09	4.84E-08
MYRIP	3p22.1	-0.429613123	1.96E-09	4.96E-08
PCNX1	14q24.2	-0.429590107	1.96E-09	4.96E-08
LANCL2	7p11.2	-0.429564178	1.97E-09	4.97E-08
KLHL13	Xq24	-0.429424811	1.99E-09	5.03E-08
GALNT5	2q24.1	0.429358009	2.01E-09	5.05E-08
C6ORF120	6q27	-0.429238591	2.03E-09	5.10E-08
CREBL2	12p13.1	-0.429221853	2.03E-09	5.11E-08
IHH	2q35	0.429094219	2.06E-09	5.16E-08
RIPK3	14q12	0.429039818	2.07E-09	5.18E-08
ZNF253	19p13.11	-0.429037725	2.07E-09	5.18E-08
ZMYND11	10p15.3	-0.428958216	2.08E-09	5.21E-08
FEM1B	15q23	-0.428853598	2.11E-09	5.25E-08
PRELID2	5q32	0.428847321	2.11E-09	5.25E-08
HACE1	6q16.3	-0.428836859	2.11E-09	5.25E-08
TNFRSF14	1p36.32	0.428786642	2.12E-09	5.27E-08
CRABP2	1q23.1	0.42870504	2.14E-09	5.30E-08
RALB	2q14.2	0.428698763	2.14E-09	5.30E-08
BTBD16	10q26.13	0.428583684	2.16E-09	5.35E-08
CXXC4	4q24	-0.428343056	2.21E-09	5.47E-08

ZNF287	17p11.2	-0.428173582	2.25E-09	5.55E-08
GPRC5D	12p13.1	0.428133827	2.26E-09	5.56E-08
HECW2	2q32.3	-0.428106626	2.26E-09	5.56E-08
DHRS1	14q12	0.428106626	2.26E-09	5.56E-08
MROH8	20q11.23	-0.428096165	2.26E-09	5.56E-08
TTC41P	12q23.3	-0.427965616	2.29E-09	5.62E-08
SGMS1	10q11.23	-0.427962254	2.29E-09	5.62E-08
LINC00242	6q27	-0.427955977	2.29E-09	5.62E-08
FAM120B	6q27	-0.427907853	2.30E-09	5.64E-08
LGR6	1q32.1	0.427897391	2.31E-09	5.64E-08
PLBD2	12q24.13	-0.427874375	2.31E-09	5.64E-08
ZSCAN2	15q25.2	-0.427771849	2.33E-09	5.69E-08
C12ORF29	12q21.32	-0.427744649	2.34E-09	5.70E-08
CREG2	2q11.2	0.427641301	2.36E-09	5.74E-08
PTPRH	19q13.42	0.427640031	2.36E-09	5.74E-08
AGRN	1p36.33	0.427581445	2.38E-09	5.76E-08
SULT2B1	19q13.33	0.427566798	2.38E-09	5.76E-08
THAP9	4q21.22	-0.427566798	2.38E-09	5.76E-08
POC1A	3p21.2	0.427313623	2.44E-09	5.89E-08
RAB39A	11q22.3	-0.427284721	2.44E-09	5.90E-08
ASL	7q11.21	0.427144142	2.48E-09	5.97E-08
CCDC120	Xp11.23	0.426985123	2.51E-09	6.06E-08
KIAA1324	1p13.3	-0.426685916	2.59E-09	6.22E-08
RPA1	17p13.3	-0.426641977	2.60E-09	6.24E-08
STAP2	19p13.3	0.426608499	2.61E-09	6.25E-08
MTF1	1p34.3	-0.426566652	2.62E-09	6.27E-08
ZNF614	19q13.41	-0.426516435	2.63E-09	6.29E-08
TULP4	6q25.3	-0.426311385	2.68E-09	6.41E-08
ERCC4	16p13.12	-0.426273722	2.69E-09	6.41E-08
UBALD2	17q25.1	0.426267445	2.69E-09	6.41E-08
PPP6C	9q33.3	-0.42626326	2.69E-09	6.41E-08
PHF10	6q27	-0.426223506	2.70E-09	6.43E-08
CCDC126	7p15.3	-0.426116795	2.73E-09	6.49E-08
RNF138	18q12.1	-0.425999623	2.76E-09	6.55E-08
DDIT4	10q22.1	0.42593476	2.78E-09	6.58E-08
CYMP	1p13.3	0.425907085	2.78E-09	6.59E-08
FAM169A	5q13.3	-0.425798757	2.81E-09	6.65E-08
BMP4	14q22.2	0.425683678	2.84E-09	6.72E-08
TBCEL	11q23.3	-0.425501642	2.89E-09	6.83E-08
CYP2C9	10q23.33	0.425125908	3.00E-09	7.06E-08
LAMB4	7q31.1	-0.425113359	3.00E-09	7.06E-08
PDZD3	11q23.3	0.425112596	3.00E-09	7.06E-08
UHRF1BP1I	12q23.1	-0.425093633	3.01E-09	7.06E-08
CA14	1q21.2	0.424965999	3.04E-09	7.14E-08
FGFR1	8p11.23	-0.424911598	3.06E-09	7.16E-08
ABCC9	12p12.1	-0.42480698	3.09E-09	7.23E-08
TUBB1	20q13.32	-0.424737932	3.11E-09	7.26E-08
SGSM1	22q11.23	-0.424731655	3.11E-09	7.26E-08
CHP1	15q15.1	0.424666792	3.13E-09	7.30E-08
CLDN4	7q11.23	0.424419894	3.20E-09	7.46E-08
PI4KA	22q11.21	-0.424350846	3.22E-09	7.50E-08
TFF1	21q22.3	0.424269466	3.25E-09	7.53E-08
RAPGEF4	2q31.1	-0.424267152	3.25E-09	7.53E-08
ACAT1	11q22.3	-0.42426506	3.25E-09	7.53E-08

ASB8	12q13. 11	-0. 424181365	3. 27E-09	7. 58E-08
SMURF1	7q22. 1	0. 423942837	3. 35E-09	7. 75E-08
INIP	9q32	-0. 423752432	3. 41E-09	7. 88E-08
POLR3B	12q23. 3	-0. 423382085	3. 53E-09	8. 15E-08
TRAPPC6A	19q13. 32	0. 4233507	3. 54E-09	8. 15E-08
HCFC1R1	16p13. 3	0. 423348608	3. 54E-09	8. 15E-08
BCL7C	16p11. 2	0. 423151926	3. 61E-09	8. 29E-08
NDST2	10q22. 2	-0. 423084971	3. 63E-09	8. 34E-08
CHMP2A	19q13. 43	0. 423036846	3. 64E-09	8. 36E-08
SRSF12	6q15	-0. 422953152	3. 67E-09	8. 42E-08
BLOC1S6	15q21. 1	-0. 422934321	3. 68E-09	8. 43E-08
ITPKA	15q15. 1	0. 422746009	3. 75E-09	8. 56E-08
KCNA7	19q13. 33	0. 422471021	3. 84E-09	8. 78E-08
FAM222B	17q11. 2	0. 422430063	3. 86E-09	8. 80E-08
TENT5A	6q14. 1	-0. 42221455	3. 94E-09	8. 97E-08
ZNF600	19q13. 41	0. 422149687	3. 96E-09	9. 01E-08
PLEKHM3	2q33. 3	-0. 421896512	4. 05E-09	9. 22E-08
ZNF625	19p13. 2	-0. 421712385	4. 12E-09	9. 37E-08
TRIM31	6p22. 1	0. 421558817	4. 18E-09	9. 48E-08
PDE10A	6q27	-0. 42155755	4. 18E-09	9. 48E-08
ZBED2	3q13. 13	0. 42153476	4. 19E-09	9. 48E-08
ZNF181	19q13. 11	-0. 421532442	4. 19E-09	9. 48E-08
DMXL1	5q23. 1	-0. 421429917	4. 23E-09	9. 56E-08
CRCT1	1q21. 3	0. 421348574	4. 27E-09	9. 62E-08
VSIG1	Xq22. 3	0. 421323206	4. 28E-09	9. 64E-08
CYB561D1	1p13. 3	-0. 421187203	4. 33E-09	9. 75E-08
TXNDC16	14q22. 1	-0. 421067939	4. 38E-09	9. 84E-08
PRLR	5p13. 2	-0. 420890089	4. 45E-09	1. 00E-07
PRPS1	Xq22. 3	-0. 420871257	4. 46E-09	1. 00E-07
RNF150	4q31. 21	-0. 420716423	4. 52E-09	1. 01E-07
FAM110A	20p13	0. 420645283	4. 55E-09	1. 02E-07
CBFA2T2	20q11. 21-	-0. 420634821	4. 56E-09	1. 02E-07
PHLPP2	16q22. 2	-0. 420505095	4. 61E-09	1. 03E-07
RGPD3	2q12. 2	-0. 42032306	4. 69E-09	1. 05E-07
AKIRIN1	1p34. 3	-0. 420302136	4. 70E-09	1. 05E-07
TMEM64	8q21. 3	-0. 420268659	4. 72E-09	1. 05E-07
TK1	17q25. 3	0. 42025192	4. 72E-09	1. 05E-07
APBA1	9q21. 12	-0. 420230996	4. 73E-09	1. 05E-07
HDHD2	18q21. 1	-0. 420224719	4. 73E-09	1. 05E-07
FITM2	20q13. 12	-0. 420205888	4. 74E-09	1. 05E-07
GKAP1	9q21. 32	-0. 420147302	4. 77E-09	1. 06E-07
ME1	6q14. 2	-0. 420048961	4. 81E-09	1. 06E-07
SPINK5	5q32	0. 419910866	4. 87E-09	1. 08E-07
RXYLT1	12q14. 2	-0. 419866926	4. 89E-09	1. 08E-07
HSPB1	7q11. 23	0. 419841818	4. 91E-09	1. 08E-07
ID4	6p22. 3	-0. 419799971	4. 92E-09	1. 08E-07
PFKP	10p15. 2	0. 4197372	4. 95E-09	1. 09E-07
GALE	1p36. 11	0. 419716276	4. 96E-09	1. 09E-07
RTN4R	22q11. 21	0. 419626305	5. 00E-09	1. 10E-07
LYPD2	8q24. 3	0. 419293289	5. 16E-09	1. 13E-07
CYP2C18	10q23. 33	0. 419220607	5. 19E-09	1. 14E-07
CPEB4	5q35. 2	-0. 419189003	5. 21E-09	1. 14E-07
DKK1	10q21. 1	0. 419170272	5. 22E-09	1. 14E-07
KPNA5	6q22. 1	-0. 419138786	5. 23E-09	1. 14E-07

GDPD2	Xq13. 1	0. 419121351	5. 24E-09	1. 14E-07
ADAP1	7p22. 3	0. 419065554	5. 27E-09	1. 15E-07
FTSJ1	Xp11. 23	0. 418806101	5. 40E-09	1. 17E-07
FRS2	12q15	-0. 418559203	5. 52E-09	1. 20E-07
ZNF236	18q23	-0. 418552926	5. 52E-09	1. 20E-07
RHPN2	19q13. 11	0. 418337413	5. 64E-09	1. 22E-07
LY6G6C	6p21. 33	0. 418113141	5. 75E-09	1. 25E-07
USB1	16q21	0. 418013098	5. 81E-09	1. 26E-07
TUBA4A	2q35	0. 417975436	5. 83E-09	1. 26E-07
PARP4	13q12. 12	0. 417793401	5. 92E-09	1. 28E-07
AHI1	6q23. 3	-0. 417757831	5. 94E-09	1. 28E-07
ZNF510	9q22. 33	-0. 417636474	6. 01E-09	1. 29E-07
HKDC1	10q22. 1	0. 417590442	6. 04E-09	1. 30E-07
SLC39A11	17q24. 3-c	0. 417374929	6. 16E-09	1. 32E-07
SRD5A3	4q12	0. 417238926	6. 23E-09	1. 34E-07
KLHL8	4q22. 1	-0. 417025506	6. 36E-09	1. 36E-07
SHISA5	3p21. 31	0. 417008767	6. 37E-09	1. 36E-07
KCNN3	1q21. 3	-0. 417006893	6. 37E-09	1. 36E-07
PPP1R14B	11q13. 1	0. 416920888	6. 42E-09	1. 37E-07
TSPAN7	Xp11. 4	-0. 416918796	6. 42E-09	1. 37E-07
RWDD2A	6q14. 1	-0. 416881133	6. 44E-09	1. 37E-07
PLEKHM1P1	17q24. 1	0. 41681627	6. 48E-09	1. 38E-07
ZNF709	19p13. 2	-0. 416688636	6. 56E-09	1. 40E-07
AMN	14q32. 32	0. 416680267	6. 56E-09	1. 40E-07
FAM83E	19q13. 33	0. 416621681	6. 60E-09	1. 40E-07
PRSS8	16p11. 2	0. 41659448	6. 61E-09	1. 40E-07
TOR4A	9q34. 3	0. 416586111	6. 62E-09	1. 40E-07
VEGFD	Xp22. 2	-0. 41654932	6. 64E-09	1. 41E-07
MED23	6q23. 2	-0. 416517063	6. 66E-09	1. 41E-07
SAYSD1	6p21. 2	-0. 416439646	6. 71E-09	1. 42E-07
SENP1	12q13. 11	-0. 416263888	6. 82E-09	1. 44E-07
LRRC2	3p21. 31	-0. 416251334	6. 82E-09	1. 44E-07
TK2	16q21	0. 416213671	6. 85E-09	1. 44E-07
RFC1	4p14	-0. 41616764	6. 88E-09	1. 45E-07
PCSK6	15q26. 3	0. 416115331	6. 91E-09	1. 45E-07
ZC3H7B	22q13. 2	-0. 416090222	6. 92E-09	1. 45E-07
NADSYN1	11q13. 4	0. 416029544	6. 96E-09	1. 46E-07
LIN52	14q24. 3	-0. 415915728	7. 04E-09	1. 47E-07
LINC01559	12p13. 1	0. 415897355	7. 05E-09	1. 47E-07
SLC41A1	1q32. 1	-0. 415851694	7. 08E-09	1. 48E-07
PITPNM3	17p13. 2-f	0. 415814031	7. 10E-09	1. 48E-07
ADAM15	1q21. 3	0. 415692675	7. 18E-09	1. 50E-07
SENP6	6q14. 1	-0. 415650828	7. 21E-09	1. 50E-07
MET	7q31. 2	0. 415636181	7. 22E-09	1. 50E-07
FBXL4	6q16. 1-q1	-0. 415600611	7. 24E-09	1. 50E-07
RTP4	3q27. 3	0. 415598519	7. 24E-09	1. 50E-07
EPS8L3	1p13. 3	0. 415555843	7. 27E-09	1. 51E-07
ZNF318	6p21. 1	-0. 415290942	7. 45E-09	1. 54E-07
C1QTNF12	1p36. 33	0. 415239897	7. 48E-09	1. 55E-07
GSS	20q11. 22	0. 415098663	7. 58E-09	1. 57E-07
LINC0130C	8q24. 3	0. 41505875	7. 61E-09	1. 57E-07
TAF5	10q24. 33	-0. 415010566	7. 64E-09	1. 58E-07
OVOL1	11q13. 1	0. 414926043	7. 70E-09	1. 59E-07
FAM122A	9q21. 11	-0. 41488921	7. 73E-09	1. 59E-07

SLC8A1	2p22.1	-0.414843178	7.76E-09	1.60E-07
SRR	17p13.3	-0.414728098	7.84E-09	1.61E-07
KLB	4p14	-0.414521822	7.99E-09	1.64E-07
HINT3	6q22.32	-0.414382859	8.09E-09	1.66E-07
DNTTIP1	20q13.12	0.414380767	8.09E-09	1.66E-07
PLAGL2	20q11.21	-0.414328458	8.13E-09	1.66E-07
ACACB	12q24.11	-0.414313812	8.14E-09	1.66E-07
HELQ	4q21.23	-0.414313812	8.14E-09	1.66E-07
WFDC10B	20q13.12	0.414125434	8.28E-09	1.69E-07
GPRASP2	Xq22.1	-0.414121315	8.28E-09	1.69E-07
TTC7A	2p21	0.414002051	8.37E-09	1.71E-07
PLEKHA7	11p15.2-1	0.413987404	8.39E-09	1.71E-07
TP53INP1	8q22.1	-0.413907894	8.45E-09	1.72E-07
FAM25BP	10q11.22	0.413890452	8.46E-09	1.72E-07
EPHB4	7q22.1	0.413707028	8.60E-09	1.75E-07
ARHGEF16	1p36.32	0.413554286	8.72E-09	1.77E-07
HTT	4p16.3	-0.413529178	8.74E-09	1.77E-07
CAPN7	3p25.1	-0.413485238	8.78E-09	1.78E-07
GPR155	2q31.1	-0.413397359	8.85E-09	1.79E-07
FSCN1	7p22.1	0.413363882	8.87E-09	1.79E-07
TBC1D20	20p13	-0.413133723	9.06E-09	1.83E-07
ZNF568	19q13.12	-0.413110707	9.08E-09	1.83E-07
ZDHHC5	11q12.1	0.412993535	9.17E-09	1.85E-07
NQO1	16q22.1	0.412914025	9.24E-09	1.86E-07
CHIC1	Xq13.2	-0.412907748	9.25E-09	1.86E-07
CYP2W1	7p22.3	0.412867163	9.28E-09	1.86E-07
DUOXA1	15q21.1	0.412865071	9.28E-09	1.86E-07
DOP1A	6q14.1	-0.412476723	9.61E-09	1.93E-07
ANKRD52	12q13.3	-0.412227732	9.83E-09	1.97E-07
SF3B4	1q21.2	0.412054066	9.99E-09	2.00E-07
SLC7A2	8p22	-0.411947356	1.01E-08	2.01E-07
NARS	18q21.31	-0.411907602	1.01E-08	2.02E-07
SNRPGP15	19p13.12	0.411689996	1.03E-08	2.06E-07
NOP10	15q14	0.411673258	1.03E-08	2.06E-07
ZC3H10	12q13.2	-0.411491223	1.05E-08	2.09E-07
ISCA1P1	5q12.1	-0.411487038	1.05E-08	2.09E-07
TOX	8q12.1	-0.411482853	1.05E-08	2.09E-07
FBXW8	12q24.22	-0.411338481	1.07E-08	2.11E-07
DHX58	17q21.2	0.411317557	1.07E-08	2.11E-07
AKAP6	14q12	-0.411135522	1.08E-08	2.15E-07
HLTF	3q24	-0.411110414	1.09E-08	2.15E-07
MGAT4A	2q11.2	-0.411066474	1.09E-08	2.16E-07
CTAGE4	7q35	0.411007888	1.10E-08	2.16E-07
NAP1L2	Xq13.2	-0.410909547	1.11E-08	2.18E-07
DENND5B	12p11.21	-0.410892809	1.11E-08	2.18E-07
TRIM47	17q25.1	0.410813299	1.12E-08	2.20E-07
CFL1	11q13.1	0.410802837	1.12E-08	2.20E-07
NIBAN2	9q34.11	0.410691942	1.13E-08	2.22E-07
ZADH2	18q22.3	-0.41065428	1.13E-08	2.22E-07
HOXB5	17q21.32	0.410497353	1.15E-08	2.25E-07
PSEN1	14q24.2	0.41046806	1.15E-08	2.25E-07
RHCE	1p36.11	-0.410453628	1.15E-08	2.26E-07
ABHD17B	9q21.13	-0.410428305	1.16E-08	2.26E-07
GNG5	1p22.3	0.410221162	1.18E-08	2.30E-07

MYH16	7q22.1	0.410008896	1.20E-08	2.34E-07
SMAD9	13q13.3	-0.409988911	1.20E-08	2.34E-07
FBXO30	6q24.3	-0.409944971	1.21E-08	2.35E-07
PLA2G10	16p13.12	0.409865676	1.22E-08	2.36E-07
ADCY1	7p12.3	-0.409831984	1.22E-08	2.37E-07
ZDHHC17	12q21.2	-0.409700165	1.23E-08	2.39E-07
AATBC	21q22.3	0.409656226	1.24E-08	2.40E-07
LOC644936	5q14.1	0.409649949	1.24E-08	2.40E-07
SLC22A18	11p15.4	0.409595547	1.25E-08	2.41E-07
RNF146	6q22.33	-0.4095537	1.25E-08	2.42E-07
SPDEF	6p21.31	0.409501391	1.26E-08	2.43E-07
WNT7B	22q13.31	0.409472098	1.26E-08	2.43E-07
TXN	9q31.3	0.40941142	1.27E-08	2.44E-07
GJB2	13q12.11	0.409185446	1.29E-08	2.49E-07
FGF13	Xq26.3-q27.1	-0.409159505	1.29E-08	2.49E-07
GZF1	20p11.21	-0.409156153	1.30E-08	2.49E-07
KRT18	12q13.13	0.409097567	1.30E-08	2.50E-07
PLCL1	2q33.1	-0.409038981	1.31E-08	2.51E-07
KCNB1	20q13.13	-0.409038145	1.31E-08	2.51E-07
TMEM159	16p12.3	0.408992949	1.31E-08	2.52E-07
BCL10	1p22.3	0.408892516	1.33E-08	2.54E-07
TMEM263	12q23.3	-0.408787898	1.34E-08	2.56E-07
SERTAD3	19q13.2	0.408771159	1.34E-08	2.56E-07
MOSPD3	7q22.1	0.408706296	1.35E-08	2.57E-07
NPR1	1q21.3	-0.408484506	1.38E-08	2.62E-07
SSR1	6p24.3	-0.408428012	1.38E-08	2.63E-07
ACOT9	Xp22.11	0.408400812	1.39E-08	2.63E-07
BCL9L	11q23.3	0.40839035	1.39E-08	2.63E-07
ZBTB33	Xq24	-0.40831084	1.40E-08	2.65E-07
PFDN2	1q23.3	0.408296194	1.40E-08	2.65E-07
SERINC1	6q22.31	-0.407787751	1.46E-08	2.77E-07
ARRDC2	19p13.11	0.407747997	1.47E-08	2.78E-07
ESPN	1p36.31	0.40751993	1.50E-08	2.83E-07
GCKR	2p23.3	0.407268847	1.53E-08	2.89E-07
ZNF37A	10p11.1	-0.40726257	1.53E-08	2.89E-07
MAPK3	16p11.2	0.407222815	1.54E-08	2.90E-07
CCDC121	2p23.3	-0.407180968	1.54E-08	2.91E-07
PRKCE	2p21	-0.407101458	1.56E-08	2.92E-07
RNPEP	1q32.1	0.407099366	1.56E-08	2.92E-07
ENPP2	8q24.12	-0.407007302	1.57E-08	2.95E-07
PAIP2B	2p13.3	-0.406978009	1.57E-08	2.95E-07
CDCP1	3p21.31	0.406971732	1.57E-08	2.95E-07
ARPC1B	7q22.1	0.406938255	1.58E-08	2.96E-07
TBC1D3B	17q12	0.406877576	1.59E-08	2.97E-07
SEMA4G	10q24.31	0.406814806	1.60E-08	2.98E-07
RGMB	5q15	-0.406578369	1.63E-08	3.04E-07
PPP1R7	2q37.3	0.406448643	1.65E-08	3.07E-07
DDX60L	4q32.3	0.406295901	1.67E-08	3.11E-07
ALDH3A1	17p11.2	0.406109681	1.70E-08	3.16E-07
SEMA7A	15q24.1	0.406088758	1.70E-08	3.17E-07
QSOX2	9q34.3	-0.406074111	1.70E-08	3.17E-07
RNF20	9q31.1	-0.406049003	1.71E-08	3.17E-07
PIK3C2G	12p12.3	0.406043106	1.71E-08	3.17E-07
PAPSS2	10q23.2-c	-0.406034356	1.71E-08	3.17E-07

LETM2	8p11. 23	0. 405906723	1. 73E-08	3. 20E-07
TBX15	1p12	0. 405829306	1. 74E-08	3. 22E-07
RNF216	7p22. 1	-0. 405634716	1. 77E-08	3. 27E-07
TUBA1C	12q13. 12	0. 405530099	1. 79E-08	3. 30E-07
CDC37	19p13. 2	0. 405425481	1. 80E-08	3. 33E-07
KBTBD6	13q14. 11	-0. 405216245	1. 84E-08	3. 39E-07
EID3	12q23. 3	-0. 405182767	1. 84E-08	3. 39E-07
BICRAL	6p21. 1	-0. 405145105	1. 85E-08	3. 40E-07
PIGK	1p31. 1	-0. 404971439	1. 88E-08	3. 45E-07
ZNF582	19q13. 43	-0. 404944239	1. 88E-08	3. 46E-07
ZNF471	19q13. 43	-0. 404739188	1. 92E-08	3. 52E-07
HAS3	16q22. 1	0. 404718264	1. 92E-08	3. 52E-07
BCL11A	2p16. 1	-0. 404599	1. 94E-08	3. 55E-07
PDZK1IP1	1p33	0. 404594815	1. 94E-08	3. 55E-07
KLHL9	9p21. 3	-0. 404504844	1. 96E-08	3. 58E-07
APLP2	11q24. 3	0. 404477643	1. 96E-08	3. 58E-07
CFAP73	12q24. 13	0. 40441278	1. 97E-08	3. 60E-07
FAM8A1	6p22. 3	-0. 404239115	2. 00E-08	3. 65E-07
BACH2	6q15	-0. 404153328	2. 02E-08	3. 67E-07
CAPZA3	12p12. 3	0. 404145229	2. 02E-08	3. 67E-07
TRIM23	5q12. 3	-0. 403822736	2. 08E-08	3. 78E-07
EFHD2	1p36. 21	0. 40376415	2. 09E-08	3. 79E-07
PLA2G12A	4q25	-0. 403653255	2. 11E-08	3. 82E-07
SPOP	17q21. 33	-0. 403638608	2. 11E-08	3. 82E-07
RBM18	9q33. 2	-0. 403636516	2. 11E-08	3. 82E-07
IP6K1	3p21. 31	-0. 403607223	2. 12E-08	3. 83E-07
OAS1	12q24. 13	0. 40354236	2. 13E-08	3. 85E-07
LRRC1	6p12. 1	0. 40353399	2. 13E-08	3. 85E-07
KLF2	19p13. 11	0. 403452388	2. 15E-08	3. 87E-07
MMP11	22q11. 23	0. 403406357	2. 15E-08	3. 89E-07
MED15	22q11. 21	0. 40339171	2. 16E-08	3. 89E-07
B3GALT4	6p21. 32	0. 403280815	2. 18E-08	3. 92E-07
IFI35	17q21. 31	0. 403207583	2. 19E-08	3. 94E-07
ZNF25	10p11. 21	-0. 40320549	2. 19E-08	3. 94E-07
UPK2	11q23. 3	0. 40318094	2. 20E-08	3. 94E-07
GTF2F2	13q14. 12-	0. 403165736	2. 20E-08	3. 95E-07
EPAS1	2p21	-0. 402954408	2. 24E-08	4. 02E-07
FAM53B	10q26. 13	-0. 402941853	2. 24E-08	4. 02E-07
TMTC1	12p11. 22	-0. 402847697	2. 26E-08	4. 05E-07
HIST2H2AA1	1q21. 2	0. 402713787	2. 29E-08	4. 09E-07
MPDZ	9p23	-0. 402561045	2. 32E-08	4. 14E-07
GNA12	7p22. 3-p2	-0. 402397841	2. 35E-08	4. 20E-07
NXNL2	9q22. 1	0. 402323666	2. 37E-08	4. 22E-07
ZNF844	19p13. 2	-0. 402284853	2. 38E-08	4. 23E-07
PLAUR	19q13. 31	0. 402155127	2. 40E-08	4. 28E-07
NFASC	1q32. 1	-0. 401994016	2. 44E-08	4. 33E-07
MAGEE1	Xq13. 3	-0. 401922876	2. 45E-08	4. 36E-07
LIPH	3q27. 2	0. 401883121	2. 46E-08	4. 37E-07
SLC36A4	11q21	-0. 401600653	2. 52E-08	4. 47E-07
PIAS3	1q21. 1	0. 401546252	2. 53E-08	4. 49E-07
ANKH	5p15. 2	-0. 401334924	2. 58E-08	4. 57E-07
SCNN1A	12p13. 31	0. 40127843	2. 59E-08	4. 59E-07
CYP3A5	7q22. 1	0. 401219844	2. 61E-08	4. 61E-07
WWC2-AS2	4q35. 1	0. 401150796	2. 62E-08	4. 63E-07

RAB1B	11q13.2	0.401123596	2.63E-08	4.64E-07
8-Mar	10q11.21-	-0.401071287	2.64E-08	4.65E-07
KLHL11	17q21.2	-0.401037809	2.65E-08	4.66E-07
KCNK6	19q13.2	0.400977131	2.66E-08	4.68E-07
LEMD3	12q14.3	-0.400931099	2.67E-08	4.70E-07
GPR75	2p16.2	-0.400898877	2.68E-08	4.71E-07
TSPAN33	7q32.1	-0.400868328	2.69E-08	4.72E-07
FAM227B	15q21.2	-0.400828573	2.70E-08	4.73E-07
NT5C	17q25.1	0.400822296	2.70E-08	4.73E-07
AAK1	2p13.3	-0.400778357	2.71E-08	4.74E-07
BRPF3	6p21.31	-0.40077208	2.71E-08	4.74E-07
DBNDD2	20q13.12	0.400740694	2.72E-08	4.75E-07
TMED8	14q24.3	-0.400717678	2.72E-08	4.75E-07
HOXB6	17q21.32	0.400690478	2.73E-08	4.76E-07
ACOT4	14q24.3	0.40047078	2.78E-08	4.85E-07
ECPAS	9q31.3	-0.400422656	2.79E-08	4.86E-07
AOC1	7q36.1	0.400393363	2.80E-08	4.87E-07
C6ORF223	6p21.1	0.400366162	2.81E-08	4.88E-07
S100A13	1q21.3	0.400117172	2.87E-08	4.98E-07
CYFIP2	5q33.3	-0.400073232	2.88E-08	5.00E-07
OVOL2	20p11.23	0.39992886	2.92E-08	5.05E-07
KDM8	16p12.1	-0.399878852	2.93E-08	5.07E-07
OR7E91P	2p13.3	0.399746125	2.96E-08	5.13E-07
SALL2	14q11.2	-0.399704978	2.97E-08	5.14E-07
HNRNPA1P3	10q11.22	0.39963593	2.99E-08	5.16E-07
ZNF569	19q13.12	-0.39963593	2.99E-08	5.16E-07
IGF2BP2	3q27.2	0.399489465	3.03E-08	5.22E-07
ZRANB3	2q21.3	-0.399382755	3.06E-08	5.27E-07
ANK2	4q25-q26	-0.399315799	3.07E-08	5.29E-07
SEC23B	20p11.23	-0.399068901	3.14E-08	5.40E-07
MIEF1	22q13.1	-0.399012408	3.16E-08	5.42E-07
SLC26A11	17q25.3	-0.398958006	3.17E-08	5.45E-07
UHRF1BP1	6p21.31	-0.398897537	3.19E-08	5.47E-07
ZNF689	16p11.2	-0.398874312	3.19E-08	5.48E-07
NME2	17q21.33	0.398809449	3.21E-08	5.50E-07
ELP1	9q31.3	-0.398798987	3.21E-08	5.50E-07
ZMIZ1	10q22.3	-0.39872157	3.24E-08	5.53E-07
BCL2L15	1p13.2	0.398497688	3.30E-08	5.64E-07
CA8	8q12.1	-0.398349131	3.34E-08	5.70E-07
CADM1	11q23.3	-0.398229866	3.38E-08	5.76E-07
CEP112	17q24.1	-0.398112694	3.41E-08	5.81E-07
UCA1	19p13.12	0.397992373	3.45E-08	5.86E-07
ERC1	12p13.33	-0.397989245	3.45E-08	5.86E-07
EPC2	2q23.1	-0.397934844	3.46E-08	5.89E-07
CAMK2N1	1p36.12	0.397880443	3.48E-08	5.91E-07
SOBP	6q21	-0.39784278	3.49E-08	5.92E-07
CCSAP	1q42.13	-0.397803026	3.50E-08	5.94E-07
RP1	8q11.23-c	0.397614987	3.56E-08	6.03E-07
IKZF4	12q13.2	-0.397508003	3.59E-08	6.08E-07
ASTN2	9q33.1	-0.397476618	3.60E-08	6.09E-07
NUP153	6p22.3	-0.397388739	3.63E-08	6.13E-07
ZNF507	19q13.11	-0.397372	3.64E-08	6.14E-07
SLC04A1	20q13.33	0.397315506	3.65E-08	6.16E-07
FNDC3A	13q14.2	-0.397169041	3.70E-08	6.23E-07

UTP20	12q23.2	-0.397093717	3.72E-08	6.27E-07
REPS1	6q24.1	-0.397081163	3.73E-08	6.27E-07
FAM168B	2q21.1	-0.39707907	3.73E-08	6.27E-07
H1FO	22q13.1	0.396995376	3.75E-08	6.31E-07
KMT2C	7q36.1	-0.39697236	3.76E-08	6.31E-07
RAB3C	5q11.2	-0.396920259	3.78E-08	6.34E-07
LY6D	8q24.3	0.396796327	3.82E-08	6.40E-07
FICD	12q23.3	-0.39678614	3.82E-08	6.40E-07
TMEM219	16p11.2	0.396761032	3.83E-08	6.40E-07
RNF180	5q12.3	-0.396754755	3.83E-08	6.40E-07
KYAT1	9q34.11	0.396745547	3.84E-08	6.40E-07
GHR	5p13.1-p1	-0.396694077	3.85E-08	6.43E-07
OTULINL	5p15.2	-0.396625029	3.88E-08	6.46E-07
RANBP2	2q13	-0.396451363	3.93E-08	6.55E-07
DTD2	14q12	-0.396405331	3.95E-08	6.57E-07
EBF1	5q33.3	-0.396399054	3.95E-08	6.57E-07
RIN1	11q13.2	0.396340468	3.97E-08	6.60E-07
TMC4	19q13.42	0.396292344	3.99E-08	6.62E-07
ITGB5	3q21.2	0.396210742	4.02E-08	6.66E-07
ARHGEF18	19p13.2	0.396047538	4.07E-08	6.75E-07
APRT	16q24.3	0.395938736	4.11E-08	6.81E-07
SOCS7	17q12	-0.39584458	4.14E-08	6.86E-07
MT01	6q13	-0.395716946	4.19E-08	6.92E-07
ITPK1	14q32.12	0.395606051	4.23E-08	6.98E-07
LYPLA2	1p36.11	0.395488879	4.27E-08	7.05E-07
CAMKK1	17p13.2	-0.395417739	4.30E-08	7.09E-07
CAPS2	12q21.1-c	-0.395070614	4.43E-08	7.29E-07
NKAIN4	20q13.33	0.395061057	4.43E-08	7.29E-07
CLASP2	3p22.3	-0.395032745	4.44E-08	7.30E-07
SRC	20q11.23	0.394936497	4.48E-08	7.36E-07
SLC8A3	14q24.2	-0.394910123	4.49E-08	7.37E-07
KLF9	9q21.12	-0.394877911	4.50E-08	7.38E-07
PPM1K	4q22.1	-0.394729354	4.56E-08	7.47E-07
EBP	Xp11.23	0.394723077	4.56E-08	7.47E-07
CTC1	17p13.1	-0.394674952	4.58E-08	7.49E-07
MUC21	6p21.33	0.394572253	4.62E-08	7.55E-07
CPE	4q32.3	-0.39456615	4.62E-08	7.55E-07
SPTBN2	11q13.2	0.39452221	4.64E-08	7.57E-07
MAVS	20p13	-0.394363191	4.70E-08	7.67E-07
MVD	16q24.2	0.394285774	4.73E-08	7.71E-07
LGALS3BP	17q25.3	0.394128847	4.80E-08	7.81E-07
HTATIP2	11p15.1	0.394093277	4.81E-08	7.83E-07
MUC20	3q29	0.393938443	4.87E-08	7.93E-07
TOGARAM1	14q21.2	-0.393867303	4.90E-08	7.97E-07
OAZ2	15q22.31	-0.393812901	4.93E-08	8.00E-07
TEX2	17q23.3	-0.393789886	4.94E-08	8.01E-07
MDC1	6p21.33	-0.393714561	4.97E-08	8.05E-07
BPNT1	1q41	0.393710376	4.97E-08	8.05E-07
PXK	3p14.3	-0.393689452	4.98E-08	8.06E-07
PFAS	17p13.1	-0.393666437	4.99E-08	8.06E-07
KIAA1147	7q34	-0.393658067	4.99E-08	8.06E-07
UBE2D4	7p13	-0.393519972	5.05E-08	8.15E-07
NRSN2	20p13	-0.393344214	5.13E-08	8.27E-07
ITPR1	3p26.1	-0.393264704	5.16E-08	8.32E-07

ARHGAP35	19q13.32	-0.393126608	5.22E-08	8.41E-07
FAM222A	12q24.11	-0.39306593	5.25E-08	8.45E-07
WDR31	9q32	-0.392565857	5.47E-08	8.80E-07
ITGA6	2q31.1	0.392517733	5.50E-08	8.83E-07
MYL12A	18p11.31	0.392367083	5.57E-08	8.94E-07
TTC37	5q15	-0.392348252	5.58E-08	8.95E-07
CCND2	12p13.32	-0.392252003	5.62E-08	9.01E-07
MYO5A	15q21.2	-0.392247819	5.62E-08	9.01E-07
RHBDL3	17q11.2	-0.392201787	5.65E-08	9.03E-07
ATP5F1A	18q21.1	-0.392197602	5.65E-08	9.03E-07
MDM1	12q15	-0.392128554	5.68E-08	9.08E-07
MFSD13A	10q24.32	0.392067876	5.71E-08	9.12E-07
SPACA4	19q13.33	0.392026234	5.73E-08	9.14E-07
TMEM131L	4q31.3	-0.391892118	5.80E-08	9.24E-07
TRIM15	6p22.1	0.391697442	5.89E-08	9.38E-07
RIOK3	18q11.2	0.391649405	5.92E-08	9.41E-07
C16ORF96	16p13.3	-0.391633026	5.92E-08	9.42E-07
EIF4B	12q13.13	-0.391392045	6.04E-08	9.60E-07
TMEM179B	11q12.3	0.391343921	6.07E-08	9.64E-07
ATP10D	4p12	-0.391287427	6.10E-08	9.67E-07
SGCE	7q21.3	-0.391264411	6.11E-08	9.68E-07
DPP3	11q13.2	0.391264411	6.11E-08	9.68E-07
SBN02	19p13.3	0.391239303	6.12E-08	9.69E-07
SMAP2	1p34.2	-0.391228841	6.13E-08	9.69E-07
RAD1	5p13.2	-0.391182809	6.15E-08	9.72E-07
GPC1	2q37.3	0.391140962	6.17E-08	9.75E-07
RAB11A	15q22.31	0.391128408	6.18E-08	9.75E-07
MLKL	16q23.1	0.391038437	6.23E-08	9.82E-07
GXYLT1	12q12	-0.391002867	6.25E-08	9.84E-07
UFL1	6q16.1	-0.390871048	6.32E-08	9.94E-07
PRUNE2	9q21.2	-0.390850124	6.33E-08	9.95E-07
PIK3C3	18q12.3	-0.390839663	6.33E-08	9.95E-07
PDXP	22q13.1	-0.390762246	6.37E-08	1E-06
MICU3	8p22	-0.390758061	6.38E-08	1E-06
CYTH2	19q13.33	0.390682736	6.42E-08	1.01E-06
KDR	4q12	-0.39065972	6.43E-08	1.01E-06
GDAP1	8q21.11	-0.390611596	6.45E-08	1.01E-06
PPM1A	14q23.1	-0.390567656	6.48E-08	1.01E-06
PANK1	10q23.31	-0.390521625	6.50E-08	1.02E-06
SCNM1	1q21.3	0.3904463	6.54E-08	1.02E-06
GSTK1	7q34	0.390442115	6.55E-08	1.02E-06
TRPM6	9q21.13	-0.390417824	6.56E-08	1.02E-06
DUSP7	3p21.2	0.390406545	6.57E-08	1.02E-06
JUNB	19p13.13	0.39033122	6.61E-08	1.03E-06
PJA2	5q21.3	-0.390322851	6.61E-08	1.03E-06
FOXD1	5q13.2	0.390115707	6.73E-08	1.05E-06
ZNF132	19q13.43	-0.39010943	6.73E-08	1.05E-06
PRKN	6q26	-0.390029921	6.78E-08	1.05E-06
SERPINB1	6p25.2	0.390013182	6.79E-08	1.05E-06
DUOX1	15q21.1	0.389990166	6.80E-08	1.05E-06
C8ORF58	8p21.3	0.389969242	6.81E-08	1.05E-06
EDNRB	13q22.3	-0.38975373	6.94E-08	1.07E-06
MYH10	17p13.1	-0.389741175	6.94E-08	1.07E-06
PRKAR1A	17q24.2	-0.389676312	6.98E-08	1.08E-06

MRPS6	21q22.11	0.389613542	7.02E-08	1.08E-06
NFATC2	20q13.2	-0.389594711	7.03E-08	1.08E-06
TMEM154	4q31.3	0.389561233	7.05E-08	1.09E-06
IGFBP6	12q13.13	0.389502647	7.08E-08	1.09E-06
PRR5-ARHC	22q13.31	0.389226399	7.25E-08	1.12E-06
ZNF667	19q13.43	-0.389130207	7.31E-08	1.12E-06
HLA-F-AS16	p22.1	0.389117653	7.32E-08	1.12E-06
CYB5RL	1p32.3	-0.389100914	7.33E-08	1.12E-06
IL17RE	3p25.3	0.38906116	7.35E-08	1.13E-06
KCTD5	16p13.3	0.388864478	7.47E-08	1.15E-06
NEK9	14q24.3	-0.388837277	7.49E-08	1.15E-06
SDK2	17q25.1	-0.388753583	7.54E-08	1.15E-06
NFKB1B	19q13.2	0.388741029	7.55E-08	1.15E-06
KCNJ8	12p12.1	-0.388713828	7.57E-08	1.16E-06
KLK7	19q13.41	0.388679097	7.59E-08	1.16E-06
ISG15	1p36.33	0.3885025	7.70E-08	1.17E-06
CTSV	9q22.33	0.388425083	7.75E-08	1.18E-06
PDCD4	10q25.2	-0.388416714	7.76E-08	1.18E-06
CTAGE9	6q23.2	0.388410437	7.76E-08	1.18E-06
SMG6	17p13.3	-0.388347666	7.80E-08	1.19E-06
SGTB	5q12.3	-0.38828908	7.84E-08	1.19E-06
CRY1	12q23.3	-0.388188647	7.90E-08	1.2E-06
ASF1B	19p13.12	0.38818237	7.91E-08	1.2E-06
CNOT11	2q11.2	0.388165631	7.92E-08	1.2E-06
CNN2	19p13.3	0.388048459	8.00E-08	1.21E-06
DNAH3	16p12.3	0.387996087	8.03E-08	1.22E-06
TSPYL4	6q22.1	-0.387868516	8.12E-08	1.23E-06
PITPNA	17p13.3	-0.387847593	8.13E-08	1.23E-06
ASXL3	18q12.1	-0.387839223	8.14E-08	1.23E-06
DGAT1	8q24.3	0.387772268	8.18E-08	1.24E-06
FDFT1	8p23.1	0.387663465	8.26E-08	1.25E-06
MDFI	6p21.1	0.387611156	8.29E-08	1.25E-06
ZFX	Xp22.11	-0.387604879	8.30E-08	1.25E-06
SF3B6	2p23.3	0.38756094	8.33E-08	1.25E-06
SLC46A1	17q11.2	-0.387504446	8.37E-08	1.26E-06
KLHDC10	7q32.2	-0.387473061	8.39E-08	1.26E-06
MTRF1L	6q25.2	-0.387456322	8.40E-08	1.26E-06
NLGN4X	Xp22.32-1	-0.387284749	8.52E-08	1.28E-06
MSANTD4	11q22.3	-0.387219886	8.57E-08	1.28E-06
ARPC2	2q35	0.387192685	8.59E-08	1.29E-06
NRN1	6p25.1	-0.387192685	8.59E-08	1.29E-06
AKT3	1q43-q44	-0.387157115	8.61E-08	1.29E-06
FYN	6q21	-0.387060867	8.68E-08	1.3E-06
PAQR4	16p13.3	0.38697508	8.74E-08	1.31E-06
SERPIN6	6p25.2	0.386968803	8.75E-08	1.31E-06
TAX1BP3	17p13.2	0.386949972	8.76E-08	1.31E-06
ATP9B	18q23	-0.386933233	8.77E-08	1.31E-06
POU5F1B	8q24.21	0.386830066	8.85E-08	1.32E-06
OTUB1	11q13.1	0.386786768	8.88E-08	1.32E-06
BBC3	19q13.32	0.386780491	8.89E-08	1.32E-06
GJA9	1p34.3	0.386700981	8.95E-08	1.33E-06
PPP1R1C	2q31.3-q32	0.386579625	9.04E-08	1.34E-06
DCK	4q13.3	-0.386560793	9.05E-08	1.34E-06
COX10	17p12	-0.386514762	9.08E-08	1.35E-06

ALDH5A1	6p22. 3	-0. 386343188	9. 21E-08	1. 37E-06
TMEM30A	6q14. 1	-0. 38628251	9. 26E-08	1. 37E-06
NEXMIF	Xq13. 3	-0. 386254465	9. 28E-08	1. 37E-06
MELTF	3q29	0. 386190446	9. 33E-08	1. 38E-06
PRDM4	12q23. 3	-0. 385988736	9. 49E-08	1. 4E-06
SAMD9	7q21. 2	0. 385830561	9. 61E-08	1. 42E-06
SHKBP1	19q13. 2	0. 385822192	9. 62E-08	1. 42E-06
MTMR14	3p25. 3	0. 385799176	9. 64E-08	1. 42E-06
HOXB7	17q21. 32	0. 385765698	9. 67E-08	1. 42E-06
SCN8A	12q13. 13	-0. 385673634	9. 74E-08	1. 43E-06
ENDOV	17q25. 3	0. 385658988	9. 75E-08	1. 43E-06
TMEM133	11q22. 1	0. 385654803	9. 75E-08	1. 43E-06
LOC283856	16q13	-0. 385563991	9. 83E-08	1. 44E-06
DCAF10	9p13. 2	-0. 385558555	9. 83E-08	1. 44E-06
SLC44A4	6p21. 33	0. 385516707	9. 87E-08	1. 45E-06
EML5	14q31. 3	-0. 38544766	9. 92E-08	1. 45E-06
TNIP1	5q33. 1	0. 385416274	9. 95E-08	1. 46E-06
OSGIN1	16q23. 3	0. 385395351	9. 97E-08	1. 46E-06
ABCA5	17q24. 3	-0. 385305379	1. 00E-07	1. 47E-06
DICER1	14q32. 13	-0. 385253071	1. 01E-07	1. 47E-06
LOC728024	8p11. 23	-0. 385213316	1. 01E-07	1. 48E-06
SLC25A37	8p21. 2	0. 385204946	1. 01E-07	1. 48E-06
HPDL	1p34. 1	0. 385186115	1. 01E-07	1. 48E-06
ADGRF3	2p23. 3	-0. 385163099	1. 02E-07	1. 48E-06
RBM23	14q11. 2	-0. 385104513	1. 02E-07	1. 49E-06
CEACAM1	19q13. 2	0. 385056389	1. 02E-07	1. 49E-06
MECP2	Xq28	-0. 384964325	1. 03E-07	1. 5E-06
LONRF2	2q11. 2	-0. 384937125	1. 03E-07	1. 5E-06
KPNA7	7q22. 1	0. 384855364	1. 04E-07	1. 51E-06
EID1	15q21. 1	-0. 384774122	1. 05E-07	1. 52E-06
ARL1	12q23. 2	-0. 384709058	1. 05E-07	1. 53E-06
PLAAT4	11q12. 3	0. 384704873	1. 05E-07	1. 53E-06
SLC22A18A	11p15. 4	0. 384619288	1. 06E-07	1. 54E-06
SNX33	15q24. 2	0. 384556316	1. 07E-07	1. 54E-06
EEA1	12q22	-0. 384547946	1. 07E-07	1. 54E-06
CEACAM5	19q13. 2	0. 38452155	1. 07E-07	1. 55E-06
LOC653653	17q23. 1	-0. 384516561	1. 07E-07	1. 55E-06
METAP2	12q22	-0. 38449773	1. 07E-07	1. 55E-06
PDE4B	1p31. 3	-0. 384495637	1. 07E-07	1. 55E-06
RALY	20q11. 22	0. 384188061	1. 10E-07	1. 59E-06
TNFRSF6B	20q13. 33	0. 384150399	1. 10E-07	1. 59E-06
GAPVD1	9q33. 3	-0. 384108551	1. 11E-07	1. 59E-06
PROSER2	10p14	0. 384072981	1. 11E-07	1. 6E-06
TNNT1	19q13. 42	0. 384060135	1. 11E-07	1. 6E-06
STEAP3	2q14. 2	0. 384047873	1. 11E-07	1. 6E-06
ARSB	5q14. 1	-0. 383993472	1. 12E-07	1. 6E-06
CAPN12	19q13. 2	0. 383985102	1. 12E-07	1. 6E-06
BTRC	10q24. 32	-0. 383980918	1. 12E-07	1. 6E-06
CLCN4	Xp22. 2	-0. 383936133	1. 12E-07	1. 61E-06
CKS1B	1q21. 3	0. 383884669	1. 13E-07	1. 61E-06
CARNS1	11q13. 2	0. 383826083	1. 13E-07	1. 62E-06
TMEM150C	4q21. 22	-0. 383798883	1. 14E-07	1. 62E-06
SLC39A1	1q21. 3	0. 383704727	1. 15E-07	1. 63E-06
OSBPL6	2q31. 2	-0. 383595924	1. 16E-07	1. 65E-06

GPR148	2q21. 1	-0. 38356975	1. 16E-07	1. 65E-06
RFX3	9p24. 2	-0. 38353943	1. 16E-07	1. 65E-06
PPDPF	20q13. 33	0. 383522692	1. 16E-07	1. 65E-06
LRCH2	Xq23	-0. 383485029	1. 17E-07	1. 66E-06
ZNF341	20q11. 22	0. 383426443	1. 17E-07	1. 66E-06
ZNF843	16p11. 2	-0. 383376227	1. 18E-07	1. 67E-06
PROX1	1q32. 3	-0. 383367857	1. 18E-07	1. 67E-06
STK39	2q24. 3	0. 383294625	1. 18E-07	1. 68E-06
ACADSB	10q26. 13	-0. 383271609	1. 19E-07	1. 68E-06
RIOK2	5q15	-0. 38300588	1. 21E-07	1. 72E-06
IKZF5	10q26. 13	-0. 382959848	1. 22E-07	1. 72E-06
LPCAT1	5p15. 33	-0. 382610424	1. 25E-07	1. 77E-06
IGFL2	19q13. 32	0. 382556823	1. 26E-07	1. 78E-06
DVL1	1p36. 33	0. 382535099	1. 26E-07	1. 78E-06
MDN1	6q15	-0. 382474421	1. 27E-07	1. 79E-06
SLC35C1	11p11. 2	0. 382417927	1. 27E-07	1. 79E-06
TTC3	21q22. 13	-0. 382327956	1. 28E-07	1. 81E-06
GPR20	8q24. 3	0. 382300955	1. 28E-07	1. 81E-06
DHX57	2p22. 1	-0. 382248446	1. 29E-07	1. 81E-06
ZNF280B	22q11. 22	-0. 382138798	1. 30E-07	1. 83E-06
ZNF527	19q13. 12	-0. 381928316	1. 32E-07	1. 86E-06
GSE1	16q24. 1	-0. 381850899	1. 33E-07	1. 87E-06
MECR	1p35. 3	0. 381848806	1. 33E-07	1. 87E-06
TMEM223	11q12. 3	0. 381604001	1. 36E-07	1. 91E-06
ITPKC	19q13. 2	0. 381574708	1. 36E-07	1. 91E-06
SERPINB3	18q21. 33	0. 381477147	1. 37E-07	1. 92E-06
FXN	9q21. 11	-0. 381467997	1. 38E-07	1. 92E-06
FBP1	9q22. 32	0. 381254577	1. 40E-07	1. 96E-06
ESRRA	11q13. 1	0. 381231561	1. 40E-07	1. 96E-06
GUCY1B2	13q14. 3	0. 381225827	1. 40E-07	1. 96E-06
PNKD	2q35	0. 381162513	1. 41E-07	1. 97E-06
CAST	5q15	0. 381093466	1. 42E-07	1. 98E-06
RAP2A	13q32. 1	-0. 381009771	1. 43E-07	1. 99E-06
KMT2D	12q13. 12	-0. 380974201	1. 43E-07	1. 99E-06
PPL	16p13. 3	0. 380959555	1. 43E-07	1. 99E-06
IL6R	1q21. 3	-0. 380944908	1. 43E-07	1. 99E-06
CTAGE15	7q35	0. 380854937	1. 45E-07	2. 01E-06
COPS7B	2q37. 1	0. 380695918	1. 46E-07	2. 03E-06
RAB20	13q34	0. 380695918	1. 46E-07	2. 03E-06
ZBED3	5q13. 3	-0. 380693825	1. 46E-07	2. 03E-06
HCFC2	12q23. 3	-0. 380685456	1. 47E-07	2. 03E-06
LYRM7	5q23. 3-q31	-0. 380685456	1. 47E-07	2. 03E-06
SENP3	17p13. 1	-0. 380645701	1. 47E-07	2. 03E-06
POMP	13q12. 3	0. 380643609	1. 47E-07	2. 03E-06
TCEAL1	Xq22. 2	-0. 380444835	1. 49E-07	2. 06E-06
ZNF684	1p34. 2	-0. 380398803	1. 50E-07	2. 07E-06
NPAS2	2q11. 2	0. 38014772	1. 53E-07	2. 11E-06
TKFC	11q12. 2	0. 380082857	1. 54E-07	2. 12E-06
LAMTOR2	1q22	0. 380030548	1. 55E-07	2. 13E-06
LRP12	8q22. 3	-0. 379986609	1. 55E-07	2. 13E-06
RAD23A	19p13. 13	0. 379984517	1. 55E-07	2. 13E-06
KCNA2	1p13. 3	-0. 379935491	1. 56E-07	2. 14E-06
ENOX2	Xq26. 1	-0. 379835959	1. 57E-07	2. 16E-06
BCOR	Xp11. 4	-0. 379760634	1. 58E-07	2. 17E-06

KLHL22	22q11. 21	-0. 379743896	1. 58E-07	2. 17E-06
SMAD6	15q22. 31	0. 379739711	1. 58E-07	2. 17E-06
NRCAM	7q31. 1	-0. 379586969	1. 60E-07	2. 19E-06
RAB39B	Xq28	-0. 379540937	1. 61E-07	2. 2E-06
ST6GALNAC1	1p31. 1	-0. 379517921	1. 61E-07	2. 2E-06
AP1G2	14q11. 2	0. 379513736	1. 61E-07	2. 2E-06
TEAD3	6p21. 31	0. 37949072	1. 61E-07	2. 2E-06
ZPR1	11q23. 3	0. 37949072	1. 61E-07	2. 2E-06
MAP3K3	17q23. 3	-0. 379390287	1. 63E-07	2. 22E-06
PCSK7	11q23. 3	0. 379367271	1. 63E-07	2. 22E-06
NSD1	5q35. 3	-0. 379275208	1. 64E-07	2. 24E-06
MBLAC2	5q14. 3	-0. 37924173	1. 65E-07	2. 24E-06
MAPK10	4q21. 3	-0. 379187329	1. 65E-07	2. 25E-06
CDRT1	17p12	0. 379184007	1. 66E-07	2. 25E-06
PRKD2	19q13. 32	0. 379172682	1. 66E-07	2. 25E-06
NIPBL	5p13. 2	-0. 379164313	1. 66E-07	2. 25E-06
HOMER3	19p13. 11	0. 379109911	1. 67E-07	2. 26E-06
KANK1	9p24. 3	-0. 379088988	1. 67E-07	2. 26E-06
FERMT1	20p12. 3	0. 379065972	1. 67E-07	2. 26E-06
RCAN2	6p12. 3	-0. 378965539	1. 68E-07	2. 28E-06
ZNF516	18q23	-0. 378932061	1. 69E-07	2. 29E-06
CDA	1p36. 12	0. 378925784	1. 69E-07	2. 29E-06
POFUT1	20q11. 21	-0. 378911138	1. 69E-07	2. 29E-06
LMAN1	18q21. 32	-0. 378900676	1. 69E-07	2. 29E-06
ATP6V0E2-	7q36. 1	-0. 378839997	1. 70E-07	2. 3E-06
ESRP2	16q22. 1	0. 378729103	1. 72E-07	2. 32E-06
SIRT1	10q21. 3	-0. 378685163	1. 72E-07	2. 32E-06
RAB36	22q11. 23	-0. 378649593	1. 73E-07	2. 33E-06
IL36B	2q14. 1	0. 378565293	1. 74E-07	2. 34E-06
XKR4	8q12. 1	-0. 378501369	1. 75E-07	2. 35E-06
SFMBT2	10p14	-0. 378488482	1. 75E-07	2. 35E-06
RPL34-AS1	4q25	-0. 378453003	1. 76E-07	2. 36E-06
CYBA	16q24. 2	0. 378436173	1. 76E-07	2. 36E-06
PACSIN1	6p21. 31	-0. 378388048	1. 77E-07	2. 37E-06
DRAIC	15q23	-0. 378350782	1. 77E-07	2. 37E-06
ZBTB7C	18q21. 1	0. 378268784	1. 78E-07	2. 39E-06
SHARPIN	8q24. 3	0. 378254138	1. 78E-07	2. 39E-06
ALPP	2q37. 1	0. 37818513	1. 79E-07	2. 4E-06
ZNF106	15q15. 1	-0. 378139058	1. 80E-07	2. 41E-06
BCLAF1	6q23. 3	-0. 378132781	1. 80E-07	2. 41E-06
SIM2	21q22. 13	0. 378090934	1. 81E-07	2. 41E-06
SGK3	8q13. 1	-0. 378065826	1. 81E-07	2. 42E-06
DIAPH1	5q31. 3	0. 37803444	1. 82E-07	2. 42E-06
FOXD2	1p33	0. 377921453	1. 83E-07	2. 44E-06
EXOSC7	3p21. 31	0. 377877513	1. 84E-07	2. 45E-06
KISS1	1q32. 1	0. 377797772	1. 85E-07	2. 46E-06
ABCD2	12q12	-0. 377604658	1. 88E-07	2. 5E-06
TOB1	17q21. 33	0. 37751972	1. 89E-07	2. 52E-06
RP1L1	8p23. 1	0. 377509456	1. 89E-07	2. 52E-06
ADAMTSL3	15q25. 2	-0. 377469504	1. 90E-07	2. 52E-06
CA13	8q21. 2	0. 377459042	1. 90E-07	2. 52E-06
TSR1	17p13. 3	-0. 377371163	1. 92E-07	2. 54E-06
NMNAT3	3q23	-0. 377289561	1. 93E-07	2. 55E-06
CD01	5q22. 3	-0. 377170297	1. 95E-07	2. 58E-06

PTPN11	12q24. 13	-0. 377028017	1. 97E-07	2. 6E-06
P3H2	3q28	0. 377000816	1. 97E-07	2. 61E-06
ZNF583	19q13. 43	-0. 376967338	1. 98E-07	2. 61E-06
CALHM3	10q24. 33	0. 376915609	1. 99E-07	2. 62E-06
TMEM41A	3q27. 2	0. 376915029	1. 99E-07	2. 62E-06
MAFF	22q13. 1	0. 376912937	1. 99E-07	2. 62E-06
BOK	2q37. 3	0. 376894106	1. 99E-07	2. 62E-06
CAVIN3	11p15. 4	0. 376885736	1. 99E-07	2. 62E-06
POLR3A	10q22. 3	-0. 376822966	2. 00E-07	2. 63E-06
KSR1	17q11. 2	-0. 376818781	2. 00E-07	2. 63E-06
MAP3K6	1p36. 11	0. 376653485	2. 03E-07	2. 67E-06
MTURN	7p14. 3	-0. 37640031	2. 07E-07	2. 72E-06
SMARCAD1	4q22. 3	-0. 376341724	2. 08E-07	2. 73E-06
MDK	11p11. 2	0. 376140857	2. 11E-07	2. 77E-06
PSMB10	16q22. 1	0. 376140857	2. 11E-07	2. 77E-06
ZNF660	3p21. 31	-0. 37607933	2. 12E-07	2. 78E-06
LINC00909	18q22. 3	-0. 375889971	2. 16E-07	2. 82E-06
AQP5	12q13. 12	0. 375886376	2. 16E-07	2. 82E-06
IAH1	2p25. 1	0. 375870943	2. 16E-07	2. 82E-06
USP16	21q21. 3	-0. 37584165	2. 17E-07	2. 83E-06
WSCD1	17p13. 2	-0. 37576443	2. 18E-07	2. 84E-06
KIF3B	20q11. 21	-0. 375737033	2. 18E-07	2. 85E-06
GIT2	12q24. 11	-0. 375688908	2. 19E-07	2. 86E-06
MANEA	6q16. 1	-0. 37562823	2. 20E-07	2. 87E-06
CST1	20p11. 21	0. 375467315	2. 23E-07	2. 91E-06
WDR19	4p14	-0. 375428606	2. 24E-07	2. 91E-06
ZNF14	19p13. 11	-0. 375362501	2. 25E-07	2. 93E-06
CAND1	12q14. 3-c	-0. 375331115	2. 26E-07	2. 93E-06
NAA30	14q22. 3	-0. 375255791	2. 27E-07	2. 95E-06
DEDD	1q23. 3	0. 375236959	2. 27E-07	2. 95E-06
FPGS	9q34. 11	0. 375211851	2. 28E-07	2. 95E-06
WFDC12	20q13. 12	0. 375102391	2. 30E-07	2. 98E-06
C6ORF62	6p22. 3	-0. 375084217	2. 30E-07	2. 98E-06
AASDHPPPT	11q22. 3	-0. 375075848	2. 30E-07	2. 98E-06
PREPL	2p21	-0. 374990061	2. 32E-07	3E-06
TMC3	15q25. 1	-0. 374905359	2. 33E-07	3. 02E-06
ZNF671	19q13. 43	-0. 374902182	2. 33E-07	3. 02E-06
MMRN1	4q22. 1	-0. 374874982	2. 34E-07	3. 02E-06
CA5B	Xp22. 2	-0. 374751533	2. 36E-07	3. 05E-06
FAXC	6q16. 2	-0. 374743163	2. 36E-07	3. 05E-06
MAP7D2	Xp22. 12	-0. 374705501	2. 37E-07	3. 06E-06
FIGN	2q24. 3	-0. 374469065	2. 42E-07	3. 11E-06
EPB41L5	2q14. 2	-0. 374368631	2. 44E-07	3. 13E-06
MON2	12q14. 1	-0. 374201243	2. 47E-07	3. 17E-06
METRNL	17q25. 3	0. 374153119	2. 48E-07	3. 18E-06
GJC2	1q42. 13	0. 374117549	2. 48E-07	3. 19E-06
PIGB	15q21. 3	0. 373975268	2. 51E-07	3. 23E-06
TBC1D3	17q12	0. 373939698	2. 52E-07	3. 23E-06
IER2	19p13. 13	0. 373922959	2. 52E-07	3. 23E-06
ARL8A	1q32. 1	0. 373918775	2. 52E-07	3. 23E-06
SLC50A1	1q22	0. 373889482	2. 53E-07	3. 24E-06
SLC1A4	2p14	-0. 373862281	2. 54E-07	3. 24E-06
PHACTR3	20q13. 32-	0. 373854694	2. 54E-07	3. 24E-06
HELZ	17q24. 2	-0. 373849727	2. 54E-07	3. 24E-06

NFE2L3	7p15. 2	0. 373822526	2. 54E-07	3. 25E-06
IRF3	19q13. 33	0. 373770217	2. 55E-07	3. 26E-06
ZNF607	19q13. 12	-0. 373686523	2. 57E-07	3. 28E-06
TRIM11	1q42. 13	0. 373537966	2. 60E-07	3. 32E-06
SMIM5	17q25. 1	0. 373517042	2. 61E-07	3. 32E-06
C17ORF80	17q25. 1	-0. 373284791	2. 65E-07	3. 38E-06
CCDC61	19q13. 32	0. 373226205	2. 67E-07	3. 39E-06
BCAR1	16q23. 1	0. 373152972	2. 68E-07	3. 41E-06
ALKAL1	8q11. 23	0. 373116732	2. 69E-07	3. 42E-06
CHMP4C	8q21. 13	0. 373054631	2. 70E-07	3. 43E-06
ZDBF2	2q33. 3	-0. 373012784	2. 71E-07	3. 44E-06
ARMCX1	Xq22. 1	-0. 373006507	2. 71E-07	3. 44E-06
RPS6KA1	1p36. 11	0. 372970937	2. 72E-07	3. 45E-06
FAM92A	8q22. 1	-0. 372870504	2. 74E-07	3. 47E-06
DRD4	11p15. 5	0. 372859758	2. 75E-07	3. 47E-06
ARSK	5q15	-0. 372828657	2. 75E-07	3. 48E-06
PLD6	17p11. 2	-0. 372743065	2. 77E-07	3. 5E-06
PRICKLE3	Xp11. 23	0. 372719854	2. 78E-07	3. 51E-06
CD36	7q21. 11	-0. 37260059	2. 80E-07	3. 54E-06
SMIM8	6q15	-0. 372554558	2. 81E-07	3. 55E-06
ZFP82	19q13. 12	-0. 37249388	2. 83E-07	3. 56E-06
SEPTIN9	17q25. 3	0. 372389262	2. 85E-07	3. 59E-06
TTC21B	2q24. 3	-0. 372370431	2. 85E-07	3. 59E-06
BIN3	8p21. 3	0. 372293014	2. 87E-07	3. 61E-06
AUP1	2p13. 1	0. 372290921	2. 87E-07	3. 61E-06
PDCD4-AS1	10q25. 2	-0. 372286737	2. 87E-07	3. 61E-06
DNAJB13	11q13. 4	0. 372237421	2. 88E-07	3. 62E-06
NAP1L5	4q22. 1 4c	-0. 372215596	2. 89E-07	3. 63E-06
RTKN	2p13. 1	0. 372205135	2. 89E-07	3. 63E-06
TCF3	19p13. 3	0. 372117256	2. 91E-07	3. 65E-06
CDK17	12q23. 1	-0. 371924759	2. 96E-07	3. 7E-06
TRIOBP	22q13. 1	0. 371880819	2. 97E-07	3. 71E-06
GREB1L	18q11. 1-c	0. 371871136	2. 97E-07	3. 71E-06
LBX2-AS1	2p13. 1	0. 371866173	2. 97E-07	3. 71E-06
KRT9	17q21. 2	0. 371832463	2. 98E-07	3. 72E-06
APBB1	11p15. 4	-0. 371809679	2. 98E-07	3. 73E-06
RAMP2-AS1	17q21. 2	-0. 371719708	3. 00E-07	3. 75E-06
CDK2AP2	11q13. 2	0. 371677861	3. 01E-07	3. 76E-06
SLC6A14	Xq23	0. 37167338	3. 01E-07	3. 76E-06
WDR35	2p24. 1	-0. 371644383	3. 02E-07	3. 77E-06
DENND5A	11p15. 4	-0. 371556504	3. 04E-07	3. 79E-06
UPK3B	7q11. 2	0. 371483272	3. 06E-07	3. 81E-06
KLHDC1	14q21. 3	-0. 371447044	3. 07E-07	3. 82E-06
ALPG	2q37. 1	0. 371402056	3. 08E-07	3. 83E-06
PTPRU	1p35. 3	0. 371257297	3. 12E-07	3. 87E-06
FBXO5	6q25. 2	-0. 371194526	3. 13E-07	3. 89E-06
COPS4	4q21. 22	-0. 371190342	3. 13E-07	3. 89E-06
PGAP1	2q33. 1	-0. 371138033	3. 14E-07	3. 9E-06
ORAI3	16p11. 2	0. 371043877	3. 17E-07	3. 93E-06
SNX13	7p21. 1	-0. 371014584	3. 18E-07	3. 93E-06
SEMA5A	5p15. 31	-0. 370895319	3. 21E-07	3. 97E-06
RPRD1A	18q12. 2	-0. 370826272	3. 22E-07	3. 99E-06
HSPA13	21q11. 2	-0. 370799071	3. 23E-07	3. 99E-06
POU2F3	11q23. 3	0. 370676862	3. 26E-07	4. 03E-06

GIMAP6	7q36.1	-0.370612851	3.28E-07	4.05E-06
HIST1H2BE	6p22.2	0.37048731	3.31E-07	4.08E-06
NKIRAS2	17q21.2	0.370435001	3.32E-07	4.1E-06
NSL1	1q32.3	-0.370330383	3.35E-07	4.13E-06
TBC1D2	9q22.33	0.370236227	3.38E-07	4.16E-06
PCSK1	5q15	-0.370160902	3.40E-07	4.18E-06
MACC1	7p21.1	0.370121147	3.41E-07	4.19E-06
FLCN	17p11.2	-0.370022807	3.43E-07	4.22E-06
MUC17	7q22.1	0.370007025	3.44E-07	4.22E-06
CCDC62	12q24.31	-0.369993514	3.44E-07	4.22E-06
AOX1	2q33.1	-0.36998096	3.44E-07	4.23E-06
TTL	2q14.1	-0.369861695	3.48E-07	4.26E-06
ARPC1A	7q22.1	0.36979474	3.49E-07	4.28E-06
GOLPH3	5p13.3	-0.369600151	3.55E-07	4.35E-06
NR2C2AP	19p13.11	0.369539472	3.57E-07	4.36E-06
ITPR3	6p21.31	0.369531103	3.57E-07	4.36E-06
MCU	10q22.1	0.369342791	3.62E-07	4.42E-06
DLC1	8p22	-0.369338606	3.62E-07	4.42E-06
MBOAT1	6p22.3	0.369336514	3.62E-07	4.42E-06
TTLL7	1p31.1	-0.369328144	3.62E-07	4.42E-06
ZNF546	19q13.2	-0.369257004	3.64E-07	4.44E-06
PCMT1	6q25.1	-0.369223526	3.65E-07	4.45E-06
KREMEN1	22q12.1	-0.369202603	3.66E-07	4.46E-06
SH2B3	12q24.12	-0.369033122	3.71E-07	4.51E-06
WDR78	1p31.3	-0.368932689	3.74E-07	4.54E-06
SH3GL1	19p13.3	0.368932689	3.74E-07	4.54E-06
ELOVL2	6p24.2	-0.368805055	3.78E-07	4.59E-06
IRF9	14q12	0.36880087	3.78E-07	4.59E-06
ACTG1	17q25.3	0.36877367	3.78E-07	4.59E-06
CRKL	22q11.21	-0.368669052	3.82E-07	4.63E-06
CEP68	2p14	-0.368612558	3.83E-07	4.64E-06
CXCL17	19q13.2	0.368608374	3.83E-07	4.64E-06
TYW3	1p31.1	-0.368604189	3.84E-07	4.64E-06
ZFP14	19q13.12	-0.368596012	3.84E-07	4.64E-06
DCTN4	5q33.1	-0.368576988	3.84E-07	4.65E-06
DGUOK	2p13.1	0.368524679	3.86E-07	4.66E-06
MSMP	9p13.3	-0.368484925	3.87E-07	4.68E-06
TDRD6	6p12.3	-0.36847237	3.87E-07	4.68E-06
C18ORF25	18q21.1	-0.368420062	3.89E-07	4.69E-06
GRAP2	22q13.1	-0.368403323	3.90E-07	4.7E-06
PRR13	12q13.13	0.368397046	3.90E-07	4.7E-06
PALM2	9q31.3	-0.368334275	3.92E-07	4.72E-06
BFAR	16p13.12	0.368277781	3.93E-07	4.73E-06
RHOBTB3	5q15	-0.368267319	3.94E-07	4.74E-06
DPY19L3	19q13.11	-0.368254765	3.94E-07	4.74E-06
MTFP1	22q12.2	0.368171071	3.97E-07	4.77E-06
NFYB	12q23.3	-0.368106208	3.99E-07	4.79E-06
SNAPC2	19p13.2	0.368007867	4.02E-07	4.82E-06
EML6	2p16.1	-0.36796602	4.03E-07	4.83E-06
H2AFV	7p13	-0.367915804	4.05E-07	4.85E-06
BMP6	6p24.3	-0.367786077	4.09E-07	4.9E-06
ABL1	9q34.12	-0.3677526	4.10E-07	4.91E-06
ZNF420	19q13.12	-0.367727491	4.11E-07	4.91E-06
TRAM2	6p12.2	-0.367723307	4.11E-07	4.91E-06

LINC00476	9q22. 32	-0.367587304	4.15E-07	4.96E-06
FAM160B1	10q25. 3	-0.367543364	4.17E-07	4.97E-06
KRT79	12q13. 13	0.367499872	4.18E-07	4.99E-06
MYEF2	15q21. 1	-0.367488963	4.18E-07	4.99E-06
TM4SF18	3q25. 1	-0.367470132	4.19E-07	4.99E-06
DNAJB1	19p13. 12	0.367470132	4.19E-07	4.99E-06
AGMO	7p21. 2	0.36744951	4.20E-07	5E-06
SPX	12p12. 1	-0.367365174	4.22E-07	5.02E-06
BNIP3	10q26. 3	-0.367361329	4.23E-07	5.02E-06
ZFPL1	11q13. 1	0.367189756	4.28E-07	5.09E-06
NADK2	5p13. 2	-0.367177202	4.29E-07	5.09E-06
ZNF624	17p11. 2	-0.367141632	4.30E-07	5.1E-06
VLDLR-AS1	19p24. 2	-0.366838345	4.40E-07	5.22E-06
THAP2	12q21. 1	-0.366823593	4.41E-07	5.22E-06
CPTP	1p36. 33	0.3667943	4.42E-07	5.23E-06
PAPOLA	14q32. 2	-0.366746176	4.43E-07	5.25E-06
WFDC3	20q13. 12	0.366727537	4.44E-07	5.25E-06
ZC3H6	2q14. 1	-0.366679221	4.45E-07	5.27E-06
PHIP	6q14. 1	-0.366641558	4.47E-07	5.28E-06
ZSCAN30	18q12. 2	-0.366585065	4.49E-07	5.3E-06
RNF181	2p11. 2	0.366551587	4.50E-07	5.31E-06
TADA2B	4p16. 1	-0.366518109	4.51E-07	5.32E-06
ACTR3B	7q36. 1-q5	-0.366513925	4.51E-07	5.32E-06
CCND1	11q13. 3	0.366469985	4.53E-07	5.34E-06
CBFA2T3	16q24. 3	-0.366442785	4.54E-07	5.34E-06
LINC00628	1q32. 1	0.366418423	4.55E-07	5.35E-06
ZFR	5p13. 3	-0.366352813	4.57E-07	5.37E-06
MAP2	2q34	-0.366329797	4.58E-07	5.38E-06
RIMBP3C	22q11. 21	-0.366316036	4.58E-07	5.38E-06
RORA	15q22. 2	-0.36625238	4.60E-07	5.41E-06
PDCL	9q33. 2	-0.366185425	4.63E-07	5.43E-06
CYP27C1	2q14. 3	0.366135974	4.65E-07	5.45E-06
NTSR1	20q13. 33	0.366084992	4.66E-07	5.47E-06
AP2B1	17q12	0.365978281	4.70E-07	5.51E-06
TES	7q31. 2	0.365909234	4.73E-07	5.54E-06
R3HDM4	19p13. 3	0.365840186	4.75E-07	5.56E-06
TNRC6C	17q25. 3	-0.365840186	4.75E-07	5.56E-06
ITM2A	Xq21. 1	-0.365783692	4.77E-07	5.58E-06
FAM214A	15q21. 2-c	-0.365756492	4.78E-07	5.59E-06
PRKCZ	1p36. 33	0.365729291	4.79E-07	5.6E-06
TCEANC	Xp22. 2	-0.365695813	4.81E-07	5.61E-06
ZNF74	22q11. 21	-0.365434269	4.91E-07	5.72E-06
FAM216A	12q24. 11	-0.365402883	4.92E-07	5.73E-06
CAPS	19p13. 3	0.365329651	4.94E-07	5.76E-06
HMCES	3q21. 3	0.365233402	4.98E-07	5.8E-06
ANXA6	5q33. 1	-0.365172724	5.01E-07	5.82E-06
VPS53	17p13. 3	-0.36516017	5.01E-07	5.83E-06
RNGTT	6q15	-0.365137154	5.02E-07	5.83E-06
SSX2IP	1p22. 3	-0.365040906	5.06E-07	5.87E-06
SCAF8	6q25. 2	-0.364992781	5.07E-07	5.89E-06
NUTF2	16q22. 1	0.364986504	5.08E-07	5.89E-06
TNRC6B	22q13. 1	-0.364965581	5.09E-07	5.9E-06
LGALS4	19q13. 2	0.364917457	5.10E-07	5.91E-06
ZBTB21	21q22. 3	-0.364906995	5.11E-07	5.92E-06

ADGRF5	6p12.3	-0.364840039	5.14E-07	5.94E-06
RIMBP3	22q11.21	-0.364757582	5.17E-07	5.98E-06
PLAT	8p11.21	0.364699851	5.19E-07	6E-06
IDH3A	15q25.1	-0.364649635	5.21E-07	6.02E-06
TPH1	11p15.1	-0.36461316	5.23E-07	6.03E-06
C14ORF132	14q32.2	-0.364578495	5.24E-07	6.05E-06
AMD1	6q21	-0.364513632	5.27E-07	6.07E-06
MATR3	5q31.2	-0.36442366	5.30E-07	6.11E-06
FOXH1	8q24.3	0.364419666	5.30E-07	6.11E-06
ARHGAP19	10q24.1	-0.364329504	5.34E-07	6.15E-06
NCAM1	11q23.2	-0.364249995	5.37E-07	6.18E-06
SNX7	1p21.3	0.364247902	5.37E-07	6.18E-06
SUMO1	2q33.1	0.364239533	5.38E-07	6.18E-06
MXD1	2p13.3	0.364170485	5.41E-07	6.21E-06
IRX5	16q12.2	0.364124453	5.43E-07	6.23E-06
FOXN3	14q31.3-c	-0.36405959	5.45E-07	6.26E-06
PPP4R4	14q32.12-	-0.364038479	5.46E-07	6.26E-06
F11R	1q23.3	0.363963342	5.49E-07	6.3E-06
C2CD5	12p12.1	-0.363944511	5.50E-07	6.3E-06
VASH1	14q24.3	-0.363827339	5.55E-07	6.35E-06
PBX4	19p13.11	0.363818969	5.55E-07	6.35E-06
ABCC4	13q32.1	-0.363804323	5.56E-07	6.36E-06
SLC52A2	8q24.3	0.363758291	5.58E-07	6.38E-06
FAM53C	5q31.2	-0.363733183	5.59E-07	6.39E-06
ADIRF	10q23.2	0.363592995	5.65E-07	6.45E-06
PEX11B	1q21.1	0.363377482	5.75E-07	6.55E-06
TUB	11p15.4	-0.36330425	5.78E-07	6.59E-06
KLKP1	19q13.33	0.363079704	5.88E-07	6.7E-06
AK9	6q21	-0.363053167	5.89E-07	6.71E-06
PNPLA2	11p15.5	0.36303852	5.90E-07	6.71E-06
TAB3	Xp21.2	-0.363032243	5.90E-07	6.71E-06
TMEM189	20q13.13	0.363030151	5.90E-07	6.71E-06
CDK7	5q13.2	0.363015504	5.91E-07	6.71E-06
GCH1	14q22.2	-0.362935995	5.94E-07	6.75E-06
HOOK1	1p32.1	-0.36293181	5.95E-07	6.75E-06
MITD1	2q11.2	0.362921348	5.95E-07	6.75E-06
PDPK1	16p13.3	-0.36268282	6.06E-07	6.87E-06
GALNT11	7q36.1 7c	-0.362620049	6.09E-07	6.9E-06
ZSCAN26	6p22.1	-0.36261168	6.09E-07	6.9E-06
RETSAT	2p11.2	0.362534262	6.13E-07	6.94E-06
CYP2C19	10q23.33	0.362317114	6.23E-07	7.05E-06
SLC13A5	17p13.1	0.362293641	6.24E-07	7.06E-06
EIF4EBP3	5q31.3	0.362281087	6.25E-07	7.06E-06
DOCK4	7q31.1	-0.362237148	6.27E-07	7.08E-06
CA9	9p13.3	0.362161823	6.31E-07	7.12E-06
ZSCAN5A	19q13.43	-0.362042559	6.36E-07	7.18E-06
LARP4	12q13.12	-0.362032097	6.37E-07	7.18E-06
PALM2-AKA1	9q31.3	-0.362032097	6.37E-07	7.18E-06
MRO	18q21.2	-0.361983973	6.39E-07	7.2E-06
RBP3	10q11.22	0.361918353	6.42E-07	7.23E-06
INPP1	2q32.2	0.361827046	6.47E-07	7.27E-06
AGR2	7p21.1	0.361818866	6.47E-07	7.27E-06
AGR3	7p21.1	0.361815249	6.47E-07	7.27E-06
DYRK3	1q32.1	-0.361779111	6.49E-07	7.29E-06

EDA	Xq13.1	-0.361774737	6.49E-07	7.29E-06
TMEM70	8q21.11	-0.361766367	6.50E-07	7.29E-06
ATIC	2q35	0.361695227	6.53E-07	7.32E-06
HEBP2	6q24.1	0.361645011	6.56E-07	7.35E-06
UBE2O	17q25.1	-0.361613625	6.58E-07	7.36E-06
DZIP3	3q13.13	-0.361598979	6.58E-07	7.37E-06
PAK3	Xq23	-0.361552947	6.61E-07	7.39E-06
FOXP2	7q31.1	-0.361538301	6.61E-07	7.39E-06
PLP2	Xp11.23	0.361538301	6.61E-07	7.39E-06
ZFP30	19q13.12	-0.361500638	6.63E-07	7.41E-06
ENDOD1	11q21	0.361462976	6.65E-07	7.42E-06
OXSR1	3p22.2	0.361452514	6.66E-07	7.42E-06
F12	5q35.3	0.361435775	6.66E-07	7.43E-06
TACC1	8p11.22	-0.361419036	6.67E-07	7.43E-06
MPG	16p13.3	0.361416944	6.67E-07	7.43E-06
AAMP	2q35	0.361414852	6.68E-07	7.43E-06
RAPGEF6	5q31.1	-0.361387651	6.69E-07	7.44E-06
KAT2B	3p24.3	-0.361366727	6.70E-07	7.45E-06
LRP6	12p13.2	-0.361295587	6.74E-07	7.48E-06
NIPSNAP3E	9q31.1	-0.361285125	6.74E-07	7.49E-06
STX2	12q24.33	-0.361268387	6.75E-07	7.49E-06
CXCL12	10q11.21	-0.361163769	6.80E-07	7.55E-06
CARS2	13q34	0.36106752	6.85E-07	7.6E-06
DMD	Xp21.2-p2	-0.360981734	6.90E-07	7.64E-06
GRID2IP	7p22.1	0.360856192	6.97E-07	7.71E-06
MIR31HG	9p21.3	0.360762791	7.01E-07	7.76E-06
FBXW2	9q33.2	-0.360713912	7.04E-07	7.79E-06
HRH1	3p25.3	0.360674157	7.06E-07	7.81E-06
TDP2	6p22.3	-0.360519323	7.15E-07	7.89E-06
ZNF441	19p13.2	-0.360515138	7.15E-07	7.89E-06
HIST1H2AM	6p22.1	0.360487813	7.16E-07	7.91E-06
DCST2	1q21.3	0.360436863	7.19E-07	7.93E-06
SLC11A2	12q13.12	-0.360362396	7.23E-07	7.97E-06
PADI3	1p36.13	0.360303218	7.26E-07	8E-06
CERKL	2q31.3	-0.360182453	7.33E-07	8.07E-06
DOCK10	2q36.2	-0.360159438	7.34E-07	8.08E-06
NBEAL2	3p21.31	0.360033896	7.41E-07	8.16E-06
FBXL6	8q24.3	0.360023434	7.42E-07	8.16E-06
CEBPB	20q13.13	0.360002511	7.43E-07	8.16E-06
STARD13	13q13.1-c	-0.360000418	7.43E-07	8.16E-06
KRT6C	12q13.13	0.35997372	7.45E-07	8.17E-06
POLR3F	20p11.23	-0.359966941	7.45E-07	8.17E-06
USF1	1q23.3	0.359946017	7.46E-07	8.18E-06
RGS22	8q22.2	-0.359873538	7.50E-07	8.22E-06
C19ORF54	19q13.2	0.359812106	7.54E-07	8.26E-06
RASA3	13q34	0.359795368	7.55E-07	8.26E-06
SMC1A	Xp11.22	-0.359791183	7.55E-07	8.26E-06
MOGAT3	7q22.1	0.359769327	7.56E-07	8.26E-06
ATP2B1-AS	12q21.33	-0.359766075	7.57E-07	8.26E-06
ARPC5	1q25.3	0.359757705	7.57E-07	8.26E-06
VSTM2L	20q11.23	0.359755613	7.57E-07	8.26E-06
UBR3	2q31.1	-0.359755613	7.57E-07	8.26E-06
HIST1H1C	6p22.2	0.359667734	7.62E-07	8.31E-06
UBE2E3	2q31.3	0.359632164	7.64E-07	8.33E-06

PGBD5	1q42. 13	-0. 359550562	7. 69E-07	8. 38E-06
COL7A1	3p21. 31	0. 359481514	7. 73E-07	8. 42E-06
PLAAT1	3q29	-0. 359471992	7. 74E-07	8. 42E-06
APC	5q22. 2	-0. 359466868	7. 74E-07	8. 42E-06
MPP6	7p15. 3	-0. 359456406	7. 75E-07	8. 42E-06
WDFY2	13q14. 3	-0. 359429205	7. 76E-07	8. 43E-06
ACSF2	17q21. 33	0. 359383173	7. 79E-07	8. 46E-06
SEMA3G	3p21. 1	-0. 359349696	7. 81E-07	8. 47E-06
DNAJB3	2q37. 1	0. 359322218	7. 82E-07	8. 49E-06
ANKRD7	7q31. 31	-0. 359265325	7. 86E-07	8. 52E-06
BVES	6q21	-0. 359150922	7. 93E-07	8. 59E-06
ZBTB4	17p13. 1	-0. 359127906	7. 94E-07	8. 6E-06
PHEX	Xp22. 11	-0. 358972101	8. 03E-07	8. 69E-06
RUNDC3B	7q21. 12	-0. 358931224	8. 06E-07	8. 72E-06
FILIP1	6q14. 1	-0. 358904024	8. 08E-07	8. 73E-06
CSN1S1	4q13. 3	-0. 358821556	8. 13E-07	8. 78E-06
ST6GALNAC1	1p31. 1	-0. 358814052	8. 13E-07	8. 78E-06
NHSL2	Xq13. 1	-0. 358763836	8. 16E-07	8. 81E-06
BID	22q11. 21	0. 358644571	8. 23E-07	8. 88E-06
SLAMF9	1q23. 2	0. 358639045	8. 24E-07	8. 88E-06
ELOA	1p36. 11	-0. 358623648	8. 25E-07	8. 88E-06
DKK4	8p11. 21	0. 358623226	8. 25E-07	8. 88E-06
CDC42EP2	11q13. 1	0. 358596447	8. 26E-07	8. 9E-06
TNFAIP2	14q32. 32	0. 358575524	8. 28E-07	8. 9E-06
MOCS1	6p21. 2	-0. 358512753	8. 32E-07	8. 94E-06
ELP2	18q12. 2	-0. 358504383	8. 32E-07	8. 94E-06
CARD19	9q22. 31	0. 358491829	8. 33E-07	8. 94E-06
TSG101	11p15. 1	0. 358487645	8. 33E-07	8. 94E-06
PDK4	7q21. 3	-0. 358477183	8. 34E-07	8. 95E-06
TGM5	15q15. 2	0. 358460576	8. 35E-07	8. 95E-06
IFI44	1p31. 1	0. 358418597	8. 38E-07	8. 98E-06
LMO4	1p22. 3	0. 35841232	8. 38E-07	8. 98E-06
RNF182	6p23	-0. 35830561	8. 45E-07	9. 04E-06
DNAH2	17p13. 1	0. 358077543	8. 59E-07	9. 2E-06
RNF135	17q11. 2	0. 358064989	8. 60E-07	9. 2E-06
ITPA	20p13	0. 358060804	8. 61E-07	9. 2E-06
CEP162	6q14. 2-q1	-0. 358054527	8. 61E-07	9. 2E-06
SLC2A13	12q12	-0. 358027326	8. 63E-07	9. 21E-06
CYLD	16q12. 1	-0. 357920616	8. 70E-07	9. 28E-06
ZC3H7A	16p13. 13	-0. 35771138	8. 83E-07	9. 42E-06
TALD01	11p15. 5	0. 357707196	8. 84E-07	9. 42E-06
NMB	15q25. 2	0. 357700919	8. 84E-07	9. 42E-06
PRICKLE2	3p14. 1	-0. 357659071	8. 87E-07	9. 44E-06
APPBP2	17q23. 2	-0. 357610947	8. 90E-07	9. 47E-06
TTC9	14q24. 2	0. 357585839	8. 92E-07	9. 49E-06
BRMS1L	14q13. 2	-0. 357571192	8. 93E-07	9. 49E-06
MSM01	4q32. 3	0. 357491683	8. 98E-07	9. 54E-06
YEATS4	12q15	-0. 357487498	8. 98E-07	9. 54E-06
NF2	22q12. 2	-0. 357460298	9. 00E-07	9. 56E-06
TIGD7	16p13. 3	-0. 35741845	9. 03E-07	9. 58E-06
FUT6	19p13. 3	0. 357409222	9. 04E-07	9. 58E-06
TRNP1	1p36. 11	0. 357407989	9. 04E-07	9. 58E-06
CHMP2B	3p11. 2	0. 357328479	9. 09E-07	9. 63E-06
RUSC1	1q22	0. 357278263	9. 13E-07	9. 66E-06

PRKCI	3q26.2	0.357196661	9.18E-07	9.71E-06
JOSD2	19q13.33	0.357190384	9.19E-07	9.71E-06
YOD1	1q32.1	0.357186199	9.19E-07	9.71E-06
AFAP1-AS1	4p16.1	0.357046011	9.29E-07	9.81E-06
GIMAP8	7q36.1	-0.356974871	9.34E-07	9.86E-06
FBXL5	4p15.32	-0.356941393	9.36E-07	9.88E-06
SCAPER	15q24.3	-0.356914192	9.38E-07	9.89E-06
VPS37B	12q24.31	0.356886992	9.40E-07	9.91E-06
SSH2	17q11.2	-0.356803298	9.46E-07	9.96E-06
CD200	3q13.2	-0.356774005	9.48E-07	9.98E-06
GNRH1	8p21.2	0.356757266	9.49E-07	9.99E-06
NLGN1	3q26.31	-0.356661017	9.56E-07	1.01E-05
KLK8	19q13.41	0.356639051	9.57E-07	1.01E-05
COG4	16q22.1	0.356543845	9.64E-07	1.01E-05
PRIMPOL	4q35.1	-0.356516645	9.66E-07	1.01E-05
PEG3	19q13.43	-0.356510368	9.67E-07	1.01E-05
TMEM141	9q34.3	0.356418304	9.73E-07	1.02E-05
ACAA1	3p22.2	0.356382734	9.76E-07	1.02E-05
SLC9A1	1p36.11	0.356365995	9.77E-07	1.02E-05
RRP9	3p21.2	0.356311594	9.81E-07	1.03E-05
FHL1	Xq26.3	-0.356282301	9.83E-07	1.03E-05
SP6	17q21.32	0.356273931	9.84E-07	1.03E-05
ANO9	11p15.5	0.356240454	9.86E-07	1.03E-05
AP1S2	Xp22.2	-0.356236269	9.87E-07	1.03E-05
ANKMY1	2q37.3	0.356190237	9.90E-07	1.03E-05
TBC1D13	9q34.11	-0.356102358	9.97E-07	1.04E-05
ZNF331	19q13.42	-0.356093989	9.97E-07	1.04E-05
FGF7P3	9p12	-0.356012387	1E-06	1.05E-05
NBPF1	1p36.13	-0.356001925	1E-06	1.05E-05
PITPNM1	11q13.2	0.35599774	1E-06	1.05E-05
PTMA	2q37.1	0.355941247	1.01E-06	1.05E-05
BEX4	Xq22.1	-0.355916138	1.01E-06	1.05E-05
RPL7L1	6p21.1	-0.355857552	1.02E-06	1.06E-05
NUDT9P1	10q23.32	-0.355811777	1.02E-06	1.06E-05
EXOC1	4q12	0.355809428	1.02E-06	1.06E-05
XAF1	17p13.1	0.355803151	1.02E-06	1.06E-05
NCOA1	2p23.3	-0.355738288	1.02E-06	1.06E-05
PLA2G4D	15q15.1	0.355631934	1.03E-06	1.07E-05
AKR1B10	7q33	0.355570039	1.04E-06	1.08E-05
PI3	20q13.12	0.355555579	1.04E-06	1.08E-05
BRSK2	11p15.5	-0.355497667	1.04E-06	1.08E-05
TSTA3	8q24.3	0.355485113	1.04E-06	1.08E-05
PYGB	20p11.21	0.355457912	1.05E-06	1.08E-05
ARID1A	1p36.11	-0.355342833	1.05E-06	1.09E-05
SLC25A5	Xq24	-0.355261231	1.06E-06	1.1E-05
TNIP2	4p16.3	0.355171259	1.07E-06	1.1E-05
ZYX	7q34	0.355077103	1.08E-06	1.11E-05
GATAD2A	19p13.11	0.354970393	1.08E-06	1.12E-05
COA4	11q13.4	0.354966208	1.08E-06	1.12E-05
HBS1L	6q23.3	-0.354953654	1.09E-06	1.12E-05
CD82	11p11.2	0.354920177	1.09E-06	1.12E-05
CD300LG	17q21.31	-0.354904807	1.09E-06	1.12E-05
DIO3OS	14q32.31	0.354902966	1.09E-06	1.12E-05
LOC100130	4p16.3	0.354865775	1.09E-06	1.13E-05

NUDT8	11q13.2	0.354813466	1.1E-06	1.13E-05
THTPA	14q11.2	-0.354805097	1.1E-06	1.13E-05
COMT	22q11.21	0.35479882	1.1E-06	1.13E-05
ANKS1B	12q23.1	-0.354769898	1.1E-06	1.13E-05
NEURL4	17p13.1	-0.354671186	1.11E-06	1.14E-05
KDM2B	12q24.31	-0.354658632	1.11E-06	1.14E-05
NPY4R	10q11.22	0.354630957	1.11E-06	1.14E-05
FAM234B	12p13.1	-0.354581215	1.12E-06	1.14E-05
SOS2	14q21.3	-0.354503798	1.12E-06	1.15E-05
ATF1	12q13.12	-0.354499613	1.12E-06	1.15E-05
IRAK2	3p25.3	0.354489151	1.12E-06	1.15E-05
CFAP161	15q25.1	-0.354478478	1.13E-06	1.15E-05
WFDC5	20q13.12	0.354290174	1.14E-06	1.17E-05
ZNF366	5q13.2 5c	-0.354269454	1.14E-06	1.17E-05
SECISBP2I	15q21.1	-0.354133451	1.15E-06	1.18E-05
PARD6B	20q13.13	0.353901199	1.17E-06	1.2E-05
IL10RB	21q22.11	0.353869814	1.18E-06	1.2E-05
PTGER4P2-	9q13	-0.353770989	1.19E-06	1.21E-05
RET	10q11.21	-0.353708702	1.19E-06	1.21E-05
CYP4F11	19p13.12	0.353702425	1.19E-06	1.21E-05
TRAPPC8	18q12.1	-0.353656393	1.2E-06	1.22E-05
NIPSNAP2	7p11.2	-0.353560145	1.2E-06	1.23E-05
CCDC178	18q12.1	-0.353554331	1.2E-06	1.23E-05
HPCAL1	2p25.1	0.353512021	1.21E-06	1.23E-05
RPSAP52	12q14.3	0.353473871	1.21E-06	1.23E-05
RBM11	21q11.2	-0.353453435	1.21E-06	1.23E-05
UGT1A8	2q37.1	0.353413929	1.22E-06	1.24E-05
ABTB2	11p13	0.353365556	1.22E-06	1.24E-05
DNAH6	2p11.2	-0.3532714	1.23E-06	1.25E-05
RPS6KA5	14q32.11	-0.353252568	1.23E-06	1.25E-05
ACVR2B	3p22.2	-0.353244199	1.23E-06	1.25E-05
C18ORF32	18q21.1	-0.353187705	1.24E-06	1.25E-05
SHE	1q21.3	-0.353177244	1.24E-06	1.25E-05
TMEM121B	22q11.1	-0.353144997	1.24E-06	1.26E-05
KIAA1324I	7q21.12	-0.353127027	1.24E-06	1.26E-05
CSF2	5q31.1	0.353114661	1.24E-06	1.26E-05
FRMD4A	10p13	-0.353066349	1.25E-06	1.26E-05
CCDC115	2q21.1	0.352913607	1.26E-06	1.28E-05
ZKSCAN1	7q22.1	-0.352894775	1.27E-06	1.28E-05
PNP	14q11.2	0.352890591	1.27E-06	1.28E-05
KBTBD7	13q14.11	-0.352808989	1.27E-06	1.28E-05
SLCO5A1	8q13.3	-0.352777603	1.28E-06	1.29E-05
LZTFL1	3p21.31	-0.35267717	1.29E-06	1.29E-05
F3	1p21.3	0.352660431	1.29E-06	1.3E-05
RBM20	10q25.2	-0.352635323	1.29E-06	1.3E-05
GDF11	12q13.2	-0.35260603	1.29E-06	1.3E-05
KLLN	10q23.31	-0.352518151	1.3E-06	1.31E-05
ZNF396	18q12.2	-0.352495135	1.3E-06	1.31E-05
FIBP	11q13.1	0.352478396	1.3E-06	1.31E-05
NIM1K	5p12	-0.352476304	1.31E-06	1.31E-05
PPIA	7p13	0.352453288	1.31E-06	1.31E-05
AMIGO2	12q13.11	0.352279623	1.32E-06	1.33E-05
SYNM	15q26.3	-0.352260791	1.33E-06	1.33E-05
KAT6B	10q22.2	-0.352141527	1.34E-06	1.34E-05

PLPPR1	9q31.1	-0.352119337	1.34E-06	1.34E-05
RBM42	19q13.12	0.351892537	1.36E-06	1.36E-05
PIK3R3	1p34.1	-0.351850689	1.37E-06	1.37E-05
NEK1	4q33	-0.351838135	1.37E-06	1.37E-05
FZD2	17q21.31	0.351827674	1.37E-06	1.37E-05
SRPK2	7q22.3	-0.351714686	1.38E-06	1.38E-05
ZNF615	19q13.41	-0.351702132	1.38E-06	1.38E-05
TTC33	5p13.1	-0.351683301	1.38E-06	1.38E-05
SNRPA	19q13.2	0.35162053	1.39E-06	1.39E-05
PREX1	20q13.13	-0.351605884	1.39E-06	1.39E-05
ANKRD13A	12q24.11	-0.351555667	1.4E-06	1.39E-05
SIRT6	19p13.3	0.351541021	1.4E-06	1.39E-05
ARSG	17q24.2	-0.351526374	1.4E-06	1.39E-05
MICA	6p21.33	0.351509635	1.4E-06	1.39E-05
PHF24	9p13.3	-0.351508278	1.4E-06	1.39E-05
RCBTB1	13q14.2	-0.351469881	1.41E-06	1.4E-05
F2RL1	5q13.3	0.351348524	1.42E-06	1.41E-05
ABHD11	7q11.23	0.351308769	1.42E-06	1.41E-05
EXOC5	14q22.3	-0.351308769	1.42E-06	1.41E-05
IFNE	9p21.3	0.351237557	1.43E-06	1.42E-05
ARPC4	3p25.3	0.350934237	1.46E-06	1.45E-05
EIF2AK3	2p11.2	-0.350921683	1.46E-06	1.45E-05
VGLL1	Xq26.3	0.350900669	1.47E-06	1.45E-05
C10ORF91	10q26.3	0.350812145	1.48E-06	1.46E-05
FAM160A2	11p15.4	0.350808696	1.48E-06	1.46E-05
LDB2	4p15.32	-0.350789865	1.48E-06	1.46E-05
SLC12A1	15q21.1	-0.350763562	1.48E-06	1.46E-05
YPEL2	17q22	-0.350762664	1.48E-06	1.46E-05
USP30	12q24.11	-0.350756387	1.48E-06	1.46E-05
FHL2	2q12.2	0.350595275	1.5E-06	1.48E-05
TSKU	11q13.5	0.35056389	1.5E-06	1.48E-05
BPTF	17q24.2	-0.350522043	1.51E-06	1.49E-05
IL12RB2	1p31.3	-0.350422839	1.52E-06	1.49E-05
PDE7B	6q23.3	-0.350419518	1.52E-06	1.49E-05
PLPP3	1p32.2	-0.350409056	1.52E-06	1.5E-05
SPC24	19p13.2	0.350394409	1.52E-06	1.5E-05
PHLDB2	3q13.2	-0.350363024	1.52E-06	1.5E-05
SART1	11q13.1	0.350293976	1.53E-06	1.51E-05
LINC00261	20p11.21	-0.350254221	1.54E-06	1.51E-05
NEGR1	1p31.1	-0.350222836	1.54E-06	1.51E-05
B3GNTL1	17q25.3	0.350178896	1.55E-06	1.52E-05
HMG20B	19p13.3	0.350166342	1.55E-06	1.52E-05
TMEM120A	7q11.23	0.350111941	1.55E-06	1.52E-05
B3GALT1	2q24.3	-0.350060291	1.56E-06	1.53E-05
PKD1L2	16q23.2	0.350003871	1.57E-06	1.53E-05
SHF	15q21.1	0.349927814	1.57E-06	1.54E-05
LMNB2	19p13.3	0.349869228	1.58E-06	1.55E-05
MPP1	Xq28	-0.349823196	1.59E-06	1.55E-05
PPP1R14D	15q15.1	0.349772979	1.59E-06	1.56E-05
FLJ16779	20q13.33	0.349735054	1.6E-06	1.56E-05
NUDT9	4q22.1	-0.349708116	1.6E-06	1.56E-05
HSD11B2	16q22.1	0.349687193	1.6E-06	1.56E-05
PSMD4	1q21.3	0.34964953	1.61E-06	1.57E-05
KIAA0355	19q13.11	-0.349639068	1.61E-06	1.57E-05

SSTR2	17q25.1	-0.349611868	1.61E-06	1.57E-05
MTX1	1q22	0.349463311	1.63E-06	1.59E-05
ZNF664	12q24.31	-0.349423556	1.63E-06	1.59E-05
ZNF207	17q11.2	0.349352416	1.64E-06	1.6E-05
PDS5A	4p14	-0.349316846	1.65E-06	1.6E-05
STX10	19p13.13	0.349306384	1.65E-06	1.6E-05
HELZ2	20q13.33	0.349210135	1.66E-06	1.61E-05
SLX1B	16p11.2	0.349145272	1.67E-06	1.62E-05
C8ORF74	8p23.1	0.349097609	1.67E-06	1.62E-05
MOCS2	5q11.2	-0.349082502	1.67E-06	1.62E-05
THUMPD2	2p22.1 2f	0.349067855	1.68E-06	1.63E-05
EXTL3	8p21.1	-0.3490281	1.68E-06	1.63E-05
DUSP4	8p12	0.348996715	1.68E-06	1.63E-05
AIMP2	7p22.1	0.348887912	1.7E-06	1.64E-05
AGO1	1p34.3	-0.348724709	1.72E-06	1.66E-05
CTTNBP2	7q31.31	-0.348695416	1.72E-06	1.67E-05
CDC20	1p34.2	0.348590798	1.74E-06	1.68E-05
PTGFR	1p31.1	-0.348528027	1.74E-06	1.69E-05
IKBKB	8p11.21	0.34852175	1.74E-06	1.69E-05
SAP30L	5q33.2	-0.34848618	1.75E-06	1.69E-05
ASPHD2	22q12.1	0.348471533	1.75E-06	1.69E-05
KIAA1328	18q12.2	-0.348446425	1.75E-06	1.69E-05
WAC	10p12.1 1	-0.348421317	1.76E-06	1.69E-05
FANK1	10q26.2	0.348398301	1.76E-06	1.7E-05
PCBP2	12q13.13	-0.348396209	1.76E-06	1.7E-05
NEAT1	11q13.1	0.348389932	1.76E-06	1.7E-05
PWARSN	15q11.2	-0.348381562	1.76E-06	1.7E-05
NRG2	5q31.2	-0.348228279	1.78E-06	1.71E-05
ZNF853	7p22.1	-0.348222543	1.78E-06	1.71E-05
ELP5	17p13.1	-0.348186973	1.79E-06	1.72E-05
PCDH17	13q21.1	-0.348057247	1.8E-06	1.73E-05
GPR108	19p13.3	0.347986107	1.81E-06	1.74E-05
ORMDL2	12q13.2	0.347889858	1.83E-06	1.75E-05
TOM1L2	17p11.2	-0.347837549	1.83E-06	1.76E-05
RALA	7p14.1	0.347824995	1.83E-06	1.76E-05
GPRASP1	Xq22.1	-0.347785241	1.84E-06	1.76E-05
LINC00482	17q25.3	0.34772247	1.85E-06	1.77E-05
CELSR1	22q13.31	0.347691084	1.85E-06	1.77E-05
TUT4	1p32.3	-0.34765133	1.86E-06	1.78E-05
TBC1D19	4p15.2	-0.347567635	1.87E-06	1.79E-05
MXD3	5q35.3	0.347559266	1.87E-06	1.79E-05
TCFL5	20q13.33	-0.347513234	1.88E-06	1.79E-05
ZNF268	12q24.33	-0.347398155	1.89E-06	1.81E-05
DMGDH	5q14.1	-0.3473584	1.9E-06	1.81E-05
DPH5	1p21.2	-0.347268428	1.91E-06	1.82E-05
11-Mar	5p15.1	-0.34726529	1.91E-06	1.82E-05
FIG4	6q21	-0.347203565	1.92E-06	1.83E-05
PHKG2	16p11.2	0.347117779	1.93E-06	1.84E-05
TMEM171	5q13.2	0.347095991	1.93E-06	1.84E-05
RHBDF2	17q25.1	0.34706547	1.94E-06	1.85E-05
ARHGDI A	17q25.3	0.346921097	1.96E-06	1.86E-05
EP400	12q24.33	-0.346686753	1.99E-06	1.9E-05
DYM	18q21.1	-0.346646999	2E-06	1.9E-05
USP27X	Xp11.23	-0.34663026	2E-06	1.9E-05

BCAS1	20q13.2	0.346603059	2.01E-06	1.9E-05
PRXL2C	9q22.33	-0.346561212	2.01E-06	1.91E-05
TTBK2	15q15.2	-0.346339422	2.04E-06	1.94E-05
GCLC	6p12.1	-0.346316406	2.05E-06	1.94E-05
SNPH	20p13	-0.346305944	2.05E-06	1.94E-05
LOC646762	7p14.3	-0.346289206	2.05E-06	1.94E-05
S100A12	1q21.3	-0.34628604	2.05E-06	1.94E-05
TRRAP	7q22.1	-0.346180403	2.07E-06	1.96E-05
CCNT1	12q13.11	-0.346174126	2.07E-06	1.96E-05
UBE4B	1p36.22	-0.346048585	2.09E-06	1.97E-05
TCHP	12q24.11	-0.345983721	2.1E-06	1.98E-05
RNF138P1	5q11.2	-0.345972394	2.1E-06	1.98E-05
PSMA5	1p13.3	0.345879104	2.11E-06	1.99E-05
BOLA2	16p11.2	0.345824702	2.12E-06	2E-05
TRIM8	10q24.32	0.345795409	2.13E-06	2E-05
PDK3	Xp22.11	-0.345770482	2.13E-06	2.01E-05
KIZ	20p11.23	-0.345766116	2.13E-06	2.01E-05
COMMD10	5q23.1	-0.345736823	2.13E-06	2.01E-05
DLG4	17p13.1	-0.345667776	2.15E-06	2.02E-05
BCAR3	1p22.1	0.345320444	2.2E-06	2.07E-05
SLC14A2	18q12.3	-0.345272448	2.21E-06	2.08E-05
FOXJ3	1p34.2	-0.345173979	2.22E-06	2.09E-05
RAI2	Xp22.13	-0.345167702	2.22E-06	2.09E-05
HGS	17q25.3	0.345121671	2.23E-06	2.1E-05
ZNF180	19q13.31	-0.345092378	2.24E-06	2.1E-05
TXNDC15	5q31.1	-0.345056807	2.24E-06	2.1E-05
PFKL	21q22.3	0.345025422	2.25E-06	2.11E-05
CLDN7	17p13.1	0.344994037	2.25E-06	2.11E-05
F8	Xq28	-0.344981483	2.25E-06	2.11E-05
LINC01128	1p36.33	-0.344960559	2.26E-06	2.11E-05
GYG2	Xp22.33	-0.344889419	2.27E-06	2.12E-05
STK35	20p13	-0.344843387	2.28E-06	2.13E-05
TLCD1	17q11.2	0.344830833	2.28E-06	2.13E-05
PWAR5	15q11.2	-0.34480309	2.28E-06	2.13E-05
NTRK2	9q21.33	-0.344786893	2.29E-06	2.14E-05
RHOV	15q15.1	0.344740862	2.29E-06	2.14E-05
RAPGEF2	4q32.1	-0.344661352	2.31E-06	2.15E-05
GK	Xp21.2	-0.344558827	2.32E-06	2.17E-05
NBPF3	1p36.12	-0.34455255	2.32E-06	2.17E-05
FGD6	12q22	0.34454418	2.33E-06	2.17E-05
SERPINE2	2q36.1	-0.344531626	2.33E-06	2.17E-05
SLC12A9	7q22.1	0.344498148	2.33E-06	2.17E-05
TNFRSF10A	8p21.3	0.344489779	2.34E-06	2.17E-05
FANCL	2p16.1	0.344433285	2.34E-06	2.18E-05
PRR15L	17q21.32	0.344416546	2.35E-06	2.18E-05
PTAR1	9q21.12	-0.344410269	2.35E-06	2.18E-05
ZNF596	8p23.3	-0.344383069	2.35E-06	2.19E-05
PPM1G	2p23.3	0.34436633	2.36E-06	2.19E-05
ARG2	14q24.1	-0.34433076	2.36E-06	2.19E-05
ENPP4	6p21.1	-0.34433076	2.36E-06	2.19E-05
TPRG1	3q28	0.34432239	2.36E-06	2.19E-05
METTL7A	12q13.12	-0.344293097	2.37E-06	2.2E-05
FAM110B	8q12.1	-0.344278451	2.37E-06	2.2E-05
AKAP9	7q21.2	-0.344175925	2.39E-06	2.21E-05

AGBL4	1p33	-0.344163614	2.39E-06	2.21E-05
SIGLEC15	18q12.3	0.344157848	2.39E-06	2.21E-05
RTKN2	10q21.2	0.344083862	2.4E-06	2.22E-05
LINC00896	22q11.21	0.344067843	2.41E-06	2.22E-05
EPC1	10p11.22	-0.344067123	2.41E-06	2.22E-05
MMGT1	Xq26.3	-0.344033645	2.41E-06	2.23E-05
KRT222	17q21.2	-0.34399389	2.42E-06	2.23E-05
MIDN	19p13.3	0.34395832	2.43E-06	2.24E-05
DIPK1B	9q34.3	-0.343954136	2.43E-06	2.24E-05
OST4	2p23.3	0.343952043	2.43E-06	2.24E-05
MLX	17q21.2	0.343820225	2.45E-06	2.26E-05
MRPL11	11q13.2	0.343782562	2.46E-06	2.26E-05
FGF3	11q13.3	0.343753472	2.46E-06	2.27E-05
DIS3L2	2q37.1	0.343677944	2.48E-06	2.28E-05
SACM1L	3p21.31	-0.343659113	2.48E-06	2.28E-05
TPM4	19p13.12-	0.343648651	2.48E-06	2.28E-05
GNPDA2	4p12	-0.343642374	2.48E-06	2.28E-05
KCNA3	1p13.3	-0.343598435	2.49E-06	2.29E-05
FAM114A2	5q33.2	-0.34359425	2.49E-06	2.29E-05
LSM4	19p13.11	0.343539849	2.5E-06	2.29E-05
USP46	4q12	-0.343437323	2.52E-06	2.31E-05
ALAS1	3p21.2	0.343410123	2.52E-06	2.31E-05
ARID2	12q12	-0.343403846	2.52E-06	2.31E-05
C3ORF52	3q13.2	0.343376645	2.53E-06	2.32E-05
FOXD2-AS1	1p33	0.343355901	2.53E-06	2.32E-05
AHSG	3q27.3	0.343355366	2.53E-06	2.32E-05
NKAPL	6p22.1	-0.343157127	2.57E-06	2.35E-05
NAP1L3	Xq21.32	-0.343029314	2.59E-06	2.37E-05
RDM1	17q12	0.343025309	2.59E-06	2.37E-05
ZNF141	4p16.3	-0.34301676	2.6E-06	2.37E-05
MAP3K12	12q13.13	-0.342949804	2.61E-06	2.38E-05
CPEB1	15q25.2	-0.342858966	2.62E-06	2.4E-05
AMIG01	1p13.3	-0.342847279	2.63E-06	2.4E-05
AP1S1	7q22.1	0.342788693	2.64E-06	2.41E-05
STAT4	2q32.2-q3	-0.342763585	2.64E-06	2.41E-05
BTBD9	6p21.2	-0.342761492	2.64E-06	2.41E-05
PORCN	Xp11.23	0.342690352	2.66E-06	2.42E-05
CACNA2D2	3p21.31	-0.342648505	2.66E-06	2.42E-05
SLC22A3	6q25.3	0.342642228	2.67E-06	2.42E-05
VPS33A	12q24.31	-0.342635951	2.67E-06	2.42E-05
MOB1B	4q13.3	-0.342606658	2.67E-06	2.43E-05
NBEA	13q13.3	-0.342575273	2.68E-06	2.43E-05
ZNF831	20q13.32	-0.342550164	2.68E-06	2.44E-05
AREG	4q13.3	0.342485301	2.7E-06	2.45E-05
TMCC2	1q32.1	-0.342468562	2.7E-06	2.45E-05
MEX3D	19p13.3	0.34246647	2.7E-06	2.45E-05
STOX1	10q22.1	-0.342428808	2.71E-06	2.45E-05
SLC10A6	4q21.3	-0.342375151	2.72E-06	2.46E-05
APOOL	Xq21.1	-0.342353483	2.72E-06	2.46E-05
ADRB1	10q25.3	-0.34235139	2.72E-06	2.46E-05
ASF1A	6q22.31	-0.342271881	2.74E-06	2.48E-05
ADGRB3	6q12-q13	-0.342251852	2.74E-06	2.48E-05
RAB9B	Xq22.2	-0.342217659	2.75E-06	2.48E-05
DLG2	11q14.1	-0.342110769	2.77E-06	2.5E-05

ELOVL4	6q14.1	-0.342012429	2.79E-06	2.52E-05
ZNF286B	17p11.2	-0.341999874	2.79E-06	2.52E-05
ARHGAP32	11q24.3	0.341983136	2.79E-06	2.52E-05
UBR7	14q32.12	-0.341958027	2.8E-06	2.52E-05
SQOR	15q21.1	0.341932919	2.8E-06	2.53E-05
CRADD	12q22	-0.341872241	2.82E-06	2.54E-05
HLF	17q22	-0.341849225	2.82E-06	2.54E-05
TMEM192	4q32.3	-0.341834578	2.82E-06	2.54E-05
SERPINB2	18q21.33-	0.341730986	2.84E-06	2.56E-05
YAF2	12q12	-0.34163162	2.86E-06	2.58E-05
MUC16	19p13.2	0.341625864	2.87E-06	2.58E-05
TFF2	21q22.3	0.341479899	2.9E-06	2.6E-05
ZFP28	19q13.43	-0.341426569	2.91E-06	2.61E-05
C11ORF95	11q13.1	-0.341420292	2.91E-06	2.61E-05
LINC00922	16q21	0.341402323	2.91E-06	2.61E-05
TSPYL5	8q22.1	-0.341353336	2.92E-06	2.62E-05
NUP88	17p13.2	-0.341344967	2.92E-06	2.62E-05
MARCKSL1	1p35.1	0.341342874	2.92E-06	2.62E-05
CCNO	5q11.2	0.341305212	2.93E-06	2.63E-05
MSI1	12q24.31	-0.341227795	2.95E-06	2.64E-05
BEND4	4p13	-0.341211431	2.95E-06	2.64E-05
CTNS	17p13.2	-0.341137824	2.97E-06	2.65E-05
C10ORF55	10q22.2	0.341124961	2.97E-06	2.66E-05
PSORS1C3	6p21.33	0.341095078	2.98E-06	2.66E-05
ZNF445	3p21.31	-0.341075053	2.98E-06	2.66E-05
ADGRV1	5q14.3	-0.341060585	2.98E-06	2.66E-05
WWOX	16q23.1-c	-0.34103739	2.99E-06	2.67E-05
CTSD	11p15.5	0.341014374	2.99E-06	2.67E-05
NOVA1	14q12	-0.340997636	3E-06	2.67E-05
GAS2	11p14.3	-0.340964158	3E-06	2.68E-05
ARF6	14q21.3	0.340949511	3.01E-06	2.68E-05
SORCS1	10q25.1	-0.340932773	3.01E-06	2.68E-05
AK4	1p31.3	0.340849078	3.03E-06	2.7E-05
ATOX1A	2p11.2	-0.340775846	3.04E-06	2.71E-05
ATP8A1	4p13	-0.340692152	3.06E-06	2.72E-05
RLN1	9p24.1	-0.340556936	3.09E-06	2.75E-05
ERO1A	14q22.1	0.340466177	3.11E-06	2.77E-05
GRIA1	5q33.2	-0.340441183	3.12E-06	2.77E-05
IRAK1BP1	6q14.1	-0.340390852	3.13E-06	2.78E-05
BCDIN3D-A	12q13.12	-0.340367836	3.13E-06	2.78E-05
RECK	9p13.3	-0.34034482	3.14E-06	2.78E-05
TMSB4XP8	4q22.1	0.340328082	3.14E-06	2.79E-05
TNFSF9	19p13.3	0.340315527	3.15E-06	2.79E-05
CD302	2q24.2	-0.340311343	3.15E-06	2.79E-05
GABRB3	15q12	-0.34030925	3.15E-06	2.79E-05
RMI1	9q21.32	-0.340298789	3.15E-06	2.79E-05
PTPRR	12q15	0.340240203	3.16E-06	2.8E-05
ANXA2P3	10q21.3	0.340128439	3.19E-06	2.82E-05
AP4B1	1p13.2	0.34009583	3.19E-06	2.82E-05
CPEB3	10q23.32	-0.340068629	3.2E-06	2.83E-05
FAM126A	7p15.3	-0.340030967	3.21E-06	2.83E-05
ETV7	6p21.31	0.339976566	3.22E-06	2.84E-05
AMPH	7p14.1	-0.339897056	3.24E-06	2.86E-05
SESN3	11q21	-0.339884502	3.24E-06	2.86E-05

LIN54	4q21. 22	-0. 339857301	3. 25E-06	2. 86E-05
LPCAT2	16q12. 2	0. 339844747	3. 25E-06	2. 87E-05
ZNF677	19q13. 42	-0. 339807085	3. 26E-06	2. 87E-05
ANKRD22	10q23. 31	0. 339788254	3. 26E-06	2. 87E-05
CAV2	7q31. 2	0. 339781976	3. 27E-06	2. 87E-05
VDAC1	5q31. 1	0. 339765238	3. 27E-06	2. 88E-05
IPW	15q11. 2	-0. 339763145	3. 27E-06	2. 88E-05
HAGHL	16p13. 3	0. 339742222	3. 28E-06	2. 88E-05
SLC29A2	11q13. 2	0. 339735945	3. 28E-06	2. 88E-05
MIA	19q13. 2	0. 339677359	3. 29E-06	2. 89E-05
PHF2	9q22. 31	-0. 33936769	3. 36E-06	2. 95E-05
TNKS2	10q23. 32	-0. 339346766	3. 37E-06	2. 96E-05
ZNF829	19q13. 12	-0. 339323116	3. 37E-06	2. 96E-05
WDFY3-AS2	4q21. 23	-0. 339313289	3. 38E-06	2. 96E-05
USP45	6q16. 2	-0. 33929045	3. 38E-06	2. 96E-05
KCND3	1p13. 2	-0. 339229772	3. 4E-06	2. 97E-05
BAD	11q13. 1	0. 33921704	3. 4E-06	2. 98E-05
ZYG11B	1p32. 3	-0. 339053836	3. 44E-06	3. 01E-05
ERN1	17q23. 3	-0. 339028728	3. 44E-06	3. 01E-05
CD55	1q32. 2	0. 339007804	3. 45E-06	3. 02E-05
MAN1C1	1p36. 11	-0. 338961773	3. 46E-06	3. 02E-05
DSG3	18q12. 1	0. 338919392	3. 47E-06	3. 03E-05
SCML4	6q21	-0. 338911556	3. 47E-06	3. 03E-05
CPQ	8q22. 1	-0. 338899002	3. 48E-06	3. 03E-05
SELENOH	11q12. 1	0. 33889691	3. 48E-06	3. 03E-05
ZCCHC2	18q21. 33	-0. 338865524	3. 48E-06	3. 04E-05
UBA7	3p21. 31	0. 338829954	3. 49E-06	3. 04E-05
CYB5B	16q22. 1	0. 338719059	3. 52E-06	3. 07E-05
MEGF8	19q13. 2	-0. 338706505	3. 52E-06	3. 07E-05
TSPAN8	12q21. 1	0. 338662566	3. 53E-06	3. 08E-05
ZNF10	12q24. 33	-0. 338572594	3. 56E-06	3. 1E-05
FZD4	11q14. 2	-0. 338555855	3. 56E-06	3. 1E-05
PLVAP	19p13. 11	-0. 338541209	3. 57E-06	3. 1E-05
KIAA0232	4p16. 1	-0. 33852447	3. 57E-06	3. 1E-05
ALOX5	10q11. 21	0. 338392652	3. 6E-06	3. 13E-05
KCNK7	11q13. 1	0. 338330058	3. 62E-06	3. 14E-05
PKMYT1	16p13. 3	0. 338183416	3. 66E-06	3. 17E-05
PEG10	7q21. 3	-0. 338143661	3. 67E-06	3. 18E-05
RETREG1	5p15. 1	-0. 337997196	3. 7E-06	3. 21E-05
DENND1A	9q33. 3	-0. 337840269	3. 75E-06	3. 25E-05
BLCAP	20q11. 23	0. 337808884	3. 75E-06	3. 25E-05
CACNA2D1	7q21. 11	-0. 337771222	3. 76E-06	3. 26E-05
ERCC5	13q33. 1	0. 337769129	3. 76E-06	3. 26E-05
MAP1B	5q13. 2	-0. 337697989	3. 78E-06	3. 27E-05
SMS	Xp22. 11	0. 337693805	3. 78E-06	3. 27E-05
NCOR1	17p12-p11	-0. 337679158	3. 79E-06	3. 27E-05
OTX1	2p15	0. 337643588	3. 8E-06	3. 28E-05
GHDC	17q21. 2	0. 337614295	3. 8E-06	3. 29E-05
TNS3	7p12. 3	-0. 337587094	3. 81E-06	3. 29E-05
SLF2	10q24. 31	-0. 337580817	3. 81E-06	3. 29E-05
PDE4DIP	1q21. 2	-0. 337566171	3. 82E-06	3. 29E-05
CFL2	14q13. 1	-0. 337555709	3. 82E-06	3. 29E-05
LRRTM2	5q31. 2	-0. 337554839	3. 82E-06	3. 29E-05
TMEM62	15q15. 2	0. 337528508	3. 83E-06	3. 3E-05

ZCCHC3	20p13	-0.337492938	3.84E-06	3.3E-05
CHRM3	1q43	-0.337486661	3.84E-06	3.3E-05
RRM2B	8q22.3	-0.337484569	3.84E-06	3.3E-05
CARD8	19q13.33	-0.337463645	3.85E-06	3.31E-05
TOPORS	9p21.1	-0.337446906	3.85E-06	3.31E-05
CDC42SE2	5q31.1	-0.337377859	3.87E-06	3.32E-05
FAM229B	6q21	-0.337279694	3.9E-06	3.35E-05
HSPA1L	6p21.33	-0.337200008	3.92E-06	3.36E-05
KSR2	12q24.22	-0.337137238	3.93E-06	3.38E-05
CDC42EP5	19q13.42	0.337122591	3.94E-06	3.38E-05
MIR4435-2	2q13	0.337118406	3.94E-06	3.38E-05
MEGF6	1p36.32	0.33699705	3.97E-06	3.41E-05
KRT4	12q13.13	0.336946482	3.99E-06	3.42E-05
QPCTL	19q13.32	0.336858954	4.01E-06	3.44E-05
CBX7	22q13.1	-0.336794091	4.03E-06	3.45E-05
MMP16	8q21.3	-0.33670412	4.06E-06	3.47E-05
FOSL1	11q13.1	0.336601594	4.08E-06	3.49E-05
NR2F6	19p13.11	0.336586948	4.09E-06	3.5E-05
TBC1D16	17q25.3	-0.336574394	4.09E-06	3.5E-05
KIAA0586	14q23.1	-0.33656184	4.1E-06	3.5E-05
CKS2	9q22.2	0.336547193	4.1E-06	3.5E-05
DNAJC12	10q21.3	-0.33652627	4.11E-06	3.5E-05
HERC2	15q13.1	-0.336478145	4.12E-06	3.51E-05
ZNF813	19q13.42	-0.336476053	4.12E-06	3.51E-05
PRPSAP2	17p11.2	-0.336415375	4.14E-06	3.53E-05
TMPRSS3	21q22.3	0.336409098	4.14E-06	3.53E-05
TNNC2	20q13.12	0.336381897	4.15E-06	3.53E-05
AVPI1	10q24.2	0.336377712	4.15E-06	3.53E-05
LBHD1	11q12.3	0.336354696	4.16E-06	3.54E-05
RFXANK	19p13.11	0.336321219	4.17E-06	3.54E-05
PIEZO1	16q24.3	0.336281464	4.18E-06	3.55E-05
SMYD3	1q44	0.336222878	4.19E-06	3.56E-05
GFRA1	10q25.3	-0.336168477	4.21E-06	3.58E-05
ADGRG6	6q24.2	0.336074321	4.24E-06	3.6E-05
COQ10A	12q13.3	-0.336026196	4.25E-06	3.61E-05
F7	13q34	-0.335988199	4.26E-06	3.62E-05
TMEM82	1p36.21	0.335972776	4.27E-06	3.62E-05
IQGAP3	1q22	0.335959241	4.27E-06	3.62E-05
PPP1R42	8q13.1	-0.335906229	4.29E-06	3.63E-05
LSM12	17q21.31	0.335900655	4.29E-06	3.63E-05
AGPAT2	9q34.3	0.335881824	4.3E-06	3.64E-05
CNOT4	7q33	-0.335793945	4.32E-06	3.66E-05
DTYMK	2q37.3	0.335775114	4.33E-06	3.66E-05
PSMC4	19q13.2	0.33575419	4.33E-06	3.66E-05
PBRM1	3p21.1	-0.335733266	4.34E-06	3.67E-05
ARID5B	10q21.2	-0.335666311	4.36E-06	3.68E-05
TIAM1	21q22.11	-0.33546126	4.42E-06	3.73E-05
LINC02381	12q13.13	0.335371289	4.45E-06	3.76E-05
SHB	9p13.1	0.335191346	4.51E-06	3.8E-05
JADE1	4q28.2	-0.335116021	4.53E-06	3.82E-05
MCF2L	13q34	-0.335103467	4.53E-06	3.82E-05
METTL14	4q26	-0.335063712	4.55E-06	3.83E-05
FRMD5	15q15.3	0.334965371	4.58E-06	3.85E-05
SEMA6D	15q21.1	-0.334965371	4.58E-06	3.85E-05

GRK4	4p16.3	-0.334933986	4.59E-06	3.86E-05
SPATA7	14q31.3	-0.334932069	4.59E-06	3.86E-05
SNAP25	20p12.2	-0.334925617	4.59E-06	3.86E-05
TAL1	1p33	-0.334885862	4.6E-06	3.87E-05
B3GALT2	1q31.2	-0.334873308	4.61E-06	3.87E-05
C14ORF119	14q11.2	0.3348482	4.62E-06	3.88E-05
NRXN1	2p16.3	-0.334774967	4.64E-06	3.89E-05
STIM2	4p15.2	-0.334743582	4.65E-06	3.9E-05
ANO7	2q37.3	0.334726843	4.65E-06	3.9E-05
SLC35E4	22q12.2	0.334691273	4.67E-06	3.91E-05
CALCRL	2q32.1	-0.33465361	4.68E-06	3.92E-05
APPL1	3p14.3	-0.334647333	4.68E-06	3.92E-05
BMPER	7p14.3	-0.334613856	4.69E-06	3.93E-05
ADAMTSL4	1q21.2	0.334599209	4.7E-06	3.93E-05
EIF4E2	2q37.1	0.334502961	4.73E-06	3.96E-05
STRN4	19q13.32	0.334479945	4.74E-06	3.96E-05
NNT	5p12	-0.334417174	4.76E-06	3.98E-05
KCNN2	5q22.3	-0.334346209	4.78E-06	3.99E-05
ZNF135	19q13.43	-0.334343942	4.78E-06	3.99E-05
ADCY9	16p13.3	-0.33432511	4.79E-06	4E-05
ZCCHC18	Xq22.2	-0.334304187	4.79E-06	4E-05
ITGA4	2q31.3	-0.334293725	4.8E-06	4E-05
PCDHB5	5q31.3	-0.334291633	4.8E-06	4E-05
TCTN1	12q24.11	-0.334251878	4.81E-06	4.01E-05
ZNF578	19q13.41	-0.334195384	4.83E-06	4.02E-05
UBE2I	16p13.3	0.334099136	4.86E-06	4.05E-05
PLK1	16p12.2	0.334017534	4.89E-06	4.07E-05
ZNF781	19q13.12	-0.333932968	4.92E-06	4.09E-05
HSBP1L1	18q23	0.333931747	4.92E-06	4.09E-05
METTL5	2q31.1	0.333877346	4.94E-06	4.1E-05
ADORA2A	22q11.23	-0.333868977	4.94E-06	4.11E-05
RAB11FIP5	2p13.2	0.33385433	4.95E-06	4.11E-05
CEP170B	14q32.33	0.333822945	4.96E-06	4.12E-05
PPP2R5C	14q32.31	-0.333802021	4.96E-06	4.12E-05
TBC1D10A	22q12.2	0.333799929	4.96E-06	4.12E-05
KCTD11	17p13.1	0.333793652	4.97E-06	4.12E-05
AGTRAP	1p36.22	0.333766451	4.98E-06	4.12E-05
NRDE2	14q32.11	-0.333758082	4.98E-06	4.13E-05
MID1	Xp22.2	-0.333741343	4.98E-06	4.13E-05
LRRC37A16	17q24.2	-0.333691126	5E-06	4.14E-05
HDGFL3	15q25.2	-0.333607432	5.03E-06	4.16E-05
EMP3	19q13.33	0.333492352	5.07E-06	4.19E-05
ZEB1-AS1	10p11.22	0.333477706	5.08E-06	4.2E-05
PHF8	Xp11.22	-0.333456782	5.08E-06	4.2E-05
SPINK7	5q32	0.333370798	5.11E-06	4.22E-05
TXLNA	1p35.2	-0.333350072	5.12E-06	4.23E-05
NHS	Xp22.2-p2	0.33334798	5.12E-06	4.23E-05
KCNK3	2p23.3	-0.333283117	5.14E-06	4.25E-05
AMOTL1	11q21	-0.33326847	5.15E-06	4.25E-05
NOG	17q22	0.333226623	5.16E-06	4.26E-05
MIRLET7BF	22q13.31	0.333199423	5.17E-06	4.26E-05
HEY1	8q21.13	-0.333188961	5.18E-06	4.27E-05
COL25A1	4q25	-0.333094455	5.21E-06	4.29E-05
USP2	11q23.3	-0.333082251	5.22E-06	4.29E-05

SCN3B	11q24.1	-0.333061327	5.22E-06	4.3E-05
CD59	11p13	0.333048773	5.23E-06	4.3E-05
ICA1L	2q33.2	-0.333044588	5.23E-06	4.3E-05
CXCL14	5q31.1	0.333025757	5.24E-06	4.3E-05
PCDHGA12	5q31.3	-0.332988094	5.25E-06	4.31E-05
PEX3	6q24.2	-0.332979725	5.25E-06	4.31E-05
SORBS1	10q24.1	-0.332929509	5.27E-06	4.33E-05
PAK4	19q13.2	0.332873015	5.29E-06	4.34E-05
HDHD3	9q32	0.332783044	5.33E-06	4.37E-05
TTC22	1p32.3	0.332778859	5.33E-06	4.37E-05
NPAS1	19q13.32	0.33276212	5.33E-06	4.37E-05
TEK	9p21.2	-0.332734919	5.34E-06	4.38E-05
ALK	2p23.2-p2	-0.332716061	5.35E-06	4.38E-05
GNAL	18p11.21	-0.332711903	5.35E-06	4.38E-05
POLH	6p21.1	-0.332596824	5.39E-06	4.41E-05
ARFGEF3	6q23.3-q2	-0.332352018	5.49E-06	4.48E-05
RNASEH2A	19p13.13	0.332352018	5.49E-06	4.48E-05
IQSEC3	12p13.33	-0.332345741	5.49E-06	4.48E-05
RNF125	18q12.1	-0.332333187	5.49E-06	4.49E-05
KRT78	12q13.13	0.33229638	5.51E-06	4.5E-05
C200RF194	20p13	-0.33229134	5.51E-06	4.5E-05
ADGRF4	6p12.3	0.332270416	5.52E-06	4.5E-05
PSENE1	19q13.12	0.332228569	5.53E-06	4.51E-05
PTPDC1	9q22.32	-0.332222292	5.54E-06	4.51E-05
REPS2	Xp22.2	0.332146967	5.56E-06	4.53E-05
GATA3-AS1	10p14	0.332143699	5.57E-06	4.53E-05
PSMB3	17q12	0.332098843	5.58E-06	4.54E-05
OPHN1	Xq12	-0.332067458	5.59E-06	4.55E-05
ZNF280C	Xq26.1	-0.332061181	5.6E-06	4.55E-05
PLCG1	20q12	-0.332059088	5.6E-06	4.55E-05
GIMAP7	7q36.1	-0.331971209	5.63E-06	4.58E-05
FAM107A	3p14.3-p1	-0.331950286	5.64E-06	4.58E-05
PLA2G4C	19q13.33	-0.331934767	5.65E-06	4.58E-05
STAG2	Xq25	-0.331925177	5.65E-06	4.58E-05
TAF11	3p14.1	-0.331924711	5.65E-06	4.58E-05
ARL14EP	11p14.1	-0.331906346	5.66E-06	4.59E-05
ZNF594	17p13.2	-0.331874961	5.67E-06	4.6E-05
CLSTN2	3q23	-0.331839391	5.68E-06	4.61E-05
LIMCH1	4p13	-0.331747327	5.72E-06	4.63E-05
ZNF772	19q13.43	-0.33170548	5.74E-06	4.64E-05
PLCL2	3p24.3	-0.331607139	5.77E-06	4.67E-05
FFAR2	19q13.12	-0.331592493	5.78E-06	4.68E-05
KARS	16q23.1	0.331573661	5.79E-06	4.68E-05
LDHD	16q23.1	0.331548553	5.8E-06	4.69E-05
GNAS	22q11.22-	-0.331469044	5.83E-06	4.71E-05
VLDLR	9p24.2	-0.331431381	5.84E-06	4.72E-05
CLDN18	3q22.3	0.331373489	5.87E-06	4.74E-05
SERTAD4-1	1q32.2	0.331303747	5.9E-06	4.76E-05
ANTXR2	4q21.21	0.331301655	5.9E-06	4.76E-05
FBXW10	17p11.2	0.331239272	5.92E-06	4.78E-05
CFDP1	16q23.1	0.331217961	5.93E-06	4.78E-05
DNAJA4	15q25.1	0.331148913	5.96E-06	4.8E-05
TAF12	12q14.1	-0.331096604	5.98E-06	4.82E-05
CYB5R2	11p15.4	0.331077773	5.99E-06	4.82E-05

FLJ12825	12q13.13	0.331048653	6E-06	4.83E-05
CYSTM1	5q31.3	0.3309334	6.05E-06	4.87E-05
PTPRD	9p24.1-p24.2	-0.330891553	6.06E-06	4.88E-05
FOXS1	20q11.21	0.330891553	6.06E-06	4.88E-05
EFNA1	1q22	0.330883184	6.07E-06	4.88E-05
ASNSD1	2q32.2	-0.330878999	6.07E-06	4.88E-05
RNF126	19p13.3	0.330832967	6.09E-06	4.89E-05
SLC4A8	12q13.13	-0.330832967	6.09E-06	4.89E-05
TACR1	2p12	-0.330718061	6.14E-06	4.92E-05
GPR142	17q25.1	-0.330705589	6.14E-06	4.93E-05
C17ORF53	17q21.31	0.330540037	6.21E-06	4.98E-05
CD200R1	3q13.2	-0.330527483	6.22E-06	4.98E-05
ZNF304	19q13.43	-0.330494005	6.23E-06	4.99E-05
SNORC	2q37.1	0.330362888	6.29E-06	5.04E-05
PCBP4	3p21.2	0.330343356	6.3E-06	5.04E-05
ABCA3	16p13.3	-0.330316155	6.31E-06	5.05E-05
KCTD16	5q31.3	-0.330314063	6.31E-06	5.05E-05
KXD1	19p13.11	0.3302764	6.33E-06	5.06E-05
TENT4B	16q12.1	-0.330253384	6.34E-06	5.06E-05
IST1	16q22.2	0.330219907	6.35E-06	5.07E-05
ZNF154	19q13.43	-0.330171782	6.37E-06	5.09E-05
DEDD2	19q13.2	0.330142489	6.38E-06	5.1E-05
ZNF559	19p13.2	-0.330138305	6.39E-06	5.1E-05
NRF1	7q32.2	-0.330106919	6.4E-06	5.1E-05
STAT5B	17q21.2	-0.330065072	6.42E-06	5.12E-05
BCL2L12	19q13.33	0.330060888	6.42E-06	5.12E-05
APOBEC1	12p13.31	0.330042377	6.43E-06	5.12E-05
DNAJC17	15q15.1	0.330037872	6.43E-06	5.12E-05
RSPH4A	6q22.1	-0.329994105	6.45E-06	5.13E-05
GYS1	19q13.33	0.329973009	6.46E-06	5.14E-05
FAM13C	10q21.1	-0.329960454	6.46E-06	5.14E-05
MYCT1	6q25.2	-0.3299207	6.48E-06	5.15E-05
ZNF727	7q11.21	-0.329916744	6.48E-06	5.15E-05
TSPAN3	15q24.3	0.329910238	6.49E-06	5.15E-05
GOLGA2P1C	15q25.2	0.329822359	6.53E-06	5.18E-05
KLHDC7B	22q13.33	0.329822359	6.53E-06	5.18E-05
DDHD1	14q22.1	-0.329818174	6.53E-06	5.18E-05
SUGT1P4-S	9q22.33	-0.329813989	6.53E-06	5.18E-05
LY75	2q24.2	0.329803528	6.53E-06	5.18E-05
BBS10	12q21.2	-0.329797251	6.54E-06	5.18E-05
PABPC5	Xq21.31	-0.329795158	6.54E-06	5.18E-05
ARMC10	7q22.1	0.329782604	6.54E-06	5.18E-05
CDHR2	5q35.2	0.329751219	6.56E-06	5.19E-05
PMEPA1	20q13.31	0.329659155	6.6E-06	5.22E-05
FANCA	16q24.3	0.329579646	6.63E-06	5.25E-05
ZFYVE19	15q15.1	0.329562907	6.64E-06	5.25E-05
ERG	21q22.2	-0.329433181	6.7E-06	5.3E-05
SLC35B4	7q33	-0.329359948	6.73E-06	5.32E-05
NACC1	19p13.13	0.329292993	6.77E-06	5.34E-05
MAPK4	18q21.1-c	-0.329244868	6.79E-06	5.36E-05
ATP1A1-AS1	1p13.1	-0.329163267	6.83E-06	5.39E-05
NOL3	16q22.1	0.329138158	6.84E-06	5.39E-05
TTC19	17p12	-0.329129789	6.84E-06	5.39E-05
RIMS1	6q13	-0.32911059	6.85E-06	5.4E-05

ATG9B	7q36.1	0.329096311	6.86E-06	5.4E-05
ZC3H14	14q31.3	-0.329054464	6.88E-06	5.41E-05
NAF1	4q32.2	-0.328907999	6.94E-06	5.47E-05
PDE3A	12p12.2	-0.328884983	6.96E-06	5.47E-05
RASD1	17p11.2	-0.328878706	6.96E-06	5.47E-05
OLFM1	9q34.3	-0.328872429	6.96E-06	5.47E-05
TADA3	3p25.3	0.32886406	6.97E-06	5.47E-05
RAD51	15q15.1	0.328853598	6.97E-06	5.48E-05
MSL2	3q22.3	-0.328836859	6.98E-06	5.48E-05
CHST10	2q11.2	-0.328751072	7.02E-06	5.51E-05
COX6B1	19q13.12	0.328742703	7.02E-06	5.51E-05
CRACR2B	11p15.5	0.328725964	7.03E-06	5.52E-05
EPHX2	8p21.2-p2	-0.32870504	7.04E-06	5.52E-05
NKIRAS1	3p24.2	-0.32867784	7.05E-06	5.53E-05
SCN3A	2q24.3	-0.328654824	7.07E-06	5.53E-05
HNRNPD	4q21.22	0.328652732	7.07E-06	5.53E-05
STC2	5q35.2	-0.328646455	7.07E-06	5.53E-05
TNPO1	5q13.2	-0.328623439	7.08E-06	5.54E-05
CRHBP	5q13.3	-0.328600805	7.09E-06	5.55E-05
CYP2J2	1p32.1	0.328514636	7.13E-06	5.58E-05
PIKFYVE	2q34	-0.328470697	7.15E-06	5.59E-05
SELENOW	19q13.33	0.328466512	7.16E-06	5.59E-05
ZC3HAV1	7q34	-0.328445588	7.17E-06	5.6E-05
PSME1	14q12	0.328439311	7.17E-06	5.6E-05
MAP3K11	11q13.1	0.328403741	7.19E-06	5.61E-05
RBAK	7p22.1	-0.328393279	7.19E-06	5.61E-05
CALML4	15q23	0.328363986	7.21E-06	5.62E-05
NUDT22	11q13.1	0.328317955	7.23E-06	5.64E-05
IDS	Xq28	-0.328286569	7.24E-06	5.65E-05
ABCA1	9q31.1	-0.328263553	7.26E-06	5.65E-05
MBTPS2	Xp22.12	-0.328253091	7.26E-06	5.65E-05
OR10H1	19p13.12	0.328156167	7.31E-06	5.69E-05
PSD4	2q14.1	0.328135919	7.32E-06	5.69E-05
CAND2	3p25.2	-0.328125458	7.32E-06	5.7E-05
CALB2	16q22.2	0.328119181	7.33E-06	5.7E-05
GPR135	14q23.1	-0.328029209	7.37E-06	5.73E-05
HTR1B	6q14.1	0.328022699	7.38E-06	5.73E-05
AGRP	16q22.1	0.327995844	7.39E-06	5.74E-05
OR2A7	7q35	0.327960162	7.41E-06	5.75E-05
KCNT2	1q31.3	-0.327932961	7.42E-06	5.76E-05
CPLANE1	5p13.2	-0.327920407	7.43E-06	5.76E-05
ATP6V1G2	6p21.33	-0.327861821	7.46E-06	5.78E-05
EPN1	19q13.42	0.327855544	7.46E-06	5.78E-05
SCAI	9q33.3	-0.327790681	7.49E-06	5.8E-05
ZNF518B	4p16.1	-0.327640031	7.57E-06	5.86E-05
PHTF2	7q11.23-c	-0.327617015	7.58E-06	5.87E-05
C12ORF65	12q24.31	-0.327449627	7.67E-06	5.93E-05
NIT1	1q23.3	0.327414056	7.69E-06	5.95E-05
NUP214	9q34.13	-0.327330362	7.73E-06	5.98E-05
LMNA	1q22	0.327326177	7.73E-06	5.98E-05
GTF2B	1p22.2	0.327206913	7.79E-06	6.02E-05
GPX3	5q33.1	-0.327152512	7.82E-06	6.04E-05
KIF1BP	10q22.1	-0.32715042	7.82E-06	6.04E-05
PPP1R12A	12q21.2-c	-0.327135773	7.83E-06	6.04E-05

RMDN3	15q15.1	0.327135773	7.83E-06	6.04E-05
NATD1	17p11.2	-0.327041617	7.88E-06	6.08E-05
SULT1E1	4q13.3	0.327040295	7.88E-06	6.08E-05
ACKR4	3q22.1	0.327022786	7.89E-06	6.08E-05
ZFP1	16q23.1	-0.326993493	7.91E-06	6.09E-05
CBR1	21q22.12	0.326943276	7.93E-06	6.11E-05
UBXN1	11q12.3	0.32689306	7.96E-06	6.13E-05
LYSMD3	5q14.3	-0.32684406	7.99E-06	6.15E-05
ARHGAP24	4q21.23-c	-0.326800996	8.01E-06	6.16E-05
SMUG1	12q13.13	0.326736133	8.05E-06	6.19E-05
MYCBP2	13q22.3	-0.326606407	8.12E-06	6.24E-05
LOC730101	6p12.2	-0.326602222	8.12E-06	6.24E-05
SCN11A	3p22.2	-0.326565947	8.14E-06	6.25E-05
TSPYL2	Xp11.22	-0.32649342	8.18E-06	6.28E-05
PELI1	2p14	0.326482958	8.19E-06	6.28E-05
ZNF713	7p11.2	-0.32641391	8.22E-06	6.31E-05
WASF1	6q21	-0.326355324	8.26E-06	6.33E-05
EXOG	3p22.2	-0.326338585	8.27E-06	6.33E-05
CALM1	14q32.11	-0.326288369	8.29E-06	6.35E-05
ATPCKMT	5p15.2	-0.32622769	8.33E-06	6.38E-05
HIST1H3H	6p22.1	0.326216924	8.33E-06	6.38E-05
IGF2R	6q25.3	-0.326154458	8.37E-06	6.4E-05
SUGT1	13q14.3	0.326083318	8.41E-06	6.43E-05
SLITRK2	Xq27.3	-0.326082931	8.41E-06	6.43E-05
HSPB8	12q24.23	-0.325991254	8.46E-06	6.47E-05
LOH12CR2	12p13.2	-0.325968238	8.47E-06	6.47E-05
SPAG17	1p12	0.325915053	8.5E-06	6.5E-05
AKAP2	9q31.3	-0.325889945	8.52E-06	6.5E-05
ERCC6L2	9q22.32	-0.325844789	8.55E-06	6.52E-05
DAPP1	4q23	0.325809219	8.57E-06	6.53E-05
CCSER2	10q23.1	-0.325608353	8.68E-06	6.62E-05
TRO	Xp11.21	-0.325581152	8.7E-06	6.63E-05
PSMG3	7p22.3	0.32557069	8.7E-06	6.63E-05
GNS	12q14.3	-0.325560228	8.71E-06	6.63E-05
TTC9C	11q12.3	0.32553512	8.73E-06	6.64E-05
TUBB4B	9q34.3	0.325505827	8.74E-06	6.65E-05
CHM	Xq21.2	-0.325468165	8.76E-06	6.67E-05
RTL6	22q13.31	-0.32539284	8.81E-06	6.7E-05
GALNT12	9q22.33	0.325292407	8.87E-06	6.74E-05
RFESD	5q15	-0.32527776	8.88E-06	6.75E-05
HOXC5	12q13.13	0.325255425	8.89E-06	6.75E-05
SHPRH	6q24.3	-0.325139665	8.96E-06	6.8E-05
EFNA5	5q21.3	0.325122926	8.97E-06	6.81E-05
ITGA9	3p22.2	-0.325104095	8.98E-06	6.82E-05
ARMC4	10p12.1	-0.325093031	8.99E-06	6.82E-05
HSP90B3P	1p22.1	-0.325081079	9E-06	6.82E-05
NCBP3	17p13.2	-0.325070617	9E-06	6.82E-05
YPEL1	22q11.21-	-0.324855104	9.13E-06	6.92E-05
TOP1MT	8q24.3	0.32481535	9.16E-06	6.94E-05
NDOR1	9q34.3	0.324783964	9.18E-06	6.95E-05
NUTM2D	10q23.2	-0.324767225	9.19E-06	6.95E-05
HOXB9	17q21.32	0.324733917	9.21E-06	6.96E-05
CUBN	10p13	-0.324733748	9.21E-06	6.96E-05
PLXNC1	12q22	-0.324717009	9.22E-06	6.97E-05

TNKS	8p23. 1	-0. 324689808	9. 23E-06	6. 97E-05
CLK2	1q22	0. 324687716	9. 24E-06	6. 97E-05
GNG7	19p13. 3	-0. 324685623	9. 24E-06	6. 97E-05
CHRD1	Xq23	-0. 324677254	9. 24E-06	6. 98E-05
LINC00574	6q27	-0. 324619808	9. 28E-06	7E-05
LINC00887	3q29	0. 324569667	9. 31E-06	7. 02E-05
MAP4K4	2q11. 2	0. 324539158	9. 33E-06	7. 03E-05
PMM1	22q13. 2	-0. 324488942	9. 36E-06	7. 05E-05
MAMLD1	Xq28	-0. 324465926	9. 37E-06	7. 06E-05
IL1A	2q14. 1	0. 324454507	9. 38E-06	7. 07E-05
MRS2	6p22. 3	-0. 324434541	9. 39E-06	7. 07E-05
C16ORF74	16q24. 1	0. 324378047	9. 43E-06	7. 1E-05
ZNF322	6p22. 2	-0. 324277614	9. 49E-06	7. 14E-05
RAB33B	4q31. 1	-0. 324269244	9. 5E-06	7. 14E-05
ADAMTS18	16q23. 1	-0. 324244984	9. 51E-06	7. 15E-05
GAPDH	12p13. 31	0. 324227397	9. 53E-06	7. 16E-05
MRPL14	6p21. 1	0. 324131149	9. 59E-06	7. 2E-05
SMOX	20p13	0. 324089302	9. 61E-06	7. 22E-05
SPINT2	19q13. 2	0. 324066286	9. 63E-06	7. 23E-05
CSGALNACT1	8p21. 3	-0. 324039085	9. 65E-06	7. 24E-05
DOC2B	17p13. 3	-0. 323995146	9. 67E-06	7. 26E-05
B3GNT7	2q37. 1 2c	0. 323980499	9. 68E-06	7. 26E-05
SFRP1	8p11. 21	-0. 323905174	9. 73E-06	7. 29E-05
DNAAF2	14q21. 3	-0. 323880066	9. 75E-06	7. 3E-05
MTA2	11q12. 3	0. 323758709	9. 83E-06	7. 36E-05
DOCK5	8p21. 2	0. 323741971	9. 84E-06	7. 37E-05
HIST1H2AC	6p22. 2	0. 323681292	9. 88E-06	7. 39E-05
PDCD6IP	3p22. 3	0. 323677108	9. 88E-06	7. 39E-05
UBE2C	20q13. 12	0. 323677108	9. 88E-06	7. 39E-05
EFNA2	19p13. 3	0. 32366604	9. 89E-06	7. 39E-05
UBC	12q24. 31	0. 323637353	9. 91E-06	7. 4E-05
IL6ST	5q11. 2	-0. 323576674	9. 95E-06	7. 43E-05
LYPD6B	2q23. 2	0. 323574582	9. 95E-06	7. 43E-05
HSD17B11	4q22. 1	0. 323559936	9. 96E-06	7. 43E-05
IGFL3	19q13. 32	0. 323516924	9. 99E-06	7. 45E-05
RPL17	18q21. 1	-0. 323486703	1E-05	7. 46E-05
EYS	6q12	-0. 32346578	1E-05	7. 47E-05
TPH2	12q21. 1	-0. 32333825	1. 01E-05	7. 53E-05
SLC6A20	3p21. 31	0. 323336223	1. 01E-05	7. 53E-05
SPTB	14q23. 3	-0. 323252359	1. 02E-05	7. 57E-05
RIOK1	6p24. 3	-0. 323220974	1. 02E-05	7. 58E-05
MAP7D3	Xq26. 3	-0. 323220974	1. 02E-05	7. 58E-05
ORAI2	7q22. 1	-0. 323214697	1. 02E-05	7. 58E-05
ARL13B	3q11. 1-q1	-0. 323202143	1. 02E-05	7. 58E-05
TIFA	4q25	-0. 323185404	1. 02E-05	7. 59E-05
PPP4R1	18p11. 22	0. 323101709	1. 03E-05	7. 63E-05
IGFBP3	7p12. 3	0. 323074509	1. 03E-05	7. 64E-05
ZNF737	19p12	-0. 323005461	1. 03E-05	7. 67E-05
SERPINB7	18q21. 33	0. 322969398	1. 04E-05	7. 69E-05
MGMT	10q26. 3	0. 32295106	1. 04E-05	7. 69E-05
PRSS53	16p11. 2	0. 322946875	1. 04E-05	7. 69E-05
TRIM58	1q44	-0. 32292872	1. 04E-05	7. 7E-05
STXBPL5L	3q13. 33	-0. 322881177	1. 04E-05	7. 72E-05
TMEM191A	22q11. 21	0. 322762748	1. 05E-05	7. 78E-05

SCT	11p15.5	0.32272927	1.05E-05	7.8E-05
FBX048	2p13.3	-0.322710439	1.05E-05	7.8E-05
CELF2	10p14	-0.322704162	1.05E-05	7.8E-05
TXNDC17	17p13.1	0.322683238	1.06E-05	7.81E-05
AP3M1	10q22.2	-0.322681146	1.06E-05	7.81E-05
ATP8A2	13q12.13	-0.322662315	1.06E-05	7.82E-05
TTYH2	17q25.1	-0.322582805	1.06E-05	7.85E-05
SNAPIN	1q21.3	0.322574436	1.06E-05	7.85E-05
LHFPL1	Xq23	-0.322570991	1.06E-05	7.85E-05
GSDMD	8q24.3	0.322570251	1.06E-05	7.85E-05
AN08	19p13.11	0.322566066	1.06E-05	7.85E-05
FOCAD	9p21.3	-0.322526311	1.07E-05	7.87E-05
SORD	15q21.1	0.322509573	1.07E-05	7.88E-05
ZNF347	19q13.42	-0.322494926	1.07E-05	7.88E-05
SNTG2	2p25.3	-0.322449298	1.07E-05	7.9E-05
RTN1	14q23.1	-0.322421694	1.07E-05	7.91E-05
MAML3	4q31.1	-0.322411232	1.08E-05	7.92E-05
SPOCK2	10q22.1	-0.322369385	1.08E-05	7.93E-05
NMI	2q23.3	0.32235683	1.08E-05	7.94E-05
ST13	22q13.2	-0.322335907	1.08E-05	7.95E-05
LPIN3	20q12	0.32229406	1.08E-05	7.97E-05
MUS81	11q13.1	0.322264767	1.09E-05	7.98E-05
ZDHHC12	9q34.11	0.322256397	1.09E-05	7.98E-05
RHOA	3p21.31	0.322254305	1.09E-05	7.98E-05
CLUL1	18p11.32	-0.322254067	1.09E-05	7.98E-05
DNAJC16	1p36.21	-0.322227104	1.09E-05	7.99E-05
SACS	13q12.12	-0.322197811	1.09E-05	8E-05
GPM6B	Xp22.2	-0.322193627	1.09E-05	8E-05
PIGN	18q21.33	-0.322189442	1.09E-05	8E-05
EXOC2	6p25.3	-0.322124579	1.1E-05	8.03E-05
CACNA1D	3p21.1	-0.322049254	1.1E-05	8.07E-05
TCIRG1	11q13.2	0.321994853	1.11E-05	8.09E-05
MXD4	4p16.3	-0.321986483	1.11E-05	8.09E-05
CCDC65	12q13.12	-0.321942712	1.11E-05	8.11E-05
KIAA1109	4q27	-0.321940452	1.11E-05	8.11E-05
CYP39A1	6p12.3	-0.321938359	1.11E-05	8.11E-05
NECTIN2	19q13.32	0.321902789	1.11E-05	8.13E-05
TUBE1	6q21	-0.321844203	1.12E-05	8.16E-05
SETX	9q34.13	-0.321827464	1.12E-05	8.16E-05
SOGA3	6q22.33	-0.321827464	1.12E-05	8.16E-05
RGS7BP	5q12.3	-0.321791894	1.12E-05	8.18E-05
PSPH	7p11.2	-0.321733308	1.12E-05	8.2E-05
MGST2	4q31.1	0.321706108	1.13E-05	8.22E-05
GRK3	22q12.1	-0.321651706	1.13E-05	8.24E-05
DCLRE1A	10q25.3	-0.321630783	1.13E-05	8.25E-05
TMEM102	17p13.1	0.321526165	1.14E-05	8.31E-05
ZNF43	19p12	-0.321507334	1.14E-05	8.31E-05
ZFP2	5q35.3	-0.321495994	1.14E-05	8.32E-05
SYNGR1	22q13.1	-0.321465487	1.14E-05	8.33E-05
OSTM1	6q21	-0.321448748	1.15E-05	8.34E-05
KLHL2	4q32.3	-0.321312745	1.16E-05	8.41E-05
SYT11	1q22	-0.321285544	1.16E-05	8.42E-05
GYG1	3q24	-0.321268805	1.16E-05	8.43E-05
ZWINT	10q21.1	0.321266713	1.16E-05	8.43E-05

PTPRM	18p11.23	-0.321247881	1.16E-05	8.43E-05
LAMP2	Xq24	-0.321197665	1.17E-05	8.46E-05
ELOB	16p13.3	0.321099324	1.17E-05	8.51E-05
PATL1	11q12.1	0.321063754	1.18E-05	8.53E-05
RTTN	18q22.2	-0.321053292	1.18E-05	8.53E-05
ELF2	4q31.1	-0.321044923	1.18E-05	8.53E-05
EMCN	4q24	-0.320871257	1.19E-05	8.63E-05
ITGAE	17p13.2	-0.320852426	1.19E-05	8.63E-05
CLSTN3	12p13.31	-0.320785471	1.2E-05	8.67E-05
IRAK4	12q12	-0.320754085	1.2E-05	8.68E-05
MAPK8IP1	11p11.2	-0.320745716	1.2E-05	8.69E-05
C20RF42	2p13.3	-0.320716423	1.2E-05	8.7E-05
USP9X	Xp11.4	-0.320708053	1.2E-05	8.7E-05
NSUN5	7q11.23	0.320680853	1.21E-05	8.71E-05
ADAM28	8p21.2	0.32065156	1.21E-05	8.73E-05
LINC02447	4p16.1	-0.320645283	1.21E-05	8.73E-05
ZNF394	7q22.1	0.32057205	1.21E-05	8.77E-05
ZNF835	19q13.43	-0.320465675	1.22E-05	8.83E-05
ITGA2	5q11.2	0.320419308	1.23E-05	8.85E-05
TTC28	22q12.1	-0.320417216	1.23E-05	8.85E-05
IFNGR2	21q22.11	0.320329337	1.23E-05	8.9E-05
SSH1	12q24.11	-0.320266566	1.24E-05	8.93E-05
EIF3L	22q13.1	-0.320264474	1.24E-05	8.93E-05
PKHD1L1	8q23.1-q2	-0.320190657	1.25E-05	8.97E-05
GALNT16	14q24.1	-0.320067792	1.26E-05	9.04E-05
PPP1R35	7q22.1	0.320061515	1.26E-05	9.04E-05
ENHO	9p13.3	-0.320033436	1.26E-05	9.05E-05
MUC4	3q29	0.319961082	1.26E-05	9.09E-05
RAB5IF	20q11.23	0.31981671	1.28E-05	9.18E-05
KIF1A	2q37.3	-0.319764401	1.28E-05	9.2E-05
DPH1	17p13.3	-0.319753939	1.28E-05	9.21E-05
SERTAD1	19q13.2	0.319741385	1.28E-05	9.21E-05
TST	22q12.3	0.319733015	1.28E-05	9.21E-05
NOL9	1p36.31	-0.319638859	1.29E-05	9.27E-05
BCL2	18q21.33	-0.319626305	1.29E-05	9.27E-05
CCDC88B	11q13.1	0.319615843	1.29E-05	9.27E-05
DPY30	2p22.3	0.319496579	1.3E-05	9.34E-05
ARL15	5q11.2	-0.319492394	1.3E-05	9.34E-05
TM6SF2	19p13.11	0.319463268	1.31E-05	9.36E-05
CDH5	16q21	-0.319458917	1.31E-05	9.36E-05
CCDC93	2q14.1	-0.319383592	1.31E-05	9.4E-05
DUSP19	2q32.1	-0.319377315	1.31E-05	9.4E-05
MOAP1	14q32.12	-0.319318729	1.32E-05	9.43E-05
ADSS	1q44	0.319314544	1.32E-05	9.43E-05
TCF7L2	10q25.2-c	0.319281066	1.32E-05	9.45E-05
GINM1	6q25.1	-0.319264327	1.32E-05	9.46E-05
GTF2E2	8p12	0.319216203	1.33E-05	9.48E-05
C11ORF58	11p15.2	-0.319178541	1.33E-05	9.5E-05
MGA	15q15.1	-0.319071831	1.34E-05	9.57E-05
HERPUD1	16q13	-0.31897349	1.35E-05	9.63E-05
APOL2	22q12.3	0.318958843	1.35E-05	9.63E-05
FLOT2	17q11.2	0.318952566	1.35E-05	9.63E-05
SCRN1	7p14.3	-0.318908627	1.36E-05	9.66E-05
RNF38	9p13.2	-0.31889398	1.36E-05	9.66E-05

KIF6	6p21. 2	-0. 318876362	1. 36E-05	9. 67E-05
SYNJ2	6q25. 3	-0. 318833302	1. 36E-05	9. 7E-05
PLS1	3q23	0. 318766347	1. 37E-05	9. 73E-05
RNF4	4p16. 3	-0. 318691022	1. 37E-05	9. 78E-05
S100A4	1q21. 3	0. 318626159	1. 38E-05	9. 82E-05
TGFBR3	1p22. 1	-0. 31857385	1. 39E-05	9. 85E-05
HOXB3	17q21. 32	0. 318559203	1. 39E-05	9. 85E-05
FRRS1L	9q31. 3	-0. 318552944	1. 39E-05	9. 85E-05
KCTD1	18q11. 2	0. 318433662	1. 4E-05	9. 93E-05
SLX4IP	20p12. 2	-0. 318416923	1. 4E-05	9. 94E-05
FAM13B	5q31. 2	-0. 318389722	1. 4E-05	9. 95E-05
TRABD	22q13. 33	0. 318324859	1. 41E-05	9. 99E-05
CCDC12	3p21. 31	0. 318291382	1. 41E-05	0. 0001
C11ORF68	11q13. 1	0. 318253719	1. 41E-05	0. 0001
KLF13	15q13. 3	-0. 318241165	1. 42E-05	0. 0001
KIAA1522	1p35. 1	0. 318216057	1. 42E-05	0. 0001
KLRG1	12p13. 31	-0. 318195133	1. 42E-05	0. 000101
GRHL1	2p25. 1	0. 318161655	1. 42E-05	0. 000101
ZBED3-AS1	5q13. 3	-0. 318126085	1. 43E-05	0. 000101
SYNRG	17q12	-0. 318034022	1. 44E-05	0. 000102
PGGHG	11p15. 5	0. 318021468	1. 44E-05	0. 000102
RNF41	12q13. 3	-0. 317927312	1. 45E-05	0. 000102
GABARAPL1	12p13. 2	-0. 317902203	1. 45E-05	0. 000102
RNF115	1q21. 1	-0. 317883372	1. 45E-05	0. 000102
SLC17A9	20q13. 33	0. 31781014	1. 46E-05	0. 000103
MCOLN3	1p22. 3	-0. 317768292	1. 46E-05	0. 000103
SLC2A4RG	20q13. 33	0. 317759923	1. 46E-05	0. 000103
RPP25	15q24. 2	0. 317709706	1. 47E-05	0. 000103
DCTN5	16p12. 2	0. 317688783	1. 47E-05	0. 000104
VAMP2	17p13. 1	-0. 317672044	1. 47E-05	0. 000104
POLR3H	22q13. 2	-0. 317653213	1. 47E-05	0. 000104
IFITM2	11p15. 5	0. 317649028	1. 47E-05	0. 000104
MRGBP	20q13. 33	0. 317613458	1. 48E-05	0. 000104
API5	11p12	-0. 317556964	1. 48E-05	0. 000104
ARF1	1q42. 13	0. 317550687	1. 48E-05	0. 000104
FKTN	9q31. 2	-0. 317548595	1. 48E-05	0. 000104
GNAO1	16q13	-0. 317506748	1. 49E-05	0. 000104
CCNB2	15q22. 2	0. 317460716	1. 49E-05	0. 000105
ARHGEF15	17p13. 1	-0. 317456531	1. 49E-05	0. 000105
PRSS12	4q26	0. 317427238	1. 49E-05	0. 000105
PHYHIP1L	10q21. 1	-0. 317349821	1. 5E-05	0. 000105
PPFIA4	1q32. 1	0. 317282866	1. 51E-05	0. 000106
ZNF454	5q35. 3	-0. 317000398	1. 54E-05	0. 000108
TRIM39	6p22. 1	-0. 316954366	1. 54E-05	0. 000108
ZG16B	16p13. 3	0. 316891595	1. 55E-05	0. 000108
MTUS2	13q12. 3	-0. 316826732	1. 55E-05	0. 000109
STARD7	2q11. 2	-0. 31678907	1. 56E-05	0. 000109
ALG3	3q27. 1	0. 316774423	1. 56E-05	0. 000109
ATP9A	20q13. 2	-0. 316774423	1. 56E-05	0. 000109
THNSL1	10p12. 1	-0. 316766054	1. 56E-05	0. 000109
TBPL1	6q23. 2	-0. 316759777	1. 56E-05	0. 000109
UPRT	Xq13. 3	-0. 316743038	1. 56E-05	0. 000109
PAX8	2q14. 1	0. 316741111	1. 56E-05	0. 000109
IGFL1	19q13. 32	0. 316734453	1. 56E-05	0. 000109

MPPED2	11p14. 1	-0. 316728391	1. 56E-05	0. 000109
GDPD1	17q22	-0. 316692987	1. 57E-05	0. 000109
STX19	3q11. 2	0. 316677294	1. 57E-05	0. 000109
MYOF	10q23. 33	0. 316636327	1. 57E-05	0. 00011
BAIAP2L2	22q13. 1	0. 316600757	1. 58E-05	0. 00011
USP43	17p13. 1	0. 316571464	1. 58E-05	0. 00011
CARD10	22q13. 1	0. 316540079	1. 58E-05	0. 00011
C8ORF48	8p22	-0. 316504509	1. 59E-05	0. 000111
FTO	16q12. 2	-0. 316500324	1. 59E-05	0. 000111
AZI2	3p24. 1	-0. 31646057	1. 59E-05	0. 000111
HIST1H2BC	6p22. 1	0. 316435293	1. 59E-05	0. 000111
CMA1	14q12	-0. 316338435	1. 6E-05	0. 000112
TMEM254-A	10q22. 3	-0. 31633712	1. 6E-05	0. 000112
SCPEP1	17q22	-0. 316303643	1. 61E-05	0. 000112
ALDH9A1	1q24. 1	-0. 316278535	1. 61E-05	0. 000112
SLC35F1	6q22. 2-q2	-0. 316247315	1. 61E-05	0. 000112
CORO2B	15q23	-0. 316247149	1. 61E-05	0. 000112
S100A3	1q21. 3	0. 31623041	1. 61E-05	0. 000112
ALOX15	17p13. 2	-0. 316212519	1. 62E-05	0. 000112
NEURL1	10q24. 33	-0. 316176009	1. 62E-05	0. 000112
DDX39A	19p13. 12	0. 316176009	1. 62E-05	0. 000112
LCA5L	21q22. 2	-0. 316156959	1. 62E-05	0. 000113
IPO13	1p34. 1	-0. 316096499	1. 63E-05	0. 000113
RRAGD	6q15	-0. 316075576	1. 63E-05	0. 000113
TNFRSF14	1p36. 32	0. 316063022	1. 63E-05	0. 000113
HAUS6	9p22. 1	-0. 316021175	1. 64E-05	0. 000113
UNC13A	19p13. 11	-0. 316014898	1. 64E-05	0. 000113
HIST3H2A	1q42. 13	0. 315958404	1. 64E-05	0. 000114
SYMPK	19q13. 32	0. 315924926	1. 65E-05	0. 000114
SOAT1	1q25. 2	-0. 31586634	1. 65E-05	0. 000114
ACRBP	12p13. 31	-0. 315864248	1. 65E-05	0. 000114
MSX2	5q35. 2	0. 315747076	1. 67E-05	0. 000115
ZNF641	12q13. 11	-0. 315738707	1. 67E-05	0. 000115
TONSL	8q24. 3	0. 315736614	1. 67E-05	0. 000115
ABCA9	17q24. 2	-0. 315673843	1. 67E-05	0. 000116
RELN	7q22. 1	-0. 31560898	1. 68E-05	0. 000116
ZBTB14	18p11. 31	-0. 315606888	1. 68E-05	0. 000116
UTRN	6q24. 2	-0. 315514824	1. 69E-05	0. 000117
SCO1	17p13. 1	-0. 315508712	1. 69E-05	0. 000117
MX1	21q22. 3	0. 315504363	1. 69E-05	0. 000117
ARHGEF35	7q35	0. 315498085	1. 69E-05	0. 000117
TMEM63B	6p21. 1	0. 315435315	1. 7E-05	0. 000117
RINT1	7q22. 3	-0. 315391375	1. 71E-05	0. 000117
SBN01	12q24. 31	-0. 315336974	1. 71E-05	0. 000118
ZBTB6	9q33. 2	-0. 315320235	1. 71E-05	0. 000118
KL	13q13. 1	-0. 315265834	1. 72E-05	0. 000118
UBE3D	6q14. 1	-0. 31521771	1. 72E-05	0. 000119
MYOM3	1p36. 11	0. 315175863	1. 73E-05	0. 000119
BRD2	6p21. 32	-0. 315094261	1. 74E-05	0. 000119
ZNF674	Xp11. 3	-0. 315083799	1. 74E-05	0. 000119
BOD1L1	4p15. 33	-0. 315060783	1. 74E-05	0. 00012
PRDM11	11p11. 2	-0. 314998012	1. 75E-05	0. 00012
PCDH9	13q21. 32	-0. 314964535	1. 75E-05	0. 00012
VAT1L	16q23. 1	-0. 314935406	1. 76E-05	0. 00012

CEP126	11q22.1	-0.31491641	1.76E-05	0.000121
SLC35A2	Xp11.23	0.314885025	1.76E-05	0.000121
KIFC1	6p21.32	0.314684159	1.79E-05	0.000122
HSF5	17q22	-0.31468371	1.79E-05	0.000122
TRUB1	10q25.3	-0.314602557	1.79E-05	0.000123
RND2	17q21.31	-0.314554597	1.8E-05	0.000123
KHDC1	6q13	0.314531193	1.8E-05	0.000123
PPP1R16B	20q11.23	-0.314460277	1.81E-05	0.000124
WDFY3	4q21.23	-0.314437261	1.81E-05	0.000124
TXNDC5	6p24.3	-0.314430984	1.81E-05	0.000124
MRPS12	19q13.2	0.314395414	1.82E-05	0.000124
RXRA	9q34.2	-0.314313812	1.83E-05	0.000125
PCDHA1	5q31.3	-0.3143088	1.83E-05	0.000125
HSPA4L	4q28.1	-0.314307535	1.83E-05	0.000125
FBXW11	5q35.1	-0.31430335	1.83E-05	0.000125
DNAL1	14q24.3	-0.314265687	1.83E-05	0.000125
CHL1	3p26.3	-0.31422384	1.84E-05	0.000125
PLA1A	3q13.33	-0.314079468	1.86E-05	0.000127
NR2C2	3p25.1	-0.314050175	1.86E-05	0.000127
LASP1	17q12	0.313972758	1.87E-05	0.000127
ATM	11q22.3	-0.313964388	1.87E-05	0.000127
ARL6IP1	16p12.3	0.313941372	1.87E-05	0.000127
AKNA	9q32	-0.313937187	1.87E-05	0.000127
SH3TC2	5q32	0.313909987	1.88E-05	0.000128
ANKRD17	4q13.3	-0.313836754	1.89E-05	0.000128
ZNF451	6p12.1	-0.3138242	1.89E-05	0.000128
ADGRL4	1p31.1	-0.313807461	1.89E-05	0.000128
GP6	19q13.42	0.31378582	1.89E-05	0.000129
PNKP	19q13.33	0.313744691	1.9E-05	0.000129
CDC25C	5q31.2	0.313690289	1.9E-05	0.000129
ZNRD2	11q13.1	0.313621242	1.91E-05	0.00013
RADX	Xq22.3	-0.313589856	1.92E-05	0.00013
SAMD15	14q24.3	-0.313568933	1.92E-05	0.00013
MIR600HG	9q33.3	-0.313470592	1.93E-05	0.000131
TMEM53	1p34.1	0.313430837	1.94E-05	0.000131
CASTOR2	7q11.23	-0.313393339	1.94E-05	0.000131
MED9	17p11.2	-0.313316968	1.95E-05	0.000132
AP5M1	14q22.3	-0.313196493	1.97E-05	0.000133
AKAP10	17p11.2	-0.313173477	1.97E-05	0.000133
RAB11FIP2	10q26.11	-0.313163016	1.97E-05	0.000133
PNPLA3	22q13.31	0.313137453	1.97E-05	0.000133
CNKSR2	Xp22.12	-0.313115546	1.98E-05	0.000134
OSBPL10	3p23	0.313012366	1.99E-05	0.000134
ANKRD9	14q32.31	0.312991442	1.99E-05	0.000135
NEU1	6p21.33	-0.312914025	2E-05	0.000135
WDR17	4q34.2	-0.31291105	2E-05	0.000135
BAK1	6p21.31	0.312899379	2E-05	0.000135
DNMBP-AS1	10q24.2	0.312865352	2.01E-05	0.000135
CAMTA2	17p13.2	-0.312736175	2.02E-05	0.000137
HSPB1P1	9q21.13	0.31273199	2.02E-05	0.000137
INSIG2	2q14.1-q1	0.312704789	2.03E-05	0.000137
NRBP2	8q24.3	0.312704789	2.03E-05	0.000137
AQP7	9p13.3	-0.31269642	2.03E-05	0.000137
ADCK5	8q24.3	0.312637834	2.04E-05	0.000137

