

Table SI. Differentially expressed lncRNAs in esophageal adenocarcinoma.

lncRNAs	Log FC	Log CPM	P-value	FDR
LINC00671 ENSG00000213373 lincRNA	-6.15948	5.666235	1.80x10 ⁻⁷⁰	1.83x10 ⁻⁶⁶
AC116407.1 ENSG00000214708 antisense	-4.52057	6.878573	2.04E-53	1.03E-49
C9orf147 ENSG00000230185 antisense	-3.65712	6.595789	5.73E-44	1.93E-40
AC079305.3 ENSG00000229337 antisense	-5.21345	3.217998	3.67E-32	9.28E-29
ZNF710-AS1 ENSG00000259291 antisense	-2.8917	9.732375	6.57E-31	1.33E-27
AC008268.1 ENSG00000235584 lincRNA	-6.61473	5.239676	1.09E-27	1.84E-24
AL031587.6 ENSG00000279010 sense_overlapping	-2.03919	8.849474	1.49E-27	2.16E-24
AC239798.2 ENSG00000234571 lincRNA	-4.01016	3.914055	1.46E-25	1.85E-22
FOXG1-AS1 ENSG00000257126 antisense	-5.85654	2.522177	1.44E-24	1.62E-21
AF001548.1 ENSG00000263065 antisense	-3.68357	5.098755	6.29E-23	5.96E-20
LINC00982 ENSG00000177133 antisense	-4.34508	10.39065	6.90E-23	5.96E-20
SLC8A1-AS1 ENSG00000227028 antisense	-3.27936	6.312007	7.06E-23	5.96E-20
AC244453.2 ENSG00000233029 antisense	-4.00379	3.825796	5.99E-22	4.67E-19
AL031429.2 ENSG00000269933 sense_intronic	-4.98141	3.723532	2.10E-21	1.52E-18
AL590426.2 ENSG00000271945 lincRNA	-5.91697	1.671566	2.83E-20	1.91E-17
AL049838.1 ENSG00000259969 sense_overlapping	-3.13347	5.376831	9.29E-20	5.88E-17
RGMB-AS1 ENSG00000246763 antisense	-2.74196	6.312231	1.26E-19	7.48E-17
AC114400.1 ENSG00000243295 lincRNA	-4.81786	1.518643	2.88E-19	1.62E-16
LINC01768 ENSG00000228420 lincRNA	-4.39984	2.410242	3.98E-19	2.12E-16
AC079313.2 ENSG00000258137 antisense	-3.58862	2.793029	9.10E-19	4.61E-16
AP003037.1 ENSG00000256220 processed_transcript	-6.92064	2.353192	1.41E-18	6.80E-16
AC078906.1 ENSG00000253317 lincRNA	-3.97309	3.633757	1.90E-18	8.62E-16
AC011247.1 ENSG00000231367 lincRNA	-3.11397	3.758555	1.96E-18	8.62E-16
LINC00940 ENSG00000235049 lincRNA	-4.80431	4.199236	3.25E-18	1.37E-15
LINC01554 ENSG00000236882 lincRNA	-3.25779	4.05754	9.97E-18	4.04E-15
AC022075.3 ENSG00000256288 lincRNA	-4.773	2.428011	1.27E-17	4.94E-15
AL353746.1 ENSG00000260412 sense_overlapping	-4.17079	4.380774	2.34E-17	8.79E-15
AC008522.1 ENSG00000279232 antisense	-2.56703	3.678668	3.91E-17	1.42E-14
ADAMTS9-AS1 ENSG00000241158 antisense	-3.07912	6.663777	4.72E-17	1.65E-14
AC069228.1 ENSG00000258162 antisense	-5.5681	3.900534	1.62E-16	5.48E-14
AC005722.3 ENSG00000264785 antisense	-3.92611	4.037699	4.56E-16	1.49E-13
NCOA7-AS1 ENSG00000232131 antisense	-3.43768	3.418433	7.74E-16	2.45E-13
CARMN ENSG00000249669 lincRNA	-3.0028	9.307561	1.34E-15	4.02E-13
AC036108.3 ENSG00000261616 antisense	-2.21591	6.157214	1.35E-15	4.02E-13
AC079210.1 ENSG00000267461 lincRNA	-2.83146	4.032343	2.26E-15	6.53E-13
BVES-AS1 ENSG00000203808 antisense	-3.14212	3.588762	4.00E-15	1.10E-12
AC015845.2 ENSG00000265542 lincRNA	-2.86945	2.419619	4.23E-15	1.13E-12
AC012085.2 ENSG00000258274 antisense	-2.32574	4.176924	6.41E-15	1.66E-12
HAND2-AS1 ENSG00000237125 antisense	-4.17924	6.125734	8.45E-15	2.14E-12
MBNL1-AS1 ENSG00000229619 antisense	-2.32135	8.240835	9.45E-15	2.33E-12
PWAR6 ENSG00000257151 lincRNA	-3.13901	7.206975	1.75E-14	4.21E-12
AC105383.1 ENSG00000250241 lincRNA	-3.87526	2.177241	2.28E-14	5.37E-12
MIR4435-2HG ENSG00000172965 lincRNA	2.410235	10.5013	2.82E-14	6.50E-12
PGM5-AS1 ENSG00000224958 antisense	-4.16716	4.439111	5.28E-14	1.19E-11
CYP1B1-AS1 ENSG00000232973 antisense	-2.23684	5.441414	6.22E-14	1.37E-11

AC010776.2 ENSG00000267774 antisense	-4.18651	2.497909	8.82E-14	1.90E-11
C20orf166-AS1 ENSG00000174403 antisense	-3.42625	4.857322	1.52E-13	3.20E-11
AC126177.8 ENSG00000274395 lincRNA	-3.80618	1.72178	1.64E-13	3.38E-11
AC053503.4 ENSG00000234638 antisense	-3.79344	3.444146	1.67E-13	3.38E-11
AC092834.1 ENSG00000249453 antisense	-3.59649	4.022059	1.75E-13	3.47E-11
AC135012.3 ENSG00000268505 lincRNA	-2.87785	5.135039	1.91E-13	3.68E-11
AC025271.4 ENSG00000276772 lincRNA	-3.13631	3.544024	1.93E-13	3.68E-11
AL137793.1 ENSG00000236975 lincRNA	-2.8921	2.818186	2.24E-13	4.20E-11
AL513217.1 ENSG00000223774 antisense	-3.0209	2.789221	3.64E-13	6.46E-11
LINC00092 ENSG00000225194 lincRNA	-2.55832	5.225268	3.73E-13	6.52E-11
AC126177.4 ENSG00000257398 lincRNA	-3.36874	1.917764	4.43E-13	7.60E-11
C8orf34-AS1 ENSG00000248801 antisense	-3.06757	2.969382	4.71E-13	7.95E-11
SEMA3B-AS1 ENSG00000232352 antisense	-2.29764	5.430753	6.56E-13	1.09E-10
ADAMTS9-AS2 ENSG00000241684 antisense	-2.42968	6.012942	8.57E-13	1.40E-10
AP001107.5 ENSG00000254510 processed_transcript	-2.90807	4.248341	9.51E-13	1.53E-10
KCNMA1-AS1 ENSG00000236467 antisense	-2.6361	3.373779	1.16E-12	1.83E-10
AL358176.4 ENSG00000231440 sense_intronic	-3.60073	2.113181	1.21E-12	1.89E-10
AF165147.1 ENSG00000232855 lincRNA	-2.6375	5.400193	1.36E-12	2.09E-10
AL034347.1 ENSG00000228679 lincRNA	-2.69368	3.117748	1.52E-12	2.29E-10
RNF217-AS1 ENSG00000236548 antisense	-2.67738	4.140285	1.78E-12	2.64E-10
AC124312.3 ENSG00000261069 lincRNA	-3.06801	4.314097	2.18E-12	3.20E-10
AL449403.2 ENSG00000275465 lincRNA	-3.50808	3.062625	2.91E-12	4.21E-10
GAS1RR ENSG00000226237 lincRNA	-2.94541	4.696175	3.27E-12	4.67E-10
AP003548.1 ENSG00000253105 lincRNA	-3.11911	2.154319	4.41E-12	6.21E-10
LINC00332 ENSG00000230710 lincRNA	-3.86696	2.048875	4.88E-12	6.77E-10
FAM167A-AS1 ENSG00000184608 antisense	-3.70474	3.440436	5.02E-12	6.87E-10
AC005180.2 ENSG00000267505 lincRNA	-2.97265	4.231044	5.54E-12	7.48E-10
AC005082.1 ENSG00000226816 lincRNA	-2.6559	4.174186	9.24E-12	1.22E-09
LINC00163 ENSG00000234880 lincRNA	-3.63461	3.107718	1.47E-11	1.91E-09
AC023906.2 ENSG00000259178 lincRNA	-3.39711	2.425518	2.01E-11	2.57E-09
CYTOR ENSG00000222041 lincRNA	2.336447	9.561405	2.10E-11	2.66E-09
AC037198.3 ENSG00000278621 antisense	-2.65637	5.27845	2.67E-11	3.33E-09
AC005920.4 ENSG00000262006 lincRNA	-3.1588	3.384208	2.76E-11	3.38E-09
LINC01697 ENSG00000232079 processed_transcript	-3.05148	4.861594	2.77E-11	3.38E-09
AP005137.1 ENSG00000267455 antisense	-3.35997	2.754316	3.39E-11	4.09E-09
AP000802.1 ENSG00000247416 antisense	-3.33453	2.106022	3.58E-11	4.26E-09
AC087894.2 ENSG00000256922 lincRNA	-2.99375	1.394001	3.78E-11	4.45E-09
AC009102.2 ENSG00000272372 antisense	-3.28966	2.920525	3.88E-11	4.52E-09
LINC01105 ENSG00000232044 processed_transcript	-4.71192	6.581933	4.72E-11	5.43E-09
AC005906.2 ENSG00000256654 processed_transcript	-4.33209	1.602634	5.33E-11	6.07E-09
AC068491.3 ENSG00000270190 lincRNA	2.517146	6.065144	7.25E-11	8.06E-09
AC005180.1 ENSG00000267405 lincRNA	-3.09498	3.99743	7.37E-11	8.11E-09
AP003356.1 ENSG00000253669 lincRNA	2.86792	7.470385	1.08E-10	1.16E-08
AC004147.4 ENSG00000265356 processed_transcript	-3.2101	2.685112	1.19E-10	1.27E-08
AP001528.2 ENSG00000255471 antisense	-2.08905	5.34288	1.23E-10	1.29E-08
AC124312.2 ENSG00000257647 lincRNA	-2.78742	3.864882	1.26E-10	1.32E-08
AC124657.1 ENSG00000254532 lincRNA	-3.27233	1.475316	1.43E-10	1.48E-08

AC002384.1 ENSG00000228742 lincRNA	4.52878	7.932652	1.74E-10	1.78E-08
AC008592.5 ENSG00000272021 lincRNA	-2.73265	2.332323	1.91E-10	1.93E-08
AC002398.2 ENSG00000267328 antisense	-3.26685	2.829244	2.19E-10	2.20E-08
AC025271.3 ENSG00000261489 lincRNA	-2.94413	1.470146	2.24E-10	2.23E-08
AC007638.1 ENSG00000262079 lincRNA	-3.72745	1.950401	2.35E-10	2.31E-08
LINC00844 ENSG00000237949 lincRNA	-3.78472	1.5376	2.80E-10	2.72E-08
PCAT18 ENSG00000265369 lincRNA	-4.16529	5.173465	3.18E-10	3.07E-08
AC092769.1 ENSG00000259685 lincRNA	-2.81352	2.784581	3.27E-10	3.12E-08
PDZRN3-AS1 ENSG00000239677 antisense	-2.96346	1.566619	3.48E-10	3.29E-08
AC244453.3 ENSG00000234998 antisense	-3.38763	3.495823	3.71E-10	3.48E-08
LINC01943 ENSG00000280721 lincRNA	2.991995	5.832149	4.63E-10	4.27E-08
AP001046.1 ENSG00000225637 lincRNA	-2.60879	2.596646	5.28E-10	4.82E-08
AC026369.2 ENSG00000256694 antisense	3.16812	6.054591	8.95E-10	8.10E-08
AC025280.1 ENSG00000260859 sense_intronic	-2.51587	2.810485	9.58E-10	8.59E-08
AL512638.2 ENSG00000228035 antisense	-3.84566	2.987708	1.03E-09	9.14E-08
LINC02185 ENSG00000262097 lincRNA	-2.26609	3.685566	1.17E-09	1.03E-07
AL033519.3 ENSG00000228559 lincRNA	-2.82617	1.800924	1.38E-09	1.19E-07
AC036108.2 ENSG00000261054 antisense	-2.32019	3.551446	1.57E-09	1.34E-07
Z82198.1 ENSG00000228622 lincRNA	-2.98873	1.593052	1.58E-09	1.34E-07
LINC01471 ENSG00000239921 lincRNA	-3.27684	1.718351	1.70E-09	1.44E-07
AL009178.2 ENSG00000269155 lincRNA	2.617815	5.880006	1.73E-09	1.45E-07
AC108861.1 ENSG00000278408 antisense	-3.25233	2.274565	1.81E-09	1.51E-07
AC023794.2 ENSG00000249388 lincRNA	-2.40034	4.33082	2.08E-09	1.71E-07
AC244453.1 ENSG00000227193 lincRNA	-3.20018	2.314981	2.10E-09	1.71E-07
AC005208.1 ENSG00000230258 antisense	-3.96626	2.765192	2.22E-09	1.80E-07
HOXC-AS1 ENSG00000250451 antisense	3.380824	5.314787	2.28E-09	1.82E-07
AC090206.1 ENSG00000275805 sense_intronic	-2.74871	2.300762	2.47E-09	1.95E-07
PART1 ENSG00000152931 lincRNA	-2.41717	7.147038	2.79E-09	2.19E-07
AC079467.1 ENSG00000250978 processed_transcript	-3.38409	2.345713	3.42E-09	2.64E-07
AC024337.2 ENSG00000273771 lincRNA	-2.45532	4.108438	3.55E-09	2.73E-07
AC016924.1 ENSG00000250934 lincRNA	-2.70903	2.585635	3.67E-09	2.79E-07
AC063919.1 ENSG00000251448 lincRNA	-3.1152	1.672617	3.84E-09	2.88E-07
NCAM1-AS1 ENSG00000227487 antisense	-3.21336	2.36165	4.50E-09	3.35E-07
AL158847.1 ENSG00000241720 antisense	-2.55567	3.986075	5.11E-09	3.78E-07
AF067845.2 ENSG00000275427 lincRNA	-2.95749	1.474614	5.42E-09	3.98E-07
AC012409.3 ENSG00000277135 lincRNA	-2.53134	3.419069	5.78E-09	4.21E-07
SLC26A4-AS1 ENSG00000233705 antisense	-2.18516	3.76927	6.29E-09	4.53E-07
AL356417.1 ENSG00000224478 lincRNA	-2.89876	2.271341	6.67E-09	4.76E-07
IL12A-AS1 ENSG00000244040 antisense	-2.99343	5.244631	7.08E-09	5.02E-07
AC006019.2 ENSG00000233363 antisense	-2.62302	1.545077	9.28E-09	6.48E-07
AC007405.1 ENSG00000234350 lincRNA	-2.23592	5.262731	9.59E-09	6.65E-07
AP003469.2 ENSG00000253395 lincRNA	2.392728	4.915661	1.11E-08	7.60E-07
CELF2-AS2 ENSG00000237986 antisense	-2.72677	1.723267	1.23E-08	8.39E-07
HCG21 ENSG00000233529 antisense	-3.08383	4.039319	1.26E-08	8.54E-07
AC037441.1 ENSG00000248738 antisense	-2.57392	2.148703	1.33E-08	8.93E-07
AC013726.1 ENSG00000259793 antisense	-2.1301	3.49675	1.35E-08	9.01E-07
LIFR-AS1 ENSG00000244968 antisense	-2.1459	6.368976	1.56E-08	1.03E-06

AC093607.1 ENSG00000250137 antisense	-2.68101	3.29537	1.88E-08	1.22E-06
AC017002.3 ENSG00000240350 lincRNA	2.642459	4.066607	1.90E-08	1.23E-06
AL031429.1 ENSG00000235782 antisense	-3.60051	1.606532	1.94E-08	1.25E-06
LINC01558 ENSG00000146521 lincRNA	2.885529	6.405159	2.17E-08	1.37E-06
AC004801.3 ENSG00000257955 lincRNA	-3.1815	1.438685	2.17E-08	1.37E-06
AC124312.5 ENSG00000271347 sense_intronic	-2.25381	3.700534	2.21E-08	1.38E-06
AC004264.2 ENSG00000268812 antisense	2.51693	5.625722	2.33E-08	1.45E-06
AC007920.1 ENSG00000198491 antisense	-4.73943	3.131402	2.41E-08	1.49E-06
AC007128.1 ENSG00000229970 antisense	3.291079	6.793087	2.62E-08	1.61E-06
HOXC-AS2 ENSG00000250133 processed_transcript	3.034286	6.185162	2.64E-08	1.61E-06
C2orf48 ENSG00000163009 lincRNA	2.62657	6.705367	2.65E-08	1.61E-06
GATA6-AS1 ENSG00000266010 lincRNA	-2.53245	8.432727	2.71E-08	1.63E-06
AC000124.1 ENSG00000226770 lincRNA	-2.97513	2.033356	3.09E-08	1.83E-06
AL390860.1 ENSG00000235749 antisense	-2.54181	1.699427	3.47E-08	2.04E-06
SNHG14 ENSG00000224078 processed_transcript	-2.27181	10.14533	3.68E-08	2.15E-06
AC103949.1 ENSG00000264263 antisense	-3.95893	2.074347	3.74E-08	2.18E-06
LINC01985 ENSG00000227260 lincRNA	-2.40694	2.296496	3.94E-08	2.28E-06
LINC00906 ENSG00000267339 lincRNA	-3.63388	2.213098	4.23E-08	2.44E-06
AC112496.1 ENSG00000241886 sense_intronic	2.539899	5.177432	4.36E-08	2.49E-06
C1orf137 ENSG00000203864 lincRNA	-3.73011	1.576382	4.50E-08	2.56E-06
AC124312.4 ENSG00000270704 sense_intronic	-2.70387	2.612011	4.55E-08	2.58E-06
GK-IT1 ENSG00000229331 sense_intronic	2.996833	5.074661	4.77E-08	2.68E-06
MRGPRF-AS1 ENSG00000256508 antisense	-2.21885	2.627305	4.83E-08	2.70E-06
AC007128.2 ENSG00000272328 lincRNA	3.35287	5.31002	4.92E-08	2.74E-06
BLACAT1 ENSG00000281406 lincRNA	3.500541	9.078351	5.01E-08	2.77E-06
AC010457.1 ENSG00000251257 antisense	-2.50934	2.231786	5.04E-08	2.77E-06
AL391056.1 ENSG00000227619 lincRNA	3.902549	7.801854	5.66E-08	3.08E-06
PTPRD-AS1 ENSG00000225706 lincRNA	-2.52227	3.217689	6.29E-08	3.40E-06
LINC01354 ENSG00000231768 lincRNA	-2.56445	3.736654	6.97E-08	3.73E-06
AL136982.6 ENSG00000272508 processed_transcript	-2.60542	3.563601	7.50E-08	4.00E-06
TRIM31-AS1 ENSG00000231226 antisense	2.716604	6.88515	7.55E-08	4.00E-06
KIRREL3-AS1 ENSG00000257271 antisense	-3.49605	1.503229	7.80E-08	4.11E-06
LINC01919 ENSG00000263438 lincRNA	-3.10236	1.91605	9.04E-08	4.72E-06
AL162511.1 ENSG00000258844 lincRNA	-3.25485	2.851281	9.71E-08	5.04E-06
BX470102.1 ENSG00000238279 antisense	2.550337	7.367055	9.76E-08	5.04E-06
AC022390.1 ENSG00000254271 lincRNA	-2.01339	2.668446	1.05E-07	5.38E-06
LINC02157 ENSG00000259763 lincRNA	-2.43791	2.282202	1.13E-07	5.75E-06
LINC00365 ENSG00000224511 lincRNA	-2.34109	7.360535	1.24E-07	6.30E-06
AC025524.2 ENSG00000254119 lincRNA	-3.06552	2.608041	1.26E-07	6.37E-06
AC007495.1 ENSG00000246379 lincRNA	-2.23489	3.21029	1.35E-07	6.77E-06
AL356489.2 ENSG00000260947 lincRNA	-2.83374	4.650457	1.47E-07	7.30E-06
AC087721.1 ENSG00000259396 sense_intronic	2.287963	2.966872	1.51E-07	7.44E-06
AC021683.1 ENSG00000267466 lincRNA	-2.35688	5.067746	1.53E-07	7.53E-06
LINC01917 ENSG00000260433 lincRNA	-2.72392	1.635827	1.56E-07	7.65E-06
LINC00836 ENSG00000280809 lincRNA	-2.80341	1.75038	1.60E-07	7.81E-06
AL390783.1 ENSG00000235020 processed_transcript	-2.20587	3.179559	1.64E-07	7.94E-06
AC092384.2 ENSG00000259881 antisense	-2.08027	4.767592	1.70E-07	8.22E-06