UBIAD1	1p36. 22	-0. 312633649	2. 04E-05	0. 000137
ZFP69B	1p34. 2	-0. 312627536	2. 04E-05	0. 000137
ZC3H12C	11q22. 3	-0. 312612726	2. 04E-05	0. 000137
MTNR1B	11q14. 3	-0. 312584822	2. 04E-05	0. 000137
FBX021	12q24. 22	-0. 312564602	2. 05E-05	0. 000138
IREB2	15q25. 1	-0. 312526939	2. 05E-05	0. 000138
WDR74	11q12. 3	0. 312520662	2. 05E-05	0. 000138
GPR78	4p16. 1	0. 312437897	2. 06E-05	0. 000139
SMG8	17q22	-0. 312426506	2. 06E-05	0. 000139
ZBTB7B	1q21. 3	0. 312407675	2. 07E-05	0. 000139
MRTFB	16p13. 12	-0. 312338627	2. 08E-05	0. 000139
UCN2	3p21. 31	0. 312337188	2. 08E-05	0. 000139
TIMM22	17p13. 3	-0. 312321888	2. 08E-05	0. 000139
HARS2	5q31. 3	0. 312231917	2. 09E-05	0. 00014
HOXA11-AS	7p15. 2	0. 312221597	2. 09E-05	0. 00014
SFR1	10q25. 1	0. 312206972	2. 09E-05	0. 00014
S1PR1	1p21. 2	-0. 312196347	2. 1E-05	0. 00014
MXRA7	17q25. 1	-0. 31219007	2. 1E-05	0. 00014
TMEM253	14q11. 2	0. 312144038	2. 1E-05	0. 000141
CFAP206	6q15	-0. 312112652	2. 11E-05	0. 000141
ORC3	6q15	-0. 312112652	2. 11E-05	0. 000141
INO80E	16p11. 2	0. 312083359	2. 11E-05	0. 000141
SFTPA2	10q22. 3	0. 312077735	2. 11E-05	0. 000141
CHUK	10q24. 31	-0. 312070805	2. 11E-05	0. 000141
PGM3	6q14. 1	-0. 312068713	2. 11E-05	0. 000141
CNTN4	3p26. 3-p2	-0. 31193271	2. 13E-05	0. 000142
METTL7B	12q13. 2	0. 311928525	2. 13E-05	0. 000142
C15ORF62	15q15. 1	0. 311811353	2. 15E-05	0. 000143
TMEM114	16p13. 2	0. 311774603	2. 15E-05	0. 000144
ABCA13	7p12. 3	0. 311723012	2. 16E-05	0. 000144
NAT8L	4p16. 3	-0. 311686464	2. 17E-05	0. 000144
C12ORF56	12q14. 2	0. 311677593	2. 17E-05	0. 000144
ASCC3	6q16. 3	-0. 31160421	2. 18E-05	0. 000145
BCL2L2	14q11. 2	-0. 311591656	2. 18E-05	0. 000145
THEM4	1q21. 3	-0. 311541439	2. 19E-05	0. 000145
PDIK1L	1p36. 11	-0. 311539347	2. 19E-05	0. 000145
DDX27	20q13. 13	0. 311420082	2. 2E-05	0. 000146
ATP8B3	19p13. 3	0. 311407691	2. 2E-05	0. 000147
DAGLB	7p22. 1	0. 311394974	2. 21E-05	0. 000147
SUMO3	21q22. 3	0. 311388697	2. 21E-05	0. 000147
KIAA0087	7p15. 2	-0. 311383644	2. 21E-05	0. 000147
STK33	11p15. 4	-0. 311367774	2. 21E-05	0. 000147
JAKMIP2	5q32	-0. 311323834	2. 22E-05	0. 000147
SDF2	17q11. 2	0. 311317557	2. 22E-05	0. 000147
IFRD2	3p21. 31	0. 311309188	2. 22E-05	0. 000147
TNNC1	3p21. 1	0. 311296633	2. 22E-05	0. 000147
MSH6	2p16. 3	-0. 31124014	2. 23E-05	0. 000148
SUGCT	7p14. 1	0. 311235955	2. 23E-05	0. 000148
TMEM72	10q11. 21	-0. 311234994	2. 23E-05	0. 000148
ETFBKMT	12p11. 21	-0. 311227586	2. 23E-05	0. 000148
CCNI2	5q31. 1	0. 311219216	2. 23E-05	0. 000148
SLC1A2	11p13	-0. 311156446	2. 24E-05	0. 000148
SPEF2	5p13. 2	-0. 311116691	2. 25E-05	0. 000149
FBXL17	5q21. 3	-0. 31108949	2. 25E-05	0. 000149

TNFSF11	13q14. 11	0. 311068567	2. 25E-05	0. 000149
CDH1	16q22. 1	0. 311051828	2. 25E-05	0. 000149
TRMO	9q22. 33	-0. 311035089	2. 26E-05	0. 000149
SPAG4	20q11. 22	0. 311012073	2. 26E-05	0. 000149
LINC00689	7q36. 3	-0. 31100979	2. 26E-05	0. 000149
MBD1	18q21. 1	-0. 310970226	2. 27E-05	0. 00015
KIF5C	2q23. 1-q2	-0. 310953487	2. 27E-05	0. 00015
PCDHB1	5q31. 3	-0. 310947018	2. 27E-05	0. 00015
SYT7	11q12. 2	-0. 310940933	2. 27E-05	0. 00015
YLPM1	14q24. 3	-0. 310907455	2. 28E-05	0. 00015
CD209	19p13. 2	-0. 310869793	2. 28E-05	0. 00015
GUSBP4	6p11. 2	-0. 310869793	2. 28E-05	0. 00015
HBEGF	5q31. 3	0. 310848869	2. 28E-05	0. 00015
GPR152	11q13. 2	0. 310764662	2. 3E-05	0. 000151
CDHR5	11p15. 5	0. 310662649	2. 31E-05	0. 000152
EDRF1	10q26. 2	-0. 310660557	2. 31E-05	0. 000152
C10RF53	1q31. 3	0. 310601971	2. 32E-05	0. 000153
BEST1	11q12. 3	-0. 310601971	2. 32E-05	0. 000153
SMPX	Xp22. 12	0. 31057945	2. 32E-05	0. 000153
CLEC1A	12p13. 2	-0. 310530831	2. 33E-05	0. 000153
C12ORF42	12q23. 2-c	-0. 310517086	2. 33E-05	0. 000153
SETDB2	13q14. 2	-0. 310516184	2. 33E-05	0. 000153
PRDM8	4q21. 21	0. 310486891	2. 34E-05	0. 000153
TPBG	6q14. 1	0. 310457598	2. 34E-05	0. 000154
MTMR3	22q12. 2	-0. 310380181	2. 35E-05	0. 000154
PSMG4	6p25. 2	0. 310373904	2. 35E-05	0. 000154
DIRAS1	19p13. 3	-0. 310216977	2. 38E-05	0. 000156
HTR1D	1p36. 12	0. 310214885	2. 38E-05	0. 000156
BBIP1	10q25. 2	-0. 310193961	2. 38E-05	0. 000156
ATG4C	1p31. 3	-0. 310191869	2. 38E-05	0. 000156
FNDC11	20q13. 33	0. 31008009	2. 4E-05	0. 000157
CADPS	3p14. 2	-0. 310041219	2. 4E-05	0. 000157
NMRAL1	16p13. 3	0. 309976356	2. 41E-05	0. 000158
C8ORF86	8p11. 22	-0. 309970051	2. 42E-05	0. 000158
ASGR2	17p13. 1	-0. 309959618	2. 42E-05	0. 000158
EFR3B	2p23. 3	-0. 309932417	2. 42E-05	0. 000158
LRRC42	1p32. 3	0. 309888477	2. 43E-05	0. 000159
SNHG12	1p35. 3	0. 309767121	2. 45E-05	0. 00016
SLC25A44	1q22	-0. 309765028	2. 45E-05	0. 00016
GRIN3A	9q31. 1	-0. 309752474	2. 45E-05	0. 00016
AUH	9q22. 31	-0. 309727366	2. 45E-05	0. 00016
SAXO2	15q25. 2	-0. 309714812	2. 46E-05	0. 00016
C12ORF4	12p13. 32	-0. 309700165	2. 46E-05	0. 00016
RSP01	1p34. 3	-0. 309615525	2. 47E-05	0. 000161
PNMA8A	19q13. 32	-0. 309612286	2. 47E-05	0. 000161
SAPCD2	9q34. 3	0. 309610194	2. 47E-05	0. 000161
KIF5A	12q13. 3	-0. 309585248	2. 48E-05	0. 000161
CHRNA5	15q25. 1	0. 309576716	2. 48E-05	0. 000161
MRPS21	1q21. 2	0. 309470006	2. 49E-05	0. 000162
MAPK8	10q11. 22	-0. 309449083	2. 5E-05	0. 000162
TTYH3	7p22. 3	0. 309432344	2. 5E-05	0. 000163
LDLRAD2	1p36. 12	0. 309432344	2. 5E-05	0. 000163
ADARB1	21q22. 3	-0. 30941979	2. 5E-05	0. 000163
CTDSP2	12q14. 1	-0. 309380035	2. 51E-05	0. 000163

TGFBRAP1	2q12.1-q1	-0.30929634	2.52E-05	0.000164
FASTKD5	20p13	-0.309264955	2.53E-05	0.000164
ANKRD44	2q33.1	-0.309252401	2.53E-05	0.000164
ADGRL1	19p13.12	-0.309246124	2.53E-05	0.000164
HSD17B2	16q23.3	0.309204277	2.54E-05	0.000164
TRIM21	11p15.4	0.309204277	2.54E-05	0.000164
ATRNL1	10q25.3	-0.309198	2.54E-05	0.000164
MRPS5	2q11.1	0.309183353	2.54E-05	0.000165
RGP1	9p13.3	-0.309179168	2.54E-05	0.000165
BRMS1	11q13.2	0.309128952	2.55E-05	0.000165
MTERF2	12q23.3	-0.309110121	2.55E-05	0.000165
ECH1	19q13.2	0.309095474	2.55E-05	0.000165
USO1	4q21.1	-0.309087105	2.56E-05	0.000165
ZFP37	9q32	-0.309070366	2.56E-05	0.000165
AGO3	1p34.3	-0.309036888	2.56E-05	0.000166
MAP2K6	17q24.3	-0.308944825	2.58E-05	0.000167
ZNF470	19q13.43	-0.30893227	2.58E-05	0.000167
DUSP16	12p13.2	-0.308875777	2.59E-05	0.000167
RAB38	11q14.2	0.308829745	2.6E-05	0.000168
ETFRF1	12p12.1	-0.308743958	2.61E-05	0.000169
PCGF1	2p13.1	0.308731404	2.61E-05	0.000169
TRMT112	11q13.1	0.308706296	2.62E-05	0.000169
GUCY1B1	4q32.1	-0.308677003	2.62E-05	0.000169
CSTA	3q21.1	0.308672818	2.62E-05	0.000169
CSTF2T	10q21.1	-0.308658172	2.63E-05	0.000169
NR1H3	11p11.2	0.308641433	2.63E-05	0.000169
ZNF483	9q31.3	-0.308624694	2.63E-05	0.000169
SLC49A3	4p16.3	0.308595401	2.64E-05	0.00017
JADE2	5q31.1	-0.308582847	2.64E-05	0.00017
SLC43A2	17p13.3	-0.308564016	2.64E-05	0.00017
ZNF708	19p12	-0.308419643	2.67E-05	0.000171
LYPLA2P1	6p21.32	0.308394535	2.67E-05	0.000172
ZNF879	5q35.3	-0.308381981	2.67E-05	0.000172
CRK	17p13.3	-0.308373611	2.67E-05	0.000172
CYP46A1	14q32.2	-0.308365242	2.67E-05	0.000172
MECOM	3q26.2	0.308346411	2.68E-05	0.000172
ARHGAP28	18p11.31	-0.308321302	2.68E-05	0.000172
ZZZ3	1p31.1	-0.308233423	2.7E-05	0.000173
PSME2	14q12	0.308208315	2.7E-05	0.000173
CCPG1	15q21.3	-0.308174837	2.71E-05	0.000174
CYP26A1	10q23.33	0.308160848	2.71E-05	0.000174
FGF10	5p12	-0.308142553	2.71E-05	0.000174
SLC9B2	4q24	0.30810579	2.72E-05	0.000174
ZKSCAN7	3p21.31	-0.308072312	2.72E-05	0.000175
CKMT1A	15q15.3	0.308068127	2.73E-05	0.000175
KIF3A	5q31.1	-0.308034649	2.73E-05	0.000175
UPP1	7p12.3	0.307938401	2.75E-05	0.000176
CERS3	15q26.3	-0.307902346	2.75E-05	0.000176
CYYR1	21q21.3	-0.307867261	2.76E-05	0.000177
ZNF91	19p12	-0.307846337	2.76E-05	0.000177
TP73	1p36.32	0.307829598	2.77E-05	0.000177
ERG28	14q24.3	0.307668487	2.79E-05	0.000179
SLIT3	5q34-q35.	-0.307664302	2.8E-05	0.000179
IPMK	10q21.1	-0.307664302	2.8E-05	0.000179

NKAIN2	6q22. 31	-0. 307659955	2. 8E-05	0. 000179
TMTC3	12q21. 32	-0. 307639194	2. 8E-05	0. 000179
RRAS2	11p15. 2	0. 307540853	2. 82E-05	0. 00018
CAPN9	1q42. 2	0. 307517113	2. 82E-05	0. 00018
CECR2	22q11. 1-c	-0. 307496107	2. 83E-05	0. 00018
RTL5	Xq13. 1	-0. 307488544	2. 83E-05	0. 00018
NDE1	16p13. 11	0. 307459251	2. 83E-05	0. 00018
INPP4A	2q11. 2	-0. 307457159	2. 83E-05	0. 00018
PID1	2q36. 3	-0. 307452974	2. 83E-05	0. 00018
IRF7	11p15. 5	0. 307436235	2. 84E-05	0. 000181
RBM34	1q42. 3	0. 307425774	2. 84E-05	0. 000181
CWC15	11q21	0. 307396481	2. 84E-05	0. 000181
FAM193A	4p16. 3	-0. 307392296	2. 84E-05	0. 000181
ZNF329	19q13. 43	-0. 307354634	2. 85E-05	0. 000181
DCAF7	17q23. 3	-0. 307270939	2. 87E-05	0. 000182
ATP2A1	16p11. 2	0. 307245831	2. 87E-05	0. 000182
COMMD4	15q24. 2	0. 307193522	2. 88E-05	0. 000183
VBP1	Xq28	-0. 307126567	2. 89E-05	0. 000184
PRKAR2A	3p21. 31	-0. 307114013	2. 89E-05	0. 000184
ZNF57	19p13. 3	0. 307009395	2. 91E-05	0. 000185
TESC	12q24. 22	0. 306967548	2. 92E-05	0. 000185
SEC1P	19q13. 33	0. 306965455	2. 92E-05	0. 000185
SLC7A10	19q13. 11	-0. 306963867	2. 92E-05	0. 000185
DCAF15	19p13. 12	0. 306885946	2. 94E-05	0. 000186
CDK19	6q21	-0. 306869207	2. 94E-05	0. 000186
BAZ1B	7q11. 23	-0. 306781328	2. 96E-05	0. 000187
PLXNB2	22q13. 33	0. 306764589	2. 96E-05	0. 000187
ANKRD26	10p12. 1	-0. 306758312	2. 96E-05	0. 000187
UQCC2	6p21. 31	0. 306716465	2. 97E-05	0. 000188
ASTN1	1q25. 2	-0. 306710746	2. 97E-05	0. 000188
MED19	11q12. 1	0. 306710188	2. 97E-05	0. 000188
SMC3	10q25. 2	-0. 306645325	2. 98E-05	0. 000188
XKR9	8q13. 3	0. 306639048	2. 98E-05	0. 000188
COP1	1q25. 1-q $\dot{2}$	0. 306582554	2. 99E-05	0. 000189
CCNA1	13q13. 3	-0. 306580622	2. 99E-05	0. 000189
RYR2	1q43	-0. 306511414	3. 01E-05	0. 00019
YTHDC1	4q13. 2	-0. 306436089	3. 02E-05	0. 000191
CANT1	17q25. 3	0. 306429812	3. 02E-05	0. 000191
EGOT	3p26. 1	0. 306413452	3. 02E-05	0. 000191
POLA1	Xp22. 11-f	-0. 306391264	3. 03E-05	0. 000191
LINC00518	6p24. 3	0. 306385501	3. 03E-05	0. 000191
FANCC	9q22. 32	-0. 30630427	3. 05E-05	0. 000192
NRXN3	14q24. 3-c	-0. 306266608	3. 05E-05	0. 000192
SLC25A39	17q21. 31	0. 306092942	3. 09E-05	0. 000194
SLF1	5q15	-0. 306049003	3. 09E-05	0. 000195
TSTD1	1q23. 3	0. 305990417	3. 11E-05	0. 000195
BAIAP2	17q25. 3	0. 305977863	3. 11E-05	0. 000196
FAM192A	16q13	0. 305881614	3. 13E-05	0. 000197
KCNA6	12p13. 32	-0. 305730965	3. 16E-05	0. 000198
WRB	21q22. 2	-0. 305687025	3. 17E-05	0. 000199
DENND2A	7q34	-0. 305676564	3. 17E-05	0. 000199
HDGF	1q23. 1	0. 305630532	3. 18E-05	0. 0002
SKIDA1	10p12. 31	-0. 30557613	3. 19E-05	0. 0002
SCAF11	12q12	-0. 305546837	3. 19E-05	0. 0002

BST2	19p13. 11	0. 305471513	3. 21E-05	0. 000201
COTL1	16q24. 1	0. 305444312	3. 21E-05	0. 000202
DHCR7	11q13. 4	0. 305431758	3. 22E-05	0. 000202
TMEM50A	1p36. 11	0. 305423388	3. 22E-05	0. 000202
PIGC	1q24. 3	0. 305408742	3. 22E-05	0. 000202
ST8SIA4	5q21. 1	-0. 305360618	3. 23E-05	0. 000202
SRGAP3	3p25. 3	-0. 305354341	3. 23E-05	0. 000202
CA12	15q22. 2	0. 305325048	3. 24E-05	0. 000203
C9ORF72	9p21. 2	-0. 305287385	3. 25E-05	0. 000203
PCDHA6	5q31. 3	-0. 305271748	3. 25E-05	0. 000203
ANKRD13C	1p31. 1	-0. 305270646	3. 25E-05	0. 000203
ARMCX2	Xq22. 1	-0. 30522043	3. 26E-05	0. 000204
LOC441204	7p15. 2	-0. 305214153	3. 26E-05	0. 000204
TMEM101	17q21. 31	0. 305180675	3. 27E-05	0. 000204
MKKS	20p12. 2	-0. 305130458	3. 28E-05	0. 000205
ZNF800	7q31. 33	-0. 305050949	3. 29E-05	0. 000206
SLC9A4	2q12. 1	0. 305040044	3. 3E-05	0. 000206
LCN10	9q34. 3	-0. 305032118	3. 3E-05	0. 000206
CPOX	3q11. 2	0. 305015379	3. 3E-05	0. 000206
NRIP2	12p13. 33	-0. 304981901	3. 31E-05	0. 000206
C10RF159	1p36. 33	0. 304975624	3. 31E-05	0. 000206
CD93	20p11. 21	-0. 304937962	3. 32E-05	0. 000207
MPST	22q12. 3	0. 304912853	3. 32E-05	0. 000207
AP3M2	8p11. 21	0. 304894022	3. 33E-05	0. 000207
CIA02B	16q22. 1	0. 304887745	3. 33E-05	0. 000207
TUSC3	8p22	-0. 304804051	3. 35E-05	0. 000208
DHX33	17p13. 2	-0. 304781035	3. 35E-05	0. 000209
B3GALT5	21q22. 2	0. 304707802	3. 37E-05	0. 000209
HYOU1	11q23. 3	-0. 304649216	3. 38E-05	0. 00021
MRPL16	11q12. 1	0. 304632478	3. 38E-05	0. 00021
SNORD116	15q11. 2	-0. 304629824	3. 38E-05	0. 00021
WTAP	6q25. 3	-0. 304559245	3. 4E-05	0. 000211
VPS13C	15q22. 2	-0. 304498567	3. 41E-05	0. 000212
LTV1	6q24. 2	-0. 304494382	3. 41E-05	0. 000212
RIC3	11p15. 4	-0. 304486013	3. 41E-05	0. 000212
PFDN1	5q31. 3	0. 304458812	3. 42E-05	0. 000212
CCDC141	2q31. 2	-0. 304424447	3. 43E-05	0. 000213
SCAMP5	15q24. 2	-0. 304393949	3. 43E-05	0. 000213
SLC25A48	5q31. 1	0. 304392829	3. 43E-05	0. 000213
TMEM201	1p36. 22	-0. 304391857	3. 43E-05	0. 000213
PITPNM2	12q24. 31	-0. 304375118	3. 44E-05	0. 000213
ZMAT1	Xq22. 1	-0. 304337455	3. 44E-05	0. 000213
TRIM37	17q22	-0. 304312347	3. 45E-05	0. 000214
PDSS2	6q21	-0. 304301885	3. 45E-05	0. 000214
ELOVL5	6p12. 1	-0. 304237022	3. 47E-05	0. 000215
AQP4-AS1	18q11. 2	-0. 304165844	3. 48E-05	0. 000215
MMD2	7p22. 1	-0. 304163955	3. 48E-05	0. 000215
C1QTNF9	13q12. 12	-0. 304135917	3. 49E-05	0. 000216
PFN2	3q25. 1	-0. 304029879	3. 51E-05	0. 000217
ATP6V1C1	8q22. 3	-0. 303931538	3. 53E-05	0. 000218
SH2D3C	9q34. 11	-0. 303839474	3. 55E-05	0. 000219
ZNF652	17q21. 32	-0. 303797627	3. 56E-05	0. 00022
LINC00473	6q27	-0. 303773605	3. 57E-05	0. 00022
NAIP	5q13. 2	-0. 303759965	3. 57E-05	0. 00022

CCDC51	3p21. 31	0. 303757872	3. 57E-05	0. 00022
DQX1	2p13. 1	0. 303712383	3. 58E-05	0. 000221
SMAD1	4q31. 21	-0. 303693009	3. 59E-05	0. 000221
FOXK1	7p22. 1	-0. 303676271	3. 59E-05	0. 000221
SMYD5	2p13. 2	0. 303634423	3. 6E-05	0. 000222
CDC5L	6p21. 1	-0. 303615592	3. 6E-05	0. 000222
RHOJ	14q23. 2	-0. 3036135	3. 6E-05	0. 000222
ITPR2	12p11. 23	-0. 303580022	3. 61E-05	0. 000222
SLC25A10	17q25. 3	0. 303550729	3. 62E-05	0. 000223
TMEM79	1q22	0. 303533103	3. 62E-05	0. 000223
MAPKBP1	15q15. 1	-0. 303515159	3. 63E-05	0. 000223
CCDC58	3q21. 1	0. 303502605	3. 63E-05	0. 000223
NSMCE3	15q13. 1	-0. 303475404	3. 63E-05	0. 000223
ANXA1	9q21. 13	0. 303444019	3. 64E-05	0. 000224
NFATC2IP	16p11. 2	0. 30343565	3. 64E-05	0. 000224
KIFC2	8q24. 3	0. 30340008	3. 65E-05	0. 000224
C10RF35	1q42. 13	0. 303372879	3. 66E-05	0. 000225
SHROOM1	5q31. 1	0. 303331032	3. 67E-05	0. 000225
CTDSPL	3p22. 2	0. 303282908	3. 68E-05	0. 000226
GIMAP5	7q36. 1	-0. 303268261	3. 68E-05	0. 000226
DIXDC1	11q23. 1	-0. 303264076	3. 68E-05	0. 000226
ERMAP	1p34. 2	-0. 303230599	3. 69E-05	0. 000226
HCN1	5p12	-0. 303225741	3. 69E-05	0. 000226
FAM98C	19q13. 2	0. 303151089	3. 71E-05	0. 000227
UNQ6494	9q22. 2	-0. 30313436	3. 71E-05	0. 000227
RER1	1p36. 32	0. 303115519	3. 72E-05	0. 000228
PLA2R1	2q24. 2	0. 303046471	3. 73E-05	0. 000228
PUS7L	12q12	-0. 302987885	3. 75E-05	0. 000229
PCDHA3	5q31. 3	-0. 302965028	3. 75E-05	0. 000229
IGF1	12q23. 2	-0. 302939761	3. 76E-05	0. 00023
DVL2	17p13. 1	-0. 302931392	3. 76E-05	0. 00023
MERTK	2q13	-0. 302895822	3. 77E-05	0. 00023
PSMD13	11p15. 5	0. 30288536	3. 77E-05	0. 00023
NEK4	3p21. 1	-0. 302858159	3. 78E-05	0. 000231
ATRX	Xq21. 1	-0. 302820497	3. 78E-05	0. 000231
BAG2	6p12. 1	-0. 302801666	3. 79E-05	0. 000231
FGF7	15q21. 2	-0. 302761911	3. 8E-05	0. 000232
PMM2	16p13. 2	0. 302671939	3. 82E-05	0. 000233
SARAF	8p12	-0. 302669847	3. 82E-05	0. 000233
TUBD1	17q23. 1	-0. 302665662	3. 82E-05	0. 000233
FRMD8	11q13. 1	0. 302596615	3. 84E-05	0. 000234
MPP3	17q21. 31	0. 302586153	3. 84E-05	0. 000234
SSBP2	5q14. 1	-0. 302565229	3. 85E-05	0. 000234
LRRC57	15q15. 2	0. 30248572	3. 86E-05	0. 000235
CNTNAP4	16q23. 1	-0. 302371163	3. 89E-05	0. 000237
PTPN18	2q21. 1	0. 302362271	3. 89E-05	0. 000237
ELAVL4	1p33-p32.	-0. 302327687	3. 9E-05	0. 000237
PRDX1	1p34. 1	0. 302291131	3. 91E-05	0. 000238
SEM1	7q21. 3	0. 302178143	3. 94E-05	0. 000239
ENAM	4q13. 3	-0. 302070686	3. 96E-05	0. 000241
GAS5	1q25. 1	0. 302050509	3. 97E-05	0. 000241
C17ORF107	17p13. 2	-0. 302012847	3. 98E-05	0. 000242
SLC25A53	Xq22. 2	-0. 302000293	3. 98E-05	0. 000242
SERPINI1	3q26. 1	-0. 301994016	3. 98E-05	0. 000242

RASA4	7q22.1	-0.301954261	3.99E-05	0.000242
ALDH1L2	12q23.3	-0.301924968	4E-05	0.000243
UBL3	13q12.3	-0.301858013	4.02E-05	0.000244
UGT1A1	2q37.1	0.301819073	4.03E-05	0.000244
DPT	1q24.2	-0.301816166	4.03E-05	0.000244
SMG9	19q13.31	0.301788965	4.03E-05	0.000244
ENOX1	13q14.11	-0.30178478	4.04E-05	0.000244
GEMIN4	17p13.3	-0.301759672	4.04E-05	0.000245
KCNK15	20q13.12	0.301753395	4.04E-05	0.000245
SKA3	13q12.11	0.30167807	4.06E-05	0.000246
FGF7P6	9q13	-0.301674406	4.06E-05	0.000246
PDE2A	11q13.4	-0.301667608	4.06E-05	0.000246
C9ORF16	9q34.11	0.301655054	4.07E-05	0.000246
ADPRHL2	1p34.3	0.301632038	4.07E-05	0.000246
BMP2K	4q21.21	-0.301629946	4.07E-05	0.000246
ZNHIT1	7q22.1	0.301629946	4.07E-05	0.000246
IER5L	9q34.11	0.301604838	4.08E-05	0.000246
SCARB2	4q21.1	-0.301504404	4.11E-05	0.000248
PKN3	9q34.11	0.301475111	4.11E-05	0.000248
FADS1	11q12.2	-0.30145628	4.12E-05	0.000249
GCNT3	15q22.2	0.301441634	4.12E-05	0.000249
EIF1AD	11q13.1	0.301426987	4.13E-05	0.000249
ANXA5	4q27	0.301383048	4.14E-05	0.000249
SERPINB11	18q21.33	0.301354813	4.14E-05	0.00025
SYT14	1q32.2	-0.301312218	4.15E-05	0.00025
MAP9	4q32.1	-0.301297261	4.16E-05	0.000251
FMN2	1q43	-0.301249137	4.17E-05	0.000251
DPP9	19p13.3	0.301226121	4.18E-05	0.000251
RPS6KA6	Xq21.1	-0.301121785	4.2E-05	0.000253
SLC16A12	10q23.31	-0.301031532	4.23E-05	0.000254
ZKSCAN8	6p22.1	-0.301002239	4.23E-05	0.000255
KIAA0100	17q11.2	-0.300987592	4.24E-05	0.000255
ARHGEF2	1q22	0.300983408	4.24E-05	0.000255
PRCP	11q14.1	-0.300979223	4.24E-05	0.000255
PGLS	19p13.11	0.300968761	4.24E-05	0.000255
AMER1	Xq11.2	-0.300964576	4.24E-05	0.000255
HES4	1p36.33	0.300960392	4.25E-05	0.000255
ZNF398	7q36.1	-0.300922729	4.26E-05	0.000255
CACNA1B	9q34.3	-0.300909138	4.26E-05	0.000256
CARNMT1	9q21.13	-0.30090599	4.26E-05	0.000256
FAM177A1	14q13.2	0.300899713	4.26E-05	0.000256
ZNF391	6p22.1	-0.300880882	4.27E-05	0.000256
AXDND1	1q25.2	0.300879611	4.27E-05	0.000256
XPC	3p25.1	-0.300818111	4.28E-05	0.000257
EVL	14q32.2	-0.300780449	4.29E-05	0.000257
CEMIP	15q25.1	0.300751156	4.3E-05	0.000258
RAPH1	2q33.2	0.300734417	4.31E-05	0.000258
DEPDC5	22q12.2-c	-0.300730232	4.31E-05	0.000258
IER3	6p21.33	0.300726048	4.31E-05	0.000258
RGPD5	2q13	-0.300707217	4.31E-05	0.000258
LINC01018	5p15.31	-0.30067646	4.32E-05	0.000258
RRAD	16q22.1	0.300646538	4.33E-05	0.000259
HEG1	3q21.2	-0.300590045	4.34E-05	0.00026
SLC35C2	20q13.12	0.300504258	4.37E-05	0.000261

STAT6	12q13.3	0.300481242	4.37E-05	0.000261
LIMD1	3p21.31	-0.300449857	4.38E-05	0.000262
CASC3	17q21.1	-0.300441487	4.38E-05	0.000262
ZSCAN4	19q13.43	0.300402984	4.39E-05	0.000262
RAD54L2	3p21.2	-0.300315946	4.42E-05	0.000263
KIF19	17q25.1	-0.300232252	4.44E-05	0.000265
UNC79	14q32.12	-0.300169481	4.46E-05	0.000266
EHD4	15q15.1	0.300131818	4.47E-05	0.000266
PCLAF	15q22.31	0.300080713	4.48E-05	0.000267
CEP78	9q21.2	-0.30007951	4.48E-05	0.000267
RXFP4	1q22	0.300046035	4.49E-05	0.000267
NEFL	8p21.2	-0.299993723	4.51E-05	0.000268
SH3BP2	4p16.3	0.299962338	4.51E-05	0.000269
UNC13B	9p13.3	-0.299876551	4.54E-05	0.00027
FAM189B	1q22	0.299782395	4.56E-05	0.000271
FAM168A	11q13.4	-0.299713347	4.58E-05	0.000273
MIOS	7p21.3	-0.29970707	4.59E-05	0.000273
CHST7	Xp11.3	-0.299679869	4.59E-05	0.000273
SUCO	1q24.3	-0.299677777	4.59E-05	0.000273
C6ORF15	6p21.33	0.299669911	4.6E-05	0.000273
OPTN	10p13	0.29963593	4.61E-05	0.000273
MRPL10	17q21.32	0.299568975	4.62E-05	0.000274
SP100	2q37.1	0.299535497	4.63E-05	0.000275
YARS2	12p11.21	0.299483188	4.65E-05	0.000276
ARID1B	6q25.3	-0.299470634	4.65E-05	0.000276
TIMM29	19p13.2	0.299466449	4.65E-05	0.000276
YTHDF3	8q12.3	-0.299407863	4.67E-05	0.000277
ESPNP	1p36.13	0.299354934	4.69E-05	0.000278
KIAA0319	6p22.3	-0.299349277	4.69E-05	0.000278
KRBA1	7q36.1	-0.299299061	4.7E-05	0.000278
LYVE1	11p15.4	-0.299259306	4.71E-05	0.000279
FZR1	19p13.3	0.299253029	4.71E-05	0.000279
ABTB1	3q21.3	0.299244659	4.72E-05	0.000279
ZNF491	19p13.2	-0.299242567	4.72E-05	0.000279
LATS1	6q25.1	-0.299215366	4.73E-05	0.000279
ZNF397	18q12.2	-0.299194443	4.73E-05	0.00028
RXFP1	4q32.1	-0.299167066	4.74E-05	0.00028
VWA2	10q25.3	0.299146318	4.75E-05	0.00028
ZNF30	19q13.11	-0.299106564	4.76E-05	0.000281
BSN	3p21.31	-0.299068901	4.77E-05	0.000281
AXIN1	16p13.3	0.299066809	4.77E-05	0.000281
TXNL1	18q21.31	-0.299033331	4.78E-05	0.000282
CTBS	1p22.3	-0.299008223	4.79E-05	0.000282
VPS72	1q21.3	0.298999854	4.79E-05	0.000282
TBC1D3C	17q12	0.298962627	4.8E-05	0.000283
NLK	17q11.2	-0.298842927	4.83E-05	0.000285
TPST1	7q11.21	-0.298840834	4.84E-05	0.000285
CELSR2	1p13.3	-0.298788526	4.85E-05	0.000286
EPN3	17q21.33	0.298787636	4.85E-05	0.000286
GCNT4	5q13.3	-0.298767602	4.86E-05	0.000286
TNS2	12q13.13	-0.298763417	4.86E-05	0.000286
GRM7	3p26.1	-0.298759008	4.86E-05	0.000286
NUDT11	Xp11.22	-0.298744586	4.86E-05	0.000286
IARS	9q22.31	-0.298740401	4.86E-05	0.000286

GLRX2	1q31.2	0.298629506	4.9E-05	0.000288
PBDC1	Xq13.3	0.29861486	4.9E-05	0.000288
FBXO31	16q24.2	-0.298516519	4.93E-05	0.00029
SERPINF2	17p13.3	-0.298447471	4.95E-05	0.000291
TAPT1	4p15.32	-0.298445379	4.95E-05	0.000291
GADD45GIF	19p13.13	0.298386793	4.97E-05	0.000292
RB1CC1	8q11.23	-0.298382608	4.97E-05	0.000292
STOM	9q33.2	-0.298380516	4.97E-05	0.000292
EPB41L2	6q23.1-q2	-0.298370054	4.98E-05	0.000292
ZNF540	19q13.12	-0.298309376	4.99E-05	0.000293
CREBRF	5q35.1	-0.298271713	5.01E-05	0.000293
PGM5	9q21.11	-0.298269621	5.01E-05	0.000293
MANCR	10p15.1	0.298263712	5.01E-05	0.000293
TTC31	2p13.1	0.298263344	5.01E-05	0.000293
RC3H1	1q25.1	-0.298248698	5.01E-05	0.000293
MPP2	17q21.31	-0.298160819	5.04E-05	0.000295
TRPT1	11q13.1	0.298031092	5.08E-05	0.000297
PTPRB	12q15	-0.298014354	5.09E-05	0.000297
ST8SIA1	12p12.1	-0.297869981	5.13E-05	0.0003
NEU3	11q13.4	-0.29785115	5.14E-05	0.0003
MFSD5	12q13.13	0.297849057	5.14E-05	0.0003
ENPP5	6p21.1	-0.297794656	5.15E-05	0.000301
PRKD1	14q12	-0.297792564	5.15E-05	0.000301
CEP83	12q22	-0.297746532	5.17E-05	0.000302
OGDHL	10q11.23	-0.297740255	5.17E-05	0.000302
AMACR	5p13.2	-0.297725608	5.18E-05	0.000302
APOLD1	12p13.1	-0.297673299	5.19E-05	0.000303
ATP6V1E2	2p21 2p16	-0.297669115	5.19E-05	0.000303
MAML1	5q35.3	-0.297472433	5.26E-05	0.000306
GALNT14	2p23.1	0.297436863	5.27E-05	0.000307
FAN1	15q13.3	-0.29738037	5.29E-05	0.000308
SHFL	19p13.2	0.297376185	5.29E-05	0.000308
WHRN	9q32	-0.297372	5.29E-05	0.000308
C1GALT1	7p22.1-p2	0.297102086	5.38E-05	0.000313
MCTP1	5q15	-0.29705187	5.39E-05	0.000314
PVT1	8q24.21	0.297045592	5.39E-05	0.000314
RSPO3	6q22.33	-0.2970435	5.39E-05	0.000314
TDRD9	14q32.33	-0.296922299	5.43E-05	0.000316
CMTM1	16q21	0.296761032	5.49E-05	0.000319
MAP1A	15q15.3	-0.296719185	5.5E-05	0.00032
PCDHGA2	5q31.3	-0.296691984	5.51E-05	0.00032
SAMHD1	20q11.23	-0.296639675	5.53E-05	0.000321
ZNF175	19q13.41	-0.296589459	5.54E-05	0.000322
EPSTI1	13q14.11	0.296560166	5.55E-05	0.000322
RBBP4	1p35.1	-0.296560166	5.55E-05	0.000322
C15ORF48	15q21.1	0.296507857	5.57E-05	0.000323
MGST3	1q24.1	0.296409516	5.61E-05	0.000325
STXBP4	17q22	-0.296392777	5.61E-05	0.000325
STK31	7p15.3	0.296388592	5.61E-05	0.000325
CDC6	17q21.2	0.296367669	5.62E-05	0.000326
HIST1H2BJ	6p22.1	0.296355115	5.62E-05	0.000326
AN05	11p14.3	-0.29635093	5.63E-05	0.000326
DCLK1	13q13.3	-0.296346745	5.63E-05	0.000326
DDI2	1p36.21	-0.296298621	5.64E-05	0.000327

NXF3	Xq22. 1	0. 296269637	5. 65E-05	0. 000327
ALDH6A1	14q24. 3	-0. 296260959	5. 66E-05	0. 000327
DCLK2	4q31. 23-c	-0. 29624422	5. 66E-05	0. 000327
C6ORF58	6q22. 33	-0. 296209477	5. 67E-05	0. 000328
DNAH7	2q32. 3	-0. 296206557	5. 68E-05	0. 000328
TATDN3	1q32. 3	-0. 296198188	5. 68E-05	0. 000328
PDZRN3	3p13	-0. 296175172	5. 69E-05	0. 000328
NPHS1	19q13. 12	-0. 296156947	5. 69E-05	0. 000329
SMU1	9p21. 1	-0. 296058	5. 73E-05	0. 00033
ITGA7	12q13. 2	-0. 295963844	5. 76E-05	0. 000332
AKAP8	19p13. 12	0. 295959659	5. 76E-05	0. 000332
STRA6	15q24. 1	0. 295878057	5. 79E-05	0. 000334
MICOS13	19p13. 3	0. 295867596	5. 79E-05	0. 000334
PLAC1	Xq26. 3	0. 295837967	5. 8E-05	0. 000334
LAMA1	18p11. 31	-0. 295802733	5. 82E-05	0. 000335
NAP1L1	12q21. 2	-0. 295752516	5. 83E-05	0. 000336
C6ORF163	6q15	-0. 29574895	5. 83E-05	0. 000336
BRAP	12q24. 12	-0. 295696022	5. 85E-05	0. 000337
HNRNPH2	Xq22. 1	-0. 295677191	5. 86E-05	0. 000337
AGGF1	5q13. 3	-0. 295637436	5. 87E-05	0. 000338
PCDHA8	5q31. 3	-0. 295634654	5. 87E-05	0. 000338
GPX2	14q23. 3	0. 295618605	5. 88E-05	0. 000338
AGAP2-AS1	12q14. 1	0. 295610236	5. 88E-05	0. 000338
PPIP5K2	5q21. 1	-0. 295603959	5. 89E-05	0. 000338
ROB04	11q24. 2	-0. 295574666	5. 9E-05	0. 000339
NARS2	11q14. 1	-0. 295572573	5. 9E-05	0. 000339
HIPK3	11p13	-0. 295564204	5. 9E-05	0. 000339
ZNF565	19q13. 12	0. 295520264	5. 92E-05	0. 00034
CENPK	5q12. 3	0. 295509803	5. 92E-05	0. 00034
A1BG-AS1	19q13. 43	-0. 295497249	5. 92E-05	0. 00034
VIPR2	7q36. 3	-0. 295490971	5. 93E-05	0. 00034
PIH1D1	19q13. 33	0. 295476325	5. 93E-05	0. 00034
KLHL5	4p14	-0. 295424016	5. 95E-05	0. 000341
QSOX1	1q25. 2	0. 295424016	5. 95E-05	0. 000341
MIR4697HC	11q25	0. 295411462	5. 95E-05	0. 000341
KIAA2026	9p24. 1	-0. 295352876	5. 98E-05	0. 000342
ZNF551	19q13. 43	-0. 295342414	5. 98E-05	0. 000342
POLR2B	4q12	-0. 295319398	5. 99E-05	0. 000343
USP39	2p11. 2	0. 295191764	6. 03E-05	0. 000345
KLRD1	12p13. 2	-0. 295191764	6. 03E-05	0. 000345
TMEM216	11q12. 2	0. 295177118	6. 04E-05	0. 000345
TGFB1I1	16p11. 2	0. 295160379	6. 05E-05	0. 000346
FSTL3	19p13. 3	0. 295160379	6. 05E-05	0. 000346
PAR6G-AS1	18q23	-0. 295118532	6. 06E-05	0. 000346
ASXL1	20q11. 21	-0. 295051577	6. 08E-05	0. 000348
ANGPTL5	11q22. 1	-0. 295044869	6. 09E-05	0. 000348
CRY2	11p11. 2	-0. 295003452	6. 1E-05	0. 000348
HSPB11	1p32. 3	0. 294982529	6. 11E-05	0. 000349
FZD3	8p21. 1	-0. 29489465	6. 14E-05	0. 00035
OPLAH	8q24. 3	0. 294873726	6. 15E-05	0. 000351
FANCM	14q21. 2	-0. 294869542	6. 15E-05	0. 000351
FAM111A	11q12. 1	0. 29478794	6. 18E-05	0. 000352
SCAMP2	15q24. 1	0. 294725169	6. 21E-05	0. 000354
MOCOS	18q12. 2	0. 294693784	6. 22E-05	0. 000354

FDPS	1q22	0.294677045	6.22E-05	0.000354
SPAG6	10p12.2	-0.294641879	6.24E-05	0.000355
LRRC4	7q32.1	-0.294607997	6.25E-05	0.000356
RPP14	3p14.3	-0.29459335	6.26E-05	0.000356
YIF1B	19q13.2	0.294509656	6.29E-05	0.000358
KCNJ3	2q24.1	-0.294493329	6.29E-05	0.000358
SLC9A2	2q12.1	0.294489933	6.29E-05	0.000358
HECTD4	12q24.13	-0.294384115	6.33E-05	0.00036
ZBTB16	11q23.2	-0.294352729	6.35E-05	0.000361
MIR205HG	1q32.2	0.29434407	6.35E-05	0.000361
USP54	10q22.2	0.294340175	6.35E-05	0.000361
FGF20	8p22	0.294318896	6.36E-05	0.000361
ADAM9	8p11.22	0.294315067	6.36E-05	0.000361
PRB1	12p13.2	0.294302862	6.37E-05	0.000361
SNN	16p13.13	-0.294298328	6.37E-05	0.000361
PEX5	12p13.31	-0.294235558	6.39E-05	0.000362
NOMO1	16p13.11	-0.29409537	6.45E-05	0.000365
SCN4A	17q23.3	-0.294055859	6.46E-05	0.000366
ZNF700	19p13.2	0.294043061	6.47E-05	0.000366
HS3ST3B1	17p12	-0.294003306	6.48E-05	0.000367
FAM161A	2p15	-0.293982382	6.49E-05	0.000367
GRM1	6q24.3	-0.293980632	6.49E-05	0.000367
NIN	14q22.1	-0.293978198	6.49E-05	0.000367
DZIP1	13q32.1	-0.293969828	6.49E-05	0.000367
PHETA1	12q24.12	0.293911242	6.52E-05	0.000369
FNBP1	9q34.11	-0.293804532	6.56E-05	0.000371
BANF1	11q13.1	0.293779424	6.57E-05	0.000371
NOTCH2NL ^A	1q21.1	0.293752223	6.58E-05	0.000372
AKR1C3	10p15.1	0.293750131	6.58E-05	0.000372
PAK1	11q13.5-c	0.293710376	6.6E-05	0.000373
RYR3	15q13.3-c	-0.293678991	6.61E-05	0.000373
DMKN	19q13.12	0.293664344	6.61E-05	0.000373
HPCAL4	1p34.2	-0.293656955	6.62E-05	0.000373
GPR158	10p12.1	-0.293605758	6.64E-05	0.000375
B3GALNT2	1q42.3	-0.293601573	6.64E-05	0.000375
ADD2	2p13.3	-0.293568096	6.65E-05	0.000375
ACBD6	1q25.2-q ₂	0.29350114	6.68E-05	0.000377
SLC38A4	12q13.11	-0.29343	6.71E-05	0.000378
STRIP2	7q32.1	0.293381876	6.73E-05	0.000379
BTG1	12q21.33	-0.293350491	6.74E-05	0.00038
TGIF1	18p11.31	0.293312828	6.75E-05	0.00038
HOXC4	12q13.13	0.293293997	6.76E-05	0.000381
HMGA2	12q14.3	0.29325215	6.78E-05	0.000382
C8ORF37	8q22.1	-0.293199841	6.8E-05	0.000383
GFRA2	8p21.3	-0.293197749	6.8E-05	0.000383
DNASE1L3	3p14.3	-0.293196144	6.8E-05	0.000383
FARSB	2q36.1	0.293178917	6.81E-05	0.000383
CREB3L1	11p11.2	0.2930743	6.85E-05	0.000385
ERO1B	1q42.3	-0.293068023	6.85E-05	0.000385
TMEM220	17p13.1	-0.293005252	6.88E-05	0.000386
LMO3	12p12.3	-0.292898542	6.92E-05	0.000389
POF1B	Xq21.1	0.292883895	6.93E-05	0.000389
LRRN2	1q32.1	-0.292839956	6.95E-05	0.00039
AMER2	13q12.13	-0.2928281	6.95E-05	0.00039

LOC100130142.13	-0.292812755	6.96E-05	0.00039
CALM2 2p21	0.292787647	6.97E-05	0.000391
CSMD3 8q23.3	-0.292784845	6.97E-05	0.000391
SUOX 12q13.2	-0.292724876	7E-05	0.000392
TPX2 20q11.21	0.292718599	7E-05	0.000392
AP2S1 19q13.32	0.292653736	7.03E-05	0.000394
DTX2P1-UF7q11.23	0.292641182	7.03E-05	0.000394
IQUB 7q31.32	-0.292588873	7.05E-05	0.000395
LRIG1 3p14.1	-0.292563765	7.06E-05	0.000395
ZNF354C 5q35.3	-0.29255958	7.07E-05	0.000395
FGF12 3q28-q29	-0.29255121	7.07E-05	0.000395
SLC25A32 8q22.3	-0.292521917	7.08E-05	0.000396
LMBRD2 5p13.2	-0.292496809	7.09E-05	0.000397
KLHL28 14q21.2	-0.292490532	7.09E-05	0.000397
GABARAP 17p13.1	-0.292440316	7.12E-05	0.000398
SF3B2 11q13.1	0.292404745	7.13E-05	0.000398
MAD1L1 7p22.3	0.292362898	7.15E-05	0.000399
FGFRL1 4p16.3	0.292348252	7.16E-05	0.000399
MED13 17q23.2	-0.292333605	7.16E-05	0.0004
RIMBP2 12q24.33	-0.292283542	7.18E-05	0.000401
LINC018812q37.3	-0.292275019	7.19E-05	0.000401
ACOT11 1p32.3	0.292214341	7.21E-05	0.000402
CACNA1F Xp11.23	0.292116	7.26E-05	0.000404
TRIM24 7q33-q34	-0.292103446	7.26E-05	0.000405
ZNF718 4p16.3	-0.292090892	7.27E-05	0.000405
LRP1B 2q22.1-q23	-0.292067379	7.28E-05	0.000405
TBL3 16p13.3	0.292003013	7.3E-05	0.000407
ADNP 20q13.13	-0.291931873	7.34E-05	0.000408
MRAP 21q22.11	-0.291927913	7.34E-05	0.000408
SLC16A4 1p13.3	0.291919319	7.34E-05	0.000408
WDR55 5q31.3	0.29190258	7.35E-05	0.000409
BCL6B 17p13.1	-0.291892118	7.35E-05	0.000409
HEMGN 9q22.33	-0.291871339	7.36E-05	0.000409
SPATA12 3p14.3	0.291851232	7.37E-05	0.00041
FAM102B 1p13.3	-0.29183144	7.38E-05	0.00041
GRIA3 Xq25	-0.291774946	7.4E-05	0.000411
TRPV4 12q24.11	0.291747745	7.42E-05	0.000412
PTPN12 7q11.23	0.291739376	7.42E-05	0.000412
CACNB4 2q23.3	-0.291651497	7.46E-05	0.000414
PLCZ1 12p12.3	0.291626722	7.47E-05	0.000414
NBL1 1p36.13	0.291597096	7.48E-05	0.000415
PATZ1 22q12.2	-0.291551064	7.5E-05	0.000416
TENM3 4q34.3-q35	-0.291540602	7.51E-05	0.000416
ATL1 14q22.1	-0.29153851	7.51E-05	0.000416
GPN3 12q24.11	-0.29149457	7.53E-05	0.000417
ROPN1L 5p15.2	-0.291493782	7.53E-05	0.000417
SYNJ1 21q22.11	-0.291419245	7.56E-05	0.000419
SAMD12 8q24.11-c	0.291392045	7.57E-05	0.000419
TMEM74 8q23.1	-0.291389219	7.58E-05	0.000419
FBLN5 14q32.12	-0.291327182	7.6E-05	0.000421
ZBTB8B 1p35.1	-0.291291702	7.62E-05	0.000422
PLAU 10q22.2	0.291199548	7.66E-05	0.000424
CAPRN2 12p11.21	0.291189086	7.67E-05	0.000424
KIAA1958 9q32	-0.291168163	7.68E-05	0.000424

ZDHC6	10q25.2	0.291107484	7.7E-05	0.000426
TYMP	22q13.33	0.2911033	7.71E-05	0.000426
UGT1A7	2q37.1	0.291099541	7.71E-05	0.000426
DAAM1	14q23.1	-0.291084468	7.71E-05	0.000426
HIST1H2BK	6p22.1	0.291078191	7.72E-05	0.000426
DAND5	19p13.13	0.291051241	7.73E-05	0.000427
CYTOR	2p11.2	0.291013328	7.75E-05	0.000427
TIGD4	4q31.3	-0.290998682	7.75E-05	0.000428
IMPAD1	8q12.1	-0.290977758	7.76E-05	0.000428
FASTKD3	5p15.31	-0.290935911	7.78E-05	0.000429
RNASET2	6q27	0.290931726	7.78E-05	0.000429
AGTR1	3q24	-0.290914988	7.79E-05	0.000429
CTNND1	11q12.1	0.290822924	7.83E-05	0.000431
ACVR1C	2q24.1	-0.290820832	7.84E-05	0.000431
IFT74	9p21.2	-0.290781077	7.85E-05	0.000432
ALDOC	17q11.2	0.290724583	7.88E-05	0.000434
FLI1	11q24.3	-0.290699475	7.89E-05	0.000434
SLC6A16	19q13.33	-0.290611596	7.93E-05	0.000436
TNRC6A	16p12.1	-0.290611596	7.93E-05	0.000436
ISCU	12q23.3	-0.290607411	7.94E-05	0.000436
ZNF415	19q13.42	-0.290534179	7.97E-05	0.000438
PDZD7	10q24.31	0.290479777	8E-05	0.000439
GABRP	5q35.1	0.290463039	8E-05	0.00044
CCDC87	11q13.2	-0.290419251	8.02E-05	0.000441
PDLIM2	8p21.3	0.290414914	8.03E-05	0.000441
GLOD5	Xp11.23	0.290398175	8.03E-05	0.000441
RFPL4A	19q13.42	-0.290395083	8.04E-05	0.000441
SPOCD1	1p35.2	0.290364698	8.05E-05	0.000442
BEX2	Xq22.2	-0.290352144	8.06E-05	0.000442
ARL5A	2q23.3	-0.290310296	8.08E-05	0.000443
NSDHL	Xq28	0.290308204	8.08E-05	0.000443
AP2A1	19q13.33	0.290297742	8.08E-05	0.000443
TFG	3q12.2	0.290257988	8.1E-05	0.000444
PCED1B	12q13.11	0.290207771	8.13E-05	0.000445
FLII	17p11.2	0.290201494	8.13E-05	0.000445
RILP	17p13.3	0.290201494	8.13E-05	0.000445
MFSD2A	1p34.2	0.290147093	8.15E-05	0.000446
PLA2G4F	15q15.1	0.290142908	8.16E-05	0.000446
PIK3C2B	1q32.1	0.290132446	8.16E-05	0.000446
CHAF1A	19p13.3	0.290113615	8.17E-05	0.000447
FOXC1	6p25.3	0.290090599	8.18E-05	0.000447
DCX	Xq23	-0.290019585	8.22E-05	0.000449
ARMC1	8q13.1	-0.290008997	8.22E-05	0.000449
LARS	5q32	-0.289990166	8.23E-05	0.000449
CASP4	11q22.3	0.289975519	8.24E-05	0.00045
KCNB2	8q21.11	-0.289947167	8.25E-05	0.00045
HUWE1	Xp11.22	-0.289937857	8.26E-05	0.000451
SLC9A3R2	16p13.3	0.289927395	8.26E-05	0.000451
ZNF17	19q13.43	-0.289908564	8.27E-05	0.000451
TRIM10	6p22.1	0.28985947	8.29E-05	0.000452
SULT1C4	2q12.3	-0.289858347	8.3E-05	0.000452
FBX015	18q22.3	-0.289843701	8.3E-05	0.000452
ADM	11p15.4	0.28971816	8.36E-05	0.000456
PDCD10	3q26.1	0.289695144	8.38E-05	0.000456

AKAP3	12p13.32	-0.28967422	8.39E-05	0.000457
PCA3	9q21.2	-0.289621637	8.41E-05	0.000458
ATP1B2	17p13.1	-0.28960308	8.42E-05	0.000458
SLC35E3	12q15	-0.289577972	8.43E-05	0.000459
UCHL3	13q22.2	0.289565418	8.44E-05	0.000459
C3ORF18	3p21.31	-0.289557048	8.44E-05	0.000459
EPM2AIP1	3p22.2	-0.289504739	8.47E-05	0.00046
GS1-124KE	7q11.21	0.289464984	8.49E-05	0.000461
BBS5	2q31.1	-0.289439876	8.5E-05	0.000462
SLC29A4	7p22.1	-0.28941686	8.51E-05	0.000462
ZNF131	5p12	-0.289383383	8.53E-05	0.000463
PTX3	3q25.32	-0.289280857	8.58E-05	0.000466
PGBD1	6p22.1	-0.289253808	8.6E-05	0.000467
HFM1	1p22.2	-0.289181621	8.63E-05	0.000468
R3HDM1	2q21.3	-0.289046513	8.7E-05	0.000472
RAB3IP	12q15	-0.289023497	8.71E-05	0.000473
ISG20	15q26.1	0.289008851	8.72E-05	0.000473
MACROD1	11q13.1	0.289002574	8.73E-05	0.000473
REEP4	8p21.3	0.289000481	8.73E-05	0.000473
CCL3L3	17q12	-0.288986367	8.73E-05	0.000473
ORC6	16q11.2	0.288967004	8.74E-05	0.000473
SLC19A1	21q22.3	0.288933526	8.76E-05	0.000474
DCT	13q32.1	-0.288899817	8.78E-05	0.000475
CGNL1	15q21.3	-0.288860293	8.8E-05	0.000476
GTF3C4	9q34.13	-0.288816354	8.82E-05	0.000477
ZNF682	19p12	-0.288770322	8.85E-05	0.000478
RBPJ	4p15.2	-0.288761953	8.85E-05	0.000478
ZNF69	19p13.2	0.288730567	8.87E-05	0.000479
CDCA4	14q32.33	0.288726383	8.87E-05	0.000479
A2M-AS1	12p13.31	-0.28872429	8.87E-05	0.000479
ELOVL6	4q25	0.288713828	8.87E-05	0.000479
DDX60	4q32.3	0.288680351	8.89E-05	0.00048
IPO11	5q12.1	-0.288651058	8.91E-05	0.000481
NRP1	10p11.22	-0.288648965	8.91E-05	0.000481
PCSK9	1p32.3	0.288613395	8.93E-05	0.000482
POLD1	19q13.33	0.28851087	8.98E-05	0.000484
LRRFIP1	2q37.3	0.288487854	8.99E-05	0.000485
USP38	4q31.21	-0.288454376	9.01E-05	0.000486
KCNA1	12p13.32	-0.28845253	9.01E-05	0.000486
TPCN1	12q24.13	-0.288450191	9.01E-05	0.000486
C22ORF39	22q11.21	-0.28843136	9.02E-05	0.000486
FAM133B	7q21.2	-0.288399975	9.04E-05	0.000487
AGTR2	Xq23	-0.288380163	9.05E-05	0.000487
RFX8	2q11.2	0.288333019	9.08E-05	0.000488
ALPL	1p36.12	-0.288326742	9.08E-05	0.000488
DNAAF3	19q13.42	0.288268156	9.11E-05	0.00049
SLIT2	4p15.31	-0.288251418	9.12E-05	0.00049
AKR1B15	7q33	0.288245854	9.12E-05	0.00049
FCHSD1	5q31.3	0.288236771	9.13E-05	0.000491
KIF27	9q21.32	-0.288228402	9.13E-05	0.000491
LMBR1	7q36.3	-0.288098676	9.2E-05	0.000494
SLC27A1	19p13.11	0.288094491	9.2E-05	0.000494
LPAR1	9q31.3	-0.288023351	9.24E-05	0.000496
VWA3A	16p12.2	0.287934674	9.29E-05	0.000499

CASP6	4q25	0.287858055	9.33E-05	0.000501
NP1PB3	16p12.2	0.287835039	9.34E-05	0.000501
PKD2	4q22.1	-0.287824577	9.35E-05	0.000501
HAAO	2p21	-0.287780637	9.37E-05	0.000503
HSPA8	11q24.1	-0.28777436	9.38E-05	0.000503
CDC42EP1	22q13.1	0.287759714	9.39E-05	0.000503
ANGPT1	8q23.1	-0.287740883	9.4E-05	0.000503
HMOX2	16p13.3	0.287701128	9.42E-05	0.000504
TFCP2L1	2q14.2	0.287688574	9.43E-05	0.000505
P2RX5	17p13.2	-0.287634172	9.46E-05	0.000506
NME5	5q31.2	-0.287615341	9.47E-05	0.000507
PIFO	1p13.2	-0.287575586	9.49E-05	0.000508
ZNF248	10p11.21	-0.287573494	9.49E-05	0.000508
CCDC102B	18q22.1-c	-0.287563032	9.5E-05	0.000508
YWHAZ	8q22.3	0.287544201	9.51E-05	0.000508
HDAC7	12q13.11	0.287479338	9.54E-05	0.00051
SNX29	16p13.13-	-0.287393551	9.59E-05	0.000512
ERBB4	2q34	-0.287355594	9.61E-05	0.000513
PDZD2	5p13.3	-0.287324504	9.63E-05	0.000514
SCRN2	17q21.32	0.287293118	9.65E-05	0.000515
CSRNP2	12q13.12	-0.287270102	9.66E-05	0.000516
SLC26A9	1q32.1	0.287261733	9.66E-05	0.000516
DDX6	11q23.3	-0.287238717	9.68E-05	0.000516
CDC48	1p34.3	0.287215701	9.69E-05	0.000517
MOGAT2	11q13.5	0.287200796	9.7E-05	0.000517
CTSG	14q12	-0.287197943	9.7E-05	0.000517
PFDN6	6p21.32	0.287171762	9.72E-05	0.000518
FAM171A1	10p13	-0.287167577	9.72E-05	0.000518
HSP90B1	12q23.3	-0.28712573	9.74E-05	0.000519
RAP2B	3q25.2	0.287108991	9.75E-05	0.000519
FAM71D	14q23.3	0.28704622	9.79E-05	0.000521
C50RF64	5q12.1	-0.287039169	9.79E-05	0.000521
TMOD3	15q21.2	0.287025297	9.8E-05	0.000521
CCDC68	18q21.2	0.287014835	9.8E-05	0.000521
SMAD2	18q21.1	-0.286977172	9.83E-05	0.000522
RPL23AP53	8p23.3	-0.286956249	9.84E-05	0.000523
B4GALT5	20q13.13	0.286922771	9.86E-05	0.000524
DALRD3	3p21.31	0.286855816	9.9E-05	0.000526
SPRY1	4q28.1	-0.286740736	9.96E-05	0.000529
TMEM41B	11p15.4	0.286723997	9.97E-05	0.00053
KCNK5	6p21.2	0.286705166	9.98E-05	0.00053
DENND4A	15q22.31	-0.286675873	0.0001	0.000531
SPAG5	17q11.2	0.286669596	0.0001	0.000531
SMPD3	16q22.1	0.286615195	0.0001	0.000532
TAF1D	11q21	0.286590086	0.000101	0.000533
ZNRF3	22q12.1	-0.286583809	0.000101	0.000533
SGSM2	17p13.3	-0.286518946	0.000101	0.000535
PRICKLE4	6p21.1	0.286514762	0.000101	0.000535
ZNF418	19q13.43	-0.286462603	0.000101	0.000536
ACTR6	12q23.1	-0.286441529	0.000101	0.000537
HSF1	8q24.3	0.286437344	0.000101	0.000537
LILRB5	19q13.42	-0.286403867	0.000102	0.000538
ASPHD1	16p11.2	0.286401774	0.000102	0.000538
GRP	18q21.32	0.286291331	0.000102	0.000541

CCNC	6q16. 2	-0.286284602	0.000102	0.000541
RHOG	11p15. 4	0.286261586	0.000102	0.000542
PFKM	12q13. 11	-0.286242755	0.000103	0.000542
USF3	3q13. 2	-0.286217647	0.000103	0.000543
PLA2G2F	1p36. 12	0.286195361	0.000103	0.000543
DCAF11	14q12	-0.286192539	0.000103	0.000543
NUDT5	10p14	0.286129768	0.000103	0.000545
GGTA1P	9q33. 2	-0.286125583	0.000103	0.000545
PALM3	19p13. 12	0.286115121	0.000103	0.000545
TCEAL5	Xq22. 1	-0.286106752	0.000103	0.000546
LCA5	6q14. 1	-0.286098383	0.000103	0.000546
DET1	15q26. 1	-0.286083736	0.000104	0.000546
PXN	12q24. 23	0.286073274	0.000104	0.000546
KPNA6	1p35. 2	-0.286071182	0.000104	0.000546
ARHGEF1	19q13. 2	0.286056535	0.000104	0.000546
SHBG	17p13. 1	-0.286008459	0.000104	0.000548
PDE4A	19p13. 2	0.286002134	0.000104	0.000548
GMIP	19p13. 11	0.285891239	0.000105	0.000551
BARX2	11q24. 3	0.285890343	0.000105	0.000551
CDYL2	16q23. 2	-0.285864039	0.000105	0.000552
TNR	1q25. 1	-0.285849785	0.000105	0.000552
SNTN	3p14. 2	0.285784016	0.000105	0.000554
HEXIM1	17q21. 31	0.285778252	0.000105	0.000554
SELENBP1	1q21. 3	0.285631787	0.000106	0.000559
NR3C1	5q31. 3	-0.285598309	0.000106	0.000556
SCRIB	8q24. 3	0.285587848	0.000107	0.000556
SCG2	2q36. 1	-0.28551043	0.000107	0.000562
ABO	9q34. 2	0.285409997	0.000108	0.000565
NANS	9q22. 33	0.285386981	0.000108	0.000566
BACE2	21q22. 2-c	0.285347227	0.000108	0.000567
IFNA8	9p21. 3	0.285304814	0.000108	0.000568
VPS54	2p15-p14	-0.285303287	0.000108	0.000568
KRTCAP2	1q22	0.285294918	0.000108	0.000568
PEX5L	3q26. 33	-0.285267368	0.000109	0.000569
ALKBH6	19q13. 12	0.28526144	0.000109	0.000569
CDC42BPG	11q13. 1	0.285255163	0.000109	0.000569
B4GAT1	11q13. 2	-0.285242609	0.000109	0.00057
GLS2	12q13. 3	-0.28522587	0.000109	0.00057
LINC00271	16q23. 3	-0.285209122	0.000109	0.00057
PTGER1	19p13. 12	0.285191191	0.000109	0.000571
THOC6	16p13. 3	0.285179838	0.000109	0.000571
MZT2A	2q21. 1	0.285165192	0.000109	0.000571
UHRF1	19p13. 3	0.285125437	0.000109	0.000573
FAM86HP	3q22. 1	0.285041743	0.00011	0.000575
MLLT10	10p12. 31	-0.285037558	0.00011	0.000575
AFF1	4q21. 3-q2	-0.284989434	0.00011	0.000577
GEMIN6	2p22. 1	0.28496851	0.00011	0.000577
ZBED6CL	7q36. 1	-0.284949679	0.000111	0.000578
GPR37	7q31. 33	-0.284939217	0.000111	0.000578
B3GAT1	11q25	-0.284930997	0.000111	0.000578
GATA3	10p14	0.284905739	0.000111	0.000579
KLK4	19q13. 41	0.284886638	0.000111	0.000579
SNX16	8q21. 13	-0.284874354	0.000111	0.000579
PHF11	13q14. 2	0.284865985	0.000111	0.00058

COL21A1	6p12.1 6p	-0.28485343	0.000111	0.00058
PSMB8	6p21.32	0.284838784	0.000111	0.00058
CNTRL	9q33.2	-0.284838784	0.000111	0.00058
LCN2	9q34.11	0.284826674	0.000111	0.00058
CTSH	15q25.1	0.284796937	0.000112	0.000581
FAR2P1	2q21.1	-0.284715335	0.000112	0.000584
NOVA2	19q13.32	-0.284677672	0.000112	0.000585
MINPP1	10q23.2	-0.284623271	0.000113	0.000587
GUSBP3	5q13.2	-0.284539577	0.000113	0.000589
NOXA1	9q34.3	0.284535392	0.000113	0.000589
IER3IP1	18q21.1	-0.284485176	0.000114	0.000591
IPPK	9q22.31	-0.284292679	0.000115	0.000597
C8ORF82	8q24.3	0.284284309	0.000115	0.000597
PISD	22q12.2	-0.284280125	0.000115	0.000597
SQLE	8q24.13	0.284259201	0.000115	0.000598
DLST	14q24.3	0.284252924	0.000115	0.000598
RBM48	7q21.2	-0.284246647	0.000115	0.000598
EMC8	16q24.1	0.284246647	0.000115	0.000598
CRTC2	1q21.3	0.284242462	0.000115	0.000598
RASGEF1B	4q21.21	-0.284208985	0.000115	0.000599
CUL1	7q36.1	-0.284144122	0.000116	0.000601
MSL3P1	2q37.1	0.284093905	0.000116	0.000603
WDR36	5q22.1	-0.284077166	0.000116	0.000603
METTTL26	16p13.3	0.284076269	0.000116	0.000603
GABPA	21q21.3	-0.284010211	0.000117	0.000605
LINGO4	1q21.3	-0.283921401	0.000117	0.000608
ZNF184	6p22.1	-0.283859561	0.000118	0.00061
BCL2L14	12p13.2	0.283853284	0.000118	0.00061
SLC31A1	9q32	-0.283842822	0.000118	0.00061
C11ORF1	11q23.1	0.283813529	0.000118	0.000611
SPICE1	3q13.2	0.28380516	0.000118	0.000611
PLA2G2A	1p36.13	-0.283705921	0.000119	0.000615
IFI6	1p35.3	0.283696357	0.000119	0.000615
TBRG4	7p13	0.283692172	0.000119	0.000615
MED12L	3q25.1	-0.283636272	0.000119	0.000617
DNAJB4	1p31.1	-0.283614755	0.000119	0.000617
RRP1	21q22.3	0.283600109	0.00012	0.000618
ANLN	7p14.2	0.283570816	0.00012	0.000619
SLC25A27	6p12.3	-0.283566631	0.00012	0.000619
DUSP23	1q23.2	0.283533153	0.00012	0.00062
SERPINA1C	14q32.13	-0.283482702	0.00012	0.000621
CUTALP	9q33.2	-0.283474567	0.00012	0.000621
RBBP6	16p12.1	-0.283462013	0.000121	0.000622
UBN2	7q34	-0.283426443	0.000121	0.000623
EDA2R	Xq12	-0.28340552	0.000121	0.000623
TLR4	9q33.1	-0.283330195	0.000121	0.000626
DPY19L1	7p14.2	0.283307179	0.000122	0.000626
REQL5	17q25.1	0.283305087	0.000122	0.000626
NOP14-AS1	14p16.3	0.283298809	0.000122	0.000626
B9D1	17p11.2	-0.283296717	0.000122	0.000626
GOPC	6q22.1	-0.283244408	0.000122	0.000628
USP42	7p22.1	-0.283229762	0.000122	0.000629
STS	Xp22.31	0.28321093	0.000122	0.000629
GATD1	11p15.5	0.283190007	0.000122	0.00063

MLANA	9p24. 1	-0.283171783	0.000123	0.00063
RAPGEF4	2q31. 1	-0.283087018	0.000123	0.000633
DNPEP	2q35	0.283043542	0.000123	0.000635
CTAGE6	7q35	0.28303157	0.000124	0.000635
LMBRD1	6q13	-0.283010064	0.000124	0.000635
CSNK1G1	15q22. 31	-0.282987048	0.000124	0.000636
ESRP1	8q22. 1	0.282934739	0.000124	0.000638
RGPD1	2p11. 2	-0.282930555	0.000124	0.000638
GTF2A1	14q31. 1	-0.282922185	0.000124	0.000638
KIF2C	1p34. 1	0.282901262	0.000124	0.000639
TRAF7	16p13. 3	0.282888708	0.000125	0.000639
NXPH1	7p21. 3	-0.282683467	0.000126	0.000646
KIF18B	17q21. 31	0.28267738	0.000126	0.000646
RGS3	9q32	0.282648087	0.000126	0.000647
ZNF274	19q13. 43	0.282627163	0.000126	0.000648
ZNF84	12q24. 33	-0.282622978	0.000126	0.000648
NODAL	10q22. 1	0.282589659	0.000127	0.000649
PLSCR4	3q24	-0.282581131	0.000127	0.000649
TM2D2	8p11. 22	0.282545561	0.000127	0.00065
PTPRA	20p13	-0.282522545	0.000127	0.000651
SDC2	8q22. 1	-0.282445128	0.000128	0.000654
TAMM41	3p25. 2	0.282443036	0.000128	0.000654
CNGA3	2q11. 2	-0.282431344	0.000128	0.000654
BIRC5	17q25. 3	0.282426297	0.000128	0.000654
CRB3	19p13. 3	0.28237608	0.000128	0.000656
PPA1	10q22. 1	0.28234888	0.000128	0.000657
BRINP2	1q25. 2	-0.282291813	0.000129	0.000659
TTC26	7q34	-0.282271462	0.000129	0.000659
SNRPG	2p13. 3	0.282256816	0.000129	0.00066
TMEM209	7q32. 2	-0.282235892	0.000129	0.00066
KCNH6	17q23. 3	-0.282219	0.000129	0.000661
SYTL1	1p36. 11	0.282106166	0.00013	0.000665
NAA25	12q24. 13	-0.282068504	0.000131	0.000666
FNDC5	1p35. 1	-0.282060134	0.000131	0.000666
GALNT13	2q23. 3-q2	-0.282032035	0.000131	0.000667
EIPR1	2p25. 3	0.281982717	0.000131	0.000669
EIF3M	11p13	0.281930408	0.000132	0.000671
CLIP3	19q13. 12	-0.281928316	0.000132	0.000671
B3GNT6	11q13. 5	0.281860632	0.000132	0.000673
CUL4B	Xq24	-0.281842529	0.000132	0.000673
EXOSC5	19q13. 2	0.281832215	0.000132	0.000674
ZNF33A	10p11. 1	-0.281815329	0.000132	0.000674
SHPK	17p13. 2	-0.281800682	0.000133	0.000675
OR2L13	1q44	-0.281785108	0.000133	0.000675
PRRG2	19q13. 33	0.281765112	0.000133	0.000676
SEMA4D	9q22. 2	-0.281721173	0.000133	0.000677
TOP2B	3p24. 2	-0.281597724	0.000134	0.000682
PLCH2	1p36. 32	0.281593539	0.000134	0.000682
CASP8AP2	6q15	-0.281553784	0.000134	0.000683
TIAF1	17q11. 2	0.281553784	0.000134	0.000683
LOC728554	5q35. 3	0.281472182	0.000135	0.000686
LMNTD2	11p15. 5	0.281440797	0.000135	0.000687
HIST2H2BF	1q21. 2	0.281430335	0.000135	0.000687
ABCA10	17q24. 3	-0.281413596	0.000136	0.000688

NYAP2	2q36.3	-0.281379919	0.000136	0.000689
BAGE2	21p11.2	-0.281292672	0.000137	0.000692
TRIM9	14q22.1	-0.281277593	0.000137	0.000693
NPTXR	22q13.1	-0.281269224	0.000137	0.000693
ATP6V0A2	12q24.31	-0.281210638	0.000137	0.000695
PCBP3	21q22.3	-0.281189714	0.000137	0.000696
GUCY1A1	4q32.1	-0.281126943	0.000138	0.000698
EXD3	9q34.3	0.281045341	0.000138	0.000701
ACLY	17q21.2	-0.280986755	0.000139	0.000703
C4BPB	1q32.1	0.28084866	0.00014	0.000709
ZXDA	Xp11.21	-0.280838198	0.00014	0.000709
FLAD1	1q21.3	0.280775427	0.000141	0.000711
RGPD4	2q12.3	-0.280746134	0.000141	0.000712
MMRN2	10q23.2	-0.28073358	0.000141	0.000713
FAM3C	7q31.31	0.280727303	0.000141	0.000713
SHANK3	22q13.33	-0.28069801	0.000141	0.000714
CADPS2	7q31.32	-0.280614316	0.000142	0.000717
FLVCR1	1q32.3	-0.280597577	0.000142	0.000717
NRP2	2q33.3	0.280522252	0.000143	0.00072
FAM219A	9p13.3	-0.280465759	0.000143	0.000722
ABRAXAS1	4q21.23	-0.280442743	0.000143	0.000723
DDAH2	6p21.33	0.280417634	0.000144	0.000724
KMT2A	11q23.3	-0.280400896	0.000144	0.000725
C4ORF46	4q32.1	-0.280325571	0.000144	0.000727
IN080B	2p13.1	0.280310924	0.000144	0.000728
OIP5	15q15.1	0.280308832	0.000144	0.000728
TTY4C	Yq11.23	-0.280298298	0.000145	0.000728
VPS9D1	16q24.3	0.280252338	0.000145	0.00073
FAM218A	4q32.3	-0.280044295	0.000147	0.000738
RNF5	6p21.32	0.280024271	0.000147	0.000739
MACO1	1p36.11 1	-0.280022179	0.000147	0.000739
PPM1H	12q14.1-c	-0.279990794	0.000147	0.00074
RUNX1T1	8q21.3	-0.279965685	0.000147	0.000741
CISD3	17q12	0.279957316	0.000147	0.000741
NDUFB3	2q33.1	0.279928023	0.000148	0.000742
SSUH2	3p25.3	-0.279909192	0.000148	0.000743
IFNA13	9p21.3	0.27989267	0.000148	0.000743
KIRREL2	19q13.12	-0.279868684	0.000148	0.000744
THAP12	11q13.5	-0.27986316	0.000148	0.000744
OSTF1	9q21.13	0.279859122	0.000148	0.000744
SLC38A5	Xp11.23	0.279840144	0.000148	0.000745
ARHGEF6	Xq26.3	-0.279833867	0.000148	0.000745
NUDT1	7p22.3	0.279804574	0.000149	0.000746
INAFM1	19q13.32	0.279777373	0.000149	0.000747
MRPL52	14q11.2	0.27975645	0.000149	0.000747
FAM86C2P	11q13.2	0.279733434	0.000149	0.000748
PREX2	8q13.2	-0.279725064	0.000149	0.000748
EGLN3	14q13.1	0.279672755	0.00015	0.00075
RNH1	11p15.5	0.2796058	0.00015	0.000753
MAP3K14	17q21.31	-0.279572322	0.000151	0.000754
ZNF697	1p12	-0.279494905	0.000151	0.000757
MMUT	6p12.3	-0.279492813	0.000151	0.000757
SLC30A9	4p13	-0.27941958	0.000152	0.00076
MALT1	18q21.32	-0.279365179	0.000152	0.000763

ADH1A	4q23	-0.279345052	0.000153	0.000763
RAB30	11q14.1	-0.279333394	0.000153	0.000763
CEP85L	6q22.31	-0.279329609	0.000153	0.000763
A1CF	10q11.23	-0.279326617	0.000153	0.000763
LDHAL6B	15q22.2	0.279288636	0.000153	0.000765
ZNF695	1q44	0.27926976	0.000153	0.000766
DNASE1L1	Xq28	0.279233361	0.000154	0.000767
FAU	11q13.1	0.279231268	0.000154	0.000767
ECT2	3q26.31	0.279218714	0.000154	0.000767
NPY5R	4q32.2	-0.279200673	0.000154	0.000768
E2F6	2p25.1	-0.279199883	0.000154	0.000768
TCTN3	10q24.1	-0.279183144	0.000154	0.000768
FNDC4	2p23.3	0.279151759	0.000154	0.000769
PPIL4	6q25.1	-0.279103634	0.000155	0.000771
TMOD1	9q22.33	-0.279059695	0.000155	0.000773
EXD2	14q24.1	-0.278990647	0.000156	0.000776
BATF2	11q13.1	0.278976001	0.000156	0.000776
PEX13	2p15	0.278976001	0.000156	0.000776
PDZD11	Xq13.1	0.278940431	0.000156	0.000777
TRAM1L1	4q26	-0.278938338	0.000156	0.000777
ZNF746	7q36.1	-0.278932061	0.000156	0.000777
TASOR	3p14.3	-0.278921599	0.000156	0.000778
CBLN1	16q12.1	-0.278871966	0.000157	0.00078
SPINK2	4q12	-0.278865266	0.000157	0.00078
ZNF85	19p12	-0.278856736	0.000157	0.00078
ALG2	9q22.33	-0.278854644	0.000157	0.00078
PHAX	5q23.2	-0.278852552	0.000157	0.00078
KIAA0825	5q15	-0.278823259	0.000157	0.000781
SNORA8	11q21	0.278796058	0.000157	0.000782
RAD51D	17q12	-0.278791873	0.000157	0.000782
JCAD	10p11.23	-0.278747934	0.000158	0.000784
DSCAM	21q22.2	-0.278705853	0.000158	0.000785
ERLEC1	2p16.2	-0.278703994	0.000158	0.000785
PGBD3	10q11.23	-0.278689348	0.000158	0.000786
ZFH3	16q22.2-c	-0.278643316	0.000159	0.000788
IFFO1	12p13.31	-0.278614023	0.000159	0.000789
JMJD1C-AS1	10q21.3	0.278607746	0.000159	0.000789
LSAMP	3q13.31	-0.278580545	0.000159	0.00079
ATP6V0E2	7q36.1	-0.278565899	0.000159	0.00079
GNG4	1q42.3	-0.278553345	0.00016	0.000791
LINC00158	21q21.2	-0.278520117	0.00016	0.000792
GANC	15q15.1	0.278488482	0.00016	0.000793
ICAM5	19p13.2	0.278462738	0.00016	0.000794
HJURP	2q37.1	0.278413157	0.000161	0.000796
USP4	3p21.31	0.27840688	0.000161	0.000796
SLC2A11	22q11.23	-0.278373402	0.000161	0.000798
AQP4	18q11.2	-0.278347021	0.000161	0.000799
USP1	1p31.3	-0.278342017	0.000161	0.000799
ST18	8q11.23	-0.278333647	0.000162	0.000799
FEZ2	2p22.2	0.278331555	0.000162	0.000799
SLC39A8	4q24	-0.278295985	0.000162	0.0008
CCDC9	19q13.32	0.278235306	0.000162	0.000803
IFT57	3q13.12-c	-0.278191367	0.000163	0.000804
ZNRF1	16q23.1	0.278189275	0.000163	0.000804

AP2M1	3q27.1	0.27814115	0.000163	0.000806
KIT	4q12	-0.278124412	0.000163	0.000807
RTL9	Xq23	-0.2781188	0.000164	0.000807
NAB1	2q32.2	0.278080472	0.000164	0.000808
TTC5	14q11.2	-0.278049087	0.000164	0.00081
PIK3R1	5q13.1	-0.27800724	0.000165	0.000811
PIF1	15q22.31	0.277971669	0.000165	0.000813
SPIRE2	16q24.3	0.277961208	0.000165	0.000813
GLUD1	10q23.2	0.277917268	0.000165	0.000815
TMC5	16p12.3	0.277871236	0.000166	0.000817
CDK1	10q21.2	0.277802189	0.000166	0.00082
LHX6	9q33.2	-0.277726864	0.000167	0.000823
CDCA5	11q13.1	0.277672462	0.000168	0.000825
MDM2	12q15	-0.277662001	0.000168	0.000826
HMBS	11q23.3	0.277653631	0.000168	0.000826
LOC100126	11p15.1	0.277607599	0.000168	0.000828
PGK1	Xq21.1	0.277574122	0.000169	0.000829
SPINK13	5q32	0.277560158	0.000169	0.00083
MPZ	1q23.3	-0.277559475	0.000169	0.00083
PKIG	20q13.12	-0.277553198	0.000169	0.00083
TTC17	11p12-p11	-0.277513443	0.000169	0.000831
CYP4F3	19p13.12	0.277500889	0.000169	0.000832
ZNF429	19p12	-0.277498797	0.000169	0.000832
PTGER3	1p31.1	-0.27749252	0.000169	0.000832
NEK10	3p24.1	-0.27748406	0.00017	0.000832
KCTD14	11q14.1	0.27745695	0.00017	0.000833
IQCG	3q29	-0.277444396	0.00017	0.000833
ARMC7	17q25.1	0.277440211	0.00017	0.000833
LINC00469	17q25.1	-0.277357753	0.000171	0.000837
SNX21	20q13.12	0.277356517	0.000171	0.000837
PRMT6	1p13.3	-0.277312577	0.000171	0.000839
STX12	1p35.3	-0.277300023	0.000171	0.000839
SVEP1	9q31.3	-0.277285377	0.000171	0.00084
TJP2	9q21.11	0.27727073	0.000172	0.00084
CCDC3	10p13	-0.277262361	0.000172	0.00084
INSM1	20p11.23	-0.277261719	0.000172	0.00084
IQSEC1	3p25.2-p2	-0.277253991	0.000172	0.00084
GPR37L1	1q32.1	0.27723949	0.000172	0.000841
CD160	1q21.1	-0.277172389	0.000173	0.000844
BNC1	15q25.2	-0.27716142	0.000173	0.000844
FBX022-AS	15q24.2	0.277111711	0.000173	0.000846
ATP6V1B2	8p21.3	-0.277097064	0.000173	0.000847
ARHGEF37	5q32	-0.277015463	0.000174	0.00085
UBA1	Xp11.3	0.27701337	0.000174	0.00085
LRP10	14q11.2	0.276971523	0.000174	0.000852
C9ORF40	9q21.13	-0.276919214	0.000175	0.000854
ZNF254	19p12	-0.27686272	0.000176	0.000857
TRIP4	15q22.31	0.276829243	0.000176	0.000858
PAQR3	4q21.21	-0.276789488	0.000176	0.00086
ZNF45	19q13.31	-0.276779026	0.000176	0.00086
THAP1	8p11.21	-0.276774842	0.000176	0.00086
CASTOR1	22q12.2	0.276766472	0.000177	0.00086
ZNF793	19q13.12	-0.276735231	0.000177	0.000862
CANX	5q35.3	-0.276697424	0.000177	0.000863

HIVEP1	6p24. 1	-0.27668487	0.000177	0.000864
HR	8p21. 3	0.276672316	0.000177	0.000864
ENPP3	6q23. 2	-0.276608332	0.000178	0.000867
AQP2	12q13. 12	0.276554145	0.000179	0.000869
ZBTB49	4p16. 3	-0.276525851	0.000179	0.000871
RAD54L	1p34. 1	0.276454711	0.00018	0.000874
ZNF782	9q22. 33	-0.276444249	0.00018	0.000874
AIP	11q13. 2	0.276429603	0.00018	0.000875
PIM3	22q13. 33	0.276377294	0.00018	0.000877
KRT8P41	11p15. 4	0.276362936	0.000181	0.000878
ATXN2L	16p11. 2	0.276339631	0.000181	0.000879
PRSS21	16p13. 3	0.276317249	0.000181	0.000879
DUSP6	12q21. 33	0.276247568	0.000182	0.000883
MGAT3	22q13. 1	0.276230829	0.000182	0.000883
TIMM23	10q11. 22	0.276209905	0.000182	0.000884
XRCC4	5q14. 2	0.276163873	0.000183	0.000886
CTBP2	10q26. 13	0.27614295	0.000183	0.000887
FBXL8	16q22. 1	0.276138765	0.000183	0.000887
KLF12	13q22. 1	-0.27613458	0.000183	0.000887
PDE8B	5q13. 3	-0.276130396	0.000183	0.000887
CHRM4	11p11. 2	-0.276031298	0.000184	0.000892
PPP2R3C	14q13. 2	-0.276006947	0.000184	0.000893
MICALCL	11p15. 3	0.276004854	0.000184	0.000893
FAT4	4q28. 1	-0.275998577	0.000184	0.000893
IL13RA2	Xq23	-0.275861925	0.000186	0.000899
ASPG	14q32. 33	0.275843012	0.000186	0.0009
GKN1	2p13. 3	0.275749459	0.000187	0.000905
D2HGDH	2q37. 3	0.275732848	0.000187	0.000905
LMTK3	19q13. 33	0.275711924	0.000187	0.000906
ZEB2	2q22. 3	-0.275634507	0.000188	0.00091
KCNH3	12q13. 12	-0.275630322	0.000188	0.00091
DYNLT1	6q25. 3	0.27559266	0.000189	0.000911
RRN3P3	16p12. 2	0.275580106	0.000189	0.000912
RLN2	9p24. 1	-0.275519529	0.000189	0.000915
BCO1	16q23. 2	0.275460842	0.00019	0.000918
ABCG2	4q22. 1	-0.275456657	0.00019	0.000918
SYT12	11q13. 2	0.275448287	0.00019	0.000918
MED25	19q13. 33	0.27544201	0.00019	0.000918
SNAP91	6q14. 2	-0.275407631	0.00019	0.000919
CARMIL2	16q22. 1	-0.275393886	0.000191	0.000919
CUL5	11q22. 3	-0.275393886	0.000191	0.000919
SNORD116	15q11. 2	-0.27539352	0.000191	0.000919
MTMR7	8p22	-0.275391794	0.000191	0.000919
CXORF49B	Xq13. 1	0.275343904	0.000191	0.000921
SLC32A1	20q11. 23	-0.275342582	0.000191	0.000921
SYT10	12p11. 1	-0.275284555	0.000192	0.000924
DEPDC1B	5q12. 1	0.275222313	0.000192	0.000927
NWD2	4p14	-0.275184458	0.000193	0.000929
SEPHS1	10p13	-0.275161635	0.000193	0.00093
ADAM23	2q33. 3	-0.275107233	0.000194	0.000933
CCL16	17q12	-0.275094463	0.000194	0.000933
P2RY14	3q25. 1	-0.27508631	0.000194	0.000933
PARM1	4q13. 3	-0.275067479	0.000194	0.000934
ZNF788P	19p13. 2	-0.275052832	0.000194	0.000934

PGM5-AS1	9q21. 11	-0. 275014151	0. 000195	0. 000936
TCP1	6q25. 3	-0. 274975415	0. 000195	0. 000938
HOXB8	17q21. 32	0. 274954491	0. 000195	0. 000939
SGPP2	2q36. 1	0. 274906367	0. 000196	0. 000941
ARL10	5q35. 2	-0. 274889628	0. 000196	0. 000942
SCCPDH	1q44	0. 274879166	0. 000196	0. 000942
TSPY26P	20q11. 21	-0. 274799657	0. 000197	0. 000946
ABCB1	7q21. 12	-0. 274782918	0. 000197	0. 000947
ANO3	11p14. 3-1	-0. 274729954	0. 000198	0. 000949
LENG9	19q13. 42	0. 274695039	0. 000198	0. 000951
MAGED1	Xp11. 22	-0. 274653192	0. 000199	0. 000953
MYO9A	15q23	-0. 274632268	0. 000199	0. 000954
FIBCD1	9q34. 12	0. 274630176	0. 000199	0. 000954
TPI1	12p13. 31	0. 274598791	0. 000199	0. 000955
RAB18	10p12. 1	-0. 274594606	0. 000199	0. 000955
ZNF549	19q13. 43	-0. 274584144	0. 000199	0. 000956
SRMS	20q13. 33	0. 274555533	0. 0002	0. 000957
UBXN7	3q29	-0. 274544533	0. 0002	0. 000957
ZFAND5	9q21. 13	-0. 274479526	0. 000201	0. 00096
SV2A	1q21. 2	-0. 274458603	0. 000201	0. 000961
CFAP54	12q23. 1	-0. 274454569	0. 000201	0. 000961
CMTM4	16q21-q22	-0. 27442094	0. 000201	0. 000963
RPL28	19q13. 42	0. 274410479	0. 000201	0. 000963
BSG	19p13. 3	0. 274301676	0. 000203	0. 000969
ANKRD53	2p13. 3	-0. 274266106	0. 000203	0. 000971
IGLON5	19q13. 41	0. 274211705	0. 000204	0. 000973
PCDHB9	5q31. 3	0. 274186596	0. 000204	0. 000974
RUFY4	2q35	0. 274171047	0. 000204	0. 000975
CAVIN2	2q32. 3	-0. 274157303	0. 000204	0. 000976
MAPKAPK3	3p21. 2	0. 274098717	0. 000205	0. 000978
SHD	19p13. 3	-0. 274041429	0. 000206	0. 000981
MMP14	14q11. 2	0. 274040131	0. 000206	0. 000981
FOXO1	13q14. 11	-0. 274012931	0. 000206	0. 000982
ZNF385B	2q31. 2-q32	-0. 27400052	0. 000206	0. 000983
YDJC	22q11. 21	0. 273992007	0. 000206	0. 000983
APMAP	20p11. 21	-0. 273987822	0. 000206	0. 000983
FBXO17	19q13. 2	-0. 273973176	0. 000206	0. 000984
UBFD1	16p12. 2	-0. 273925052	0. 000207	0. 000986
CD34	1q32. 2	-0. 273897851	0. 000207	0. 000987
BIVM	13q33. 1	-0. 273883205	0. 000207	0. 000988
FXYD6	11q23. 3	-0. 273870651	0. 000208	0. 000988
SH3RF1	4q32. 3-q33	0. 273862281	0. 000208	0. 000989
TSC22D4	7q22. 1	0. 273814157	0. 000208	0. 000991
KLHL41	2q31. 1	-0. 273730463	0. 000209	0. 000995
ZNF157	Xp11. 3	-0. 273707144	0. 000209	0. 000996
EFCAB6	22q13. 2-c	-0. 273686523	0. 00021	0. 000997
ZNF554	19p13. 3	-0. 273663507	0. 00021	0. 000998
SETD4	21q22. 12	0. 273632122	0. 00021	0. 001
GOS2	1q32. 2	0. 273560982	0. 000211	0. 001004
DMRTC1B	Xq13. 1	-0. 27351115	0. 000212	0. 001006
ATG7	3p25. 3	0. 273496119	0. 000212	0. 001007
ZNF593	1p36. 11	0. 273450087	0. 000212	0. 001009
LYPD3	19q13. 31	0. 273412424	0. 000213	0. 001011
QRSL1	6q21	-0. 273406147	0. 000213	0. 001011

ARV1	1q42. 2	0. 273387316	0. 000213	0. 001012
DHX40	17q23. 1	-0. 273366393	0. 000213	0. 001013
MAN1A2	1p12	-0. 273330823	0. 000214	0. 001015
CEP19	3q29	-0. 273251313	0. 000215	0. 001019
KIDINS22C	2p25. 1	-0. 273215743	0. 000215	0. 001021
BTG2	1q32. 1	-0. 27315088	0. 000216	0. 001024
FAM163A	1q25. 2	-0. 273144603	0. 000216	0. 001024
ADCYAP1R1	7p14. 3	-0. 273139551	0. 000216	0. 001024
MYO16	13q33. 3	-0. 273119494	0. 000216	0. 001025
ODF3B	22q13. 33	0. 273111125	0. 000216	0. 001025
CLN6	15q23	0. 273090201	0. 000217	0. 001026
PCDH19	Xq22. 1	-0. 273063001	0. 000217	0. 001028
POLI	18q21. 2	-0. 273031616	0. 000217	0. 001029
CLGN	4q31. 1	-0. 27297303	0. 000218	0. 001032
TRIM44	11p13	-0. 272968845	0. 000218	0. 001032
NRM	6p21. 33	0. 272939552	0. 000219	0. 001034
ZSCAN18	19q13. 43	-0. 272931182	0. 000219	0. 001034
ZNF644	1p22. 2	-0. 27292909	0. 000219	0. 001034
NOS1	12q24. 22	-0. 272927649	0. 000219	0. 001034
HRH2	5q35. 2	-0. 272889478	0. 000219	0. 001036
H2AFJ	12p12. 3	0. 272872596	0. 000219	0. 001036
GRK2	11q13. 2	0. 272834934	0. 00022	0. 001038
NECAP1	12p13. 31	-0. 272830749	0. 00022	0. 001038
SHROOM4	Xp11. 22	-0. 272824472	0. 00022	0. 001038
TAF15	17q12	0. 27274287	0. 000221	0. 001043
SLC8B1	12q24. 13	0. 272701023	0. 000221	0. 001045
HMGN1	21q22. 2	0. 272692654	0. 000222	0. 001045
CMC1	3p24. 1	0. 272606867	0. 000223	0. 00105
ZNF776	19q13. 43	-0. 27260059	0. 000223	0. 00105
UBE2T	1q32. 1	0. 272585944	0. 000223	0. 001051
SAT2	17p13. 1	-0. 272535727	0. 000224	0. 001053
SNX8	7p22. 3	0. 272529592	0. 000224	0. 001053
DUSP5P1	1q42. 13	0. 2725177	0. 000224	0. 001054
STRAP	12p12. 3	-0. 272502249	0. 000224	0. 001054
ZFYVE16	5q14. 1	-0. 272500157	0. 000224	0. 001054
PHGR1	15q15. 1	0. 272492253	0. 000224	0. 001055
ATP8B5P	9p13. 3	0. 272487603	0. 000224	0. 001055
PDLIM1	10q23. 33	0. 272435294	0. 000225	0. 001057
MMP7	11q22. 2	0. 272418698	0. 000225	0. 001058
INTS4	11q14. 1	0. 272410186	0. 000225	0. 001058
CA5A	16q24. 2	0. 272395581	0. 000225	0. 001059
PCDHB3	5q31. 3	-0. 272349507	0. 000226	0. 001061
AMZ2	17q24. 2	-0. 272274182	0. 000227	0. 001066
SH3RF3	2q13	-0. 272267905	0. 000227	0. 001066
ALG1L	3q21. 2	0. 272253259	0. 000227	0. 001066
LINC00602	6q27	-0. 2722411	0. 000227	0. 001067
MRI1	19p13. 13	0. 272230243	0. 000227	0. 001067
SLC25A33	1p36. 22	-0. 272188396	0. 000228	0. 001069
FAM89B	11q13. 1	0. 272113071	0. 000229	0. 001074
NPR3	5p13. 3	0. 272087963	0. 000229	0. 001075
ZNF326	1p22. 2	-0. 272087963	0. 000229	0. 001075
ADM2	22q13. 33	0. 272052393	0. 00023	0. 001077
RSBN1L	7q11. 23	-0. 272027284	0. 00023	0. 001078
AHSA2P	2p15	0. 272027284	0. 00023	0. 001078

BPIFB1	20q11. 21	0. 272020894	0. 00023	0. 001078
KCNA5	12p13. 32	-0. 272016823	0. 00023	0. 001078
SARNP	12q13. 2	0. 271997991	0. 00023	0. 001079
ST13P4	13q14. 2	-0. 271977068	0. 000231	0. 00108
ITPKB	1q42. 12	-0. 271941498	0. 000231	0. 001081
IL36RN	2q14. 1	0. 271912513	0. 000231	0. 001083
ARPC3	12q24. 11	0. 271903835	0. 000231	0. 001083
LINC01106	2q13	0. 271889189	0. 000232	0. 001084
NR1D1	17q21. 1	0. 271868265	0. 000232	0. 001085
RGS7	1q43 1q25	-0. 27184791	0. 000232	0. 001086
APPL2	12q23. 3	-0. 271822233	0. 000232	0. 001087
ENO1	1p36. 23	0. 271820141	0. 000233	0. 001087
CUX2	12q24. 11-	-0. 271815691	0. 000233	0. 001087
KAT7	17q21. 33	-0. 271763647	0. 000233	0. 00109
ZNF276	16q24. 3	0. 271749001	0. 000233	0. 00109
CARS	11p15. 4	0. 271711338	0. 000234	0. 001092
LIN7A	12q21. 31	-0. 271702969	0. 000234	0. 001093
DCC	18q21. 2	-0. 271685477	0. 000234	0. 001093
DYNLRB1	20q11. 22	0. 271663214	0. 000235	0. 001095
MAPK1	22q11. 22	-0. 271656937	0. 000235	0. 001095
GEMIN5	5q33. 2	-0. 271640198	0. 000235	0. 001095
IL33	9p24. 1	-0. 271612998	0. 000235	0. 001097
WDR89	14q23. 2	-0. 271523026	0. 000236	0. 001102
WDR87	19q13. 13	-0. 271522995	0. 000236	0. 001102
DHFR2	3q11. 2	-0. 271516749	0. 000236	0. 001102
UBQLN4	1q22	0. 271514657	0. 000236	0. 001102
ADPRH	3q13. 33	-0. 27150838	0. 000237	0. 001102
RHOQ	2p21	-0. 271506288	0. 000237	0. 001102
BLZF1	1q24. 2	0. 27150001	0. 000237	0. 001102
FAM167A	8p23. 1	-0. 271481179	0. 000237	0. 001103
SCYL1	11q13. 1	0. 271460256	0. 000237	0. 001104
CMTM3	16q22. 1	0. 271447702	0. 000237	0. 001104
RAP1GAP2	17p13. 3	-0. 271447702	0. 000237	0. 001104
LSM8	7q31. 31	0. 271445609	0. 000237	0. 001104
HNRNPAB	5q35. 3	0. 271443517	0. 000237	0. 001104
CCDC181	1q24. 2	-0. 271422593	0. 000238	0. 001105
TAF1	Xq13. 1	-0. 271397485	0. 000238	0. 001106
LINC00336	6p21. 31	0. 271394087	0. 000238	0. 001106
MIOX	22q13. 33	0. 271383585	0. 000238	0. 001106
PCSK4	19p13. 3	0. 271257297	0. 00024	0. 001114
PEX14	1p36. 22	0. 271253112	0. 00024	0. 001114
ZSCAN25	7q22. 1	-0. 27121545	0. 00024	0. 001116
SLC35G1	10q23. 33	-0. 271169418	0. 000241	0. 001118
SCMH1	1p34. 2	-0. 27110874	0. 000242	0. 001122
ZNF140	12q24. 33	-0. 271081539	0. 000242	0. 001123
SYP	Xp11. 23	-0. 271054339	0. 000243	0. 001125
P2RY12	3q25. 1	-0. 271033982	0. 000243	0. 001126
CHRNA2	1q21. 3	-0. 270999937	0. 000243	0. 001128
HOXA13	7p15. 2	0. 270992122	0. 000243	0. 001128
NUS1	6q22. 1	-0. 270943444	0. 000244	0. 00113
TMEM108	3q22. 1	-0. 270943444	0. 000244	0. 00113
SLC25A23	19p13. 3	0. 270903689	0. 000245	0. 001133
AOAH	7p14. 2	-0. 270899504	0. 000245	0. 001133
SEMA3E	7q21. 11	-0. 270878581	0. 000245	0. 001134

TPPP	5p15. 33	-0. 270870211	0. 000245	0. 001134
SELE	1q24. 2	-0. 270853472	0. 000245	0. 001135
ESR1	6q25. 1-q ϵ	-0. 270819995	0. 000246	0. 001136
LRP2BP	4q35. 1	-0. 270769778	0. 000246	0. 001139
SEC14L1	17q25. 2-c	-0. 270750947	0. 000247	0. 00114
GPC6	13q31. 3-c	-0. 270746762	0. 000247	0. 00114
ANKRD40CI	17q21. 33	0. 270734925	0. 000247	0. 001141
MDGA1	6p21. 2	-0. 270732116	0. 000247	0. 001141
THAP4	2q37. 3	0. 270727931	0. 000247	0. 001141
PPP1R10	6p21. 33	-0. 270686084	0. 000248	0. 001143
DKFZP586I	7p14. 3	-0. 270625405	0. 000248	0. 001146
DEFB1	8p23. 1	0. 270623313	0. 000248	0. 001146
NR3C2	4q31. 23	-0. 270621221	0. 000248	0. 001146
MAST4	5q12. 3	-0. 270614944	0. 000248	0. 001146
TRIM25	17q22	-0. 270579374	0. 000249	0. 001148
DEFB132	20p13	-0. 270563536	0. 000249	0. 001149
OSBPL8	12q21. 2	-0. 270520788	0. 00025	0. 001152
BDP1	5q13. 2	-0. 270510326	0. 00025	0. 001152
CCDC173	2q31. 1	-0. 270501956	0. 00025	0. 001152
BBOF1	14q24. 3	-0. 270460109	0. 000251	0. 001155
ANKRD36BF	1q24. 2	-0. 27044337	0. 000251	0. 001155
BORCS7	10q24. 32	-0. 270432909	0. 000251	0. 001156
TCAF1	7q35	-0. 270422588	0. 000251	0. 001156
NXF2B	Xq22. 1	-0. 270405683	0. 000251	0. 001157
FGF19	11q13. 3	0. 27040526	0. 000251	0. 001157
SLC16A14	2q36. 3	-0. 270338753	0. 000252	0. 001161
PRAG1	8p23. 1	0. 270311552	0. 000253	0. 001162
POLN	4p16. 3	-0. 27030109	0. 000253	0. 001163
TAF10	11p15. 4	0. 270238319	0. 000254	0. 001166
KCNJ5	11q24. 3	-0. 270219488	0. 000254	0. 001167
HIST1H3D	6p22. 2	0. 270190761	0. 000254	0. 001169
IFT81	12q24. 11	-0. 270190195	0. 000254	0. 001169
B4GALT2	1p34. 1	0. 27015881	0. 000255	0. 00117
ATG4B	2q37. 3	0. 270102316	0. 000256	0. 001174
PLPPR4	1p21. 3-p ϵ	-0. 270073023	0. 000256	0. 001175
CST9	20p11. 21	0. 270040142	0. 000256	0. 001177
ABHD14B	3p21. 2	0. 270022807	0. 000257	0. 001178
FAM3D	3p14. 2	0. 270012345	0. 000257	0. 001178
WNK2	9q22. 31	-0. 269976775	0. 000257	0. 001181
CNTNAP5	2q14. 3	-0. 26994071	0. 000258	0. 001183
TBC1D5	3p24. 3	-0. 269914004	0. 000258	0. 001184
ATP5PD	17q25. 1	0. 269880526	0. 000259	0. 001186
GMCL2	5q35. 3	-0. 269808272	0. 00026	0. 00119
CENPM	22q13. 2	0. 269767539	0. 00026	0. 001193
ACTL6A	3q26. 33	0. 269742431	0. 000261	0. 001194
CCHCR1	6p21. 33	0. 269729877	0. 000261	0. 001195
ADRB2	5q32	-0. 269725692	0. 000261	0. 001195
TMC2	20p13	-0. 269677622	0. 000262	0. 001197
PSMC3	11p11. 2	0. 269677568	0. 000262	0. 001197
FAM117A	17q21. 33	-0. 269629444	0. 000262	0. 0012
OAS2	12q24. 13	0. 269606428	0. 000263	0. 001201
FGD1	Xp11. 22	-0. 269589689	0. 000263	0. 001202
PYROXD2	10q24. 2	0. 269522733	0. 000264	0. 001206
MAP1S	19p13. 11	0. 269518549	0. 000264	0. 001206

MIEN1	17q12	0.269518549	0.000264	0.001206
RNF187	1q42.13	0.269516456	0.000264	0.001206
CES2	16q22.1	0.269482979	0.000264	0.001208
NR1H2	19q13.33	0.269439039	0.000265	0.001211
GIMAP4	7q36.1	-0.269428577	0.000265	0.001211
STARD8	Xq13.1	-0.269420208	0.000265	0.001211
BEND5	1p33	-0.269411839	0.000265	0.001211
SCAF1	19q13.33	0.269367899	0.000266	0.001214
SMIM10L2A	Xq26.3	-0.26931559	0.000267	0.001217
SLC6A8	Xq28	0.269290482	0.000267	0.001219
DRC3	17p11.2	-0.269277928	0.000267	0.001219
TCN1	11q12.1	0.269228073	0.000268	0.001222
INTS10	8p21.3	-0.269175402	0.000269	0.001225
TBCE	1q42.3	0.26916494	0.000269	0.001225
TSPOAP1	17q22	-0.26916494	0.000269	0.001225
EEF2KMT	16p13.3	0.26916494	0.000269	0.001225
HSD17B8	6p21.32	0.269141925	0.000269	0.001227
TM6SF1	15q25.2	-0.269139832	0.000269	0.001227
PPP1R36	14q23.3	0.269085431	0.00027	0.00123
AMBRA1	11p11.2	0.269064507	0.000271	0.001231
KHDC4	1q22	0.269056138	0.000271	0.001231
PCDHGB6	5q31.3	-0.269056138	0.000271	0.001231
CDT1	16q24.3	0.269033122	0.000271	0.001232
HIST3H2BE1	1q42.13	0.269013595	0.000271	0.001233
CELF4	18q12.2	-0.269010106	0.000271	0.001233
PNRC1	6q15	-0.268993367	0.000272	0.001234
GK3P	4q32.3	-0.268991275	0.000272	0.001234
TFAM	10q21.1	-0.268976628	0.000272	0.001235
SLFN13	17q12	0.268955705	0.000272	0.001236
LINC01091	14q28.1	-0.268938966	0.000272	0.001237
NT5M	17p11.2	-0.268928504	0.000273	0.001237
PGR	11q22.1	-0.268924319	0.000273	0.001237
DROSHA	5p13.3	-0.268922227	0.000273	0.001237
MASP2	1p36.22	-0.268880521	0.000273	0.00124
ING1	13q34	0.268857364	0.000274	0.001241
ATP2B3	Xq28	-0.268849515	0.000274	0.001241
FUT1	19q13.33	-0.268819702	0.000274	0.001243
IL2RG	Xq13.1	0.268769485	0.000275	0.001246
ST7L	1p13.2	-0.268740192	0.000275	0.001248
CLINT1	5q33.3	0.268692068	0.000276	0.001251
CMAHP	6p22.3	-0.268683698	0.000276	0.001251
PPM1E	17q22	-0.268635574	0.000277	0.001253
CCNB1	5q13.2	0.268635574	0.000277	0.001253
PLD2	17p13.2	0.268635574	0.000277	0.001253
ZNF426	19p13.2	-0.268610466	0.000277	0.001255
PALB2	16p12.2	0.268574896	0.000278	0.001257
EVX1	7p15.2	0.268567918	0.000278	0.001257
DLGAP5	14q22.3	0.268558157	0.000278	0.001257
DCAF8L1	Xp21.3	-0.268555147	0.000278	0.001257
TPRA1	3q21.3	0.268482832	0.000279	0.001262
CENPBD1	16q24.3	-0.268474463	0.000279	0.001262
KIF21A	12q12	-0.268474463	0.000279	0.001262
ACSL1	4q35.1	-0.268466093	0.000279	0.001262
RIMS2	8q22.3	-0.268448666	0.00028	0.001263

ISL1	5q11.1	-0.268388676	0.000281	0.001267
PRDX3	10q26.11	-0.268388676	0.000281	0.001267
CNTN1	12q12	-0.26837403	0.000281	0.001268
PCDH10	4q28.3	-0.268353106	0.000281	0.001269
PFN1	17p13.2	0.268351014	0.000281	0.001269
LCN6	9q34.3	-0.268336686	0.000281	0.001269
FER1L6	8q24.13	0.268326467	0.000282	0.00127
GLRA2	Xp22.2	-0.26830912	0.000282	0.001271
MGARP	4q31.1	-0.268278138	0.000282	0.001273
DCP1B	12p13.33	-0.268256858	0.000283	0.001273
SLC7A8	14q11.2	-0.268256858	0.000283	0.001273
LRRC37A3	17q24.1	-0.268229657	0.000283	0.001275
BTF3	5q13.2	0.268219195	0.000283	0.001275
SYTL2	11q14.1	0.268212918	0.000283	0.001276
PIMREG	17p13.2	0.268181533	0.000284	0.001277
PPP1R15A	19q13.33	0.268181533	0.000284	0.001277
SURF4	9q34.2	-0.268162702	0.000284	0.001278
ARL6IP6	2q23.3	0.268131316	0.000285	0.00128
RUVBL1	3q21.3	0.268120855	0.000285	0.001281
TRPC1	3q23	-0.268070638	0.000286	0.001284
ZNF438	10p11.23	0.268066453	0.000286	0.001284
PTPRJ	11p11.2	-0.268060176	0.000286	0.001284
GSKIP	14q32.2	0.268058084	0.000286	0.001284
OIT3	10q22.1	-0.268036461	0.000286	0.001285
ABCA12	2q35	0.268031595	0.000286	0.001285
MARCO	2q14.2	0.268026698	0.000286	0.001285
PCGF5	10q23.32	-0.268014144	0.000286	0.001286
H2AFX	11q23.3	0.268005775	0.000287	0.001286
DBNL	7p13	0.267989036	0.000287	0.001287
IRAK1	Xq28	0.267968112	0.000287	0.001288
EPB41L4B	9q31.3	-0.267959743	0.000287	0.001288
EBF3	10q26.3	-0.267957651	0.000287	0.001288
TTLL13P	15q26.1	0.267915804	0.000288	0.001291
GALR1	18q23	-0.267889866	0.000288	0.001292
HEATR5A	14q12	-0.267886511	0.000288	0.001292
RCCD1	15q26.1	0.267794447	0.00029	0.001298
SLC12A5	20q13.12	-0.267791448	0.00029	0.001298
IPO8	12p11.21	-0.267775616	0.00029	0.001299
COMMD5	8q24.3	0.267767246	0.00029	0.0013
CDC14A	1p21.2	-0.267750507	0.000291	0.0013
MPND	19p13.3	0.267683552	0.000292	0.001305
C2ORF69	2q33.1	-0.267654259	0.000292	0.001307
ZNF37BP	10q11.21	-0.267578934	0.000293	0.001311
IWS1	2q14.3	0.267578934	0.000293	0.001311
MTHFR	1p36.22	-0.267553826	0.000294	0.001313
SLC20A1	2q14.1	0.267493148	0.000295	0.001317
MGAT5	2q21.2-q2	-0.267455485	0.000295	0.001319
HMG2	1p36.11	-0.2674513	0.000295	0.001319
VWF	12p13.31	-0.267432469	0.000296	0.00132
ATP1B3	3q23	0.26738016	0.000296	0.001324
ZNF699	19p13.2	-0.267371791	0.000297	0.001324
PDE8A	15q25.3	-0.267359237	0.000297	0.001325
ABCA8	17q24.2	-0.26730902	0.000298	0.001328
SHISAL1	22q13.31	-0.267304835	0.000298	0.001328

ABHD2	15q26.1	0.267260896	0.000298	0.001331
ARL6	3q11.2	-0.267225326	0.000299	0.001333
CDADC1	13q14.2	-0.267214864	0.000299	0.001334
ARHGAP31	3q13.32-c	-0.267206495	0.000299	0.001334
RARA	17q21.2	0.267206495	0.000299	0.001334
BCL2L11	2q13	-0.267185571	0.0003	0.001335
USP47	11p15.3	-0.267141632	0.0003	0.001338
BCS1L	2q35	0.267110246	0.000301	0.00134
SNCG	10q23.2	0.267097692	0.000301	0.00134
FAM135B	8q24.23	-0.267095767	0.000301	0.00134
FAM162A	3q21.1	0.267091415	0.000301	0.00134
TECR	19p13.12	0.267074676	0.000301	0.001341
NUP85	17q25.1	0.267053753	0.000302	0.001342
ARAP3	5q31.3	0.267028644	0.000302	0.001344
TSNAX	1q42.2	-0.266997259	0.000303	0.001346
PCNP	3q12.3	-0.266993074	0.000303	0.001346
ST6GALNAC9	9q34.11	-0.266976335	0.000303	0.001347
QDPR	4p15.32	-0.26690938	0.000304	0.001352
KDM3A	2p11.2	0.266875902	0.000305	0.001354
PTGER4	5p13.1	-0.266834055	0.000305	0.001356
PPARGC1A	4p15.2	-0.266806855	0.000306	0.001358
SRRM5	19q13.31	0.266806855	0.000306	0.001358
PHF20	20q11.22-	-0.266806855	0.000306	0.001358
SRSF8	11q21	-0.26675873	0.000307	0.001361
TRPC4	13q13.3	-0.266744084	0.000307	0.001362
MAP7D1	1p34.3	0.26673153	0.000307	0.001362
GCFC2	2p12	-0.266729437	0.000307	0.001362
SULT1A3	16p11.2	0.266729437	0.000307	0.001362
ZNF136	19p13.2	-0.266704329	0.000308	0.001363
FAM124A	13q14.3	-0.266656205	0.000308	0.001367
SCYL2	12q23.1	-0.266639466	0.000309	0.001367
DNAH10	12q24.31	-0.266631236	0.000309	0.001368
PHB	17q21.33	0.26661645	0.000309	0.001369
LINC00593	15q23	-0.266575978	0.00031	0.001371
CCKAR	4p15.2	-0.266557657	0.00031	0.001372
SLC26A6	3p21.31	0.266497186	0.000311	0.001377
ZBTB2	6q25.1	-0.266467893	0.000312	0.001378
PIPOX	17q11.2	-0.266453246	0.000312	0.001379
MIA3	1q41	-0.266446969	0.000312	0.001379
ITPRIPL1	2q11.2	-0.266426046	0.000312	0.001381
C19ORF12	19q12	-0.266336074	0.000314	0.001387
UBA6	4q13.2	0.266317243	0.000314	0.001388
C3ORF33	3q25.31	-0.266313058	0.000314	0.001388
TNNI1	1q32.1	0.266292135	0.000314	0.001389
PPP1R11	6p22.1	0.266290042	0.000315	0.001389
TNK1	17p13.1	0.266275396	0.000315	0.00139
KIF20A	5q31.2	0.266235641	0.000315	0.001393
IDUA	4p16.3	0.266204256	0.000316	0.001395
TET2	4q24	-0.266202163	0.000316	0.001395
SLC7A4	22q11.21	0.266189609	0.000316	0.001395
P2RX7	12q24.31	-0.26618124	0.000316	0.001396
SLC4A9	5q31.3	0.266171988	0.000317	0.001396
GLIS1	1p32.3	0.266140717	0.000317	0.001398
LINC00636	3q13.12	-0.266140128	0.000317	0.001398

PRKCD	3p21. 1	0. 266124746	0. 000317	0. 001398
CDKL2	4q21. 1	-0. 266120562	0. 000317	0. 001398
CCDC69	5q33. 1	-0. 266118469	0. 000317	0. 001398
GNG10	9q31. 3	-0. 266080807	0. 000318	0. 001401
INTS2	17q23. 2	-0. 266066616	0. 000318	0. 001402
ZNF876P	4p16. 3	-0. 26603059	0. 000319	0. 001404
RIC1	9p24. 1	-0. 266026406	0. 000319	0. 001404
TERF2IP	16q23. 1	-0. 266018036	0. 000319	0. 001405
SMARCA5	4q31. 21	-0. 265848555	0. 000322	0. 001417
IGSF3	1p13. 1	0. 265840186	0. 000322	0. 001417
VDR	12q13. 11	0. 265827632	0. 000322	0. 001418
TMEM126A	11q14. 1	0. 265810893	0. 000323	0. 001419
PURA	5q31. 3	-0. 2657816	0. 000323	0. 001421
LRBA	4q31. 3	-0. 265748122	0. 000324	0. 001423
MYO5C	15q21. 2	0. 26559538	0. 000327	0. 001435
DUOXA2	15q21. 1	0. 265584011	0. 000327	0. 001435
MARK2	11q13. 1	0. 265505409	0. 000328	0. 001441
HIST2H2BE	1q21. 2	0. 26548867	0. 000328	0. 001442
NFATC1	18q23	-0. 265463562	0. 000329	0. 001444
FAM110D	1p36. 11	-0. 265446823	0. 000329	0. 001445
SOX11	2p25. 2	0. 265435454	0. 000329	0. 001445
REEP6	19p13. 3	0. 265434269	0. 000329	0. 001445
BCAN	1q23. 1	0. 265390329	0. 00033	0. 001448
C7	5p13. 1	-0. 26538196	0. 00033	0. 001448
GRIP2	3p25. 1	-0. 265365776	0. 000331	0. 001449
SUMF1	3p26. 1	0. 265333835	0. 000331	0. 001452
MAGED4B	Xp11. 22	-0. 265323374	0. 000331	0. 001452
DNAJC28	21q22. 11	-0. 265321281	0. 000331	0. 001452
SEPTIN5	22q11. 21	-0. 265315004	0. 000332	0. 001452
RANBP6	9p24. 1	-0. 265312912	0. 000332	0. 001452
CDCA2	8p21. 2	0. 265285711	0. 000332	0. 001454
SLC01B3	12p12. 2	0. 265284396	0. 000332	0. 001454
ZNF473	19q13. 33	-0. 265268972	0. 000332	0. 001454
ILDR1	3q13. 33	0. 265243864	0. 000333	0. 001456
FANCD2	3p25. 3	0. 265233402	0. 000333	0. 001456
SEMA6A	5q23. 1	-0. 265233402	0. 000333	0. 001456
ZNF346	5q35. 2	-0. 265181093	0. 000334	0. 00146
E2F7	12q21. 2	0. 265158078	0. 000334	0. 001462
CMTR1	6p21. 2	-0. 265139246	0. 000335	0. 001463
BEX5	Xq22. 1	-0. 26511623	0. 000335	0. 001464
TAPBP	6p21. 32	0. 26511623	0. 000335	0. 001464
KYNU	2q22. 2	0. 265097399	0. 000335	0. 001465
TSPEAR	21q22. 3	-0. 265092338	0. 000336	0. 001465
ICE2	15q22. 2	-0. 26508903	0. 000336	0. 001465
METTL25	12q21. 31	-0. 265078568	0. 000336	0. 001465
GC	4q13. 3	-0. 26507519	0. 000336	0. 001465
VSTM5	11q21	0. 265044181	0. 000336	0. 001468
LIF	22q12. 2	0. 265034629	0. 000337	0. 001468
TMEM88	17p13. 1	-0. 264986504	0. 000337	0. 001472
RMI2	16p13. 13	0. 264980227	0. 000338	0. 001472
GNAI1	7q21. 11	-0. 264904902	0. 000339	0. 001477
FBXL16	16p13. 3	-0. 264892348	0. 000339	0. 001478
BCDIN3D	12q13. 12	-0. 264837947	0. 00034	0. 001482
MTHFD1	14q23. 3	0. 264821208	0. 00034	0. 001483

DAB1	1p32. 2	-0. 264753733	0. 000342	0. 001488
PYG01	15q21. 3	-0. 264752853	0. 000342	0. 001488
JAZF1	7p15. 2-p1	-0. 264750068	0. 000342	0. 001488
NLRC3	16p13. 3	-0. 264714498	0. 000342	0. 00149
SDHAP2	3q29	0. 26468102	0. 000343	0. 001493
FOPNL	16p13. 11	-0. 264630804	0. 000344	0. 001496
SPTA1	1q23. 1	-0. 264576726	0. 000345	0. 0015
LRRN1	3p26. 2	0. 264572218	0. 000345	0. 0015
EPHA5	4q13. 1-q1	-0. 264553345	0. 000345	0. 001502
CHRD2	11q13. 4	-0. 264521292	0. 000346	0. 001504
RAET1L	6q25. 1	0. 264520063	0. 000346	0. 001504
WDSUB1	2q24. 2	-0. 264496893	0. 000346	0. 001505
ZNF292	6q14. 3	-0. 2644676	0. 000347	0. 001507
ATP2B2	3p25. 3	-0. 264445276	0. 000347	0. 001509
ZNF2	2q11. 1	-0. 264385998	0. 000348	0. 001513
PRODH2	19q13. 12	-0. 264371365	0. 000349	0. 001514
ADGRD1	12q24. 33	-0. 264273011	0. 000351	0. 001522
KCNH1	1q32. 2	-0. 264268826	0. 000351	0. 001522
GPX4	19p13. 3	0. 264247902	0. 000351	0. 001523
ZNF626	19p12	-0. 264199778	0. 000352	0. 001527
GCLM	1p22. 1	-0. 264191409	0. 000352	0. 001527
HOXA10	7p15. 2	0. 264185132	0. 000352	0. 001527
SCGB1D2	11q12. 3	-0. 264174874	0. 000352	0. 001528
CLNS1A	11q14. 1	0. 264137008	0. 000353	0. 00153
DOCK11	Xq24	-0. 264122361	0. 000353	0. 001531
ZHX1	8q24. 13	-0. 264113992	0. 000354	0. 001532
THSD7A	7p21. 3	-0. 264093068	0. 000354	0. 001533
KDM6B	17p13. 1	-0. 264074237	0. 000354	0. 001534
ADA2	22q11. 1	-0. 264028205	0. 000355	0. 001538
CAMKMT	2p21	0. 263957065	0. 000357	0. 001543
RNF25	2q35	0. 263931957	0. 000357	0. 001545
GPR34	Xp11. 4	-0. 263890109	0. 000358	0. 001548
CNRIP1	2p14	-0. 26384617	0. 000359	0. 001551
C5ORF46	5q32	0. 263836376	0. 000359	0. 001552
HNRNPL	19q13. 2	0. 263825246	0. 000359	0. 001553
TMEM231	16q23. 1	-0. 263783399	0. 00036	0. 001556
LDOC1	Xq27. 1	-0. 263762476	0. 00036	0. 001557
OR2B6	6p22. 1	0. 26375787	0. 00036	0. 001557
CTR9	11p15. 4	-0. 263749922	0. 000361	0. 001557
COMMD8	4p12	-0. 263735413	0. 000361	0. 001558
AIF1L	9q34. 12-c	-0. 263657858	0. 000362	0. 001564
WASHC2C	10q11. 22	-0. 263636934	0. 000363	0. 001566
CFAP53	18q21. 1	-0. 263622426	0. 000363	0. 001567
GSTO1	10q25. 1	0. 263607641	0. 000363	0. 001568
C2ORF76	2q14. 2	-0. 263542778	0. 000365	0. 001573
STPG4	2p21	0. 263539862	0. 000365	0. 001573
CBX2	17q25. 3	-0. 263454899	0. 000366	0. 00158
ZNF592	15q25. 3	-0. 263423514	0. 000367	0. 001582
SEC16A	9q34. 3	-0. 263390036	0. 000368	0. 001584
ZC3H12B	Xq11. 2-q1	-0. 263371205	0. 000368	0. 001586
GUCY1A2	11q22. 3	-0. 26333145	0. 000369	0. 001589
TCEAL8	Xq22. 1	-0. 263300065	0. 000369	0. 001591
SOX9	17q24. 3	0. 263249848	0. 00037	0. 001595
ADGRG2	Xp22. 13	-0. 263242663	0. 00037	0. 001595

CAMK1D	10p13	-0.263239387	0.000371	0.001595
CNPPD1	2q35	0.263226832	0.000371	0.001596
CETP	16q13	-0.263168246	0.000372	0.0016
ZNF107	7q11.21	-0.263143138	0.000372	0.001602
TNFRSF19	13q12.12	-0.263088737	0.000374	0.001607
SART3	12q23.3	-0.263040613	0.000374	0.00161
TRPC6	11q22.1	-0.263032243	0.000375	0.001611
SPATS2	12q13.12	-0.262942272	0.000376	0.001618
PAEP	9q34.3	0.262888494	0.000378	0.001622
PLXNA4	7q32.3	-0.262820915	0.000379	0.001628
MAP3K7	6q15	-0.262820915	0.000379	0.001628
GJB6	13q12.11	0.262794341	0.000379	0.00163
GDF10	10q11.22	-0.262755334	0.00038	0.001633
ZSWIM5	1p34.1	-0.262741406	0.000381	0.001633
DNAH9	17p12	-0.262703881	0.000381	0.001636
MGAT4C	12q21.31-	-0.262686045	0.000382	0.001638
KRT6B	12q13.13	0.262661474	0.000382	0.001639
CYSLTR1	Xq21.1	-0.262634695	0.000383	0.001641
VAPB	20q13.32	-0.262607495	0.000383	0.001643
AQP6	12q13.12	0.262604494	0.000383	0.001643
GAL3ST1	22q12.2	0.262580294	0.000384	0.001645
CAP1	1p34.2	0.262557278	0.000384	0.001647
CUL4A	13q34	0.262540539	0.000385	0.001648
XCR1	3p21.31	-0.262503966	0.000385	0.001651
TSR3	16p13.3	0.262471492	0.000386	0.001653
USP12	13q12.13	-0.262396167	0.000388	0.001659
AAMDC	11q14.1	0.262379428	0.000388	0.001661
FYB2	1p32.2	-0.262354995	0.000388	0.001662
RYBP	3p13	-0.262314565	0.000389	0.001666
SLC30A5	5q13.1-q1	-0.262276902	0.00039	0.001668
MYH6	14q11.2	-0.262274831	0.00039	0.001668
TMEM87A	15q15.1	0.262268533	0.00039	0.001669
TLL1	4q32.3	-0.262224594	0.000391	0.001672
KCNK12	2p16.3	-0.26222106	0.000391	0.001672
COL6A4P1	3p25.1	0.262191193	0.000392	0.001674
RPTN	1q21.3	0.262172549	0.000392	0.001676
TRMT9B	8p22	-0.262149269	0.000393	0.001677
USP44	12q22	-0.262124709	0.000393	0.001679
PAK5	20p12.2	-0.262123876	0.000393	0.001679
FBXW7	4q31.3	-0.262027912	0.000395	0.001687
KIAA1841	2p15	0.262021635	0.000395	0.001687
RTL10	22q11.21	-0.261998619	0.000396	0.001689
GPN1	2p23.3	0.261975603	0.000396	0.001691
TMEM132B	12q24.31-	-0.261965141	0.000397	0.001691
DDX3X	Xp11.4	-0.261940033	0.000397	0.001693
COL15A1	9q22.33	-0.261896094	0.000398	0.001697
SAE1	19q13.32	0.261895184	0.000398	0.001697
HPN	19q13.11	-0.261883539	0.000398	0.001697
FLT1	13q12.3	-0.261854246	0.000399	0.0017
RETN	19p13.2	0.26180696	0.0004	0.001703
S100Z	5q13.3	-0.261802774	0.0004	0.001703
GBP2	1p22.2	0.261799845	0.0004	0.001703
SERPINB4	18q21.33	0.261798345	0.0004	0.001703
LOC441666	10q11.21	-0.261791613	0.0004	0.001703

NAP1L4	11p15. 4	0. 261785199	0. 0004	0. 001704
WNT8B	10q24. 31	-0. 261755091	0. 000401	0. 001706
DBIL5P	17p13. 3	-0. 261726613	0. 000402	0. 001708
PROK2	3p13	-0. 261651382	0. 000403	0. 001715
RPN1	3q21. 3	0. 261649195	0. 000403	0. 001715
C22ORF31	22q12. 1	-0. 261641338	0. 000403	0. 001715
COL14A1	8q24. 12	-0. 261640826	0. 000403	0. 001715
ADCY2	5p15. 31	-0. 26154667	0. 000405	0. 001723
SPRY3	Xq28 and	-0. 261515285	0. 000406	0. 001725
LRRFIP2	3p22. 2	0. 261479715	0. 000407	0. 001728
SEC24D	4q26	-0. 261469253	0. 000407	0. 001729
SCN1B	19q13. 11	-0. 261425313	0. 000408	0. 001732
MSI2	17q22	-0. 261421129	0. 000408	0. 001732
PLPP4	10q26. 12	0. 261379281	0. 000409	0. 001736
LRFN1	19q13. 2	-0. 261345804	0. 00041	0. 001739
CTNNB1	20q11. 23	0. 26132488	0. 00041	0. 00174
ZKSCAN3	6p22. 1	-0. 26132488	0. 00041	0. 00174
DCST1	1q21. 3	0. 261316843	0. 00041	0. 00174
RNF227	17p13. 1	-0. 261314418	0. 00041	0. 00174
PRAC2	17q21. 32	0. 261237902	0. 000412	0. 001747
LOXHD1	18q21. 1	-0. 261202806	0. 000413	0. 00175
MROH7	1p32. 3	0. 261188877	0. 000413	0. 001751
CHST9	18q11. 2	-0. 261168593	0. 000414	0. 001752
RBP7	1p36. 22	-0. 261159584	0. 000414	0. 001753
RAB6B	3q22. 1	-0. 261142845	0. 000414	0. 001754
NXF2	Xq22. 1	-0. 261102645	0. 000415	0. 001757
TP63	3q28	0. 261088444	0. 000415	0. 001758
HDAC1	1p35. 2-p5	0. 261073797	0. 000416	0. 001759
SNORA31	13q14. 13	0. 261071498	0. 000416	0. 001759
RTP2	3q27. 3	0. 261060469	0. 000416	0. 001759
SEPTIN7P2	7p12. 3	-0. 261057059	0. 000416	0. 001759
SON	21q22. 11	-0. 261054966	0. 000416	0. 001759
KCNJ6	21q22. 13	-0. 261031498	0. 000417	0. 001761
RAET1E	6q25. 1	0. 261014848	0. 000417	0. 001762
PAQR6	1q22	0. 260985918	0. 000418	0. 001765
PECR	2q35	0. 260946164	0. 000419	0. 001768
GAS7	17p13. 1	-0. 260941979	0. 000419	0. 001768
GFM2	5q13. 3	-0. 260912686	0. 000419	0. 00177
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EME1	17q21. 33	0. 260852008	0. 000421	0. 001775
GALNT6	12q13. 13	0. 26077459	0. 000422	0. 001782
GIN1	5q21. 1	-0. 260768313	0. 000423	0. 001782
RALBP1	18p11. 22	0. 260749482	0. 000423	0. 001784
ANGPTL4	19p13. 2	0. 260726466	0. 000423	0. 001786
IL15RA	10p15. 1	0. 260695081	0. 000424	0. 001788
ATG4A	Xq22. 3	-0. 260687894	0. 000424	0. 001788
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FAM136A	2p13. 3	0. 26067625	0. 000425	0. 001789
COL4A3BP	5q13. 3	-0. 26066788	0. 000425	0. 001789
PSMD5	9q33. 2	-0. 260663696	0. 000425	0. 001789
SPTAN1	9q34. 11	0. 260607202	0. 000426	0. 001794
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CYP7B1	8q12. 3	-0. 260567447	0. 000427	0. 001797

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PRKG2	4q21. 21	-0. 260515138	0. 000428	0. 001801
FAM173A	16p13. 3	0. 26048166	0. 000429	0. 001804
LOC646214	15q11. 2	-0. 260473291	0. 000429	0. 001804
SYN3	22q12. 3	-0. 260449535	0. 00043	0. 001806
PACRG	6q26	-0. 26041052	0. 000431	0. 001809
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DLGAP1	18p11. 31	-0. 260350793	0. 000432	0. 001814
NOXO1	16p13. 3	0. 260218024	0. 000435	0. 001827
MEDAG	13q12. 3	-0. 26012596	0. 000437	0. 001835
SLC66A1L	3q25. 32	0. 260099388	0. 000438	0. 001837
GRIK5	19q13. 2	-0. 260050635	0. 000439	0. 001842
NFKB2	10q24. 32	0. 260006696	0. 00044	0. 001845
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DPP4	2q24. 2	-0. 25997531	0. 000441	0. 001848
RPS3A	4q31. 3	-0. 259964848	0. 000441	0. 001848
ANKRD12	18p11. 22	-0. 259870692	0. 000443	0. 001857
DENND4C	9p22. 1	-0. 259856046	0. 000443	0. 001858
PHF3	6q12	-0. 259841399	0. 000444	0. 001859
DHCR24	1p32. 3	0. 259795368	0. 000445	0. 001863
SNX15	11q13. 1	0. 259778629	0. 000445	0. 001865
RC3H2	9q33. 2	-0. 259774444	0. 000445	0. 001865
TLCD4	1p21. 3	-0. 259738874	0. 000446	0. 001868
SLAIN1	13q22. 3	-0. 259722135	0. 000447	0. 001869
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P2RY13	3q25. 1	-0. 259650995	0. 000448	0. 001874
GNPTAB	12q23. 2	-0. 259650995	0. 000448	0. 001874
ANKEF1	20p12. 2	-0. 259648903	0. 000448	0. 001874
LAMTOR5	1p13. 3	0. 25964681	0. 000448	0. 001874
ADAMTS1	21q21. 3	-0. 259640533	0. 000448	0. 001875
PCDHA5	5q31. 3	-0. 259568948	0. 00045	0. 001881
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AFF3	2q11. 2	-0. 259519176	0. 000451	0. 001886
PRB2	12p13. 2	0. 259443408	0. 000453	0. 001893
LLGL2	17q25. 1	0. 25938945	0. 000454	0. 001898
CYB5D2	17p13. 2	-0. 259383173	0. 000455	0. 001898
LOXL1	15q24. 1	0. 259374804	0. 000455	0. 001898
SLC9A9	3q24	-0. 259324587	0. 000456	0. 001903
UNC80	2q34	-0. 259290335	0. 000457	0. 001906
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DESI1	22q13. 2	0. 259238801	0. 000458	0. 00191
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GNB2	7q22. 1	0. 258968887	0. 000465	0. 001933
FABP6	5q33. 3	0. 2589605	0. 000465	0. 001934

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SRPRA	11q24.2	-0.258910301	0.000466	0.001938
CDON	11q24.2	-0.258895654	0.000466	0.001939
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NFXL1	4p12	-0.2588831	0.000467	0.001939
SARM1	17q11.2	-0.258870546	0.000467	0.001939
VPS13D	1p36.22-f	-0.258866361	0.000467	0.001939
ZNF222	19q13.31	-0.258866361	0.000467	0.001939
FNIP2	4q32.1	-0.258816145	0.000468	0.001944
PPT1	1p34.2	-0.258801498	0.000469	0.001945
SF3A2	19p13.3	0.258774297	0.000469	0.001947
PTTG1	5q33.3	0.258738727	0.00047	0.001951
MRPL21	11q13.3	0.258717804	0.000471	0.001952
LAT2	7q11.23	-0.258684326	0.000472	0.001955
DLX4	17q21.33	0.258667894	0.000472	0.001956
H3F3B	17q25.1	0.258667587	0.000472	0.001956
TEDC1	14q32.33	0.258663403	0.000472	0.001956
THOC3	5q35.2	0.258655033	0.000472	0.001957
RTL8A	Xq26.3	0.258652941	0.000472	0.001957
LRRC8D	1p22.2	-0.258640387	0.000473	0.001957
ERICH3	1p31.1	-0.258598521	0.000474	0.001961
GPC3	Xq26.2	-0.258537861	0.000475	0.001967
TUBAL3	10p15.1	0.258485174	0.000476	0.001972
HABP4	9q22.32	-0.258445798	0.000477	0.001976
PARN	16p13.12	0.258429059	0.000478	0.001977
INA	10q24.33	-0.258416505	0.000478	0.001978
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JAM2	21q21.3	-0.25836838	0.000479	0.001982
BHLHA15	7q21.3	-0.258361362	0.00048	0.001982
MAPT	17q21.31	-0.258360011	0.00048	0.001982
LRRC31	3q26.2	0.258344262	0.00048	0.001983
SNX2	5q23.2	-0.258328626	0.00048	0.001984
RGS20	8q11.23	0.258298128	0.000481	0.001987
RAB27B	18q21.2	0.258253301	0.000482	0.001991
CRBN	3p26.2	-0.258219958	0.000483	0.001994
MESTIT1	7q32.2	-0.258194846	0.000484	0.001997
KIRREL1	1q23.1	-0.258175883	0.000484	0.001998
CBX3	7p15.2	0.25815496	0.000485	0.002
KIAA1549	7q34	-0.258081862	0.000487	0.002007
EIF5	14q32.32	-0.257993848	0.000489	0.002016
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SELENON	1p36.11	-0.25793317	0.00049	0.002021
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SAP30BP	17q25.1	0.257876677	0.000492	0.002026
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PPP1R9A	7q21.3	-0.257830645	0.000493	0.00203
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ASCL1	12q23. 2	-0. 25771241	0. 000496	0. 00204
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UCP2	11q13. 4	-0. 25760467	0. 000499	0. 00205
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VEZT	12q22	0. 257579562	0. 0005	0. 002052
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PTPRN2	7q36. 3	-0. 257548177	0. 0005	0. 002055
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THEM6	8q24. 3	0. 257422635	0. 000504	0. 002067
GATA4	8p23. 1	0. 257416493	0. 000504	0. 002067
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POLE4	2p12	0. 257376603	0. 000505	0. 002071
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CNTN5	11q22. 1	-0. 257253612	0. 000508	0. 002083
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LILRA1	19q13. 42	-0. 257178368	0. 00051	0. 00209
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TKTL2	4q32. 2	0. 257116155	0. 000512	0. 002096
SYT15	10q11. 22	-0. 257112966	0. 000512	0. 002096
NKX3-2	4p15. 33	0. 257073212	0. 000513	0. 0021
PALMD	1p21. 2	-0. 257064842	0. 000513	0. 002101
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TRABD2A	2p11. 2	0. 257025087	0. 000514	0. 002104
LTK	15q15. 1	0. 256964409	0. 000516	0. 00211
MPP7	10p12. 1	-0. 256933024	0. 000517	0. 002113
NT5E	6q14. 3	0. 256874438	0. 000518	0. 002119
IGSF10	3q25. 1	-0. 256859791	0. 000519	0. 002121
FAM241A	4q25	-0. 256830498	0. 00052	0. 002123
TIGD1	2q37. 1	0. 256801205	0. 00052	0. 002126
GPR132	14q32. 33	0. 256753081	0. 000522	0. 002131
STYXL1	7q11. 23	0. 256748896	0. 000522	0. 002131
BOC	3q13. 2	-0. 256723788	0. 000522	0. 002134
YIPF1	1p32. 3	0. 256631724	0. 000525	0. 002143
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HECTD3	1p34. 1	0. 25654803	0. 000527	0. 002152
CTNND2	5p15. 2	-0. 256470613	0. 000529	0. 00216
DBI	2q14. 2	0. 256453874	0. 00053	0. 002161
ODAPH	4q21. 1	0. 256432355	0. 00053	0. 002163
NCAPG	4p15. 31	0. 256399473	0. 000531	0. 002167
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KAT6A	8p11. 21	-0. 256330425	0. 000533	0. 002173
MEF2C	5q14. 3	-0. 25632624	0. 000533	0. 002173
EEPD1	7p14. 2	0. 256319963	0. 000534	0. 002173
GTPBP2	6p21. 1	0. 25629904	0. 000534	0. 002175
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DNMBP	10q24. 2	0. 25618396	0. 000537	0. 002186

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VEZF1	17q22	-0.256158852	0.000538	0.002188
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MTX2	2q31.1	0.25610445	0.00054	0.002193
RNF14	5q31.3	-0.256100266	0.00054	0.002193
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SMPD1	11p15.4	-0.256066788	0.000541	0.002196
AGBL2	11p11.2	0.256064696	0.000541	0.002196
EMSY	11q13.5	-0.256018664	0.000542	0.002201
TTC30A	2q31.2	-0.256014479	0.000542	0.002201
TATDN2	3p25.3	-0.255945431	0.000544	0.002208
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ODC1	2p25.1	-0.255840814	0.000547	0.002219
LHX1	17q12	0.255839234	0.000547	0.002219
SESN2	1p35.3	-0.255796874	0.000548	0.002223
PRNP	20p13	-0.255790597	0.000548	0.002224
ZNF543	19q13.43	-0.255756207	0.000549	0.002227
MAPK9	5q35.3	-0.255742473	0.00055	0.002228
HK1	10q22.1	0.255688071	0.000551	0.002234
PLEKHB1	11q13.4	-0.25566924	0.000552	0.002236
MREG	2q35	0.255625301	0.000553	0.00224
DPP10	2q14.1	-0.255622945	0.000553	0.00224
TENT4A	5p15.31	-0.25560647	0.000554	0.002242
MYL10	7q22.1	0.255524949	0.000556	0.002251
OMP	11q13.5	0.255519906	0.000556	0.002251
MX2	21q22.3	0.255512314	0.000556	0.002251
STAG1	3q22.3	-0.255508129	0.000556	0.002251
NEK2	1q32.3	0.255441173	0.000558	0.002259
GIMAP1	7q36.1	-0.25531354	0.000562	0.002273
NUDT16P1	3q22.1	0.25530517	0.000562	0.002274
SOX2-OT	3q26.33	-0.25528144	0.000563	0.002276
SLC18B1	6q23.2	-0.255272872	0.000563	0.002276
HS6ST3	13q32.1	-0.255268843	0.000563	0.002276
ZP3	7q11.23	0.255267508	0.000563	0.002276
ZMAT3	3q26.32	-0.25523403	0.000564	0.00228
GAB2	11q14.1	-0.255225661	0.000565	0.00228
PCYT1B	Xp22.11	-0.255225661	0.000565	0.00228
TINAG	6p12.1	0.25515948	0.000567	0.002287
FERMT2	14q22.1	-0.255125228	0.000568	0.002291
PRR18	6q27	-0.255117314	0.000568	0.002291
PRPF4B	6p25.2	-0.255051995	0.00057	0.002299
SQSTM1	5q35.3	0.255022702	0.000571	0.002302
AMER3	2q21.1	-0.255019711	0.000571	0.002302
CYTH1	17q25.3	0.255003871	0.000571	0.002303
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CPVL	7p14.3	-0.254876237	0.000575	0.002317
TMEM243	7q21.12	0.25483439	0.000576	0.002321
DNAJC5	20q13.33	-0.254807189	0.000577	0.002324
ZMIZ1-AS1	10q22.3	0.254708849	0.00058	0.002336
ZNF791	19p13.13	-0.254698387	0.00058	0.002336
LOC401463	8q12.3	-0.254677969	0.000581	0.002338
RALGAPA2	20p11.23	-0.254637708	0.000582	0.002343

NFKBIE	6p21.1	0.254631431	0.000582	0.002343
UCHL1	4p13	-0.254627247	0.000582	0.002343
HIST2H4A	1q21.2	0.254560291	0.000584	0.002351
ATP6V1B1	2p13.3	0.254539368	0.000585	0.002353
RGS4	1q23.3	-0.254533091	0.000585	0.002353
MCF2L2	3q27.1	-0.254528906	0.000585	0.002353
C21ORF91	21q21.1	-0.254522629	0.000586	0.002353
MPEG1	11q12.1	-0.254512167	0.000586	0.002354
RPL3	22q13.1	-0.25450589	0.000586	0.002354
LOC10012817	17p13.1	-0.254455673	0.000588	0.00236
INPP5B	1p34.3	-0.254420103	0.000589	0.002364
LCE3D	1q21.3	0.254416202	0.000589	0.002364
UTP23	8q24.11	-0.254376164	0.00059	0.002368
PPT2	6p21.32	-0.25436361	0.00059	0.002369
SYBU	8q23.2	-0.254357333	0.000591	0.00237
SLC25A1	22q11.21	0.254338501	0.000591	0.002372
MMP13	11q22.2	0.254333398	0.000591	0.002372
RUVBL2	19q13.33	0.254323855	0.000592	0.002372
ZNF462	9q31.2	-0.254307116	0.000592	0.002374
SC02	22q13.33	0.254200406	0.000595	0.002387
ZNF205	16p13.3	0.254162743	0.000597	0.002391
NOTCH4	6p21.32	-0.254156466	0.000597	0.002391
CTBP1-DT	4p16.3	-0.254154374	0.000597	0.002391
PROZ	13q34	-0.254136651	0.000597	0.002392
ZNF704	8q21.13	-0.254122989	0.000598	0.002394
INSL5	1p31.3	-0.254119859	0.000598	0.002394
GLRB	4q32.1	-0.254104158	0.000598	0.002395
CRSP8P	5q14.1	-0.254093696	0.000599	0.002396
SPTBN5	15q15.1	0.254058126	0.0006	0.0024
PPIAL4G	1q21.2	0.254053941	0.0006	0.0024
NDUFB4	3q13.33	0.254016279	0.000601	0.002404
COASY	17q21.2	0.253986986	0.000602	0.002407
LOC220729	3q29	0.253943046	0.000603	0.002412
TRIM34	11p15.4	0.253922122	0.000604	0.002414
SHC4	15q21.1	-0.253917938	0.000604	0.002414
LARGE1	22q12.3	-0.253850069	0.000606	0.002422
N4BP3	5q35.3	0.25381332	0.000607	0.002426
ZNRD1ASP	6p22.1	-0.253804951	0.000608	0.002427
MIER3	5q11.2	-0.253786119	0.000608	0.002429
C4ORF33	4q28.2	0.25377775	0.000608	0.002429
DDX41	5q35.3	0.253740087	0.00061	0.002434
LINC00847	5q35.3	-0.253708702	0.000611	0.002437
CCNY	10p11.21	-0.253683594	0.000611	0.00244
IL1RAP	3q28	0.253645931	0.000613	0.002443
CAPZA1	1p13.2	0.253645931	0.000613	0.002443
DLL3	19q13.2	-0.253560744	0.000615	0.002454
CRACR2A	12p13.32	-0.253541314	0.000616	0.002456
LRRK2	12q12	-0.253524575	0.000616	0.002457
RNF130	5q35.3	-0.253478543	0.000618	0.002463
LRRC37B	17q11.2	-0.253472266	0.000618	0.002463
RGS17	6q25.2	-0.253447158	0.000619	0.002466
DDX25	11q24.2	-0.25341805	0.00062	0.002469
PPARD	6p21.31	0.253407403	0.00062	0.00247
CAPN10	2q37.3	0.253367648	0.000621	0.002474

PCMTD2	20q13.33	-0.253363463	0.000622	0.002474
UQCRC1	3p21.31	0.253329986	0.000623	0.002478
WHAMMP2	15q13.1	-0.253325801	0.000623	0.002478
CBARP	19p13.3	-0.253158412	0.000628	0.002499
RPP38	10p13	0.253116565	0.000629	0.002504
NCR1	19q13.42	-0.253090897	0.00063	0.002507
CBLL1	7q22.3	-0.253024501	0.000632	0.002515
TNIP3	4q27	-0.253007164	0.000633	0.002516
GADD45G	9q22.2	-0.253003578	0.000633	0.002516
GLYATL3	6p12.3	-0.252968716	0.000634	0.00252
MYOC	1q24.3	-0.252894602	0.000637	0.002529
TLX1	10q24.31	0.252823654	0.000639	0.002538
APOH	17q24.2	-0.25280022	0.00064	0.002541
GPR6	6q21	-0.25279232	0.00064	0.002541
SYT3	19q13.33	-0.252759951	0.000641	0.002545
COL19A1	6q13	-0.252719743	0.000642	0.00255
NDST4	4q26	-0.252715404	0.000643	0.00255
SLK	10q24.33-	0.252691817	0.000643	0.002552
SLC22A13	3p22.2	0.252689158	0.000643	0.002552
STK25	2q37.3	0.252683447	0.000644	0.002552
NPB	17q25.3	0.252637211	0.000645	0.002558
TENM2	5q34	-0.252564183	0.000648	0.002567
ENTPD8	9q34.3	0.252555814	0.000648	0.002568
CLASP1	2q14.2-q1	-0.252503505	0.00065	0.002574
TMEM25	11q23.3	-0.252478396	0.00065	0.002576
PSAPL1	4p16.1	0.252478023	0.00065	0.002576
NEFM	8p21.2	-0.252474212	0.000651	0.002576
GGACT	13q32.3	0.252451196	0.000651	0.002579
CIDEC	3p25.3	0.252411989	0.000653	0.002583
JAKMIP3	10q26.3	-0.252363317	0.000654	0.002589
TAL2	9q31.2	-0.252323264	0.000656	0.002594
TRIM67	1q42.2	-0.252315193	0.000656	0.002595
SLC37A1	21q22.3	0.252302638	0.000656	0.002596
SYNGAP1	6p21.32	-0.252298454	0.000656	0.002596
BZW2	7p21.1	0.252195928	0.00066	0.002609
LINC00638	14q32.33	-0.252185466	0.00066	0.00261
C10ORF108	10q22.1	-0.252175005	0.000661	0.00261
XPOT	12q14.2	-0.252172912	0.000661	0.00261
RASIP1	19q13.33	-0.25217082	0.000661	0.00261
CAMK2D	4q26	-0.252168728	0.000661	0.00261
GRN	17q21.31	0.252149896	0.000661	0.002612
STAB2	12q23.3	-0.252099561	0.000663	0.002618
KAT14	20p11.23	-0.252043186	0.000665	0.002625
LINC00552	13q34	-0.251961047	0.000668	0.002636
ZSCAN31	6p22.1 6p	-0.251959492	0.000668	0.002636
NT5DC3	12q23.3	-0.251944845	0.000668	0.002637
NDFIP2	13q31.1	0.251926014	0.000669	0.002639
PDGFRA	4q12	-0.251919737	0.000669	0.002639
PRMT8	12p13.32	-0.251870335	0.000671	0.002645
TANC1	2q24.2	0.251861151	0.000671	0.002646
C17ORF82	17q23.2	0.251827674	0.000672	0.00265
USP31	16p12.2	-0.251798381	0.000673	0.002654
MTMR9	8p23.1	-0.251783734	0.000674	0.002655
KLK6	19q13.41	0.251733942	0.000676	0.002661

LINC00339	1p36. 12	-0.25170004	0.000677	0.002665
RPGRIP1L	16q12. 2	-0.251693763	0.000677	0.002665
RPS6KA3	Xp22. 12	-0.251693763	0.000677	0.002665
NUP205	7q33	-0.2516561	0.000678	0.00267
ZNF573	19q13. 12	-0.251622623	0.000679	0.002674
RNF215	22q12. 2	0.251607976	0.00068	0.002675
FBXW9	19p13. 13	0.251580775	0.000681	0.002679
LAMTOR1	11q13. 4	0.251576591	0.000681	0.002679
GAR1	4q25	0.251568221	0.000681	0.002679
ZNF669	1q44	-0.251503358	0.000684	0.002688
IFITM4P	6p22. 1	0.25146283	0.000685	0.002693
NIT2	3q12. 2	0.251432218	0.000686	0.002696
TUBA1A	12q13. 12	-0.251392463	0.000687	0.002701
ZC3H3	8q24. 3	0.251386186	0.000688	0.002702
MEP1B	18q12. 1	-0.251379759	0.000688	0.002702
PKN1	19p13. 12	0.251342247	0.000689	0.002706
MIER2	19p13. 3	0.251340154	0.000689	0.002706
LYSMD4	15q26. 3	0.251310861	0.00069	0.00271
FBXO27	19q13. 2	-0.251271107	0.000692	0.002715
PCDHGA5	5q31. 3	-0.25125646	0.000692	0.002716
NETO2	16q12. 1	-0.251252275	0.000692	0.002716
AK2	1p35. 1	0.251195782	0.000694	0.002723
MRPS22	3q23	0.251193689	0.000694	0.002723
MLH1	3p22. 2	-0.251183228	0.000695	0.002724
PCDHB6	5q31. 3	-0.251172766	0.000695	0.002725
DACH1	13q21. 33	-0.251130919	0.000697	0.00273
IFITM3	11p15. 5	0.251103718	0.000698	0.002734
CSTF1	20q13. 2-c	-0.251095349	0.000698	0.002734
SLC7A14	3q26. 2	-0.251075503	0.000699	0.002737
ADRM1	20q13. 33	0.250997008	0.000701	0.002747
CDK5RAP3	17q21. 32	0.250986546	0.000702	0.002748
TAFA4	3p14. 1	-0.250980285	0.000702	0.002748
NOP16	5q35. 2	0.250965623	0.000703	0.002749
PDF	16q22. 1	0.250965623	0.000703	0.002749
MSL3	Xp22. 2	-0.250923775	0.000704	0.002754
VSIG10L	19q13. 41	0.250923775	0.000704	0.002754
EFTUD2	17q21. 31	0.250907037	0.000705	0.002756
KCNQ4	1p34. 2	0.250875013	0.000706	0.00276
TEP1	14q11. 2	0.250858912	0.000706	0.002761
CASTOR3	7q22. 1	-0.250854728	0.000707	0.002761
GNAT2	1p13. 3	-0.250854494	0.000707	0.002761
TMEM237	2q33. 1	-0.250764756	0.00071	0.002773
SATB1	3p24. 3	-0.250758479	0.00071	0.002773
TLE2	19p13. 3	-0.250727094	0.000711	0.002777
KLHL24	3q27. 1	-0.250718724	0.000711	0.002778
MLYCD	16q23. 3	-0.250668508	0.000713	0.002784
TMEM236	10p12. 33	-0.250667593	0.000713	0.002784
PLPP1	5q11. 2	-0.250609922	0.000715	0.002791
NEDD1	12q23. 1	-0.25060783	0.000715	0.002791
KLRC4	12p13. 2	-0.250602118	0.000716	0.002792
USP8	15q21. 2	-0.250595275	0.000716	0.002792
B4GALNT3	12p13. 33	0.250591091	0.000716	0.002792
PCYOX1	2p13. 3	-0.250547151	0.000718	0.002798
SLC01C1	12p12. 2	-0.250535659	0.000718	0.002799

LAMB2	3p21. 31	0. 250526228	0. 000718	0. 0028
DIPK2B	Xp11. 3	-0. 250444626	0. 000721	0. 002811
PTCH1	9q22. 32	-0. 25041324	0. 000723	0. 002815
RBM12	20q11. 22	-0. 250360932	0. 000725	0. 002822
SLC16A2	Xq13. 2	-0. 25030653	0. 000727	0. 002829
PRRG4	11p13	0. 250260498	0. 000728	0. 002835
PARP10	8q24. 3	0. 250252129	0. 000729	0. 002836
GINS2	16q24. 1	0. 25024376	0. 000729	0. 002836
RBSN	3p25. 1	-0. 250220744	0. 00073	0. 002839
CDC45	22q11. 21	0. 250195635	0. 000731	0. 002842
FBX08	4q34. 1	-0. 250120311	0. 000733	0. 002852
MBNL1	3q25. 1-q2	-0. 250111941	0. 000734	0. 002853
FSIP1	15q14	-0. 250047209	0. 000736	0. 002861
ZNF436	1p36. 12	-0. 250047078	0. 000736	0. 002861
ADAMTS3	4q13. 3	-0. 249992677	0. 000738	0. 002869
ZNF678	1q42. 13	-0. 249962468	0. 000739	0. 002873
PECAM1	17q23. 3	-0. 249957107	0. 00074	0. 002873
HTATSF1	Xq26. 3	-0. 249931998	0. 00074	0. 002876
CITED4	1p34. 2 1r	0. 249919444	0. 000741	0. 002877
FEM1A	19p13. 3	-0. 24990689	0. 000741	0. 002878
TCF4	18q21. 2	-0. 249892244	0. 000742	0. 00288
NDUFAF4	6q16. 1	-0. 249862951	0. 000743	0. 002883
FARP2	2q37. 3	0. 249860858	0. 000743	0. 002883
STAB1	3p21. 1	-0. 249860858	0. 000743	0. 002883
HIRIP3	16p11. 2	-0. 24980018	0. 000745	0. 002891
RAB27A	15q21. 3	-0. 249798088	0. 000745	0. 002891
LGALS1	22q13. 1	0. 249787626	0. 000746	0. 002892
DENND6B	22q13. 33	0. 249779256	0. 000746	0. 002893
IL1RAPL1	Xp21. 3-p2	-0. 249765414	0. 000747	0. 002894
CRB1	1q31. 3	-0. 249676029	0. 00075	0. 002907
HGF	7q21. 11	-0. 249659992	0. 000751	0. 002908
PAFAH1B3	19q13. 2	0. 2496579	0. 000751	0. 002908
LINC00592	12q13. 13	0. 24964661	0. 000751	0. 002909
FGL2	7q11. 23	-0. 249632791	0. 000752	0. 002911
KRTAP5-9	11q13. 4	0. 249625975	0. 000752	0. 002911
PCDH15	10q21. 1	-0. 249588796	0. 000753	0. 002916
PYM1	12q13. 2	0. 249565836	0. 000754	0. 002919
TRPM7	15q21. 2	-0. 24955119	0. 000755	0. 002921
C3ORF36	3q22. 1	-0. 249511435	0. 000756	0. 002925
ZNF81	Xp11. 23	-0. 249511435	0. 000756	0. 002925
DHX32	10q26. 2	0. 24939217	0. 000761	0. 002942
PRSS55	8p23. 1	0. 24931418	0. 000764	0. 002953
SEL1L	14q31. 1	-0. 249251983	0. 000766	0. 002962
BDH2	4q24	0. 249239686	0. 000767	0. 002963
GLYAT	11q12. 1	-0. 249228511	0. 000767	0. 002965
MTERF4	2q37. 3	-0. 249170381	0. 00077	0. 002973
ST8SIA2	15q26. 1	0. 249156248	0. 00077	0. 002974
PKNOX1	21q22. 3	-0. 249132718	0. 000771	0. 002977
TBC1D12	10q23. 33	-0. 249124349	0. 000771	0. 002978
FAM66C	12p13. 31	-0. 24910761	0. 000772	0. 00298
CLEC3B	3p21. 31	-0. 249105518	0. 000772	0. 00298
GSTO2	10q25. 1	0. 24907204	0. 000773	0. 002984
TMEM173	5q31. 2	0. 249019731	0. 000775	0. 002991
CHD3	17p13. 1	-0. 249015546	0. 000776	0. 002991

NDUFAF7	2p22. 2	0. 248936037	0. 000779	0. 003001
SYDE2	1p22. 3	-0. 248936037	0. 000779	0. 003001
ZNF382	19q13. 12	-0. 248936037	0. 000779	0. 003001
ZNF280D	15q21. 3	-0. 248931852	0. 000779	0. 003001
ZFYVE26	14q24. 1	-0. 248931852	0. 000779	0. 003001
DCAF16	4p15. 31	-0. 248887912	0. 000781	0. 003007
POLR1D	13q12. 2	0. 248839788	0. 000782	0. 003014
HOXA11	7p15. 2	0. 248828994	0. 000783	0. 003015
RBP5	12p13. 31	-0. 248825142	0. 000783	0. 003015
LOC154449	6q27	-0. 248815743	0. 000783	0. 003016
CEP41	7q32. 2	-0. 248791664	0. 000784	0. 003019
ABCA6	17q24. 2-c	-0. 248789572	0. 000784	0. 003019
IGFBPL1	9p13. 1	-0. 248743196	0. 000786	0. 003025
SLC35A1	6q15	0. 248701693	0. 000788	0. 003031
UBP1	3p22. 3	-0. 248678677	0. 000789	0. 003034
TRMT10A	4q23	-0. 248643107	0. 00079	0. 003039
MRPL23	11p15. 5	0. 248607537	0. 000792	0. 003043
VIT	2p22. 2	-0. 248606855	0. 000792	0. 003043
SSBP1	7q34	0. 248571967	0. 000793	0. 003048
POLQ	3q13. 33	0. 248551043	0. 000794	0. 003051
ERBB3	12q13. 2	0. 248488272	0. 000796	0. 00306
CCNK	14q32. 2	0. 248484088	0. 000797	0. 00306
PCDHGA3	5q31. 3	-0. 24844237	0. 000798	0. 003065
PRSS36	16p11. 2	0. 248385747	0. 000801	0. 003074
ANGPTL1	1q25. 2	-0. 248348084	0. 000802	0. 003079
CDKN2D	19p13. 2	0. 248281129	0. 000805	0. 003088
OAT	10q26. 13	-0. 248279037	0. 000805	0. 003088
ATXN10	22q13. 31	-0. 24827276	0. 000805	0. 003089
HAUS3	4p16. 3	-0. 248266483	0. 000805	0. 003089
RPS6KA2	6q27	-0. 248220451	0. 000807	0. 003095
BRAF	7q34	-0. 248218358	0. 000807	0. 003095
TROAP	12q13. 12	0. 248153495	0. 00081	0. 003105
LDLRAD4	18p11. 21	-0. 248140941	0. 000811	0. 003106
SRCAP	16p11. 2	0. 248115833	0. 000812	0. 00311
CFAP61	20p11. 23	-0. 2480756	0. 000813	0. 003115
SAMD13	1p31. 1	0. 248073986	0. 000813	0. 003115
EPHB1	3q22. 2	-0. 248048877	0. 000814	0. 003118
GCHFR	15q15. 1	0. 2480426	0. 000815	0. 003119
CBR4	4q32. 3	-0. 248017492	0. 000816	0. 003122
KATNAL1	13q12. 3	-0. 2480154	0. 000816	0. 003122
RRM2	2p25. 1	0. 247994476	0. 000817	0. 003125
DSCAML1	11q23. 3	-0. 247975775	0. 000817	0. 003127
CISH	3p21. 2	-0. 247965183	0. 000818	0. 003128
RNF128	Xq22. 3	0. 247963091	0. 000818	0. 003128
SNRPD2	19q13. 32	0. 247937983	0. 000819	0. 003131
PLXNB3	Xq28	0. 247927521	0. 000819	0. 003132
POU3F2	6q16. 1	-0. 247884755	0. 000821	0. 003138
SNORA81	3q27. 3	0. 247806782	0. 000824	0. 00315
ZNF70	22q11. 23	-0. 24771423	0. 000828	0. 003164
VPS28	8q24. 3	0. 247695269	0. 000829	0. 003166
CLDN1	3q28	0. 247693177	0. 000829	0. 003166
RAB11FIP1	8p11. 23	0. 247670161	0. 00083	0. 003169
ZNF311	6p22. 1	0. 247622037	0. 000832	0. 003176
SENP7	3q12. 3	-0. 247619944	0. 000832	0. 003176

LOC1001283q26. 2	-0. 247594867	0. 000833	0. 003179
CCDC30 1p34. 2	-0. 247573912	0. 000834	0. 003182
EFCAB7 1p31. 3	-0. 24753625	0. 000836	0. 003188
CHRAC1 8q24. 3	0. 247452556	0. 000839	0. 0032
P2RY8 Xp22. 33 ε	-0. 247379323	0. 000842	0. 003211
PNPLA8 7q31. 1	-0. 247303998	0. 000845	0. 003223
SPATA13 13q12. 12	-0. 247283075	0. 000846	0. 003226
CPT1C 19q13. 33	-0. 247268428	0. 000847	0. 003228
SUPT20H 13q13. 3	0. 247247505	0. 000848	0. 00323
ENKD1 16q22. 1	0. 247237043	0. 000848	0. 003231
CST2 20p11. 21	0. 247209972	0. 000849	0. 003234
KCNJ11 11p15. 1	-0. 247209842	0. 000849	0. 003234
UCN 2p23. 3	0. 247208151	0. 000849	0. 003234
MAFB 20q12	-0. 247184734	0. 00085	0. 003237
ZNF665 19q13. 42	-0. 247179633	0. 000851	0. 003238
C10ORF88 10q26. 13	-0. 247174272	0. 000851	0. 003238
UBE2Z 17q21. 32	0. 247153349	0. 000852	0. 003241
IMP4 2q21. 1	0. 247132425	0. 000853	0. 003243
GAN 16q23. 2	0. 247086393	0. 000855	0. 00325
PATJ 1p31. 3	0. 247086393	0. 000855	0. 00325
EPCAM 2p21	0. 247067562	0. 000855	0. 003252
REG4 1p12	0. 247039445	0. 000857	0. 003256
MTMR4 17q22	-0. 247017346	0. 000858	0. 003259
BMP1 8p21. 3	0. 246996422	0. 000858	0. 003262
RBM8A 1q21. 1	0. 246975499	0. 000859	0. 003265
ETFA 15q24. 2-c	0. 24695876	0. 00086	0. 003267
ACSM5 16p12. 3	-0. 246943313	0. 000861	0. 003269
RELB 19q13. 32	0. 246904358	0. 000862	0. 003274
COLGALT1 19p13. 11	0. 24688762	0. 000863	0. 003277
SERF2 15q15. 3	0. 246877158	0. 000864	0. 003278
GFOD2 16q22. 1	-0. 246856234	0. 000864	0. 00328
DERA 12p12. 3	0. 246852049	0. 000865	0. 003281
CEP72 5p15. 33	0. 246826941	0. 000866	0. 003284
ZSWIM2 2q32. 1	-0. 246825984	0. 000866	0. 003284
HYAL1 3p21. 31	0. 246816479	0. 000866	0. 003285
ZNF324 19q13. 43	-0. 246797648	0. 000867	0. 003287
RAB28 4p15. 33	-0. 246793463	0. 000867	0. 003287
LDLRAP1 1p36. 11	-0. 246787186	0. 000867	0. 003287
JAKMIP1 4p16. 1	-0. 246761277	0. 000869	0. 003291
ZNF524 19q13. 42	0. 246741155	0. 000869	0. 003294
PIP4P2 8q21. 3	-0. 246718139	0. 00087	0. 003297
SNX18 5q11. 2	-0. 246713954	0. 000871	0. 003297
RHOT1 17q11. 2	-0. 246699307	0. 000871	0. 003299
PRRX2 9q34. 11	0. 246684661	0. 000872	0. 003301
ARRB2 17p13. 2	-0. 24665746	0. 000873	0. 003304
GCSAML 1q44	-0. 246604607	0. 000875	0. 003313
PAX8-AS1 2q14. 1	0. 246600967	0. 000876	0. 003313
CCDC74A 2q21. 1	0. 246596782	0. 000876	0. 003313
SULT1B1 4q13. 3	0. 246558331	0. 000877	0. 003318
FREM1 9p22. 3	-0. 246554935	0. 000878	0. 003318
PRMT7 16q22. 1	0. 246546565	0. 000878	0. 003319
CCDC66 3p14. 3	-0. 246542381	0. 000878	0. 003319
LRFN5 14q21. 1	-0. 246527734	0. 000879	0. 003321
FEZF1 7q31. 32	0. 246521691	0. 000879	0. 003321

ANXA8L1	10q11.22	0.246492005	0.00088	0.003326
DOCK8	9p24.3	-0.246487979	0.000881	0.003326
NUTM1	15q14	0.246477709	0.000881	0.003327
ARHGAP1	11p11.2	0.246467056	0.000881	0.003328
SCAMP3	1q22	0.246421024	0.000883	0.003335
NHSL1	6q24.1	-0.24640847	0.000884	0.003336
RHOH	4p14	-0.246370807	0.000886	0.003342
TPM3	1q21.3	0.246345699	0.000887	0.003346
SOWAHA	5q31.1	-0.246322683	0.000888	0.003349
SAMD5	6q24.3	-0.246308037	0.000888	0.003351
IGF2BP3	7p15.3	0.246285021	0.00089	0.003354
MDH1B	2q33.3	-0.246213881	0.000893	0.003365
CHST6	16q23.1	0.246160654	0.000895	0.003373
WDR62	19q13.12	0.246107171	0.000897	0.003382
JAG1	20p12.2	0.246082062	0.000899	0.003385
ST3GAL2	16q22.1	-0.246065323	0.000899	0.003388
CPNE7	16q24.3	0.246038123	0.000901	0.003392
ETFDH	4q32.1	-0.246015107	0.000902	0.003395
PENK	8q12.1	-0.245973774	0.000903	0.003401
FAM98B	15q14	-0.245966983	0.000904	0.003402
ZNF354A	5q35.3	-0.245962798	0.000904	0.003402
ZDHHC13	11p15.1	0.245941874	0.000905	0.003405
EIF3A	10q26.11	-0.245912581	0.000906	0.003409
TMEM184A	7p22.3	0.245891658	0.000907	0.003412
SPRYD3	12q13.13	-0.245874919	0.000908	0.003414
FUT4	11q21	0.245860272	0.000909	0.003416
SLC25A26	3p14.1	0.245849811	0.000909	0.003417
RNF183	9q32	0.245816333	0.000911	0.003422
GPATCH11	2p22.2	-0.245805871	0.000911	0.003423
KYAT3	1p22.2	0.245801686	0.000911	0.003423
IL1R1	2q11.2-q1	-0.245694976	0.000916	0.003441
CLIP1	12q24.31	-0.245661499	0.000918	0.003446
PNCK	Xq28	0.245617836	0.00092	0.003453
PIP5KL1	9q34.11	0.245566425	0.000922	0.003461
CENPC	4q13.2	-0.245489925	0.000925	0.003474
BABAM1	19p13.11	0.245464817	0.000927	0.003477
PLEKHA5	12p12.3	0.245460632	0.000927	0.003477
RUSC1-AS1	11q22	0.245454355	0.000927	0.003478
HLA-J	6p22.1	0.245393677	0.00093	0.003488
NBN	8q21.3	-0.245383215	0.00093	0.003489
SMARCA4	19p13.2	0.245345553	0.000932	0.003495
FCN3	1p36.11	-0.245339276	0.000932	0.003495
GPR19	12p13.1	-0.245328814	0.000933	0.003496
GPR162	12p13.31	-0.245263951	0.000936	0.003507
HTR2A	13q14.2	-0.24523959	0.000937	0.003511
DNAAF1	16q24.1	-0.245215213	0.000938	0.003514
SH3GL3	15q25.2	-0.245185981	0.00094	0.003519
GAB3	Xq28	-0.245182349	0.00094	0.003519
PAPOLB	7p22.1	-0.245176329	0.00094	0.003519
NUBPL	14q12	-0.245146779	0.000941	0.003524
PRELID1	5q35.3	0.245113301	0.000943	0.003529
SECISBP2	9q22.2	-0.24509447	0.000944	0.003531
RPL6	12q24.13	-0.245079823	0.000945	0.003533
CC2D1B	1p32.3	0.245069362	0.000945	0.003534