AL158166.1 ENSG00000227076 sense_intronic	2.305426	5.214095	1.77E-07	8.49E-06
C8orf31 ENSG00000177335 processed_transcript	2.948168	7.765436	1.95E-07	9.28E-06
AL162385.1 ENSG00000228174 antisense	-2.33951	1.795615	1.97E-07	9.31E-06
PTGES2-AS1 ENSG00000232850 lincRNA	2.524701	5.89003	2.01E-07	9.46E-06
AC017002.1 ENSG00000224959 lincRNA	2.05013	3.585004	2.04E-07	9.57E-06
AC025165.1 ENSG00000224713 antisense	-2.00908	4.191556	2.09E-07	9.68E-06
GK-AS1 ENSG00000243055 antisense	2.445364	5.573542	2.09E-07	9.68E-06
AL031726.1 ENSG00000237707 antisense	-2.62273	2.884089	2.25E-07	1.03E-05
AC007406.3 ENSG00000256540 lincRNA	2.550507	5.286683	2.29E-07	1.04E-05
AL359633.2 ENSG00000236466 antisense	-2.95272	1.52337	2.49E-07	1.11E-05
LINC01497 ENSG00000237560 lincRNA	-3.91951	1.663573	2.52E-07	1.12E-05
AC005165.1 ENSG00000223561 lincRNA	-2.36951	5.213627	2.64E-07	1.17E-05
PVT1 ENSG00000249859 lincRNA	2.104564	10.39983	2.71E-07	1.20E-05
EPHA5-AS1 ENSG00000250846 lincRNA	-4.01474	2.311471	2.80E-07	1.23E-05
AC147651.2 ENSG00000234471 lincRNA	-3.09234	1.506511	2.85E-07	1.24E-05
LINC01629 ENSG00000258602 lincRNA	-2.7935	2.964675	3.05E-07	1.32E-05
LHX5-AS1 ENSG00000257935 antisense	-4.60962	2.001488	3.06E-07	1.32E-05
AC129492.2 ENSG00000263427 lincRNA	-3.17098	3.846378	3.23E-07	1.38E-05
AC116337.3 ENSG00000249856 lincRNA	-2.35995	2.341307	3.81E-07	1.60E-05
LINC00561 ENSG00000261206 lincRNA	-2.66055	1.729825	3.88E-07	1.62E-05
LINC02410 ENSG00000258292 lincRNA	-3.42121	1.59651	4.03E-07	1.67E-05
AC083837.1 ENSG00000261618 lincRNA	2.605938	7.184803	4.06E-07	1.68E-05
AC103702.2 ENSG00000272763 lincRNA	2.998464	9.628743	4.14E-07	1.70E-05
AC084819.1 ENSG00000256923 lincRNA	-2.9767	2.102062	4.35E-07	1.78E-05
AC012409.1 ENSG00000259359 lincRNA	-2.31352	3.833239	4.51E-07	1.84E-05
AC022424.1 ENSG00000250579 antisense	-2.65478	1.495984	4.57E-07	1.86E-05
AL691482.3 ENSG00000249007 sense_intronic	2.395534	8.135968	5.18E-07	2.05E-05
LINC01247 ENSG00000227007 lincRNA	-2.84084	1.449764	5.39E-07	2.13E-05
AC010980.2 ENSG00000267034 lincRNA	-2.06643	4.568865	5.50E-07	2.16E-05
LINC00710 ENSG00000229240 processed_transcript	-2.97631	2.751497	5.54E-07	2.16E-05
AC080037.1 ENSG00000263893 lincRNA	2.203457	6.605777	5.63E-07	2.19E-05
AL451060.1 ENSG00000226251 lincRNA	-2.05058	4.096507	5.72E-07	2.21E-05
AC093627.6 ENSG00000242611 lincRNA	-2.36805	3.462816	6.31E-07	2.39E-05
AC246680.1 ENSG00000230186 antisense	-2.75464	2.256917	6.71E-07	2.53E-05
AC016395.1 ENSG00000233590 lincRNA	-2.54435	2.7878	7.08E-07	2.66E-05
AC012531.1 ENSG00000260597 lincRNA	2.780913	6.400802	7.16E-07	2.68E-05
AC134312.5 ENSG00000261327 lincRNA	3.351065	4.191632	7.57E-07	2.81E-05
AL391807.1 ENSG00000230910 antisense	-2.46995	3.494535	7.59E-07	2.81E-05
U62317.2 ENSG00000272666 lincRNA	2.210847	5.656769	7.98E-07	2.93E-05
AL353997.2 ENSG00000264177 antisense	-2.52972	4.354361	8.01E-07	2.93E-05
LINC02106 ENSG00000251573 lincRNA	-3.41426	2.263777	8.49E-07	3.08E-05
AC078962.4 ENSG00000256670 antisense	-2.80473	1.611285	8.90E-07	3.21E-05
AC019117.1 ENSG00000236039 lincRNA	3.294676	6.541784	9.19E-07	3.30E-05
AC005358.1 ENSG00000227274 antisense	-2.23997	1.701257	9.29E-07	3.32E-05
LINC01479 ENSG00000255772 lincRNA	-2.1191	2.944652	9.37E-07	3.33E-05
MUC19 ENSG00000205592 processed_transcript	-2.23652	3.375472	9.38E-07	3.33E-05
AL132642.1 ENSG00000258987 antisense	-2.0954	3.652998	9.48E-07	3.36E-05

AL596223.2 ENSG00000231748 antisense	2.956285	4.568494	9.64E-07	3.40E-05
LINC01510 ENSG00000231210 lincRNA	-2.48557	1.885002	9.89E-07	3.48E-05
AC021683.2 ENSG00000267506 lincRNA	-2.14236	5.350531	9.98E-07	3.50E-05
AC122685.1 ENSG00000258763 antisense	-3.83564	3.666572	1.08E-06	3.77E-05
AC022144.1 ENSG00000267892 antisense	2.017274	6.928848	1.11E-06	3.86E-05
AC116345.3 ENSG00000251599 antisense	-2.61953	1.798832	1.12E-06	3.87E-05
AC254629.1 ENSG00000274993 antisense	3.927211	8.554387	1.20E-06	4.12E-05
AP002518.2 ENSG00000256947 antisense	-2.52301	2.194958	1.26E-06	4.32E-05
AL133387.2 ENSG00000229649 lincRNA	-2.87444	1.942502	1.27E-06	4.32E-05
AC136475.3 ENSG00000255026 antisense	3.497129	8.864529	1.28E-06	4.34E-05
AC099850.3 ENSG00000265415 antisense	2.079273	8.125753	1.31E-06	4.43E-05
AC104078.1 ENSG00000247193 antisense	-2.35118	2.45971	1.55E-06	5.14E-05
AC083906.3 ENSG00000250643 antisense	3.137873	3.971115	1.56E-06	5.18E-05
AC126768.2 ENSG00000248994 lincRNA	-2.33521	3.049551	1.63E-06	5.36E-05
LINC02321 ENSG00000258884 lincRNA	3.162085	3.756794	1.66E-06	5.45E-05
AC002546.2 ENSG00000267653 lincRNA	-2.57598	2.933756	1.75E-06	5.69E-05
EVX1-AS ENSG00000253405 antisense	5.110837	3.546313	1.83E-06	5.91E-05
AC103853.2 ENSG00000254141 sense_intronic	-2.03725	2.458507	1.87E-06	6.00E-05
U62317.5 ENSG00000273272 lincRNA	3.05283	3.249023	2.05E-06	6.52E-05
AC003965.2 ENSG00000263325 antisense	2.548101	5.892391	2.09E-06	6.63E-05
AC097713.1 ENSG00000228162 lincRNA	-3.40003	1.480263	2.13E-06	6.72E-05
AC015849.5 ENSG00000270977 lincRNA	2.534339	6.582489	2.19E-06	6.84E-05
LINC00460 ENSG00000233532 lincRNA	4.628044	6.331708	2.20E-06	6.84E-05
AC055854.1 ENSG00000253125 processed_transcript	-2.14351	2.597236	2.26E-06	6.99E-05
AC090044.1 ENSG00000224239 lincRNA	-2.35557	3.041302	2.26E-06	6.99E-05
AL138733.2 ENSG00000231883 lincRNA	-2.25042	1.822484	2.29E-06	7.06E-05
LINC01640 ENSG00000231253 lincRNA	-2.6338	1.573316	2.34E-06	7.20E-05
DPP10-AS1 ENSG00000235026 antisense	-3.45487	2.515342	2.39E-06	7.29E-05
AC092198.1 ENSG00000223486 lincRNA	4.784631	4.929138	2.40E-06	7.30E-05
LINC01266 ENSG00000224957 lincRNA	-2.67332	4.066865	2.45E-06	7.41E-05
LINC01568 ENSG00000258779 lincRNA	-2.68101	1.383992	2.47E-06	7.43E-05
AC100823.1 ENSG00000237061 sense_intronic	-2.47694	3.038956	2.63E-06	7.88E-05
AL954642.1 ENSG00000237419 lincRNA	-2.30121	1.76184	2.78E-06	8.28E-05
LINC02411 ENSG00000256022 lincRNA	-3.23915	4.365097	3.01E-06	8.91E-05
AC105446.1 ENSG00000227053 antisense	2.467547	6.629932	3.03E-06	8.92E-05
AC006487.1 ENSG00000249906 antisense	-2.04967	2.083544	3.04E-06	8.93E-05
AC005592.1 ENSG00000261757 lincRNA	-2.24727	2.294275	3.07E-06	8.99E-05
LINC01050 ENSG00000271216 lincRNA	4.704118	3.148739	3.09E-06	9.01E-05
AC093583.1 ENSG00000242048 processed_transcript	-2.37187	5.595476	3.11E-06	9.03E-05
FAM225A ENSG00000231528 lincRNA	2.319156	4.71592	3.12E-06	9.03E-05
LINC01644 ENSG00000218357 lincRNA	-2.78617	4.400627	3.12E-06	9.03E-05
AC104211.1 ENSG00000253177 lincRNA	-2.05443	2.074433	3.39E-06	9.65E-05
HOTAIR ENSG00000228630 antisense	3.412183	7.690524	3.46E-06	9.83E-05
AC092667.1 ENSG00000230393 antisense	-2.60005	2.368226	3.61E-06	0.000101
AC025470.2 ENSG00000250961 antisense	-2.15769	1.865593	3.67E-06	0.000103
LINC00536 ENSG00000249917 lincRNA	-2.69063	2.14108	4.22E-06	0.000117
LINC01695 ENSG00000236532 lincRNA	-2.11256	2.971097	4.41E-06	0.000121