PGAP3	17q12	0.245054715	0.000946	0.003536
LDHB	12p12.1	-0.245035884	0.000947	0.003539
TTPAL	20q13.12	-0.245025422	0.000947	0.003539
AK3	9p24.1	-0.24502333	0.000947	0.003539
DRAP1	11q13.1	0.24502333	0.000947	0.003539
NCKAP5	2q21.2	-0.244977298	0.000949	0.003547
ABCA7	19p13.3	0.244941728	0.000951	0.003552
ZNF189	9q31.1	-0.244878957	0.000954	0.003563
GABARAPL3	15q26.1	-0.244875754	0.000954	0.003563
SEC16B	1q25.2	0.244807817	0.000957	0.003574
RAC2	22q13.1	0.244753416	0.00096	0.003583
ZMYND12	1p34.2	-0.244749231	0.00096	0.003583
SLC25A45	11q13.1	-0.244701107	0.000962	0.003591
PDXK	21q22.3	0.244699015	0.000963	0.003591
ZNF827	4q31.21-c	-0.24469483	0.000963	0.003591
NDUFS8	11q13.2	0.244583935	0.000968	0.00361
ZNF548	19q13.43	-0.244569288	0.000969	0.003612
KIAA0408	6q22.33	-0.244529409	0.000971	0.003618
LHFPL6	13q13.3-c	-0.244498148	0.000972	0.003623
QKI	6q26	-0.244470948	0.000974	0.003627
C2ORF66	2q33.1	-0.244452419	0.000974	0.00363
PURB	7p13	-0.24443747	0.000975	0.003632
WHAMMP3	15q11.2	-0.244422823	0.000976	0.003634
DEGS2	14q32.2	0.244412362	0.000976	0.003635
GARNL3	9q33.3	-0.244360053	0.000979	0.003644
FSHB	11p14.1	-0.244354971	0.000979	0.003644
ETV4	17q21.31	0.24429519	0.000982	0.003654
TRIM61	4q32.3	-0.244289376	0.000982	0.003655
IFNA21	9p21.3	-0.244280883	0.000983	0.003656
MYO15B	17q25.1	0.24425962	0.000984	0.003659
EZH1P	Xp11.22	-0.244196438	0.000987	0.00367
RBL2	16q12.2	-0.244142448	0.000989	0.003679
TAZ	Xq28	0.244136171	0.00099	0.003679
MFAP3	5q33.2	-0.24410897	0.000991	0.003683
TXNL4A	18q23	-0.244050384	0.000994	0.003693
POM121	7q11.23	-0.244044107	0.000994	0.003694
DCTPP1	16p11.2	0.24402946	0.000995	0.003695
EHD3	2p23.1	-0.24402946	0.000995	0.003695
FAM74A3	9q21.11	-0.244024709	0.000995	0.003695
ZBTB5	9p13.2	-0.243979244	0.000997	0.003703
IMPG2	3q12.3	-0.243978157	0.000998	0.003703
FYCO1	3p21.31	-0.24396669	0.000998	0.003704
SEMA3F	3p21.31	0.243945766	0.000999	0.003707
ACVRL1	12q13.13	-0.243929027	0.001	0.003709
FILIP1L	3q12.1	-0.243906011	0.001001	0.003713
SNRPD1	18q11.2	0.243903919	0.001001	0.003713
ATP8B4	15q21.2	-0.243853702	0.001004	0.003721
KLF11	2p25.1	-0.243784655	0.001007	0.003733
FBXL18	7p22.1	-0.243734438	0.00101	0.003742
PRSS35	6q14.2	-0.243686441	0.001012	0.00375
SELPLG	12q24.11	0.243669575	0.001013	0.003752
TPRXL	3p25.1	0.2436659	0.001013	0.003752
SETD1B	12q24.31	-0.243617266	0.001016	0.00376
CCNE1	19q12	0.243615174	0.001016	0.00376

TGM2	20q11.23	0.243610989	0.001016	0.003761
BUD23	7q11.23	0.243544034	0.001019	0.003772
DAG1	3p21.31	0.243537757	0.001019	0.003773
MIPEP	13q12.12	0.243533572	0.00102	0.003773
TESMIN	11q13.3	0.243527295	0.00102	0.003773
NME2P1	12q24.23	0.243514741	0.001021	0.003775
TRIP11	14q32.12	-0.243490806	0.001022	0.003779
HEPACAM2	7q21.2	-0.243474167	0.001023	0.003781
VPS13B	8q22.2	-0.243464524	0.001023	0.003782
DDX20	1p13.2	-0.243439543	0.001024	0.003786
NFIC	19p13.3	-0.243439416	0.001024	0.003786
KEAP1	19p13.2	0.243424769	0.001025	0.003787
CERS1	19p13.11	-0.243422677	0.001025	0.003787
AKAP11	13q14.11	-0.243418492	0.001026	0.003787
PDE6C	10q23.33	-0.243413688	0.001026	0.003788
CALCR	7q21.3	-0.243395557	0.001027	0.00379
ECI2	6p25.2	-0.243370368	0.001028	0.003794
ZNF513	2p23.3	0.243368276	0.001028	0.003794
NR1D2	3p24.2	-0.24333689	0.00103	0.003799
BMT2	7q31.1	-0.243313874	0.001031	0.003802
NSMAF	8q12.1	-0.24330969	0.001031	0.003802
PAX9	14q13.3	0.24330887	0.001031	0.003802
RECQL4	8q24.3	0.243267843	0.001033	0.003809
CCDC112	5q22.3	-0.243263658	0.001033	0.003809
SIGIRR	11p15.5	0.243219718	0.001036	0.003817
MRPL9	1q21.3	0.243200887	0.001037	0.00382
TBC1D10B	16p11.2	0.243196702	0.001037	0.00382
HLA-F	6p22.1	0.243175779	0.001038	0.003823
TFF3	21q22.3	0.243163225	0.001039	0.003824
SPIN1	9q22.1	-0.243161132	0.001039	0.003824
SCARA5	8p21.1	-0.243147799	0.001039	0.003826
TKTL1	Xq28	-0.243122235	0.001041	0.00383
NECAP2	1p36.13	0.243069069	0.001043	0.00384
NUDT13	10q22.2	0.243033499	0.001045	0.003846
OTULIN	5p15.2	-0.243029314	0.001045	0.003846
LCN1	9q34.3	0.24296873	0.001049	0.003857
KBTBD8	3p14.1	-0.242964451	0.001049	0.003857
SLC25A11	17p13.2	-0.242939343	0.00105	0.003861
SNORA12	10q24.31	-0.24292877	0.001051	0.003861
MAP6D1	3q27.1	-0.242927962	0.001051	0.003861
CEP350	1q25.2	-0.242926788	0.001051	0.003861
CISD1	10q21.1	-0.242884941	0.001053	0.003868
FANCD2OS	3p25.3	0.242863019	0.001054	0.003872
ZNF232	17p13.2	-0.242807524	0.001057	0.003882
ADORA2A	22q11.23	-0.24279413	0.001058	0.003883
ZSWIM7	17p12	-0.242778231	0.001058	0.003886
PIP4K2B	17q12	-0.242763585	0.001059	0.003888
BTBD1	15q25.2	-0.242728015	0.001061	0.003894
RPL39L	3q27.3	0.242725922	0.001061	0.003894
TXLNB	6q24.1	-0.242702906	0.001062	0.003897
NRROS	3q29	-0.242698722	0.001063	0.003897
MBD5	2q23.1	-0.24268826	0.001063	0.003899
TMEM232	5q22.1	-0.24268119	0.001063	0.003899
ZMIZ2	7p13	0.242575273	0.001069	0.003919

XPNPEP2	Xq26. 1	-0.242510981	0.001072	0.003931
GLIPR1L2	12q21. 2	-0.242506225	0.001073	0.003931
KCNH2	7q36. 1	-0.242493671	0.001073	0.003933
LNPEP	5q15	-0.242481116	0.001074	0.003934
THEMIS	6q22. 33	-0.242403699	0.001078	0.003949
WDR81	17p13. 3	-0.242397422	0.001078	0.003949
EVA1B	1p34. 3	0.242391145	0.001079	0.00395
ADTRP	6p24. 1	0.242340929	0.001081	0.003958
RNF103	2p11. 2	0.242340929	0.001081	0.003958
ST3GAL3	1p34. 1	-0.242322097	0.001082	0.003961
ZNF860	3p23-p22.	0.242276066	0.001085	0.003969
C10ORF53	10q11. 23	-0.242252112	0.001086	0.003973
RAMP2	17q21. 2	-0.242232126	0.001087	0.003976
NUSAP1	15q15. 1	0.242219572	0.001088	0.003978
C7ORF26	7p22. 1	-0.242167263	0.001091	0.003987
TREM1	6p21. 1	0.242146466	0.001092	0.003991
TMEM43	3p25. 1	0.242142155	0.001092	0.003991
FMR1	Xq27. 3	-0.242125416	0.001093	0.003993
IPP	1p34. 1	-0.242117046	0.001093	0.003994
TAF1L	9p21. 1	-0.242117046	0.001093	0.003994
FAM217B	20q13. 33	-0.242108677	0.001094	0.003994
RADIL	7p22. 1	-0.242083569	0.001095	0.003999
P4HA1	10q22. 1	0.242077292	0.001095	0.003999
HIKESHI	11q14. 2	0.242054276	0.001097	0.004003
SLFN11	17q12	-0.242029167	0.001098	0.004007
IFNA1	9p21. 3	0.241999205	0.0011	0.004012
COMMD7	20q11. 21	0.241985228	0.0011	0.004014
SGPP1	14q23. 2	-0.241978951	0.001101	0.004015
CHD8	14q11. 2	-0.241968489	0.001101	0.004016
KLHL38	8q24. 13	-0.241946764	0.001103	0.00402
NUMB	14q24. 2-c	0.241939196	0.001103	0.00402
SLC45A4	8q24. 3	0.241897349	0.001105	0.004028
IL18RAP	2q12. 1	-0.241876425	0.001106	0.004031
GMCL1	2p13. 3	-0.241874333	0.001106	0.004031
DCBLD2	3q12. 1 3	0.241861779	0.001107	0.004033
DAZAP1	19p13. 3	0.241857594	0.001107	0.004033
ZNF252P	8q24. 3	-0.241840855	0.001108	0.004036
PPME1	11q13. 4	0.241836671	0.001108	0.004036
SMARCAL1	2q35	0.241794824	0.001111	0.004043
ZNF365	10q21. 2	0.241765531	0.001112	0.004048
SNED1	2q37. 3	-0.241763438	0.001112	0.004048
LOC143666	11p15. 5	0.241723683	0.001115	0.004054
PTGS2	1q31. 1	0.241723683	0.001115	0.004054
MYH7	14q11. 2	-0.241720684	0.001115	0.004054
TNNI3	19q13. 42	0.241717692	0.001115	0.004054
OR2C1	16p13. 3	-0.241707291	0.001116	0.004055
ZNF165	6p22. 1	0.241686021	0.001117	0.004059
WDR63	1p22. 3	-0.241677936	0.001117	0.00406
CYSLTR2	13q14. 2	-0.241644174	0.001119	0.004066
LCP1	13q14. 13	-0.241581403	0.001122	0.004078
TNFSF13	17p13. 1	0.241539556	0.001125	0.004085
TPD52L2	20q13. 33	0.241529094	0.001125	0.004086
KIAA1143	3p21. 31	-0.241522817	0.001126	0.004087
WDR92	2p14	-0.241485281	0.001128	0.004094

CCDC33	15q24.1	0.241468438	0.001129	0.004096
CTIF	18q21.1	-0.241426569	0.001131	0.004104
PCBP1	2p13.3	0.241424476	0.001131	0.004104
FAAH	1p33	0.24140146	0.001132	0.004108
KCNAB1	3q25.31	-0.241386814	0.001133	0.004111
SPEN	1p36.21-f	-0.24137426	0.001134	0.004112
C14ORF18C	14q32.33	-0.241339158	0.001136	0.004118
ALG1L2	3q22.1	0.241322076	0.001137	0.00412
IBTK	6q14.1	-0.241319859	0.001137	0.00412
ZNF674-AS1	Xp11.3	-0.241311489	0.001137	0.004121
HMGCS1	5p12	0.241271734	0.00114	0.004129
PTBP1	19p13.3	0.241263365	0.00114	0.004129
AP3B2	15q25.2	-0.241205951	0.001143	0.00414
TMEM9B	11p15.4	0.241202687	0.001143	0.00414
FMNL3	12q13.12	-0.24118804	0.001144	0.004142
RELCH	18q21.33	-0.241171301	0.001145	0.004145
ZFP92	Xq28	-0.241169079	0.001145	0.004145
RAB5C	17q21.2	0.241137824	0.001147	0.00415
HAUS1	18q21.1	-0.241110623	0.001149	0.004155
FOXO3B	17p11.2	-0.241104346	0.001149	0.004156
CENPS	1p36.22	-0.241098069	0.001149	0.004156
LY6E-DT	8q24.3	0.241021953	0.001154	0.004171
WNT4	1p36.12	-0.240993451	0.001155	0.004176
CLN3	16p12.1	0.240955789	0.001157	0.004183
SOD3	4p15.2	-0.24090348	0.00116	0.004193
RFX2	19p13.3	-0.240805139	0.001166	0.004212
XAB2	19p13.2	0.240773753	0.001168	0.004218
CLRN2	4p15.32	-0.240742507	0.001169	0.004224
ARSJ	4q26	-0.240731906	0.00117	0.004225
ZNF778	16q24.3	-0.240706798	0.001171	0.00423
ABHD6	3p14.3	-0.240635658	0.001176	0.004243
BCHE	3q26.1	-0.240629381	0.001176	0.004244
ZNF616	19q13.41	-0.240587534	0.001178	0.004252
AEN	15q26.1	-0.24053941	0.001181	0.004261
GPR137C	14q22.1	-0.240526855	0.001182	0.004263
NALCN	13q32.3-c	-0.240522671	0.001182	0.004263
TPI1P2	7q32.1	-0.240499655	0.001183	0.004267
PPP2R2B	5q32	-0.240482916	0.001184	0.00427
CLTRN	Xp22.2	-0.240451656	0.001186	0.004276
APEX2	Xp11.21	0.240445253	0.001187	0.004276
IGSF8	1q23.2	0.240399222	0.001189	0.004285
LINC00341	14q32.13	-0.240384575	0.00119	0.004287
TIMM17B	Xp11.23	0.24038039	0.00119	0.004287
CREBBP	16p13.3	-0.24035319	0.001192	0.004292
AMZ2P1	17q24.1	-0.24034482	0.001192	0.004293
PSMD7	16q23.1	0.240307158	0.001195	0.0043
FANCI	15q26.1	0.240271588	0.001197	0.004307
PCDHGA6	5q31.3	-0.240250664	0.001198	0.004311
GALNT3	2q24.3	0.240204632	0.001201	0.00432
SMIM19	8p11.21	0.240181617	0.001202	0.004324
THOC7	3p14.1	0.240129308	0.001205	0.004334
ZNF213	16p13.3	0.240091645	0.001207	0.004341
ITGA8	10p13	-0.240083778	0.001208	0.004342
RBL1	20q11.23	-0.240043521	0.00121	0.00435

CEP76	18p11. 21	-0. 240018413	0. 001211	0. 004354
HAUS8	19p13. 11	0. 240012136	0. 001212	0. 004355
BUB1B	15q15. 1	0. 239995397	0. 001213	0. 004357
TMED2	12q24. 31	-0. 23998912	0. 001213	0. 004358
ABAT	16p13. 2	-0. 239966104	0. 001215	0. 004362
RNF167	17p13. 2	-0. 239947273	0. 001216	0. 004365
YIF1A	11q13. 2	0. 239905425	0. 001218	0. 004373
KCNMB2	3q26. 32	-0. 239894964	0. 001219	0. 004375
PCDHB4	5q31. 3	-0. 239863578	0. 001221	0. 004381
PLEKHG5	1p36. 31	0. 239855209	0. 001221	0. 004382
HPD	12q24. 31	-0. 23983658	0. 001222	0. 004385
GPR174	Xq21. 1	-0. 239822479	0. 001223	0. 004387
ZNF417	19q13. 43	-0. 239817547	0. 001223	0. 004387
XPR1	1q25. 3	-0. 239804992	0. 001224	0. 004389
POLR2M	15q21. 3	-0. 23976733	0. 001226	0. 004397
SLC25A2	5q31. 3	0. 239742247	0. 001228	0. 004401
AFF2	Xq28	-0. 239721298	0. 001229	0. 004405
MRPS30	5p12	0. 239719206	0. 001229	0. 004405
TUBA3FP	22q11. 21	-0. 239715523	0. 001229	0. 004405
WNK4	17q21. 2	-0. 239679451	0. 001232	0. 004411
SLC35A3	1p21. 2	0. 239666897	0. 001232	0. 004413
DNALI1	1p34. 3	-0. 239639696	0. 001234	0. 004418
FASLG	1q24. 3	-0. 239633419	0. 001234	0. 004419
GFI1	1p22. 1	-0. 239614588	0. 001235	0. 004422
MYO1E	15q22. 2	0. 239593664	0. 001237	0. 004426
FBXO34	14q22. 3	0. 239532986	0. 00124	0. 004438
WASHC4	12q23. 3	-0. 239505785	0. 001242	0. 004443
ATP2A3	17p13. 2	-0. 239472308	0. 001244	0. 00445
TFAP2E	1p34. 3	0. 239466156	0. 001244	0. 00445
LEPR	1p31. 3	-0. 239440922	0. 001246	0. 004455
ROR1	1p31. 3	-0. 239415814	0. 001247	0. 00446
TMEM165	4q12	0. 239392798	0. 001249	0. 004462
PACS1	11q13. 1-c	0. 239390706	0. 001249	0. 004462
CR1L	1q32. 2	-0. 239390428	0. 001249	0. 004462
AFMID	17q25. 3	0. 239386521	0. 001249	0. 004462
SMC2	9q31. 1	-0. 239386521	0. 001249	0. 004462
PLEKHJ1	19p13. 3	0. 239382336	0. 001249	0. 004462
USP34	2p15	-0. 239302827	0. 001254	0. 004478
NOB1	16q22. 1	0. 239292365	0. 001255	0. 00448
ACTL10	20q11. 22	0. 239273534	0. 001256	0. 004483
RBPM5	8p12	0. 239242148	0. 001258	0. 004489
CCDC186	10q25. 3	-0. 239221225	0. 001259	0. 004493
SRP72	4q12	-0. 239212855	0. 00126	0. 004494
CPSF3	2p25. 1	0. 239135438	0. 001265	0. 00451
PPIL6	6q21	-0. 239123009	0. 001265	0. 004512
KCNH7	2q24. 2	-0. 239095743	0. 001267	0. 004517
TERF1	8q21. 11	-0. 239078945	0. 001268	0. 00452
AKR1C2	10p15. 1	0. 239062206	0. 001269	0. 004523
TAB2	6q25. 1	-0. 238809031	0. 001285	0. 004578
SIAH3	13q14. 13	-0. 23879324	0. 001286	0. 004581
UQCC3	11q12. 3	0. 23873789	0. 001289	0. 004592
PPIAL4C	1q21. 2	0. 238721152	0. 00129	0. 004595
DDX31	9q34. 13	-0. 238679305	0. 001293	0. 004603
PLK3	1p34. 1	0. 238662566	0. 001294	0. 004606

EPPIN	20q13.12	0.238616378	0.001297	0.004616
TMEM158	3p21.31	0.238608164	0.001297	0.004617
KDELR2	7p22.1	0.238541209	0.001301	0.004631
GDE1	16p12.3	0.238486808	0.001305	0.004642
TIMM8B	11q23.1	0.23840939	0.00131	0.004659
VAV3	1p13.3	-0.23837382	0.001312	0.004666
RBBP9	20p11.23	-0.238369636	0.001312	0.004666
SLC16A8	22q13.1	0.238340343	0.001314	0.004672
MRPL17	11p15.4	0.238308957	0.001316	0.004678
RAB3B	1p32.3	-0.238298496	0.001317	0.00468
ZNF41	Xp11.3	-0.238254556	0.00132	0.004689
BEX1	Xq22.1 Xc	-0.238229448	0.001321	0.004694
WDR5	9q34.2	-0.23819597	0.001323	0.004701
TDG	12q23.3	-0.238189693	0.001324	0.004701
PDS5B	13q13.1	-0.2381604	0.001326	0.004707
FCMR	1q32.1	-0.238076706	0.001331	0.004725
RERE	1p36.23	-0.238064152	0.001332	0.004727
MELK	9p13.2	0.238032766	0.001334	0.004734
NUP210	3p25.1	-0.238020212	0.001335	0.004736
MICU1	10q22.1	0.238003473	0.001336	0.004739
NKX2-2	20p11.22	-0.237998415	0.001336	0.004739
KDM6A	Xp11.3	-0.237944887	0.00134	0.00475
ARG1	6q23.2	-0.237944243	0.00134	0.00475
MFAP2	1p36.13	0.237936518	0.00134	0.004751
MBNL1-AS1	13q25.1	-0.237896763	0.001343	0.004759
USH2A	1q41	-0.237852948	0.001345	0.004768
HTR3C	3q27.1	0.237806599	0.001348	0.004778
EID2	19q13.2	-0.237781684	0.00135	0.004783
NAP1L6	Xq13.2	-0.237712631	0.001355	0.004798
CDKL5	Xp22.13	-0.237667101	0.001358	0.004808
PHLPP1	18q21.33	-0.237643588	0.001359	0.004812
KLHDC3	6p21.1	-0.237639403	0.001359	0.004812
SEC14L5	16p13.3	-0.237616387	0.001361	0.004817
TBC1D2B	15q24.3-c	-0.23761011	0.001361	0.004817
GTF2H3	12q24.31	-0.237578725	0.001363	0.004824
COX5B	2q11.2	0.237566171	0.001364	0.004826
SLC18A2	10q25.3	-0.237561986	0.001364	0.004826
SNRPN	15q11.2	-0.237551524	0.001365	0.004828
C20RF27A	2q21.2	0.237534785	0.001366	0.00483
PRR34	22q13.31	-0.237534785	0.001366	0.00483
LYST	1q42.3	-0.237524324	0.001367	0.00483
XPO5	6p21.1	-0.237524324	0.001367	0.00483
SLC22A14	3p22.2	0.23752079	0.001367	0.00483
GAB1	4q31.21	-0.237520139	0.001367	0.00483
EOMES	3p24.1	-0.237470118	0.001371	0.00484
WRAP73	1p36.32	0.237469922	0.001371	0.00484
ERC2	3p14.3	-0.237415645	0.001374	0.004851
EMC1	1p36.13	-0.237413429	0.001374	0.004851
HIC2	22q11.21	-0.237405184	0.001375	0.004852
SELP	1q24.2	-0.23739669	0.001375	0.004853
MAN2A1	5q21.3	-0.237350658	0.001378	0.004863
OGN	9q22.31	-0.237338228	0.001379	0.004865
LOC90784	2p11.2	-0.237321365	0.00138	0.004868
HYDIN	16q22.2	-0.237300441	0.001382	0.004872

PPP1CC	12q24. 11	-0. 237298349	0. 001382	0. 004872
ST8SIA6	10p12. 33	-0. 23727136	0. 001384	0. 004878
MYCBP	1p34. 3	0. 237243948	0. 001386	0. 004883
ZNF71	19q13. 43	-0. 237193731	0. 001389	0. 004893
KIF22	16p11. 2	0. 237193731	0. 001389	0. 004893
TBC1D32	6q22. 31	-0. 23718327	0. 00139	0. 004895
BCL3	19q13. 32	0. 237156069	0. 001391	0. 0049
ZDHHC24	11q13. 2	0. 237143515	0. 001392	0. 004903
E2F1	20q11. 22	0. 237133053	0. 001393	0. 004904
TRAF3IP2	6q21	-0. 237130961	0. 001393	0. 004904
KNSTRN	15q15. 1	0. 237126776	0. 001393	0. 004904
DHRS11	17q12	0. 237118406	0. 001394	0. 004905
AURKB	17p13. 1	0. 237066098	0. 001397	0. 004916
ALMS1	2p13. 1	-0. 237051451	0. 001398	0. 004919
COL6A4P2	3q22. 1	0. 23704567	0. 001399	0. 00492
MAGED2	Xp11. 21	-0. 23702425	0. 0014	0. 004924
MEX3C	18q21. 2	-0. 237013789	0. 001401	0. 004925
PDPR	16q22. 1	-0. 237013789	0. 001401	0. 004925
MIIP	1p36. 22	0. 236980311	0. 001403	0. 004932
PLD5	1q43	-0. 236872234	0. 001411	0. 004956
KCTD20	6p21. 31	-0. 236848492	0. 001412	0. 004961
SLA2	20q11. 23	-0. 236842215	0. 001413	0. 004962
KLHL14	18q12. 1	-0. 23682604	0. 001414	0. 004965
TRAIP	3p21. 31	0. 236823384	0. 001414	0. 004965
METAP1	4q23	0. 236771075	0. 001417	0. 004976
POM121C	7q11. 23	-0. 236750152	0. 001419	0. 00498
DAB2	5p13. 1	-0. 236708305	0. 001422	0. 004989
FAM111B	11q12. 1	0. 236643442	0. 001426	0. 005004
GPI	19q13. 11	0. 236586948	0. 00143	0. 005017
LIN37	19q13. 12	0. 236580671	0. 00143	0. 005017
JPT2	16p13. 3	0. 23655347	0. 001432	0. 005023
DSG2	18q12. 1	0. 236540916	0. 001433	0. 005025
SMCHD1	18p11. 32	-0. 236496977	0. 001436	0. 005035
PDE5A	4q26	-0. 236494884	0. 001436	0. 005035
LTBR	12p13. 31	0. 236459314	0. 001439	0. 005042
ANKS3	16p13. 3	0. 236404913	0. 001443	0. 005055
HIST1H2AC	6p22. 1	0. 236391341	0. 001443	0. 005057
FAM183A	1p34. 2	-0. 236382695	0. 001444	0. 005058
ADGRL2	1p31. 1	-0. 236350512	0. 001446	0. 005065
SSRP1	11q12. 1	0. 236300295	0. 00145	0. 005076
IFI44L	1p31. 1	0. 236289833	0. 00145	0. 005078
PART1	5q12. 1	-0. 236272998	0. 001452	0. 005081
DSEL	18q22. 1	-0. 23626891	0. 001452	0. 005081
LIMA1	12q13. 12	0. 236208231	0. 001456	0. 005095
MPHOSPH8	13q12. 11	-0. 236160107	0. 00146	0. 005106
ZNF862	7q36. 1	-0. 236124537	0. 001462	0. 005114
SNRPD3	22q11. 23	0. 236111983	0. 001463	0. 005116
OAS3	12q24. 13	0. 236091059	0. 001464	0. 005119
HPS1	10q24. 2	0. 236091059	0. 001464	0. 005119
SLC6A13	12p13. 33	-0. 236088999	0. 001465	0. 005119
GNA14	9q21. 2	-0. 236078505	0. 001465	0. 005121
SENP8	15q23	-0. 236053397	0. 001467	0. 005126
LRRN3	7q31. 1	-0. 236007365	0. 00147	0. 005136
BAG3	10q26. 11	0. 235990626	0. 001471	0. 00514

CRTC3	15q26.1	-0.235959241	0.001474	0.005146
CENPX	17q25.3	0.235959241	0.001474	0.005146
FAM234A	16p13.3	0.235881824	0.001479	0.005164
PTPRQ	12q21.31	-0.235870264	0.00148	0.005166
ADAMTS7	15q25.1	0.235812776	0.001484	0.005179
SLC25A52	18q12.1	-0.235792099	0.001485	0.005183
SRF	6p21.1	-0.235672588	0.001494	0.005212
KCNG2	18q23	-0.235667919	0.001494	0.005212
C2ORF68	2p11.2	0.235660034	0.001495	0.005213
MYT1L-AS1	12p25.3	-0.235628966	0.001497	0.00522
TMED5	1p22.1	-0.235622371	0.001498	0.005221
RRNAD1	1q23.1	0.235599356	0.001499	0.005226
MTFR1L	1p36.11	-0.235595171	0.0015	0.005226
RORB	9q21.13	-0.235583786	0.0015	0.005228
SYT6	1p13.2	-0.23557183	0.001501	0.00523
OR4N2	14q11.2	-0.235536108	0.001504	0.005238
STK40	1p34.3	-0.2355052	0.001506	0.005245
TMEM242	6q25.3	-0.235498922	0.001506	0.005245
PIR	Xp22.2	-0.235454983	0.00151	0.005256
POR	7q11.23	0.235448706	0.00151	0.005256
DCAF4L2	8q21.3	-0.235446183	0.00151	0.005256
PRUNE1	1q21.3	-0.235427782	0.001512	0.00526
ARHGEF9	Xq11.1	-0.235404766	0.001513	0.005265
IL1RL1	2q12.1	-0.23534618	0.001517	0.005278
ZNF581	19q13.42	0.235333626	0.001518	0.00528
UCP1	4q31.1	-0.235331271	0.001519	0.00528
CACNA1C	12p13.33	-0.235323164	0.001519	0.005281
BICD2	9q22.31	-0.235321072	0.001519	0.005281
CLEC4D	12p13.31	-0.235318088	0.001519	0.005281
ATPAF1	1p33	-0.235293871	0.001521	0.005286
IL37	2q14.1	0.235276929	0.001522	0.005289
KIF3C	2p23.3	-0.235241563	0.001525	0.005297
ABC4	7q21.12	-0.235218547	0.001527	0.005301
LGALS9C	17p11.2	0.235218547	0.001527	0.005301
CLEC9A	12p13.2	-0.235183399	0.001529	0.005309
GLRA3	4q34.1	-0.235158945	0.001531	0.005315
CENPU	4q35.1	0.235147407	0.001532	0.005317
TMEM150B	19q13.42	0.235107652	0.001535	0.005324
CDK10	16q24.3	0.235105559	0.001535	0.005324
BLOC1S4	4p16.1	0.235105559	0.001535	0.005324
ZNF506	19p13.11	-0.235049066	0.001539	0.005338
ACD	16q22.1	0.235038604	0.00154	0.00534
AFF4	5q31.1	-0.23502605	0.001541	0.005342
HSDL2	9q32	-0.235009311	0.001542	0.005345
PMVK	1q21.3	0.234996757	0.001543	0.005348
DECR2	16p13.3	0.234992572	0.001543	0.005348
EEF1AKMT1	113q12.11	-0.234971649	0.001545	0.005352
THUMPDI	16p12.3	-0.234904693	0.00155	0.005368
SAP18	13q12.11	0.234887954	0.001551	0.005372
PRRG1	Xp21.1	0.2348754	0.001552	0.005374
LGALS7	19q13.2	0.234848562	0.001554	0.005379
TMEM183A	1q32.1	0.2348482	0.001554	0.005379
TMEM132D	12q24.33	-0.234745763	0.001562	0.005404
EBPL	13q14.2	0.234741489	0.001562	0.005405

SMOC1	14q24. 2	-0. 23472475	0. 001563	0. 005408
FAM72B	1p11. 2	0. 234703827	0. 001565	0. 005412
CDK16	Xp11. 3	0. 234701735	0. 001565	0. 005412
EMC3	3p25. 3	0. 234651518	0. 001569	0. 005424
NCBP1	9q22. 33	-0. 234613856	0. 001571	0. 005433
CAMSAP1	9q34. 3	-0. 23455527	0. 001576	0. 005447
ZBTB9	6p21. 32	-0. 234538531	0. 001577	0. 005449
TMEM67	8q22. 1	-0. 234538531	0. 001577	0. 005449
DGKE	17q22	-0. 234505053	0. 00158	0. 005457
GUSBP1	5p14. 3	-0. 234500868	0. 00158	0. 005457
DLD	7q31. 1	-0. 234469483	0. 001582	0. 005465
CNTNAP1	17q21. 2	-0. 234450652	0. 001584	0. 005469
VPS37C	11q12. 2	0. 23444019	0. 001584	0. 00547
ZNF204P	6p22. 1	-0. 234421359	0. 001586	0. 005474
WWC3	Xp22. 2	-0. 23440462	0. 001587	0. 005478
RTRAF	14q22. 1	0. 234358588	0. 001591	0. 005489
SMAD5-AS1	15q31. 1	-0. 234347203	0. 001591	0. 005491
SH3BGR	21q22. 2	-0. 23433348	0. 001592	0. 005493
PTPRG	3p14. 2	-0. 234320926	0. 001593	0. 005496
KRT24	17q21. 2	-0. 234299348	0. 001595	0. 0055
STX1A	7q11. 23	0. 234247693	0. 001599	0. 005513
FAM83B	6p12. 1	0. 234242641	0. 001599	0. 005513
POLR2A	17p13. 1	-0. 234235139	0. 0016	0. 005513
RGS9	17q24. 1	-0. 234233047	0. 0016	0. 005513
XRCC3	14q32. 33	0. 234233047	0. 0016	0. 005513
ZNF493	19p12	-0. 234212123	0. 001602	0. 005518
MED31	17p13. 1	-0. 234207938	0. 001602	0. 005518
PAG1	8q21. 13	-0. 234180738	0. 001604	0. 005524
VHL	3p25. 3	-0. 234166091	0. 001605	0. 005527
PPM1B	2p21	-0. 234092859	0. 001611	0. 005545
CUX1	7q22. 1	0. 234044735	0. 001614	0. 005557
TSC1	9q34. 13	-0. 23403218	0. 001615	0. 005559
SNRPE	1q32. 1	0. 234002887	0. 001618	0. 005566
KIAA0753	17p13. 1	-0. 233986149	0. 001619	0. 005569
KIF21B	1q32. 1	-0. 2338899	0. 001626	0. 005594
NTPCR	1q42. 2	0. 233831314	0. 001631	0. 005609
BEX3	Xq22. 2	-0. 233724604	0. 001639	0. 005636
ZNF619	3p22. 1	-0. 233705773	0. 001641	0. 00564
ATP2A2	12q24. 11	-0. 233699496	0. 001641	0. 00564
STOML1	15q24. 1	0. 233697403	0. 001641	0. 00564
KLHL36	16q24. 1	0. 233645094	0. 001645	0. 005653
ARHGEF39	9p13. 3	0. 233611617	0. 001648	0. 005661
DCLK3	3p22. 2	-0. 233544784	0. 001653	0. 005678
LACTB2	8q13. 3	0. 233523738	0. 001655	0. 005683
TSPAN17	5q35. 2	0. 233504907	0. 001656	0. 005687
TIE1	1p34. 2	-0. 233502814	0. 001656	0. 005687
RAB2B	14q11. 2	-0. 233496537	0. 001657	0. 005687
LCAT	16q22. 1	0. 233483983	0. 001658	0. 00569
ZNF768	16p11. 2	0. 233479798	0. 001658	0. 00569
SPARCL1	4q22. 1	-0. 233396104	0. 001665	0. 005712
TMEM45B	11q24. 3	0. 233322872	0. 001671	0. 005731
PIK3C2A	11p15. 1	-0. 233251731	0. 001676	0. 005749
ARL4D	17q21. 31	0. 233243362	0. 001677	0. 00575
PCLO	7q21. 11	-0. 233211977	0. 001679	0. 005758

CHI3L2	1p13.2	-0.233207792	0.00168	0.005758
CYFIP1	15q11.2	0.233184776	0.001682	0.005763
CDRT4	17p12	-0.233182684	0.001682	0.005763
CBWD5	9q21.11	-0.233176572	0.001682	0.005763
GLIDR	9p12	-0.233174314	0.001682	0.005763
CES4A	16q22.1	-0.233117821	0.001687	0.005777
TREML3P	6p21.1	0.233064347	0.001691	0.005791
ARFGEF2	20q13.13	-0.233050865	0.001692	0.005793
DSE	6q22.1	-0.233050865	0.001692	0.005793
OARD1	6p21.1	-0.233029942	0.001694	0.005798
TAC3	12q13.3	0.23301176	0.001695	0.005802
AVPR1B	1q32.1	-0.232978883	0.001698	0.00581
LDB3	10q23.2	-0.23297554	0.001698	0.00581
FAM155B	Xq13.1	-0.232971356	0.001699	0.00581
DDX50	10q22.1	-0.232942063	0.001701	0.005817
PHC1	12p13.31	-0.232887661	0.001705	0.005831
NOL8	9q22.31	-0.232862553	0.001707	0.005836
CLEC14A	14q21.1	-0.232860461	0.001708	0.005836
SEPTIN3	22q13.2	-0.232854184	0.001708	0.005837
GPR107	9q34.11	-0.232757935	0.001716	0.005863
DLL1	6q27	-0.232716088	0.001719	0.005873
GRIA2	4q32.1	-0.232714072	0.001719	0.005873
KIF15	3p21.31	0.232701442	0.00172	0.005875
KNOP1	16p12.3	0.232653317	0.001724	0.005888
INSC	11p15.2	0.232605193	0.001728	0.0059
ENPEP	4q25	-0.232563346	0.001732	0.005911
CDKN1B	12p13.1	-0.23250476	0.001737	0.005926
HIF1AN	10q24.31	-0.232498483	0.001737	0.005927
USP28	11q23.2	-0.232462913	0.00174	0.005936
PALD1	10q22.1	-0.232343649	0.00175	0.005968
FAM104B	Xp11.21	-0.232308079	0.001753	0.005977
RAD23B	9q31.2	-0.232297617	0.001754	0.005979
PYCR2	1q42.12	0.232264139	0.001756	0.005987
CHTF18	16p13.3	0.232259954	0.001757	0.005988
MOSPD2	Xp22.2	-0.2322474	0.001758	0.00599
MTRF1	13q14.11	0.232222292	0.00176	0.005996
RAD9A	11q13.2	0.232209738	0.001761	0.005999
GNL2	1p34.3	0.232201368	0.001762	0.006
CHAMP1	13q34	-0.232190907	0.001762	0.006002
ALKBH1	14q24.3	-0.23206955	0.001773	0.006035
ECT2L	6q24.1	-0.232020622	0.001777	0.006048
SPART	13q13.3	-0.232006779	0.001778	0.006051
CENPA	2p23.3	0.231975394	0.00178	0.006059
RIPOR1	16q22.1	0.231937731	0.001784	0.006068
ANKRD13D	11q13.2	0.231937731	0.001784	0.006068
ART4	12p12.3	-0.231924252	0.001785	0.006069
MIS18BP1	14q21.2	-0.231923085	0.001785	0.006069
ADGRL3	4q13.1	-0.231920993	0.001785	0.006069
CNR1	6q15	-0.231910531	0.001786	0.006071
CC2D2A	4p15.32	-0.23188333	0.001788	0.006078
CHN1	2q31.1	-0.231820559	0.001793	0.006095
FAM81B	5q15	0.231762306	0.001798	0.006111
SYT4	18q12.3	-0.231739016	0.0018	0.006116
AKAP12	6q25.1	-0.231732681	0.001801	0.006117

SNX3	6q21	-0.231724311	0.001802	0.006119
ZBTB80S	1p35.1	0.231699203	0.001804	0.006125
GTPBP3	19p13.11	0.231686649	0.001805	0.006127
ABCC2	10q24.2	-0.231672002	0.001806	0.00613
SNRPB	20p13	0.23166991	0.001806	0.00613
KANSL2	12q13.11	-0.231657356	0.001807	0.006133
HECA	6q24.1	-0.231644802	0.001808	0.006135
TRIO	5p15.2	-0.231642709	0.001808	0.006135
XIAP	Xq25	-0.231632247	0.001809	0.006137
HMGB1P1	20q13.31	0.231613416	0.001811	0.006141
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SLC38A2	12q13.11	-0.231548553	0.001817	0.006158
AKAP1	17q22	0.231533907	0.001818	0.006161
NOCT	4q31.1	-0.231506706	0.00182	0.006168
KCTD9	8p21.2	0.23149206	0.001821	0.006171
IRF6	1q32.2	0.23148369	0.001822	0.006172
CFAP46	10q26.3	-0.231476748	0.001823	0.006173
DPYS	8q22.3	-0.231421725	0.001827	0.006186
KCMF1	2p11.2	0.231420919	0.001827	0.006186
TPP1	11p15.4	-0.231420919	0.001827	0.006186
CTSA	20q13.12	0.231393719	0.00183	0.006193
KCNE3	11q13.4	0.231391626	0.00183	0.006193
AADAC	3q25.1	0.231341894	0.001834	0.006206
ARHGAP45	19p13.3	0.231312117	0.001837	0.006214
MRPL44	2q36.1	0.23130584	0.001837	0.006215
GRB10	7p12.1	-0.231287009	0.001839	0.006219
DYRK2	12q15	-0.23127027	0.00184	0.006223
ZNF833P	19p13.2	-0.231263067	0.001841	0.006223
RNF11	1p32.3	-0.2312619	0.001841	0.006223
MCC	5q22.2	-0.2312347	0.001843	0.00623
CA10	17q21.33-	-0.231193765	0.001847	0.006241
LZTS3	20p13	0.23119076	0.001847	0.006241
RBBP5	1q32.1	-0.231134267	0.001852	0.006256
CASS4	20q13.31	-0.231121712	0.001853	0.006259
IGFL4	19q13.32	-0.231077722	0.001857	0.006271
HOXC6	12q13.13	0.231052665	0.001859	0.006277
DERL2	17p13.2	-0.231025464	0.001862	0.006284
LINC01588	14q21.3	0.231005024	0.001863	0.006289
NDUFS2	1q23.3	0.230973155	0.001866	0.006298
LAMB1	7q31.1	-0.230952231	0.001868	0.006303
MMP9	20q13.12	0.23094177	0.001869	0.006305
PCM1	8p22	-0.230866445	0.001876	0.006326
POP7	7q22.1	0.23086226	0.001876	0.006326
RFC4	3q27.3	0.230858075	0.001876	0.006326
EFNB3	17p13.1	-0.230855983	0.001877	0.006326
SERTM1	13q13.3	-0.230849551	0.001877	0.006326
PTGS1	9q33.2	-0.230847614	0.001877	0.006326
SLC38A11	2q24.3	-0.230838319	0.001878	0.006327
SHH	7q36.3	0.230837635	0.001878	0.006327
HELLS	10q23.33	0.230832967	0.001879	0.006327
BARX1	9q22.32	0.230816271	0.00188	0.006331
SLC24A3	20p11.23	-0.230809951	0.001881	0.006332
NUP93	16q13	0.230789028	0.001882	0.006337
AMOT	Xq23	-0.230780658	0.001883	0.006339

SBK2	19q13. 42	-0. 230759022	0. 001885	0. 006344
ALOX12P2	17p13. 1	0. 230749394	0. 001886	0. 006346
RAD17	5q13. 2	-0. 230728349	0. 001888	0. 006351
RPL36A	Xq22. 1	0. 230701149	0. 00189	0. 006358
SWAP70	11p15. 4	-0. 230686502	0. 001891	0. 006361
EFCAB2	1q44	-0. 230680225	0. 001892	0. 006362
HMG5	Xq21. 1	-0. 230667671	0. 001893	0. 006365
ERAL1	17q11. 2	0. 2305777	0. 001901	0. 00639
CHKB	22q13. 33	0. 230571423	0. 001902	0. 006391
SLITRK1	13q31. 1	-0. 230564575	0. 001902	0. 006392
PTPMT1	11p11. 2	0. 230529575	0. 001905	0. 006402
IVL	1q21. 3	0. 230511586	0. 001907	0. 006406
SLC7A7	14q11. 2	0. 230483544	0. 00191	0. 006413
PLA2G15	16q22. 1	0. 230454251	0. 001912	0. 006421
FNIP1	5q31. 1	-0. 230439604	0. 001913	0. 006424
APLP1	19q13. 12	-0. 230414496	0. 001916	0. 00643
PDE6D	2q37. 1	0. 230414496	0. 001916	0. 00643
TNFAIP3	6q23. 3	-0. 230376833	0. 001919	0. 00644
NXF5	Xq22. 1	-0. 230370808	0. 00192	0. 00644
DCDC1	11p13	-0. 230368662	0. 00192	0. 00644
LSM7	19p13. 3	0. 230360095	0. 001921	0. 006442
RABIF	1q32. 1	0. 230353818	0. 001921	0. 006443
DNAJA1	9p21. 1	-0. 23031197	0. 001925	0. 006454
BCL9	1q21. 2	-0. 230309878	0. 001925	0. 006454
DNAH5	5p15. 2	-0. 230257569	0. 00193	0. 006468
IL26	12q15	-0. 230229692	0. 001932	0. 006476
GKN2	2p13. 3	0. 230220257	0. 001933	0. 006477
GPR83	11q21	-0. 230213788	0. 001934	0. 006478
JRKL	11q21	0. 230209445	0. 001934	0. 006479
CDS1	4q21. 23	0. 23016969	0. 001938	0. 00649
RBMX	Xq26. 3	-0. 230155044	0. 001939	0. 006493
TRAPPC2L	16q24. 3	0. 230138425	0. 001941	0. 006497
RASL10B	17q12	-0. 23013412	0. 001941	0. 006497
ISOC2	19q13. 42	0. 230123658	0. 001942	0. 006499
BCR	22q11. 23	0. 230117381	0. 001942	0. 0065
BAHCC1	17q25. 3	-0. 230109012	0. 001943	0. 006501
PRKAG2	7q36. 1	-0. 230073442	0. 001946	0. 006511
KAT2A	17q21. 2	0. 230042056	0. 001949	0. 00652
E2F5	8q21. 2	-0. 230016948	0. 001952	0. 006526
NMNAT1	1p36. 22	-0. 230004394	0. 001953	0. 006529
STON1-GTF	2p16. 3	-0. 229948741	0. 001958	0. 006544
ZGPAT	20q13. 33	0. 2299479	0. 001958	0. 006544
HIST1H2BC	6p22. 2	0. 229924884	0. 00196	0. 00655
ALOXE3	17p13. 1	0. 229862715	0. 001966	0. 006568
ALG8	11q14. 1	0. 229826544	0. 001969	0. 006578
HEATR6	17q23. 1	-0. 229819341	0. 00197	0. 006579
RARS2	6q15	-0. 229774235	0. 001974	0. 006589
MPC1	6q27	-0. 229774235	0. 001974	0. 006589
FKBP11	12q13. 12	-0. 229772142	0. 001974	0. 006589
TMEM131	2q11. 2	-0. 229772142	0. 001974	0. 006589
AIFM2	10q22. 1	0. 229759588	0. 001975	0. 006592
ESF1	20p12. 1	-0. 229744942	0. 001977	0. 006595
ARFRP1	20q13. 33	0. 229717741	0. 001979	0. 006602
ESYT1	12q13. 2	-0. 22965497	0. 001985	0. 006621

OXGR1	13q32.1	-0.229623337	0.001988	0.006629
CEP55	10q23.33	0.229604754	0.00199	0.006634
ENTPD7	10q24.2	-0.2295922	0.001991	0.006637
CDK13	7p14.1	-0.229579646	0.001992	0.00664
EPS8	12p12.3	0.22954826	0.001995	0.006648
ETS1	11q24.3	-0.229533614	0.001996	0.006652
RPE	2q34	0.22952106	0.001997	0.006654
MCAM	11q23.3	-0.229516875	0.001998	0.006655
CASP8	2q33.1	0.229510598	0.001998	0.006655
COX5A	15q24.2	0.229483397	0.002001	0.006663
SUMO1P3	1q23.2	0.229472935	0.002002	0.006665
CCL14	17q12	-0.229428996	0.002006	0.006677
CACHD1	1p31.3	-0.229424811	0.002006	0.006677
TMPO	12q23.1	-0.229424811	0.002006	0.006677
TMEM229B	14q24.1	-0.229401795	0.002008	0.006683
MAP3K20	2q31.1	-0.22937041	0.002011	0.006691
SCN4B	11q23.3	-0.229349486	0.002013	0.006697
ZFAND2B	2q35	0.229345302	0.002014	0.006697
PPP2R1A	19q13.41	0.229322286	0.002016	0.006702
ELAC2	17p12	-0.229320193	0.002016	0.006702
IPCEF1	6q25.2	-0.229316009	0.002016	0.006702
KBTBD4	11p11.2	-0.229313916	0.002017	0.006702
XKR5	8p23.1	0.229285702	0.002019	0.00671
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NDUFB7	19p13.12	0.2292637	0.002021	0.006714
HAS1	19q13.41	-0.229259668	0.002022	0.006715
TRIQK	8q22.1	-0.22925533	0.002022	0.006715
EIF2AK2	2p22.2	0.229240684	0.002024	0.006718
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CCM2L	20q11.21	-0.229173728	0.00203	0.006737
HCG26	6p21.33	0.229167451	0.00203	0.006738
SNX22	15q22.31	-0.22915699	0.002031	0.00674
ATE1	10q26.13	-0.229146528	0.002032	0.006742
SLC22A16	6q21 6q21	-0.229135759	0.002033	0.006744
ZNF330	4q31.21	-0.229069111	0.00204	0.006764
CASP10	2q33.1	0.228991693	0.002047	0.006788
LZIC	1p36.22	-0.228981232	0.002048	0.00679
TPO	2p25.3	-0.228974308	0.002049	0.006791
PSMB9	6p21.32	0.228889168	0.002057	0.006817
SPR	2p13.2	0.228861967	0.002059	0.006824
KDEL3	22q13.1	0.228857783	0.00206	0.006824
JAK1	1p31.3	-0.228826397	0.002063	0.006833
CCNDBP1	15q15.2	0.22882012	0.002063	0.006834
CLUAP1	16p13.3	-0.228801289	0.002065	0.006839
ECSCR	5q31.2	-0.228797104	0.002066	0.006839
ZNF440	19p13.2	0.228771996	0.002068	0.006846
4-Mar	2q35	-0.228746888	0.002071	0.006853
HSPE1	2q33.1	0.228692486	0.002076	0.006869
ATP2C2	16q24.1	0.228671563	0.002078	0.006874
DOK6	18q22.2	-0.228659009	0.002079	0.006877
DMAC2L	14q21.3	-0.228625531	0.002082	0.006887
IL12A	3q25.33	-0.228560668	0.002089	0.006907
HSF2BP	21q22.3	0.228554391	0.002089	0.006907
TPM2	9p13.3	0.228541837	0.00209	0.00691

SND1	7q32.1	-0.228537652	0.002091	0.00691
MIF	22q11.23	0.228520913	0.002092	0.006915
DOK7	4p16.3	0.228472789	0.002097	0.006929
GNB4	3q26.33	-0.228391187	0.002105	0.006952
KLKB1	4q35.2	-0.228389214	0.002105	0.006952
ASXL2	2p23.3	-0.228389095	0.002105	0.006952
CCDC84	11q23.3	0.228382818	0.002106	0.006953
SLC6A4	17q11.2	-0.228366491	0.002107	0.006957
KLRK1	12p13.2	-0.228353525	0.002109	0.006961
ECHDC3	10p14	-0.228322139	0.002112	0.00697
PDGFRL	8p22	-0.22831377	0.002113	0.006971
SLC48A1	12q13.11	-0.228271923	0.002117	0.006982
XRCC1	19q13.31	0.228271923	0.002117	0.006982
RBM24	6p22.3	-0.228267738	0.002117	0.006982
FAM207A	21q22.3	0.228238445	0.00212	0.006991
SRSF2	17q25.1	0.228225891	0.002121	0.006994
ZNF408	11p11.2	0.22819869	0.002124	0.007001
RHPN1	8q24.3	0.228184044	0.002125	0.007005
TMEM51-AS1	1p36.21	0.228152658	0.002128	0.007014
ITFG2	12p13.33	-0.22812755	0.002131	0.007021
SLC15A1	13q32.2-c	0.228120346	0.002132	0.007022
FOLR2	11q13.4	-0.228062687	0.002137	0.00704
TASOR2	10p15.1	-0.228022932	0.002141	0.007052
THSD1	13q14.3	-0.22801247	0.002142	0.007054
CCDC24	1p34.1	0.228006193	0.002143	0.007055
PAX6	11p13	-0.227993639	0.002144	0.007058
PLAA	9p21.2	-0.227983177	0.002145	0.00706
PANK4	1p36.32	-0.227972716	0.002146	0.007062
STARD7-AS2	2q11.2	-0.227937146	0.00215	0.007073
ADAMTS5	21q21.3	-0.227928776	0.002151	0.007074
SLC25A42	19p13.11	-0.227909945	0.002152	0.007079
COL6A6	3q22.1	-0.227875686	0.002156	0.007089
POLK	5q13.3	-0.227832528	0.00216	0.007102
TPTE	21p11.2	-0.227819469	0.002161	0.007105
TBP	6q27	-0.227794865	0.002164	0.007112
NKD2	5p15.33	0.227725818	0.002171	0.007134
HMG3	6q14.1	-0.227723725	0.002171	0.007134
MTX3	5q14.1	-0.227715356	0.002172	0.007135
GOLGA8CP	15q11.2	-0.227683329	0.002175	0.007144
FAM92B	16q24.1	-0.227669004	0.002177	0.007148
KRTAP3-3	17q21.2	-0.227654102	0.002178	0.007152
PPP1R3F	Xp11.23	-0.227650493	0.002178	0.007152
GPA33	1q24.1	0.227633754	0.00218	0.007155
PRDM2	1p36.21	-0.227633754	0.00218	0.007155
HOXD1	2q31.1	-0.227579353	0.002186	0.007172
ZNF235	19q13.31	-0.227558429	0.002188	0.007178
NAT2	8p22	0.227536491	0.00219	0.007183
CNTFR	9p13.3	-0.227533609	0.00219	0.007183
CHN2	7p14.3	-0.227420334	0.002202	0.00722
MEG8	14q32.2-c	-0.227405203	0.002203	0.007224
CXCL16	17p13.2	0.227391041	0.002205	0.007227
WBP4	13q14.11	-0.227388948	0.002205	0.007227
SPATA33	16q24.3	0.227351286	0.002209	0.007238
ZSCAN12P16	2p22.1	-0.227317808	0.002212	0.007248

TMEM229A	7q31. 32	-0. 227228122	0. 002221	0. 007277
NIF3L1	2q33. 1	0. 227219586	0. 002222	0. 007279
RHBDL1	16p13. 3	0. 227190174	0. 002225	0. 007288
ANAPC11	17q25. 3	0. 227131588	0. 002231	0. 007306
DRD3	3q13. 31	-0. 22709309	0. 002235	0. 007318
TAF3	10p14	-0. 227088814	0. 002236	0. 007318
NT5C2	10q24. 32-	0. 227066725	0. 002238	0. 007324
PLA2G3	22q12. 2	0. 227012498	0. 002244	0. 007341
DNAI2	17q25. 1	-0. 227003065	0. 002245	0. 007343
PLEKHH3	17q21. 2	0. 226899337	0. 002255	0. 007377
DNAJB5	9p13. 3	-0. 22689306	0. 002256	0. 007378
COMMD6	13q22. 2	0. 226867951	0. 002259	0. 007385
TRMT61A	14q32. 33	0. 226865859	0. 002259	0. 007385
TMPRSS5	11q23. 2	0. 226838777	0. 002262	0. 007392
ATP6VOC	16p13. 3	0. 226838658	0. 002262	0. 007392
TNMD	Xq22. 1	-0. 226807888	0. 002265	0. 007401
SDC3	1p35. 2	-0. 226800996	0. 002266	0. 007401
TVP23B	17p11. 2	-0. 226800996	0. 002266	0. 007401
SLC1A5	19q13. 32	0. 226769611	0. 002269	0. 00741
ZMYM4	1p34. 3	-0. 226767518	0. 002269	0. 00741
HSP90AB2F	4p15. 33	-0. 226738225	0. 002272	0. 007419
PSAP	10q22. 1	-0. 226727763	0. 002273	0. 007421
BCAS4	20q13. 13	0. 226677547	0. 002278	0. 007437
TP53I11	11p11. 2	0. 226675455	0. 002279	0. 007437
PKP1	1q32. 1	0. 226669177	0. 002279	0. 007438
PEX12	17q12	-0. 226660808	0. 00228	0. 007439
PLAGL1	6q24. 2	-0. 2266357	0. 002283	0. 007447
SLC44A1	9q31. 1-q5	0. 226616869	0. 002285	0. 007452
FCHSD2	11q13. 4	-0. 226552006	0. 002292	0. 007473
LRRC70	5q12. 1	-0. 226541544	0. 002293	0. 007475
VANGL1	1p13. 1	0. 226539451	0. 002293	0. 007475
ZNF570	19q13. 12	-0. 226491327	0. 002298	0. 00749
RICTOR	5p13. 1	-0. 226480865	0. 002299	0. 007493
PCTP	17q22	0. 226418095	0. 002306	0. 007513
INPP5K	17p13. 3	-0. 226411818	0. 002306	0. 007514
ERCC2	19q13. 32	0. 226405541	0. 002307	0. 007515
MARF1	16p13. 11	-0. 226372063	0. 002311	0. 007525
CHCHD5	2q14. 1	0. 226365786	0. 002311	0. 007526
G6PD	Xq28	0. 226349047	0. 002313	0. 007531
C10RF194	1p13. 3	-0. 226332251	0. 002315	0. 007536
JAGN1	3p25. 3	0. 226319754	0. 002316	0. 007539
R3HDM2	12q13. 3	-0. 226309292	0. 002317	0. 007541
GFOD1	6p23	0. 226303015	0. 002318	0. 007541
TICRR	15q26. 1	0. 226303015	0. 002318	0. 007541
STRC	15q15. 3	0. 226273722	0. 002321	0. 00755
MAP6	11q13. 5	-0. 226267445	0. 002322	0. 007551
ADAL	15q15. 3	-0. 226256983	0. 002323	0. 007553
TUBB2B	6p25. 2	-0. 226254891	0. 002323	0. 007553
ABL2	1q25. 2	-0. 226217228	0. 002327	0. 007564
ACTL6B	7q22. 1	-0. 226206884	0. 002328	0. 007567
STARD3NL	7p14. 1	-0. 226202582	0. 002329	0. 007567
ARID3A	19p13. 3	-0. 226190028	0. 00233	0. 00757
NUTM2F	9q22. 32	0. 226171315	0. 002332	0. 007575
SPRR4	1q21. 3	0. 226050944	0. 002345	0. 007616

WRN	8p12	-0.226003808	0.00235	0.007631
FAM228B	2p23.3	-0.226001716	0.00235	0.007631
RANBP10	16q22.1	-0.225984977	0.002352	0.007636
BCL7A	12q24.31	-0.225980792	0.002353	0.007636
SLC4A7	3p24.1	-0.225949407	0.002356	0.007646
HOXC9	12q13.13	0.225936971	0.002357	0.007649
CAPSL	5p13.2	-0.225889829	0.002362	0.007664
DNAJC15	13q14.11	0.225861528	0.002366	0.007673
RCAN1	21q22.12	-0.225846881	0.002367	0.007677
DYNC1I2	2q31.1	0.225794572	0.002373	0.007694
RGS18	1q31.2	-0.225790388	0.002373	0.007694
FUNDC2	Xq28	-0.225759002	0.002377	0.007704
LSM1	8p11.23	0.225712971	0.002382	0.007719
GPKOW	Xp11.23	0.225675308	0.002386	0.007731
WDR20	14q32.31	-0.225631369	0.002391	0.007745
CARM1	19p13.2	0.225616722	0.002392	0.007749
DNASE1	16p13.3	-0.225589521	0.002395	0.007758
ERCC1	19q13.32	0.22557069	0.002397	0.007763
JAK3	19p13.11	-0.225520474	0.002403	0.00778
NEMP1	12q13.3	-0.225489088	0.002406	0.00779
ELF4	Xq26.1	0.225482811	0.002407	0.007791
ANAPC5	12q24.31	-0.225466072	0.002409	0.007795
RAB26	16p13.3	-0.225355178	0.002421	0.007834
SYS1	20q13.12	-0.225319607	0.002425	0.007845
MRM3	17p13.3	-0.22527776	0.00243	0.007859
KLHL17	1p36.33	0.225275668	0.00243	0.007859
KRI1	19p13.2	0.225271483	0.00243	0.007859
USP27X-AS1	Xp11.23	-0.225261021	0.002432	0.007861
HHLA2	3q13.13	0.225254744	0.002432	0.007862
C11ORF49	11p11.2	0.225252652	0.002432	0.007862
UBR2	6p21.1	-0.225248467	0.002433	0.007862
LPL	8p21.3	-0.22524219	0.002434	0.007862
KIF13A	6p22.3	-0.225240098	0.002434	0.007862
CAB39L	13q14.2	-0.225210805	0.002437	0.007872
GYPE	4q31.21	-0.225198369	0.002438	0.007875
COQ8A	1q42.13	-0.225194066	0.002439	0.007875
SNRNP48	6p24.3	-0.225189881	0.002439	0.007875
AP1B1	22q12.2	-0.225156404	0.002443	0.007884
HPGD	4q34.1	0.225156404	0.002443	0.007884
TM7SF2	11q13.1	0.225156404	0.002443	0.007884
ZNF281	1q32.1	-0.225148152	0.002444	0.007885
PEAK1	15q24.3	-0.225137572	0.002445	0.007888
RNF34	12q24.31	-0.225083171	0.002451	0.007906
CFAP298	21q22.11	0.225074802	0.002452	0.007908
NDUFA7	19p13.2	0.225066432	0.002453	0.00791
CIAO3	16p13.3	0.22502877	0.002457	0.007922
HEPH	Xq12	0.224980646	0.002463	0.007938
MGAT1	5q35.3	-0.224965999	0.002465	0.007942
VPS26B	11q25	-0.224880213	0.002474	0.007972
ASCL2	11p15.5	-0.224871961	0.002475	0.007974
PLSCR3	17p13.1	0.224844643	0.002478	0.007983
LRRC7	1p31.1	-0.224838447	0.002479	0.007984
PCDHA4	5q31.3	-0.224825929	0.00248	0.007987
GSTCD	4q24	-0.224802795	0.002483	0.007994

UBE3A	15q11.2	-0.224760948	0.002488	0.008008
PCDHA7	5q31.3	-0.224755141	0.002488	0.008009
UBE2L6	11q12.1	0.224696085	0.002495	0.008029
KHDRBS2	6q11.1	-0.224673086	0.002498	0.008036
FBX046	19q13.32	0.224664817	0.002499	0.008038
WDR48	3p22.2	-0.224633315	0.002502	0.008047
RTN4RL1	17p13.3	-0.224631222	0.002503	0.008047
SUV39H2	10p13	-0.224631222	0.002503	0.008047
GJD3	17q21.2	-0.224608206	0.002505	0.008054
TMEM257	Xq27.3	-0.224574319	0.002509	0.008065
TTC39C	18q11.2	-0.224543343	0.002513	0.008075
DAPK1	9q21.33	0.224537066	0.002513	0.008076
NANP	20p11.21	-0.224534974	0.002514	0.008076
NELFA	4p16.3	0.224524512	0.002515	0.008078
TMEM273	10q11.23	-0.224520797	0.002515	0.008078
RIPOR2	6p22.3	-0.224461741	0.002522	0.008099
PSMB4	1q21.3	0.224430356	0.002526	0.008107
RFPL1S	22q12.2	-0.224430356	0.002526	0.008107
DUOX2	15q21.1	0.224428264	0.002526	0.008107
PTGDR	14q22.1	-0.224421058	0.002527	0.008108
CCDC43	17q21.31	0.224417802	0.002527	0.008108
IFRD1	7q31.1	-0.2243634	0.002533	0.008127
NKX2-4	20p11.22	-0.224334375	0.002537	0.008137
UBE2E1	3p24.2	0.224306907	0.00254	0.008146
ZP2	16p12.3-1	-0.224252153	0.002546	0.008165
ARHGEF33	2p22.1	-0.224244253	0.002547	0.008166
RASSF4	10q11.21	-0.224239951	0.002548	0.008166
CSRNP3	2q24.3	-0.224237859	0.002548	0.008166
TTC39B	9p22.3	-0.22420136	0.002552	0.008177
IFIT3	10q23.31	0.224200197	0.002552	0.008177
APOF	12q13.3	-0.224115678	0.002562	0.008208
EML3	11q12.3	0.224039085	0.002571	0.008234
SAMD9L	7q21.2	0.224036993	0.002571	0.008234
SGK1	6q23.2	-0.224034901	0.002571	0.008234
RBAKDN	7p22.1	0.223979913	0.002578	0.008253
RAB10	2p23.3	0.223976315	0.002578	0.008253
TAOK1	17q11.2	-0.22397213	0.002579	0.008254
OSCAR	19q13.42	0.223930283	0.002584	0.008268
SRPK1	6p21.31	0.223926098	0.002584	0.008268
PRC1	15q26.1	0.223924006	0.002584	0.008268
RPL27A	11p15.4	0.223919821	0.002585	0.008268
HOMER1	5q14.1	-0.22382148	0.002597	0.008303
TCF25	16q24.3	0.223815203	0.002597	0.008303
GLP2R	17p13.1	-0.223813579	0.002598	0.008303
USHBP1	19p13.11	-0.223813111	0.002598	0.008303
PTRH2	17q23.1	0.223802649	0.002599	0.008305
CEP250	20q11.22	-0.223798464	0.002599	0.008306
RNF40	16p11.2	0.223777541	0.002602	0.008312
IKZF3	17q12-q21	-0.223769639	0.002603	0.008314
IL2RB	22q12.3	-0.223767079	0.002603	0.008314
QRICH2	17q25.1	-0.223737786	0.002606	0.008323
COX7B	Xq21.1	0.223662461	0.002615	0.008351
ZSWIM4	19p13.13-	0.223631076	0.002619	0.008361
LOC285847	6p21.31	-0.223622811	0.00262	0.008363

MMP1	11q22. 2	0. 223568305	0. 002627	0. 008382
LIAS	4p14	-0. 223522273	0. 002632	0. 008399
SPG7	16q24. 3	0. 223359069	0. 002652	0. 00846
HBB	11p15. 4	-0. 223331869	0. 002655	0. 008469
ACOT12	5q14. 1	-0. 223312638	0. 002657	0. 008475
DLGAP3	1p34. 3	-0. 223281652	0. 002661	0. 008485
TMPRSS6	22q12. 3	-0. 223259799	0. 002664	0. 008492
CNFN	19q13. 2	0. 223239805	0. 002666	0. 008499
KDM4A	1p34. 2-pc	-0. 223223066	0. 002668	0. 008503
C9ORF78	9q34. 11	-0. 223220974	0. 002668	0. 008503
RFX6	6q22. 1	-0. 223194351	0. 002672	0. 008512
LINC00324	17p13. 1	-0. 223174942	0. 002674	0. 008518
JARID2	6p22. 3	-0. 22317285	0. 002674	0. 008518
CASC2	10q26. 11	-0. 22309334	0. 002684	0. 008547
KCNQ5	6q13	-0. 222999184	0. 002695	0. 008582
TSHR	14q31. 1	-0. 222974654	0. 002698	0. 008591
SYNP02	4q26	-0. 222946875	0. 002702	0. 0086
CREM	10p11. 21	-0. 222930136	0. 002704	0. 008602
TEX261	2p13. 3	-0. 222930136	0. 002704	0. 008602
CEP128	14q31. 1	-0. 222928044	0. 002704	0. 008602
EFHC1	6p12. 2	-0. 222925951	0. 002704	0. 008602
MTIF3	13q12. 2	0. 222923859	0. 002705	0. 008602
GTF2IP1	7q11. 23	-0. 22287155	0. 002711	0. 008621
SYT9	11p15. 4	-0. 222827611	0. 002716	0. 008637
GPR55	2q37. 1	-0. 222817615	0. 002718	0. 00864
MYO10	5p15. 1	-0. 222760655	0. 002725	0. 008661
ZNFX1	20q13. 13	0. 222743916	0. 002727	0. 008666
NOP56	20p13	-0. 222714623	0. 00273	0. 008676
WDR90	16p13. 3	0. 222679053	0. 002735	0. 008687
KDELR1	19q13. 33	0. 222676961	0. 002735	0. 008687
MAPK15	-	0. 222674869	0. 002735	0. 008687
ANKRD2	10q24. 2	0. 222647905	0. 002739	0. 008697
BEND3P3	10q22. 3	-0. 222628837	0. 002741	0. 008703
DNTTIP2	1p22. 1	0. 222584897	0. 002746	0. 008718
MORF4	4q34. 1	-0. 222581766	0. 002747	0. 008718
KIF2A	5q12. 1	-0. 22257862	0. 002747	0. 008718
ZBTB11	3q12. 3	-0. 222563974	0. 002749	0. 008723
LINC00910	17q21. 31	0. 22255142	0. 002751	0. 008726
ACSS2	20q11. 22	0. 222513757	0. 002755	0. 00874
TMIE	3p21. 31	0. 222500273	0. 002757	0. 008744
ESCO2	8p21. 1	0. 222456334	0. 002762	0. 00876
ASH1L	1q22	-0. 222419601	0. 002767	0. 008773
EMID1	22q12. 2	-0. 222409139	0. 002768	0. 008776
EPB41	1p35. 3	-0. 22240077	0. 002769	0. 008778
MCM10	10p13	0. 222333815	0. 002778	0. 008803
EVI5L	19p13. 2	0. 22232126	0. 002779	0. 008806
E2F8	11p15. 1	0. 222314983	0. 00278	0. 008808
RAMP3	7p13	-0. 222279413	0. 002785	0. 00882
KREMEN2	16p13. 3	0. 222258606	0. 002787	0. 008827
VPS25	17q21. 2	0. 222233381	0. 00279	0. 008836
GOLT1B	12p12. 1	-0. 222181073	0. 002797	0. 008855
MRPL4	19p13. 2	0. 222153872	0. 0028	0. 008865
PKD1L3	16q22. 2	-0. 222146694	0. 002801	0. 008866
ZXDC	3q21. 3	-0. 221969745	0. 002824	0. 008935

DENND2D	1p13. 3-p1	0. 221967652	0. 002824	0. 008935
SLC25A40	7q21. 12	-0. 221959283	0. 002825	0. 008937
GRHL2	8q22. 3	0. 221927897	0. 002829	0. 008949
TMEM230	20p13-p12	-0. 221900697	0. 002833	0. 008958
ARMH4	14q23. 1	-0. 221854665	0. 002839	0. 008975
CDCA3	12p13. 31	0. 221846295	0. 00284	0. 008977
REXO2	11q23. 2	0. 221806541	0. 002845	0. 008992
TMEM255A	Xq24	-0. 221802356	0. 002845	0. 008992
PRCC	1q23. 1	0. 221796079	0. 002846	0. 008993
TEX10	9q31. 1	-0. 221760509	0. 002851	0. 009006
ASS1	9q34. 11	0. 221727031	0. 002855	0. 009019
LOC93429	19q13. 32	0. 221702387	0. 002858	0. 009027
HOXA3	7p15. 2	0. 221693553	0. 002859	0. 009029
NFATC3	16q22. 1	-0. 221616136	0. 002869	0. 00906
POPDC3	6q21	-0. 221583238	0. 002873	0. 009072
HMGCLL1	6p12. 1	-0. 221572776	0. 002875	0. 009074
OPRD1	1p35. 3	-0. 221545813	0. 002878	0. 009084
SIX1	14q23. 1	0. 221491757	0. 002885	0. 009104
NEXN	1p31. 1	-0. 221490595	0. 002885	0. 009104
BORA	13q21. 33	0. 221473856	0. 002888	0. 009109
ZNF780B	19q13. 2	-0. 221455025	0. 00289	0. 009115
OBP2A	9q34. 3	0. 221436316	0. 002893	0. 009121
OR10G4	11q24. 2	-0. 22143502	0. 002893	0. 009121
NHEJ1	2q35	0. 221420617	0. 002895	0. 009125
KBTBD3	11q22. 3	-0. 221413178	0. 002896	0. 009127
BHLHE41	12p12. 1	0. 221400624	0. 002897	0. 00913
KDM4C	9p24. 1	-0. 221398531	0. 002897	0. 00913
CTSF	11q13. 2	-0. 221381792	0. 0029	0. 009135
LRRC37BP1	17q11. 2	-0. 221323206	0. 002907	0. 009158
EIF3I	1p35. 2	0. 221231143	0. 002919	0. 009195
C4ORF50	4p16. 1	-0. 221203427	0. 002923	0. 009204
MMP26	11p15. 4	-0. 221202955	0. 002923	0. 009204
YTHDC2	5q22. 2	-0. 221191388	0. 002925	0. 009206
FLG	1q21. 3	-0. 221190573	0. 002925	0. 009206
ANP32A	15q23	0. 221176741	0. 002927	0. 00921
ASH1L-AS1	1q22	0. 221162095	0. 002928	0. 009215
CCP110	16p12. 3	-0. 22115791	0. 002929	0. 009215
TIMM17A	1q32. 1	0. 221111878	0. 002935	0. 009233
CCDC124	19p13. 11	0. 221098394	0. 002937	0. 009237
CDKL3	5q31. 1	-0. 221067939	0. 002941	0. 009248
RPS19	19q13. 2	0. 221063754	0. 002941	0. 009248
COX8C	14q32. 12	-0. 221038955	0. 002945	0. 009257
SLC22A10	11q12. 3	-0. 221016659	0. 002948	0. 009265
ALDH1A1	9q21. 13	-0. 221003076	0. 002949	0. 009268
CHMP4A	14q12	0. 220998891	0. 00295	0. 009268
EEF2	19p13. 3	-0. 220998891	0. 00295	0. 009268
SGO1	3p24. 3	0. 220988429	0. 002951	0. 009271
VSIG10	12q24. 23	0. 220917289	0. 002961	0. 009299
CD164L2	1p36. 11	0. 220862888	0. 002968	0. 00932
ACKR2	3p22. 1	-0. 220781286	0. 002979	0. 009353
PTPRZ1	7q31. 32	-0. 220760362	0. 002982	0. 00936
TCEAL2	Xq22. 1	-0. 220749901	0. 002983	0. 009363
RHO	3q22. 1	0. 220693519	0. 002991	0. 009386
STAG3	7q22. 1	-0. 220639006	0. 002998	0. 009407

ELL3	15q15.3	0.220609713	0.003002	0.009418
EBF2	8p21.2	-0.220603897	0.003003	0.009419
KRR1	12q21.2	-0.220588789	0.003005	0.009424
GRPR	Xp22.2	-0.220580643	0.003006	0.009424
DTX4	11q12.1	0.22058042	0.003006	0.009424
MUC5B	11p15.5	0.220576235	0.003007	0.009425
MNAT1	14q23.1	0.220567866	0.003008	0.009427
SNORD116	15q11.2	-0.220563681	0.003008	0.009427
RPRD2	1q21.2	-0.220549034	0.00301	0.009432
NHLRC2	10q25.3	-0.220477894	0.00302	0.00946
ACY3	11q13.2	0.220433955	0.003026	0.009478
AIFM1	Xq26.1	-0.220417216	0.003028	0.009483
MRPL42	12q22	-0.220371184	0.003034	0.009501
PPP2R2A	8p21.2	0.220339799	0.003039	0.009513
DIP2C	10p15.3	-0.220312598	0.003042	0.009523
EMX1	2p13.2	0.220301394	0.003044	0.009527
ZNF541	19q13.33	-0.22028561	0.003046	0.009532
SLC25A46	5q22.1	-0.220266566	0.003049	0.009539
GLI4	8q24.3	0.220237273	0.003053	0.00955
CST5	20p11.21	0.220231434	0.003053	0.009551
KNCN	1p33	-0.220221563	0.003055	0.009553
CYP4V2	4q35.1-q36	-0.220161948	0.003063	0.009577
FAM185A	7q22.1	0.220153579	0.003064	0.009579
CD226	18q22.2	-0.220151487	0.003064	0.009579
COQ7	16p12.3	-0.220130563	0.003067	0.009586
DMRT2	9p24.3	-0.2200939	0.003072	0.009599
CLIC2	Xq28	-0.220092901	0.003072	0.009599
ILVBL	19p13.12	0.220067792	0.003076	0.009609
ZNF75D	Xq26.3	-0.220044776	0.003079	0.009617
CRYBB3	22q11.23	0.220030441	0.003081	0.009622
LRRC45	17q25.3	0.220017576	0.003083	0.009626
C19ORF53	19p13.13	0.219973636	0.003089	0.009643
ZNF595	4p16.3	-0.219967359	0.00309	0.009645
CD5	11q12.2	-0.219963175	0.00309	0.009645
C10ORF71	10q11.23	-0.219946914	0.003093	0.00965
GCNT2	6p24.3-p25	0.219933882	0.003094	0.009653
FAM72D	1q21.1	0.219933882	0.003094	0.009653
C5ORF51	5p13.1	-0.219921327	0.003096	0.009657
FKBP5	6p21.31	-0.219829264	0.003109	0.009695
HDGFL2	19p13.3	0.219812525	0.003111	0.0097
SH2D5	1p36.12	0.219810536	0.003111	0.0097
WDR46	6p21.32	0.219804155	0.003112	0.009702
EIF4ENIF1	22q12.2	-0.219722554	0.003124	0.009735
TSPAN12	7q31.31	-0.219668152	0.003131	0.009758
MYLK4	6p25.2	-0.219647344	0.003134	0.009765
1-Mar	4q32.2-q33	-0.219645136	0.003135	0.009765
HOOK2	19p13.13	0.219605382	0.00314	0.00978
GOLIM4	3q26.2	-0.21959492	0.003142	0.009784
TCAIM	3p21.31	0.219563534	0.003146	0.009795
SEPTIN1	16p11.2	-0.219561442	0.003146	0.009795
GTF3C1	16p12.1	-0.219555165	0.003147	0.009796
EMP2	16p13.13	0.21951541	0.003153	0.009812
WNT2B	1p13.2	-0.21948821	0.003157	0.009823
PSMD8	19q13.2	0.219477748	0.003158	0.009826

CEP104	1p36. 32	-0. 219467286	0. 00316	0. 009829
DDR1	6p21. 33	0. 219450547	0. 003162	0. 009835
SLC25A43	Xq24	0. 219345929	0. 003177	0. 009879
SLC16A1	1p13. 2	0. 219320821	0. 00318	0. 009889
PPP4R1L	20q13. 32	0. 219272697	0. 003187	0. 009908
SIPA1L2	1q42. 2	-0. 219270604	0. 003187	0. 009908
TIGD6	5q32	-0. 219245496	0. 003191	0. 009915
CD81	11p15. 5	-0. 219241311	0. 003192	0. 009915
GPR1	2q33. 3	0. 219239219	0. 003192	0. 009915
LCE3E	1q21. 3	0. 219239023	0. 003192	0. 009915
CSNK1G2	19p13. 3	0. 219226665	0. 003194	0. 009919
HYAL4	7q31. 32	0. 219210992	0. 003196	0. 009925
XRCC5	2q35	0. 219172264	0. 003201	0. 00994
MAIP1	2q33. 1	0. 219157617	0. 003203	0. 009945
MIR9-3HG	15q26. 1	-0. 219132509	0. 003207	0. 009955
CACNA1A	19p13. 13	-0. 219117862	0. 003209	0. 009959
ARHGAP21	10p12. 1 1	0. 21911577	0. 003209	0. 009959
CDC123	10p14-p15	0. 2190802	0. 003215	0. 009974
SUN1	7p22. 3	0. 219057184	0. 003218	0. 009982
TEDC2	16p13. 3	0. 219050907	0. 003219	0. 009983
NCOA2	8q13. 3	-0. 219040445	0. 00322	0. 009987
TRIM33	1p13. 2	-0. 219019522	0. 003223	0. 009994
MTHFD2L	4q13. 3	-0. 218992321	0. 003227	0. 010005
ZNF321P	19q13. 41	0. 218983952	0. 003228	0. 010007
GTSE1	22q13. 31	0. 218952566	0. 003233	0. 01002
UCK1	9q34. 13	-0. 21893792	0. 003235	0. 010025
NTHL1	16p13. 3	0. 218904442	0. 00324	0. 010038
ERICH1	8p23. 3	0. 218879334	0. 003243	0. 010048
ZNF721	4p16. 3	-0. 218864687	0. 003246	0. 010052
CNOT7	8p22	-0. 218862595	0. 003246	0. 010052
NAPB	20p11. 21	-0. 218850041	0. 003248	0. 010056
TP53BP1	15q15. 3	-0. 218843764	0. 003249	0. 010057
MOK	14q32. 31	0. 218827025	0. 003251	0. 010063
MTOR	1p36. 22	-0. 218814471	0. 003253	0. 010067
HSD11B1	1q32. 2	-0. 21871613	0. 003267	0. 01011
MMP8	11q22. 2	0. 218694617	0. 00327	0. 010118
C1QBP	17p13. 2	-0. 218676375	0. 003273	0. 010125
PRPF31	19q13. 42	0. 218663821	0. 003275	0. 010128
HCG4	6p22. 1	0. 218661729	0. 003275	0. 010128
HIST1H2AJ	6p22. 1	0. 218632249	0. 003279	0. 01014
AP4S1	14q12	-0. 218626159	0. 00328	0. 010141
KCNS1	20q13. 12	0. 218591046	0. 003285	0. 010155
MBOAT4	8p12	-0. 218578034	0. 003287	0. 01016
ADGRG1	16q21	0. 218571757	0. 003288	0. 010161
BCKDK	16p11. 2	0. 218567573	0. 003289	0. 010161
CDC16	13q34	0. 21856548	0. 003289	0. 010161
LMAN2	5q35. 3	0. 218550834	0. 003291	0. 010166
ATP6AP2	Xp11. 4	-0. 218536187	0. 003293	0. 010171
ARHGEF11	1q23. 1	-0. 218521541	0. 003296	0. 010176
VDAC2	10q22. 2	0. 218511079	0. 003297	0. 010179
EWSAT1	15q23	-0. 218497477	0. 003299	0. 010183
EID2B	19q13. 2	-0. 218452493	0. 003306	0. 010202
PRRG3	Xq28	-0. 218437657	0. 003308	0. 010207
ROR2	9q22. 31	-0. 218416923	0. 003311	0. 010215

CLCA4	1p22. 3	0. 218411314	0. 003312	0. 010216
EIF2B2	14q24. 3	0. 218393907	0. 003314	0. 010223
XKR7	20q11. 21	-0. 218389068	0. 003315	0. 010223
ABI2	2q33. 2	-0. 218381353	0. 003316	0. 010225
TMC04	1p36. 13	0. 218362522	0. 003319	0. 010232
NMUR2	5q33. 1	0. 218345514	0. 003321	0. 010238
AP5S1	20p13	-0. 218337413	0. 003323	0. 01024
CLN8	8p23. 3	-0. 218335321	0. 003323	0. 01024
MTHFSD	16q24. 1	0. 218289289	0. 00333	0. 010258
ANKRD6	6q15	-0. 218289289	0. 00333	0. 010258
PDE1A	2q32. 1	-0. 218283012	0. 003331	0. 010259
ZNF599	19q13. 11	-0. 218230703	0. 003338	0. 010281
JADE3	Xp11. 3	-0. 218216057	0. 003341	0. 010286
ESRRB	14q24. 3	-0. 218209895	0. 003341	0. 010287
PI4K2A	10q24. 2	-0. 218186764	0. 003345	0. 010296
DLG5	10q22. 3	0. 218170025	0. 003347	0. 010303
KCTD8	4p13	-0. 218110344	0. 003356	0. 010328
LRRC37A4F	17q21. 31	-0. 218090515	0. 003359	0. 010336
MFAP3L	4q33	-0. 218057038	0. 003364	0. 01035
PTGDR2	11q12. 2	-0. 217973343	0. 003377	0. 010386
NUF2	1q23. 3	0. 217948235	0. 003381	0. 010395
C10ORF12C	10q26. 13	-0. 2179469	0. 003381	0. 010395
APH1B	15q22. 2	-0. 217941958	0. 003381	0. 010396
BCKDHB	6q14. 1	-0. 217931496	0. 003383	0. 010397
ADCY5	3q21. 1	-0. 217927312	0. 003384	0. 010397
FABP1	2p11. 2	0. 217926655	0. 003384	0. 010397
TRMT10B	9p13. 2	-0. 217925219	0. 003384	0. 010397
HELB	12q14. 3 1	-0. 217900111	0. 003388	0. 010407
SLC16A11	17p13. 1	-0. 21784571	0. 003396	0. 010431
PIGS	17q11. 2	0. 217835248	0. 003397	0. 010434
MAK	6p24. 2	-0. 217805955	0. 003402	0. 010446
COX4I1	16q24. 1	0. 2177662	0. 003408	0. 010463
GADL1	3p24. 1-p2	-0. 217689535	0. 00342	0. 010497
STARD3	17q12	0. 217678321	0. 003421	0. 010501
MBOAT7	19q13. 42	0. 217663675	0. 003423	0. 010506
B3GNT5	3q27. 1	0. 21765949	0. 003424	0. 010506
CLU	8p21. 1	-0. 217638566	0. 003427	0. 010514
MYORG	9p13. 3	0. 217600904	0. 003433	0. 01053
SNAI3-AS1	16q24. 2	-0. 217582073	0. 003436	0. 010537
GLB1L2	11q25	0. 217571611	0. 003437	0. 010541
NEUROD1	2q31. 3	-0. 217558855	0. 003439	0. 010545
FYB1	5p13. 1	-0. 21755278	0. 00344	0. 010545
KCNU1	8p11. 23	-0. 217552208	0. 00344	0. 010545
ATP5P0	21q22. 11	0. 217540226	0. 003442	0. 010549
DUSP10	1q41	0. 217533948	0. 003443	0. 01055
SRSF7	2p22. 1	0. 217523487	0. 003445	0. 010553
CLNK	4p16. 1	-0. 217515275	0. 003446	0. 010556
FAM133CP	10q21. 1	-0. 217485824	0. 00345	0. 010568
RBM27	5q32	-0. 217471178	0. 003453	0. 010573
SOX6	11p15. 2	-0. 217466993	0. 003453	0. 010573
POLDIP2	17q11. 2	0. 2174377	0. 003458	0. 010585
NAA80	3p21. 31	0. 217400038	0. 003464	0. 010601
N4BP2L2-1	13q13. 1	0. 217377022	0. 003467	0. 010611
ESYT3	3q22. 3	0. 217341452	0. 003473	0. 010626

EI24	11q24. 2	0. 217312159	0. 003477	0. 010638
SCN2A	2q24. 3	-0. 217247296	0. 003487	0. 010667
DYNLL2	17q22	-0. 21721591	0. 003492	0. 01068
DHX36	3q25. 2	-0. 217190802	0. 003496	0. 01069
SYPL1	7q22. 3	0. 217092461	0. 003511	0. 010734
DAAM2	6p21. 2	-0. 217090369	0. 003511	0. 010734
C10RF174	1p36. 32	0. 217088277	0. 003512	0. 010734
PMS1	2q32. 2	-0. 217067353	0. 003515	0. 010742
PSMG2	18p11. 21	0. 217042245	0. 003519	0. 010752
KLF16	19p13. 3	0. 217033875	0. 00352	0. 010755
KRBOX4	Xp11. 3	-0. 217029691	0. 003521	0. 010755
YRDC	1p34. 3	-0. 217023413	0. 003522	0. 010755
NTN3	16p13. 3	-0. 2170208	0. 003522	0. 010755
CEP135	4q12	-0. 217019229	0. 003522	0. 010755
COMMD1	2p15	0. 217006675	0. 003524	0. 010759
KLF15	3q21. 3	-0. 217000398	0. 003525	0. 010761
EVPLL	17p11. 2	0. 216958467	0. 003532	0. 010779
FAM24B	10q26. 13	0. 216918796	0. 003538	0. 010796
APOO	Xp22. 11	-0. 216883226	0. 003544	0. 010812
AARD	8q24. 11	-0. 216853933	0. 003548	0. 010824
GJA8	1q21. 2	-0. 216818646	0. 003554	0. 010837
LRRC75B	22q11. 23	0. 216816384	0. 003554	0. 010837
PPWD1	5q12. 3	-0. 216814178	0. 003554	0. 010837
CERS2	1q21. 3	0. 216812085	0. 003555	0. 010837
MAFK	7p22. 3	0. 216797439	0. 003557	0. 010843
SLC01B1	12p12. 1	0. 216777988	0. 00356	0. 01085
SNORA11E	Xp11. 22	-0. 216757674	0. 003563	0. 010858
AIDA	1q41	0. 216751407	0. 003564	0. 01086
PEX1	7q21. 2	-0. 216740945	0. 003566	0. 010863
SYNE3	14q32. 13	-0. 216705375	0. 003572	0. 010879
RPP38-DT	10p13	-0. 216697006	0. 003573	0. 010881
ACBD4	17q21. 31	0. 216667713	0. 003578	0. 010891
NOP58	2q33. 1	0. 216667713	0. 003578	0. 010891
EPDR1	7p14. 1	0. 21666562	0. 003578	0. 010891
HDC	15q21. 2	-0. 216636327	0. 003582	0. 010903
WFDC13	20q13. 12	0. 216626286	0. 003584	0. 010907
FYTTD1	3q29	-0. 216611219	0. 003586	0. 010912
ILK	11p15. 4	0. 216462662	0. 00361	0. 010981
GMPS	3q25. 31	0. 216462662	0. 00361	0. 010981
CEACAM18	19q13. 41	0. 216431606	0. 003615	0. 010994
CEP290	12q21. 32	-0. 216427092	0. 003616	0. 010994
FUNDC2P2	2p11. 2	-0. 216407736	0. 003619	0. 011002
FGF14	13q33. 1	-0. 216387337	0. 003622	0. 01101
RGMA	15q26. 1	-0. 216383152	0. 003623	0. 011011
PPP3CA	4q24	0. 216372691	0. 003624	0. 011014
FLT3	13q12. 2	-0. 216354312	0. 003627	0. 011021
SEC22B	1p12	-0. 216303643	0. 003635	0. 011044
RSC1A1	1p36. 21	-0. 216291089	0. 003637	0. 011049
SPATA6L	9p24. 2-p2	0. 216268073	0. 003641	0. 011058
VAMP7	Xq28 and	-0. 216259703	0. 003642	0. 011061
SLC25A24	1p13. 3	0. 216242964	0. 003645	0. 011067
PTPRT	20q12-q13	-0. 216206461	0. 003651	0. 011083
FBXL21P	5q31. 1	-0. 216198696	0. 003652	0. 011085
FRMPD2	10q11. 22	-0. 216172101	0. 003657	0. 011097

SLC25A29	14q32. 2	0. 21616764	0. 003657	0. 011097
FAM71F1	7q32. 1	-0. 216163544	0. 003658	0. 011097
ATP5MF	7q22. 1	0. 21615927	0. 003659	0. 011097
ATP1A3	19q13. 2	-0. 216155085	0. 003659	0. 011097
MXRA8	1p36. 33	0. 216155085	0. 003659	0. 011097
PARP1	1q42. 12	-0. 216138347	0. 003662	0. 011103
BAALC	8q22. 3	-0. 216121608	0. 003665	0. 011108
CDH18	5p14. 3	-0. 216121468	0. 003665	0. 011108
ARHGAP44	17p12	-0. 216094407	0. 003669	0. 011119
MACF1	1p34. 3	-0. 216090222	0. 00367	0. 01112
FSCN2	17q25. 3	0. 216044191	0. 003677	0. 011141
DDI1	11q22. 3	-0. 216013824	0. 003682	0. 011154
SIPA1	11q13. 1	0. 216006528	0. 003683	0. 011156
GIGYF2	2q37. 1	-0. 215987697	0. 003686	0. 011163
SLC6A10P	16p11. 2	0. 215946302	0. 003693	0. 011182
LRP11	6q25. 1	-0. 215922834	0. 003697	0. 011192
ZNF430	19p12	-0. 215908187	0. 003699	0. 011197
ZNRD1	6p22. 1	0. 215899818	0. 003701	0. 011199
CHPF	2q35	0. 215897726	0. 003701	0. 011199
ZNF484	9q22. 31	-0. 215889356	0. 003702	0. 011202
MFSD14A	1p21. 2	-0. 215878894	0. 003704	0. 011205
DNAJC4	11q13. 1	0. 215837047	0. 003711	0. 011224
MRTFA	22q13. 1-c	0. 21580357	0. 003716	0. 011239
CD84	1q23. 3	-0. 215788923	0. 003719	0. 011244
HDAC5	17q21. 31	-0. 215776369	0. 003721	0. 011247
VAMP3	1p36. 23	0. 215776369	0. 003721	0. 011247
HHIP	4q31. 21	0. 215744984	0. 003726	0. 011261
AJUBA	14q11. 2	0. 215717783	0. 00373	0. 011273
GJA5	1q21. 2	-0. 215713598	0. 003731	0. 011273
PGAP2	11p15. 4	0. 215667566	0. 003739	0. 011294
KTN1-AS1	14q22. 3	-0. 215657217	0. 00374	0. 011298
SHLD1	20p12. 3	-0. 215648848	0. 003742	0. 0113
TRAPPC2B	19q13. 43	0. 215636181	0. 003744	0. 011305
PCGF2	17q12	0. 215596426	0. 00375	0. 011322
C5ORF49	5p15. 31	-0. 215594334	0. 003751	0. 011322
SCARNA6	2q37. 1	0. 215581233	0. 003753	0. 011327
RPL36	19p13. 3	0. 215575503	0. 003754	0. 011328
MRPL57	13q12. 11	0. 215535748	0. 00376	0. 011346
TRMT1	19p13. 13	0. 215529471	0. 003761	0. 011347
HEATR3	16q12. 1	-0. 215514824	0. 003764	0. 011353
SUGT1P1	9p13. 3	-0. 215493048	0. 003767	0. 011362
SOCS4	14q22. 3	-0. 21547507	0. 00377	0. 011369
CASP12	11q22. 3	-0. 215465579	0. 003772	0. 011372
HIST1H4H	6p22. 2	0. 215432289	0. 003777	0. 011387
LEP	7q32. 1	-0. 215372443	0. 003787	0. 011416
ZDHHC9	Xq26. 1	0. 215368359	0. 003788	0. 011416
ATP6V1G1	9q32	-0. 215343251	0. 003792	0. 011427
PRIM1	12q13. 3	-0. 215328605	0. 003795	0. 011432
ADAM22	7q21. 12	-0. 215322328	0. 003796	0. 011434
PRADC1	2p13. 2	-0. 215309773	0. 003798	0. 011438
LINC00899	22q13. 31	0. 215251187	0. 003807	0. 011466
LINC01278	Xq11. 1	-0. 215240726	0. 003809	0. 01147
ZNF787	19q13. 43	0. 215194694	0. 003817	0. 011491
PLCB4	20p12. 3-f	-0. 215161216	0. 003823	0. 011506

OR3A2	17p13.3	-0.21515483	0.003824	0.011508
MINAR1	15q25.1	-0.215136108	0.003827	0.011515
ASPA	17p13.2	-0.215129831	0.003828	0.011515
STX17	9q31.1	-0.215129831	0.003828	0.011515
ACAD9	3q21.3	0.215117277	0.00383	0.01152
MTMR6	13q12.13	-0.215106815	0.003832	0.011523
CTSO	4q32.1	-0.215085891	0.003835	0.011532
CXCR6	3p21.31	-0.215081707	0.003836	0.011532
RNF212	4p16.3	-0.215077522	0.003837	0.011533
POLM	7p13	0.215033582	0.003844	0.011553
IZUM01	19q13.33	-0.21502528	0.003845	0.011556
PCDH18	4q28.3	-0.21499592	0.00385	0.011569
F10	13q34	-0.214914318	0.003864	0.011608
SHROOM3	4q21.1	0.214878748	0.00387	0.011625
ACOT13	6p22.3	-0.214866194	0.003872	0.011629
ROB01	3p12.3	-0.21484527	0.003876	0.011638
GUF1	4p12	-0.214843178	0.003876	0.011638
CACNA1G	17q21.33	-0.2148097	0.003882	0.011653
ZNF529	19q13.12	-0.214805515	0.003883	0.011653
POLR1B	2q14.1	-0.214797146	0.003884	0.011654
SEC62	3q26.2	-0.214795054	0.003884	0.011654
C10RF112	1q24.2	0.214790869	0.003885	0.011654
TTC25	17q21.2	-0.214789935	0.003885	0.011654
PBX1	1q23.3	-0.2147825	0.003886	0.011656
RUFY1	5q35.3	0.21477413	0.003888	0.011657
NPSR1-AS1	17p14.3	0.21477367	0.003888	0.011657
CHGB	20p12.3	-0.214705082	0.0039	0.011691
MRPL24	1q23.1	0.214646496	0.00391	0.011719
PNPLA1	6p21.31	0.214641399	0.00391	0.01172
CDC42BPB	14q32.32	0.214606742	0.003916	0.011734
FUZ	19q13.33	0.214604649	0.003917	0.011734
CAAP1	9p21.2	-0.214602557	0.003917	0.011734
ORC2	2q33.1	0.214504216	0.003934	0.011783
CCNA2	4q27	0.214464461	0.003941	0.011802
STIM1	11p15.4	-0.214430984	0.003947	0.011817
SLC01B7	12p12.2	0.214405006	0.003951	0.011829
SCN7A	2q24.3	-0.214384018	0.003955	0.011838
TNXB	6p21.33-1	-0.214380767	0.003955	0.011838
PCDHA2	5q31.3	-0.214345496	0.003961	0.011854
NSMCE1	16p12.1	0.21433055	0.003964	0.01186
LINC00028	20q11.21	-0.214314325	0.003967	0.011867
FKBP8	19p13.11	0.214290796	0.003971	0.011878
WDR18	19p13.3	0.214282426	0.003972	0.01188
CCDC78	16p13.3	0.214278242	0.003973	0.01188
BREA2	8q24.3	0.214250331	0.003978	0.011893
UBE2QL1	5p15.31	-0.214238487	0.00398	0.011898
KIAA1614	1q25.3	-0.214230117	0.003981	0.011898
SLC6A12	12p13.33	0.214230117	0.003981	0.011898
ROB03	11q24.2	0.214219656	0.003983	0.0119
MSH5	6p21.33	0.214219656	0.003983	0.0119
LINC00294	11p13	-0.214192455	0.003988	0.011913
PLCD1	3p22.2	0.214175716	0.003991	0.011919
ARHGAP23	17q12	0.214131777	0.003999	0.011941
PROX2	14q24.3	-0.214068102	0.00401	0.011972

IL17A	6p12. 2	-0. 214050447	0. 004013	0. 011979
MGC2889	3q29	-0. 21398243	0. 004025	0. 012013
CAP2	6p22. 3	-0. 213970665	0. 004027	0. 012018
KCNG1	20q13. 13	-0. 213949854	0. 00403	0. 012027
PHLDA1	12q21. 2	0. 213943465	0. 004031	0. 012028
ERCC6	10q11. 23	-0. 213905802	0. 004038	0. 012046
XKR8	1p35. 3	-0. 213893248	0. 00404	0. 012051
SLC8A2	19q13. 32	-0. 213890221	0. 004041	0. 012051
LDB1	10q24. 32	-0. 213886971	0. 004041	0. 012051
RPS6KC1	1q32. 3	-0. 213882786	0. 004042	0. 012051
ZNF536	19q12	-0. 213802163	0. 004056	0. 012092
LYRM1	16p12. 3	-0. 213730044	0. 004069	0. 012128
KMT5C	19q13. 42	0. 213691447	0. 004076	0. 012147
GMPPA	2q35	0. 213675643	0. 004079	0. 012152
RDH11	14q24. 1	-0. 213673551	0. 004079	0. 012152
CHCHD1	10q22. 2	0. 213671458	0. 00408	0. 012152
NUP37	12q23. 2	0. 213656812	0. 004082	0. 012158
NBDY	Xp11. 21	0. 213642165	0. 004085	0. 012164
SMIM1	1p36. 32	0. 21363798	0. 004085	0. 012164
SYNCRIP	6q14. 3	-0. 213568933	0. 004098	0. 012199
METTL11B	1q24. 2	0. 213511969	0. 004108	0. 012227
PDE6B	4p16. 3	-0. 21350407	0. 004109	0. 01223
FDPSP2	7q11. 23	0. 213491739	0. 004112	0. 012234
CCZ1	7p22. 1	0. 213487331	0. 004112	0. 012235
GMNC	3q28	-0. 213467259	0. 004116	0. 012244
MINK1	17p13. 2	-0. 21338899	0. 00413	0. 012284
UPB1	22q11. 23	-0. 213335356	0. 00414	0. 012311
C14ORF178	14q24. 3	-0. 213259686	0. 004153	0. 012349
ATXN1L	16q22. 2	-0. 21323834	0. 004157	0. 012359
FABP4	8q21. 13	-0. 213232063	0. 004158	0. 01236
ZBED9	6p22. 1	-0. 213228325	0. 004159	0. 012361
STRIP1	1p13. 3	-0. 213215324	0. 004161	0. 012363
UBQLN1	9q21. 32 c	-0. 213215324	0. 004161	0. 012363
SRPX	Xp11. 4	-0. 213213232	0. 004162	0. 012363
KIAA0895	7p14. 2	-0. 213177662	0. 004168	0. 01238
RGL4	22q11. 23	-0. 2131672	0. 00417	0. 012384
MFAP4	17p11. 2	-0. 213127445	0. 004177	0. 012404
MTSS1	8q24. 13	-0. 213121168	0. 004178	0. 012405
C3ORF35	3p22. 2	0. 213108614	0. 004181	0. 01241
CCL8	17q12	-0. 213063028	0. 004189	0. 012433
PLCXD3	5p13. 1	-0. 213037474	0. 004194	0. 012445
SMARCA1	Xq25-q26.	-0. 213010273	0. 004199	0. 012458
NOP9	14q12	-0. 212994692	0. 004201	0. 012464
CIDECP1	3p25. 3	0. 212985277	0. 004203	0. 012468
HUNK	21q22. 11	-0. 212934949	0. 004212	0. 012491
TRAPPC5	19p13. 2	0. 212934949	0. 004212	0. 012491
HOXB1	17q21. 32	0. 212931927	0. 004213	0. 012491
PRDX6	1q25. 1	0. 212928783	0. 004213	0. 012491
CA7	16q22. 1	0. 212916942	0. 004216	0. 012495
CCR2	3p21. 31	-0. 212903563	0. 004218	0. 0125
IL1B	2q14. 1	-0. 212901471	0. 004218	0. 0125
FCN2	9q34. 3	-0. 212891234	0. 00422	0. 012504
RUFY3	4q13. 3	-0. 212880547	0. 004222	0. 012507
RCSD1	1q24. 2	-0. 212878455	0. 004223	0. 012507

CD300E	17q25. 1	-0. 212858855	0. 004226	0. 012516
AREL1	14q24. 3	-0. 2128387	0. 00423	0. 012525
GLG1	16q23. 1	-0. 212801038	0. 004237	0. 012544
LRRC66	4q12	0. 212792668	0. 004238	0. 012546
UBQLN2	Xp11. 21	-0. 212746637	0. 004247	0. 012569
KLF4	9q31. 2	0. 212704789	0. 004255	0. 01259
PSRC1	1p13. 3	0. 212700605	0. 004255	0. 012591
DAW1	2q36. 3	0. 212664531	0. 004262	0. 012608
DPCD	10q24. 32	0. 212662942	0. 004262	0. 012608
NCAM2	21q21. 1	-0. 212656665	0. 004263	0. 012609
RPL7	8q21. 11	-0. 212621095	0. 00427	0. 012627
CYB5R4	6q14. 2	-0. 21258134	0. 004277	0. 012647
NPTX1	17q25. 3	0. 212575063	0. 004279	0. 012648
PSMA4	15q25. 1	0. 212547863	0. 004284	0. 012661
NCAN	19p13. 11	-0. 212531787	0. 004287	0. 012668
SYNJ2BP	14q24. 2	-0. 212512293	0. 00429	0. 012677
GOLGA1	9q33. 3	-0. 212489277	0. 004294	0. 012688
RACGAP1P	12q12	0. 21246783	0. 004298	0. 012698
BHLHE22	8q12. 3	-0. 212464168	0. 004299	0. 012698
ARMC12	6p21. 31	-0. 212457133	0. 0043	0. 0127
USP36	17q25. 3	-0. 212453707	0. 004301	0. 0127
ZAN	7q22. 1	-0. 212442914	0. 004303	0. 012704
ZCCHC8	12q24. 31	-0. 21243906	0. 004304	0. 012704
DNAI1	9p13. 3	-0. 212431536	0. 004305	0. 012706
DHX29	5q11. 2	-0. 212420229	0. 004307	0. 012711
PRTG	15q21. 3	-0. 212382566	0. 004314	0. 01273
CLEC4E	12p13. 31	-0. 212353273	0. 00432	0. 012744
TBX4	17q23. 2	0. 212348264	0. 004321	0. 012745
CPLANE2	1p36. 13	-0. 21232398	0. 004325	0. 012756
PRKCB	16p12. 2-1	-0. 212298872	0. 00433	0. 012767
C2ORF48	2p25. 1	0. 212297451	0. 00433	0. 012767
HIPK1	1p13. 2	-0. 212265395	0. 004336	0. 012783
MIGA1	1p31. 1	-0. 212250748	0. 004339	0. 012787
MS4A7	11q12. 2	-0. 212250748	0. 004339	0. 012787
KCNC3	19q13. 33	-0. 212206809	0. 004347	0. 01281
RCOR1	14q32. 31-	0. 212173331	0. 004354	0. 012827
PNMA3	Xq28	-0. 21216959	0. 004354	0. 012827
NLGN2	17p13. 1	-0. 212164961	0. 004355	0. 012827
SCAMP1	5q14. 1	-0. 212158684	0. 004356	0. 012829
SAAL1	11p15. 1	0. 212127299	0. 004362	0. 012845
RBBP7	Xp22. 2	0. 212095914	0. 004368	0. 01286
PGAM1	10q24. 1	0. 212083359	0. 004371	0. 012865
FOXB1	15q22. 2	-0. 212073055	0. 004373	0. 012869
B4GALNT4	11p15. 5	-0. 212062436	0. 004375	0. 012873
SLC19A2	1q24. 2	-0. 212047789	0. 004377	0. 012879
SRP54	14q13. 2	-0. 212037328	0. 004379	0. 012883
DYNC1I1	7q21. 3	-0. 212020589	0. 004382	0. 012891
HTR7P1	12p13. 1	-0. 211997573	0. 004387	0. 012902
GSDMC	8q24. 21	0. 211956883	0. 004395	0. 012922
CCNI	4q21. 1	-0. 211949449	0. 004396	0. 012925
GATC	12q24. 31	-0. 211936895	0. 004398	0. 01293
PTPN13	4q21. 3	-0. 21193271	0. 004399	0. 01293
KRIT1	7q21. 2	-0. 211905509	0. 004404	0. 012943
C6ORF141	6p12. 3	0. 211901324	0. 004405	0. 012943

ULK4	3p22.1	-0.211899232	0.004405	0.012943
ARIH2	3p21.31	-0.211890863	0.004407	0.012946
FRMPD1	9p13.2	-0.211880552	0.004409	0.01295
G3BP2	4q21.1	-0.21186157	0.004413	0.012959
TRPC7	5q31.1	-0.211856969	0.004414	0.012959
BTAF1	10q23.32	-0.211846923	0.004415	0.012963
GNRH2	20p13	-0.211820306	0.004421	0.012976
CRMP1	4p16.2	-0.211792522	0.004426	0.01299
HCFC1	Xq28	-0.211738121	0.004436	0.013016
LOC91450	15q24.3	0.211738121	0.004436	0.013016
MRPS34	16p13.3	0.211719289	0.00444	0.013023
PCNX4	14q23.1	-0.211719289	0.00444	0.013023
ARRDC4	15q26.2	-0.211570732	0.004468	0.013105
CHEK2	22q12.1	0.211528885	0.004476	0.013126
GDPGP1	15q26.1	0.211522608	0.004478	0.013126
CYP1B1-AS2	2p22.2	-0.211520516	0.004478	0.013126
ZNF681	19p12	-0.211520516	0.004478	0.013126
HSDL1	16q24.1	-0.211480761	0.004486	0.013146
CRIP3	6p21.1	-0.211475407	0.004487	0.013147
ACAT2	6q25.3	0.211466114	0.004489	0.013151
TIMMDC1	3q13.33	0.211457745	0.00449	0.013153
SNX4	3q21.2	-0.211455653	0.004491	0.013153
SP140L	2q37.1	0.211451468	0.004491	0.013153
SRA1	5q31.3	0.211434729	0.004495	0.013161
GPHN	14q23.3-c	-0.211399159	0.004502	0.013177
UBXN4	2q21.3	-0.211399159	0.004502	0.013177
CRISPLD1	8q21.13	-0.211380328	0.004505	0.013186
CCDC32	15q15.1	0.211357422	0.00451	0.013197
RASSF2	20p13	-0.211348942	0.004511	0.0132
HS6ST2	Xq26.2	-0.211344758	0.004512	0.0132
EBNA1BP2	1p34.2	0.211336388	0.004514	0.013203
SPRR2A	1q21.3	0.211302303	0.00452	0.013221
C100RF99	10q23.1	0.2112817	0.004524	0.01323
TAGLN3	3q13.2	-0.211276152	0.004526	0.013231
TEN1	17q25.1	0.211273617	0.004526	0.013231
NKAPP1	Xq24	-0.211252694	0.00453	0.01324
KIF16B	20p12.1	-0.211250602	0.004531	0.01324
RNF121	11q13.4	0.211221309	0.004536	0.013255
UCK2	1q24.1	0.211187831	0.004543	0.013272
DANCR	4q12	-0.211173184	0.004546	0.013279
CCK	3p22.1	0.211169048	0.004546	0.013279
RBBP8NL	20q13.33	0.211125171	0.004555	0.013302
GAMT	19p13.3	-0.211099952	0.00456	0.013313
HLA-A	6p22.1	0.211099952	0.00456	0.013313
ACOT8	20q13.12	0.211076936	0.004565	0.013323
RBM4B	11q13.2	-0.211074844	0.004565	0.013323
NDC80	18p11.32	0.211072862	0.004565	0.013323
PPP2R1B	11q23.1	-0.211058105	0.004568	0.013329
ECHDC1	6q22.33	-0.211022535	0.004575	0.013348
PTPRC	1q31.3-q32	-0.211003703	0.004579	0.013354
GRIK2	6q16.3	-0.211001611	0.004579	0.013354
MKMK2	19p13.3	0.211001611	0.004579	0.013354
ATP7A	Xq21.1	-0.210989057	0.004582	0.013359
MARS	12q13.3	-0.210959764	0.004588	0.013371

PLA2G5	1p36. 13	-0. 210959764	0. 004588	0. 013371
MAGEC3	Xq27. 2	-0. 210957804	0. 004588	0. 013371
IL32	16p13. 3	0. 210955579	0. 004588	0. 013371
LRG1	19p13. 3	0. 21093884	0. 004592	0. 013378
PRPF4	9q32	-0. 210888624	0. 004602	0. 013405
DNAJC25-C	9q31. 3	-0. 210883491	0. 004603	0. 013405
PKD1L1	7p12. 3	-0. 210882898	0. 004603	0. 013405
DLK2	6p21. 1	-0. 210869793	0. 004605	0. 01341
SGCD	5q33. 2-q ₂	-0. 210859331	0. 004607	0. 013414
ALDH2	12q24. 12	0. 210786098	0. 004622	0. 013455
TMCO6	5q31. 3	0. 21076099	0. 004627	0. 013467
MKLN1	7q32. 3	-0. 210740067	0. 004631	0. 013475
CACNA1H	16p13. 3	-0. 210737974	0. 004632	0. 013475
L2HGDH	14q21. 3	-0. 210733789	0. 004632	0. 013475
NOSIP	19q13. 33	0. 210733789	0. 004632	0. 013475
OR6A2	11p15. 4	0. 210731048	0. 004633	0. 013475
RDX	11q22. 3	-0. 21072542	0. 004634	0. 013476
C17ORF99	17q25. 3	0. 210714352	0. 004636	0. 013481
ADAMTSL1	9p22. 2-p ₂	-0. 210706589	0. 004638	0. 013483
TMEM198	2q35	-0. 210700312	0. 004639	0. 013484
USP33	1p31. 1	-0. 210698219	0. 00464	0. 013484
MGST1	12p12. 3	0. 210679388	0. 004643	0. 013493
TRIM14	9q22. 33	0. 210671019	0. 004645	0. 013496
ZMYND19	9q34. 3	0. 210652188	0. 004649	0. 013505
MANBAL	20q11. 23	0. 210641726	0. 004651	0. 013509
EDARADD	1q42. 3-q ₄	-0. 210597786	0. 00466	0. 013533
PPP1R1B	17q12	0. 210587325	0. 004662	0. 013537
HIST1H1D	6p22. 2	0. 210576256	0. 004664	0. 013541
LINGO2	9p21. 2-p ₂	-0. 210568684	0. 004665	0. 013544
SDAD1	4q21. 1	-0. 210560124	0. 004667	0. 013547
SSPO	7q36. 1	-0. 210553957	0. 004668	0. 013548
RNFT1	17q23. 1	-0. 210541293	0. 004671	0. 013554
BTBD6	14q32. 33	-0. 210518277	0. 004676	0. 013565
GOLGA3	12q24. 33	-0. 210505723	0. 004678	0. 01357
PPP1R3B	8p23. 1	0. 210470153	0. 004685	0. 013587
C9ORF152	9q31. 3	0. 210470153	0. 004685	0. 013587
GAK	4p16. 3	0. 210419936	0. 004695	0. 013615
TTN	2q31. 2	-0. 210413659	0. 004697	0. 013616
ADGRG4	Xq26. 3	-0. 210410214	0. 004697	0. 013616
CRYZ	1p31. 1	0. 210405289	0. 004698	0. 013617
SERPINA4	14q32. 13	0. 210388991	0. 004702	0. 013624
CRYAB	11q23. 1	-0. 210386458	0. 004702	0. 013624
ATXN7L3	17q21. 31	0. 210365535	0. 004706	0. 013634
DUS2	16q22. 1	0. 210350888	0. 004709	0. 01364
CDNF	10p13	-0. 210348796	0. 00471	0. 01364
VMA21	Xq28	-0. 210313226	0. 004717	0. 013659
SCFD2	4q12	-0. 210304856	0. 004719	0. 013662
ARL16	17q25. 3	0. 210296487	0. 00472	0. 013665
NEURL1B	5q35. 1	-0. 210292302	0. 004721	0. 013665
NOMO2	16p12. 3	-0. 210279748	0. 004724	0. 013671
SPDYC	11q13. 1	0. 210259338	0. 004728	0. 013681
DCP1A	3p21. 1	-0. 210204423	0. 004739	0. 013711
AHCYL1	1p13. 3	-0. 2101835	0. 004743	0. 013721
SLCO2A1	3q22. 1-q ₂	-0. 210181407	0. 004744	0. 013721

PRKDC	8q11. 21	-0. 210154207	0. 004749	0. 013735
ASB4	7q21. 3	-0. 210116916	0. 004757	0. 013755
GPR18	13q32. 3	-0. 210102008	0. 00476	0. 013761
PRF1	10q22. 1	-0. 210097713	0. 004761	0. 013761
TACC3	4p16. 3	0. 210095621	0. 004761	0. 013761
KDM1B	6p22. 3	-0. 210091436	0. 004762	0. 013762
CMTM6	3p22. 3	0. 21003285	0. 004774	0. 013794
MRPL48	11q13. 4	0. 210028665	0. 004775	0. 013794
MMS22L	6q16. 1	-0. 210026573	0. 004775	0. 013794
CFAP69	7q21. 13	-0. 210009834	0. 004779	0. 013802
EEF1A1P9	4q24	-0. 210005649	0. 004779	0. 013802
RPLP1	15q23	0. 209991003	0. 004782	0. 013808
YY1AP1	1q22	0. 209988911	0. 004783	0. 013808
ARPC5L	9q33. 3	0. 209936602	0. 004794	0. 013837
PROC	2q14. 3	0. 209913586	0. 004798	0. 013849
ZDHC21	9p22. 3	-0. 209888477	0. 004804	0. 013862
LINC00589	8p12	0. 20985814	0. 00481	0. 013878
LRRC49	15q23	-0. 209850815	0. 004811	0. 013879
GABRG2	5q34	-0. 209849909	0. 004811	0. 013879
ANGPTL3	1p31. 3	-0. 209844167	0. 004813	0. 01388
TRAK2	2q33. 1	-0. 209834076	0. 004815	0. 013883
FEZF2	3p14. 2	-0. 2098329	0. 004815	0. 013883
PDZD4	Xq28	-0. 209829891	0. 004816	0. 013883
HLA-B	6p21. 33	0. 209817337	0. 004818	0. 013888
CENPQ	6p12. 3	-0. 209785952	0. 004825	0. 013905
RRP8	11p15. 4	0. 209777582	0. 004826	0. 013908
PCDHGA9	5q31. 3	-0. 209773398	0. 004827	0. 013908
RAB23	6p12. 1-p1	-0. 209723181	0. 004838	0. 013936
LDLRAD3	11p13	-0. 209708535	0. 004841	0. 013943
KCTD19	16q22. 1	-0. 209694962	0. 004843	0. 013949
NOL4	18q12. 1	-0. 209676011	0. 004847	0. 013958
KLK2	19q13. 33	0. 209659777	0. 004851	0. 013966
HES2	1p36. 31	0. 209640643	0. 004855	0. 013975
PCDH12	5q31. 3	-0. 209629025	0. 004857	0. 01398
GASK1B	4q32. 1	-0. 209606009	0. 004862	0. 013992
HTR4	5q32	-0. 209597807	0. 004864	0. 013995
IRF2BPL	14q24. 3	-0. 209591363	0. 004865	0. 013995
MOV10	1p13. 2	0. 209591363	0. 004865	0. 013995
VWA3B	2q11. 2	0. 209580901	0. 004867	0. 013999
CCDC13	3p22. 1	-0. 209564162	0. 004871	0. 014007
TARS2	1q21. 2	0. 209549516	0. 004874	0. 014014
MADD	11p11. 2	-0. 209545331	0. 004875	0. 014014
SDHAP1	3q29	0. 209488837	0. 004886	0. 014046
NDN	15q11. 2	-0. 209440713	0. 004896	0. 014073
DPP6	7q36. 2	-0. 209430251	0. 004899	0. 014077
TCEAL6	Xq22. 1	-0. 209421882	0. 0049	0. 01408
HNRNPH3	10q21. 3	-0. 209373758	0. 00491	0. 014107
SP110	2q37. 1	0. 209369573	0. 004911	0. 014108
STUM	1q42. 12	-0. 209328881	0. 00492	0. 01413
TGFB1	19q13. 2	0. 20926914	0. 004932	0. 014164
PAPPA2	1q25. 2	-0. 209219725	0. 004943	0. 014192
NCK1	3q22. 3	0. 209198	0. 004947	0. 014203
IPO5	13q32. 2	-0. 209193815	0. 004948	0. 014204
CASKIN1	16p13. 3	-0. 209162526	0. 004955	0. 014221

MUTYH	1p34.1	0.209158245	0.004956	0.014221
SCG3	15q21.2	-0.209106045	0.004967	0.01425
HOXC8	12q13.13	0.209103953	0.004967	0.01425
CH25H	10q23.31	-0.209043165	0.00498	0.014285
ARHGAP20	11q22.3-c	-0.208995041	0.00499	0.014313
CCDC28A	6q24.1	-0.208972025	0.004995	0.014325
C16ORF89	16p13.3	-0.20896784	0.004996	0.014325
PCGF6	10q24.33	-0.208957379	0.004999	0.014329
AADAT	4q33	-0.208953194	0.004999	0.01433
ZNF148	3q21.2	-0.20894064	0.005002	0.014336
CEP63	3q22.2	-0.208930178	0.005004	0.01434
KRT5	12q13.13	0.20891144	0.005008	0.014349
NGFR	17q21.33	-0.2088967	0.005011	0.014356
SP2	17q21.32	-0.208890423	0.005013	0.014356
RUNX1-IT1	21q22.12	0.208890016	0.005013	0.014356
SIRT4	12q24.23-	-0.208882054	0.005015	0.014359
CCDC77	12p13.33	-0.208865315	0.005018	0.014367
ZNF134	19q13.43	-0.208838114	0.005024	0.014382
CCBE1	18q21.32	-0.208832993	0.005025	0.014383
CARD6	5p13.1	0.208792083	0.005034	0.014405
FAM47E	4q21.1	-0.20878999	0.005034	0.014405
INOSOC	18q12.2	0.208783713	0.005036	0.014407
LPA	6q25.3-q2	-0.208754223	0.005042	0.014423
RPL8	8q24.3	0.208720942	0.005049	0.014442
TMEM59L	19p13.11	-0.208697926	0.005054	0.014454
LAMA5	20q13.33	0.208645618	0.005065	0.014484
PRKD3	2p22.2	-0.208591216	0.005077	0.014515
SLIT1	10q24.1	-0.208578662	0.00508	0.014521
LOC644669	18p11.21	-0.208517579	0.005093	0.014557
IL21	4q27	-0.2085054	0.005096	0.014562
LILRB1	19q13.42	-0.208501245	0.005097	0.014563
AKIRIN2	6q15	-0.208482414	0.005101	0.014572
TMUB1	7q36.1	0.208471952	0.005103	0.014577
MB21D2	3q29	-0.208457305	0.005106	0.014584
SEC22C	3p22.1	-0.208407089	0.005117	0.014613
PTHLH	12p11.22	0.208388258	0.005121	0.014622
NDRG3	20q11.23	-0.208381981	0.005123	0.014624
SNORD115-	15q11.2	-0.208335594	0.005133	0.014651
CIPC	14q24.3	-0.208331764	0.005133	0.014651
PADI4	1p36.13	-0.20832746	0.005134	0.014652
KIF23	15q23	0.208321302	0.005136	0.014654
SLC22A17	14q11.2	-0.208254347	0.00515	0.014693
KLRF1	12p13.31	-0.208242948	0.005153	0.014698
CDK11B	1p36.33	0.208229239	0.005156	0.014705
GABRE	Xq28	0.208220869	0.005158	0.014708
TEF	22q13.2	-0.20820413	0.005161	0.014716
ZNF575	19q13.31	0.208199946	0.005162	0.014717
H1FNT	12q13.11	-0.208184037	0.005166	0.014725
SHISA7	19q13.42	-0.208176162	0.005168	0.014728
RFTN2	2q33.1	-0.208172745	0.005168	0.014728
CIB4	2p23.3	-0.208140877	0.005175	0.014744
ZNF804A	2q32.1	-0.208139703	0.005176	0.014744
EXOSC1	10q24.1	0.208118344	0.00518	0.014755
TAP1	6p21.32	0.208074404	0.00519	0.01478

AFM	4q13.3	-0.208072339	0.00519	0.01478
MED28	4p15.32	-0.208066035	0.005192	0.014782
CCDC130	19p13.13	0.208055573	0.005194	0.014786
SCGN	6p22.2	-0.208044107	0.005197	0.014791
C7ORF31	7p15.3	-0.208032557	0.005199	0.014796
SHISA3	4p13	-0.208029527	0.0052	0.014796
SBSN	19q13.12	0.208024962	0.005201	0.014797
FGFBP3	10q23.32	-0.208007449	0.005205	0.014806
CHST4	16q22.2	0.207974055	0.005212	0.014825
SLC35E2A	1p36.33	-0.207944678	0.005219	0.014841
VPS4A	16q22.1	0.207936309	0.00522	0.014844
LRRIQ4	3q26.2	0.207886235	0.005232	0.014872
IGIP	5q31.3	-0.207886092	0.005232	0.014872
DCPS	11q24.2	0.207871446	0.005235	0.014879
SEMA3D	7q21.11	-0.207865169	0.005236	0.014881
ZNF225	19q13.31	-0.207858891	0.005238	0.014881
SERPIN1	18q21.33	0.207858697	0.005238	0.014881
KIF4A	Xq13.1	0.207846446	0.00524	0.014886
ANKRD30B	18p11.21	-0.20783805	0.005242	0.014889
NUDT10	Xp11.22	-0.207835876	0.005243	0.014889
MRPL49	11q13.1	0.207827506	0.005245	0.014892
RIPPLY2	6q14.2	-0.207786856	0.005254	0.014916
NOL10	2p25.1	0.20776892	0.005258	0.014924
TSHB	1p13.2	-0.2077667	0.005258	0.014924
PEX6	6p21.1	-0.207672672	0.005279	0.014982
DNAJB2	2q35	0.207666395	0.005281	0.014984
STON2	14q31.1	0.207639194	0.005287	0.014999
DGKQ	4p16.3	0.207628732	0.005289	0.015003
SALL3	18q23	-0.207599297	0.005296	0.01502
KLF10	8q22.3	-0.207559684	0.005305	0.015042
DCTN1-AS1	12p13.1	0.207557461	0.005305	0.015042
SH3GL2	9p22.2	-0.207526286	0.005312	0.01506
ARPP21	3p22.3	-0.207509744	0.005316	0.015068
ZDHHC16	10q24.1	0.207505283	0.005317	0.015069
CASP14	19p13.12	0.207402377	0.00534	0.015133
OS9	12q13.3-c	-0.207371372	0.005347	0.015151
RAD51C	17q22	-0.207358818	0.00535	0.015156
TMED6	16q22.1	-0.207354634	0.005351	0.015157
RCC2	1p36.13	0.207339987	0.005354	0.015161
TMEM138	11q12.2	0.207339987	0.005354	0.015161
KRAS	12p12.1	0.207337895	0.005355	0.015161
FTH1	11q12.3	0.207275124	0.005369	0.015199
SAMD4A	14q22.2	-0.207241646	0.005377	0.015219
GMFB	14q22.2	-0.207235369	0.005378	0.015221
ZNF439	19p13.2	-0.207212353	0.005383	0.015233
GBP6	1p22.2	0.207202546	0.005385	0.015238
NME1	17q21.33	0.207180968	0.00539	0.015249
PEX16	11p11.2	0.207164229	0.005394	0.015258
CDH23	10q22.1	-0.207143306	0.005399	0.015269
CELF5	19p13.3	-0.207116105	0.005405	0.015285
OTUD3	1p36.13	-0.207080535	0.005413	0.015306
SETD7	4q31.1	-0.207021949	0.005427	0.015341
CGRRF1	14q22.2	-0.207015672	0.005428	0.015343
RHOT2	16p13.3	0.207011487	0.005429	0.015344

ZNF75A	16p13.3	-0.206996841	0.005432	0.015351
NIBAN1	1q25.3	-0.206990563	0.005434	0.015353
MPV17	2p23.3	0.206946624	0.005444	0.015378
SLC22A8	11q12.3	-0.206946125	0.005444	0.015378
SLC34A1	5q35.3	0.206925244	0.005449	0.015389
COA7	1p32.3	-0.206900592	0.005455	0.015403
MMP23B	1p36.33	0.206871299	0.005461	0.01542
FCGR3B	1q23.3	-0.206804344	0.005477	0.015461
SS18	18q11.2	-0.206779235	0.005483	0.015476
TBX21	17q21.32	-0.206765743	0.005486	0.015482
CSPP1	8q13.1-q1	-0.206741573	0.005491	0.015495
MRPL55	1q42.13	0.206739481	0.005492	0.015495
ALG9	11q23.1	-0.206722742	0.005496	0.015504
ETV6	12p13.2	0.206716465	0.005497	0.015505
OR13C2	9q31.1	-0.206714897	0.005498	0.015505
EMC4	15q14	0.206680895	0.005505	0.015524
TRIM26	6p22.1	0.206678802	0.005506	0.015524
SLC45A1	1p36.23	-0.206628694	0.005518	0.015554
HIVEP3	1p34.2	-0.206623463	0.005519	0.015556
RPL13	16q24.3 1	0.206593016	0.005526	0.015573
TXNRD1	12q23.3	-0.206576277	0.00553	0.015582
ADCYAP1	18p11.32	-0.206544892	0.005537	0.015601
ANO2	12p13.31	-0.206484213	0.005551	0.015639
NCOA7	6q22.31-c	-0.206438181	0.005562	0.015666
IQCF1	3p21.2	0.206436323	0.005563	0.015666
REPIN1	7q36.1	-0.206421442	0.005566	0.015673
CDH19	18q22.1	-0.206415199	0.005568	0.015675
SYTL4	Xq22.1	0.206394242	0.005572	0.015687
VTI1B	14q24.1	0.206358672	0.005581	0.015708
TUFM	16p11.2	0.206350302	0.005583	0.015712
DYRK1A	21q22.13	-0.206291716	0.005597	0.015748
IGSF22	11p15.1	0.206251962	0.005606	0.015772
CDK2	12q13.2	0.206237315	0.005609	0.015778
HSD3B7	16p11.2	0.206237315	0.005609	0.015778
ZNF765	19q13.42	-0.206220576	0.005613	0.015787
SF3A3	1p34.3	-0.206214299	0.005615	0.015787
POU4F3	5q32	-0.206213699	0.005615	0.015787
FBXW12	3p21.31	-0.206208966	0.005616	0.015788
TOR1A	9q34.11	-0.206199653	0.005618	0.015792
CSNK2B	6p21.33	0.206193376	0.00562	0.015794
ERVFRD-1	6p24.2	-0.206181738	0.005623	0.015799
NKX2-8	14q13.3	0.206177365	0.005624	0.0158
GDF6	8q22.1	-0.206172452	0.005625	0.015801
ZNF703	8p11.23	0.20612642	0.005636	0.015829
TMEM37	2q14.2	0.206122235	0.005637	0.01583
TRIM59	3q25.33	0.206118051	0.005638	0.01583
LOXL2	8p21.3	0.206072019	0.005649	0.015859
RPP21	6p22.1	0.206057372	0.005652	0.015867
TOMM40	19q13.32	0.206036449	0.005657	0.015878
GEMIN7	19q13.32	0.206011341	0.005663	0.015891
SPAG16	2q34	0.206011341	0.005663	0.015891
TNFSF8	9q32-q33.	-0.205982048	0.00567	0.015908
MSRA	8p23.1	0.205938108	0.005681	0.015935
MUC12	7q22.1	0.205923462	0.005684	0.015943

FARSA	19p13. 13	0. 205910907	0. 005687	0. 015949
DCTD	4q35. 1	0. 205848137	0. 005702	0. 015989
MT3	16q13	-0. 205838719	0. 005704	0. 015993
ATP6AP1	Xq28	-0. 205783274	0. 005718	0. 016028
HIST1H2AI	6p22. 1	0. 205753295	0. 005725	0. 016046
OSER1	20q13. 12	0. 205714226	0. 005734	0. 01607
DCAF12	9p13. 3	-0. 205697487	0. 005738	0. 016079
VAC14	16q22. 1-c	0. 205682841	0. 005742	0. 016087
EPPK1	8q24. 3	0. 205659825	0. 005747	0. 0161
CHRNA2	2q37. 1	0. 205649032	0. 00575	0. 016105
ATF2	2q31. 1	-0. 205638901	0. 005753	0. 01611
STAT3	17q21. 2	-0. 205624255	0. 005756	0. 016117
SNX10	7p15. 2	-0. 205609608	0. 00576	0. 016125
ADCY8	8q24. 22	-0. 205603904	0. 005761	0. 016125
KIF7	15q26. 1	0. 205603331	0. 005761	0. 016125
CLK4	5q35. 3	-0. 205563576	0. 005771	0. 01615
NDUFAF3	3p21. 31	0. 205551022	0. 005774	0. 016154
TAF4B	18q11. 2	-0. 205551022	0. 005774	0. 016154
TRPM3	9q21. 12-c	-0. 205533126	0. 005778	0. 016163
DKFZP434F	16q13	-0. 205506492	0. 005785	0. 016179
ZC3H12A	1p34. 3	0. 205465235	0. 005795	0. 016205
MARVELD3	16q22. 2	0. 205458958	0. 005796	0. 016207
GABRA1	5q34	-0. 205443489	0. 0058	0. 016215
ALDH1L1	3q21. 3	0. 205424542	0. 005805	0. 016226
POMT2	14q24. 3	-0. 20539828	0. 005811	0. 016242
PLEKHG6	12p13. 31	0. 205394095	0. 005812	0. 016242
SCARF1	17p13. 3	-0. 205360618	0. 00582	0. 016263
KCNK2	1q41	-0. 205341786	0. 005825	0. 016273
TMEM245	9q31. 3	-0. 205331325	0. 005827	0. 016278
SOD2	6q25. 3	-0. 205316678	0. 005831	0. 016284
ADIPOQ	3q27. 3	-0. 205316345	0. 005831	0. 016284
CYP2R1	11p15. 2	0. 205308309	0. 005833	0. 016287
ISL2	15q24. 3	0. 205253183	0. 005846	0. 016323
OXCT1	5p13. 1	-0. 205138828	0. 005875	0. 016399
PACSIN3	11p11. 2	0. 205109535	0. 005882	0. 016417
BIRC3	11q22. 2	0. 205086519	0. 005887	0. 01643
PTPRN	2q35	-0. 205048857	0. 005897	0. 016454
6-Mar	5p15. 2	-0. 205019564	0. 005904	0. 016472
SH3BGRL	Xq21. 1	-0. 205013286	0. 005906	0. 016474
HEATR5B	2p22. 2	-0. 204992363	0. 005911	0. 016484
HERC6	4q22. 1	0. 204992363	0. 005911	0. 016484
SIGLEC6	19q13. 41	-0. 204988861	0. 005912	0. 016484
LINC00205	21q22. 3	-0. 20496307	0. 005918	0. 016499
POMT1	9q34. 13	-0. 204952608	0. 005921	0. 016504
MSL1	17q21. 1	0. 204925407	0. 005927	0. 016521
SLC7A6OS	16q22. 1	0. 204902392	0. 005933	0. 016534
SMPDL3A	6q22. 31	-0. 204885653	0. 005937	0. 016544
PABPC4L	4q28. 3	-0. 204875191	0. 00594	0. 016549
KLF3	4p14	0. 20485636	0. 005945	0. 016558
KLHL29	2p24. 1	-0. 204854267	0. 005945	0. 016558
CCRL2	3p21. 31	0. 204850083	0. 005946	0. 016559
YWHAEP7	17q12	0. 204823534	0. 005953	0. 016575
SNX19	11q24. 3-c	-0. 204753834	0. 00597	0. 016621
UBL5	19p13. 2	0. 204737095	0. 005974	0. 01663

MAATS1	3q13. 33	-0. 204735003	0. 005975	0. 01663
SFT2D1	6q27	0. 204678509	0. 005989	0. 016667
TNFRSF25	1p36. 31	0. 204672232	0. 005991	0. 016669
AHR	7p21. 1	0. 204661771	0. 005993	0. 016674
TBC1D22A	22q13. 31	0. 204653401	0. 005995	0. 016677
CLCN6	1p36. 22	-0. 204649216	0. 005996	0. 016678
GNG11	7q21. 3	-0. 204584353	0. 006013	0. 016721
INSYN2A	10q26. 2	-0. 204525767	0. 006027	0. 01676
LOC38895E	2p15	0. 204521583	0. 006028	0. 01676
GPSM2	1p13. 3	0. 204502751	0. 006033	0. 016771
MUSK	9q31. 3	-0. 204466463	0. 006042	0. 016794
TMEM39B	1p35. 2	-0. 204460904	0. 006044	0. 016796
AR	Xq12	-0. 204435903	0. 00605	0. 016811
SCARNA11	12p13. 31	-0. 204397241	0. 00606	0. 016836
DIRAS3	1p31. 3	-0. 204379302	0. 006064	0. 016844
RSRP1	1p36. 11	0. 20437721	0. 006065	0. 016844
BUB1	2q13	0. 204375118	0. 006065	0. 016844
ZNF620	3p22. 1	-0. 204373025	0. 006066	0. 016844
SETMAR	3p26. 1	-0. 204358379	0. 00607	0. 016852
NONO	Xq13. 1	-0. 204345825	0. 006073	0. 016858
RAB21	12q21. 1	-0. 204314439	0. 006081	0. 016878
GJB1	Xq13. 1	0. 204289331	0. 006087	0. 016893
PYHIN1	1q23. 1	-0. 204276777	0. 00609	0. 0169
KCNE4	2q36. 1	-0. 204243299	0. 006099	0. 016921
NKRF	Xq24	-0. 204237022	0. 006101	0. 016923
BHMT2	5q14. 1	-0. 204224468	0. 006104	0. 01693
MFSD4B	6q21	-0. 204205637	0. 006109	0. 016941
ZFAND2A	7p22. 3	0. 20419936	0. 00611	0. 016943
FLT4	5q35. 3	-0. 204176344	0. 006116	0. 016957
KCNG3	2p21	-0. 204128241	0. 006128	0. 016988
DNAJC21	5p13. 2	-0. 204111481	0. 006133	0. 016998
RBCK1	20p13	0. 204059172	0. 006146	0. 017033
UBR5	8q22. 3	-0. 204044525	0. 00615	0. 017041
POU6F1	12q13. 13	-0. 204038248	0. 006151	0. 017042
ZNF579	19q13. 42	0. 204036156	0. 006152	0. 017042
CEP164	11q23. 3	-0. 204002678	0. 00616	0. 017063
IL31RA	5q11. 2	0. 203998883	0. 006161	0. 017064
MAP3K7CL	21q21. 3	-0. 203988032	0. 006164	0. 017069
METTL3	14q11. 2	-0. 203981755	0. 006166	0. 017071
NXPH4	12q13. 3	-0. 203942	0. 006176	0. 017097
CCDC166	8q24. 3	0. 203928144	0. 00618	0. 017099
TMEM42	3p21. 31	0. 20392746	0. 00618	0. 017099
CLDN3	7q11. 23	-0. 203925261	0. 00618	0. 017099
FAH	15q25. 1	0. 203923169	0. 006181	0. 017099
MORN4	10q24. 2	-0. 203923169	0. 006181	0. 017099
PABPC1L2A	Xq13. 2	-0. 203907229	0. 006185	0. 017108
SLC04A1-A	20q13. 33	0. 203897121	0. 006188	0. 017113
PIBF1	13q21. 33-	0. 203829013	0. 006205	0. 017159
HS2ST1	1p22. 3	-0. 203810181	0. 00621	0. 01717
CDH24	14q11. 2	0. 203797627	0. 006213	0. 017177
C8ORF34	8q13. 2	-0. 203784134	0. 006217	0. 017184
EEF1A1	6q13	-0. 203776704	0. 006219	0. 017186
CACNG6	19q13. 42	0. 203772968	0. 00622	0. 017186
MC3R	20q13. 2	-0. 203770887	0. 00622	0. 017186

SSTR1	14q21.1	-0.203749503	0.006226	0.017199
NUP160	11p11.2	-0.203730672	0.006231	0.01721
CSF2RB	22q12.3	-0.203709748	0.006236	0.017223
PCMTD1	8q11.23	-0.203686732	0.006242	0.017237
SOD1	21q22.11	0.203659532	0.006249	0.017253
MRPL37	1p32.3	0.203657439	0.00625	0.017253
ATAD3A	1p36.33	0.203655347	0.00625	0.017253
LINC01634	22q11.21	-0.203644699	0.006253	0.017258
TRPC2	11p15.4	0.20361706	0.00626	0.017275
PPIH	1p34.2	0.203592576	0.006267	0.017291
ARNTL2	12p11.23	0.203582115	0.006269	0.017291
GTSE1-DT	22q13.31	-0.203582115	0.006269	0.017291
SUB1	5p13.3	-0.203582115	0.006269	0.017291
PTPN23	3p21.31	0.203575837	0.006271	0.017291
TYW1B	7q11.22-c	-0.203575837	0.006271	0.017291
ADAMTS2	5q35.3	-0.203540267	0.00628	0.017312
ARL5C	17q12	-0.203539001	0.006281	0.017312
MYO1D	17q11.2	0.203529806	0.006283	0.017317
KDM5A	12p13.33	-0.20350679	0.006289	0.017331
SREK1	5q12.3	-0.203500513	0.006291	0.017333
SRSF4	1p35.3	0.203437742	0.006307	0.017376
CPA5	7q32.2	-0.203428407	0.00631	0.01738
PPP1R1A	12q13.2	-0.203398094	0.006318	0.0174
IL3RA	Xp22.33 ε	-0.203381248	0.006322	0.01741
DLX5	7q21.3	0.203368694	0.006325	0.017415
CD2AP	6p12.3	0.203366602	0.006326	0.017415
YIPF2	19p13.2	0.203347771	0.006331	0.017427
SLC25A34	1p36.21	-0.203339401	0.006333	0.01743
ZFPM1	16q24.2	0.203331032	0.006335	0.017434
SCG5	15q13.3	-0.203310108	0.006341	0.017447
DDR2	1q23.3	-0.203278723	0.006349	0.017467
C11ORF53	11q23.1	0.203254678	0.006355	0.017482
HCAR1	12q24.31	0.203234783	0.006361	0.017494
CMKLR1	12q23.3	-0.20320549	0.006368	0.017513
ADGRG5	16q21	-0.203153181	0.006382	0.017549
RFK	9q21.13	-0.203115519	0.006392	0.017574
RPL14	3p22.1	0.20309878	0.006397	0.017584
TMEM241	18q11.2	0.203088318	0.0064	0.017589
SOX12	20p13	-0.20307158	0.006404	0.017599
RARS	5q34	0.203061118	0.006407	0.017604
LMO2	11p13	-0.203025548	0.006416	0.017628
FRRS1	1p21.2	0.203019271	0.006418	0.01763
PKNOX2	11q24.2	-0.202925115	0.006443	0.017697
CLEC10A	17p13.1	-0.202886512	0.006453	0.017723
NME1-NME2	17q21.33	0.202879083	0.006455	0.017726
PWWP2B	10q26.3	0.202826774	0.006469	0.017762
ZNF732	4p16.3	-0.202784956	0.006481	0.01779
DHPS	19p13.13	0.20273471	0.006494	0.017825
BPI	20q11.23	0.202729471	0.006496	0.017826
EFCAB5	17q11.2	-0.202726985	0.006496	0.017826
LAX1	1q32.1	-0.202680309	0.006509	0.017858
SRRM4	12q24.23	-0.20267498	0.00651	0.017859
TOX2	20q13.12	-0.202668907	0.006512	0.017861
URB2	1q42.13	-0.20266357	0.006513	0.017863

FCH01	19p13. 11	0. 202611261	0. 006528	0. 017899
RIIAD1	1q21. 3	-0. 202607896	0. 006528	0. 017899
NUP62CL	Xq22. 3	0. 202558952	0. 006542	0. 017933
LYRM9	17q11. 2	-0. 202542213	0. 006546	0. 017943
TRIM78P	11p15	0. 202533857	0. 006549	0. 017947
TTC30B	2q31. 2	-0. 202500472	0. 006558	0. 017969
RPL29	3p21. 2	0. 202487812	0. 006561	0. 017976
WDR60	7q36. 3	-0. 20244178	0. 006574	0. 018008
TEL02	16p13. 3	0. 202416672	0. 00658	0. 018024
BRD30S	9q34. 2	-0. 202408302	0. 006583	0. 018027
OXT	20p13	0. 20240638	0. 006583	0. 018027
LCMT2	15q15. 3	-0. 202305777	0. 006611	0. 0181
PRPF18	10p13	0. 202276484	0. 006619	0. 018119
TMED4	7p13	-0. 202272299	0. 00662	0. 018119
GPR173	Xp11. 22	-0. 202270207	0. 00662	0. 018119
LINC00667	18p11. 31	-0. 202266022	0. 006622	0. 01812
CDS2	20p12. 3	-0. 202261838	0. 006623	0. 01812
HAPLN3	15q26. 1	0. 202253468	0. 006625	0. 018124
DHRS7	14q23. 1	0. 202247191	0. 006627	0. 018126
CORT	1p36. 22	-0. 202218321	0. 006635	0. 018145
NIFK	2q14. 3	0. 202196974	0. 006641	0. 018159
DIAPH3	13q21. 2	0. 202169774	0. 006648	0. 018177
IL10RA	11q23. 3	-0. 202117465	0. 006662	0. 018214
DLX3	17q21. 33	0. 202047382	0. 006682	0. 018264
RUBCNL	13q14. 13	-0. 202035863	0. 006685	0. 01827
LINC00526	18p11. 31	-0. 201977277	0. 006701	0. 01831
CTXN2	15q21. 1	-0. 20197681	0. 006701	0. 01831
USP26	Xq26. 2	0. 201936857	0. 006712	0. 018338
GP1BA	17p13. 2	-0. 201907741	0. 00672	0. 018357
RGN	Xp11. 3	-0. 201904045	0. 006721	0. 018357
KIF18A	11p14. 1	0. 201901952	0. 006722	0. 018357
TFCP2	12q13. 12	-0. 201834997	0. 006741	0. 018405
SVOP	12q24. 11	-0. 201826752	0. 006743	0. 018409
ZNF606	19q13. 43	-0. 201809888	0. 006748	0. 018419
CXCR2	2q35	-0. 201804667	0. 006749	0. 01842
LINC01096	4p15. 33	0. 201801633	0. 00675	0. 01842
PDXDC2P-M	16q22. 1	0. 201782688	0. 006755	0. 018432
MRPL13	8q24. 12	0. 201765949	0. 00676	0. 01844
PTP4A3	8q24. 3	-0. 201765949	0. 00676	0. 01844
SCN2B	11q23. 3	-0. 201728287	0. 00677	0. 018466
SLMAP	3p14. 3	0. 201707363	0. 006776	0. 018479
KCNC1	11p15. 1	-0. 201704884	0. 006777	0. 018479
NFX1	9p13. 3	-0. 201663424	0. 006789	0. 018508
ARHGAP17	16p12. 1	-0. 201632038	0. 006797	0. 01853
AFDN	6q27	-0. 201621576	0. 0068	0. 018535
CYP27B1	12q14. 1	0. 201573452	0. 006814	0. 01857
PSMA1	11p15. 2	0. 201498127	0. 006835	0. 018625
ZNF333	19p13. 12	-0. 201487666	0. 006838	0. 01863
C16ORF54	16p11. 2	-0. 201450003	0. 006849	0. 018657
SLC25A4	4q35. 1	-0. 201433264	0. 006853	0. 018667
UPK3BL1	7q22. 1	0. 20142491	0. 006856	0. 018671
USPL1	13q12. 3	-0. 201341201	0. 006879	0. 018733
ANKHD1-EI	5q31. 3	-0. 201328646	0. 006883	0. 01874
FMNL2	2q23. 3	-0. 201315151	0. 006887	0. 018748

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DPY19L2P4	7q21. 13	-0.201308121	0.006889	0.018748
SKP2	5p13. 2	-0.201301446	0.006891	0.018751
FBXO39	17p13. 1	0.201288997	0.006894	0.018758
PWAR4	15q11. 2	-0.201244915	0.006907	0.018786
CABIN1	22q11. 23	-0.20124286	0.006907	0.018786
MED20	6p21. 1	-0.20124286	0.006907	0.018786
POLR1E	9p13. 2	-0.201224029	0.006913	0.018798
PTCHD3P1	10p11. 23	-0.201215659	0.006915	0.018802
ZFP36L2	2p21	0.201194736	0.006921	0.018816
CCDC85A	2p16. 1	-0.201188459	0.006923	0.018818
RLN3	19p13. 12	-0.20118255	0.006925	0.01882
TINF2	14q12	-0.201177997	0.006926	0.018821
SNHG17	20q11. 23	0.201052455	0.006962	0.018916
NIPA2	15q11. 2	0.201023162	0.00697	0.018936
SMARCD3	7q36. 1	-0.201006424	0.006975	0.018946
NIPAL3	1p36. 11	-0.201004331	0.006976	0.018946
HTR1E	6q14. 3	-0.200992089	0.006979	0.01895
DOK1	2p13. 1	0.200991777	0.006979	0.01895
KBTBD12	3q21. 3	0.200983413	0.006982	0.018953
PDCD5	19q13. 11	0.200981315	0.006982	0.018953
GLT1D1	12q24. 33	-0.20093225	0.006996	0.018989
PNISR	6q16. 2	-0.200885067	0.00701	0.019021
RANGAP1	22q13. 2	0.200885067	0.00701	0.019021
MYL6	12q13. 2	0.200851589	0.00702	0.019044
RFNG	17q25. 3	0.200847404	0.007021	0.019045
MED12	Xq13. 1	-0.200841127	0.007023	0.019047
CCL20	2q36. 3	0.200820414	0.007029	0.019061
SELENOS	15q26. 3	0.200782541	0.00704	0.019087
GLYATL2	11q12. 1	-0.200780498	0.00704	0.019087
YWHAE	17p13. 3	-0.200776264	0.007041	0.019088
XPO4	13q12. 11	-0.20077208	0.007043	0.019089
ZNF98	19p12	-0.200764291	0.007045	0.019092
MYOCD	17p12	-0.200718098	0.007058	0.019123
KRT80	12q13. 13	0.200717783	0.007058	0.019123
BTLA	3q13. 2	-0.200715691	0.007059	0.019123
GABBR2	9q22. 33	-0.200708911	0.007061	0.019125
CEP83-DT	12q22	-0.200638169	0.007081	0.019178
BLOC1S3	19q13. 32	0.200617245	0.007088	0.019192
POLE2	14q21. 3	0.200593288	0.007095	0.019209
PDAP1	7q22. 1	0.20055029	0.007107	0.01924
OGFRL1	6q13	-0.200544013	0.007109	0.019242
CHD2	15q26. 1	-0.200535643	0.007111	0.019246
FGL1	8p22	-0.200523509	0.007115	0.019253
BCAP31	Xq28	0.200504258	0.007121	0.019266
DNM1	9q34. 11	-0.200474965	0.007129	0.019287
IFT52	20q13. 12	-0.200454041	0.007135	0.0193
ASAP1	8q24. 21-c	-0.200449857	0.007136	0.019301
FCAR	19q13. 42	-0.200419446	0.007145	0.019323
HSD17B7P2	10p11. 1	0.200395455	0.007152	0.019339
FHL5	6q16. 1	-0.200382901	0.007156	0.019346
C5AR2	19q13. 32	0.200377775	0.007158	0.019348
CRYM-AS1	16p12. 2	0.200270141	0.007189	0.019431
SLCO2B1	11q13. 4	-0.20022179	0.007204	0.019467

STUB1	16p13.3	0.200215513	0.007205	0.019469
BTBD7	14q32.12	-0.200211328	0.007207	0.01947
FAM178B	2q11.2	0.200202961	0.007209	0.019474
ZNF100	19p12	-0.200194694	0.007212	0.019478
USP20	9q34.11	-0.200190404	0.007213	0.019479
GATA2	3q21.3	-0.20017785	0.007217	0.019486
KRT17P5	17p11.2	0.200173662	0.007218	0.019486
MRGPRX2	11p15.1	-0.200170971	0.007219	0.019486
TMED10P1	8q24.3	-0.200166447	0.00722	0.019487
USH1C	11p15.1	0.200154834	0.007223	0.019494
CENPBD1P1	19q13.43	-0.200146465	0.007226	0.019498
ACTR1B	2q11.2	0.200117172	0.007235	0.019519
STK32B	4p16.2	-0.20010263	0.007239	0.019528
TEX264	3p21.2	0.200083694	0.007244	0.019537
LMTK2	7q21.3	-0.200081602	0.007245	0.019537
U2AF1	21q22.3	0.200081602	0.007245	0.019537
PIGP	21q22.13	-0.200077417	0.007246	0.019538
RASGRP3	2p22.3	-0.199995815	0.007271	0.0196
BRD8	5q31.2	-0.199966522	0.007279	0.019621
TSPAN19	12q21.31	-0.199958542	0.007282	0.019625
FOXO3	6q21	-0.199945599	0.007286	0.019633
ATCAY	19p13.3	-0.199922582	0.007292	0.019645
RCC1	1p35.3	0.19992049	0.007293	0.019645
SCGB1C1	11p15.5	-0.199920187	0.007293	0.019645
HSPBP1	19q13.42	0.199912121	0.007296	0.019649
MCM3AP	21q22.3	-0.199897475	0.0073	0.019658
FAM210B	20q13.2	-0.199872366	0.007307	0.019676
FLRT2	14q31.3	-0.19984935	0.007314	0.019692
SLC18A1	8p21.3	-0.199822137	0.007322	0.019711
CCDC183-A	9q34.3	-0.199797041	0.00733	0.019729
TMEM160	19q13.32	0.199769841	0.007338	0.019748
AKR7L	1p36.13 1	0.199757287	0.007342	0.019756
PPP6R1	19q13.42	0.199744732	0.007346	0.019763
MYO1C	17p13.3	0.199709162	0.007356	0.019789
IRF2BP2	1q42.3	-0.199700793	0.007359	0.019793
FBLN7	2q13-q14.	-0.199661038	0.007371	0.019823
TBC1D3P2	17q23.2	0.19964112	0.007377	0.019836
TMEM100	17q22	-0.19963593	0.007379	0.019838
RASSF8	12p12.1	-0.199631745	0.00738	0.019839
BPIFB4	20q11.21	-0.199621942	0.007383	0.019844
STOX2	4q35.1	-0.199587806	0.007393	0.019869
RSAD1	17q21.33	-0.199575252	0.007397	0.019876
CDH8	16q21	-0.199541257	0.007407	0.019901
SHISA9	16p13.12	-0.199534659	0.007409	0.019902
ARL3	10q24.32	-0.199533404	0.00741	0.019902
LINC00852	3p25.3	-0.199476911	0.007427	0.019946
GREB1	2p25.1	-0.199472726	0.007428	0.019947
APAF1	12q23.1	-0.199464357	0.00743	0.019951
DPP8	15q22.31	-0.199455987	0.007433	0.019955
C5ORF24	5q31.1	-0.199393217	0.007452	0.020003
MYH1	17p13.1	-0.19931693	0.007475	0.020063
MEIOB	16p13.3	-0.199268426	0.00749	0.020098
ZNF317	19p13.2	-0.199267675	0.00749	0.020098
TAF13	1p13.3	-0.199252087	0.007495	0.020108

PUSL1	1p36.33	0.199244659	0.007497	0.020112
PYG02	1q21.3	0.199234197	0.007501	0.020118
IKZF1	7p12.2	-0.199114933	0.007537	0.020213
FAM184B	4p15.32-f	-0.199109714	0.007539	0.020215
ANKZF1	2q35	0.199043793	0.007559	0.020266
MAPRE1	20q11.21	-0.199039608	0.00756	0.020267
TMEM259	19p13.3	0.199001946	0.007572	0.020296
C1S	12p13.31	-0.198993576	0.007575	0.0203
CCS	11q13.2	0.198976838	0.00758	0.020307
RLIM	Xq13.2	-0.198976838	0.00758	0.020307
KCTD6	3p14.3	-0.198974745	0.007581	0.020307
CACNA1I	22q13.1	-0.198945452	0.00759	0.020328
NPY1R	4q32.2	-0.19894336	0.00759	0.020328
UBE2N	12q22	-0.198930806	0.007594	0.020333
ERF	19q13.2	0.198930806	0.007594	0.020333
RPL13AP2C	12p13.1	0.198918252	0.007598	0.02034
FDXR	17q25.1	0.198874312	0.007612	0.020374
SPATA4	4q34.2	-0.198849956	0.007619	0.020392
DDX46	5q31.1	-0.198840834	0.007622	0.020396
ZNF675	19p12	-0.198767706	0.007645	0.020455
BRK1	3p25.3	0.198752955	0.007649	0.020464
MROH1	8q24.3	0.198740401	0.007653	0.020472
HMMR	5q34	0.198696462	0.007667	0.020506
NOL11	17q24.2	-0.198690185	0.007669	0.020507
JAK2	9p24.1	-0.198688092	0.00767	0.020507
BRD3	9q34.2	-0.198671354	0.007675	0.020519
STON1	2p16.3	-0.198665076	0.007677	0.020521
TLR7	Xp22.2	-0.19865043	0.007681	0.020531
BTF3L4	1p32.3	-0.198621137	0.007691	0.020552
SLC31A2	9q32	-0.198583475	0.007702	0.020581
RPS27L	15q22.2	0.198573013	0.007706	0.020587
ANK3	10q21.2	-0.198568828	0.007707	0.020588
NOM1	7q36.3	-0.198556274	0.007711	0.020593
SKIV2L	6p21.33	0.198556274	0.007711	0.020593
DNAJC25	9q31.3	-0.198524889	0.007721	0.020617
SSTR3	22q13.1	-0.198516659	0.007723	0.020621
MND1	4q31.3	0.198512334	0.007725	0.020622
MYO3A	10p12.1	-0.198501865	0.007728	0.020628
OSBPL2	20q13.33	0.198449564	0.007744	0.020669
SNORA2B	12q13.11	-0.198435926	0.007749	0.020677
SLC2A4	17p13.1	-0.198432825	0.00775	0.020677
GABRA5	15q12	-0.198424637	0.007752	0.020681
ACSS3	12q21.31	-0.198416086	0.007755	0.020686
IL1RAPL2	Xq22.3	0.19836273	0.007772	0.020728
STRBP	9q33.3	-0.198315653	0.007787	0.020765
CADM3	1q23.2	-0.198280083	0.007798	0.020792
NMBR	6q24.1	-0.198259494	0.007805	0.020807
DNM1P35	15q24.2	0.198246605	0.007809	0.020815
WASF2	1p36.11	-0.198234051	0.007813	0.020823
TMEM196	7p21.1	-0.198224627	0.007816	0.020828
CBX1	17q21.32	-0.198167096	0.007834	0.020874
HSD11B1L	19p13.3	0.198139895	0.007843	0.020894
ABCC10	6p21.1	0.198133618	0.007845	0.020897
TTC8	14q31.3	-0.198129433	0.007846	0.020898

ZSWIM1	20q13.12	0.198125248	0.007847	0.020898
OR52I2	11p15.4	-0.198027174	0.007879	0.020979
HDAC10	22q13.33	0.198018538	0.007881	0.020984
ATP1A2	1q23.2	-0.198008076	0.007885	0.02099
FAR1	11p15.3	0.197991338	0.00789	0.020998
JPH4	14q11.2	-0.197991338	0.00789	0.020998
ADGRE1	19p13.3-1	-0.197987567	0.007891	0.020998
RPS2	16p13.3	0.197985061	0.007892	0.020998
STK26	Xq26.2	0.197920198	0.007913	0.021051
RGS12	4p16.3	0.197834411	0.00794	0.021121
MYBL2	20q13.12	0.197750717	0.007967	0.02119
ABCG5	2p21	-0.19771907	0.007978	0.021214
RAVER2	1p31.3	-0.197717239	0.007978	0.021214
ANXA4	2p13.3	0.197683761	0.007989	0.02124
PSMD14	2q24.2	0.197667022	0.007995	0.02125
CMPK2	2p25.2	0.19766493	0.007995	0.02125
IFNL3	19q13.2	0.197649647	0.008	0.021261
BMPRI1A	10q23.2	-0.19758542	0.008021	0.021313
C22ORF15	22q11.23	-0.197577422	0.008024	0.021315
CRNKL1	20p11.23	-0.197577051	0.008024	0.021315
AKR1B1	7q33	-0.197566589	0.008027	0.021321
NRK	Xq22.3	-0.19754985	0.008033	0.021332
DMRTC1	Xq13.1	-0.197542259	0.008035	0.021336
CSF3	17q21.1	-0.197487041	0.008053	0.021381
TMEM177	2q14.2	0.197472433	0.008058	0.021391
SH3GLB2	9q34.11	0.197468248	0.008059	0.021391
PIM2	Xp11.23	-0.197466156	0.00806	0.021391
ADAMTS16	5p15.32	-0.197430586	0.008072	0.021419
GFRA3	5q31.2	-0.197421274	0.008075	0.021424
GLB1L	2q35	-0.197284121	0.00812	0.02154
CAPN15	16p13.3	0.197267382	0.008125	0.021551
PPP1R8	1p35.3	-0.19726529	0.008126	0.021551
NR4A3	9q31.1	-0.197259013	0.008128	0.021553
RIN2	20p11.23	-0.19725692	0.008129	0.021553
TBC1D24	16p13.3	-0.197235997	0.008135	0.021568
CXORF58	Xp22.11	-0.197223257	0.00814	0.021575
ATF7IP	12p13.1	-0.19722135	0.00814	0.021575
SLC5A12	11p14.2	-0.197194902	0.008149	0.021593
SPSB3	16p13.3	0.197192057	0.00815	0.021593
HIVEP2	6q24.2	-0.197191114	0.00815	0.021593
CLPP	19p13.3	0.197141841	0.008166	0.021633
HSD17B14	19q13.33	-0.197137656	0.008168	0.021633
PRDM5	4q27	-0.197135564	0.008169	0.021633
GPR15	3q11.2	-0.197128402	0.008171	0.021636
DGCR2	22q11.21	0.197102086	0.00818	0.021657
MYO5B	18q21.1	0.19708744	0.008184	0.021665
NDUFS3	11p11.2	0.197085347	0.008185	0.021665
TP53TG1	7q21.12	0.19705187	0.008196	0.021692
ASPH	8q12.3	0.197030946	0.008203	0.021707
AFG1L	6q21	-0.197024669	0.008205	0.02171
SMIM6	17q25.1	0.197005838	0.008211	0.021724
RPH3AL	17p13.3	-0.196953529	0.008229	0.021767
PUM1	1p35.2	-0.196924236	0.008239	0.02179
C21ORF62	21q22.11	-0.196890758	0.00825	0.021814

NRG3	10q23.1	0.196889815	0.00825	0.021814
PCDHGB3	5q31.3	-0.196882492	0.008253	0.021818
CACNG7	19q13.42	-0.196858804	0.00826	0.021836
MGC16275	17q25.1	-0.196827044	0.008271	0.021861
PON2	7q21.3	0.196802879	0.008279	0.021879
PRRT3	3p25.3	-0.196765217	0.008292	0.02191
EEF1D	8q24.3	0.196752663	0.008296	0.021918
ZFP90	16q22.1	-0.196738016	0.008301	0.021927
TWNK	10q24.31	-0.196735924	0.008302	0.021927
CDHR1	10q23.1	-0.196709752	0.00831	0.021947
WDR83	19p13.13	0.196696169	0.008315	0.021956
TMEM30B	14q23.1	0.196683615	0.008319	0.021965
IRX3	16q12.2	0.196671061	0.008323	0.021973
MAGI2	7q21.11	-0.196654322	0.008329	0.021985
MICALL1	22q13.1	0.19664386	0.008332	0.021991
TMEM94	17q25.1	-0.196631306	0.008337	0.022
AKTIP	16q12.2	-0.196553889	0.008363	0.022065
SRSF6	20q13.11	-0.196507857	0.008378	0.022104
ACADS	12q24.31	0.196503672	0.00838	0.022104
PCF11	11q14.1	-0.196486933	0.008385	0.022116
NFIB	9p23-p22.	-0.196453456	0.008397	0.022143
EP300	22q13.2	-0.196440901	0.008401	0.022151
PPIC	5q23.2	0.196438809	0.008402	0.022151
CHCHD10	22q11.23	0.196415793	0.008409	0.022168
PAPPA	9q33.1	-0.19639487	0.008417	0.022183
OR12D2	6p22.1	-0.196392327	0.008417	0.022183
C16ORF72	16p13.2	-0.196388592	0.008419	0.022184
GLRX3	10q26.3	0.196359299	0.008429	0.022207
MRPL58	17q25.1	0.196334191	0.008437	0.022227
ZNF385D	3p24.3	-0.196317452	0.008443	0.022239
PCDHGA7	5q31.3	-0.196206557	0.008481	0.022335
PIGY	4q22.1	-0.196202373	0.008482	0.022336
CD2BP2	16p11.2	0.196194003	0.008485	0.022341
GIT1	17q11.2	0.196185634	0.008488	0.022345
SSTR4	20p11.21	-0.196161897	0.008496	0.022364
NKX6-1	4q21.23	-0.196150044	0.0085	0.022371
C22ORF42	22q12.3	-0.196082525	0.008523	0.022429
AMDHD2	16p13.3	0.196058	0.008532	0.022449
GPT	8q24.3	0.196049631	0.008534	0.022453
TPTEP1	22q11.1	-0.196020338	0.008544	0.022477
IL7R	5p13.2	-0.195898981	0.008586	0.022584
KDM5B	1q32.1	0.195892704	0.008588	0.022586
LHX4	1q25.2	-0.195871182	0.008596	0.022603
LINC00494	20q13.13	-0.195839585	0.008607	0.022629
OXLD1	17q25.3	0.195832026	0.008609	0.022633
GAS6	13q34	0.195827841	0.008611	0.022634
RANBP9	6p23	-0.195817379	0.008614	0.022638
SPRR2D	1q21.3	0.195814427	0.008616	0.022638
SETD2	3p21.31	-0.195813194	0.008616	0.022638
GOLM1	9q21.33	0.195804825	0.008619	0.022642
TEKT2	1p34.3	-0.195802733	0.00862	0.022642
SMIM15	5q12.1	0.195796456	0.008622	0.022644
DONSON	21q22.11	0.195758793	0.008635	0.022676
BIRC6	2p22.3	-0.195748331	0.008638	0.022682

CCDC171	9p22.3	-0.195745295	0.008639	0.022682
THRSP	11q14.1	-0.195725098	0.008647	0.022697
IFIT1	10q23.31	0.195714854	0.00865	0.022704
DAZL	3p24.3	-0.195643684	0.008675	0.022765
NHP2	5q35.3	0.195641621	0.008676	0.022765
MEIS2	15q14	-0.195624882	0.008681	0.022777
STAU2	8q21.11	-0.195593497	0.008692	0.022803
PABPN1L	16q24.3	-0.195589067	0.008694	0.022804
OR2T4	1q44	-0.195568319	0.008701	0.02282
INE2	Xp22.2	-0.195469575	0.008736	0.022907
KANK3	19p13.2	-0.195430293	0.008749	0.022941
LCP2	5q35.1	-0.195384261	0.008766	0.02298
HNF1B	17q12	0.195371707	0.00877	0.022989
KCTD4	13q14.12-	-0.195363946	0.008773	0.022993
ST8SIA3	18q21.31	-0.195293734	0.008798	0.023055
LGI3	8p21.3	-0.195277502	0.008803	0.023067
PSMA7	20q13.33	0.195269182	0.008806	0.023071
SBK1	16p12.1	-0.195202226	0.00883	0.02313
AKAIN1	18p11.31	-0.195168346	0.008842	0.023159
CATSPERB	14q32.12	0.195074593	0.008875	0.023242
CFP	Xp11.23	-0.1950725	0.008876	0.023242
ASPRV1	2p13.3	-0.195053669	0.008883	0.023256
UBASH3A	21q22.3	-0.195047392	0.008885	0.023259
LRRC41	1p34.1-p5	-0.195039022	0.008888	0.023264
EIF3B	7p22.3	0.195032745	0.00889	0.023266
PAM16	16p13.3	0.195022284	0.008894	0.023273
B2M	15q21.1	0.195018099	0.008895	0.023274
DND1	5q31.3	0.194969975	0.008912	0.023316
FHL3	1p34.3	0.194959513	0.008916	0.023323
CSF1R	5q32	-0.194953236	0.008918	0.023325
HRNR	1q21.3	-0.194940682	0.008923	0.023334
HYAL3	3p21.31	0.194936497	0.008924	0.023335
PAQR9	3q23	0.194918349	0.008931	0.023349
GABRB1	4p12	-0.194902707	0.008937	0.02336
TBC1D3H	17q12	0.194888373	0.008942	0.023371
PYCR3	8q24.3	0.194877911	0.008945	0.023376
TUBB	6p21.33	0.194875819	0.008946	0.023376
TRAPPC11	4q35.1	-0.194866505	0.008949	0.023379
ABCC8	11p15.1	-0.194865357	0.00895	0.023379
SH3KBP1	Xp22.12	0.194863264	0.008951	0.023379
ZNF423	16q12.1	-0.194854895	0.008954	0.023384
AZU1	19p13.3	0.194807158	0.008971	0.023425
RGPD6	2q13	-0.194763482	0.008986	0.023463
SCD5	4q21.22	-0.194737723	0.008996	0.023484
ZAR1	4p11	0.194726046	0.009	0.023492
LINC02716	11p11.2	-0.194704672	0.009008	0.023509
FAM189A1	15q13.1	-0.194685414	0.009015	0.023524
ZCCHC10	5q31.1	-0.194679137	0.009017	0.023527
MAST2	1p34.1	0.194649844	0.009027	0.023548
RPAP3	12q13.11	-0.194649844	0.009027	0.023548
CAMK2N2	3q27.1	-0.194643567	0.00903	0.023548
POLA2	11q13.1	0.194643567	0.00903	0.023548
MAPK8IP1F	17q21.31	-0.194631013	0.009034	0.023557
CCDC80	3q13.2	-0.194624736	0.009036	0.02356

NPM3	10q24.32	0.19460172	0.009045	0.023577
OR14I1	1q44	-0.194600403	0.009045	0.023577
FAM200A	7q22.1	-0.19459335	0.009048	0.02358
CCDC137	17q25.3	0.194580796	0.009052	0.023589
CLMP	11q24.1	-0.194576612	0.009054	0.02359
DPYSL5	2p23.3	-0.194573449	0.009055	0.02359
ACYP1	14q24.3	0.194553697	0.009062	0.023606
A2M	12p13.31	-0.194545226	0.009065	0.02361
IL6	7p15.3	-0.194536857	0.009068	0.023615
KCNJ12	17p11.2	-0.194528589	0.009071	0.023617
CHODL	21q21.1	-0.194528011	0.009071	0.023617
ALPK1	4q25	0.194511749	0.009077	0.02363
MRRF	9q33.2	0.19445944	0.009096	0.023673
TMEM38A	19p13.11	0.19445944	0.009096	0.023673
ZER1	9q34.11	-0.194442701	0.009102	0.023686
NRIP3	11p15.4	0.194430147	0.009107	0.023695
GPR119	Xq26.1	-0.194418983	0.009111	0.023702
PCDHB15	5q31.3	-0.194411315	0.009114	0.023706
NES	1q23.1	-0.194396669	0.009119	0.023717
SAMD3	6q23.1	-0.194390392	0.009121	0.02372
MCMDC2	8q13.1	-0.194342268	0.009139	0.023762
PLPP5	8p11.23	-0.194333898	0.009142	0.023767
FOXN4	12q24.11	-0.194323436	0.009146	0.023774
TNNT3	11p15.5	-0.19426028	0.009169	0.023831
FLJ34503	6q21	-0.194239324	0.009177	0.023848
OXCT2	1p34.2	-0.194212542	0.009186	0.02387
HSPA1A	6p21.33	0.19420208	0.00919	0.023877
KIF14	1q32.1	0.194162325	0.009205	0.023911
PELP1	17p13.2	-0.194160233	0.009206	0.023911
SYT1	12q21.2	-0.194145586	0.009211	0.023922
COMP	19p13.11	0.194108025	0.009225	0.023954
THRA	17q21.1	-0.194087	0.009233	0.023971
RBX1	22q13.2	0.194049338	0.009246	0.024004
CX3CR1	3p22.2	-0.194043061	0.009249	0.024007
ZNF514	2q11.1	0.194036784	0.009251	0.02401
SLC66A3	2p25.1	0.194030507	0.009253	0.024013
NLRX1	11q23.3	0.194017952	0.009258	0.024022
CAMK2G	10q22.2	0.194007491	0.009262	0.024029
TRAT1	3q13.13	-0.194001619	0.009264	0.024031
NDUFA10	2q37.3	0.193992844	0.009267	0.024037
TAF2	8q24.12	-0.19398029	0.009272	0.024046
ECM2	9q22.31	-0.193971921	0.009275	0.02405
ETFB	19q13.41	0.193967736	0.009277	0.024051
NCDN	1p34.3	-0.193936351	0.009288	0.024078
TRIM45	1p13.1	0.193923796	0.009293	0.024087
LOC100130	12q24.33	0.19388374	0.009308	0.024123
SERPINA11	14q32.13	-0.193879181	0.009309	0.024124
LCOR	10q24.1	-0.193806624	0.009336	0.024191
RASGEF1C	5q35.3	-0.193721794	0.009368	0.024269
ISLR	15q24.1	0.193716653	0.00937	0.024271
ZNF773	19q13.43	-0.19369573	0.009378	0.024288
LOC401052	3p25.3	0.193685268	0.009382	0.024295
EVC2	4p16.2	-0.19365179	0.009394	0.024324
P2RY10	Xq21.1	-0.193595296	0.009415	0.024374

SEZ6	17q11.2	-0.193594387	0.009416	0.024374
TWIST1	7p21.1	0.193551357	0.009432	0.024412
BBS9	7p14.3	-0.193505325	0.009449	0.024454
RGR	10q23.1	-0.193495498	0.009453	0.02446
MTM1	Xq28	-0.193467663	0.009463	0.024484
EIF2AK1	7p22.1	0.193455108	0.009468	0.024493
NUCKS1	1q32.1	-0.193436277	0.009475	0.024506
RASA4CP	7p13	-0.193434185	0.009476	0.024506
TNS1	2q35	-0.193432093	0.009477	0.024506
MRPL22	5q33.2	0.193392338	0.009492	0.024542
CPSF4L	17q25.1	-0.193365733	0.009502	0.024565
PWWP2A	5q33.3	-0.193356768	0.009505	0.02457
YBX2	17p13.1	-0.193351273	0.009507	0.024572
AURKA	20q13.2	0.193340029	0.009511	0.02458
PRDX4	Xp22.11	-0.193321198	0.009518	0.024595
DCHS1	11p15.4	-0.193317013	0.00952	0.024596
ODF2	9q34.11	-0.193285628	0.009532	0.024624
ALMS1P1	2p13.1	-0.193267125	0.009539	0.024639
INPPL1	11q13.4	0.193262612	0.009541	0.02464
VGLL4	3p25.3-p2	0.193245873	0.009547	0.024653
MBTPS1	16q23.3-c	-0.193233319	0.009552	0.024662
MAST3	19p13.11	-0.193187287	0.009569	0.024704
FADS2	11q12.2	-0.193160086	0.00958	0.024728
HCLS1	3q13.33	-0.193143347	0.009586	0.024741
RAVER1	19p13.2	0.193114054	0.009597	0.024767
PLEKH02	15q22.31	-0.193103593	0.009601	0.024774
GRIK4	11q23.3	-0.193078136	0.009611	0.024796
C15ORF39	15q24.2	0.19306593	0.009616	0.024804
TNFAIP8L3	15q21.2	-0.193049191	0.009622	0.024818
SUSD2	22q11.23	0.193040822	0.009625	0.024823
ING5	2q37.3	-0.193032452	0.009628	0.024827
ROM01	20q11.22	0.19303036	0.009629	0.024827
RFPL2	22q12.3	-0.192942075	0.009663	0.024909
UACA	15q23	0.192940389	0.009664	0.024909
MTHFD2	2p13.1	-0.192921558	0.009671	0.024921
RASGRF2	5q14.1	-0.192921558	0.009671	0.024921
SCAMP4	19p13.3	0.192911096	0.009675	0.024928
LINC00938	12q12	-0.192865064	0.009692	0.024971
AFAP1L1	5q32	-0.192860879	0.009694	0.024972
PRR5	22q13.31	0.192842048	0.009701	0.024987
NLRP4	19q13.43	-0.192836001	0.009704	0.02499
PDGFD	11q22.3	-0.192814847	0.009712	0.025008
ATP11C	Xq27.1	-0.192802293	0.009717	0.025017
SEZ6L	22q12.1	-0.192789701	0.009721	0.025026
FMOD	1q32.1	-0.192743707	0.009739	0.025068
FLJ13224	12p11.21	-0.192739599	0.009741	0.025068
NDFIP1	5q31.3	-0.19273743	0.009742	0.025068
MYDGF	19p13.3	0.192718599	0.009749	0.025084
MAMSTR	19q13.33	0.192691499	0.009759	0.025108
CLCC1	1p13.3	-0.192683029	0.009763	0.025113
POGLUT1	3q13.33	-0.192618166	0.009788	0.025174
FOXA2	20p11.21	-0.192580503	0.009802	0.025209
CCDC90B	11q14.1	0.192567949	0.009807	0.025218
GP9	3q21.3	-0.192560543	0.00981	0.025222