FAM181A-AS1 ENSG00000258584 antisense	-3.01962	1.602879	4.54E-06	0.000124
LINC00514 ENSG00000262152 processed_transcript	2.56573	4.988154	4.54E-06	0.000124
AP001783.1 ENSG00000254607 antisense	-2.85607	2.248284	4.58E-06	0.000124
LINC02310 ENSG00000258808 lincRNA	-3.52477	1.964731	4.65E-06	0.000125
AC004988.1 ENSG00000203446 antisense	2.738934	3.439407	4.81E-06	0.00013
KRT7-AS ENSG00000257671 antisense	2.695374	7.994739	4.89E-06	0.000131
LINC01633 ENSG00000260976 lincRNA	2.899068	3.369745	4.89E-06	0.000131
AC011503.1 ENSG00000269289 antisense	-2.04469	3.178643	5.15E-06	0.000138
AL161457.1 ENSG00000229019 sense_intronic	-2.32585	2.474281	5.32E-06	0.000142
LINC02386 ENSG00000257756 lincRNA	-3.16096	1.320745	5.33E-06	0.000142
AL391845.2 ENSG00000233542 antisense	4.318306	6.280817	5.46E-06	0.000145
PLUT ENSG00000247381 antisense	2.144676	4.963601	5.79E-06	0.000152
AC022898.2 ENSG00000273792 sense_intronic	-2.47133	2.132291	5.79E-06	0.000152
AP001094.3 ENSG00000266149 antisense	-2.57645	2.605072	6.10E-06	0.000159
AF131216.3 ENSG00000255020 antisense	-2.51616	2.883091	6.46E-06	0.000167
AC103563.7 ENSG00000233850 antisense	-3.12933	4.612235	6.49E-06	0.000168
AC005089.1 ENSG00000274080 sense_intronic	2.631631	6.882177	6.81E-06	0.000175
LINC00299 ENSG00000236790 lincRNA	2.166026	5.527355	6.97E-06	0.000179
AC110491.1 ENSG00000261292 lincRNA	-2.74589	2.097082	7.01E-06	0.000179
LINC01234 ENSG00000249550 lincRNA	5.186791	7.870561	7.43E-06	0.000188
AP001065.1 ENSG00000228709 lincRNA	3.349618	7.351724	7.87E-06	0.000196
AL138737.1 ENSG00000236013 lincRNA	-3.26716	2.040517	7.90E-06	0.000196
AP003043.1 ENSG00000255548 antisense	-2.35401	1.479064	7.92E-06	0.000196
AP001065.3 ENSG00000277352 lincRNA	4.171415	3.657382	8.27E-06	0.000203
LINC00556 ENSG00000260131 antisense	-2.59466	1.845064	8.45E-06	0.000207
AL109615.3 ENSG00000237686 antisense	2.422611	7.564322	8.74E-06	0.000214
AC087588.2 ENSG00000274976 sense_intronic	2.053667	5.603726	9.21E-06	0.000223
AL445426.1 ENSG00000231246 lincRNA	-2.23371	2.843967	9.21E-06	0.000223
HOXC-AS3 ENSG00000251151 processed_transcript	3.18136	6.330357	9.67E-06	0.000232
LINC02081 ENSG00000267123 lincRNA	3.104624	5.252736	9.93E-06	0.000238
AL138789.1 ENSG00000233589 antisense	2.555596	5.291236	9.99E-06	0.000239
AC090192.2 ENSG00000253227 lincRNA	3.428606	4.104049	1.04E-05	0.000247
AC097359.3 ENSG00000271653 lincRNA	-2.24796	1.534698	1.05E-05	0.000248
AC006058.1 ENSG00000261786 lincRNA	-2.22468	4.6087	1.07E-05	0.000253
AC016229.1 ENSG00000267000 antisense	-2.77939	1.621935	1.11E-05	0.000262
AC123912.4 ENSG00000268555 lincRNA	-2.59697	3.445314	1.13E-05	0.000265
ALDH1L1-AS2 ENSG00000246022 antisense	-2.13471	2.559645	1.14E-05	0.000266
AC004817.3 ENSG00000269927 lincRNA	3.023374	3.688556	1.15E-05	0.000268
AC090912.3 ENSG00000273232 sense_intronic	3.121387	5.202763	1.15E-05	0.000268
LINC01146 ENSG00000258867 lincRNA	4.00566	5.706516	1.17E-05	0.000271
LINC00337 ENSG00000225077 lincRNA	2.103041	4.782342	1.25E-05	0.000286
AC009065.5 ENSG00000261123 sense_intronic	2.132497	8.511076	1.31E-05	0.000297
AC119424.1 ENSG00000243384 antisense	-2.23421	2.551654	1.38E-05	0.00031
LINC02072 ENSG00000225860 lincRNA	-2.079	1.823589	1.41E-05	0.000317
RNF157-AS1 ENSG00000267128 antisense	2.466482	6.22262	1.47E-05	0.000328
LINC02156 ENSG00000257906 lincRNA	2.543389	3.71361	1.48E-05	0.00033
CADM2-AS1 ENSG00000239519 antisense	-2.99977	2.122312	1.55E-05	0.000342

AC099518.1 ENSG00000260430 lincRNA	2.153342	4.576915	1.56E-05	0.000344
LINC00314 ENSG00000178457 lincRNA	-2.51119	1.528556	1.69E-05	0.00037
AC092447.8 ENSG00000261275 lincRNA	-2.4642	1.581014	1.73E-05	0.000376
AC087855.2 ENSG00000254302 lincRNA	-3.01709	1.988984	1.84E-05	0.000396
LINC01270 ENSG00000203999 lincRNA	2.015624	6.087615	1.85E-05	0.000397
LINC02351 ENSG00000277987 lincRNA	-2.40352	1.528422	1.87E-05	0.0004
AC106796.1 ENSG00000263237 antisense	-3.29334	1.587119	1.88E-05	0.0004
CADM3-AS1 ENSG00000225670 antisense	-2.22052	5.676617	1.90E-05	0.000403
AC008808.2 ENSG00000250360 lincRNA	-2.50827	3.052228	1.91E-05	0.000403
LINC01844 ENSG00000236714 lincRNA	-2.05618	2.928851	1.92E-05	0.000405
ABHD11-AS1 ENSG00000225969 antisense	2.50077	7.730405	1.93E-05	0.000405
ESRG ENSG00000265992 sense_intronic	-2.18347	3.347258	2.03E-05	0.000419
AL162408.1 ENSG00000229206 lincRNA	-2.40806	1.79882	2.05E-05	0.000421
LINC01672 ENSG00000228750 lincRNA	-2.08512	1.552579	2.05E-05	0.000421
AP005120.1 ENSG00000263952 antisense	-2.92938	1.486298	2.07E-05	0.000423
AL135924.2 ENSG00000235523 lincRNA	2.99291	4.275541	2.11E-05	0.000429
AL445471.2 ENSG00000261025 lincRNA	-2.31545	1.595091	2.22E-05	0.000448
LINC01833 ENSG00000259439 lincRNA	3.308864	8.688915	2.25E-05	0.000452
AL137024.1 ENSG00000244757 antisense	-2.00641	1.733996	2.32E-05	0.000463
AL512328.1 ENSG00000244137 antisense	-2.18092	5.79825	2.38E-05	0.000473
TMEM26-AS1 ENSG00000237233 antisense	2.434712	2.1297	2.41E-05	0.000478
AC078850.2 ENSG00000248802 lincRNA	-2.12405	1.618638	2.57E-05	0.000504
AC092691.1 ENSG00000239268 lincRNA	-3.28672	1.707657	2.63E-05	0.000511
AP003555.2 ENSG00000254605 lincRNA	2.421294	6.7319	2.64E-05	0.000512
AL365203.1 ENSG00000229656 lincRNA	2.604586	4.503777	2.70E-05	0.000516
LINC01843 ENSG00000251169 lincRNA	2.008483	7.011974	2.76E-05	0.000527
AC011374.1 ENSG00000260581 antisense	-2.74914	5.229428	2.88E-05	0.000544
AC004080.1 ENSG00000253308 lincRNA	4.098064	3.026403	2.94E-05	0.000555
AP000894.2 ENSG00000265179 processed_transcript	-2.29045	3.856112	2.97E-05	0.000559
Z98257.1 ENSG00000227066 lincRNA	3.70509	6.766816	3.01E-05	0.000565
AC007193.2 ENSG00000269124 antisense	-2.17096	4.013383	3.01E-05	0.000565
AC016735.1 ENSG00000224739 lincRNA	2.159727	6.369753	3.12E-05	0.000582
LINC00114 ENSG00000223806 lincRNA	3.768079	4.910293	3.13E-05	0.000583
NKILA ENSG00000278709 antisense	2.744405	7.964068	3.25E-05	0.000602
AL138962.1 ENSG00000228573 lincRNA	2.297615	2.659948	3.27E-05	0.000604
AC104827.1 ENSG00000250062 antisense	-2.09514	1.627084	3.34E-05	0.000616
LUCAT1 ENSG00000248323 lincRNA	2.623876	6.609004	3.76E-05	0.00068
LINC02029 ENSG00000241544 lincRNA	3.1402	2.896378	3.85E-05	0.000693
AL135903.2 ENSG00000234155 lincRNA	3.085221	8.091148	4.01E-05	0.000718
UMODL1-AS1 ENSG00000184385 sense_overlapping	-2.2434	1.902266	4.01E-05	0.000718
AC007834.1 ENSG00000249094 lincRNA	-2.55199	1.983065	4.15E-05	0.000735
AC027807.2 ENSG00000274128 sense_intronic	-2.03734	2.083237	4.25E-05	0.000747
AC091564.6 ENSG00000255410 antisense	-2.07518	1.675348	4.33E-05	0.000757
AC068491.2 ENSG00000229118 lincRNA	2.196781	2.933052	4.35E-05	0.000759
AL033397.1 ENSG00000231683 lincRNA	-2.87366	6.277057	4.41E-05	0.000765
DUXAP8 ENSG00000206195 processed_transcript	2.632232	8.771566	4.41E-05	0.000765
HOXB-AS4 ENSG00000242207 antisense	2.628364	6.558964	4.43E-05	0.000766