SGCB	4q12	-0.19255121	0.009814	0.025227
ENPP1	6q23.2	-0.192549118	0.009815	0.025227
NOTCH1	9q34.3	-0.192534472	0.00982	0.025238
MRPL15	8q11.23	0.192473793	0.009844	0.025296
PON1	7q21.3	-0.192454741	0.009851	0.025312
SPTSSA	14q13.1	-0.192429854	0.009861	0.025333
MAP2K3	17p11.2	0.19240893	0.009869	0.025351
ARF5	7q32.1	0.192356621	0.00989	0.0254
JPH3	16q24.2	-0.192352437	0.009891	0.025401
HSPA12A	10q25.3	-0.192341975	0.009895	0.025408
LRRC75A	17p11.2	-0.192264558	0.009926	0.025483
AMDHD1	12q23.1	-0.192255444	0.009929	0.025487
FSTL4	5q31.1	-0.192254196	0.00993	0.025487
DNM3	1q24.3	-0.192218526	0.009944	0.02552
XYLT2	17q21.33	0.192193417	0.009954	0.025542
OPN1MW	Xq28	-0.192158366	0.009968	0.025573
VIPAS39	14q24.3	0.192155755	0.009969	0.025573
CAPN13	2p23.1	0.192151972	0.00997	0.025574
GDF5	20q11.22	0.192138113	0.009976	0.025585
NAA16	13q14.11	-0.192128554	0.009979	0.025591
ANKRD45	1q25.1	-0.192108636	0.009987	0.025608
CDKAL1	6p22.3	-0.192105538	0.009988	0.025608
CCL2	17q12	-0.192061599	0.010006	0.025649
COPG1	3q21.3	0.192036491	0.010016	0.025671
MCM2	3q21.3	0.191990459	0.010034	0.025715
MAP3K15	Xp22.12	-0.191950123	0.01005	0.025752
TMED7-TIC	5q22.3	-0.191916571	0.010063	0.025783
ZNF638	2p13.3-p1	-0.191890026	0.010074	0.025802
CCL4	17q12	-0.191887933	0.010075	0.025802
TEC	4p12-p11	0.191887933	0.010075	0.025802
XRRA1	11q13.4	0.191879564	0.010078	0.025808
MYBBP1A	17p13.2	-0.191875379	0.01008	0.025808
UBAP1	9p13.3	0.191871195	0.010081	0.025809
ALPK3	15q25.3	-0.191864917	0.010084	0.025813
CLEC4G	19p13.2	-0.191833497	0.010096	0.025841
HUS1B	6p25.3	0.191820728	0.010101	0.025851
SLC7A1	13q12.3	-0.191810516	0.010105	0.025858
COMMD3	10p12.2	0.191781223	0.010117	0.025885
PAXIP1	7q36.2	-0.191774946	0.01012	0.025888
TMEM155	4q27	-0.191752714	0.010129	0.025907
GABRR1	6q15	-0.19173918	0.010134	0.025918
CFAP70	10q22.2	-0.19172473	0.01014	0.025929
SOS1	2p22.1	-0.191697529	0.010151	0.025953
PTCHD4	6p12.3	-0.191695437	0.010151	0.025953
TNIK	3q26.2-q2	0.191605465	0.010188	0.026041
AKR1E2	10p15.1	0.191601281	0.010189	0.026042
C3ORF62	3p21.31	-0.191586634	0.010195	0.026054
MGAM	7q34	-0.191553156	0.010209	0.026085
SOX17	8q11.23	-0.191534325	0.010216	0.026101
RSAD2	2p25.2	0.191513402	0.010225	0.026118
BOD1	5q35.2	-0.191511309	0.010225	0.026118
HTR1F	3p11.2-p1	-0.191456919	0.010247	0.026168
INHBA-AS1	17p14.1	-0.191456819	0.010247	0.026168
CACNG5	17q24.2	-0.191453703	0.010249	0.026168

UTS2	1p36. 23	0. 191442748	0. 010253	0. 026176
ARHGAP26	5q31. 3	0. 191438077	0. 010255	0. 026177
ADGRA2	8p11. 23	-0. 19142343	0. 010261	0. 026189
LRRC58	3q13. 33	-0. 191410876	0. 010266	0. 026198
HSPB6	19q13. 12	-0. 191358567	0. 010287	0. 026249
STK11	19p13. 3	0. 191310443	0. 010307	0. 026294
FBRS	16p11. 2	0. 191308351	0. 010308	0. 026294
GMPR2	14q12	0. 191291612	0. 010314	0. 026308
PLEKHA3	2q31. 2	-0. 191276965	0. 01032	0. 02632
MISP3	19p13. 12	0. 191272781	0. 010322	0. 026321
PGPEP1	19p13. 11	-0. 191258134	0. 010328	0. 026333
OR10H5	19p13. 12	0. 191220152	0. 010343	0. 026369
KIF17	1p36. 12	-0. 191172347	0. 010363	0. 026415
NBR2	17q21. 31	0. 191161886	0. 010367	0. 026423
ERCC8	5q12. 1	-0. 191136777	0. 010377	0. 026446
QARS	3p21. 31	0. 191122131	0. 010383	0. 026457
NDUFB10	16p13. 3	0. 191117946	0. 010385	0. 026457
STMN3	20q13. 33	-0. 191111669	0. 010388	0. 026457
S100B	21q22. 3	-0. 191111669	0. 010388	0. 026457
LINC00643	14q23. 2	-0. 191109333	0. 010389	0. 026457
ZNF76	6p21. 31	-0. 191088653	0. 010397	0. 026475
SLC33A1	3q25. 31	-0. 191080284	0. 0104	0. 026481
ATP4A	19q13. 12	-0. 191038414	0. 010418	0. 026521
SUCLA2	13q14. 2	-0. 19103216	0. 01042	0. 026524
LIMK1	7q11. 23	0. 191025882	0. 010423	0. 026527
PHKA2	Xp22. 13	-0. 190979851	0. 010442	0. 026572
DEGS1	1q42. 11	-0. 190961019	0. 010449	0. 026585
SMIM1A	21q22. 11-	-0. 190958927	0. 01045	0. 026585
HIST1H2BE	6p22. 2	0. 190956835	0. 010451	0. 026585
NEDD9	6p24. 2	-0. 190954742	0. 010452	0. 026585
VASH2	1q32. 3	-0. 190948465	0. 010455	0. 026588
RCAN3	1p36. 11	-0. 190938003	0. 010459	0. 026595
ZXDB	Xp11. 21	-0. 190914988	0. 010468	0. 026616
TOR1AIP1	1q25. 2	-0. 190902433	0. 010473	0. 026626
SLC35G2	3q22. 3	-0. 190896156	0. 010476	0. 026629
MRPS18A	6p21. 1	0. 190848032	0. 010496	0. 026676
SLC39A13	11p11. 2	0. 190835478	0. 010501	0. 026686
SLC17A1	6p22. 2	-0. 190792163	0. 010519	0. 026728
DPH3	3p25. 1	-0. 190770615	0. 010528	0. 026747
ZNF221	19q13. 31	-0. 190735045	0. 010543	0. 026781
ZNF319	16q21	-0. 190718306	0. 010549	0. 026795
ZBTB11-AS	3q12. 3	0. 190709937	0. 010553	0. 026801
MAGEE2	Xq13. 3	-0. 190694184	0. 010559	0. 026814
PHYKPL	5q35. 3	0. 190691105	0. 010561	0. 026814
CCDC40	17q25. 3	-0. 190645074	0. 01058	0. 026859
LMF1	16p13. 3	0. 190611596	0. 010594	0. 026886
TPRG1L	1p36. 32	0. 190611596	0. 010594	0. 026886
PAX5	9p13. 2	-0. 190609294	0. 010595	0. 026886
ADH1C	4q23	0. 190599042	0. 010599	0. 026894
POLR2E	19p13. 3	0. 190582303	0. 010606	0. 026908
ADAMTS19	5q23. 3	-0. 190535158	0. 010626	0. 026954
CLC	19q13. 2	-0. 190502962	0. 010639	0. 026985
AP4M1	7q22. 1	0. 190479777	0. 010649	0. 027006
ZNF467	7q36. 1	-0. 190475593	0. 01065	0. 027007

MED7	5q33.3	0.190454669	0.010659	0.027026
FAM78A	9q34.13	-0.190423284	0.010672	0.027056
KIF26A	14q32.33	-0.190396083	0.010684	0.027081
GABPB1-AS1	15q21.2	-0.190377252	0.010692	0.027096
CCDC177	14q24.1	-0.190375608	0.010692	0.027096
DPPA4	3q13.13	-0.190345258	0.010705	0.027125
NCLN	19p13.3	0.190335405	0.010709	0.027132
TESK2	1p34.1	-0.190278911	0.010733	0.027186
HCG9	6p22.1	-0.190278505	0.010733	0.027186
PPP1R3E	14q11.2	-0.190262172	0.01074	0.0272
THYN1	11q25	0.190257988	0.010742	0.027201
RALGAPB	20q11.23	-0.190232879	0.010752	0.027224
PIPSL	10q23.33	0.190170109	0.010779	0.027288
AMFR	16q13	0.190159647	0.010783	0.027295
NPAT	11q22.3	-0.190140816	0.010791	0.027312
ALDH3B2	11q13.2	0.190116105	0.010802	0.027335
PRAMEF12	1p36.21	-0.190097066	0.01081	0.027352
TVP23A	16p13.13	-0.19008223	0.010816	0.027364
LINC00696	3p21.2	0.189975398	0.010861	0.027476
CHD9	16q12.2	-0.189958781	0.010868	0.02749
PSME3	17q21.31	0.189937857	0.010877	0.027509
KCNJ10	1q23.2	-0.189912749	0.010888	0.027533
SMARCE1	17q21.2	-0.189906472	0.010891	0.027536
VWA5B2	3q27.1	-0.18989601	0.010895	0.027544
TRNAU1AP	1p35.3	0.189879271	0.010902	0.027558
GOLGA8EP	15q11.2	-0.189874223	0.010904	0.02756
ZNF93	19p12	-0.189820685	0.010927	0.027612
R3HDML	20q13.12	0.189820055	0.010927	0.027612
ZNF383	19q13.12	-0.189804045	0.010934	0.027625
EIF4E	4q23	-0.189797669	0.010937	0.027629
TRIB2	2p24.3	0.189728621	0.010967	0.0277
MYPOP	19q13.32	0.189720252	0.01097	0.027706
AKIP1	11p15.4	0.189695144	0.010981	0.027729
FIGNL2	12q13.13	-0.189663758	0.010994	0.02776
LINC00314	21q21.3	-0.18962403	0.011012	0.027799
CSF1	1p13.3	-0.18960308	0.011021	0.027815
SELENOI	2p23.3	-0.18960308	0.011021	0.027815
SRD5A1	5p15.31	0.189577972	0.011031	0.027836
C19ORF24	19p13.3	0.189573787	0.011033	0.027836
MGAT5B	17q25.2	-0.189573787	0.011033	0.027836
KRTAP5-5	11p15.5	-0.189525027	0.011054	0.027886
ACTC1	15q14	-0.189482869	0.011072	0.027928
RIPPLY3	21q22.13	0.189475446	0.011076	0.027933
MAN2C1	15q24.2	0.189464984	0.01108	0.027941
SLU7	5q33.3	-0.189450338	0.011087	0.027953
GLE1	9q34.11	-0.189446153	0.011088	0.027954
SORT1	1p13.3 1p	-0.189441968	0.01109	0.027955
UMPS	3q21.2	0.189406398	0.011106	0.027991
TADA2A	17q12	-0.189393844	0.011111	0.028001
RNF216P1	7p22.1	-0.189387567	0.011114	0.028004
MYOG	1q32.1	0.189335234	0.011136	0.028058
CD96	3q13.13-c	-0.189322704	0.011142	0.028068
LINC02591	11q21.1	0.189316427	0.011145	0.028071
CAMSAP3	19p13.2	0.189276672	0.011162	0.028112

UTP6	17q11.2	0.189257841	0.01117	0.028129
NEDD8	14q12	0.189243195	0.011176	0.028141
TMEM167A	5q14.2	-0.189201347	0.011195	0.028182
COG5	7q22.3	-0.189199255	0.011196	0.028182
FIGNL1	7p12.2	-0.189172054	0.011208	0.028209
PTGES2-AS1	9q34.11	0.189134392	0.011224	0.028247
OSCP1	1p34.3	-0.189100914	0.011239	0.028276
PCBD2	5q31.1	0.189100914	0.011239	0.028276
TANG06	16q22.1	-0.189067437	0.011253	0.02831
MED4	13q14.2	0.189059067	0.011257	0.028315
USP7	16p13.2	-0.188967004	0.011297	0.028414
GNPAT	1q42.2	0.188958634	0.011301	0.028419
EPHA4	2q36.1	0.188927249	0.011315	0.02845
PRPS1L1	7p21.1	-0.188919217	0.011319	0.028456
RPLP2	11p15.5	0.18890214	0.011326	0.028471
HSPA1B	6p21.33	0.188883309	0.011334	0.028488
CDC37L1	9p24.1	-0.188864478	0.011343	0.028506
CYP4F2	19p13.12	0.18885151	0.011348	0.028515
ADPRM	17p13.1	-0.188849832	0.011349	0.028515
ZNF786	7q36.1	-0.188833093	0.011357	0.02853
SLC4A10	2q24.2	-0.18872887	0.011403	0.028642
TBX22	Xq21.1	-0.188686391	0.011422	0.028686
FETUB	3q27.3	0.188604156	0.011458	0.028774
BAX	19q13.33	0.188592472	0.011463	0.028784
CD3G	11q23.3	-0.188574035	0.011472	0.028801
ITGB7	12q13.13	0.188508777	0.011501	0.02887
TXNIP	1q21.1	0.188496223	0.011506	0.028881
DDX24	14q32.12	-0.188487854	0.01151	0.028885
PPM1F	22q11.22	-0.188485762	0.011511	0.028885
ZNF192P1	6p22.1	0.188474352	0.011516	0.028894
HPR	16q22.2	-0.188470258	0.011518	0.028895
SEPTIN10	2q13	0.188458561	0.011523	0.028905
PLOD3	7q22.1	0.188414621	0.011543	0.028951
BUD31	7q22.1	0.188387421	0.011555	0.028978
RPL5	1p22.1	-0.188343481	0.011575	0.029023
HBG1	11p15.4	-0.188331218	0.01158	0.029034
FABP5P3	7q36.1	-0.188327377	0.011582	0.029034
TMEM251	14q32.12	-0.188312096	0.011589	0.029048
DHX34	19q13.32	0.188286988	0.0116	0.029073
THNSL2	2p11.2	0.188272341	0.011607	0.029086
ERCC6L	Xq13.1	0.188226309	0.011628	0.029134
KRTAP5-7	11q13.4	0.188220586	0.01163	0.029137
IRS2	13q34	-0.188167723	0.011654	0.029193
EYA2	20q13.12	0.188153077	0.011661	0.029206
NLRP2	19q13.42	0.188145852	0.011664	0.02921
SDE2	1q42.12	-0.188136338	0.011668	0.029217
PRMT1	19q13.33	0.188123784	0.011674	0.029228
LOC341056	11q24.1	0.188100768	0.011684	0.029251
CIDEA	18p11.21	-0.188085743	0.011691	0.029262
UQCRQ	5q31.1	0.188084029	0.011692	0.029262
C18ORF21	18q12.2	-0.188010797	0.011725	0.029342
ARMT1	6q25.1	-0.188006612	0.011727	0.029343
IGFBP1	7p12.3	0.18796058	0.011748	0.029392
WDTC1	1p36.11	-0.187939656	0.011758	0.029412

SHCBP1	16q11.2	0.187920825	0.011766	0.02943
CBLN4	20q13.2	-0.187914941	0.011769	0.029433
TCL6	14q32.13	-0.187898263	0.011777	0.029445
SPCS3	4q34.2	-0.187897809	0.011777	0.029445
DDX56	7p13	0.187878978	0.011785	0.029463
TCEAL4	Xq22.2	-0.187866424	0.011791	0.029473
EZH2	7q36.1	0.187862239	0.011793	0.029474
USE1	19p13.11	0.187847593	0.0118	0.029487
GCN1	12q24.23	-0.187832946	0.011806	0.0295
TEX43	5q23.2	-0.18781691	0.011814	0.029515
SLC6A17	1p13.3	-0.187776453	0.011832	0.029558
SNHG11	20q11.23	0.187765991	0.011837	0.029566
PRRT4	7q32.1	-0.187702449	0.011866	0.029635
ZNF395	8p21.1	-0.187692758	0.011871	0.029643
FCGRT	19q13.33	0.187686481	0.011874	0.029646
ZNF585B	19q13.12	-0.187673927	0.011879	0.029657
CELF3	1q21.3	-0.187665558	0.011883	0.029663
ZNF780A	19q13.2	-0.187648819	0.011891	0.029674
SERAC1	6q25.3	-0.187648819	0.011891	0.029674
CHCHD2	7p11.2	0.187636265	0.011897	0.029684
HIGD1A	3p22.1	0.187634172	0.011898	0.029684
TMPRSS11L	4q13.2	0.187613828	0.011907	0.029704
MAP2K5	15q23	-0.187609064	0.011909	0.029705
PIWIL4	11q21	0.187581863	0.011922	0.029733
EPYC	12q21.33	0.187559349	0.011932	0.029755
RAB34	17q11.2	0.187554663	0.011934	0.029757
RBMS3	3p24.1	-0.187546293	0.011938	0.029763
SSNA1	9q34.3	0.187540016	0.011941	0.029766
ECHS1	10q26.3	0.187531647	0.011945	0.029772
CALR	19p13.13	0.187521185	0.01195	0.029779
EIF2S2	20q11.22	0.187519093	0.011951	0.029779
RPA3	7p21.3	0.187512816	0.011954	0.029783
RTN3	11q13.1	0.187502354	0.011958	0.029791
DIMT1	5q12.1	-0.187491892	0.011963	0.029799
VCL	10q22.2	0.187487707	0.011965	0.029801
BBS7	4q27	-0.187464691	0.011976	0.029823
EIF4G2	11p15.4	-0.187443768	0.011986	0.029844
TMEM214	2p23.3	0.187406105	0.012003	0.029884
SNURF	15q11.2	-0.187377957	0.012016	0.029912
ATXN7L3B	12q21.1	-0.187307765	0.012049	0.02999
MCTP2	15q26.2	-0.187293118	0.012056	0.030003
FXYP4	10q11.21	0.18725833	0.012072	0.03004
SPTBN4	19q13.2	-0.187253363	0.012074	0.030042
PSMD1	2q37.1	0.187230348	0.012085	0.030065
IMMP1L	11p13	-0.187205239	0.012097	0.03009
PA2G4	12q13.2	0.187171762	0.012112	0.030125
PTBP2	1p21.3	-0.187165484	0.012115	0.030129
PLXND1	3q22.1	-0.187115268	0.012139	0.030184
MEF2A	15q26.3	-0.187088067	0.012151	0.030212
FBXL14	12p13.33	-0.187067144	0.012161	0.030232
TMPRSS2	21q22.3	0.187062959	0.012163	0.030233
EBAG9	8q23.2	-0.187039943	0.012174	0.030257
HAO1	20p12.3	-0.187035585	0.012176	0.030258
TGM3	20p13	-0.187011307	0.012188	0.030283

TDRD10	1q21.3	-0.187002281	0.012192	0.030287
BRS3	Xq26.3	-0.186998811	0.012193	0.030287
GYPC	2q14.3	-0.186998096	0.012194	0.030287
PRKG1	10q11.23-	-0.186966711	0.012209	0.03032
SPOCK3	4q32.3	-0.186893419	0.012243	0.030402
NTN1	17p13.1	-0.186874647	0.012252	0.03042
SPSB2	12p13.31	0.186857908	0.01226	0.030436
ZNF557	19p13.2	-0.18682443	0.012276	0.03047
NELFE	6p21.33	0.186822338	0.012277	0.03047
MFHAS1	8p23.1	-0.18679723	0.012289	0.030494
LYPD5	19q13.31	0.186795137	0.01229	0.030494
IGF2BP2-A	3q27.2	0.186788708	0.012293	0.030498
PVALEF	17q25.3	-0.186770993	0.012301	0.030515
GJC1	17q21.31	-0.186755383	0.012308	0.03053
CXXC1	18q21.1	-0.186751198	0.01231	0.030531
UBE2W	8q21.11	-0.186698889	0.012335	0.030589
TEKT4P2	21p11.2	0.186677965	0.012345	0.030607
CCR5	3p21.31	-0.186675873	0.012346	0.030607
HNRNPF	10q11.21	0.186673781	0.012347	0.030607
OSR1	2p24.1	-0.18664658	0.01236	0.030635
TANC2	17q23.2-c	-0.186594271	0.012385	0.030693
STK17B	2q32.3	-0.186579625	0.012392	0.030706
ABCA11P	4p16.3	-0.186577532	0.012393	0.030706
ZNF649	19q13.41	-0.186573348	0.012395	0.030707
TTK	6q14.1	0.186556609	0.012403	0.030723
SRCIN1	17q12	-0.1865315	0.012415	0.030747
ZNF433	19p13.2	-0.186529408	0.012416	0.030747
KRTAP7-1	21q22.11	-0.186504287	0.012428	0.030773
ECE2	3q27.1	-0.186498023	0.012431	0.030777
NSG2	5q35.2	-0.186494326	0.012433	0.030777
KIF11	10q23.33	0.186481284	0.012439	0.030789
FFAR3	19q13.12	-0.18646912	0.012445	0.0308
CCDC85B	11q13.1	0.186451991	0.012453	0.030815
NRG1	8p12	-0.186449899	0.012454	0.030815
DDX11	12p11.21	0.186437344	0.01246	0.030826
OLFM2	19p13.2	-0.186405959	0.012475	0.030859
PITPNC1	17q24.2	-0.186382943	0.012486	0.030883
STARD10	11q13.4	0.18636202	0.012496	0.030904
STIL	1p33	0.186336911	0.012508	0.03093
DST	6p12.1	-0.186320172	0.012517	0.030946
TRAF3	14q32.32	-0.186288787	0.012532	0.03098
KDSR	18q21.33	-0.186269956	0.012541	0.030998
RGS19	20q13.33	0.186249032	0.012551	0.031019
ZNF230	19q13.31	-0.186243899	0.012553	0.031019
ISY1	3q21.3	0.186242755	0.012554	0.031019
REEP3	10q21.3	0.186234386	0.012558	0.031025
ABCB5	7p21.1	-0.186218155	0.012566	0.03104
GART	21q22.11	0.186215555	0.012567	0.03104
BTBD2	19p13.3	0.186196723	0.012576	0.031059
C17ORF97	17p13.3	-0.186188354	0.01258	0.031065
CLEC4C	12p13.31	-0.186174067	0.012587	0.031078
PIN1	19p13.2	0.186142322	0.012602	0.031112
ITK	5q33.3	-0.18613186	0.012608	0.031121
OR2W3	1q44	-0.186109065	0.012619	0.031144

PFDN4	20q13.2	0.186008411	0.012667	0.031257
RPL13AP1	17q21.11	0.186007205	0.012668	0.031257
CDH10	5p14.2-p1	-0.186005706	0.012669	0.031257
ABI3BP	3q12.2	-0.185997949	0.012673	0.031262
ARNT	1q21.3	-0.185895424	0.012723	0.031379
TAAR1	6q23.2	-0.185894497	0.012723	0.031379
PEBP1	12q24.23	-0.185887055	0.012727	0.031384
NOD2	16q12.1	0.185822192	0.012758	0.031458
MTMR10	15q13.3	-0.185794991	0.012772	0.031487
AP2A2	11p15.5	-0.185790806	0.012774	0.031489
PRPF3	1q21.2	0.185782437	0.012778	0.031495
DUSP26	8p12	-0.185778252	0.01278	0.031496
ETV5	3q27.2	-0.185771975	0.012783	0.0315
RPL26	17p13.1	-0.185757328	0.01279	0.031513
PCDHA13	5q31.3	-0.185736677	0.0128	0.031535
TYMS	18p11.32	0.18573222	0.012803	0.031536
NUP43	6q25.1	-0.185728035	0.012805	0.031537
CENPW	6q22.32	0.18569665	0.01282	0.031567
PPP1R16A	8q24.3	0.18569665	0.01282	0.031567
LRRC40	1p31.1	-0.185654803	0.012841	0.031614
CPED1	7q31.31	-0.185648526	0.012844	0.031618
PDE11A	2q31.2	0.18558994	0.012873	0.031684
TMEM63C	14q24.3	-0.185587848	0.012874	0.031684
HPCA	1p35.1	-0.185575391	0.01288	0.031695
WBP11P1	18q12.1	-0.185516707	0.012909	0.031763
JAM3	11q25	-0.185502061	0.012916	0.031776
LINC00889	Xq26.3	-0.18549305	0.01292	0.031784
KCTD7	7q11.21	-0.185485322	0.012924	0.031789
FZD9	7q11.23	-0.185461575	0.012936	0.031814
PRRT1	6p21.32	-0.18544766	0.012943	0.031826
ZNF142	2q35	-0.185445567	0.012944	0.031826
SNORD15A	11q13.4	0.185410117	0.012962	0.031865
SMAD7	18q21.1	-0.185391166	0.012971	0.031884
CSTF2	Xq22.1	0.18537652	0.012978	0.031898
ZNF101	19p13.11	-0.185349319	0.012992	0.031928
DYNLRB2	16q23.2	-0.18534568	0.012994	0.031928
GRAMD2A	15q23	0.185336765	0.012998	0.031933
UNC5C	4q22.3	-0.18533506	0.012999	0.031933
C9ORF139	9q34.3	-0.185294841	0.013019	0.031979
APBB2	4p14-p13	-0.185271902	0.01303	0.032003
FBLIM1	1p36.21	0.185223778	0.013054	0.032058
TBCC	6p21.1	-0.185219593	0.013056	0.032058
IL18R1	2q12.1	-0.1852175	0.013058	0.032058
RTP5	2q37.3	-0.185201751	0.013065	0.032073
PTOV1	19q13.33	0.185177746	0.013077	0.032099
CYP1B1	2p22.2	-0.185112883	0.01311	0.032174
NCBP2AS2	3q29	0.185045927	0.013144	0.032253
CPA6	8q13.2	0.185024317	0.013154	0.032276
MRC1	10p12.33	-0.185010357	0.013161	0.032289
PLXDC2	10p12.31	-0.184972695	0.01318	0.032331
IL22RA1	1p36.11	0.184909924	0.013212	0.032405
GET4	7p22.3	0.184880631	0.013227	0.032437
CHTOP	1q21.3	0.184874354	0.01323	0.032441
SNRPA1	15q26.3	0.184855523	0.01324	0.032461

ZMAT2	5q31. 3	0. 184847153	0. 013244	0. 032467
ZFHX4	8q21. 13	-0. 184824137	0. 013255	0. 032492
ASNS	7q21. 3	-0. 184815768	0. 01326	0. 032498
RGS5	1q23. 3	-0. 184767644	0. 013284	0. 032551
ACOXL	2q13	-0. 184764687	0. 013286	0. 032551
TP73-AS1	1p36. 32	-0. 184763459	0. 013286	0. 032551
ATAT1	6p21. 33	0. 184660934	0. 013338	0. 032675
ST6GAL1	3q27. 3	-0. 184654657	0. 013342	0. 032675
TMEM190	19q13. 42	0. 18465423	0. 013342	0. 032675
GATA6	18q11. 2	0. 184606532	0. 013366	0. 032731
SEC14L4	22q12. 2	0. 184597036	0. 013371	0. 032738
CCZ1B	7p22. 1	0. 184585609	0. 013377	0. 032749
OR10H2	19p13. 12	0. 184573375	0. 013383	0. 032756
PRKACA	19p13. 12	-0. 184573055	0. 013383	0. 032756
GABRG1	4p12	-0. 184559179	0. 01339	0. 03277
EXTL2	1p21. 2	-0. 184539577	0. 0134	0. 032789
CLK2P1	7p15. 3	0. 184537485	0. 013401	0. 032789
COQ10B	2q33. 1	0. 184493545	0. 013424	0. 03284
EIF3CL	16p12. 1	0. 184485176	0. 013428	0. 032841
MKI67	10q26. 2	0. 184485176	0. 013428	0. 032841
SOWAHC	2q13	0. 184483083	0. 013429	0. 032841
PPTC7	12q24. 11	-0. 184478899	0. 013431	0. 032842
WIPF2	17q21. 2	0. 18446216	0. 01344	0. 032856
ZNF804B	7q21. 13	-0. 184461752	0. 01344	0. 032856
ZIM2	19q13. 43	-0. 184457819	0. 013442	0. 032856
PDP2	16q22. 1	-0. 184422405	0. 01346	0. 032897
DHH	12q13. 12	-0. 184414036	0. 013465	0. 032903
TANG02	22q11. 21	-0. 184405666	0. 013469	0. 032908
THOC2	Xq25	-0. 184403574	0. 01347	0. 032908
RAB7A	3q21. 3	0. 184386835	0. 013479	0. 032925
APOBEC4	1q25. 3	-0. 184352649	0. 013496	0. 032964
GNB1L	22q11. 21	0. 184340803	0. 013502	0. 03297
GPR63	6q16. 1	-0. 184340803	0. 013502	0. 03297
PSMA6	14q13. 2	0. 184338711	0. 013503	0. 03297
ZNF200	16p13. 3	-0. 184332434	0. 013507	0. 032974
ALKBH2	12q24. 11	0. 184317787	0. 013514	0. 032988
UNC5B	10q22. 1	0. 184286402	0. 01353	0. 033023
FAM86DP	3p12. 3	0. 184269663	0. 013539	0. 033034
CHD4	12p13. 31	-0. 184269663	0. 013539	0. 033034
PDCL2	4q12	0. 184267925	0. 01354	0. 033034
FITM1	14q12	-0. 184265575	0. 013541	0. 033034
RAPGEF3	12q13. 11	0. 184223631	0. 013563	0. 033082
PPAT	4q12	-0. 184190153	0. 01358	0. 03312
ITGAD	16p11. 2	-0. 184177964	0. 013586	0. 033128
HS1BP3	2p24. 1	0. 184177599	0. 013586	0. 033128
ZNF8	19q13. 43	-0. 184167137	0. 013592	0. 033137
COL11A1	1p21. 1	0. 184161246	0. 013595	0. 033141
EGFL7	9q34. 3	-0. 184142029	0. 013605	0. 033161
ATP13A3	3q29	-0. 184114829	0. 013619	0. 033191
RNPS1	16p13. 3	0. 184108551	0. 013622	0. 033195
OLFML3	1p13. 2	-0. 184064612	0. 013645	0. 033247
ZNHIT3	17q12	0. 184047873	0. 013654	0. 033264
HIST3H3	1q42. 13	0. 184010723	0. 013673	0. 033303
AP1M1	19p13. 11	0. 184010211	0. 013673	0. 033303

DOCK2	5q35.1	-0.183995564	0.013681	0.033318
HTRA3	4p16.1	0.183985102	0.013686	0.033327
RGS14	5q35.3	0.183957902	0.013701	0.033358
RNF217	6q22.31	-0.18394744	0.013706	0.033367
C10RF229	1q44	-0.183937074	0.013711	0.033376
LINC00691	13p24.2	0.183895912	0.013733	0.033424
MMP21	10q26.2	-0.183856151	0.013754	0.033471
PSMA8	18q11.2	-0.183832271	0.013766	0.033497
VTN	17q11.2	-0.183826083	0.013769	0.033501
CDKN2AIPN	5q31.1	-0.183817714	0.013774	0.033507
GRIK1	21q21.3	-0.183776687	0.013795	0.033556
TBC1D22B	6p21.2	-0.183750758	0.013809	0.033585
ZFYVE1	14q24.2	-0.18372565	0.013822	0.033613
PIRT	17p12	-0.183719397	0.013825	0.033617
ZNF705A	12p13.31	-0.183714828	0.013828	0.033618
ACSM6	10q23.33	-0.183681043	0.013846	0.033657
PLIN1	15q26.1	-0.183641956	0.013866	0.033703
ASCC2	22q12.2	0.183629402	0.013873	0.033711
CCDC134	22q13.2	-0.183629402	0.013873	0.033711
KNTC1	12q24.31	0.18361894	0.013878	0.03372
TOM1	22q12.3	0.183606386	0.013885	0.033732
GXYLT2	3p13	-0.183579185	0.013899	0.033763
DHDH	19q13.33	0.183535246	0.013922	0.033814
GLIPR1	12q21.2	-0.183533153	0.013924	0.033814
HENMT1	1p13.3	0.183520599	0.01393	0.033826
HAPLN1	5q14.3	0.183460305	0.013962	0.033899
KCTD2	17q25.1	-0.183434813	0.013976	0.033928
SAC3D1	11q13.1	0.183428536	0.013979	0.033932
CRISPLD2	16q24.1	-0.183378319	0.014006	0.033993
ATXN1	6p22.3	-0.183363673	0.014013	0.034003
FKBPL	6p21.32	0.183363673	0.014013	0.034003
SPG21	15q22.31	0.183349026	0.014021	0.034018
TDGF1P3	Xq23	-0.183342621	0.014025	0.034022
IDH1	2q34	0.18333438	0.014029	0.034029
SPON2	4p16.3	0.183300902	0.014047	0.034066
RABL3	3q13.33	-0.183298809	0.014048	0.034066
RNF113B	13q32.2	0.183292756	0.014051	0.034066
MIR7-3HG	19p13.3	-0.183292755	0.014051	0.034066
TTC27	2p22.3	0.183284163	0.014056	0.034073
ESPL1	12q13.13	0.183263239	0.014067	0.034096
ZSCAN29	15q15.3	-0.183227669	0.014086	0.034138
IGF1R	15q26.3	-0.183206746	0.014097	0.034161
KRT32	17q21.2	0.183192261	0.014105	0.034175
BIN1	2q14.3	0.183177549	0.014113	0.03419
CPNE1	20q11.22	0.18313979	0.014133	0.034235
ACKR1	1q23.2	-0.183129329	0.014138	0.034245
PSG2	19q13.31	-0.18312371	0.014141	0.034248
GSN	9q33.2	0.183079112	0.014165	0.034301
ST5	11p15.4	0.183058188	0.014177	0.03432
GNB5	15q21.2	-0.183058188	0.014177	0.03432
PPARA	22q13.31	-0.183030988	0.014191	0.034352
TP53INP2	20q11.22	-0.183024711	0.014195	0.034356
NOL12	22q13.1	0.182989141	0.014214	0.034398
CCR4	3p22.3	-0.182984039	0.014217	0.0344

SLC9A3R1	17q25. 1	0. 182978679	0. 014219	0. 034403
PSMB2	1p34. 3	0. 18296194	0. 014228	0. 034421
LYSMD2	15q21. 2	-0. 182953571	0. 014233	0. 034427
TTLL4	2q35	0. 182930555	0. 014245	0. 034453
CS	12q13. 3	-0. 182913816	0. 014254	0. 034471
SMPD4	2q21. 1	0. 182905446	0. 014259	0. 034478
GNAQ	9q21. 2	-0. 182892892	0. 014266	0. 03449
COA6	1q42. 2	0. 182876153	0. 014275	0. 034508
FEN1	11q12. 2	0. 182869876	0. 014278	0. 034512
WAPL	10q23. 2	-0. 182859415	0. 014284	0. 034521
CRYGC	2q33. 3	-0. 182805453	0. 014313	0. 034588
WNT9B	17q21. 32	-0. 182798146	0. 014317	0. 034593
RPRD1B	20q11. 23	-0. 182790367	0. 014321	0. 034599
KLF14	7q32. 2	-0. 182781097	0. 014326	0. 034604
IL16	15q25. 1	-0. 182779905	0. 014327	0. 034604
SORBS2	4q35. 1	-0. 182765259	0. 014335	0. 034619
AGPAT5	8p23. 1	-0. 182733873	0. 014352	0. 034654
TBL2	7q11. 23	0. 182731781	0. 014353	0. 034654
MTNR1A	4q35. 2	-0. 182729119	0. 014354	0. 034654
MMP15	16q21	0. 182719227	0. 01436	0. 034663
ZDHC22	14q24. 3	-0. 182679196	0. 014382	0. 034711
MSX2P1	17q22	-0. 182648254	0. 014398	0. 034748
LHX9	1q31. 3	0. 182578403	0. 014436	0. 034833
PHACTR4	1p35. 3	-0. 182576946	0. 014437	0. 034833
NXPE4	11q23. 2	-0. 182551346	0. 014451	0. 034863
PKP4	2q24. 1	0. 182530915	0. 014462	0. 034885
SIRPA	20p13	-0. 182493252	0. 014483	0. 034931
EPGN	4q13. 3	0. 182462961	0. 0145	0. 034966
ACSL4	Xq23	-0. 182449313	0. 014507	0. 03498
LINC00839	10q11. 21	-0. 182428389	0. 014518	0. 035004
CEP57L1	6q21	-0. 182415835	0. 014525	0. 035016
PIN4P1	15q15. 3	0. 182384545	0. 014543	0. 035053
CST13P	20p11. 21	0. 182372171	0. 014549	0. 035064
TBC1D4	13q22. 2	-0. 182369803	0. 014551	0. 035064
BUB3	10q26. 13	0. 182357249	0. 014558	0. 035077
GLP1R	6p21. 2	-0. 182333393	0. 014571	0. 035104
EIF4G3	1p36. 12	-0. 182327956	0. 014574	0. 035107
FAM66A	8p23. 1	-0. 182314358	0. 014581	0. 035121
NPHP1	2q13	-0. 182296571	0. 014591	0. 03514
SHISA4	1q32. 1	0. 182286109	0. 014597	0. 03515
TMEM233	12q24. 23	-0. 182252726	0. 014615	0. 03519
OR5E1P	11p15. 4	0. 182231408	0. 014627	0. 035214
PYGL	14q22. 1	0. 182219153	0. 014634	0. 035226
NIBAN3	19p13. 11	-0. 182191997	0. 014649	0. 035258
IL23R	1p31. 3	-0. 182174927	0. 014658	0. 035275
RAB5A	3p24. 3	0. 182173122	0. 014659	0. 035275
ESRRG	1q41	-0. 182166845	0. 014663	0. 035279
ATP6V1F	7q32. 1	0. 18216266	0. 014665	0. 03528
C19ORF47	19q13. 2	0. 182158475	0. 014667	0. 035281
SNORA3B	11p15. 4	0. 182142829	0. 014676	0. 035296
LINC00167	11q24. 3	-0. 182141325	0. 014677	0. 035296
MPV17L	16p13. 11	-0. 18212709	0. 014685	0. 03531
PSAT1	9q21. 2	-0. 182116628	0. 01469	0. 03532
DGCR11	22q11. 21	0. 182108259	0. 014695	0. 035327

PCDHA11	5q31.3	-0.182075733	0.014713	0.035366
CD276	15q24.1	0.182037118	0.014734	0.035412
NCOA3	20q13.12	-0.182035026	0.014736	0.035412
SPAG9	17q21.33	-0.182026657	0.01474	0.035419
MS4A2	11q12.1	-0.181970163	0.014772	0.03549
GCOM1	15q21.3	0.181928316	0.014795	0.03554
NUP155	5p13.2	-0.181926224	0.014796	0.03554
HIST1H2AI	6p22.2	0.181901178	0.01481	0.03557
SEC23IP	10q26.11-	-0.181863453	0.014831	0.035616
RUBCN	3q29	-0.181844622	0.014842	0.035637
NIP7	16q22.1	0.181832067	0.014849	0.03565
TMEM151B	6p21.1	-0.181765112	0.014886	0.035735
CASC1	12p12.1	-0.181760927	0.014889	0.035737
DENR	12q24.31	-0.181748373	0.014896	0.035749
RNASE10	14q11.2	0.181734644	0.014903	0.03576
RAB3GAP2	1q41	-0.181733727	0.014904	0.03576
FAM71E2	19q13.42	0.181711325	0.014916	0.035786
GAS2L3	12q23.1	-0.181665059	0.014942	0.035842
RANBP3L	5p13.2	-0.181663474	0.014943	0.035842
DCP2	5q22.2	-0.181660494	0.014945	0.035842
AVPR1A	12q14.2	-0.181649176	0.014951	0.035853
MEAF6	1p34.3	-0.181606093	0.014976	0.035907
FOXD4L5	9q21.11	0.181593883	0.014983	0.035919
MAS1L	6p22.1	-0.181581164	0.01499	0.035932
SUZ12	17q11.2	-0.181560061	0.015002	0.035954
ZNF610	19q13.41	-0.181557969	0.015003	0.035954
SFTPC	8p21.3	-0.181538337	0.015014	0.035977
ZNF215	11p15.4	0.18152354	0.015022	0.035992
TOP2A	17q21.2	0.181516122	0.015026	0.035998
ATP2C1	3q22.1	0.181447074	0.015065	0.036087
ZC3H18	16q24.2	0.181436612	0.015071	0.036097
LRRTM4	2p12	-0.181405405	0.015089	0.036135
CUL7	6p21.1	-0.181401042	0.015092	0.036137
DUS1L	17q25.3	0.181394765	0.015095	0.036141
ANK1	8p11.21	0.181346641	0.015122	0.036202
ATXN7	3p14.1	-0.181338271	0.015127	0.036209
FRZB	2q32.1	-0.181277593	0.015162	0.036283
ELK3	12q23.1	-0.181277593	0.015162	0.036283
ZBED8	5q33.3	-0.181271316	0.015165	0.036287
CPNE3	8q21.3	-0.181254577	0.015175	0.036306
CBX4	17q25.3	0.181237838	0.015184	0.036324
IL5RA	3p26.2	-0.181226722	0.015191	0.036335
HOXA9	7p15.2	0.181214822	0.015198	0.036347
AKR7A3	1p36.13	0.181191806	0.015211	0.03637
DNAJB11	3q27.3	0.181191806	0.015211	0.03637
ZNF821	16q22.2	-0.18114159	0.015239	0.036434
ZSCAN12	6p22.1	-0.181137405	0.015242	0.036435
MIR100HG	11q24.1	-0.18110602	0.01526	0.036474
MYRF-AS1	11q12.2	0.181094736	0.015266	0.036485
RBM26	13q31.1	-0.181055803	0.015289	0.036534
ZFAND6	15q25.1	0.181047434	0.015293	0.036541
TSC22D1	13q14.11	0.180995125	0.015323	0.036609
CDIPTOSP	16p11.2	0.180983948	0.01533	0.03662
KIFAP3	1q24.2	-0.180921892	0.015366	0.036701

TKT	3p21. 1	0. 180900969	0. 015378	0. 036724
PKD1	16p13. 3	-0. 180898876	0. 015379	0. 036724
TRDN	6q22. 31	-0. 180894022	0. 015382	0. 036726
ATP2B4	1q32. 1	0. 180867491	0. 015397	0. 036758
ZNF706	8q22. 3	0. 180857029	0. 015403	0. 036768
NCAPH	2q11. 2	0. 180850752	0. 015407	0. 036771
PARD3B	2q33. 3	-0. 18084866	0. 015408	0. 036771
LINC00346	13q34	0. 180775427	0. 01545	0. 036867
FUT11	10q22. 2	-0. 180762873	0. 015457	0. 03688
PLXNA1	3q21. 3	0. 180731488	0. 015476	0. 036919
HDX	Xq21. 1	-0. 180704287	0. 015491	0. 036951
DUSP8	11p15. 5	-0. 180702195	0. 015493	0. 036951
ZNF492	19p12	-0. 180682641	0. 015504	0. 036974
LUZP1	1p36. 12	-0. 180658255	0. 015518	0. 037002
CCDC6	10q21. 2	0. 180656163	0. 015519	0. 037002
GPR12	13q12. 13	-0. 180595947	0. 015554	0. 03708
ANKRD36	2q11. 2	0. 180593392	0. 015556	0. 03708
TMEM65	8q24. 13	-0. 180559915	0. 015575	0. 03712
NEU2	2q37. 1	0. 180558342	0. 015576	0. 03712
ARF3	12q13. 12	-0. 18054736	0. 015583	0. 037131
NIPAL4	5q33. 3	0. 18054088	0. 015586	0. 037135
C1QTNF6	22q12. 3	0. 180505513	0. 015607	0. 03718
MRPL47	3q26. 33	0. 180478313	0. 015623	0. 037213
DISC2	1q42. 2	0. 180470559	0. 015628	0. 03722
HDAC11	3p25. 1	0. 180453204	0. 015638	0. 037239
ODF3L1	15q24. 2	-0. 18040508	0. 015666	0. 037302
PCDHB18P	5q31. 3	-0. 180392526	0. 015673	0. 037315
FLG2	1q21. 3	-0. 180386078	0. 015677	0. 037318
ARHGAP25	2p13. 3	-0. 180384157	0. 015678	0. 037318
PIK3CD	1p36. 22	-0. 18036951	0. 015687	0. 037334
STBD1	4q21. 1	-0. 180294185	0. 015731	0. 037435
SFPQ	1p34. 3	-0. 180250246	0. 015757	0. 037492
HYPK	15q15. 3	0. 180208399	0. 015782	0. 037546
HMSD	18q22. 1	0. 180203732	0. 015784	0. 037548
HAS2-AS1	8q24. 13	-0. 180200501	0. 015786	0. 037548
FCRLB	1q23. 3	0. 180189568	0. 015793	0. 037556
SCGB1B2P	19q13. 11	0. 180188616	0. 015793	0. 037556
SYCE3	22q13. 33	0. 180128681	0. 015829	0. 037636
CYP8B1	3p22. 1	-0. 18012142	0. 015833	0. 037641
FAM167A-1	8p23. 1	-0. 18011879	0. 015834	0. 037641
VWC2L	2q34-q35	-0. 18010239	0. 015844	0. 037659
NUDT15	13q14. 2	0. 18007658	0. 015859	0. 037691
CARF	2q33. 2	-0. 18001381	0. 015897	0. 037775
TAP2	6p21. 32	0. 179963593	0. 015927	0. 037842
HEPACAM	11q24. 2	-0. 179941573	0. 01594	0. 037868
EIF2B5	3q27. 1	0. 179905007	0. 015961	0. 037915
CPT1B	22q13. 33	0. 17989873	0. 015965	0. 037915
SOX13	1q32. 1	0. 17989873	0. 015965	0. 037915
ZNF174	16p13. 3	-0. 179885224	0. 015973	0. 03793
LONRF3	Xq24	0. 179877806	0. 015978	0. 037931
PPID	4q32. 1	-0. 179877806	0. 015978	0. 037931
INTS11	1p36. 33	0. 179773189	0. 01604	0. 038075
TUSC1	9p21. 2	-0. 179769004	0. 016043	0. 038077
TMEM8A	16p13. 3	0. 179760634	0. 016048	0. 038084

EAF1	3p25. 1	-0.17975645	0.01605	0.038085
UGGT1	2q14. 3	-0.17974808	0.016055	0.038093
PPM1L	3q25. 33-c	-0.179725064	0.016069	0.038121
PRKCQ	10p15. 1	-0.17971251	0.016076	0.038134
GOLGA4	3p22. 2	-0.179704141	0.016081	0.038142
FIGLA	2p13. 3	-0.179698671	0.016085	0.038145
DHRS4L1	14q11. 2	-0.179660201	0.016108	0.038195
TTLL3	3p25. 3	0.179651832	0.016113	0.038202
GABRG3	15q12	-0.179646344	0.016116	0.038206
ZNF302	19q13. 11	-0.179626724	0.016128	0.038228
KCNAB2	1p36. 31	-0.179624631	0.016129	0.038228
MAGEA1	Xq28	-0.179611794	0.016137	0.038241
TLX2	2p13. 1	0.179570915	0.016161	0.038295
B3GALT5-A	21q22. 2	0.179563001	0.016166	0.038302
SLC6A5	11p15. 1	-0.179546004	0.016176	0.038322
FBL	19q13. 2	0.179513736	0.016196	0.038362
SPRTN	1q42. 2	-0.179511644	0.016197	0.038362
ZBTB45	19q13. 43	0.179494905	0.016207	0.038381
LRFN3	19q13. 12	0.179459335	0.016229	0.038427
LINC01845	5q33. 3	-0.179454296	0.016232	0.03843
NDUFA5	7q31. 32	-0.179444689	0.016238	0.038439
UBA2	19q13. 11	-0.179436319	0.016243	0.038447
ADARB2	10p15. 3	-0.179428751	0.016247	0.038452
POLDIP3	22q13. 2	-0.179425857	0.016249	0.038452
EPX	17q22	-0.179418784	0.016253	0.038455
RNF185	22q12. 2	-0.179417488	0.016254	0.038455
ZBED4	22q13. 33	-0.179390287	0.016271	0.03849
UBE2M	19q13. 43	0.179379825	0.016277	0.0385
ZNF611	19q13. 41	-0.179360994	0.016288	0.038523
GGN	19q13. 2	0.179350626	0.016295	0.038532
TCTA	3p21. 31	-0.17934844	0.016296	0.038532
PCSK2	20p12. 1	-0.179338123	0.016302	0.038542
ORC4	2q23. 1	0.179331701	0.016306	0.038546
RILPL1	12q24. 31	-0.179296131	0.016328	0.038593
ASB5	4q34. 2	-0.179287553	0.016333	0.038601
CYP4B1	1p33	0.179281579	0.016337	0.038605
CELF6	15q23	-0.179252192	0.016354	0.038636
LOC100130	2q31. 2	-0.179251239	0.016355	0.038636
GRPEL2	5q32	-0.179250099	0.016356	0.038636
ERMARD	6q27	-0.179243822	0.01636	0.038641
ALG14	1p21. 3	-0.179222899	0.016372	0.038666
DNM1L	12p11. 21	-0.179216622	0.016376	0.038671
TRIR	19p13. 13	0.179195698	0.016389	0.038696
CDC34	19p13. 3	0.179185236	0.016395	0.038707
EDAR	2q13	0.179160503	0.01641	0.038737
MYO1A	12q13. 3	0.179158036	0.016412	0.038737
TGS1	8q12. 1	-0.179151759	0.016416	0.038737
YIPF6	Xq12-q13.	-0.179151759	0.016416	0.038737
GOSR1	17q11. 2	-0.179145482	0.016419	0.038741
CNTN2	1q32. 1	-0.179139346	0.016423	0.038745
CD9	12p13. 31	0.179130835	0.016428	0.038753
HPS5	11p15. 1	-0.179124558	0.016432	0.038758
TARM1	19q13. 42	-0.179110394	0.016441	0.038773
IL36G	2q14. 1	0.179049364	0.016478	0.038857

UBTD1	10q24.1-c	0.179038771	0.016485	0.038868
SIK1	21q22.3	0.179026217	0.016492	0.038881
RHOU	1q42.13	-0.17901994	0.016496	0.038886
FGF9	13q12.11	-0.179013663	0.0165	0.03889
SLC30A10	1q41	0.179004883	0.016506	0.038898
ZMYM5	13q12.11	0.179001109	0.016508	0.038899
ATG2A	11q13.1	0.178967631	0.016528	0.038943
HLA-DOA	6p21.32	-0.178963447	0.016531	0.038944
OR11H4	14q11.2	-0.178951724	0.016538	0.038957
C15ORF41	15q14	0.178946708	0.016541	0.038958
CCDC14	3q21.1	0.178944615	0.016543	0.038958
CCIN	9p13.3	-0.178883937	0.01658	0.039041
KDF1	1p36.11	0.178879752	0.016582	0.039043
LIPJ	10q23.31	-0.1788655	0.016591	0.039055
NID1	1q42.3	-0.178865106	0.016591	0.039055
ONECUT2	18q21.31	0.178839997	0.016607	0.039085
GON7	14q32.12	-0.178837905	0.016608	0.039085
SUCLG2	3p14.1	0.178825351	0.016616	0.039099
SLC26A4	7q22.3	-0.178758489	0.016657	0.039191
ZFAS1	20q13.13	0.178752119	0.016661	0.039196
PABPC1L2E	Xq13.2	-0.178746557	0.016665	0.039199
PRAP1	10q26.3	0.178717328	0.016683	0.039237
SPTLC3	20p12.1	0.178649593	0.016725	0.039331
INSYN1	15q24.1	-0.17863504	0.016734	0.039348
DBN1	5q35.3	0.178616115	0.016745	0.039371
TLCD3B	16p11.2	-0.178601843	0.016754	0.039387
GPR176	15q14-q15	-0.178597284	0.016757	0.039388
CLYBL	13q32.3	0.178595192	0.016758	0.039388
ZSWIM8	10q22.2	-0.178586822	0.016764	0.039395
CDC42EP3	2p22.2	-0.178563806	0.016778	0.039421
SLC35F3	1q42.2	-0.178562947	0.016779	0.039421
GMDS	6p25.3	0.178542883	0.016791	0.039445
DOLK	9q34.11	-0.178521959	0.016804	0.039471
OR9G4	11q12.1	-0.178496798	0.01682	0.039504
CPSF6	12q15	-0.178492666	0.016822	0.039505
SLC7A11	4q28.3	0.178473835	0.016834	0.039528
FLOT1	6p21.33	0.17846965	0.016837	0.039529
FAM174B	15q26.1	-0.17844245	0.016854	0.039565
OLMALINC	10q24.31	-0.17843408	0.016859	0.039572
SPATA2L	16q24.3	0.178408972	0.016875	0.039605
MCM7	7q22.1	0.178400603	0.01688	0.039612
TCTEX1D1	1p31.3	-0.178396418	0.016882	0.039614
GJA3	13q12.11	-0.178388235	0.016888	0.039617
TOMM34	20q13.12	0.178388048	0.016888	0.039617
NCOA4	10q11.22	-0.178379679	0.016893	0.039624
GASK1A	3p22.1	-0.178352478	0.01691	0.03966
GRB14	2q24.3	-0.178325278	0.016927	0.039695
IL4I1	19q13.33	0.178321093	0.01693	0.039696
SIX5	19q13.32	0.178314816	0.016934	0.039701
CLASRP	19q13.32	0.178304354	0.01694	0.039712
NEK3	13q14.3	0.178277154	0.016957	0.039747
PRY2	Yq11.223	-0.178258619	0.016969	0.03977
TTC36	11q23.3	-0.178240651	0.01698	0.039791
KDM4D	11q21	-0.1782354	0.016983	0.039795

TIMM50	19q13.2	0.178224845	0.01699	0.039805
XYLT1	16p12.3	-0.178203921	0.017003	0.039832
GRM4	6p21.31	-0.178191139	0.017011	0.039846
SLC5A8	12q23.1-c	-0.178174623	0.017022	0.039865
ASIP	20q11.22	0.178169507	0.017025	0.039868
IMP3	15q24.2	0.178162074	0.01703	0.039875
ASB2	14q32.12	-0.178132781	0.017048	0.039913
PPP4R3A	14q32.12	-0.178120227	0.017056	0.039927
SHTN1	10q25.3	-0.178088841	0.017076	0.039969
XPNPEP3	22q13.2	-0.178059548	0.017094	0.040007
ZNF823	19p13.2	0.178046994	0.017102	0.040021
UBQLNL	11p15.4	0.178003055	0.01713	0.040082
PWAR1	15q11.2	-0.177984566	0.017142	0.040104
MRPS17	7p11.2	0.177980039	0.017145	0.040107
PTN	7q33	-0.177973762	0.017149	0.040108
CCDC168	13q33.1	-0.177972402	0.017149	0.040108
ZNF512B	20q13.33	-0.177913084	0.017187	0.040192
PTPN21	14q31.3	-0.177860775	0.01722	0.040263
KLF6	10p15.2	0.17785659	0.017223	0.040263
GPIHBP1	8q24.3	-0.177855637	0.017224	0.040263
CD1A	1q23.1	0.177843804	0.017231	0.040274
CSDE1	1p13.2	-0.177841943	0.017232	0.040274
PLEKHA6	1q32.1	0.177816835	0.017248	0.040301
TM9SF4	20q11.21	0.177816835	0.017248	0.040301
WDR49	3q26.1	-0.177814331	0.01725	0.040301
FBLN1	22q13.31	-0.177804281	0.017256	0.040311
FOXP4	6p21.1	-0.177772896	0.017276	0.040353
DEPDC1	1p31.3	0.177739418	0.017298	0.040399
RHOB	2p24.1	0.177731048	0.017303	0.040406
ABCB10	1q42.13	-0.177724771	0.017307	0.040411
TREM2	6p21.1	0.177710125	0.017317	0.040428
LINC00111	21q22.3	0.177664469	0.017346	0.040492
CBLN2	18q22.3	-0.177658703	0.017349	0.040496
CAPNS2	16q12.2	0.17764143	0.01736	0.040517
SOX2	3q26.33	-0.177637264	0.017363	0.040518
PRSS27	16p13.3	0.177607599	0.017382	0.040558
WDR88	19q13.11	-0.177513208	0.017443	0.040695
SH3PXD2A	10q24.33	-0.177490427	0.017458	0.040724
IFITM1	11p15.5	0.17748415	0.017462	0.040729
RAB4B	19q13.2	0.177465319	0.017474	0.040752
RPIA	2p11.2	0.177431841	0.017495	0.040798
GANAB	11q12.3	-0.177408826	0.01751	0.040828
NCS1	9q34.11	-0.17738581	0.017525	0.040858
SUPT16H	14q11.2	-0.177379533	0.017529	0.040861
MANSC1	12p13.2	0.17737744	0.01753	0.040861
TGM1	14q12	0.177364886	0.017539	0.040875
HLA-DPA1	6p21.32	-0.177337685	0.017556	0.040911
EFCAB8	20q11.21	-0.177315096	0.017571	0.040927
ARAP1	11q13.4	-0.17731467	0.017571	0.040927
NFIL3	9q22.31	-0.17731467	0.017571	0.040927
CDR1	Xq27.1	-0.177314281	0.017571	0.040927
IKBKG	Xq28	0.177287469	0.017589	0.040963
WDFY4	10q11.23	-0.177274915	0.017597	0.040977
ZUP1	6q22.1	-0.177249806	0.017613	0.04101

TBKBP1	17q21. 32	-0. 177230975	0. 017625	0. 041034
C9ORF43	9q32	-0. 177201775	0. 017644	0. 041069
FAM20A	17q24. 2	-0. 177201682	0. 017644	0. 041069
TEPP	16q21	-0. 177192015	0. 017651	0. 041079
PPAN	19p13. 2	0. 177159835	0. 017672	0. 041121
LPAR6	13q14. 2	0. 177157743	0. 017673	0. 041121
CCNL2	1p36. 33	0. 177145189	0. 017681	0. 041135
FGF8	10q24. 32	0. 177116792	0. 0177	0. 041173
KLC4	6p21. 1	0. 177111711	0. 017703	0. 041176
CDC42SE1	1q21. 3	0. 177101249	0. 01771	0. 041187
MEN1	11q13. 1	0. 177094972	0. 017714	0. 041192
TMCC1	3q22. 1	0. 177086603	0. 017719	0. 0412
HEPHL1	11q21	0. 177078417	0. 017725	0. 041208
SNRK	3p22. 1	-0. 177063587	0. 017734	0. 041225
ILKAP	2q37. 3	0. 177036386	0. 017752	0. 041262
TCF12	15q21. 3	-0. 176938045	0. 017816	0. 041407
UNK	17q25. 1	-0. 176929676	0. 017822	0. 041415
INE1	Xp11. 3	0. 176917122	0. 01783	0. 041429
SPAST	2p22. 3	-0. 176879459	0. 017855	0. 041482
STK36	2q35	0. 176858536	0. 017869	0. 041509
FBXL3	13q22. 3	-0. 176825058	0. 017891	0. 041555
PARP14	3q21. 1	0. 176789488	0. 017914	0. 041605
LEPROT	1p31. 3	-0. 176739271	0. 017947	0. 041668
NPY2R	4q32. 1	-0. 17673772	0. 017948	0. 041668
CARTPT	5q13. 2	-0. 176736911	0. 017949	0. 041668
ADD1	4p16. 3	-0. 176735087	0. 01795	0. 041668
DIRC3	2q35	0. 176699517	0. 017973	0. 041718
SEPTIN6	Xq24	-0. 176663947	0. 017997	0. 041768
CENPE	4q24	0. 17665767	0. 018001	0. 041773
SEC14L3	22q12. 2	-0. 176624726	0. 018023	0. 041818
EVC	4p16. 2	-0. 176546775	0. 018075	0. 041933
PPP1R26	9q34. 3	0. 176502835	0. 018104	0. 041996
HAS2	8q24. 13	-0. 176496558	0. 018108	0. 042001
NUGGC	8p21. 1	-0. 176473634	0. 018123	0. 042031
PUDP	Xp22. 31	0. 176469357	0. 018126	0. 042033
GPR179	17q12	-0. 17646665	0. 018128	0. 042033
STK16	2q35	0. 176454711	0. 018136	0. 042046
AURKAIP1	1p36. 33	0. 176412864	0. 018164	0. 042106
SFXN5	2p13. 2	-0. 17640031	0. 018172	0. 04212
PHC2	1p35. 1	0. 176396125	0. 018175	0. 042122
POMGNT2	3p22. 1	-0. 176360555	0. 018199	0. 042166
CCDC144B	17p11. 2	-0. 176358832	0. 0182	0. 042166
FAAP20	1p36. 33	0. 176358463	0. 0182	0. 042166
ARID3C	9p13. 3	0. 17634553	0. 018209	0. 042181
ANKRD37	4q35. 1	0. 176314523	0. 018229	0. 042224
NEO1	15q24. 1	-0. 176297784	0. 01824	0. 042245
WDR77	1p13. 2	0. 176291507	0. 018245	0. 04225
LPAR4	Xq21. 1	-0. 176206734	0. 018301	0. 042376
EBI3	19p13. 3	-0. 176199443	0. 018306	0. 042383
ARX	Xp21. 3	-0. 1761943	0. 01831	0. 042386
PI16	6p21. 2	-0. 176185166	0. 018316	0. 042395
HERC4	10q21. 3	0. 17617852	0. 01832	0. 0424
LARP1B	4q28. 2	-0. 176163873	0. 01833	0. 042418
GPR85	7q31. 1	-0. 176145042	0. 018343	0. 042439

SNORA26	4q12	-0.176144389	0.018343	0.042439
FOXA1	14q21.1	0.176138857	0.018347	0.042442
NRBP1	2p23.3	0.176105287	0.01837	0.04249
SIGMAR1	9p13.3	0.176092733	0.018378	0.042504
UBB	17p11.2	-0.176073902	0.018391	0.042522
VCPIP1	8q13.1	-0.176073902	0.018391	0.042522
JMJD7-PLA	15q15.1	0.17607181	0.018392	0.042522
SORL1	11q24.1	-0.176048794	0.018408	0.042553
SUDS3	12q24.23	-0.176011131	0.018433	0.042607
KCNA10	1p13.3	0.175985588	0.01845	0.042642
CA11	19q13.33	-0.175975561	0.018457	0.042651
PDHX	11p13	-0.175973469	0.018459	0.042651
FOXM1	12p13.33	0.175969284	0.018461	0.042653
CD207	2p13.3	0.17594636	0.018477	0.042684
SPIN4	Xq11.1	0.175937899	0.018483	0.042692
PIM1	6p21.2	0.175933714	0.018485	0.042693
AGO4	1p34.3	-0.175914883	0.018498	0.042713
SLC66A2	18q23	-0.175914883	0.018498	0.042713
ZNF501	3p21.31	-0.175906514	0.018504	0.04272
FAM180B	11p11.2	-0.175904249	0.018505	0.04272
GPR158-AS	10p12.1	-0.175894384	0.018512	0.04273
CPA3	3q24	-0.175866759	0.018531	0.042769
DDC	7p12.2-p1	-0.175834419	0.018553	0.042814
MAP1LC3C	1q43	-0.175785914	0.018586	0.042885
CRIM1	2p22.2	-0.175753771	0.018608	0.042931
REEP2	5q31.2	-0.17574331	0.018615	0.042942
GTF2H4	6p21.33	0.175703555	0.018642	0.043
MED22	9q34.2	-0.175670077	0.018665	0.043048
ETV1	7p21.2	-0.175634507	0.018689	0.043099
AUNIP	1p36.11	0.175624045	0.018696	0.04311
GRAP	17p11.2	-0.175613584	0.018703	0.043122
PGC	6p21.1	0.175563926	0.018737	0.043195
TWIST2	2q37.3	-0.17555709	0.018742	0.043199
PIGQ	16p13.3	0.175554998	0.018743	0.043199
WNT11	11q13.5	0.175494319	0.018785	0.04329
ATP5F1C	10p14	0.175483857	0.018792	0.043293
PUS1	12q24.33	0.175483857	0.018792	0.043293
TNFRSF10E	8p21.3	0.175481765	0.018794	0.043293
TENM1	Xq25	-0.17548004	0.018795	0.043293
BMP5	6p12.1	-0.175452858	0.018813	0.043331
GRSF1	4q13.3	-0.175439918	0.018822	0.043346
OPRL1	20q13.33	-0.175421087	0.018835	0.043371
SEC61A2	10p14	-0.17541481	0.01884	0.043376
LILRB2	19q13.42	-0.175402256	0.018848	0.043391
SYTL5	Xp11.4	0.175356224	0.01888	0.043459
SPTSSB	3q26.1	0.175297638	0.01892	0.043547
DAXX	6p21.32	0.175220221	0.018974	0.043665
SMDT1	22q13.2	-0.175186743	0.018997	0.043712
EIF3G	19p13.2	0.17518465	0.018999	0.043712
MAPK8IP2	22q13.33	-0.175172096	0.019007	0.043727
PGM2L1	11q13.4	0.175146988	0.019025	0.043762
TMEM87B	2q13	0.175088402	0.019065	0.04385
DMWD	19q13.32	0.175084217	0.019068	0.043852
UBE2V1	20q13.13	0.175065386	0.019081	0.043877

GNPTG	16p13.3	0.175038186	0.0191	0.043916
STAC2	17q12	0.175002615	0.019125	0.043968
CYP20A1	2q33.2	-0.174914828	0.019186	0.044103
ALX3	1p13.3	-0.174903411	0.019194	0.044117
CLBA1	14q32.33	0.174887536	0.019205	0.044137
PTRHD1	2p23.3	0.174877074	0.019213	0.044149
DTHD1	4p14	-0.1748486	0.019233	0.04419
P2RX1	17p13.2	-0.174833135	0.019244	0.044209
ZNF839	14q32.31	-0.174826857	0.019248	0.044214
UNCX	7p22.3	-0.174811748	0.019259	0.044234
SLC17A8	12q23.1	-0.17477443	0.019285	0.044289
FAIM2	12q13.12	-0.174764087	0.019292	0.0443
CD40LG	Xq26.3	-0.174751624	0.019301	0.044312
BMS1P2	10q11.22	0.174747348	0.019304	0.044312
GORASP2	2q31.1	0.174747348	0.019304	0.044312
UCN3	10p15.1	-0.174735728	0.019312	0.044326
SDR42E1	16q23.3	0.174715963	0.019326	0.044347
NAT10	11p13	0.174715963	0.019326	0.044347
CCDC91	12p11.22	-0.174711778	0.019329	0.044349
CD28	2q33.2	-0.174684577	0.019348	0.044388
EIF2B3	1p34.1	-0.174676208	0.019354	0.044396
RPS16	19q13.2	0.174653192	0.01937	0.044428
ZNF571	19q13.12	-0.174646915	0.019374	0.044433
RXFP3	5p13.2	-0.174618402	0.019395	0.044474
CCDC183	9q34.3	0.174598791	0.019408	0.044501
NDUFA4	7p21.3	0.174554851	0.019439	0.044567
TTC23L	5p13.2	-0.174532018	0.019456	0.044592
SLC25A18	22q11.21	-0.174531835	0.019456	0.044592
LCE1E	1q21.3	0.174530325	0.019457	0.044592
IL10	1q32.1	-0.174518326	0.019465	0.044606
CSN2	4q13.3	-0.174514673	0.019468	0.044607
TCIM	8p11.21	0.174469065	0.0195	0.044674
ZMPSTE24	1p34.2	-0.174466972	0.019502	0.044674
GABPB1-IT1	15q21.2	-0.17445651	0.019509	0.044684
DNAJC2	7q22.1	0.174454418	0.019511	0.044684
MUC2	11p15.5	0.174442256	0.019519	0.044699
MDS2	1p36.11	-0.174431686	0.019527	0.044711
PAGE2B	Xp11.21	0.17437405	0.019568	0.044799
CLOCK	4q12	-0.174356077	0.01958	0.044822
ZSCAN22	19q13.43	-0.174353985	0.019582	0.044822
FLT3LG	19q13.33	0.174347708	0.019586	0.044827
RAET1G	6q25.1	0.174328877	0.0196	0.044852
CENPF	1q41	0.174318415	0.019607	0.044864
CACNA2D3	3p21.1-p1	-0.174299675	0.019621	0.04489
ITIH5	10p14	-0.174268198	0.019643	0.044936
SLC35D2	9q22.32	0.174249367	0.019657	0.044962
MBD3L1	19p13.2	-0.174229503	0.019671	0.044989
TEX13B	Xq22.3	0.174205912	0.019688	0.045022
HIST1H1B	6p22.1	0.174190967	0.019698	0.045042
RUFY2	10q21.3	-0.174153119	0.019725	0.045098
PODN	1p32.3	-0.174048501	0.0198	0.045265
FAM133A	Xq21.32	-0.174027941	0.019815	0.045293
ANKRD26P3	13q12.11	-0.174024698	0.019817	0.045293
BIN3-IT1	8p21.3	0.174019462	0.019821	0.045297

IDH2	15q26.1	-0.174000377	0.019835	0.045323
AHCYL2	7q32.1	0.1739941	0.019839	0.045328
ATP5F1D	19p13.3	0.173939698	0.019879	0.045413
HILPDA	7q32.1	0.173906221	0.019903	0.045463
FCRL3	1q23.1	-0.173862326	0.019934	0.04553
OR1L1	9q33.2	-0.173846382	0.019946	0.045551
TMEM234	1p35.2	0.173837173	0.019953	0.045561
DEPDC4	12q23.1	-0.173832988	0.019956	0.045563
TOPAZ1	3p21.31	-0.173829476	0.019958	0.045563
SLC25A19	17q25.1	0.173774402	0.019998	0.045649
LHX5	12q24.13	0.173767741	0.020003	0.045655
YIPF7	4p12	-0.173704213	0.020049	0.045755
CACTIN	19p13.3	0.173663507	0.020079	0.045816
FGF23	12p13.32	0.173660889	0.020081	0.045816
DCUN1D3	16p12.3	-0.173644676	0.020092	0.045838
RANBP1	22q11.21	0.173579813	0.02014	0.04594
LOC100129	19q13.2	-0.17357396	0.020144	0.045945
RBM28	7q32.1	-0.173544243	0.020165	0.045989
LTBP4	19q13.2	0.173531689	0.020175	0.046005
NAPG	18p11.22	0.173477287	0.020214	0.04609
NRSN1	6p22.3	-0.173469523	0.02022	0.046098
OGFR	20q13.33	0.173454272	0.020231	0.046116
SULF2	20q13.12	0.173452179	0.020233	0.046116
PLSCR2	3q24	-0.173408984	0.020264	0.046183
TMEM127	2q11.2	0.173355931	0.020303	0.046266
MOB2	11p15.5	0.173345469	0.020311	0.046279
SYF2	1p36.11	0.173341284	0.020314	0.04628
CMC4	Xq28	-0.173318268	0.020331	0.046314
MAPK13	6p21.31	0.173305714	0.02034	0.046329
SLC16A7	12q14.1	-0.173274329	0.020363	0.046377
HIST1H4J	6p22.1	0.173234574	0.020393	0.046438
GABPB1	15q21.2	-0.173230389	0.020396	0.04644
RNF26	11q23.3	0.173226205	0.020399	0.046442
GNMT	6p21.1	-0.173219928	0.020403	0.046447
HMGB1	13q12.3	0.173194819	0.020422	0.046484
PSMA3	14q23.1	0.173167619	0.020442	0.046524
DTL	1q32.3	0.17315088	0.020454	0.046547
COPS5	8q13.1	0.173136233	0.020465	0.046566
FN3KRP	17q25.3	0.173088109	0.020501	0.046642
GATAD2B	1q21.3	-0.173072507	0.020512	0.046663
BMI1	10p12.2	-0.173058816	0.020522	0.046681
PRRC1	5q23.2	-0.173029523	0.020544	0.046725
ST3GAL4	11q24.2	0.172998138	0.020567	0.046772
MYH3	17p13.1	-0.172958383	0.020597	0.046834
IGSF9B	11q25	0.172950014	0.020603	0.046843
SLC25A6	Xp22.33	-0.172924905	0.020622	0.04688
THUMPD3-A	3p25.3	0.172916536	0.020628	0.046889
ZNF555	19p13.3	-0.172910259	0.020633	0.046894
DARS	2q21.3	0.172885151	0.020652	0.046931
CXORF38	Xp11.4	0.172855948	0.020673	0.046972
OR13J1	9p13.3	0.172854905	0.020674	0.046972
ZBTB20	3q13.31	-0.172824472	0.020697	0.047018
GCC1	7q32.1	-0.172818195	0.020701	0.047024
SV2C	5q13.3	-0.172777588	0.020732	0.047087

H2AFZ	4q23	0.172770071	0.020737	0.047094
C10ORF25	10q11.21	-0.172765886	0.020741	0.047096
TEAD2	19q13.33	-0.172759609	0.020745	0.047102
SLAH2	3q25.1	0.17271567	0.020778	0.047171
DRAM2	1p13.3	0.172627791	0.020844	0.047315
ACOX2	3p14.3	-0.172608959	0.020858	0.047342
CARHSP1	16p13.2	0.172594313	0.020869	0.047361
TAPBPL	12p13.31	-0.172527358	0.02092	0.04747
C2CD6	2q33.1	-0.172521101	0.020924	0.047476
ULK1	12q24.33	-0.17249388	0.020945	0.047517
PIP4K2A	10p12.2	-0.172487603	0.02095	0.047522
LY6G5C	6p21.33	-0.172481326	0.020954	0.047526
PIP4K2C	12q13.3	0.172479233	0.020956	0.047526
BTBD17	17q25.1	-0.172473476	0.02096	0.04753
MRPS36	5q13.2	0.172426924	0.020995	0.047605
NLRP11	19q13.42-	-0.172414675	0.021005	0.04762
SLC1A1	9p24.2	0.172395539	0.021019	0.047648
FAM174A	5q21.1	-0.172382985	0.021029	0.047664
WIZ	19p13.12	0.172374616	0.021035	0.047673
MRPL53	2p13.1	0.172330676	0.021068	0.047743
TLDC2	20q11.23	0.172295106	0.021095	0.047798
FAM86B1	8p23.1	0.172276275	0.021109	0.047825
ANKRD30A	10p11.21	-0.172271006	0.021113	0.047829
OCRL	Xq26.1	-0.172242797	0.021135	0.047872
VPS45	1q21.2	0.172228151	0.021146	0.047892
FGFBP2	4p15.32	-0.172196945	0.02117	0.04794
SLC13A4	7q33	0.172170701	0.02119	0.04798
PGA5	11q12.2	-0.172125822	0.021224	0.048052
KLHL23	2q31.1	-0.172117256	0.021231	0.048052
USP11	Xp11.3	-0.172117256	0.021231	0.048052
OR2L2	1q44	-0.172115511	0.021232	0.048052
ZNF668	16p11.2	0.172113071	0.021234	0.048052
ATP6V1A	3q13.31	-0.172098424	0.021245	0.048072
NSF	17q21.31	-0.172067039	0.021269	0.048121
MEF2B	19p13.11	0.172060762	0.021274	0.048126
MCM5	22q12.3	0.1720503	0.021282	0.048139
GALNT15	3p25.1	-0.172046116	0.021285	0.048141
OXSM	3p24.2	0.172037746	0.021291	0.04815
APOC1	19q13.32	0.172006361	0.021315	0.048199
XXYL1	3q29	0.17198753	0.02133	0.048226
SGSH	17q25.3	-0.171949867	0.021359	0.048286
BTN2A2	6p22.2	-0.171910112	0.021389	0.048349
IBSP	4q22.1	0.1718733	0.021417	0.048408
DIRAS2	9q22.2	-0.171841065	0.021442	0.048458
VPS37A	8p22	-0.171790848	0.021481	0.04854
COX17	3q13.33	0.171774109	0.021494	0.048564
LRRC34	3q26.2	-0.171761555	0.021503	0.04858
MINDY3	10p13	-0.171742724	0.021518	0.048608
PSKH2	8q21.3	0.171708785	0.021544	0.048661
PHF21B	22q13.31	-0.171667103	0.021576	0.048729
TMEM39A	3q13.33	-0.171648568	0.021591	0.048755
CTSL	9q21.33	-0.17162346	0.02161	0.048794
BMF	15q15.1	-0.171617182	0.021615	0.048799
AOC2	17q21.31	-0.171610905	0.02162	0.048805

PRLHR	10q26. 11	-0. 171598654	0. 021629	0. 048821
UBOX5	20p13	-0. 171564874	0. 021656	0. 048874
THEM5	1q21. 3	-0. 17155046	0. 021667	0. 048893
TIGAR	12p13. 32	-0. 171548135	0. 021669	0. 048893
GABRQ	Xq28	-0. 171540298	0. 021675	0. 048901
VWAS	13q14. 11	-0. 171527211	0. 021685	0. 048918
NDUFAF6	8q22. 1	-0. 171516749	0. 021693	0. 048931
IYD	6q25. 1	0. 171506646	0. 021701	0. 048943
ACO1	9p21. 1	-0. 171476995	0. 021724	0. 048988
CLSTN1	1p36. 22	0. 171474902	0. 021726	0. 048988
CXORF21	Xp21. 2	-0. 171454068	0. 021742	0. 049017
NDUFV1	11q13. 2	0. 171451886	0. 021744	0. 049017
CTXN3	5q23. 2	-0. 171441711	0. 021751	0. 04903
NUTM2A	10q23. 2	-0. 171405854	0. 021779	0. 049085
SEC24A	5q31. 1	-0. 171403762	0. 021781	0. 049085
POMK	8p11. 21	-0. 171379012	0. 0218	0. 049123
SNX14	6q14. 3	-0. 171374469	0. 021804	0. 049126
FRMD4B	3p14. 1	0. 171345176	0. 021827	0. 049172
PANK2	20p13	-0. 171315883	0. 02185	0. 049218
LRRC27	10q26. 3	-0. 171292867	0. 021868	0. 049253
LINGO3	19p13. 3	-0. 171272402	0. 021884	0. 049283
SH2D1A	Xq25	-0. 17126184	0. 021892	0. 049296
BBS4	15q24. 1	-0. 171240558	0. 021909	0. 049328
IGFN1	1q32. 1	-0. 171205819	0. 021936	0. 049384
LINC00599	8p23. 1	-0. 17118832	0. 02195	0. 04941
LINC00908	18q23	-0. 171171869	0. 021963	0. 049433
TMED3	15q25. 1	0. 171146402	0. 021983	0. 049473
PRG4	1q31. 1	-0. 17113594	0. 021991	0. 049486
HSPBAP1	3q21. 1	0. 171112924	0. 022009	0. 049521
UCMA	10p13	-0. 171082191	0. 022033	0. 04957
WDR82	3p21. 2	-0. 1710376	0. 022068	0. 049641
CD8A	2p11. 2	-0. 171035507	0. 02207	0. 049641
KLRB1	12p13. 31	-0. 171018768	0. 022083	0. 049665
FOXF2	6p25. 3	0. 170981106	0. 022113	0. 049727
NLGN4Y	Yq11. 221	-0. 170975208	0. 022118	0. 04973
CSGALNACT1	10q11. 21	-0. 170972737	0. 02212	0. 04973
NFRKB	11q24. 3	0. 17096646	0. 022124	0. 049736
PCP4	21q22. 2	-0. 170929691	0. 022154	0. 049796
WIPF1	2q31. 1	-0. 170909966	0. 022169	0. 049825
ACAP2	3q29	-0. 170874396	0. 022197	0. 049883
DDHD2	8p11. 23	-0. 170868119	0. 022202	0. 049889
NUP188	9q34. 11	-0. 17085138	0. 022216	0. 049913
ANKRD27	19q13. 11	0. 170845103	0. 022221	0. 049918
NELL1	11p15. 1	-0. 170841777	0. 022223	0. 049919
ATP10B	5q34	0. 170817992	0. 022242	0. 049955
MRPL12	17q25. 3	0. 17080744	0. 022251	0. 049969
HSPA7	1q23. 3	0. 170799071	0. 022257	0. 049978
CUL2	10p11. 21	-0. 170769778	0. 02228	0. 050025
DYNC1H1	14q32. 31	-0. 170759316	0. 022289	0. 050038
ANKRD33	12q13. 13	0. 170752198	0. 022294	0. 050045
SNRPC	6p21. 31	0. 170721654	0. 022319	0. 050092
TCAF2	7q35	-0. 170719561	0. 02232	0. 050092
TAS2R50	12p13. 2	-0. 170710202	0. 022328	0. 050103
SPATA48	7p12. 2	-0. 170697389	0. 022338	0. 05012

NOL4L	20q11. 21	0. 170683991	0. 022349	0. 050139
PELI3	11q13. 2	-0. 17066516	0. 022364	0. 050167
SCN9A	2q24. 3	-0. 170658883	0. 022369	0. 050172
CDKN1A	6p21. 2	0. 170648421	0. 022377	0. 05018
MAGEL2	15q11. 2	-0. 170648421	0. 022377	0. 05018
OPN3	1q43	0. 170633775	0. 022389	0. 050195
PHF13	1p36. 31	0. 170633775	0. 022389	0. 050195
SINHCAF	12p11. 21	0. 170550081	0. 022456	0. 050339
C2CD4B	15q22. 2	-0. 170531249	0. 022471	0. 050364
ICOS	2q33. 2	-0. 170527957	0. 022474	0. 050364
CPT2	1p32. 3	-0. 170527065	0. 022474	0. 050364
APP	21q21. 3	-0. 170462202	0. 022526	0. 050475
XRN1	3q23	-0. 170455925	0. 022531	0. 05048
HRAS	11p15. 5	0. 170430816	0. 022552	0. 05052
MIB1	18q11. 2	-0. 170420354	0. 02256	0. 050533
CLPX	15q22. 31	-0. 17041617	0. 022563	0. 050535
HEXB	5q13. 3	-0. 170405708	0. 022572	0. 050548
GPR171	3q25. 1	-0. 170383827	0. 022589	0. 050582
NTM	11q25	0. 1703806	0. 022592	0. 050582
ZNF227	19q13. 31	-0. 170365953	0. 022604	0. 050603
RPS10P7	1q32. 1	-0. 170332475	0. 022631	0. 050657
THRAP3	1p34. 3	-0. 170315737	0. 022644	0. 050682
MFSD4A-AS1	1q32. 1	0. 170269394	0. 022682	0. 05076
RTEL1	20q13. 33	0. 170248781	0. 022698	0. 050792
HSD17B7	1q23. 3	0. 170215303	0. 022725	0. 050846
MS4A6A	11q12. 2	-0. 170206934	0. 022732	0. 050856
DGKK	Xp11. 22	-0. 170200575	0. 022737	0. 05086
GOLGA7	8p11. 21	-0. 170198565	0. 022739	0. 05086
YPEL3	16p11. 2	0. 170175549	0. 022758	0. 050896
C1QL1	17q21. 31	-0. 170137886	0. 022788	0. 050958
CREB3L4	1q21. 3	0. 170068839	0. 022844	0. 051078
FOXA3	19q13. 32	0. 170022807	0. 022882	0. 051156
BMP10	2p13. 3	-0. 170014435	0. 022888	0. 051165
INPP5A	10q26. 3	0. 17000816	0. 022893	0. 051171
ITIH2	10p14	0. 16998483	0. 022912	0. 051208
CAMK2B	7p13	-0. 169954894	0. 022937	0. 051257
ADGRG7	3q12. 2	0. 169910789	0. 022973	0. 051331
SHOC2	10q25. 2	-0. 169886804	0. 022992	0. 051369
ZBTB26	9q33. 2	-0. 169878434	0. 022999	0. 051379
PLA2G4E	15q15. 1	0. 169871175	0. 023005	0. 051386
SAT1	Xp22. 11	0. 169861695	0. 023013	0. 051398
KRTAP5-1	11p15. 5	0. 169842864	0. 023028	0. 051427
TMC01	1q24. 1	0. 169828218	0. 02304	0. 051448
CLDN12	7q21. 13	0. 16982194	0. 023046	0. 051452
VIRMA	8q22. 1	-0. 169819848	0. 023047	0. 051452
ADA	20q13. 12	0. 169775909	0. 023083	0. 051526
CHRM2	7q33	-0. 169748344	0. 023106	0. 051571
EMX2	10q26. 11	0. 169743854	0. 02311	0. 051573
PLP1	Xq22. 2	-0. 169703031	0. 023143	0. 051642
RPS3	11q13. 4	0. 169681753	0. 023161	0. 051676
PHACTR2	6q24. 2	-0. 169667195	0. 023173	0. 051697
ITPK1-AS1	11q32. 12	0. 169662547	0. 023176	0. 051699
UNC5D	8p12	-0. 169638669	0. 023196	0. 051738
EMG1	12p13. 31	0. 169631536	0. 023202	0. 051745

RPS6KB2	11q13.2	0.169627351	0.023205	0.051747
PRR12	19q13.33	0.169623167	0.023209	0.051749
VEGFA	6p21.1	0.169604335	0.023224	0.051778
GTF2I	7q11.23	-0.169598058	0.02323	0.051783
DENND3	8q24.3	0.169549934	0.023269	0.051866
THAP6	4q21.1	-0.169522733	0.023292	0.05191
THBS4	5q14.1	-0.169516456	0.023297	0.051911
TRPM5	11p15.5	0.169516137	0.023297	0.051911
COG6	13q14.11	-0.169455778	0.023347	0.052016
CASK	Xp11.4	0.169449501	0.023352	0.052022
SMIM29	6p21.31	0.169434854	0.023364	0.052043
CCN2	6q23.2	-0.169418116	0.023378	0.052067
CCDC174	3p25.1	0.169416023	0.02338	0.052067
SHLD2P1	10q11.22	-0.169403469	0.02339	0.052084
ADGRE2	19p13.12	-0.169300944	0.023476	0.052268
WDR47	1p13.3	-0.169296759	0.023479	0.05227
EVA1C	21q22.11	0.169290482	0.023484	0.052276
PIK3R5	17p13.1	-0.169257004	0.023512	0.052332
PRSS30P	16p13.3	0.169252819	0.023516	0.052334
MAP2K2	19p13.3	0.169242358	0.023524	0.052347
IFNLR1	1p36.11	-0.169167033	0.023587	0.052481
UTP11	1p34.3	-0.169160756	0.023593	0.052487
VWCE	11q12.2	-0.16912937	0.023619	0.05254
RITA1	12q24.13	-0.169079242	0.023661	0.052627
EXOC6	10q23.33	-0.169041491	0.023692	0.052692
TMEM258	11q12.2	0.16903103	0.023701	0.052705
ULBP2	6q25.1	0.169003829	0.023724	0.05275
ZNF567	19q13.12	-0.168982905	0.023742	0.052783
PVRIG	7q22.1	-0.168970351	0.023752	0.052801
TIMP1	Xp11.3	0.168966167	0.023756	0.052803
REXO1	19p13.3	0.168953612	0.023766	0.05282
PPIAL4D	1q21.1	-0.168950908	0.023768	0.05282
BRWD1	21q22.2	-0.168943151	0.023775	0.052826
MFSD8	4q28.2	-0.168941058	0.023777	0.052826
CDH16	16q22.1	0.168827706	0.023872	0.053033
GRM6	5q35.3	-0.168813513	0.023884	0.053053
RAD21	8q24.11	-0.168805055	0.023891	0.053063
SDHC	1q23.3	0.168775762	0.023916	0.053113
NUDT14	14q32.33	0.168742284	0.023945	0.05317
NDUFC2	11q14.1	0.1687381	0.023948	0.053171
SCNN1B	16p12.2	-0.168720403	0.023963	0.053199
HCN3	1q22	0.168681606	0.023996	0.05326
STT3B	3p23	-0.168681606	0.023996	0.05326
TIRAP	11q24.2	-0.168675329	0.024001	0.053264
SLC7A5P2	16p12.2	0.168673073	0.024003	0.053264
ITGB1BP2	Xq13.1	0.168654494	0.024019	0.053293
RWDD1	6q22.1	-0.168606281	0.02406	0.053378
CCL21	9p13.3	-0.168602097	0.024063	0.05338
PRR3	6p21.33	-0.168572804	0.024088	0.05343
SPATA1	1p22.3	-0.168555736	0.024103	0.053456
RUNDC3A	17q21.31	-0.168541418	0.024115	0.053475
HS6ST1	2q14.3	-0.168539326	0.024117	0.053475
ABCC11	16q12.1	0.168533995	0.024121	0.053479
NDRG4	16q21	-0.168530956	0.024124	0.053479

GPR153	1p36. 31	0. 168497479	0. 024152	0. 053536
NID2	14q22. 1	-0. 168489109	0. 02416	0. 053546
GJB7	6q14. 3-q1	-0. 168466704	0. 024179	0. 053583
FBXL2	3p22. 3	0. 168426339	0. 024213	0. 053653
CYTH4	22q13. 1	-0. 168420062	0. 024219	0. 053656
ALLC	2p25. 3	-0. 168418689	0. 02422	0. 053656
LGALS7B	19q13. 2	0. 168407799	0. 024229	0. 05367
BDKRB2	14q32. 2	-0. 168371937	0. 02426	0. 053732
ZNF486	19p12	-0. 168359383	0. 02427	0. 05375
SERF1A	5q13. 2	-0. 168346829	0. 024281	0. 053768
PI4KB	1q21. 3	-0. 168340552	0. 024287	0. 053774
SHLD2	10q23. 2	-0. 168317536	0. 024306	0. 053812
ZNF589	3p21. 31	-0. 168313351	0. 02431	0. 053814
RBM41	Xq22. 3	0. 168298705	0. 024323	0. 053835
TSHZ3	19q12	-0. 16829452	0. 024326	0. 053837
NUDC	1p36. 11	0. 168277781	0. 02434	0. 053863
CXCL3	4q13. 3	0. 168264269	0. 024352	0. 053883
SAMD14	17q21. 33	0. 168244304	0. 024369	0. 053915
C12ORF49	12q24. 22	-0. 16822338	0. 024387	0. 053949
TEKT3	17p12	-0. 168219195	0. 024391	0. 053951
CHRM5	15q14	-0. 1682023	0. 024405	0. 053977
TLE5	19p13. 3	0. 168189902	0. 024416	0. 053995
ERP29	12q24. 13	-0. 168179441	0. 024425	0. 054008
UBE2S	19q13. 42	0. 168164794	0. 024438	0. 05403
GALNT1	18q12. 2	-0. 168154332	0. 024447	0. 054044
KANSL3	2q11. 2	-0. 168148055	0. 024452	0. 05405
PARS2	1p32. 3	-0. 168122947	0. 024474	0. 054092
CR1	1q32. 2	-0. 168114577	0. 024481	0. 054102
SNF8	17q21. 32	0. 168097839	0. 024495	0. 054128
EXOSC10	1p36. 22	0. 168091562	0. 024501	0. 054134
WDR75	2q32. 2	0. 168079007	0. 024512	0. 054148
OCLM	1q31. 1	0. 168078215	0. 024512	0. 054148
TMEM179	14q32. 33	-0. 168060815	0. 024527	0. 054175
BMP2	20p12. 3	0. 168053899	0. 024533	0. 054182
OLFM3	1p21. 1	-0. 168050211	0. 024536	0. 054183
ZNF761	19q13. 42	-0. 168028791	0. 024555	0. 054218
LRRC8C	1p22. 2	-0. 168016237	0. 024566	0. 054236
DPH6	15q14	0. 168007867	0. 024573	0. 054246
EPS15	1p32. 3	-0. 167968112	0. 024608	0. 054316
KLHL4	Xq21. 31	-0. 167957651	0. 024617	0. 05433
FAM200B	4p15. 32	-0. 167945097	0. 024627	0. 054348
SCLT1	4q28. 2	-0. 167915804	0. 024653	0. 054396
MTLN	2q13	0. 167913711	0. 024655	0. 054396
SKAP2	7p15. 2	0. 167907434	0. 02466	0. 054402
DDIT3	12q13. 3	0. 167853033	0. 024707	0. 0545
LINC00115	1p36. 33	0. 167840479	0. 024718	0. 054518
PSMC1	14q32. 11	0. 167821648	0. 024735	0. 054548
EIF3F	11p15. 4	0. 167817463	0. 024738	0. 054549
TFPI	2q32. 1	0. 16781537	0. 02474	0. 054549
KRTAP5-1C	11q13. 4	0. 167732718	0. 024812	0. 054693
TTY6B	Yq11. 223	-0. 167732395	0. 024813	0. 054693
ROPN1B	3q21. 2	0. 167728258	0. 024816	0. 054693
C9ORF85	9q21. 13	-0. 167727491	0. 024817	0. 054693
IL11RA	9p13. 3	-0. 167723307	0. 02482	0. 054695

LINC004712q37.1	-0.167712683	0.02483	0.05471
KRT3 12q13.13	0.167697413	0.024843	0.054733
ELOF1 19p13.2	0.167666813	0.02487	0.054774
IGSF21 1p36.13	-0.167666813	0.02487	0.054774
DRC7 16q21	-0.167664784	0.024872	0.054774
XAGE5 Xp11.22	-0.16766344	0.024873	0.054774
BCL7B 7q11.23	0.167656351	0.024879	0.054782
PCDHGB1 5q31.3	-0.16764589	0.024888	0.054796
TMEM250 9q34.3	0.167627058	0.024905	0.054826
PAN2 12q13.3	-0.167585211	0.024941	0.054901
YIPF4 2p22.3	0.167574749	0.02495	0.054915
FIP1L1 4q12	0.167501517	0.025015	0.055051
REST 4q12	-0.167482686	0.025031	0.055081
NCKAP1L 12q13.13-	-0.167463855	0.025048	0.055111
FAM151B 5q14.1	-0.167434562	0.025074	0.055162
VTA1 6q24.1-q2	-0.1674241	0.025083	0.055176
OR6T1 11q24.1	-0.167376472	0.025125	0.055262
C19ORF48 19q13.33	0.167313205	0.025181	0.055379
MPV17L2 19p13.11	0.167290189	0.025201	0.055418
GPRC5C 17q25.1	0.167275542	0.025214	0.05544
LPAL2 6q25.3	-0.167251572	0.025235	0.055481
SNHG1 11q12.3	0.167191848	0.025288	0.055591
ASB1 2q37.3	-0.167185571	0.025294	0.055597
TESPA1 12q13.2	-0.167179294	0.025299	0.055603
SNORA32 11q21	0.16717059	0.025307	0.055614
CBR3 21q22.12	0.167126985	0.025346	0.055693
ZNF490 19p13.2-F	-0.167116523	0.025355	0.055707
WDR830S 19p13.13	0.167110246	0.025361	0.055714
LAMC1 1q25.3	-0.167106062	0.025364	0.055716
LIPG 18q21.1	-0.167093507	0.025375	0.055734
SLC12A4 16q22.1	0.167049568	0.025415	0.055814
MXRA5 Xp22.33	0.167028644	0.025433	0.055849
ZPBP 7p12.2	-0.166935384	0.025516	0.056025
PRKRA 2q31.2	0.16690938	0.02554	0.056068
TEAD1 11p15.3	-0.166907288	0.025542	0.056068
ANKHD1 5q31.3	-0.166894734	0.025553	0.056084
ATF7IP2 16p13.2-F	0.166892728	0.025555	0.056084
BBX 3q13.12	-0.166869625	0.025575	0.05612
BTNL3 5q35.3	0.166868283	0.025577	0.05612
SPON1 11p15.2	-0.166854979	0.025588	0.05614
COL8A2 1p34.3	0.166840332	0.025602	0.056163
DENND4B 1q21.3	-0.16682987	0.025611	0.056177
C2CD4A 15q22.2	-0.166804762	0.025633	0.05622
KATNBL1 15q14	0.166739899	0.025692	0.056336
ZC3H13 13q14.13	-0.166739899	0.025692	0.056336
ABCF2 7q36.1	-0.166725253	0.025705	0.056359
NPPB 1p36.22	-0.166704854	0.025723	0.056393
DISP3 1p36.22	-0.166684888	0.025741	0.056426
SCIMP 17p13.2	-0.166622727	0.025797	0.056542
TDGF1 3p21.31	-0.166595177	0.025822	0.056591
UBR1 15q15.2	-0.166585065	0.025831	0.056605
RAPGEF5 7p15.3	-0.166578788	0.025837	0.056611
ZNF124 1q44	-0.166570418	0.025845	0.056621
INSL3 19p13.11	0.16654531	0.025867	0.056665

DEF6	6p21. 31	0. 166478355	0. 025928	0. 056791
SLC22A5	5q31. 1	-0. 166444877	0. 025958	0. 056851
SLC9A3	5p15. 33	0. 166427179	0. 025974	0. 05688
PASD1	Xq28	-0. 166411582	0. 025988	0. 056905
GRAPL	17p11. 2	-0. 166341999	0. 026052	0. 057037
ADAMDEC1	8p21. 2	-0. 166337208	0. 026056	0. 057041
SEPSECS	4p15. 2	-0. 16632352	0. 026068	0. 057062
HHEX	10q23. 33	-0. 166319335	0. 026072	0. 057064
PGRMC2	4q28. 2	-0. 166310966	0. 02608	0. 057072
CTAGE10P	13q14. 2	-0. 166308961	0. 026082	0. 057072
KRT33B	17q21. 2	0. 166297022	0. 026093	0. 05709
OTOR	20p12. 1	0. 166293082	0. 026096	0. 057091
SKA1	18q21. 1	0. 166283765	0. 026105	0. 057101
NAT9	17q25. 1	0. 166281673	0. 026107	0. 057101
ZFP42	4q35. 2	-0. 166251724	0. 026134	0. 057155
CRYBG3	3q11. 2	-0. 166200071	0. 026181	0. 057252
VSTM4	10q11. 23	-0. 166185425	0. 026194	0. 057269
MORC2	22q12. 2	0. 166183332	0. 026196	0. 057269
CASKIN2	17q25. 1	-0. 16618124	0. 026198	0. 057269
UBTF	17q21. 31	-0. 166179148	0. 0262	0. 057269
POU2F2	19q13. 2	-0. 166151947	0. 026225	0. 057317
NAT16	7q22. 1	-0. 166066655	0. 026303	0. 057481
FAM166B	9p13. 3	-0. 166012437	0. 026353	0. 057583
MBTD1	17q21. 33	-0. 166009667	0. 026356	0. 057583
CCDC89	11q14. 1	-0. 165992928	0. 026371	0. 057606
TMC05A	15q14	0. 165989352	0. 026374	0. 057606
GEM	8q22. 1	-0. 165988743	0. 026375	0. 057606
GINS1	20p11. 21	0. 165972004	0. 02639	0. 057633
CPNE4	3q22. 1	-0. 16596772	0. 026394	0. 057636
LMNTD1	12p12. 1	-0. 165950883	0. 02641	0. 057663
UGT2B4	4q13. 3	-0. 165943158	0. 026417	0. 057673
PARVB	22q13. 31	-0. 165930157	0. 026429	0. 057689
PMP2	8q21. 13	-0. 16592851	0. 02643	0. 057689
PIK3CG	7q22. 3	-0. 165905049	0. 026452	0. 05773
HTR7	10q23. 31	-0. 165894934	0. 026461	0. 057741
LCN8	9q34. 3	-0. 165892785	0. 026463	0. 057741
ICK	6p12. 1	-0. 16588831	0. 026467	0. 057741
VCP	9p13. 3	-0. 165886218	0. 026469	0. 057741
MRM1	17q12	0. 165884125	0. 026471	0. 057741
RPUSD4	11q24. 2	0. 165865294	0. 026489	0. 057772
NDUFV2	18p11. 22	0. 165846463	0. 026506	0. 057804
CCDC197	14q32. 12	-0. 165843533	0. 026509	0. 057804
HTR3E	3q27. 1	0. 16583509	0. 026516	0. 057814
WWTR1	3q25. 1	-0. 165829724	0. 026521	0. 057819
STEAP1	7q21. 13	0. 165823447	0. 026527	0. 057825
ICA1	7p21. 3	0. 1658088	0. 026541	0. 057844
ARL4C	2q37. 1	0. 165804616	0. 026545	0. 057844
SSR4P1	21q22. 3	-0. 165804616	0. 026545	0. 057844
ABHD10	3q13. 2	-0. 165798339	0. 02655	0. 057851
RNF208	9q34. 3	0. 165792062	0. 026556	0. 057857
PDCD2	6q27	-0. 165683259	0. 026657	0. 05807
TMED9	5q35. 3	0. 165649781	0. 026688	0. 058132
ZNF300	5q33. 1	0. 165591195	0. 026743	0. 058244
ZBTB41	1q31. 3	-0. 16552424	0. 026805	0. 058373

MKNK1	1p33	-0.165511686	0.026817	0.058393
GFER	16p13.3	0.165494947	0.026832	0.05842
TMEM182	2q12.1	0.165451007	0.026873	0.058503
RFLNB	17p13.3	-0.16544473	0.026879	0.05851
DDX12P	12p13.31	0.165432176	0.026891	0.058529
GSC	14q32.13	0.165415437	0.026907	0.058556
GAD2	10p12.1	-0.165405087	0.026916	0.058571
EYA3	1p35.3	-0.165361036	0.026958	0.058654
DHX8	17q21.31	0.165352667	0.026965	0.058661
RAB13	1q21.3	0.165348482	0.026969	0.058661
SRGAP1	12q14.2	-0.165348482	0.026969	0.058661
GALNTL6	4q34.1	-0.165342904	0.026975	0.058666
RESF1	12p11.21	0.165298265	0.027016	0.058751
PSMA2	7p14.1	0.165252234	0.02706	0.058838
ATP6V1D	14q23.3	0.165225033	0.027085	0.058887
SLC4A1	17q21.31	-0.165190319	0.027118	0.058952
TMEM161A	19p13.11	0.165162262	0.027144	0.058997
ZNF264	19q13.43	-0.165162262	0.027144	0.058997
CADM4	19q13.31	-0.165153893	0.027152	0.059007
TMED7	5q22.3	-0.165135062	0.02717	0.05904
TJP1	15q13.1	0.165128785	0.027176	0.059046
SNORA24	4q26	0.165120875	0.027183	0.059053
CHD7	8q12.2	-0.165118323	0.027186	0.059053
CSNK2A3	11p15.4	-0.16511623	0.027188	0.059053
C3ORF14	3p14.2	-0.165093214	0.027209	0.059093
TMEM8B	9p13.3	-0.165074383	0.027227	0.059119
FPR1	19q13.41	-0.165074383	0.027227	0.059119
PRDM10	11q24.3	-0.165057644	0.027243	0.059147
SLC35F6	2p23.3	0.165032536	0.027267	0.059192
RBM15B	3p21.2	-0.165003243	0.027295	0.059246
PEBP4	8p21.3	-0.164988115	0.027309	0.059271
RABEP2	16p11.2	0.164953027	0.027342	0.059334
ISCA2	14q24.3	0.164950934	0.027344	0.059334
CD1D	1q23.1	-0.164944657	0.02735	0.059341
ZNF717	3p12.3	-0.164936374	0.027358	0.059351
CPPED1	16p13.12	-0.164923734	0.02737	0.05937
NPAP1	15q11.2	-0.164921015	0.027373	0.05937
NT5C1A	1p34.2	-0.164912267	0.027381	0.059377
ACHE	7q22.1	0.164911179	0.027382	0.059377
SEMA4C	2q11.2	0.164892348	0.0274	0.05941
KCNS3	2p24.2	0.164854686	0.027436	0.059474
TEX30	13q33.1	-0.164854686	0.027436	0.059474
RPS6KB1	17q23.1	-0.164848409	0.027442	0.059481
FBXL7	5p15.1	-0.164840039	0.027449	0.059492
SERPINH1	11q13.5	0.164810746	0.027477	0.059537
SLFN12L	17q12	-0.164809786	0.027478	0.059537
RASSF6	4q13.3	0.164808654	0.027479	0.059537
WDR13	Xp11.23	0.164804469	0.027483	0.059539
NR2E3	15q23	0.164790552	0.027497	0.059557
GRIN3B	19p13.3	0.164789486	0.027498	0.059557
CXCR2P1	2q35	-0.164768365	0.027518	0.059595
KCNA4	11p14.1	-0.164754758	0.027531	0.059616
ANKS6	9q22.33	0.164745883	0.027539	0.059628
LOC150776	2q21.1	0.164672651	0.027609	0.059769

SERPINA6	14q32. 13	-0.164671691	0.02761	0.059769
SOCS6	18q22. 2	-0.164624527	0.027655	0.05986
PARL	3q27. 1	0.164616157	0.027663	0.059871
PNPLA7	9q34. 3	-0.164591049	0.027687	0.059916
CRPPA	7p21. 2	-0.164582679	0.027695	0.059927
LOC100132	2p15	0.164561756	0.027715	0.059962
GABRA2	4p12	-0.164559433	0.027718	0.059962
HSD17B4	5q23. 1	-0.164549202	0.027727	0.059977
PSTK	10q26. 13	-0.164492708	0.027782	0.060088
YWHAH	22q12. 3	0.164482246	0.027792	0.060103
HAMP	19q13. 12	0.164461667	0.027812	0.06014
TBRG1	11q24. 2	0.164457138	0.027816	0.060143
SMPDL3B	1p35. 3	0.164446676	0.027826	0.060158
NUP42	7p15. 3	-0.16443203	0.02784	0.06018
CFAP97	4q35. 1	-0.164429937	0.027842	0.06018
GPATCH1	19q13. 11	0.164420608	0.027851	0.060193
MPPE1	18p11. 21	0.164406922	0.027864	0.060212
HLA-C	6p21. 33	0.164404829	0.027866	0.060212
CEACAM8	19q13. 2	0.164262061	0.028004	0.060504
GOSR2	17q21. 32	-0.164258364	0.028008	0.060505
BMS1	10q11. 21	0.164249995	0.028016	0.06051
KIR2DL1	19q13. 42	-0.164249489	0.028016	0.06051
ATMIN	16q23. 2	-0.164241625	0.028024	0.060514
OSGEP	14q11. 2	0.164241625	0.028024	0.060514
PRSS40A	2q21. 1	-0.164232425	0.028033	0.060527
GLIS3	9p24. 2	-0.164164208	0.028099	0.060661
METTL17	14q11. 2	0.164162116	0.028101	0.060661
TBK1	12q14. 2	-0.164157931	0.028105	0.060663
ARHGAP12	10p11. 22	0.164111899	0.02815	0.060753
EPHB6	7q34	0.164080514	0.02818	0.060812
H3F3C	12p11. 21	0.164076329	0.028185	0.060814
FXVD2	11q23. 3	-0.164072144	0.028189	0.060815
TGFB2	1q41	0.164070052	0.028191	0.060815
CFAP45	1q23. 2	0.16402402	0.028235	0.060905
MT1B	16q13	-0.164010384	0.028249	0.060927
SLC24A4	14q32. 12	-0.163980167	0.028278	0.060977
SIN3A	15q24. 2	-0.163980081	0.028278	0.060977
CHST2	3q24	-0.163973804	0.028284	0.060984
RNF152	18q21. 33	-0.163969619	0.028289	0.060986
DNAJC9	10q22. 2	0.163940326	0.028317	0.061041
HIST1H4I	6p22. 1	0.16391943	0.028338	0.061079
PAICS	4q12	0.163888017	0.028368	0.061132
NFIA	1p31. 3	-0.163888017	0.028368	0.061132
PHYHIP	8p21. 3	0.163871278	0.028385	0.061161
FAM237A	2q33. 3	-0.163842267	0.028413	0.061215
BABAM2-AS	2p23. 2	-0.163806415	0.028448	0.061284
IRGC	19q13. 31	0.163760997	0.028493	0.061368
NAV3	12q21. 2	-0.163758291	0.028496	0.061368
C15ORF61	15q23	-0.16375733	0.028496	0.061368
ADIPOR1	1q32. 1	0.163743644	0.02851	0.061391
AHNAK	11q12. 3	0.163724813	0.028528	0.061424
GZMH	14q12	-0.163697613	0.028555	0.061475
PLGLB2	2p11. 2	-0.163687151	0.028566	0.06149
PTPN5	11p15. 1	-0.163670308	0.028582	0.06152

IRF5	7q32.1	0.16365995	0.028592	0.061535
GADD45A	1p31.3	0.163649488	0.028603	0.06155
SPNS1	16p11.2	0.163645304	0.028607	0.061553
PCDHGB4	5q31.3	-0.163641119	0.028611	0.061555
OSBPL5	11p15.4	0.16363275	0.028619	0.061559
ZKSCAN4	6p22.1	-0.16363275	0.028619	0.061559
NUP58	13q12.13	-0.163601364	0.02865	0.061618
PADI6	1p36.13	-0.163597169	0.028654	0.061618
DEUP1	11q21	-0.163595695	0.028656	0.061618
RABGEF1	7q11.21	-0.163582533	0.028669	0.06164
VASN	16p13.3	0.163578348	0.028673	0.061642
ITFG1	16q12.1	-0.163534409	0.028716	0.061726
KMT2E	7q22.3	-0.163532316	0.028718	0.061726
KIAA1211I	2q11.2	0.163528132	0.028722	0.061729
PLA2G2D	1p36.12	-0.163524375	0.028726	0.06173
AKR7A2P1	1p13.2	0.163517394	0.028733	0.061738
TRAF1	9q33.2	-0.163494654	0.028756	0.061773
ZFP36L1	14q24.1	0.163494654	0.028756	0.061773
TGM4	3p21.31	0.163483245	0.028767	0.061791
PKD2	17q21.33	-0.163480008	0.02877	0.061791
LOC401127	4p14	-0.163456992	0.028793	0.061833
CMBL	5p15.2	0.163427699	0.028822	0.061887
DLG3	Xq13.1	0.163425606	0.028824	0.061887
ACTL8	1p36.13	0.163381181	0.028868	0.061975
PTBP3	9q32	0.163377482	0.028872	0.061976
POMGNT1	1p34.1	-0.163362836	0.028886	0.061999
SCHIP1	3q25.32-c	-0.163360743	0.028888	0.061999
LINC01554	5q15	-0.16334836	0.028901	0.062012
CNNM1	10q24.2	0.163348189	0.028901	0.062012
UPF1	19p13.11	0.163289603	0.028959	0.062131
COQ8B	19q13.2	0.163249848	0.028999	0.062209
HSP90AB4F	15q21.3	0.163246576	0.029002	0.062209
TMEM88B	1p36.33	0.16323445	0.029014	0.062228
OTC	Xp11.4	-0.163230945	0.029018	0.062229
HSPA9	5q31.2	-0.163226832	0.029022	0.062231
GALNT4	12q21.33	0.163222648	0.029026	0.062234
GPR182	12q13.3	-0.163212327	0.029036	0.062249
MMS19	10q24.1	0.163208001	0.029041	0.06225
TOMM70	3q12.2	-0.163205909	0.029043	0.06225
HNRNPC	14q11.2	0.163199632	0.029049	0.062256
TFDP2	3q23	0.163149415	0.029099	0.062357
NAPEPLD	7q22.1	0.163132676	0.029116	0.062386
PLEK	2p14	-0.163061536	0.029187	0.062532
MMP10	11q22.2	0.163053252	0.029195	0.062543
ARSD	Xp22.33	0.163044797	0.029204	0.062555
EFEMP1	2p16.1	-0.162979934	0.029269	0.062688
TRAPPC4	11q23.3	0.162956918	0.029292	0.062731
MRPL46	15q25.3	0.162952734	0.029296	0.062733
OTUD4	4q31.21	-0.16293181	0.029318	0.062771
LINC0203E	3q21.1	-0.162908794	0.029341	0.062814
CXCL5	4q13.3	0.162887871	0.029362	0.062853
CRYGS	3q27.3	0.16278953	0.029461	0.063058
LRRC59	17q21.33	0.162785345	0.029465	0.063061
TUBB3	16q24.3	0.162779068	0.029472	0.063067

TTI1	20q11.23	-0.162758144	0.029493	0.063106
SCART1	10q26.3	0.16274559	0.029506	0.063117
ITGB1BP1	2p25.1	0.162741406	0.02951	0.063117
ADAM2	8p11.22	-0.162739444	0.029512	0.063117
EX05	1p34.2	-0.162737306	0.029514	0.063117
MIS18A	21q22.11	0.162737306	0.029514	0.063117
CHGA	14q32.12	-0.162722574	0.029529	0.063142
NELL2	12q12	-0.162712113	0.029539	0.063158
LMOD3	3p14.1	0.162705836	0.029546	0.063165
RSPO4	20p13	-0.162694984	0.029557	0.063182
EN2	7q36.3	0.162689776	0.029562	0.063186
UBA5	3q22.1	-0.162678635	0.029573	0.063204
FAM102A	9q34.11	0.162643065	0.029609	0.06327
LRP4	11p11.2	-0.16263888	0.029614	0.06327
C5ORF30	5q21.1	0.162636788	0.029616	0.06327
LINC00654	20p12.3	-0.162628418	0.029624	0.06327
NECAB1	8q21.3	-0.162626326	0.029626	0.06327
CCDC152	5p12	-0.162622141	0.029631	0.06327
ZNF208	19p12	-0.162622141	0.029631	0.06327
LOC100130	11q13.2	0.162620134	0.029633	0.06327
ASPM	1q31.3	0.162620049	0.029633	0.06327
RPAIN	17p13.2	-0.162597033	0.029656	0.063313
FPR3	19q13.41	-0.162569832	0.029684	0.063366
CALM3	19q13.32	0.162490323	0.029765	0.063532
URM1	9q34.11	0.162469399	0.029786	0.06357
RPS15AP1C	1p34.1	0.16243469	0.029822	0.063639
FAM118B	11q24.2	0.162406629	0.02985	0.063694
ATP6VOA1	17q21.2	-0.162383613	0.029874	0.063737
AXIN2	17q24.1	-0.162333396	0.029925	0.06384
PHF20L1	8q24.22	-0.162293641	0.029966	0.063918
PPIEL	1p34.3	-0.162291549	0.029968	0.063918
RPL22L1	3q26.2	0.162262256	0.029998	0.063975
ARPIN	15q26.1	-0.162216224	0.030045	0.064069
ALG11	13q14.3	0.162184839	0.030078	0.064131
CD70	19p13.3	0.162146215	0.030118	0.064209
CAGE1	6p24.3	-0.162134314	0.03013	0.064228
GBAP1	1q22	0.162126253	0.030138	0.064237
EXOC3L2	19q13.32	-0.16212416	0.03014	0.064237
CREB3L3	19p13.3	0.162116355	0.030148	0.064247
EEFSEC	3q21.3	0.16208859	0.030177	0.064301
C9ORF135	9q21.12	-0.162054396	0.030212	0.06437
SHLD2P3	10q11.22	-0.162038374	0.030229	0.064398
PLA2G6	22q13.1	-0.162032097	0.030235	0.064405
C3ORF20	3p25.1	-0.162024979	0.030243	0.064414
STYX	14q22.1	-0.161996527	0.030272	0.06447
CCL7	17q12	0.161987527	0.030281	0.064483
HYLS1	11q24.2	-0.161965141	0.030305	0.064525
MPLKIP	7p14.1	0.161929571	0.030341	0.064597
COG7	16p12.2	0.161921202	0.03035	0.064608
CKM	19q13.32	0.161915259	0.030356	0.064614
HLA-G	6p22.1	0.16191074	0.030361	0.064618
EDN2	1p34.2	0.161820938	0.030454	0.064809
IL2	4q27	-0.161811798	0.030464	0.064822
SLC10A7	4q31.22	-0.161785199	0.030491	0.064874

STK4	20q13.12	-0.161741259	0.030537	0.064965
GTF2IRD2F7	7q11.23	-0.161714059	0.030565	0.065018
ZNF99	19p12	-0.161695976	0.030584	0.065051
DIPK1C	18q22.3	0.161654511	0.030628	0.065137
SPRR2E	1q21.3	0.161621012	0.030663	0.065199
ENPP6	4q35.1	-0.161620241	0.030663	0.065199
LAG3	12p13.31	-0.161609441	0.030675	0.065214
PUF60	8q24.3	0.161607348	0.030677	0.065214
CYP26B1	2p13.2	-0.161584332	0.030701	0.065258
DNAJC14	12q13.2	-0.161536208	0.030751	0.065358
TRNT1	3p26.2	0.161527839	0.03076	0.06537
GNB3	12p13.31	-0.16147553	0.030815	0.06548
PHETA2	22q13.2	0.161462976	0.030828	0.065501
SH3YL1	2p25.3	0.161421129	0.030872	0.065587
KCNV1	8q23.2	-0.161396286	0.030898	0.065636
COL9A2	1p34.2	0.161383466	0.030912	0.065658
SKAP1	17q21.32	0.161362543	0.030934	0.065695
LSM14A	19q13.11	-0.16136045	0.030936	0.065695
ATF6	1q23.3	-0.161341619	0.030956	0.06573
DAD1	14q11.2	0.161331157	0.030967	0.065744
TARSL2	15q26.3	-0.161329065	0.030969	0.065744
CCNF	16p13.3	0.161316511	0.030983	0.065765
FMN1	15q13.3	0.16129768	0.031002	0.065801
BATF3	1q32.3	-0.16128931	0.031011	0.065812
ZNF284	19q13.31	0.161280941	0.03102	0.065824
MASTL	10p12.1	0.161272571	0.031029	0.065836
PSMC6	14q22.1	0.161249555	0.031053	0.065881
PDE12	3p14.3	-0.161241186	0.031062	0.065892
SARDH	9q34.2	-0.161190969	0.031115	0.065998
PPIL3	2q33.1	0.161182684	0.031124	0.06601
PRR19	19q13.2	0.161176323	0.031131	0.066017
NXF1	11q12.3	-0.161161676	0.031146	0.066043
ADAM10	15q21.3	0.161151215	0.031157	0.066059
NR4A1	12q13.13	-0.161136568	0.031173	0.066078
NSMCE2	8q24.13	0.161136568	0.031173	0.066078
C10RF61	1q22	-0.161109442	0.031202	0.066132
MOCS3	20q13.13	-0.161105183	0.031206	0.066135
PPP4R2	3p13	-0.161084259	0.031228	0.066175
SIGLEC10	19q13.41	-0.161069613	0.031244	0.066201
TMEM208	16q22.1	0.161048689	0.031266	0.066241
PAPOLG	2p16.1	-0.161042412	0.031273	0.066246
TRARG1	17p13.3	-0.161040396	0.031275	0.066246
INCENP	11q12.3	0.161029858	0.031286	0.066262
SLC04C1	5q21.1	-0.16101948	0.031297	0.066279
C1QTNF9B	13q12.12	-0.161015961	0.031301	0.06628
LINC01816	2p13.3	-0.16097797	0.031342	0.066358
SPATA41	15q26.3	-0.160941017	0.031381	0.066435
GAS2LIP2	9q22.33	-0.160932853	0.03139	0.066445
PRAMEF20	1p36.21	-0.160929807	0.031393	0.066445
CD320	19p13.2	-0.160927332	0.031396	0.066445
WSB2	12q24.23	-0.160921055	0.031402	0.066452
SNRNP25	16p13.3	-0.160910594	0.031413	0.066468
RBM44	2q37.3	0.160906577	0.031418	0.06647
ITGB1	10p11.22	0.160862469	0.031465	0.066563

IL11	19q13. 42	0. 160856192	0. 031472	0. 06657
SLC6A7	5q32	0. 160843273	0. 031485	0. 066592
PLEKHG3	14q23. 3	0. 160824807	0. 031505	0. 066627
SNX20	16q12. 1	-0. 160789237	0. 031543	0. 066698
L1CAM	Xq28	-0. 160787145	0. 031545	0. 066698
TNFSF10	3q26. 31	0. 160736928	0. 031599	0. 066805
TUBGCP3	13q34	-0. 160695081	0. 031644	0. 066893
CCDC114	19q13. 33	0. 160661603	0. 03168	0. 066962
HOXB2	17q21. 32	0. 160634403	0. 031709	0. 067017
HRK	12q24. 22	0. 160601989	0. 031744	0. 067083
DTWD2	5q23. 1	-0. 160590463	0. 031757	0. 067102
CDHR4	3p21. 31	0. 160586543	0. 031761	0. 067104
KBTBD11	8p23. 3	0. 160479568	0. 031876	0. 067341
MROH2B	5p13. 1	-0. 160457321	0. 0319	0. 067376
SUGP1	19p13. 11	0. 160456552	0. 031901	0. 067376
LINC00113	21q21. 3	0. 16045478	0. 031903	0. 067376
LOC285593	5q35. 2	-0. 160445761	0. 031913	0. 06739
LOC728613	5p15. 33	-0. 160425167	0. 031935	0. 06743
KRT83	12q13. 13	0. 160394825	0. 031968	0. 067492
AP5Z1	7p22. 1	0. 160379135	0. 031985	0. 067521
AGL	1p21. 2	-0. 160366581	0. 031999	0. 067542
CARD14	17q25. 3	0. 160358211	0. 032008	0. 067554
TMEM260	14q22. 3	-0. 160328918	0. 03204	0. 067614
NFE2	12q13. 13	0. 160320549	0. 032049	0. 067626
C16ORF58	16p11. 2	0. 16031218	0. 032058	0. 067639
OLFM4	13q14. 3	0. 160302848	0. 032068	0. 067653
LONRF1	8p23. 1	-0. 160278702	0. 032094	0. 067691
ANKRD34A	1q21. 1	0. 16027661	0. 032096	0. 067691
SEPHS2	16p11. 2	0. 16027661	0. 032096	0. 067691
SHANK1	19q13. 33	-0. 160261001	0. 032113	0. 06772
PACRG-AS1	16q26	-0. 160242799	0. 032133	0. 067755
PRH1	12p13. 2	-0. 160224384	0. 032153	0. 06779
SMCP	1q21. 3	-0. 160219736	0. 032158	0. 067793
DRD5	4p16. 1	-0. 160201902	0. 032178	0. 067827
MAFG	17q25. 3	-0. 160182453	0. 032199	0. 067865
ZSCAN23	6p22. 1	-0. 160133075	0. 032253	0. 067971
LINC00114	21q22. 2	-0. 160109809	0. 032278	0. 068018
SEMA3C	7q21. 11	0. 160086205	0. 032304	0. 068065
DMBT1	10q26. 13	0. 160069466	0. 032322	0. 068096
MYO7B	2q14. 3	0. 160042266	0. 032352	0. 068152
GRIK3	1p34. 3	-0. 160012973	0. 032384	0. 068211
GPR141	7p14. 1	-0. 160010128	0. 032387	0. 068211
PAXB1	21q22. 11	-0. 160006696	0. 032391	0. 068212
LIN9	1q42. 12	0. 160000418	0. 032398	0. 068219
TDP1	14q32. 11	-0. 159979495	0. 032421	0. 068261
GOLGA8IP	15q11. 2	-0. 1599608	0. 032441	0. 068296
N4BP2L1	13q13. 1	-0. 159933463	0. 032471	0. 068352
DACT1	14q23. 1	-0. 159914632	0. 032492	0. 068389
ADGB	6q24. 3	-0. 159879494	0. 032531	0. 068463
XCL2	1q24. 2	-0. 159870273	0. 032541	0. 068477
RPL32P3	3q21. 3	0. 159851861	0. 032561	0. 068512
ACTBL2	5q11. 2	0. 159834822	0. 03258	0. 068545
NTRK3	15q25. 3	-0. 159812106	0. 032605	0. 06859
ZNF18	17p12	-0. 15978909	0. 03263	0. 068636

SP1	12q13.13	0.159749336	0.032674	0.068712
RASGRP4	19q13.2	-0.159747243	0.032676	0.068712
KLHDC4	16q24.2	0.159747243	0.032676	0.068712
SLC2A12	6q23.2	-0.159720043	0.032707	0.068768
FOSB	19q13.32	-0.159663549	0.032769	0.068892
UBE3B	12q24.11	-0.159659364	0.032774	0.068894
GBP3	1p22.2	0.159650995	0.032783	0.068906
SERPINF1	17p13.3	-0.159621702	0.032815	0.068967
TMEM63A	1q42.12	0.159609148	0.032829	0.068989
FERMT3	11q13.1	0.159602871	0.032836	0.068997
GSTM1	1p13.3	0.159579494	0.032862	0.069044
DLEU7	13q14.3	0.159573366	0.032869	0.069046
SLC17A3	6p22.2	-0.15957248	0.03287	0.069046
PRDM15	21q22.3	-0.159565208	0.032878	0.069056
FTH1P3	2p23.3	0.159529638	0.032917	0.069131
CES3	16q22.1	0.159521269	0.032927	0.069141
ZCCHC7	9p13.2	-0.159519176	0.032929	0.069141
ENAH	1q42.12	-0.159502438	0.032948	0.069173
ANKRD18DF	3q29	-0.159486403	0.032966	0.069202
PLXNA3	Xq28	0.159483606	0.032969	0.069202
LOC100129	9q33.3	-0.15946896	0.032985	0.069229
RPL3L	16p13.3	-0.159448084	0.033008	0.069271
ADPRHL1	13q34	0.159435482	0.033022	0.069293
GALNT7	4q34.1	0.159387358	0.033076	0.069398
GRHL3	1p36.11	0.159351871	0.033115	0.069474
ABI1	10p12.1	0.159337141	0.033132	0.069499
THADA	2p21	0.159332957	0.033137	0.069499
AKR1C4	10p15.1	-0.159331912	0.033138	0.069499
CCDC159	19p13.2	0.159293202	0.033181	0.069582
PRELID3B	20q13.32	0.159276463	0.0332	0.069614
FAHD2CP	2q11.2	0.159266001	0.033211	0.069632
INSM2	14q13.2	-0.159248661	0.033231	0.069665
TGIF2	20q11.23	0.159245078	0.033235	0.069666
TPRKB	2p13.1	0.159201138	0.033284	0.069762
TIMM10	11q12.1	0.159161467	0.033329	0.069848
DYNAP	18q21.2	-0.159154927	0.033336	0.069856
PCDHB14	5q31.3	0.159149959	0.033342	0.06986
CHD5	1p36.31	-0.15913209	0.033362	0.069895
SOWAHB	4q21.1	0.159121629	0.033373	0.069912
NUMA1	11q13.4	0.15910489	0.033392	0.069944
ODAM	4q13.3	0.159097699	0.0334	0.069954
TMED1	19p13.2	0.159046304	0.033458	0.070063
ENGASE	17q25.3	0.159044211	0.033461	0.070063
DMAC2	19q13.2	0.159042119	0.033463	0.070063
SCRG1	4q34.1	-0.158991986	0.033519	0.070174
ERGIC3	20q11.22	0.158985626	0.033527	0.070182
SMG5	1q22	0.158977256	0.033536	0.070194
SCGB1D1	11q12.3	-0.158942981	0.033575	0.070268
C7ORF61	7q22.1	0.158935409	0.033583	0.070278
LOC730668	22q13.31	0.158918787	0.033602	0.07031
MYSM1	1p32.1	-0.158881008	0.033645	0.070392
PER2	2q37.3	-0.158868454	0.033659	0.070415
PRL	6p22.3	-0.158781102	0.033758	0.070614
SSR4	Xq28	-0.15877639	0.033763	0.070618

PRKX	Xp22. 33	-0. 158751282	0. 033792	0. 070671
PPP1R14A	19q13. 2	0. 158747097	0. 033797	0. 070672
RNASE13	14q11. 2	0. 158744316	0. 0338	0. 070672
SPANXC	Xq27. 2	0. 158727917	0. 033818	0. 070704
TARS	5p13. 3	-0. 158715712	0. 033832	0. 070725
TFPT	19q13. 42	0. 158709434	0. 033839	0. 070733
TVP23C	17p12	-0. 15870525	0. 033844	0. 070736
RRN3P1	16p12. 2	0. 158690603	0. 033861	0. 070763
GUCY2GP	10q25. 2	0. 15868418	0. 033868	0. 070771
KLRC3	12p13. 2	-0. 158672913	0. 033881	0. 07079
MTHFS	15q25. 1	0. 158644571	0. 033913	0. 07085
DHRS12	13q14. 3	0. 15859017	0. 033975	0. 070972
SNTG1	8q11. 21	-0. 158558352	0. 034012	0. 071041
UGCG	9q31. 3	-0. 158537861	0. 034035	0. 071076
DSCR4	21q22. 13	-0. 158537517	0. 034035	0. 071076
PLPP6	9p24. 1	-0. 158521122	0. 034054	0. 071107
CLTCL1	22q11. 21	-0. 158445798	0. 03414	0. 07128
EXOC3-AS1	15p15. 33	-0. 158431151	0. 034157	0. 071305
SLC35B2	6p21. 1	0. 158429059	0. 03416	0. 071305
S1PR2	19p13. 2	-0. 158406043	0. 034186	0. 071353
RASGEF1A	10q11. 21	-0. 158374657	0. 034222	0. 071421
GDF7	2p24. 1	-0. 158264408	0. 034349	0. 071677
CHMP1B	18p11. 21	0. 15826167	0. 034352	0. 071677
NEK7	1q31. 3	0. 158213546	0. 034407	0. 071785
HIST1H3A	6p22. 2	-0. 15818063	0. 034445	0. 071857
ARF4	3p14. 3	0. 158134036	0. 034499	0. 071959
FLRT3	20p12. 1	0. 158131944	0. 034502	0. 071959
ZDHHC11	5p15. 33	0. 158102651	0. 034535	0. 072022
LHFPL2	5q14. 1	-0. 158098466	0. 03454	0. 072025
C2CD2	21q22. 3	-0. 158092189	0. 034548	0. 072032
KRT40	17q21. 2	-0. 158074795	0. 034568	0. 072067
ZNF623	8q24. 3	-0. 15803988	0. 034608	0. 072144
TRPM8	2q37. 1	0. 15803443	0. 034615	0. 072149
MOGS	2p13. 1	0. 158031511	0. 034618	0. 072149
PSMD10	Xq22. 3	-0. 158025234	0. 034625	0. 072157
BPIFA4P	20q11. 21	-0. 158005351	0. 034648	0. 072197
ADAP2	17q11. 2	-0. 158000126	0. 034654	0. 072202
TSHZ2	20q13. 2	-0. 15797711	0. 034681	0. 072245
SLC51B	15q22. 31	-0. 157976066	0. 034682	0. 072245
IFI27L2	14q32. 12	0. 157949909	0. 034713	0. 072291
PWP2	21q22. 3	0. 157947817	0. 034715	0. 072291
SLAMF1	1q23. 3	-0. 157947817	0. 034715	0. 072291
HADH	4q25	-0. 15794154	0. 034722	0. 072299
ZNF257	19p12	-0. 157936391	0. 034728	0. 072304
ANKRD26P1	16q11. 2	-0. 157926715	0. 03474	0. 07232
UBE2E2	3p24. 3	-0. 157868307	0. 034808	0. 072451
ZBTB46	20q13. 33	-0. 157866215	0. 03481	0. 072451
CCL11	17q12	-0. 157847466	0. 034832	0. 072489
RHOXF2B	Xq24	-0. 15783315	0. 034849	0. 072516
PTEN	10q23. 31	-0. 157820183	0. 034864	0. 07254
RAP1GAP	1p36. 12	-0. 157815998	0. 034869	0. 072543
DCAF17	2q31. 1	-0. 157809721	0. 034876	0. 07255
TREX1	3p21. 31	0. 157784613	0. 034905	0. 072604
TEX13A	Xq22. 3	0. 157763838	0. 034929	0. 072647

PIEZ02	18p11. 22-	-0. 157715565	0. 034986	0. 072756
SMARCD2	17q23. 3	0. 157686272	0. 03502	0. 07282
CLK3	15q24. 1	0. 157682087	0. 035025	0. 072823
FLJ42393	3q27. 3	0. 157656319	0. 035055	0. 072878
EN1	2q14. 2	0. 157646524	0. 035067	0. 072894
PF4	4q13. 3	0. 157608858	0. 035111	0. 072978
SMIM14	4p14	-0. 15760467	0. 035116	0. 072981
TET1	10q21. 3	-0. 157575377	0. 03515	0. 073045
IDH3G	Xq28	0. 157564915	0. 035162	0. 073063
RSPRY1	16q13	-0. 157504237	0. 035234	0. 073204
RPL23P8	7p21. 1	0. 157472852	0. 035271	0. 073273
RNMT	18p11. 21	-0. 157466575	0. 035278	0. 07328
FAM86C1	11q13. 4	0. 157397527	0. 03536	0. 073442
TCERG1	5q32	0. 157370326	0. 035392	0. 073501
MCEMP1	19p13. 2	0. 157334838	0. 035434	0. 07358
ZNF34	8q24. 3	-0. 157280355	0. 035498	0. 073707
SNORA1	11q21	0. 157275852	0. 035503	0. 07371
MOSPD1	Xq26. 3	-0. 157257339	0. 035525	0. 073748
SMIM7	19p13. 11	0. 157215492	0. 035575	0. 073843
BNIP1	5q35. 1	-0. 157198753	0. 035595	0. 073869
SLC5A9	1p33	-0. 157198753	0. 035595	0. 073869
RACGAP1	12q13. 12	0. 157190384	0. 035605	0. 07388
CTDP1	18q23	-0. 157188291	0. 035607	0. 07388
POU2F1	1q24. 2	-0. 157171552	0. 035627	0. 073913
PCK1	20q13. 31	-0. 157131798	0. 035674	0. 074004
EXO1	1q43	0. 15712552	0. 035682	0. 074011
HIF1A	14q23. 2	-0. 157102505	0. 035709	0. 074061
RXRβ	6p21. 32	-0. 157096227	0. 035717	0. 074068
SLAIN2	4p11	-0. 157073212	0. 035744	0. 074117
GPRIN2	10q11. 22	0. 157066934	0. 035752	0. 074125
NACC2	9q34. 3	-0. 157058565	0. 035762	0. 074138
SNORA74B	5q35. 1	-0. 157032378	0. 035793	0. 074195
STK38	6p21. 31	0. 15701881	0. 035809	0. 074221
TTC24	1q22	-0. 157011684	0. 035818	0. 074231
TRIP13	5p15. 33	0. 156981148	0. 035854	0. 074299
ZNF83	19q13. 41	0. 156964409	0. 035874	0. 074333
DUSP11	2p13. 1	0. 15694767	0. 035894	0. 074364
BOLA1	1q21. 2	0. 156943485	0. 035899	0. 074364
SCARNA22	4p16. 3	-0. 156939426	0. 035904	0. 074364
TOP1P2	22q11. 23	0. 156939301	0. 035904	0. 074364
MFSD1	3q25. 32	-0. 15692047	0. 035926	0. 074403
SYPL2	1p13. 3	-0. 156903731	0. 035947	0. 074437
ZCCHC12	Xq24	-0. 156887074	0. 035966	0. 07447
PTP4A1	6q12	-0. 156838868	0. 036024	0. 074582
TWISTNB	7p21. 1	-0. 156824221	0. 036042	0. 074611
EIF4EBP1	8p11. 23	0. 156817944	0. 036049	0. 074619
IL24	1q32. 1	-0. 156810883	0. 036058	0. 074628
SRY	Yp11. 2	-0. 15680626	0. 036063	0. 074632
GRK1	13q34	-0. 156796587	0. 036075	0. 074649
NRG4	15q24. 2	0. 156758086	0. 036121	0. 074737
CHSY1	15q26. 3	-0. 15673425	0. 03615	0. 074788
LINC0114C	1p22. 3	-0. 156677756	0. 036218	0. 074921
EXOSC8	13q13. 3	0. 156669387	0. 036228	0. 074934
CASZ1	1p36. 22	0. 156656833	0. 036243	0. 074958

GDAP1L1	20q13.12	-0.156631453	0.036274	0.075013
NTAN1	16p13.11	0.156621263	0.036286	0.075031
NPEPPS	17q21.32	0.156602431	0.036309	0.07507
CD163	12p13.31	-0.156543845	0.036379	0.075209
BRDT	1p22.1	-0.156528096	0.036399	0.07524
PEX11G	19p13.2	0.156516645	0.036412	0.075261
CDK15	2q33.1	-0.156504389	0.036427	0.075284
ZNF770	15q14	-0.156464336	0.036476	0.075376
C9ORF64	9q21.32	-0.156443412	0.036501	0.075421
NACA4P	8q22.3	0.156435043	0.036511	0.075434
GRASP	12q13.13	-0.156403657	0.036549	0.075505
TMEM14C	6p24.2	0.156393196	0.036562	0.075523
SCARF2	22q11.21	0.156389011	0.036567	0.075526
ZNF526	19q13.2	0.156328333	0.036641	0.075671
PPP6R2	22q13.33	-0.156311594	0.036661	0.075705
RAB11B	19p13.2	0.156286485	0.036692	0.07576
MAPT-IT1	17q21.31	-0.15625917	0.036725	0.075821
AP5B1	11q13.1	0.156248823	0.036738	0.075838
CDH4	20q13.33	-0.156246355	0.036741	0.075838
RAD51B	14q24.1	0.156238361	0.03675	0.07585
IL13	5q31.1	-0.156231732	0.036759	0.075859
TLN2	15q22.2	0.156217438	0.036776	0.075879
PAXX	9q34.3	0.156217438	0.036776	0.075879
POLR1A	2p11.2	-0.156213253	0.036781	0.075882
KRTAP4-5	17q21.2	-0.156193969	0.036805	0.075923
FMO2	1q24.3	-0.156179775	0.036822	0.075948
C10ORF95	10q24.32	0.156177683	0.036824	0.075948
RIPOR3	20q13.13	-0.156169313	0.036835	0.075961
MRAP2	6q14.2	-0.156085619	0.036937	0.076164
DLEC1	3p22.2	0.156075157	0.03695	0.076183
WDR34	9q34.11	0.156037495	0.036996	0.07627
RELL2	5q31.3	0.156018664	0.037019	0.07631
CAPN14	2p23.1	0.156005441	0.037035	0.076336
LINC01134	1p36.32	0.15597054	0.037078	0.076416
LRRC4C	11p12	-0.15596217	0.037089	0.076429
AGPAT4	6q26	-0.155920323	0.03714	0.076528
ADRA2A	10q25.2	0.155895215	0.037171	0.076583
LOXL4	10q24.2	0.155886845	0.037181	0.076597
TLE4	9q21.31	-0.155876384	0.037194	0.076615
PTGR1	9q31.3	0.155868014	0.037204	0.076629
ZNF574	19q13.2	0.155851275	0.037225	0.076663
MPRIP	17p11.2	0.155824075	0.037259	0.076724
UBE3C	7q36.3	-0.155794782	0.037295	0.076791
RBFOX1	16p13.3	-0.155773313	0.037321	0.07683
GUCA1A	6p21.1	0.155773102	0.037322	0.07683
PCDHAC1	5q31.3	-0.155761017	0.037336	0.076853
PPEF1	Xp22.13	0.155755027	0.037344	0.07686
SAMD8	10q22.2	-0.15574875	0.037352	0.076869
CALY	10q26.3	-0.155737602	0.037365	0.076889
CRIP2	14q32.33	0.155723642	0.037383	0.076914
PRR5L	11p13-p12	0.155721549	0.037385	0.076914
TAS2R40	7q34	-0.155706552	0.037404	0.076944
TLN1	9p13.3	-0.15566924	0.03745	0.077031
CMTM2	16q21	0.155654675	0.037468	0.077061

POLR2J	7q22. 1	0. 155646224	0. 037479	0. 077072
NPHS2	1q25. 2	0. 155644043	0. 037481	0. 077072
AVEN	15q14	0. 15563367	0. 037494	0. 07709
NDUFA11	19p13. 3	0. 155616931	0. 037515	0. 077125
POPDC2	3q13. 33	-0. 155612747	0. 03752	0. 077128
SIAH1	16q12. 1	0. 155589731	0. 037549	0. 077178
MOG	6p22. 1	-0. 155586944	0. 037552	0. 077178
PLEKHG1	6q25. 1	-0. 155564622	0. 03758	0. 077227
LOC643923	11q22. 3	0. 15555832	0. 037588	0. 077235
FAM9C	Xp22. 2	-0. 155541863	0. 037608	0. 077269
RPL23AP7	2q14. 1	0. 155508129	0. 03765	0. 077347
RGS2	1q31. 2	-0. 155451635	0. 03772	0. 077484
FBX016	8p21. 1	-0. 155441173	0. 037734	0. 077495
TLE1	9q21. 32	-0. 155441173	0. 037734	0. 077495
VAR5	6p21. 33	0. 155426527	0. 037752	0. 077524
CENPH	5q13. 2	0. 155418157	0. 037762	0. 077538
NOC2L	1p36. 33	0. 155413973	0. 037767	0. 077541
DPYSL2	8p21. 2	-0. 155378403	0. 037812	0. 077624
COQ9	16q21	0. 155353294	0. 037843	0. 07768
GPR65	14q31. 3	-0. 155336556	0. 037864	0. 077715
ABHD4	14q11. 2	0. 155290524	0. 037922	0. 077826
NEIL2	8p23. 1	-0. 15527797	0. 037938	0. 077844
GOLGA8DP	15q11. 2	-0. 155277045	0. 037939	0. 077844
CYP4F30P	2q21. 1	-0. 155221662	0. 038008	0. 077979
COCH	14q12	-0. 15516289	0. 038082	0. 078114
RRAGC	1p34. 3	-0. 15516289	0. 038082	0. 078114
PLEKHM2	1p36. 21	-0. 155133597	0. 038119	0. 078182
MOGAT1	2q36. 1	0. 155127103	0. 038127	0. 07819
DDX49	19p13. 11	0. 155123135	0. 038132	0. 078192
TLCD5	11q23. 3	-0. 155110581	0. 038148	0. 078217
PIN4	Xq13. 1	0. 155095935	0. 038166	0. 078244
IL17C	16q24. 2	0. 155093989	0. 038169	0. 078244
DTX3L	3q21. 1	0. 155068734	0. 0382	0. 078301
CIART	1q21. 2	0. 155051995	0. 038221	0. 078328
MFSD4A	1q32. 1	0. 155051995	0. 038221	0. 078328
FRMD3	9q21. 32	-0. 154993409	0. 038295	0. 078471
DEK	6p22. 3	-0. 15498504	0. 038306	0. 078485
SARS2	19q13. 2	0. 154959931	0. 038338	0. 078542
TECPR1	7q21. 3	-0. 1549411	0. 038361	0. 078583
COPS6	7q22. 1	0. 154926454	0. 03838	0. 078613
CYTL1	4p16. 2	-0. 154884607	0. 038433	0. 078713
PTTG3P	8q13. 1	0. 154872427	0. 038448	0. 078737
EYA1	8q13. 3	-0. 15485966	0. 038465	0. 078759
GPR4	19q13. 32	-0. 154857406	0. 038467	0. 078759
NCR3LG1	11p15. 1	-0. 154846944	0. 038481	0. 078778
ANGEL2	1q32. 3	-0. 154830205	0. 038502	0. 078814
RFC2	7q11. 23	0. 154817651	0. 038518	0. 078836
BLOC1S5	6p24. 3	-0. 154815559	0. 038521	0. 078836
CXCL13	4q21. 1	-0. 154809363	0. 038528	0. 078844
CD247	1q24. 2	-0. 154794635	0. 038547	0. 078874
ENTHD1	22q13. 1	0. 154734091	0. 038624	0. 079023
TCEANC2	1p32. 3	-0. 15472768	0. 038632	0. 079032
RIF1	2q23. 3	-0. 154669094	0. 038707	0. 079176
ANKRD29	18q11. 2	-0. 154662817	0. 038715	0. 079185

CAMK2A	5q32	-0.154658794	0.03872	0.079187
PAXIP1-AS1	7q36.2	-0.154646078	0.038736	0.079212
NKX3-1	8p21.2	0.154604231	0.038789	0.079313
APLNR	11q12.1	-0.154597954	0.038797	0.079319
NME6	3p21.31	0.154595861	0.0388	0.079319
BZW1	2q33.1	0.154551922	0.038856	0.079425
GTF2H2B	5q13.2	-0.154547737	0.038862	0.079428
CECR7	22q11.1	-0.154533414	0.03888	0.079457
NT5DC1	6q22.1	-0.154520536	0.038896	0.079483
N4BP1	16q12.1	0.154466135	0.038966	0.079617
MCCC1	3q27.1	-0.154457766	0.038977	0.079631
LOC1547617	7q35	-0.154418011	0.039028	0.079727
PPCDC	15q24.2	0.154403365	0.039047	0.079757
ARHGAP11A	15q13.3	0.15439918	0.039052	0.07976
LY9	1q23.3	-0.154384533	0.039071	0.07979
ACVR1	2q24.1	0.154380349	0.039076	0.079793
GNAI3	1p13.3	0.154369887	0.03909	0.079793
TRIM4	7q22.1	-0.154369887	0.03909	0.079793
CPLX2	5q35.2	-0.154367875	0.039092	0.079793
TOR1AIP2	1q25.2	-0.154367794	0.039092	0.079793
TSPAN14	10q23.1	0.154336409	0.039133	0.079867
PABPC1L	20q13.12	0.154332224	0.039138	0.07987
PLK5	19p13.3	0.154288296	0.039194	0.079978
SEC61B	9q22.33	-0.154263177	0.039227	0.080035
SHROOM2	Xp22.2	-0.15424853	0.039246	0.080066
FURIN	15q26.1	-0.154233884	0.039265	0.080096
AARS	16q22.1	-0.154225514	0.039275	0.08011
GUSBP2	6p22.2	-0.154197348	0.039312	0.080176
C10RF43	1q21.3	0.154189944	0.039321	0.080187
SCGB2B2	19q13.11	-0.154177756	0.039337	0.080204
KDM7A	7q34	-0.15417739	0.039337	0.080204
LENG8	19q13.42	0.154158559	0.039362	0.080245
NRDC	1p32.3	-0.154139728	0.039386	0.080287
ITGA1	5q11.2	-0.154129266	0.0394	0.080306
C20RF80	2q33.3	-0.154111291	0.039423	0.080345
KCNC2	12q21.1	-0.154062057	0.039487	0.080467
CCDC38	12q23.1	-0.154048957	0.039504	0.080493
ELOC	8q21.11	0.154043479	0.039511	0.0805
RNASE7	14q11.2	0.154030132	0.039528	0.080527
TENT5D	Xq21.1	-0.15399756	0.03957	0.080597
ZNF12	7p22.1	-0.153997447	0.03957	0.080597
BTBD8	1p22.1	-0.153953833	0.039627	0.080704
ARNTL	11p15.3	-0.15392003	0.039671	0.080785
NKX2-3	10q24.2	-0.153892829	0.039706	0.080846
TMF1	3p14.1	-0.153890737	0.039709	0.080846
C16ORF71	16p13.3	-0.153873998	0.039731	0.08088
PHRF1	11p15.5	0.153871906	0.039734	0.08088
COX6A2	16p11.2	-0.153820077	0.039801	0.081009
CREG1	1q24.2	-0.153781935	0.039851	0.081102
FAM72A	1q32.1	0.153742984	0.039902	0.081197
DIPK1A	1p22.1	-0.153727533	0.039922	0.081227
CHRD	3q27.1	-0.153725441	0.039925	0.081227
WASH5P	19p13.3	0.153691963	0.039969	0.081308
TMEM81	1q32.1	0.153666855	0.040002	0.081367

ZNF846	19p13.2	0.153629193	0.040051	0.081459
EPRS	1q41	-0.153614546	0.04007	0.08149
PUM2	2p24.1	-0.153608269	0.040078	0.081498
ITGAL	16p11.2	-0.153585253	0.040109	0.081551
OMG	17q11.2	0.153561661	0.040139	0.081599
BANF2	20p12.1	-0.153561154	0.04014	0.081599
TMEM144	4q32.1	0.153553868	0.04015	0.08161
RPS25	11q23.3	0.153537129	0.040172	0.081647
ANKRD65	1p36.33	-0.153532944	0.040177	0.081649
FXYD1	19q13.12	-0.153505744	0.040213	0.081714
UQCR11	19p13.3	0.153495282	0.040227	0.081734
CCT5	5p15.2	0.153491097	0.040232	0.081736
SLIRP	14q24.3	0.153478543	0.040249	0.081762
RPUSD3	3p25.3	0.153442973	0.040296	0.081849
MS4A3	11q12.1	-0.153400072	0.040352	0.081955
LINC00588	8q12.1	-0.153353488	0.040414	0.082068
ADAMTS14	10q22.1	0.153350909	0.040417	0.082068
TEPSIN	17q25.3	0.153348817	0.04042	0.082068
FAM83D	20q11.23	0.153340447	0.040431	0.082082
TSGA10	2q11.2	-0.153313247	0.040467	0.082146
ARHGEF10L	1p36.13	-0.153304877	0.040478	0.08216
MUC7	4q13.3	-0.153295607	0.04049	0.082177
FBXO40	3q13.33	-0.153289495	0.040498	0.082185
PTCD1	7q22.1	0.153281861	0.040508	0.082197
SRRT	7q22.1	0.153277677	0.040514	0.0822
TMEM51	1p36.21	0.153248384	0.040553	0.082271
RSPH9	6p21.1	-0.153240014	0.040564	0.082285
STIP1	11q13.1	0.153208629	0.040606	0.082355
CER1	9p22.3	-0.153207774	0.040607	0.082355
GATAD1	7q21.2	0.153202352	0.040614	0.082361
TAAR8	6q23.2	0.153184109	0.040638	0.082398
TLR8	Xp22.2	-0.153181428	0.040642	0.082398
GLCE	15q23	-0.153179336	0.040644	0.082398
WIPF3	7p14.3	-0.153155354	0.040676	0.082454
TMEM123	11q22.2	0.153150043	0.040683	0.082459
CCN6	6q21	0.153147142	0.040687	0.082459
ATP5IF1	1p35.3	0.153118658	0.040725	0.082519
S100PBP	1p35.1	-0.153118658	0.040725	0.082519
GOLPH3L	1q21.3	0.153097734	0.040753	0.082567
AEBP1	7p13	0.153070533	0.040789	0.082632
LACTB	15q22.2	0.153062164	0.0408	0.082647
RFX7	15q21.3	-0.153045425	0.040822	0.082683
PDE1B	12q13.2	-0.153003578	0.040878	0.082788
LOC143188	10q25.2	0.152988931	0.040898	0.082819
OGFOD1	16q13	0.152980562	0.040909	0.082833
TMEM252	9q21.11	-0.152928807	0.040978	0.082965
ELAVL2	9p21.3	-0.152867409	0.04106	0.083123
FAM222A-A	12q24.11	-0.152823424	0.041119	0.083234
GHITM	10q23.1	-0.152800619	0.04115	0.083287
KIRREL3	11q24.2	-0.152790158	0.041164	0.083304
ITGA11	15q23	0.152788065	0.041167	0.083304
C16ORF91	16p13.3	0.152779696	0.041178	0.083319
METTL24	6q21	-0.152773499	0.041186	0.083327
C1QTNF3	5p13.2	0.152760865	0.041203	0.083353

SSPN	12p12.1	-0.15274831	0.04122	0.083379
ZFP36	19q13.2	0.152744126	0.041226	0.083381
CYP3A43	7q22.1	-0.152724463	0.041252	0.083426
NEMF	14q21.3	-0.152714833	0.041265	0.083444
KLHL34	Xp22.12	-0.152673533	0.041321	0.083547
DHX38	16q22.2	0.152670893	0.041324	0.083547
DNAJC24	11p13	-0.152666709	0.04133	0.08355
PRORS1P	2p16.1	0.152662524	0.041335	0.083553
FCRLA	1q23.3	-0.152651183	0.041351	0.08357
TLR1	4p14	-0.15264997	0.041352	0.08357
MFN2	1p36.22	-0.152635323	0.041372	0.083601
WDR1	4p16.1	0.152631138	0.041378	0.083604
SMTNL2	17p13.2	-0.152619383	0.041393	0.083628
SOCS5	2p21	-0.152580922	0.041445	0.083724
DPM1	20q13.13	0.152572552	0.041457	0.083739
NME3	16p13.3	0.152568368	0.041462	0.083742
RPL23	17q12	0.152547444	0.041491	0.08379
MORF4L2	Xq22.2	-0.152524428	0.041522	0.083845
CD244	1q23.3	-0.152516059	0.041533	0.083859
POLR2G	11q12.3	0.152447011	0.041626	0.084039
WFIKKN1	16p13.3	-0.152434457	0.041643	0.084065
RNF186	1p36.13	-0.152416752	0.041667	0.084105
BNC2	9p22.3-p2	-0.152403072	0.041686	0.084134
MRPL27	17q21.33	0.152369594	0.041731	0.084217
ADAT3	19p13.3	0.152311008	0.041811	0.084369
GCK	7p13	-0.152300546	0.041825	0.084389
PAK6	15q15.1	0.152292177	0.041837	0.084404
CKAP2L	2q14.1	0.152264976	0.041874	0.08447
SLC22A4	5q31.1	-0.152225221	0.041928	0.08457
NSA2	5q13.3	-0.152208482	0.04195	0.084608
AIMP1	4q24	0.152166635	0.042008	0.084715
DNASE1L2	16p13.3	0.152141686	0.042042	0.084775
NTSR2	2p25.1	-0.152112339	0.042082	0.084839
SPTBN1	2p16.2	0.152112234	0.042082	0.084839
ZNF496	1q44	-0.152095495	0.042105	0.084876
EFCAB1	8q11.21	0.152091629	0.04211	0.084878
COX18	4q13.3	-0.152062017	0.042151	0.084951
UNC45B	17q12	-0.152056242	0.042158	0.084952
SS18L1	20q13.33	-0.15205574	0.042159	0.084952
ACER1	19p13.3	-0.152038394	0.042183	0.084991
ACR	22q13.33	-0.15201393	0.042216	0.08505
PDCD1LG2	9p24.1	-0.152003431	0.042231	0.08507
OR2B2	6p22.1	0.151980803	0.042262	0.085124
ENTPD1	10q24.1	-0.151963677	0.042285	0.085163
MSH3	5q14.1	-0.151936476	0.042323	0.08523
SH2D4B	10q23.1	0.151895625	0.042379	0.085334
VN1R2	19q13.42	-0.151886979	0.042391	0.085349
NOMO3	16p13.11	-0.151867428	0.042418	0.085395
HOXC11	12q13.13	0.151844165	0.04245	0.085451
CPZ	4p16.1	0.151825581	0.042475	0.085494
PAH	12q23.2	-0.151808457	0.042499	0.085526
TMEM200B	1p35.3	0.15180675	0.042501	0.085526
LRRK1	15q26.3	-0.151804658	0.042504	0.085526
DNAJB6	7q36.3	-0.151783734	0.042533	0.085575

CTCF	16q22.1	-0.151756533	0.04257	0.085639
TCEAL3	Xq22.2	-0.151754441	0.042573	0.085639
ABCB11	2q31.1	0.151731972	0.042604	0.085693
CA2	8q21.2	0.151725148	0.042614	0.085703
ZNF627	19p13.2	-0.151706317	0.04264	0.085747
UTY	Yq11.221	-0.151667586	0.042693	0.085846
SYT5	19q13.42	-0.151630992	0.042744	0.085937
MRPS25	3p25.1	0.1516289	0.042747	0.085937
SCX	8q24.3	0.151611738	0.042771	0.085976
CTSB	8p23.1	0.151605884	0.042779	0.085983
PDCD6	5p15.33	0.151587052	0.042805	0.086027
NEDD4	15q21.3	-0.151582868	0.042811	0.08603
MANF	3p21.2	0.151574498	0.042822	0.086042
SLC5A3	21q22.11	0.151572406	0.042825	0.086042
TUBGCP4	15q15.3	-0.151566129	0.042834	0.08605
FGD3	9q22.31	-0.151561944	0.04284	0.08605
SNHG4	5q31.2	0.151560169	0.042842	0.08605
IMPDH1	7q32.1	0.151551482	0.042854	0.086066
RSKR	17q11.2	0.151545205	0.042863	0.086075
ZNF521	18q11.2	-0.151528467	0.042886	0.086113
LTN1	21q21.3	-0.151522189	0.042895	0.086122
DAPK2	15q22.31	-0.151503358	0.042921	0.086165
COL26A1	7q22.1	-0.151448069	0.042998	0.086311
XG	Xp22.33	-0.151425271	0.04303	0.086366
CYP24A1	20q13.2	0.151403611	0.04306	0.086418
NUP133	1q42.13	-0.151392463	0.043075	0.086441
DMRTA2	1p32.3	0.15136029	0.04312	0.086522
SLAMF6	1q23.2-q2	-0.151350616	0.043134	0.086537
SCUBE1	22q13.2	-0.151348524	0.043137	0.086537
DSCR8	21q22.13	-0.15131004	0.04319	0.086637
TNFRSF18	1p36.33	0.151273199	0.043242	0.086731
GZMM	19p13.3	-0.151267001	0.043251	0.08674
MYF6	12q21.31	-0.151234249	0.043296	0.086823
RSPH14	22q11.22-	-0.151210428	0.04333	0.086872
GAP43	3q13.31	-0.151210428	0.04333	0.086872
PRIMA1	14q32.12	-0.151181214	0.043371	0.086937
DNAAF5	7p22.3	0.151181135	0.043371	0.086937
ATP5MC3	2q31.1	0.151166489	0.043391	0.08697
COX8A	11q13.1	0.151160212	0.0434	0.086979
TBL1XR1	3q26.32	0.151141381	0.043427	0.087023
P2RX4	12q24.31	-0.151049317	0.043556	0.087273
CENPV	17p11.2	0.151013747	0.043606	0.087365
ARHGAP15	2q22.2-q2	-0.151000225	0.043625	0.087389
RNF19B	1p35.1	0.1509991	0.043627	0.087389
KCNS2	8q22.2	-0.150988996	0.043641	0.087408
RAD52	12p13.33	-0.150925868	0.04373	0.087578
MAGED4	Xp11.22	-0.150888205	0.043783	0.087676
AGT	1q42.2	-0.150879836	0.043795	0.087691
ARVCF	22q11.21	-0.150854728	0.04383	0.087753
JPH2	20q13.12	0.150842174	0.043848	0.08778
TM4SF5	17p13.2	0.150838304	0.043854	0.087782
PLAC4	21q22.2	0.150823085	0.043875	0.087816
STMN4	8p21.2	-0.150818376	0.043882	0.087821
ROCK2	2p25.1	-0.150815052	0.043887	0.087821

UAP1L1	9q34.3	-0.150789865	0.043922	0.087884
TMEM106B	7p21.3	-0.150771033	0.043949	0.087929
HTRA2	2p13.1	0.150745925	0.043984	0.087988
SYCP2	20q13.33	-0.150743833	0.043987	0.087988
ERBIN	5q12.3	0.150697801	0.044053	0.088107
ZNF260	19q13.12	-0.150695709	0.044056	0.088107
KIR3DL1	19q13.42	-0.150692465	0.04406	0.088108
CPSF2	14q32.12	-0.150681062	0.044077	0.088131
WFDC10A	20q13.12	0.150666717	0.044097	0.088163
SLC9A6	Xq26.3	-0.150655954	0.044112	0.088185
OR6B3	2q37.3	-0.150647021	0.044125	0.088201
NAA20	20p11.23	-0.150641307	0.044133	0.088209
MID1IP1	Xp11.4	0.15059946	0.044193	0.088319
CD274	9p24.1	-0.150595354	0.044198	0.088322
LAMP5	20p12.2	0.150588998	0.044208	0.088331
RCL1	9p24.1	-0.150576523	0.044225	0.088358
SLC5A5	19p13.11	0.150547397	0.044267	0.088432
SNX1	15q22.31	-0.150538782	0.044279	0.088448
SERP2	13q14.11	-0.150509489	0.044321	0.088522
LRRIQ1	12q21.31	-0.150484987	0.044356	0.088583
GLB1	3p22.3	-0.150480196	0.044363	0.088588
SIT1	9p13.3	-0.150455088	0.044399	0.088651
KCNK13	14q32.11	-0.150446718	0.044411	0.088666
BRINP3	1q31.1	-0.150434578	0.044428	0.088692
MAPKAPK5	12q24.12	0.15042161	0.044447	0.08872
AIPL1	17p13.2	0.150353667	0.044544	0.088905
CCNJ	10q24.1	-0.150293976	0.044629	0.089067
MEMO1	2p22.3	0.15027933	0.04465	0.0891
ACYP2	2p16.2	-0.15016425	0.044816	0.089422
ARFIP1	4q31.3	0.150143326	0.044846	0.089473
RABL2B	22q13.33	-0.150101479	0.044907	0.089585
LVRN	5q23.1	-0.150058195	0.044969	0.0897
NASP	1p34.1	0.150036616	0.045	0.089754
TRA2B	3q27.2	-0.150007323	0.045043	0.089829
CEMP1	16p13.3	0.149961291	0.045109	0.089953
SPIN2A	Xp11.21	0.149955533	0.045118	0.089961
HMCN1	1q25.3-q25.4	-0.149898521	0.0452	0.090117
CHCHD6	3q21.3	0.149885967	0.045219	0.090144
NDUFA13	19p13.11	0.149860858	0.045255	0.090208
SLC9A7	Xp11.3-Xp11.4	-0.149850397	0.04527	0.090229
IDE	10q23.33	-0.149839935	0.045285	0.090238
CMTM5	14q11.2	-0.149838965	0.045287	0.090238
FABP12	8q21.13	-0.149837952	0.045288	0.090238
RNF170	8p11.21	0.149825288	0.045307	0.090266
CCNG2	4q21.1	0.149812734	0.045325	0.090293
TCP11	6p21.31	0.14978419	0.045366	0.090367
ENO2	12p13.31	0.149760425	0.045401	0.090427
CCDC122	13q14.11	-0.149720749	0.045459	0.090521
ADHFE1	8q13.1	-0.14972067	0.045459	0.090521
WDR4	21q22.3	0.149718578	0.045462	0.090521
RNF111	15q22.1-q22.2	-0.149710209	0.045474	0.090536
DAP3	1q22	0.149701839	0.045486	0.090549
LINC00265	7p14.1	0.149699747	0.04549	0.090549
SRGN	10q22.1	-0.14969347	0.045499	0.090558

THAP10	15q23	-0.149659992	0.045548	0.090643
ANKRD34C	15q25.1	-0.149658113	0.04555	0.090643
FGG	4q32.1	0.149651921	0.045559	0.090651
GLRX	5q15	-0.149580482	0.045664	0.09085
PITX3	10q24.32	0.149527098	0.045742	0.090997
TGOLN2	2p11.2	-0.149521897	0.04575	0.091003
ZNF655	7q22.1	-0.149486326	0.045802	0.091098
LINC00284	13q14.11	-0.149482826	0.045807	0.091099
CDK11A	1p36.33	0.149473772	0.04582	0.091116
GPM6A	4q34.2	-0.149470712	0.045825	0.091116
FAM124B	2q36.2	-0.149458158	0.045843	0.091144
CHPT1	12q23.2	0.149446572	0.04586	0.091168
TLR10	4p14	-0.149425648	0.045891	0.09122
CDK6	7q21.2	0.149408909	0.045915	0.09126
IL1RL2	2q12.1	-0.14939217	0.04594	0.0913
SMOC2	6q27	-0.149367062	0.045977	0.091364
C4ORF48	4p16.3	0.149340174	0.046017	0.091432
CD27-AS1	12p13.31	0.149337769	0.04602	0.091432
MAPKAP1	9q33.3	-0.149300107	0.046076	0.09152
RASGRP2	11q13.1	-0.149300107	0.046076	0.09152
OR51I2	11p15.4	-0.149298496	0.046078	0.09152
EDEM1	3p26.1	-0.149291737	0.046088	0.09153
FAM186B	12q13.12	-0.149174643	0.046261	0.091865
TCF23	2p23.3	-0.149162244	0.046279	0.091892
C1R	12p13.31	-0.149103425	0.046366	0.092053
ATP11B	3q26.33	0.149101333	0.04637	0.092053
TSEN34	19q13.42	0.149082502	0.046397	0.092099
SERPINI2	3q26.1	-0.149063988	0.046425	0.092145
TAT	16q22.2	-0.149059902	0.046431	0.092147
UBXN8	8p12	-0.149049024	0.046447	0.09217
METAP1D	2q31.1	-0.14899253	0.046531	0.092328
KIF5B	10p11.22	-0.148988346	0.046537	0.092331
ID2	2p25.1	-0.148977884	0.046553	0.092353
ARID4B	1q42.3	-0.148969514	0.046565	0.092368
CCDC92	12q24.31	-0.148963237	0.046575	0.092377
PHF7	3p21.1	-0.14895696	0.046584	0.092387
TSNARE1	8q24.3	0.148933944	0.046618	0.092446
HNRNPA2B1	7p15.2	0.14892976	0.046625	0.092449
FABP3	1p35.2	0.148910928	0.046653	0.092495
XPO1	2p15	0.148906744	0.046659	0.092498
AP1AR	4q25	-0.148900467	0.046668	0.092508
CHEK1	11q24.2	0.148864897	0.046721	0.092604
NELFB	9q34.3	0.148860712	0.046727	0.092607
ALS2	2q33.1	-0.148852342	0.04674	0.092623
ZNF696	8q24.3	-0.148837696	0.046762	0.092657
HMGCL	1p36.11	0.148827234	0.046777	0.092678
LINC00319	21q22.3	0.148806622	0.046808	0.09273
LZTS2	10q24.31	0.148722616	0.046934	0.09297
NAT8	2p13.1	-0.1486761	0.047004	0.093099
SPANXB1	Xq27.1	0.14864686	0.047047	0.093176
SCARA3	8p21.1	-0.148603352	0.047113	0.093297
ILDR2	1q24.1	-0.148570502	0.047162	0.093385
NLRC4	2p22.3	-0.148536397	0.047213	0.093477
RIPK1	6p25.2	-0.148530119	0.047223	0.093487

TNRC18	7p22. 1	0. 148525935	0. 047229	0. 09349
SH2D6	2p11. 2	0. 148516426	0. 047243	0. 093509
ABCD4	14q24. 3	0. 148511366	0. 047251	0. 093515
GGTLC2	22q11. 22	0. 148498734	0. 04727	0. 093543
TMSB4Y	Yq11. 221	-0. 148478799	0. 0473	0. 093593
EDEM3	1q25. 3	-0. 148423409	0. 047384	0. 09375
TUBGCP5	15q11. 2	-0. 148410855	0. 047403	0. 093775
FOLH1	11p11. 12	-0. 148408763	0. 047406	0. 093775
TTY15	Yq11. 221	-0. 148389926	0. 047434	0. 093822
UTP18	17q21. 33	-0. 148375285	0. 047456	0. 093856
PRRC2A	6p21. 33	-0. 148358546	0. 047482	0. 093897
GPATCH3	1p36. 11	-0. 148345992	0. 047501	0. 093925
NECAB2	16q23. 3	-0. 148337623	0. 047513	0. 093941
SUMO2	17q25. 1	0. 148331346	0. 047523	0. 09395
ASRGL1	11q12. 3	-0. 148316699	0. 047545	0. 093985
GPR101	Xq26. 3	-0. 14828716	0. 04759	0. 094064
DDX58	9p21. 1	0. 148281129	0. 047599	0. 094073
URAD	13q12. 2	-0. 148263712	0. 047625	0. 094108
FAM138B	2q14. 1	-0. 148261584	0. 047628	0. 094108
IER5	1q25. 3	0. 148260205	0. 047631	0. 094108
ZNF449	Xq26. 3	-0. 148239282	0. 047662	0. 094161
PLN	6q22. 31	-0. 148220451	0. 047691	0. 094208
MGME1	20p11. 23	0. 148195342	0. 047729	0. 094274
MAGEA3	Xq28	0. 148160179	0. 047782	0. 094362
GFAP	17q21. 31	-0. 14815985	0. 047783	0. 094362
RUNX1	21q22. 12	0. 148151403	0. 047796	0. 094378
CD63	12q13. 2	0. 148099094	0. 047875	0. 094526
ISOC1	5q23. 3	-0. 148076078	0. 04791	0. 09458
TEX11	Xq13. 1	-0. 148074911	0. 047912	0. 09458
USP9Y	Yq11. 221	-0. 148066781	0. 047925	0. 094586
RPE65	1p31. 3	-0. 148064019	0. 047929	0. 094586
CD69	12p13. 31	-0. 148063524	0. 04793	0. 094586
ALG13	Xq23	-0. 148046785	0. 047955	0. 094627
PCCB	3q22. 3	-0. 148025862	0. 047987	0. 094681
NOX4	11q14. 3	0. 14800703	0. 048016	0. 094728
ANKRD35	1q21. 1	0. 147996569	0. 048032	0. 09475
ANP32B	9q22. 33	0. 147986107	0. 048048	0. 094772
KIF26B	1q44	0. 147960998	0. 048086	0. 094839
BDNF-AS	11p14. 1	-0. 147942167	0. 048115	0. 094886
ARGLU1	13q33. 3	0. 147883581	0. 048204	0. 095048
TNFSF15	9q32	-0. 147882262	0. 048206	0. 095048
ARHGEF3	3p14. 3	-0. 147799887	0. 048333	0. 095288
BASP1-AS1	5p15. 1	-0. 147795674	0. 048339	0. 095291
CALML3	10p15. 1	-0. 147773115	0. 048374	0. 09535
SYN2	3p25. 2	-0. 147716193	0. 048461	0. 095513
FOLR1	11q13. 4	0. 147705808	0. 048477	0. 095535
AWAT1	Xq13. 1	-0. 147679693	0. 048517	0. 095605
MIA2	14q13. 2	-0. 147660008	0. 048548	0. 095655
TF	3q22. 1	-0. 147647145	0. 048568	0. 095685
DNER	2q36. 3	-0. 147632498	0. 04859	0. 09572
MYBPC3	11p11. 2	0. 147622758	0. 048605	0. 09574
TMED10	14q24. 3	-0. 147603205	0. 048635	0. 09579
TSEN54	17q25. 1	0. 14758019	0. 048671	0. 09585
LOC541473	7q11. 23	0. 147512685	0. 048775	0. 096046

CABLES1	18q11.2	0.147502772	0.04879	0.096067
HCG11	6p22.2	-0.147490218	0.04881	0.096092
ALDH16A1	19q13.33	0.147488126	0.048813	0.096092
BRD1	22q13.33	-0.147471387	0.048839	0.096134
MAGEB4	Xp21.2	-0.147444748	0.04888	0.096206
PHYHD1	9q34.11	0.147400247	0.048949	0.096332
C6ORF47	6p21.33	0.147387693	0.048969	0.096361
SMC5	9q21.12	-0.147341661	0.04904	0.096492
ZNF256	19q13.43	-0.147316553	0.049079	0.096559
IARS2	1q41	0.147312368	0.049086	0.096563
TPSD1	16p13.3	-0.14729993	0.049105	0.096591
ZNF692	1q44	0.147285167	0.049128	0.096622
UGT2B11	4q13.2	-0.147283486	0.049131	0.096622
FMR1NB	Xq27.3-q28	-0.147276124	0.049142	0.096635
SLC39A12	10p12.33	-0.147270977	0.04915	0.096642
EFCC1	3q21.3	-0.147257967	0.04917	0.096672
GBA2	9p13.3	-0.147239135	0.0492	0.09672
PCDHGA4	5q31.3	-0.147174272	0.049301	0.096909
EPHA3	3p11.1	-0.147167995	0.049311	0.096919
TCP11L1	11p13	-0.147159626	0.049324	0.096932
RSRC1	3q25.32	-0.147157534	0.049327	0.096932
GLUL	1q25.3	-0.147149164	0.04934	0.096948
CCR6	6q27	-0.147138702	0.049356	0.096971
NPEPL1	20q13.32	0.147132425	0.049366	0.09698
EPHX3	19p13.12	0.147111502	0.049399	0.097035
BAG1	9p13.3	0.147078024	0.049451	0.097128
HAT1	2q31.1	-0.14702153	0.049539	0.097293
KRT12	17q21.2	0.147011805	0.049555	0.097302
ABCE1	4q31.21	-0.147011069	0.049556	0.097302
ADAT1	16q23.1	-0.147008976	0.049559	0.097302
LINC00705	10p15.1	0.146994802	0.049581	0.097337
LINC01020	5p15.32	0.146954035	0.049645	0.097452
GRPEL1	4p16.1	0.146944113	0.049661	0.097473
DDX5	17q23.3	-0.14691482	0.049707	0.097554
GPD2	2q24.1	0.146906451	0.04972	0.097555
CCDC113	16q21	-0.146905481	0.049722	0.097555
LOC400710	19q13.33	-0.146905364	0.049722	0.097555
VGF	7q22.1	-0.146833218	0.049835	0.097764
FAM226B	Xq13.1	-0.146831126	0.049838	0.097764
PSMD3	17q21.1	0.146783002	0.049914	0.097904
TRAPPC13	5q12.3	-0.146749524	0.049967	0.097997
FIRRE	Xq26.2	0.146745137	0.049974	0.098001
ZFY	Yp11.2	-0.146735676	0.049989	0.098021
CT62	15q23	0.146717124	0.050018	0.098069
FOS	14q24.3	0.14663026	0.050156	0.098328
CILP	15q22.31	-0.146605151	0.050195	0.098394
CP	3q24-q25	0.146603059	0.050199	0.098394
OR10V1	11q12.1	-0.146575129	0.050243	0.098471
NEIL1	15q24.2	0.146544473	0.050291	0.098556
TAF6	7q22.1	0.146540288	0.050298	0.09856
SEC31A	4q21.22	-0.146523549	0.050325	0.098602
CCT2	12q15	-0.146510995	0.050345	0.098631
GLO1	6p21.2	-0.146496349	0.050368	0.098664
PI4K2B	4p15.2	-0.146494256	0.050371	0.098664

PDK1	2q31.1	0.146487979	0.050381	0.098674
RNASE9	14q11.2	0.146478064	0.050397	0.098695
EXOSC4	8q24.3	0.146454502	0.050434	0.098759
FHOD3	18q12.2	0.146427301	0.050478	0.09882
TMX1	14q22.1	-0.146427301	0.050478	0.09882
PPAN-P2RY1	19p13.2	-0.146425614	0.05048	0.09882
KCNIP4	4p15.31-1	-0.146347792	0.050604	0.099053
PELI2	14q22.3	-0.146331053	0.050631	0.099095
AKAP8L	19p13.12	0.146326868	0.050638	0.099097
CDH7	18q22.1	-0.146324153	0.050642	0.099097
ARMC9	2q37.1	0.146270374	0.050728	0.099256
HOXD11	2q31.1	0.146254291	0.050753	0.099296
CDKN3	14q22.2	0.146218065	0.050811	0.0994
LRCH4	7q22.1	0.146213881	0.050818	0.099403
HIST1H2BM	6p22.1	0.146185352	0.050864	0.099483
SHOC1	9q31.3	0.146173142	0.050883	0.099511
RAB6A	11q13.4	0.146146925	0.050925	0.099574
MIR99AHG	21q21.1	-0.146146925	0.050925	0.099574
GLDC	9p24.1	-0.146142817	0.050932	0.099577
ACTRT3	3q26.2	0.146136463	0.050942	0.099587
MS4A4A	11q12.2	-0.146123909	0.050962	0.099617
CTSZ	20q13.32	0.146119725	0.050969	0.09962
NSUN5P1	7q11.23	0.146082062	0.051029	0.099729
CYP2A13	19q13.2	0.14607767	0.051036	0.099733
LOC100130	1q43	-0.146050189	0.051081	0.099809
OLFML1	11p15.4	-0.146033938	0.051107	0.099847
RBM38	20q13.31	-0.146031846	0.05111	0.099847
POU3F3	2q12.1	-0.145981948	0.05119	0.099994
KCTD10	12q24.11	-0.145977444	0.051198	0.099999
GP5	3q29	-0.145972351	0.051206	0.100005
SDHAF1	19q13.12	0.14596489	0.051218	0.100019
UVSSA	4p16.3	0.145920951	0.051289	0.100147
RAB43	3q21.3	0.145910489	0.051305	0.10017
ZC2HC1C	14q24.3	-0.145900027	0.051322	0.100174
ZNF324B	19q13.43	-0.145900027	0.051322	0.100174
GSTT2	22q11.23	-0.145900027	0.051322	0.100174
DPY19L2	12q14.2	-0.145874919	0.051363	0.100243
COL10A1	6q22.1	0.145826795	0.051441	0.100382
VPS35	16q11.2	0.145824702	0.051444	0.100382
PSMD11	17q11.2	0.145791225	0.051498	0.100478
IP6K2	3p21.31	0.14578704	0.051505	0.100478
HNRNPR	1p36.12	-0.145784948	0.051508	0.100478
IKBKE	1q32.1	0.145778671	0.051518	0.100488
CAPN6	Xq23	-0.145764024	0.051542	0.100524
RDH5	12q13.2	0.145757747	0.051552	0.100524
ZCCHC14	16q24.2	-0.145757747	0.051552	0.100524
ANKS1A	6p21.31	-0.145749378	0.051566	0.100541
MMP24	20q11.22	-0.145717992	0.051617	0.10063
CD3E	11q23.3	-0.145665683	0.051702	0.100786
KATNA1	6q25.1	-0.145640575	0.051742	0.100846
SNRNP70	19q13.33	0.145640575	0.051742	0.100846
OMD	9q22.31	-0.145555911	0.05188	0.101104
VWC2	7p12.2	-0.14555002	0.05189	0.101113
HBP1	7q22.3	-0.14553805	0.051909	0.101138

ETNK1	12p12.1	-0.145535957	0.051912	0.101138
CCDC155	19q13.33	-0.145502111	0.051968	0.101233
FAM205A	9p13.3	-0.145499848	0.051971	0.101233
CXORF56	Xq24	-0.145496202	0.051977	0.101234
C12ORF45	12q23.3	0.145477371	0.052008	0.101284
CYP3A7	7q22.1	0.145465121	0.052028	0.101301
CDC42BPA	1q42.13	0.145464817	0.052028	0.101301
CCDC189	16p11.2	0.145462725	0.052032	0.101301
MEOX2	7p21.2	-0.145408628	0.05212	0.101463
SLC06A1	5q21.1	-0.145394129	0.052144	0.101498
ITM2B	13q14.2	0.145391585	0.052148	0.101498
OSGIN2	8q21.3	-0.145347645	0.05222	0.101628
BICRA	19q13.33	0.145335091	0.05224	0.101658
ELMOD2	4q31.1	-0.145328814	0.052251	0.101658
FGF11	17p13.1	0.145328814	0.052251	0.101658
AACS	12q24.31	-0.145318352	0.052268	0.101682
CCNG1	5q34	-0.145314167	0.052275	0.101685
TRAPPC12	2p25.3	0.145259766	0.052364	0.101849
ANXA9	1q21.3	0.145255581	0.052371	0.101852
CDV3	3q22.1	-0.145192811	0.052474	0.102033
LT01	11q13.3	0.145192811	0.052474	0.102033
NINJ2	12p13.33	0.145167702	0.052515	0.102103
AQP3	9p13.3	-0.145136317	0.052567	0.102193
CT45A2	Xq26.3	0.145115242	0.052601	0.102251
HS3ST4	16p12.1	-0.145111872	0.052607	0.102252
PCDH11Y	Yp11.2	-0.145095593	0.052634	0.102294
IRGQ	19q13.31	-0.145090285	0.052642	0.102301
TLE3	15q23	0.145042161	0.052722	0.102442
NAT1	8p22	0.145037976	0.052729	0.102442
EFHB	3p24.3	-0.145033931	0.052735	0.102442
STRADB	2q33.1	-0.145033792	0.052736	0.102442
ARID4A	14q23.1	-0.145027514	0.052746	0.102452
BEND6	6p12.1	-0.14502333	0.052753	0.102452
PCNT	21q22.3	-0.145021237	0.052756	0.102452
MGC12916	17p12	-0.145006591	0.05278	0.102479
NUDCD3	7p13	0.145006591	0.05278	0.102479
KCNQ1	11p15.5-1	0.144983575	0.052818	0.102543
GTF3A	13q12.2	0.144960559	0.052856	0.102607
FTHL17	Xp21.2	-0.144933523	0.052901	0.102684
DLL4	15q15.1	-0.144893604	0.052967	0.102802
TTLL5	14q24.3	0.14487268	0.053002	0.102859
SGSM3	22q13.1	0.144862218	0.053019	0.102883
YWHAB	20q13.12	0.144849664	0.05304	0.102913
ZNF442	19p13.2	-0.144820371	0.053089	0.102998
RPL18	19q13.33	0.144809909	0.053106	0.103021
CCR1	3p21.31	-0.14480154	0.05312	0.10303
PYY2	17q11.2	-0.144798051	0.053126	0.10303
DSG1	18q12.1	-0.144795145	0.05313	0.10303
SNORA57	11q12.3	0.144794885	0.053131	0.10303
ATF6B	6p21.32	0.144788986	0.053141	0.103039
FRYL	4p11	-0.144778524	0.053158	0.103052
KLHL6	3q27.1	-0.144778524	0.053158	0.103052
TAS2R8	12p13.2	-0.144751665	0.053203	0.103129
CYP4F8	19p13.12	0.144729404	0.05324	0.103181

KRT39	17q21. 2	-0. 144729269	0. 05324	0. 103181
CYP2C8	10q23. 33	-0. 144705292	0. 05328	0. 103248
LRRC6	8q24. 22	0. 144657167	0. 05336	0. 10339
PDCD7	15q22. 31	-0. 144655075	0. 053363	0. 10339
RNF217-AS6	6q22. 31	-0. 144646784	0. 053377	0. 103407
VPS39	15q15. 1	-0. 144638336	0. 053391	0. 103424
ATP1B1	1q24. 2	0. 14462369	0. 053416	0. 103462
KRT85	12q13. 13	-0. 144614916	0. 05343	0. 103475
CHORDC1	11q14. 3	-0. 144613228	0. 053433	0. 103475
GPR137	11q13. 1	0. 144596489	0. 053461	0. 103519
GTF2IRD2	7q11. 23	-0. 144569288	0. 053507	0. 103597
OTOP2	17q25. 1	0. 144552964	0. 053534	0. 103636
RDH8	19p13. 2	-0. 144551252	0. 053537	0. 103636
IFIT2	10q23. 31	0. 14454418	0. 053548	0. 103648
MARK4	19q13. 32	0. 144525349	0. 05358	0. 103699
EXOC1L	4q12	0. 144504876	0. 053614	0. 103755
NXPH2	2q22. 1	-0. 14440379	0. 053783	0. 104073
C12ORF74	12q22	-0. 144383695	0. 053817	0. 104128
IL17RD	3p14. 3	-0. 14436633	0. 053846	0. 104174
KDM5C	Xp11. 22	-0. 144345406	0. 053881	0. 104232
HIBCH	2q32. 2	0. 144288913	0. 053976	0. 104406
SPATA20	17q21. 33	0. 14425962	0. 054026	0. 104491
PRAMEF6	1p36. 21	-0. 144244058	0. 054052	0. 104529
AP3B1	5q14. 1	-0. 144238696	0. 054061	0. 104529
RPL15	3p24. 2	-0. 144238696	0. 054061	0. 104529
DEF8	16q24. 3	-0. 144232419	0. 054071	0. 104539
RAB35	12q24. 23	-0. 144226142	0. 054082	0. 104546
CD2	1p13. 1	-0. 14422405	0. 054086	0. 104546
CCT3	1q22	0. 144213588	0. 054103	0. 10457
NANOS3	19p13. 12	0. 144210525	0. 054108	0. 10457
F11	4q35. 2	-0. 144205076	0. 054118	0. 104578
TRMT2B	Xq22. 1	-0. 144163371	0. 054188	0. 104693
ZNF670	1q44	-0. 144163371	0. 054188	0. 104693
ARHGAP11E	15q13. 2	0. 14412586	0. 054251	0. 104803
VTI1A	10q25. 2	0. 144123616	0. 054255	0. 104803
PLXNB1	3p21. 31	0. 144098508	0. 054297	0. 104875
FUT8-AS1	14q23. 3	0. 144092231	0. 054308	0. 104885
NOP53	19q13. 33	0. 144071308	0. 054343	0. 104943
SIGLEC11	19q13. 33	-0. 14405569	0. 05437	0. 104984
ADI1	2p25. 3	0. 144031553	0. 054411	0. 10505
ZNF747	16p11. 2	-0. 14402946	0. 054414	0. 10505
SLC24A5	15q21. 1	-0. 144020927	0. 054429	0. 105067
E4F1	16p13. 3	0. 143939489	0. 054567	0. 105324
CRAMP1	16p13. 3	-0. 14393112	0. 054581	0. 105341
DENND1C	19p13. 3	-0. 143924843	0. 054592	0. 105351
NAXE	1q22	0. 143920658	0. 054599	0. 105355
ZNF707	8q24. 3	0. 143882995	0. 054663	0. 105465
RASGRF1	15q25. 1	-0. 143880903	0. 054666	0. 105465
TMEM186	16p13. 2	0. 143876718	0. 054673	0. 105468
GAGE2B	Xp11. 23	-0. 143862564	0. 054697	0. 105501
SMC1B	22q13. 31	-0. 143860544	0. 054701	0. 105501
BTNL9	5q35. 3	-0. 143841148	0. 054734	0. 105554
SNCAIP	5q23. 2	-0. 143778378	0. 054841	0. 10575
OR3A3	17p13. 2	-0. 143762895	0. 054867	0. 105791

CHIT1	1q32.1	0.143757454	0.054876	0.105799
DCANP1	5q31.1	-0.143745483	0.054897	0.105828
GZMA	5q11.2	-0.143732346	0.054919	0.105861
LAMA2	6q22.33	-0.14366539	0.055034	0.106071
SLC35A5	3q13.2	-0.143634005	0.055087	0.106164
HIST2H3C	1q21.2	0.143624328	0.055104	0.106186
ATAD3B	1p36.33	0.143610989	0.055127	0.10622
SLC25A51F	6q12	-0.143605175	0.055137	0.106229
NLRP5	19q13.43	-0.143591551	0.05516	0.106263
LINC0241E	12q24.33	-0.143576548	0.055186	0.106303
KHDRBS3	8q24.23	-0.143569142	0.055198	0.106317
KLHL18	3p21.31	-0.143564957	0.055205	0.10632
C2CD3	11q13.4	-0.143546126	0.055238	0.106366
LINC00244	7q36.3	0.143543833	0.055242	0.106366
RPS27A	2p16.1	0.143541941	0.055245	0.106366
DHRS4-AS1	11q11.2	-0.143535664	0.055256	0.106376
RPS24	10q22.3	0.143518925	0.055284	0.106421
EYA4	6q23.2	-0.143468413	0.055371	0.106578
CYTIP	2q24.1	-0.143361999	0.055554	0.10692
USP15	12q14.1	-0.143355722	0.055565	0.10693
ESR2	14q23.2-c	-0.14333689	0.055597	0.106982
WDR6	3p21.31	-0.143313874	0.055637	0.107048
LYPD1	2q21.2	0.143297136	0.055666	0.107087
LRP3	19q13.11	-0.143292951	0.055673	0.107087
RAD51AP1	12p13.32	0.143292951	0.055673	0.107087
HPS3	3q24	0.143282489	0.055691	0.107111
GIPC2	1p31.1	0.143276212	0.055702	0.107122
ZPLD1	3q12.3	0.143261269	0.055728	0.107161
BIN2	12q13.13	-0.143255288	0.055738	0.107167
NTF3	12p13.31	0.143253196	0.055742	0.107167
OR1L8	9q33.2	-0.143242012	0.055761	0.107194
EVI2A	17q11.2	-0.143221811	0.055796	0.107251
RBFOX2	22q12.3	-0.14320298	0.055829	0.107303
MAPK11	22q13.33	-0.143192518	0.055847	0.107328
ABHD16A	6p21.33	-0.143152763	0.055916	0.10745
HRC	19q13.33	-0.143138191	0.055941	0.107488
ST3GAL1	8q24.22	0.143110916	0.055988	0.107568
MMP12	11q22.2	0.143106731	0.055995	0.107572
LTA4H	12q23.1	-0.143064884	0.056068	0.107701
CTF1	16p11.2	0.143054422	0.056086	0.107726
PEG3-AS1	19q13.43	-0.143046992	0.056099	0.10774
ACOT7	1p36.31	0.14304396	0.056104	0.10774
PXDNL	8q11.22-c	0.142995836	0.056188	0.10789
CD79B	17q23.3	-0.14298119	0.056213	0.107918
CYP51A1	7q21.2	0.14298119	0.056213	0.107918
OR5M1	11q12.1	-0.142943168	0.056279	0.108032
GJD2	15q14	-0.142940936	0.056283	0.108032
PCOTH	13q12.12	0.142889126	0.056374	0.108195
PEX7	6q23.3	-0.142882849	0.056385	0.108202
FKBP2	11q13.1	0.142880757	0.056388	0.108202
C10RF105	1q24.3	0.142865086	0.056416	0.108244
LINC01777	1p36.32	-0.142855299	0.056433	0.108266
SPATA22	17p13.2	-0.142838568	0.056462	0.108307
GNAS	20q13.32	-0.142836817	0.056465	0.108307

MCM9	6q22. 31	-0. 142813801	0. 056505	0. 108364
ZBTB3	11q12. 3	-0. 142813801	0. 056505	0. 108364
OFD1	Xp22. 2	0. 142761492	0. 056597	0. 108529
TRAP1	16p13. 3	0. 142755215	0. 056608	0. 108539
VPS50	7q21. 2-q2	-0. 142725922	0. 056659	0. 108617
LURAP1L	9p23	0. 142725922	0. 056659	0. 108617
ANKLE2	12q24. 33	0. 142692445	0. 056717	0. 108715
FGD4	12p11. 21	0. 142690352	0. 056721	0. 108715
GRWD1	19q13. 33	0. 142677798	0. 056743	0. 108747
ZNF252P-A	8q24. 3	0. 142633859	0. 05682	0. 108884
MRPS15	1p34. 3	0. 142629674	0. 056827	0. 108888
ZNF653	19p13. 2	0. 142585734	0. 056905	0. 109025
ASCL3	11p15. 4	0. 142519379	0. 057021	0. 109238
GTF2H5	6q25. 3	-0. 142495763	0. 057063	0. 109308
GBX1	7q36. 1	-0. 142492058	0. 057069	0. 10931
LGR5	12q21. 1	0. 142476932	0. 057096	0. 10935
NROB1	Xp21. 2	-0. 142455352	0. 057134	0. 109411
FAHD1	16p13. 3	0. 142449731	0. 057144	0. 109411
PPP2R5E	14q23. 2	-0. 142449731	0. 057144	0. 109411
OR1K1	9q33. 2	-0. 142437818	0. 057165	0. 10944
TMEM222	1p36. 11	0. 142418346	0. 057199	0. 109496
GLS	2q32. 2	-0. 142399515	0. 057233	0. 109549
KLHDC2	14q21. 3	-0. 142391145	0. 057247	0. 109567
RPF1	1p22. 3	0. 142336744	0. 057343	0. 10974
FOXJ2	12p13. 31	-0. 142332559	0. 057351	0. 109744
STEAP4	7q21. 12	-0. 14232419	0. 057366	0. 109761
ASCL4	12q23. 3	-0. 142300235	0. 057408	0. 109824
C17ORF47	17q22	0. 142299454	0. 057409	0. 109824
STAU1	20q13. 13	0. 142259327	0. 057481	0. 109948
CADM2	3p12. 1	-0. 142256572	0. 057485	0. 109948
RFX5	1q21. 3	-0. 142240495	0. 057514	0. 109992
DGKI	7q33	-0. 142235339	0. 057523	0. 109999
PRKRIP1	7q22. 1	0. 142227941	0. 057536	0. 11
HLA-DRA	6p21. 32	-0. 142225849	0. 05754	0. 11
LRCH1	13q14. 13-	0. 142225849	0. 05754	0. 11
NMT2	10p13	-0. 142194464	0. 057596	0. 110096
PROS1	3q11. 1	-0. 142175632	0. 057629	0. 110149
ANKLE1	19p13. 11	-0. 142171522	0. 057636	0. 110153
MAGOH	1p32. 3	0. 142167263	0. 057644	0. 110157
SYCP2L	6p24. 2	-0. 142154019	0. 057667	0. 110191
TBL1Y	Yp11. 2	-0. 142150931	0. 057673	0. 110191
CYP4F35P	18p11. 21	0. 142144544	0. 057684	0. 110202
CRAT	9q34. 11	-0. 142129601	0. 057711	0. 110242
AHDC1	1p36. 11-f	0. 142081476	0. 057796	0. 110381
PPP1R2B	5q33. 3	-0. 142079384	0. 0578	0. 110381
SSU72	1p36. 33	0. 142079384	0. 0578	0. 110381
RBM12B	8q22. 1	-0. 142071015	0. 057815	0. 110393
GAGE13	Xp11. 23	-0. 142069741	0. 057817	0. 110393
ADAM29	4q34. 1	-0. 142022177	0. 057902	0. 110544
NORAD	20q11. 23	-0. 142010336	0. 057923	0. 110574
NSUN5P2	7q11. 23	0. 141966397	0. 058001	0. 110709
RYK	3q22. 2	0. 141964304	0. 058005	0. 110709
ABRA	8q23. 1	-0. 141928922	0. 058068	0. 110819
BAHD1	15q15. 1	-0. 14192455	0. 058076	0. 110824

ABHD13	13q33.3	-0.141918273	0.058087	0.110835
CCDC144NL	17p11.2	-0.141837986	0.058231	0.111098
SDCBP	8q12.1	-0.141830394	0.058245	0.111113
SLC27A4	9q34.11	0.141801101	0.058297	0.111203
TOMM20L	14q23.1	-0.141789825	0.058317	0.111231
AGBL3	7q33	-0.141759328	0.058372	0.111321
FAM189A2	9q21.12	-0.141757161	0.058376	0.111321
NKAIN1	1p35.2	-0.141742589	0.058402	0.111361
SIM1	6q16.3	-0.141710797	0.058459	0.111459
HIST1H3G	6p22.2	0.141700565	0.058477	0.111483
TTC23	15q26.3	0.141686021	0.058504	0.111522
IL27	16p12.1-1	0.141677321	0.058519	0.111542
FPR2	19q13.41	-0.1416627	0.058546	0.111581
ZNF814	19q13.43	-0.141625343	0.058613	0.111695
LINC00472	6q13	0.14162325	0.058617	0.111695
CDY2B	Yq11.222	-0.141612576	0.058636	0.111721
TAS2R1	5p15.31	-0.141598534	0.058661	0.111759
TENM4	11q14.1	-0.141566757	0.058718	0.111857
EED	11q14.2	0.141531261	0.058782	0.111954
BTNL8	5q35.3	0.141529593	0.058785	0.111954
TEKT5	16p13.13	0.141529346	0.058786	0.111954
PRELID3A	18p11.21	0.141510263	0.05882	0.112001
KCNJ16	17q24.3	-0.141509291	0.058822	0.112001
9-Mar	12q14.1	0.141466324	0.0589	0.112138
STX1B	16p11.2	0.141453769	0.058922	0.112171
RAB14	9q33.2	-0.141424476	0.058975	0.112261
FKBP14	7p14.3	-0.141407738	0.059006	0.112308
SHISA6	17p12	-0.141393396	0.059032	0.112344
CBL	11q23.3	-0.141390999	0.059036	0.112344
F2R	5q13.3	-0.14136589	0.059081	0.11242
REL	2p16.1	-0.141347059	0.059116	0.112471
ALG5	13q13.3	0.141344967	0.059119	0.112471
TXNDC9	2q11.2	0.141340782	0.059127	0.112475
SERPINE3	13q14.3	-0.141295255	0.05921	0.112621
GALNT8	12p13.32	-0.141290766	0.059218	0.112626
MARS2	2q33.1	-0.141263365	0.059267	0.112691
GZMK	5q11.2	-0.141261273	0.059271	0.112691
TMA16	4q32.2	0.141261273	0.059271	0.112691
LINC02694	15q14	-0.141259577	0.059274	0.112691
PNMT	17q12	0.141254996	0.059283	0.112696
TFEC	7q31.2	-0.141227795	0.059332	0.112779
TXNDC12	1p32.3	0.141185948	0.059408	0.112908
CNTF	11q12.1	-0.141184151	0.059412	0.112908
GPR146	7p22.3	-0.141177578	0.059424	0.11292
CCKBR	11p15.4	-0.141163424	0.059449	0.112959
CEP85	1p36.11	-0.141144101	0.059484	0.113004
GIPR	19q13.32	0.141144101	0.059484	0.113004
KRT18P55	17q11.2	-0.141128557	0.059513	0.113047
GBP5	1p22.2	-0.141121085	0.059526	0.113062
OR2C3	1q44	-0.141117148	0.059534	0.113065
LRATD2	8q24.21	0.141108531	0.059549	0.113084
GRIPAP1	Xp11.23	0.141087607	0.059588	0.113146
PTENP1	9p13.3	-0.14108133	0.059599	0.113157
NKG7	19q13.41	-0.141058314	0.059641	0.113226

CLRN3	10q26.2	0.14104576	0.059664	0.113259
PCCA	13q32.3	-0.140991359	0.059763	0.113437
RPRM	2q23.3	-0.140975242	0.059793	0.113482
ASAH1	8p22	-0.140968343	0.059805	0.113495
CCDC70	13q14.3	0.140949486	0.05984	0.11355
CLIC6	21q22.12	0.140943234	0.059851	0.113561
TMPRSS7	3q13.2	0.140932607	0.059871	0.113587
GRAMD4	22q13.31	-0.140907664	0.059917	0.113663
MCRIP2	16p13.3	0.140901387	0.059928	0.113672
MAB21L2	4q31.3	0.140898986	0.059933	0.113672
VPS26A	10q22.1	0.140890925	0.059947	0.113689
PRPH2	6p21.1	-0.140884648	0.059959	0.1137
GRK5	10q26.11	-0.140878371	0.05997	0.113711
SLC25A21	14q13.3	-0.140859835	0.060004	0.113765
ACTR5	20q11.23	0.140841829	0.060037	0.113817
C9ORF153	9q21.33	-0.140827525	0.060064	0.113856
TRPC5	Xq23	-0.140822965	0.060072	0.113861
BOLA3	2p13.1	0.140811416	0.060093	0.11389
CTAGE1	18q11.2	-0.140763292	0.060182	0.114047
MRGPRD	11q13.3	-0.140759759	0.060188	0.114048
NME9	3q22.3	-0.140750811	0.060205	0.114069
GPR89A	1q21.1	0.140740276	0.060224	0.114095
NDUFAB1	16p12.2	0.140696336	0.060305	0.114237
YARS	1p35.1	0.140692152	0.060313	0.114241
CSTL1	20p11.21	0.14067159	0.060351	0.1143
IGSF1	Xq26.1	-0.140669136	0.060355	0.1143
HDAC2	6q21	-0.140658674	0.060375	0.114326
DYSF	2p13.2	-0.140652397	0.060386	0.114337
FCER2	19p13.2	-0.140626641	0.060434	0.114416
PPDPFL	8q11.21	0.140606652	0.060471	0.114465
TMEM132A	11q12.2	0.140606365	0.060471	0.114465
UTP4	16q22.1	0.140597996	0.060487	0.114483
GAD1	2q31.1	0.140586561	0.060508	0.114513
SCML1	Xp22.13	-0.14057498	0.060529	0.114542
H3F3A	1q42.12	0.140568703	0.060541	0.114553
LAPTM4A	2p24.1	0.140562425	0.060552	0.114564
NDUFS5	1p34.3	0.140545687	0.060583	0.114612
IKBIP	12q23.1	-0.140528948	0.060614	0.11466
NSMF	9q34.3	0.140520578	0.06063	0.114668
TMEM143	19q13.33	0.140520578	0.06063	0.114668
NFE2L3P2	17q21.32	0.140516394	0.060637	0.114671
F2RL3	19p13.11	-0.140503839	0.060661	0.114704
ST8SIA5	18q21.1	-0.140500671	0.060667	0.114705
RPL18A	19p13.11	0.140476639	0.060711	0.114778
NRTN	19p13.3	-0.140466177	0.06073	0.114804
CHMP5	9p13.3	0.140430607	0.060796	0.114907
PAOX	10q26.3	0.140430607	0.060796	0.114907
OR13C5	9q31.1	-0.140401004	0.060851	0.115
CSRP1	1q32.1	0.140395037	0.060862	0.115008
TM4SF20	2q36.3	0.140392478	0.060867	0.115008
CRTAM	11q24.1	-0.140369929	0.060909	0.115076
KDM4E	11q21	-0.140344217	0.060957	0.115156
ARHGAP5	14q12	0.140328082	0.060987	0.115194
C7ORF57	7p12.3	0.140325695	0.060991	0.115194

MCUB	4q25	0.140323897	0.060995	0.115194
IL17D	13q12.11	-0.140294604	0.061049	0.115286
SPHK2	19q13.33	0.140265311	0.061104	0.115378
TRERF1	6p21.1	0.140194171	0.061236	0.115618
FUT8	14q23.3	0.140185801	0.061252	0.115633
CATSPERE	1q44	-0.140183709	0.061256	0.115633
WFDC6	20q13.12	0.140163184	0.061294	0.115694
TSNAXIP1	16q22.1	-0.140106292	0.061401	0.115884
FRAT2	10q24.1	0.140081183	0.061448	0.115962
C9ORF129	9q22.31	-0.140049798	0.061506	0.116062
CCDC190	1q23.3	0.139997117	0.061605	0.116232
SNAI1	20q13.13	-0.139995397	0.061608	0.116232
ARHGEF17	11q13.4	-0.139982843	0.061632	0.116266
MTFMT	15q22.31	0.139966104	0.061663	0.116314
OR11A1	6p22.1	-0.13996268	0.06167	0.116315
SNAI2	8q11.21	0.139951457	0.061691	0.116344
PDZK1	1q21.1	-0.139932626	0.061726	0.1164
AP4E1	15q21.2	-0.139884502	0.061817	0.116559
TMEM19	12q21.1	-0.139853117	0.061876	0.11666
INTS7	1q32.3	-0.139800808	0.061974	0.116834
ECRG4	2q12.2	-0.139788985	0.061996	0.116865
HLA-DPB1	6p21.32	-0.139771515	0.062029	0.116913
NKD1	16q12.1	0.139769422	0.062033	0.116913
KRT1	12q13.13	-0.139752824	0.062065	0.116958
OR6F1	1q44	-0.13975057	0.062069	0.116958
SBSPON	8q21.11	-0.139733852	0.062101	0.117006
TYSND1	10q22.1	0.139712929	0.06214	0.11707
SRPRB	3q22.1	-0.139704559	0.062156	0.117088
GFI1B	9q34.13	0.139677907	0.062206	0.117163
HAPLN4	19p13.11	0.139677359	0.062207	0.117163
CDK5R2	2q35	-0.139671082	0.062219	0.117175
WRAP53	17p13.1	-0.139643881	0.062271	0.11726
SSTR5-AS1	16p13.3	-0.139612496	0.06233	0.117361
CCDC150	2q33.1	0.139604126	0.062346	0.11738
ZKSCAN5	7q22.1	-0.139599941	0.062354	0.117384
RNASEH2B	13q14.3	-0.139541355	0.062465	0.117582
SCRN3	2q31.1	-0.139522524	0.062501	0.117638
GLI3	7p14.1	-0.139489047	0.062564	0.117747
SLC25A30	13q14.13	-0.139472308	0.062596	0.117795
GPR31	6q27	-0.139468605	0.062603	0.117797
GPER1	7p22.3	0.139459754	0.06262	0.117818
PCDHA9	5q31.3	-0.139398965	0.062735	0.118013
VGLL2	6q22.1	0.139398631	0.062736	0.118013
GLB1L3	11q25	-0.139394303	0.062744	0.118013
EDDM3A	14q11.2	-0.139392945	0.062747	0.118013
ZNF585A	19q13.12	-0.139386521	0.062759	0.118025
PCDH8	13q14.3	-0.139369839	0.062791	0.118073
FCRL6	1q23.2	-0.139364624	0.062801	0.118081
MORN1	1p36.32	-0.139357228	0.062815	0.118096
CCDC47	17q23.3	-0.139340489	0.062847	0.118145
RBM14	11q13.2	-0.139300734	0.062923	0.118277
PRPH	12q13.12	-0.139256868	0.063006	0.118423
DXO	6p21.33	-0.139244241	0.063031	0.118457
IMMP2L	7q31.1	-0.13921704	0.063083	0.118544

CEP89	19q13. 11	0. 139212855	0. 063091	0. 118548
CDC27	17q21. 32	-0. 139208671	0. 063099	0. 118551
SLC37A4	11q23. 3	-0. 139196117	0. 063123	0. 118585
SPATA6	1p33	-0. 139175193	0. 063163	0. 11865
SEC13	3p25. 3	0. 139152177	0. 063207	0. 118721
FLJ36000	17p11. 2	-0. 139133625	0. 063242	0. 118777
HCN4	15q24. 1	-0. 139129452	0. 06325	0. 118781
G2E3	14q12	-0. 139120792	0. 063267	0. 118801
SESTD1	2q31. 2	0. 139106145	0. 063295	0. 118842
C6ORF118	6q27	-0. 13910058	0. 063306	0. 118851
INCA1	17p13. 2	-0. 139083202	0. 063339	0. 118902
MYL2	12q24. 11	0. 139072366	0. 06336	0. 11893
PSD	10q24. 32	-0. 13906639	0. 063371	0. 118937
CHRNE	17p13. 2	-0. 139064298	0. 063375	0. 118937
NEFH	22q12. 2	-0. 139020359	0. 06346	0. 119084
CNEP1R1	16q12. 1	-0. 139000554	0. 063498	0. 119145
NAALAD2	11q14. 3	-0. 138997343	0. 063504	0. 119145
CMPK1	1p33	0. 138991066	0. 063516	0. 119153
RNF144A	2p25. 1	-0. 138988973	0. 06352	0. 119153
ENPP7	17q25. 3	-0. 13898137	0. 063535	0. 119168
MAP4K1	19q13. 2	-0. 138978511	0. 06354	0. 119168
CXADRP3	18p11. 21	-0. 138953899	0. 063587	0. 119246
SGMS2	4q25	0. 138949219	0. 063596	0. 119251
TMEFF1	9q31. 1	-0. 138940849	0. 063613	0. 11927
KRT23	17q21. 2	0. 138913648	0. 063665	0. 119354
C6ORF201	6p25. 2	-0. 138911556	0. 063669	0. 119354
PODXL2	3q21. 3	-0. 138903187	0. 063685	0. 119373
STIMATE	3p21. 1	-0. 138863432	0. 063762	0. 119505
OR5V1	6p22. 1	-0. 138851853	0. 063784	0. 119536
IGSF5	21q22. 2	0. 138842581	0. 063802	0. 119558
LINC00475	9q22. 31	-0. 138753564	0. 063974	0. 11987
TARP	7p14. 1	-0. 138744893	0. 063991	0. 11989
SLC28A1	15q25. 3	-0. 138725003	0. 064029	0. 119951
EIF4G1	3q27. 1	0. 138708597	0. 064061	0. 119999
MAPK1IP1I	14q22. 3	-0. 138704413	0. 064069	0. 120003
ECI1	16p13. 3	0. 138683489	0. 06411	0. 120062
TUSC7	3q13. 31	-0. 138681809	0. 064113	0. 120062
EIF1B	3p22. 1	-0. 138656289	0. 064162	0. 120144
CUTC	10q24. 2	-0. 138652104	0. 064171	0. 120144
TMEM132C	12q24. 32	-0. 138650012	0. 064175	0. 120144
IL23A	12q13. 3	0. 138622811	0. 064227	0. 120232
BET1L	11p15. 5	0. 138618626	0. 064235	0. 120235
BSDC1	1p35. 1	-0. 138562133	0. 064345	0. 120418
ASB7	15q26. 3	-0. 138562133	0. 064345	0. 120418
DHFR	5q14. 1	0. 138547486	0. 064374	0. 12046
MAMDC2	9q21. 12	-0. 138514008	0. 064439	0. 120567
MSRB2	10p12. 2	0. 138511916	0. 064443	0. 120567
DHX9	1q25. 3	-0. 138478438	0. 064508	0. 120674
COQ3	6q16. 2	-0. 138476346	0. 064512	0. 120674
TM4SF19	3q29	0. 13847328	0. 064518	0. 120674
ITIH6	Xp11. 22	-0. 138470248	0. 064524	0. 120674
SFRP4	7p14. 1	-0. 138413575	0. 064634	0. 120865
TPM1	15q22. 2	0. 138411483	0. 064639	0. 120865
TMEM147	19q13. 12	0. 138388467	0. 064683	0. 12093

GAGE2D	Xp11. 23	-0.138387611	0.064685	0.12093
SCARNA10	12p13. 31	-0.138383536	0.064693	0.120933
LOC641367	19p12	-0.13838017	0.0647	0.120934
RIMKLA	1p34. 2	-0.138317327	0.064822	0.121153
C3	19p13. 3	-0.138313142	0.064831	0.121157
KCND1	Xp11. 23	-0.138294311	0.064867	0.121214
NKAIN3	8q12. 3	0.13828481	0.064886	0.121238
LINC00661	19p13. 12	0.138280249	0.064895	0.121243
C2ORF72	2q37. 1	-0.13826711	0.064921	0.12128
TMEM167B	1p13. 3	-0.138260833	0.064933	0.121291
THG1L	5q33. 3	0.13823991	0.064974	0.121356
JOSD1	22q13. 1	0.138235725	0.064982	0.12136
ZNF416	19q13. 43	-0.138223171	0.065007	0.121395
SRP14P1	12p13. 31	-0.138200155	0.065052	0.121468
MYOT	5q31. 2	-0.138196463	0.065059	0.12147
ARPP19	15q21. 2	-0.138158308	0.065134	0.121599
QRFP	9q34. 12	-0.138117168	0.065215	0.121738
LINC0071C	10p14	-0.138081859	0.065284	0.121856
TRIM28	19q13. 43	0.138062059	0.065323	0.121918
POMC	2p23. 3	-0.138032766	0.065381	0.122014
ZNF500	16p13. 3	-0.13801812	0.06541	0.122056
CDH12	5p14. 3	-0.138000624	0.065444	0.122109
DEFB103A	8p23. 1	0.137973325	0.065498	0.122198
NACA2	17q23. 2	0.137959534	0.065525	0.122237
CLDN14	21q22. 13	0.137952571	0.065539	0.122252
KRTAP4-8	17q21. 2	-0.137940229	0.065563	0.122286
CD83	6p23	-0.137915594	0.065612	0.122365
HS3ST5	6q21-q22.	0.137864723	0.065712	0.122541
YWHAQ	2p25. 1	-0.137859101	0.065724	0.12255
IFIH1	2q24. 2	0.137840269	0.065761	0.122605
MRPS10	6p21. 1	0.137838177	0.065765	0.122605
C2ORF73	2p16. 2	-0.137813893	0.065813	0.122683
CKAP4	12q23. 3	-0.137804699	0.065831	0.122705
TRMT11	6q22. 32	0.137790053	0.06586	0.122744
UBE2G2	21q22. 3	-0.137787961	0.065864	0.122744
MTR	1q43	-0.137779591	0.065881	0.122764
LINC0155E	6q27	-0.13776786	0.065904	0.122796
TCF19	6p21. 33	0.13771682	0.066005	0.122966
FAM216B	13q14. 11	-0.137715441	0.066008	0.122966
DPH3P1	20q13. 33	-0.137704266	0.06603	0.122996
RPTOR	17q25. 3	-0.137693805	0.066051	0.123023
DOCK7	1p31. 3	-0.137662419	0.066113	0.123124
FUT7	9q34. 3	-0.137660327	0.066118	0.123124
ZNF774	15q26. 1	0.13765405	0.06613	0.123136
MTRFR2	6q23. 3	0.137624757	0.066188	0.123214
APIP	11p13	-0.137622664	0.066193	0.123214
DAZ4	Yq11. 23	-0.13762216	0.066194	0.123214
SUPT5H	19q13. 2	0.137620572	0.066197	0.123214
LANCL1	2q34	-0.137608018	0.066222	0.123249
WLS	1p31. 3	-0.137564078	0.066309	0.1234
DPF3	14q24. 2	-0.137507585	0.066422	0.123587
FAHD2B	2q11. 2	-0.137507585	0.066422	0.123587
ARHGEF38	4q24	0.137491134	0.066455	0.123637
VSTM2B	19q12	-0.137487211	0.066462	0.12364

CCAR1	10q21.3	-0.137442722	0.066551	0.123793
GAGE2C	Xp11.23	-0.137423294	0.06659	0.123854
SLC25A17	22q13.2	-0.137375766	0.066685	0.124016
PRKAG1	12q13.12	-0.137373674	0.066689	0.124016
IRF4	6p25.3	-0.137329734	0.066777	0.124168
PSG9	19q13.31	0.13732075	0.066795	0.12419
GLT8D1	3p21.1	-0.137310903	0.066815	0.124215
COMTD1	10q22.2	0.137296257	0.066844	0.124258
LINC00313	21q22.3	0.137288919	0.066859	0.124262
PIDD1	11p15.5	0.137287887	0.066861	0.124262
CD300LB	17q25.1	-0.137285795	0.066865	0.124262
MEX3B	15q25.2	-0.137279518	0.066878	0.124262
MIR17HG	13q31.3	0.137279518	0.066878	0.124262
GTF2IRD2	7q11.23	-0.137273241	0.066891	0.124274
ARC	8q24.3	-0.137250225	0.066937	0.124348
STK3	8q22.2	0.13724604	0.066945	0.124353
FTX	Xq13.2	-0.137239763	0.066958	0.124364
RNF166	16q24.2-c	-0.137225117	0.066987	0.124407
PTCD3	2p11.2	-0.137191639	0.067054	0.124521
ULBP3	6q25.1	0.137181177	0.067076	0.124548
TBCCD1	3q27.3	0.137170715	0.067097	0.124576
CLCA3P	1p22.3	0.137156532	0.067125	0.124615
IPO7	11p15.4	-0.137153977	0.06713	0.124615
MS4A1	11q12.2	-0.137144232	0.06715	0.12464
USP24	1p32.3	-0.137126776	0.067185	0.124694
ANKDD1A	15q22.31	-0.137118406	0.067202	0.124713
LIG3	17q12	-0.137051451	0.067337	0.124952
KRTAP10-1	21q22.3	0.136993749	0.067453	0.125156
GOLGA2P7	15q25.2	0.136990773	0.067459	0.125156
HSD17B6	12q13.3	0.136980311	0.06748	0.125178
FOXN1	17q11.2	0.136978693	0.067484	0.125178
PAQR5	15q23	0.136967757	0.067506	0.125208
ALG10B	12q12	-0.136963572	0.067514	0.125212
PDGFC	4q32.1	0.136957295	0.067527	0.125224
ARMH3	10q24.32	-0.136948926	0.067544	0.125243
SIRPG	20p13	-0.136942649	0.067557	0.125255
PHC3	3q26.2	-0.136932187	0.067578	0.125283
SIGLEC8	19q13.41	-0.13691754	0.067607	0.125326
ISM1	20p12.1	0.136896617	0.06765	0.125393
LMLN	3q29	-0.13689034	0.067662	0.125405
NFKBIL1	6p21.33	0.136856862	0.06773	0.125519
NEUROG1	5q31.1	-0.136852166	0.06774	0.125519
PLPPR2	19p13.2	-0.136850585	0.067743	0.125519
HNRNPA1L2	13q14.3	-0.136802461	0.067841	0.125689
NLRP3	1q44	-0.136781537	0.067883	0.125756
HDHD5-AS1	22q11.1	-0.136772728	0.067901	0.125777
SCARNA7	3q25.33	0.136724576	0.067999	0.125947
CLCN3	4q33	-0.136699935	0.068049	0.126028
NXT2	Xq23	-0.136691566	0.068066	0.126048
USP40	2q37.1	0.136683196	0.068083	0.126068
KRTAP10-3	21q22.3	-0.136663282	0.068124	0.126131
HNRNPUL2	11q12.3	0.13666018	0.06813	0.126131
LCE1C	1q21.3	0.136640175	0.068171	0.126195
C11ORF21	11p15.5	-0.136626703	0.068198	0.126234

OSBPL11	3q21. 2	-0. 136555563	0. 068343	0. 126491
ZBTB43	9q33. 3	-0. 136549285	0. 068356	0. 126503
SNTB2	16q22. 1	-0. 1365179	0. 06842	0. 12661
FCRL1	1q23. 1	-0. 136511557	0. 068433	0. 12661
S100A7A	1q21. 3	-0. 136510336	0. 068436	0. 12661
TMPRSS11F	4q13. 2	0. 136505497	0. 068445	0. 12661
ABHD18	4q28. 2	-0. 136505346	0. 068446	0. 12661
HSPA12B	20p13	-0. 136501161	0. 068454	0. 126615
SH3BP4	2q37. 2	-0. 136467684	0. 068523	0. 126729
XRN2	20p11. 22	-0. 136461406	0. 068536	0. 126741
CYP2B6	19q13. 2	0. 136443632	0. 068572	0. 126797
ACSM1	16p12. 3	0. 136438391	0. 068583	0. 126805
FBX011	2p16. 3	-0. 136421652	0. 068617	0. 126857
ZNHIT2	11q13. 1	0. 13641295	0. 068635	0. 126878
B3GNT4	12q24. 31	0. 136371435	0. 06872	0. 12701
GLYATL1	11q12. 1	-0. 136368822	0. 068725	0. 12701
SLC13A1	7q31. 32	-0. 136368796	0. 068725	0. 12701
OR10G8	11q24. 2	-0. 13635917	0. 068745	0. 127024
ZBTB34	9q33. 3	-0. 136358881	0. 068746	0. 127024
FAM78B	1q24. 1	-0. 136344235	0. 068776	0. 127068
HNRNPK	9q21. 32	-0. 136308664	0. 068849	0. 127179
FBXW5	9q34. 3	0. 136308664	0. 068849	0. 127179
PARP9	3q21. 1	0. 136264725	0. 068939	0. 127334
HES7	17p13. 1	0. 136219403	0. 069032	0. 127489
AGBL1	15q25. 3	0. 136217742	0. 069036	0. 127489
LRTM1	3p14. 3	-0. 136181683	0. 06911	0. 127615
LYG1	2q11. 2	0. 136164363	0. 069146	0. 127669
LRRC28	15q26. 3	-0. 136158015	0. 069159	0. 127681
NUDT6	4q28. 1	0. 136145461	0. 069185	0. 127717
SNORA22	7q11. 21	-0. 136135655	0. 069205	0. 127743
ANKRD20A1	21q11. 2	0. 136075051	0. 06933	0. 127961
CCDC39	3q26. 33	-0. 136072228	0. 069336	0. 127961
SIX4	14q23. 1	0. 136051305	0. 069379	0. 128025
LHPP	10q26. 13	0. 136049212	0. 069383	0. 128025
LRRIQ3	1p31. 1	-0. 13604322	0. 069396	0. 128036
E2F4	16q22. 1	0. 136030381	0. 069422	0. 128073
LYRM4	6p25. 1	-0. 13601155	0. 069461	0. 128122
ADGRB1	8q24. 3	0. 136009457	0. 069466	0. 128122
MED16	19p13. 3	0. 136007365	0. 06947	0. 128122
FBLL1	5q34	-0. 136005273	0. 069474	0. 128122
RPA2	1p35. 3	-0. 135998996	0. 069487	0. 128134
EFCAB11	14q32. 11	0. 135992719	0. 0695	0. 128146
FOXC2	16q24. 1	0. 13597598	0. 069535	0. 128198
FRG1BP	20q11. 1	-0. 135965518	0. 069557	0. 128226
CHRNA1	2q31. 1	0. 135959638	0. 069569	0. 128237
SYT14P1	4q13. 2	-0. 135955717	0. 069577	0. 12824
FAM225B	9q32	-0. 13589647	0. 0697	0. 128445
SCRT1	8q24. 3	-0. 135895903	0. 069701	0. 128445
C17ORF58	17q24. 2	-0. 135881824	0. 06973	0. 128487
SCARNA9L	Xp22. 12	0. 135859312	0. 069777	0. 128561
KDM1A	1p36. 12	0. 135850438	0. 069795	0. 128583
ERLIN1	10q24. 31	0. 135821145	0. 069856	0. 128683
GPX8	5q11. 2	0. 135814868	0. 069869	0. 128684
TUBG1	17q21. 2	0. 135814868	0. 069869	0. 128684

C10RF158	1p36. 21	-0.135809785	0.06988	0.128691
PTPN2	18p11. 21	0.135802314	0.069895	0.128708
RTL8C	Xq26. 3	0.135796037	0.069908	0.12872
LOC285074	2p11. 2	0.135791852	0.069917	0.128724
HSP90AB1	6p21. 1	-0.135779298	0.069943	0.128761
SLC39A14	8p21. 3	-0.135758375	0.069987	0.128829
GAGE8	Xp11	-0.135723482	0.070059	0.128951
HNRNPLL	2p22. 1	-0.135716528	0.070074	0.128966
TPD52L1	6q22. 31	0.135712343	0.070083	0.12897
CDC20B	5q11. 2	0.135706292	0.070095	0.128981
BPIFB6	20q11. 21	-0.135679935	0.07015	0.12907
ZNF77	19p13. 3	-0.135672588	0.070165	0.129087
FADS3	11q12. 2	-0.135668403	0.070174	0.129091
ZNF629	16p11. 2	0.13563911	0.070235	0.129191
FAM20B	1q25. 2	-0.135620279	0.070275	0.129248
TMEM266	15q24. 2	-0.135618187	0.070279	0.129248
NF1	17q11. 2	-0.135614002	0.070288	0.129252
PROP1	5q35. 3	-0.135581607	0.070355	0.129365
MCM4	8q11. 21	0.135547047	0.070428	0.129486
CNR2	1p36. 11	-0.135511691	0.070502	0.12961
TMEM185A	Xq28	0.135488461	0.07055	0.129687
CEP170P1	4q26	-0.135463166	0.070603	0.129773
HIST2H2AE	1q21. 2	0.135430536	0.070672	0.129887
PCDHB11	5q31. 3	-0.135398489	0.070739	0.129998
GNAI2	3p21. 31	0.135371289	0.070796	0.130091
GSTT1	22q11. 23	0.135365944	0.070808	0.1301
MAP7	6q23. 3	-0.135360827	0.070818	0.1301
FAM110C	2p25. 3	0.135356642	0.070827	0.1301
TRIM32	9q33. 1	-0.135356642	0.070827	0.1301
HAR1B	20q13. 33	-0.135352357	0.070836	0.130105
THBS1	15q14	-0.135344088	0.070853	0.130125
SMCR5	-	-0.135338053	0.070866	0.130136
CEBPG	19q13. 11	0.135331534	0.07088	0.130149
MORN5	9q33. 2	-0.135309605	0.070926	0.130222
RABGGTB	1p31. 1	-0.13528341	0.070981	0.130311
PHF23	17p13. 1	-0.135272948	0.071003	0.13034
TFDP1	13q34	0.135245747	0.07106	0.130422
MSMB	10q11. 22	0.135245554	0.071061	0.130422
RPL37	5p13. 1	0.13521227	0.071131	0.130539
H1FX	3q21. 3	0.13516833	0.071224	0.130697
H2AFY	5q31. 1	0.135141129	0.071281	0.130779
LY86-AS1	6p25. 1	-0.135140918	0.071282	0.130779
ANKMY2	7p21. 1	0.135136945	0.07129	0.130782
CIR1	2q31. 1	0.135128575	0.071308	0.130803
LINC0016C	21q22. 12	0.135122914	0.07132	0.130813
COA5	2q11. 2	0.135116021	0.071334	0.13082
TH	11p15. 5	0.135114846	0.071337	0.13082
BET1	7q21. 3	-0.135057435	0.071458	0.131031
CCDC102A	16q21	0.135049066	0.071476	0.131051
MYCBPAP	17q21. 33	-0.135045998	0.071482	0.131051
C3P1	19p13. 2	0.135032631	0.071511	0.131091
WDR53	3q29	0.134961257	0.071662	0.131356
PDIA5	3q21. 1	-0.134952817	0.07168	0.131377
TYMSOS	18p11. 32	0.134940334	0.071707	0.131414

ROB02	3p12. 3	-0. 134937195	0. 071713	0. 131414
HEY2	6q22. 31	-0. 134923524	0. 071742	0. 131455
MILR1	17q23. 3	0. 134885862	0. 071822	0. 131574
INHBE	12q13. 3	0. 13488384	0. 071827	0. 131574
TOP3B	22q11. 22	0. 13488377	0. 071827	0. 131574
CEND1	11p15. 5	-0. 134860824	0. 071876	0. 131651
GH1	17q23. 3	-0. 134839202	0. 071922	0. 131713
KLRC2	12p13. 2	-0. 13483574	0. 071929	0. 131713
NAALADL2	3q26. 31	0. 134835645	0. 071929	0. 131713
CTCFL	20q13. 31	0. 134816814	0. 071969	0. 131774
UBXN11	1p36. 11	0. 134812629	0. 071978	0. 131779
SNORA29	6q25. 3	0. 134786186	0. 072034	0. 13187
DISC1	1q42. 2	-0. 134779152	0. 072049	0. 131885
OR2A14	7q35	0. 134772691	0. 072063	0. 131898
SAMSN1	21q11. 2	-0. 13476869	0. 072072	0. 131902
CD53	1p13. 3	-0. 134762413	0. 072085	0. 131914
FAAP24	19q13. 11	0. 13472475	0. 072165	0. 132049
CLTC	17q23. 1	-0. 134714289	0. 072188	0. 132074
RAD9B	12q24. 11	-0. 134712196	0. 072192	0. 132074
CEP170	1q43	-0. 134705919	0. 072206	0. 132074
ETNK2	1q32. 1	-0. 134705919	0. 072206	0. 132074
ZIC3	Xq26. 3	-0. 134698085	0. 072222	0. 132091
SH3TC1	4p16. 1	0. 134695457	0. 072228	0. 132091
MEFV	16p13. 3	-0. 134665189	0. 072293	0. 132197
PABPN1	14q11. 2	0. 13466198	0. 0723	0. 132197
TRIM51	11q12. 1	-0. 134652709	0. 072319	0. 132222
MYT1L	2p25. 3	-0. 134638725	0. 072349	0. 132264
AMBN	4q13. 3	-0. 134628543	0. 072371	0. 132292
FAM27B	9q21. 11	0. 134607707	0. 072416	0. 132361
TAGAP	6q25. 3	-0. 134601301	0. 072429	0. 132374
IBA57	1q42. 13	-0. 134580378	0. 072474	0. 132444
EPHA6	3q11. 2	-0. 134555973	0. 072526	0. 132524
CABP2	11q13. 2	0. 134553675	0. 072531	0. 132524
LGSN	6q12	-0. 134530909	0. 07258	0. 132601
SUMO4	6q25. 1	0. 134500627	0. 072645	0. 132708
AGMAT	1p36. 21	0. 134485246	0. 072678	0. 132756
SPATA18	4q12	-0. 134482037	0. 072685	0. 132756
CCDC22	Xp11. 23	0. 134473668	0. 072703	0. 132777
SULT1A2	16p11. 2	0. 134448559	0. 072757	0. 132864
IRX4	5p15. 33	-0. 134443698	0. 072767	0. 13287
KCTD17	22q12. 3	-0. 134394158	0. 072874	0. 133044
FAT3	11q14. 3	-0. 134393182	0. 072876	0. 133044
HLA-H	6p22. 1	0. 134389973	0. 072883	0. 133045
SWI5	9q34. 11	-0. 134379512	0. 072905	0. 133074
CYBB	Xp21. 1-p1	-0. 134323018	0. 073027	0. 133284
TIGIT	3q13. 31	-0. 134306279	0. 073063	0. 133337
CALB1	8q21. 3	-0. 134296184	0. 073085	0. 133365
PGA3	11q12. 2	-0. 13428137	0. 073117	0. 133411
FRAT1	10q24. 1	-0. 134276986	0. 073126	0. 133416
CDK5RAP2	9q33. 2	-0. 134193292	0. 073307	0. 133734
NRL	14q11. 2-c	-0. 134155629	0. 073388	0. 13387
NUAK1	12q23. 3	-0. 134140983	0. 07342	0. 133903
RNF169	11q13. 4	-0. 134140983	0. 07342	0. 133903
TEX29	13q34	0. 134102854	0. 073503	0. 134042

CASP2	7q34	0.134094951	0.07352	0.134048
RPL19	17q12	0.134094951	0.07352	0.134048
ASB11	Xp22.2	-0.134091291	0.073528	0.134051
ZBP1	20q13.31	0.134069843	0.073574	0.134119
FAM71E1	19q13.33	0.134067751	0.073579	0.134119
UBE2L3	22q11.21	0.13404055	0.073638	0.134215
PPIL1	6p21.2	-0.134036365	0.073647	0.134219
NTMT1	9q34.11	0.134021719	0.073679	0.134265
UTP15	5q13.2	-0.134017534	0.073688	0.134265
CYP11B2	8q24.3	0.134015497	0.073692	0.134265
SYNGR3	16p13.3	-0.13396941	0.073792	0.134435
MALSU1	7p15.3	0.133950579	0.073833	0.134497
EEF1E1	6p24.3	-0.133942209	0.073851	0.134518
RPL10L	14q21.2	-0.133938135	0.07386	0.134522
HEBP1	12p13.1	0.133934956	0.073867	0.134522
ABHD16B	20q13.33	0.133921286	0.073897	0.134564
ARHGEF19	1p36.13	0.133917101	0.073906	0.134568
CD163L1	12p13.31	-0.13389827	0.073947	0.134631
SERBP1	1p31.3	-0.133871069	0.074006	0.134726
SPDYA	2p23.2	0.133814575	0.074129	0.134938
ATG5	6q21	-0.133802021	0.074157	0.134976
RNF213	17q25.3	-0.133774821	0.074216	0.135072
CYP2D7	22q13.2	0.13376129	0.074246	0.135113
SLC26A5	7q22.1	0.133756143	0.074257	0.135121
ENDOG	9q34.11	0.13374762	0.074275	0.135136
HPS4	22q12.1	0.133745528	0.07428	0.135136
WEE2	7q34	-0.133743094	0.074285	0.135136
SUGP2	19p13.11	-0.133732973	0.074307	0.135164
HBM	16p13.3	-0.133718479	0.074339	0.135209
CFAP57	1p34.2	-0.133703467	0.074372	0.135257
CD8B	2p11.2	-0.133691126	0.074399	0.135294
LRRC47	1p36.32	-0.133678572	0.074426	0.135331
SHOX	Xp22.33 ϵ	0.133648113	0.074493	0.13544
CALCB	11p15.2	-0.133594579	0.07461	0.135641
MAK16	8p12	-0.133588601	0.074623	0.135649
FBH1	10p15.1	-0.133586508	0.074628	0.135649
CLTA	9p13.3	0.133573954	0.074656	0.135686
BORCS8-ME	19p13.11	0.133530015	0.074752	0.135849
EIF4EBP2	10q22.1	-0.133523738	0.074766	0.135858
YBX3	12p13.2	0.133521645	0.07477	0.135858
MRPL2	6p21.1	0.133513276	0.074789	0.135879
MAPRE3	2p23.3	-0.133504907	0.074807	0.135896
FBF1	17q25.1	-0.133502814	0.074812	0.135896
TXK	4p12	-0.133493468	0.074832	0.135921
ZNF197	3p21.31	-0.133486075	0.074849	0.135938
EIF5A2	3q26.2	0.133467244	0.07489	0.135989
SASH3	Xq26.1	-0.133467244	0.07489	0.135989
GALR2	17q25.1	0.133455173	0.074917	0.136022
CHST8	19q13.11	-0.133452598	0.074922	0.136022
HES3	1p36.31	-0.133439475	0.074951	0.136062
TRANK1	3p22.2	-0.133435859	0.074959	0.136065
LOC284009	17p13.3	-0.13342807	0.074976	0.136083
RAB8B	15q22.2	-0.133377273	0.075088	0.136274
C5ORF56	5q31.1	-0.133345887	0.075157	0.136387

C100RF13110q24.1	-0.133339932	0.07517	0.136388
ARIH20S 3p21.31	-0.13333961	0.075171	0.136388
CA3 8q21.2	0.133291486	0.075277	0.136568
REX1BD 19p13.11	0.13326038	0.075346	0.13668
CRHR2 7p14.3	-0.133256071	0.075356	0.136685
FOXI2 10q26.2	-0.133217913	0.07544	0.136826
EMC9 14q12	0.133193145	0.075495	0.136913
LRRC73 6p21.1	-0.133176407	0.075532	0.136967
AAGAB 15q23	0.13317013	0.075546	0.13698
VMO1 17p13.2	0.13316176	0.075564	0.137001
HSPA6 1q23.3	0.133155483	0.075578	0.137014
ZNF609 15q22.31	-0.133134559	0.075625	0.137086
EIF3K 19q13.2	0.133080158	0.075745	0.137291
CRYBA1 17q11.2	-0.133077417	0.075751	0.137291
ARIH1 15q24.1	-0.133073881	0.075759	0.137292
VSTM1 19q13.42	0.133028929	0.075859	0.137461
PTF1A 10p12.2	-0.133022492	0.075873	0.137468
CLDN19 1p34.2	-0.133020998	0.075877	0.137468
MC1R 16q24.3	0.133017387	0.075885	0.13747
SIGLEC5 19q13.41	-0.132988094	0.07595	0.137576
CGGBP1 3p11.1	-0.132971356	0.075987	0.137631
CFLAR 2q33.1	0.132960894	0.07601	0.13766
PNRC2 1p36.11	-0.132952524	0.076029	0.137682
MAP3K14-A 17q21.31	0.132946247	0.076043	0.137694
ZMYND15 17p13.2	0.132921139	0.076099	0.137783
IL1F10 2q14.1	0.132912338	0.076118	0.137806
KRTDAP 19q13.12	0.132896294	0.076154	0.137858
CXCR1 2q35	-0.132889823	0.076169	0.137872
WASH7P 1p36.33	0.132852091	0.076253	0.138012
HMG20A 15q24.3	-0.13284163	0.076276	0.138042
DGCR5 22q11.21	-0.132801875	0.076365	0.13819
BBS1 11q13.2	-0.132766305	0.076444	0.138321
HCG18 6p22.1	-0.132757935	0.076463	0.13833
MRFAP1L1 4p16.1	-0.132757935	0.076463	0.13833
SLC6A2 16q12.2	-0.132733132	0.076519	0.138418
PRICKLE1 12q12	-0.13272655	0.076533	0.138419
LYPD6 2q23.2	0.132724458	0.076538	0.138419
SSTR5 16p13.3	-0.132723688	0.07654	0.138419
EGR3 8p21.3	-0.132711903	0.076566	0.138454
MRPL41 9q34.3	0.132705626	0.07658	0.138467
PROSER3 19q13.12	0.132659595	0.076683	0.138628
WDR45B 17q25.3	0.132659595	0.076683	0.138628
ATP6VOE1 5q35.1	0.13265541	0.076693	0.138632
SIPA1L1 14q24.2	0.132644948	0.076716	0.138662
CIAPIN1 16q21	0.132617747	0.076777	0.13876
NARF 17q25.3	0.132590547	0.076838	0.138858
BDH1 3q29	0.132577993	0.076867	0.138892
PTPRF 1p34.2	0.1325759	0.076871	0.138892
PMFBP1 16q22.2	-0.132554	0.07692	0.138968
ASIC2 17q11.2-c	-0.132545192	0.07694	0.138992
WHAMM 15q25.2	0.132506852	0.077026	0.139135
PCOLCE2 3q23	0.132481744	0.077083	0.139224
CYP4F22 19p13.12	0.13245521	0.077143	0.139312
PCGEM1 2q32.3	-0.132453934	0.077146	0.139312

LIN28B	6q16.3-q2	-0.132450716	0.077153	0.139313
IFNW1	9p21.3	-0.132427711	0.077205	0.139394
ENTR1	9q34.3	0.132421066	0.07722	0.139408
DBT	1p21.2	-0.132414789	0.077234	0.139421
HTR2B	2q37.1	0.132397073	0.077274	0.139481
ZMYM3	Xq13.1	-0.132379219	0.077314	0.139541
LRR1	14q21.3	0.132366665	0.077342	0.139579
NEUROD4	12q13.2	-0.132318337	0.077452	0.139764
TNP2	16p13.13	-0.132281919	0.077534	0.1399
DDX3Y	Yq11.221	-0.132250297	0.077605	0.140016
PDE9A	21q22.3	-0.132222292	0.077669	0.140118
SLC38A1	12q13.11	-0.132213923	0.077688	0.14014
CRB2	9q33.3	-0.13219827	0.077723	0.140178
CPO	2q33.3	-0.132198252	0.077723	0.140178
C3AR1	12p13.31	-0.132195091	0.07773	0.140179
TLR6	4p14	-0.132180445	0.077764	0.140226
STARD5	15q25.1	-0.132169983	0.077787	0.140256
ZYG11A	1p32.3	-0.132155532	0.07782	0.140302
KIAA1549L	11p13	0.13214069	0.077854	0.14035
USH1G	17q25.1	-0.132108254	0.077927	0.14047
SH2B1	16p11.2	0.132103028	0.077939	0.140479
SREBF1	17p11.2	0.132096751	0.077954	0.140492
SCFD1	14q12	-0.132050719	0.078058	0.140668
BRSK1	19q13.42	-0.132046534	0.078068	0.140673
ASAP3	1p36.12	-0.13203398	0.078096	0.140709
KRTAP10-6	21q22.3	-0.132031537	0.078102	0.140709
SORCS3	10q25.1	-0.132025346	0.078116	0.140721
TTC1	5q33.3	0.132021426	0.078125	0.140725
LONP1	19p13.3	0.132015149	0.078139	0.140738
KCTD13	16p11.2	0.132010964	0.078149	0.140742
URB1	21q22.11	-0.13199841	0.078177	0.140781
B3GLCT	13q12.3	0.131967024	0.078249	0.140897
INTS6L	Xq26.3	-0.131960747	0.078263	0.14091
MPHOSPH6	16q23.3	0.131952378	0.078282	0.140932
KEL	7q34	-0.131943297	0.078303	0.140956
NUDT7	16q23.1	-0.131939824	0.078311	0.140958
MYL5	4p16.3	0.131906346	0.078387	0.141083
MED14	Xp11.4	-0.131843575	0.07853	0.141328
FHIT	3p14.2	0.131816375	0.078593	0.141414
NFAM1	22q13.2	-0.131816375	0.078593	0.141414
SELENOK	3p21.1	-0.131772435	0.078693	0.141583
NIPAL2	8q22.2	-0.131751512	0.078741	0.141656
KIAA0513	16q24.1	-0.131703388	0.078851	0.141842
PIGM	1q23.2	-0.131688741	0.078885	0.141889
STAC	3p22.3-p2	0.131682464	0.078899	0.141902
SERINC4	15q15.3	0.1316282	0.079024	0.142114
RPS15	19p13.3	0.131567384	0.079164	0.142352
ZEB1	10p11.22	-0.131500429	0.079318	0.142617
PLS3	Xq23	0.131477413	0.079371	0.142699
ACSF3	16q24.3	0.131443935	0.079448	0.142825
VPS41	7p14.1	-0.131389534	0.079574	0.143038
NP1PB5	16p12.2	0.131349779	0.079666	0.14319
SATL1	Xq21.1	-0.131307932	0.079762	0.143351
CCT7	2p13.2	0.131303747	0.079772	0.143352

LINC00663	19p13. 11	-0.131301655	0.079777	0.143352
PATE1	11q24. 2	-0.131295554	0.079791	0.143364
ADCY3	2p23. 3	-0.131291193	0.079801	0.143369
EZH1	17q21. 2	-0.131257716	0.079879	0.143487
ZNF628	19q13. 42	0.131255692	0.079883	0.143487
NWD1	19p13. 11	-0.131253531	0.079888	0.143487
ZDHC14	6q25. 3	-0.131247254	0.079903	0.143501
SHISA2	13q12. 13	0.131222146	0.079961	0.143592
EGFEM1P	3q26. 2	-0.131198683	0.080015	0.143665
UGT1A4	2q37. 1	0.131198505	0.080016	0.143665
CCR7	17q21. 2	-0.13119076	0.080034	0.143684
C8ORF76	8q24. 13	0.131174021	0.080073	0.143741
C12ORF60	12p13. 1-1	-0.131169837	0.080082	0.143746
GOLGA6A	15q24. 1	0.131147083	0.080135	0.143828
ANKRD1	10q23. 31	0.131129104	0.080177	0.14389
ANKRD24	19p13. 3	0.131117528	0.080204	0.143925
TRIM71	3p22. 3	-0.131105705	0.080231	0.143961
ARHGAP42	11q22. 1	0.131096604	0.080253	0.143986
WNT2	7q31. 2	0.131048754	0.080364	0.144173
C19ORF25	19p13. 3	0.13104011	0.080384	0.144196
PGM1	1p31. 3	0.131029649	0.080408	0.144227
AK8	9q34. 13	0.131017095	0.080438	0.144267
C10RF127	1p36. 22	-0.130994079	0.080491	0.14435
PMF1	1q22	0.130962693	0.080564	0.144468
ANKK1	11q23. 2	0.130959194	0.080573	0.14447
TTC14	3q26. 33	0.130929216	0.080643	0.144582
RPL36AL	14q21. 3	0.130891553	0.080731	0.144727
SMYD2	1q32. 3	0.130839244	0.080853	0.144929
ZNF749	19q13. 43	-0.130837152	0.080858	0.144929
NCBP2	3q29	0.130830875	0.080872	0.144942
GNG13	16p13. 3	0.13082359	0.08089	0.14496
RPL7A	9q34. 2	-0.130812044	0.080917	0.144995
CDK5	7q36. 1	0.130797397	0.080951	0.14504
ASB16-AS1	17q21. 31	0.130795305	0.080956	0.14504
GTF3C2	2p23. 3	0.130786935	0.080975	0.145062
RNF144B	6p22. 3	-0.130747181	0.081069	0.145216
COPA	1q23. 2	-0.130740903	0.081083	0.145229
FST	5q11. 2	-0.130732534	0.081103	0.145238
ZAP70	2q11. 2	-0.130732534	0.081103	0.145238
TNFSF14	19p13. 3	-0.13071505	0.081144	0.145299
WBP2	17q25. 1	0.130686502	0.081211	0.145406
CRLS1	20p12. 3	0.130659302	0.081275	0.145507
ATP4B	13q34	-0.130648789	0.081299	0.145538
BPIFB2	20q11. 21	-0.130643954	0.081311	0.145545
DIP2B	12q13. 12	-0.130625824	0.081353	0.145609
CCR8	3p22. 1	-0.130603384	0.081406	0.14569
TUBA4B	2q35	0.130596418	0.081423	0.145696
GFRA1	6p12. 1	-0.130595832	0.081424	0.145696
SNORA28	14q32. 32	-0.130591871	0.081433	0.145699
OR4D1	17q22	-0.130584541	0.081451	0.145717
UFSP2	4q35. 1	-0.130571423	0.081481	0.145759
HEXIM2	17q21. 31	0.13054213	0.08155	0.14587
PCDHB16	5q31. 3	-0.130512837	0.081619	0.145971
CCL4L1	17q12	-0.130511927	0.081622	0.145971

RWDD4	4q35.1	-0.130496098	0.081659	0.146025
COL11A2	6p21.32	0.130483544	0.081689	0.146065
GNL3	3p21.1	0.130475174	0.081708	0.146087
PLK4	4q28.1	0.130407241	0.081869	0.14636
CCNL1	3q25.31	0.130385203	0.081921	0.146441
FAM49A	2p24.2	-0.130341263	0.082025	0.146605
RHAG	6p12.3	-0.130338329	0.082032	0.146605
TM9SF3	10q24.1	0.130337079	0.082035	0.146605
BABAM2	2p23.2	0.130332894	0.082045	0.146609
C2ORF78	2p13.1	0.130290978	0.082144	0.146774
TBC1D28	17p11.2	-0.130280153	0.08217	0.1468
PNMA8B	19q13.32	-0.130278493	0.082173	0.1468
NAAA	4q21.1	-0.130268031	0.082198	0.146831
PRKAB1	12q24.23	0.130261754	0.082213	0.146845
RRAGB	Xp11.21	-0.130251292	0.082238	0.146876
LRRC36	16q22.1	-0.130196891	0.082367	0.147094
MZT2B	2q21.1	0.130186429	0.082392	0.147125
UHMK1	1q23.3	-0.13017806	0.082412	0.147147
ZNF177	19p13.2	-0.130146674	0.082486	0.147267
SEC24B	4q25	-0.130140397	0.082501	0.147281
PCDHGC5	5q31.3	0.13013628	0.082511	0.147281
SDHA	5p15.33	0.13013412	0.082516	0.147281
GALM	2p22.1	0.130100642	0.082596	0.14741
MAP2K7	19p13.2	0.130092273	0.082616	0.147432
HPF1	4q33	-0.130071349	0.082666	0.147495
FHOD1	16q22.1	0.130071349	0.082666	0.147495
PCDH11X	Xq21.31	-0.130065852	0.082679	0.147505
SNORA23	11p15.4	-0.130054317	0.082706	0.147538
HIST1H4G	6p22.2	0.130051992	0.082712	0.147538
B3GNT2	2p15	0.130039964	0.08274	0.147563
IPO4	14q12	-0.130037872	0.082745	0.147563
BTK	Xq22.1	-0.130035779	0.08275	0.147563
FBN1	15q21.1	-0.130033687	0.082755	0.147563
MRPL23-AS1	11p15.5	0.130012031	0.082807	0.147642
BCAP29	7q22.3	-0.129973009	0.0829	0.147795
LINC00882	3q13.12	-0.129963227	0.082923	0.147823
STK38L	12p11.23	0.129943716	0.08297	0.147893
MNS1	15q21.3	0.129918607	0.08303	0.147987
COL24A1	1p22.3	-0.129901868	0.08307	0.148045
RBIS	8q21.2	0.129889314	0.0831	0.148085
OGFOD3	17q25.3	-0.129864206	0.08316	0.148179
TFB2M	1q44	-0.129860089	0.08317	0.148183
DHTKD1	10p14	-0.129853744	0.083185	0.148197
ZNF296	19q13.32	0.12984119	0.083215	0.148237
PCDHGA11	5q31.3	-0.129837005	0.083225	0.148242
ENG	9q34.11	-0.129832821	0.083235	0.148247
GALNT10	5q33.2	0.129813989	0.08328	0.14831
TBC1D31	8q24.13	-0.129811897	0.083285	0.14831
SMIM24	19p13.3	0.129786789	0.083346	0.148403
FAM180A	7q33	-0.129767958	0.083391	0.148457
FTSJ3	17q23.3	0.129767958	0.083391	0.148457
KCNF1	2p25.1	-0.129713556	0.083521	0.148677
FDX2	19p13.2	0.129648693	0.083677	0.148941
ZCCHC9	5q14.1	0.129636139	0.083707	0.148981

TPT1-AS1	13q14. 13	0. 129633068	0. 083715	0. 148981
RGL3	19p13. 2	0. 129629862	0. 083723	0. 148982
LRIT2	10q23. 1	-0. 129623055	0. 083739	0. 148998
GLMP	1q22	0. 129577553	0. 083848	0. 149175
IP09	1q32. 1	-0. 129575461	0. 083854	0. 149175
XRCC2	7q36. 1	0. 129558722	0. 083894	0. 149233
CTDSPL2	15q15. 3-c	-0. 12954826	0. 083919	0. 149265
HTN1	4q13. 3	-0. 129542021	0. 083934	0. 149271
NR5A1	9q33. 3	0. 129533803	0. 083954	0. 149271
ZSWIM3	20q13. 12	-0. 129532635	0. 083957	0. 149271
EIF4A2	3q27. 3	0. 129531521	0. 083959	0. 149271
USP49	6p21. 1	-0. 129529429	0. 083964	0. 149271
AP3S2	15q26. 1	-0. 129527337	0. 08397	0. 149271
VRK2	2p16. 1	0. 129525244	0. 083975	0. 149271
PSG8	19q13. 2	-0. 129514378	0. 084001	0. 149304
PCDHB12	5q31. 3	-0. 129502228	0. 08403	0. 149343
SGK2	20q13. 12	0. 129489674	0. 08406	0. 149376
CPXCR1	Xq21. 31	-0. 129488339	0. 084064	0. 149376
FAM83C	20q11. 22	0. 129429629	0. 084205	0. 149615
RASL11A	13q12. 2	-0. 129416442	0. 084237	0. 149658
TGFB3	14q24. 3	-0. 129399703	0. 084278	0. 149717
MYPN	10q21. 3	0. 129341565	0. 084419	0. 149953
DACH2	Xq21. 2	-0. 129319915	0. 084471	0. 150033
DKC1	Xq28	-0. 129313916	0. 084486	0. 150046
UTP14C	13q14. 3	-0. 129301362	0. 084516	0. 150086
ZNF720	16p11. 2	-0. 1292909	0. 084541	0. 150116
LINC0047C	18p11. 32	-0. 129288136	0. 084548	0. 150116
MST1P2	1p36. 13	0. 129257423	0. 084623	0. 150235
PDZRN4	12q12	-0. 129236769	0. 084673	0. 150311
TYR	11q14. 3	-0. 129226657	0. 084697	0. 150341
C10RF210	1p34. 2	0. 12921976	0. 084714	0. 150358
GSK3A	19q13. 2	0. 129200929	0. 08476	0. 150426
RPL26L1	5q35. 1	0. 129171636	0. 084831	0. 150539
ELP4	11p13	-0. 129150712	0. 084882	0. 150611
PPP3CC	8p21. 3	-0. 12914862	0. 084887	0. 150611
CREB5	7p15. 1	-0. 129117235	0. 084963	0. 150733
PRAMEF14	1p36. 21	-0. 129099445	0. 085007	0. 150783
PRAMEF5	1p36. 21	-0. 129099445	0. 085007	0. 150783
PIK3CA	3q26. 32	-0. 129085849	0. 08504	0. 150829
CAPZB	1p36. 13	0. 12907748	0. 08506	0. 150852
AXL	19q13. 2	0. 129062833	0. 085096	0. 150892
TRIM17	1q42. 13	0. 129061855	0. 085098	0. 150892
KLRC1	12p13. 2	-0. 129056624	0. 085111	0. 150902
SLC17A2	6p22. 2	-0. 129052405	0. 085121	0. 150902
GGNBP2	17q12	0. 129050279	0. 085126	0. 150902
IDO2	8p11. 21	-0. 129038415	0. 085155	0. 150916
PTCH2	1p34. 1	-0. 129037725	0. 085157	0. 150916
XPNPEP1	10q25. 1	0. 129037725	0. 085157	0. 150916
LHFPL4	3p25. 3	-0. 129031448	0. 085172	0. 15093
C5ORF47	5q35. 2	-0. 129026952	0. 085183	0. 150936
FKBP10	17q21. 2	0. 128981232	0. 085295	0. 151121
PDE4D	5q11. 2-q1	-0. 128960308	0. 085346	0. 151198
C1GALT1C1	Xq24	0. 128956123	0. 085356	0. 151198
NBPF14	1q21. 2	-0. 128954031	0. 085361	0. 151198

NDEL1	17p13.1	-0.128933107	0.085413	0.151275
SLC22A23	6p25.2	-0.128897537	0.0855	0.151416
KRT26	17q21.2	0.128876401	0.085551	0.151494
EIF2AK4	15q15.1	-0.128847321	0.085623	0.151607
KIAA1257	3q21.3	-0.128843136	0.085633	0.151608
BEND2	Xp22.13	-0.128838114	0.085645	0.151608
PM20D1	1q32.1	-0.128835197	0.085652	0.151608
TRIM69	15q21.1	0.128834767	0.085653	0.151608
SPESP1	15q23	-0.128815935	0.085699	0.151676
POFUT2	21q22.3	0.128805474	0.085725	0.151708
SIGLEC12	19q13.41	0.128790827	0.085761	0.151758
ZNF80	3q13.31	-0.128743266	0.085878	0.151951
ABCC12	16q12.1	-0.128726723	0.085918	0.152009
ADAMTS9	3p14.1	-0.128700856	0.085982	0.152108
CCN4	8q24.22	-0.128688302	0.086013	0.15215
SEPTIN7	7p14.2	-0.12866947	0.086059	0.152218
KIAA1107	1p22.1	-0.128661101	0.08608	0.152241
OSTCP1	6q25.3	-0.128652732	0.0861	0.152264
DCHS2	4q31.3	-0.128637106	0.086139	0.152318
EPN2	17p11.2	-0.128631808	0.086152	0.152328
ETV3L	1q23.1	-0.128627847	0.086162	0.152332
DGKB	7p21.2	-0.128623439	0.086172	0.152338
MADCAM1	19p13.3	-0.128596238	0.086239	0.152442
SH3BP5	3p25.1	-0.128569037	0.086306	0.152534
TAF7	5q31.3	0.128569037	0.086306	0.152534
DUS4L	7q22.3	0.128520913	0.086425	0.15273
FAM193B	5q35.3	0.128514636	0.086441	0.152744
MFSD9	2q12.1	0.12849999	0.086477	0.152795
ZNF676	19p12	-0.128490872	0.086499	0.152821
LINC00488	3q13.13	-0.128463487	0.086567	0.152927
FKBP7	2q31.2	-0.128460235	0.086575	0.152928
PLOD1	1p36.22	0.128451865	0.086596	0.152951
ZNF528	19q13.41	0.12842048	0.086673	0.153074
ASB14	3p14.3	-0.128388116	0.086753	0.153202
PCDHAC2	5q31.3	-0.128361894	0.086818	0.153303
SLC18A3	10q11.23	-0.128343872	0.086863	0.153369
EMILIN2	18p11.32	-0.128320047	0.086922	0.153459
IFT172	2p23.3	0.128307493	0.086953	0.153501
HIST2H3D	1q21.2	0.128301879	0.086967	0.153512
TICAM2	5q22.3	0.128274015	0.087036	0.15362
TNFAIP1	17q11.2	0.128253091	0.087088	0.153685
SAMD1	19p13.12	0.128253091	0.087088	0.153685
LINC02685	11p11.2	-0.128238815	0.087124	0.153721
HBA1	16p13.3	-0.128238691	0.087124	0.153721
DEFB109B	8p23.1	0.128205611	0.087206	0.153851
ZNF226	19q13.31	0.128200783	0.087218	0.153851
SNORA13	5q22.1	-0.128199776	0.087221	0.153851
HOXD8	2q31.1	-0.128179859	0.08727	0.153916
GPRC5B	16p12.3	0.128177767	0.087275	0.153916
TCF21	6q23.2	-0.128175674	0.087281	0.153916
SLC51A	3q29	0.128161028	0.087317	0.153966
CIRBP	19p13.3	-0.128156843	0.087328	0.153971
CD48	1q23.3	-0.128131735	0.08739	0.154068
C22ORF34	22q13.33	-0.128040331	0.087618	0.154456

DNAJC3	13q32.1	-0.128016655	0.087677	0.154546
FBX032	8q24.13	0.127981085	0.087766	0.154689
RAB33A	Xq26.1	-0.127967552	0.0878	0.154735
HCP5	6p21.33	0.127962254	0.087813	0.15474
SSR2	1q22	0.127960162	0.087818	0.15474
TMEM145	19q13.2	-0.127945582	0.087855	0.154791
RASSF3	12q14.2	-0.127922499	0.087912	0.154879
LMCD1	3p25.3	-0.127916222	0.087928	0.154893
TSFM	12q14.1	-0.127909945	0.087944	0.154907
CLIC4	1p36.11	-0.127886929	0.088001	0.154995
ENTPD4	8p21.3	-0.127866005	0.088054	0.155069
NUP50	22q13.31	-0.127861821	0.088064	0.155069
TOMM40L	1q23.3	0.127855544	0.08808	0.155069
ZNF444	19q13.43	0.127855544	0.08808	0.155069
MAEL	1q24.1	0.127854789	0.088082	0.155069
WDYHV1	8q24.13	0.127849267	0.088096	0.155079
LCLAT1	2p23.1	0.127830435	0.088143	0.155149
TMEM116	12q24.12	-0.127803235	0.088211	0.155255
PLIN4	19p13.3	-0.127788588	0.088248	0.155306
DTWD1	15q21.2	-0.127782311	0.088264	0.15532
ULK3	15q24.1	0.127776034	0.088279	0.155334
DTNBP1	6p22.3	-0.127767665	0.0883	0.155357
LRRD1	7q21.2	-0.127756134	0.088329	0.155395
PKN2	1p22.2	0.127725818	0.088406	0.155515
MTTP	4q23	-0.127696716	0.088479	0.15563
SLA	8q24.22	-0.127663047	0.088563	0.155757
OR8D4	11q24.1	-0.127661944	0.088566	0.155757
SCARNA12	12p13.31	-0.127658217	0.088576	0.155759
DAOA	13q33.2 1	0.127648889	0.088599	0.155773
LINC00293	8q11.1	0.127648889	0.088599	0.155773
SNORA71C	20q11.23	0.127645904	0.088607	0.155773
PJVK	2q31.2	0.127619174	0.088674	0.155877
COBL	7p12.1	-0.127614923	0.088685	0.155883
RANGRF	17p13.1	-0.127608646	0.0887	0.155897
TMCO2	1p34.2	-0.127549721	0.088849	0.156144
DPYSL3	5q32	-0.12751449	0.088938	0.156287
VPS13A	9q21.2	-0.127493566	0.088991	0.156352
MAT2A	2p11.2	0.127493566	0.088991	0.156352
DTX3	12q13.3	-0.12747055	0.089049	0.15644
CPN1	10q24.2	-0.127445605	0.089112	0.156538
NACA	12q13.3	0.12743498	0.089139	0.156567
C16ORF70	16q22.1	-0.127432888	0.089144	0.156567
C10RF94	1p35.1	0.127428938	0.089154	0.15657
MAGEB16	Xp21.1	0.127420552	0.089175	0.156591
TRMT5	14q23.1	-0.127417262	0.089184	0.156591
WDCP	2p23.3	-0.127414056	0.089192	0.156591
PCNX3	11q13.1	0.127411964	0.089197	0.156591
THBD	20p11.21	-0.127401502	0.089224	0.156623
SCN1A	2q24.3	-0.127370186	0.089303	0.156731
ZHX2	8q24.13	-0.127370117	0.089303	0.156731
MCFD2	2p21	-0.127368025	0.089309	0.156731
CACNG8	19q13.42	0.127362583	0.089322	0.156741
KDM2A	11q13.2	0.12728433	0.089521	0.157076
TM2D3	15q26.3	-0.127273869	0.089547	0.157109

CA6	1p36. 23	-0.127270509	0.089556	0.15711
ZNF738	19p12	-0.12720698	0.089717	0.157379
CCL23	17q12	-0.127179393	0.089788	0.157489
SYCE2	19p13. 13	0.127169517	0.089813	0.157519
TTLL6	17q21. 32	-0.127140024	0.089888	0.157637
LSM10	1p34. 3	-0.127102295	0.089984	0.157792
BAMBI	10p12. 1	-0.127062541	0.090085	0.157955
COL4A6	Xq22. 3	-0.127014416	0.090208	0.158157
DNAJA2	16q11. 2	0.127010232	0.090219	0.158162
DDX47	12p13. 1	0.126953738	0.090363	0.158401
MCPH1	8p23. 1	-0.126945369	0.090385	0.158416
FAM182A	20p11. 1	-0.126944206	0.090388	0.158416
SYCE1L	16q23. 1	0.126933161	0.090416	0.158452
RPS20	8q12. 1	0.126926537	0.090433	0.158468
CBWD1	9p24. 3	-0.126922353	0.090444	0.158472
EFHC2	Xp11. 3	-0.126915096	0.090462	0.158491
OLFML2A	9q33. 3	-0.126903521	0.090492	0.158529
PLA2G1B	12q24. 31	-0.126863298	0.090595	0.158675
TREX2	Xq28	0.126862338	0.090597	0.158675
LINC00312	3p25. 3	-0.126861674	0.090599	0.158675
EXPH5	11q22. 3	0.126832381	0.090674	0.158793
GJA1	6q22. 31	-0.126798904	0.09076	0.158915
SELL	1q24. 2	-0.126798904	0.09076	0.158915
NMRK2	19p13. 3	-0.126788612	0.090786	0.158935
FAM76A	1p35. 3	-0.126788442	0.090787	0.158935
CHKA	11q13. 2	0.126780072	0.090808	0.158958
HCCS	Xp22. 2	0.126736133	0.090921	0.159142
ZNF556	19p13. 3	-0.126727584	0.090943	0.159166
EIF5A	17p13. 1	0.126711025	0.090986	0.159227
SBF2	11p15. 4	-0.126683824	0.091056	0.159335
LOC728392	17p13. 2	-0.126637792	0.091174	0.159529
STX11	6q24. 2	-0.126633607	0.091185	0.159534
OR4A47	11p11. 2	-0.126627851	0.0912	0.159546
MCUR1	6p23	-0.126618961	0.091223	0.159546
SLC43A1	11q12. 1	-0.126618961	0.091223	0.159546
MAGEB2	Xp21. 2	-0.126618577	0.091224	0.159546
SNHG3	1p35. 3	0.126566652	0.091358	0.159766
HBA2	16p13. 3	-0.126549913	0.091401	0.159827
HSF4	16q22. 1	0.126539451	0.091428	0.159856
PCDHGA1	5q31. 3	-0.126537359	0.091433	0.159856
CCT8	21q21. 3	0.126514343	0.091493	0.159944
DYTN	2q33. 3	-0.126511687	0.0915	0.159944
ALKBH7	19p13. 3	0.126501789	0.091525	0.159975
TEAD4	12p13. 33	0.12648505	0.091568	0.160036
A4GALT	22q13. 2	0.126464127	0.091622	0.160117
CYHR1	8q24. 3	0.126407633	0.091769	0.160358
ANTXR1	10q11. 22	0.126385237	0.091827	0.160446
RNF43	17q22	0.12637834	0.091845	0.160463
SPIRE1	18p11. 21	-0.126372063	0.091861	0.160473
CLPB	11q13. 4	-0.12636997	0.091866	0.160473
RRP7A	22q13. 2	0.126315569	0.092007	0.160701
TRMU	22q13. 31	-0.126313477	0.092013	0.160701
SSR3	3q25. 31	-0.126290461	0.092072	0.160791
C20ORF85	20q13. 32	0.126284063	0.092089	0.160806

UQCRC2	16p12.2	0.126266465	0.092135	0.160872
EFCAB10	7q22.3	-0.126225598	0.092241	0.161043
SPDYE5	7q11.23	-0.126210951	0.092279	0.161095
ZNF219	14q11.2	0.126202582	0.092301	0.161096
CD68	17p13.1	0.12620049	0.092306	0.161096
FAM197Y2	Yp11.2	-0.126198334	0.092312	0.161096
LYZL1	10p12.1-1	-0.126198334	0.092312	0.161096
POMZP3	7q11.23	0.126187935	0.092339	0.161111
PITHD1	1p36.11	-0.126185843	0.092344	0.161111
SLC1A3	5p13.2	-0.126185843	0.092344	0.161111
MRPL3	3q22.1	0.126179566	0.092361	0.161125
DIS3	13q21.33	0.126169104	0.092388	0.161159
DSTN	20p12.1	-0.126162827	0.092404	0.161173
FARP1	13q32.2	0.126150273	0.092437	0.161216
TSG1	6q16.1	-0.126135104	0.092476	0.161271
KCNT1	9q34.3	-0.126120245	0.092515	0.161325
LINC00467	1q32.3	0.126106334	0.092551	0.161374
NOC4L	12q24.33	0.126102149	0.092562	0.161379
CCL3L1	17q21.1	-0.12607606	0.09263	0.161466
NHEG1	6q23.3	-0.126076046	0.09263	0.161466
CALHM4	6q22.1	-0.126073638	0.092637	0.161466
SNRNP200	2q11.2	-0.126064486	0.092661	0.161494
URAHF	16q24.3	0.125993346	0.092846	0.161798
CRP	1q23.2	0.125991468	0.092851	0.161798
CCDC163	1p34.1	-0.125985043	0.092868	0.161813
TACR2	10q22.1	0.125974515	0.092896	0.161847
TUT1	11q12.3	0.125968238	0.092912	0.161861
RGCC	13q14.11	-0.125940057	0.092986	0.161966
AQP1	7p14.3	-0.125938945	0.092989	0.161966
RING1	6p21.32	0.125924299	0.093027	0.162014
NCR3	6p21.33	-0.125922206	0.093032	0.162014
MYBL1	8q13.1	-0.12583642	0.093257	0.162392
PLA2G4A	1q31.1	0.125798757	0.093356	0.162536
TBCK	4q24	-0.125798757	0.093356	0.162536
ANKRD19P	9q22.31	0.12579248	0.093373	0.16255
ANAPC16	10q22.1	-0.125752725	0.093477	0.162718
TMC03	13q34	-0.125738079	0.093515	0.162771
PRPF40A	2q23.3	0.125731802	0.093532	0.162785
PLGRKT	9p24.1	0.125727617	0.093543	0.16279
FZD5	2q33.3	0.125717155	0.09357	0.162824
PGA4	11q12.2	-0.125678968	0.093671	0.162984
TLK2	17q23.2	-0.12564183	0.093769	0.16314
MAGEA5	Xq28	0.125623355	0.093817	0.163211
LINC00092	9q22.32	-0.125576967	0.09394	0.163409
HIST1H3I	6p22.1	0.125569145	0.09396	0.163431
IIFT80	3q25.33	-0.125560228	0.093984	0.163458
HYAL2	3p21.31	0.125553951	0.094	0.163472
FBX025	8p23.3	-0.125547674	0.094017	0.163487
RABAC1	19q13.2	0.125489088	0.094172	0.163742
PNPO	17q21.32	0.125459795	0.094249	0.163855
KCNK9	8q24.3	-0.125456923	0.094257	0.163855
SLC25A51F	11p15.1	-0.125455058	0.094262	0.163855
PDCD11	10q24.33	-0.125440964	0.094299	0.163906
CCR9	3p21.31	0.125416512	0.094364	0.164004

KPNA4	3q25. 33	0. 125407486	0. 094388	0. 164032
ADAMTS20	12q12	0. 125394113	0. 094423	0. 164079
WNT5B	12p13. 33	0. 125382378	0. 094454	0. 164119
HDAC9	7p21. 1	-0. 125350993	0. 094537	0. 164249
LIG4	13q33. 3	-0. 1253217	0. 094615	0. 16437
BGLAP	1q22	0. 125292407	0. 094693	0. 16449
SAP30	4q34. 1	-0. 125284037	0. 094715	0. 164505
ADGRG3	16q21	-0. 125283057	0. 094718	0. 164505
CTNNB1	3p22. 1	0. 125279853	0. 094726	0. 164505
RGSL1	1q25. 3	-0. 125261065	0. 094776	0. 164578
GTF2F1	19p13. 3	0. 125256837	0. 094787	0. 164583
IQCC	1p35. 2	-0. 125240098	0. 094832	0. 164646
LINC01002	19p13. 3	0. 125235913	0. 094843	0. 164651
LOC100133	5q21. 1	-0. 125217872	0. 094891	0. 16472
STRA8	7q33	0. 125197733	0. 094944	0. 164798
DBX2	12q12	-0. 125154727	0. 095059	0. 164983
RWDD2B	21q21. 3	0. 125140776	0. 095096	0. 165033
DOCK3	3p21. 2	-0. 125137572	0. 095105	0. 165033
PBOV1	6q23. 3	-0. 125128321	0. 095129	0. 165044
COX6C	8q22. 2	0. 125127111	0. 095132	0. 165044
FBX06	1p36. 22	0. 125122926	0. 095144	0. 165044
USP18	22q11. 21	0. 125122926	0. 095144	0. 165044
LOC642846	12p13. 31	0. 125049693	0. 095339	0. 165368
ZBTB44	11q24. 3	-0. 125037139	0. 095372	0. 165398
EVI2B	17q11. 2	-0. 125037139	0. 095372	0. 165398
ACTN1	14q24. 1 1	0. 125032955	0. 095384	0. 165403
NR2E1	6q21	0. 125014484	0. 095433	0. 165474
FKRP	19q13. 32	-0. 124997385	0. 095479	0. 165539
RPS21	20q13. 33	0. 124989015	0. 095501	0. 165563
CRELD2	22q13. 33	-0. 12498483	0. 095512	0. 165568
SRRM3	7q11. 23	-0. 124955537	0. 09559	0. 165685
PKIB	6q22. 31	-0. 124953445	0. 095596	0. 165685
CCDC88A	2p16. 1	-0. 124942983	0. 095624	0. 165714
PYCR1	17q25. 3	0. 124940891	0. 09563	0. 165714
ATP5F1E	20q13. 32	0. 124934614	0. 095646	0. 165729
UBXN6	19p13. 3	0. 12492206	0. 09568	0. 165773
PSTPIP1	15q24. 3	-0. 124907413	0. 095719	0. 165827
VNN1	6q23. 2	0. 124903229	0. 09573	0. 165832
RCN3	19q13. 33	0. 124890674	0. 095764	0. 165875
TBX20	7p14. 2	0. 124863983	0. 095836	0. 165985
HOOK3	8p11. 21	-0. 124857197	0. 095854	0. 165988
KALRN	3q21. 1-q2	0. 124857197	0. 095854	0. 165988
TMEM119	12q23. 3	-0. 124846735	0. 095882	0. 166022
RAB42	1p35. 3	0. 124841569	0. 095896	0. 166022
SSB	2q31. 1	0. 124840458	0. 095899	0. 166022
CABP1	12q24. 31	-0. 124827904	0. 095932	0. 166066
HCN2	19p13. 3	-0. 124792334	0. 096028	0. 166217
FOXI1	5q35. 1	0. 124776647	0. 09607	0. 166276
TAF8	6p21. 1	-0. 124767225	0. 096095	0. 166305
NEK8	17q11. 2	0. 124763041	0. 096106	0. 16631
FUOM	10q26. 3	0. 124752579	0. 096135	0. 166338
LCE2D	1q21. 3	-0. 124747778	0. 096147	0. 166338
LCE6A	1q21. 3	-0. 124747778	0. 096147	0. 166338
ZNF511	10q26. 3	0. 124687716	0. 096309	0. 166603

ZSCAN1	19q13. 43	-0. 12468285	0. 096322	0. 166611
FTL	19q13. 33	0. 124675162	0. 096343	0. 166632
KRTAP26-1	21q22. 11	0. 12465867	0. 096387	0. 166691
TNP02	19p13. 13	-0. 12465633	0. 096393	0. 166691
TIMM10B	11p15. 4	-0. 124635407	0. 09645	0. 16677
CHML	1q43	0. 124633315	0. 096455	0. 16677
TPM3P9	19q13. 42	-0. 12462913	0. 096467	0. 166775
NDNF	4q27	0. 124606114	0. 096529	0. 166867
ZMYM2	13q12. 11	0. 124589375	0. 096574	0. 166931
LXN	3q25. 32	-0. 124539158	0. 096709	0. 167151
CDH17	8q22. 1	0. 124530789	0. 096732	0. 167175
TRIM63	1p36. 11	-0. 124491318	0. 096839	0. 167345
RMND5A	2p11. 2	0. 124484757	0. 096856	0. 167361
ARMC5	16p11. 2	-0. 124470111	0. 096896	0. 167415
NPC1L1	7p13	0. 124447095	0. 096958	0. 167508
LOC391343	2p25. 3	-0. 124411107	0. 097056	0. 167662
HNRNPDL	4q21. 22	0. 124375955	0. 097151	0. 167812
VSX2	14q24. 3	-0. 124335209	0. 097261	0. 167988
SNORA55	1p34. 3	-0. 124323724	0. 097292	0. 168028
MR1	1q25. 3	0. 124302722	0. 097349	0. 168111
OR52N2	11p15. 4	0. 124273671	0. 097428	0. 168233
CTNNA3	10q21. 3	-0. 124269122	0. 097441	0. 16824
TMX2	11q12. 1	0. 124254598	0. 09748	0. 168293
WDR97	8q24. 3	0. 124246229	0. 097503	0. 168318
PHF19	9q33. 2	-0. 124242044	0. 097514	0. 168322
OR1F1	16p13. 3	-0. 124239238	0. 097522	0. 168322
GDF1	19p13. 11	-0. 124225582	0. 097559	0. 168371
IFT43	14q24. 3	0. 124216936	0. 097582	0. 168393
FAM50A	Xq28	0. 124214843	0. 097588	0. 168393
NHLRC1	6p22. 3	-0. 124208566	0. 097605	0. 168408
CLEC17A	19p13. 12	-0. 124192022	0. 09765	0. 168471
HIP1	7q11. 23	-0. 124183458	0. 097673	0. 168496
TUBBP6	7p11. 2	-0. 124177373	0. 09769	0. 168507
PLCB2	15q15. 1	0. 124175088	0. 097696	0. 168507
SLC45A2	5p13. 2	-0. 124158196	0. 097742	0. 168571
RSPH10B2	7p22. 1	-0. 12415154	0. 09776	0. 168588
CLLU10S	12q22	0. 124135266	0. 097805	0. 16865
NACAD	7p13	-0. 124129057	0. 097822	0. 168665
AMPD3	11p15. 4	-0. 124083025	0. 097947	0. 168862
SMG7	1q25. 3	0. 124080932	0. 097953	0. 168862
CACNA2D4	12p13. 33	0. 124051639	0. 098033	0. 168985
KTI12	1p32. 3	-0. 124020254	0. 098118	0. 169118
RAX	18q21. 32	0. 123993861	0. 09819	0. 169228
FBX022	15q24. 2	0. 12397213	0. 09825	0. 169315
GNAT1	3p21. 31	-0. 123961693	0. 098278	0. 169345
RBM3	Xp11. 23	0. 123959576	0. 098284	0. 169345
SOSTDC1	7p21. 2	0. 123947281	0. 098318	0. 169375
TADA1	1q24. 1	-0. 123947022	0. 098318	0. 169375
SLC2A10	20q13. 12	0. 123942837	0. 09833	0. 16938
SUPV3L1	10q22. 1	-0. 123896805	0. 098456	0. 169568
TMEM168	7q31. 1	-0. 123896805	0. 098456	0. 169568
DACT2	6q27	-0. 123882158	0. 098496	0. 169608
KCNH8	3p24. 3	0. 123877974	0. 098507	0. 169608
RNASE6	14q11. 2	-0. 123875881	0. 098513	0. 169608

SAX01	9p22.1	-0.123875846	0.098513	0.169608
SPDYE8P	7q11.23	0.12386542	0.098542	0.169643
SLC29A3	10q22.1	0.123852865	0.098576	0.169679
OR1L4	9q33.2	-0.123851509	0.09858	0.169679
RPL23A	17q11.2	0.123846588	0.098593	0.169688
FCN1	9q34.3	-0.123756617	0.09884	0.170098
2-Mar	19p13.2	0.123610152	0.099243	0.170777
AOC3	17q21.31	-0.123601783	0.099266	0.170802
LSMEM2	3p21.31	0.123597071	0.099279	0.17081
SLC6A15	12q21.31	-0.123546507	0.099419	0.171035
ELP3	8p21.1	-0.123541104	0.099434	0.171046
LARP7	4q25	-0.123513904	0.099509	0.17116
POLR2I	19q13.12	0.123497165	0.099555	0.171225
PIGX	3q29	-0.123484611	0.09959	0.17127
PRG3	11q12.1	0.123473392	0.099621	0.171308
ASMTL-AS1	Xp22.33	0.123461595	0.099653	0.17135
RALGDS	9q34.13-c	-0.123413471	0.099786	0.171555
GINS4	8p11.21	0.123409286	0.099798	0.171555
SNORD115	15q11.2	-0.123405992	0.099807	0.171555
SLC2A9	4p16.1	-0.123403009	0.099815	0.171555
UVRAG	11q13.5	-0.123403009	0.099815	0.171555
DEFB124	20q11.21	-0.123386109	0.099862	0.17162
ZNF710	15q26.1	-0.123354885	0.099949	0.171754
FOXE3	1p33	0.123349083	0.099965	0.171767
RAB9A	Xp22.2	0.123338146	0.099995	0.171804
TRMT1L	1q25.3	-0.123310945	0.10007	0.171919
AGAP4	10q11.22	0.12330676	0.100082	0.171924
TECRL	4q13.1	0.123297223	0.100108	0.171955
CLEC4F	2p13.3	-0.123273526	0.100174	0.172053
MGP	12p12.3	-0.123241897	0.100262	0.172189
CUL9	6p21.1	-0.123210512	0.100349	0.172324
EGLN1	1q42.2	-0.12320005	0.100378	0.172355
CHERP	19p13.11	0.123197958	0.100384	0.172355
IQCB1	3q13.33	0.123179127	0.100437	0.17243
CXCR3	Xq13.1	0.123131002	0.100571	0.172645
CCT6B	17q12	-0.123122633	0.100594	0.17267
TMEM181	6q25.3	-0.123112171	0.100623	0.172705
AATK	17q25.3	0.123101709	0.100652	0.17274
AGXT2	5p13.2	-0.123061533	0.100764	0.172918
NCAPH2	22q13.33	0.123011738	0.100903	0.173141
ORM2	9q32	0.123006839	0.100917	0.17315
CFAP74	1p36.33	-0.122975957	0.101003	0.173277
GPX7	1p32.3	-0.122974076	0.101008	0.173277
CLVS2	6q22.31	-0.122928718	0.101135	0.17348
TLNRD1	15q25.1	0.122825518	0.101424	0.17396
FAM3A	Xq28	0.12280878	0.101471	0.174026
BOP1	8q24.3	0.122789948	0.101524	0.174102
ECHDC2	1p32.3	0.122781579	0.101547	0.174127
PHF5A	22q13.2	0.122766932	0.101588	0.174183
DMRTA1	9p21.3	0.122706511	0.101758	0.174459
SCOC	4q31.1	-0.122681146	0.101829	0.174561
ATPAF2	17p11.2	-0.122679053	0.101835	0.174561
OSM	22q12.2	0.122668592	0.101865	0.174596
LOC100130	2q37.3	0.122646587	0.101927	0.174683

CHURC1	14q23.3	-0.122643483	0.101935	0.174683
APOC2	19q13.32	0.122641391	0.101941	0.174683
OR3A1	17p13.3	-0.12261373	0.102019	0.174801
FAM90A1	12p13.31	0.122597708	0.102064	0.174863
JMJD4	1q42.13	0.122536773	0.102236	0.175137
PTPN20	10q11.22	0.122534789	0.102242	0.175137
ZWILCH	15q22.31	0.122494926	0.102354	0.175305
GMFG	19q13.2	-0.122490741	0.102366	0.175305
LOC646471	11p36.11	-0.122490741	0.102366	0.175305
DOHH	19p13.3	0.122476095	0.102407	0.175361
CD6	11q12.2	-0.122448894	0.102484	0.175478
SEMA6C	1q21.3	-0.12243634	0.10252	0.175523
SRRD	22q12.1	0.122421694	0.102561	0.175579
CPB2	13q14.13	-0.122418352	0.10257	0.17558
CIITA	16p13.13	-0.122386123	0.102662	0.175706
MATN3	2p24.1	0.122386123	0.102662	0.175706
UFM1	13q13.3	0.122375662	0.102691	0.175742
CATSPERG	19q13.2	0.122348461	0.102768	0.175859
RNF175	4q31.3	-0.122302429	0.102899	0.176062
MYL9	20q11.23	0.122300337	0.102905	0.176062
HLCS	21q22.13	-0.122281506	0.102958	0.176138
TATDN1	8q24.13	0.122275229	0.102976	0.176149
UBASH3B	11q24.1	0.122273136	0.102982	0.176149
GATB	4q31.3	-0.122266859	0.103	0.176159
STRN3	14q12	-0.122264767	0.103006	0.176159
AKT1	14q32.33	0.122241751	0.103071	0.176251
WDR91	7q33	-0.122239659	0.103077	0.176251
CARMN	5q32	0.122199904	0.10319	0.176418
PRO0628	20q12	0.122198959	0.103192	0.176418
RRP1B	21q22.3	-0.122189442	0.103219	0.17645
CPEB2	4p15.32	-0.122164334	0.103291	0.176556
POTEG	14q11.2	-0.122136789	0.103369	0.176675
SLC36A1	5q33.1	-0.122118302	0.103422	0.17675
FSTL1	3q13.33	-0.122093194	0.103493	0.176857
CABP5	19q13.33	-0.122080699	0.103529	0.176903
KLHL1	13q21.33	-0.122071999	0.103554	0.17693
DAZ1	Yq11.223	-0.122059448	0.10359	0.176976
EFCAB13	17q21.32	0.122030423	0.103672	0.177102
AJM1	9q34.3	-0.122009499	0.103732	0.177189
PNPT1	2p16.1	0.122003222	0.10375	0.177205
LIG1	19q13.33	0.121982299	0.10381	0.177291
PRB3	12p13.2	0.121948981	0.103905	0.177439
FGGY	1p32.1	-0.121938359	0.103935	0.177476
PLEKHA8P1	12q12	0.121927897	0.103965	0.177511
CPM	12q15	-0.121877681	0.104109	0.177727
LRRC4B	19q13.33	-0.121875588	0.104115	0.177727
RPL32	3p25.2	0.121873496	0.104121	0.177727
TMEM71	8q24.22	-0.121871404	0.104127	0.177727
TSPAN31	12q14.1	0.12185048	0.104186	0.177814
OR2B3	6p22.1	0.121846667	0.104197	0.177817
UMODL1-AS	21q22.3	-0.121823184	0.104265	0.177917
TMEM115	3p21.31	0.121812818	0.104294	0.177952
ZNF461	19q13.12	-0.121618229	0.104853	0.17889
NUBP1	16p13.13	-0.121611952	0.104871	0.178906

TLK1	2q31.1	-0.121603582	0.104895	0.178932
DDX51	12q24.33	-0.12159312	0.104925	0.178968
ZNF598	16p13.3	0.121568012	0.104998	0.179076
TSGA13	7q32.2	-0.121538861	0.105082	0.179204
STK19	6p21.33	0.121532442	0.1051	0.17922
ANGPTL6	19p13.2	-0.121528512	0.105112	0.179224
OR2V2	5q35.3	-0.121486752	0.105232	0.179414
SPATA9	5q15	-0.121458227	0.105314	0.179539
MED1	17q12	-0.121434101	0.105384	0.179643
HLA-DMB	6p21.32	-0.121417362	0.105432	0.17971
TSEN15	1q25.3	0.121392254	0.105505	0.179818
CMIP	16q23.2-c	-0.121383885	0.105529	0.179844
ABCC13	21q11.2	0.121354112	0.105615	0.179976
ERC2-IT1	3p14.3	-0.121344321	0.105644	0.180009
SOX4	6p22.3	0.121339945	0.105656	0.180015
CNGA2	Xq28	-0.121307765	0.10575	0.180158
CHIC2	4q12	0.121287636	0.105808	0.180242
ZNF560	19p13.2	-0.121277729	0.105837	0.180258
KC6	-	-0.121277439	0.105837	0.180258
RNF222	17p13.1	-0.121275213	0.105844	0.180258
PABPC4	1p34.3	-0.121233235	0.105966	0.18045
GGT6	17p13.2	0.121216623	0.106014	0.180516
PPP1R3A	7q31.1	-0.121209044	0.106036	0.180538
R3HCC1L	10q24.2	0.121197665	0.106069	0.180579
MRAS	3q22.3	-0.12119348	0.106081	0.180584
WT1	11p13	-0.121174806	0.106135	0.180661
HNRNPH1	5q35.3	-0.121160003	0.106178	0.180719
STX6	1q25.3	0.12113071	0.106264	0.180849
SLC25A12	2q31.1	-0.121111878	0.106318	0.180927
PSMB11	14q11.2	-0.121057386	0.106477	0.181181
KCNV2	9p24.2	-0.121028291	0.106562	0.18131
CETN3	5q14.3	-0.121019815	0.106586	0.181337
AKR1A1	1p34.1	0.120998891	0.106647	0.181425
VPS4B	18q21.33	-0.120975875	0.106715	0.181524
LIPT1	2q11.2	-0.120963321	0.106751	0.181565
DNAJC7	17q21.2	0.120961229	0.106757	0.181565
COLQ	3p25.1	-0.120896366	0.106947	0.181857
ZBTB37	1q25.1	-0.120896366	0.106947	0.181857
MAP3K2	2q14.3	-0.120867073	0.107032	0.181987
PZP	12p13.31	-0.120861063	0.10705	0.182001
IL17RC	3p25.3 3f	0.120856611	0.107063	0.182008
SPNS3	17p13.2	0.12083575	0.107124	0.182096
SPPL2B	19p13.3	0.120821041	0.107167	0.182154
NUFIP2	17q11.2	0.120808487	0.107204	0.182191
MED6	14q24.2	0.120806394	0.10721	0.182191
BTBD11	12q23.3	-0.120804302	0.107216	0.182191
PSMC5	17q23.3	0.120781286	0.107283	0.18229
HIST1H3J	6p22.1	0.120693512	0.107541	0.182712
HAUS5	19q13.12	0.120676668	0.10759	0.18278
FEZ1	11q24.2	-0.120672483	0.107603	0.182786
CHD1	5q15-q21.	-0.12064319	0.107689	0.182916
CR2	1q32.2	-0.120613099	0.107777	0.183051
JMJD1C	10q21.3	-0.120561589	0.107929	0.183293
PABPC1	8q22.3	0.120546942	0.107972	0.18335

NDUFA2	5q31. 3	0. 120540665	0. 10799	0. 183366
LGI1	10q23. 33	-0. 120520618	0. 108049	0. 183451
L3MBTL4	18p11. 31	-0. 120496725	0. 10812	0. 183549
HOXB13	17q21. 32	0. 120494714	0. 108126	0. 183549
OTOAP1	16p12. 2	0. 120471932	0. 108193	0. 183648
LOC100132	1p36. 33	0. 120463248	0. 108219	0. 183676
PFKFB4	3p21. 31	-0. 120456971	0. 108237	0. 183691
GDF15	19p13. 11	0. 120450694	0. 108256	0. 183702
CEP70	3q22. 3	0. 120448601	0. 108262	0. 183702
GNRHR2	1q21. 1	0. 120442324	0. 10828	0. 183718
KIR2DL4	19q13. 42	-0. 120432625	0. 108309	0. 183751
HSPB9	17q21. 2	0. 120427678	0. 108324	0. 18376
VIP	6q25. 2	-0. 12041956	0. 108347	0. 183781
TSEN2	3p25. 2	0. 120417216	0. 108354	0. 183781
OTOL1	3q26. 1	-0. 120409353	0. 108378	0. 183805
FOXK2	17q25. 3	-0. 120379553	0. 108466	0. 183939
ASIC3	7q36. 1	0. 120366999	0. 108503	0. 183986
ASGR1	17p13. 1	-0. 120354445	0. 10854	0. 184033
POGK	1q24. 1	0. 120348168	0. 108558	0. 184049
LRRC18	10q11. 23	-0. 120332056	0. 108606	0. 184103
FRMPD4	Xp22. 2	-0. 120331334	0. 108608	0. 184103
NOS2	17q11. 2	-0. 120325152	0. 108627	0. 184118
POLR2D	2q14. 3	0. 120304229	0. 108688	0. 184207
NDP	Xp11. 3	0. 120278137	0. 108766	0. 184323
C10RF189	1q21. 3	-0. 120257422	0. 108827	0. 184411
SNORA11	Xp11. 21	-0. 120247317	0. 108857	0. 184439
AGAP1	2q37. 2	-0. 120245643	0. 108862	0. 184439
YJEFN3	19p13. 11	0. 120240475	0. 108877	0. 184449
ZNF300P1	5q33. 1	-0. 120235181	0. 108893	0. 18446
VPS33B	15q26. 1	0. 120170318	0. 109085	0. 18477
TERF2	16q22. 1	-0. 120161948	0. 10911	0. 184797
C6ORF136	6p21. 33	0. 120155671	0. 109129	0. 184813
SAR1B	5q31. 1	-0. 12010127	0. 109291	0. 185071
RASAL3	19p13. 12	-0. 120080346	0. 109353	0. 18516
COPS9	2q37. 3	0. 120057331	0. 109421	0. 185261
SLC39A9	14q24. 1	-0. 120053146	0. 109434	0. 185266
RTCA	1p21. 2	0. 120048961	0. 109446	0. 185271
PDCD1	2q37. 3	-0. 12003013	0. 109502	0. 185351
RPUSD1	16p13. 3	0. 120017576	0. 10954	0. 185398
SLC22A9	11q12. 3	-0. 119983336	0. 109642	0. 185555
SNORA27	13q12. 2	0. 119969578	0. 109683	0. 185609
MAPK12	22q13. 33	-0. 119965267	0. 109695	0. 185615
DOLPP1	9q34. 11	0. 119954805	0. 109727	0. 185652
TSP02	6p21. 1	0. 119904743	0. 109876	0. 185889
MAPK7	17p11. 2	0. 119883665	0. 109939	0. 18598
TRIM56	7q22. 1	-0. 119848095	0. 110045	0. 186144
OTOP3	17q25. 1	-0. 11983211	0. 110093	0. 186192
ZBTB38	3q23	-0. 119831356	0. 110095	0. 186192
ATRAID	2p23. 3	0. 119829264	0. 110102	0. 186192
WASH8P	12p13. 33	0. 119810432	0. 110158	0. 186271
C5ORF52	5q33. 3	-0. 119795541	0. 110202	0. 186331
PTPN1	20q13. 13	-0. 119791601	0. 110214	0. 186335
LUC7L2	7q34	-0. 119781139	0. 110246	0. 186372
GBF1	10q24. 32	-0. 119735108	0. 110383	0. 186589

ZNF816	19q13. 41	0. 119695353	0. 110503	0. 186775
TAS2R31	12p13. 2	-0. 119666694	0. 110588	0. 186904
NUPR1	16p11. 2	0. 119634675	0. 110685	0. 187051
GGCT	7p14. 3	0. 11963049	0. 110697	0. 187056
DUPD1	10q22. 2	-0. 119618817	0. 110732	0. 1871
RIC8A	11p15. 5	0. 119601197	0. 110785	0. 187174
RELT	11q13. 4	0. 11955935	0. 110911	0. 18737
ORC1	1p32. 3	0. 119542611	0. 110961	0. 187439
NHLH1	1q23. 2	0. 119511288	0. 111056	0. 187583
NAA10	Xq28	0. 119507041	0. 111068	0. 187583
XKR6	8p23. 1	0. 119505011	0. 111074	0. 187583
CBS	21q22. 3	-0. 119465194	0. 111194	0. 18777
FEV	2q35	-0. 119428781	0. 111304	0. 187939
RPS6KL1	14q24. 3	0. 119421254	0. 111327	0. 187962
TMEM178A	2p22. 1	0. 119412885	0. 111352	0. 187988
TNN	1q25. 1	-0. 119402423	0. 111384	0. 188026
ETS2	21q22. 2	0. 119398238	0. 111396	0. 188031
EDN3	20q13. 32	-0. 119387776	0. 111428	0. 188069
PLAC9P1	2q21. 1	-0. 119382024	0. 111445	0. 188082
SOX3	Xq27. 1	-0. 119376063	0. 111463	0. 188097
CBWD2	2q14. 1	0. 119371038	0. 111478	0. 188106
HOMEZ	14q11. 2	0. 119362668	0. 111504	0. 188123
SLC22A2	6q25. 3	-0. 119361601	0. 111507	0. 188123
C10RF162	1p13. 2	-0. 119350114	0. 111542	0. 188149
UBE2F	2q37. 3	-0. 119350114	0. 111542	0. 188149
ZC2HC1B	6q24. 2	-0. 119305096	0. 111678	0. 188363
NEU4	2q37. 3	-0. 119214734	0. 111951	0. 188808
COL28A1	7p21. 3	-0. 119191157	0. 112023	0. 188902
TRIL	7p14. 3	-0. 119190111	0. 112026	0. 188902
C22ORF23	22q13. 1	-0. 11918691	0. 112035	0. 188903
FCGR2A	1q23. 3	-0. 119178541	0. 112061	0. 18893
PIGO	9p13. 3	-0. 119168079	0. 112093	0. 188967
GTF2IRD1F	7q11. 21	0. 119161527	0. 112112	0. 188985
C1QTNF7	4p15. 32	-0. 11915134	0. 112143	0. 189021
LINC01257	12q24. 33	-0. 119120232	0. 112238	0. 189164
ACP5	19p13. 2	0. 119107401	0. 112277	0. 189198
UCKL1	20q13. 33	0. 119107401	0. 112277	0. 189198
CHRM1	11q12. 3	-0. 118996993	0. 112612	0. 189736
1-Dec	9q33. 1	-0. 118995999	0. 112615	0. 189736
CTU2	16q24. 3	0. 118992321	0. 112627	0. 189739
MAP3K8	10p11. 23	-0. 118988136	0. 112639	0. 189745
C1QTNF8	16p13. 3	-0. 118976667	0. 112674	0. 189777
MTCP1	Xq28	0. 118975582	0. 112677	0. 189777
DEFB107A	8p23. 1	-0. 118945556	0. 112769	0. 189899
SSX7	Xp11. 22	-0. 118945556	0. 112769	0. 189899
DCBLD1	6q22. 1	0. 118925366	0. 11283	0. 189981
HPN-AS1	19q13. 11-	-0. 118923297	0. 112837	0. 189981
GPS2	17p13. 1	-0. 118887703	0. 112945	0. 190148
BAZ2A	12q13. 3	-0. 11886678	0. 113009	0. 19024
RGS6	14q24. 2	0. 11885694	0. 113039	0. 190274
CYREN	7q33	-0. 118814471	0. 113169	0. 190466
CHRNA2	8p21. 2	-0. 118813385	0. 113172	0. 190466
KRT33A	17q21. 2	-0. 11880704	0. 113192	0. 190482
C4ORF36	4q21. 3	0. 11874709	0. 113375	0. 190775

FASTKD1	2q31.1	-0.118743331	0.113386	0.190775
STAP1	4q13.2	-0.118740875	0.113394	0.190775
C14ORF39	14q23.1	-0.118715765	0.113471	0.190888
ARGFX	3q13.33	0.11870723	0.113497	0.190916
PRPF19	11q12.2	0.118686837	0.113559	0.191005
MB	22q12.3	0.118663883	0.11363	0.191107
NXN	17p13.3	-0.118655452	0.113656	0.191134
NPFF	12q13.13	0.118642897	0.113694	0.191183
CHKB-DT	22q13.33	-0.118622036	0.113758	0.191259
FASTK	7q36.1	0.118621974	0.113758	0.191259
TMEM174	5q13.2	0.118598809	0.113829	0.191362
ASTE1	3q22.1	-0.118594773	0.113842	0.191367
TRAPPC3	1p34.3	0.118580127	0.113887	0.191426
CEP95	17q23.3	0.11856548	0.113932	0.191486
NPHP3-AS1	3q22.1	-0.118562101	0.113942	0.191487
IP6K3	6p21.31	-0.118547667	0.113986	0.191546
PGLYRP1	19q13.32	-0.118476499	0.114205	0.191897
POP4	19q12	0.118452493	0.114279	0.192005
ETV3	1q23.1	-0.118429477	0.11435	0.192108
RBPMS2	15q22.31	-0.118412738	0.114401	0.192162
BLOC1S1	12q13.2	0.118410646	0.114408	0.192162
KLK3	19q13.33	0.118409788	0.114411	0.192162
MCHR2	6q16.2	-0.118362965	0.114555	0.192388
COX6A1	12q24.31	0.118358337	0.114569	0.192396
CCDC74B	2q21.1	0.11834369	0.114614	0.192455
EIF2B4	2p23.3	0.118337413	0.114634	0.192466
INTS4P2	7q11.21	0.118335383	0.11464	0.192466
SRGAP2	1q32.1	0.118318644	0.114692	0.192537
CHMP3	2p11.2	0.118310213	0.114718	0.192564
HEPN1	11q24.2	-0.118235626	0.114948	0.192935
MSANTD2	11q24.2	0.118222334	0.114989	0.192988
JUND	19p13.11	0.11820141	0.115054	0.19308
OSGEPL1	2q32.2	-0.118188856	0.115093	0.193129
TRIM2	4q31.3	-0.118178394	0.115125	0.193167
VNN3	6q23.2	-0.118162892	0.115173	0.193232
CEACAM20	19q13.31	0.118152972	0.115204	0.193244
CNNM2	10q24.32	-0.118151194	0.11521	0.193244
PROB1	5q31.2	0.118151194	0.11521	0.193244
GPR45	2q12.1	-0.118145844	0.115226	0.193255
PMS2P3	7q11.23	0.118111501	0.115333	0.193418
USP3	15q22.31	0.118092608	0.115391	0.1935
LRRC29	16q22.1	0.118071684	0.115456	0.193592
RAF1	3p25.2	0.118067499	0.115469	0.193598
RP2	Xp11.3	-0.118042391	0.115547	0.193712
KLHDC7A	1p36.13	0.118025652	0.115599	0.193783
DKK2	4q25	-0.117996359	0.11569	0.193919
CCDC196	14q23.3	-0.11796866	0.115776	0.194048
SNORA53	12q23.1	-0.117937426	0.115873	0.194194
SULT1A1	16p11.2	0.117929404	0.115898	0.19422
PTCHD1	Xp22.11	-0.11792119	0.115924	0.194246
DCN	12q21.33	-0.117898019	0.115996	0.194351
DIPK2A	3q24	-0.117891741	0.116016	0.194367
CNGB3	8q21.3	-0.117883605	0.116041	0.194394
CTRL	16q22.1	-0.117839433	0.116179	0.194608

JMJD8	16p13.3	0.117822694	0.116231	0.194679
DGKH	13q14.11	0.11781014	0.11627	0.194728
STAT1	2q32.2	0.117799678	0.116303	0.194767
VAR52	6p21.33	0.117780847	0.116361	0.194849
RFTN1	3p24.3	-0.117774569	0.116381	0.19486
NDUFA12	12q22	0.117772477	0.116388	0.19486
SLC38A8	16q23.3	-0.117751204	0.116454	0.194948
NPIPA1	16p13.11	-0.117749461	0.116459	0.194948
PPP2R5B	11q13.1	0.11773063	0.116518	0.19503
TBCB	19q13.12	0.117718076	0.116557	0.195079
HIST1H2BF	6p22.2	0.117692201	0.116638	0.195198
C10RF131	1q42.2	0.117678321	0.116682	0.195254
HMGB2	4q34.1	0.117636474	0.116813	0.195436
CYP2B7P	19q13.2	0.117634382	0.116819	0.195436
UQCRB	8q22.1	-0.117634382	0.116819	0.195436
CSAG3	Xq28	0.117536795	0.117125	0.195931
PEF1	1p35.2	0.117521394	0.117174	0.19599
COX7C	5q14.3	0.117519302	0.11718	0.19599
CALHM5	6q22.1	-0.117510933	0.117206	0.196018
CD109	6q13	0.117504655	0.117226	0.196034
OR51F1	11p15.4	-0.117495	0.117257	0.196052
CXORF66	Xq27.1	0.117495	0.117257	0.196052
TPD52	8q21.13	-0.117456531	0.117377	0.196238
RDH12	14q24.1	-0.117450254	0.117397	0.196254
ZNF362	1p35.1	-0.117441885	0.117423	0.196282
TMIGD1	17q11.2	-0.117411571	0.117519	0.196425
MYOZ2	4q26	-0.117370643	0.117648	0.196617
CACNA1S	1q32.1	-0.117368818	0.117653	0.196617
TRIM68	11p15.4	-0.117364468	0.117667	0.196623
C17ORF77	17q25.1	0.117350124	0.117712	0.196682
C16ORF92	16p11.2	-0.11734401	0.117732	0.196698
EMB	5q11.1	0.117326805	0.117786	0.196772
SLC22A7	6p21.1	-0.117299771	0.117871	0.196898
SPATA5L1	15q21.1	0.117289143	0.117904	0.196938
ZNF561	19p13.2	-0.117276589	0.117944	0.196987
POTEF	2q21.1	-0.117262065	0.11799	0.197048
REXO5	16p12.3	-0.117257757	0.118004	0.197054
DCAF8	1q23.2	-0.117238926	0.118063	0.197137
MMP17	12q24.33	0.117209633	0.118155	0.197275
GPRC6A	6q22.1	-0.117180729	0.118247	0.197411
CTH	1p31.1	-0.117165694	0.118294	0.197473
ANO10	3p22.1-p2	0.117151047	0.118341	0.197534
AGAP11	10q23.2	0.11714797	0.11835	0.197534
WBP1	2p13.1	0.11714477	0.118361	0.197534
IRX2	5p15.33	-0.117081999	0.118559	0.19785
LARS2	3p21.31	-0.117012952	0.118778	0.198198
ZNF775	7q36.1	-0.117000398	0.118818	0.198248
SPHK1	17q25.1	0.116935534	0.119024	0.198575
POGLUT3	11q22.3	-0.116910426	0.119104	0.198692
LRRC25	19p13.11	-0.116891595	0.119164	0.198775
DNAJB14	4q23	-0.116872764	0.119224	0.198842
GPD1	12q13.12	-0.116872764	0.119224	0.198842
NYNRIN	14q12	0.11685184	0.11929	0.198936
ZBTB18	1q44	-0.116847656	0.119304	0.198942

RPS11	19q13.33	0.116835101	0.119343	0.198992
CLIP4	2p23.2	-0.116826732	0.11937	0.19902
IQCJ	3q25.32	0.116807441	0.119432	0.199106
PIK3R4	3q22.1	-0.116797439	0.119463	0.199142
RHBDD2	7q11.23	0.116791162	0.119483	0.199159
SEBOX	17q11.2	-0.116784612	0.119504	0.19917
POLRMT	19p13.3	0.116782792	0.11951	0.19917
HAO2	1p12	-0.116772225	0.119544	0.19921
ATP5MD	10q24.33	0.116751407	0.11961	0.199298
BRWD3	Xq21.1	-0.116749315	0.119617	0.199298
LINC01001	11p15.5	0.116738853	0.11965	0.199337
SFT2D3	2q14.3	0.116722114	0.119704	0.19941
KLHL25	15q25.3	0.116711652	0.119737	0.199449
CLEC6A	12p13.31	-0.116704999	0.119758	0.199467
MRGPRX4	11p15.1	-0.116686962	0.119816	0.199532
OLR1	12p13.2	0.116686544	0.119817	0.199532
LAS1L	Xq12	0.116650974	0.119931	0.199705
ZNRF2	7p14.3	-0.116642605	0.119958	0.199733
FAAP100	17q25.3	0.116579834	0.120158	0.20004
LECT2	5q31.1	0.116578394	0.120163	0.20004
SPN	16p11.2	-0.116575649	0.120172	0.20004
LIX1L	1q21.1	-0.116508694	0.120386	0.20038
LAMTOR4	7q22.1	0.116500324	0.120413	0.200408
HAVCR1	5q33.3	0.116473317	0.1205	0.200535
SPIC	12q23.2	-0.116454593	0.12056	0.200619
KIAA0319L	1p34.3	-0.116450108	0.120574	0.200626
NPAS4	11q13.2	-0.116441661	0.120601	0.200654
RAD18	3p25.3	0.116429184	0.120641	0.200704
ATXN7L1	7q22.3	-0.116393614	0.120756	0.200868
SNORA41	2q33.3	0.116392339	0.12076	0.200868
ASB6	9q34.11	0.11626598	0.121166	0.201527
LCN15	9q34.3	-0.116255491	0.1212	0.201554
CHRNA9	4p14	-0.116254806	0.121202	0.201554
HRCT1	9p13.3	0.11623878	0.121254	0.201623
FAM241B	10q22.1	0.116226226	0.121295	0.201659
BHMT	5q14.1	-0.116225734	0.121296	0.201659
GPR151	5q32	-0.116198177	0.121385	0.20179
TEX47	7q21.13	0.11618873	0.121416	0.201824
CD4	12p13.31	-0.116173917	0.121463	0.201887
ARHGAP29	1p22.1	-0.116127885	0.121612	0.2021
PEX11A	15q26.1	0.116127885	0.121612	0.2021
PAK1IP1	6p24.2	-0.116102777	0.121693	0.202218
C3ORF79	3q25.2	-0.11609673	0.121713	0.202234
NPHP4	1p36.31	-0.116079761	0.121768	0.202308
RXRG	1q23.3	-0.116069926	0.121799	0.202344
FCRL2	1q23.1	-0.116054208	0.12185	0.202412
DPPA5	6q13	0.116048666	0.121868	0.202425
CDHR3	7q22.3	-0.116044191	0.121883	0.202432
ZNF547	19q13.43	-0.116023267	0.12195	0.202528
MORN3	12q24.31	-0.116014898	0.121978	0.202539
PBXIP1	1q21.3	-0.116012805	0.121984	0.202539
TSPAN10	17q25.3	0.11601182	0.121988	0.202539
PCDH7	4p15.1	0.115952127	0.122181	0.202843
ZNF883	9q32	-0.115853786	0.1225	0.203356

FKBP1A	20p13	0.115784738	0.122725	0.203712
DYNC1LI1	3p22.3	-0.115763815	0.122793	0.203786
RTN4IP1	6q21	-0.115763815	0.122793	0.203786
SS18L2	3p22.1	0.115761722	0.1228	0.203786
DPEP3	16q22.1	-0.115755176	0.122821	0.203804
CHMP6	17q25.3	0.115747076	0.122847	0.203831
ADCY4	14q12	-0.115707321	0.122977	0.204029
KLHL35	11q13.4	0.115648796	0.123168	0.204329
ARL6IP5	3p14.1	0.11564455	0.123182	0.204335
LRRC20	10q22.1	0.115627812	0.123236	0.204403
ARHGAP9	12q13.3	-0.115625719	0.123243	0.204403
PSMG1	21q22.2	0.115621535	0.123257	0.204409
KNL1	15q15.1	0.115606888	0.123305	0.204465
WTIP	19q13.11	0.115604796	0.123311	0.204465
NPTX2	7q22.1	-0.115571318	0.123421	0.204618
FMO1	1q24.3	-0.115570332	0.123424	0.204618
GABRR2	6q15	-0.115507836	0.123628	0.20494
GAPT	5q11.2	-0.115504363	0.12364	0.204942
GALK2	15q21.1-c	0.115489716	0.123688	0.205004
ZBTB17	1p36.13	0.115426945	0.123893	0.205328
AHSA1	14q24.3	0.115418576	0.123921	0.205356
ORAI1	12q24.31	0.115412299	0.123941	0.205373
COPE	19p13.11	0.115366267	0.124092	0.205607
CFAP43	10q25.1	-0.11535999	0.124113	0.205624
LRRC52-AS1	1q23.3-q2	-0.115330074	0.124211	0.205755
PMCHL1	5p14.3	-0.115329641	0.124213	0.205755
OCLNP1	5q13.2	0.115325293	0.124227	0.205761
HOTAIR	12q13.13	0.115314734	0.124262	0.205802
LINC0093C	15q26.1	-0.115286592	0.124354	0.205938
NANOS2	19q13.32	-0.115277091	0.124385	0.20596
AKAP13	15q25.3	-0.115276296	0.124388	0.20596
KMT5A	12q24.31	0.115270019	0.124409	0.205977
SPATA31C1	19q22.1	0.115241353	0.124503	0.206116
SERINC5	5q14.1	-0.115228171	0.124546	0.206171
ST20-AS1	15q25.1	-0.115212539	0.124598	0.206228
USP32P2	17p11.2	-0.115211433	0.124601	0.206228
PPP5C	19q13.32	0.115205156	0.124622	0.206245
SRP14	15q15.1	0.115161216	0.124767	0.206467
PGS1	17q25.3	-0.115148662	0.124808	0.206519
C4A	6p21.33	-0.115113092	0.124925	0.206679
MSRB3	12q14.3	-0.115113092	0.124925	0.206679
EMBP1	1p11.2	0.115108907	0.124939	0.206684
LEO1	15q21.2	-0.115092168	0.124994	0.206759
FLRT1	11q13.1	-0.115069152	0.12507	0.206867
SPAG8	9p13.3	-0.115010566	0.125264	0.20717
LINC00937	12p13.31	-0.11499598	0.125312	0.207233
IVD	15q15.1	0.11498755	0.12534	0.207262
CTPS1	1p34.2	-0.114981273	0.125361	0.207273
EVA1A	2p12	-0.114979181	0.125368	0.207273
HOXD10	2q31.1	0.11494727	0.125473	0.207431
ZCCHC24	10q22.3	-0.114931057	0.125527	0.207497
RBBP8	18q11.2	0.114928964	0.125534	0.207497
YES1	18p11.32	0.114899672	0.125631	0.20764
CDKN2AIP	4q35.1	-0.114891302	0.125659	0.207668

DBP	19q13.33	0.114885025	0.12568	0.207686
MED18	1p35.3	0.114876656	0.125707	0.207714
RNF6	13q12.13	-0.114824347	0.125881	0.207978
CYB5A	18q22.3	-0.114822254	0.125888	0.207978
EDIL3	5q14.3	-0.114815977	0.125909	0.207995
MRPS14	1q25.1	0.114795054	0.125978	0.208093
PLEKHF1	19q12	0.114730191	0.126194	0.208432
PCDHGB7	5q31.3	-0.114726006	0.126208	0.208437
KCNK17	6p21.2	-0.114721821	0.126221	0.208443
UST	6q25.1	0.11470299	0.126284	0.208529
PRAMEF1	1p36.21	-0.114671959	0.126387	0.208683
PRAMEF8	1p36.21	-0.114661649	0.126422	0.208722
LINC01089	12q24.31	-0.114638127	0.1265	0.208834
HOPX	4q12	0.11463185	0.126521	0.208851
TAC1	7q21.3	-0.11462777	0.126534	0.208857
LGALS12	11q12.3	-0.114621866	0.126554	0.208872
SEMA6B	19p13.3	-0.114602557	0.126619	0.208961
ARHGEF12	11q23.3	-0.114579541	0.126695	0.20907
TRPV1	17p13.2	-0.114562802	0.126751	0.209145
SLC7A6	16q22.1	-0.114533509	0.126849	0.209272
SWT1	1q25.3	-0.114533509	0.126849	0.209272
ERAP1	5q15	-0.114512586	0.126919	0.20937
RTN4RL2	11q12.1	-0.114495847	0.126975	0.209445
AGA	4q34.3	-0.11448957	0.126996	0.209462
RETREG3	17q21.2	0.114483293	0.127017	0.209479
HMGB4	1p35.1	-0.114464015	0.127081	0.209568
MAS1	6q25.3	-0.114447856	0.127135	0.20964
HULC	6p24.3	0.114430598	0.127193	0.209718
TMEM106C	12q13.11	-0.114418429	0.127233	0.209768
LOC440896	9p11.2	-0.114410536	0.12726	0.209794
ARSF	Xp22.33	-0.11439632	0.127307	0.209855
OR51B6	11p15.4	0.114387004	0.127339	0.209889
IZUMO1R	11q21	-0.114377837	0.127369	0.209923
EXOC4	7q33	0.114343105	0.127486	0.210097
WNT1	12q13.12	-0.114315914	0.127577	0.21023
HINFP	11q23.3	0.11429498	0.127647	0.210328
ZNF343	20p13	-0.114284519	0.127682	0.210369
GPS1	17q25.3	0.114236394	0.127844	0.210595
PMS2P1	7q22.1	0.114236394	0.127844	0.210595
RS1	Xp22.13	-0.114234209	0.127851	0.210595
CCDC15	11q24.2	0.114219656	0.1279	0.210641
SLX4	16p13.3	-0.114219656	0.1279	0.210641
TLR3	4q35.1	0.114194547	0.127984	0.210762
ASB16	17q21.31	-0.114175716	0.128048	0.210849
ZIC5	13q32.3	0.114149205	0.128137	0.210967
KRTAP3-2	17q21.2	-0.114148093	0.128141	0.210967
MMADHC	2q23.2	0.114115038	0.128252	0.211133
TSPAN2	1p13.2	-0.114110853	0.128266	0.211139
CNOT9	2q35	-0.114096207	0.128315	0.211203
TBC1D7	6p24.1	0.114069006	0.128407	0.211336
SLC7A3	Xq13.1	0.114018612	0.128577	0.211597
GPBP1	5q11.2	-0.114012512	0.128597	0.211597
TSPAN5	4q23	0.114012512	0.128597	0.211597
THAP7-AS1	22q11.21	-0.114006235	0.128618	0.211615

IQSEC2	Xp11. 22	0. 113991589	0. 128668	0. 211661
ZFPM2	8q23. 1	-0. 113991589	0. 128668	0. 211661
ELAVL3	19p13. 2	-0. 113973597	0. 128729	0. 211744
RUNX3	1p36. 11	-0. 113968573	0. 128746	0. 211754
TRIM5	11p15. 4	0. 113953926	0. 128795	0. 211818
AFTPH	2p14	-0. 113941372	0. 128837	0. 211871
LRRC55	11q12. 1	-0. 113926785	0. 128887	0. 211934
TCL1A	14q32. 13	-0. 11391635	0. 128922	0. 211975
FAM117B	2q33. 2	-0. 113909987	0. 128944	0. 211993
EGLN2	19q13. 2	0. 113905802	0. 128958	0. 211999
OR2M3	1q44	0. 113878746	0. 129049	0. 212131
RPL12	9q33. 3	0. 113866047	0. 129092	0. 212185
SOHLH1	9q34. 3	-0. 113850984	0. 129143	0. 212251
CLDN22	4q35. 1	0. 113822053	0. 129241	0. 212395
TNNI3K	1p31. 1	-0. 113817923	0. 129255	0. 2124
ZCWPW1	7q22. 1	-0. 113792815	0. 12934	0. 212522
LRP8	1p32. 3	0. 113740506	0. 129518	0. 212796
CPD	17q11. 2	-0. 113730044	0. 129553	0. 212837
TULP3	12p13. 33	-0. 113700751	0. 129652	0. 212977
TMEM104	17q25. 1	-0. 113698659	0. 12966	0. 212977
HK3	5q35. 2	0. 113686105	0. 129702	0. 21303
TFB1M	6q25. 3	0. 113658904	0. 129795	0. 213164
TBC1D23	3q12. 1-q1	-0. 11364635	0. 129837	0. 213199
YKT6	7p13	0. 11364635	0. 129837	0. 213199
VPS8	3q27. 2	-0. 113581487	0. 130058	0. 213544
C16ORF90	16p13. 3	-0. 113570533	0. 130095	0. 213587
C12ORF76	12q24. 11	-0. 113524993	0. 13025	0. 213824
TTF2	1p13. 1	0. 113516624	0. 130279	0. 213854
OR4F6	15q26. 3	0. 113510988	0. 130298	0. 213854
ECD	10q22. 2	0. 113510347	0. 1303	0. 213854
DUSP1	5q35. 1	-0. 113447576	0. 130514	0. 214187
ALX4	11p11. 2	-0. 113430573	0. 130572	0. 214265
OACYLP	18q21. 32	0. 113421386	0. 130604	0. 214299
GGT8P	2p11. 2	0. 113395722	0. 130691	0. 214414
CABP7	22q12. 2	-0. 113393175	0. 1307	0. 214414
KCNIP1	5q35. 1	-0. 11339132	0. 130706	0. 214414
OR51F2	11p15. 4	0. 113361586	0. 130808	0. 214564
LOC40094C	2p25. 2	-0. 113341956	0. 130875	0. 214656
FBXO3	11p13	-0. 113336681	0. 130893	0. 214668
LSM6	4q31. 22	-0. 113305296	0. 131	0. 214809
ZDHHC4	7p22. 1	0. 113305296	0. 131	0. 214809
MAX	14q23. 3	0. 113301111	0. 131015	0. 214815
LRCH3	3q29	-0. 113276003	0. 131101	0. 214922
LOC28437C	19q13. 42	0. 113275745	0. 131102	0. 214922
RPSAP58	19p12	0. 113259264	0. 131158	0. 214997
PGAM5	12q24. 33	-0. 113252987	0. 131179	0. 215014
TEX35	1q25. 2	0. 113217969	0. 131299	0. 215193
CDH6	5p13. 3	-0. 113179754	0. 131431	0. 215376
LINC01551	14q12	0. 113179178	0. 131433	0. 215376
BTNL2	6p21. 32	-0. 113175768	0. 131444	0. 215378
TYW1	7q11. 21	-0. 113160923	0. 131495	0. 215443
FAM71B	5q33. 3	-0. 113143334	0. 131556	0. 215507
OR6Q1	11q12. 1	-0. 113143334	0. 131556	0. 215507
OPA3	19q13. 32	-0. 113133723	0. 131589	0. 215543

ZDHC19	3q29	0.113086401	0.131751	0.215792
ZNF117	7q11.21	0.113081414	0.131768	0.215802
HOXA6	7p15.2	0.113065927	0.131821	0.215872
P2RY1	3q25.2	-0.113058398	0.131847	0.215897
TGFBI	5q31.1	0.112997719	0.132056	0.216221
CALD1	7q33	-0.112993535	0.132071	0.216227
HLA-DQA1	6p21.32	-0.112964242	0.132171	0.216374
CCDC73	11p13	0.11294541	0.132236	0.216463
SHQ1	3p13	-0.112941226	0.132251	0.216469
CCDC146	7q11.23	0.112930764	0.132287	0.216504
BMPR1B	4q22.3	-0.112928672	0.132294	0.216504
MYADML	2p22.3	0.112893538	0.132415	0.216684
UGDH	4p14	-0.11288264	0.132453	0.216728
ADSL	22q13.1	-0.112872178	0.132489	0.216763
BRINP1	9q33.1	-0.112870145	0.132496	0.216763
MDH2	7q11.23	0.112863809	0.132518	0.216781
DCDC2	6p22.3	-0.112859624	0.132532	0.216787
SLC5A7	2q12.3	-0.112808866	0.132708	0.217056
DELE1	5q31.3	-0.112805223	0.13272	0.217059
DKFZP434I	7p11.2	-0.11280188	0.132732	0.21706
MNDA	1q23.1	-0.112796853	0.132749	0.217071
MTCH1	6p21.2	-0.112748729	0.132916	0.217325
NFE2L1	17q21.32	-0.11273199	0.132974	0.21739
XP07	8p21.3	-0.112729898	0.132981	0.21739
MOXD1	6q23.2	-0.112727805	0.132988	0.21739
TRMT44	4p16.1	0.112721528	0.13301	0.217408
GLIPR2	9p13.3	-0.112644111	0.133278	0.217829
LHX8	1p31.1	-0.112631419	0.133322	0.217883
OR2A4	6q23.2	0.112627372	0.133336	0.217888
PMP22	17p12	-0.112600172	0.133431	0.218025
CELA1	12q13.13	-0.112543692	0.133627	0.218327
ANKRD42	11q14.1	0.112485092	0.13383	0.218642
USP53	4q26	-0.112420229	0.134056	0.218993
SPATA16	3q26.31	-0.112393242	0.13415	0.219129
PRR27	4q13.3	-0.11234221	0.134328	0.219386
CORO6	17q11.2	0.112338627	0.134341	0.219386
L3MBTL2	22q13.2	-0.112338627	0.134341	0.219386
BCAM	19q13.32	-0.112321888	0.134399	0.21944
EIF1AY	Yq11.223	-0.112321744	0.1344	0.21944
PPY2P	17q11.2	-0.112317692	0.134414	0.21944
CCL3	17q12	-0.112313519	0.134428	0.21944
MIB2	1p36.33	0.112313519	0.134428	0.21944
CALML5	10p15.1	0.112282248	0.134537	0.2196
HSFX2	Xq28	-0.112259117	0.134618	0.219714
ORC5	7q22.1-q ²	-0.112248656	0.134655	0.219756
MRPS28	8q21.13	-0.11222564	0.134735	0.219869
MPL	1p34.2	-0.112215178	0.134772	0.219911
KPNA3	13q14.2	-0.11219007	0.13486	0.220036
AQP8	16p12.1	-0.112184287	0.13488	0.220051
SLC46A2	9q32	-0.112140958	0.135032	0.220269
ACTR8	3p21.1	-0.112139853	0.135036	0.220269
CHRNA3	15q25.1	-0.112102191	0.135168	0.220466
SERINC3	20q13.12	-0.112093821	0.135197	0.220496
LARP4B	10p15.3	0.112079175	0.135248	0.220562

GUCA1C	3q13. 13	-0. 112067034	0. 135291	0. 220613
ACSM2A	16p12. 3	-0. 112061278	0. 135311	0. 220628
RBMY1A1	Yq11. 223	-0. 112048691	0. 135355	0. 220682
MED27	9q34. 13	-0. 112035235	0. 135402	0. 220741
QRFPR	4q27	-0. 112021151	0. 135452	0. 220804
KISS1R	19p13. 3	-0. 112003155	0. 135515	0. 220889
SLC16A10	6q21	-0. 111970372	0. 13563	0. 221059
OR52W1	11p15. 4	-0. 111924092	0. 135793	0. 221306
KRTAP12-2	21q22. 3	-0. 11188867	0. 135918	0. 221491
C22ORF46	22q13. 2	-0. 111884586	0. 135932	0. 221496
OR2T33	1q44	-0. 111867301	0. 135993	0. 221576
SULT2A1	19q13. 33	0. 111863806	0. 136005	0. 221576
ANKRD30B1	2q21. 2	-0. 111861175	0. 136014	0. 221576
SELENOT	3q25. 1	-0. 111851108	0. 13605	0. 221616
UQCRH	1p33	0. 111826	0. 136138	0. 221742
RNU6ATAC	9q34. 2	-0. 11182079	0. 136157	0. 221754
TMEM106A	17q21. 31	0. 111815596	0. 136175	0. 221766
NDUFB9	8q24. 13	0. 111779968	0. 136301	0. 221952
PAX3	2q36. 1	-0. 111756052	0. 136385	0. 222072
SNRNP40	1p35. 2	-0. 111729751	0. 136478	0. 222205
CDCA7	2q31. 1	0. 111715105	0. 13653	0. 222271
TAX1BP1	7p15. 2	0. 111704643	0. 136567	0. 222313
CD22	19q13. 12	-0. 111687904	0. 136626	0. 222391
HEYL	1p34. 2	-0. 111681627	0. 136648	0. 222409
FDX1	11q22. 3	0. 111646057	0. 136774	0. 222592
ASIC5	4q32. 1	-0. 111643564	0. 136783	0. 222592
SRPK3	Xq28	0. 111528885	0. 137189	0. 223235
SPIN3	Xp11. 21	-0. 111514238	0. 137241	0. 223301
CATSPER2	15q15. 3	0. 111484945	0. 137344	0. 223452
FRA10AC1	10q23. 33	-0. 111480761	0. 137359	0. 223452
PRMT5	14q11. 2	0. 111478668	0. 137367	0. 223452
ANG	14q11. 2	0. 111451468	0. 137463	0. 22359
PRKAG3	2q35	0. 111437206	0. 137514	0. 223655
CTNNBIP1	1p36. 22	0. 11142636	0. 137553	0. 223699
RTN4	2p16. 1	0. 111422175	0. 137567	0. 223705
P3H3	12p13. 31	-0. 11141799	0. 137582	0. 223711
NUDCD1	8q23. 1	-0. 111403344	0. 137634	0. 223777
UBXN10	1p36. 12	0. 111397067	0. 137657	0. 223796
PPP1R3D	20q13. 33	0. 11138242	0. 137709	0. 223831
RAP1A	1p13. 2	-0. 11138242	0. 137709	0. 223831
GHRL	3p25. 3	-0. 111381432	0. 137712	0. 223831
FLJ37201	10q23. 31	-0. 111377247	0. 137727	0. 223837
SREK1IP1	5q12. 3	-0. 111367774	0. 137761	0. 223868
NISCH	3p21. 1	-0. 111365681	0. 137768	0. 223868
CTTNBP2NL	1p13. 2	0. 111305003	0. 137984	0. 2242
OPRM1	6q25. 2	-0. 111293892	0. 138024	0. 224246
SRP19	5q22. 2	-0. 111227586	0. 13826	0. 224606
HOXA5	7p15. 2	-0. 111225493	0. 138268	0. 224606
GYPB	4q31. 21	-0. 111152623	0. 138528	0. 22501
GPBP1L1	1p34. 1	0. 111141799	0. 138566	0. 225055
RNF2	1q25. 3	0. 11113343	0. 138596	0. 225085
SLITRK4	Xq27. 3	-0. 111120875	0. 138641	0. 225133
MT1F	16q13	-0. 111118783	0. 138649	0. 225133
ALCAM	3q13. 11	-0. 111114598	0. 138663	0. 225139

AS3MT	10q24.32	-0.11109786	0.138723	0.225218
SNORD115	15q11.2	-0.111092935	0.138741	0.225229
PREP	6q21	0.111087398	0.138761	0.225243
MBNL3	Xq26.2	-0.111066474	0.138836	0.225346
CFB	6p21.33	0.111049735	0.138895	0.225425
MYH15	3q13.13	0.111032066	0.138959	0.225509
KERA	12q21.33	0.111020665	0.139	0.225557
CLRN1-AS1	3q25.1	0.111008896	0.139042	0.225607
HMGN4	6p22.2	0.110978595	0.13915	0.225765
VMAC	19p13.3	0.110924194	0.139345	0.226063
P4HTM	3p21.31 3	0.110907455	0.139405	0.226142
GSTM4	1p13.3	0.11090327	0.13942	0.226148
AUTS2	7q11.22	-0.11087607	0.139518	0.226288
DAPK3	19p13.3	0.110855146	0.139593	0.226385
ATP6V1E1	22q11.21	0.110853054	0.139601	0.226385
TMEM117	12q12	-0.1108405	0.139646	0.22644
SLC2A6	9q34.2	0.110830038	0.139684	0.226471
APOB	2p24.1	-0.110827946	0.139691	0.226471
ANPEP	15q26.1	-0.110825853	0.139699	0.226471
COA8	14q32.33	0.110809114	0.139759	0.22655
UGT2B7	4q13.2	0.110803069	0.13978	0.226561
TPI1P3	6q22.1	0.110800941	0.139788	0.226561
EXOC8	1q42.2	-0.11079656	0.139804	0.226568
HRG	3q27.3	0.110730213	0.140043	0.226922
HLA-L	6p22.1	0.110729605	0.140045	0.226922
SLC39A10	2q32.3	0.110717051	0.14009	0.226976
LHFPL5	6p21.31	-0.110708926	0.140119	0.227005
UMOD	16p12.3	-0.110700809	0.140149	0.227034
ST6GALNAC	17q25.1	0.110671019	0.140256	0.22719
CXORF65	Xq13.1	0.110641309	0.140363	0.227336
ITPRID2	2q31.3	0.110639633	0.140369	0.227336
SP140	2q37.1	-0.110624987	0.140422	0.227404
TDRD12	19q13.11	-0.1106194	0.140442	0.227418
MAZ	16p11.2	0.11061034	0.140475	0.227452
RECQL	12p12.1	-0.110593602	0.140535	0.227531
BTC	4q13.3	-0.110590521	0.140546	0.227531
TIFAB	5q31.1	-0.110574942	0.140603	0.227604
SUSD6	14q24.1	-0.110570586	0.140619	0.227611
ROPN1	3q21.1	0.110564267	0.140641	0.22763
MRPS35	12p11.22	0.11054757	0.140702	0.227709
GSR	8p12	-0.110530831	0.140762	0.22777
ITCH	20q11.22	-0.110530831	0.140762	0.22777
OR10A2	11p15.4	0.110501901	0.140867	0.227921
CCDC81	11q14.2	0.110491076	0.140906	0.227966
APOBEC3F	22q13.1	-0.110474337	0.140967	0.228045
ARMS2	10q26.13	-0.110453308	0.141043	0.22815
B4GALT7	5q35.3	0.110442952	0.14108	0.228192
DI01	1p32.3	-0.110430997	0.141124	0.228241
NFKB1	4q24	-0.110428305	0.141133	0.228241
UNC45A	15q26.1	0.110392735	0.141262	0.228431
ERICH4	19q13.2	-0.11034243	0.141445	0.228708
IRS1	2q36.3	0.110288118	0.141642	0.229007
TTLL2	6q27	-0.110285144	0.141653	0.229007
DTD1	20p11.23	0.110275563	0.141687	0.229045

CLEC7A	12p13.2	-0.110271379	0.141703	0.229051
HNRNPA0	5q31.2	-0.110267194	0.141718	0.229057
TCP10L2	6q27	-0.110208105	0.141933	0.229385
10-Mar	17q23.2	-0.110202392	0.141954	0.229401
USP6NL	10p14	0.110189777	0.141999	0.229456
DAO	12q24.11	-0.110180584	0.142033	0.229492
PLIN2	9p22.1	-0.110164668	0.142091	0.229567
PPIE	1p34.2	0.110131191	0.142213	0.229745
MCEE	2p13.3	-0.110124914	0.142236	0.229764
MAT2B	5q34	0.110108175	0.142297	0.229831
STAMBPL1	10q23.31	0.11010399	0.142312	0.229831
TSSC4	11p15.5	0.11010399	0.142312	0.229831
C9ORF116	9q34.3	0.110053774	0.142495	0.230108
KITLG	12q21.32	0.110047496	0.142518	0.230127
FAM86JP	3q21.2	0.110014019	0.14264	0.230306
AQP11	11q14.1	-0.110003557	0.142679	0.230349
CD24	6q21	0.109995188	0.142709	0.230379
HHLA3	1p31.1	0.109984726	0.142747	0.230422
CERS6	2q24.3	-0.109974264	0.142786	0.230466
PUS7	7q22.3	-0.109967987	0.142809	0.230467
TBC1D26	17p12	0.109967644	0.14281	0.230467
RPL35	9q33.3	0.109942879	0.1429	0.230595
BTN3A3	6p22.2	-0.109907309	0.14303	0.230786
POM121L1C	22q11.23	-0.109861334	0.143199	0.231039
GAS1	9q21.33	-0.109852907	0.14323	0.231039
RBM19	12q24.13-	-0.109850815	0.143237	0.231039
ANAPC1	2q13	-0.109850815	0.143237	0.231039
LINC00653	20p11.23	-0.109848723	0.143245	0.231039
NTRK1	1q23.1	-0.109830995	0.14331	0.231107
LRRC37A6F	10p12.1	-0.109827799	0.143322	0.231107
TRAPPC2	Xp22.2	0.109827799	0.143322	0.231107
RABGAP1	9q33.2-q3	-0.109800598	0.143421	0.231249
PLEKHG4	16q22.1	-0.109785952	0.143475	0.231304
MRGPRE	11p15.4	-0.109785095	0.143478	0.231304
SMC4	3q25.33	0.109769213	0.143537	0.231379
SIGLEC17F	19q13.41	-0.109765028	0.143552	0.231385
SLC27A5	19q13.43	-0.109746197	0.143621	0.231478
MPPED1	22q13.2	-0.109741221	0.143639	0.231488
IMPACT	18q11.2	-0.109731551	0.143675	0.231527
SUSD1	9q31.3-q3	-0.109706442	0.143767	0.231657
KRTAP5-8	11q13.4	0.109693792	0.143814	0.231713
MTIF2	2p16.1	0.109683426	0.143852	0.231756
UQCRHL	1p36.21	0.109679242	0.143867	0.231762
C10ORF82	10q25.3	-0.109645659	0.143991	0.231942
LOC1002712	2p22.3	0.10963751	0.144021	0.231972
MIR924HG	18q12.2-c	0.109617304	0.144095	0.232073
RCOR3	1q32.2-q3	-0.109603917	0.144144	0.232134
SERPINA12	14q32.13	-0.109600637	0.144156	0.232134
PAX7	1p36.13	0.109579282	0.144235	0.232226
DMTF1	7q21.12	-0.109578809	0.144237	0.232226
TM9SF2	13q32.3	-0.109547423	0.144352	0.232394
PATE4	11q24.2	-0.109540766	0.144377	0.232415
UNG	12q24.11	0.109505576	0.144507	0.232605
FOXD4L1	2q14.1	0.109499299	0.14453	0.232623

MRPL32	7p14.1	0.109495172	0.144545	0.232629
C9ORF131	9p13.3	-0.109489342	0.144566	0.232645
ZNF205-AS1	16p13.3	-0.109478375	0.144607	0.232691
ZNF229	19q13.31	-0.109453267	0.1447	0.232822
SNUPN	15q24.2	0.109440713	0.144746	0.232871
TMEM184C	4q31.23	-0.109438621	0.144754	0.232871
CAB39	2q37.1	0.109426067	0.1448	0.232927
RAPSN	11p11.2	0.109400867	0.144893	0.233058
OVCH1	12p11.22	-0.109388687	0.144938	0.233112
LINC00173	12q24.22	-0.109378797	0.144975	0.233152
DLGAP1-AS1	18p11.31	0.109317264	0.145202	0.233499
MYOM2	8p23.3	-0.10929634	0.14528	0.233605
STAM2	2q23.3	-0.109292156	0.145295	0.233611
ABHD1	2p23.3	-0.109278613	0.145346	0.233673
CDC14C	7p12.3	-0.109267333	0.145387	0.233721
DMRT1	9p24.3	0.109260644	0.145412	0.233742
CTNNAL1	9q31.3	0.109250309	0.145451	0.233785
CAMK4	5q22.1	-0.109244032	0.145474	0.233804
ZFP41	8q24.3	-0.109202184	0.145629	0.234034
SLC35D1	1p31.3	-0.10918963	0.145676	0.234091
GDF3	12p13.31	0.109166624	0.145761	0.234203
MRPS23	17q22	0.109164522	0.145769	0.234203
ZSCAN9	6p22.1	0.109139414	0.145862	0.234334
CNBD2	20q11.23	-0.109088108	0.146053	0.234621
CNPY1	7q36.3	0.109030246	0.146268	0.234948
GPATCH2L	14q24.3	-0.109026426	0.146282	0.234952
ALAS2	Xp11.21	-0.108954599	0.14655	0.235363
POU4F2	4q31.22	-0.108948624	0.146572	0.23538
PLRG1	4q31.3	-0.108934363	0.146625	0.235418
OR51B5	11p15.4	-0.108934025	0.146627	0.235418
SPINK4	9p13.3	0.108932727	0.146631	0.235418
PLEKHA4	19q13.33	0.108917624	0.146688	0.23549
NOXRED1	14q24.3	-0.108886239	0.146805	0.235659
FOXF1	16q24.1	-0.108867407	0.146875	0.235753
GLI2	2q14.2	0.108863223	0.146891	0.235759
BGN	Xq28	0.108806729	0.147102	0.236079
SLC26A4-AS1	7q22.3	-0.1088027	0.147117	0.236084
GMEB1	1p35.3	-0.108792083	0.147157	0.236112
OR51A2	11p15.4	0.108791667	0.147158	0.236112
TOMM22	22q13.1	0.108777436	0.147211	0.23616
VWA7	6p21.33	-0.108777436	0.147211	0.23616
SUSD5	3p22.3	-0.10875442	0.147298	0.236279
TNFRSF10C	8p21.3	0.108746051	0.147329	0.23631
ARMC8	3q22.3	-0.108735589	0.147368	0.236354
CLCA1	1p22.3	-0.108712797	0.147453	0.236472
CEL	9q34.13	-0.108702111	0.147493	0.236517
STX3	11q12.1	0.108679095	0.14758	0.236637
DMTN	8p21.3	0.108670726	0.147611	0.236649
PDCD2L	19q13.11	0.108670726	0.147611	0.236649
RNF19A	8q22.2	-0.108662356	0.147642	0.23668
LINC0041C	13q31.3	-0.108638422	0.147732	0.236805
SLC25A35	17p13.1	-0.108626786	0.147776	0.236856
C5ORF34	5p12	0.108601678	0.14787	0.236988
SBF1	22q13.33	0.108578662	0.147957	0.237088

ZNF32	10q11. 21	-0. 108578662	0. 147957	0. 237088
BLK	8p23. 1	-0. 108572953	0. 147978	0. 237088
ACAD8	11q25	-0. 108572385	0. 14798	0. 237088
CCDC63	12q24. 11	0. 108554249	0. 148048	0. 237179
AURKAP1	1q41	0. 108515891	0. 148192	0. 237391
SLC39A2	14q11. 2	0. 108508539	0. 14822	0. 237416
CDH13	16q23. 3	-0. 108484506	0. 14831	0. 237542
DDX21	10q22. 1	-0. 108463583	0. 148389	0. 237649
APOL6	22q12. 3	-0. 108417551	0. 148562	0. 237907
UHRF2	9p24. 1	-0. 108375704	0. 14872	0. 238141
AJAP1	1p36. 32	-0. 108366345	0. 148755	0. 238178
STXBP6	14q12	-0. 108346411	0. 148831	0. 238279
MYL1	2q34	0. 108333639	0. 148879	0. 238337
BRD9	5p15. 33	0. 10831084	0. 148965	0. 238443
HTR3A	11q23. 2	0. 108306882	0. 14898	0. 238443
DPY19L2P2	7q22. 1	-0. 108306656	0. 148981	0. 238443
TTR	18q12. 1	-0. 108276883	0. 149093	0. 238604
CLPSL2	6p21. 31	-0. 108272337	0. 14911	0. 238612
TPPP3	16q22. 1	-0. 108250162	0. 149194	0. 238727
SPCS1	3p21. 1	0. 108241793	0. 149226	0. 238759
CYP17A1	10q24. 32	0. 108214025	0. 149331	0. 238908
GJC3	7q22. 1	-0. 108210089	0. 149346	0. 238912
RPL24	3q12. 3	0. 108197853	0. 149392	0. 238967
XPA	9q22. 33	-0. 108181114	0. 149455	0. 239049
GLT8D2	12q23. 3	-0. 108174837	0. 149479	0. 239068
TXLNGY	Yq11. 222-	-0. 108148117	0. 14958	0. 239211
CREB1	2q33. 3	-0. 108143452	0. 149598	0. 23922
CHRN3	8p11. 21	-0. 108117555	0. 149696	0. 239358
PRPF6	20q13. 33	0. 108112067	0. 149717	0. 239372
MAPT-AS1	17q21. 31	-0. 108064323	0. 149898	0. 239638
MAGI1	3p14. 1	-0. 10806185	0. 149907	0. 239638
SLC9A8	20q13. 13	0. 108049296	0. 149955	0. 239695
PGLYRP3	1q21. 3	0. 108030481	0. 150026	0. 23979
MAGIX	Xp11. 23	0. 108020003	0. 150066	0. 239834
ORM1	9q32	0. 1080098	0. 150104	0. 239856
IFI30	19p13. 11	0. 108009541	0. 150105	0. 239856
ANP32C	4q32. 3	0. 108006818	0. 150116	0. 239856
MED26	19p13. 11	0. 108001172	0. 150137	0. 239871
NKX2-5	5q35. 1	0. 107995831	0. 150158	0. 239871
ZCCHC4	4p15. 2	-0. 107994895	0. 150161	0. 239871
TAS2R7	12p13. 2	-0. 107972661	0. 150246	0. 239985
NEMP2	2q32. 2	0. 107969786	0. 150256	0. 239985
MGAM2	7q34	-0. 107958915	0. 150298	0. 240032
ZSCAN5B	19q13. 43	-0. 107922451	0. 150436	0. 240234
GSTM2	1p13. 3	-0. 107917477	0. 150455	0. 240245
CYP1A2	15q24. 1	-0. 107910341	0. 150482	0. 240269
USP6	17p13. 2	-0. 107888184	0. 150567	0. 240385
UGT8	4q26	0. 107884	0. 150583	0. 240391
PIK3AP1	10q24. 1	-0. 107844245	0. 150734	0. 240613
CLDN10	13q32. 1	0. 107794085	0. 150925	0. 240899
ZNF711	Xq21. 1	-0. 107783567	0. 150965	0. 240944
WASHC5	8q24. 13	-0. 10776892	0. 151021	0. 241014
PAM	5q21. 1	-0. 107758458	0. 151061	0. 241058
TBC1D21	15q24. 1	0. 107741775	0. 151125	0. 241135

MYLK	3q21. 1	-0.107739627	0.151133	0.241135
MYO1F	19p13. 2	-0.107735442	0.151149	0.241141
MFSD3	8q24. 3	0.107724981	0.151189	0.241178
NT5C3A	7p14. 3	0.107722888	0.151197	0.241178
GCSH	16q23. 2	0.107716611	0.151221	0.241178
TNFRSF1B	1p36. 22	-0.107716611	0.151221	0.241178
TOR3A	1q25. 2	0.107712427	0.151237	0.241185
LY96	8q21. 11	-0.107695688	0.151301	0.241261
PTS	11q23. 1	0.107693595	0.151309	0.241261
MYL7	7p13	-0.107683515	0.151347	0.241303
ZNF799	19p13. 2	-0.107678949	0.151365	0.241312
FAM114A1	4p14	-0.107647563	0.151485	0.24147
LOC440173	9q21. 33	-0.107646658	0.151488	0.24147
NLRP7	19q13. 42	0.10764172	0.151507	0.241481
SLC12A8	3q21. 2	-0.107620363	0.151589	0.241592
RPAP2	1p22. 1	-0.107601532	0.151661	0.241687
MLC1	22q13. 33	0.107597347	0.151677	0.241693
SPINK9	5q32	-0.107585112	0.151723	0.241749
EPHB3	3q27. 1	0.107578516	0.151749	0.24177
MEF2D	1q22	-0.107501098	0.152045	0.242223
MRPS24	7p13	0.107419497	0.152358	0.242702
MARVELD1	10q24. 2	0.10740485	0.152415	0.242772
DCLRE1C	10p13	0.107383927	0.152495	0.242881
UBD	6p22. 1	0.107375557	0.152527	0.242913
F13A1	6p25. 1	-0.107365095	0.152567	0.242958
INPP5D	2q37. 1	-0.107356726	0.152599	0.242969
ZNF35	3p21. 31	-0.107350449	0.152624	0.242969
PNPLA6	19p13. 2	0.107344172	0.152648	0.242969
BPIFA3	20q11. 21	-0.107341111	0.152659	0.242969
OR13C4	9q31. 1	-0.107341111	0.152659	0.242969
PAGE3	Xp11. 21	0.107341111	0.152659	0.242969
POTED	21q11. 2	0.107341111	0.152659	0.242969
PDLIM4	5q31. 1	0.107323248	0.152728	0.243059
MAN1B1-D1	9q34. 3	-0.107308602	0.152785	0.243129
PTK7	6p21. 1	0.107291863	0.152849	0.243212
ETNPPL	4q25	0.107278984	0.152898	0.243272
SRSF3	6p21. 31-1	0.107270939	0.152929	0.243302
RABL2A	2q14. 1	0.107258385	0.152978	0.243359
CENPT	16q22. 1	0.1072542	0.152994	0.243359
SURF2	9q34. 2	0.107252108	0.153002	0.243359
DNAH12	3p14. 3	-0.107236696	0.153061	0.243434
PICSAR	21q22. 3	0.10722037	0.153124	0.243515
MYO3B	2q31. 1	-0.107204545	0.153185	0.243592
ACP7	19q13. 2	-0.107182022	0.153272	0.243711
KPRP	1q21. 3	0.107166719	0.153331	0.243786
OR2T10	1q44	-0.107150071	0.153395	0.243868
CYP19A1	15q21. 2	-0.107137084	0.153446	0.243922
NPL	1q25. 3	-0.107134936	0.153454	0.243922
BRF1	14q32. 33	-0.107122382	0.153502	0.24398
MGRN1	16p13. 3	0.107116105	0.153527	0.243999
VSTM2A	7p11. 2	-0.107097121	0.1536	0.244096
RNASE3	14q11. 2	0.107039992	0.153821	0.244428
WAS	Xp11. 23	-0.107026134	0.153874	0.244494
PJA1	Xq13. 1	0.106986379	0.154028	0.244719

ATAD3C	1p36.33	-0.106982194	0.154044	0.244725
DNAJC1	10p12.31	0.106971732	0.154085	0.24477
HUS1	7p12.3	-0.106959178	0.154133	0.244828
SERPINB8	18q22.1	0.106865022	0.154498	0.245388
BEND7	10p13	0.10685456	0.154539	0.245433
GAS2L1	22q12.2	0.106848283	0.154563	0.245452
ARL5B	10p12.31	-0.106835729	0.154612	0.24551
WIPI2	7p22.1	-0.106800159	0.15475	0.24571
DPPA2P3	3q29	-0.106795347	0.154769	0.24572
FKBP9P1	7p11.2	-0.10679179	0.154783	0.245722
PNMA2	8p21.2	-0.106754127	0.154929	0.245935
G3BP1	5q33.1	-0.106731111	0.155019	0.246058
GNG3	11q12.3	-0.106693449	0.155165	0.246271
CAVIN1	17q21.2	0.106682987	0.155206	0.246316
MPP5	14q23.3	0.106653694	0.15532	0.246477
CRTAC1	10q24.2	-0.106647417	0.155344	0.246497
TNFSF12-1	17p13.1	0.106630901	0.155409	0.246579
SLN	11q22.3	0.106626635	0.155425	0.246586
TMEM246	9q31.1	0.106613939	0.155475	0.246645
RIT2	18q12.3	-0.106546458	0.155738	0.247043
OR5K2	3q11.2	-0.106534182	0.155786	0.247099
KANK4	1p31.3	0.106513506	0.155867	0.247208
HIST1H2BC	6p22.2	0.106505545	0.155898	0.247237
FBN2	5q23.3	-0.106500952	0.155916	0.247246
SFT2D2	1q24.2	-0.106494675	0.15594	0.247266
ARAF	Xp11.3	0.106488398	0.155965	0.247285
MAP3K1	5q11.2	-0.106484213	0.155981	0.247291
VEGFC	4q34.3	-0.106480028	0.155998	0.247297
RESP18	2q35	-0.106445407	0.156133	0.247492
MYL3	3p21.31	-0.10642062	0.15623	0.247626
SMG1P1	16p12.2	-0.106384003	0.156373	0.247834
ZNF214	11p15.4	-0.106367041	0.15644	0.24792
INSL6	9p24.1	0.106340445	0.156544	0.248065
LINC00323	21q22.2	0.106332584	0.156575	0.248087
DSN1	20q11.23	0.106329379	0.156587	0.248087
LMX1A	1q23.3	-0.106327395	0.156595	0.248087
PCNA	20p12.3	0.106323102	0.156612	0.248087
TRAF3IP3	1q32.2	-0.106321009	0.15662	0.248087
BSX	11q24.1	0.106314005	0.156648	0.248111
UBL7	15q24.1	0.106287532	0.156751	0.248256
CCDC28B	1p35.2	-0.106272885	0.156809	0.248327
KCNK10	14q31.3	-0.106262479	0.15685	0.248372
CFC1B	2q21.1	-0.106236987	0.15695	0.248511
CGA	6q14.3	-0.106218435	0.157023	0.248607
RIT1	1q22	0.10619756	0.157105	0.248717
TLR2	4q31.3	-0.106189191	0.157138	0.248749
BTB	3p25.1	-0.106180821	0.15717	0.248775
KLHDC8A	1q32.1	-0.106178729	0.157179	0.248775
MAGT1	Xq21.1	-0.106174544	0.157195	0.248781
LOC652276	16p13.3	0.106145251	0.15731	0.248944
SNORA48	17p13.1	-0.106107034	0.157461	0.249162
RCN2	15q24.3	-0.10609922	0.157491	0.249184
LYN	8q12.1	-0.106097127	0.1575	0.249184
GABRB2	5q34	-0.106072019	0.157598	0.249321