AC025580.1 ENSG00000259342 antisense	3.126378	7.51046	4.50E-05	0.000776
AL117355.1 ENSG00000257636 antisense	3.738477	5.033535	4.55E-05	0.000784
AC098613.1 ENSG00000223552 antisense	2.13511	6.449192	4.70E-05	0.000805
AC133644.2 ENSG00000273445 antisense	2.134158	4.478014	4.93E-05	0.000833
AC074389.1 ENSG00000205971 lincRNA	-2.1312	1.511388	4.96E-05	0.000835
LINC01775 ENSG00000267201 lincRNA	2.045242	3.447605	4.99E-05	0.00084
LINC00941 ENSG00000235884 lincRNA	3.025536	8.240385	5.07E-05	0.000848
AL138930.1 ENSG00000234425 antisense	-2.28477	3.591505	5.09E-05	0.00085
LINC01614 ENSG00000230838 lincRNA	3.289128	4.804698	5.11E-05	0.000851
MIR181A1HG ENSG00000229989 lincRNA	2.133521	3.14108	5.21E-05	0.000863
AC245100.6 ENSG00000238107 lincRNA	3.875548	4.351726	5.43E-05	0.000894
LINC01224 ENSG00000269416 lincRNA	2.748266	8.05658	5.55E-05	0.000907
AL445259.1 ENSG00000235535 antisense	-2.08123	1.718773	5.69E-05	0.00093
AC012313.4 ENSG00000268307 lincRNA	-2.55706	6.443834	5.71E-05	0.000932
LINC00483 ENSG00000167117 processed_transcript	2.611098	8.696673	5.84E-05	0.000947
LINC02014 ENSG00000248243 lincRNA	2.191175	5.707031	5.99E-05	0.00097
AC139491.1 ENSG00000248469 antisense	-2.47172	1.740696	6.62E-05	0.001057
AC025271.2 ENSG00000261265 lincRNA	-2.19318	1.880312	6.68E-05	0.001064
AC082651.4 ENSG00000244260 lincRNA	-2.54151	1.363262	6.69E-05	0.001064
AP003351.1 ENSG00000253585 lincRNA	3.255955	2.875006	6.81E-05	0.00108
AL390729.1 ENSG00000224167 lincRNA	2.623334	5.349246	6.93E-05	0.001094
CTD-2194D22.4 ENSG00000249326 antisense	-2.60649	1.490296	7.08E-05	0.001117
C15orf54 ENSG00000175746 lincRNA	2.061758	3.096047	7.15E-05	0.001126
AC007405.2 ENSG00000235934 antisense	2.876571	3.087962	7.25E-05	0.00114
VSTM2A-OT1 ENSG00000224223 sense_overlapping	-2.80691	1.509075	7.30E-05	0.001145
AC098864.1 ENSG00000177822 antisense	-2.50631	5.169191	7.34E-05	0.001147
AC004585.1 ENSG00000266088 lincRNA	2.618555	5.520403	7.44E-05	0.001156
LINC02086 ENSG00000244649 lincRNA	3.427527	9.750095	7.59E-05	0.001177
TSPEAR-AS2 ENSG00000182912 antisense	2.388104	7.721153	7.68E-05	0.001189
LINC00929 ENSG00000259150 lincRNA	-2.88644	1.370613	7.72E-05	0.001193
POU6F2-AS1 ENSG00000224122 antisense	-2.9986	3.900963	7.86E-05	0.001214
AC011297.1 ENSG00000273906 sense_intronic	-2.77165	4.541219	7.93E-05	0.001223
AC087491.1 ENSG00000214546 lincRNA	4.632724	7.008084	8.44E-05	0.001282
AC022898.1 ENSG00000259591 antisense	-2.11545	2.223563	8.44E-05	0.001282
AC097478.1 ENSG00000251095 antisense	4.199599	5.982516	8.52E-05	0.001291
LINC01114 ENSG00000234177 lincRNA	-2.37269	1.592837	8.95E-05	0.001349
AC009123.1 ENSG00000250685 antisense	-2.7984	3.704526	8.97E-05	0.00135
C3orf67-AS1 ENSG00000242428 antisense	-2.07235	2.108076	9.11E-05	0.001369
LINC00457 ENSG00000225179 lincRNA	-2.6028	1.49453	9.27E-05	0.001391
AC246817.1 ENSG00000253853 lincRNA	-2.01234	2.464789	9.40E-05	0.001404
AC012363.1 ENSG00000224789 antisense	2.136343	5.207238	9.53E-05	0.001419
AC008456.1 ENSG00000253687 antisense	3.010871	3.450853	0.000102	0.001501
AC113346.1 ENSG00000251144 lincRNA	4.407404	2.719485	0.000106	0.001563
LINC01470 ENSG00000249484 lincRNA	-2.11649	1.674622	0.000109	0.001591
AC131097.3 ENSG00000224272 antisense	2.951755	6.900076	0.000109	0.001594
UG0898H09 ENSG00000274956 lincRNA	-2.06654	4.957931	0.000109	0.001594
AC096888.1 ENSG00000244564 lincRNA	3.972079	1.695554	0.00011	0.001611

AL592146.1 ENSG00000230550 antisense	-2.10597	1.814499	0.000111	0.001616
AL731557.1 ENSG00000225936 antisense	-2.04626	2.024948	0.000112	0.001626
AL117382.1 ENSG00000226812 antisense	2.096799	7.19878	0.000113	0.001644
LINC01018 ENSG00000250056 lincRNA	-2.46985	5.214944	0.000114	0.001649
AC083809.1 ENSG00000277247 antisense	4.192698	5.554264	0.000114	0.001652
AC120498.4 ENSG00000260710 lincRNA	2.891011	4.347777	0.000119	0.001709
AC244100.3 ENSG00000275944 antisense	2.710081	3.534438	0.000121	0.001729
AC009084.1 ENSG00000265408 processed_transcript	-2.43516	1.697106	0.000123	0.00176
AL772337.3 ENSG00000234460 lincRNA	4.991513	3.584028	0.000124	0.001769
AF124730.1 ENSG00000224649 antisense	2.858203	3.650429	0.000132	0.001857
AC099482.1 ENSG00000260741 antisense	-2.32945	1.51682	0.000133	0.001874
AC090912.2 ENSG00000266850 antisense	2.081275	4.524927	0.000134	0.001888
AL109954.2 ENSG00000273838 lincRNA	3.016754	2.764037	0.000135	0.001896
LINC01987 ENSG00000267790 lincRNA	-2.12957	1.386497	0.000138	0.001928
LINC01100 ENSG00000242107 lincRNA	-3.19946	2.026397	0.000147	0.00202
AL596223.1 ENSG00000229261 antisense	2.026843	5.39822	0.000149	0.002042
LINC02268 ENSG00000248174 lincRNA	-2.17451	2.576942	0.00015	0.002053
LINC02407 ENSG00000257219 lincRNA	2.108694	3.418664	0.000166	0.002248
LINC02253 ENSG00000259485 lincRNA	3.881494	7.367267	0.000167	0.002252
AC012409.4 ENSG00000278146 lincRNA	-2.02019	1.608176	0.000167	0.002253
AC073323.1 ENSG00000232524 antisense	-2.28965	2.973302	0.000171	0.002296
C5orf66-AS1 ENSG00000249082 lincRNA	-2.19824	7.45591	0.000173	0.002324
LINC02437 ENSG00000248517 lincRNA	-2.41764	1.577964	0.000175	0.002339
LINC02279 ENSG00000258933 lincRNA	-2.28837	1.506503	0.000175	0.002343
LINC00871 ENSG00000258700 lincRNA	-2.81651	2.397856	0.000178	0.00238
SLCO4A1-AS1 ENSG00000232803 antisense	2.110682	8.688036	0.00018	0.002391
AP000424.1 ENSG00000253666 antisense	2.817925	4.028648	0.000186	0.002451
AL365181.3 ENSG00000272405 antisense	2.203996	10.89568	0.000188	0.002472
AC010307.3 ENSG00000249478 antisense	-2.15961	1.427243	0.000195	0.002549
AC122108.2 ENSG00000276121 lincRNA	2.257375	3.980085	0.000201	0.0026
AC090709.1 ENSG00000257191 antisense	4.065446	4.654622	0.000205	0.002637
AC067930.5 ENSG00000255050 antisense	2.07483	6.440414	0.000205	0.002637
AC079466.1 ENSG00000266976 lincRNA	6.074945	7.477244	0.000209	0.002676
PACRG-AS3 ENSG00000225683 antisense	-2.04778	2.304084	0.000211	0.00269
AC074327.1 ENSG00000228651 antisense	2.137686	3.102771	0.000214	0.002708
AC008440.3 ENSG00000232324 lincRNA	2.461607	5.051466	0.00022	0.002772
AP001995.2 ENSG00000270160 lincRNA	2.458782	2.611255	0.000223	0.002798
LINC01927 ENSG00000266312 lincRNA	-2.67785	1.925676	0.000224	0.002808
LINC01879 ENSG00000276397 lincRNA	-2.50192	1.439988	0.000227	0.002838
LINC00525 ENSG00000146666 antisense	2.209899	4.609658	0.000246	0.003035
LINC00554 ENSG00000260738 antisense	-2.41695	1.39437	0.000256	0.003144
AC011298.1 ENSG00000219159 lincRNA	3.616564	6.092575	0.000259	0.003167
KRBOX1-AS1 ENSG00000206552 antisense	-2.13634	1.341437	0.000259	0.003167
AP000553.1 ENSG00000272954 sense_intronic	2.040546	3.177127	0.00026	0.00318
PCDH9-AS2 ENSG00000228842 antisense	-2.82048	1.592122	0.000273	0.003313
AL606970.1 ENSG00000224417 sense_intronic	4.221979	5.079984	0.000284	0.003422
AL353693.1 ENSG00000229312 antisense	2.790142	3.503249	0.000284	0.003422