TDRKH	1q21. 3	-0. 106051095	0. 157681	0. 249432
DLAT	11q23. 1	-0. 106046911	0. 157697	0. 249438
ABI3	17q21. 32	-0. 106023895	0. 157788	0. 249562
LPP	3q27. 3-q ²	-0. 10601971	0. 157805	0. 249568
OCLN	5q13. 2	0. 106011341	0. 157838	0. 2496
PHKA1	Xq13. 1	-0. 105969493	0. 158003	0. 249842
POLR2J3	7q22. 1	0. 105954847	0. 15806	0. 249913
FBX036	2q36. 3	-0. 105942293	0. 15811	0. 249972
GLTPD2	17p13. 2	0. 105933713	0. 158144	0. 250006
TFAP2D	6p12. 3	0. 105927732	0. 158168	0. 250023
FOXO4	Xq13. 1	-0. 105921369	0. 158193	0. 250043
OR6K2	1q23. 1	-0. 105890556	0. 158314	0. 250176
SDR16C6P	8q12. 1	-0. 105890556	0. 158314	0. 250176
VCY	Yq11. 221	0. 105890556	0. 158314	0. 250176
RBM12B-AS	8q22. 1	-0. 105885855	0. 158333	0. 250186
LOC100129	10p11. 1	0. 105877634	0. 158365	0. 250217
IRF1	5q31. 1	0. 105873245	0. 158383	0. 250225
CWF19L2	11q22. 3	-0. 105858599	0. 158441	0. 250297
ATG10	5q14. 1-q1	-0. 105814659	0. 158615	0. 250532
TRIM38	6p22. 2	-0. 105814659	0. 158615	0. 250532
GPR3	1p36. 11	-0. 105774904	0. 158772	0. 250761
SETD9	5q11. 2	0. 10576235	0. 158822	0. 250819
HS3ST6	16p13. 3	-0. 105723407	0. 158976	0. 251043
ASB10	7q36. 1	-0. 105718525	0. 158995	0. 251054
DDX52	17q12	0. 105676564	0. 159162	0. 25129
HNMT	2q22. 1	0. 105674471	0. 15917	0. 25129
SMCO4	11q21	0. 10562007	0. 159386	0. 251611
XCL1	1q24. 2	-0. 105569694	0. 159586	0. 251893
PIK3IP1	22q12. 2	0. 105567761	0. 159594	0. 251893
CCDC185	1q41	0. 105565649	0. 159602	0. 251893
COL6A1	21q22. 3	0. 105557299	0. 159636	0. 251925
FBX024	7q22. 1	0. 105538468	0. 15971	0. 252024
POLR3GL	1q21. 1	0. 105515452	0. 159802	0. 252135
LOC729609	Xp22. 12	0. 105514383	0. 159806	0. 252135
FAM86B3P	8p23. 1	0. 105498713	0. 159869	0. 252214
CD3D	11q23. 3	-0. 10546942	0. 159985	0. 252378
PSMD2	3q27. 1	0. 10544222	0. 160094	0. 252529
ADGRD2	9q33. 3	-0. 105398383	0. 160268	0. 252784
EOGT	3p14. 1	-0. 105383634	0. 160327	0. 252857
HSCB	22q12. 1	-0. 105379449	0. 160344	0. 252857
CHCHD7	8q12. 1	0. 105377357	0. 160352	0. 252857
GMNN	6p22. 3	-0. 105331325	0. 160536	0. 253127
PRSS16	6p22. 1	0. 105316678	0. 160595	0. 253199
ZNF662	3p22. 1	0. 105276923	0. 160753	0. 253429
TMCC3	12q22	-0. 105272739	0. 16077	0. 253436
C6ORF203	6q21	-0. 105264369	0. 160804	0. 253449
SOX18	20q13. 33	-0. 105264369	0. 160804	0. 253449
RINL	19q13. 2	0. 105258092	0. 160829	0. 253468
PHOX2B	4p13	-0. 105252241	0. 160852	0. 253485
HARBI1	11p11. 2	0. 105224614	0. 160963	0. 253639
SP8	7p21. 1	-0. 105186653	0. 161115	0. 253859
UROS	10q26. 2	0. 10517649	0. 161155	0. 253903
KPTN	19q13. 32	0. 105138828	0. 161306	0. 25412
BUD13	11q23. 3	0. 105119997	0. 161382	0. 254219

VNN2	6q23. 2	-0. 105090704	0. 161499	0. 254378
WFS1	4p16. 1	0. 105088611	0. 161508	0. 254378
CA4	17q23. 1	-0. 105082056	0. 161534	0. 254399
NFIX	19p13. 13	-0. 10506978	0. 161583	0. 254454
NBPF22P	5q14. 3	0. 105066962	0. 161594	0. 254454
MZF1	19q13. 43	0. 105050949	0. 161659	0. 254535
CYBC1	17q25. 3	0. 105027933	0. 161751	0. 254661
RPSA	3p22. 1	0. 105017471	0. 161793	0. 2547
CD3EAP	19q13. 32	0. 105015379	0. 161801	0. 2547
GYS2	12p12. 1	-0. 1049936	0. 161889	0. 254818
RYR1	19q13. 2	0. 104990271	0. 161902	0. 254819
SLC17A7	19q13. 33	-0. 104981901	0. 161936	0. 254839
GOLGA6B	15q24. 1	0. 104980738	0. 161941	0. 254839
CTAGE11P	13q22. 2	0. 104931739	0. 162138	0. 255129
DNAH17	17q25. 3	0. 104906576	0. 162239	0. 255268
ACTR10	14q23. 1	-0. 104900299	0. 162264	0. 255288
PHB2	12p13. 31	-0. 104858452	0. 162433	0. 255526
SHOX2	3q25. 32	0. 10485636	0. 162441	0. 255526
IFNGR1	6q23. 3	-0. 104852175	0. 162458	0. 255532
SSX5	Xp11. 23	-0. 104841107	0. 162503	0. 255582
SLC25A14	Xq26. 1	-0. 104829159	0. 162551	0. 255638
AHCTF1	1q44	-0. 104814513	0. 16261	0. 255711
ABHD3	18q11. 2	0. 104808236	0. 162635	0. 25573
UGT2B28	4q13. 2	-0. 104796518	0. 162682	0. 255785
CWH43	4p11	0. 104788916	0. 162713	0. 255813
GGA3	17q25. 1	0. 104774758	0. 16277	0. 255882
HAND2-AS1	4q34. 1	-0. 104761212	0. 162825	0. 255948
SLC52A1	17p13. 2	0. 104756146	0. 162845	0. 25596
UQCRBP1	Xp11. 21	-0. 10474965	0. 162872	0. 255981
ST7	7q31. 2	-0. 104737095	0. 162922	0. 256041
CCDC144A	17p11. 2	-0. 104718561	0. 162997	0. 256138
GGPS1	1q42. 3	0. 104711987	0. 163024	0. 25616
C22ORF24	22q12. 3	-0. 104697549	0. 163082	0. 256209
TUBGCP2	10q26. 3	0. 104697341	0. 163083	0. 256209
OR5AN1	11q12. 1	0. 104694785	0. 163093	0. 256209
JCHAIN	4q13. 3	-0. 104663863	0. 163218	0. 256385
GNA11	19p13. 3	-0. 104628293	0. 163362	0. 256591
TIMELESS	12q13. 3	-0. 104622016	0. 163387	0. 25661
PRSS3P2	7q34	-0. 104607916	0. 163444	0. 25668
ATOH7	10q21. 3 1	-0. 1046	0. 163477	0. 25671
VRTN	14q24. 3	0. 104583667	0. 163543	0. 256794
TBC1D29P	17q11. 2	0. 104579853	0. 163558	0. 256798
GLIS2	16p13. 3	0. 104573892	0. 163582	0. 256816
P2RY11	19p13. 2	0. 104565522	0. 163616	0. 256849
C2ORF16	2p23. 3	0. 104546691	0. 163692	0. 256948
PMS2P2	7q11. 23	0. 104498567	0. 163888	0. 257224
MLLT11	1q21. 3	-0. 104494382	0. 163904	0. 257224
BLID	11q24. 1	0. 104493779	0. 163907	0. 257224
AARS2	6p21. 1	-0. 104488105	0. 16393	0. 25724
RASSF1	3p21. 31	0. 104444165	0. 164108	0. 257466
IQCF2	3p21. 2	0. 10444	0. 164125	0. 257466
OR5D16	11q12. 1	-0. 10444	0. 164125	0. 257466
OR6C68	12q13. 2	0. 10444	0. 164125	0. 257466
CHST11	12q23. 3	0. 104435796	0. 164142	0. 257472

ZNF283	19q13.31	-0.104425389	0.164185	0.257518
DGCR8	22q11.21	-0.10441278	0.164236	0.257578
COX14	12q13.12	-0.104406503	0.164261	0.257598
C10ORF12	10q24.1	0.104400226	0.164287	0.257606
FM06P	1q24.3	-0.104398856	0.164292	0.257606
SDCCAG8	1q43-q44	0.104389764	0.164329	0.257644
TRPM2	21q22.3	-0.104381395	0.164363	0.257676
DPF1	19q13.2	-0.104378357	0.164376	0.257676
TMEM11	17p11.2	-0.104360471	0.164448	0.25777
TTC4	1p32.3	0.104310255	0.164653	0.25807
HPGDS	4q22.3	0.104295608	0.164712	0.258137
NCKIPSD	3p21.31	0.104293516	0.164721	0.258137
FBLN2	3p25.1	-0.104268408	0.164823	0.258276
ARTN	1p34.1	0.104260038	0.164857	0.25831
SHC1	1q21.3	0.104255853	0.164874	0.258316
MRPL43	10q24.31	0.104249576	0.1649	0.258336
GHRHR	7p14.3	0.104233944	0.164963	0.258415
MAT1A	10q22.3	-0.104148642	0.165311	0.25894
TRIM3	11p15.4	-0.104134497	0.165369	0.25901
C11ORF74	11p12	0.104130312	0.165386	0.259017
ZNF460	19q13.43	-0.104111481	0.165463	0.259117
POLG	15q26.1	0.104105204	0.165489	0.259137
IFNL1	19q13.2	0.104099871	0.16551	0.259151
TBC1D17	19q13.33	0.10409265	0.16554	0.25917
ABLIM2	4p16.1	-0.104090557	0.165549	0.25917
CHKB-CPT1	22q13.33	0.104082188	0.165583	0.259203
RPH3A	12q24.13	-0.104066698	0.165646	0.259282
RUSC2	9p13.3	-0.104063357	0.16566	0.259283
GOLGA6L9	15q25.2	0.104025694	0.165814	0.259476
SNAI3	16q24.2	-0.104023602	0.165822	0.259476
STC1	8p21.2	-0.104023602	0.165822	0.259476
TTC29	4q31.22	-0.1040196	0.165839	0.259482
RD3	1q32.3	-0.103975829	0.166018	0.259742
IQCF3	3p21.2	0.103963685	0.166068	0.259799
ACTR3C	7q36.1	-0.103946185	0.166139	0.259891
EEF1AKMT2	10q26.13	-0.103937815	0.166174	0.259892
FAM106A	17p11.2	-0.103936712	0.166178	0.259892
UGT3A1	5p13.2	-0.103936448	0.166179	0.259892
DDX10	11q22.3	0.103929446	0.166208	0.259917
HYMAI	6q24.2	-0.103912571	0.166277	0.260005
CKMT2	5q14.1	0.103902245	0.166319	0.26005
C11ORF52	11q23.1	0.103891783	0.166362	0.260097
CYB561D2	3p21.31	-0.103885506	0.166388	0.260117
COA1	7p13	-0.103875044	0.166431	0.260164
NUBP2	16p13.3	0.103845751	0.166551	0.260331
MT1A	16q13	-0.103808089	0.166706	0.260553
CT45A1	Xq26.3	-0.103801888	0.166731	0.260572
TPP2	13q33.1	-0.10379135	0.166775	0.260619
TYW5	2q33.1	0.103757872	0.166912	0.260814
CCDC60	12q24.23	-0.103723425	0.167054	0.260975
OR7E5P	11q12.1	-0.103722463	0.167058	0.260975
PRAMEF11	1p36.21	-0.103721881	0.16706	0.260975
PUS3	11q24.2	-0.10372021	0.167067	0.260975
ZNF169	9q22.32	0.10368464	0.167213	0.261182

UROC1	3q21.3	-0.103680922	0.167229	0.261182
NDUFB11	Xp11.3	0.103678363	0.167239	0.261182
FAT2	5q33.1	0.103669994	0.167274	0.261189
HMBOX1	8p21.1-p1	-0.103669994	0.167274	0.261189
KCNK4	11q13.1	0.103667796	0.167283	0.261189
GFPT2	5q35.3	-0.103623962	0.167463	0.261451
PES1	22q12.2	0.103619777	0.167481	0.261457
CD38	4p15.32	-0.103607223	0.167532	0.261517
NCF1B	7q11.23	-0.103598853	0.167567	0.261551
HSPA14	10p13	-0.103500513	0.167973	0.262164
PCDHB19P	5q31.3	-0.10349429	0.167998	0.262184
ZBTB47	3p22.1	-0.103464943	0.16812	0.262352
TEX9	15q21.3	-0.103414726	0.168327	0.262656
HADHB	2p23.3	-0.103372879	0.168501	0.262906
IDI2	10p15.3	-0.103360325	0.168553	0.262966
RALYL	8q21.2	-0.103334759	0.168659	0.263111
TTY7	Yp11.2	0.103331478	0.168672	0.263112
CCN3	8q24.12	-0.103266169	0.168943	0.263513
ERICH6	3q25.1	-0.103248922	0.169014	0.263605
DNM1P46	15q26.3	-0.103234999	0.169072	0.263674
UPK1A	19q13.12	0.103231065	0.169089	0.263679
DNAH8	6p21.2	-0.103225742	0.169111	0.263693
ESM1	5q11.2	0.103218044	0.169143	0.263722
FAM223B	Xq28	0.103212868	0.169164	0.263735
RRP7BP	22q13.2	0.103195029	0.169238	0.26383
SNORA47	5q13.3	-0.103179906	0.169301	0.263907
LOC399815	10q26.13	0.103128181	0.169516	0.264211
UGT1A3	2q37.1	0.103126641	0.169522	0.264211
MMAA	4q31.21	0.103119704	0.169551	0.264236
AP1G1	16q22.2	-0.103109242	0.169595	0.264283
EEF1G	11q12.3	0.103102965	0.169621	0.264303
TMEM150A	2p11.2	0.103094595	0.169656	0.264337
MGC16025	2q37.3	-0.103084086	0.1697	0.264384
ACCS	11p11.2	0.103077857	0.169725	0.264393
IGF2-AS	11p15.5	0.103076303	0.169732	0.264393
FRY	13q13.1	-0.103052748	0.16983	0.264526
MAU2	19p13.11	-0.103044379	0.169865	0.264559
ASAH2B	10q11.23	-0.103012713	0.169997	0.264744
SETD3	14q32.2	0.103004624	0.170031	0.264763
PRTN3	19p13.3	0.10300349	0.170035	0.264763
ZNF679	7q11.21	0.102989445	0.170094	0.264813
ZNF735	7q11.21	-0.102989445	0.170094	0.264813
MKX	10p12.1	-0.102964923	0.170196	0.264951
EDC3	15q24.1	-0.102950223	0.170257	0.265017
LGALS9B	17p11.2	0.10294841	0.170265	0.265017
PDX1	13q12.2	-0.102933484	0.170327	0.265094
PER1	17p13.1	-0.102910468	0.170423	0.265222
CARD16	11q22.3	0.102895822	0.170485	0.265297
TBR1	2q24.2	-0.102880836	0.170547	0.265374
GALNT17	7q11.22	-0.102837236	0.170729	0.265637
DDN	12q13.12	-0.102825997	0.170776	0.265689
CD40	20q13.12	0.102810035	0.170843	0.265772
ZNF234	19q13.31	-0.102801666	0.170878	0.265806
AKT1S1	19q13.33	0.102789165	0.17093	0.265867

NUDT4	12q22	-0.10274308	0.171123	0.266146
FAM45BP	Xq26.1	-0.102736802	0.17115	0.266166
PPP2R5D	6p21.1	-0.102726341	0.171193	0.266214
ENY2	8q23.1	0.102720064	0.17122	0.266234
MMP25	16p13.3	-0.102715879	0.171237	0.26624
VPS29	12q24.11	0.102707509	0.171272	0.266274
C21ORF62	21q22.11	-0.102684708	0.171368	0.266402
TMEM14EP	3q25.2	-0.102596737	0.171737	0.266955
SLC46A3	13q12.3	-0.102558952	0.171896	0.267181
MKRN2	3p25.2	-0.102525474	0.172037	0.267379
CCDC25	8p21.1	-0.102506643	0.172116	0.267481
DNASE2	19p13.13	0.102500366	0.172142	0.267502
URB1-AS1	21q22.11	0.102496181	0.17216	0.267508
PDE6A	5q32	0.102446501	0.172369	0.267812
ZC3H4	19q13.32	-0.102422949	0.172468	0.267946
DSC2	18q12.1	0.102393656	0.172592	0.268094
METTL2B	7q32.1	-0.102391564	0.1726	0.268094
OR5B21	11q12.1	-0.102390775	0.172604	0.268094
GDNF	5p13.2	-0.102385892	0.172624	0.268105
SLC39A3	19p13.3	0.102366455	0.172706	0.268211
KRT86	12q13.13	0.102347678	0.172785	0.268313
ZBED1	Xp22.33	-0.102318331	0.172909	0.268485
SLTM	15q22.1	-0.102307869	0.172953	0.268533
ZNF836	19q13.41	-0.102299553	0.172988	0.268559
PSMC2	7q22.1	0.102297408	0.172998	0.268559
PRR16	5q23.1	-0.102278576	0.173077	0.268662
BICC1	10q21.1	-0.102266022	0.17313	0.268723
OR52K1	11p15.4	0.102254673	0.173178	0.268758
IGF2BP1	17q21.32	0.102254371	0.173179	0.268758
MCTS2P	20q11.21	-0.102248772	0.173203	0.268763
FANCB	Xp22.2	0.102247191	0.17321	0.268763
SALL1	16q12.1	-0.102224229	0.173307	0.268873
MRPL38	17q25.1	0.102224175	0.173307	0.268873
SMYD1	2p11.2	-0.102210986	0.173363	0.268938
LRRC30	18p11.23	-0.102202411	0.173399	0.268974
ARHGEF25	12q13.3	-0.102196974	0.173422	0.268988
MAP10	1q42.2	-0.10215722	0.17359	0.269228
FBXO45	3q29	-0.102142573	0.173652	0.269297
LRPAP1	4p16.3	-0.102140481	0.173661	0.269297
ATOX1	5q33.1	0.102130019	0.173705	0.269344
FAM156A	Xp11.22	0.102111188	0.173785	0.269447
TFAP2C	20q13.31	0.102092357	0.173865	0.269529
URI1	19q12	-0.102092357	0.173865	0.269529
CEP192	18p11.21	-0.102004531	0.174237	0.270086
KIAA1211	4q12	0.101991924	0.174291	0.270133
CPSF1	8q24.3	0.101989831	0.1743	0.270133
RIPK2	8q21.3	0.101987739	0.174309	0.270133
FNDC9	5q33.3	-0.101960949	0.174422	0.270289
HIST1H1E	6p22.2	0.101941974	0.174503	0.270393
RTL4	Xq23	-0.101933888	0.174537	0.270425
CNIH2	11q13.2	-0.101904045	0.174664	0.2706
MAP3K13	3q27.2	0.101881029	0.174762	0.270731
CSNK1A1L	13q13.3	-0.10187532	0.174787	0.270748
NEDD4L	18q21.31	-0.101868474	0.174816	0.270772

LRRC23	12p13. 31	0. 101862197	0. 174842	0. 270792
ADRA1D	20p13	-0. 101856187	0. 174868	0. 270811
SRARP	1p36. 13	-0. 101853018	0. 174881	0. 270811
KCNIP4-IT1	4p15. 2	-0. 101834653	0. 17496	0. 270911
NAGPA	16p13. 3	0. 101811981	0. 175056	0. 271039
PLEKHH2	2p21	0. 101791057	0. 175145	0. 271128
GAB4	22q11. 1	-0. 101789588	0. 175152	0. 271128
SPACA6	19q13. 41	0. 101788965	0. 175154	0. 271128
COPRS	17q11. 2	-0. 101765949	0. 175252	0. 271259
HIST1H2BF	6p22. 2	0. 101746926	0. 175333	0. 271364
SERPINA1E	14q32. 13	-0. 101718509	0. 175455	0. 271493
AIG1	6q24. 2	-0. 101717825	0. 175458	0. 271493
HDAC8	Xq13. 1	0. 101717825	0. 175458	0. 271493
SLC25A3	12q23. 1	-0. 101692717	0. 175565	0. 271637
CEMIP2	9q21. 13	-0. 101675978	0. 175636	0. 271727
VWA1	1p36. 33	0. 101667608	0. 175672	0. 271747
LSM5	7p14. 3	0. 101665516	0. 175681	0. 271747
CAPN3	15q15. 1	0. 101663424	0. 17569	0. 271747
GOLGA2P5	12q23. 1	-0. 101650869	0. 175743	0. 271809
PRM2	16p13. 13	0. 101641265	0. 175784	0. 271851
RND3	2q23. 3	0. 101560898	0. 176128	0. 272361
MICAL3	22q11. 21	-0. 101552529	0. 176164	0. 272396
KLHL33	14q11. 2	-0. 101542022	0. 176209	0. 272423
GOLGA2P3Y	Yq11. 23	0. 101538889	0. 176222	0. 272423
GSC2	22q11. 21	-0. 101538889	0. 176222	0. 272423
SLC30A6	2p22. 3	-0. 10152742	0. 176271	0. 272478
CEBPA-DT	19q13. 11	0. 101510681	0. 176343	0. 272567
SLC34A2	4p15. 2	0. 101500432	0. 176387	0. 272614
LLGL1	17p11. 2	-0. 101495042	0. 17641	0. 272629
YTHDF2	1p35. 3	-0. 101485573	0. 176451	0. 27267
BNIP5	6p21. 31	0. 101460677	0. 176557	0. 272814
FBXL19-AS1	16p11. 2	0. 101452149	0. 176594	0. 272849
C12ORF77	12p12. 1	-0. 101441339	0. 17664	0. 2729
CD1B	1q23. 1	-0. 101417246	0. 176744	0. 273039
ARHGAP30	1q23. 3	-0. 101376771	0. 176917	0. 273286
PIP	7q34	0. 101364674	0. 176969	0. 273345
RPL27	17q21. 31	0. 101355847	0. 177007	0. 273382
DYRK4	12p13. 32	-0. 101334924	0. 177097	0. 2735
WDFY1	2q36. 1	0. 101330739	0. 177115	0. 273507
LINC0023E	16p13. 3	-0. 10131653	0. 177176	0. 27358
C2ORF27B	2q21. 2	-0. 101311451	0. 177198	0. 273592
ADH4	4q23	-0. 101307763	0. 177214	0. 273596
AMELX	Xp22. 2	0. 101301027	0. 177243	0. 273619
TPST2	22q12. 1	-0. 101295169	0. 177268	0. 273637
OR2L1P	1q44	-0. 101248961	0. 177466	0. 273923
CCAR2	8p21. 3	0. 101226121	0. 177565	0. 274053
PRB4	12p13. 2	0. 101215012	0. 177613	0. 274106
DENND6A	3p14. 3	0. 101211474	0. 177628	0. 274108
KLK5	19q13. 41	0. 101206537	0. 177649	0. 27412
SPOPL	2q22. 1	-0. 101165443	0. 177826	0. 274372
GPHA2	11q13. 1	-0. 101146141	0. 177909	0. 274479
CRHR1	17q21. 31	-0. 101125368	0. 177999	0. 274596
PPCS	1p34. 2	0. 101071287	0. 178232	0. 274935
RAB3A	19p13. 11	-0. 101060825	0. 178277	0. 274983

CCDC86	11q12. 2	0. 101023162	0. 17844	0. 275213
KCNJ15	21q22. 13-	0. 101006424	0. 178512	0. 275303
HMOX1	22q12. 3	-0. 100975038	0. 178648	0. 275491
SLC35G3	17q12	-0. 100968138	0. 178678	0. 275516
UPF2	10p14	-0. 100943653	0. 178784	0. 275658
FAM126B	2q33. 1	0. 100935283	0. 17882	0. 275692
GPR61	1p13. 3	-0. 100927948	0. 178852	0. 27572
ITIH3	3p21. 1	0. 100922729	0. 178874	0. 275733
PYROXD1	12p12. 1	-0. 100889252	0. 179019	0. 275936
NSG1	4p16. 3	-0. 10087042	0. 179101	0. 27604
PHTF1	1p13. 2	-0. 100866236	0. 179119	0. 276047
RMC1	18q11. 2	0. 100857866	0. 179155	0. 276081
VSX1	20p11. 21	-0. 100834238	0. 179258	0. 276218
PHOSPHO2	2q31. 1	-0. 100828573	0. 179282	0. 276222
SECTM1	17q25. 3	0. 100822296	0. 179309	0. 276222
FNBP4	11p11. 2	0. 100820204	0. 179318	0. 276222
TRPS1	8q23. 3	-0. 100818111	0. 179327	0. 276222
HES5	1p36. 32	0. 100817669	0. 179329	0. 276222
TTPA	8q12. 3	-0. 100803798	0. 17939	0. 276293
TNP1	2q35	-0. 100787434	0. 179461	0. 276381
PRODH	22q11. 21	0. 100778357	0. 1795	0. 276421
GSTA3	6p12. 2	-0. 100759492	0. 179582	0. 276526
RERGL	12p12. 3	-0. 100731091	0. 179705	0. 276694
VPS52	6p21. 32	0. 100717678	0. 179763	0. 276762
DDIAS	11q14. 1	0. 100684201	0. 179909	0. 27695
SILC1	2p25. 2	-0. 100683234	0. 179913	0. 27695
LCORL	4p15. 31	-0. 100669554	0. 179972	0. 27702
USP37	2q35	-0. 100636076	0. 180118	0. 277216
MUC6	11p15. 5	0. 100633984	0. 180127	0. 277216
LAMA4	6q21	-0. 100623522	0. 180173	0. 277264
ARHGAP36	Xq26. 1	-0. 100609743	0. 180233	0. 277335
PRR25	16p13. 3	0. 100590958	0. 180314	0. 27744
TCEAL7	Xq22. 2	-0. 100583767	0. 180346	0. 277467
YY1	14q32. 2	0. 10057749	0. 180373	0. 277487
CYP7A1	8q12. 1	-0. 100484148	0. 18078	0. 278092
NEK5	13q14. 3	-0. 100466269	0. 180858	0. 278173
SLC9A5	16q22. 1	0. 100464503	0. 180866	0. 278173
MEA1	6p21. 1	0. 100462411	0. 180875	0. 278173
TRPV5	7q34	-0. 100447498	0. 18094	0. 278252
AVL9	7p14. 3	0. 10044358	0. 180957	0. 278257
ALKBH8	11q22. 3	-0. 100424748	0. 181039	0. 278362
KLHL10	17q21. 2	-0. 100392446	0. 18118	0. 278558
ATP13A4	3q29	-0. 100387138	0. 181203	0. 278572
LRRC14B	5p15. 33	-0. 100371478	0. 181272	0. 278656
CEP131	17q25. 3	0. 100368255	0. 181286	0. 278656
DDX59	1q32. 1	-0. 100343146	0. 181396	0. 278803
MLNR	13q14. 2	-0. 100307986	0. 181549	0. 279018
GSTT4	22q11. 23	0. 100299151	0. 181588	0. 279048
C14ORF93	14q11. 2	-0. 100297115	0. 181597	0. 279048
CLEC3A	16q23. 1	-0. 100293252	0. 181614	0. 279053
ACSBG2	19p13. 3	-0. 100280273	0. 181671	0. 279119
CCDC42	17p13. 1	-0. 10024523	0. 181824	0. 279333
WWP2	16q22. 1	0. 100240621	0. 181844	0. 279341
LINC00598	13q14. 11	-0. 100237573	0. 181858	0. 279341

RAB3D	19p13.2	-0.100223882	0.181918	0.279412
ABCC6	16p13.11	-0.100219697	0.181936	0.279419
PANX1	11q21	0.100215513	0.181954	0.279425
CSNK1E	22q13.1	0.100209236	0.181982	0.279446
OR13A1	10q11.21	-0.100198516	0.182029	0.279497
NKPD1	19q13.32	0.100194642	0.182046	0.279502
NEIL3	4q34.3	0.100184127	0.182092	0.279543
IMPDH2	3p21.31	0.100182035	0.182101	0.279543
TMPRSS11E	4q13.2	0.100171787	0.182146	0.279591
HIST2H2BA	1p11.2	0.100162315	0.182188	0.279633
BANK1	4q24	0.100144373	0.182266	0.279733
OR51G2	11p15.4	-0.100088334	0.182512	0.280089
AKT2	19q13.2	0.100050217	0.18268	0.280324
PPA2	4q24	0.100039755	0.182726	0.280373
ADAMTS17	15q26.3	-0.100027201	0.182781	0.280436
SUZ12P1	17q11.2	0.099986452	0.18296	0.28069
AADACL3	1p36.21	-0.099968827	0.183038	0.280787
C2ORF15	2q11.2	-0.099949783	0.183122	0.280894
HACL1	3p25.1	-0.099941414	0.183159	0.280929
ATXN7L2	1p13.3	-0.099912121	0.183288	0.281106
PTDSS1	8q22.1	-0.099899567	0.183343	0.281169
BIRC8	19q13.42	0.099858085	0.183526	0.281428
PAQR8	6p12.2	0.099836796	0.18362	0.28155
NOTO	2p13.2	-0.099812491	0.183727	0.281693
RABGGTA	14q12	0.099784487	0.183851	0.281861
CPA2	7q32.2	-0.099774194	0.183896	0.281897
MIMT1	19q13.43	-0.099772783	0.183902	0.281897
NKX6-2	10q26.3	0.099742736	0.184035	0.282079
ADPGK	15q24.1	0.099725901	0.184109	0.282171
EIF3C	16p11.2	0.099710405	0.184178	0.282255
CLEC4A	12p13.31	-0.099704978	0.184202	0.28227
SMO	7q32.1	-0.099694516	0.184248	0.282319
TTY9B	Yq11.222	-0.099675428	0.184333	0.282427
SPINT3	20q13.12	0.099634288	0.184515	0.282684
CASC10	10p12.31	-0.099615006	0.1846	0.282793
CNGA1	4p12	0.099596175	0.184684	0.282899
NCEH1	3q26.31	0.09959199	0.184702	0.282906
TTY8	Yp11.2	-0.099570639	0.184797	0.283026
DDIT4L	4q24	0.09956798	0.184809	0.283026
PPP1R12C	19q13.42	0.099562697	0.184832	0.28304
VPS35L	16p12.3	-0.09955642	0.18486	0.283061
FOXL2	3q22.3	0.099550721	0.184885	0.283078
KRT72	12q13.13	-0.099538874	0.184938	0.283137
C3ORF67	3p14.2	-0.099531312	0.184971	0.283166
FAM136BP	6p25.2	0.099516694	0.185036	0.283244
FAM71F2	7q32.1	-0.099508296	0.185073	0.283279
SUPT20HL2	Xp22.11	-0.099484749	0.185178	0.283418
NUPR2	7p11.2	-0.099448353	0.185339	0.283643
YY2	Xp22.12	-0.099444583	0.185356	0.283647
SEH1L	18p11.21	-0.099430879	0.185417	0.283719
ALYREF	17q25.3	0.099380662	0.18564	0.284038
VRK3	19q13.33	0.099349277	0.18578	0.28423
EGFLAM	5p13.2-p1	-0.099336723	0.185836	0.284294
CCDC140	2q36.1	0.099323213	0.185896	0.284364

MT1M	16q13	-0.099309522	0.185957	0.284421
ZNF233	19q13.31	-0.099308528	0.185961	0.284421
MAPK8IP3	16p13.3	0.099261398	0.186171	0.28472
C18ORF54	18q21.2	-0.099238382	0.186274	0.284855
IK	5q31.3	0.09922792	0.186321	0.284905
OR2T8	1q44	-0.09921915	0.18636	0.284943
STEAP2	7q21.13	0.099209089	0.186405	0.28499
TMEM248	7q11.21	0.09919235	0.186479	0.285082
OR10G3	14q11.2	-0.099185688	0.186509	0.285106
HIST1H1T	6p22.2	0.099158003	0.186633	0.285259
SLC17A5	6q13	-0.09915678	0.186638	0.285259
MFRP	11q23.3	0.099146318	0.186685	0.285309
CMTM8	3p22.3	-0.099125395	0.186778	0.285408
DNAJB12	10q22.1	0.099125395	0.186778	0.285408
CFAP100	3q21.3	-0.099074515	0.187006	0.285714
GSDME	7p15.3	0.099073086	0.187012	0.285714
MZT1	13q21.33	0.099070994	0.187021	0.285714
PSG6	19q13.31	0.099058242	0.187078	0.285779
SCARNA1	1p35.3	-0.099043573	0.187144	0.285858
ENTPD6	20p11.21	0.099018685	0.187255	0.286006
ZIC1	3q24	0.099012918	0.187281	0.286024
NKAPD1	11q23.1	-0.099004038	0.187321	0.286062
OR2L3	1q44	-0.098998056	0.187348	0.286081
VSNL1	2p24.2	0.098966376	0.18749	0.286276
CSNK1G3	5q23.2	-0.098945452	0.187583	0.286398
GPR82	Xp11.4	-0.098928765	0.187658	0.286483
DGCR6	22q11.21	-0.098926621	0.187668	0.286483
OBP2B	9q34.2	0.098901971	0.187778	0.286629
DNAJC22	12q13.12	0.098884774	0.187856	0.286725
PCGF3	4p16.3	0.098878497	0.187884	0.286746
DOCK1	10q26.2	-0.09886385	0.187949	0.286825
FAM86FP	12p13.31	0.098855481	0.187987	0.28686
BRI3BP	12q24.31	-0.098738309	0.188513	0.287642
TMEM61	1p32.3	-0.09872157	0.188589	0.287735
ART3	4q21.1 4t	-0.098711702	0.188633	0.28778
POM121L9F	22q11.23	-0.098692277	0.188721	0.287892
SPATA3	2q37.1	-0.098687185	0.188744	0.287905
ABR	17p13.3	-0.098673446	0.188805	0.287977
ABCB8	7q36.1	0.09865043	0.188909	0.288113
CDH22	20q13.12	-0.09860725	0.189104	0.288388
CBX8	17q25.3	0.098598121	0.189145	0.288429
SLC15A3	11q12.2	0.098591844	0.189173	0.28845
MORC4	Xq22.3	-0.098562551	0.189305	0.288629
NXF4	Xq22.1	-0.098551207	0.189356	0.288685
MCCD1	6p21.33	-0.098527341	0.189464	0.288811
KRTAP10-1	21q22.3	-0.098526581	0.189468	0.288811
AURKC	19q13.43	0.098496693	0.189603	0.288987
PLIN5	19p13.3	0.098491411	0.189626	0.288987
STK11IP	2q35	0.098491411	0.189626	0.288987
TAAR5	6q23.2	-0.098479248	0.189681	0.289049
IQCH	15q23	-0.098470487	0.189721	0.289087
PTRH1	9q34.11	0.098462118	0.189759	0.289122
PRX	19q13.2	-0.098441194	0.189853	0.289245
LINC0024C	6p22.2	-0.098430733	0.189901	0.289295

ERGIC1	5q35.1	0.098409809	0.189995	0.289417
TM4SF4	3q25.1	0.098403532	0.190024	0.28943
WDR45	Xp11.23	0.09840144	0.190033	0.28943
NR5A2	1q32.1	-0.098380516	0.190128	0.289552
ZNF224	19q13.31	0.098315653	0.190422	0.289978
SCAND2P	15q25.2	-0.098282175	0.190573	0.290187
SLC35B3	6p24.3	-0.098248698	0.190725	0.290396
CMC2	16q23.2	0.098225682	0.19083	0.29051
TRIB1	8q24.13	0.098225682	0.19083	0.29051
RFX4	12q23.3	-0.098213078	0.190887	0.290574
MTMR8	Xq11.2	0.098208943	0.190906	0.290574
COPG2	7q32.2	0.09820685	0.190915	0.290574
NCOA6	20q11.22	-0.098196389	0.190963	0.290624
HIST1H2AE	6p22.2	0.098156238	0.191145	0.29088
SLC22A12	11q13.1	-0.098150754	0.19117	0.290895
PDILT	16p12.3	-0.098142266	0.191208	0.290931
KLK14	19q13.41	-0.098139147	0.191223	0.290931
ST7-AS1	7q31.2	-0.098133618	0.191248	0.290947
EIF3H	8q23.3-q24.1	0.098112694	0.191343	0.29107
CELP	9q34.13	-0.098097787	0.191411	0.291151
VSIR	10q22.1	0.098081309	0.191486	0.291243
CDX2	13q12.2	0.098068755	0.191543	0.291308
SLC2A2	3q26.2	-0.098063549	0.191566	0.291321
ECSIT	19p13.2	0.098060385	0.191581	0.291321
AGAP2	12q14.1	-0.098054108	0.191609	0.291342
SIRPB2	20p13	-0.098018538	0.191771	0.291567
ABHD5	3p21.33	-0.098010169	0.191809	0.291595
CHID1	11p15.5	-0.098008076	0.191819	0.291595
HCRT	17q21.2	0.098000677	0.191853	0.291624
GTPBP1	22q13.1	0.09799343	0.191886	0.291652
EPOP	17q12	-0.097978784	0.191952	0.291731
LRFN2	6p21.2-p21.3	-0.097955266	0.19206	0.291872
C2ORF49	2q12.2	0.097934844	0.192153	0.291991
ITIH1	3p21.1	-0.097921639	0.192213	0.292048
C5AR1	19q13.32	-0.097920198	0.19222	0.292048
MRPL39	21q21.3	0.097899274	0.192315	0.292171
RNF165	18q21.1	-0.097868986	0.192453	0.292359
LENG1	19q13.42	0.097796748	0.192783	0.292838
ZRSR2	Xp22.2	0.097790471	0.192812	0.292859
CACYBP	1q25.1	0.097742347	0.193032	0.293171
BRAT1	7p22.3	0.097698408	0.193233	0.293447
NAE1	16q22.1	-0.097696315	0.193243	0.293447
HILS1	17q21.33	0.09765575	0.193429	0.293693
LRRCC1	8q21.2	-0.097654468	0.193435	0.293693
ARHGAP27F	17q24.2	-0.097633596	0.19353	0.293809
CNOT10	3p22.3	0.097631452	0.19354	0.293809
SAA1	11p15.1	-0.097598026	0.193694	0.294019
CCDC191	3q13.31	0.097572866	0.193809	0.294164
FAM157B	9q34.3	-0.097568588	0.193829	0.294164
CTLA4	2q33.2	-0.097567686	0.193833	0.294164
POLR2L	11p15.5	0.097554035	0.193895	0.294229
DNAJC30	7q11.23	-0.097551943	0.193905	0.294229
DHODH	16q22.2	0.097510096	0.194097	0.294498
SPRED3	19q13.2	-0.097498687	0.19415	0.294555

FSCN3	7q32.1	-0.097476271	0.194253	0.294689
CCDC27	1p36.32	-0.097464724	0.194306	0.294747
EXOC3L1	16q22.1	-0.097447325	0.194386	0.294846
PRR22	19p13.3	0.097428494	0.194473	0.294955
ARFGAP1	20q13.33	0.097418032	0.194521	0.295006
ADCY10	1q24.2	-0.097413609	0.194541	0.295014
NAIF1	9q34.11	0.097386647	0.194665	0.29518
GAGE2A	Xp11.23	-0.097372923	0.194728	0.295254
MESP1	15q26.1	-0.097368912	0.194747	0.295259
GNL3L	Xp11.22	-0.097302952	0.195051	0.295689
H1FOO	3q22.1	0.097300937	0.19506	0.295689
ZNF182	Xp11.23	-0.097296675	0.19508	0.295689
TMEM47	Xp21.1	0.097294583	0.195089	0.295689
CCDC18	1p22.1	0.097290398	0.195109	0.295696
RASL12	15q22.31	-0.097277844	0.195167	0.295761
C21ORF58	21q22.3	-0.097269475	0.195205	0.295797
HIST1H2AE	6p22.2	0.097250847	0.195291	0.295905
OXR1	8q23.1	0.097215073	0.195456	0.296125
PTDSS2	11p15.5	-0.097212981	0.195466	0.296125
NGRN	15q26.1	0.09719415	0.195553	0.296234
OR6K6	1q23.1	-0.097187223	0.195585	0.296238
OR6Y1	1q23.1	-0.097187223	0.195585	0.296238
USP48	1p36.12	-0.097171134	0.195659	0.296328
CINP	14q32.31	0.09715021	0.195756	0.296452
FRS3	6p21.1	0.097141841	0.195795	0.296488
JTB	1q21.3	0.097129287	0.195853	0.296554
ANGPTL7	1p36.22	-0.097123039	0.195882	0.296575
C17ORF67	17q22	0.097058147	0.196182	0.296985
GLYR1	16p13.3	-0.097058147	0.196182	0.296985
OCIAD1	4p11	-0.097026761	0.196327	0.297182
NRIP1	21q11.2-c	-0.097014207	0.196386	0.297247
RNF122	8p12	-0.09700793	0.196415	0.297247
WARS	14q32.2	-0.09700793	0.196415	0.297247
PRR7	5q35.3	0.097001653	0.196444	0.297268
MT1DP	16q13	-0.096994939	0.196475	0.297293
HPX	11p15.4	0.096947252	0.196696	0.297605
RRS1	8q13.1	0.096940975	0.196725	0.297627
PGP	16p13.3	0.096917959	0.196832	0.297766
CD14	5q31.3	-0.096911682	0.196861	0.297787
ALPI	2q37.1	0.096906453	0.196885	0.297801
NOTCH3	19p13.12	0.096861465	0.197094	0.298095
SERPINB1	18q21.33	0.0968562	0.197119	0.298109
PHF2P1	13q12.11	-0.096840273	0.197193	0.298183
DGAT2L6	Xq13.1	-0.09683926	0.197197	0.298183
CNOT3	19q13.42	0.096804971	0.197357	0.298402
DFFB	1p36.32	-0.096788233	0.197435	0.298497
MAP11	7q22.1	0.096775678	0.197493	0.298563
LOC728743	7q36.1	-0.096771494	0.197513	0.298569
ZNF792	19q13.11	-0.096754755	0.197591	0.298665
LOC643387	2q37.3	0.096727554	0.197717	0.298833
WDR72	15q21.3	0.096720737	0.197749	0.298859
PDIA4	7q36.1	0.096717092	0.197766	0.298862
MAST1	19p13.13	-0.096712908	0.197785	0.298869
GRIN2A	16p13.2	-0.096635491	0.198146	0.299391

GTF2A1L	2p16.3	0.096624712	0.198197	0.299445
MORN2	2p22.1	-0.096612475	0.198254	0.299508
DUSP14	17q12	0.096606198	0.198283	0.299529
H6PD	1p36.22	-0.096602013	0.198302	0.299529
CARMIL3	14q11.2	-0.09659992	0.198312	0.299529
VDAC3	8p11.21	0.096576905	0.19842	0.299661
ATG13	11p11.2	-0.096574812	0.198429	0.299661
EDF1	9q34.3	0.096562258	0.198488	0.299727
OR6B1	7q35	0.096555203	0.198521	0.299751
SPECC1	17p11.2	0.096551796	0.198537	0.299751
NBPF9	1q21.2	-0.096547612	0.198556	0.299751
TMEM89	3p21.31	-0.096545886	0.198565	0.299751
PTPN3	9q31.3	-0.096484841	0.19885	0.300159
KMO	1q43	-0.096480656	0.198869	0.300166
ZNF48	16p11.2	-0.096470194	0.198918	0.300218
IL13RA1	Xq24	-0.096434624	0.199085	0.300446
SPRR2C	1q21.3	0.09643092	0.199102	0.300449
PCDHA10	5q31.3	-0.096426307	0.199124	0.300459
ARGFXP2	17q11.2	0.096417663	0.199164	0.300498
LLPH	12q14.3	0.096413701	0.199183	0.300503
OAZ1	19p13.3	0.096403239	0.199232	0.300554
AADA4L4	1p36.21	-0.096385261	0.199316	0.300659
NUDT3	6p21.31	-0.096378131	0.199349	0.300686
OAF	11q23.3	0.096357207	0.199447	0.300811
DCAF4	14q24.2	0.096353022	0.199467	0.300818
THEMIS2	1p35.3	-0.096342561	0.199516	0.300862
ARHGEF40	14q11.2	-0.096340468	0.199526	0.300862
STATH	4q13.3	0.096335247	0.19955	0.300876
PCDHA12	5q31.3	-0.096324233	0.199602	0.300931
RAD50	5q31.1	-0.096317452	0.199634	0.300956
OR51Q1	11p15.4	-0.096290981	0.199758	0.301121
ERAP2	5q15	0.096267236	0.199869	0.301266
ANKRD55	5q11.2	-0.09625667	0.199919	0.301318
SH3BP1	22q13.1	0.096250497	0.199948	0.301339
CRYBB2	22q11.23	-0.096239276	0.200001	0.301396
ST7-OT4	7q31.2	-0.096212165	0.200128	0.301565
TNFRSF11A	18q21.33	0.096202373	0.200174	0.301611
GPNMB	7p15.3	-0.096183542	0.200262	0.301722
IL21R	16p12.1	-0.096175172	0.200302	0.301759
C12ORF57	12p13.31	-0.096168895	0.200331	0.30178
SNCB	5q35.2	-0.096160617	0.20037	0.301816
LINC00923	15q26.2	0.096156549	0.200389	0.301822
MLN	6p21.31	-0.096141956	0.200458	0.301903
SLC25A36	3q23	-0.096131233	0.200508	0.301956
GLRA1	5q33.1	-0.096110871	0.200604	0.302078
LYZL4	3p22.1	0.096105437	0.20063	0.302093
UBAP1L	15q22.31	-0.09610199	0.200646	0.302095
TMEM80	11p15.5	-0.096085201	0.200725	0.302191
ATP5F1B	12q13.3	-0.096076831	0.200764	0.302228
RANBP3	19p13.3	0.096072647	0.200784	0.302233
TAS2R10	12p13.2	-0.096069605	0.200798	0.302233
TANK	2q24.2	0.096062185	0.200833	0.302263
NT5DC2	3p21.1	0.096058	0.200853	0.30227
CPLX3	15q24.1	-0.096048613	0.200897	0.302314

FCRL5	1q23. 1	-0.096041764	0.20093	0.30234
SUSD4	1q41	-0.096032892	0.200971	0.30238
KATNB1P6	6q24. 3	-0.095991045	0.201169	0.302652
SMIM21	18q23	-0.095988146	0.201182	0.302652
ZNF714	19p12	-0.095978491	0.201228	0.302697
MYOD1	11p15. 1	0.095958888	0.20132	0.302814
KLHL7	7p15. 3	-0.095932459	0.201445	0.302979
TCF15	20p13	0.09591577	0.201524	0.303074
CYP2F1	19q13. 2	0.095893764	0.201628	0.303208
SOX30	5q33. 3	-0.095878308	0.201701	0.303295
NAA35	9q21. 33	-0.095829933	0.201929	0.303616
DUSP2	2q11. 2	-0.095825749	0.201949	0.303623
LBR	1q42. 12	-0.095785994	0.202137	0.303879
PPIAP80	7p15. 1	-0.095783258	0.20215	0.303879
FAM120A	9q22. 31	0.095775532	0.202187	0.303893
ACSM2B	16p12. 3	-0.095774875	0.20219	0.303893
RSRC2	12q24. 31	-0.095754608	0.202286	0.303984
FAM186A	12q13. 12	-0.095752566	0.202296	0.303984
IDO1	8p11. 21	-0.095752516	0.202296	0.303984
IFNL2	19q13. 2	0.095726041	0.202421	0.304149
SCGB2A1	11q12. 3	-0.095706684	0.202513	0.304264
STX7	6q23. 2	-0.095702299	0.202534	0.304272
S100A8	1q21. 3	-0.095654175	0.202762	0.304592
RP9P	7p14. 3	0.095616513	0.20294	0.304838
FAM238C	10p12. 1	-0.095602166	0.203009	0.304917
KRT82	12q13. 13	0.09559284	0.203053	0.304961
RGS11	16p13. 3	-0.095589312	0.20307	0.304963
SYNDIG1L	14q24. 3	-0.095585835	0.203086	0.304965
SLC41A2	12q23. 3	0.095568389	0.203169	0.305066
PSPC1	13q12. 11	0.095541188	0.203298	0.305214
SLBP	4p16. 3	0.095541188	0.203298	0.305214
IQCE	7p22. 3	0.095499341	0.203497	0.30549
CRYZL1	21q22. 11	0.095493064	0.203527	0.305512
NAT14	19q13. 42	0.095457494	0.203696	0.305743
LGR4	11p14. 1	0.095415647	0.203895	0.306019
ANKRD16	10p15. 1	-0.095403093	0.203955	0.306086
LINC0208E	3q12. 3	0.095376173	0.204083	0.306255
HNF4G	8q21. 13	0.095367522	0.204125	0.30627
OPRK1	8q11. 23	-0.095364511	0.204139	0.30627
VIPR1	3p22. 1	-0.095363338	0.204144	0.30627
TMEM164	Xq23	0.095361245	0.204154	0.30627
SLC4A2	7q36. 1	0.095354968	0.204184	0.306292
BLVRA	7p13	0.095296382	0.204464	0.30667
KNG1	3q27. 3	0.095295635	0.204467	0.30667
AARSD1	17q21. 31	0.095281736	0.204534	0.306746
GSPT2	Xp11. 22	0.095275459	0.204564	0.306746
STAR	8p11. 23	-0.095275459	0.204564	0.306746
IRX6	16q12. 2	-0.095266551	0.204606	0.306774
GZMB	14q12	-0.095264997	0.204614	0.306774
ADCK1	14q24. 3	-0.095254535	0.204663	0.306826
RHN01	12p13. 33	0.09525035	0.204683	0.306833
NR2C1	12q22	0.095241981	0.204723	0.30687
BCL2L13	22q11. 21	-0.095237796	0.204743	0.306877
SLC25A5	Xq24	-0.095231519	0.204773	0.306899

APBB1IP	10p12.1	-0.095218965	0.204833	0.306966
TRIM55	8q13.1	-0.095173814	0.205049	0.307266
DDX39B	6p21.33	0.095166656	0.205083	0.307295
TRIM65	17q25.1	0.095162471	0.205103	0.307301
ESAM	11q24.2	-0.09514364	0.205193	0.307413
LINC01591	8q24.22	-0.095130568	0.205256	0.307484
ASB9	Xp22.2	-0.095122717	0.205294	0.307494
COLEC11	2p25.3	-0.095122717	0.205294	0.307494
NSFL1C	20p13	0.095105978	0.205374	0.307591
SNORA10	16p13.3	-0.095096413	0.205419	0.307637
FOXL2NB	3q22.3	0.095048035	0.205651	0.307961
DHX35	20q11.23-	-0.095032745	0.205724	0.308047
SZRD1	1p36.13	-0.095026468	0.205755	0.308069
TRMT6	20p12.3	-0.094997175	0.205895	0.308248
IL7	8q21.13	0.094995083	0.205905	0.308248
MTG2	20q13.33	-0.094986714	0.205945	0.308285
CDKN2A	9p21.3	0.094967882	0.206035	0.308377
CASP5	11q22.3	-0.094967522	0.206037	0.308377
B4GALT1	9p21.1	0.094944866	0.206146	0.308517
SGTA	19p13.3	0.094938589	0.206176	0.308538
LARP1	5q33.2	-0.094934405	0.206196	0.308545
CCDC59	12q21.31	-0.094863264	0.206538	0.309034
CNP	17q21.2	-0.094848618	0.206608	0.309116
NICN1	3p21.31	-0.094842341	0.206638	0.309138
XIRP2	2q24.3	-0.094820338	0.206744	0.309273
PGBD2	1q44	-0.094813048	0.206779	0.309302
OPN5	6p12.3	-0.094799284	0.206845	0.309378
QSER1	11p13	-0.094783755	0.20692	0.309467
ARAP2	4p14	0.094769108	0.206991	0.309549
RPS18	6p21.32	0.094760739	0.207031	0.309586
ATP6VOD2	8q21.3	0.094756554	0.207051	0.309593
APOA4	11q23.3	0.094741965	0.207121	0.309675
CNOT2	12q15	-0.094727261	0.207192	0.309758
DEFA5	8p23.1	-0.094712291	0.207264	0.309842
ETF1	5q31.2	-0.09470843	0.207283	0.309847
POC1B	12q21.33	0.094691691	0.207364	0.309944
SNORA50C	17q23.3	-0.094685578	0.207393	0.309965
MYH13	17p13.1	0.094671344	0.207462	0.310045
C200RF141	20p13	-0.094657004	0.207531	0.310125
CWF19L1	10q24.31	-0.094614274	0.207737	0.31041
TMPRSS9	19p13.3	-0.094605038	0.207782	0.310453
GDI2	10p15.1	-0.09459335	0.207838	0.310492
OR11H6	14q11.2	-0.094593263	0.207838	0.310492
PRKCSH	19p13.2	0.094545226	0.20807	0.310815
GPR50	Xq28	-0.094534024	0.208125	0.310873
CARMIL1	6p22.2	0.094513841	0.208222	0.310995
CGAS	6q13	-0.094501287	0.208283	0.311031
AEBP2	12p12.3	-0.094499194	0.208293	0.311031
RPL30	8q22.2	0.094499194	0.208293	0.311031
ZNF875	19q13.12	0.094492917	0.208323	0.311053
COIL	17q22	-0.094480363	0.208384	0.311121
CCL13	17q12	0.094469951	0.208434	0.311173
SNAP23	15q15.1-c	0.09445944	0.208485	0.311225
TEX37	2p11.2	-0.09442131	0.20867	0.311477

FBX042	1p36. 13	-0.094405038	0.208749	0.311572
SFTPB	2p11. 2	-0.094393962	0.208802	0.311629
SPATA32	17q21. 31	0.094385855	0.208841	0.311664
CAMKK2	12q24. 31	-0.094382022	0.20886	0.311668
CTAG2	Xq28	-0.094362524	0.208955	0.311786
NOC3L	10q23. 33	-0.094356914	0.208982	0.311787
SNORA36B	1q41	0.094355932	0.208986	0.311787
GGTLC1	20p11. 21	0.094345367	0.209038	0.31184
DDX17	22q13. 1	-0.094319252	0.209164	0.312006
C12ORF10	12q13. 13	0.094300421	0.209256	0.312116
PIN1P1	1p31. 1	-0.094297585	0.209269	0.312116
RAB2A	8q12. 1-q1	-0.094287866	0.209317	0.312129
CSH1	17q23. 3	0.094286111	0.209325	0.312129
ZIM3	19q13. 43	0.094286111	0.209325	0.312129
SGIP1	1p31. 3	-0.094277405	0.209367	0.312169
CCL5	17q12	-0.094266943	0.209418	0.312221
UTS2R	17q25. 3	-0.094263272	0.209436	0.312225
CBFB	16q22. 1	0.094227188	0.209611	0.312463
TMEM255B	13q34	-0.094185341	0.209815	0.312726
LOC727896	18p11. 31	-0.094184344	0.209819	0.312726
TUBGCP6	22q13. 33	-0.094174879	0.209865	0.312772
DYNLL1	12q24. 31	0.09416651	0.209906	0.312809
TRHR	8q23. 1	-0.094149294	0.20999	0.31291
FAM171A2	17q21. 31	-0.094120527	0.21013	0.313049
CCDC184	12q13. 11	-0.094120478	0.21013	0.313049
PLAC9	10q22. 3	-0.094120478	0.21013	0.313049
ABCA17P	16p13. 3	-0.094110065	0.210181	0.313101
NINL	20p11. 21	-0.094089093	0.210283	0.313211
OSMR	5p13. 1	-0.094087	0.210293	0.313211
SLC25A41	19p13. 3	0.094085321	0.210301	0.313211
BECN1	17q21. 31	0.094076538	0.210344	0.313251
CRLF2	Xp22. 33 ε	-0.094064677	0.210402	0.313314
BST1	4p15. 32	0.094047245	0.210487	0.313417
CHRNA7	15q13. 3	-0.094018985	0.210624	0.313599
GABRD	1p36. 33	0.094003306	0.210701	0.313681
OR51B4	11p15. 4	-0.094001127	0.210711	0.313681
WDR5B	3q21. 1	-0.093990752	0.210762	0.313718
HIST1H2BI	6p22. 2	-0.093989669	0.210767	0.313718
IGDCC4	15q22. 31	-0.093946812	0.210976	0.314006
CCN1	1p22. 3	-0.093942628	0.210997	0.314013
GIPC3	19p13. 3	-0.093930073	0.211058	0.314072
ZNF384	12p13. 31	0.093927981	0.211068	0.314072
RNF126P1	17q22	0.093895296	0.211228	0.314286
FAM169B	15q26. 3	0.093876639	0.211319	0.314379
CFHR1	1q31. 3	-0.093876171	0.211321	0.314379
MORC1	3q13. 13	-0.093869639	0.211353	0.314388
PCP2	19p13. 2	0.093868082	0.211361	0.314388
RPS13	11p15. 1	0.09386521	0.211375	0.314388
TP53RK	20q13. 12	-0.093842194	0.211487	0.314532
UXT-AS1	Xp11. 23	-0.093808717	0.211651	0.314752
HACD4	9p21. 3	-0.09379407	0.211723	0.314835
DHRS13	17q11. 2	0.093785701	0.211764	0.314873
MST1L	1p36. 13	0.093760593	0.211886	0.315032
CPXM1	20p13	-0.093754315	0.211917	0.315054

FCGR2C	1q23.3	-0.093737626	0.211999	0.315152
NDUFAF8	17q25.3	-0.093718745	0.212091	0.315266
BDNF	11p14.1	0.09369573	0.212204	0.31541
UGT2B15	4q13.2	-0.093690548	0.21223	0.315425
ACTG2	2p13.1	0.093655975	0.212399	0.315653
HNRNPA3	2q31.2	0.093635051	0.212502	0.315782
MLF1	3q25.32	-0.093624589	0.212553	0.315835
ALKAL2	2p25.3	-0.093607899	0.212635	0.315933
CFAP126	1q23.3	-0.093597389	0.212686	0.315986
LINC0221C	17q21.31	0.093591112	0.212717	0.316009
THAP8	19q13.12	-0.093584835	0.212748	0.316031
BAZ1A	14q13.1-c	0.093566003	0.212841	0.316145
CFAP65	2q35	0.093562014	0.21286	0.31615
CD99	Xp22.33 ε	-0.093555542	0.212892	0.316174
SDHAF4	6q13	-0.093542987	0.212954	0.316242
CPXM2	10q26.13	-0.093517879	0.213077	0.316385
LINC02112	5p15.31-f	-0.093514198	0.213095	0.316385
RCBTB2	13q14.2	-0.093513694	0.213098	0.316385
PASK	2q37.3	-0.093507417	0.213128	0.316408
BMP15	Xp11.22	-0.093496445	0.213182	0.316464
ZNF267	16p11.2	0.093490679	0.213211	0.316483
LINC01205	3q13.13	0.093483578	0.213246	0.316511
PMS2	7p22.1	-0.09346557	0.213334	0.316619
CLEC2L	7q34	-0.093459939	0.213362	0.316637
OPCML	11q25	0.093432288	0.213498	0.316815
SAMM50	22q13.31	0.093398615	0.213664	0.317038
KCNMB4	12q15	0.093386061	0.213726	0.317068
SFMBT1	3p21.1	-0.093386061	0.213726	0.317068
APCS	1q23.2	0.09338476	0.213732	0.317068
IFNB1	9p21.3	0.093371046	0.2138	0.317145
KRT27	17q21.2	-0.093351931	0.213894	0.317261
CA5BP1	Xp22.2	0.093331659	0.213994	0.317386
SNHG32	6p21.33	-0.093325382	0.214025	0.317408
TAF1C	16q24.1	0.093293997	0.214179	0.317614
ST3GAL5	2p11.2	-0.093289812	0.2142	0.317621
IQCD	12q24.13	-0.093250106	0.214396	0.317865
BORCS6	17p13.1	-0.093250058	0.214396	0.317865
ZNF432	19q13.41	-0.093227042	0.21451	0.31801
TMEM212	3q26.31	-0.093213022	0.214579	0.318077
EMC7	15q14	0.093210303	0.214593	0.318077
ENSA	1q21.3	0.09320821	0.214603	0.318077
TCEA3	1p36.12	0.093178917	0.214748	0.318268
DNASE2B	1p31.1-p2	-0.093167082	0.214806	0.318331
SCGB3A1	5q35.3	0.093143984	0.21492	0.318473
MIF4GD	17q25.1	-0.093141255	0.214934	0.318473
RAB37	17q25.1	-0.093130793	0.214986	0.318518
APCDD1L	20q13.32	0.093128701	0.214996	0.318518
HOXD9	2q31.1	0.093111962	0.215079	0.318617
OR2Z1	19p13.2	0.093069431	0.215289	0.318905
KRTAP4-11	17q21.2	-0.09306396	0.215316	0.318921
FIBIN	11p14.2	-0.093047099	0.2154	0.319022
SLC20A2	8p11.21	0.093019898	0.215535	0.319197
HIGD2A	5q35.2	0.093015714	0.215555	0.319205
ZNF608	5q23.2	-0.092998975	0.215638	0.319304

RNU4ATAC	2q14. 2	-0.092986513	0.2157	0.319372
SPATA17	1q41	-0.092942481	0.215918	0.319671
ADAMTS8	11q24. 3	-0.092929927	0.215981	0.31974
DUSP9	Xq28	0.092923722	0.216012	0.319762
LINC00174	7q11. 21	0.09291528	0.216053	0.3198
SEMA4F	2p13. 1	-0.092892265	0.216168	0.319945
UBE2V2	8q11. 21	-0.092877618	0.21624	0.320029
UQCR10	22q12. 2	0.092856694	0.216344	0.320151
FBX028	1q42. 11	0.092854651	0.216355	0.320151
COL1A1	17q21. 33	0.092810663	0.216573	0.320451
FGF17	8p21. 3	-0.09280189	0.216617	0.320492
CAMK1	3p25. 3	-0.092798109	0.216636	0.320496
KMT5B	11q13. 2	-0.092758354	0.216833	0.320764
TNFAIP8L2	1q21. 3	-0.092749984	0.216875	0.320802
ITGB3BP	1p31. 3	0.0927458	0.216896	0.320809
MED8	1p34. 2	0.092735338	0.216948	0.320863
MBD6	12q13. 3	0.092731153	0.216969	0.32087
RIOX2	3q11. 2	-0.092693491	0.217156	0.321123
HAR1A	20q13. 33	-0.092670475	0.217271	0.321269
PPP1R15B	1q32. 1	-0.092634905	0.217448	0.321508
LINC00301	11q12. 2	0.09260621	0.217591	0.321692
VGLL3	3p12. 1	-0.092603519	0.217605	0.321692
B3GAT3	11q12. 3	0.092597242	0.217636	0.321697
TCF7L1	2p11. 2	-0.092593058	0.217657	0.321697
ZNF195	11p15. 4	0.092593058	0.217657	0.321697
UBXN2B	8q12. 1	-0.092565857	0.217793	0.321874
ALOX15B	17p13. 1	0.092549118	0.217876	0.321974
HIST1H4E	6p22. 2	0.092538456	0.21793	0.322029
MAD2L1	4q27	0.092534472	0.21795	0.322034
MFSD11	17q25. 1-c	0.092513548	0.218054	0.322152
SYNGR4	19q13. 33	-0.092512117	0.218061	0.322152
SYDE1	19p13. 12	0.092500994	0.218117	0.32221
ATP23	12q14. 1	-0.092494717	0.218148	0.322233
HAND1	5q33. 2	-0.092480883	0.218217	0.322311
TPT1	13q14. 13	0.092463331	0.218305	0.322417
OR7E156P	13q21. 31	-0.092444468	0.218399	0.322532
HOXA7	7p15. 2	-0.092427858	0.218483	0.322631
CYP2D6	22q13. 2	0.092393286	0.218656	0.322862
NR2F2	15q26. 2	-0.092390099	0.218672	0.322862
FOXP3	Xp11. 23	-0.09237336	0.218755	0.322962
EEF1DP3	13q13. 1	0.092333206	0.218957	0.323224
TRPA1	8q21. 11	-0.092331561	0.218965	0.323224
WASH2P	2q14. 1	0.092300128	0.219122	0.323432
GCAT	22q13. 1	-0.092285481	0.219196	0.323509
PI4KAP1	22q11. 21	-0.092283389	0.219206	0.323509
CCNH	5q14. 3	0.092260373	0.219322	0.323655
NOP14	4p16. 3	-0.092241542	0.219416	0.323771
KIAA0556	16p12. 1	0.092237357	0.219437	0.323778
KRTAP5-11	11q13. 4	0.092211764	0.219566	0.323943
ATP5ME	4p16. 3	0.092180863	0.219721	0.324148
PRRX1	1q24. 2	-0.092176679	0.219742	0.324155
HACD2	3q21. 1	-0.092092984	0.220163	0.324752
PAF1	19q13. 2	0.092059507	0.220331	0.324977
PMPCA	9q34. 3	-0.092023937	0.22051	0.325217

KRT20	17q21. 2	0. 092006019	0. 220601	0. 325326
LTA	6p21. 33	-0. 092000921	0. 220626	0. 32534
GJA4	1p34. 3	-0. 091977905	0. 220742	0. 325487
AGPAT4-IT1	6q26	-0. 091957991	0. 220843	0. 325611
UBE2DNL	Xq21. 1	-0. 091903374	0. 221118	0. 325993
GATA5	20q13. 33	0. 091897038	0. 22115	0. 326016
ATAD2B	2p24. 1-p2	-0. 091887933	0. 221196	0. 326051
PARP16	15q22. 31	0. 091885841	0. 221207	0. 326051
MAMDC4	9q34. 3	0. 091835624	0. 22146	0. 326401
ADAM12	10q26. 2	-0. 09182307	0. 221524	0. 326462
NBEAL1	2q33. 2	-0. 091820978	0. 221534	0. 326462
ASAH2	10q11. 23	-0. 091781751	0. 221732	0. 32673
RAB11FIP4	17q11. 2	0. 091758207	0. 221852	0. 326881
SIRPB1	20p13	-0. 091722637	0. 222032	0. 327123
POM121L1F	22q11. 22	0. 09170288	0. 222132	0. 327245
POM121L8F	22q11. 21	-0. 091699035	0. 222151	0. 327245
MMACHC	1p34. 1	-0. 091696531	0. 222164	0. 327245
USP19	3p21. 31	-0. 091653589	0. 222381	0. 327533
TAF1A	1q41	0. 091651497	0. 222392	0. 327533
ZCCHC13	Xq13. 2	0. 091640844	0. 222446	0. 32755
WT1-AS	11p13	-0. 091639625	0. 222452	0. 32755
RAG2	11p12	-0. 091639489	0. 222453	0. 32755
CDH26	20q13. 33	-0. 091624296	0. 22253	0. 327639
SERGEF	11p15. 1	-0. 091601281	0. 222646	0. 327787
TLE6	19p13. 3	0. 091580357	0. 222752	0. 327919
EFCAB12	3q21. 3	-0. 091571988	0. 222795	0. 327957
OPA1	3q29	-0. 091559433	0. 222859	0. 328018
SNORA68	19p13. 11	-0. 091557367	0. 222869	0. 328018
USP17L6P	4p16. 1	0. 09152836	0. 223016	0. 328211
TMOD4	1q21. 3	0. 091520949	0. 223054	0. 328219
BRCC3	Xq28	0. 091519679	0. 22306	0. 328219
ZFAND1	8q21. 13	-0. 091517586	0. 223071	0. 328219
ZSCAN32	16p13. 3	-0. 091509217	0. 223114	0. 328257
RIBC2	22q13. 31	-0. 091471554	0. 223305	0. 328514
ANKRA2	5q13. 2	-0. 091421338	0. 22356	0. 328841
RPL39	Xq24	0. 091421338	0. 22356	0. 328841
KRTAP4-4	17q21. 2	-0. 091385	0. 223745	0. 329041
OR4F5	1p36. 33	-0. 091385	0. 223745	0. 329041
OR52E6	11p15. 4	0. 091385	0. 223745	0. 329041
SCD	10q24. 31	0. 091373214	0. 223805	0. 329105
DNMT1	19p13. 2	-0. 091341876	0. 223965	0. 329305
HIST1H4L	6p22. 1	-0. 091339952	0. 223974	0. 329305
USP25	21q21. 1	-0. 091329274	0. 224029	0. 329361
KIF25	6q27	-0. 091289161	0. 224233	0. 329637
PRSS1	7q34	-0. 091285335	0. 224253	0. 329642
STH	17q21. 31	-0. 091258678	0. 224389	0. 329817
TBPL2	14q22. 3	0. 091243511	0. 224466	0. 329907
C11ORF71	11q23. 2	-0. 091239303	0. 224487	0. 329914
RNASEK	17p13. 1	-0. 091216287	0. 224605	0. 330062
KRT81	12q13. 13	0. 091193319	0. 224722	0. 330187
GORASP1	3p22. 2	0. 091191179	0. 224733	0. 330187
RAD54B	8q22. 1	0. 091189086	0. 224744	0. 330187
CFAP77	9q34. 13	0. 091186691	0. 224756	0. 330187
FAM205BP	9p13. 3	-0. 091164028	0. 224872	0. 330333

IL19	1q32.1	0.091148343	0.224952	0.330426
RCOR2	11q13.1	0.091107484	0.225161	0.330709
VPS16	20p13	-0.091025882	0.225578	0.331297
ACPP	3q22.1	-0.091019605	0.22561	0.33132
TFAP2B	6p12.3	-0.091013127	0.225643	0.331345
SEMG1	20q13.12	0.090995213	0.225735	0.331455
DRG1	22q12.2	-0.090981991	0.225803	0.33153
RPL31P11	1q23.3	-0.090969579	0.225866	0.331567
DDB2	11p11.2	0.090967344	0.225878	0.331567
CLCN2	3q27.1	0.090967296	0.225878	0.331567
USF2	19q13.12	-0.090946373	0.225985	0.3317
B4GALNT2	17q21.32	-0.09093266	0.226055	0.331779
HGH1	8q24.3	0.090904526	0.2262	0.331967
SLC17A4	6p22.2	-0.090893493	0.226256	0.332012
CDK5R1	17q11.2	-0.090891972	0.226264	0.332012
JHY	11q24.1	-0.090887787	0.226286	0.332019
GSPT1	16p13.13	-0.09088151	0.226318	0.332042
SNORA54	11p15.4	-0.090868072	0.226387	0.332119
KHK	2p23.3	-0.090860586	0.226425	0.332151
LINC0062C	3p25.1	0.090850832	0.226475	0.3322
PITPNB	22q12.1	0.090827109	0.226597	0.332346
INTS6	13q14.3	-0.090825016	0.226608	0.332346
MCF2	Xq27.1	-0.090773286	0.226873	0.332711
LINC01622	6p25.3	0.090764322	0.22692	0.332754
TTC28-AS1	22q12.1	-0.090737137	0.227059	0.332935
SLC35G5	8p23.1	0.090695114	0.227275	0.333227
DCAF12L2	Xq25	-0.090678968	0.227359	0.333308
ADGRF2	6p12.3	0.090677917	0.227364	0.333308
TTC9B	19q13.2	0.090673041	0.227389	0.333318
MUL1	1p36.12	0.090670182	0.227404	0.333318
OR6K3	1q23.1	-0.090615087	0.227687	0.333709
COL6A3	2q37.3	-0.090609503	0.227716	0.333727
MYNN	3q26.2	-0.090578118	0.227878	0.333939
PSMB7	9q33.3	0.090573933	0.2279	0.333946
CCR3	3p21.31	-0.09054741	0.228036	0.334122
PRND	20p13	0.090540456	0.228072	0.33415
MOB3C	1p33	-0.090515347	0.228202	0.334316
ABCD3	1p21.3	-0.090492332	0.228321	0.334465
PYGM	11q13.1	-0.090475593	0.228407	0.334567
UBE2MP1	16p11.2	-0.090467223	0.22845	0.334606
PTPN14	1q32.3-q4	0.09043793	0.228602	0.334803
BET1P1	7q36.1	-0.090403154	0.228781	0.335042
HMGCS2	1p12	0.090378345	0.22891	0.335205
CLEC11A	19q13.33	0.090358421	0.229013	0.335317
GFRA4	20p13	0.090357068	0.22902	0.335317
KRT10	17q21.2	-0.090350051	0.229056	0.335321
WDR86	7q36.1	0.090350051	0.229056	0.335321
IDI2-AS1	10p15.3	0.090329128	0.229164	0.335455
P2RX6	22q11.21	-0.090304019	0.229294	0.335621
MUCL1	12q13.2	-0.090291691	0.229358	0.33569
CUTA	6p21.32	0.090264265	0.2295	0.335864
NOS1AP	1q23.3	-0.090262172	0.229511	0.335864
CCL17	16q21	0.090223361	0.229712	0.336134
OR51A7	11p15.4	-0.090212916	0.229766	0.336189

SLC12A3	16q13	-0.090200995	0.229828	0.336255
GPR160	3q26.2	0.090176386	0.229956	0.336417
PNLDC1	6q25.3	-0.090155461	0.230064	0.336551
CCL19	9p13.3	-0.090142955	0.230129	0.336621
MFF	2q36.3	0.090101061	0.230347	0.336915
PSPN	19p13.3	-0.090096582	0.23037	0.336924
ARHGEF10	8p23.3	0.09007386	0.230488	0.337072
ATP7B	13q14.3	0.090067583	0.230521	0.337095
THPO	3q27.1	-0.090023832	0.230748	0.337403
DSP	6p24.3	-0.090019459	0.230771	0.337412
ITLN2	1q23.3	-0.090012934	0.230805	0.337437
NQO2	6p25.2	0.09000272	0.230858	0.33749
ACAP1	17p13.1	-0.089946226	0.231152	0.337867
ABCB9	12q24.31	0.089935765	0.231207	0.337867
OR10H3	19p13.12	-0.089934445	0.231213	0.337867
SCARNA23	Xp22.11	-0.089934445	0.231213	0.337867
SPANXN4	Xq27.3	-0.089934445	0.231213	0.337867
XYLB	3p22.2	0.089933672	0.231217	0.337867
XKR3	22q11.1	-0.089893666	0.231426	0.338147
BCO2	11q23.1	0.089872994	0.231534	0.338279
AOPEP	9q22.32	0.089833239	0.231741	0.338558
OTUD1	10p12.2	-0.089799761	0.231916	0.338788
QTRT2	3q13.31	0.089774653	0.232047	0.338955
FAM170A	5q23.1	-0.08976507	0.232097	0.339003
SPCS2P4	1p35.3	-0.089760007	0.232123	0.339017
LINC0159C	6q15	-0.089726529	0.232298	0.339248
LRRN4CL	11q12.3	0.089722344	0.23232	0.339255
OR2A12	7q35	0.089701201	0.232431	0.339391
SPP1	4q22.1	0.089686774	0.232506	0.339477
LIMS2	2q14.3	0.089665851	0.232615	0.339612
OR2H1	6p22.1	-0.089628288	0.232812	0.339874
ZG16	16p11.2	-0.089608282	0.232917	0.340002
NPPA	1p36.22	-0.089592206	0.233001	0.3401
TP53I13	17q11.2	0.089554956	0.233196	0.34036
ZBTB25	14q23.3	-0.089550771	0.233218	0.340367
CORO1A	16p11.2	-0.089538217	0.233284	0.340438
LRRC46	17q21.32	0.089534032	0.233306	0.340445
MCTS1	Xq24	0.089527755	0.233338	0.340468
CHAC1	15q15.1	0.089481723	0.23358	0.340771
USP32	17q23.1-c	-0.089481723	0.23358	0.340771
GTPBP10	7q21.13	0.089421045	0.233898	0.341211
CCDC17	1p34.1	0.089410583	0.233953	0.341266
CHST12	7p22.3	-0.089404306	0.233986	0.341289
RBMS2	12q13.3	0.089400121	0.234008	0.341296
DCDC2B	1p35.2	0.089396433	0.234028	0.341299
INSRR	1q23.1	-0.089375404	0.234138	0.341418
TRHDE	12q21.1	-0.089374434	0.234143	0.341418
SH3PXD2B	5q35.1	-0.089331074	0.234371	0.341726
TRIM35	8p21.2	-0.089308058	0.234492	0.341877
OMA1	1p32.2-p3	0.089272488	0.234679	0.342114
CRELD1	3p25.3	0.089268303	0.234701	0.342114
LRRC26	9q34.3	0.089265035	0.234719	0.342114
WDR70	5p13.2	-0.089264118	0.234723	0.342114
CDKN1C	11p15.4	0.089257841	0.234756	0.342138

ZNRF2P1	7p14.3	-0.089249472	0.2348	0.342177
GPALPP1	13q14.12	0.089234825	0.234878	0.342264
SLC23A1	5q31.2	0.089226456	0.234922	0.342304
RPL38	17q25.1	0.089211809	0.234999	0.342391
PITRM1	10p15.2	-0.089188793	0.23512	0.342543
LAIR1	19q13.42	-0.089180424	0.235164	0.342582
SLC2A5	1p36.23	0.089140669	0.235374	0.342862
TOGARAM2	2p23.2	-0.089122931	0.235467	0.342957
FKBP9	7p14.3	0.089121838	0.235473	0.342957
BRIP1	17q23.2	0.089082083	0.235683	0.343238
LY6H	8q24.3	-0.089031913	0.235948	0.343599
ZNF587	19q13.43	0.089027682	0.23597	0.343606
TNFRSF4	1p36.33	0.088983742	0.236202	0.343919
CIP2A	3q13.13	0.088967004	0.236291	0.344023
CKAP2	13q14.3	-0.088935618	0.236457	0.34424
RNASE2	14q11.2	0.088931433	0.236479	0.344247
HDAC6	Xp11.23	-0.088927249	0.236501	0.344248
FRMD7	Xq26.2	0.088921984	0.236529	0.344248
WNT16	7q31.31	-0.088921484	0.236532	0.344248
RCN1	11p13	-0.088916787	0.236557	0.344259
ADAM20	14q24.2	0.088892014	0.236688	0.344425
FRK	6q22.1	-0.088887494	0.236712	0.344435
SEPTIN12	16p13.3	0.088878934	0.236757	0.344476
TMEM205	19p13.2	0.088868663	0.236811	0.34453
EIF3E	8q23.1	-0.088833093	0.237	0.344754
ROCK1	18q11.1	-0.088833093	0.237	0.344754
UBL4A	Xq28	0.088826816	0.237033	0.344777
DNPH1	6p21.1	0.088810077	0.237122	0.344881
PDGFB	22q13.1	0.088805892	0.237144	0.344888
ANKRD31	5q13.3	-0.088799076	0.23718	0.344916
FMC1	7q34	-0.088791292	0.237222	0.344951
LCNL1	9q34.3	0.088666666	0.237883	0.345887
NEK6	9q33.3	0.088644781	0.237999	0.346022
PDIA3	15q15.3	0.088640596	0.238022	0.346022
TAS1R2	1p36.13	0.088639514	0.238027	0.346022
CSTF3	11p13	-0.088625949	0.2381	0.346101
SEPTIN4	17q22	-0.088596656	0.238255	0.346303
RIMS3	1p34.2	-0.088579918	0.238344	0.346376
SNAR-B2	19q13.33	-0.088575741	0.238367	0.346376
RAB1A	2p14	0.088575733	0.238367	0.346376
CT83	Xq23	0.088573838	0.238377	0.346376
TGIF2LY	Yp11.2	-0.088570885	0.238392	0.346376
FAM209A	20q13.31	0.0885645	0.238426	0.3464
HNF1A-AS1	12q24.31	-0.088521517	0.238655	0.346707
PTH2	19q13.33	-0.0884909	0.238818	0.346919
KRTAP19-ε	21q22.11	-0.088483889	0.238856	0.346923
OR14A16	1q44	0.088483889	0.238856	0.346923
LINC00623	1p11.2	0.088448099	0.239046	0.347175
MAL	2q11.1	-0.088436637	0.239108	0.347238
SLC9C1	3q13.2	-0.088418487	0.239204	0.347354
ADH6	4q23	-0.08840416	0.239281	0.34744
LIN28A	1p36.11	-0.08838115	0.239404	0.347593
PRR26	10p15.3	-0.08832465	0.239705	0.348005
DPM2	9q34.11	0.088301634	0.239828	0.348159

ELP6	3p21. 31	-0.088293265	0.239873	0.348198
DNAJB8	3q21. 3	0.08825998	0.240051	0.348431
OXTR	3p25. 3	0.088249325	0.240108	0.348489
ZBBX	3q26. 1	-0.088229887	0.240212	0.348614
TMEM184B	22q13. 1	0.088226309	0.240231	0.348617
ATXN3L	Xp22. 2	0.088194488	0.240401	0.348838
SLC6A3	5p15. 33	-0.088187309	0.24044	0.348869
FCAMR	1q32. 1	-0.088160686	0.240582	0.34905
BASP1	5p15. 1	-0.0881468	0.240657	0.349133
CMYA5	5q14. 1	-0.088134246	0.240724	0.349205
GABPB2	1q21. 3	0.088127969	0.240758	0.349229
CD5L	1q23. 1	-0.088121105	0.240794	0.349243
PODXL	7q32. 3	0.088119599	0.240802	0.349243
KLK12	19q13. 41	0.088110558	0.240851	0.349268
REN	1q32. 1	0.088106796	0.240871	0.349268
KRTAP5-3	11p15. 5	0.088106577	0.240872	0.349268
MVK	12q24. 11	0.088094491	0.240937	0.349337
RIDA	8q22. 2	-0.088069383	0.241072	0.349497
GRAMD2B	5q23. 2	0.08806729	0.241083	0.349497
C5ORF63	5q23. 2	0.088058921	0.241128	0.349537
RIMKLB	12p13. 31	0.087975226	0.241577	0.350163
ACTA2	10q23. 31	0.087935472	0.241791	0.350447
HMGB3	Xq28	-0.087931287	0.241813	0.350454
CIT	12q24. 23	0.08792501	0.241847	0.350478
CASP3	4q35. 1	0.087910363	0.241925	0.350556
CFL1P1	10q23. 31	-0.087908394	0.241936	0.350556
ADSSL1	14q32. 33	-0.087895717	0.242004	0.350604
CHDH	3p21. 1	-0.087895717	0.242004	0.350604
HRH3	20q13. 33	-0.08788363	0.242069	0.350651
GRIN2D	19q13. 33	0.087883163	0.242072	0.350651
PKLR	1q22	-0.087876993	0.242105	0.350666
MTSS2	16q22. 1	-0.087874793	0.242117	0.350666
MEIG1	10p13	-0.08785237	0.242237	0.350815
PDE6G	17q25. 3	-0.087841316	0.242297	0.350876
MKRN3	15q11. 2	-0.08783392	0.242337	0.350897
LINC01142	1q24. 2	0.087829182	0.242362	0.350897
PRPF40B	12q13. 12	0.087828762	0.242364	0.350897
AASS	7q31. 32	-0.0878183	0.242421	0.350954
TNFSF13B	13q33. 3	-0.087801561	0.242511	0.351048
MYL4	17q21. 32	0.087799652	0.242521	0.351048
EIF1AX	Xp22. 12	-0.087780637	0.242624	0.351171
SPAG1	8q22. 2	0.087768083	0.242691	0.351234
KRT37	17q21. 2	0.087766074	0.242702	0.351234
TD02	4q32. 1	-0.087740883	0.242838	0.351405
MRPS16	10q22. 2	0.087736698	0.24286	0.351412
DUSP15	20q11. 21	-0.087699035	0.243064	0.35168
CCDC125	5q13. 2	0.087692758	0.243097	0.351704
LDHAL6A	11p15. 1	-0.087679754	0.243168	0.351773
HSPH1	13q12. 3	0.087671835	0.24321	0.351773
ZNF250	8q24. 3	-0.087671835	0.24321	0.351773
ZNF425	7q36. 1	-0.087670834	0.243216	0.351773
NDUFS4	5q11. 2	0.087642542	0.243368	0.351968
NIPSNAP1	22q12. 2	-0.087613249	0.243527	0.352172
HSD17B1	17q21. 2	-0.087604879	0.243572	0.352202

WDR61	15q25.1	-0.087602787	0.243583	0.352202
CD177	19q13.31	0.087590416	0.24365	0.35225
LRRC3	21q22.3	0.087590233	0.243651	0.35225
ISLR2	15q24.1	0.087581863	0.243696	0.352289
GPR25	1q32.1	0.087575646	0.24373	0.352313
PRINS	10p12.1	0.087564804	0.243788	0.352372
DGLUCY	14q32.11	0.087556755	0.243832	0.352409
FLACC1	2q33.1	-0.087536365	0.243942	0.352543
YJU2	19p13.3	0.087523277	0.244013	0.352618
ZNF784	19q13.42	0.087519093	0.244035	0.352618
ZNF763	19p13.2	-0.087517	0.244047	0.352618
FBX041	2p13.2	-0.087510723	0.244081	0.352641
CCDC7	10p11.22	-0.087485615	0.244217	0.352812
HSD52	1p32.1	-0.087481309	0.24424	0.35282
TIMM13	19p13.3	0.087475153	0.244273	0.352843
TNFRSF8	1p36.22	-0.087468876	0.244307	0.35285
GTF2H1	11p15.1	-0.087466784	0.244319	0.35285
MTVR2	17q22	0.0874645	0.244331	0.35285
PIWIL3	22q11.23	-0.08745334	0.244391	0.352912
ICAM4	19p13.2	0.087420752	0.244568	0.353128
MRS2P2	12q21.1	-0.087419209	0.244576	0.353128
CYB561A3	11q12.2	-0.08741029	0.244625	0.353163
SMG1P5	16p11.2	-0.087408198	0.244636	0.353163
CPA4	7q32.2	0.087378905	0.244795	0.353357
SPRN	10q26.3	-0.087376813	0.244806	0.353357
PCDH20	13q21.2	0.087360531	0.244894	0.353459
TDRG1	6p21.2	-0.087326677	0.245078	0.353674
YME1L1	10p12.1	-0.087326596	0.245078	0.353674
RDH10	8q21.11	0.087314042	0.245146	0.353746
SYCP3	12q23.2	0.087308736	0.245175	0.353762
RSU1	10p13	-0.087293118	0.24526	0.353824
LOC642929	9q21.11	-0.087291135	0.245271	0.353824
SPEG	2q35	-0.087291026	0.245271	0.353824
DCAF1	3p21.2	-0.087284749	0.245305	0.353839
ZNF320	19q13.41	-0.087282656	0.245317	0.353839
EPB41L4A	5q22.1	0.087263825	0.245419	0.353961
DIRC1	2q32.2	-0.087246497	0.245513	0.354057
CD180	5q12.3	-0.087244994	0.245521	0.354057
HEMK1	3p21.31	0.087236625	0.245567	0.354088
LGMN	14q32.12	0.087234532	0.245578	0.354088
LOC100129	1p36.32	-0.087227255	0.245618	0.35412
WASHC2A	10q11.23	-0.087221978	0.245646	0.354135
LINC00662	19q11	-0.087217839	0.245669	0.354142
IRX1	5p15.33	-0.087210959	0.245706	0.354148
FAM27C	9q13	0.087207332	0.245726	0.354148
IGFBP2	2q35	-0.087207332	0.245726	0.354148
NR2F1-AS1	15q15	0.087201055	0.24576	0.354172
COL6A2	21q22.3	0.087167577	0.245942	0.354408
SNHG29	17p11.2	-0.087163392	0.245965	0.354416
TOE1	1p34.1	-0.08715293	0.246022	0.354472
MTDH	8q22.1	-0.087140376	0.24609	0.354545
ESYT2	7q36.3	0.087132007	0.246136	0.354585
SPA17	11q24.2	0.087088067	0.246375	0.354904
LSP1P4	2p11.2	0.087079698	0.24642	0.354935

NMRK1	9q21. 13	0. 087077606	0. 246432	0. 354935
FKBP15	9q32	-0. 087073421	0. 246454	0. 354935
MIR1-1HG	20q13. 33	0. 087071087	0. 246467	0. 354935
BTN2A1	6p22. 2	-0. 08704622	0. 246603	0. 355104
SCGB2A2	11q12. 3	-0. 087040788	0. 246632	0. 355121
TIPARP-AS3	3q25. 31	0. 087027389	0. 246705	0. 355148
TM9SF1	14q12	-0. 087027389	0. 246705	0. 355148
PMEL	12q13. 2	0. 087025297	0. 246717	0. 355148
ZNF20	19p13. 2	0. 087023204	0. 246728	0. 355148
CLDN5	22q11. 21	-0. 087021112	0. 246739	0. 355148
MYOM1	18p11. 31	0. 087008558	0. 246808	0. 355221
CSNK1G2-A	19p13. 3	0. 086967641	0. 247031	0. 355516
ATP1A4	1q23. 2	-0. 086930309	0. 247235	0. 355784
PMS2P5	7q11. 23	0. 086908125	0. 247356	0. 355932
SNX24	5q23. 2	0. 086897663	0. 247413	0. 355989
NSUN6	10p12. 31	-0. 086887201	0. 24747	0. 356046
FAM153B	5q35. 2	0. 086855616	0. 247643	0. 356268
RPGRIP1	14q11. 2	-0. 086837075	0. 247744	0. 356388
ZNF121	19p13. 2	0. 086820246	0. 247836	0. 356495
PLCXD1	Xp22. 33 ε	0. 086813969	0. 24787	0. 356519
HSBP1	16q23. 3	0. 086799322	0. 24795	0. 356608
GGT3P	22q11. 21	0. 086765844	0. 248134	0. 356846
MAGEA12	Xq28	0. 086751189	0. 248214	0. 356936
PHYH	10p13	-0. 086698889	0. 2485	0. 357322
MFNG	22q13. 1	-0. 086669596	0. 248661	0. 357501
ZNF211	19q13. 43	0. 086669596	0. 248661	0. 357501
STAG3L3	7q11. 23	0. 086657042	0. 248729	0. 357574
PFN4	2p23. 3	0. 086640348	0. 248821	0. 35768
PWRN1	15q11. 2	-0. 086621002	0. 248927	0. 357775
CRTC1	19p13. 11	-0. 086619379	0. 248936	0. 357775
TAS2R42	12p13. 2	-0. 086617087	0. 248949	0. 357775
TEX14	17q22	-0. 086615285	0. 248958	0. 357775
RHBDD3	22q12. 2	-0. 086583809	0. 249131	0. 357997
TRIM16L	17p11. 2	0. 086579625	0. 249154	0. 358004
GAS8	16q24. 3	0. 086571255	0. 2492	0. 358045
KDM5D	Yq11. 223	-0. 08655518	0. 249288	0. 358146
MORC3	21q22. 12	-0. 086546147	0. 249338	0. 358165
PAFAH1B2	11q23. 3	-0. 086546147	0. 249338	0. 358165
KRTAP5-6	11p15. 5	0. 086536557	0. 24939	0. 358215
C1QTNF1	17q25. 3	-0. 086523131	0. 249464	0. 35827
TASP1	20p12. 1	-0. 086523131	0. 249464	0. 35827
RPL37A	2q35	0. 086510577	0. 249533	0. 35833
TMEM95	17p13. 1	0. 086508931	0. 249542	0. 35833
STAC3	12q13. 3	0. 086481284	0. 249694	0. 358507
EDDM3B	14q11. 2	-0. 086480069	0. 249701	0. 358507
RBKS	2p23. 2	0. 086428975	0. 249982	0. 358884
DLGAP2	8p23. 3	-0. 086385616	0. 25022	0. 359201
CHCHD3	7q32. 3-q32	0. 086380851	0. 250246	0. 359213
ODF4	17p13. 1	0. 086371126	0. 2503	0. 359264
THSD1P1	13q14. 3	-0. 08635365	0. 250396	0. 359376
RAMAC	15q25. 2	0. 086336911	0. 250488	0. 35948
GPX6	6p22. 1	0. 086331329	0. 250519	0. 35948
CABCOC01	10q21. 2	-0. 086330679	0. 250523	0. 35948
KIR3DL2	19q13. 42	-0. 086302191	0. 25068	0. 35968

RFWD3	16q23.1	-0.086297156	0.250707	0.359693
TAGLN	11q23.3	0.086290879	0.250742	0.359717
TTC21A	3p22.2	-0.086286695	0.250765	0.359725
METTL18	1q24.2	0.086244848	0.250996	0.36003
PRCD	17q25.1	-0.086240663	0.251019	0.360037
RPL31	2q11.2	0.086217647	0.251146	0.360193
PNLIPRP1	10q25.3	-0.086194937	0.251271	0.360324
SYNE2	14q23.2	-0.086194631	0.251273	0.360324
ARRB1	11q13.4	-0.086190446	0.251296	0.360331
FAM209B	20q13.31	0.086185747	0.251322	0.360342
CORIN	4p12	0.086179985	0.251354	0.360362
SPRY4	5q31.3	0.086146507	0.251539	0.360601
TRIM49D2	11q14.3	0.086141446	0.251567	0.360616
SEC14L1P1	11p11.2	-0.086138137	0.251585	0.360616
ADAM5	8p11.22	0.086131183	0.251623	0.360645
MMP3	11q22.2	-0.086099283	0.2518	0.360872
NEURL2	20q13.12	-0.086039797	0.252129	0.361317
PRKCG	19q13.42	0.086012776	0.252278	0.361481
FN3K	17q25.3	-0.086012596	0.252279	0.361481
KCNQ2	20q13.33	-0.085968735	0.252522	0.361803
CFH	1q31.3	-0.085924717	0.252766	0.362118
LITAF	16p13.13	-0.085922625	0.252778	0.362118
IGLL1	22q11.23	-0.085870069	0.253069	0.362509
MAOA	Xp11.3	-0.085864039	0.253102	0.362531
TINCR	19p13.3	-0.085853577	0.25316	0.362588
OR4F29	1p36.33	0.085834011	0.253269	0.362718
GRINA	8q24.3	0.085830561	0.253288	0.362719
RERG	12p12.3	-0.08581173	0.253393	0.362843
ALG1	16p13.3	0.085807545	0.253416	0.36285
RAB24	5q35.3	0.085799176	0.253462	0.362891
FAM204A	10q26.11	-0.085748959	0.253741	0.363264
LRRC15	3q29	0.085696695	0.254032	0.363654
RB1	13q14.2	-0.08566945	0.254183	0.363845
PLA2G12B	10q22.1	-0.085657453	0.25425	0.363914
CAV3	3p25.3	-0.085652486	0.254278	0.363928
GAA	17q25.3	-0.085633879	0.254381	0.36405
BLOC1S2	10q24.31	-0.08562551	0.254428	0.364088
CNPY4	7q22.1	-0.085619233	0.254463	0.364088
MYO9B	19p13.11	0.085619233	0.254463	0.364088
3-Mar	5q23.2	-0.085596217	0.254591	0.364196
ATP13A1	19p13.11	0.085592032	0.254614	0.364196
MEI1	22q13.2	-0.08558994	0.254626	0.364196
DCUN1D1	3q26.33	-0.085587848	0.254638	0.364196
ADAD1	4q27	-0.085582778	0.254666	0.364196
HYAL6P	7q31.32	-0.085582778	0.254666	0.364196
LACRT	12q13.2	-0.085582778	0.254666	0.364196
ZNF358	19p13.2	0.085560647	0.254789	0.364347
APOE	19q13.32	0.085541816	0.254894	0.364469
AGFG1	2q36.3	0.085535539	0.254929	0.364469
ZNF146	19q13.12	-0.085535539	0.254929	0.364469
C200RF197	20q13.33	-0.085520028	0.255016	0.364495
AMIG03	3p21.31	-0.0855188	0.255023	0.364495
BRD7P3	6q22.31	-0.085517272	0.255031	0.364495
SEPHS1P1	7q11.21	-0.08551681	0.255034	0.364495

DMBT1P1	10q26.13	0.085515852	0.255039	0.364495
ZNF137P	19q13.41	0.085491599	0.255174	0.364644
ANP32D	12q13.11	-0.085490627	0.25518	0.364644
DRAM1	12q23.2	-0.085458121	0.255361	0.364867
PRSS48	4q31.3	0.085455929	0.255373	0.364867
ZNF750	17q25.3	-0.085452935	0.25539	0.364867
SDSL	12q24.13	-0.085437198	0.255478	0.364966
C6	5p13.1	-0.085433013	0.255501	0.364973
HHIPL2	1q41	-0.085414594	0.255604	0.365094
BRPF1	3p25.3	-0.085399535	0.255688	0.365188
CLDN8	21q22.11	-0.085395852	0.255709	0.365191
ALDH1B1	9p13.1	-0.085391166	0.255735	0.365203
C4ORF51	4q31.21	0.085379577	0.2558	0.365251
RLF	1p34.2	-0.085378612	0.255805	0.365251
PLCG2	16q23.3	-0.085366058	0.255875	0.365325
OR52I1	11p15.4	-0.085352748	0.25595	0.365404
SNORA11D	Xp11.22	-0.085349539	0.255968	0.365404
ZNF431	19p12	-0.085309564	0.256191	0.365653
TGM6	20p13	0.085308501	0.256197	0.365653
KRT73	12q13.13	-0.085306239	0.25621	0.365653
TMEM240	1p36.33	0.085305379	0.256215	0.365653
LINC01144	1p34.1	-0.085294918	0.256273	0.36571
CALHM6	6q22.1	-0.085257255	0.256484	0.365985
CASQ1	1q23.2	-0.085236496	0.2566	0.366124
OLA1	2q31.1	0.085207039	0.256765	0.366334
CST7	20p11.21	-0.085200762	0.2568	0.366358
HGC6.3	6q27	-0.085172545	0.256959	0.366557
SYNPR	3p14.2	-0.085139342	0.257145	0.366797
PPP1R32	11q12.2	0.085131714	0.257188	0.366822
EDEM2	20q11.22	0.085129621	0.257199	0.366822
NXPH3	17q21.33	-0.085094051	0.257399	0.36708
SCARNA9	11q21	-0.085090134	0.257421	0.367086
ZFAND3	6p21.2	-0.085081497	0.257469	0.367129
SH2B2	7q22.1	0.085064758	0.257563	0.367236
NDUFB6	9p21.1	-0.08503965	0.257704	0.367411
COL22A1	8q24.23-c	0.085031281	0.257751	0.367434
FAM170B	10q11.23	-0.085030305	0.257757	0.367434
FAM104A	17q25.1	0.085020819	0.25781	0.367483
RTF2	20q13.31	0.084985249	0.25801	0.367742
CCDC8	19q13.32	-0.084981064	0.258034	0.367749
UTP3	4q13.3	0.084974787	0.258069	0.367773
ITGB3	17q21.32	-0.08496851	0.258104	0.367797
ENC1	5q13.3	0.084962233	0.258139	0.367797
CLDN25	11q23.2	0.084958523	0.25816	0.367797
LIMK2	22q12.2	-0.084953864	0.258187	0.367797
PRAC1	17q21.32	0.084952243	0.258196	0.367797
OR6C76	12q13.2	-0.084952235	0.258196	0.367797
GP2	16p12.3	-0.084943846	0.258243	0.367838
RAB4A	1q42.13	-0.084920386	0.258375	0.368
CLPSL1	6p21.31	0.084914992	0.258405	0.368017
FCSK	16q22.1	0.084893185	0.258528	0.368165
KCTD15	19q13.11	-0.084882723	0.258587	0.368223
CITED1	Xq13.1	-0.084876446	0.258622	0.368247
LCE1D	1q21.3	-0.084856129	0.258737	0.368384

SORBS3	8p21. 3	0. 084832507	0. 25887	0. 368547
FBRSL1	12q24. 33	-0. 084828322	0. 258893	0. 368554
SOX1	13q34	-0. 084793973	0. 259087	0. 368787
YAE1	7p14. 1	-0. 084792796	0. 259094	0. 368787
USP5	12p13. 31	-0. 084786475	0. 259129	0. 368811
CSF3R	1p34. 3	-0. 084773921	0. 2592	0. 368886
CREB3	9p13. 3	0. 084758273	0. 259288	0. 368985
KLHDC9	1q23. 3	-0. 084752997	0. 259318	0. 369001
PRH2	12p13. 2	0. 084745718	0. 259359	0. 369033
NAGA	22q13. 2	0. 084713243	0. 259542	0. 369268
C9ORF170	9q21. 33	-0. 08470991	0. 259561	0. 369268
DPY19L2P1	7p14. 2	-0. 084703695	0. 259596	0. 369292
TEX19	17q25. 3	-0. 084666107	0. 259808	0. 369549
LOC606724	16p11. 2	-0. 084665118	0. 259814	0. 369549
ABCC1	16p13. 11	0. 084656749	0. 259861	0. 369582
KLK13	19q13. 41	0. 084652548	0. 259885	0. 369582
MSGN1	2p24. 2	0. 084650225	0. 259898	0. 369582
APOC4	19q13. 32	0. 084647931	0. 259911	0. 369582
CDKN2B	9p21. 3	0. 084623271	0. 26005	0. 369754
WDR66	12q24. 31	-0. 084596071	0. 260204	0. 369946
SYCP1	1p13. 2	-0. 084591021	0. 260233	0. 36996
CELA2A	1p36. 21	-0. 084575469	0. 260321	0. 370059
DBH	9q34. 2	-0. 084554608	0. 260439	0. 3702
AIFM3	22q11. 21	0. 084543762	0. 2605	0. 370261
NDUFC1	4q31. 1	0. 0845333	0. 260559	0. 370319
UCP3	11q13. 4	-0. 084520746	0. 26063	0. 370394
IRS4	Xq22. 3	-0. 084514939	0. 260663	0. 370414
SH2D7	15q25. 1	0. 084482123	0. 260849	0. 370652
PPP2R2C	4p16. 1	0. 084437051	0. 261104	0. 370988
OCSTAMP	20q13. 12	0. 084432701	0. 261129	0. 370997
IGFLR1	19q13. 12	-0. 08442659	0. 261164	0. 37102
GRAMD1B	11q24. 1	0. 08441822	0. 261211	0. 371061
CRYBA2	2q35	-0. 084399959	0. 261315	0. 371182
NIPAL1	4p12	0. 084393112	0. 261354	0. 371201
CENPI	Xq22. 1	0. 08439102	0. 261365	0. 371201
TSPEAR-AS	21q22. 3	-0. 084372075	0. 261473	0. 371327
SLAMF8	1q23. 2	-0. 084353357	0. 261579	0. 371452
RPS12	6q23. 2	-0. 08434708	0. 261615	0. 371466
GDF9	5q31. 1	-0. 084344988	0. 261627	0. 371466
NHLH2	1p13. 1	-0. 084334811	0. 261684	0. 371522
DDT	22q11. 23	0. 084324064	0. 261745	0. 371556
EFEMP2	11q13. 1	0. 084324064	0. 261745	0. 371556
LETMD1	12q13. 12	-0. 084304231	0. 261858	0. 371669
LOC646813	11p11. 12	0. 084303485	0. 261862	0. 371669
CXORF40A	Xq28	-0. 084296864	0. 2619	0. 371696
COPS2	15q21. 1	-0. 084292679	0. 261924	0. 371703
SAMD11	1p36. 33	-0. 084284309	0. 261971	0. 371744
SUN2	22q13. 1	0. 084278032	0. 262007	0. 371768
HOXA1	7p15. 2	-0. 084273848	0. 262031	0. 371776
HECTD1	14q12	-0. 084238278	0. 262233	0. 372036
LBP	20q11. 23	-0. 084225291	0. 262307	0. 372114
NR1H4	12q23. 1	0. 084215438	0. 262363	0. 37215
CFAP97D1	17q21. 31	-0. 084211202	0. 262387	0. 37215
COL5A1	9q34. 3	0. 084211077	0. 262387	0. 37215

SP011	20q13.31	0.084185861	0.262531	0.372327
CRIPT	2p21	0.084175507	0.26259	0.372374
DPY19L4	8q22.1	-0.084173415	0.262602	0.372374
DEFB136	8p23.1	-0.084132223	0.262836	0.372496
GAGE12F	Xp11.23	-0.084132223	0.262836	0.372496
GAGE2E	Xp11.23	-0.084132223	0.262836	0.372496
GSX1	13q12.2	-0.084132223	0.262836	0.372496
KRTAP19-3	21q22.11	-0.084132223	0.262836	0.372496
KRTAP6-1	21q22.11	-0.084132223	0.262836	0.372496
OR4F4	15q26.3	-0.084132223	0.262836	0.372496
SNAR-C4	19q13.33	-0.084132223	0.262836	0.372496
SLC22A11	11q13.1	0.084121986	0.262894	0.372552
HABP2	10q25.3	-0.084116921	0.262923	0.372566
WNT3A	1q42.13	0.084111552	0.262954	0.372583
SH3D19	4q31.3	-0.084087628	0.26309	0.37275
PKP2	12p11.21	0.084068797	0.263197	0.372875
TBC1D3G	17q12	0.08405251	0.26329	0.37298
LSM11	5q33.3	-0.084043688	0.26334	0.373025
CETN4P	4q27	-0.084028936	0.263425	0.373118
MEP1A	6p12.3	-0.083988356	0.263656	0.37341
FUNDC1	Xp11.3	0.083985102	0.263675	0.37341
NPC1	18q11.2	0.08398301	0.263687	0.37341
HYPM	Xp11.4	0.083971105	0.263754	0.373475
CFAP36	2p16.1	-0.083968364	0.26377	0.373475
UPP2	2q24.1	-0.083964882	0.26379	0.373477
SCN5A	3p22.2	0.083926516	0.264009	0.373724
UGT2A3	4q13.2	0.083924914	0.264018	0.373724
BRICD5	16p13.3	0.083924424	0.264021	0.373724
SNORA14A	7q11.23	-0.083900806	0.264156	0.373882
SUFU	10q24.32	-0.083897223	0.264176	0.373882
INKA1	3p21.31	-0.083895131	0.264188	0.373882
C15ORF54	15q14	-0.08388406	0.264252	0.373945
UPF3A	13q34	-0.083847007	0.264463	0.3742
REC114	15q24.1	-0.083846012	0.264469	0.3742
ATP6VOD1	16q22.1	-0.083821899	0.264607	0.374368
PLEKHG2	19q13.2	0.083794698	0.264763	0.374556
C10RF87	1p32.1	-0.08379046	0.264787	0.374556
AMY2A	1p21.1	-0.083788903	0.264796	0.374556
TM2D1	1p31.3	0.083746574	0.265038	0.374872
SERPINA9	14q32.13	-0.083730619	0.265129	0.374975
SCARNA15	15q25.2	-0.083715799	0.265214	0.375068
LINC00698	3p14.2	-0.08368754	0.265376	0.375271
NBEAP1	15q11.2	-0.083617982	0.265775	0.375808
FAM81A	15q22.2	0.083610571	0.265818	0.375842
SAFB2	19p13.3	-0.083585462	0.265962	0.376019
WSB1	17q11.1	0.083566631	0.26607	0.376145
KIF1C	17p13.2	0.083526876	0.266298	0.376441
OR2L8	1q44	-0.083515678	0.266362	0.376505
ASB12	Xq11.2	0.083508461	0.266404	0.376523
C17ORF64	17q23.2	-0.083506953	0.266413	0.376523
FAM149B1	10q22.2	0.083501768	0.266442	0.376538
HGFAC	4p16.3	0.083495456	0.266479	0.376563
KAAG1	6p22.3	0.083488163	0.266521	0.376596
SLC44A3	1p21.3	0.083474567	0.266599	0.376679

GBE1	3p12. 2	-0.083457829	0.266695	0.376789
LOC441601	11p11. 12	-0.083439748	0.266799	0.376909
PARG	10q11. 23	-0.08342021	0.266911	0.377041
LINC0100C	7q32. 1	0.083415981	0.266936	0.377049
SH2D1B	1q23. 3	0.083399243	0.267032	0.377158
MAFG-DT	17q25. 3	0.083317641	0.267502	0.377795
MEX3A	1q22	0.083300902	0.267598	0.377905
LACC1	13q14. 11	-0.083269516	0.267779	0.378134
SGCZ	8p22	-0.083256307	0.267855	0.378203
PRSS54	16q21	-0.083254477	0.267866	0.378203
DDTL	22q11. 23	0.083190007	0.268238	0.378701
CCDC107	9p13. 3	0.083169083	0.268359	0.378845
PGM5P2	9p11. 2	-0.083165458	0.26838	0.378848
CNBD1	8q21. 3	-0.083154655	0.268442	0.378909
HLA-DRB1	6p21. 32	-0.083135606	0.268552	0.379038
ICAM2	17q23. 3	0.083127236	0.268601	0.379079
DDO	6q21	-0.083074927	0.268903	0.379479
OR52B4	11p15. 4	-0.083070683	0.268928	0.379487
FAM86EP	4p16. 3	0.083064466	0.268964	0.379511
MAGEB6	Xp21. 3	0.083059742	0.268991	0.379523
BPIFB3	20q11. 21	-0.083055979	0.269013	0.379527
ARFGAP3	22q13. 2	-0.083026803	0.269181	0.379738
RNF168	3q29	-0.082976587	0.269472	0.380121
NOS3	7q36. 1	-0.082964032	0.269545	0.380197
MMP27	11q22. 2	-0.082959265	0.269572	0.380209
APEX1	14q11. 2	0.082945201	0.269654	0.380297
PFN3	5q35. 3	0.082889107	0.269979	0.380729
ZSCAN16	6p22. 1	0.082865692	0.270115	0.380894
TOR2A	9q34. 11	-0.082830122	0.270321	0.381158
SUV39H1	Xp11. 23	-0.082825937	0.270346	0.381165
UXT	Xp11. 23	0.08281966	0.270382	0.38118
COPB2	3q23	-0.082817567	0.270394	0.38118
IFITM5	11p15. 5	0.082805472	0.270464	0.381252
HBBP1	11p15. 4	0.082800477	0.270493	0.381253
SPINDOC	11q13. 1	-0.082798736	0.270503	0.381253
CRLF3	17q11. 2	0.08278409	0.270588	0.381346
CSNK1A1P1	15q14	-0.082774087	0.270647	0.381395
ANKRD50	4q28. 1	0.082771536	0.270661	0.381395
SETD6	16q21	-0.082765259	0.270698	0.38142
DISP1	1q41	-0.082750612	0.270783	0.381513
SLC10A4	4p11	-0.082742459	0.27083	0.381552
IFT20	17q11. 2	-0.082727596	0.270917	0.381647
TSPAN4	11p15. 5	0.082715042	0.27099	0.381723
CT45A3	Xq26. 3	-0.082681667	0.271184	0.381943
DEFB118	20q11. 21	-0.082681667	0.271184	0.381943
INS	11p15. 5	0.082658981	0.271316	0.382069
UBN1	16p13. 3	-0.082658548	0.271318	0.382069
POP5	12q24. 31	0.082656456	0.27133	0.382069
RFFL	17q12	0.082652271	0.271355	0.382076
KCNQ10T1	11p15. 5	0.082604147	0.271635	0.382434
RNF113A	Xq24	0.082602055	0.271647	0.382434
CFAP52	17p13. 1	-0.082589676	0.271719	0.382508
RAMP1	2q37. 3	0.082579039	0.271781	0.382568
SNHG9	16p13. 3	-0.08255393	0.271927	0.382747

TMEM161B	5q14.3	0.082509991	0.272183	0.383081
AADACL2	3q25.1	0.082499939	0.272242	0.383136
VWDE	7p21.3	-0.082491332	0.272292	0.38318
TRIM41	5q35.3	0.082478606	0.272367	0.383257
DTX1	12q24.13	0.082459774	0.272476	0.383375
IFT22	7q22.1	-0.082457682	0.272489	0.383375
GAGE4	Xp11.4-p1	-0.082439291	0.272596	0.383477
MYMK	9q34.2	-0.082438738	0.272599	0.383477
TUBA3D	2q21.1	-0.082428464	0.272659	0.383534
MCAT	22q13.2	0.082422112	0.272696	0.383559
SKI	1p36.33-f	-0.082417927	0.272721	0.383567
RND1	12q13.12	0.082407466	0.272782	0.383626
COL4A4	2q36.3	-0.082388634	0.272892	0.383753
ARMCX5	Xq22.1	-0.082371895	0.272989	0.383854
RNASEL	1q25.3	0.082369803	0.273002	0.383854
PPF1BP2	11p15.4	0.082353064	0.2731	0.383965
OR5AU1	14q11.2	-0.082342456	0.273162	0.384025
SDR39U1	14q12	-0.082309125	0.273356	0.384272
APOM	6p21.33	0.082277739	0.27354	0.384503
TSPAN32	11p15.5	-0.082258908	0.27365	0.38463
GYPA	4q31.21	-0.082245615	0.273728	0.384713
BMP7	20q13.31	0.082231708	0.273809	0.38479
BTN2A3P	6p22.2	0.082229658	0.273821	0.38479
GOLGA8A	15q14	0.082214969	0.273907	0.384884
PKIA	8q21.13	0.082191953	0.274042	0.385046
COPS7A	12p13.31	0.082171029	0.274165	0.385191
FLNC	7q32.1	0.082150106	0.274287	0.385336
LUZP6	7q33	-0.082122905	0.274447	0.385533
ACADL	2q34	-0.082106623	0.274542	0.38564
MYO7A	11q13.5	0.082087335	0.274655	0.385772
TFR2	7q22.1	0.082081058	0.274692	0.385797
PRPF38B	1p13.3	-0.082062227	0.274803	0.38592
MT1X	16q13	-0.082058042	0.274827	0.38592
RPS19BP1	22q13.1	0.082053857	0.274852	0.38592
PCDHB2	5q31.3	0.082050762	0.27487	0.38592
BLNK	10q24.1	0.082049673	0.274876	0.38592
IL18BP	11q13.4	-0.082045488	0.274901	0.385927
EIF5AL1	10q22.3	0.082035026	0.274962	0.385986
PPFIA1	11q13.3	0.082026657	0.275012	0.386028
SMAP1	6q13	-0.082022472	0.275036	0.386036
PDHA1	Xp22.12	-0.082009918	0.27511	0.386112
ZFP62	5q35.3	0.082001548	0.275159	0.386154
AVPR2	Xq28	-0.081982717	0.27527	0.386282
TTC38	22q13.31	0.081974348	0.275319	0.386324
RBM7	11q23.2	-0.081965978	0.275368	0.386356
IZUMO4	19p13.3	0.081963886	0.27538	0.386356
KCNIP3	2q11.1	-0.081938778	0.275528	0.386536
EPHA7	6q16.1	-0.081915144	0.275667	0.386704
YEATS2	3q27.1	0.081878099	0.275885	0.386982
FBXO44	1p36.22	-0.081867638	0.275946	0.387004
FAM166A	9q34.3	-0.081866714	0.275952	0.387004
C12ORF43	12q24.31	-0.081865588	0.275958	0.387004
NXNL1	19p13.11	-0.081828241	0.276178	0.387261
SNAP47	1q42.13	-0.081827883	0.27618	0.387261

PCDHGC4	5q31.3	-0.081803725	0.276323	0.387414
ZNF502	3p21.31	-0.081802774	0.276328	0.387414
DNAJC10	2q32.1	-0.08179859	0.276353	0.387421
C15ORF56	15q15.1	-0.081790306	0.276402	0.387436
KATNB1	16q21	0.08179022	0.276402	0.387436
HCG27	6p21.33	0.081762059	0.276568	0.387642
FSCB	14q21.2	0.081743396	0.276678	0.387769
EAF2	3q13.33	-0.081735819	0.276723	0.387804
KIN	10p14	0.081721173	0.276809	0.387876
CLECL1	12p13.31	-0.081720554	0.276813	0.387876
SOX7	8p23.1	0.081652125	0.277217	0.388414
LRRC43	12q24.31	-0.081614676	0.277438	0.388697
NUDCD2	5q34	-0.081574708	0.277674	0.388991
OR12D3	6p22.1	-0.081569903	0.277702	0.388991
KCNH5	14q23.2	-0.081569261	0.277706	0.388991
KRTAP4-12	17q21.2	-0.081553397	0.2778	0.389095
LOC284441	11p12	-0.081549599	0.277822	0.389099
TP53AIP1	11q24.3	0.081542721	0.277863	0.389129
CTU1	19q13.41	0.081524491	0.277971	0.389253
TOM1L1	17q22	0.081511937	0.278045	0.389329
TOLLIP	11p15.5	-0.08147009	0.278293	0.389649
APC2	19p13.3	-0.081432427	0.278516	0.389934
TET3	2p13.1	0.081419873	0.27859	0.39001
MAML2	11q21	-0.081382211	0.278813	0.390293
CZIB	1p32.3	0.081378026	0.278838	0.390293
IMPA1	8q21.13	-0.081375934	0.27885	0.390293
CEP44	4q34.1	-0.081323625	0.279161	0.3907
ARHGAP18	6q22.33	-0.081311071	0.279235	0.390777
ELFN1	7p22.3	-0.081306886	0.27926	0.390784
MKS1	17q22	-0.081290147	0.279359	0.390896
PCNAP1	4q23	-0.081245261	0.279626	0.391224
FATE1	Xq28	0.081244064	0.279633	0.391224
SLC6A1	3p25.3	0.081195991	0.279918	0.391596
REM2	14q11.2	-0.081179295	0.280018	0.391707
LOC284788	20p11.21	-0.081109703	0.280431	0.392259
UBE2NL	Xq27.3	-0.081091597	0.280539	0.392382
MSTN	2q32.2	-0.081087514	0.280563	0.392388
NDUFS7	19p13.3	0.081064173	0.280702	0.392555
SLC22A24	11q12.3	-0.081056292	0.280749	0.39256
NUP62	19q13.33	0.081053711	0.280765	0.39256
SURF1	9q34.2	0.081053711	0.280765	0.39256
LINC01119	2p21	-0.081036972	0.280864	0.392672
CELA2B	1p36.21	-0.081028193	0.280917	0.392704
TXNL4B	16q22.2	-0.08102651	0.280927	0.392704
NTS	12q21.31	-0.081016662	0.280985	0.392758
ANKRD23	2q11.2	-0.08101086	0.28102	0.392761
ARHGAP5	14q12	-0.081009771	0.281026	0.392761
TRIB3	20p13	-0.080988848	0.281151	0.392908
CHADL	22q13.2	0.080967924	0.281276	0.392973
UOX	1p31.1	-0.080966436	0.281285	0.392973
ABHD17A	19p13.3	0.080965832	0.281288	0.392973
GM2A	5q33.1	-0.080965832	0.281288	0.392973
DKKL1	19q13.33	-0.08096455	0.281296	0.392973
C16ORF87	16q11.2	0.080944908	0.281413	0.393109

GPX5	6p22.1	-0.080932728	0.281486	0.393183
TMEM14A	6p12.2	-0.080913523	0.2816	0.393305
CCZ1P-OR7	7q21.3	0.080911431	0.281613	0.393305
ERCC3	2q14.3	0.080873768	0.281837	0.393592
MRPL30	2q11.2	0.080827736	0.282112	0.393948
DNAL4	22q13.1	0.080815182	0.282187	0.394025
ANO4	12q23.1	0.08080472	0.28225	0.394085
TMEM202	15q23-q24	-0.08078888	0.282345	0.39419
BTBD18	11q12.1	-0.080774951	0.282428	0.394278
ATN1	12p13.31	-0.080756596	0.282538	0.394395
ASNA1	19p13.13	0.0807535	0.282556	0.394395
TIMD4	5q33.3	-0.080751049	0.282571	0.394395
SNORA14B	1q42.3	-0.080736108	0.28266	0.394492
ESCO1	18q11.2	0.080725211	0.282725	0.394523
HIST1H4A	6p22.2	-0.080722581	0.282741	0.394523
TPSG1	16p13.3	-0.080722537	0.282741	0.394523
KIAA2013	1p36.22	0.080672902	0.283038	0.39491
FLJ44635	Xq13.1	-0.080665621	0.283082	0.394943
BARHL2	1p22.2	-0.080650238	0.283174	0.395044
GRID1	10q23.1-c	-0.080645701	0.283201	0.395055
GPR17	2q14.3	-0.080599669	0.283477	0.395412
KLHDC8B	3p21.31	-0.0805913	0.283527	0.395454
CSPG4	15q24.2	0.080576653	0.283615	0.395521
ERICH5	8q22.2	0.080576653	0.283615	0.395521
TGDS	13q32.1	0.080570376	0.283653	0.395526
ODF3	11p15.5	0.080569462	0.283658	0.395526
SLC35F4	14q22.3-c	-0.080531404	0.283886	0.395817
GUCY2D	17p13.1	0.080516872	0.283973	0.395891
PGD	1p36.22	0.080515975	0.283979	0.395891
REG1CP	2p12	-0.080486018	0.284159	0.396114
RPS6	9p22.1	-0.08047622	0.284217	0.396168
LGALS1	2p14	0.080463666	0.284293	0.396245
PWWP3B	Xq22.3	-0.080435215	0.284464	0.396456
FAM238B	10p12.1	0.08041466	0.284587	0.3966
COX4I2	20q11.21	-0.080382064	0.284783	0.396818
STAT2	12q13.3	0.080382064	0.284783	0.396818
PRAM1	19p13.2	0.080361141	0.284909	0.396966
ABRAXAS2	10q26.13	-0.080344402	0.28501	0.397076
TMEM156	4p14	-0.080340217	0.285035	0.397076
ADAM33	20p13	-0.080338125	0.285047	0.397076
LUC7L	16p13.3	0.080329755	0.285098	0.397118
KHDC1L	6q13	-0.080322554	0.285141	0.397133
MZF1-AS1	19q13.43	0.080321386	0.285148	0.397133
SMN1	5q13.2	-0.080296756	0.285296	0.397312
STAG3L4	7q11.21	-0.080271169	0.28545	0.397498
NMUR1	2q37.1	-0.080256523	0.285538	0.397583
RPS28	19p13.2	0.080254431	0.285551	0.397583
TIA1	2p13.3	0.080237692	0.285652	0.397696
PKD2L2	5q31.2	0.080232072	0.285686	0.397715
CRLF1	19p13.11	0.080220953	0.285753	0.397781
CIDEB	14q12	-0.080195845	0.285904	0.397964
CD86	3q13.33	-0.080164459	0.286093	0.398199
UNC5CL	6p21.1	0.080133074	0.286282	0.398435
CRYL1	13q12.11	0.080116335	0.286383	0.398548

PPP4R3B	2p16.1	-0.080099596	0.286485	0.398649
NUTM2A-AS1	10q23.2	-0.080097504	0.286497	0.398649
RNF133	7q31.32	-0.080091982	0.28653	0.398649
LINC01226	1p35.2	0.080091036	0.286536	0.398649
ITGA2B	17q21.31	-0.080068253	0.286674	0.398813
ANKRD54	22q13.1	-0.080059841	0.286725	0.398856
NCF2	1q25.3	0.080003348	0.287066	0.399265
SEMA5B	3q21.1	-0.080003348	0.287066	0.399265
BMPR2	2q33.1-q34	-0.080001255	0.287078	0.399265
PIK3CB	3q22.3	0.079982424	0.287192	0.399396
RSL24D1	15q21.3	-0.079953131	0.287369	0.399614
FOXN3-AS2	14q32.11	-0.079925898	0.287534	0.399815
OR4D5	11q24.1	-0.079906055	0.287654	0.399954
HAP1	17q21.2	-0.079877806	0.287825	0.400164
GRXCR2	5q32	-0.079867852	0.287885	0.400197
LINC01184	5q23.3	-0.079867345	0.287889	0.400197
SNORA38	6p21.33	-0.079842386	0.28804	0.400379
TERT	5p15.33	0.079799964	0.288297	0.400708
RAB22A	20q13.32	0.079796204	0.28832	0.400712
ADH5	4q23	-0.07978365	0.288396	0.400742
KRTAP12-4	21q22.3	0.079780556	0.288414	0.400742
OR10K1	1q23.1	0.079780556	0.288414	0.400742
THBS3	1q22	0.079779466	0.288421	0.400742
ACP1	2p25.3	0.079769004	0.288484	0.400802
CCDC167	6p21.2	0.07975645	0.288561	0.40088
FGFR4	5q35.2	0.079741803	0.288649	0.400976
NOX3	6q25.3	0.07973466	0.288693	0.40099
DUSP3	17q21.31	-0.079733434	0.2887	0.40099
CYP1A1	15q24.1	-0.079707701	0.288856	0.401179
CX3CL1	16q21	0.079704141	0.288878	0.401181
FNTA	8p11.21	0.079697864	0.288916	0.401206
NRGN	11q24.2	-0.079653924	0.289183	0.401549
CASP7	10q25.3	0.079628816	0.289335	0.401733
ATXN2	12q24.12	-0.079595338	0.289539	0.401988
ATP10A	15q12	0.079589061	0.289577	0.402013
IVNS1ABP	1q25.3	0.079572322	0.289679	0.402126
ABRACL	6q24.1	0.079563953	0.28973	0.402169
TCEA1	8q11.23	-0.079540937	0.28987	0.402335
CEPT1	1p13.3	0.079513736	0.290035	0.402537
PHF1	6p21.32	0.079509552	0.290061	0.402544
LINC00635	3q13.12	-0.079491928	0.290168	0.402665
PAFAH2	1p36.11	0.079453058	0.290405	0.402966
ADAMTSL2	9q34.2	-0.079444689	0.290455	0.403008
MITF	3p13	0.079432134	0.290532	0.403086
UBL4B	1p13.3	0.0794165	0.290627	0.403191
TIPARP	3q25.31	0.079411211	0.290659	0.403207
FZD1	7q21.13	-0.079365179	0.29094	0.403569
TTY14	Yq11.222	-0.079358066	0.290983	0.403601
GSTA1	6p12.2	0.079349528	0.291036	0.403645
CYB561	17q23.3	0.07931287	0.291259	0.403927
GALR3	22q13.1	-0.079302013	0.291325	0.403977
C7ORF25	7p14.1	-0.079300316	0.291336	0.403977
LRPPRC	2p21	-0.079262654	0.291566	0.404268
C1D	2p14	-0.079248007	0.291655	0.404364

PIGG	4p16.3	0.079237545	0.291719	0.404414
RIOX1	14q24.3	-0.079235453	0.291732	0.404414
HNRNPA3P1	10q11.21	0.079174816	0.292102	0.4049
DGKD	2q37.1	-0.079158036	0.292205	0.405014
PRPSAP1	17q25.1	-0.07912665	0.292397	0.405225
TMPRSS12	12q13.12	-0.079126543	0.292398	0.405225
SLC41A3	3q21.2-q22.1	0.079116189	0.292461	0.405285
CES5A	16q12.2	-0.079082938	0.292665	0.405539
DMRTC2	19q13.2	-0.079073307	0.292724	0.405592
DCAF8L2	Xp21.3	-0.079066664	0.292764	0.405615
LOC153910	6q24.2	0.079063924	0.292781	0.405615
LOC284798	20p11.21	-0.078996952	0.293191	0.406156
FAM157A	3q29	-0.078986462	0.293256	0.406217
LCT	2q21.3	-0.07897073	0.293352	0.406322
DCD	12q13.2	-0.078964665	0.293389	0.406346
BAZ2B	2q24.2	-0.078957169	0.293435	0.406381
NAA50	3q13.31	0.078915322	0.293692	0.406708
GUCY2EP	11q13.5	0.078894592	0.293819	0.406856
C8ORF44	8q13.1	0.07887766	0.293923	0.406972
NANOG	12p13.31	0.078851017	0.294087	0.40717
PNPLA5	22q13.31	-0.078829223	0.294221	0.407328
RAD21L1	20p13	-0.078823203	0.294258	0.407351
PHKB	16q12.1	-0.07880652	0.29436	0.407464
SLC25A3P1	1p32.3	-0.078796384	0.294422	0.407522
UBE2K	4p14	-0.078789781	0.294463	0.40755
LNX1	4q12	-0.07876258	0.29463	0.407753
CCDC105	19p13.12	-0.078725045	0.294861	0.408045
PPIF	10q22.3	-0.078720733	0.294888	0.40805
ST20	15q25.1	0.078716548	0.294913	0.40805
MRPL35	2p11.2	-0.078714456	0.294926	0.40805
CCDC138	2q13	0.078706087	0.294978	0.408093
CAMK1G	1q32.2	-0.078697717	0.295029	0.408136
CD19	16p11.2	-0.078670851	0.295195	0.408337
DCUN1D4	4q12	-0.078662147	0.295248	0.408383
ZNF841	19q13.41	0.078641224	0.295377	0.408533
MPIG6B	6p21.33	-0.078623451	0.295487	0.408656
PTPRCAP	11q13.2	-0.07858473	0.295725	0.408934
OR1C1	1q44	-0.078584141	0.295729	0.408934
LDLRAD1	1p32.3	0.078547875	0.295953	0.409215
FN1	2q35	0.078542883	0.295983	0.409229
SPATA31D5	9q21.32	-0.078531424	0.296054	0.409299
COX11	17q22	-0.078507313	0.296203	0.409476
SPINK14	5q32	-0.078483731	0.296348	0.409649
TBC1D10C	11q13.2	-0.07846965	0.296435	0.409741
ZNF503-AS1	10q22.2	-0.078450819	0.296552	0.409873
DPEP1	16q24.3	-0.078440357	0.296616	0.409934
KCNE1	21q22.12	-0.078419823	0.296743	0.410081
RNF151	16p13.3	-0.078416053	0.296766	0.410085
IGLL3P	22q11.23	-0.078408373	0.296814	0.410104
CYCSP52	1q23.1	-0.078407153	0.296821	0.410104
CRYGA	2q33.3	0.07833	0.297298	0.410735
H1FX-AS1	3q21.3	-0.078314816	0.297392	0.410815
HID1	17q25.1	0.078312724	0.297405	0.410815
TTC13	1q42.2	-0.078310631	0.297418	0.410815

PICK1	22q13.1	0.078281338	0.2976	0.411037
HIST1H2BI	6p22.1	0.078263079	0.297713	0.411165
RSF1	11q14.1	-0.078247861	0.297807	0.411267
LINC01126	2p21	-0.078235306	0.297885	0.411343
IL36A	2q14.1	0.078232363	0.297903	0.411343
GDAP2	1p12	0.07822066	0.297975	0.411414
CCDC106	19q13.42	-0.078189275	0.29817	0.411654
LIPE	19q13.2	-0.078172536	0.298274	0.411769
LINC02347	12q24.32	-0.07816105	0.298345	0.411818
COL4A3	2q36.3	-0.078160145	0.29835	0.411818
CIAO2A	15q22.31	-0.078124412	0.298572	0.412096
GAPDHS	19q13.12	-0.078118008	0.298612	0.412122
NUMBL	19q13.2	0.07811395	0.298637	0.412129
PNLIP	10q25.3	-0.078103355	0.298703	0.412191
NFYC-AS1	1p34.2	-0.078090934	0.29878	0.412237
RARRES1	3q25.32	-0.078090934	0.29878	0.412237
SPCS2	11q13.4	-0.078086749	0.298806	0.412237
NECTIN3	3q13.13	0.078084657	0.298819	0.412237
BMS1P1	10q11.22	0.07807838	0.298858	0.412262
DCTN3	9p13.3	-0.078063733	0.298949	0.412331
DOK3	5q35.3	-0.078063733	0.298949	0.412331
TMEM200A	6q23.1	-0.078055364	0.299001	0.412374
SNORA61	1p35.3	-0.078025655	0.299185	0.4126
SCARNA18	5q14.2	-0.077986914	0.299426	0.412904
OLAH	10p13	-0.077965494	0.299559	0.413031
VAX2	2p13.3	0.077965392	0.29956	0.413031
IFIT5	10q23.31	-0.077948654	0.299664	0.413146
BTN3A2	6p22.2	-0.077938192	0.299729	0.413197
POLR2J2	7q22.1	-0.077936099	0.299742	0.413197
POGLUT2	13q33.1	-0.077908899	0.299911	0.413402
CTPS2	Xp22.2	0.077904714	0.299937	0.413409
PPP1R9B	17q21.33	-0.077871236	0.300145	0.413668
WIPI1	17q24.2	-0.077841943	0.300328	0.41389
OR7D4	19p13.2	-0.077830292	0.3004	0.413962
C1QTNF2	5q33.3	-0.077810558	0.300523	0.414103
LMNB1	5q23.2	0.077751972	0.300889	0.414567
SLC34A3	9q34.3	0.07774988	0.300902	0.414567
SLC30A8	8q24.11	-0.077722863	0.30107	0.41477
CDK20	9q22.1	-0.077701755	0.301202	0.414923
SPTLC2	14q24.3	0.077655724	0.301489	0.415262
ARSH	Xp22.33	0.077655642	0.30149	0.415262
ATP6AP1L	5q14.2	0.077638985	0.301594	0.415377
SLC2A14	12p13.31	-0.077630615	0.301646	0.415421
ASIC1	12q13.12	-0.077624338	0.301685	0.415446
CDK3	17q25.1	0.077584584	0.301934	0.415759
SURF6	9q34.2	0.077559475	0.302091	0.415947
ALDH3A2	17p11.2	-0.077542736	0.302195	0.416034
HIGD1B	17q21.31	-0.077542736	0.302195	0.416034
OR5M11	11q12.1	0.07751957	0.30234	0.416204
OR1N2	9q33.2	-0.077504532	0.302434	0.416305
LIPA	10q23.31	-0.077477873	0.302601	0.416506
TCL1B	14q32.13	-0.077474349	0.302623	0.416508
CCDC57	17q25.3	0.077454857	0.302745	0.416583
PMCHL2	5q13.2	-0.077454635	0.302746	0.416583

SRSF10	1p36. 11	-0.077450673	0.302771	0.416583
SLC22A6	11q12. 3	-0.077448103	0.302787	0.416583
EGFL8	6p21. 32	0.077444396	0.302811	0.416583
TDH	8p23. 1	-0.077442461	0.302823	0.416583
PXMP4	20q11. 22	-0.077442303	0.302824	0.416583
TMEM97	17q11. 2	0.077410918	0.30302	0.416825
VAMP1	12p13. 31	-0.077389994	0.303151	0.416966
RREB1	6p24. 3	0.077387902	0.303164	0.416966
MPZL1	1q24. 2	0.077379533	0.303217	0.417009
FCER1A	1q23. 2	-0.077348147	0.303414	0.417251
CXCR5	11q23. 3	-0.077331408	0.303519	0.417364
USP17L9P	4p16. 1	-0.077326029	0.303552	0.417364
ROGDI	16p13. 3	0.077325131	0.303558	0.417364
DAZ2	Yq11. 223	-0.077309285	0.303657	0.417472
KRT84	12q13. 13	0.077295991	0.303741	0.417557
NBPF15	1q21. 1	0.077274915	0.303873	0.417711
WDR73	15q25. 2	-0.077266545	0.303926	0.417754
AMT	3p21. 31	0.077260268	0.303965	0.417779
NCOR2	12q24. 31	0.077224698	0.304188	0.418058
PRR35	16p13. 3	-0.077171379	0.304523	0.418489
ABCB6	2q35	-0.077147281	0.304675	0.418669
OR1E2	17p13. 2	0.07713783	0.304734	0.418722
HJV	1q21. 1	0.077123364	0.304825	0.418818
COG1	17q25. 1	-0.077086603	0.305057	0.419085
MAG	19q13. 12	-0.077084526	0.30507	0.419085
SBDSP1	7q11. 23	-0.077082418	0.305083	0.419085
FJX1	11p13	0.077076141	0.305122	0.419111
GEMIN2	14q21. 1	0.077044756	0.30532	0.419353
OVGP1	1p13. 2	0.077007093	0.305557	0.41965
UPK1B	3q13. 32	0.076994902	0.305634	0.419727
HMGB3P1	20q11. 22	0.076940706	0.305976	0.420157
PNLIPRP3	10q25. 3	-0.076938595	0.305989	0.420157
HIST1H4F	6p22. 2	0.076923727	0.306083	0.420256
MRFAP1	4p16. 1	-0.076898291	0.306243	0.420448
FTMT	5q23. 1	-0.076879445	0.306362	0.420582
ZNF558	19p13. 2	0.076875275	0.306388	0.420589
RIN3	14q32. 12	0.076860628	0.306481	0.420687
CALCOCO1	12q13. 13	-0.07683552	0.306639	0.420876
TEDDM1	1q25. 3	0.076828111	0.306686	0.420911
GALK1	17q25. 1	0.076818781	0.306745	0.420963
COX16	14q24. 2	0.076743456	0.307221	0.421588
ZW10	11q23. 2	0.07672881	0.307313	0.421686
HBQ1	16p13. 3	-0.07670145	0.307486	0.421894
NCCRP1	19q13. 2	0.0766934	0.307537	0.421935
OR2AE1	7q22. 1	-0.076678516	0.307632	0.422013
KIF12	9q32	-0.076676501	0.307644	0.422013
BRIX1	5p13. 2	0.076674408	0.307658	0.422013
PPBPP2	4q13. 3	0.076669538	0.307688	0.422026
FIS1	7q22. 1	0.076638838	0.307883	0.422264
MAFA	8q24. 3	0.076628741	0.307947	0.422297
MEIS3	19q13. 32	-0.076628377	0.307949	0.422297
GNA13	17q24. 1	-0.076609545	0.308068	0.422431
CSE1L	20q13. 13	-0.076603268	0.308108	0.422457
GPR22	7q22. 3	-0.076576241	0.308279	0.422663

ELMOD1	11q22.3	-0.076567053	0.308337	0.422712
ME3	11q14.2	0.076560415	0.308379	0.422712
RAP1B	12q15	-0.076557236	0.3084	0.422712
TIPIN	15q22.31	-0.076557236	0.3084	0.422712
NUDT18	8p21.3	0.076553052	0.308426	0.422719
GPR149	3q25.2	-0.076547513	0.308461	0.422738
CXCL9	4q21.1	-0.076530036	0.308572	0.422861
GRIA4	11q22.3	-0.076517522	0.308651	0.42293
MOSMO	16p12.2	-0.076515389	0.308665	0.42293
UBA3	3p14.1	0.07650702	0.308718	0.422974
ST3GAL6	3q12.1	-0.076500743	0.308758	0.423
SLFN14	17q12	-0.076493233	0.308805	0.423036
TMPO-AS1	12q23.1	-0.076484004	0.308864	0.423087
GPC4	Xq26.2	0.076477727	0.308904	0.423113
CABLES2	20q13.33	-0.076473542	0.30893	0.42312
EME2	16p13.3	0.076465173	0.308983	0.423164
INHBB	2q14.2	0.076444249	0.309116	0.423288
TSR2	Xp11.22	-0.076444249	0.309116	0.423288
FUBP1	1p31.1	-0.076423326	0.309249	0.42344
TYROBP	19q13.12	0.076412864	0.309315	0.423492
WNT10B	12q13.12	-0.076410771	0.309329	0.423492
GFM1	3q25.32	-0.076394033	0.309435	0.423608
SNORA62	3p22.1	0.076380036	0.309524	0.423701
ATP5MG	11q23.3	0.076339631	0.309781	0.424023
POLG2	17q23.3	0.076310338	0.309967	0.424249
AMELY	Yp11.2	-0.07630287	0.310014	0.424285
CTHRC1	8q22.3	0.076297784	0.310047	0.424289
ACTG1P4	1p21.1	-0.076295692	0.31006	0.424289
KRT2	12q13.13	-0.076283141	0.31014	0.424352
DLG1	3q29	-0.076278953	0.310167	0.424352
GPR52	1q25.1	-0.076276312	0.310183	0.424352
PFKFB1	Xp11.21	-0.076275119	0.310191	0.424352
GPR157	1p36.22	0.076255937	0.310313	0.42449
FAT1	4q35.2	0.076251752	0.31034	0.424498
NADK	1p36.33	0.076218275	0.310553	0.42476
VCX	Xp22.31	0.076209168	0.310611	0.42481
SLC10A5	8q21.13	-0.076174335	0.310833	0.425078
UNC13C	15q21.3	0.076171726	0.310849	0.425078
MFSD6L	17p13.1	-0.076151319	0.310979	0.425227
ALOX5AP	13q12.3	0.076122026	0.311166	0.425395
HLA-DQB2	6p21.32	0.076122026	0.311166	0.425395
PDLIM3	4q35.1	-0.076122026	0.311166	0.425395
SPRYD7	13q14.2	0.076109472	0.311246	0.425453
NP1PB13	16p11.2	0.076105493	0.311271	0.425453
ERI2	16p12.3	0.076105287	0.311273	0.425453
PRDM1	6q21	-0.076059256	0.311566	0.425826
POLL	10q24.32	0.076048794	0.311633	0.425888
PGGT1B	5q22.3	-0.076040424	0.311686	0.425921
CMTR2	16q22.2	-0.076038332	0.3117	0.425921
TREML4	6p21.1	0.07600615	0.311905	0.426169
C3ORF49	3p14.1	-0.076003231	0.311924	0.426169
SPP2	2q37.1	0.075972351	0.312121	0.426388
LRRN4	20p12.3	0.075971377	0.312127	0.426388
CSAG2	Xq28	0.075952036	0.312251	0.426513

GOLGA6L1C	15q25. 2	0. 075950453	0. 312261	0. 426513
VAV2	9q34. 2	0. 075944176	0. 312301	0. 426538
TAS1R1	1p36. 31	0. 075937794	0. 312342	0. 426565
MEIS3P1	17p12	-0. 075927437	0. 312408	0. 426626
CD47	3q13. 12	0. 07592116	0. 312448	0. 426652
CD7	17q25. 3	-0. 075877221	0. 312729	0. 427006
PLEKHF2	8q22. 1	-0. 075866759	0. 312796	0. 427068
CLDND2	19q13. 41	-0. 075817628	0. 31311	0. 427468
LIX1	5q15	-0. 075774075	0. 313389	0. 42782
NSUN2	5p15. 31	0. 075762141	0. 313466	0. 427895
ANO6	12q12	-0. 075751679	0. 313533	0. 427957
PLCXD2	3q13. 2	-0. 075701463	0. 313855	0. 428367
C1QL2	2q14. 2	-0. 075695248	0. 313894	0. 428382
FZD8	10p11. 21	-0. 075693093	0. 313908	0. 428382
ZNF497	19q13. 43	-0. 075680539	0. 313989	0. 428463
GNLY	2p11. 2	-0. 075647061	0. 314203	0. 428697
M6PR	12p13. 31	-0. 075647061	0. 314203	0. 428697
TSPAN13	7p21. 1	-0. 075621953	0. 314365	0. 428888
KRT34	17q21. 2	0. 075607003	0. 31446	0. 428989
ZGRF1	4q25	-0. 075601029	0. 314499	0. 429012
TEX101	19q13. 31	-0. 075597202	0. 314523	0. 429017
KCNK16	6p21. 2	-0. 075592462	0. 314554	0. 429029
PLAG1	8q12. 1	0. 075586383	0. 314593	0. 429053
C6ORF226	6p21. 1	0. 075578014	0. 314647	0. 429097
ATP5F1EP2	13q12. 2	-0. 07555709	0. 314781	0. 429251
MSR1	8p22	-0. 075548721	0. 314835	0. 429295
POU3F1	1p34. 3	-0. 075542267	0. 314876	0. 429322
MLIP	6p12. 1	-0. 0755249	0. 314988	0. 429445
OR51B2	11p15. 4	0. 075506857	0. 315104	0. 429574
TIMP4	3p25. 2	-0. 07545038	0. 315467	0. 430039
SMARCD1	12q13. 12	-0. 075444103	0. 315507	0. 430065
C14ORF177	14q32. 2	-0. 075428889	0. 315605	0. 43014
OR51T1	11p15. 4	-0. 075428889	0. 315605	0. 43014
OR51E1	11p15. 4	-0. 075412717	0. 315709	0. 430252
CCL25	19p13. 2	-0. 075379096	0. 315926	0. 430518
CCL18	17q12	0. 075352039	0. 3161	0. 430726
LOC728989	1q21. 1	-0. 075301975	0. 316422	0. 431136
NUCB1	19q13. 33	-0. 075293453	0. 316477	0. 431181
HESX1	3p14. 3	0. 075279892	0. 316565	0. 431271
TSKS	19q13. 33	0. 075255903	0. 316719	0. 431453
PRPF39	14q21. 2	-0. 07522859	0. 316896	0. 431663
VWA5A	11q24. 2	0. 075213943	0. 31699	0. 431762
GK5	3q23	0. 075159542	0. 317341	0. 4322
ASPN	9q22. 31	-0. 07515745	0. 317355	0. 4322
LIMD2	17q23. 3	-0. 075153265	0. 317382	0. 432208
PIWIL2	8p21. 3	-0. 07512188	0. 317584	0. 432403
DDX54	12q24. 13	0. 075119787	0. 317598	0. 432403
EIF4E1B	5q35. 2	-0. 075118452	0. 317607	0. 432403
BRD7	16q12. 1	0. 075117695	0. 317612	0. 432403
GCC2	2q12. 3	-0. 075080033	0. 317855	0. 432704
IGDCC3	15q22. 31	0. 075062888	0. 317966	0. 432811
SYT17	16p12. 3	0. 075061201	0. 317977	0. 432811
LOC145845	15q14	0. 07505608	0. 31801	0. 432827
IFT122	3q21. 3-q2	0. 075048647	0. 318058	0. 432863

SVOPL	7q34	0.075040519	0.31811	0.432897
MED24	17q21.1	0.075036093	0.318139	0.432897
OR8A1	11q24.2	-0.075034713	0.318148	0.432897
CFAP58	10q25.1	-0.075024324	0.318215	0.432959
PPP1R12B	1q32.1	-0.075004708	0.318342	0.433102
H2AFY2	10q22.1	0.074977507	0.318518	0.433312
RPL34	4q25	0.074954491	0.318667	0.433485
ADAMTS12	5p13.3-p1	-0.074948214	0.318708	0.433511
SF3B1	2q33.1	0.074893813	0.31906	0.433961
MATN4	20q13.12	0.074878779	0.319158	0.434064
TRA2A	7p15.3	0.074870797	0.319209	0.434105
RGS21	1q31.2	0.074859094	0.319285	0.434178
ZMYM6	1p34.3	-0.074854058	0.319318	0.434193
HDHD5	22q11.1	-0.074831042	0.319467	0.434366
A4GNT	3q22.3	0.074823185	0.319518	0.434406
SMNDC1	10q25.2	0.074816396	0.319562	0.434437
GPANK1	6p21.33	-0.074810119	0.319603	0.434462
GSG1L	16p12.1	0.074786646	0.319755	0.43464
IGHMBP2	11q13.3	0.074776641	0.31982	0.434698
OR13G1	1q44	-0.074771235	0.319855	0.434717
TULP2	19q13.33	-0.074763532	0.319905	0.434755
ACOT2	14q24.3	-0.07474944	0.319997	0.43485
TPK1	7q35	-0.074734794	0.320092	0.434949
SYNC	1p35.1	0.074728517	0.320132	0.434975
RASA1	5q14.3	0.074709686	0.320255	0.435112
CTDNEP1	17p13.1	-0.074682485	0.320431	0.435322
SEPTIN8	5q31.1	0.0746783	0.320459	0.43533
POU2AF1	11q23.1	-0.074655284	0.320608	0.435503
CLEC4GP1	19p13.2	-0.074623199	0.320817	0.435757
MAP4K5	14q22.1	-0.074617622	0.320853	0.435777
FAM106C	17p11.2	-0.074608634	0.320911	0.435826
RPS29	14q21.3	0.074546482	0.321316	0.436326
SPEM1	17p13.1	-0.074545428	0.321323	0.436326
SPAAR	9p13.3	-0.074504635	0.321588	0.436657
AMPD1	1p13.2	-0.074498397	0.321629	0.436682
F5	1q24.2	-0.07445651	0.321902	0.437023
ALAD	9q32	0.074441864	0.321997	0.437123
C11ORF65	11q22.3	-0.074434618	0.322045	0.437157
GLOD4	17p13.3	-0.074427217	0.322093	0.437193
FNDC7	1p13.3	-0.07441167	0.322194	0.437301
GAGE12D	Xp11.23	-0.074383137	0.32238	0.437512
TM7SF3	12p11.23	-0.074381186	0.322393	0.437512
CPN2	3q29	0.074360224	0.32253	0.437667
PPHLN1	12q12	0.074347708	0.322612	0.437749
RSPO2	8q23.1	-0.074342326	0.322647	0.437766
CEACAM4	19q13.2	-0.074333061	0.322707	0.437789
TPMT	6p22.3	0.074333061	0.322707	0.437789
SNAPC3	9p22.3	-0.074318415	0.322803	0.437889
SNORD89	2q11.2	0.074313423	0.322835	0.437904
ATP5MC1	17q21.32	0.074238905	0.323322	0.438501
RCC1L	7q11.23	0.074234721	0.323349	0.438501
SLC49A4	3q21.1	0.074232628	0.323363	0.438501
OPN1LW	Xq28	-0.07423258	0.323363	0.438501
ZNF160	19q13.41-	0.074211705	0.3235	0.438656

PDRG1	20q11. 21	0. 074201243	0. 323568	0. 438719
HPRT1	Xq26. 2-q \dot{z}	0. 07412801	0. 324047	0. 439339
ASZ1	7q31. 2	-0. 074124255	0. 324072	0. 439343
LINC0110 \dot{z}	2q12. 1	-0. 074110861	0. 32416	0. 439432
KHDRBS1	1p35. 2	0. 074081979	0. 324349	0. 439658
CUEDC1	17q22	0. 074050593	0. 324554	0. 439907
HTR5A	7q36. 2	-0. 07403979	0. 324625	0. 439973
CSDC2	22q13. 2	-0. 07402967	0. 324691	0. 440033
DNAJC5G	2p23. 3	-0. 074013811	0. 324795	0. 440144
CFHR2	1q31. 3	0. 073986377	0. 324975	0. 440358
LRRC69	8q21. 3	0. 073940472	0. 325276	0. 440736
CRABP1	15q25. 1	-0. 073918585	0. 32542	0. 440901
SNTB1	8q24. 12	0. 073906221	0. 325501	0. 440981
LOC10019 \dot{z}	18p11. 23	-0. 073895929	0. 325569	0. 441043
MYBPC1	12q23. 2	0. 073867183	0. 325757	0. 441263
MAP4	3p21. 31	0. 073864373	0. 325776	0. 441263
KCNJ14	19q13. 33	0. 073853912	0. 325845	0. 441327
VAV1	19p13. 3	0. 073847635	0. 325886	0. 441353
CLCNKA	1p36. 13	-0. 073838644	0. 325945	0. 441376
PAX4	7q32. 1	0. 073838298	0. 325947	0. 441376
BICDL1	12q24. 23	0. 073830896	0. 325996	0. 441412
PPIL2	22q11. 21	-0. 07380788	0. 326147	0. 441587
INMT	7p14. 3	-0. 073801603	0. 326188	0. 441613
ENTPD3	3p22. 1	-0. 073761848	0. 32645	0. 441937
WNT9A	1q42. 13	-0. 07372837	0. 32667	0. 442205
TBCA	5q14. 1	0. 073722093	0. 326711	0. 442231
UNKL	16p13. 3	-0. 073707447	0. 326808	0. 442319
RBFOX3	17q25. 3	-0. 073705439	0. 326821	0. 442319
RBM22	5q33. 1	-0. 073671915	0. 327042	0. 442574
MAGEA10	Xq28	0. 073670078	0. 327054	0. 442574
RPS4Y1	Yp11. 2	-0. 073657838	0. 327134	0. 442653
CSF2RA	Xp22. 33 \dot{z}	-0. 073615383	0. 327414	0. 443002
ADAMTS4	1q23. 3	-0. 073592367	0. 327566	0. 443177
ZNF771	16p11. 2	-0. 073588182	0. 327593	0. 443184
HHLA1	8q24. 22	-0. 073569303	0. 327718	0. 443323
TSGA10IP	11q13. 1	0. 073552589	0. 327828	0. 443435
F2	11p11. 2	-0. 073550002	0. 327845	0. 443435
CDC7	1p22. 1	-0. 073523319	0. 328021	0. 443643
SPATA24	5q31. 2	-0. 073487749	0. 328256	0. 44393
RPS14	5q33. 1	0. 073483565	0. 328283	0. 443937
THRB	3p24. 2	-0. 073464733	0. 328407	0. 444076
UBE2A	Xq24	0. 073456364	0. 328463	0. 44412
CSN3	4q13. 3	-0. 073353085	0. 329145	0. 445013
CIRBP-AS1	19p13. 3	-0. 073343377	0. 329209	0. 445058
PTPRO	12p12. 3 1	-0. 073341284	0. 329223	0. 445058
DECR1	8q21. 3	0. 073320361	0. 329362	0. 445204
STXBP3	1p13. 3	-0. 073318268	0. 329375	0. 445204
SELENOV	19q13. 2	-0. 073292029	0. 329549	0. 445408
MTA3	2p21	0. 073278514	0. 329638	0. 445499
AP3S1	5q22. 3-q \dot{z}	0. 073270144	0. 329694	0. 445539
MINDY4	7p14. 3	0. 073265959	0. 329721	0. 445539
KANSL1	17q21. 31	-0. 073263867	0. 329735	0. 445539
ATP12A	13q12. 12	-0. 073245384	0. 329858	0. 445648
PALM	19p13. 3	-0. 073245036	0. 32986	0. 445648

RPLP0P2	11q12.2	0.073234574	0.329929	0.445711
PIWIL1	12q24.33	0.073222236	0.330011	0.445791
SMIM32	5q31.1	-0.073191719	0.330213	0.446033
MAPK14	6p21.31	-0.073188542	0.330234	0.446033
ANKRD20A9	13q11	-0.073167619	0.330373	0.446177
HNRNPCL2	1p36.21	0.073165691	0.330386	0.446177
CRYBB1	22q12.1	-0.073154401	0.33046	0.446248
TIGD3	11q13.1	-0.073134141	0.330595	0.446399
OR9Q1	11q12.1	-0.073130675	0.330618	0.4464
DEFA6	8p23.1	-0.073120131	0.330688	0.446464
HEATR9	17q12	-0.073103938	0.330795	0.446579
GHRH	20q11.23	-0.073096139	0.330847	0.446618
DEFB131A	4p16.1	-0.073082763	0.330935	0.446708
PTPRK	6q22.33	0.073012784	0.3314	0.447305
ICAM3	19p13.2	-0.072989768	0.331553	0.447481
PTCRA	6p21.1	0.072969337	0.331688	0.447634
MMD	17q22	-0.072952106	0.331803	0.447758
SPC25	2q24.3	0.072943737	0.331859	0.447803
CD27	12p13.31	-0.072931182	0.331942	0.447885
SLC27A2	15q21.2	0.07285795	0.332429	0.448512
F2RL2	5q13.3	-0.072847488	0.332499	0.448576
CTXN1	19p13.2	0.07282238	0.332666	0.448771
TCTE3	6q27	-0.072816103	0.332708	0.448797
SNRPB2	20p12.1	0.072784717	0.332917	0.449049
PINX1	8p23.1	0.072772163	0.333	0.449131
ADAR	1q21.3	-0.072726131	0.333307	0.449515
DOP1B	21q22.12	-0.072721947	0.333335	0.449522
RNASE1	14q11.2	0.0727073	0.333432	0.449623
SNORA2A	12q13.11	-0.072701318	0.333472	0.449647
TPD52L3	9p24.1	0.072686116	0.333574	0.449753
MGC27382	1p31.1	0.072675556	0.333644	0.449817
LRP2	2q31.1	0.072626431	0.333972	0.450205
NOTCH2	1p12	-0.072625698	0.333977	0.450205
C20ORF204	20q13.33	0.072613144	0.33406	0.450288
ITM2C	2q37.1	-0.07260059	0.334144	0.450345
CYP2A7	19q13.2	0.072600064	0.334148	0.450345
PARVG	22q13.31	-0.072596405	0.334172	0.450347
AMHR2	12q13.13	-0.072582056	0.334268	0.450425
TMEM270	7q11.23	0.072580971	0.334275	0.450425
LENEP	1q21.3	0.072554838	0.33445	0.45063
C10RF220	1q25.2	0.072544096	0.334522	0.450696
OR11H1	22q11.1	0.072527778	0.334631	0.450752
OR5H6	3q11.2	0.072527778	0.334631	0.450752
PYDC2	3q28	-0.072527778	0.334631	0.450752
SNHG15	7p13	0.072518988	0.334689	0.450801
ZNF414	19p13.2	0.072498065	0.334829	0.450959
ZDHHC8	22q11.21	0.072452033	0.335137	0.451343
HM13	20q11.21	0.072433202	0.335263	0.451482
MRPL18	6q25.3	-0.072418555	0.335361	0.451584
FAM92A1P2	4q35.1	0.07241101	0.335411	0.451621
RASSF10	11p15.3	0.072382429	0.335603	0.451848
GPSM1	9q34.3	-0.072372523	0.335669	0.451907
CATIP	2q35	-0.072356541	0.335776	0.452021
BCCIP	10q26.2	0.072334861	0.335921	0.452186

FAF1	1p32.3	0.072305568	0.336117	0.45242
PKDCC	2p21	0.072288829	0.33623	0.45254
PLEKHH1	14q24.1	0.072276275	0.336314	0.452598
HIST1H1A	6p22.2	0.072275661	0.336318	0.452598
TSC22D2	3q25.1	0.072265813	0.336384	0.452656
PSMC3IP	17q21.2	0.072234428	0.336594	0.452909
SF1	11q13.1	-0.072192581	0.336875	0.453256
LRRC19	9p21.2	0.072114532	0.337399	0.453931
RHPN1-AS1	8q24.3	0.072108886	0.337437	0.453951
LINC01512	6p21.1	-0.072072803	0.337679	0.454247
PACC1	1q32.3	-0.072069131	0.337704	0.454249
LL22NC03-	22q11.22	0.072057847	0.33778	0.454321
FABP7	6q22.31	-0.07202376	0.338009	0.454599
GUCA1B	6p21.1	0.072008453	0.338112	0.454706
SRXN1	20p13	-0.072002176	0.338154	0.454733
POP1	8q22.2	-0.07197916	0.338309	0.45491
CATSPER3	5q31.1	-0.071958237	0.33845	0.455069
PSG10P	19q13.2	-0.071947828	0.33852	0.455102
CD33	19q13.41	-0.071947775	0.33852	0.455102
PACSIN2	22q13.2	-0.071924759	0.338675	0.45528
PNOC	8p21.1	-0.071918519	0.338717	0.455306
CLEC16A	16p13.13	0.071903835	0.338816	0.455408
BNIP2	15q22.2	0.071899651	0.338844	0.455415
ZNF239	10q11.21	0.071870358	0.339042	0.455619
ZNF487	10q11.21	-0.071870358	0.339042	0.455619
SLC27A6	5q23.3	-0.071846705	0.339201	0.455803
LOC553137	6q21	-0.07183887	0.339254	0.455843
COL27A1	9q32	-0.071822233	0.339366	0.455963
OR8S1	12q13.11	0.071804881	0.339483	0.45606
CLPS	6p21.31	-0.071804765	0.339484	0.45606
HNF4A	20q13.12	0.07179294	0.339564	0.456137
CACNG2	22q12.3	-0.07178011	0.33965	0.456222
AMN1	12p11.21	-0.07176574	0.339747	0.456322
TG	8q24.22	0.071759463	0.339789	0.456348
C10RF216	1p34.3	-0.071698784	0.340199	0.456867
FLVCR1-D1	1q32.3	-0.0716946	0.340227	0.456875
WWC1	5q34	0.071677861	0.34034	0.456996
OSTN	3q28	-0.071667995	0.340407	0.457055
PATL2	15q21.1	-0.071649651	0.340531	0.45719
PLCH1	3q25.31	0.071642291	0.340581	0.457226
ARCN1	11q23.3	-0.071636014	0.340623	0.457241
PLD1	3q26.31	-0.071633921	0.340637	0.457241
FAM74A4	9q12	-0.071618089	0.340744	0.45735
ZNF350	19q13.41	-0.07161509	0.340764	0.45735
SSX3	Xp11.23	0.071601325	0.340857	0.457444
STAT5A	17q21.2	0.071566966	0.34109	0.457725
LONP2	16q12.1	0.071552319	0.341189	0.457828
CBLIF	11q12.1	-0.071489808	0.341612	0.458365
NDUFA1	Xq24	0.071474902	0.341713	0.458457
C16ORF86	16q22.1	0.07147281	0.341727	0.458457
SUCNR1	3q25.1	-0.071462498	0.341797	0.45851
SLC35B1	17q21.33	0.071460256	0.341812	0.45851
METTL2A	17q23.2	0.071449794	0.341883	0.458574
IQCN	19p13.11	-0.071445609	0.341911	0.458581

SNORA4	3q27.3	-0.071414391	0.342123	0.458834
PTMS	12p13.31	-0.07140167	0.342209	0.458919
RBPJL	20q13.12	-0.071397562	0.342237	0.458926
SAPCD1	6p21.33	0.071382838	0.342337	0.459005
WBP2NL	22q13.2	0.071378803	0.342364	0.459005
PALLD	4q32.3	-0.071378654	0.342365	0.459005
ADORA3	1p13.2	-0.071361915	0.342479	0.459103
PIAS1	15q23	-0.071359823	0.342493	0.459103
C2CD4D	1q21.3	0.07135773	0.342507	0.459103
PCDHGB8P	5q31.3	0.071340255	0.342625	0.459231
CKB	14q32.33	0.071326345	0.34272	0.459327
DPP7	9q34.3	0.071317975	0.342777	0.459372
NMT1	17q21.31	-0.071301237	0.34289	0.459463
TMPPE	3p22.3	0.071301237	0.34289	0.459463
HRH4	18q11.2	-0.071273422	0.343079	0.459685
LRRC61	7q36.1	0.071261482	0.34316	0.459763
FGR	1p35.3	-0.071236374	0.34333	0.45996
KCNJ1	11q24.3	-0.071206031	0.343537	0.460206
CASQ2	1p13.1	-0.071198711	0.343586	0.460207
SERPINA7	Xq22.3	-0.071195395	0.343609	0.460207
MC4R	18q21.32	-0.071193834	0.343619	0.460207
SPATA46	1q23.3	-0.071192297	0.34363	0.460207
HSPD1	2q33.1	0.071184065	0.343686	0.460247
C17ORF75	17q11.2	-0.071177788	0.343729	0.460247
TCP10L	21q22.11	-0.071177788	0.343729	0.460247
CDK14	7q21.13	-0.071154772	0.343885	0.460425
COQ4	9q34.11	0.071121294	0.344113	0.460699
OR10R2	1q23.1	0.071077222	0.344412	0.460977
OR56A3	11p15.4	-0.071077222	0.344412	0.460977
RBMV2FP	Yq11.223	-0.071077222	0.344412	0.460977
SCP2D1	20p11.23	-0.071077222	0.344412	0.460977
MAJIN	11q13.1	-0.070987353	0.345024	0.461765
MAN2B1	19p13.13	0.070941351	0.345338	0.462154
CHRND	2q37.1	-0.070923349	0.345461	0.462271
ABCF3	3q27.1	0.070920428	0.345481	0.462271
BMS1P4	10q22.2	-0.070918335	0.345495	0.462271
CFAP47	Xp21.1	0.070900718	0.345615	0.4624
FZD6	8q22.3	0.070897412	0.345638	0.4624
CNGA4	11p15.4	0.070887321	0.345706	0.462461
PEPD	19q13.11	-0.070874396	0.345795	0.462548
CLPTM1	19q13.32	0.070868119	0.345837	0.462555
LINC00161	21q21.3	-0.07086685	0.345846	0.462555
GNAS-AS1	20q13.32	-0.070863283	0.34587	0.462557
PP12613	4q27	-0.070838205	0.346041	0.462755
CNOT8	5q33.2	0.070834641	0.346066	0.462756
RPL13AP6	10q25.2	-0.070813717	0.346209	0.462916
PIAS4	19p13.3	-0.070759316	0.34658	0.463364
NANOGNB	12p13.31	-0.070757904	0.34659	0.463364
RNF10	12q24.31	-0.070746762	0.346666	0.463435
NUDT12	5q21.2	-0.070698638	0.346995	0.463827
OR1A2	17p13.3	0.070694505	0.347023	0.463827
SYT16	14q23.2	-0.070692127	0.347039	0.463827
MCCC2	5q13.2	0.070690268	0.347052	0.463827
CXCL2	4q13.3	-0.070671437	0.347181	0.463956

TBC1D8B	Xq22. 3	-0.070669345	0.347195	0.463956
IL27RA	19p13. 12	-0.070658883	0.347267	0.464021
HCRTR2	6p12. 1	-0.070618468	0.347543	0.464359
SPERT	13q14. 13	0.070598337	0.347681	0.464512
TGFBR1	9q22. 33	-0.070571004	0.347868	0.464688
WNT5A	3p14. 3	0.070571004	0.347868	0.464688
ZNF687	1q21. 3	-0.070568912	0.347883	0.464688
CATSPER2F	15q15. 3	0.070556358	0.347969	0.464772
RTCB	22q12. 3	-0.070537526	0.348098	0.464913
DOK2	8p21. 3	-0.070531249	0.348141	0.46494
LEF1	4q25	0.070499864	0.348356	0.465196
PTCD2	5q13. 2	-0.070476848	0.348514	0.465375
NOLC1	10q24. 32	-0.070449647	0.3487	0.465562
REM1	20q11. 21	-0.070449647	0.3487	0.465562
KRTAP10-2	21q22. 3	-0.070444246	0.348737	0.465581
SPATC1	8q24. 3	-0.070438383	0.348777	0.465603
HIPK4	19q13. 2	0.070418409	0.348914	0.465755
ESD	13q14. 2	0.070399431	0.349045	0.465898
LINC00934	12q24. 23	-0.0703441	0.349424	0.466374
CCDC144CF	17p11. 2	-0.070326043	0.349548	0.466508
CTRC	1p36. 21	-0.070319889	0.349591	0.466533
IL22RA2	6q23. 3	0.070315644	0.34962	0.466541
B3GAT2	6q13	0.070296905	0.349749	0.466682
PHF12	17q11. 2	-0.070280167	0.349864	0.466792
ZNF419	19q13. 43	0.070278074	0.349878	0.466792
CT45A5	Xq26. 3	-0.070247978	0.350085	0.467037
RAB41	Xq13. 1	-0.070178505	0.350563	0.467643
SHC3	9q22. 1	0.070156718	0.350713	0.467812
TBC1D8	2q11. 2	-0.070152533	0.350742	0.467819
ARRDC1-AS	9q34. 3	0.070148348	0.35077	0.467827
STRN	2p22. 2	-0.070133702	0.350871	0.467906
ID2B	3p14. 2	-0.07013293	0.350877	0.467906
SNORA21	17q12	0.070126065	0.350924	0.467938
NGB	14q24. 3	-0.070107785	0.35105	0.468074
EMP1	12p13. 1	0.070098132	0.351116	0.468132
CD44	11p13	0.0700793	0.351246	0.468249
SLC9C2	1q25. 1	0.070075692	0.351271	0.468249
EMC6	17p13. 2	0.070075116	0.351275	0.468249
FAM89A	1q42. 2	-0.070037453	0.351534	0.468564
LINC00999	10p11. 1	-0.069978867	0.351938	0.469071
CYP4Z1	1p33	-0.069973738	0.351974	0.469087
IFI27L1	14q32. 12	0.069928651	0.352285	0.469471
VPREB3	22q11. 23	-0.069893227	0.35253	0.469765
GABRA3	Xq28	-0.069888563	0.352582	0.469804
C10RF21	1q25. 3	-0.069878434	0.352632	0.469839
TPCN2	11q13. 3	-0.069874249	0.352661	0.469846
LOC389705	9p22. 3	-0.069845189	0.352861	0.470053
NCF1	7q11. 23	-0.069844956	0.352863	0.470053
TRIM72	16p11. 2	0.069841231	0.352889	0.470056
LUC7L3	17q21. 33	0.069834495	0.352935	0.470085
GAGE1	Xp11. 23	0.069831235	0.352958	0.470085
TRMT2A	22q11. 21	0.06982194	0.353022	0.470139
SLC7A5P1	16p11. 2	0.069810979	0.353098	0.470209
RAB29	1q32. 1	-0.069798925	0.353181	0.470277

TRIT1	1p34.2	-0.069796832	0.353196	0.470277
ALDH4A1	1p36.13	-0.069778001	0.353326	0.470419
ZSWIM6	5q12.1	0.069761262	0.353442	0.470529
IL17B	5q32	0.069759181	0.353456	0.470529
MAP1LC3B	16q24.2	0.0697508	0.353514	0.470575
GTF3C5	9q34.13	0.069746616	0.353543	0.470582
MAP4K3	2p22.1	0.069706861	0.353818	0.470917
IL22	12q15	-0.069681023	0.353997	0.471124
EFR3A	8q24.22	-0.069675475	0.354035	0.471143
LTB4R2	14q12	-0.069662921	0.354122	0.471228
TYK2	19p13.2	0.069654552	0.35418	0.471274
RASEF	9q21.32	0.069635757	0.35431	0.471415
ACAA2	18q21.1	-0.069627351	0.354369	0.471462
SERPING1	11q12.1	-0.069621074	0.354412	0.471488
C12ORF73	12q23.3	-0.06960852	0.354499	0.471572
NSD3	8p11.23	0.069600151	0.354557	0.471618
CPSF7	11q12.2	-0.069595966	0.354586	0.471622
ZP4	1q43	0.069592917	0.354607	0.471622
TRIM42	3q23	-0.069587143	0.354647	0.471644
TMEM247	2p21	-0.069552344	0.354889	0.471933
ADAMTS6	5q12.3	0.069524826	0.355079	0.472156
FAM151A	-	-0.069504505	0.35522	0.472312
LINC0146E	12q14.1	-0.06947883	0.355399	0.472493
FAM3B	21q22.3	0.069474609	0.355428	0.472493
PIGU	20q11.22	0.069474609	0.355428	0.472493
MRPL40	22q11.21	0.069451593	0.355588	0.472674
SYNPO2L	10q22.2	0.069422052	0.355793	0.472916
DEFB109A	8p23.1	0.06937762	0.356102	0.473294
CD300LF	17q25.1	0.069372084	0.35614	0.473314
SOX10	22q13.1	-0.06936617	0.356181	0.473336
TREML1	6p21.1	-0.069360183	0.356223	0.473336
SLC15A2	3q13.33	0.06935953	0.356227	0.473336
GNGT2	17q21.32	-0.069353253	0.356271	0.473362
PIP5K1B	9q21.11	-0.069346975	0.356315	0.473389
ANAPC2	9q34.3	-0.069340698	0.356358	0.473415
SNORA78	16p13.3	0.069330648	0.356428	0.473477
SHCBP1L	1q25.3	-0.069312197	0.356556	0.473616
DMRTB1	1p32.3	-0.06929828	0.356653	0.473713
C20ORF202	20p13	-0.069292574	0.356693	0.473722
PCDHGA10	5q31.3	-0.069290482	0.356707	0.473722
KLRA1P	12p13.2	-0.069277928	0.356795	0.473806
CAMLG	5q31.1	-0.069267466	0.356868	0.473871
ZNF826P	19p12	-0.069263281	0.356897	0.473879
PCP4L1	1q23.3	-0.069251746	0.356977	0.473954
CCNT2	2q21.3	-0.069219342	0.357203	0.474222
PNLIPRP2	10q25.3	-0.069198991	0.357344	0.474378
APBB3	5q31.3	-0.069179587	0.357479	0.474526
MMP20	11q22.2	-0.069174176	0.357517	0.474545
CCER1	12q21.33	-0.069156597	0.35764	0.474652
UROD	1p34.1	0.069154479	0.357654	0.474652
B4GALT3	1q23.3	0.069152386	0.357669	0.474652
ITGB8	7p21.1	0.06913774	0.357771	0.474756
HBE1	11p15.4	-0.069127794	0.35784	0.474816
INHBC	12q13.3	-0.069117713	0.357911	0.474878

TAC4	17q21.33	-0.069085959	0.358132	0.47514
NKX1-2	10q26.13	-0.06902862	0.358532	0.475612
LINC00461	5q14.3	-0.069025497	0.358554	0.475612
LSM3	3p25.1	0.069024753	0.358559	0.475612
PRKACB	1p31.1	-0.069014291	0.358632	0.475677
C17ORF98	17q12	-0.068997615	0.358749	0.4758
NOL6	9p13.3	-0.068980813	0.358866	0.475924
SDHAP3	5p15.33	-0.068966167	0.358968	0.476016
NECTIN1	11q23.3	0.068964074	0.358983	0.476016
RNFT2	12q24.22	-0.06895152	0.359071	0.476101
TRMT13	1p21.2	-0.068932689	0.359202	0.476244
ACVR1B	12q13.13	-0.068911765	0.359348	0.476406
NAV1	1q32.1	-0.068895026	0.359465	0.476529
HIP1R	12q24.31	-0.068876195	0.359597	0.476672
TMEM217	6p21.2	-0.068855272	0.359743	0.476835
NUP210L	1q21.3	-0.068847323	0.359799	0.476877
PRKACG	9q21.11	0.068829775	0.359922	0.477008
UBE2Q1	1q21.3	0.068825979	0.359948	0.477011
NFKBID	19q13.12	0.068796686	0.360153	0.477251
VSIG4	Xq12	-0.068788316	0.360212	0.477297
SNHG7	9q34.3	-0.068746469	0.360505	0.477654
TMEM267	5p12	-0.068742284	0.360534	0.477661
PRKAB2	1q21.1	-0.068704622	0.360798	0.477967
IFT88	13q12.11	-0.06870253	0.360813	0.477967
ATG9A	2q35	0.068654405	0.36115	0.478382
KIAA1191	5q35.2	0.068620928	0.361385	0.478636
NXT1	20p11.21	0.068618835	0.361399	0.478636
CCNYL1	2q33.3	0.068616743	0.361414	0.478636
LOC374443	12p13.31	0.068610466	0.361458	0.478638
HIST1H3F	6p22.2	0.068609514	0.361465	0.478638
ENOPH1	4q21.22	-0.068606281	0.361487	0.478638
PLSCR1	3q24	0.068602097	0.361517	0.478646
HCG4B	6p22.1	0.068587594	0.361618	0.478749
CNBP	3q21.3	0.068564434	0.361781	0.478932
FAM76B	11q21	-0.068533049	0.362001	0.479192
MASP1	3q27.3	0.068514218	0.362133	0.479323
ZNF622	5p15.1	-0.068512125	0.362148	0.479323
CROCCP2	1p36.13	-0.068503756	0.362207	0.479369
ZNF334	20q13.12	0.068493294	0.36228	0.47939
TREH	11q23.3	0.068491918	0.36229	0.47939
SUPT6H	17q11.2	0.068491202	0.362295	0.47939
CYP2E1	10q26.3	-0.06848074	0.362369	0.479456
OR6C2	12q13.2	-0.06846056	0.36251	0.479603
LINC00239	14q32.31	0.068449355	0.362589	0.479603
SPANXN1	Xq27.3	-0.068449068	0.362591	0.479603
KCNG4	16q24.1	0.06844785	0.3626	0.479603
P2RY6	11q13.4	0.068443077	0.362633	0.479603
APOBEC3D	22q13.1	0.068440985	0.362648	0.479603
LDAH	2p24.1	-0.068440985	0.362648	0.479603
ZNF345	19q13.12	-0.068424246	0.362766	0.479727
SEC22A	3q21.1	0.068407507	0.362883	0.479849
COL20A1	20q13.33	0.068404328	0.362906	0.479849
LINC00426	13q12.3	-0.068399138	0.362942	0.479865
HACD1	10p12.33	-0.068386584	0.363031	0.47995

LINC00052	15q25.3	-0.068362922	0.363197	0.480139
GPR183	13q32.3	-0.068359383	0.363222	0.48014
AKR1C1	10p15.1	0.068346829	0.36331	0.480204
MS4A5	11q12.2	-0.068345636	0.363319	0.480204
DHRS2	14q11.2	-0.068319628	0.363502	0.480414
ELN	7q11.23	-0.068313351	0.363546	0.480441
SUPT7L	2p23.3	-0.068288243	0.363723	0.480643
ELK4	1q32.1	-0.068281966	0.363767	0.48067
PREB	2p23.3	-0.068275689	0.363811	0.480696
TGIF2LX	Xq21.31	-0.06827035	0.363849	0.480714
MAD2L2	1p36.22	-0.06825895	0.363929	0.480788
SC5D	11q23.3-c	-0.068244304	0.364032	0.480886
NAA11	4q21.21	-0.068241628	0.364051	0.480886
FAR2	12p11.22	0.068215011	0.364239	0.481102
SYCN	19q13.2	-0.06820603	0.364302	0.481154
COLEC12	18p11.32	-0.068179441	0.364489	0.481369
SNAR-C3	19q13.33	-0.068176111	0.364513	0.481369
HLA-DQB1	6p21.32	-0.068166886	0.364578	0.481423
LY6G6E	6p21.33	0.068155523	0.364658	0.481476
AMPD2	1p13.3	-0.068154332	0.364666	0.481476
MFGE8	15q26.1	0.068120855	0.364903	0.481724
NGF	1p13.2	-0.068120855	0.364903	0.481724
C7ORF65	7p12.3	0.068108035	0.364993	0.481797
BAG5	14q32.33	-0.068106208	0.365006	0.481797
ENTPD5	14q24.3	0.068093654	0.365095	0.481882
LEFTY1	1q42.12	0.068076915	0.365213	0.482006
GGA1	22q13.1	0.068058084	0.365346	0.48215
RMDN2	2p22.2	-0.068047622	0.36542	0.482203
ARL8B	3p26.1	0.06804553	0.365434	0.482203
TSPAN18	11p11.2	-0.068014144	0.365656	0.482445
KRTAP10-4	21q22.3	-0.068012782	0.365666	0.482445
CPA1	7q32.2	-0.067993932	0.365799	0.482576
ANKRD34B	5q14.1	0.067991897	0.365813	0.482576
EIF2S3	Xp22.11	0.067968112	0.365981	0.482766
KCNRG	13q14.2	-0.067936727	0.366203	0.483027
GALC	14q31.3	-0.067896972	0.366484	0.483341
L3MBTL1	20q13.12	0.06789488	0.366499	0.483341
LOC100268	5q35.1	-0.067892788	0.366514	0.483341
TSNAX-DIS	1q42.2	0.067867349	0.366694	0.483546
PTPN7	1q32.1	-0.067842571	0.366869	0.483733
FBX038	5q32	-0.067840479	0.366884	0.483733
SH3GLB1	1p22.3	0.067819555	0.367032	0.48384
TAPT1-AS1	4p15.32	-0.067819555	0.367032	0.48384
SCRT2	20p13	-0.067818812	0.367038	0.48384
ATG4D	19p13.2	0.067813278	0.367077	0.48386
PHOX2A	11q13.4	-0.067805415	0.367133	0.483901
HASPIN	17p13.2	0.067794447	0.36721	0.483972
LINC02800	1p36.11	-0.067785652	0.367273	0.484022
MSS51	10q22.2	-0.0677798	0.367314	0.484045
SORCS2	4p16.1	-0.067763062	0.367433	0.484169
GPT2	16q11.2	-0.067740046	0.367596	0.484325
FADS6	17q25.1	-0.067739503	0.3676	0.484325
IL9	5q31.1	0.067725043	0.367702	0.484428
ILF3-DT	19p13.2	-0.06771703	0.367759	0.484439

INTS14	15q22.31	0.06771703	0.367759	0.484439
NEURL3	2q11.2	0.067712845	0.367789	0.484446
FGF2	4q28.1	0.067706568	0.367833	0.484473
SCTR	2q14.2	0.067700999	0.367873	0.484493
GBP4	1p22.2	0.067679367	0.368026	0.484663
TMEM69	1p34.1	0.067652167	0.368219	0.484882
PRSS41	16p13.3	0.067649171	0.36824	0.484882
FCGR1CP	1q21.1	-0.067604042	0.36856	0.485266
C10ORF113	10p12.31	0.067599265	0.368594	0.485266
MATN2	8q22.1-q2	-0.067597765	0.368605	0.485266
DLEU1	13q14.2-c	-0.067585211	0.368694	0.485351
THEG	19p13.3	-0.067567021	0.368823	0.48549
NAA60	16p13.3	0.067558011	0.368887	0.485507
SLED1	4q35.1	0.067557551	0.368891	0.485507
LGALS17A	19q13.2	0.067553094	0.368922	0.485507
ZNF789	7q22.1	0.067549641	0.368947	0.485507
C7ORF69	7p12.3	-0.067548065	0.368958	0.485507
R3HCC1	8p21.3	-0.067543364	0.368991	0.485519
CCNB3	Xp11.22	0.067507794	0.369244	0.48582
FAM131C	1p36.13	-0.067470132	0.369512	0.48614
COBLL1	2q24.3	-0.067409453	0.369944	0.486676
OTUD6A	Xq13.1	-0.06739598	0.370039	0.48677
CLDN9	16p13.3	0.06738853	0.370093	0.486807
RABEPK	9q33.3	-0.067363421	0.370271	0.486998
GRM8	7q31.33	0.067361329	0.370286	0.486998
FOXD4	9p24.3	0.06735296	0.370346	0.487012
KDM3B	5q31.2	-0.06735296	0.370346	0.487012
NIPA1	15q11.2	0.067290189	0.370793	0.487568
FAM30A	14q32.33	-0.06726699	0.370958	0.487754
CHD1L	1q21.1	-0.067248342	0.371091	0.487896
IL3	5q31.1	-0.06724375	0.371124	0.487907
SERHL	22q13.2	0.067235788	0.371181	0.48795
GOLGA2P6	10p11.23	0.06721864	0.371303	0.488078
TMEM86B	19q13.42	0.067214864	0.37133	0.488082
HDDC3	15q26.1	0.06720231	0.371419	0.488167
MICAL2	11p15.3	0.067198125	0.371449	0.488174
CRYGD	2q33.3	-0.067176851	0.371601	0.488342
ARRDC3-AS	5q14.3	-0.067152093	0.371778	0.488542
CLHC1	2p16.1	-0.067139539	0.371867	0.488628
MRPS9	2q12.1	0.067129077	0.371942	0.488694
LMBR1L	12q13.12	-0.067116523	0.372032	0.488779
LINC01973	17q25.3	-0.067069234	0.37237	0.489191
ZNF688	16p11.2	0.067064214	0.372405	0.489206
SCAND1	20q11.23	0.067032829	0.37263	0.489468
TRIM43	2q11.1	-0.067018509	0.372732	0.489571
APBA3	19p13.3	0.067001444	0.372854	0.489699
REXO4	9q34.2	-0.066997259	0.372884	0.489702
OR52N1	11p15.4	-0.066994195	0.372906	0.489702
POU5F2	5q15	0.066973125	0.373057	0.489845
KHNYN	14q12	-0.066972151	0.373064	0.489845
TRPM1	15q13.3	-0.06695828	0.373163	0.489943
NOX1	Xq22.1	0.066939899	0.373294	0.490084
KCNQ1DN	11p15.4 1	0.066930599	0.373361	0.490084
MTHFD1L	6q25.1	0.066928211	0.373378	0.490084

POT1	7q31. 33	-0.066928211	0.373378	0.490084
MARCKS	6q21	-0.066926119	0.373393	0.490084
SIVA1	14q32. 33	0.066917749	0.373453	0.490131
LY6K	8q24. 3	-0.066901361	0.37357	0.490201
JAML	11q23. 3	-0.066901011	0.373573	0.490201
DRP2	Xq22. 1	-0.066899999	0.37358	0.490201
HIST1H4C	6p22. 2	-0.066888698	0.373661	0.490275
C200RF173	20q11. 22	-0.066860338	0.373864	0.490509
EXOC6B	2p13. 2	-0.066834055	0.374052	0.490724
SLC25A38	3p22. 1	-0.066815224	0.374187	0.490869
FFAR1	19q13. 12	-0.066804259	0.374266	0.490917
FBXL22	15q22. 31	-0.06680267	0.374277	0.490917
C1RL-AS1	12p13. 31	0.066796393	0.374322	0.490917
MPC2	1q24. 2	-0.066796393	0.374322	0.490917
SPSB4	3q23	-0.066790465	0.374365	0.490931
VPS36	13q14. 3	-0.066788023	0.374382	0.490931
MRGPRX3	11p15. 1	0.066782998	0.374418	0.490946
RNF13	3q25. 1	-0.066773377	0.374487	0.490999
NOL7	6p23	0.066769192	0.374517	0.490999
TMEM187	Xq28	0.0667671	0.374532	0.490999
TRPV2	17p11. 2	0.06675873	0.374592	0.491046
UBE2D1	10q21. 1	-0.066754546	0.374622	0.491053
LINC02209	8p12	-0.066725556	0.37483	0.491261
TTY11	Yp11. 2	0.066725556	0.37483	0.491261
LINC00894	Xq28	0.066677128	0.375178	0.491684
CCDC151	19p13. 2	-0.066670851	0.375223	0.491711
ODR4	1q31. 1	0.06666039	0.375298	0.491777
LRP5	11q13. 2	0.066643651	0.375418	0.491902
UBTFL1	11q14. 3	-0.066630001	0.375516	0.491976
UBE2D3	4q24	-0.066629004	0.375523	0.491976
FSTL5	4q32. 2	-0.066622748	0.375568	0.492002
CDK5RAP1	20q11. 21	0.066618542	0.375598	0.492009
AFDN-DT	6q27	0.066610173	0.375658	0.492056
QRICH1	3p21. 31	-0.066582972	0.375854	0.49228
DYRK1B	19q13. 2	0.066570418	0.375944	0.492366
ATF7	12q13. 13	-0.066551587	0.376079	0.492511
EIF2A	3q25. 1	0.066541125	0.376154	0.492577
ZNF586	19q13. 43	0.066526479	0.37626	0.49267
PPP2R2D	10q26. 3	-0.066524386	0.376275	0.49267
STK17A	7p13	-0.066520202	0.376305	0.492677
BCL11B	14q32. 2	-0.066419769	0.377028	0.493585
WDR33	2q14. 3	-0.066415584	0.377058	0.493585
RAB6C	2q21. 1	0.066413492	0.377073	0.493585
CHMP7	8p21. 3	0.066407214	0.377118	0.493612
NYX	Xp11. 4	-0.066396646	0.377194	0.493679
RAI14	5p13. 2	-0.066373737	0.377359	0.493863
UPF3B	Xq24	-0.066365367	0.377419	0.49391
FCH02	5q13. 2	0.066354906	0.377495	0.493925
CDK12	17q12	-0.066350721	0.377525	0.493925
MAPKAPK5	12q24. 12-	-0.066350721	0.377525	0.493925
MRPL20-AS1	1p36. 33	0.066348628	0.37754	0.493925
PGRMC1	Xq24	0.066344444	0.37757	0.493925
HCRTR1	1p35. 2	-0.066343119	0.37758	0.493925
NME4	16p13. 3	0.06632352	0.377721	0.494078

LILRA5	19q13. 42	-0. 066264934	0. 378143	0. 494598
RFPL1	22q12. 2	-0. 066243373	0. 378299	0. 494769
GOT1	10q24. 2	-0. 066195886	0. 378642	0. 495185
CALCA	11p15. 2	-0. 066185785	0. 378714	0. 495219
ZNF367	9q22. 32 c	-0. 066185425	0. 378717	0. 495219
MDP1	14q12	0. 0661373	0. 379065	0. 495641
UNC5A	5q35. 2	0. 066116377	0. 379216	0. 495806
BMP8B	1p34. 2	-0. 066112192	0. 379246	0. 495813
PPOX	1q23. 3	0. 066099638	0. 379337	0. 495899
IGBP1	Xq13. 1	0. 06607453	0. 379518	0. 496104
GUCD1	22q11. 23	-0. 066057791	0. 379639	0. 49623
ANKRD39	2q11. 2	0. 066049421	0. 3797	0. 496276
GPR156	3q13. 33	-0. 066017224	0. 379932	0. 496548
MDFIC	7q31. 1-qc	-0. 066009667	0. 379987	0. 496587
GRB2	17q25. 1	-0. 065976189	0. 380229	0. 496839
TMTC4	13q32. 3	0. 065976189	0. 380229	0. 496839
ULBP1	6q25. 1	-0. 065959485	0. 38035	0. 496964
RDH14	2p24. 2	-0. 065951081	0. 380411	0. 497011
UBR4	1p36. 13	-0. 065942711	0. 380472	0. 497058
FBP2	9q22. 32	0. 065936455	0. 380517	0. 497084
TFIP11	22q12. 1	0. 065905049	0. 380744	0. 497349
CDC42	1p36. 12	0. 065898772	0. 38079	0. 497376
OR1M1	19p13. 2	0. 06588625	0. 380881	0. 497462
RRH	4q25	-0. 065871525	0. 380987	0. 497569
HCK	20q11. 21	-0. 065854832	0. 381108	0. 497694
TOP1P1	1q24. 3	0. 065848555	0. 381154	0. 497721
DPPA3	12p13. 31	-0. 065827959	0. 381303	0. 497883
BTN3A1	6p22. 2	-0. 065800431	0. 381503	0. 498112
LIMS1	2q12. 3	-0. 065783692	0. 381624	0. 498238
IGFBP5	2q35	0. 065756492	0. 381821	0. 498463
C9ORF47	9q22. 1	-0. 065750558	0. 381864	0. 498486
DMC1	22q13. 1	0. 06573989	0. 381942	0. 498555
GGT1	22q11. 23	0. 065727199	0. 382034	0. 498642
NLRP8	19q13. 43	-0. 065687098	0. 382325	0. 49899
TAS2R41	7q35	0. 065673306	0. 382425	0. 499088
IQCF5	3p21. 2	0. 06566707	0. 38247	0. 499114
OR9I1	11q12. 1	-0. 065658082	0. 382536	0. 499167
ELOA2	18q21. 1	-0. 065652342	0. 382577	0. 499189
TUBG2	17q21. 2	0. 065641412	0. 382657	0. 49926
TMEM176A	7q36. 1	0. 065597472	0. 382976	0. 499631
RAB12	18p11. 22	-0. 06559538	0. 382991	0. 499631
MFSD6	2q32. 2	-0. 065543071	0. 383372	0. 500094
CCL15	17q12	0. 065484622	0. 383797	0. 500617
VN1R10P	6p22. 1	-0. 065477604	0. 383848	0. 50065
ILRUN	6p21. 31	-0. 065442638	0. 384102	0. 500917
CNTD1	17q21. 2-c	0. 065442638	0. 384102	0. 500917
ESPNL	2q37. 3	0. 065438488	0. 384133	0. 500924
TOMM7	7p15. 3	-0. 065423807	0. 38424	0. 501031
CYP4Z2P	1p33	0. 06541148	0. 384329	0. 501115
ACRV1	11q24. 2	0. 065405409	0. 384374	0. 50113
HEATR4	14q24. 3	-0. 065403035	0. 384391	0. 50113
CSMD2	1p35. 1	-0. 065352667	0. 384758	0. 50157
MN1	22q12. 1	-0. 065348482	0. 384788	0. 50157
MFSD12	19p13. 3	0. 06534639	0. 384804	0. 50157

TMSB15A	Xq22. 1	-0.065312912	0.385048	0.50182
ABCB7	Xq13. 3	-0.065312912	0.385048	0.50182
LINC00597	15q24. 3	0.065309763	0.385071	0.50182
KAT5	11q13. 1	0.065298265	0.385155	0.501896
HIF3A	19q13. 32	0.065285711	0.385246	0.501983
FABP9	8q21. 13	-0.065275	0.385324	0.502004
OR5H2	3q11. 2	-0.065275	0.385324	0.502004
ACSS1	20p11. 21	-0.065273157	0.385338	0.502004
ZFAT-AS1	8q24. 22	-0.06522032	0.385723	0.502474
PVALB	22q12. 3	0.065195494	0.385905	0.502677
SLC44A5	1p31. 1	-0.065181093	0.38601	0.502781
LMX1B	9q33. 3	-0.065174953	0.386055	0.502807
CCL1	17q12	-0.065160873	0.386157	0.502908
WASH3P	15q26. 3	0.065155985	0.386193	0.502922
OOSP2	11q12. 1	0.065148579	0.386247	0.502959
OLFML2B	1q23. 3	-0.065143431	0.386285	0.502976
HACD3	15q22. 31	-0.065109953	0.386529	0.503261
PEX10	1p36. 32	0.065091122	0.386667	0.503408
TRPC4AP	20q11. 22	0.065066014	0.386851	0.503614
COL23A1	5q35. 3	-0.065061863	0.386881	0.503621
NREP	5q22. 1	0.065047183	0.386988	0.503728
RNF148	7q31. 32	-0.065038401	0.387053	0.503778
RBFA	18q23	-0.065032536	0.387096	0.503786
DUXA	19q13. 43	-0.065030716	0.387109	0.503786
HIST1H2BM	6p22. 1	0.065024654	0.387153	0.503811
KRT25	17q21. 2	-0.064993181	0.387384	0.504078
WFDC9	20q13. 12	0.064977079	0.387501	0.504195
POTEM	14q11. 2	0.06497395	0.387524	0.504195
RCVRN	17p13. 1	-0.064954216	0.387669	0.504351
DARS2	1q25. 1	0.064942565	0.387754	0.504429
GADD45B	19p13. 3	-0.064919549	0.387923	0.504615
FM05	1q21. 1	0.064915364	0.387953	0.504622
SIX3	2p21	-0.064894464	0.388107	0.504788
EDC4	16q22. 1	0.064873517	0.38826	0.504942
NCAPG2	7q36. 3	0.064871425	0.388275	0.504942
NCK2	2q12. 2	0.064837947	0.388521	0.505229
C10RF140	1q41	-0.064834213	0.388548	0.505231
TMEM126B	11q14. 1	0.064812839	0.388705	0.505402
POLR3K	16p13. 3	0.064802377	0.388782	0.505469
RNF24	20p13	-0.0647961	0.388828	0.505496
XK	Xp21. 1	0.06478773	0.388889	0.505543
CLMN	14q32. 13	0.064766807	0.389043	0.505677
TPRN	9q34. 3	0.064766807	0.389043	0.505677
CD37	19q13. 33	-0.064747976	0.389181	0.505795
SNORA79	14q31. 1	-0.064747525	0.389184	0.505795
SLC26A8	6p21. 31	0.064695432	0.389567	0.506259
GUCY2C	12p12. 3	-0.064651727	0.389888	0.506643
PPBP	4q13. 3	0.064614352	0.390162	0.506966
OR2T5	1q44	-0.064611051	0.390187	0.506966
HP1BP3	1p36. 12	-0.064591049	0.390334	0.507124
PTPA	9q34. 11	0.06457431	0.390457	0.507251
LIN7B	19q13. 33	-0.064570125	0.390487	0.507258
NAA15	4q31. 1	-0.064551294	0.390626	0.507379
GNG8	19q13. 32	0.064548016	0.39065	0.507379

EPS15L1	19p13.11	0.064547109	0.390657	0.507379
LINC00632	Xq27.1	-0.064540256	0.390707	0.507411
PSD2	5q31.2	0.06453685	0.390732	0.507411
LRRC71	1q23.1	0.064509644	0.390932	0.507638
G6PC2	2q31.1	-0.064444277	0.391414	0.50823
PDP1	8q22.1	0.064438307	0.391458	0.508254
C16ORF82	16p12.1	-0.0644293	0.391524	0.508307
NFATC4	14q12	0.064383906	0.391858	0.508703
DCUN1D2	13q34	0.064379721	0.391889	0.508703
GRIN2B	12p13.1	-0.064377538	0.391905	0.508703
PLEKHG7	12q22	-0.064367167	0.391982	0.508769
SIGLEC9	19q13.41	-0.064308581	0.392414	0.509297
SHC2	19p13.3	0.064298119	0.392491	0.509364
ZNF790	19q13.12	-0.064291842	0.392537	0.509391
RRN3	16p13.11	-0.06428138	0.392614	0.509458
SDHB	1p36.13	0.064273011	0.392676	0.50949
LRGUK	7q33	-0.064270918	0.392692	0.50949
DEFA1B	8p23.1	-0.064267716	0.392715	0.50949
LIMS3	2q13	-0.064254179	0.392815	0.509586
DHRX	Xp22.33	-0.064239533	0.392923	0.509647
IGSF6	16p12.2	-0.06423852	0.392931	0.509647
HNRNPUL1	19q13.2	-0.064237441	0.392939	0.509647
GSDMA	17q21.1	-0.064222929	0.393046	0.509753
SLC26A1	4p16.3	0.06421024	0.39314	0.509842
GCSAML-AS1	1q44	-0.064195133	0.393251	0.509953
SLC4A5	2p13.1	-0.064187224	0.39331	0.509996
ENKUR	10p12.1	0.064168393	0.393449	0.510143
SEMA4A	1q22	-0.064149562	0.393588	0.510264
TRPC3	4q27	-0.064146591	0.39361	0.510264
THSD7B	2q22.1	0.06414541	0.393618	0.510264
GABRR3	3q11.2	-0.064087726	0.394045	0.510784
WNK1	12p13.33	0.064042851	0.394377	0.511181
DBR1	3q22.3	-0.064028205	0.394485	0.511288
POLD2	7p13	0.064021928	0.394532	0.511315
PURG	8p12	-0.064013558	0.394594	0.511362
BNIP1	1q21.3	0.063986358	0.394795	0.51159
MYL6B	12q13.2	-0.06396125	0.394981	0.511798
DCXR	17q25.3	0.063938234	0.395151	0.511979
ZNF584	19q13.43	-0.063934049	0.395182	0.511979
RALGPS1	9q33.3	-0.063931957	0.395198	0.511979
HOGA1	10q24.2	-0.063902664	0.395415	0.512227
STOML3	13q13.3	-0.063895198	0.39547	0.512261
TOX3	16q12.1	0.063892202	0.395492	0.512261
FAM13A	4q22.1	-0.063883832	0.395554	0.512308
LOC650293	4p16.1	-0.063863578	0.395704	0.51247
EIF4A3	17q25.3	0.063856632	0.395756	0.512503
SPAG11B	8p23.1	0.063849203	0.395811	0.512541
CYP26C1	10q23.33	0.063809031	0.396109	0.512866
TOMM20	1q42.3	0.063808508	0.396113	0.512866
TMEM185B	2q14.2	0.063800138	0.396175	0.512913
C5ORF22	5p13.3	-0.063791769	0.396237	0.51296
BFSP2	3q22.1	-0.063760608	0.396468	0.513226
SFRP2	4q31.3	-0.063737367	0.396641	0.513416
PIGH	14q24.1	-0.063708074	0.396858	0.513661

LYG2	2q11. 2	-0. 063705014	0. 396881	0. 513661
BCYRN1	2p21	-0. 063694323	0. 39696	0. 51373
PGAM2	7p13	-0. 063670412	0. 397138	0. 513927
NLRP14	11p15. 4	-0. 063655055	0. 397252	0. 514041
SKINT1L	1p33	0. 063638658	0. 397374	0. 514165
KLF17	1p34. 1	-0. 063621236	0. 397503	0. 5143
DNLZ	9q34. 3	0. 063613918	0. 397558	0. 514337
PLCD4	2q35	-0. 063601364	0. 397651	0. 514424
DHRS4L2	14q11. 2	0. 063592995	0. 397713	0. 514471
LCN12	9q34. 3	-0. 063546963	0. 398056	0. 514881
PSMD12	17q24. 2	0. 063536501	0. 398134	0. 514948
KDM7A-DT	7q34	0. 063526039	0. 398211	0. 515016
FCGBP	19q13. 2	-0. 063511393	0. 39832	0. 515123
POU1F1	3p11. 2	0. 063505588	0. 398364	0. 515146
ELOVL3	10q24. 32	0. 063497444	0. 398424	0. 51516
GLUD2	Xq24	-0. 063492562	0. 398461	0. 51516
PCED1B-AS1	12q13. 11	-0. 063492562	0. 398461	0. 51516
ITLN1	1q23. 3	0. 063490261	0. 398478	0. 51516
TCERG1L	10q26. 3	-0. 063484486	0. 398521	0. 515182
SLC7A9	19q13. 11	-0. 063471771	0. 398615	0. 515271
CCT6P1	7q11. 21	0. 06344653	0. 398803	0. 515481
CD72	9p13. 3	-0. 063421422	0. 39899	0. 515689
SLC14A1	18q12. 3	0. 063400498	0. 399146	0. 515818
WIF1	12q14. 3	0. 063400379	0. 399147	0. 515818
INTS4P1	7q11. 21	0. 063394221	0. 399193	0. 515818
ZNF518A	10q24. 1	0. 063394221	0. 399193	0. 515818
TIMM44	19p13. 2	0. 063354466	0. 399489	0. 516167
DDX11L2	2q14. 1	0. 063323081	0. 399723	0. 516403
SNX29P2	16p11. 2	0. 063323081	0. 399723	0. 516403
S1PR3	9q22. 1	-0. 063312619	0. 399801	0. 51647
LPGAT1	1q32. 3	-0. 063297973	0. 399911	0. 516578
EXD1	15q15. 1	0. 063286192	0. 399999	0. 516658
PTH2R	2q34	-0. 063276054	0. 400074	0. 516723
CNOT1	16q21	-0. 06326868	0. 400129	0. 51676
H2BFXP	Xq22. 2	-0. 063227978	0. 400433	0. 517119
SCARNA20	17q23. 2	0. 063220557	0. 400488	0. 517157
VXN	8q13. 1	-0. 063195447	0. 400676	0. 517366
SPATA31A	9p11. 2	0. 063185523	0. 40075	0. 517428
GAST	17q21. 2	0. 063179847	0. 400793	0. 51745
METTTL9	16p12. 2	-0. 063172431	0. 400848	0. 517488
MON1B	16q23. 1	0. 063166154	0. 400895	0. 517502
ZNF552	19q13. 43	0. 063164062	0. 40091	0. 517502
PXDC1	6p25. 2	0. 063141046	0. 401082	0. 51769
CFHR3	1q31. 3	0. 063136673	0. 401115	0. 517699
FGF16	Xq21. 1	-0. 063096217	0. 401418	0. 518056
CERCAM	9q34. 11	-0. 063090829	0. 401458	0. 518061
RNASEH2C	11q13. 1	0. 063088737	0. 401473	0. 518061
PON3	7q21. 3	-0. 06308246	0. 40152	0. 518088
QPCT	2p22. 2	-0. 063065721	0. 401646	0. 518216
CHRN4	15q25. 1	0. 063034665	0. 401878	0. 518419
ACER3	11q13. 5	-0. 063034336	0. 40188	0. 518419
DCLRE1B	1p13. 2	-0. 063034336	0. 40188	0. 518419
C8ORF33	8q24. 3	-0. 063019689	0. 40199	0. 518527
APOBEC3A	22q13. 1	-0. 063000858	0. 402131	0. 518675

GLTP	12q24.11	-0.062990396	0.402209	0.518743
LOC44145E	9q22.33	-0.062966367	0.402389	0.518941
SENP2	3q27.2	-0.062952734	0.402491	0.519039
PLTP	20q13.12	-0.062938087	0.402601	0.519147
LRRC74B	22q11.21	-0.062931993	0.402647	0.519173
LINC0030E	18q22.1	-0.062927194	0.402682	0.519186
GPR150	5q15	-0.062900544	0.402882	0.519377
HERC2P2	15q11.2	0.062900425	0.402883	0.519377
PARP6	15q23	0.062858578	0.403197	0.519748
ATF5	19q13.33	0.062848116	0.403275	0.519796
SPRYD4	12q13.3	-0.062839746	0.403338	0.519796
ZNF385A	12q13.13	0.062839746	0.403338	0.519796
RPA4	Xq21.33	0.062839719	0.403338	0.519796
GPR143	Xp22.2	0.062833502	0.403385	0.519823
SAA3P	11p15.1	-0.062829379	0.403416	0.519829
NFU1	2p13.3	-0.062818823	0.403495	0.519871
SPOUT1	9q34.11	0.06281673	0.40351	0.519871
RAG1	11p12	0.062814638	0.403526	0.519871
METTL4	18p11.32	-0.062772791	0.40384	0.520242
NSUN4	1p33	-0.06274559	0.404044	0.520471
CFAP157	9q34.11	-0.062741406	0.404076	0.520478
ADRA2C	4p16.3	-0.062714205	0.40428	0.520708
ATP5MC2	12q13.13	0.062707928	0.404327	0.520735
LSM14B	20q13.33	-0.062699591	0.40439	0.520782
REEP5	5q22.2	-0.062687004	0.404484	0.52087
CD80	3q13.33	0.06268282	0.404516	0.520877
CEACAM21	19q13.2	-0.062672358	0.404594	0.520935
TNFRSF13E	17p11.2	-0.062669853	0.404613	0.520935
C2ORF81	2p13.1	0.062651434	0.404751	0.52108
TAF7L	Xq22.1	0.062639883	0.404838	0.521158
DUSP28	2q37.3	0.062624234	0.404956	0.521276
SUPT3H	6p21.1	-0.06261168	0.40505	0.521337
NCF1C	7q11.23	-0.062607528	0.405081	0.521337
CDAN1	15q15.2	-0.062607495	0.405082	0.521337
OR2A5	7q35	0.062603927	0.405108	0.521338
ALDH18A1	10q24.1	-0.062590756	0.405207	0.521432
CASC4	15q15.3	-0.062574017	0.405333	0.521527
MAP3K21	1q42.2	-0.062574017	0.405333	0.521527
GDPD4	11q13.5	-0.062562854	0.405417	0.521601
TRIAP1	12q24.31	-0.062557278	0.405459	0.521622
DDX55	12q24.31	-0.062544724	0.405554	0.521709
EAPP	14q13.1	-0.062523833	0.405711	0.521878
NEB	2q23.3	-0.062511246	0.405806	0.521886
GPAT3	4q21.23	-0.062509154	0.405821	0.521886
EIF2S1	14q23.3	0.062507062	0.405837	0.521886
RAB6D	2q21.1	-0.062504969	0.405853	0.521886
GPC5	13q31.3	-0.062503041	0.405867	0.521886
CNPY3	6p21.1	-0.062498725	0.4059	0.521886
SGCA	17q21.33	0.062498692	0.4059	0.521886
FMNL1	17q21.31	-0.062490323	0.405963	0.521934
IL12RB1	19p13.11	-0.062486138	0.405994	0.521941
CCDC198	14q22.3	0.06245266	0.406247	0.522218
CXORF40B	Xq28	-0.062450568	0.406262	0.522218
LOC44004C	11p11.12	-0.062437857	0.406358	0.522307

LAMC3	9q34. 12	-0.062412906	0.406546	0.522502
DUT	15q21. 1	0.062410813	0.406562	0.522502
KCNC4	1p13. 3	0.062396167	0.406672	0.522523
GRM2	3p21. 2	-0.062390969	0.406711	0.522523
TMEM91	19q13. 2	0.06238989	0.406719	0.522523
CAMP	3p21. 31	0.062389246	0.406724	0.522523
ADGRA3	4p15. 2	0.062387797	0.406735	0.522523
LAPTM5	1p35. 2	-0.062387797	0.406735	0.522523
C2CD4D-AS1	1q21. 3	-0.062379159	0.4068	0.522573
CSHL1	17q23. 3	-0.062373889	0.40684	0.522591
PBX2	6p21. 32	-0.062368966	0.406877	0.522605
NPY	7p15. 3	-0.062364206	0.406913	0.522617
MYF5	12q21. 31	-0.06235823	0.406958	0.522641
PDHA2	4q22. 3	0.062335081	0.407133	0.522832
REG3A	2p12	-0.062303829	0.407368	0.523101
CNTN3	3p12. 3	-0.062289457	0.407477	0.523173
IRF8	16q24. 1	-0.062289457	0.407477	0.523173
CDX1	5q32	0.06228331	0.407523	0.523199
ORMDL3	17q21. 1	0.062258104	0.407713	0.52341
NPRL2	3p21. 31	0.062232963	0.407903	0.523619
U2AF2	19q13. 42	0.062222501	0.407982	0.523687
SNORA71A	20q11. 23	0.062210563	0.408072	0.523769
TPGS2	18q12. 2	-0.062172285	0.408361	0.524107
GCCR	17q25. 3	0.062161915	0.408439	0.524141
APCDD1	18p11. 22	0.062161823	0.40844	0.524141
APOBEC2	6p21. 1	-0.062153811	0.408501	0.524185
CYLC2	9q31. 1	-0.062149391	0.408534	0.524194
ATG12	5q22. 3	0.062128345	0.408693	0.524331
NAA40	11q13. 1	-0.062128345	0.408693	0.524331
C1GALT1C1	12p21	-0.062106408	0.408859	0.52451
PGBD4	15q14	-0.062094867	0.408946	0.524588
MPO	17q22	-0.062070084	0.409133	0.524717
EGR4	2p13. 2	0.062069889	0.409135	0.524717
MFAP5	12p13. 31	0.062069759	0.409136	0.524717
NMD3	3q26. 1	0.062067667	0.409152	0.524717
CLEC19A	16p12. 3	0.062055455	0.409244	0.524802
DCSTAMP	8q22. 3	0.062046743	0.40931	0.524846
COL2A1	12q13. 11	-0.062043944	0.409331	0.524846
BCL2L10	15q21. 2	-0.061990006	0.409739	0.525336
PEAK3	19p13. 3	-0.061983973	0.409785	0.525361
ZNF480	19q13. 41	0.061950495	0.410038	0.525643
CHI3L1	1q32. 1	0.06194631	0.41007	0.525643
OR9A4	7q34	-0.061944416	0.410084	0.525643
METTL1	12q14. 1	0.061931664	0.410181	0.525713
TBXT	6q27	-0.061930276	0.410191	0.525713
CLDN2	Xq22. 3	0.061923294	0.410244	0.525747
MRT04	1p36. 13	0.061919109	0.410276	0.525754
TLL2	10q24. 1	-0.061887724	0.410514	0.526025
BAGE	21p11. 1	-0.061883825	0.410543	0.526029
ODF3L2	19p13. 3	-0.061855546	0.410758	0.52627
HHIPL1	14q32. 2	0.061843785	0.410847	0.526351
CD200R1L	3q13. 2	-0.061834539	0.410917	0.526407
CROCC	1p36. 13	0.061824953	0.41099	0.526466
OR13C3	9q31. 1	-0.061817921	0.411043	0.526501

FUT5	19p13.3	0.061802902	0.411157	0.526613
LINC00917	16q24.1	0.061795	0.411217	0.526656
UCKL1-AS1	20q13.33	-0.061772645	0.411386	0.526839
SDS	12q24.13	0.061766367	0.411434	0.52686
ELSPBP1	19q13.33	0.06176174	0.411469	0.52686
PARVA	11p15.3	-0.06176009	0.411482	0.52686
SNORA80A	21q22.11	-0.061754738	0.411522	0.526878
ANOS1	Xp22.31	-0.061749629	0.411561	0.526894
TTL8	22q13.33	-0.061734935	0.411672	0.527003
ZFAT	8q24.22	-0.061728705	0.41172	0.52703
USP14	18p11.32	-0.061716151	0.411815	0.527104
EDN1	6p24.1	0.061714059	0.411831	0.527104
RPL4	15q22.31	-0.06169732	0.411958	0.527233
LOC100132	Xp11.4	-0.061689259	0.412019	0.527278
MT1H	16q13	-0.061677525	0.412108	0.527358
C200RF96	20p13	-0.061670119	0.412165	0.527396
FAM74A1	9p12	-0.061643232	0.412369	0.527624
IQGAP2	5q13.3	-0.061632457	0.412451	0.527695
SENP5	3q29	-0.06162618	0.412498	0.527722
ART5	11p15.4	0.061614994	0.412583	0.527754
PIGA	Xp22.2	0.061613625	0.412594	0.527754
NPW	16p13.3	-0.061612529	0.412602	0.527754
ABCD1	Xq28	0.061605256	0.412657	0.527757
NDUFS6	5p15.33	0.061605256	0.412657	0.527757
MMAB	12q24.11	-0.061527839	0.413246	0.528476
OR6S1	14q11.2	-0.061512663	0.413361	0.528589
IGFBP7	4q12	-0.061506915	0.413405	0.528598
TMEM60	7q11.23	-0.061504823	0.413421	0.528598
KIF20B	10q23.31	0.061490176	0.413532	0.528707
AZIN1	8q22.3	-0.061465068	0.413724	0.528917
OPTC	1q32.1	0.061429368	0.413995	0.529224
SOHLH2	13q13.3	0.061426571	0.414017	0.529224
CENPN	16q23.2	0.061421129	0.414058	0.52923
LINC01547	21q22.3	0.061419036	0.414074	0.52923
MAGEA8	Xq28	0.061400264	0.414217	0.529379
MRPL33	2p23.2	-0.061385559	0.414329	0.529488
ZCRB1	12q12	-0.061373004	0.414425	0.529576
ATP11A	13q34	0.061358358	0.414536	0.529685
PIANP	12p13.31	0.06134479	0.41464	0.529783
NEPRO	3q13.2	-0.061312326	0.414887	0.530052
TBX19	1q24.2	0.061310234	0.414903	0.530052
C200RF144	20q11.22	-0.061299493	0.414985	0.530123
SAV1	14q22.1	-0.061276756	0.415158	0.530311
OXER1	2p21	-0.06125374	0.415334	0.530487
PDPN	1p36.21	-0.061251648	0.41535	0.530487
NTNG1	1p13.3	-0.061230852	0.415509	0.530656
MRPL50	9q31.1	-0.061226539	0.415541	0.530664
CPB1	3q24	-0.061220337	0.415589	0.530671
ZFP57	6p22.1	-0.061218096	0.415606	0.530671
PF4V1	4q13.3	0.061212586	0.415648	0.530671
EPHX1	1q42.12	-0.061211893	0.415653	0.530671
MAGEA4	Xq28	-0.061204594	0.415709	0.530685
EXOSC6	16q22.1	0.061203524	0.415717	0.530685
PI4KAP2	22q11.21	0.061184692	0.415861	0.530835

ICOSLG	21q22.3	-0.061140753	0.416196	0.531195
LEKR1	3q25.31	-0.061140753	0.416196	0.531195
BORCS8	19p13.11	0.061136568	0.416228	0.531202
PCDHGB5	5q31.3	-0.061096813	0.416532	0.531556
GRIP1	12q14.3	-0.061086352	0.416612	0.531624
PDC	1q31.1	0.061076588	0.416687	0.531685
OR4D10	11q12.1	-0.06105157	0.416878	0.531866
SDR9C7	12q13.3	-0.061051058	0.416882	0.531866
KRT31	17q21.2	0.061043486	0.41694	0.531906
TAAR6	6q23.2	0.061024375	0.417086	0.532059
OR2M1P	1q44	-0.061013449	0.417169	0.532131
UBE2D2	5q31.2	-0.06100475	0.417236	0.532182
ZNF837	19q13.43	0.060992196	0.417332	0.532271
CHRNA4	20q13.33	-0.060952668	0.417635	0.532598
NCAPD2	12p13.31	-0.060950348	0.417652	0.532598
RPS23	5q14.2	-0.060948256	0.417668	0.532598
SNORA69	Xq24	0.060923334	0.417859	0.532807
DOC2A	16p11.2	0.060910594	0.417957	0.532897
HSPA5	9q33.3	-0.060885485	0.418149	0.533101
SLITRK6	13q31.1	-0.060881301	0.418181	0.533101
CAPN11	6p21.1	-0.060879336	0.418196	0.533101
PTGES2	9q34.11	0.060870839	0.418261	0.533149
CAT	11p13	-0.060864562	0.418309	0.533165
DRAXIN	1p36.22	0.06086231	0.418326	0.533165
DLX1	2q31.1	-0.060854168	0.418389	0.533197
ATAD5	17q11.2	0.060852008	0.418405	0.533197
PP2D1	3p24.3	0.060842117	0.418481	0.53326
CCDC103	17q21.31	-0.060822715	0.41863	0.533415
CXCL6	4q13.3	0.060808195	0.418741	0.533523
MCM3	6p12.2	0.060755759	0.419143	0.534001
SNORD10	17p13.1	-0.060740724	0.419258	0.534114
HOXC13	12q13.13	-0.060734146	0.419309	0.534145
EFL1	15q25.2	0.060707635	0.419512	0.53437
ZNF572	8q24.13	-0.060699266	0.419577	0.534417
PQBP1	Xp11.23	0.060665788	0.419834	0.534697
C7ORF13	7q36.3	-0.060663696	0.41985	0.534697
MED21	12p11.23	-0.060659511	0.419882	0.534704
KLF8	Xp11.21	-0.060644864	0.419994	0.534813
CFAP299	4q21.21	-0.060626732	0.420133	0.534956
KBTBD13	15q22.31	0.060621741	0.420172	0.534971
PAN3	13q12.2	0.060607202	0.420283	0.535079
POC5	5q13.3	-0.060586278	0.420444	0.535216
SIRT3	11p15.5	0.060586278	0.420444	0.535216
ZNF878	19p13.2	-0.060580793	0.420486	0.535235
PIGW	17q12	0.060571632	0.420557	0.535291
MRGPRG-AS1	11p15.4	-0.060566314	0.420598	0.535309
DICER1-AS1	14q32.13	0.060550708	0.420718	0.535427
PAGE4	Xp11.23	0.060544591	0.420765	0.535453
HORMAD2	22q12.2	-0.060519679	0.420956	0.535662
LILRA6	19q13.42	-0.060508861	0.421039	0.535734
ZNF3	7q22.1	0.060492122	0.421168	0.535864
ADAM11	17q21.31	-0.060485877	0.421216	0.535891
SPDYE2	7q22.1	-0.060470183	0.421337	0.53601
H3F3AP5	Xp11.22	-0.060466558	0.421365	0.536012

U2SURP	3q23	0.06045446	0.421458	0.536096
CCL28	5p12	0.060447168	0.421514	0.536133
OR2G6	1q44	0.060430515	0.421642	0.536262
ANAPC10	4q31.21	-0.060366581	0.422134	0.536854
FGFR2	10q26.13	-0.060358211	0.422199	0.536902
ZNRF4	19p13.3	-0.060343144	0.422315	0.537015
LCTL	15q22.31	-0.060324525	0.422458	0.537163
PPP1R2C	Xp11.3	-0.060317297	0.422514	0.537179
NXPE2	11q23.2-c	-0.060314608	0.422535	0.537179
PRSS58	7q34	-0.060312514	0.422551	0.537179
SULT4A1	22q13.31	-0.060301844	0.422633	0.537249
DZANK1	20p11.23	-0.060289164	0.422731	0.537339
STT3A	11q24.2	-0.060284979	0.422763	0.537346
PARK7	1p36.23	-0.060266148	0.422908	0.537496
TPPP2	14q11.2	-0.060225981	0.423218	0.537856
TUBB4A	19p13.3	-0.060153161	0.42378	0.538536
CAV1	7q31.2	0.060142699	0.423861	0.538604
GDA	9q21.13	0.06012076	0.42403	0.538785
LYSMD1	1q21.3	0.060096667	0.424216	0.538987
TSPAN6	Xq22.1	-0.060075743	0.424378	0.539158
LRMP	12p12.1	-0.060056912	0.424523	0.539298
GPR88	1p21.2	-0.060054487	0.424542	0.539298
IRAK3	12q14.3	-0.060044358	0.42462	0.539363
SPPL3	12q24.31	-0.060031804	0.424717	0.539452
CAMSAP2	1q32.1	-0.059985772	0.425073	0.53987
ACSM4	12p13.31	-0.059978529	0.425129	0.539899
CNMD	13q14.3	-0.059975846	0.42515	0.539899
GSTM5	1p13.3	-0.059958571	0.425283	0.540034
AGAP6	10q11.23	0.059933463	0.425478	0.540247
LINC0095C	9p13.3	-0.059923033	0.425558	0.540315
ACAD10	12q24.12	-0.059908355	0.425672	0.540424
TMEM33	4p13	0.059902078	0.42572	0.540424
LINC0051E	5p21q21.3	0.059901444	0.425725	0.540424
SCNN1D	1p36.33	0.059889524	0.425818	0.540507
DCAF6	1q24.2	-0.059879062	0.425899	0.540575
CYB5R1	1q32.1	0.0598686	0.42598	0.540644
OBSCN	1q42.13	0.059853954	0.426093	0.540753
SEL1L2	20p12.1	-0.059847134	0.426146	0.540786
CD101	1p13.1	-0.059824661	0.42632	0.540959
GALNT18	11p15.4	-0.059822568	0.426336	0.540959
AACSP1	5q35.3	-0.059817954	0.426372	0.54097
SERPIND1	22q11.21	-0.059803768	0.426482	0.541075
ZNF563	19p13.2	-0.059791183	0.426579	0.541164
SUSD3	9q22.31	-0.059780721	0.42666	0.541233
SPATA19	11q25	0.059767129	0.426766	0.541332
CABS1	4q13.3	0.059761887	0.426806	0.541349
ZNF443	19p13.2	0.059747243	0.42692	0.541459
DHX16	6p21.33	0.059743059	0.426952	0.541465
ZBTB1	14q23.3	-0.059736782	0.427001	0.541493
BMP8A	1p34.3	0.059709581	0.427212	0.541726
PTER	10p13	0.059697027	0.427309	0.541815
FAM161B	14q24.3	-0.05968238	0.427423	0.541925
S100A7	1q21.3	0.05967567	0.427475	0.541956
HNRNPA1	12q13.13	-0.059665641	0.427553	0.54202

AGK	7q34	-0.059648903	0.427683	0.542116
LRIF1	1p13.3	-0.059648903	0.427683	0.542116
LYZL2	10p11.23	0.059644786	0.427714	0.542122
MTG1	10q26.3	0.059634256	0.427796	0.542192
LHCGR	2p16.3	-0.059587646	0.428158	0.542616
TOR1B	9q34.11	-0.059579855	0.428219	0.542658
ICAM1	19p13.2	-0.059569393	0.4283	0.542727
FAM71C	12q23.1	-0.059553561	0.428423	0.542848
CCDC82	11q21	-0.059529638	0.428609	0.543049
LINC0261C	2q37.3	-0.059498377	0.428852	0.543323
NPBWR1	8q11.23	0.059479119	0.429001	0.543437
BCAS2	1p13.2	-0.059473145	0.429048	0.543437
OR5D18	11q12.1	0.059472778	0.429051	0.543437
TTY21	Yp11.2	0.059472778	0.429051	0.543437
KHDC3L	6q13	0.059461306	0.42914	0.543499
PRR23A	3q23	0.059459478	0.429154	0.543499
RSU1P2	10q11.21	-0.059455263	0.429187	0.543506
FAM201A	9p13.1	0.059448036	0.429243	0.543508
RARB	3p24.2	0.059448036	0.429243	0.543508
KIAA0040	1q25.1	0.059441759	0.429292	0.543536
CRYGN	7q36.1	0.059415132	0.429499	0.543763
CCN5	20q13.12	-0.05938945	0.429699	0.543982
MAPKAPK2	1q32.1	-0.059383173	0.429747	0.544002
FER1L5	2q11.2	-0.059377899	0.429789	0.544002
SNORA84	9q22.31	0.059376934	0.429796	0.544002
OGG1	3p25.3	0.05932668	0.430187	0.544463
MS4A12	11q12.2	0.059304509	0.43036	0.544641
RHEB	7q36.1	0.059301571	0.430383	0.544641
CPLX4	18q21.32	-0.059254777	0.430747	0.545067
ZNF672	1q44	-0.059251355	0.430774	0.545067
EIF5B	2q11.2	-0.05924717	0.430807	0.545074
CIB2	15q25.1	-0.059238801	0.430872	0.545122
SFI1	22q12.2	0.059226247	0.43097	0.545211
GPD1L	3p22.3	0.059205323	0.431133	0.545383
MAF1	8q24.3	0.059178122	0.431345	0.545582
RAB31	18p11.22	-0.059178122	0.431345	0.545582
FBX047	17q12 17c	0.059167398	0.431428	0.545653
SIDT1	3q13.2	-0.059163476	0.431459	0.545658
PCSK1N	Xp11.23	-0.05913209	0.431704	0.545933
OR7D2	19p13.2	-0.059119421	0.431803	0.546008
FSD1	19p13.3	-0.059117444	0.431818	0.546008
MT1L	16q13	-0.059103875	0.431924	0.546084
FAM155A	13q33.3	-0.059102797	0.431932	0.546084
FUCA1	1p36.11	0.059086059	0.432063	0.546214
LINC0090E	19p13.12	-0.059058902	0.432275	0.546448
FGFR10P	6q27	-0.059012826	0.432635	0.546868
MAB21L1	13q13.3	-0.059001473	0.432724	0.546945
C7ORF33	7q36.1	-0.058941963	0.433189	0.547499
EMILIN1	2p23.3	0.058881008	0.433665	0.548052
ATP1A1	1p13.1	0.058878915	0.433682	0.548052
SAFB	19p13.3	-0.058851715	0.433895	0.548259
ATP13A2	1p36.13	-0.05884753	0.433927	0.548259
DUSP22	6p25.3	-0.05884753	0.433927	0.548259
CENPP	9q22.31	-0.058822422	0.434124	0.548424

COPB1	11p15.2	-0.058820329	0.43414	0.548424
DDX19A	16q22.1	-0.058820329	0.43414	0.548424
DEFB119	20q11.21	-0.058806985	0.434245	0.548521
PTPN4	2q14.2	0.058780575	0.434451	0.548748
LINC011012	2q14.2	-0.058776916	0.43448	0.548749
SPRR2G	1q21.3	0.058769451	0.434539	0.548788
ZFH4-AS1	8q21.13	-0.058743667	0.43474	0.549009
ACOT6	14q24.3	-0.058737013	0.434793	0.54904
SPIN2B	Xp11.21	0.058721989	0.43491	0.549154
MRGPRF	11q13.3	-0.058698973	0.435091	0.549347
RAB32	6q24.3	0.058680141	0.435238	0.549498
SYTL3	6q25.3	-0.058621555	0.435698	0.550043
HEXA	15q23	-0.058602724	0.435845	0.550195
EHMT1	9q34.3	-0.058594355	0.435911	0.550243
GLDN	15q21.2	0.058551492	0.436247	0.550633
DHX37	12q24.31	-0.058508568	0.436584	0.551024
STEAP1B	7p15.3	0.058441613	0.43711	0.551653
GPATCH8	17q21.31	-0.058437428	0.437143	0.551659
SPNS2	17p13.2	0.058414412	0.437324	0.551853
IL17RB	3p21.1	-0.058399766	0.437439	0.551963
ALDH8A1	6q23.3	-0.058387212	0.437538	0.552053
FKBP4	12p13.33	0.05836838	0.437686	0.552205
C10RF50	1p34.2	0.058343272	0.437883	0.552419
C19ORF57	19p13.12	0.058328656	0.437998	0.552529
LGI4	19q13.12	-0.058311887	0.43813	0.552647
SLC4A3	2q35	-0.058309794	0.438147	0.552647
PCDHB7	5q31.3	-0.058303517	0.438196	0.552674
CSK	15q24.1	0.058274224	0.438427	0.55293
LY6G6F	6p21.33	0.058264375	0.438504	0.552993
PPP1R18	6p21.33	0.058259578	0.438542	0.553006
ZNF202	11q24.1	-0.058251239	0.438608	0.553031
CPT1A	11q13.3	-0.058249116	0.438624	0.553031
TNFRSF17	16p13.13	-0.058246465	0.438645	0.553031
SLC47A2	17p11.2	-0.058222443	0.438834	0.553235
SLC3A1	2p21	0.058213546	0.438904	0.553288
NDUFA4L2	12q13.3	0.058196807	0.439036	0.553419
CIZ1	9q34.11	-0.058163329	0.4393	0.553717
TDRD1	10q25.3	-0.058135624	0.439518	0.553957
SAMD7	3q26.2	-0.058126368	0.439591	0.553986
PMS2P4	7q11.21	-0.058125667	0.439597	0.553986
OR4S1	11p11.2	0.05811735	0.439663	0.554034
ARHGDI3	16p13.3	-0.058104206	0.439766	0.55413
OLIG1	21q22.11	-0.058097238	0.439821	0.554164
ACTN2	1q43	-0.058079665	0.43996	0.554304
PPP2R3B	Xp22.33	-0.058069173	0.440042	0.554373
HLA-DRB5	6p21.32	-0.058037788	0.44029	0.55465
AK5	1p31.1	-0.058025234	0.440389	0.554735
NEUROD6	7p14.3	0.058022222	0.440413	0.554735
DCAF13P3	15q21.2	-0.058016456	0.440458	0.554739
TPSB2	16p13.3	-0.058014772	0.440472	0.554739
DCAF4L1	4p13	-0.058008495	0.440521	0.554766
PPP1R17	7p14.3	0.058003224	0.440563	0.554784
ROS1	6q22.1	0.057932157	0.441124	0.555455
PROCR	20q11.22	0.057908062	0.441314	0.55566

SNX6	14q13.1	0.0578976	0.441397	0.555729
HIST1H3C	6p22.2	0.057887207	0.441479	0.555798
MPHOSPH1C	2p13.3	-0.057847384	0.441794	0.556159
OTOS	2q37.3	0.05783724	0.441874	0.556225
CABYR	18q11.2	-0.057813906	0.442059	0.556422
ECEL1	2q37.1	-0.057795105	0.442207	0.556574
ASB15	7q31.32	-0.057788634	0.442258	0.556603
GRIN2C	17q25.1	-0.057780428	0.442323	0.556636
PHGDH	1p12	-0.057778336	0.44234	0.556636
PSMD9	12q24.31	0.057767874	0.442423	0.556705
NNMT	11q23.2	0.057761597	0.442472	0.556732
FAXDC2	5q33.2	-0.057753227	0.442539	0.556781
CCDC170	6q25.1	-0.057744858	0.442605	0.556829
SNX27	1q21.3	0.057715565	0.442837	0.557086
ACAN	15q26.1	-0.057703011	0.442936	0.557141
CHRFAM7A	15q13.2	-0.057703011	0.442936	0.557141
ANKRD66	6p12.3	0.05769301	0.443015	0.557205
ERP44	9q31.1	-0.057679995	0.443118	0.55727
C10RF198	1q42.2	0.057677903	0.443135	0.55727
MYBPC2	19q13.33	-0.057675969	0.44315	0.55727
CFD	19p13.3	-0.057669533	0.443201	0.557299
FAM187B	19q13.12	0.057661221	0.443267	0.557346
KCTD3	1q41	0.057654887	0.443317	0.557374
CLIC5	6p21.1	-0.057650702	0.44335	0.557381
XKRX	Xq22.1	-0.05762667	0.443541	0.557585
CCDC136	7q32.1	-0.057617224	0.443616	0.557644
SARS	1p13.3	-0.057592116	0.443815	0.557837
DDX53	Xp22.11	-0.057590866	0.443824	0.557837
WDR54	2p13.1	0.057560731	0.444063	0.558102
LYPD8	1q44	-0.057546698	0.444175	0.558207
E2F3	6p22.3	-0.057525161	0.444345	0.558386
CCDC85C	14q32.2	-0.057512606	0.444445	0.558476
ANXA13	8q24.13	0.057508422	0.444478	0.558483
GATM	15q21.1	-0.057464482	0.444827	0.558886
FBXL20	17q12	-0.057435189	0.445059	0.559143
C12ORF75	12q23.3	0.05742682	0.445126	0.559177
PIGR	1q32.1	0.057424727	0.445142	0.559177
PATE2	11q24.2	-0.057395149	0.445377	0.559437
LUM	12q21.33	-0.05739125	0.445408	0.55944
KRTAP5-4	11p15.5	0.057375622	0.445532	0.559561
LIPM	10q23.31	0.057346082	0.445767	0.559821
CCDC71	3p21.31	0.057328479	0.445907	0.559961
APOA5	11q23.3	-0.057307396	0.446074	0.560123
CELA3B	1p36.12	-0.05730522	0.446092	0.560123
CXCR4	2q22.1	-0.057295001	0.446173	0.56019
TMEM17	2p15	-0.057278292	0.446306	0.560321
ASPSR1	17q25.3	0.057238508	0.446622	0.560683
SIAE	11q24.2	-0.057209215	0.446855	0.560941
RETNLB	3q13.13	-0.057164655	0.44721	0.561351
JPX	Xq13.2	0.057144352	0.447372	0.561518
MEIS1	2p14	-0.05712552	0.447522	0.561671
FCGR2B	1q23.3	-0.057117151	0.447588	0.561697
HIST1H2BE	6p22.2	-0.057114847	0.447607	0.561697
PSG11	19q13.31	0.057110319	0.447643	0.561697

CCNE2	8q22. 1	0. 057108782	0. 447655	0. 561697
HAUS7	Xq28	0. 057094135	0. 447772	0. 561773
RAB40AL	Xq22. 1	-0. 057094135	0. 447772	0. 561773
CSRNP1	3p22. 2	-0. 057066934	0. 447988	0. 561995
SMIM10L2E	Xq26. 3	-0. 057064842	0. 448005	0. 561995
PRDM14	8q13. 3	-0. 057038813	0. 448212	0. 56222
FPGT	1p31. 1	-0. 057031364	0. 448272	0. 56226
PARPBP	12q23. 2	0. 057016718	0. 448388	0. 562371
DNTT	10q24. 1	-0. 057008206	0. 448456	0. 562421
UBAC1	9q34. 3	0. 056997887	0. 448539	0. 562474
CNPY2	12q13. 3	-0. 056995794	0. 448555	0. 562474
CST8	20p11. 21	0. 056968104	0. 448776	0. 562716
ADGRA1	10q26. 3	-0. 056953338	0. 448894	0. 562828
TMEM235	17q25. 3	-0. 05694223	0. 448983	0. 562904
PLXDC1	17q12	-0. 056930931	0. 449073	0. 562982
RBM17	10p15. 1	0. 056895361	0. 449357	0. 563302
HLX	1q41	0. 056824221	0. 449925	0. 563979
SPRED2	2p14	0. 056803298	0. 450092	0. 564153
DRG2	17p11. 2	-0. 05679702	0. 450142	0. 56418
UQCC1	20q11. 22	-0. 056792836	0. 450175	0. 564187
HIST1H4B	6p22. 2	-0. 056769866	0. 450359	0. 564382
ACTRT1	Xq25	0. 056747061	0. 450541	0. 564575
MTFR1	8q13. 1	-0. 056740527	0. 450593	0. 56459
PPFIA2	12q21. 31	-0. 056738464	0. 45061	0. 56459
LHX2	9q33. 3	-0. 056700898	0. 45091	0. 564931
CTSL3P	9q21. 33	-0. 056697058	0. 450941	0. 564934
MON1A	3p21. 31	0. 056650556	0. 451313	0. 565362
ZNF19	16q22. 2	-0. 056646371	0. 451346	0. 565362
SLC22A1	6q25. 3	-0. 056643688	0. 451368	0. 565362
PKD2L1	10q24. 31	0. 056626939	0. 451502	0. 565495
CDH15	16q24. 3	0. 056620207	0. 451556	0. 565527
FGF4	11q13. 3	0. 056614661	0. 4516	0. 565547
ATG101	12q13. 13	0. 056608708	0. 451648	0. 565571
CTRB1	16q23. 1	-0. 056591022	0. 451789	0. 565689
ZNF716	7p11. 2	-0. 056589947	0. 451798	0. 565689
OR5R1	11q12. 1	-0. 056571667	0. 451944	0. 565793
OR6C65	12q13. 2	0. 056571667	0. 451944	0. 565793
KLHL20	1q25. 1	-0. 056568954	0. 451966	0. 565793
GCNA	Xq13. 1	-0. 05651249	0. 452418	0. 566323
LPIN2	18p11. 31	-0. 056508275	0. 452452	0. 56633
ITSN2	2p23. 3	-0. 056497813	0. 452536	0. 5664
MBD3	19p13. 3	-0. 056474798	0. 45272	0. 566595
HIST1H3B	6p22. 2	0. 056471108	0. 45275	0. 566597
RPS4X	Xq13. 1	-0. 056464336	0. 452804	0. 566615
BFSP1	20p12. 1	0. 056462243	0. 452821	0. 566615
GBP7	1p22. 2	-0. 056435249	0. 453037	0. 56683
CDCP2	1p32. 3	0. 056433675	0. 45305	0. 56683
APLN	Xq26. 1	-0. 056399473	0. 453324	0. 567138
MYO6	6q14. 1	0. 056384826	0. 453442	0. 567249
MAN1B1	9q34. 3	0. 056365995	0. 453593	0. 567403
CARD18	11q22. 3	0. 056357835	0. 453658	0. 567449
SNU13	22q13. 2	0. 056317871	0. 453979	0. 567815
DBF4B	17q21. 31	-0. 056282301	0. 454265	0. 568137
SMTN	22q12. 2	0. 05626347	0. 454416	0. 56829

KMT2E-AS1	7q22.3	0.056213253	0.454819	0.568759
FARS2	6p25.1	-0.056196514	0.454954	0.568892
LURAP1	1p34.1	-0.056183989	0.455055	0.568982
PEMT	17p11.2	-0.056169313	0.455173	0.569094
FSD2	15q25.2	-0.056157392	0.455269	0.56917
RNF44	5q35.2	0.056154667	0.45529	0.56917
PROKR2	20p12.3	-0.05614142	0.455397	0.569268
VAX1	10q25.3	0.056137392	0.455429	0.569272
AGER	6p21.32	0.056064696	0.456014	0.569968
HAL	12q23.1	-0.056058419	0.456065	0.569995
TEFM	17q11.2	0.05602497	0.456334	0.570296
ADAM21P1	14q24.2	0.056020784	0.456368	0.570303
ADAM32	8p11.22	0.056014479	0.456418	0.57033
SYCE1	10q26.3	-0.056010227	0.456453	0.570338
RBM5	3p21.31	-0.056004017	0.456503	0.570364
DNAH1	3p21.1	0.055987278	0.456637	0.570497
INTU	4q28.1	0.055978909	0.456705	0.570546
RBM39	20q11.22	-0.055964263	0.456823	0.570657
EPB41L4A	5q22.1-q2	0.055957985	0.456873	0.570685
KIR3DP1	19q13.42	-0.055951392	0.456927	0.570716
COL9A1	6q13	0.055929768	0.457101	0.570898
PPP2R5A	1q32.3	-0.055907769	0.457278	0.571083
KRTAP1-5	17q21.2	0.055894271	0.457387	0.571159
MGC57346	17q21.31	0.055893122	0.457396	0.571159
RAP1GDS1	4q23	0.055847091	0.457767	0.571587
FSHR	2p16.3	-0.055828712	0.457916	0.571737
EMILIN3	20q12	-0.055809428	0.458071	0.571895
PAQR7	1p36.11	0.055798966	0.458156	0.571965
SPDYE1	7p13	-0.05578432	0.458274	0.572068
FLVCR2	14q24.3	0.055779118	0.458316	0.572068
RRN3P2	16p11.2	0.055778072	0.458324	0.572068
PRR32	Xq25	0.055769764	0.458391	0.572116
FAM217A	6p25.2	-0.05576032	0.458467	0.572175
GRK7	3q23	-0.05574237	0.458612	0.57232
MIGA2	9q34.11	0.055717364	0.458814	0.572537
MS4A14	11q12.2	-0.055711087	0.458865	0.57255
CBY1	22q13.1	-0.055708995	0.458882	0.57255
CUL3	2q36.2	-0.055698533	0.458966	0.572619
COL4A1	13q34	-0.055688071	0.459051	0.572674
PACRGL	4p15.31	-0.055685979	0.459068	0.572674
MDH1	2p15	0.05567761	0.459135	0.572723
HIST2H2AC	1q21.2	0.055673425	0.459169	0.572729
SDHAF3	7q21.3	-0.055639947	0.45944	0.573016
PRIM2	6p11.2	0.055637855	0.459457	0.573016
GPATCH2	1q41	0.055619024	0.459609	0.573156
PLEKHA2	8p11.22	0.055616931	0.459626	0.573156
DHRS4	14q11.2	-0.055610654	0.459676	0.573183
PIGL	17p11.2	0.055575084	0.459964	0.573502
DRGX	10q11.23	0.055571885	0.45999	0.573502
TRIM62	1p35.1	-0.055524868	0.46037	0.57391
CNTFR-AS1	9p13.3	0.055517337	0.460431	0.57391
IFNAR2	21q22.11	0.055516498	0.460438	0.57391
OR2A9P	7q35	0.055514406	0.460455	0.57391
MAGEB1	Xp21.2	-0.055510224	0.460489	0.57391

PPIP5K1	15q15.3	0.055510221	0.460489	0.57391
OR7E24	19p13.2	0.055486075	0.460684	0.574117
SNORA72	8q22.2	0.055474489	0.460778	0.574198
SRRM2	16p13.3	0.055466282	0.460844	0.574245
IRGM	5q33.1	-0.055451314	0.460965	0.57436
OLIG3	6q23.3	0.055443237	0.461031	0.574406
SYN1	Xp11.3-p1	-0.055434896	0.461098	0.574455
SLC35G6	17p13.1	-0.055420169	0.461218	0.574549
PSG4	19q13.31	0.055418432	0.461232	0.574549
ZDHHC8P1	22q11.23	-0.055413973	0.461268	0.574558
BAALC-AS2	8q22.3	-0.055384748	0.461505	0.574802
RFPL4B	6q21	-0.055382702	0.461521	0.574802
CKAP5	11p11.2	-0.055374218	0.46159	0.574852
AICDA	12p13.31	-0.055367034	0.461648	0.574889
PCDHB17P	5q31.3	-0.055357508	0.461725	0.574949
XIRP1	3p22.2	-0.055353294	0.461759	0.574956
CFAP300	11q22.1	0.055336556	0.461895	0.575089
KLC3	19q13.32	0.055332371	0.461929	0.575095
BORCS5	12p13.2	0.055324001	0.461997	0.575144
PPFIA3	19q13.33	-0.055309355	0.462116	0.575256
ANXA7	10q22.2	-0.05530517	0.46215	0.575262
RPF2	6q21	-0.055290524	0.462268	0.575374
MNT	17p13.3	-0.055284247	0.462319	0.575402
RTF1	15q15.1	0.055271693	0.462421	0.575478
SERP1	3q25.1	-0.0552696	0.462438	0.575478
CD1E	1q23.1	-0.055240307	0.462676	0.575738
HBD	11p15.4	-0.055234383	0.462724	0.575762
LIPC	15q21.3	-0.055219384	0.462845	0.575877
FGD5	3p25.1	0.05516289	0.463304	0.576412
LIPK	10q23.31	0.055157444	0.463348	0.576431
ACTR1A	10q24.32	0.055144059	0.463457	0.576494
ZNF764	16p11.2	-0.055144059	0.463457	0.576494
CT45A4	Xq26.3	0.055137434	0.463511	0.576507
VEGFB	11q13.1	0.055135689	0.463525	0.576507
OR52N4	11p15.4	-0.055131418	0.463559	0.576514
LELP1	1q21.3	-0.055121111	0.463643	0.576583
BMERB1	16p13.11	-0.055116858	0.463678	0.57659
HTN3	4q13.3	-0.055083342	0.46395	0.576892
GNB1	1p36.33	-0.055075011	0.464018	0.576932
RNF145	5q33.3	-0.055070826	0.464052	0.576932
SLC40A1	2q32.2	0.055068734	0.464069	0.576932
LZTS1	8p21.3	-0.055062457	0.46412	0.57696
PLSCR5	3q24	-0.055057127	0.464163	0.576978
LOC344967	4p14	-0.055050536	0.464217	0.577009
CDH11	16q21	-0.055003871	0.464596	0.577444
OR1J4	9q33.2	0.054966037	0.464904	0.577791
NBPF11	1q21.2	-0.054962024	0.464936	0.577795
SAGE1	Xq26.3	0.054954868	0.464995	0.577829
CISD2	4q24	-0.054951562	0.465021	0.577829
ADAM17	2p25.1	0.054903438	0.465413	0.578244
AK1	9q34.11	0.054903438	0.465413	0.578244
TP53TG3B	16p11.2	-0.054893416	0.465495	0.578309
KRTAP19-1	21q22.11	-0.054876477	0.465633	0.578445
NDUFB5	3q26.33	0.054867868	0.465703	0.578496

TNFSF4	1q25.1	0.054842759	0.465907	0.578714
ADGRE4P	19p13.2	-0.05482284	0.466069	0.578879
ACTL7B	9q31.3	0.054765896	0.466533	0.57942
TMC8	17q25.3	-0.054742326	0.466725	0.579622
SMIM30	7q31.1	-0.054736049	0.466777	0.57965
ESRG	3p14.3 3p	0.054717078	0.466931	0.579806
CHSY3	5q23.3	-0.054713033	0.466964	0.579811
GAS8-AS1	16q24.3	0.054703929	0.467038	0.579867
AQP7P3	9q21.11	-0.054687984	0.467169	0.579992
P3H4	17q21.2	0.054675371	0.467271	0.580048
ZNF485	10q11.21	0.054675371	0.467271	0.580048
LILRB4	19q13.42	-0.054646078	0.46751	0.580309
LMOD1	1q32.1	-0.054623062	0.467698	0.580506
VAMP5	2p11.2	0.054616785	0.467749	0.580533
ZNF544	19q13.43	-0.054608415	0.467818	0.580582
RASAL2	1q25.2	0.054597954	0.467903	0.580607
DHRS7C	17p13.1	-0.054596416	0.467916	0.580607
TMPRSS11F	4q13.2	0.054595122	0.467926	0.580607
SCUBE3	6p21.31	0.054591677	0.467954	0.580607
KLHL40	3p22.1	0.054569558	0.468135	0.580795
SATB2	2q33.1	0.054564476	0.468176	0.580811
USP29	19q13.43	-0.054516379	0.468569	0.581262
RBM45	2q31.2	0.054484966	0.468826	0.581544
TEX38	1p33	-0.054468517	0.46896	0.58164
FRMD1	6q27	-0.054467615	0.468968	0.58164
CLDN17	21q21.3	-0.054462749	0.469008	0.58164
LRIG2	1p13.2	-0.054459858	0.469031	0.58164
INSR	19p13.2	-0.054457766	0.469048	0.58164
B4GALNT1	12q13.3	-0.054443119	0.469168	0.581752
SNORA50A	16q21	-0.054438959	0.469202	0.581758
LRRTM1	2p12	-0.054426367	0.469305	0.58185
OR2T2	1q44	-0.054420872	0.46935	0.581869
LRIT1	10q23.1	-0.054370521	0.469762	0.582319
SLC22A25	11q12.3	-0.054369379	0.469771	0.582319
ACTR3	2q14.1	0.054340594	0.470007	0.582575
SLC25A31	4q28.1	-0.054309276	0.470263	0.582857
IQCA1	2q37.2-q3	-0.054290377	0.470418	0.583012
TMEM130	7q22.1	0.054277823	0.47052	0.583103
TUBB2A	6p25.2	-0.054273638	0.470555	0.58311
IL17F	6p12.2	-0.054243147	0.470804	0.583383
LOC286359	9q22.33	-0.054218492	0.471006	0.583566
SLC6A6	3p25.1	0.054215052	0.471035	0.583566
NLRP10	11p15.4	0.054212849	0.471053	0.583566
CD300C	17q25.1	0.054210896	0.471069	0.583566
NLGN3	Xq13.1	-0.054187852	0.471258	0.583763
FNDC8	17q12	-0.054183667	0.471292	0.58377
MCOLN1	19p13.2	-0.054143912	0.471618	0.584122
FAM107B	10p13	-0.05414182	0.471635	0.584122
COQ5	12q24.31	-0.054127173	0.471755	0.584235
WDR26	1q42.11-c	-0.054116712	0.471841	0.584305
LOC100133	2q11.1	0.054107249	0.471918	0.584365
WBP1L	10q24.32	-0.054091603	0.472047	0.584487
ADCK2	7q34	-0.054083234	0.472115	0.584536
PVR	19q13.31	0.054039294	0.472476	0.584946

TP53TG5	20q13. 12	-0. 054025565	0. 472589	0. 585024
OR13H1	Xq26. 2	-0. 054024318	0. 472599	0. 585024
RPSAP9	9q21. 13	-0. 054018371	0. 472648	0. 585024
SFRP5	10q24. 2	0. 054017353	0. 472656	0. 585024
FAM9B	Xp22. 31	0. 054013208	0. 47269	0. 58503
CNTN6	3p26. 3	-0. 05398468	0. 472924	0. 585284
PA2G4P4	3q25. 31	0. 053970275	0. 473042	0. 585379
COL18A1	21q22. 3	0. 053968154	0. 47306	0. 585379
SULT6B1	2p22. 2	-0. 053903666	0. 47359	0. 585999
SNORA75	2q37. 1	-0. 053884229	0. 473749	0. 58616
ZNF404	19q13. 31	0. 053867721	0. 473885	0. 586292
SIRT5	6p23	0. 053855167	0. 473988	0. 586383
NOTUM	17q25. 3	0. 053840521	0. 474109	0. 586496
THOC5	22q12. 2	-0. 053817505	0. 474298	0. 586693
MS4A8	11q12. 2	-0. 053778824	0. 474616	0. 587051
C1QC	1p36. 12	-0. 053765196	0. 474728	0. 587153
PCDHGC3	5q31. 3	0. 053737995	0. 474952	0. 587394
CD79A	19q13. 2	-0. 053708702	0. 475193	0. 587655
TEX45	19p13. 2	0. 053700264	0. 475263	0. 587705
C11ORF24	11q13. 2	0. 053691963	0. 475331	0. 587753
FRG2DP	16p11. 1	0. 053670556	0. 475507	0. 587935
GFPT1	2p13. 3	-0. 053664763	0. 475555	0. 587957
SLC26A7	8q21. 3	-0. 053654301	0. 475641	0. 588028
LINC01139	1q43	-0. 053648083	0. 475692	0. 588054
ASIC4	2q35	0. 053636171	0. 475791	0. 588139
PHKG1	7p11. 2	-0. 053606205	0. 476037	0. 588408
SDF2L1	22q11. 21	-0. 053601992	0. 476072	0. 588415
MPZL3	11q23. 3	0. 053585253	0. 47621	0. 588549
CCR10	17q21. 2	0. 053555596	0. 476452	0. 588811
GAREM1	18q12. 1	-0. 053539221	0. 47659	0. 588945
PRNT	20p13	0. 05353186	0. 47665	0. 588979
FAM135A	6q13	-0. 053528759	0. 476676	0. 588979
BTG4	11q23. 1	0. 053517211	0. 476771	0. 58906
SLCO3A1	15q26. 1	0. 053497374	0. 476935	0. 589226
FRMD6	14q22. 1	0. 053472266	0. 477142	0. 589445
LINC00320	21q21. 1	0. 053399681	0. 477741	0. 590149
PCDHB8	5q31. 3	-0. 053373925	0. 477954	0. 590375
C9ORF106	9q34. 11	-0. 053367413	0. 478007	0. 590405
SRSF9	12q24. 31	-0. 053336263	0. 478265	0. 590635
MAGOHB	12p13. 2	0. 053335244	0. 478273	0. 590635
FAM131B	7q34	0. 05333417	0. 478282	0. 590635
SERHL2	22q13. 2	0. 053317431	0. 47842	0. 590769
CCDC127	5p15. 33	-0. 0532986	0. 478576	0. 590925
SMG1	16p12. 3	-0. 053286046	0. 47868	0. 591016
ATXN8OS	13q21. 33	-0. 053277632	0. 478749	0. 591066
MCL1	1q21. 2	-0. 053258845	0. 478905	0. 591221
TPTE2P6	13q12. 12	0. 053235453	0. 479098	0. 591389
COL3A1	2q32. 2	-0. 053233737	0. 479112	0. 591389
GPSM3	6p21. 32	-0. 053231645	0. 479129	0. 591389
PRO0611	1p35. 2	-0. 05320474	0. 479352	0. 591601
OR2G3	1q44	-0. 053203695	0. 479361	0. 591601
TIMM8A	Xq22. 1	0. 053122842	0. 48003	0. 59239
CCDC71L	7q22. 3	0. 053106103	0. 480168	0. 592525
LINC02731	11q25	0. 053100382	0. 480216	0. 592547

NR1I3	1q23.3	0.053087272	0.480324	0.592644
CWC27	5q12.3	0.053078903	0.480393	0.592668
RRM1	11p15.4	0.05307681	0.480411	0.592668
CCDC160	Xq26.2	0.05307418	0.480433	0.592668
LTBP2	14q24.3	-0.053064256	0.480515	0.592733
HORMAD1	1q21.3	-0.053051205	0.480623	0.59283
NPPC	2q37.1	-0.053025257	0.480838	0.593051
DEXI	16p13.13	0.053022409	0.480861	0.593051
OR2K2	9q31.3	-0.052961312	0.481368	0.593638
C11ORF42	11p15.4	0.05295408	0.481428	0.593676
TRIM40	6p22.1	0.052913683	0.481763	0.594052
SNX32	11q13.1	-0.052903726	0.481845	0.594071
ZNF525	19q13.42	0.052903145	0.48185	0.594071
ACBD7	10p13	0.05290108	0.481867	0.594071
HLA-DMA	6p21.32	-0.052848744	0.482302	0.594555
PNMA1	14q24.3	0.052846651	0.482319	0.594555
RGS9BP	19q13.11	0.052827974	0.482474	0.594709
CHST13	3q21.3	0.052797757	0.482725	0.594976
UGT2A1	4q13.3	0.052794695	0.48275	0.594976
S100A1	1q21.3	-0.052779696	0.482875	0.595093
OR4D6	11q12.1	-0.052769669	0.482958	0.595159
GUSBP11	22q11.23	0.05275668	0.483066	0.59524
CCDC36	3p21.31	-0.052754587	0.483083	0.59524
TACO1	17q23.3	0.052750403	0.483118	0.595246
THAP3	1p36.31	0.052727387	0.483309	0.595445
L1TD1	1p31.3	0.05270173	0.483522	0.595671
CTSC	11q14.2	-0.052681355	0.483692	0.595827
C10RF54	1q21.2	-0.052679263	0.483709	0.595827
IL9R	Xq28 and	-0.052666984	0.483811	0.595916
CSMD1	8p23.2	-0.052649283	0.483958	0.596061
C9	5p13.1	0.052623389	0.484174	0.596289
RFPL3	22q12.3	0.052610569	0.48428	0.596337
GIMAP2	7q36.1	-0.052610215	0.484283	0.596337
TERC	3q26.2	-0.052607986	0.484302	0.596337
PAR6A	16q22.1	-0.052589291	0.484457	0.596492
SAA2	11p15.1	-0.052581197	0.484525	0.596538
NCKAP5L	12q13.12	-0.052549537	0.484788	0.596814
MAGEA6	Xq28	-0.052547012	0.484809	0.596814
POGZ	1q21.3	-0.052532798	0.484927	0.596923
DUSP5	10q25.2	0.05249932	0.485206	0.59723
TAF1B	2p25.1	0.052493043	0.485258	0.597257
RPL21	13q12.2	0.052475749	0.485402	0.597398
FAM199X	Xq22.2	-0.052453288	0.485589	0.597591
GRAMD1A	19q13.11	0.05241981	0.485868	0.597897
TEKT1	17p13.1	-0.052412943	0.485926	0.597931
WNT6	2q35	0.052407805	0.485968	0.597947
RHD	1p36.11	-0.052390434	0.486113	0.598088
AGPAT3	21q22.3	0.052382148	0.486182	0.598136
TSSC2	11p15.4	-0.052352855	0.486426	0.59838
MAGEA11	Xq28	-0.052351202	0.48644	0.59838
C19ORF38	19p13.2	-0.052342393	0.486514	0.598425
RMST	12q23.1 1	-0.05233963	0.486537	0.598425
SNORD15B	11q13.4	0.052324921	0.486659	0.598516
ABCA2	9q34.3	-0.052323562	0.486671	0.598516

FAM181B	11q14.1	-0.052319405	0.486705	0.598522
SH3BGRL2	6q14.1	-0.052300546	0.486863	0.598679
NPC2	14q24.3	0.052296361	0.486898	0.598685
GUCA2B	1p34.2	0.052292456	0.48693	0.598688
TMEM215	9p21.1	0.052271783	0.487103	0.59883
CDKN2A-DT	9p21.3	0.052271443	0.487105	0.59883
MAP3K9	14q24.2	-0.05225033	0.487282	0.59901
CDY1B	Yq11.23	-0.05222	0.487535	0.5991
OR2Y1	5q35.3	-0.05222	0.487535	0.5991
RNASE12	14q11.2	-0.05222	0.487535	0.5991
MT4	16q13	0.05222	0.487535	0.5991
OR5B3	11q12.1	0.05222	0.487535	0.5991
SPACA1	6q15	0.05222	0.487535	0.5991
NLRP12	19q13.42	0.052173986	0.487919	0.599535
SNORA7B	3q21.3	0.052147239	0.488142	0.599727
AHSP	16p11.2	-0.052145855	0.488154	0.599727
FFAR4	10q23.33	-0.052143619	0.488173	0.599727
RBM46	4q32.1	-0.05213907	0.488211	0.599727
SLC25A25	9q34.11	-0.052137342	0.488225	0.599727
SELENOM	22q12.2	-0.052077737	0.488723	0.600302
EARS2	16p12.2	0.05205574	0.488907	0.60049
CYB5R3	22q13.2	0.052013893	0.489257	0.600868
COG8	16q22.1	-0.052011801	0.489274	0.600868
ASB17	1p31.1	-0.051994937	0.489415	0.600975
SCARNA21	17p13.1	-0.051994153	0.489422	0.600975
HTRA4	8p11.22	0.051982617	0.489518	0.601043
PDSS1	10p12.1	0.051980416	0.489537	0.601043
CDC25A	3p21.31	0.051965769	0.489659	0.601156
ZNF519	18p11.21	-0.051959492	0.489712	0.601184
PER3	1p36.23	-0.051932291	0.489939	0.601401
CRISP3	6p12.3	0.05193115	0.489949	0.601401
LINC02203	15q11.2	-0.051922916	0.490018	0.601449
LYZ	12q15	0.051909275	0.490132	0.601552
LINC00032	9p21.2	0.051905213	0.490166	0.601557
HSD17B12	11p11.2	0.051863244	0.490518	0.601951
RETREG2	2q35	0.051838135	0.490728	0.602172
NCSTN	1q23.2	-0.051827674	0.490815	0.602175
SEZ6L2	16p11.2	0.051827674	0.490815	0.602175
CMSS1	3q12.1	-0.051823489	0.490851	0.602175
MORF4L1	15q25.1	-0.051823489	0.490851	0.602175
KRTAP6-3	21q22.11	-0.051819484	0.490884	0.602179
PPP6R3	11q13.2	-0.051815119	0.490921	0.602187
MTCL1	18p11.22	-0.051794196	0.491096	0.602355
SNX17	2p23.3	0.051790011	0.491131	0.602355
ZNF446	19q13.43	0.051787919	0.491149	0.602355
APTX	9p21.1	-0.05177118	0.491289	0.60249
KIAA1671	22q11.23	-0.051764903	0.491341	0.602518
OR10G2	14q11.2	0.051756263	0.491414	0.60257
TAS2R39	7q34	0.051750529	0.491462	0.602592
SNTA1	20q11.21	-0.051708409	0.491815	0.602988
KAZN	1p36.21	-0.051637269	0.492412	0.603673
COQ6	14q24.3	0.051633084	0.492447	0.603673
WDR12	2q33.2	0.051630992	0.492465	0.603673
KIAA1217	10p12.2-1	0.051624715	0.492517	0.603701

KCNQ3	8q24. 22	-0.051618546	0.492569	0.603719
EFCAB14	1p33	-0.051612161	0.492623	0.603719
WDR3	1p12	-0.051612161	0.492623	0.603719
SLC38A3	3p21. 31	-0.051576618	0.492921	0.604047
OR2F2	7q35	-0.05155008	0.493144	0.604283
SLC16A9	10q21. 2	-0.051522189	0.493378	0.604533
PLPP7	9q34. 13	-0.051515912	0.493431	0.604561
ANGPTL8	19p13. 2	-0.051503073	0.493539	0.604656
TAS2R14	12p13. 2	0.051478789	0.493743	0.604869
SNORA40	11q21	-0.051474673	0.493777	0.604874
CCDC88C	14q32. 11-	0.051428033	0.494169	0.605317
C20ORF27	20p13	0.051358986	0.49475	0.605992
TAS2R13	12p13. 2	-0.051351046	0.494817	0.606036
PLPPR5	1p21. 3	0.051339299	0.494916	0.60612
PROKR1	2p13. 3	-0.051331258	0.494983	0.606166
DCAF12L1	Xq25	0.05128316	0.495388	0.606625
MYO15A	17p11. 2	0.051277384	0.495437	0.606647
C20ORF20E	20q11. 21	0.051255653	0.49562	0.606803
TLX1NB	10q24. 31	0.051255011	0.495625	0.606803
ANAPC13	3q22. 2	-0.051245998	0.495701	0.606851
SNORA3A	11p15. 4	0.051243132	0.495725	0.606851
KIAA0754	1p34. 3	-0.051225075	0.495877	0.606985
RAN	12q24. 33	0.051222982	0.495895	0.606985
AKAP7	6q23. 2	-0.051174858	0.4963	0.607444
MIPOL1	14q13. 3-c	0.051164396	0.496389	0.607515
CAPZA2	7q31. 2	-0.051160212	0.496424	0.60752
DUSP27	1q24. 1	0.051155835	0.496461	0.607528
ATAD1	10q23. 31	0.051145565	0.496547	0.607597
AGAP3	7q36. 1	0.051139288	0.4966	0.607625
OR52R1	11p15. 4	-0.051133513	0.496649	0.607647
SMCO3	12p12. 3	-0.051120457	0.496759	0.607745
TREML5P	6p21. 1	0.051098808	0.496942	0.607929
PPP2R3A	3q22. 2-q2	0.051095349	0.496971	0.607929
TSSK4	14q12	-0.051086979	0.497041	0.607978
OR2T35	1q44	-0.051060982	0.497261	0.608209
SLC1A7	1p32. 3	-0.050992823	0.497836	0.608875
LGALS14	19q13. 2	0.050931078	0.498357	0.609476
SMIM26	20p11. 23	0.050913314	0.498507	0.609606
COL1A2	7q21. 3	0.050911221	0.498525	0.609606
F9	Xq27. 1	0.050894189	0.498669	0.609726
ABHD8	19p13. 11	-0.05089239	0.498684	0.609726
SLC2A8	9q33. 3	-0.050871467	0.498861	0.609905
1-Mar	1q41	0.050812881	0.499356	0.610473
TTI2	8p12	0.050806603	0.499409	0.610501
TCHH	1q21. 3	-0.050781495	0.499621	0.610707
SLC38A10	17q25. 3	0.050779403	0.499639	0.610707
MAGEB10	Xp21. 3	-0.050769445	0.499723	0.610773
BBS2	16q13	-0.050756387	0.499833	0.610833
EGR1	5q31. 2	-0.050756387	0.499833	0.610833
BRCA2	13q13. 1	0.050735463	0.50001	0.611012
LCE2B	1q21. 3	-0.050727701	0.500076	0.611024
LOC10013E	1p36. 33	0.050727094	0.500081	0.611024
OR52N5	11p15. 4	-0.050708706	0.500237	0.611176
MAB21L3	1p13. 1	-0.050688636	0.500407	0.611346

CXADR	21q21.1	0.050674785	0.500524	0.611452
CYGB	17q25.1	-0.050662231	0.50063	0.611528
RIMS4	20q13.12	-0.050660218	0.500647	0.611528
ZNF532	18q21.32	-0.050651769	0.500719	0.611578
TNFRSF9	1p36.23	-0.050643506	0.500789	0.611626
TOMM6	6p21.1	0.050622476	0.500967	0.611806
TMPRSS15	21q21.1	0.05061351	0.501043	0.611862
PRG2	11q12.1	0.050580735	0.50132	0.612155
LCE1A	1q21.3	0.050577591	0.501347	0.612155
SIGLEC7	19q13.41	-0.050574352	0.501374	0.612155
PPP1R27	17q25.3	0.050535813	0.501701	0.612516
HLA-DOB	6p21.32	-0.050530412	0.501747	0.612534
SPATC1L	21q22.3	0.050501119	0.501995	0.6128
STOML2	9p13.3	0.05049275	0.502066	0.612849
PRLH	2q37.3	-0.05048898	0.502098	0.612851
NBPF10	1q21.1	-0.050455088	0.502385	0.613164
IKZF2	2q34	0.05041324	0.50274	0.61356
LAMTOR3	4q23	-0.050402779	0.502829	0.613631
TMEM272	13q14.3	-0.050384053	0.502988	0.613787
SAP130	2q14.3	0.050379763	0.503024	0.613794
KLHL31	6p12.1	-0.05030653	0.503646	0.614485
NKX2-1	14q13.3	0.050305843	0.503652	0.614485
DPYSL4	10q26.3	-0.050273053	0.50393	0.61473
SAA4	11p15.1	0.050272123	0.503938	0.61473
PTGDS	9q34.3	-0.050264683	0.504002	0.61473
ALDH7A1	5q23.2	0.050260498	0.504037	0.61473
CST3	20p11.21	-0.050260498	0.504037	0.61473
PPP2CB	8p12	0.050260498	0.504037	0.61473
FAM66E	8p23.1	-0.050250613	0.504121	0.614795
EIF3D	22q12.3	0.05024376	0.504179	0.614828
PRKAR1B	7p22.3	-0.050221816	0.504366	0.615018
LARGE2	11p11.2	-0.050214467	0.504428	0.615057
P2RX2	12q24.33	-0.050188052	0.504653	0.615293
SNAP29	22q11.21	-0.050172619	0.504784	0.615399
PRXL2A	10q23.1	0.050170527	0.504802	0.615399
SLC36A3	5q33.1	-0.050123003	0.505206	0.615855
ACP2	11p11.2 1	-0.050116126	0.505264	0.615888
CDH2	18q12.1	-0.050095202	0.505442	0.616
POSTN	13q13.3	0.050088925	0.505496	0.616
MTREX	5q11.2	-0.050086833	0.505514	0.616
ZNF680	7q11.21	-0.050086833	0.505514	0.616
CAD	2p23.3	-0.050080556	0.505567	0.616
ARSI	5q32	0.050078463	0.505585	0.616
PPF1BP1	12p11.23-	-0.050078463	0.505585	0.616
TMEM18	2p25.3	0.050076371	0.505603	0.616
RTL8B	Xq26.3	-0.050068002	0.505674	0.616049
RHCG	15q26.1	0.050050637	0.505822	0.616192
XAGE3	Xp11.22	0.050047015	0.505853	0.616192
THBS2	6q27	0.050034524	0.505959	0.616268
NIPSNAP3A	9q31.1	0.050032432	0.505977	0.616268
PRM1	16p13.13	-0.049997366	0.506275	0.61658
MYCNOS	2p24.3	0.049995075	0.506295	0.61658
LRRC74A	14q24.3	-0.049973996	0.506474	0.616761
CATSPER4	1p36.11	0.049962044	0.506576	0.616848

CCL26	7q11. 23	-0. 049944553	0. 506725	0. 616991
ZNF354B	5q35. 3	-0. 049936183	0. 506796	0. 617025
RBMXL1	1p22. 2	-0. 049934091	0. 506814	0. 617025
SCGB1D4	11q12. 3	0. 049910223	0. 507018	0. 617235
PDHB	3p14. 3	-0. 049869228	0. 507367	0. 617622
FAM13A-AS1	4q22. 1	0. 049858766	0. 507456	0. 617693
ZBTB22	6p21. 32	-0. 049850397	0. 507528	0. 617743
CDC42EP4	17q25. 1	0. 049844119	0. 507581	0. 61777
ALG12	22q13. 33	-0. 049837842	0. 507635	0. 617798
OR5AP2	11q12. 1	0. 049811419	0. 50786	0. 618034
PPP2CA	5q31. 1	0. 049791811	0. 508027	0. 618184
SLC37A2	11q24. 2	0. 049789718	0. 508045	0. 618184
OR5AK2	11q12. 1	-0. 049770627	0. 508208	0. 618306
IFNA5	9p21. 3	0. 049770116	0. 508212	0. 618306
HCAR2	12q24. 31	0. 04976359	0. 508268	0. 618306
MYH8	17p13. 1	-0. 049763513	0. 508269	0. 618306
LATS2	13q12. 11	-0. 04975624	0. 508331	0. 618344
TCTN2	12q24. 31	-0. 049747871	0. 508402	0. 618355
RNASEH1	2p25. 3	0. 049747871	0. 508402	0. 618355
CACNG4	17q24. 2	0. 049741594	0. 508456	0. 618383
OR6C70	12q13. 2	0. 049735857	0. 508505	0. 618405
UBE4A	11q23. 3	-0. 049691377	0. 508884	0. 618829
KANK2	19p13. 2	0. 049676731	0. 509009	0. 618938
APOC3	11q23. 3	-0. 049671033	0. 509058	0. 618938
FRG1	4q35. 2	0. 049668361	0. 509081	0. 618938
LOC283731	15q24. 1	0. 049666373	0. 509098	0. 618938
EHMT2	6p21. 33	0. 049659992	0. 509152	0. 61894
ZNF479	7p11. 2	-0. 049658902	0. 509162	0. 61894
PRSS50	3p21. 31	0. 049645605	0. 509275	0. 619041
G6PC3	17q21. 31	-0. 049597221	0. 509689	0. 619505
CALHM1	10q24. 33	-0. 049584898	0. 509794	0. 619596
GSK3B	3q13. 33	-0. 049557467	0. 510028	0. 619843
RANBP17	5q35. 1	0. 049517712	0. 510368	0. 620218
DCAF5	14q24. 1	-0. 049509342	0. 51044	0. 620267
HEXA-AS1	15q23	-0. 049482142	0. 510672	0. 620512
UBAP2	9p13. 3	-0. 049475865	0. 510726	0. 62054
TAB1	22q13. 1	-0. 049467495	0. 510798	0. 620589
NUP98	11p15. 4	-0. 049454941	0. 510905	0. 620682
HMX1	4p16. 1	-0. 04944245	0. 511012	0. 620774
USP21	1q23. 3	0. 049438202	0. 511048	0. 620781
C1QL4	12q13. 12	-0. 049428568	0. 511131	0. 620843
ADCY7	16q12. 1	0. 049398447	0. 511389	0. 621118
ZSCAN20	1p35. 1	-0. 049375432	0. 511586	0. 62132
ARFGAP2	11p11. 2	0. 049371247	0. 511621	0. 621326
A1BG	19q13. 43	-0. 049360785	0. 511711	0. 621397
SIGLEC1	20p13	0. 049350323	0. 511801	0. 621468
NDUFA3	19q13. 42	0. 049337769	0. 511908	0. 621509
TSBP1	6p21. 32	-0. 049331891	0. 511958	0. 621509
MRPS33	7q34	-0. 0493294	0. 51198	0. 621509
PHF6	Xq26. 2	-0. 04932103	0. 512051	0. 621509
SYVN1	11q13. 1	0. 04932103	0. 512051	0. 621509
GPR139	16p12. 3	-0. 049318889	0. 51207	0. 621509
RBMXL2	11p15. 4	0. 049314564	0. 512107	0. 621509
SNORA59B	17p11. 2	0. 049310359	0. 512143	0. 621509

CLEC18A	16q22.1	0.049308476	0.512159	0.621509
FAM47A	Xp21.1	-0.049308155	0.512162	0.621509
SMG1P2	16p11.2	0.049306384	0.512177	0.621509
SMIM3	5q33.1	0.049295922	0.512267	0.62158
PCOLCE	7q22.1	0.049287553	0.512338	0.621616
TAS2R19	12p13.2	-0.049285275	0.512358	0.621616
OR4K14	14q11.2	0.049251528	0.512647	0.621929
NUDT16L1	16p13.3	0.049235244	0.512787	0.622023
SLITRK5	13q31.2	-0.049235244	0.512787	0.622023
TFEB	6p21.1	-0.049220597	0.512912	0.622137
ZNF285	19q13.31	0.049208043	0.51302	0.62223
SEC31B	10q24.31	-0.049191304	0.513163	0.622366
LY86	6p25.1	-0.049185027	0.513217	0.622394
ZFYVE27	10q24.2	0.049118072	0.513791	0.623052
MAGEF1	3q27.1	0.049090871	0.514025	0.623298
NFAT5	16q22.1	-0.049082502	0.514097	0.623347
TMEM256	17p13.1	-0.049061578	0.514276	0.623527
CT47B1	Xq24	-0.049049802	0.514377	0.623612
EGFL6	Xp22.2	0.049042747	0.514438	0.623647
EMC2	8q23.1	0.049034377	0.51451	0.623697
SLC35D3	6q23.3	-0.049017895	0.514651	0.62383
UBA52	19p13.11	0.049007177	0.514743	0.623904
CBWD3	9q21.11	0.04899253	0.514869	0.624019
PACS2	14q32.33	0.048984161	0.514941	0.624068
TIGD2	4q22.1	0.048977884	0.514995	0.624096
OR8G5	11q24.2	0.048968287	0.515078	0.624158
C10RF74	1q32.2	-0.048942314	0.515301	0.62439
PRDX2	19p13.13	0.048919298	0.515499	0.624592
SPPL2C	17q21.31	0.048900084	0.515664	0.624754
AKAP17A	Xp22.33	-0.048879543	0.51584	0.624907
GNAT3	7q21.11	0.048878129	0.515852	0.624907
FANCE	6p21.31	0.04885025	0.516092	0.62516
LILRA3	19q13.4	-0.048800519	0.51652	0.62564
UNC93A	6q27	0.048796086	0.516558	0.625648
FGF1	5q31.3	-0.048785387	0.51665	0.625722
TTLL9	20q11.21	-0.048768674	0.516794	0.625858
DNAH11	7p15.3	0.048745632	0.516992	0.62606
HERPUD2	7p14.2	-0.04873517	0.517082	0.626132
MEOX1	17q21.31	-0.048714247	0.517263	0.626312
SNORA70	Xq28	-0.048689746	0.517474	0.626529
NOSTRIN	2q24.3	0.04866403	0.517695	0.626759
CD164	6q21	-0.048653569	0.517785	0.626793
MYO1G	7p13	-0.048653569	0.517785	0.626793
RPPH1	14q11.2	-0.048638947	0.517911	0.626907
KCND2	7q31.31	-0.048624276	0.518038	0.626984
RPUSD2	15q15.1	0.048624276	0.518038	0.626984
FCGR1B	1p11.2	-0.04860126	0.518236	0.627186
TMEM121	14q32.33	-0.048567782	0.518525	0.627487
OGA	10q24.32	0.048561505	0.518579	0.627487
PAIP1	5p12	-0.048561505	0.518579	0.627487
RPS10	6p21.31	-0.048548951	0.518687	0.62758
FAM122B	Xq26.3	-0.048534304	0.518813	0.627695
CEP57	11q21	-0.048496642	0.519138	0.62805
ADCY6	12q13.12	-0.048433896	0.519679	0.628667

MYH7B	20q11.22	-0.048383655	0.520113	0.629121
PLAC8L1	5q32	-0.048382406	0.520124	0.629121
RARRES2	7q36.1	0.04837947	0.520149	0.629121
NT5C3B	17q21.2	-0.048360639	0.520312	0.62928
MANBA	4q24	-0.048345992	0.520438	0.629388
ASPDH	19q13.33	-0.04834262	0.520468	0.629388
PRDM7	16q24.3	-0.048339301	0.520496	0.629388
GBP1P1	1p22.2	-0.048323103	0.520636	0.629519
EXT1	8q24.11	0.04829996	0.520836	0.629723
C2ORF50	2p25.1	0.048294755	0.520881	0.629739
PBLD	10q21.3	-0.048283221	0.520981	0.629822
CUZD1	10q26.13	-0.048279037	0.521017	0.629827
CRYBG1	6q21	0.048251836	0.521252	0.630052
MINDY1	1q21.3	-0.048247651	0.521288	0.630052
LPCAT3	12p13.31	-0.048245559	0.521306	0.630052
ZNF322P1	9q22.33	-0.048239307	0.52136	0.630052
HADHA	2p23.3	0.048239282	0.521361	0.630052
DCTN6	8p12	0.048233005	0.521415	0.63008
PIH1D2	11q23.1	0.048224635	0.521487	0.630129
IL20	1q32.1	-0.048210218	0.521612	0.630242
ZNF562	19p13.2	-0.048203712	0.521668	0.630271
DZIP1L	3q22.3	-0.048189065	0.521795	0.630386
ELF5	11p13	0.048181406	0.521861	0.630397
LLCFC1	7q34	0.048180729	0.521867	0.630397
ACVR2B-AS3	3p22.2	-0.048166049	0.521994	0.630513
TMEM176B	7q36.1	0.048155588	0.522084	0.630584
TRPV6	7q34	0.048139101	0.522227	0.630718
PCSK5	9q21.13	0.048124202	0.522356	0.630819
GOLT1A	1q32.1	0.04812211	0.522374	0.630819
TENT5B	1p36.11	0.048115833	0.522428	0.630847
RFC3	13q13.2	-0.048103279	0.522537	0.63094
KRTAP17-1	17q21.2	-0.048072943	0.5228	0.631219
MS4A10	11q12.2	-0.048067209	0.522849	0.631219
TMEM200C	18p11.31	-0.048065616	0.522863	0.631219
CHAD	17q21.33	-0.048055155	0.522954	0.631242
SLAMF7	1q23.3	0.048055155	0.522954	0.631242
SPDYE7P	7q11.23	0.048048877	0.523008	0.631242
WDR59	16q23.1	0.048048877	0.523008	0.631242
SHMT1	17p11.2	-0.048034231	0.523135	0.631357
IL5	5q31.1	-0.048023977	0.523224	0.631412
ARL2	11q13.1	0.048021677	0.523244	0.631412
HELT	4q35.1	0.047982397	0.523584	0.631784
TNFSF12	17p13.1	-0.047975645	0.523642	0.631795
TMEM125	1p34.2	0.04797146	0.523679	0.631795
ADGRE3	19p13.12	-0.047964589	0.523738	0.631795
EBF4	20p13	-0.047963091	0.523751	0.631795
RPL19P12	7q22.1	-0.047963091	0.523751	0.631795
SVBP	1p34.2	-0.047933798	0.524005	0.632063
RPL23AP32	2p16.2	-0.047928095	0.524054	0.632085
SNORA25	11q21	0.047915421	0.524164	0.632179
FUT9	6q16.1	0.047893278	0.524356	0.632348
CDK9	9q34.11	0.047891951	0.524368	0.632348
GARS	7p14.3	0.047885674	0.524422	0.632366
HERC5	4q22.1	-0.047879397	0.524477	0.632366

KCNIP2	10q24.32	-0.047873119	0.524531	0.632366
POLR2F	22q13.1	0.047868935	0.524567	0.632366
OR4F17	19p13.3	0.047868333	0.524573	0.632366
OR51D1	11p15.4	-0.047868333	0.524573	0.632366
C14ORF28	14q21.2	-0.047837549	0.52484	0.63265
SMIM12	1p34.3	0.047831272	0.524894	0.632677
MSANTD1	4p16.3	-0.047823003	0.524966	0.632716
DVL3	3q27.1	0.047818718	0.525003	0.632716
TRIM36	5q22.3	-0.047816626	0.525021	0.632716
AMH	19p13.3	0.047800874	0.525158	0.632843
SVIL	10p11.23	-0.047787333	0.525275	0.632946
DLGAP4	20q11.23	-0.047770594	0.525421	0.633083
CCSER1	4q22.1	-0.047766409	0.525457	0.633089
PGLYRP4	1q21.3	0.047755411	0.525552	0.633165
UIMC1	5q35.2	0.047709916	0.525947	0.633579
SLC4A1AP	2p23.3	0.047701546	0.52602	0.633579
CRYBA4	22q12.1	-0.047701342	0.526022	0.633579
GAL3ST2	2q37.3	0.047701255	0.526023	0.633579
IL31	12q24.31	0.047651952	0.526451	0.634057
CDH9	5p14.1	-0.047648233	0.526483	0.634057
EBLN2	3p13	0.047642064	0.526537	0.634084
ARL11	13q14.2	-0.047634591	0.526602	0.634099
LUZP4	Xq23	-0.047631829	0.526626	0.634099
SCARNA5	2q37.1	0.047629648	0.526645	0.634099
LIN7C	11p14.1	-0.047622037	0.526711	0.634141
TSSK1B	5q22.2	-0.047609718	0.526818	0.634231
OR9A2	7q34	0.04759757	0.526923	0.634289
DDX42	17q23.3	-0.047596928	0.526929	0.634289
C7ORF50	7p22.3	0.047576005	0.527111	0.634469
OPRPN	4q13.3	-0.047559984	0.52725	0.634568
PTGIS	20q13.13	-0.047559266	0.527256	0.634568
COL18A1- A	21q22.3	-0.047551462	0.527324	0.634612
CTRB2	16q23.1	-0.047547549	0.527358	0.634614
RBP4	10q23.33	-0.047540435	0.52742	0.634651
ADAMTS15	11q24.3	-0.047527881	0.527529	0.634714
ABHD12B	14q22.1	-0.047527044	0.527537	0.634714
LMAN1L	15q24.1	0.047487001	0.527885	0.635095
NBPF7	1p12	-0.047475058	0.527989	0.635182
CACNG3	16p12.1	-0.047413594	0.528524	0.635787
MATK	19p13.3	-0.047391877	0.528713	0.635912
SOCS1	16p13.13	-0.047387693	0.528749	0.635912
PFKFB3	10p15.1	0.0473856	0.528767	0.635912
TACR3	4q24	-0.047385245	0.528771	0.635912
OR10J3	1q23.2	-0.047383396	0.528787	0.635912
PDZK1P1	1q21.2	-0.047379373	0.528822	0.635916
ARFIP2	11p15.4	0.047368862	0.528913	0.635961
RPS5	19q13.43	0.047362584	0.528968	0.635961
MRPS26	20p13	-0.047360492	0.528986	0.635961
ZFP69	1p34.2	-0.047360492	0.528986	0.635961
EFHD1	2q37.1	-0.047335384	0.529205	0.636185
FZD7	2q33.1	-0.047320737	0.529332	0.6363
ITGAV	2q32.1	-0.047295629	0.529551	0.636502
NRN1L	16q22.1	0.047294173	0.529564	0.636502
VOPP1	7p11.2	-0.047280983	0.529679	0.636547

HLA-DPB2	6p21. 32	-0.047280802	0.52968	0.636547
COL5A3	19p13. 2	0.04727889	0.529697	0.636547
CCL24	7q11. 23	0.047242167	0.530017	0.636871
ZDHHC2	8p22	-0.047239135	0.530044	0.636871
CYP4X1	1p33 1	0.047237043	0.530062	0.636871
NRAP	10q25. 3	-0.047224322	0.530173	0.636966
HDDC2	6q22. 31	-0.047220304	0.530208	0.63697
LINC00452	13q34	0.047188836	0.530482	0.637261
RAC3	17q25. 3	0.047159626	0.530737	0.637474
SUGT1P3	13q14. 11	-0.047159626	0.530737	0.637474
PI15	8q21. 13	-0.047153349	0.530792	0.637474
GPATCH4	1q22-q23.	0.047149164	0.530828	0.637474
NSUN7	4p14	-0.047144979	0.530865	0.637474
CBLN3	14q12	0.047142887	0.530883	0.637474
ERRFI1	1p36. 23	0.047142887	0.530883	0.637474
BCAT1	12p12. 1	-0.047134518	0.530956	0.637524
C10RF52	1p22. 3	0.047119871	0.531084	0.637639
SNORA71E	20q11. 23	0.047111526	0.531157	0.637688
LCE2C	1q21. 3	0.047102793	0.531233	0.637741
LOC145783	15q21. 3	-0.047098948	0.531266	0.637743
SPHAR	1q42. 13	-0.047071747	0.531504	0.637957
TMEM120B	12q24. 31	-0.047069655	0.531522	0.637957
SCARNA17	18q21. 1	0.047067611	0.53154	0.637957
DR1	1p22. 1	-0.047059193	0.531613	0.637974
SPAM1	7q31. 32	-0.047055091	0.531649	0.637974
DNAJC19	3q26. 33	0.047055008	0.53165	0.637974
LTBP3	11q13. 1	-0.047044546	0.531741	0.638045
CSAD	12q13. 13	-0.047038269	0.531796	0.638072
OCM2	7q21. 3	-0.047012246	0.532023	0.638307
C2ORF88	2q32. 2	0.047006884	0.53207	0.638325
RPL10A	6p21. 31	-0.04699433	0.53218	0.638418
DUSP18	22q12. 2	0.046971314	0.532381	0.638621
TERB1	16q22. 1	0.046955234	0.532522	0.638751
OR2D2	11p15. 4	-0.046914083	0.532881	0.63912
HSPG2	1p36. 12	0.046912728	0.532893	0.63912
C6ORF52	6p24. 2	0.046896038	0.533039	0.639257
SGPL1	10q22. 1	-0.04688762	0.533113	0.63929
FOXP1	3p13	-0.046885527	0.533131	0.63929
TCTE1	6p21. 1	-0.046843437	0.533499	0.63965
POU3F4	Xq21. 1	-0.046840615	0.533524	0.63965
C9ORF57	9q21. 13	0.046840243	0.533527	0.63965
VCX3B	Xp22. 31	0.046835587	0.533568	0.63966
TAS2R9	12p13. 2	-0.046820953	0.533696	0.639775
KLHL3	5q31. 2	-0.04680811	0.533808	0.639872
FMO3	1q24. 3	-0.046770448	0.534138	0.640228
HSD17B3	9q22. 32	-0.046756657	0.534258	0.640335
C11ORF16	11p15. 4	-0.046724648	0.534538	0.640596
GREM1	15q13. 3	-0.046724416	0.53454	0.640596
MBD3L5	19p13. 2	-0.046705341	0.534707	0.640758
SEC24C	10q22. 2	0.046686753	0.53487	0.640914
KRT38	17q21. 2	-0.046667591	0.535038	0.641077
QTRT1	19p13. 2	0.046651183	0.535182	0.641211
TTF1	9q34. 13	-0.046632352	0.535347	0.641354
WDR93	15q26. 1	-0.04663026	0.535365	0.641354

TMEM249	8q24.3	0.04656856	0.535906	0.641919
VSIG8	1q23.2	-0.046567157	0.535918	0.641919
JKAMP	14q23.1	-0.046565397	0.535934	0.641919
MAD2L1BP	6p21.1	0.046557027	0.536007	0.641969
THOC1	18p11.32	0.046538196	0.536172	0.642128
DGCR6L	22q11.21	-0.046531919	0.536227	0.642155
IL4	5q31.1	-0.04652353	0.536301	0.642205
WDR76	15q15.3	0.046490072	0.536594	0.642463
ING4	12p13.31	0.046487979	0.536612	0.642463
MANEAL	1p34.3	-0.046487979	0.536612	0.642463
PNPLA4	Xp22.31	-0.046481702	0.536668	0.64249
UBA6-AS1	4q13.2	0.046477518	0.536704	0.642496
SLC43A3	11q12.1	-0.046469148	0.536778	0.642545
NFKBIA	14q13.2	-0.046458686	0.536869	0.642617
TNPO3	7q32.1	-0.046448225	0.536961	0.642688
SYNDIG1	20p11.21	-0.046429393	0.537127	0.642815
NUDT19	19q13.11	0.046425209	0.537163	0.642815
OR4N5	14q11.2	0.04641803	0.537226	0.642815
SNAR-G1	19q13.33	-0.046417778	0.537228	0.642815
TRIM48	11q11	0.046417778	0.537228	0.642815
HDLBP	2q37.3	0.046410562	0.537292	0.642853
KRTAP5-2	11p15.5	-0.04639509	0.537428	0.642977
GMPPB	3p21.31	0.046370807	0.537641	0.643193
TSIX	Xq13.2	0.046319695	0.53809	0.643692
TFDP3	Xq26.2	-0.046290722	0.538344	0.643958
TMEM218	11q24.2	-0.046220158	0.538964	0.644661
NMNAT2	1q25.3	-0.046209696	0.539056	0.644732
DCUN1D5	11q22.3	0.046195049	0.539185	0.644848
PAPSS1	4q25	-0.046169941	0.539406	0.645073
CES1P1	16q12.2	-0.04615787	0.539512	0.645161
SLC47A1	17p11.2	0.04611554	0.539884	0.645535
KAZALD1	10q24.31	0.046113448	0.539903	0.645535
MBLAC1	7q22.1	-0.046111355	0.539921	0.645535
CRYGB	2q33.3	-0.046107272	0.539957	0.645539
MT1IP	16q13	-0.04610211	0.540003	0.645555
NSUN3	3q11.2	0.046094616	0.540069	0.645595
DYDC1	10q23.1	-0.046089882	0.54011	0.645606
PDE7A	8q13.1	-0.046069508	0.54029	0.645754
SNORA74A	5q31.2	-0.046063669	0.540341	0.645754
CAVIN4	9q31.1	0.046062209	0.540354	0.645754
FBXO2	1p36.22	0.046061139	0.540363	0.645754
TUSC2	3p21.31	0.046031846	0.540621	0.646024
RASL11B	4q12	-0.046010922	0.540805	0.646205
MED11	17p13.2	-0.045994183	0.540953	0.646343
RAP2C	Xq26.2	0.045985814	0.541027	0.646392
PAK2	3q29	0.045981629	0.541063	0.646398
TCF20	22q13.2 2	-0.045941874	0.541414	0.646777
MZB1	5q31.2	-0.045935597	0.541469	0.646805
QPRT	16p11.2	-0.045904212	0.541745	0.647097
HYI	1p34.2	-0.045887473	0.541893	0.647234
ZNF503	10q22.2	-0.045866549	0.542077	0.647399
ARMC6	19p13.11	-0.045864457	0.542096	0.647399
ADK	10q22.2 1	0.045856088	0.54217	0.647449
PRSS3	9p13.3	0.045849811	0.542225	0.647476

HAND2	4q34.1	-0.045845626	0.542262	0.647481
KLC2	11q13.2	0.045833072	0.542373	0.647575
PDCL3P4	3q12.3	-0.045818425	0.542502	0.64769
RGS13	1q31.2	-0.045793557	0.542721	0.647914
ALOX12	17p13.1	-0.045772393	0.542908	0.648098
INTS3	1q21.3	-0.045761932	0.543	0.648169
SPATA45	1q32.3	-0.045757759	0.543037	0.648174
FAIM	3q22.3	0.045753562	0.543074	0.64818
FAS	10q23.31	-0.045726362	0.543314	0.648369
KIAA0930	22q13.31	0.045726362	0.543314	0.648369
CEACAM22F	19q13.31	0.045724605	0.54333	0.648369
ERH	14q24.1	0.045717992	0.543388	0.6484
PDE6H	12p12.3	-0.045706049	0.543493	0.648455
PLXNA2	1q32.2	0.045705438	0.543499	0.648455
BHLHE23	20q13.33	0.045642823	0.544052	0.649075
PPRC1	10q24.32	0.045613374	0.544312	0.649347
PRKY	Yp11.2	-0.045605537	0.544381	0.649391
ZNF705D	8p23.1	0.045561698	0.544768	0.649814
RGPD8	2q14.1	-0.045557271	0.544808	0.649822
PIP5K1A	1q21.3	-0.045542234	0.54494	0.649865
COMMD9	11p13	-0.045540142	0.544959	0.649865
VCX3A	Xp22.31	0.045538606	0.544973	0.649865
OR1L6	9q33.2	-0.045538456	0.544974	0.649865
LINC00159	21q22.11	0.045494016	0.545367	0.650295
TARBP2	12q13.13	0.045452263	0.545736	0.650674
GCM1	6p12.1	0.045449719	0.545759	0.650674
ANKUB1	3q25.1	0.045447004	0.545783	0.650674
GTF2H2C	5q13.2	-0.045425062	0.545977	0.650867
LNX2	13q12.2	-0.0454146	0.546069	0.650934
CASP1	11q22.3	0.045406231	0.546143	0.650934
PTGER2	14q22.1	-0.045406231	0.546143	0.650934
MYO18B	22q12.1	-0.045403948	0.546163	0.650934
CALR3	19p13.11	-0.045392234	0.546267	0.651019
SIRPD	20p13	-0.045362727	0.546528	0.651291
PWP1	12q23.3	-0.045349737	0.546643	0.651364
CEACAM7	19q13.2	0.045348475	0.546654	0.651364
GSTA2	6p12.2	-0.045324528	0.546866	0.651578
FTCD	21q22.3	-0.04531968	0.546909	0.65159
ACBD5	10p12.1	0.045312075	0.546977	0.651632
WDR11	10q26.12	-0.045297428	0.547106	0.651733
LOC100134	20p11.1	-0.045295061	0.547127	0.651733
ARHGDIB	12p12.3	0.045232565	0.547681	0.652354
VENTXP7	3p24.3	0.045226429	0.547735	0.65238
GPR21	9q33.2	0.045203985	0.547934	0.652569
LRRC8B	1p22.2	-0.04520118	0.547959	0.652569
SLC30A1	1q32.3	-0.045196995	0.547996	0.652574
FAM41C	1p36.33	-0.045169795	0.548237	0.652822
ANP32AP1	15q14	0.045113301	0.548738	0.653353
RLBP1	15q26.1	-0.04511212	0.548749	0.653353
CIB3	19p13.11	0.045072531	0.5491	0.653733
INTS1	7p22.3	0.045060992	0.549202	0.653804
PDIA6	2p25.1	-0.045054715	0.549258	0.653804
RAB3GAP1	2q21.3	-0.045054715	0.549258	0.653804
RASAL2-AS1	1q25.2	-0.045044253	0.549351	0.653875

ZNF577	19q13. 41	-0. 045035884	0. 549425	0. 653925
SLC22A15	1p13. 1	0. 045012868	0. 549629	0. 654112
ZDHC1	16q22. 1	-0. 045010776	0. 549648	0. 654112
LINC00928	15q26. 1	-0. 044980954	0. 549913	0. 654385
SNORA20	6q25. 3	-0. 044977576	0. 549943	0. 654385
DUSP12	1q23. 3	0. 044973113	0. 549982	0. 654393
STRADA	17q23. 3	-0. 044968929	0. 55002	0. 654399
MS4A6E	11q12. 2	-0. 044958669	0. 550111	0. 65443
ZMAT5	22q12. 2	0. 044956374	0. 550131	0. 65443
TRHDE-AS1	12q21. 1	0. 044954898	0. 550144	0. 65443
LARP6	15q23	-0. 044931266	0. 550354	0. 654641
DACT3	19q13. 32	0. 044899881	0. 550633	0. 654933
DSC1	18q12. 1	-0. 044889172	0. 550728	0. 654988
LINS1	15q26. 3	-0. 044887327	0. 550744	0. 654988
SMARCB1	22q11. 23	-0. 044878957	0. 550819	0. 655037
GIGYF1	7q22. 1	-0. 044866403	0. 55093	0. 655131
VHLL	1q22	-0. 04486098	0. 550979	0. 655142
ANAPC15	11q13. 4	0. 044858034	0. 551005	0. 655142
DYNC2LI1	2p21	-0. 044841295	0. 551153	0. 655256
PLB1	2p23. 2	0. 044835041	0. 551209	0. 655256
LNPB	2q31. 1	-0. 044835018	0. 551209	0. 655256
CHAT	10q11. 23	-0. 044829664	0. 551257	0. 655256
AP3D1	19p13. 3	0. 044828741	0. 551265	0. 655256
MRPL1	4q21. 1	-0. 044791078	0. 5516	0. 655615
CSRP3	11p15. 1	-0. 044740216	0. 552052	0. 656112
ZGLP1	19p13. 2	0. 044736677	0. 552084	0. 656112
OTX2	14q22. 3	-0. 044732473	0. 552121	0. 656118
BPIFC	22q12. 3	-0. 044710867	0. 552313	0. 656307
HIGD2B	15q24. 1	0. 044700254	0. 552408	0. 65638
TRIM50	7q11. 23	-0. 04469544	0. 552451	0. 656392
REG3G	2p12	-0. 044661181	0. 552756	0. 656702
MUSTN1	3p21. 1	-0. 044655075	0. 55281	0. 656702
SSC4D	7q11. 23	0. 044655075	0. 55281	0. 656702
ATP5PF	21q21. 3	0. 044644613	0. 552903	0. 656774
SCARB1	12q24. 31	0. 044636244	0. 552978	0. 656823
ACTA1	1q42. 13	-0. 044628789	0. 553044	0. 656863
MESP2	15q26. 1	0. 04462369	0. 553089	0. 656878
ACCSL	11p11. 2	-0. 044591686	0. 553374	0. 657158
DUSP21	Xp11. 3	-0. 044589833	0. 553391	0. 657158
SZT2	1p34. 2	-0. 044581843	0. 553462	0. 657203
GDI1	Xq28	0. 044563011	0. 55363	0. 657363
LILRB3	19q13. 42	-0. 044542088	0. 553816	0. 657546
OR10G7	11q24. 2	-0. 044509387	0. 554107	0. 657822
LRIG3	12q14. 1	0. 04450861	0. 554114	0. 657822
ZSCAN21	7q22. 1	-0. 044479317	0. 554375	0. 658092
NPS	10q26. 2	-0. 044453525	0. 554605	0. 658285
RPL35A	3q29	0. 044452116	0. 554618	0. 658285
AGBL5	2p23. 3	0. 044450024	0. 554637	0. 658285
TSPAN16	19p13. 2	0. 044427207	0. 55484	0. 658488
KIR3DX1	19q13. 42	-0. 044409607	0. 554997	0. 658614
RNU11	1p35. 3	0. 044407898	0. 555012	0. 658614
GULP1	2q32. 1-q32. 2	0. 04436633	0. 555383	0. 658998
MLF2	12p13. 31	0. 044364237	0. 555402	0. 658998
RABGAP1L	1q25. 1	-0. 044353776	0. 555495	0. 659069

ADAM18	8p11. 22	0. 044339178	0. 555625	0. 659129
DYDC2	10q23. 1	0. 044337939	0. 555636	0. 659129
MCOLN2	1p22. 3	-0. 044337037	0. 555644	0. 659129
SCLY	2q37. 3	-0. 044328667	0. 555719	0. 659179
AIRE	21q22. 3	0. 044304562	0. 555934	0. 659395
LSP1P5	1q21. 1	0. 044293097	0. 556037	0. 659421
OR51S1	11p15. 4	-0. 0442925	0. 556042	0. 659421
MRE11	11q21	-0. 044291005	0. 556055	0. 659421
LOC148696	1q32. 2	-0. 044274325	0. 556204	0. 659558
EIF4A1	17p13. 1	-0. 044253343	0. 556392	0. 659741
METTL27	7q11. 23	-0. 044249158	0. 556429	0. 659746
PITX2	4q25	0. 044227047	0. 556626	0. 659941
OR2S2	9p13. 3	0. 044210991	0. 55677	0. 660072
SERTAD4	1q32. 2	0. 044188479	0. 556971	0. 660271
ABCF1	6p21. 33	0. 044178018	0. 557064	0. 660343
WFDC8	20q13. 12	0. 044164388	0. 557186	0. 660448
PAXIP1-AS1	7q36. 2	0. 044159186	0. 557233	0. 660464
CDKL1	14q21. 3	-0. 044155002	0. 55727	0. 660469
MYO18A	17q11. 2	0. 044131986	0. 557476	0. 660674
PAGE5	Xp11. 21	-0. 044121551	0. 557569	0. 660689
OR10AD1	12q13. 11	-0. 04412129	0. 557571	0. 660689
MAOB	Xp11. 3	0. 044119432	0. 557588	0. 660689
FAM225A	9q32	-0. 044092231	0. 557831	0. 660921
MED17	11q21	-0. 044090139	0. 55785	0. 660921
FAM49B	8q24. 21	0. 044062938	0. 558093	0. 66117
OR56B4	11p15. 4	0. 044050608	0. 558203	0. 661262
RGL2	6p21. 32	0. 044044107	0. 558261	0. 661291
BEST3	12q15	0. 044037897	0. 558317	0. 661318
AFAP1	4p16. 1	0. 044023183	0. 558449	0. 661435
OSBPL1A	18q11. 2	-0. 044018999	0. 558486	0. 66144
SLC10A1	14q24. 1	0. 04398542	0. 558786	0. 661756
AQP12A	2q37. 3	-0. 043978645	0. 558847	0. 661789
COL12A1	6q13-q14.	0. 043952043	0. 559085	0. 662032
FOXJ1	17q25. 1	0. 043933212	0. 559254	0. 662141
NYAP1	7q22. 1	-0. 043933212	0. 559254	0. 662141
LAT	16p11. 2	-0. 043926935	0. 55931	0. 662141
CDRT15	17p12	0. 043926932	0. 55931	0. 662141
HOXD12	2q31. 1	0. 043897094	0. 559577	0. 662418
TP53BP2	1q41	0. 043880903	0. 559722	0. 66255
APOA1	11q23. 3	0. 043866715	0. 559849	0. 662662
ANKRD28	3p25. 1	-0. 043862072	0. 559891	0. 662672
GPAT4	8p11. 21	-0. 043857887	0. 559928	0. 662677
SNORA63	3q27. 3	-0. 043846471	0. 56003	0. 662758
PSMF1	20p13	0. 043839056	0. 560097	0. 662798
ISG20L2	1q23. 1	-0. 043826502	0. 560209	0. 662892
BCKDHA	19q13. 2	-0. 043811855	0. 56034	0. 662987
COLCA2	11q23. 1	0. 043809763	0. 560359	0. 662987
CATSPERZ	11q13. 1	0. 043806424	0. 560389	0. 662987
SPATA31A	5q12	0. 043789618	0. 56054	0. 663099
PCAT4	4q21. 21	0. 043788466	0. 56055	0. 663099
PRAMEF18	1p36. 21	0. 043774765	0. 560673	0. 663205
TSN	2q14. 3	0. 043761639	0. 56079	0. 663305
OR52B6	11p15. 4	0. 043745421	0. 560936	0. 663437
PLD3	19q13. 2	-0. 043698868	0. 561353	0. 663892

LINC010037q36.1	-0.04366539	0.561654	0.664207
UMODL1 21q22.3	-0.043654624	0.56175	0.664282
TFAMP1 7p22.3	0.043642202	0.561862	0.664375
IL17REL 22q13.33	-0.043628001	0.561989	0.664486
TIMM9 14q23.1	-0.04360262	0.562217	0.664606
ZNF23 16q22.2	-0.043596343	0.562273	0.664606
EEF1AKMT3 12q14.1	0.04359425	0.562292	0.664606
TAF3 1p13.2	0.043581531	0.562406	0.664606
CLN5 13q22.3	-0.043552403	0.562667	0.664606
PIK3CD-AS1 1p36.22	-0.043550441	0.562685	0.664606
GOLGA6L6 15q11.2	0.043547074	0.562715	0.664606
NOC2LP2 2q21.1	0.043533572	0.562837	0.664606
ASB13 10p15.1	0.04353148	0.562855	0.664606
OR2A1 7q35	-0.043530912	0.56286	0.664606
LTC4S 5q35.3	0.043525202	0.562912	0.664606
HYKK 15q25.1	0.043521018	0.562949	0.664606
TRAF3IP1 2q37.3	0.043518925	0.562968	0.664606
CDX4 Xq13.2	0.043516667	0.562988	0.664606
KIF2B 17q22	0.043516667	0.562988	0.664606
KRTAP9-8 17q21.2	0.043516667	0.562988	0.664606
OR10A7 12q13.2	0.043516667	0.562988	0.664606
OR14J1 6p22.1	0.043516667	0.562988	0.664606
OR1I1 19p13.12	0.043516667	0.562988	0.664606
OR2M2 1q44	0.043516667	0.562988	0.664606
OR2M5 1q44	0.043516667	0.562988	0.664606
OR2M7 1q44	0.043516667	0.562988	0.664606
OR4B1 11p11.2	0.043516667	0.562988	0.664606
OR4M1 14q11.2	0.043516667	0.562988	0.664606
OR8B3 11q24.2	0.043516667	0.562988	0.664606
TAAR2 6q23.2	0.043516667	0.562988	0.664606
TAS2R16 7q31.32 7	0.043516667	0.562988	0.664606
UTP25 1q32.2	0.043502187	0.563118	0.66472
IQCK 16p12.3	0.043498002	0.563156	0.664726
AMY2B 1p21.1	-0.043489632	0.563231	0.664775
LOC10012819p13.2	-0.043461694	0.563482	0.665032
LOC10013020p11.23	0.043434559	0.563726	0.66528
PER4 7p21.3	0.043418766	0.563868	0.665409
CCL22 16q21	0.043403846	0.564002	0.665528
KCNJ9 1q23.2	0.043385354	0.564168	0.665684
SLC5A1 22q12.3	0.043371437	0.564293	0.665793
LRRC24 8q24.3	-0.043365361	0.564348	0.665818
ZNF282 7q36.1	0.043357814	0.564416	0.66584
HPSE2 10q24.2	-0.043355885	0.564433	0.66584
WDR44 Xq24	-0.043343167	0.564547	0.665935
GMPR 6p22.3	-0.043303413	0.564905	0.666318
LCE2A 1q21.3	-0.043277415	0.565139	0.666554
TTC32 2p24.1	-0.04326575	0.565244	0.666639
AK7 14q32.2	-0.043261566	0.565281	0.666644
PRPF38A 1p32.3	0.043246919	0.565413	0.66676
PLPBP 8p11.23	-0.043221811	0.565639	0.666987
SND1-IT1 7q32.1	0.043216867	0.565684	0.667
PC 11q13.2	0.043205072	0.56579	0.667086
SMARCC1 3p21.31	-0.043198795	0.565846	0.667113
CPSF4 7q22.1	0.043188333	0.56594	0.667185

ABCG4	11q23.3	-0.043167409	0.566129	0.667328
CNTNAP3	9p12	-0.043167409	0.566129	0.667328
IMMT	2p11.2 2	-0.043146486	0.566317	0.667511
MYB	6q23.3	0.043138116	0.566393	0.667543
HAGH	16p13.3	-0.043136024	0.566411	0.667543
GNRHR	4q13.2	-0.043122652	0.566532	0.667646
ZNF112	19q13.31	-0.043106731	0.566675	0.667775
NR2F1	5q15	-0.043096269	0.56677	0.667808
SLC25A28	10q24.2	0.043096269	0.56677	0.667808
PMS2CL	7p22.1	-0.043062792	0.567071	0.668084
VAPA	18p11.22	0.043062792	0.567071	0.668084
C5ORF58	5q35.1	-0.043012159	0.567528	0.668561
CREBZF	11q14.1	0.043010483	0.567543	0.668561
MXI1	10q25.2	-0.042993744	0.567694	0.668699
LINC01553	10q21.2	0.042981485	0.567804	0.668754
PXDN	2p25.3	-0.04298119	0.567807	0.668754
C8A	1p32.2	-0.042972506	0.567885	0.668782
PPP1R14C	6q25.1	0.042970728	0.567901	0.668782
EGF	4q25	0.042967385	0.567931	0.668782
IGF2	11p15.5	0.042956081	0.568033	0.668863
GPR27	3p13	-0.042937853	0.568198	0.669017
ZNF251	8q24.3	0.042903773	0.568505	0.669326
DEFB125	20p13	-0.042901338	0.568527	0.669326
KIR2DL3	19q13.42	0.042844186	0.569043	0.669894
BRF2	8p11.23	-0.04283054	0.569166	0.66996
TOPBP1	3q22.1	-0.04283054	0.569166	0.66996
NUTM2G	9q22.33	0.042790808	0.569525	0.670303
BEGAIN	14q32.2	-0.042790785	0.569525	0.670303
DRC1	2p23.3	-0.042781516	0.569609	0.670362
PPARGC1B	5q32	-0.042767769	0.569733	0.670469
OR2A25	7q35	-0.042763678	0.56977	0.670473
YIPF5	5q31.3	-0.042719667	0.570167	0.670824
HIBADH	7p15.2	-0.042719645	0.570167	0.670824
BYSL	6p21.1	-0.042717553	0.570186	0.670824
LINC00596	14q11.2	-0.042715768	0.570202	0.670824
CHST1	11p11.2	0.042711276	0.570243	0.670833
FAM138D	12p13.33	-0.042660875	0.570698	0.671321
CPNE2	16q13	-0.042656874	0.570735	0.671321
BCL2A1	15q25.1	0.04265269	0.570772	0.671321
SCARNA3	1q25.1	-0.042650468	0.570792	0.671321
FUCA2	6q24.2	-0.042633859	0.570943	0.671458
SMG1P3	16p12.2	-0.042604566	0.571207	0.67173
DSCR9	21q22.13	-0.042594821	0.571296	0.671794
SNX5	20p11.23	0.042577365	0.571453	0.67194
AGO2	8q24.3	0.042571088	0.57151	0.671948
PCYT1A	3q29	-0.042568995	0.571529	0.671948
KRTAP4-9	17q21.2	-0.042565503	0.571561	0.671948
P2RX3	11q12.1	-0.042545644	0.57174	0.672119
DYNC2H1	11q22.3	-0.042529241	0.571889	0.672254
POLR2C	16q21	-0.042504132	0.572116	0.672482
ARHGAP6	Xp22.2	-0.04246647	0.572457	0.672843
ADH7	4q23	0.042450168	0.572604	0.672963
ABCA4	1p22.1	0.042447728	0.572626	0.672963
MRPS18C	4q21.23	-0.042424623	0.572836	0.673169

OVCH2	11p15.4	0.042393788	0.573115	0.673458
RACK1	5q35.3	0.042382776	0.573215	0.673536
ATP6V1G3	1q31.3	0.042364041	0.573384	0.673695
FGF18	5q35.1	0.042347206	0.573537	0.673835
PMCH	12q23.2	-0.042339524	0.573606	0.673877
OR2D3	11p15.4	0.042335803	0.57364	0.673877
RXFP2	13q13.1	0.042323122	0.573755	0.673944
HS3ST2	16p12.2	0.042322097	0.573764	0.673944
PFDN5	12q13.13	-0.04231582	0.573821	0.673971
FAM50B	6p25.2	-0.042301174	0.573954	0.674087
TDRD3	13q21.2	-0.042273973	0.5742	0.674314
CCDC54	3q13.12	0.042272451	0.574214	0.674314
ZNF683	1p36.11	0.042254118	0.57438	0.674441
LTBP1	2p22.3	-0.04225305	0.57439	0.674441
ITPRIP	10q25.1	-0.042236311	0.574542	0.674562
MOB3B	9p21.2	-0.042234218	0.574561	0.674562
NPRL3	16p13.3	0.04220911	0.574789	0.67479
AMMECR1L	2q14.3	0.042186094	0.574997	0.674995
GSX2	4q12	0.042151048	0.575315	0.675329
HS3ST3A1	17p12	0.04213797	0.575434	0.675406
C11ORF87	11q22.3	-0.042136379	0.575448	0.675406
GOLGA2	9q34.11	-0.042121231	0.575586	0.675527
OR7C1	19p13.12	0.042113302	0.575658	0.675572
CALN1	7q11.22	-0.042102048	0.57576	0.675631
STAM	10p12.33	-0.042100308	0.575776	0.675631
DEFB128	20p13	-0.042066111	0.576086	0.675956
STARD4	5q22.1	-0.042052183	0.576212	0.676065
GOLGA6C	15q24.2	0.042034846	0.57637	0.67621
CCT8L2	22q11.1	0.042026138	0.576449	0.676263
PCIF1	20q13.12	0.041999874	0.576688	0.676503
SPDYE3	7q22.1	0.041991505	0.576764	0.676552
MYLK3	16q11.2	-0.041976859	0.576897	0.676669
WDR43	2p23.2	-0.041949658	0.577144	0.6769
GREM2	1q43	-0.041947653	0.577162	0.6769
PCNX2	1q42.2	-0.041914088	0.577467	0.677218
CCDC154	16p13.3	0.041901621	0.57758	0.677311
METRNL	16p13.3	0.041895257	0.577638	0.677322
ANKRD40	17q21.33	-0.041893164	0.577657	0.677322
SCP2	1p32.3	0.04188061	0.577771	0.677416
PNN	14q21.1	0.041855502	0.578	0.677613
LOC148709	1q32.1	0.041854675	0.578007	0.677613
FAM162B	6q22.1	-0.041805285	0.578456	0.6781
PARP8	5q11.1	0.041792731	0.57857	0.678194
RPEL1	10q24.33	0.041736238	0.579084	0.678757
CYP11A1	15q24.1	-0.04173214	0.579122	0.678761
OR4C6	11q11	0.041725878	0.579179	0.678788
ACTL7A	9q31.3	-0.041719865	0.579233	0.678812
LOC153684	5p12	-0.041711129	0.579313	0.678826
KRT71	12q13.13	0.041711094	0.579313	0.678826
LAYN	11q23.1	0.041706945	0.579351	0.67883
OR10S1	11q24.1	0.04169463	0.579463	0.678888
KBTBD2	7p14.3	-0.041692298	0.579484	0.678888
MROH5	8q24.3	-0.041690375	0.579502	0.678888
C10RF146	1p22.1	-0.041667243	0.579712	0.679095

SEC61G	7p11. 2	0. 041648359	0. 579884	0. 679256
TLL10	1p36. 33	0. 041622226	0. 580122	0. 679495
TMEM35A	Xq22. 1	-0. 041616973	0. 58017	0. 679511
SPRED1	15q14	-0. 041610696	0. 580227	0. 679539
AGFG2	7q22. 1	0. 041593957	0. 58038	0. 679677
PRKAA1	5p13. 1	0. 041581403	0. 580494	0. 679771
SPACA3	17q11. 2	0. 041547592	0. 580802	0. 680092
CWC25	17q12	-0. 041543741	0. 580837	0. 680094
ADAM6	14q32. 33	-0. 041531187	0. 580952	0. 680188
MRPL20	1p36. 33	0. 041510263	0. 581143	0. 680335
CT55	Xq26. 3	-0. 041508147	0. 581162	0. 680335
USP50	15q21. 2	0. 041506147	0. 58118	0. 680335
LOC407835	7q32. 1	0. 041501894	0. 581219	0. 680341
VN1R1	19q13. 43	0. 041483062	0. 581391	0. 680502
SCUBE2	11p15. 4	-0. 041474693	0. 581467	0. 680551
KANSL1L	2q34	0. 041399368	0. 582154	0. 681316
NEBL	10p12. 31	0. 041321951	0. 58286	0. 68209
LHFPL3-AS1	7q22. 2-q2	0. 041316443	0. 582911	0. 68209
DLG5-AS1	10q22. 3	-0. 041315674	0. 582918	0. 68209
SLITRK3	3q26. 1	-0. 041286597	0. 583183	0. 68236
APOL3	22q12. 3	-0. 041252903	0. 583491	0. 68265
XKRY2	Yq11. 222	0. 041251988	0. 583499	0. 68265
GNPNAT1	14q22. 1	0. 041217333	0. 583816	0. 682981
DPPA2	3q13. 13	0. 041210008	0. 583883	0. 683019
LRP1	12q13. 3	-0. 041202687	0. 583949	0. 683057
CTSW	11q13. 1	-0. 04119641	0. 584007	0. 683084
IL2RA	10p15. 1	-0. 041158747	0. 584351	0. 683447
SCAP	3p21. 31	-0. 041142008	0. 584504	0. 683586
HSPB3	5q11. 2	-0. 041134302	0. 584574	0. 683617
DIDO1	20q13. 33	-0. 041131546	0. 584599	0. 683617
C2	6p21. 33	-0. 041093884	0. 584944	0. 68398
COLCA1	11q23. 1	0. 041087607	0. 585001	0. 684007
RNF17	13q12. 12	-0. 041068712	0. 585174	0. 684169
ITGB2	21q22. 3	0. 041054129	0. 585307	0. 684285
CLCNKB	1p36. 13	-0. 041045465	0. 585387	0. 684338
TAF12	1p35. 3	0. 041041575	0. 585422	0. 684339
SSX2	Xp11. 22	-0. 041011542	0. 585697	0. 68462
VANGL2	1q23. 2	0. 040991359	0. 585882	0. 684796
DDX4	5q11. 2	0. 040983078	0. 585957	0. 684845
PCID2	13q34	0. 04097462	0. 586035	0. 684877
RPS9	19q13. 42	0. 040972527	0. 586054	0. 684877
SPRR2F	1q21. 3	0. 040964404	0. 586128	0. 684924
RABL6	9q34. 3	0. 040955789	0. 586207	0. 684976
UFD1	22q11. 21	0. 040945327	0. 586303	0. 685048
ZNF212	7q36. 1	-0. 040926496	0. 586475	0. 685209
CROCCP3	1p36. 13	-0. 040918126	0. 586552	0. 685259
ZNF436-AS1	1p36. 12	-0. 040909757	0. 586628	0. 685291
ASCC1	10q22. 1	0. 040907664	0. 586648	0. 685291
DGKG	3q27. 2-q2	-0. 040890925	0. 586801	0. 68543
DAZAP2	12q13. 13	-0. 040876279	0. 586935	0. 685546
POLD3	11q13. 4	0. 040828155	0. 587376	0. 686021
SNHG28	1q23. 2	-0. 040780031	0. 587817	0. 686496
PEX19	1q23. 2	-0. 040754922	0. 588047	0. 686691
DIABLO	12q24. 31	0. 04075283	0. 588066	0. 686691

RTL1	14q32. 2	-0. 040750538	0. 588087	0. 686691
LYZL6	17q12	0. 040731526	0. 588261	0. 686854
APOD	3q29	0. 040723537	0. 588334	0. 6869
LOC1002729q34. 11		-0. 040710983	0. 588449	0. 686994
CD74	5q33. 1	-0. 040685875	0. 58868	0. 687223
MFSD14B	9q22. 32	-0. 040667043	0. 588852	0. 687384
EEF1AKNM1	1q24. 3	0. 040654489	0. 588967	0. 687478
ASH2L	8p11. 23	0. 040648212	0. 589025	0. 687505
ANKRD49	11q21	-0. 040627289	0. 589217	0. 687689
OR6X1	11q24. 1	-0. 040615556	0. 589325	0. 687775
KIR3DL3	19q13. 42	-0. 040606605	0. 589407	0. 68778
NKTR	3p22. 1	0. 040604273	0. 589428	0. 68778
PGPEP1L	15q26. 3	-0. 040601355	0. 589455	0. 68778
OGDH	7p13	-0. 040600088	0. 589467	0. 68778
SST	3q27. 3	-0. 040583349	0. 58962	0. 687919
NPR2	9p13. 3	-0. 040579164	0. 589659	0. 687923
FOLR3	11q13. 4	0. 040569741	0. 589745	0. 687959
OR6P1	1q23. 1	-0. 04056837	0. 589758	0. 687959
AOX2P	2q33. 1	-0. 04055861	0. 589847	0. 688023
AMZ1	7p22. 3	-0. 040549893	0. 589927	0. 688059
LRATD1	2p24. 3	-0. 040547779	0. 589947	0. 688059
GALP	19q13. 43	-0. 04054216	0. 589998	0. 688059
PAX2	10q24. 31	-0. 040540235	0. 590016	0. 688059
NDRG1	8q24. 22	0. 040528948	0. 590119	0. 68814
SNORA5A	7p13	-0. 040524668	0. 590159	0. 688146
SPOCK1	5q31. 2	-0. 040505932	0. 590331	0. 688306
S1PR4	19p13. 3	0. 040485008	0. 590523	0. 68849
TMEM175	4p16. 3	-0. 040476639	0. 5906	0. 688539
CYBRD1	2q31. 1	-0. 040455715	0. 590792	0. 688723
TMSB15B	Xq22. 2	-0. 040441069	0. 590926	0. 688815
COX7A2L	2p21	-0. 040438976	0. 590946	0. 688815
PSG7	19q13. 31	-0. 040435922	0. 590974	0. 688815
PCDHGA8	5q31. 3	-0. 040418053	0. 591138	0. 688966
OR13D1	9q31. 1	0. 040358291	0. 591687	0. 689566
ZNF280A	22q11. 22	0. 040347651	0. 591785	0. 689639
MCMBP	10q26. 11	-0. 040328082	0. 591965	0. 689791
AHCY	20q11. 22	0. 040325989	0. 591984	0. 689791
FUS	16p11. 2	0. 040321804	0. 592022	0. 689795
CST9L	20p11. 21	0. 040302541	0. 5922	0. 689962
SGCG	13q12. 12	-0. 040296224	0. 592258	0. 689988
PRR21	2q37. 3	0. 040292551	0. 592291	0. 689988
THAP7	22q11. 21	-0. 040284142	0. 592369	0. 690027
LINC00304	16q24. 3	-0. 040281448	0. 592393	0. 690027
BEST2	19p13. 13	-0. 04027326	0. 592469	0. 690074
LINC00608	2q35	0. 04023979	0. 592777	0. 690393
STARD6	18q21. 2	0. 040206291	0. 593085	0. 690711
SNORD94	2p11. 2	0. 040187412	0. 593259	0. 690873
FAM153CP	5q35. 3	-0. 040169287	0. 593425	0. 691027
COX19	7p22. 3	0. 040154416	0. 593562	0. 691146
ANXA2R	5p12	-0. 040139769	0. 593697	0. 691263
CELA3A	1p36. 12	-0. 040134858	0. 593742	0. 691272
IFI16	1q23. 1	-0. 0401314	0. 593774	0. 691272
MRPS18B	6p21. 33	-0. 040110476	0. 593967	0. 691456
TAF4	20q13. 33	0. 040066537	0. 594371	0. 691887

GCG	2q24. 2	0. 040048127	0. 594541	0. 692044
TAS2R43	12p13. 2	0. 040039623	0. 594619	0. 69208
TSC22D3	Xq22. 3	-0. 040037244	0. 594641	0. 69208
WASHC3	12q23. 2	0. 04002469	0. 594757	0. 69214
DPRX	19q13. 42	-0. 040024113	0. 594762	0. 69214
TRIM6	11p15. 4	0. 040012136	0. 594872	0. 692173
ALB	4q13. 3	-0. 040010043	0. 594892	0. 692173
DEFB126	20p13	-0. 040009788	0. 594894	0. 692173
CLU1	12q22	-0. 039995962	0. 595021	0. 692256
LRRC3B	3p24. 1	-0. 039993854	0. 595041	0. 692256
HIC1	17p13. 3	0. 03998912	0. 595085	0. 692256
MCRS1	12q13. 12	0. 039987027	0. 595104	0. 692256
EXOSC3	9p13. 2	-0. 039978658	0. 595181	0. 692305
INPP5J	22q12. 2	-0. 039934718	0. 595586	0. 692736
ARHGAP4	Xq28	0. 039928441	0. 595644	0. 692763
PRR30	2p23. 3	0. 039885124	0. 596043	0. 693187
RNLS	10q23. 31	-0. 039880317	0. 596088	0. 693198
ZNF410	14q24. 3	0. 03987404	0. 596145	0. 693225
FAM153A	5q35. 3	0. 039856276	0. 596309	0. 693356
COQ2	4q21. 22-c	0. 039851024	0. 596358	0. 693356
EHHADH	3q27. 2	0. 039846839	0. 596396	0. 693356
ZNF534	19q13. 41	0. 039846839	0. 596396	0. 693356
BCAT2	19q13. 33	0. 039840562	0. 596454	0. 693383
SPINK1	5q32	-0. 039834285	0. 596512	0. 69341
SLFN12	17q12	0. 039817547	0. 596667	0. 693549
PRR11	17q22	0. 039796831	0. 596858	0. 693731
FDXACB1	11q23. 1	-0. 039777792	0. 597033	0. 693895
TCAP	17q12	0. 039763145	0. 597169	0. 694011
RPS7	2p25. 3	-0. 039752683	0. 597265	0. 694083
CEBPE	14q11. 2	0. 039718399	0. 597582	0. 694411
CTSS	1q21. 3	0. 039710836	0. 597651	0. 694451
FNDC3B	3q26. 31	0. 039637604	0. 598328	0. 695121
FOXRED1	11q24. 2	0. 039635511	0. 598347	0. 695121
KLF7	2q33. 3	0. 039635511	0. 598347	0. 695121
ZNF597	16p13. 3	-0. 039633419	0. 598366	0. 695121
SLC4A4	4q13. 3	-0. 039622957	0. 598463	0. 695192
RNF32	7q36. 3	0. 039606218	0. 598618	0. 695332
GSTM2P1	6q21	-0. 039573288	0. 598922	0. 69561
SMIM4	3p21. 1	0. 039572741	0. 598927	0. 69561
BRCA1	17q21. 31	0. 039564371	0. 599004	0. 69566
MRPL34	19p13. 11	0. 039560187	0. 599043	0. 695664
MTMR1	Xq28	-0. 039551817	0. 59912	0. 695713
DDOST	1p36. 12	-0. 039526709	0. 599353	0. 695943
ABCG1	21q22. 3	-0. 039512062	0. 599488	0. 696059
OTUB2	14q32. 12	0. 039495324	0. 599643	0. 696199
CENPO	2p23. 3	0. 039478585	0. 599798	0. 696338
DUX4L6	4q35. 2	0. 039458852	0. 59998	0. 696509
OR51A4	11p15. 4	0. 039419124	0. 600348	0. 696895
LRIT3	4q25	-0. 039371895	0. 600785	0. 697362
ZC3HC1	7q32. 2	-0. 039348859	0. 600998	0. 697531
ATP13A5	3q29	-0. 039348642	0. 601	0. 697531
MPP4	2q33. 1	-0. 039343829	0. 601044	0. 697542
TUBB6	18p11. 21	0. 03933212	0. 601153	0. 697628
CIAO1	2q11. 2	-0. 039325843	0. 601211	0. 697654

MTF2	1p22.1	-0.039317473	0.601288	0.697704
PGM2	4p14	-0.039269349	0.601734	0.698164
LOX	5q23.1	-0.039265164	0.601773	0.698164
NPFFR1	10q22.1	-0.039263295	0.60179	0.698164
IDI1	10p15.3	0.03922541	0.602141	0.698531
ANKRD20A	2q13	-0.039204279	0.602337	0.69867
LIPI	21q11.2	-0.039201096	0.602366	0.69867
C10ORF62	10q24.2	-0.039200337	0.602373	0.69867
SLC13A2	17q11.2	0.039196443	0.602409	0.69867
TRIM49	11q14.3	-0.039191592	0.602454	0.69867
GCNT1	9q21.13	-0.03918984	0.60247	0.69867
ARHGAP10	4q31.23	-0.039171008	0.602645	0.698719
ARFGEF1	8q13.2	-0.039166824	0.602684	0.698719
CXORF51A	Xq27.3	0.039165	0.602701	0.698719
TTY16	Yp11.2	0.039165	0.602701	0.698719
OR2J2	6p22.1	0.039164093	0.602709	0.698719
LAMP3	3q27.1	0.039162639	0.602723	0.698719
ITIH4	3p21.1	0.039116607	0.603149	0.699173
TMEM189	12q13.13	0.03909545	0.603345	0.69936
INTS5	11q12.3	0.039078945	0.603498	0.699461
RO60	1q31.2	-0.039076852	0.603518	0.699461
VRK1	14q32.2	0.03907476	0.603537	0.699461
SSMEM1	7q32.2	-0.039061324	0.603662	0.699565
ULK4P2	15q13.2	-0.039031871	0.603935	0.699841
AMY1A	1p21.1	-0.039016863	0.604074	0.699961
KCTD21	11q14.1	0.038997343	0.604255	0.700131
UBE2Q2P2	15q25.2	-0.038982812	0.60439	0.700246
SPEF1	20p13	-0.038978532	0.60443	0.700252
PRAMEF4	1p36.21	-0.038966616	0.60454	0.700339
SFTPD	10q22.3	-0.038953403	0.604663	0.700441
CEACAM19	19q13.31	0.03892411	0.604935	0.700715
GJA10	6q15	0.038912934	0.605039	0.700777
SPATA31E1	19q22.1	0.03890704	0.605093	0.700777
GPR89B	1q21.2	0.038906346	0.6051	0.700777
STMP1	7q33	-0.038903187	0.605129	0.700777
TMEM31	Xq22.2	0.038897899	0.605178	0.700786
MBIP	14q13.3	0.038894817	0.605207	0.700786
MYADML2	17q25.3	-0.038841806	0.605699	0.701316
N4BP2L2	13q13.1	0.038832047	0.60579	0.70138
DMPK	19q13.32	0.038798569	0.606101	0.701699
COPZ1	12q13.13	0.038794384	0.60614	0.701704
NCAPD3	11q25	-0.038739983	0.606645	0.702248
SCYL3	1q24.2	0.038727429	0.606762	0.702333
APOC1P1	19q13.32	0.038722451	0.606808	0.702333
LCE1F	1q21.3	0.038719765	0.606833	0.702333
ADIPOR2	12p13.33	0.038716967	0.606859	0.702333
C19ORF18	19q13.43	0.038673108	0.607267	0.702747
PROCA1	17q11.2	0.038670935	0.607287	0.702747
ZNF90	19p12	-0.038626996	0.607696	0.703179
SIGLEC14	19q13.41	-0.038621266	0.607749	0.7032
MTERF3	8q22.1	0.038614441	0.607813	0.703233
ONECUT1	15q21.3	-0.038600974	0.607938	0.703337
MFN1	3q26.33	0.038572594	0.608202	0.703563
ELOA3	18q21.1	-0.038572438	0.608204	0.703563

PRKAA2	1p32. 2	-0. 038566317	0. 608261	0. 703588
FCGR1A	1q21. 2	-0. 038551671	0. 608397	0. 703705
CBLB	3q13. 11	-0. 038545394	0. 608455	0. 703714
SETD5	3p25. 3	-0. 038543301	0. 608475	0. 703714
FAAH2	Xp11. 21	-0. 03853284	0. 608572	0. 703754
CCDC172	10q25. 3	0. 038531991	0. 60858	0. 703754
SH3BP5L	1q44	0. 038520285	0. 608689	0. 703839
STPG3	9q34. 3	-0. 038503804	0. 608842	0. 703976
ABHD15	17q11. 2	-0. 038497269	0. 608903	0. 704006
SNHG5	6q14. 3	0. 0384889	0. 608981	0. 704037
FBX04	5p13. 1	-0. 038486808	0. 609001	0. 704037
NGLY1	3p24. 2	0. 038467976	0. 609176	0. 704199
LMOD2	7q31. 32	-0. 038421332	0. 60961	0. 704636
SYNPO	5q33. 1	-0. 038419852	0. 609624	0. 704636
CCDC97	19q13. 2	-0. 038405206	0. 609761	0. 704752
OLIG2	21q22. 11	0. 038397686	0. 609831	0. 70477
KRT75	12q13. 13	-0. 038394833	0. 609857	0. 70477
HERC2P4	16p11. 2	-0. 038389085	0. 609911	0. 70477
CRIPAK	4p16. 3	0. 038388467	0. 609917	0. 70477
CNIH3	1q42. 12	0. 03837382	0. 610053	0. 704868
PCAT18	18q11. 2	0. 038371722	0. 610073	0. 704868
SPACA5	Xp11. 23	0. 038311461	0. 610634	0. 705477
PNMA6A	Xq28	-0. 038294311	0. 610794	0. 7056
APOBEC3H	22q13. 1	0. 038292419	0. 610812	0. 7056
DYNLT3	Xp11. 4	0. 038260833	0. 611106	0. 705881
SPARC	5q33. 1	-0. 038258741	0. 611126	0. 705881
ITGAX	16p11. 2	0. 038252464	0. 611184	0. 705908
FAM86B2	8p23. 1	-0. 038228075	0. 611412	0. 70613
CHAF1B	21q22. 12-	-0. 038218986	0. 611496	0. 706187
LYPLA1	8q11. 23	0. 038212709	0. 611555	0. 706214
FAM228A	2p23. 3	-0. 038199209	0. 611681	0. 706319
SPINT4	20q13. 12	0. 038143116	0. 612204	0. 706882
CCDC169	13q13. 3	0. 038134463	0. 612285	0. 706918
BBS12	4q27	-0. 038132173	0. 612306	0. 706918
OR2AG2	11p15. 4	0. 038080563	0. 612788	0. 707434
LCE3A	1q21. 3	0. 038075278	0. 612838	0. 70745
SIGLEC16	19q13. 33	-0. 038059967	0. 61298	0. 707533
C11ORF88	11q23. 1	-0. 038059931	0. 612981	0. 707533
MIR1-1HG-	20q13. 33	0. 038049204	0. 613081	0. 707608
ZCCHC17	1p35. 2	-0. 038022324	0. 613332	0. 707837
TTY2	Yp11. 2	-0. 038020407	0. 61335	0. 707837
SF3B5	6q24. 2	-0. 037986734	0. 613664	0. 708159
POM121L4F	22q11. 21	-0. 037932452	0. 614172	0. 708703
GAL3ST4	7q22. 1	0. 037898855	0. 614486	0. 709025
RAB40C	16p13. 3	0. 037884209	0. 614623	0. 709142
TXNDC2	18p11. 22	0. 037869623	0. 614759	0. 709258
PLEKHD1	14q24. 1	0. 037856482	0. 614882	0. 709352
KIAA0895L	16q22. 1	-0. 037846547	0. 614975	0. 709352
ZNF266	19p13. 2	0. 037842362	0. 615014	0. 709352
LEFTY2	1q42. 12	-0. 037841398	0. 615023	0. 709352
ELOVL7	5q12. 1	0. 037838177	0. 615053	0. 709352
SWSAP1	19p13. 2	0. 037838177	0. 615053	0. 709352
CYC1	8q24. 3	0. 037781684	0. 615581	0. 709872
COMMD2	3q25. 1	0. 037779591	0. 615601	0. 709872

DOCK8-AS19p24. 3	-0.037778565	0.615611	0.709872
TBK1 6p21. 1	-0.037764945	0.615738	0.709978
HOXC12 12q13. 13	-0.037748198	0.615895	0.710099
SLC37A3 7q34	-0.037746113	0.615914	0.710099
PPP3R1 2p14	0.037737764	0.615992	0.710148
SLC24A1 15q22. 31	-0.037718913	0.616169	0.71031
OR5M10 11q12. 1	-0.037714445	0.61621	0.710318
TRAPPC1 17p13. 1	0.037668696	0.616639	0.71077
VPREB1 22q11. 22	-0.037653627	0.61678	0.710892
FAM167B 1p35. 2	-0.037649865	0.616815	0.710892
AGAP5 10q22. 2	0.03764568	0.616854	0.710896
B3GNT9 16q22. 1	0.037641496	0.616893	0.7109
SNORA58 3q22. 1	-0.037614808	0.617143	0.711111
NR4A2 2q24. 1	-0.037614295	0.617148	0.711111
SNORA65 9q33. 3	-0.037608541	0.617202	0.711133
ZFR2 19p13. 3	-0.037602862	0.617255	0.711153
HMHB1 5q31. 3	0.037579768	0.617471	0.711361
CHIA 1p13. 2	-0.03757108	0.617553	0.711385
NAALADL1 11q13. 1	0.037566171	0.617599	0.711385
LRRC14 8q24. 3	0.037564078	0.617618	0.711385
ENDOU 12q13. 11	0.037560601	0.617651	0.711385
RNF123 3p21. 31	0.037557801	0.617677	0.711385
CLDN6 16p13. 3	0.037554717	0.617706	0.711385
SPSB1 1p36. 22	0.037536878	0.617873	0.711537
MAEA 4p16. 3	0.037497123	0.618246	0.711916
PHACTR2-A 6q24. 2	-0.037494174	0.618273	0.711916
RNASE8 14q11. 2	-0.037453419	0.618656	0.712303
TMPRSS11A 4q13. 2	0.03744801	0.618706	0.712303
NOP2 12p13. 31	0.037446906	0.618717	0.712303
ZFYVE28 4p16. 3	0.037442722	0.618756	0.712307
ANKRD36B 2q11. 2	0.037417613	0.618991	0.712537
ACER2 9p22. 1	0.037386228	0.619286	0.712835
OR6M1 11q24. 1	-0.0373302	0.619811	0.713399
C17ORF49 17p13. 1	0.037304626	0.620051	0.713619
RAB17 2q37. 3	0.037298349	0.62011	0.713619
URGCP 7p13	0.037298349	0.62011	0.713619
SMIM10 Xq26. 3	-0.03728998	0.620189	0.713669
POLE 12q24. 33	0.037283703	0.620247	0.713695
INTS12 4q24	0.037277426	0.620306	0.713722
ZNF474 5q23. 2	-0.037273436	0.620344	0.713724
TRPV3 17p13. 2	0.03722934	0.620758	0.714159
EDNRA 4q31. 22-c	0.037208378	0.620955	0.714303
PSMB5 14q11. 2	-0.037208378	0.620955	0.714303
CASC15 6p22. 3	0.037197935	0.621053	0.714375
ANKRD30BF 21q11. 2	0.037193291	0.621096	0.714383
OR4D11 11q12. 1	0.037189588	0.621131	0.714383
PTK2B 8p21. 2	0.037181177	0.62121	0.714433
NUP54 4q21. 1	-0.037162346	0.621387	0.714595
MAP4K2 11q13. 1	0.037145607	0.621544	0.71471
SBDS 7q11. 21	0.037141422	0.621583	0.71471
SPPL2A 15q21. 2	-0.037137238	0.621623	0.71471
SPHKAP 2q36. 3	-0.037135085	0.621643	0.71471
TBX2 17q23. 2	0.037130961	0.621682	0.71471
RP9 7p14. 3	0.037128868	0.621701	0.71471

EIF4H	7q11. 23	0. 037112129	0. 621859	0. 71485
CRX	19q13. 33	0. 037073231	0. 622224	0. 715229
ASMTL	Xp22. 33 ϵ	-0. 037064005	0. 622311	0. 715287
FKSG29	13q32. 3	-0. 037040403	0. 622533	0. 715501
RPS2P32	7p15. 3	0. 037017973	0. 622744	0. 715694
SNORA16A	1p35. 3	-0. 037014961	0. 622772	0. 715694
GABBR1	6p22. 1	-0. 037009604	0. 622822	0. 71571
NOA1	4q12	0. 037001234	0. 622901	0. 71576
SOAT2	12q13. 13	-0. 036984818	0. 623055	0. 715896
ZPBP2	17q21. 1	0. 036977041	0. 623128	0. 715939
ANKIB1	7q21. 2	-0. 036959387	0. 623295	0. 716088
ARHGAP33	19q13. 12	0. 03695311	0. 623354	0. 716115
XRCC6P5	Xq22. 1	-0. 036934751	0. 623526	0. 716272
CILP2	19p13. 11	-0. 036923837	0. 623629	0. 716349
OR2F1	7q35	-0. 036919979	0. 623665	0. 716349
GTPBP4	10p15. 3	0. 036900801	0. 623846	0. 716516
NR6A1	9q33. 3	0. 036867517	0. 624159	0. 716834
FAM227A	22q13. 1	-0. 036856862	0. 624259	0. 716908
C16ORF46	16q23. 2	0. 036829661	0. 624515	0. 717161
PLEKHA8	7p14. 3	-0. 036825477	0. 624555	0. 717165
AWAT2	Xq13. 1	-0. 036808902	0. 624711	0. 717303
LINC00051	18q24. 3	0. 036801173	0. 624783	0. 717345
TCAM1P	17q23. 3	-0. 03679546	0. 624837	0. 717358
GOLGA7B	10q24. 2	-0. 036785722	0. 624929	0. 717358
PRTFDC1	10p12. 1	0. 036785722	0. 624929	0. 717358
CGREF1	2p23. 3	0. 036784695	0. 624938	0. 717358
TAS1R3	1p36. 33	0. 036754375	0. 625224	0. 717645
PTPRVP	1q32. 1	0. 036727376	0. 625478	0. 717896
ATL2	2p22. 2-p ϵ	0. 036641349	0. 626289	0. 718743
LRRC32	11q13. 5	0. 036641349	0. 626289	0. 718743
LAIR2	19q13. 42	-0. 036620047	0. 62649	0. 718932
PMPCB	7q22. 1	-0. 036605779	0. 626624	0. 719046
ESX1	Xq22. 2	-0. 036597047	0. 626706	0. 719076
LINC00685	Xp22. 33 ϵ	0. 036595317	0. 626723	0. 719076
C12ORF50	12q21. 32	-0. 03657122	0. 62695	0. 719296
OR10P1	12q13. 2	0. 036554139	0. 627111	0. 719439
PRDM13	6q16. 2	-0. 036542673	0. 627219	0. 719522
SNHG10	14q32. 13	0. 036515808	0. 627472	0. 719771
SLC28A3	9q21. 32-c	-0. 03647729	0. 627836	0. 720141
TJAP1	6p21. 1	0. 036473961	0. 627867	0. 720141
PINK1	1p36. 12	-0. 036459314	0. 628005	0. 720258
MTMR2	11q21	0. 036436298	0. 628223	0. 720425
PPIB	15q22. 31	0. 036436298	0. 628223	0. 720425
KRTAP2-1	17q21. 2	0. 03643032	0. 628279	0. 720448
ZNF766	19q13. 41	0. 036400728	0. 628558	0. 720727
SLC24A2	9p22. 1-p ϵ	0. 036395554	0. 628607	0. 720742
RHBDD1	2q36. 3	-0. 03637562	0. 628795	0. 720841
RNASE11	14q11. 2	0. 036374351	0. 628807	0. 720841
PLA2G2C	1p36. 12	-0. 03636865	0. 628861	0. 720841
ACOX3	4p16. 1	0. 03636725	0. 628874	0. 720841
SLC16A13	17p13. 1	0. 03636725	0. 628874	0. 720841
SP3	2q31. 1	-0. 036354696	0. 628993	0. 720936
CNGB1	16q21	0. 036345192	0. 629083	0. 720997
HPS6	10q24. 32	0. 036333773	0. 62919	0. 72108

FCRL4	1q23. 1	0. 036311609	0. 6294	0. 721269
VIM	10p13	-0. 036308664	0. 629428	0. 721269
SATB2-AS1	12q33. 1	-0. 036291669	0. 629588	0. 721411
OR6N1	1q23. 1	0. 036284457	0. 629656	0. 721443
PARP2	14q11. 2	0. 036277279	0. 629724	0. 721443
TAOK3	12q24. 23	-0. 036277279	0. 629724	0. 721443
MOXD2P	7q34	0. 036263889	0. 62985	0. 721547
CLUHP3	16p11. 2	0. 036248005	0. 630001	0. 721677
SERPINA5	14q32. 13	0. 036237524	0. 6301	0. 721749
CLEC12A	12p13. 31	-0. 036223943	0. 630228	0. 721829
RPP40	6p25. 1	-0. 036219758	0. 630267	0. 721829
DNAJC13	3q22. 1	0. 036218693	0. 630278	0. 721829
ZMAT4	8p11. 21	-0. 036207291	0. 630385	0. 721882
REP15	12p11. 22	0. 036206139	0. 630396	0. 721882
PCARE	2p23. 2	-0. 036187528	0. 630572	0. 722042
C4ORF19	4p14	0. 036164292	0. 630792	0. 722252
SLC28A2	15q21. 1	0. 036151833	0. 630909	0. 722328
UTP14A	Xq26. 1	0. 036149645	0. 63093	0. 722328
AVIL	12q14. 1	-0. 036072228	0. 631662	0. 723125
INSL4	9p24. 1	0. 036056365	0. 631812	0. 723255
IL4R	16p12. 1	0. 036036658	0. 631999	0. 723427
TAF6L	11q12. 3	-0. 036032473	0. 632038	0. 723431
STKLD1	9q34. 2	-0. 036023095	0. 632127	0. 723484
MEG3	14q32. 2	-0. 036019919	0. 632157	0. 723484
SPATS1	6p21. 1	-0. 035994262	0. 6324	0. 723714
MGC15885	15q22. 2	-0. 035991012	0. 632431	0. 723714
AGXT	2q37. 3	0. 035982597	0. 63251	0. 723764
SVIP	11p14. 3	-0. 035973887	0. 632593	0. 723817
ARL9	4q12	-0. 035879731	0. 633484	0. 724776
UFSP1	7q22. 1	-0. 035877639	0. 633504	0. 724776
ZNF7	8q24. 3	0. 035865085	0. 633623	0. 724814
CLEC5A	7q34	0. 0358609	0. 633663	0. 724814
MST1	3p21. 31	0. 0358609	0. 633663	0. 724814
RFX1	19p13. 12	0. 035858808	0. 633682	0. 724814
C2ORF83	2q36. 3	-0. 035850131	0. 633765	0. 724867
LINC01596	14q21. 3	0. 035836917	0. 63389	0. 724969
C8B	1p32. 2	0. 035815309	0. 634094	0. 725161
DAZ3	Yq11. 23	-0. 035811098	0. 634134	0. 725165
CLRN1	3q25. 1	0. 035780102	0. 634428	0. 72546
ZNF133	20p11. 23	0. 035773021	0. 634495	0. 725495
UBE2U	1p31. 3	-0. 035739242	0. 634815	0. 72582
NOD1	7p14. 3	0. 035733266	0. 634872	0. 725843
DERL3	22q11. 23	0. 035700854	0. 635179	0. 726153
TEX26	13q12. 3	-0. 035678097	0. 635395	0. 726357
ERAS	Xp11. 23	-0. 035674362	0. 63543	0. 726357
OR2AG1	11p15. 4	-0. 035663372	0. 635535	0. 726434
LILRA4	19q13. 42	0. 035610799	0. 636033	0. 726963
MED10	5p15. 31	-0. 035588894	0. 636241	0. 727159
HBZ	16p13. 3	-0. 035564573	0. 636472	0. 727381
LINC01366	5q35. 1	0. 035556458	0. 636549	0. 727427
FBXW4	10q24. 32	0. 035513569	0. 636956	0. 727851
NDUFAF1	15q15. 1	0. 03549683	0. 637115	0. 727957
DAPL1	2q24. 1	-0. 03549475	0. 637134	0. 727957
LALBA	12q13. 11	0. 035492177	0. 637159	0. 727957

DPH2	1p34. 1	-0.035488461	0.637194	0.727957
IFNA7	9p21. 3	-0.035456584	0.637497	0.728261
ERICH6B	13q14. 13	0.035442723	0.637628	0.728369
TRIM52	5q35. 3	-0.03542569	0.63779	0.728513
TBXAS1	7q34	-0.035406859	0.637969	0.728675
ZNF337	20p11. 21	-0.035400582	0.638029	0.728702
CHRNA6	8p11. 21	-0.035394038	0.638091	0.728731
NPDC1	9q34. 3	0.03539012	0.638128	0.728732
C2CD2L	11q23. 3	-0.035373381	0.638287	0.728872
SLC29A1	6p21. 1	-0.035348273	0.638526	0.729103
OR13F1	9q31. 1	-0.03533896	0.638614	0.729162
HTRA1	10q26. 13	0.035300149	0.638983	0.729541
RASD2	22q12. 3	0.035289705	0.639082	0.729613
OR10A5	11p15. 4	0.035281077	0.639164	0.729665
PRR23C	3q23	0.035270347	0.639266	0.729694
LSM2	6p21. 33	0.035268763	0.639281	0.729694
SPATA8	15q26. 2	-0.035266845	0.639299	0.729694
SRSF1	17q22	0.035262486	0.639341	0.7297
OXNAD1	3p25. 1-p2	-0.035249932	0.63946	0.729795
GNGT1	7q21. 3	0.035237107	0.639582	0.72988
TNFSF18	1q25. 1	-0.035234406	0.639608	0.72988
STK10	5q35. 1	-0.035226916	0.639679	0.729919
BBOX1	11p14. 2	0.035214863	0.639794	0.730008
PPIG	2q31. 1	0.035201808	0.639918	0.730108
SNORA77	1q32. 1	0.035176587	0.640158	0.73034
TWSG1	18p11. 22	-0.035118114	0.640714	0.730895
SOX14	3q22. 3	-0.035117772	0.640717	0.730895
GORAB	1q24. 2	0.035034419	0.641511	0.731717
MDM4	1q32. 1	0.035034419	0.641511	0.731717
MED30	8q24. 11	0.035021865	0.64163	0.731811
RNF220	1p34. 1	-0.035003034	0.641809	0.731974
PAMR1	11p13	-0.034996757	0.641869	0.732
CELSR3	3p21. 31	0.034986295	0.641969	0.732072
FBX07	22q12. 3	-0.034938171	0.642427	0.732553
UGT1A5	2q37. 1	0.034919814	0.642602	0.732697
HNRNPM	19p13. 2	-0.034917247	0.642627	0.732697
XPO6	16p12. 1	0.034904693	0.642746	0.732772
NCL	2q37. 1	0.034902601	0.642766	0.732772
RNF114	20q13. 13	-0.034896324	0.642826	0.732799
CCDC157	22q12. 2	-0.034864938	0.643125	0.733098
SFXN2	10q24. 32	-0.034842987	0.643334	0.733295
CXCL10	4q21. 1	0.034835645	0.643404	0.733332
OR1L3	9q33. 2	-0.0348244	0.643511	0.733413
TRIM22	11p15. 4	-0.034818907	0.643564	0.733431
NAGLU	17q21. 2	-0.034814722	0.643604	0.733434
SMR3A	4q13. 3	-0.034802555	0.64372	0.733525
KPNA2	17q24. 2	0.034785429	0.643883	0.733627
PHLDB3	19q13. 31	-0.034785429	0.643883	0.733627
SPRY2	13q31. 1	0.034777059	0.643963	0.733657
LYNX1	8q24. 3	0.034774967	0.643983	0.733657
PPM1M	3p21. 2	0.034760321	0.644122	0.733751
SYS1-DBN1	20q13. 12	-0.034758592	0.644139	0.733751
GHRLOS	3p25. 3	0.034749859	0.644222	0.733804
CYP27A1	2q35	0.034741489	0.644302	0.733853