LINC01423 ENSG00000231231 lincRNA	-2.25003	1.817094	0.000288	0.003459
AC022148.2 ENSG00000267115 lincRNA	-2.07958	1.560183	0.000299	0.003585
AL008723.1 ENSG00000224050 lincRNA	2.110164	4.229589	0.0003	0.003587
AL359873.1 ENSG00000234593 lincRNA	-2.09013	1.638236	0.000304	0.003622
AC022784.1 ENSG00000248538 lincRNA	2.931559	7.280722	0.000305	0.003622
LINC00501 ENSG00000203645 lincRNA	2.259861	5.569859	0.000311	0.003681
AC015936.1 ENSG00000267334 lincRNA	-2.49909	1.28892	0.000318	0.00374
AL121578.3 ENSG00000259977 lincRNA	4.198661	2.969031	0.000321	0.003777
AL365356.5 ENSG00000242147 lincRNA	3.150985	5.090835	0.000322	0.003783
AL450345.1 ENSG00000227455 lincRNA	-2.51864	1.516514	0.000324	0.003803
LINC01343 ENSG00000237290 lincRNA	-2.68055	1.866483	0.000327	0.003814
AL356387.1 ENSG00000229283 antisense	-4.09138	2.866227	0.000329	0.003837
AF250324.2 ENSG00000272566 lincRNA	-2.4896	2.400189	0.000344	0.003972
AC007991.4 ENSG00000254287 antisense	3.412413	4.792178	0.000349	0.004021
OSTM1-AS1 ENSG00000225174 lincRNA	-2.16242	1.508756	0.000353	0.004046
PRSS30P ENSG00000172460 processed_transcript	2.280224	6.422892	0.000355	0.004056
BMPR1B-AS1 ENSG00000249599 lincRNA	-2.26655	1.655744	0.000357	0.004074
AC087242.1 ENSG00000255648 antisense	-2.45039	2.156846	0.000363	0.00413
C15orf59-AS1 ENSG00000260469 lincRNA	-2.49865	2.049454	0.000378	0.00427
AC104809.1 ENSG00000223991 antisense	-2.08036	2.657091	0.000379	0.00427
PTENP1-AS ENSG00000281128 antisense	-2.44521	2.136374	0.000401	0.004466
AC008109.1 ENSG00000266602 lincRNA	6.420552	3.938936	0.000408	0.00454
LINC01419 ENSG00000253898 lincRNA	7.868477	6.613319	0.000413	0.004579
AP002478.1 ENSG00000266401 antisense	2.614342	5.086608	0.000421	0.004644
AP000525.1 ENSG00000272872 sense_intronic	2.344545	4.782312	0.000421	0.004644
LINC01748 ENSG00000226476 lincRNA	2.484182	7.051695	0.000439	0.004814
AL365181.2 ENSG00000272068 lincRNA	2.421663	9.214931	0.000443	0.004848
AC079354.3 ENSG00000231903 antisense	2.068258	2.340308	0.000452	0.004917
AP001180.4 ENSG00000264843 antisense	-2.32246	1.673182	0.000465	0.005033
AC093390.1 ENSG00000232057 antisense	-2.29477	1.901521	0.000467	0.005045
LINC02474 ENSG00000228437 lincRNA	5.041641	6.116541	0.00047	0.005077
AC148477.3 ENSG00000256943 antisense	3.345607	3.069066	0.000477	0.005123
AC243967.2 ENSG00000268833 antisense	2.637969	4.376455	0.000491	0.005259
LINC02195 ENSG00000236481 lincRNA	2.195401	4.113329	0.000494	0.005287
LINC01331 ENSG00000248673 lincRNA	-2.30715	1.818627	0.000509	0.005437
AL022316.1 ENSG00000230107 lincRNA	2.538545	5.146985	0.000514	0.005464
AC122710.3 ENSG00000272071 lincRNA	2.543862	2.365139	0.000517	0.005474
AP000439.2 ENSG00000255774 lincRNA	2.592152	6.935788	0.000519	0.005486
AC112721.2 ENSG00000222032 lincRNA	2.178772	2.721209	0.000524	0.005524
AL353747.2 ENSG00000228648 lincRNA	2.716514	2.93297	0.000532	0.0056
AC106712.1 ENSG00000241280 lincRNA	3.036902	2.797315	0.00055	0.005757
AC079062.1 ENSG00000263711 processed_transcript	5.599066	7.284411	0.000559	0.00582
LINC00944 ENSG00000256128 lincRNA	2.12592	5.689924	0.000559	0.00582
AC027698.1 ENSG00000253116 lincRNA	-2.13113	2.808626	0.000565	0.005868
AC139720.1 ENSG00000249806 lincRNA	2.310617	4.094329	0.000573	0.00593
AC004801.5 ENSG00000258203 lincRNA	-2.26609	1.680668	0.000583	0.005997
AC133565.1 ENSG00000261810 antisense	-2.20229	1.470619	0.000591	0.006071

AP001269.2 ENSG00000267079 lincRNA	-2.00999	1.491252	0.000596	0.006102
AC068580.2 ENSG00000230834 lincRNA	3.124563	4.843499	0.000602	0.00615
AC010967.1 ENSG00000228033 lincRNA	3.165334	2.451982	0.000622	0.006307
AL357060.1 ENSG00000230533 lincRNA	2.796426	3.964523	0.000622	0.006307
AL445490.2 ENSG00000233975 lincRNA	2.429438	1.947974	0.000632	0.006385
AL354984.2 ENSG00000225708 lincRNA	-2.04655	1.348872	0.000643	0.006462
LINC02119 ENSG00000248461 lincRNA	5.761263	4.078329	0.00065	0.0065
AC022784.8 ENSG00000279949 lincRNA	2.710585	3.998015	0.000661	0.0066
AP001625.3 ENSG00000239930 sense_intronic	2.482958	1.926496	0.000663	0.006608
AC007991.2 ENSG00000253838 sense_intronic	3.56472	4.074596	0.000665	0.006614
LINC01727 ENSG00000279082 lincRNA	2.723174	2.017337	0.000666	0.006623
LINC02365 ENSG00000254233 lincRNA	3.34702	6.232784	0.000682	0.006749
CCDC144NL-AS1 ENSG00000233098 antisense	3.147195	8.20153	0.000684	0.006754
AL391152.1 ENSG00000258592 lincRNA	2.354141	4.37752	0.000706	0.006937
AC010547.2 ENSG00000260015 sense_intronic	3.046931	5.569213	0.00075	0.007313
LINC01068 ENSG00000227676 lincRNA	2.159991	3.985897	0.000752	0.007325
AC005550.3 ENSG00000237070 antisense	3.068968	8.544781	0.000758	0.007377
CTD-3080P12.3 ENSG00000249201 antisense	3.24188	5.492221	0.000805	0.007685
AC034199.1 ENSG00000250274 lincRNA	2.203504	3.491692	0.00081	0.007713
AL122008.3 ENSG00000233332 antisense	-2.26788	1.827002	0.000813	0.007735
AC010328.1 ENSG00000267943 lincRNA	5.183123	7.478615	0.000813	0.007735
AC131097.1 ENSG00000215023 antisense	3.103973	4.837425	0.000819	0.007774
AC244100.4 ENSG00000278690 lincRNA	2.947168	2.082612	0.000827	0.007835
LINC01304 ENSG00000237401 lincRNA	-2.45252	1.54037	0.000829	0.00785
LINC2194 ENSG00000260264 lincRNA	-2.37065	1.303624	0.000835	0.007896
LINC00524 ENSG00000259023 lincRNA	3.377158	3.111877	0.000836	0.007898
AC012404.1 ENSG00000259481 antisense	-2.13969	1.857303	0.00085	0.008004
AL049836.1 ENSG00000258919 lincRNA	2.120181	4.551403	0.000852	0.008015
LINC00494 ENSG00000235621 lincRNA	2.278145	6.844509	0.000857	0.00806
FOXCUT ENSG00000280916 lincRNA	2.848696	2.943	0.000867	0.008108
AC034213.1 ENSG00000250509 lincRNA	2.316067	2.69857	0.000877	0.008186
AL157400.2 ENSG00000232936 antisense	2.274377	2.324275	0.000879	0.008186
LINC02254 ENSG00000259664 lincRNA	3.204785	5.864725	0.000886	0.008233
AC026765.1 ENSG00000257517 lincRNA	-2.34137	1.361413	0.000898	0.008315
AL365226.2 ENSG00000237643 lincRNA	3.825046	8.587432	0.000912	0.008425
DIAPH3-AS2 ENSG00000223815 antisense	2.056313	2.048823	0.000948	0.008708
AC138904.1 ENSG00000246465 lincRNA	2.320565	5.138636	0.00096	0.008799
AC244230.1 ENSG00000279458 processed_transcript	-2.9079	2.569547	0.000962	0.008804
AC099509.1 ENSG00000249746 lincRNA	2.601881	4.162282	0.000979	0.008933
Z99289.2 ENSG00000270661 lincRNA	2.164443	3.129381	0.00101	0.009136
LINC01163 ENSG00000280953 lincRNA	4.533023	4.103274	0.001035	0.0093
AC002464.1 ENSG00000260188 antisense	-2.14507	1.605958	0.001055	0.009457
LINC02340 ENSG00000275294 lincRNA	2.185174	5.093956	0.001091	0.009707
LINC01511 ENSG00000250584 lincRNA	3.712142	2.94629	0.001094	0.009724
MIR663AHG ENSG00000227195 processed_transcript	3.124143	4.204932	0.001107	0.009822
LINC02408 ENSG00000203585 lincRNA	2.304185	3.149055	0.001121	0.00991

CMP, counts per million; FC, fold change; FDR, false discovery rate; lncRNAs, long non-coding RNAs.

Table SII. Differentially expressed mRNAs in esophageal adenocarcinoma.

Gene	Log FC	Log CPM	P-value	FDR
VIP	-6.5919	1.614204	6.28x10 ⁻⁵⁹	1.16x10 ⁻⁵⁴
GPR155	-4.63831	6.037005	1.26E-51	1.17E-47
AQP4	-8.53277	3.548184	5.69E-39	3.52E-35
LRP1B	-4.39562	-0.67025	6.62E-38	2.58E-34
ESRRB	-5.04916	1.226377	6.95E-38	2.58E-34
CKM	-6.4464	2.579108	2.20E-37	6.80E-34
TMED6	-4.39222	2.257823	3.85E-35	1.02E-31
RGMB	-2.51156	4.424917	2.03E-34	4.70E-31
SIGLEC11	-5.52256	1.705237	2.74E-34	5.65E-31
CKMT2	-3.99527	1.974682	1.23E-33	2.27E-30
PEBP4	-5.97669	-0.13117	2.78E-33	4.69E-30
CKB	-3.91103	7.096268	6.46E-33	9.97E-30
HRH2	-4.16644	1.971655	1.49E-32	2.13E-29
FNDC5	-4.18325	1.759061	1.83E-32	2.42E-29
C22orf23	-3.2791	0.60816	2.71E-32	3.35E-29
SLC25A4	-2.38589	4.816567	3.34E-32	3.87E-29
TRIM74	-3.48378	-1.40446	4.81E-32	5.25E-29
ADCYAP1R1	-5.1714	0.334027	4.38E-31	4.51E-28
DPT	-4.74386	3.810918	5.26E-31	5.13E-28
SLC7A14	-4.87124	-1.67826	1.78E-30	1.65E-27
ADHFE1	-3.90437	1.560108	1.99E-30	1.76E-27
SLC1A2	-4.56383	2.844349	4.56E-30	3.84E-27
PLIN4	-4.05273	3.728692	5.14E-30	4.14E-27
SLC26A7	-5.09077	2.201606	5.34E-29	4.12E-26
DNER	-5.72321	3.136631	9.24E-29	6.85E-26
PHOX2B	-6.22729	-3.3962	1.88E-28	1.34E-25
CYP2C8	-4.22753	0.824573	2.29E-28	1.57E-25
MFSD4A	-4.45835	6.608041	2.86E-28	1.90E-25
PTX4	-4.49364	-1.85471	4.43E-28	2.83E-25
TCEAL6	-4.94476	-2.98005	4.73E-28	2.92E-25
PTGER3	-4.69392	4.208178	5.26E-28	3.15E-25
SLC2A4	-3.35015	2.430848	8.50E-28	4.92E-25
SORBS1	-3.12842	6.777313	1.03E-27	5.79E-25
RBPM52	-3.56772	3.492153	2.10E-27	1.15E-24
KCNMA1	-4.47241	5.232943	2.96E-27	1.57E-24
MTURN	-2.25246	5.200055	3.20E-27	1.61E-24
LEPR	-3.4117	4.946679	3.20E-27	1.61E-24
PHOX2A	-4.84721	-3.26927	3.46E-27	1.69E-24
CPB1	-4.52507	-2.12748	4.43E-27	2.11E-24
FHL1	-3.63613	6.197114	6.31E-27	2.92E-24
SYNM	-4.25783	6.410393	6.97E-27	3.15E-24
TNNT3	-5.46376	-0.20812	1.58E-26	6.95E-24
CD300LG	-4.32465	-1.71563	1.62E-26	6.97E-24
IGFBP6	-3.8561	5.051651	2.39E-26	1.01E-23

COL2A1	-6.51535	3.543227	5.73E-26	2.36E-23
NR5A1	-5.11127	-0.97859	7.19E-26	2.84E-23
KCNA5	-4.11632	0.866141	9.18E-26	3.54E-23
PRIMA1	-4.32666	2.752089	1.48E-25	5.60E-23
TACR2	-3.68621	2.302008	6.26E-25	2.32E-22
ESRRG	-5.47956	4.318262	8.20E-25	2.98E-22
CLCNKA	-4.65212	0.677041	8.41E-25	3.00E-22
PLD5	-4.27991	-2.34164	9.01E-25	3.15E-22
C11orf87	-6.16547	0.521248	9.64E-25	3.31E-22
C2orf40	-5.48525	2.380544	1.07E-24	3.60E-22
DUSP19	-2.71302	2.985825	1.25E-24	4.15E-22
GLUL	-2.65115	9.160226	1.57E-24	5.12E-22
ALKAL2	-3.57276	0.27164	1.99E-24	6.36E-22
ANGPTL3	-3.93259	1.068011	2.55E-24	8.00E-22
GBGT1	-3.24571	2.898197	2.99E-24	9.24E-22
COL4A6	-3.87743	3.923007	3.39E-24	1.03E-21
SCUBE2	-3.86057	3.157406	4.64E-24	1.39E-21
PM20D1	-3.13461	0.157868	7.33E-24	2.16E-21
DPP6	-4.52462	-0.30451	8.25E-24	2.39E-21
FRRS1L	-4.52909	0.669958	1.16E-23	3.25E-21
LIM2	-6.29527	-2.38085	1.33E-23	3.68E-21
SLC5A7	-5.09836	-1.14486	1.68E-23	4.58E-21
CARTPT	-6.53049	-1.75249	1.70E-23	4.58E-21
GHR	-3.43606	2.279034	4.88E-23	1.29E-20
DIRC3	-3.36803	-1.31395	6.38E-23	1.65E-20
B3GAT1	-5.08422	3.957122	6.41E-23	1.65E-20
CNTN2	-3.55984	-0.75379	9.15E-23	2.32E-20
NBPF12	-2.43586	4.401969	9.36E-23	2.34E-20
NOS1	-4.17758	0.692695	1.10E-22	2.71E-20
ARHGEF37	-2.14146	4.719156	1.56E-22	3.82E-20
PIRT	-4.18521	-1.6498	1.95E-22	4.70E-20
PLIN5	-3.5772	2.069951	1.99E-22	4.73E-20
KLF15	-3.81516	2.778141	2.28E-22	5.35E-20
GPER1	-3.81556	3.518602	2.61E-22	6.04E-20
PCDH9	-4.66565	2.508943	2.84E-22	6.49E-20
NOBOX	-6.31878	-2.98169	3.00E-22	6.77E-20
NTS	-6.29391	5.086894	3.04E-22	6.78E-20
ADAMTS8	-3.76205	2.292966	3.20E-22	7.07E-20
ETNPPL	-6.58432	2.253071	4.68E-22	1.02E-19
RYR2	-3.5593	3.179092	4.94E-22	1.07E-19
LIFR	-3.46783	5.703771	5.88E-22	1.25E-19
ZBTB16	-4.1734	3.682488	7.47E-22	1.57E-19
HDC	-3.85487	1.934788	7.95E-22	1.66E-19
MYH11	-4.30573	9.806406	9.09E-22	1.87E-19
SYNPO2	-3.81801	6.987477	9.46E-22	1.93E-19
RANBP3L	-4.51908	0.375736	9.57E-22	1.93E-19
XYLT2	-2.18268	5.912112	2.55E-21	5.02E-19

GNMT	-3.39414	0.491383	2.98E-21	5.81E-19
LDB3	-3.33928	2.019771	3.12E-21	6.02E-19
VIPR2	-4.14577	0.739691	3.40E-21	6.50E-19
TRIM73	-2.79688	-0.84905	3.85E-21	7.28E-19
EDARADD	-3.17429	1.04421	3.93E-21	7.35E-19
GUCA1C	-8.03113	-1.42297	5.10E-21	9.46E-19
KLHL41	-3.04053	-0.50393	5.49E-21	1.01E-18
GALR1	-4.19758	-2.4333	5.82E-21	1.06E-18
GUCA2B	-5.39804	0.715316	7.96E-21	1.43E-18
ERO1B	-3.05031	5.165782	1.06E-20	1.89E-18
ASB11	-6.24341	1.289144	1.12E-20	1.98E-18
ATP4B	-8.45133	8.154798	1.27E-20	2.23E-18
GRIA4	-4.75159	1.337688	3.73E-20	6.46E-18
SLC7A3	-4.99774	-1.36891	4.22E-20	7.25E-18
C8orf46	-3.55435	-0.96277	4.54E-20	7.72E-18
ASAH2	-3.10693	2.067157	4.60E-20	7.76E-18
CCBE1	-3.80916	1.434929	4.66E-20	7.78E-18
TDRD15	-5.77048	-2.93995	4.71E-20	7.79E-18
ATP1A2	-4.42216	3.05427	5.17E-20	8.48E-18
ASTN2	-2.35697	2.080697	7.50E-20	1.22E-17
P2RY14	-3.33591	2.516855	8.14E-20	1.31E-17
PSCA	-4.85271	8.337521	8.36E-20	1.34E-17
CNN1	-3.73425	5.740044	9.59E-20	1.52E-17
FAT3	-4.23148	1.423669	1.02E-19	1.60E-17
CNTD1	-2.47201	1.883776	1.26E-19	1.96E-17
ITGA8	-3.40721	5.075587	1.36E-19	2.11E-17
ACACB	-2.02325	5.368012	1.89E-19	2.90E-17
LMOD1	-3.64098	5.644887	2.08E-19	3.15E-17
MYLK	-2.98107	7.393536	2.34E-19	3.51E-17
GIF	-7.57904	8.563636	2.35E-19	3.51E-17
ZNF385B	-4.46955	2.089456	2.63E-19	3.88E-17
SORCS3	-4.46586	-2.95354	2.63E-19	3.88E-17
VEGFD	-3.63186	0.195191	2.70E-19	3.94E-17
FLNC	-3.4442	6.635124	2.75E-19	3.98E-17
SMCP	-6.16989	-4.18184	2.79E-19	4.02E-17
C8orf88	-3.12708	-0.52192	3.30E-19	4.70E-17
CDH2	-4.2081	3.002538	4.54E-19	6.38E-17
PNPLA1	-3.41139	0.297494	4.88E-19	6.80E-17
KCNQ5	-3.50072	0.002832	6.95E-19	9.61E-17
MICALL1	-2.11139	6.425659	7.41E-19	1.02E-16
RYR3	-2.26838	1.353309	9.04E-19	1.23E-16
ACSM6	-3.20681	-2.14134	1.10E-18	1.48E-16
PYGM	-2.99714	1.299948	1.98E-18	2.66E-16
ATP4A	-8.14584	9.075239	2.17E-18	2.89E-16
CGNL1	-2.97707	4.544087	3.05E-18	4.04E-16
MT1X	-2.45415	5.032439	3.20E-18	4.21E-16
RIMS4	-4.70671	1.017961	3.61E-18	4.71E-16

AC011498.5	-3.40904	-0.94059	4.24E-18	5.49E-16
CNKSR2	-4.24908	0.661221	5.02E-18	6.42E-16
ACADL	-3.91378	0.250885	5.20E-18	6.60E-16
NECAB1	-3.06413	1.127518	5.34E-18	6.73E-16
PMP2	-3.88334	-1.89318	5.55E-18	6.95E-16
C3orf18	-2.33588	1.635548	5.58E-18	6.95E-16
HSPB7	-3.69229	3.613571	6.54E-18	8.08E-16
SYT9	-3.60091	-2.19025	6.67E-18	8.18E-16
FAM19A2	-2.51326	0.620376	7.37E-18	8.99E-16
ATP8A2	-3.29287	0.810517	8.36E-18	1.01E-15
PPP2R3A	-2.37549	4.350308	1.04E-17	1.25E-15
ANGPTL1	-3.52503	2.226042	1.18E-17	1.41E-15
RBPJL	-3.68659	-1.0984	1.40E-17	1.65E-15
ACTG2	-3.45336	6.997841	1.58E-17	1.84E-15
PTCHD1	-3.56553	1.291628	1.89E-17	2.17E-15
GRIP2	-3.32881	2.471758	1.97E-17	2.25E-15
NPTX1	-4.37524	1.12435	2.15E-17	2.45E-15
PKNOX2	-2.92053	0.503376	2.41E-17	2.73E-15
KCNE2	-5.47872	4.408423	2.46E-17	2.76E-15
IP6K3	-3.22118	-0.67955	2.52E-17	2.82E-15
GPT2	-2.39841	6.244689	2.76E-17	3.07E-15
CUX2	-4.47739	1.294878	3.03E-17	3.35E-15
DAAM2	-2.59161	4.508885	3.55E-17	3.87E-15
PGM5	-3.37056	4.097122	3.57E-17	3.87E-15
SERTM1	-5.50448	-3.17814	3.79E-17	4.09E-15
FKBP5	-2.53921	6.890971	4.20E-17	4.50E-15
RCAN2	-2.79399	4.643701	4.79E-17	5.10E-15
ALDH3A1	-3.83478	6.888276	5.40E-17	5.72E-15
MYOC	-6.12912	3.759095	5.54E-17	5.83E-15
PPP1R12B	-2.28267	7.007638	1.10E-16	1.14E-14
TMCO5A	-4.25306	-3.87772	1.17E-16	1.21E-14
COL19A1	-3.8882	-0.69287	1.27E-16	1.31E-14
RPRM	-4.29556	0.19758	1.46E-16	1.49E-14
KCNMB1	-2.93885	3.50226	1.54E-16	1.56E-14
JPH2	-3.05882	3.514773	1.57E-16	1.58E-14
PRRG3	-3.09335	1.98894	1.88E-16	1.89E-14
KRTAP3-2	-7.0031	0.847974	1.97E-16	1.96E-14
MYRIP	-3.31119	3.184801	2.07E-16	2.05E-14
MAMDC2	-3.6682	3.087444	2.20E-16	2.17E-14
C14orf180	-4.53476	-2.58396	2.22E-16	2.18E-14
BVES	-2.90824	2.722436	2.29E-16	2.23E-14
NEFL	-4.64581	1.861403	2.69E-16	2.61E-14
KIAA2022	-4.25645	0.748238	2.73E-16	2.63E-14
FRMD1	-4.4339	2.893792	2.94E-16	2.83E-14
PHYHIP	-3.00449	1.96853	3.12E-16	2.98E-14
FGFBP2	-3.63421	-0.29821	3.14E-16	2.98E-14
TRPC5	-3.29296	-3.08119	4.30E-16	4.07E-14