TMEM204	16p13.3	0.034728935	0.644422	0.733948
PRDM9	5p14.2	-0.034714033	0.644564	0.734068
OR1G1	17p13.3	0.034673898	0.644947	0.734462
CLEC12B	12p13.2	-0.034629309	0.645372	0.734905
TBC1D9B	5q35.3	-0.034622225	0.64544	0.73494
C10RF115	1q41	0.034611763	0.64554	0.735012
PPY	17q21.31	-0.034599155	0.64566	0.735107
GSTA5	6p12.2	-0.034546446	0.646163	0.735638
KRTAP4-3	17q21.2	0.034535451	0.646268	0.735716
PWRN2	15q11.2	-0.034529656	0.646323	0.735737
HIST1H4D	6p22.2	0.034512108	0.646491	0.735886
ADM5	19q13.33	-0.034479945	0.646798	0.736193
MBNL2	13q32.1	0.03447576	0.646838	0.736197
FAM219B	15q24.1-c	0.034446467	0.647118	0.736474
SCARNA4	1q22	0.034412688	0.647441	0.736776
CCNB1IP1	14q11.2	-0.034410897	0.647458	0.736776
HMGXB4	22q12.3	-0.034392066	0.647638	0.736939
CSNK1A1	5q32	0.034383696	0.647718	0.736952
MYLPF	16p11.2	-0.034379909	0.647754	0.736952
DLEU2L	1p31.3	-0.034379341	0.64776	0.736952
LOC90246	3q21.3	-0.034373235	0.647818	0.736976
MATN1	1p35.2	-0.034356474	0.647978	0.737097
HNRNPU	1q44	-0.034354403	0.647998	0.737097
CAPRIN1	11p13	0.03433348	0.648198	0.737283
SLC5A10	17p11.2	0.034317387	0.648352	0.737416
TMA7	3p21.31	-0.034310464	0.648418	0.737449
SPATA25	20q13.12	0.034306315	0.648458	0.737452
THAP11	16q22.1	-0.034300002	0.648518	0.737479
VAMP4	1q24.3	-0.03426234	0.648878	0.737808
ANGPT2	8p23.1	0.034258155	0.648918	0.737808
ZDHHC20	13q12.11	0.034258155	0.648918	0.737808
SMTNL1	11q12.1	0.034242437	0.649069	0.737925
IQCF6	3p21.2	-0.034239201	0.6491	0.737925
SNORA66	1p22.1	-0.034235866	0.649131	0.737925
ATF3	1q32.3	-0.034187015	0.649599	0.738414
GUCA2A	1p34.2	-0.034161301	0.649845	0.738652
HOXA2	7p15.2	0.034142047	0.650029	0.738819
SYK	9q22.2	0.034124244	0.6502	0.738971
TAS2R60	7q35	0.034110653	0.65033	0.739077
FRG2C	3p12.3	0.034099565	0.650436	0.739155
USP32P1	17p11.2	-0.034069843	0.65072	0.739437
CYCS	7p15.3	-0.034061473	0.650801	0.739486
OSTC	4q25	-0.034025903	0.651141	0.739831
DI03	14q32.31	0.034013349	0.651262	0.739925
VWA5B1	1p36.12	0.033998745	0.651401	0.740042
NDUFA6	22q13.2	-0.033984056	0.651542	0.74016
OVCA2	17p13.3	-0.033977779	0.651602	0.740186
DHX15	4p15.2	-0.033950579	0.651863	0.74044
NPY6R	5q31.2	0.033926972	0.652089	0.740655
MIR22HG	17p13.3	-0.033910824	0.652244	0.740789
TMEM170A	16q23.1	0.033904547	0.652304	0.740796
STMN1	1p36.11	0.033902454	0.652324	0.740796
SUCLG1	2p11.2	-0.033887808	0.652465	0.740881
RUNX2	6p21.1	0.033883623	0.652505	0.740881

FAM224B	Yq11. 222	-0.033883017	0.65251	0.740881
CCDC142	2p13. 1	-0.033871069	0.652625	0.740969
FKBP6	7q11. 23	0.033865116	0.652682	0.740992
FMO4	1q24. 3	-0.033858515	0.652745	0.741002
RIBC1	Xp11. 22	-0.033856422	0.652765	0.741002
ZC3H15	2q32. 1	-0.033831314	0.653006	0.741216
TUBA3E	2q21. 1	-0.033829028	0.653028	0.741216
STX5	11q12. 3	0.033820852	0.653107	0.741263
FAM120A	9q22. 31	0.033812483	0.653187	0.741312
MRPL42P5	15q15. 1	0.033784254	0.653458	0.741577
CCL27	9p13. 3	-0.033773651	0.653559	0.741645
ZNF33B	10q11. 21	-0.033768544	0.653608	0.741645
OSBP	11q12. 1	-0.033766451	0.653628	0.741645
C3ORF38	3p11. 1	0.033761238	0.653678	0.741659
OR2G2	1q44	0.033751138	0.653775	0.741727
BCL6	3q27. 3	0.033735066	0.653929	0.74184
TBX1	22q11. 21	-0.033733044	0.653949	0.74184
REEP1	2p11. 2	-0.033720419	0.65407	0.741935
DHX30	3p21. 31	0.033709958	0.65417	0.742007
NPM2	8p21. 3	-0.033701588	0.654251	0.742056
HECTD2-AS1	10q23. 32	0.033678017	0.654477	0.74227
CD1C	1q23. 1	-0.033664989	0.654602	0.742335
OR52L1	11p15. 4	0.033664365	0.654608	0.742335
CDK4	12q14. 1	-0.033659741	0.654652	0.742343
GPAT2	2q11. 2	0.033645094	0.654793	0.74246
TRAM1	8q13. 3	-0.033628356	0.654954	0.742599
CRYM	16p12. 2	0.033622079	0.655014	0.742599
FAM183BP	7p14. 1	0.033620737	0.655027	0.742599
SLC12A7	5p15. 33	0.033613709	0.655094	0.742614
TOP1	20q12	0.033611617	0.655114	0.742614
RTP1	3q27. 3	0.033601971	0.655207	0.742677
EIF2B1	12q24. 31	0.033580231	0.655416	0.74281
LINC00634	22q13. 2	0.033578225	0.655435	0.74281
BCRP3	22q11. 23	-0.033578139	0.655436	0.74281
CHRNA10	11p15. 4	-0.033519553	0.655999	0.743406
MARVELD2	5q13. 2	-0.033502814	0.656159	0.743546
EEF1A2	20q13. 33	-0.033486075	0.65632	0.743686
FKBP3	14q21. 2	0.033479798	0.656381	0.743712
DEFB4A	8p23. 1	-0.033465369	0.656519	0.743827
LOC340357	8p23. 1-p2	-0.033443047	0.656734	0.744028
SLC25A47	14q32. 2	0.033425536	0.656902	0.744176
L3HYPDH	14q23. 1	-0.033381458	0.657326	0.744598
LOR	1q21. 3	-0.033378353	0.657356	0.744598
KRTAP10-1	21q22. 3	-0.033375163	0.657386	0.744598
OR2T12	1q44	-0.033362778	0.657505	0.744649
TTY18	Yp11. 2	0.033362778	0.657505	0.744649
LIPT2	11q13. 4	-0.033350072	0.657628	0.744745
RNF219	13q31. 1	0.033345887	0.657668	0.744748
ZNF646	16p11. 2	-0.033310317	0.65801	0.745054
SNORA5C	7p13	0.033310056	0.658013	0.745054
POM121L2	6p22. 1	-0.033298495	0.658124	0.745138
GLT6D1	9q34. 3	0.033283006	0.658273	0.745264
DOCK9	13q32. 3	-0.03327684	0.658332	0.74527
SLC66A1	1p36. 13	-0.033274747	0.658352	0.74527

FLJ25758	19p13. 2	0. 033259043	0. 658503	0. 745399
RASA2	3q23	-0. 033239177	0. 658694	0. 745573
COL16A1	1p35. 2	-0. 033203607	0. 659037	0. 745918
CDIPT	16p11. 2	0. 033195238	0. 659117	0. 745967
RHEBL1	12q13. 12	0. 033174314	0. 659319	0. 746153
CACFD1	9q34. 2	0. 03316176	0. 65944	0. 746247
CHTF8	16q22. 1	-0. 033132467	0. 659722	0. 746455
LRRC10	12q15	0. 033131691	0. 659729	0. 746455
SNORA15	7p11. 2	0. 033131097	0. 659735	0. 746455
RTP3	3p21. 31	-0. 033116867	0. 659872	0. 746567
SOWAHD	Xq24	0. 033088528	0. 660145	0. 746834
PCED1A	20p13	-0. 033080158	0. 660225	0. 746883
SPI1	11p11. 2	0. 033075973	0. 660266	0. 746886
SLC38A6	14q23. 1	0. 033050865	0. 660508	0. 747117
NAB2	12q13. 3	0. 03301948	0. 66081	0. 747417
LYL1	19p13. 13	0. 03301111	0. 660891	0. 747466
GRIN1	9q34. 3	-0. 03297139	0. 661273	0. 747857
MOB4	2q33. 1	0. 032923231	0. 661738	0. 748297
SIN3B	19p13. 11	-0. 032923231	0. 661738	0. 748297
RPL10	Xq28	0. 032916954	0. 661798	0. 748323
SIPA1L3	19q13. 13-	-0. 0329044	0. 661919	0. 748418
CYP11B1	8q24. 3	0. 032850494	0. 662439	0. 748923
KCNK18	10q25. 3	0. 032850035	0. 662443	0. 748923
NCF4	22q12. 3	-0. 032845814	0. 662484	0. 748923
WFDC11	20q13. 12	0. 032842461	0. 662516	0. 748923
KRT28	17q21. 2	0. 032835799	0. 662581	0. 748954
DCAKD	17q21. 31	-0. 032785136	0. 663069	0. 749428
SEPTIN14	7p11. 2	0. 032784481	0. 663076	0. 749428
ACTR2	2p14	-0. 032768397	0. 663231	0. 749562
PSTPIP2	18q21. 1 t	-0. 032751658	0. 663392	0. 749702
METTL6	3p25. 1	0. 032745381	0. 663453	0. 749728
PIGF	2p21	0. 03271818	0. 663715	0. 749982
NEUROD2	17q12	-0. 032694825	0. 663941	0. 750194
PLEKHA1	10q26. 13	0. 032678426	0. 664099	0. 750331
FASN	17q25. 3	-0. 032672149	0. 66416	0. 750357
MIER1	1p31. 3	-0. 032663779	0. 664241	0. 750386
PEA15	1q23. 2	0. 032661687	0. 664261	0. 750386
EMX2OS	10q26. 11	0. 03265746	0. 664302	0. 75039
ZNF335	20q13. 12	-0. 032644948	0. 664422	0. 750484
KLK15	19q13. 33	0. 032595883	0. 664896	0. 750977
NDC1	1p32. 3	0. 03258427	0. 665008	0. 751061
ATP6VOA4	7q34	-0. 032542526	0. 665412	0. 751474
OR4E2	14q11. 2	-0. 032506573	0. 665759	0. 751824
ALG10	12p11. 1	-0. 032500575	0. 665817	0. 751847
LAP3	4p15. 32	-0. 032490114	0. 665918	0. 751918
RPP25L	9p13. 3	0. 032485929	0. 665959	0. 751922
RNPC3	1p21. 1	0. 032467098	0. 666141	0. 752085
LINC00523	14q32. 2	-0. 032454824	0. 666259	0. 752176
ACMSD	2q21. 3	-0. 032450794	0. 666298	0. 752178
GUSBP5	4q31. 21	-0. 03243362	0. 666464	0. 752322
FBXL13	7q22. 1	0. 032421066	0. 666586	0. 752417
NLRP1	17p13. 2	0. 032416881	0. 666626	0. 75242
DAB2IP	9q33. 2	0. 032410604	0. 666687	0. 752446
PELO	5q11. 2	0. 03236248	0. 667152	0. 752929

SLFN5	17q12	-0.032339464	0.667375	0.753138
FGF22	19p13.3	0.032321362	0.66755	0.753293
PRSS57	19p13.3	-0.032303263	0.667725	0.753407
CHP2	16p12.2	0.03230309	0.667727	0.753407
GOLGA6L5F	15q25.2	0.032270416	0.668043	0.753701
B9D2	19q13.2	0.032268324	0.668063	0.753701
LINC00965	8p23.1	-0.032218107	0.668549	0.754207
CYP3A4	7q22.1	0.032211374	0.668614	0.754213
LOC155060	7q36.1	0.032209738	0.66863	0.754213
OR4X2	11p11.2	-0.032190369	0.668818	0.754357
MTAP	9p21.3	0.032188814	0.668833	0.754357
SNORA46	16q21	-0.032177844	0.668939	0.754434
BAIAP2-D1	17q25.3	-0.032155337	0.669157	0.754637
ERLIN2	8p11.23	-0.032144875	0.669258	0.754709
CASP9	1p36.21	-0.032132321	0.66938	0.754803
NPHP3	3q22.1	-0.032128136	0.66942	0.754806
SUMO1P1	20q13.2	0.032117172	0.669526	0.754884
UBE2H	7q32.2	0.032098843	0.669704	0.755039
TRAPPC9	8q24.3	-0.032094658	0.669744	0.755039
RIPPLY1	Xq22.3	0.032091221	0.669778	0.755039
DUSP13	10q22.2	-0.032084009	0.669848	0.755075
ACAP3	1p36.33	-0.032071642	0.669967	0.755168
HSD17B10	Xp11.22	-0.032036072	0.670312	0.755498
TAS2R4	7q34	-0.032033606	0.670336	0.755498
PARD3	10p11.22-	0.03202561	0.670413	0.755543
SNORA71D	20q11.23	-0.032020688	0.670461	0.755554
ART1	11p15.4	-0.032015473	0.670512	0.755568
NAV2	11p15.1	-0.032010964	0.670555	0.755575
TYRP1	9p23	0.032001088	0.670651	0.75564
NDUFB2	7q34	0.031987948	0.670778	0.755741
LOC286238	9q22.1	-0.031983505	0.670821	0.755747
ABCC6P2	16p13.11	-0.031971209	0.670941	0.755796
ZNF114	19q13.33	-0.031971209	0.670941	0.755796
STK32C	10q26.3	0.03195447	0.671103	0.755831
ABCG8	2p21	-0.031953948	0.671108	0.755831
C11ORF45	11q24.3	0.031952378	0.671123	0.755831
TBXA2R	19p13.3	-0.031952378	0.671123	0.755831
UBE2Q2	15q24.2	-0.031937731	0.671265	0.755949
SPDYE4	17p13.1	-0.031925226	0.671386	0.756007
OR1D4	17p13.3	-0.031924593	0.671392	0.756007
SNORA70B	2p15	-0.031912222	0.671512	0.756099
HDGFL1	6p22.3	0.031904552	0.671587	0.75614
FAM221A	7p15.3	0.031872868	0.671894	0.756444
RPS15A	16p12.3	0.031864499	0.671975	0.756492
RAET1K	6q25.1	0.031854618	0.672071	0.756558
SPANXN3	Xq27.3	0.03181248	0.67248	0.756975
MAGEB3	Xp21.2	0.031786714	0.67273	0.757214
SLC25A13	7q21.3	0.031766158	0.672929	0.757396
HCCAT5	16q22.3	-0.03175621	0.673026	0.757462
SNORA80E	1q22	0.031751852	0.673068	0.757467
MIA2	14q21.1	0.031720126	0.673376	0.757771
SERPINA3	14q32.13	0.031709665	0.673477	0.757842
HIST1H2AF	6p22.1	-0.031696238	0.673608	0.757946
OR11H12	14q11.2	-0.031687141	0.673696	0.758003

FBXL15	10q24.32	0.031663633	0.673924	0.758217
FOXD4L3	9q21.11	0.031642818	0.674126	0.758383
OBSL1	2q35	0.031640617	0.674148	0.758383
LZTR1	22q11.21	-0.031602954	0.674514	0.758752
FRMPD2B	10q11.22	0.031584189	0.674696	0.758914
DDAH1	1p22.3	0.031575754	0.674778	0.758964
MRPS11	15q25.3	0.031571569	0.674818	0.758967
NSRP1	17q11.2	0.031552738	0.675001	0.75913
RILPL2	12q24.31	0.031542276	0.675103	0.759201
BDKRB1	14q32.2	-0.031538091	0.675144	0.759204
GSTZ1	14q24.3	0.031525537	0.675266	0.759299
TRAPPC3L	6q22.1	-0.031515437	0.675364	0.759366
ELMOD3	2p11.2	0.03149206	0.675591	0.759579
FLJ30679	16q24.1	-0.031487282	0.675637	0.759589
NPFRR2	4q13.3	-0.031441901	0.676079	0.760042
HTR6	1p36.13	0.031431843	0.676176	0.760109
TRIM74	7q11.23	0.031406475	0.676423	0.760343
KLC1	14q32.33	0.031397903	0.676506	0.760394
REG1B	2p12	-0.031389722	0.676586	0.760441
AZGP1	7q22.1	0.031379072	0.676689	0.760515
BMX	Xp22.2	-0.031351872	0.676954	0.760769
IDNK	9q21.32	0.031328856	0.677178	0.760978
OR3A4P	17p13.3	-0.031315774	0.677305	0.761078
SF3B3	16q22.1	-0.031307932	0.677381	0.761121
ELMSAN1	14q24.3	0.031295378	0.677504	0.761176
SPG11	15q21.1	0.031293286	0.677524	0.761176
TRAF6	11p12	-0.031291193	0.677544	0.761176
TSACC	1q22	-0.031268973	0.67776	0.761376
NFKBIZ	3q12.3	0.031255623	0.67789	0.761479
COL8A1	3q12.1	-0.031251438	0.677931	0.761482
LRRC37A2	17q21.31	0.031238884	0.678053	0.761576
LINC00189	21q21.3	0.031224453	0.678194	0.761691
YBX3P1	16p11.2	0.031215868	0.678277	0.761742
ARID5A	2q11.2	-0.031186575	0.678562	0.76202
TMPRSS13	11q23.3	-0.03115519	0.678868	0.76232
DSC3	18q12.1	0.031130147	0.679112	0.762551
KLF1	19p13.13	-0.031115834	0.679251	0.762665
FOXR1	11q23.3	0.031090561	0.679497	0.762881
MLXIPL	7q11.23	-0.031088235	0.67952	0.762881
FOXR2	Xp11.21	0.031075757	0.679642	0.762974
EHF	11p13	-0.031052665	0.679867	0.763184
CLDN16	3q28	0.03104688	0.679923	0.763204
FAF2	5q35.2	-0.031038018	0.680009	0.763259
ZNF767P	7q36.1	-0.031010817	0.680274	0.763513
METTL22	16p13.2	0.031006649	0.680315	0.763516
RSPH1	21q22.3	0.030987802	0.680499	0.76365
NEK11	3q22.1	0.030983617	0.680539	0.76365
NSMCE4A	10q26.13	0.030982587	0.680549	0.76365
LINC01124	2q31.1	0.030971063	0.680662	0.763685
DUBR	3q13.12	-0.030964786	0.680723	0.763685
GCSAM	3q13.2	0.030962709	0.680743	0.763685
MLLT3	9p21.3	-0.030958509	0.680784	0.763685
SLC27A3	1q21.3	-0.030954324	0.680825	0.763685
NAXD	13q34	0.030952231	0.680845	0.763685

MAP2K1	15q22.31	-0.030950139	0.680866	0.763685
FAM43B	1p36.12	0.030948047	0.680886	0.763685
PLET1	11q23.1	-0.030919941	0.68116	0.76395
PRR4	12p13.2	0.030908292	0.681274	0.764034
RMND1	6q25.1	-0.030899923	0.681355	0.764083
XRCC6	22q13.2	0.030893646	0.681416	0.764088
EVI5	1p22.1	-0.030891553	0.681437	0.764088
SLC25A16	10q21.3	-0.030862276	0.681722	0.764366
CLIP2	7q11.23	0.030853891	0.681804	0.764415
SRRM1	1p36.11	0.03082669	0.682069	0.764669
P2RY4	Xq13.1	0.030814932	0.682184	0.764755
CSNK1D	17q25.3	-0.030801582	0.682314	0.764847
REXO1L1P	8q21.2	-0.030798673	0.682343	0.764847
LOC145474	14q24.2	0.030784044	0.682485	0.764964
JRK	8q24.3	-0.030772289	0.6826	0.765049
RAB40A	Xq22.2	0.030759735	0.682723	0.765144
ELL	19p13.11	-0.030728349	0.683029	0.765444
C1QB	1p36.12	-0.030724165	0.68307	0.765447
CLCA2	1p22.3	-0.030719644	0.683114	0.765453
IGFBP4	17q21.2	-0.030715795	0.683151	0.765453
ALPK2	18q21.31-	0.03071161	0.683192	0.765456
FNBP1L	1p22.1	-0.03068441	0.683458	0.765667
GGCX	2p11.2	-0.03068441	0.683458	0.765667
FAM138F	19p13.3	0.030674771	0.683552	0.765709
OR10G9	11q24.2	-0.030672705	0.683572	0.765709
SGO2	2q33.1	0.030617454	0.684111	0.766271
HES6	2q37.3	-0.030602808	0.684254	0.766388
MTUS1	8p22	-0.030586069	0.684418	0.766528
OR56A5	11p15.4	-0.030553913	0.684732	0.766827
SLC26A3	7q22.3-q2	-0.030550886	0.684762	0.766827
ATP5MPL	14q32.33	0.030531668	0.684949	0.766931
AIM2	1q23.1-q2	-0.030530781	0.684958	0.766931
ZNF273	7q11.21	0.030529575	0.68497	0.766931
PANX2	22q13.33	0.030521206	0.685051	0.76698
RPN2	20q11.23	-0.030510744	0.685154	0.767051
GAGE10	Xp11.23	-0.030470612	0.685546	0.767446
TOB2	22q13.2	-0.030466805	0.685583	0.767446
ERMN	2q24.1	0.030435419	0.68589	0.767746
TCEA2	20q13.33	0.030406126	0.686176	0.768024
PAWR	12q21.2	0.030387295	0.68636	0.768187
DRD2	11q23.2	-0.030379988	0.686432	0.768224
MOS	8q12.1	-0.030340084	0.686822	0.768618
TAS2R38	7q34	0.030329662	0.686924	0.768689
C11ORF94	11p11.2	0.03031866	0.687031	0.768766
ABCC6P1	16p12.3	0.030307025	0.687145	0.76885
MESD	15q25.1	0.030301509	0.687199	0.768868
NINJ1	9q22.31	-0.030295232	0.687261	0.768893
GOLGA6D	15q24.2	-0.030290764	0.687304	0.768899
PLEKH01	1q21.2	-0.030253384	0.68767	0.769265
DENND2C	1p13.2	-0.030247107	0.687731	0.769291
IFT46	11q23.3	-0.030226184	0.687936	0.769477
BIRC2	11q22.2	0.030217814	0.688018	0.769525
RPS17	15q25.2	0.030203168	0.688161	0.769643
TMEM163	2q21.3	-0.030194798	0.688243	0.769691

GSG1	12p13.1	-0.030176209	0.688425	0.769851
MICOS10	1p36.13	0.030138305	0.688796	0.77018
MSRB1	16p13.3	-0.030138305	0.688796	0.77018
LDHC	11p15.1	-0.030126397	0.688913	0.770232
C10RF185	1p32.3	-0.030125666	0.68892	0.770232
IL15	4q31.21	0.030092273	0.689247	0.770512
VPS37D	7q11.23	-0.030092273	0.689247	0.770512
YIPF3	6p21.1	0.030067165	0.689493	0.770744
CDC23	5q31.2	-0.030044149	0.689718	0.770952
TWF1	12q12	-0.030039964	0.689759	0.770955
PAPLN	14q24.2	-0.030035779	0.6898	0.770958
KRTAP8-1	21q22.11	0.030024571	0.68991	0.771037
NVL	1q42.11	0.030016948	0.689985	0.771078
POTEH	22q11.1	-0.030004419	0.690107	0.771172
CLVS1	8q12.2-q1	-0.029985066	0.690297	0.771341
ZNHIT6	1p22.3	-0.029973009	0.690415	0.771429
PRDM12	9q34.12	0.029954412	0.690597	0.771572
MRC2	17q23.2	0.029952085	0.69062	0.771572
CD46	1q32.2	0.029943716	0.690702	0.771621
VCAM1	1p21.2	0.029933254	0.690805	0.77166
ADAM7	8p21.2	0.029928444	0.690852	0.77166
MYCN	2p24.3	-0.029922792	0.690907	0.77166
KIAA1755	20q11.23	-0.0299207	0.690928	0.77166
TPR	1q31.1	0.029918607	0.690948	0.77166
FHDC1	4q31.3	-0.029916515	0.690969	0.77166
SIMC1	5q35.2	0.02991233	0.69101	0.771662
EFCAB3	17q23.2	-0.02987675	0.691359	0.772009
CDPF1	22q13.31	0.029845375	0.691666	0.772289
MYH11	16p13.11	0.029843282	0.691687	0.772289
SKIL	3q26.2	-0.029837005	0.691748	0.772314
S100G	Xp22.2	-0.0298122	0.691992	0.772543
NDUFA8	9q33.2	-0.029807712	0.692036	0.772549
SOCS3	17q25.3	-0.029793066	0.692179	0.772666
PROK1	1p13.3	-0.029786957	0.692239	0.77267
HECW1	7p14.1-p1	-0.029784852	0.69226	0.77267
CERS5	12q13.12	0.029759588	0.692508	0.772903
FGF6	12p13.32	-0.029735351	0.692745	0.773102
ZFP91-CN1	11q12.1	-0.029726722	0.69283	0.773102
LINC010116	p25.2	-0.029724018	0.692857	0.773102
PPP4R3C	Xp21.3	0.029723284	0.692864	0.773102
H2BFM	Xq22.2	-0.029720797	0.692888	0.773102
GLRX5	14q32.13	0.029717741	0.692918	0.773102
PSMB6	17p13.2	-0.029703095	0.693062	0.773219
APOA2	1q23.3	0.029679228	0.693296	0.773414
ANKRD20A3	9q21.11	-0.029675894	0.693329	0.773414
SNORA51	20p13	0.029673521	0.693352	0.773414
EPHA10	1p34.3	0.029640324	0.693678	0.773734
PGF	14q24.3	-0.02962777	0.693801	0.773828
ARMCX6	Xq22.1	0.0296194	0.693883	0.773877
HIST1H3E	6p22.2	0.029608939	0.693986	0.773905
PILRB	7q22.1	0.029608939	0.693986	0.773905
CLSPN	1p34.3	0.029600569	0.694068	0.773953
ACSL3	2q36.1	0.029588015	0.694191	0.774048
GTF2H2	5q13.2	-0.029569184	0.694376	0.77417

LPO	17q22	0.029567592	0.694392	0.77417
SHANK2	11q13.3-c	-0.029564999	0.694417	0.77417
GATA1	Xp11.23	-0.029555981	0.694506	0.774226
SNORA36A	Xq28	-0.029550725	0.694558	0.77424
METTL21C	13q33.1	-0.029543645	0.694627	0.774274
PHPT1	9q34.3	-0.029525244	0.694808	0.774432
FXR1	3q26.33	-0.029495951	0.695095	0.77471
TFPI2	7q21.3	-0.029454104	0.695507	0.775125
MRPS2	9q34.3	-0.029447827	0.695568	0.77515
CLCN7	16p13.3	0.029426904	0.695774	0.775336
KPNB1	17q21.32	-0.029412257	0.695918	0.775453
COL6A5	3q22.1	-0.029388188	0.696154	0.775674
BARHL1	9q34.13	0.029375959	0.696275	0.775764
DLK1	14q32.2	-0.02936876	0.696345	0.7758
CLEC2A	12p13.31	-0.029345789	0.696571	0.776008
PTGES3	12q13.3 1	0.029341117	0.696617	0.776016
MALAT1	11q13.1	0.029336932	0.696658	0.776019
LOC100190	16p12.2	0.029322286	0.696802	0.776116
STPG1	1p36.11	0.029320193	0.696823	0.776116
RPL21P44	4q12	-0.029296403	0.697057	0.77633
EEF1B2	2q33.3	0.0292909	0.697111	0.77633
PTGFRN	1p13.1	0.029288808	0.697131	0.77633
LINC00303	1q32.1	-0.029282649	0.697192	0.776354
LINC02593	1p36.33	0.029267238	0.697343	0.776479
NEUROG3	10q22.1	0.029251087	0.697502	0.776601
ACTRT2	1p36.32	-0.029248214	0.697531	0.776601
ASB3	2p16.2	-0.029200929	0.697996	0.777076
POTEE	2q21.1	0.029184511	0.698157	0.777195
DGCR9	22q11.21	-0.029182098	0.698181	0.777195
OR51I1	11p15.4	-0.02917674	0.698234	0.777211
RPS4Y2	Yq11.223	0.029152685	0.69847	0.777388
C100RF90	10q26.2	-0.029152639	0.698471	0.777388
CHST14	15q15.1	0.029117235	0.698819	0.777733
MYOZ3	5q33.1	0.029073295	0.699252	0.778171
LGALS2	22q13.1	-0.029067018	0.699313	0.778196
EIF3IP1	7q31.1	-0.029050207	0.699479	0.778337
ANKRD13B	17q11.2	0.029035633	0.699622	0.77841
B3GALNT1	3q26.1	-0.029035633	0.699622	0.77841
OR13C9	9q31.1	-0.029011111	0.699864	0.778512
SNORA19	10q26.11	0.029011111	0.699864	0.778512
SNORA36C	2p13.3	0.029011111	0.699864	0.778512
DUS3L	19p13.3	0.029010525	0.69987	0.778512
OR5T2	11q12.1	0.028972482	0.700244	0.778885
TCF7	5q31.1	-0.028966585	0.700302	0.778906
DNAJB7	22q13.2	-0.028956349	0.700403	0.778975
C11ORF96	11p11.2	-0.028949846	0.700467	0.779003
CSAG1	Xq28	0.028938937	0.700575	0.779079
SLC7A5	16q24.2	-0.028933107	0.700632	0.7791
PRKCA	17q24.2	0.028903814	0.700921	0.779334
TSSK6	19p13.11	0.028903814	0.700921	0.779334
LTB4R	14q12	0.028897537	0.700983	0.779359
C50RF38	5p15.33	-0.028893355	0.701024	0.779362
PN01	2p14	-0.02886406	0.701313	0.779639
BAAT	9q31.1	0.028857783	0.701374	0.779665

IGBP1P1	14q13.2	-0.028852703	0.701424	0.779677
C1ORF100	1q44	-0.028827594	0.701672	0.779909
DIAPH2	Xq21.33	0.028811751	0.701828	0.780018
NCKAP1	2q32.1	0.028809658	0.701849	0.780018
PHF14	7p21.3	0.028799197	0.701952	0.78009
SEL1L3	4p15.2	-0.028795012	0.701993	0.780092
KRTAP5-AS1	11p15.5	-0.028786703	0.702075	0.78014
CEACAM3	19q13.2	0.028756845	0.702369	0.780423
GBA3	4p15.2	-0.028752269	0.702415	0.78043
CHCHD4	3p25.1	-0.028742703	0.702509	0.780492
PCBD1	10q22.1	0.028738518	0.70255	0.780494
C4ORF17	4q23	0.028712464	0.702807	0.780736
PTCHD3	10p12.1	0.028704512	0.702885	0.780745
ZP1	11q12.2	0.028703774	0.702893	0.780745
HAX1	1q21.3	-0.028686209	0.703066	0.780894
GOLGA6L1	15q11.2	-0.028676915	0.703158	0.780921
LRMDA	10q22.2-c	-0.028675747	0.703169	0.780921
CRISP2	6p12.3	-0.028653713	0.703387	0.781119
VPS11	11q23.3	-0.02864227	0.703499	0.78116
LAMB2P1	3p21.31	0.028638085	0.703541	0.78116
NPLOC4	17q25.3	-0.028638085	0.703541	0.78116
OR56A4	11p15.4	-0.028627708	0.703643	0.781231
SERPINE1	7q22.1	-0.028610884	0.703809	0.781372
PCYOX1L	5q32	0.028587869	0.704036	0.78158
MTCH2	11p11.2	0.028575314	0.70416	0.781674
OR10J1	1q23.2	-0.028569924	0.704213	0.781679
MAPK6	15q21.2	-0.028566945	0.704243	0.781679
DPM3	1q22	0.028533467	0.704573	0.782003
NKX6-3	8p11.21	0.028514022	0.704765	0.782172
PRR23B	3q23	0.028507357	0.704831	0.782202
EIF3J	15q21.1	0.028502082	0.704883	0.782216
ARRDC5	19p13.3	-0.028489018	0.705012	0.782316
STK32A	5q32	0.028428998	0.705605	0.78293
MBL1P	10q22.3	0.028423633	0.705658	0.782945
TEX44	2q37.1	-0.028407667	0.705815	0.783077
GPCPD1	20p12.3	-0.028389095	0.705999	0.783237
NPM1	5q35.1	0.028382818	0.706061	0.783262
KRTAP1-1	17q21.2	-0.028370543	0.706182	0.783295
IGFALS	16p13.3	-0.028365047	0.706236	0.783295
ALG6	1p31.3	-0.028363986	0.706247	0.783295
SNORD1C	17q25.1	0.028363986	0.706247	0.783295
KDM4B	19p13.3	0.028355617	0.706329	0.783343
CLEC2D	12p13.31	-0.02834934	0.706391	0.783368
BMS1P20	22q11.22	-0.028345155	0.706433	0.783371
ODF1	8q22.3	0.02833756	0.706508	0.783398
PUM3	9p24.2	0.028334693	0.706536	0.783398
OR5K1	3q11.2	-0.028302567	0.706854	0.783707
CPS1-IT1	2q34	-0.028292052	0.706958	0.783779
BSPRY	9q32	0.028259369	0.707281	0.784093
LRRC56	11p15.5	0.028253091	0.707343	0.784119
PTPN6	12p13.31	-0.028238445	0.707487	0.784236
ZBTB12	6p21.33	0.028230076	0.70757	0.784284
FNDC1	6q25.3	-0.028221706	0.707653	0.784332
TNFRSF11E	8q24.12	0.028211244	0.707756	0.784403

DCTN1	2p13.1	0.02819869	0.70788	0.784488
CLEC4M	19p13.2	-0.028195518	0.707912	0.784488
DDB1	11q12.2	-0.028167305	0.708191	0.784754
GLA	Xq22.1	-0.028135919	0.708501	0.785055
HSPA4	5q31.1	-0.028117088	0.708687	0.785217
HSPA2	14q23.3	-0.028098257	0.708874	0.78538
CCL15-CCI17q12		-0.028093105	0.708925	0.785393
KAT8	16p11.2	0.028079426	0.70906	0.785481
SCARNA2	1p13.3	0.02807421	0.709112	0.785481
CCND3	6p21.1	0.028073149	0.709122	0.785481
RAB15	14q23.3	0.028064779	0.709205	0.785529
MT1G	16q13	-0.028045948	0.709391	0.785692
ANAPC4	4p15.2	0.028029209	0.709557	0.785832
HOXD3	2q31.1	-0.028018748	0.70966	0.785903
IMPA2	18p11.21	0.028014563	0.709702	0.785906
ADRA2B	2q11.2	0.028010393	0.709743	0.785908
ATXN3	14q32.12	-0.027999916	0.709847	0.785979
NPTN	15q24.1	-0.027993639	0.709909	0.786004
PTPRE	10q26.2	0.027983177	0.710012	0.786075
IFT140	16p13.3	0.027978993	0.710054	0.786078
GPN2	1p36.11	0.027966439	0.710178	0.786172
TMEFF2	2q32.3	-0.027960487	0.710237	0.786193
ILF3	19p13.2	-0.027955977	0.710282	0.786199
PMAIP1	18q21.32	0.027939238	0.710447	0.786339
SCGB1A1	11q12.3	0.027911845	0.710719	0.786596
LINC015874p16.2		0.027883389	0.711	0.786864
MUC13	3q21.2	0.027845082	0.71138	0.78724
LCE5A	1q21.3	-0.027833772	0.711492	0.787313
C8G	9q34.3	0.027830494	0.711524	0.787313
HMGXB3	5q32	0.027819974	0.711628	0.787364
TXN2	22q12.3	0.027817881	0.711649	0.787364
C10RF68	1q21.3	-0.027772939	0.712094	0.787813
MTBP	8q24.12	0.027677693	0.713038	0.78877
NLN	5q12.3	0.027677693	0.713038	0.78877
APOBEC3G	22q13.1	-0.027642123	0.713391	0.789117
EMC10	19q13.33	-0.027637939	0.713433	0.789119
HMX3	10q26.13	0.027628608	0.713525	0.789177
CD300A	17q25.1	-0.027596091	0.713847	0.78947
ELFN2	22q13.1	0.027593999	0.713868	0.78947
MINDY2	15q21.3-c	-0.027589814	0.71391	0.789472
SMURF2	17q23.3-c	-0.027575168	0.714055	0.789568
LCK	1p35.2	-0.027573076	0.714076	0.789568
TMEM254	10q22.3	0.027547967	0.714325	0.7898
TMEM26	10q21.2	-0.02754169	0.714387	0.789825
HTR3D	3q27.1	-0.027537206	0.714431	0.78983
JSRP1	19p13.3	0.027527044	0.714532	0.789859
KTN1	14q22.3	0.027522859	0.714574	0.789859
TBX10	11q13.2	0.027522635	0.714576	0.789859
SEC61A1	3q21.3	0.027510305	0.714698	0.789951
PRORP	14q13.2	0.027499843	0.714802	0.790022
NT5C1B	2p24.2	0.027460445	0.715193	0.79041
PTPN9	15q24.2	0.027449627	0.7153	0.790485
MCM6	2q21.3	0.027445442	0.715342	0.790487
HIST1H2AA6p22.2		0.027436314	0.715433	0.790543

ZNF845	19q13. 42	-0. 027424518	0. 71555	0. 790629
PKDREJ	22q13. 31	-0. 027383732	0. 715954	0. 791033
TYRO3	15q15. 1	0. 02735547	0. 716235	0. 791299
ERI3	1p34. 1	-0. 027342916	0. 71636	0. 791393
RDH16	12q13. 3	0. 027330362	0. 716484	0. 791487
FLNA	Xq28	0. 027301069	0. 716775	0. 791764
DDX23	12q13. 12	0. 0272927	0. 716858	0. 791812
CSH2	17q23. 3	-0. 027286892	0. 716916	0. 791832
WDR25	14q32. 2	0. 027277021	0. 717014	0. 791897
TMEM109	11q12. 2	0. 027246668	0. 717315	0. 792186
ZNF277	7q31. 1	-0. 027223652	0. 717544	0. 792395
TEX36	10q26. 13	-0. 027202643	0. 717753	0. 792582
G6PC	17q21. 31	-0. 027191566	0. 717863	0. 792631
CYP21A2	6p21. 33	-0. 027190174	0. 717877	0. 792631
SNORA71B	20q11. 23	-0. 027185833	0. 71792	0. 792635
KIAA1210	Xq24	0. 027176695	0. 718011	0. 792691
CCDC83	11q14. 1-c	-0. 027169477	0. 718082	0. 792726
SIKE1	1p13. 2	-0. 027160881	0. 718168	0. 792777
OR4F21	8p23. 3	-0. 027152421	0. 718252	0. 792826
ACKR3	2q37. 3	0. 027139958	0. 718376	0. 792919
PHOSPHO1	17q21. 32	-0. 027132663	0. 718448	0. 792955
BPHL	6p25. 2	-0. 027127404	0. 7185	0. 792969
IFNG	12q15	-0. 027103279	0. 71874	0. 79319
ARMC3	10p12. 2	-0. 027096514	0. 718808	0. 79322
LINC00626	1q24. 2	-0. 027088348	0. 718889	0. 793266
MYADM	19q13. 42	0. 027047894	0. 719291	0. 793666
OR5L2	11q12. 1	-0. 027030256	0. 719466	0. 793816
FAM177B	1q41	-0. 027003955	0. 719728	0. 79406
ILF2	1q21. 3	-0. 0269914	0. 719853	0. 794154
IFFO2	1p36. 13	-0. 026909799	0. 720664	0. 795006
ZC3H11A	1q32. 1	0. 026840751	0. 721351	0. 79572
ZNF815P	7p22. 1	0. 026834474	0. 721414	0. 79572
PRG1	19q13. 31	-0. 02683273	0. 721431	0. 79572
HPSE	4q21. 23	0. 026811458	0. 721643	0. 79591
LMO1	11p15. 4	-0. 026803974	0. 721717	0. 795914
ZNF648	1q25. 3	-0. 02680311	0. 721726	0. 795914
CYTH3	7p22. 1	-0. 026798904	0. 721768	0. 795916
LINC00906	19q12	-0. 026794719	0. 72181	0. 795918
FAM181A	14q32. 12	0. 026778304	0. 721973	0. 796014
DFFA	1p36. 22	-0. 02677798	0. 721976	0. 796014
ADCY10P1	6p21. 1	-0. 026758117	0. 722174	0. 796188
AGPS	2q31. 2	0. 026740318	0. 722351	0. 796339
C4ORF3	4q26	-0. 026736133	0. 722393	0. 796341
OR2B11	1q44	-0. 026719432	0. 722559	0. 796481
SETDB1	1q21. 3	0. 026715209	0. 722601	0. 796483
ZNF564	19p13. 2	-0. 026711025	0. 722643	0. 796485
SNRPF	12q23. 1	0. 026702655	0. 722726	0. 796533
GTF2A2	15q22. 2	0. 026677547	0. 722976	0. 796765
PDGFRB	5q32	-0. 026669177	0. 72306	0. 796792
DBF4	7q21. 12	-0. 026667085	0. 723081	0. 796792
C15ORF40	15q25. 2	-0. 026660808	0. 723143	0. 796817
RBMS1	2q24. 2	0. 026587576	0. 723873	0. 797577
KRTAP2-2	17q21. 2	0. 026578574	0. 723962	0. 797632
CPNE6	14q11. 2	-0. 026574356	0. 724004	0. 797634

ZNF805	19q13. 43	0. 026568744	0. 72406	0. 797652
APOL4	22q12. 3	-0. 026545728	0. 72429	0. 79786
RPL13P5	12p13. 31	0. 026537359	0. 724373	0. 797908
ARL17B	17q21. 31	0. 026515407	0. 724592	0. 798105
PRMT3	11p15. 1	0. 026510158	0. 724644	0. 798119
SLC30A7	1p21. 2	-0. 026503881	0. 724707	0. 798144
ARID3B	15q24. 1	0. 026497604	0. 724769	0. 798169
HSPB2	11q23. 1	0. 026470404	0. 72504	0. 79836
LINC02145	5p15. 31	-0. 026469395	0. 725051	0. 79836
VKORC1	16p11. 2	0. 026464127	0. 725103	0. 79836
ZNF777	7q36. 1	-0. 026464127	0. 725103	0. 79836
MLH3	14q24. 3	-0. 02644948	0. 725249	0. 798477
ABT1	6p22. 2	-0. 026432741	0. 725416	0. 798617
ANTXR1	2p13. 3	0. 026428556	0. 725458	0. 798619
SEPTIN11	4q21. 1	-0. 026403448	0. 725708	0. 79885
DRICH1	22q11. 23	0. 026360989	0. 726132	0. 799273
FREM2	13q13. 3	-0. 026355338	0. 726188	0. 799291
IL2ORA	6q23. 3	0. 026338585	0. 726355	0. 799431
RORC	1q21. 3	-0. 026311385	0. 726626	0. 799666
ZNF580	19q13. 42	0. 0263072	0. 726668	0. 799666
DIP2A	21q22. 3	0. 026305107	0. 726689	0. 799666
TRH	3q22. 1	-0. 026279048	0. 726949	0. 799908
PAX1	20p11. 22	0. 026262926	0. 72711	0. 800041
SERPINA1	14q32. 13	-0. 026256983	0. 727169	0. 800062
AMMECR1	Xq23	-0. 026248614	0. 727253	0. 800066
FGD2	6p21. 2	0. 026248614	0. 727253	0. 800066
CCDC34	11p14. 1	0. 026238152	0. 727357	0. 800137
DAD1P1	12p12. 1	0. 026225556	0. 727483	0. 800231
KRT35	17q21. 2	-0. 026176816	0. 727969	0. 800722
NAA38	17p13. 1	-0. 026141904	0. 728318	0. 801062
FAM83G	17p11. 2	-0. 026114703	0. 72859	0. 801316
FOXB2	9q21. 2	-0. 02611	0. 728637	0. 80132
GNL1	6p21. 33	0. 026106334	0. 728673	0. 80132
SALL4	20q13. 2	-0. 026100056	0. 728736	0. 801345
TGM7	15q15. 2-c	0. 02609223	0. 728814	0. 801387
ZNF691	1p34. 2	-0. 026045655	0. 729279	0. 801854
DMP1	4q22. 1	-0. 026037494	0. 729361	0. 8019
COG3	13q14. 13	-0. 026031009	0. 729425	0. 801927
DNAJA3	16p13. 3	0. 026016362	0. 729572	0. 802043
MS4A15	11q12. 2	-0. 025973425	0. 730001	0. 802471
GTDC1	2q22. 3	0. 025953592	0. 730199	0. 8026
TAOK2	16p11. 2	0. 025953592	0. 730199	0. 8026
LINC00442	13q12. 11	-0. 025940987	0. 730325	0. 802695
GNPDA1	5q31. 3	0. 025922206	0. 730513	0. 802857
2-Mar	1q41	-0. 025918021	0. 730554	0. 802859
TEX15	8p12	-0. 025907056	0. 730664	0. 802919
C1QL3	10p13	-0. 025904513	0. 73069	0. 802919
ELANE	19p13. 3	-0. 025889192	0. 730843	0. 803043
GOLGA8B	15q14	-0. 025848974	0. 731245	0. 803441
FAM43A	3q29	-0. 025817588	0. 731559	0. 803697
GIP	17q21. 32	0. 025817581	0. 731559	0. 803697
RTBDN	19p13. 13	-0. 025808747	0. 731647	0. 80375
IRF2BP1	19q13. 32	-0. 025800849	0. 731726	0. 803793
OR2AK2	1q44	-0. 025783212	0. 731902	0. 803942

AQP12B	2q37.3	0.025774848	0.731986	0.80399
DPYD	1p21.3	-0.025694139	0.732793	0.804832
RAB3IL1	11q12.2-c	0.025662754	0.733107	0.805133
MAGEA9B	Xq28	-0.025645812	0.733277	0.805253
PTX4	16p13.3	-0.025643756	0.733297	0.805253
DMRT3	9p24.3	-0.025592129	0.733814	0.805718
GBA	1q22	0.025591614	0.733819	0.805718
ACE2	Xp22.2	0.025587429	0.733861	0.805718
SLC38A7	16q21	-0.025585337	0.733882	0.805718
SRP68	17q25.1	-0.02557906	0.733945	0.805743
TNC	9q33.1	-0.025560228	0.734133	0.805886
SYT13	11p11.2	-0.025556044	0.734175	0.805886
H19	11p15.5	-0.025553951	0.734196	0.805886
E2F2	1p36.12	0.02554349	0.734301	0.805957
SRSF5	14q24.1	0.02553512	0.734385	0.806005
MTPAP	10p11.23	-0.025501642	0.73472	0.806328
THY1	11q23.3	-0.025491181	0.734825	0.806399
PLPPR3	19p13.3	0.025460203	0.735135	0.806678
POLR3E	16p12.2	0.025457703	0.73516	0.806678
PP7080	5p15.33	0.025453518	0.735202	0.80668
PARD6G	18q23	-0.025449334	0.735244	0.806682
COL4A2	13q34	0.025432595	0.735412	0.806821
TMEM128	4p16.3	0.025417948	0.735558	0.806894
TMEM50B	21q22.11	0.025417948	0.735558	0.806894
TUT7	9q21.33	-0.025411671	0.735621	0.806918
C12ORF71	12p11.23	-0.025399614	0.735742	0.806991
MRPL36	5p15.33	-0.025397025	0.735768	0.806991
OR10A3	11p15.4	0.025374962	0.735989	0.807189
ARL4A	7p21.3	0.025367732	0.736061	0.807224
RGS16	1q25.3	0.025309146	0.736648	0.807824
MEST	7q32.2	0.025300776	0.736732	0.807827
TRIP12	2q36.3	-0.025300776	0.736732	0.807827
NECAB3	20q11.22	-0.025292407	0.736816	0.807875
RHEX	1q32.1	0.025273576	0.737005	0.808016
ATAD2	8q24.13	-0.025271483	0.737026	0.808016
RAB5B	12q13.2	-0.025263114	0.73711	0.808064
KCNJ4	22q13.1	0.025248649	0.737255	0.808159
NDRG2	14q11.2	-0.025246375	0.737278	0.808159
OR5B12	11q12.1	-0.025226417	0.737478	0.808323
GPAA1	8q24.3	0.025223359	0.737508	0.808323
RBM47	4p14	0.025173143	0.738012	0.808831
FGFR3	4p16.3	0.025152219	0.738222	0.808987
SPATA31A1	9p12	0.025150876	0.738235	0.808987
MSANTD3	9q31.1	0.025139665	0.738348	0.809066
ETV2	19q13.12	-0.02513548	0.73839	0.809067
CDC25B	20p13	-0.025125018	0.738495	0.809105
RAB19	7q34	-0.025123985	0.738505	0.809105
LAMP1	13q34	0.025114557	0.7386	0.809164
TXNRD3NB	3q21.3	0.025085264	0.738893	0.809442
OXA1L	14q11.2	0.025068525	0.739061	0.809581
LAGE3	Xq28	0.02502877	0.73946	0.809974
TCHHL1	1q21.3	-0.025017185	0.739576	0.810057
GLYCTK	3p21.2	-0.024934614	0.740405	0.81092
NOBOX	7q35	-0.024904152	0.740711	0.81121

SP7	12q13. 13	-0. 024892204	0. 740831	0. 811297
IDH3B	20p13	0. 024884397	0. 740909	0. 811339
TAS2R30	12p13. 2	0. 024873693	0. 741017	0. 811412
ABCC5	3q27. 1	-0. 024838365	0. 741372	0. 811756
CYS1	2p25. 1	-0. 024834181	0. 741414	0. 811758
CARD9	9q34. 3	-0. 024821627	0. 74154	0. 811851
PILRA	7q22. 1	-0. 024817442	0. 741582	0. 811853
MMP23A	1p36. 33	0. 024793623	0. 741821	0. 812063
PROSER1	13q13. 3	-0. 024790241	0. 741855	0. 812063
FHAD1	1p36. 21	-0. 024744209	0. 742317	0. 812525
LINC00207	22q13. 31	-0. 024696339	0. 742798	0. 812965
PIK3R6	17p13. 1	0. 024696085	0. 742801	0. 812965
PFN1P2	1p11. 2	-0. 024683531	0. 742927	0. 813058
CYP4A22	1p33	-0. 024667098	0. 743092	0. 813195
OR6N2	1q23. 1	-0. 024659445	0. 743169	0. 813234
GALNS	16q24. 3	0. 024597744	0. 743789	0. 813868
ARSE	Xp22. 33	0. 024532881	0. 744442	0. 814537
SPATA31A	9q21. 11	-0. 024493653	0. 744836	0. 814924
LRRC39	1p21. 2	0. 02448796	0. 744893	0. 814943
OR56B1	11p15. 4	0. 02446609	0. 745113	0. 815101
MYC	8q24. 21	-0. 024461741	0. 745157	0. 815101
NOX5	15q23	-0. 024461424	0. 74516	0. 815101
TMEM211	22q11. 23	0. 024442136	0. 745354	0. 815268
FOXN2	2p16. 3	-0. 024417802	0. 745599	0. 815491
UEVLD	11p15. 1	-0. 024413617	0. 745641	0. 815493
MLLT1	19p13. 3	0. 024382232	0. 745957	0. 815794
VTCN1	1p13. 1-p1	-0. 024363451	0. 746146	0. 815949
UNC50	2q11. 2	-0. 024359216	0. 746189	0. 815949
CFAP410	21q22. 3	-0. 024352939	0. 746252	0. 815949
GPR84	12q13. 13	-0. 024351905	0. 746262	0. 815949
PIGT	20q13. 12	-0. 024344569	0. 746336	0. 815985
CNTROB	17p13. 1	-0. 024298537	0. 746799	0. 816447
SNORA56	Xq28	0. 02427954	0. 746991	0. 816611
RPL22	1p36. 31	-0. 024260875	0. 747179	0. 816772
SELENOO	22q13. 33	0. 024254598	0. 747242	0. 816796
MSN	Xq12	0. 024237859	0. 74741	0. 816936
ELK1	Xp11. 23	-0. 024233674	0. 747452	0. 816937
ACBD3	1q42. 12	-0. 024216936	0. 747621	0. 817077
ARR3	Xq13. 1	-0. 024151917	0. 748276	0. 817748
PPP3R2	9q31. 1	-0. 024139534	0. 748401	0. 817839
SCARNA16	17q25. 2	-0. 024129427	0. 748502	0. 817906
HAUS2	15q15. 2	0. 024120687	0. 74859	0. 817957
LINC01138	1q21. 2	-0. 024097091	0. 748828	0. 818167
OCA2	15q12-q15	0. 024093474	0. 748865	0. 818167
GBP1	1p22. 2	-0. 024068378	0. 749117	0. 818349
ELF1	13q14. 11	-0. 024066286	0. 749138	0. 818349
TSPYL6	2p16. 2	-0. 02406479	0. 749154	0. 818349
OSBP2	22q12. 2	0. 024053732	0. 749265	0. 818412
TRIML1	4q35. 2	-0. 024050955	0. 749293	0. 818412
EIF2D	1q32. 1	0. 024026531	0. 749539	0. 818636
GALNT2	1q42. 13	-0. 024011885	0. 749687	0. 818752
TMEM74B	20p13	0. 024005608	0. 74975	0. 818777
CELF1	11p11. 2	-0. 024001423	0. 749792	0. 818778
OR7A5	19p13. 12	-0. 023986094	0. 749947	0. 818902

ANKAR	2q32. 2	-0. 023981558	0. 749992	0. 818907
OR9G9	11q11	0. 023977161	0. 750037	0. 818911
HOMER2	15q25. 2	-0. 023957483	0. 750235	0. 819016
TMEM135	11q14. 2	-0. 023957483	0. 750235	0. 819016
SNW1	14q24. 3	0. 023955391	0. 750256	0. 819016
BRDTP1	Xq21. 33	0. 02389179	0. 750897	0. 819649
CDRT15P1	17p12	-0. 023886481	0. 750951	0. 819649
LINC01959	5q31. 1	0. 02388402	0. 750976	0. 819649
TMEM244	6q22. 33	-0. 023881629	0. 751	0. 819649
OR4N4	15q11. 2	0. 023867527	0. 751142	0. 81976
TTY1B	Yp11. 2	-0. 023845574	0. 751363	0. 819948
ATL3	11q13. 1	0. 023840311	0. 751417	0. 819948
ABITRAM	9q31. 3	0. 023838219	0. 751438	0. 819948
SAG	2q37. 1	0. 023815322	0. 751669	0. 820155
INGX	Xq13. 1	-0. 023810516	0. 751717	0. 820163
DPF2	11q13. 1	0. 023704308	0. 752789	0. 821243
PAAF1	11q13. 4	0. 023704308	0. 752789	0. 821243
TCTEX1D2	3q29	-0. 023660369	0. 753232	0. 821682
DNHD1	11p15. 4	-0. 023645722	0. 75338	0. 821798
CXCL11	4q21. 1	0. 023622706	0. 753612	0. 822007
SNORD97	11p15. 4	0. 023602732	0. 753814	0. 822141
AKR1C6P	10p15. 1	-0. 023602339	0. 753818	0. 822141
ADAM30	1p12	-0. 023588047	0. 753962	0. 822219
IQGAP1	15q26. 1	0. 023587136	0. 753971	0. 822219
DNMT3B	20q11. 21	0. 02353692	0. 754478	0. 822727
SSX1	Xp11. 23	-0. 023518875	0. 754661	0. 822881
SCARNA8	9p22. 1	-0. 023508988	0. 75476	0. 822945
BCAS3	17q23. 2	-0. 023486703	0. 754986	0. 823108
VCX2	Xp22. 31	0. 023485992	0. 754993	0. 823108
CNTNAP2	7q35-q36.	-0. 023467872	0. 755176	0. 823263
UBE2Q2P1	15q25. 2	-0. 023451133	0. 755345	0. 823402
LINC02249	15q13. 2	-0. 023438669	0. 755471	0. 823494
GCNT7	20q13. 31	-0. 023426553	0. 755593	0. 823583
EEF2K	16p12. 2	0. 023417655	0. 755683	0. 823636
CALCOCO2	17q21. 32	-0. 023411378	0. 755747	0. 82366
DYNC1LI2	16q22. 1	-0. 023373716	0. 756127	0. 82403
TRAPPC10	21q22. 3	-0. 023369531	0. 756169	0. 824031
HSPB7	1p36. 13	-0. 023294206	0. 756931	0. 824816
TMEM169	2q35	0. 02327119	0. 757163	0. 825024
DNAAF4	15q21. 3	0. 023258636	0. 75729	0. 825118
LRRC17	7q22. 1	0. 023225158	0. 757629	0. 825399
POLR2J4	7p13	0. 023220974	0. 757671	0. 825399
KIF9	3p21. 31	0. 023218881	0. 757692	0. 825399
MMP2	16q12. 2	-0. 023216789	0. 757713	0. 825399
OR8D1	11q24. 2	0. 023208889	0. 757793	0. 825441
OR1N1	9q33. 2	0. 023175079	0. 758135	0. 825707
BAG4	8p11. 23	-0. 023174942	0. 758137	0. 825707
SIGLECL1	19q13. 41	-0. 023172435	0. 758162	0. 825707
COX7B2	4p12	0. 02313623	0. 758528	0. 826028
METTL21A	2q33. 3	-0. 023135187	0. 758539	0. 826028
SNX31	8q22. 3	-0. 023130014	0. 758591	0. 82604
DSG4	18q12. 1	0. 023104509	0. 758849	0. 826276
INTS9	8p21. 1	0. 023097525	0. 75892	0. 826286
CPNE5	6p21. 2	-0. 023095432	0. 758941	0. 826286

ESS2	22q11. 21	0. 023091248	0. 758983	0. 826287
S100A9	1q21. 3	-0. 023078694	0. 75911	0. 82638
DAGLA	11q12. 2	0. 023049401	0. 759407	0. 826657
ZMYND10	3p21. 31	0. 023028489	0. 759618	0. 826843
TLR5	1q41	0. 023018015	0. 759724	0. 826913
ZNF512	2p23. 3	-0. 023003369	0. 759872	0. 827026
FAM163B	9q34. 2	0. 022999374	0. 759913	0. 827026
SSX6P	Xp11. 23	0. 022995511	0. 759952	0. 827026
EPHA8	1p36. 12	0. 022923196	0. 760684	0. 827772
THUMPD3	3p25. 3	0. 02291864	0. 76073	0. 827772
DNAH14	1q42. 12	0. 022915502	0. 760762	0. 827772
SNX9	6q25. 3	0. 022894566	0. 760974	0. 827958
KRTAP4-7	17q21. 2	0. 022880224	0. 761119	0. 828007
RSPH3	6q25. 3	-0. 02287992	0. 761122	0. 828007
RASSF5	1q32. 1	0. 022877827	0. 761143	0. 828007
LINC00964	8q24. 13	0. 02285853	0. 761339	0. 828174
ABHD14A	3p21. 2	-0. 022846442	0. 761461	0. 828262
NTNG2	9q34. 13	-0. 022825518	0. 761673	0. 828448
HHATL	3p22. 1	0. 022811095	0. 761819	0. 828562
WDR24	16p13. 3	-0. 022766932	0. 762266	0. 828966
TUBB7P	4q35. 2	-0. 022766203	0. 762274	0. 828966
HGSNAT	8p11. 21- Γ	0. 022737639	0. 762563	0. 82919
SNRNP27	2p13. 3	0. 022737639	0. 762563	0. 82919
TAS2R46	12p13. 2	-0. 022708385	0. 762859	0. 829468
GPR180	13q32. 1	-0. 022697885	0. 762966	0. 829538
PRAF2	Xp11. 23	-0. 0226937	0. 763008	0. 829539
RPL23AP64	11q23. 3	-0. 022677222	0. 763175	0. 829675
RBM25	14q24. 2	-0. 022628837	0. 763666	0. 830163
NUDT17	1q21. 1	0. 02262256	0. 763729	0. 830187
TOB2P1	6p22. 1	-0. 022597452	0. 763984	0. 830419
BCLAF3	Xp22. 12	0. 022591174	0. 764047	0. 830443
COX7A1	19q13. 12	-0. 022584897	0. 764111	0. 830467
PRMT2	21q22. 3	0. 02257862	0. 764175	0. 830491
GRID2	4q22. 1-q ζ	0. 022548214	0. 764483	0. 830781
LBX1	10q24. 32	0. 022537144	0. 764595	0. 830816
NME7	1q24. 2	0. 022536773	0. 764599	0. 830816
GPRIN1	5q35. 2	0. 022522127	0. 764747	0. 830933
AIF1	6p21. 33	-0. 022513757	0. 764832	0. 830935
EXOC3	5p15. 33	0. 022513757	0. 764832	0. 830935
KRT36	17q21. 2	0. 022467658	0. 7653	0. 831397
PIP4P1	14q11. 2	0. 022457264	0. 765405	0. 831467
IFNAR1	21q22. 11	-0. 022446802	0. 765511	0. 831537
KRCC1	2p11. 2	-0. 02243634	0. 765617	0. 831539
ZC3HAV1L	7q34	-0. 02243634	0. 765617	0. 831539
DEPTOR	8q24. 12	-0. 022434248	0. 765639	0. 831539
RPL13AP3	14q22. 3	0. 022427971	0. 765702	0. 831562
ZAR1L	13q13. 1	0. 022424023	0. 765742	0. 831562
ZNF613	19q13. 41	0. 022413324	0. 765851	0. 831612
SYNE4	19q13. 12	0. 022411232	0. 765872	0. 831612
CALU	7q32. 1	-0. 022404955	0. 765936	0. 831636
ASMT	Xp22. 33 ϵ	-0. 022393941	0. 766048	0. 831707
SLC2A3	12p13. 31	0. 022390308	0. 766084	0. 831707
C11ORF54	11q21	0. 022377754	0. 766212	0. 8318
PGAM4	Xq21. 1	-0. 022367292	0. 766318	0. 83187

EFS	14q11.2	0.022344276	0.766551	0.832056
LPIN1	2p25.1	-0.022342184	0.766573	0.832056
THSD4	15q23	0.022337999	0.766615	0.832057
FM09P	1q24.1	0.022292308	0.767079	0.832508
CFTR	7q31.2	-0.022288841	0.767114	0.832508
ARL17A	17q21.31	-0.022279413	0.76721	0.832522
CCDC96	4p16.1	-0.022279413	0.76721	0.832522
ZMYND8	20q13.12	-0.022273136	0.767273	0.832546
MGAT2	14q21.3	0.022266859	0.767337	0.83257
SNX11	17q21.32	0.02225012	0.767507	0.832709
CEBPD	8q11.21	-0.022229197	0.767719	0.832894
CLDN15	7q22.1	0.022216643	0.767847	0.832944
JPH1	8q21.11	-0.022210366	0.767911	0.832944
SMN2	5q13.2	-0.022210366	0.767911	0.832944
RMRP	9p13.3	-0.022208273	0.767932	0.832944
C20RF74	2p15	-0.022191546	0.768102	0.833083
GEMIN8P4	1p22.2	0.022176899	0.76825	0.833199
SPINK8	3p21.31	-0.02215869	0.768435	0.833322
OR2T34	1q44	-0.022157455	0.768448	0.833322
SMC01	3q29	-0.022131236	0.768714	0.833566
GEMIN8	Xp22.2	0.022124579	0.768782	0.833594
PIP5K1C	19p13.3	-0.02210784	0.768952	0.833733
TMEM207	3q28	-0.022092999	0.769102	0.833827
TECTB	10q25.2	0.022091058	0.769122	0.833827
POTEC	18p11.21	0.022056702	0.769471	0.834161
LBH	2p23.1	-0.022032515	0.769717	0.834336
PDIA3P1	1q21.1	0.022032515	0.769717	0.834336
APBA2	15q13.1	0.022007407	0.769972	0.834522
STAG3L2	7q11.23	-0.022007407	0.769972	0.834522
CNTD2	19q13.2	-0.021990668	0.770142	0.834661
SYT2	1q32.1	-0.021982299	0.770227	0.834708
TTC16	9q34.11	0.021972078	0.770331	0.834753
BPIFA2	20q11.21	-0.021970066	0.770351	0.834753
EML4	2p21	0.021955098	0.770503	0.834872
MT1E	16q13	0.021919528	0.770865	0.835219
HLA-E	6p22.1	-0.021871404	0.771354	0.835703
CTSK	1q21.3	-0.021865127	0.771418	0.835706
EWSR1	22q12.2	-0.02185885	0.771482	0.835706
IRF2	4q35.1	0.02185885	0.771482	0.835706
MRPL54	19p13.3	0.021842111	0.771652	0.835826
OR1J2	9q33.2	0.021839706	0.771676	0.835826
TMEM52	1p36.33	0.021833741	0.771737	0.835846
CDCA7L	7p15.3	-0.021827464	0.771801	0.83587
CPNE9	3p25.3	0.021802773	0.772052	0.836097
GTF3C3	2q33.1	-0.021791894	0.772162	0.836171
GNE	9p13.3	-0.021781432	0.772269	0.836241
RASGRP1	15q14	-0.021777248	0.772311	0.836242
OR6C1	12q13.2	-0.021758333	0.772504	0.836359
OR8B2	11q24.2	-0.021758333	0.772504	0.836359
MACROD2	20p12.1	-0.021745862	0.772631	0.836373
RPS27	1q21.3	-0.02174377	0.772652	0.836373
ZDHHC23	3q13.31	-0.021741678	0.772673	0.836373
LINC0031C	21q22.11	0.021740643	0.772684	0.836373
KCNJ13	2q37.1	0.021732125	0.77277	0.836422

LINC-PIN1	7q32.3	0.021720754	0.772886	0.836501
RELL1	4p14	-0.021712385	0.772971	0.836548
AZIN2	1p35.1	-0.021704015	0.773056	0.836595
RENBP	Xq28	0.021683092	0.773269	0.83678
LOC645752	15q24.3	0.021675647	0.773345	0.836817
GBX2	2q37.2	0.021669146	0.773411	0.836843
HINT2	9p13.3	-0.021660076	0.773503	0.836898
CENPJ	13q12.12-	0.021651706	0.773588	0.836944
OC90	8q24.22	-0.021638547	0.773722	0.837039
PTH	11p15.3	-0.021633074	0.773778	0.837039
DNAJC11	1p36.31	0.021630783	0.773801	0.837039
AFG3L1P	16q24.3	0.021614044	0.773972	0.837177
OR10Q1	11q12.1	0.021606647	0.774047	0.837177
ZMYM1	1p34.3	-0.021605674	0.774057	0.837177
PANX3	11q24.2	0.021601802	0.774096	0.837177
CPNE8	12q12	0.02156592	0.774461	0.837526
ZNF576	19q13.31	0.021561735	0.774504	0.837527
LINC00112	21q22.3	-0.02154242	0.7747	0.837668
PYDC1	16p11.2	0.021540687	0.774718	0.837668
TPRX1	19q13.33	0.021521875	0.77491	0.83783
PGLYRP2	19p13.12	-0.021516504	0.774964	0.837843
ARL13A	Xq22.1	0.02149789	0.775154	0.838003
MICB	6p21.33	0.021488503	0.775249	0.838061
C2ORF70	2p23.3	0.021457128	0.775569	0.838361
PTPN22	1p13.2	-0.021442471	0.775718	0.838477
HIGD1C	12q13.12	0.021419204	0.775955	0.838688
CLPTMIL	5p15.33	-0.021413178	0.776016	0.838709
PTK2	8q24.3	-0.021362961	0.776528	0.839216
FDCSP	4q13.3 4c	0.021314584	0.77702	0.839703
TPTE2	13q12.11	-0.021278312	0.77739	0.840024
RASSF9	12q21.31	-0.021277174	0.777402	0.840024
SPANXN5	Xp11.22	0.021264888	0.777527	0.840094
LSG1	3q29	0.021262528	0.777551	0.840094
RAD51AP2	2p24.2	-0.021255166	0.777626	0.84013
DDRGK1	20p13	0.021241604	0.777764	0.840234
TGFBR2	3p24.1	-0.021235327	0.777828	0.840258
L3MBTL3	6q23.1	0.021226958	0.777913	0.840304
MAF	16q23.2	-0.021222773	0.777956	0.840305
RRBP1	20p12.1	0.021195573	0.778233	0.840537
TRIM66	11p15.4	-0.02119348	0.778254	0.840537
MYOZ1	10q22.2	0.021189307	0.778297	0.840537
TREML2	6p21.1	-0.021168416	0.77851	0.840677
BTBD19	1p34.1	-0.021168372	0.77851	0.840677
PSMD6	3p14.1	-0.021147448	0.778724	0.840794
MIR503HG	Xq26.3	-0.021145356	0.778745	0.840794
RAB40B	17q25.3	0.021145356	0.778745	0.840794
POLR3D	8p21.3	-0.021126525	0.778937	0.840956
TMEM14B	6p24.2	0.021101417	0.779193	0.841187
CCT4	2p15	0.021088862	0.779321	0.841279
RBMXL3	Xq23	0.021077	0.779442	0.841342
SFTA1P	10p14	0.021073561	0.779477	0.841342
TRIM53AP	11q14.3	0.02107079	0.779505	0.841342
XIST	Xq13.2	-0.021038267	0.779837	0.841654
SDC4P	22q12.2	-0.021004794	0.780178	0.841977

SRL	16p13.3	-0.020984245	0.780388	0.842158
YAP1	11q22.1	0.020977967	0.780452	0.842182
FAM53A	4p16.3	-0.020967506	0.780558	0.842251
MYH4	17p13.1	-0.020941921	0.780819	0.842487
OR4N3P	15q11.2	-0.020927245	0.780969	0.842603
REC8	14q12	0.020898458	0.781263	0.842859
LINC01312	26q23.2	-0.020895768	0.78129	0.842859
ARL6IP4	12q24.31	-0.02087335	0.781519	0.84306
NRARP	9q34.3	-0.020867073	0.781583	0.843084
INTS8	8q22.1	0.020848241	0.781775	0.843246
STMN2	8q21.13	-0.020821041	0.782053	0.843499
UTS2B	3q28	-0.020806623	0.7822	0.843613
ARL2BP	16q13	0.020789655	0.782373	0.843731
MICU2	13q12.11	-0.020787563	0.782394	0.843731
SLFNL1	1p34.2	0.020762466	0.782651	0.843942
TBC1D3P1	17q23.1	-0.020756227	0.782714	0.843942
SCNN1G	16p12.2	-0.020756044	0.782716	0.843942
SEC11A	15q25.2-c	0.020749901	0.782779	0.843964
GON4L	1q22	0.020735254	0.782928	0.844079
PABPC3	13q12.13	0.020714331	0.783142	0.844264
TRMT61B	2p23.2	-0.020710146	0.783185	0.844265
HAVCR2	5q33.3	-0.020695499	0.783334	0.84438
PDYN	20p13	-0.020679218	0.7835	0.844512
LOC100240	12q13.13	-0.020675247	0.783541	0.844512
BTF3P11	13q22.3	0.020659968	0.783697	0.844635
TIMP3	22q12.3	0.020655745	0.78374	0.844636
OR52B2	11p15.4	0.020629517	0.784008	0.844879
HLA-DQA2	6p21.32	0.020601343	0.784296	0.845143
UFC1	1q23.3	0.020567866	0.784638	0.845444
METTL23	17q25.1	-0.020565773	0.784659	0.845444
XAGE2	Xp11.22	0.020557897	0.78474	0.845479
SPIB	19q13.33	0.020554276	0.784777	0.845479
SLC19A3	2q36.3	-0.02054485	0.784873	0.845537
PRRT2	16p11.2	0.020534388	0.78498	0.845607
SCAF4	21q22.11	0.020523926	0.785087	0.845676
NRXN2	11q13.1	-0.020505095	0.785279	0.845838
MEIOC	17q21.31	-0.020488367	0.78545	0.845977
RHOBTB2	8p21.3	0.020484171	0.785493	0.845977
PTTG2	4p14	-0.020466609	0.785672	0.846064
DKFZP434A	9q34.3	0.020464968	0.785689	0.846064
AFP	4q13.3	-0.020463837	0.785701	0.846064
TMEM45A	3q12.2	-0.020450694	0.785835	0.846163
JDP2	14q24.3	0.020433955	0.786006	0.846302
HIST1H2BA	6p22.2	-0.020414142	0.786208	0.846474
GGT5	22q11.23	-0.020385831	0.786498	0.84674
LMF2	22q13.33	0.020360722	0.786754	0.846971
LINC01341	1q44	0.020343994	0.786925	0.847109
C7ORF66	7q31.1	-0.020307778	0.787296	0.847375
SCARNA27	6p24.3	0.020307778	0.787296	0.847375
TAF11	6p21.31	0.020307378	0.7873	0.847375
TMEM86A	11p15.1	-0.020281213	0.787567	0.847618
PSMB1	6q27	0.020262382	0.78776	0.847734
RPAP1	15q15.1	0.020262382	0.78776	0.847734
SNORA64	16p13.3	-0.020256549	0.78782	0.847752

MYH2	17p13.1	-0.020246291	0.787924	0.847819
MAP3K19	2q21.3	0.020238781	0.788001	0.847856
INHBA	7p14.1	-0.020226811	0.788124	0.847898
RNF141	11p15.4 1	0.020222627	0.788166	0.847898
BPGM	7q33	0.020220534	0.788188	0.847898
PRPS2	Xp22.2	0.020218442	0.788209	0.847898
C9ORF50	9q34.11	-0.02019719	0.788427	0.848014
MSX1	4p16.2	-0.020195426	0.788445	0.848014
VN1R5	1q44	-0.020191981	0.78848	0.848014
FAM98A	2p22.3	-0.020191241	0.788487	0.848014
NUFIP1	13q14.12	0.020187057	0.78853	0.848015
TTC39A	1p32.3	0.020155671	0.788851	0.848314
RBM15	1p13.3	-0.02013684	0.789044	0.848476
AKAP5	14q23.3	-0.020094993	0.789472	0.848731
LSMEM1	7q31.1	0.020094993	0.789472	0.848731
FAM91A1	8q24.13	-0.020092901	0.789494	0.848731
RTL3	Xq21.1	0.020089083	0.789533	0.848731
DPH7	9q34.3	0.020088716	0.789536	0.848731
PDIA2	16p13.3	0.020088716	0.789536	0.848731
CHST15	10q26.13	-0.020042684	0.790007	0.849169
C4ORF47	4q35.1	-0.020040644	0.790028	0.849169
GABRA6	5q34	0.01999905	0.790454	0.849531
SPATA2	20q13.13	-0.019998745	0.790457	0.849531
INSYN2B	5q35.1	-0.019995282	0.790493	0.849531
PRDM16-D1	1p36.32	0.019969452	0.790757	0.849769
OR1Q1	9q33.2	-0.019930199	0.791159	0.850155
HMG2P46	15q21.1	0.019912958	0.791335	0.850299
SSBP3	1p32.3	0.019894127	0.791528	0.850461
MOBP	3p22.1	-0.019882005	0.791652	0.850549
TBC1D1	4p14	0.019877388	0.7917	0.850554
FBXO43	8q22.2	-0.019854372	0.791935	0.850761
VCPKMT	14q21.3	0.019848095	0.792	0.850784
GINS3	16q21	0.019818802	0.7923	0.851061
HOXD4	2q31.1	0.019800022	0.792492	0.851222
F8A1	Xq28	0.019789509	0.7926	0.851292
MAP1LC3B2	12q24.22	-0.019779047	0.792707	0.851338
MSC	8q13.3	0.019776955	0.792728	0.851338
FAM210A	18p11.21	-0.019764401	0.792857	0.851387
SNORA49	12q24.33	-0.019764253	0.792858	0.851387
MPDU1	17p13.1	-0.019758124	0.792921	0.851408
TEX33	22q12.3	0.019753298	0.79297	0.851416
SFTA3	14q13.3	0.019743591	0.79307	0.851477
INHA	2q35	-0.019735108	0.793157	0.851524
ALDOB	9q31.1	-0.019728831	0.793221	0.851547
CT45A6	Xq26.3	0.019709562	0.793419	0.851714
MED29	19q13.2	0.019693261	0.793586	0.851847
TLX3	5q35.1	0.01968908	0.793628	0.851847
COG2	1q42.2	0.019680706	0.793714	0.851848
PRELP	1q32.1	0.019680706	0.793714	0.851848
H2BFWT	Xq22.2	-0.01964636	0.794066	0.85218
KLHL21	1p36.31	-0.019615843	0.794379	0.852434
OR52K2	11p15.4	0.019614958	0.794388	0.852434
HAPLN2	1q23.1	0.019608427	0.794455	0.852448
EIF1	17q21.2	-0.019605382	0.794486	0.852448

INTS13	12p11. 23	-0.019592827	0.794615	0.85254
SH2D2A	1q23. 1	0.019582366	0.794722	0.852609
ANKRD11	16q24. 3	-0.019565627	0.794894	0.852748
DIO2	14q31. 1	-0.019561442	0.794937	0.852748
DOT1L	19p13. 3	-0.019555165	0.795001	0.852771
TRAF5	1q32. 3	-0.019527964	0.79528	0.853024
SMARCC2	12q13. 2	0.019511225	0.795451	0.85314
MDGA2	14q21. 3	0.019507006	0.795495	0.85314
BICD1	12p11. 21	0.019504948	0.795516	0.85314
OCM	7p22. 1	0.019414401	0.796444	0.85409
CDR2	16p12. 2	0.019394054	0.796653	0.854268
P4HB	17q25. 3	0.019354299	0.797061	0.854614
ZC3H8	2q14. 1	-0.019354299	0.797061	0.854614
LYPLAL1	1q41	0.019331283	0.797297	0.85472
UXS1	2q12. 2	0.01932919	0.797318	0.85472
LINC02396	12q13. 12	0.019328823	0.797322	0.85472
GJD4	10p11. 21	0.019327961	0.797331	0.85472
ZNF530	19q13. 43	0.019306175	0.797554	0.854849
LOC729603	6q25. 3	-0.019304082	0.797576	0.854849
LINC00326	6q23. 2	0.019303678	0.79758	0.854849
SRP9	1q42. 12	0.019270604	0.797919	0.855145
M1AP	2p13. 1	0.019268512	0.797941	0.855145
DPRXP4	17q11. 2	-0.019256532	0.798064	0.85523
ARHGEF7	13q34	0.019220388	0.798435	0.855582
GDPD5	11q13. 4-c	-0.019200521	0.798639	0.855743
DNAJC8	1p35. 3	-0.019197372	0.798671	0.855743
KCNE2	21q22. 11	0.01918691	0.798778	0.855813
SLC36A2	5q33. 1	0.019170926	0.798942	0.855942
SLC5A11	16p12. 1	-0.019147405	0.799184	0.856155
NPNT	4q24	-0.019134601	0.799315	0.85625
NCR2	6p21. 1	-0.019106599	0.799603	0.856488
KRTAP1-3	17q21. 2	-0.01910421	0.799627	0.856488
OR4Q3	14q11. 2	-0.019100462	0.799666	0.856488
CYP2A6	19q13. 2	0.019084639	0.799828	0.856595
WDR27	6q27	-0.0190802	0.799874	0.856595
LINC00895	22q11. 21	-0.019078212	0.799894	0.856595
KRT77	12q13. 13	0.019027968	0.80041	0.857078
WSCD2	12q23. 3	0.019025898	0.800431	0.857078
SNORA52	11p15. 5	0.018998675	0.800711	0.857332
PXT1	6p21. 31	0.018978601	0.800917	0.857507
YBEY	21q22. 3	-0.018959899	0.801109	0.857666
LINGO1	15q24. 3	-0.018925366	0.801464	0.857931
OOEP	6q13	-0.018919468	0.801525	0.857931
MST01	1q22	-0.018919089	0.801529	0.857931
ACACA	17q12	-0.018914904	0.801572	0.857931
RGS10	10q26. 11	0.018914904	0.801572	0.857931
PAGE2	Xp11. 21	0.018906609	0.801657	0.857977
RRP36	6p21. 1	0.01889398	0.801787	0.85807
SDF4	1p36. 33	0.018877241	0.801958	0.858185
KCNN1	19p13. 11	0.018860542	0.80213	0.858185
CSN1S2AP	4q13. 3	0.018857222	0.802164	0.858185
OR10C1	6p22. 1	-0.018857222	0.802164	0.858185
OR52J3	11p15. 4	-0.018857222	0.802164	0.858185
SPACA7	13q34	-0.018857222	0.802164	0.858185

LTB	6p21. 33	0. 018854226	0. 802195	0. 858185
TBATA	10q22. 1	-0. 018843119	0. 802309	0. 85824
SPINK6	5q32	0. 0188409	0. 802332	0. 85824
NPBWR2	20q13. 33	-0. 018829055	0. 802454	0. 858324
IFT27	22q12. 3	-0. 018816563	0. 802582	0. 858415
RPLP0	12q24. 23	0. 018808194	0. 802668	0. 858461
DEPDC7	11p13	-0. 01879564	0. 802797	0. 858553
ZBTB48	1p36. 31	0. 018778901	0. 802969	0. 858669
CNN1	19p13. 2	-0. 018776808	0. 802991	0. 858669
GALT	9p13. 3	-0. 018770531	0. 803055	0. 858692
TIGD5	8q24. 3	-0. 018764254	0. 80312	0. 858715
STPG2	4q22. 3-q2	-0. 018758126	0. 803183	0. 858736
HGD	3q13. 33	-0. 0187517	0. 803249	0. 858761
NFYC	1p34. 2	-0. 018724499	0. 803528	0. 859014
RNF31	14q12	-0. 018720315	0. 803571	0. 859014
MARK3	14q32. 32-	0. 018711945	0. 803657	0. 85906
SNORA38B	17q24. 2	-0. 018697936	0. 803801	0. 859168
OPN1SW	7q32. 1	-0. 018689213	0. 803891	0. 859218
IL34	16q22. 1	0. 018682652	0. 803958	0. 859244
SPDL1	5q35. 1	-0. 018665913	0. 804131	0. 859382
LYAR	4p16. 3	0. 018642897	0. 804367	0. 859566
DPEP2	16q22. 1	-0. 018640805	0. 804389	0. 859566
RAE1	20q13. 31	-0. 018634528	0. 804453	0. 859589
GTSF1	12q13. 13	-0. 018629874	0. 804501	0. 859594
CALML6	1p36. 33	-0. 018615742	0. 804646	0. 859679
BMP3	4q21. 21	-0. 018613799	0. 804666	0. 859679
PSG3	19q13. 2	-0. 018577286	0. 805042	0. 860034
AKR1D1	7q33	-0. 01856649	0. 805153	0. 860107
NME8	7p14. 1	-0. 018558851	0. 805232	0. 860144
ISYNA1	19p13. 11	-0. 018542464	0. 8054	0. 860279
TAF5L	1q42. 13	-0. 018508987	0. 805744	0. 8606
NFYA	6p21. 1	0. 018496433	0. 805874	0. 860692
HSD3B2	1p12	0. 018485767	0. 805983	0. 860738
UGP2	2p15	-0. 018483878	0. 806003	0. 860738
CALHM2	10q24. 33	0. 018477601	0. 806067	0. 860761
SUPT20HL1	Xp22. 11	0. 018467606	0. 80617	0. 860825
ACTN3	11q13. 2	-0. 018452857	0. 806322	0. 860941
AAAS	12q13. 13	-0. 018439939	0. 806455	0. 861037
PPP1CB	2p23. 2	0. 018435754	0. 806498	0. 861037
OR51M1	11p15. 4	0. 018429331	0. 806564	0. 861062
UCHL5	1q31. 2	-0. 018406461	0. 806799	0. 861221
FH	1q43	0. 018402276	0. 806842	0. 861221
HSFY1P1	22q11. 1	0. 018399422	0. 806872	0. 861221
LINC00924	15q26. 2	-0. 018398092	0. 806885	0. 861221
AGAP7P	10q11. 22	-0. 018393907	0. 806929	0. 861221
FAM99A	11p15. 5	-0. 018366532	0. 80721	0. 861435
INS-IGF2	11p15. 5	0. 018365998	0. 807216	0. 861435
FAM99B	11p15. 5	0. 018325904	0. 807628	0. 86183
HEATR1	1q43	0. 01830812	0. 807811	0. 861956
CEBPA	19q13. 11	-0. 018306028	0. 807833	0. 861956
FCF1	14q24. 3	0. 018257904	0. 808328	0. 862392
UBLCP1	5q33. 3	-0. 018257904	0. 808328	0. 862392
YTHDF1	20q13. 33	0. 018253719	0. 808372	0. 862392
SSX8P	Xp11. 22	-0. 018238628	0. 808527	0. 862512

SNRNP35	12q24.31	-0.018213964	0.808781	0.862737
PCDHB13	5q31.3	-0.018186764	0.809061	0.86299
ITPRIPL2	16p12.3	0.018170025	0.809233	0.863128
GHSR	3q26.31	0.018108549	0.809866	0.863757
JMJD6	17q25.1	0.018075869	0.810203	0.86407
SLC30A2	1p36.11	-0.018065445	0.810311	0.864092
ZBTB42	14q32.33	-0.018065407	0.810311	0.864092
ITGAM	16p11.2	0.018054945	0.810419	0.864161
SSX4	Xp11.23	0.018049557	0.810474	0.864174
TMEM199	17q11.2	-0.018025652	0.81072	0.864391
DLX6-AS1	7q21.3	0.017998138	0.811004	0.864647
CSNK2A2	16q21	0.01798799	0.811109	0.864712
ROM1	11q12.3	-0.01797962	0.811195	0.864758
DSPP	4q22.1	-0.017967581	0.811319	0.864844
LOC100240	12q13.13	-0.017953209	0.811467	0.864956
COL5A2	2q32.2	-0.017948235	0.811518	0.864964
GSAP	7q11.23	0.017927312	0.811734	0.865125
MOB3A	19p13.3	-0.017925219	0.811755	0.865125
ACO2	22q13.2	-0.017918942	0.81182	0.865148
RBMX2	Xq26.1	-0.017910573	0.811906	0.865194
SASS6	1p21.2	-0.017885464	0.812165	0.865354
C19ORF44	19p13.11	-0.017883372	0.812187	0.865354
SPTLC1	9q22.31	0.017883372	0.812187	0.865354
CETN1	18p11.32	0.017864736	0.812379	0.865513
BANP	16q24.2	-0.017831063	0.812726	0.865836
FLJ42627	16p13.3	0.017791308	0.813136	0.866227
B3GNT8	19q13.2	0.017768292	0.813373	0.866406
LCE1B	1q21.3	-0.017766543	0.813391	0.866406
SLC35E1	19p13.11	-0.017762015	0.813438	0.86641
LGALS13	19q13.2	0.017697393	0.814104	0.867074
OIP5-AS1	15q15.1	-0.017688783	0.814193	0.867122
LPXN	11q12.1	-0.017632289	0.814776	0.867696
LSP1	11p15.5	0.017621827	0.814884	0.867761
KRTAP10-C	21q22.3	-0.017617935	0.814924	0.867761
FZD10	12q24.33	-0.017609273	0.815013	0.86781
MICAL1	6q21	-0.017561149	0.81551	0.868293
ITGA5	12q13.13	0.017533948	0.81579	0.868499
RBM4	11q13.2	-0.017533948	0.81579	0.868499
CD248	11q13.2	-0.017521394	0.81592	0.868591
OR5B2	11q12.1	-0.017505778	0.816081	0.868716
CCM2	7p13	0.017500471	0.816136	0.868728
TIAM2	6q25.2-q2	0.017464901	0.816503	0.869052
SNORA2C	12q13.11	-0.017462523	0.816527	0.869052
AGPAT1	6p21.32	-0.01744607	0.816697	0.869187
RFPL3S	22q12.3	-0.017426219	0.816902	0.869359
GEN1	2p24.2	0.017416777	0.817	0.869416
TRIM27	6p22.1	-0.017412592	0.817043	0.869416
CRNN	1q21.3	-0.017403481	0.817137	0.86947
CCDC148	2q24.1	-0.017374938	0.817432	0.869736
FOXD4L6	9p11.2	0.017367592	0.817507	0.869736
GUSB	7q11.21	0.01736656	0.817518	0.869736
SNORA18	11q21	0.01733498	0.817844	0.870037
NAPSB	19q13.33	-0.017316352	0.818036	0.870195
RMDN1	8q21.3	0.017253573	0.818685	0.870802

LINC0020C	10p15.3	0.01725266	0.818694	0.870802
FNTB	14q23.3	0.017241019	0.818814	0.870884
CHFR	12q24.33	0.01721591	0.819074	0.87109
SPATA31D1	9q21.32	-0.017213776	0.819096	0.87109
LINC0243E	4q32.1	-0.017193038	0.81931	0.871272
TMEM52B	12p13.2	-0.017184525	0.819398	0.871319
SLC2A7	1p36.23	-0.01715738	0.819678	0.871571
PGK2	6p12.3	0.017152999	0.819724	0.871572
GCM2	6p24.2	-0.017144728	0.819809	0.871617
SNORA9	7p13	0.017129582	0.819966	0.871707
ERGIC2	12p11.22	0.017128031	0.819982	0.871707
OTOA	16p12.2 1	0.017123847	0.820025	0.871707
ADAT2	6q24.2	0.017102923	0.820241	0.871848
SNORA11B	14q32.11	0.017102532	0.820245	0.871848
OPALIN	10q24.1	-0.017084821	0.820428	0.871997
CDKL4	2p22.1	-0.017076242	0.820517	0.872044
CNDP2	18q22.3	-0.017071538	0.820565	0.87205
GRAMD1C	3q13.31	-0.016987843	0.82143	0.872922
ATP5PB	1p13.2	-0.016975289	0.82156	0.873013
PPP1R2	3q29	0.016971105	0.821603	0.873013
TUG1	22q12.2	0.016952273	0.821798	0.87315
ABHD12	20p11.21	0.016948089	0.821841	0.87315
RPS8	1p34.1	0.016945996	0.821863	0.87315
TTC12	11q23.2	-0.016941812	0.821906	0.87315
LINC0002C	20q13.33	-0.016889783	0.822444	0.873675
SHMT2	12q13.3	-0.016872764	0.82262	0.873815
PLEKHG4B	5p15.33	0.016866487	0.822685	0.873837
TRMT10C	3q12.3	0.01685184	0.822836	0.873952
ORMDL1	2q32.2	-0.01681627	0.823204	0.874296
ST7-OT3	7q31.2	-0.016806721	0.823303	0.874355
TC2N	14q32.12	0.016786977	0.823507	0.874525
MYBPH	1q32.1	-0.016741266	0.82398	0.87498
BPIFA1	20q11.21	-0.016729695	0.824099	0.875061
PEAR1	1q23.1	0.016705375	0.824351	0.875251
CBLL2	Xp22.11	-0.016703926	0.824366	0.875251
MIXL1	1q42.12	-0.016665594	0.824763	0.875602
ZNF16	8q24.3	0.016663528	0.824784	0.875602
SLC35A4	5q31.3	-0.016648882	0.824935	0.875716
PMS2P9	7q11.23	-0.016640521	0.825022	0.875761
LOC10012E	9q22.31	-0.01662463	0.825186	0.875889
SLC01A2	12p12.1	-0.016561028	0.825844	0.876542
EXOC7	17q25.1	0.016533802	0.826126	0.876794
NEUROG2	4q25	0.016492435	0.826554	0.877202
RPL11	1p36.11	-0.016468939	0.826798	0.877413
VEPH1	3q25.31-c	0.016443839	0.827057	0.877643
CHAC2	2p16.2	-0.016422916	0.827274	0.877826
TP53	17p13.1	-0.016404084	0.827469	0.877986
ACTL9	19p13.2	-0.016361616	0.827909	0.878406
RBP2	3q23	0.016350649	0.828022	0.87848
PEX2	8q21.13	-0.016330843	0.828227	0.878651
FOLH1B	11q14.3	-0.016324659	0.828291	0.878672
IFNA4	9p21.3	-0.016302689	0.828519	0.878867
REG1A	2p12	-0.016282804	0.828725	0.878969
SDHD	11q23.1	-0.016282719	0.828726	0.878969

NBPF4	1p13.3	-0.016277176	0.828783	0.878969
NFE2L2	2q31.2	0.016276442	0.828791	0.878969
SRPX2	Xq22.1	0.016268073	0.828877	0.879014
GOT2	16q21	0.016261796	0.828942	0.879036
REV1	2q11.2	0.016226226	0.829311	0.879357
PLEKHB2	2q21.1	0.016224133	0.829333	0.879357
EXTL1	1p36.11	0.01619484	0.829636	0.879632
STX8	17p13.1	-0.016182286	0.829766	0.879723
AQP9	15q21.3	0.016157178	0.830026	0.879952
UBALD1	16p13.3	0.016142531	0.830178	0.880042
FABP5	8q21.13	-0.016140439	0.8302	0.880042
RHOXF1	Xq24	0.016129861	0.830309	0.880112
SUPT4H1	17q22	-0.016113238	0.830482	0.880248
5-Mar	10q23.32-	-0.016079761	0.830828	0.880569
PAGE1	Xp11.23	0.016051529	0.831121	0.880832
OAZ3	1q21.3	-0.016040006	0.83124	0.880912
MNX1	7q36.3	-0.015998159	0.831674	0.881252
DERL1	8q24.13	-0.015987697	0.831783	0.881252
ARHGEF28	5q13.2	-0.015983512	0.831826	0.881252
EP400P1	12q24.33	-0.015983512	0.831826	0.881252
HP	16q22.2	0.015983512	0.831826	0.881252
MFAP1	15q15.3	-0.015983512	0.831826	0.881252
EVX2	2q31.1	0.015956111	0.83211	0.881455
OR7G2	19p13.2	0.015956111	0.83211	0.881455
SBF1P1	8q12.1	0.015949635	0.832177	0.881455
SLC35F5	2q14.1	-0.015939573	0.832282	0.881455
TEKT4	2q11.1	-0.015939573	0.832282	0.881455
ZNF143	11p15.4	-0.015939573	0.832282	0.881455
PNMA5	Xq28	0.015931361	0.832367	0.881498
ITPRID1	7p14.3	0.015919985	0.832485	0.881576
NRAS	1p13.2	-0.015906095	0.832629	0.881682
RAI1	17p11.2	-0.015843324	0.833279	0.882324
RHOBTB1	10q21.2	0.015832863	0.833388	0.882393
NAPSA	19q13.33	-0.015825548	0.833464	0.882426
SLC26A10	12q13.3	0.015820308	0.833518	0.882437
TMEM9	1q32.1	-0.015799385	0.833735	0.882576
GTSF1L	20q13.12	-0.015799123	0.833738	0.882576
GABARAPL2	16q23.1	-0.015774277	0.833996	0.882802
WDR41	5q13.3-q1	-0.015765907	0.834082	0.882846
MRPL19	2p12	-0.015761722	0.834126	0.882846
ACIN1	14q11.2	0.015747076	0.834278	0.88296
AKNAD1	1p13.3	-0.015723941	0.834518	0.883168
HNF1A	12q24.31	-0.015682213	0.834951	0.883533
KRT74	12q13.13	0.015682104	0.834952	0.883533
KY	3q22.2	0.015675936	0.835016	0.883554
MRM2	7p22.3	-0.015667566	0.835102	0.883599
SLC25A20	3p21.31	-0.01564455	0.835341	0.883805
GLRA4	Xq22.2	-0.015632311	0.835468	0.883893
CFHR5	1q31.3	0.015595913	0.835846	0.884246
TRIML2	4q35.2	-0.015589068	0.835917	0.884274
CUEDC2	10q24.32	0.015583872	0.835971	0.884284
TUBA8	22q11.21	-0.015571318	0.836101	0.884375
ZSCAN10	16p13.3	0.015550749	0.836315	0.884554
ZNF44	19p13.2	-0.015508547	0.836753	0.884971

FAM118A	22q13.31	-0.0154667	0.837187	0.885383
NHLRC3	13q13.3	0.015458331	0.837274	0.885428
LINC01548	21q22.11	-0.015453583	0.837323	0.885434
NBR1	17q21.31	0.015447869	0.837383	0.885449
TFE3	Xp11.23	-0.015422761	0.837643	0.885678
CST11	20p11.21	-0.0154001	0.837878	0.88588
ZNF468	19q13.41	-0.015383006	0.838056	0.886021
EXOSC2	9q34.12	0.015372544	0.838165	0.886089
FAM9A	Xp22.31	-0.015360321	0.838291	0.886176
DNMT3L	21q22.3	-0.01534577	0.838443	0.886289
ULK4P3	15q13.2	0.015333844	0.838566	0.886373
ATP6V1H	8q11.23	0.015318143	0.838729	0.886498
HPYR1	8q24.22	-0.015302822	0.838889	0.88662
FAM90A7P	8p23.1	0.015290689	0.839015	0.886706
HAUS4	14q11.2	0.015270019	0.839229	0.886886
CA1	8q21.2	-0.015255825	0.839377	0.886995
C9ORF24	9p13.3	0.015192601	0.840033	0.887642
YPEL4	11q12.1	-0.01518214	0.840142	0.88771
MOB1A	2p13.1	-0.015165401	0.840316	0.887847
STAG3L1	7q11.23	-0.015152847	0.840446	0.887938
DLX6	7q21.3	-0.015090841	0.841091	0.888533
HSP90AA1	14q32.31	0.015090076	0.841099	0.888533
GLMN	1p22.1	-0.015073337	0.841273	0.888669
WDHD1	14q22.2-c	0.015062875	0.841381	0.888735
NAT8B	2p13.1	-0.015056222	0.84145	0.888735
DEAF1	11p15.5	-0.015054506	0.841468	0.888735
NLRP13	19q13.43	0.015044974	0.841567	0.888793
OR10T2	1q23.1	-0.014997655	0.842059	0.889252
BTN1A1	6p22.2	-0.01499461	0.842091	0.889252
SLC1A6	19p13.12	-0.014983863	0.842202	0.889323
TARBP1	1q42.2	0.014977089	0.842273	0.889348
DES	2q35	0.014972904	0.842316	0.889348
MCRIP1	17q25.3	0.014968719	0.84236	0.889348
NUDT16	3q22.1	-0.014939426	0.842664	0.889567
ZNF26	12q24.33	-0.014939426	0.842664	0.889567
MAGEA2	Xq28	0.014935894	0.842701	0.889567
THOP1	19p13.3	-0.014931057	0.842751	0.889573
DHRS7B	17p11.2	-0.014899672	0.843078	0.889847
BCAR4	16p13.13	-0.01489759	0.843099	0.889847
PPEF2	4q21.1	0.01488199	0.843261	0.889925
PRSS45P	3p21.31	0.014881839	0.843263	0.889925
IL25	14q11.2	0.014873671	0.843348	0.889968
INPP5F	10q26.11	-0.014849455	0.8436	0.890187
FOXD3	1p31.3	-0.014837634	0.843723	0.890269
GTPBP8	3q13.2	0.014829585	0.843806	0.890298
MPI	15q24.1	0.014826439	0.843839	0.890298
NF1P2	15q11.2	0.014797101	0.844144	0.890573
CEBPZ	2p22.2	-0.01477413	0.844383	0.890744
FAM66D	8p23.1	-0.014772965	0.844395	0.890744
CLDN20	6q25.3	-0.01476794	0.844447	0.890752
CCNQ	Xq28	0.014763668	0.844492	0.890752
YWHAG	7q11.23	0.014755299	0.844579	0.890797
OPN4	10q23.2	0.014736803	0.844771	0.890953
GAL	11q13.2	-0.014715975	0.844988	0.891115

TPGS1	19p13.3	0.014713452	0.845014	0.891115
HOXA4	7p15.2	0.014707175	0.845079	0.891135
POLR2K	8q22.2	-0.01470299	0.845123	0.891135
LOC283922	16q23.1	-0.014690436	0.845253	0.891226
7-Mar	2q24.2	-0.014684159	0.845319	0.891248
NROB2	1p36.11	-0.014671635	0.845449	0.891338
WDR64	1q43	0.014653876	0.845634	0.891461
SNORD17	20p11.23	0.014651832	0.845655	0.891461
PIGV	1p36.11	-0.014644404	0.845732	0.891496
CDK2AP1	12q24.31	0.014633942	0.845841	0.891539
SLC12A6	15q14	-0.01463185	0.845863	0.891539
RBM6	3p21.31	-0.014621388	0.845972	0.891583
GCA	2q24.2	0.014619296	0.845993	0.891583
TPTEP2	22q13.1	0.014585818	0.846342	0.891903
SERPIN1	18q22.1	0.014525682	0.846968	0.892515
DDX28	16q22.1	-0.014512586	0.847104	0.892569
FMR1-AS1	Xq27.3	0.014512181	0.847108	0.892569
MME	3q25.2	0.014504216	0.847191	0.89261
BAG6	6p21.33	0.014491662	0.847322	0.892699
NAGK	2p13.3	-0.014487477	0.847365	0.892699
LIMS3-LOC	2q13	-0.014458184	0.84767	0.892973
WFIKKN2	17q21.33	0.014450079	0.847754	0.893015
CNIH1	14q22.2	-0.014433076	0.847931	0.893154
LEAP2	5q31.1	-0.014422614	0.84804	0.893222
TNFRSF13C	22q13.2	-0.014416986	0.848099	0.893237
TTYH1	19q13.42	-0.014399598	0.84828	0.893355
ANGPT4	20p13	0.014397582	0.848301	0.893355
TXNDC11	16p13.13	0.014391229	0.848367	0.893378
BRD4	19p13.12	0.014376582	0.848519	0.893491
USP10	16q24.1	0.014341012	0.84889	0.893834
AKR1C8P	10p15.1	0.014336569	0.848936	0.893836
PPP1R13B	14q32.33	-0.014326366	0.849042	0.893853
TMEM140	7q33	0.014326366	0.849042	0.893853
SFSWAP	12q24.33	0.014317996	0.849129	0.893898
EMD	Xq28	0.014311719	0.849195	0.89392
ADAD2	16q24.1	-0.014304329	0.849272	0.893954
PRSS38	1q42.13	0.014297686	0.849341	0.893979
S1PR5	19p13.2	0.014284519	0.849478	0.894065
CD300LD	17q25.1	0.014281262	0.849512	0.894065
TMEM203	9q34.3	0.014276149	0.849565	0.894074
ATR	3q23	0.014257318	0.849761	0.894233
C10ORF67	10p12.2	-0.014233156	0.850013	0.894451
SSBP4	19p13.11	0.014225933	0.850088	0.894483
RFT1	3p21.1	-0.014186178	0.850502	0.894872
C5ORF15	5q31.1	-0.014177808	0.850589	0.894916
ATP6V1C2	-	0.014154793	0.850829	0.89512
BTG3	21q21.1	0.014150608	0.850873	0.89512
HOXC10	12q13.13	0.014142262	0.850959	0.895165
MRNIP	5q35.3	-0.014135961	0.851025	0.895183
CHST3	10q22.1	0.014131777	0.851069	0.895183
VPS26C	21q22.13	-0.014123407	0.851156	0.895183
PRRC2C	1q24.3	-0.014123407	0.851156	0.895183
WDR38	9q33.3	0.014118105	0.851211	0.895194
GUCY2F	Xq22.3-q2	-0.014086902	0.851536	0.895488

GID8	20q13.33	-0.014062729	0.851788	0.895682
ADGRB2	1p35.2	0.014060636	0.85181	0.895682
NUB1	7q36.1	-0.014052267	0.851897	0.895726
KCNMB1	5q35.1	-0.014035528	0.852071	0.895863
PIGZ	3q29	0.014025066	0.85218	0.89593
SKA2	17q22	-0.01401042	0.852333	0.896043
WARS2	1p12	-0.014002051	0.85242	0.896088
LOC646999	7p14.1	0.013987411	0.852573	0.896201
EHBP1	2p15	0.013972758	0.852725	0.896315
NLRP9	19q13.42	-0.01395942	0.852864	0.896414
ISX	22q12.3	-0.013945652	0.853008	0.896482
LRTM2	12p13.33	-0.013944541	0.853019	0.896482
KIF24	9p13.3	-0.013922541	0.853249	0.896676
RRP15	1q41	0.013909987	0.85338	0.896742
ZNF517	8q24.3	-0.013907894	0.853401	0.896742
GPC2	7q22.1	0.01389534	0.853532	0.896833
EGR2	10q21.3	-0.013884879	0.853641	0.896866
DDX43	6q13	-0.013879473	0.853698	0.896866
OR2H2	6p22.1	-0.013879338	0.853699	0.896866
WFDC1	16q24.1	-0.013857678	0.853925	0.897031
SKOR1	15q23	-0.013855586	0.853947	0.897031
ZNF702P	19q13.41	-0.013851401	0.85399	0.897031
RHBG	1q22	0.013825947	0.854256	0.897262
ZNF138	7q11.21	0.013815831	0.854361	0.897326
MUC15	11p14.2	0.013805229	0.854472	0.897378
SLC6A11	3p25.3	0.013802467	0.8545	0.897378
TAFA5	22q13.32	0.013769799	0.854841	0.897655
RPL29P2	17p13.1	-0.013768537	0.854854	0.897655
TNFAIP8L1	19p13.3	0.013757245	0.854972	0.897707
TRAPPC6B	14q21.1	0.013755152	0.854994	0.897707
SOST	17q21.31	-0.013710334	0.855461	0.89814
ERI1	8p23.1	-0.013707028	0.855495	0.89814
WEE1	11p15.4	-0.013698659	0.855583	0.898184
PXYLP1	3q23	-0.013673551	0.855844	0.898412
EPO	7q22.1	-0.013664087	0.855943	0.898468
HEXD	17q25.3	-0.013654719	0.856041	0.898524
TERB2	15q21.1	0.013644162	0.856151	0.898542
TUBA1B	12q13.12	0.013642165	0.856172	0.898542
ALKBH3	11p11.2	-0.013640073	0.856194	0.898542
ATP5MGL	22q13.2	0.013596028	0.856653	0.898977
MYCL	1p34.2	0.013581487	0.856805	0.899089
C10RF141	1p31.3	-0.013541731	0.857219	0.899477
NELFCD	20q13.32	-0.013489423	0.857765	0.900003
ACSBG1	15q25.1	0.013476869	0.857896	0.900093
FANCF	11p14.3	-0.013464315	0.858027	0.900183
KCNH4	17q21.2	0.013418311	0.858507	0.900639
MKRN1	7q34	-0.013407821	0.858616	0.900705
TCN2	22q12.2	0.013403637	0.85866	0.900705
ALOX12B	17p13.1	0.013391328	0.858789	0.900793
TRIM13	13q14.2	-0.013359697	0.859119	0.901092
MAGEC2	Xq27.2	0.013347179	0.859249	0.901156
KMT2B	19q13.12	0.013345051	0.859271	0.901156
GTPBP6	Xp22.33	-0.013340866	0.859315	0.901156
NABP2	12q13.3	0.013292742	0.859817	0.901611

TSPAN9	12p13.33-	0.013290649	0.859839	0.901611
EPHB2	1p36.12	0.01324671	0.860298	0.902045
PSME4	2p16.2	-0.013240433	0.860363	0.902066
SEPTIN7P9	10p11.1	-0.013212168	0.860658	0.902328
KCNE5	Xq23	0.013200678	0.860778	0.902382
PTAFR	1p35.3	-0.013198586	0.8608	0.902382
MROH9	1q24.3	-0.013193337	0.860855	0.902392
MFSD14C	9q22.33	0.013153607	0.86127	0.90278
TTY6	Yq11.223	-0.013141923	0.861392	0.90286
ACE	17q23.3	0.013129538	0.861521	0.902948
HCAR3	12q24.31	0.013116991	0.861652	0.903038
SERPINC1	1q25.1	-0.013063982	0.862206	0.903552
AKAP14	Xq24	-0.0130601	0.862246	0.903552
IFNA10	9p21.3	0.013055	0.8623	0.903552
PTH1R	3p21.31	-0.013050028	0.862351	0.903552
HTR2C	Xq23	0.013048389	0.862369	0.903552
TAS2R5	7q34	0.013041795	0.862437	0.903577
SNHG6	8q13.1 8c	-0.012987258	0.863007	0.904126
KLRG2	7q34	-0.012978698	0.863096	0.904173
KLHL12	1q32.1	-0.012966334	0.863226	0.90426
OR6B2	2q37.3	0.012958979	0.863302	0.904294
CPLX1	4p16.3	-0.012893102	0.863991	0.904942
KLF3-AS1	4p14	-0.012891016	0.864012	0.904942
NUDT2	9p13.3	0.012876363	0.864165	0.905055
SMPD2	6q21	-0.012851254	0.864428	0.905283
GOT1L1	8p11.23	-0.012846659	0.864476	0.905285
NDUFB8	10q24.31	0.012830331	0.864646	0.905417
GGNBP1	6p21.31	0.012818077	0.864774	0.905459
NCMAP	1p36.11	0.012817777	0.864778	0.905459
SETD1A	16p11.2	0.012792668	0.86504	0.905686
AADACP1	3q25.1	0.012784332	0.865127	0.90573
SNORD22	11q12.3	0.012774347	0.865231	0.905792
DPAGT1	11q23.3	0.012765468	0.865324	0.905842
CENPL	1q25.1	0.012758151	0.865401	0.905874
LRSAM1	9q33.3-q5	0.012727805	0.865718	0.906159
B3GALT6	1p36.33	-0.012711066	0.865893	0.906265
IFNA14	9p21.3	0.012709411	0.86591	0.906265
TMC1	9q21.13	-0.012697814	0.866031	0.906344
SPIDR	8q11.21	0.012681773	0.866199	0.906464
GLIS3-AS1	19p24.2	-0.01267823	0.866236	0.906464
STX18	4p16.3-p1	0.012669219	0.86633	0.906515
MYO1H	12q24.11	-0.012659945	0.866427	0.906569
METTL8	2q31.1	0.012635742	0.86668	0.906786
C12ORF54	12q13.11	-0.012624153	0.866801	0.906865
OR1A1	17p13.3	-0.012607224	0.866978	0.906939
OR5A1	11q12.1	-0.012607224	0.866978	0.906939
ZBTB32	19q13.12	-0.012604356	0.867008	0.906939
PRSS42P	3p21.31	-0.012549564	0.867581	0.90746
SCIN	7p21.3	-0.012547863	0.867599	0.90746
MLST8	16p13.3	0.012543678	0.867642	0.90746
SLC5A6	2p23.3	0.012524847	0.867839	0.907619
ZDHHC18	1p36.11	-0.012501831	0.86808	0.907772
ASB18	2q37.2	-0.012497955	0.868121	0.907772
SPEM2	17p13.1	0.012497791	0.868122	0.907772

PDZD8	10q25.3-c	-0.012483	0.868277	0.907887
OR5C1	9q33.2	0.012476782	0.868342	0.907907
TMIGD2	19p13.3	-0.012459997	0.868517	0.907983
C3ORF84	3p21.31	-0.01245864	0.868532	0.907983
LIPN	10q23.31	-0.012456838	0.86855	0.907983
LIM2	19q13.41	-0.01243602	0.868768	0.908126
WNT3	17q21.31-	-0.012434875	0.86878	0.908126
KIF4B	5q33.2	0.012430691	0.868824	0.908126
COX15	10q24.2	0.012344904	0.869721	0.909016
DDX18	2q14.1	0.012321888	0.869962	0.90922
MTERF1	7q21.2	-0.01228841	0.870312	0.909539
ACAD11	3q22.1	0.012277949	0.870422	0.909606
BCORL1	Xq26.1	0.012267487	0.870531	0.909671
DNA2	10q21.3	-0.012263302	0.870575	0.909671
GAGE12J	Xp11.23	-0.012220348	0.871024	0.910092
GTF2E1	3q13.33	-0.012206809	0.871166	0.910193
PDCL3	2q11.2	-0.012200531	0.871231	0.910212
COX7A2	6q14.1	0.012196347	0.871275	0.910212
CXXC5	5q31.2	-0.012183793	0.871407	0.910302
YPEL5	2p23.1	0.012177516	0.871472	0.910323
HERC3	4q22.1	-0.012158684	0.871669	0.910481
TIAL1	10q26.11	0.012108468	0.872195	0.910979
DHDDS	1p36.11	-0.012100098	0.872282	0.910979
ETAA1	2p14	-0.012100098	0.872282	0.910979
SLC38A9	5q11.2	0.012085458	0.872436	0.911091
P4HA3	11q13.4	0.012060344	0.872698	0.911318
LINC0156E	3q21.3	0.012051888	0.872787	0.911363
ZNF785	16p11.2	-0.012045697	0.872852	0.911383
OR2T11	1q44	-0.012030584	0.87301	0.911493
DGAT2	11q13.5	-0.012026866	0.873049	0.911493
CEACAM16	19q13.31-	-0.012008682	0.873239	0.911644
VCAN	5q14.2-q1	-0.011970372	0.87364	0.912015
TFAP4	16p13.3	0.011962003	0.873728	0.912059
FAM149A	4q35.1	0.011934802	0.874013	0.912255
IL12B	5q33.3	0.01193221	0.87404	0.912255
PRAMEF16	1p36.21	-0.011929169	0.874072	0.912255
FLYWCH2	16p13.3	-0.011922248	0.874144	0.912255
LOXL3	2p13.1	-0.011922248	0.874144	0.912255
ADRA1B	5q33.3	0.011901324	0.874363	0.912434
DCTN2	12q13.3	0.01189714	0.874407	0.912434
MRPS7	17q25.1	0.011890863	0.874473	0.912455
NDUFAF2	5q12.1	0.011869939	0.874692	0.912589
RNF112	17p11.2	0.011869939	0.874692	0.912589
PICALM	11q14.2	-0.011863662	0.874757	0.91261
MIR155HG	-	0.011805076	0.875371	0.913202
PXMP2	12q24.33	0.011796707	0.875458	0.913244
TOX4	14q11.2	0.011792522	0.875502	0.913244
FOXG1	14q12	-0.011773073	0.875706	0.913409
GOLGB1	3q13.33	0.011761137	0.875831	0.913467
SRSF11	1p31.1	-0.011759044	0.875853	0.913467
GOLGA8G	15q13.1	0.011742849	0.876023	0.913596
MEGF10	5q23.2	0.011713012	0.876335	0.913826
PLOD2	3q24	-0.011713012	0.876335	0.913826
CLEC1B	12p13.31-	0.011702398	0.876446	0.913895

TMEM151A	11q13.2	0.011666981	0.876817	0.914234
ALX1	12q21.31	0.011662558	0.876863	0.914234
SLC3A2	11q12.3	-0.011650242	0.876992	0.914298
FBN3	19p13.2	0.011648005	0.877016	0.914298
KRT76	12q13.13	0.011637759	0.877123	0.914362
PWWP3A	19p13.3	-0.011606302	0.877453	0.914583
GPHB5	14q23.2	-0.011604444	0.877472	0.914583
TSPY3	Yp11.2	0.011604444	0.877472	0.914583
DNAJC5B	8q13.1	-0.011579108	0.877738	0.914812
KHSRP	19p13.3	-0.01156864	0.877847	0.914878
RBP1	3q23	0.011545624	0.878088	0.915082
SLC25A15	13q14.11	-0.011539347	0.878154	0.915085
OR5P3	11p15.4	-0.011536565	0.878183	0.915085
DENND1B	1q31.3	-0.0114975	0.878593	0.915464
SP9	2q31.1	-0.011487177	0.878701	0.915529
CMAS	12p12.1	0.011482853	0.878746	0.915529
PSG1	19q13.2	-0.011474047	0.878838	0.915553
COX20	1q44	0.011468207	0.8789	0.915553
COLEC10	8q24.12	0.011467508	0.878907	0.915553
TXNRD2	22q11.21	-0.011422181	0.879382	0.916
SOX8	16p13.3	0.011401251	0.879601	0.916137
SFTPA1	10q22.3	0.011400889	0.879605	0.916137
RRP12	10q24.1	0.011388697	0.879733	0.916175
SLC39A7	6p21.32	0.011388697	0.879733	0.916175
SPDYE6	7q22.1	-0.011369866	0.87993	0.91633
SGF29	16p11.2	-0.011365681	0.879974	0.91633
KRTAP3-1	17q21.2	0.011361375	0.880019	0.91633
SLC12A2	5q23.3	-0.011332203	0.880325	0.9166
RALGPS2	1q25.2	0.011317557	0.880479	0.916712
NABP1	2q32.3	0.011296633	0.880698	0.916891
LEMD2	6p21.31	0.011292449	0.880742	0.916891
OR4A16	11q11	-0.011285592	0.880814	0.916918
PARP15	3q21.1	-0.011269433	0.880983	0.917046
EGFR	7p11.2	0.011246417	0.881224	0.917218
PRAMEF2	1p36.21	-0.011244913	0.88124	0.917218
DDX1	2p24.3	0.011206662	0.881641	0.917588
SLC17A6	11p14.3	0.011196685	0.881746	0.917649
NAMPT	7q22.3	-0.011156446	0.882168	0.91804
SFXN4	10q26.11	0.011150168	0.882233	0.918061
ATG3	3q13.2	0.01113343	0.882409	0.918196
CHPF2	7q36.1	0.011127153	0.882475	0.918217
KLK1	19q13.33	0.011112529	0.882628	0.918296
FAM238A	10p12.1	0.011111139	0.882643	0.918296
FAHD2A	2q11.1	-0.011026719	0.883528	0.919169
C12ORF40	12q12	0.011010752	0.883695	0.919295
TMBIM4	12q14.3	-0.01098278	0.883989	0.919553
FRG2	4q35.2	0.010971313	0.884109	0.91963
PPIAL4E	1q21.1	-0.010963827	0.884188	0.919664
GSTM3	1p13.3	-0.010924194	0.884603	0.920048
HMGCR	5q13.3	-0.010901178	0.884845	0.920226
TNFAIP8	5q23.1	0.010899086	0.884867	0.920226
AQR	15q14	-0.010882347	0.885042	0.920361
CYP4F29P	21q11.2	0.01085954	0.885282	0.920516
SET	9q34.11	0.010859331	0.885284	0.920516

OTP	5q14.1	0.01084461	0.885438	0.920629
ZNF295-AS2	21q22.3	0.010837086	0.885517	0.920663
ISM2	14q24.3	0.010819883	0.885698	0.920803
NLRC5	16q13	0.010811207	0.885789	0.92085
ZNF428	19q13.31	0.010792375	0.885986	0.921007
SNORA6	3p22.1	-0.010780094	0.886115	0.921093
ARMH1	1p34.1	0.01076936	0.886228	0.921163
YBX1	1p34.2	-0.01076099	0.886316	0.921206
BAP1	3p21.1	-0.010754713	0.886382	0.92121
TAS2R3	7q34	-0.010751868	0.886411	0.92121
BCORP1	Yq11.222	0.010732556	0.886614	0.921372
UQCRFS1	19q12	-0.01072542	0.886689	0.921402
OR52D1	11p15.4	0.010714334	0.886805	0.921475
HAVCR1P1	19p12	0.010690907	0.887051	0.921683
CCT6A	7p11.2	0.010681481	0.88715	0.92169
PDGFA	7p22.3	0.010681481	0.88715	0.92169
HSD3B1	1p12	0.010653647	0.887442	0.921936
ZFP91	11q12.1	-0.010650095	0.887479	0.921936
COPSS	2q37.3	0.010643818	0.887545	0.921954
IN080	15q15.1	-0.010639633	0.887589	0.921954
SDHAF2	11q12.2	0.010629172	0.887699	0.922021
CDC26	9q32	0.010589417	0.888116	0.922406
ZNF630	Xp11.23	0.010541293	0.888621	0.922856
NLRP6	11p15.5	-0.010539311	0.888642	0.922856
ADAM19	5q33.3	0.010528739	0.888753	0.922924
CBWD6	9p11.2	0.010516184	0.888885	0.923013
NKAIN3-IT1	8q12.3	0.010499643	0.889059	0.923145
BSCL2	11q12.3	-0.010465968	0.889412	0.923439
CFAP44	3q13.2	0.010463875	0.889434	0.923439
CD52	1p36.11	-0.010403197	0.890071	0.924052
PLG	6q26	-0.010391177	0.890198	0.924093
ACOX1	17q25.1	-0.010390643	0.890203	0.924093
C17ORF78	17q12	-0.010367836	0.890443	0.924294
SUMF2	7p11.2	0.010350888	0.890621	0.924431
RPL23AP82	22q13.33	-0.010334149	0.890796	0.924565
ENO3	17p13.2	0.010327878	0.890862	0.924583
C4BPA	1q32.2	-0.010323688	0.890906	0.924583
NDUFS1	2q33.3	-0.010304856	0.891104	0.924715
ST6GAL2	2q12.3	-0.010302764	0.891126	0.924715
CC2D2B	10q24.1	-0.010292308	0.891236	0.924781
TESK1	9p13.3	-0.010279748	0.891368	0.92487
ATOH1	4q22.2	-0.01023942	0.891791	0.92523
OTUD5	Xp11.23	0.010237901	0.891807	0.92523
NBPF6	1p13.3	0.010212543	0.892074	0.925412
NKX2-6	8p21.2	-0.010212327	0.892076	0.925412
BPESC1	3q23	0.010204171	0.892162	0.925453
RNF139	8q24.13	-0.010191869	0.892291	0.925539
GLIPR1L1	12q21.2	0.010161412	0.892611	0.925823
IFIT1B	10q23.31	0.010154328	0.892685	0.925852
HFE	6p22.2	0.010137468	0.892862	0.925988
FAM131A	3q27.1	0.010127006	0.892972	0.926054
TBCD	17q25.3	-0.010074697	0.893522	0.926576
SPAG7	17p13.2	-0.010055866	0.89372	0.926733
TMLHE	Xq28	0.010039127	0.893895	0.926867

MLLT6	17q12	-0.010028665	0.894005	0.926933
CHIAP2	1p13.2	-0.01000183	0.894287	0.927131
XAGE1B	Xp11.22	0.010000074	0.894306	0.927131
SAR1A	10q22.1	-0.00999728	0.894335	0.927131
ARSA	22q13.33	-0.009976356	0.894555	0.927262
MT2A	16q13	-0.009976356	0.894555	0.927262
UBTD2	5q35.1	0.009965895	0.894665	0.927328
BPY2	Yq11.223	0.009961515	0.894711	0.927328
SLC15A4	12q24.33	-0.009949156	0.894841	0.927414
SCN10A	3p22.2	0.009931599	0.895025	0.927521
PADI2	1p36.13	-0.009930325	0.895039	0.927521
DTNB	2p23.3	-0.00992614	0.895083	0.927521
SCGB3A2	5q32	-0.009919593	0.895152	0.927544
TNFAIP6	2q23.3	-0.0098822	0.895545	0.927903
GDF2	10q11.22	-0.009873555	0.895635	0.927949
HBG2	11p15.4	0.009859208	0.895786	0.928057
TIPRL	1q24.2	-0.009852907	0.895852	0.928078
PTMAP11	9q22.33	-0.009845161	0.895934	0.928114
RPL41	12q13.2	0.009802691	0.89638	0.928528
KRTAP4-1	17q21.2	-0.00977258	0.896697	0.928808
NDUFB2-AS7	7q34	0.009767121	0.896754	0.928819
HMX2	10q26.13	-0.009757126	0.896859	0.928834
ACOT1	14q24.3	-0.009754567	0.896886	0.928834
IL17RA	22q11.1	0.009752479	0.896908	0.928834
LINC00298	2p25.1	0.009740406	0.897035	0.928897
ANGPTL2	9q33.3	0.009737828	0.897062	0.928897
LRAT	4q32.1	0.00972214	0.897227	0.92902
UBE2B	5q31.1	-0.00970435	0.897414	0.929166
IZUMO2	19q13.33	-0.009649165	0.897994	0.929704
IFNA6	9p21.3	0.009645169	0.898036	0.929704
VENTX	10q26.3	-0.009641579	0.898074	0.929704
FCER1G	1q23.3	0.009626933	0.898228	0.929814
RSPH6A	19q13.32	-0.009622705	0.898272	0.929814
RBM43	2q23.3	-0.009616471	0.898338	0.929831
CIC	19q13.2	-0.009612286	0.898382	0.929831
SNORA5B	7p13	-0.009596201	0.898551	0.929958
RNF8	6p21.2	0.009564162	0.898888	0.930258
SNHG8	4q26	0.009555793	0.898976	0.930301
LINC00486	2p22.3	0.009537892	0.899164	0.930448
ZBED5	11p15.4	-0.0095265	0.899284	0.930523
OR1J1	9q33.2	-0.009498564	0.899578	0.930779
OR2M4	1q44	0.009485201	0.899718	0.930876
ITGA10	1q21.1	0.009480468	0.899768	0.93088
ACP4	19q13.33	0.009468937	0.899889	0.930957
DGCR10	22q11.21	-0.009451523	0.900073	0.931098
NLE1	17q12	0.009432344	0.900274	0.931228
PATE3	11q24.2	-0.009426147	0.900339	0.931228
CLEC18B	16q23.1	-0.009422977	0.900373	0.931228
OSBPL9	1p32.3	-0.009421882	0.900384	0.931228
SRM	1p36.22	0.009415605	0.90045	0.931248
PRAME	22q11.22	0.009410727	0.900502	0.931253
CXCL1	4q13.3	-0.009403051	0.900582	0.931288
SLC13A3	20q13.12	-0.009392589	0.900692	0.931354
ZNF155	19q13.31	0.009384219	0.90078	0.931397

ITGBL1	13q33.1	-0.009371665	0.900913	0.931485
C19ORF71	19p13.3	-0.009363296	0.901001	0.931528
ZNF621	3p22.1	0.009350742	0.901133	0.931616
C10RF226	1q23.3	-0.00934028	0.901243	0.931682
KRTAP12-121	q22.3	-0.009331245	0.901338	0.931732
CDKN2B-AS1	9p21.3	-0.009315191	0.901507	0.931858
MEPE	4q22.1	-0.009298369	0.901684	0.931993
ZNF263	16p13.3	0.009283786	0.901837	0.932103
ACSM3	16p12.3	0.00926914	0.901991	0.932166
GOLGA5	14q32.12	0.00926914	0.901991	0.932166
ENOSF1	18p11.32	0.00926077	0.902079	0.932195
FGF21	19q13.33	0.009257652	0.902112	0.932195
SLC7A13	8q21.3	0.009220817	0.9025	0.932547
TCEAL9	Xq22.2	-0.009208461	0.90263	0.932608
ZNF880	19q13.41	-0.009206369	0.902652	0.932608
KRTAP21-221	q22.11	0.009187173	0.902854	0.932733
CDK8	13q12.13	-0.009183353	0.902894	0.932733
ADIG	20q11.23	-0.009181329	0.902915	0.932733
PCK2	14q11.2-c	-0.009177076	0.90296	0.932733
BNIP3L	8p21.2	-0.009168707	0.903048	0.932776
RPS26P11	Xq13.1	-0.009137156	0.90338	0.933071
SLC25A22	11p15.5	0.009131044	0.903444	0.933075
CLP1	11q12.1	-0.009127911	0.903477	0.933075
ATP6V0B	1p34.1	-0.009120583	0.903554	0.933079
LKAAEAR1	20q13.33	-0.009118654	0.903575	0.933079
DLX2	2q31.1	-0.009101075	0.90376	0.933222
LOC256880	4q23	0.009072477	0.90406	0.933482
TSC2	16p13.3	0.009068274	0.904105	0.933482
PRR29	17q23.3	0.009059904	0.904193	0.933525
ZNF469	16q24.2	0.009038981	0.904413	0.933704
CCDC116	22q11.21	0.009009688	0.904721	0.933974
NFS1	20q11.22	0.009003411	0.904787	0.933994
LOC93622	4p16.1	0.008982487	0.905008	0.934147
ODF2L	1p22.3	-0.008980395	0.90503	0.934147
CSPG5	3p21.31	0.008913439	0.905734	0.934826
TUBA3C	13q12.11	-0.008908873	0.905782	0.934828
C19ORF73	19q13.33	0.008890423	0.905977	0.93483
TPTE2P1	13q12.13	-0.008888336	0.905999	0.93483
ZFC3H1	12q21.1	0.008888331	0.905999	0.93483
CARD17	11q22.3	0.008887597	0.906006	0.93483
FES	15q26.1	-0.008884146	0.906043	0.93483
SSC5D	19q13.42	-0.008882054	0.906065	0.93483
OR4M2	15q11.2	-0.008872176	0.906169	0.934889
FAM182B	20p11.1	-0.008854853	0.906351	0.934918
SMC6	2p24.2	0.008854853	0.906351	0.934918
FOXE1	9q22.33	-0.008854774	0.906352	0.934918
OTOP1	4p16.3	0.008851682	0.906385	0.934918
NDUFB1	14q32.12	0.008844391	0.906461	0.934949
LOC100270	6p22.2	0.008838114	0.906527	0.934969
TTLL1	22q13.2	0.00882556	0.90666	0.935057
CRTAP	3p22.3	0.008806729	0.906858	0.935213
SNHG20	17q25.2	0.00879836	0.906946	0.935256
LHX3	9q34.3	0.008768584	0.907259	0.935531
APOBR	16p12.1	-0.008756512	0.907387	0.935614

HHAT	1q32. 2	0. 008733497	0. 907629	0. 935815
N6AMT1	21q21. 3	-0. 008691649	0. 90807	0. 936221
ATRIP	3p21. 31	-0. 008674911	0. 908246	0. 936355
OR52H1	11p15. 4	0. 008660036	0. 908402	0. 936408
TSLP	5q22. 1	-0. 008653987	0. 908466	0. 936408
OTUD7B	1q21. 2	0. 008651895	0. 908488	0. 936408
PFKFB2	1q32. 1	0. 008651895	0. 908488	0. 936408
TENM3-AS1	4q34. 3	-0. 008647755	0. 908532	0. 936408
GTF3C6	6q21	-0. 008641433	0. 908598	0. 936428
OR1F2P	16p13. 3	-0. 008625578	0. 908765	0. 936552
SAMD4B	19q13. 2	0. 008599586	0. 909039	0. 936786
LY6G5B	6p21. 33	0. 008587032	0. 909171	0. 936874
FOSL2	2p23. 2	0. 008578662	0. 909259	0. 936891
DNMT3A	2p23. 3	0. 00857657	0. 909281	0. 936891
DISP2	15q15. 1	-0. 008570293	0. 909348	0. 936891
GRM3	7q21. 11-c	-0. 008567673	0. 909375	0. 936891
EPOR	19p13. 2	-0. 008543092	0. 909634	0. 937109
WRNIP1	6p25. 2	-0. 008524261	0. 909832	0. 937265
GRHPR	9p13. 2	0. 00850543	0. 910031	0. 937373
NNAT	20q11. 23	0. 00850543	0. 910031	0. 937373
HTR1A	5q12. 3	0. 008436889	0. 910753	0. 938068
MIEF2	17p11. 2	0. 008428012	0. 910846	0. 938116
CPS1	2q34	0. 008398719	0. 911155	0. 938386
F13B	1q31. 3	0. 008390609	0. 91124	0. 938403
CCNJL	5q33. 3	-0. 008388258	0. 911265	0. 938403
C17ORF10C	17p13. 1	-0. 008381981	0. 911331	0. 938422
CES1	16q12. 2	-0. 008363149	0. 91153	0. 938578
AANAT	17q25. 1	0. 008341992	0. 911753	0. 938741
TPTE2P3	13q14. 3	0. 008339247	0. 911781	0. 938741
MIAT	22q12. 1	-0. 008331764	0. 91186	0. 938774
ICMT	1p36. 31	-0. 008323395	0. 911948	0. 938816
PSD3	8p22	0. 008298286	0. 912213	0. 93904
UBAP2L	1q21. 3	0. 008285732	0. 912345	0. 939128
LMAN2L	2q11. 2	-0. 008268993	0. 912522	0. 939235
MMP19	12q13. 2	-0. 008266901	0. 912544	0. 939235
CFI	4q25	0. 008245977	0. 912764	0. 939414
PRR34-AS1	22q13. 31	0. 008220869	0. 913029	0. 939638
SNAPC4	9q34. 3	-0. 0082125	0. 913117	0. 939677
TFRC	3q29	-0. 008208315	0. 913161	0. 939677
PABPC1P2	2q22. 3	-0. 008187304	0. 913382	0. 93983
SOX15	17p13. 1	-0. 008185303	0. 913404	0. 93983
TCP10	6q27	-0. 008099368	0. 914309	0. 940713
ARRDC3	5q14. 3	-0. 008059758	0. 914727	0. 941094
TACC2	10q26. 13	0. 008053481	0. 914793	0. 941114
ATF4	22q13. 1	-0. 008036742	0. 914969	0. 941247
MYH9	22q12. 3	-0. 008013726	0. 915212	0. 941448
LINC00893	Xq28	0. 007988618	0. 915477	0. 941672
ANKRD20A8	2q11. 1	-0. 00797092	0. 915663	0. 94175
ZACN	17q25. 1	0. 007967927	0. 915695	0. 94175
WWC2	4q35. 1	-0. 007965602	0. 915719	0. 94175
ADO	10q21. 3	-0. 007963509	0. 915741	0. 94175
GPR137B	1q42. 3	-0. 007936309	0. 916028	0. 941997
TIMP2	17q25. 3	0. 00791957	0. 916204	0. 94213
C1RL	12p13. 31	0. 007907016	0. 916337	0. 942192

NDUFV3	21q22.3	-0.007904923	0.916359	0.942192
MYLK2	20q11.21	-0.007890293	0.916513	0.942254
MRPL51	12p13.31	0.007890277	0.916513	0.942254
CORO1C	12q24.11	0.007865169	0.916778	0.942477
SRFBP1	5q23.1	-0.007854707	0.916888	0.942542
LOC392196	8p23.1	0.007841299	0.91703	0.942639
FXYD7	19q13.12	-0.007821908	0.917234	0.942801
OGFOD2	12q24.31	-0.007779382	0.917682	0.943213
PDZD9	16p12.2	0.007766672	0.917816	0.943302
C7ORF71	7p15.2	-0.007750947	0.917982	0.943424
GALNTL5	7q36.1	-0.00773905	0.918108	0.943472
ZNF28	19q13.41	-0.007737535	0.918124	0.943472
HINT1	5q23.3	-0.007674764	0.918786	0.944104
MRPS31	13q14.11	0.007664302	0.918896	0.944169
CXADRP2	15q11.2	0.007651872	0.919027	0.944253
ID3	1p36.12	0.007647563	0.919073	0.944253
MBL2	10q21.1	0.007640972	0.919142	0.944276
SULF1	8q13.2-q1	0.007630825	0.919249	0.944338
GPR26	10q26.13	0.007584437	0.919738	0.944792
SPACA9	9q34.13	0.0075555	0.920043	0.945029
BROX	1q41	-0.007551315	0.920088	0.945029
PLGLA	2q12.2	-0.007549069	0.920111	0.945029
CAMKV	3p21.31	-0.007532203	0.920289	0.945154
PTGIR	19q13.32	0.007526207	0.920352	0.945154
NENF	1q32.3	-0.007524114	0.920375	0.945154
COA3	17q21.2	0.007505283	0.920573	0.945309
PEX26	22q11.21	-0.007490637	0.920728	0.945416
CLEC2B	12p13.31	-0.007486452	0.920772	0.945416
GML	8q24.3	-0.007456251	0.92109	0.945689
FOXI3	2p11.2	-0.007452286	0.921132	0.945689
KRTAP11-1	21q22.11	-0.00743974	0.921265	0.945776
PLA2G7	6p12.3	0.00741322	0.921544	0.946015
CXCL8	4q13.3	0.007406942	0.921611	0.946034
RNU12-2P	Xp11.3	0.007401594	0.921667	0.946043
SERTAD2	2p14	0.007323248	0.922493	0.946843
STX16	20q13.32	0.007312786	0.922604	0.946908
APLF	2p13.3	-0.007296048	0.92278	0.94697
MAP3K5	6q23.3	0.007293955	0.922803	0.94697
IFNK	9p21.2	0.00729362	0.922806	0.94697
TRUB2	9q34.11	0.007287678	0.922869	0.946985
CYLC1	Xq21.1	-0.007252778	0.923237	0.947217
OR8K3	11q12.1	-0.007252778	0.923237	0.947217
TRIM60	4q32.3	0.007252778	0.923237	0.947217
SREBF2	22q13.2	-0.007222815	0.923553	0.947493
C1QTNF4	11p11.2	0.007208206	0.923707	0.947602
HIST1H4K	6p22.1	0.007194978	0.923847	0.947697
HOXD13	2q31.1	-0.007177003	0.924037	0.947843
MBD2	18q21.2	-0.007160044	0.924216	0.947978
TCOF1	5q32-q33.	0.007124474	0.924591	0.948314
ADD3	10q25.1-c	0.007090997	0.924944	0.948628
CFHR4	1q31.3	-0.007005808	0.925843	0.949459
SEPTIN2	2q37.3	-0.00700521	0.92585	0.949459
C1QA	1p36.12	-0.006996841	0.925938	0.949501
CLUH	17p13.3	0.006980102	0.926115	0.949607

RPS26	12q13.2	-0.006978009	0.926137	0.949607
FAM181A- A	14q32.12	-0.006964546	0.926279	0.949704
GGH	8q12.3	-0.006952901	0.926402	0.949782
RWDD3	1p21.3	-0.006877576	0.927197	0.950518
PROM1	4p15.32	-0.006873395	0.927241	0.950518
SERPINB9	6p25.2	0.006871299	0.927263	0.950518
SNORA37	18q21.2	0.006864576	0.927334	0.950542
CLK1	2q33.1	0.00685456	0.92744	0.950576
OR51E2	11p15.4	-0.006852472	0.927462	0.950576
DBX1	11p15.1	-0.006813266	0.927876	0.950905
AQP7P1	9q13	0.006808532	0.927926	0.950905
ADORA1	1q32.1	0.006808528	0.927926	0.950905
IFNA17	9p21.3	-0.006803534	0.927979	0.95091
TSSK3	1p35.1	0.00678342	0.928191	0.951079
EPB41L4A- A	5q22.2	-0.006764589	0.92839	0.951156
MAGEB18	Xp21.3	0.006763966	0.928396	0.951156
NTN5	19q13.33	-0.006758322	0.928456	0.951156
SNAPC1	14q23.2	-0.006758312	0.928456	0.951156
TMEM213	7q34	0.006744456	0.928602	0.951239
NGDN	14q11.2	-0.006741573	0.928633	0.951239
UPK3A	22q13.31	-0.006736071	0.928691	0.95125
SFXN1	5q35.2	-0.006724834	0.928809	0.951323
LGALS8	1q43	0.006703911	0.92903	0.9515
CDKN2C	1p32.3	0.006695541	0.929119	0.951513
C15ORF32	15q26.1	0.006692445	0.929151	0.951513
TRAFD1	12q24.13	0.006689264	0.929185	0.951513
FEM1C	5q22.3	0.006666248	0.929428	0.951713
FAM138E	15q26.3	0.006631416	0.929796	0.952022
DMAP1	1p34.1	-0.006628586	0.929826	0.952022
DESI2	1q44	0.006609755	0.930025	0.952177
RAX2	19p13.3	-0.006587925	0.930255	0.952364
TDRD5	1q25.2	0.006553329	0.93062	0.95269
HIST4H4	12p12.3	-0.006515599	0.931019	0.953049
CLEC18C	16q22.1	0.006481818	0.931376	0.953358
CDC14B	9q22.32- c	-0.006477936	0.931417	0.953358
DMAC1	9p24.1	-0.006467474	0.931527	0.953422
ADAMTS13	9q34.2	0.006452828	0.931682	0.953532
C4ORF45	4q32.1	0.006444211	0.931773	0.953568
COL13A1	10q22.1	-0.006438181	0.931837	0.953568
CROT	7q21.12	-0.006433997	0.931881	0.953568
LINC01098	4q34.3	0.006431418	0.931908	0.953568
ING2	4q35.1	-0.00641935	0.932035	0.95365
FAM83F	22q13.1	-0.006385872	0.932389	0.953963
LINC01600	6p25.2	0.006366877	0.93259	0.954063
BAIAP3	16p13.3	0.006364949	0.93261	0.954063
AQP10	1q21.3	0.006363028	0.93263	0.954063
TMEM68	8q12.1	-0.006346118	0.932809	0.954197
DKK3	11p15.3	0.006302178	0.933273	0.95457
SPTY2D1	11p15.1	-0.006300086	0.933295	0.95457
SELENOF	1p22.3	0.006297993	0.933317	0.95457
SPATA5	4q28.1	0.006291716	0.933384	0.954589
NRBF2	10q21.3	-0.006281258	0.933494	0.954605
P4HA2	5q31.1	-0.006281255	0.933494	0.954605
OR1E1	17p13.3	0.006244907	0.933878	0.954919

UBQLN3	11p15. 4	0. 006243111	0. 933897	0. 954919
RGS8	1q25. 3	0. 006237433	0. 933957	0. 954931
GBGT1	9q34. 2	-0. 006210114	0. 934246	0. 955178
AOC4P	17q21. 31	0. 006198095	0. 934373	0. 955259
LOC391322	22q11. 23	-0. 006142184	0. 934963	0. 955814
METTL15	11p14. 1	0. 006135839	0. 93503	0. 955833
LRP5L	22q11. 23	-0. 006101312	0. 935395	0. 956157
HSD17B13	4q22. 1	-0. 006088758	0. 935528	0. 956218
FCGR3A	1q23. 3	-0. 006086665	0. 93555	0. 956218
TENT2	5q14. 1	0. 006074111	0. 935683	0. 956304
TMEM132E	17q12	-0. 006061557	0. 935815	0. 956391
PTGR2	14q24. 3	0. 006053188	0. 935904	0. 956425
FAM20C	7p22. 3	-0. 006044818	0. 935992	0. 956425
PHLDB1	11q23. 3	0. 006044818	0. 935992	0. 956425
NAPA	19q13. 32-	-0. 006030172	0. 936147	0. 956508
ITSN1	21q22. 11	0. 006028079	0. 936169	0. 956508
NUP35	2q32. 1	-0. 006021802	0. 936235	0. 956527
ZBTB8A	1p35. 1	0. 005982048	0. 936655	0. 956907
TARDBP	1p36. 22	0. 005971586	0. 936766	0. 956971
TULP1	6p21. 31	0. 005965668	0. 936828	0. 956986
FAM95B1	9p11. 2	0. 005946478	0. 937031	0. 957144
TPSAB1	16p13. 3	0. 0059402	0. 937098	0. 957163
FLYWCH1	16p13. 3	0. 005923462	0. 937274	0. 957295
CDYL	6p25. 1	-0. 005906723	0. 937451	0. 957421
TRIM75P	4q32. 3	-0. 005902744	0. 937493	0. 957421
FAM47B	Xp21. 1	0. 005893141	0. 937595	0. 957475
PDXDC1	16p13. 11	0. 005866968	0. 937871	0. 957709
TUBBP5	9q34. 3	0. 005860866	0. 937936	0. 957726
CTBP1	4p16. 3	0. 005848137	0. 93807	0. 957814
TAF9	5q13. 2	0. 005839767	0. 938159	0. 957856
LCMT1	16p12. 1	0. 005829306	0. 938269	0. 95792
OR5P2	11p15. 4	0. 005806457	0. 938511	0. 958117
DGKZ	11p11. 2	-0. 005730965	0. 939309	0. 958869
P3H1	1p34. 2	0. 005720503	0. 939419	0. 958869
DEFA4	8p23. 1	0. 005719945	0. 939425	0. 958869
CASR	3q13. 33-c	-0. 005710071	0. 93953	0. 958869
TBC1D25	Xp11. 23	-0. 005710041	0. 93953	0. 958869
SNORA67	17p13. 1	0. 005709508	0. 939536	0. 958869
SMR3B	4q13. 3	-0. 005692043	0. 93972	0. 958882
ATG14	14q22. 3	-0. 005687025	0. 939773	0. 958882
VPS51	11q13. 1	-0. 005687025	0. 939773	0. 958882
C10RF122	1p34. 3	-0. 005678656	0. 939862	0. 958882
DSCR10	21q22. 13	0. 005677111	0. 939878	0. 958882
OSR2	8q22. 2	-0. 005676564	0. 939884	0. 958882
U2AF1L4	19q13. 12	0. 005676564	0. 939884	0. 958882
CRISP1	6p12. 3	0. 005660373	0. 940055	0. 959008
ZRANB2	1p31. 1	0. 005651455	0. 940149	0. 959029
VKORC1L1	7q11. 21	-0. 005649363	0. 940171	0. 959029
SKP1	5q31. 1	-0. 005609608	0. 940592	0. 959402
FGF	4q31. 3	-0. 00560567	0. 940633	0. 959402
IAPP	12p12. 1	-0. 005593154	0. 940766	0. 959488
HSFY2	Yq11. 222	-0. 005576762	0. 940939	0. 959616
MCM8	20p12. 3	-0. 005561484	0. 9411	0. 959731
RNASE4	14q11. 2	0. 005517544	0. 941565	0. 960087

WWP1	8q21. 3	-0. 005515452	0. 941587	0. 960087
DCAF13	8q22. 3	0. 005511267	0. 941631	0. 960087
SRD5A2	2p23. 1	0. 005510277	0. 941642	0. 960087
GATD3A	21q22. 3	0. 005498713	0. 941764	0. 960163
TEX55	3q13. 32	-0. 005482608	0. 941934	0. 960288
OR10A6	11p15. 4	-0. 005472578	0. 94204	0. 960347
ANP32A-IT1	15q23	0. 005465338	0. 942117	0. 960376
OR4K2	14q11. 2	0. 005458917	0. 942185	0. 960396
MC2R	18p11. 21	-0. 005430504	0. 942485	0. 960613
NUDT21	16q13	0. 005425481	0. 942538	0. 960613
C5ORF60	5q35. 3	0. 005421542	0. 94258	0. 960613
CRH	8q13. 1	-0. 005420571	0. 94259	0. 960613
MTA1	14q32. 33	-0. 005377357	0. 943047	0. 960997
LPAR3	1p22. 3	0. 005372102	0. 943103	0. 960997
MIP	12q13. 3	0. 005371346	0. 943111	0. 960997
KIR2DS4	19q13. 42	0. 005347678	0. 943361	0. 961203
TMTC2	12q21. 31	0. 005331325	0. 943534	0. 96133
NDST3	4q26	-0. 005325661	0. 943594	0. 961342
NDUFAF5	20p12. 1	-0. 005304124	0. 943821	0. 961525
SPATA21	1p36. 13	0. 00526302	0. 944256	0. 961919
MSH4	1p31. 1	0. 005232901	0. 944575	0. 962194
SHISAL2A	1p32. 3	0. 005226718	0. 94464	0. 962212
FRG2B	10q26. 3	-0. 00520259	0. 944895	0. 962403
HCG22	6p21. 33	0. 005198775	0. 944935	0. 962403
FRAS1	4q21. 21	-0. 005195321	0. 944972	0. 962403
KRTAP19-ε	21q22. 11	-0. 005183098	0. 945101	0. 962485
FASTKD2	2q33. 3	0. 005161844	0. 945326	0. 962665
SPZ1	5q14. 1	0. 005157156	0. 945376	0. 962667
AVP	20p13	0. 00514862	0. 945466	0. 96271
PDLIM5	4q22. 3	0. 005115812	0. 945813	0. 963014
PLK2	5q11. 2	-0. 00510535	0. 945923	0. 963057
LINC00575	4q21. 22	0. 00510265	0. 945952	0. 963057
ECE1	1p36. 12	0. 005092796	0. 946056	0. 963114
KRTAP4-2	17q21. 2	-0. 005083378	0. 946156	0. 963167
LINC00606	3p25. 3	-0. 005067243	0. 946327	0. 963291
MAP3K10	19q13. 2	-0. 005046764	0. 946543	0. 963463
PANK3	5q34	-0. 00496307	0. 947428	0. 964315
INPP5E	9q34. 3	-0. 0049275	0. 947805	0. 964649
C17ORF102	17q12	-0. 004859116	0. 948528	0. 965336
JUN	1p32. 1	0. 004822882	0. 948911	0. 965677
ARHGAP22	10q11. 22-	0. 004783127	0. 949332	0. 96601
ZNF223	19q13. 31	0. 004778943	0. 949376	0. 96601
CTAG1B	Xq28	-0. 004778217	0. 949384	0. 96601
PLCE1	10q23. 33	0. 004745465	0. 94973	0. 966313
TMEM99	17q21. 2	-0. 004728726	0. 949907	0. 966444
PSG5	19q13. 31	-0. 004717473	0. 950026	0. 966516
CLDND1	3q11. 2	0. 00470571	0. 950151	0. 966544
MEPCE	7q22. 1	0. 00470571	0. 950151	0. 966544
ST7-AS2	7q31. 2	0. 004694627	0. 950268	0. 966581
ARHGEF4	2q21. 1	0. 004693156	0. 950284	0. 966581
LRRC52	1q24. 1	0. 004682702	0. 950394	0. 966595
FANCG	9p13. 3	-0. 004682694	0. 950394	0. 966595
PAGR1	16p11. 2	0. 004668048	0. 950549	0. 966704
ANP32E	1q21. 2	0. 004653401	0. 950704	0. 966812

C2CD4C	19p13.3	-0.004645034	0.950793	0.966826
FAM160A1	4q31.3	0.004642939	0.950815	0.966826
EXOSC9	4q27	0.004630385	0.950948	0.966912
GOLGA8F	15q13.1	-0.004613392	0.951128	0.967046
PIK3R2	19p13.11	-0.004596907	0.951302	0.967147
UGGT2	13q32.1	-0.004594815	0.951324	0.967147
PTP4A2	1p35.2	0.004542506	0.951878	0.967661
CATSPERD	19p13.3	0.004533171	0.951976	0.967712
OR2A2	7q35	0.004516853	0.952149	0.967838
APOBEC3B	22q13.1	0.004496474	0.952365	0.967977
SIRT2	19q13.2	-0.00449229	0.952409	0.967977
KCNAB3	17p13.1	-0.004490197	0.952431	0.967977
FGA	4q31.3	-0.004478692	0.952553	0.968036
PCDHB10	5q31.3	0.004475551	0.952586	0.968036
OR1B1	9q33.2	0.004457592	0.952776	0.96818
FAM45A	10q26.11	0.004448353	0.952874	0.968189
KRTAP24-1	121q22.11	0.00444758	0.952882	0.968189
JAG2	14q32.33	-0.004435796	0.953007	0.96824
SLC6A9	1p34.1	-0.004433704	0.953029	0.96824
SNORA16B	1q32.3	0.00439585	0.953429	0.968598
PIP5K1P1	6p24.3	0.004386553	0.953528	0.968649
ARHGAP39	8q24.3	-0.004358379	0.953826	0.968901
OR10J5	1q23.2	0.004351667	0.953897	0.968901
CDH20	18q21.33	-0.004349339	0.953922	0.968901
VPS18	15q15.1	-0.004320716	0.954225	0.969159
LAPTM4B	8q22.1	0.00430607	0.95438	0.969267
MBD4	3q21.3	0.004287239	0.954579	0.969421
LRRTM3	10q21.3	-0.004268862	0.954773	0.969569
WNT8A	5q31.2	0.004233396	0.955149	0.969901
MRPL45	17q12	0.004220283	0.955287	0.969988
ZNF217	20q13.2	-0.004216099	0.955332	0.969988
HDAC3	5q31.3	0.004205637	0.955442	0.970051
DRD1	5q35.2	-0.004191034	0.955597	0.970159
OR11L1	1q44	-0.004183254	0.955679	0.970177
FERD3L	7p21.1	0.004180174	0.955712	0.970177
GPR161	1q24.2	0.004172159	0.955797	0.970214
CDC73	1q31.2	0.004126127	0.956284	0.970605
NXPE1	11q23.2	-0.004122546	0.956322	0.970605
SYAP1	Xp22.2	0.004121943	0.956328	0.970605
HVCN1	12q24.11	-0.00408428	0.956727	0.970961
TBX5	12q24.21	0.004077075	0.956803	0.970975
ZNF808	19q13.41	0.004073818	0.956838	0.970975
GRK6	5q35.3	-0.004063357	0.956948	0.971038
AKR7A2	1p36.13	-0.004042433	0.95717	0.971123
RMND5B	5q35.3	0.004042433	0.95717	0.971123
TAS2R20	12p13.2	0.004040341	0.957192	0.971123
TSPY2	Yp11.2	0.004037054	0.957227	0.971123
HCST	19q13.12	-0.004019417	0.957414	0.971236
LSS	21q22.3	-0.004017325	0.957436	0.971236
ATP11AUN	13q34	-0.003988366	0.957742	0.971498
RFC5	12q24.23	-0.003965016	0.957989	0.971699
SULT1C3	2q12.3	-0.003946512	0.958185	0.971849
MYBPHL	1p13.3	-0.00386677	0.959029	0.972655
GH2	17q23.3	-0.003834819	0.959368	0.972949

CLDN11	3q26. 2	0. 00382692	0. 959451	0. 972976
ASTL	2q11. 2	-0. 003820105	0. 959523	0. 972976
GMEB2	20q13. 33	0. 003818551	0. 95954	0. 972976
FER	5q21. 3	0. 003812274	0. 959606	0. 972994
USP17L2	8p23. 1	-0. 003782181	0. 959925	0. 973267
BARD1	2q35	-0. 00376415	0. 960116	0. 973412
FAM122C	Xq26. 3	0. 003753688	0. 960227	0. 973474
NUP107	12q15	-0. 00372021	0. 960581	0. 973784
CASC8	8q24. 21	-0. 003715639	0. 960629	0. 973784
TBX3	12q24. 21	-0. 003707656	0. 960714	0. 97382
RPL9	4p14	0. 003693009	0. 960869	0. 973924
LRWD1	7q22. 1	0. 003688825	0. 960913	0. 973924
NETO1	18q22. 3	0. 003658511	0. 961234	0. 9742
TTY10	Yq11. 223	-0. 003635204	0. 961481	0. 9744
PYY	17q21. 31	0. 003618381	0. 961659	0. 974531
ELAVL1	19p13. 2	0. 003609315	0. 961755	0. 974579
UBE2J2	1p36. 33	-0. 003588393	0. 961977	0. 974745
SNORA44	1p35. 3	0. 003583207	0. 962032	0. 974745
WASL	7q31. 32	-0. 003580022	0. 962065	0. 974745
GABRA4	4p12	0. 003570502	0. 962166	0. 974759
USP35	11q14. 1	-0. 00356956	0. 962176	0. 974759
CACNA1E	1q25. 3	-0. 003513076	0. 962774	0. 975315
ERMP1	9p24. 1	-0. 003504697	0. 962863	0. 975356
LILRA2	19q13. 42	0. 003464943	0. 963284	0. 975689
HPVC1	7p11. 2	-0. 003464389	0. 96329	0. 975689
ANKS4B	16p12. 2	-0. 003428328	0. 963672	0. 976026
MCM3AP-AS	21q22. 3	-0. 003423095	0. 963727	0. 976027
GALNT9	12q24. 33	0. 003419013	0. 96377	0. 976027
ADAM21	14q24. 2	-0. 003364659	0. 964346	0. 976499
ATP8B1	18q21. 31	0. 003360325	0. 964392	0. 976499
CACUL1	10q26. 11	-0. 003360325	0. 964392	0. 976499
SEMG2	20q13. 12	0. 00335622	0. 964435	0. 976499
RASL10A	22q12. 2	0. 003351957	0. 96448	0. 976499
ABLIM1	10q25. 3	0. 003337309	0. 964635	0. 976607
INSIG1	7q36. 3	0. 003289185	0. 965145	0. 977055
TMPRSS11E	4q13. 2	-0. 003285214	0. 965187	0. 977055
LINC02159	5q34	0. 003281655	0. 965225	0. 977055
AFG3L2	18p11. 21	-0. 003274538	0. 9653	0. 977082
LTF	3p21. 31	0. 003226414	0. 96581	0. 977548
UBE2R2	9p13. 3	-0. 003165736	0. 966452	0. 978149
KRTAP13-2	21q22. 11	0. 003143087	0. 966692	0. 978342
SLC30A3	2p23. 3	0. 003126578	0. 966867	0. 97847
MEGF11	15q22. 31	-0. 003115521	0. 966984	0. 978539
GPR32	19q13. 33	-0. 003101653	0. 967131	0. 978638
TLCD3A	17p13. 3	-0. 003088318	0. 967272	0. 978722
RNF5P1	8p11. 22	-0. 003079949	0. 967361	0. 978722
SLC39A5	12q13. 3	0. 003079949	0. 967361	0. 978722
PLAAT5	11q12. 3	0. 00306321	0. 967538	0. 978851
GPBAR1	2q35	0. 003056933	0. 967605	0. 978869
GLI1	12q13. 3	0. 00304438	0. 967738	0. 978954
UBXN2A	2p23. 3	-0. 003036009	0. 967826	0. 978994
CRCP	7q11. 21	-0. 003017178	0. 968026	0. 979021
LOC202181	5q35. 3	-0. 003012994	0. 96807	0. 979021
WEE2-AS1	7q34	0. 003008809	0. 968115	0. 979021

SLC6A19	5p15. 33	-0. 003004813	0. 968157	0. 979021
CEP295	11q21	0. 003002532	0. 968181	0. 979021
SIL1	5q31. 2	-0. 003002532	0. 968181	0. 979021
RUNDC1	17q21. 31	0. 002998347	0. 968225	0. 979021
H2AFB1	Xq28	0. 002996513	0. 968245	0. 979021
POU4F1	13q31. 1	-0. 002977821	0. 968443	0. 979172
GRM5	11q14. 2-c	-0. 002971177	0. 968513	0. 979189
DEPP1	10q11. 21	-0. 002966962	0. 968558	0. 979189
POLR3G	5q14. 3	0. 00294813	0. 968757	0. 979341
MRPS27	5q13. 2	-0. 002918837	0. 969067	0. 979605
CFAP20	16q21	0. 002904191	0. 969223	0. 979696
REXO1L6P	8q21. 2	0. 002901111	0. 969255	0. 979696
ZNF654	3p11. 1	0. 00288536	0. 969422	0. 979815
KRTAP10-1	121q22. 3	0. 002865321	0. 969634	0. 97994
LEPROTL1	8p12	-0. 002864436	0. 969644	0. 97994
ZC2HC1A	8q21. 13	0. 002833051	0. 969976	0. 980217
CSRP2	12q21. 2	-0. 002828866	0. 970021	0. 980217
TOMM5	9p13. 2	0. 002824681	0. 970065	0. 980217
ANKRD20A4	9q13	0. 002806747	0. 970255	0. 980359
LINC00652	20p11. 23	-0. 002795327	0. 970376	0. 980432
FIZ1	19q13. 42	-0. 002772373	0. 970619	0. 980628
LHFPL3	7q22. 2-q2	0. 00276453	0. 970702	0. 980662
SLC10A2	13q33. 1	0. 002748744	0. 970869	0. 980782
HTR3B	11q23. 2	-0. 00273975	0. 970965	0. 980828
MTMR9LP	1p35. 2	0. 002709602	0. 971284	0. 981101
BACH1	21q21. 3	0. 002686586	0. 971528	0. 981298
CENPB	20p13	0. 002674032	0. 971661	0. 981383
ATG16L2	11q13. 4	0. 002651016	0. 971905	0. 981538
CORO7	16p13. 3	-0. 002644739	0. 971971	0. 981538
LRTOMT	11q13. 4	0. 002640554	0. 972015	0. 981538
TRMT12	8q24. 13	-0. 002636369	0. 97206	0. 981538
ZFP64	20q13. 2	-0. 002636369	0. 97206	0. 981538
SEC23A	14q21. 1	-0. 00261963	0. 972237	0. 98164
NTN4	12q22	-0. 002617538	0. 972259	0. 98164
MAN2B2	4p16. 1	-0. 002607076	0. 97237	0. 981702
CACNG1	17q24. 2	-0. 002592475	0. 972525	0. 981705
MRVI1	11p15. 4	0. 00259243	0. 972525	0. 981705
AMBP	9q32	-0. 002588245	0. 972569	0. 981705
CHRNB1	17p13. 1	-0. 002588245	0. 972569	0. 981705
NDUFA9	12p13. 32	0. 002579876	0. 972658	0. 981735
SNX12	Xq13. 1	-0. 002573599	0. 972725	0. 981735
PKHD1	6p12. 3-p1	0. 002571512	0. 972747	0. 981735
CNOT6	5q35. 3	0. 002565229	0. 972813	0. 981753
GSTTP2	22q11. 23	0. 002552621	0. 972947	0. 981838
LRRC37A	17q21. 31	0. 002540121	0. 973079	0. 981889
UGT2B10	4q13. 2	-0. 002538644	0. 973095	0. 981889
MAGEC1	Xq27. 2	-0. 002497896	0. 973527	0. 982275
FAP	2q24. 2	-0. 002489904	0. 973611	0. 98231
DAP	5p15. 2	-0. 002458519	0. 973944	0. 982596
DSCC1	8q24. 12	0. 002445965	0. 974077	0. 982604
LOC100134	16p13. 3	-0. 002443874	0. 974099	0. 982604
MAP1LC3A	20q11. 22	0. 002443873	0. 974099	0. 982604
SRRM2-AS1	16p13. 3	-0. 00242295	0. 974321	0. 982734
C16ORF78	16q12. 1	-0. 002419523	0. 974357	0. 982734

SPANXA2	Xq27. 2	-0. 002417799	0. 974375	0. 982734
SMIM20	4p15. 2	0. 002412487	0. 974432	0. 982741
NKAP	Xq24	0. 002399933	0. 974565	0. 982826
OR10A4	11p15. 4	-0. 002379536	0. 974781	0. 982994
MSH2	2p21-p16.	-0. 002368548	0. 974897	0. 983062
PLEKHS1	10q25. 3	0. 002339255	0. 975207	0. 98332
RBM33	7q36. 3	-0. 00233507	0. 975252	0. 98332
CAMTA1	1p36. 31-f	0. 002320423	0. 975407	0. 983427
FAM47C	Xp21. 1	-0. 002311558	0. 975501	0. 983472
APOBEC3C	22q13. 1	0. 002280669	0. 975828	0. 983753
SPATA31D4	9q21. 32	-0. 002234242	0. 97632	0. 984193
PRAMEF22	1p36. 21	0. 002230151	0. 976363	0. 984193
ASAP1-IT1	8q24. 21	-0. 002215028	0. 976524	0. 984305
ANAPC7	12q24. 11	-0. 002199067	0. 976693	0. 984426
GPR62	3p21. 2	0. 002172503	0. 976974	0. 984639
C10RF56	1q21. 3	0. 002169774	0. 977003	0. 984639
TBX18	6q14. 3	0. 002153036	0. 977181	0. 984768
GAL3ST3	11q13. 1	0. 00212801	0. 977446	0. 984937
CFAP221	2q14. 2	-0. 002127931	0. 977447	0. 984937
GNG12	1p31. 3	0. 002111188	0. 977624	0. 985016
TDRD7	9q22. 33	-0. 002111188	0. 977624	0. 985016
ALDH1A3	15q26. 3	-0. 002069341	0. 978067	0. 985413
DOK5	20q13. 2	0. 002048417	0. 978289	0. 985559
ATP1B4	Xq24	0. 002046361	0. 978311	0. 985559
TMEM129	4p16. 3	-0. 002033771	0. 978444	0. 985644
CCDC50	3q28	0. 002027494	0. 978511	0. 985661
RPL13A	19q13. 33	-0. 002017032	0. 978622	0. 985723
KIFC3	16q21	0. 002008662	0. 97871	0. 985763
TMEM98	17q11. 2	0. 001975185	0. 979065	0. 986071
COPZ2	17q21. 32	-0. 001962631	0. 979198	0. 986155
KCNMB3	3q26. 32	-0. 001931245	0. 979531	0. 986391
ZNF830	17q12	-0. 001931245	0. 979531	0. 986391
SEMA3A	7q21. 11	0. 001914506	0. 979708	0. 986519
TRIM6-TRI	11p15. 4	-0. 001899384	0. 979868	0. 986631
HARS	5q31. 3	0. 001887306	0. 979996	0. 986656
HNRNPCL3	1p36. 21	0. 001885214	0. 980018	0. 986656
MOV10L1	22q13. 33	-0. 001883121	0. 980041	0. 986656
FAM215A	17q21. 31	0. 001873879	0. 980139	0. 986704
METTL21EF	13q33. 1	-0. 001827554	0. 980629	0. 987149
RGS1	1q31. 2	0. 001822443	0. 980684	0. 987154
LINC00926	15q21. 3	0. 001811981	0. 980795	0. 987216
UTF1	10q26. 3	0. 001802803	0. 980892	0. 987264
SIX6	14q23. 1	0. 001797489	0. 980948	0. 987271
KNDC1	10q26. 3	0. 001780595	0. 981127	0. 987396
PRDM16	1p36. 32	0. 001776411	0. 981171	0. 987396
OR2AT4	11q13. 4	0. 00174554	0. 981499	0. 987676
BSND	1p32. 3	-0. 001710534	0. 98187	0. 987992
C3ORF22	3q21. 3	-0. 001706523	0. 981912	0. 987992
UAP1	1q23. 3	-0. 001673885	0. 982258	0. 98829
FUT10	8p12	0. 001659239	0. 982413	0. 988397
CWC22	2q31. 3	0. 001644592	0. 982568	0. 988498
ZC4H2	Xq11. 2	0. 001640408	0. 982613	0. 988498
CHST5	16q23. 1	0. 001627853	0. 982746	0. 988567
ALKBH4	7q22. 1	-0. 001621576	0. 982812	0. 988567

EXT2	11p11.2	0.001615299	0.982879	0.988567
RSL1D1	16p13.13	0.001615299	0.982879	0.988567
PRSS23	11q14.2	0.001600653	0.983034	0.988673
NHLRC4	16p13.3	-0.001590191	0.983145	0.988735
IFNA2	9p21.3	-0.001583794	0.983213	0.988753
CPAMD8	19p13.11	0.001554621	0.983522	0.989014
PRDM6	5q23.2	-0.001485573	0.984254	0.989651
RBM10	Xp11.3	0.001485573	0.984254	0.989651
KRTAP20-4	21q22.11	0.001450556	0.984625	0.989924
BOLL	2q33.1	0.001446301	0.98467	0.989924
MC5R	18p11.21	-0.00144587	0.984674	0.989924
VAT1	17q21.31	-0.001433264	0.984808	0.990009
HLA-DRB6	6p21.32	0.001428034	0.984863	0.990015
GCDH	19p13.13	0.001408156	0.985074	0.990177
SI	3q26.1	0.00138255	0.985346	0.9904
BLM	15q26.1	-0.001311908	0.986094	0.991103
CRYAA	21q22.3	-0.001291686	0.986309	0.99123
ZIC4	3q24	0.001290559	0.986321	0.99123
UNC119	17q11.2	-0.001280522	0.986427	0.991232
TCTEX1D4	1p34.1	0.00127843	0.986449	0.991232
CSNK2A1	20p13	0.001276338	0.986471	0.991232
MCHR1	22q13.2	-0.001242873	0.986826	0.991534
ZNF701	19q13.41	0.001238675	0.98687	0.991534
UGT3A2	5p13.2	-0.001231789	0.986943	0.991557
OR2W5	1q44	-0.00120447	0.987233	0.991798
PCDHGB2	5q31.3	-0.001196828	0.987314	0.99183
IGSF11	3q13.32	0.001186366	0.987425	0.991891
AKAP4	Xp11.22	0.001174103	0.987555	0.99192
AMTN	4q13.3	0.001169887	0.987599	0.99192
RNF214	11q23.3	0.001169627	0.987602	0.99192
OGT	Xq13.1	-0.001159166	0.987713	0.991981
MAGI3	1p13.2	-0.001146611	0.987846	0.992065
PLD4	14q32.33	0.001138242	0.987935	0.992104
FAM220A	7p22.1	0.001121503	0.988112	0.992233
DLEU2	13q14.2	0.001111041	0.988223	0.992294
OR2T3	1q44	0.001078224	0.988571	0.992594
OTUD6B	8q21.3	0.00105664	0.9888	0.992773
FAM71A	1q32.3	0.001025851	0.989126	0.993051
AHRR	5p15.33	0.001010608	0.989288	0.993164
PRSS37	7q34	0.000990787	0.989498	0.993325
C9ORF163	9q34.3	-0.000966669	0.989753	0.993526
SIX2	2p21	0.000962485	0.989798	0.993526
CCNQP1	1q32.1	0.000949093	0.98994	0.993554
CNDP1	18q22.3	0.000948843	0.989942	0.993554
GGT7	20q11.22	-0.000945745	0.989975	0.993554
APOL5	22q12.3	-0.000928424	0.990159	0.993689
TRIM46	1q22	0.000922729	0.990219	0.993699
OR2J3	6p22.1	-0.000912599	0.990327	0.993757
GK2	4q21.21	0.000906211	0.990394	0.993775
HOXB4	17q21.32	0.00084322	0.991062	0.994395
LST1	6p21.33	0.000830666	0.991195	0.994438
PIH1D3	Xq22.3	0.000829793	0.991204	0.994438
FABP2	4q26	-0.000787607	0.991651	0.994837
PPP1R21	2p16.3	-0.000780449	0.991727	0.994863

TUBB8	10p15.3	-0.000774172	0.991794	0.99488
COL4A5	Xq22.3	-0.000767895	0.99186	0.994897
TNF	6p21.33	-0.000707217	0.992503	0.995492
PPP1R3C	10q23.32	0.000698847	0.992592	0.995525
ADAMTS10	19p13.2	0.000694662	0.992637	0.995525
FAM221B	9p13.3	0.000684898	0.99274	0.995579
PRAMEF10	1p36.21	0.000672809	0.992868	0.995632
OTOF	2p23.3	0.000669554	0.992903	0.995632
SPRR2B	1q21.3	0.000665844	0.992942	0.995632
SPATA31D	9q21.32	-0.00065507	0.993056	0.995693
SP5	2q31.1	0.000650723	0.993102	0.995693
IN080D	2q33.3	-0.000642353	0.993191	0.995732
CSKMT	11q12.3	0.000629799	0.993324	0.995765
POLE3	9q32	0.000629799	0.993324	0.995765
FGF5	4q21.21	-0.000623641	0.993389	0.995781
NCOR1P1	20p11.1	0.000606697	0.993569	0.995911
LETM1	4p16.3	0.000590045	0.993745	0.996038
ACADVL	17p13.1	-0.000579583	0.993856	0.996083
LIPF	10q23.31	0.000576192	0.993892	0.996083
SNAPC5	15q22.31	-0.000571213	0.993945	0.996083
ERP27	12p12.3	-0.000567029	0.993989	0.996083
OR10W1	11q12.1	-0.000555449	0.994112	0.996138
AAR2	20q11.23	0.000552382	0.994145	0.996138
MSTO2P	1q22	0.000516812	0.994522	0.996416
KLHL26	19p13.11	0.000508443	0.99461	0.996416
TLR9	3p21.2	0.000508443	0.99461	0.996416
TMBIM6	12q13.12	0.00050635	0.994633	0.996416
PSEN2	1q42.13	0.000500073	0.994699	0.996416
FKBP1AP1	19q13.43	-0.000497982	0.994721	0.996416
EHMT1-IT1	19q34.3	0.000479232	0.99492	0.996516
ACVR2A	2q22.3-q2	-0.00047915	0.994921	0.996516
IMPG1	6q14.1	-0.000448813	0.995243	0.996789
LINC0155E	1p22.3	-0.000372092	0.996056	0.997553
OR6W1P	7q34	0.000361983	0.996163	0.99761
PUS10	2p16.1-p1	-0.00035047	0.996285	0.99763
SLC6A18	5p15.33	0.000347708	0.996314	0.99763
OR11G2	14q11.2	0.000344811	0.996345	0.99763
CYP4A11	1p33	0.000341258	0.996383	0.99763
AMOTL2	3q22.2	0.000301299	0.996806	0.998005
CETN2	Xq28	0.000282468	0.997006	0.998104
TMEM59	1p32.3	0.000282468	0.997006	0.998104
GRIK1-AS1	21q21.3	-0.00026409	0.997201	0.998249
LY6G6D	6p21.33	0.000236085	0.997497	0.998497
ALDH1A2	15q21.3	0.000217605	0.997693	0.998637
KPNA1	3q21.1	-0.00021342	0.997738	0.998637
SUN3	7p12.3	0.000199653	0.997884	0.998679
VIL1	2q35	-0.000196682	0.997915	0.998679
OR6C4	12q13.2	-0.000195372	0.997929	0.998679
LYPD4	19q13.2	0.000185338	0.998035	0.99872
NSD2	4p16.3	0.000182035	0.99807	0.99872
CEP152	15q21.1	-0.000163204	0.99827	0.998836
MORC2-AS1	22q12.2	0.000156927	0.998337	0.998836
RPP30	10q23.31	0.000156927	0.998337	0.998836
COL9A3	20q13.33	0.000138096	0.998536	0.998986

LILRP2	19q13.42	0.000102787	0.99891	0.999285
ADRB3	8p11.23	0.000100445	0.998935	0.999285
POLR1C	6p21.1	9.4156E-05	0.999002	0.999302
TEX12	11q23.1	7.17926E-05	0.999239	0.999479
HIST1H2AK	6p22.1	6.69842E-05	0.99929	0.999479
POLR3C	1q21.1	-6.06783E-05	0.999357	0.999479
COLGALT2	1q25.3	5.8586E-05	0.999379	0.999479
GPR68	14q32.11	5.23089E-05	0.999446	0.999496
LINC00671	17q21.31	2.52026E-05	0.999733	0.999733