PDIA2	-4.44178	4.63353	4.51E-16	4.24E-14
FLNA	-2.46658	10.48549	5.37E-16	5.00E-14
SV2C	-3.41101	-0.28249	6.29E-16	5.83E-14
CLIC6	-3.60484	6.509751	6.35E-16	5.86E-14
GKN1	-7.86053	9.360123	6.46E-16	5.90E-14
ADAMTSL1	-2.8831	2.875926	6.46E-16	5.90E-14
C16orf89	-4.75198	3.786613	6.50E-16	5.91E-14
RPS6KA6	-3.55981	0.830346	6.74E-16	6.10E-14
LYVE1	-3.08338	2.834421	7.42E-16	6.67E-14
PTX3	-3.18067	0.668932	7.94E-16	7.11E-14
GSTA3	-5.51123	-1.27471	8.23E-16	7.34E-14
C14orf132	-2.80204	3.91842	8.27E-16	7.34E-14
PII6	-4.61067	3.349178	1.01E-15	8.81E-14
HSPB6	-3.68238	5.175421	1.01E-15	8.81E-14
GHRL	-4.74997	4.681946	1.01E-15	8.81E-14
FAM107A	-3.05627	3.593195	1.31E-15	1.13E-13
GNAL	-2.51038	3.779039	1.39E-15	1.19E-13
SBSPON	-2.73819	3.367304	1.41E-15	1.20E-13
FLG	-4.66626	3.840502	2.12E-15	1.78E-13
CLEC3B	-2.70451	1.897336	2.31E-15	1.93E-13
TNS1	-2.60035	8.077354	2.34E-15	1.95E-13
TMOD1	-2.7769	2.549871	2.39E-15	1.98E-13
ELL2	-2.00836	6.322545	2.43E-15	2.00E-13
BHLHA15	-3.1047	1.69322	2.53E-15	2.08E-13
MYL9	-2.64802	7.601455	3.50E-15	2.85E-13
SLC7A8	-2.15502	5.889792	4.30E-15	3.48E-13
CT62	-2.77631	-1.86155	4.55E-15	3.66E-13
PLN	-3.49691	3.621459	4.69E-15	3.74E-13
GKN2	-6.76588	5.952495	5.87E-15	4.67E-13
PCDH11Y	-3.79442	-3.12907	7.26E-15	5.73E-13
SLC16A7	-3.07643	5.063632	9.34E-15	7.25E-13
C14orf37	-2.2429	1.856673	1.08E-14	8.24E-13
LMOD2	-3.10227	-3.18941	1.16E-14	8.84E-13
GFRA1	-3.2819	3.604437	1.17E-14	8.84E-13
AR	-2.77481	1.907871	1.40E-14	1.05E-12
DES	-4.06292	7.735331	1.71E-14	1.28E-12
FSHR	-3.72111	-4.32274	1.99E-14	1.48E-12
DMD	-2.31383	4.709966	2.10E-14	1.56E-12
LIPJ	-4.1735	-2.63373	2.46E-14	1.81E-12
ALK	-2.79281	-1.9756	2.49E-14	1.82E-12
PCSK2	-3.77328	-0.72326	2.61E-14	1.91E-12
COL4A5	-2.47993	4.833123	2.96E-14	2.15E-12
SCUBE1	-2.66853	3.40309	3.26E-14	2.36E-12
SLC5A5	-4.22936	4.248936	3.60E-14	2.59E-12
HPSE2	-3.57287	1.356129	3.68E-14	2.63E-12
AC026464.1	-4.01145	-4.07729	3.82E-14	2.72E-12
ADGRD1	-3.19293	3.651922	3.94E-14	2.80E-12

WNK3	-2.41647	0.36644	4.17E-14	2.95E-12
GSTM5	-2.80668	1.368203	5.44E-14	3.81E-12
FAM180B	-3.19621	-2.88779	5.45E-14	3.81E-12
KCNJ15	-3.36174	4.027288	5.66E-14	3.94E-12
SYT10	-4.19337	-3.22497	5.82E-14	4.04E-12
MAB21L1	-3.12987	-2.15227	6.00E-14	4.15E-12
HLF	-2.74409	3.007715	6.70E-14	4.61E-12
CYFIP2	-2.23312	5.323428	6.75E-14	4.63E-12
TNXB	-3.08516	6.357402	6.78E-14	4.64E-12
GRIA3	-2.58916	-0.30423	7.20E-14	4.90E-12
MROH2A	-3.76034	-0.19394	8.69E-14	5.90E-12
FGL2	-2.96339	5.634021	9.32E-14	6.31E-12
PRKN	-2.46837	1.303803	1.05E-13	7.10E-12
FAM129A	-2.35972	6.18046	1.13E-13	7.56E-12
METTL7A	-2.27058	6.247797	1.17E-13	7.83E-12
CASQ2	-3.76748	2.312616	1.20E-13	7.98E-12
TMEM252	-3.35546	-0.68411	1.20E-13	7.98E-12
SH3GL2	-4.98913	1.195057	1.68E-13	1.11E-11
PLP1	-4.10587	0.937877	1.80E-13	1.19E-11
GPR149	-5.09206	-3.58567	1.98E-13	1.30E-11
SMIM1	-2.3017	-0.25554	2.12E-13	1.39E-11
RSPO2	-3.8811	0.761603	2.75E-13	1.78E-11
PRKAR2B	-2.36773	3.548478	2.90E-13	1.87E-11
NCAM1	-3.35355	3.17729	2.92E-13	1.88E-11
NEGR1	-2.56843	3.226364	2.97E-13	1.90E-11
HIPK4	-2.13088	-1.82977	3.08E-13	1.97E-11
PRKACB	-2.00481	5.630808	3.17E-13	2.02E-11
GFRA2	-2.61913	-0.23931	3.31E-13	2.10E-11
NMRK2	-3.481	-2.79235	3.46E-13	2.19E-11
EFCAB1	-2.62842	-2.61728	3.56E-13	2.25E-11
APOBEC2	-2.98421	1.132625	3.78E-13	2.37E-11
LRRC52	-4.29515	-4.47526	4.35E-13	2.71E-11
PGLYRP2	-3.20398	-1.66105	4.44E-13	2.76E-11
TSGA10IP	-3.20207	-3.24029	5.39E-13	3.33E-11
LRRC17	-2.89199	1.917094	5.48E-13	3.37E-11
GRIK5	-2.71362	1.392153	5.71E-13	3.50E-11
EPHA5	-4.35265	-0.55474	5.78E-13	3.52E-11
PDE1C	-2.16333	2.073782	5.80E-13	3.53E-11
ZNF471	-2.53765	1.423358	5.87E-13	3.56E-11
ASB5	-5.09229	0.773219	6.42E-13	3.87E-11
PTPRS	-2.2933	5.694286	6.53E-13	3.93E-11
ST6GAL2	-3.37638	0.291067	6.96E-13	4.17E-11
DNAJB5	-2.07053	3.137352	7.61E-13	4.53E-11
TMEM132C	-3.82985	-0.66598	8.52E-13	5.03E-11
CCKBR	-5.60315	3.097798	8.80E-13	5.18E-11
SLC4A1	-3.0966	-1.58211	9.22E-13	5.39E-11
XKR4	-3.38209	-0.21729	1.02E-12	5.96E-11

MT1G	-3.26949	6.357163	1.08E-12	6.28E-11
GSTM2	-2.18046	3.192211	1.13E-12	6.54E-11
HOMER2	-2.80987	4.934296	1.19E-12	6.86E-11
KL	-2.73266	2.114674	1.54E-12	8.81E-11
ECT2	2.299261	7.025992	1.63E-12	9.27E-11
SLC9A4	-4.09652	4.406088	1.71E-12	9.69E-11
CKS2	2.202269	5.340289	1.73E-12	9.78E-11
TRIM50	-5.23502	2.786171	1.75E-12	9.87E-11
CHRM2	-3.86591	0.258921	1.96E-12	1.10E-10
ADGRG2	-2.37879	1.644595	2.02E-12	1.13E-10
SEC14L5	-2.56911	0.553889	2.04E-12	1.14E-10
MAP7D2	-3.79197	2.491899	2.09E-12	1.17E-10
DCAF12L1	-5.82121	-1.16665	2.11E-12	1.17E-10
RNLS	-2.75445	1.444613	2.12E-12	1.17E-10
ETNK2	-2.70344	2.893689	2.21E-12	1.22E-10
GDF9	-2.29047	-0.29319	2.28E-12	1.25E-10
RIMS3	-2.4185	3.0747	2.53E-12	1.38E-10
TMEM100	-2.81581	0.640137	2.64E-12	1.44E-10
ASTN1	-3.66133	-1.04768	2.69E-12	1.46E-10
C6orf10	-3.98062	-2.46778	3.10E-12	1.67E-10
AFF3	-2.739	2.468492	3.19E-12	1.72E-10
ADRA1A	-2.95596	-1.32853	3.48E-12	1.86E-10
ASPA	-2.84221	0.95941	3.50E-12	1.86E-10
METTTL24	-2.73329	-0.46955	3.56E-12	1.89E-10
PBLD	-2.03638	4.550808	3.61E-12	1.91E-10
MYH13	-3.01664	-1.62682	3.66E-12	1.94E-10
GPRASP1	-2.11532	2.401795	4.42E-12	2.32E-10
PDZRN4	-3.87108	0.914243	4.54E-12	2.38E-10
C7	-3.85239	5.25522	4.83E-12	2.53E-10
TPX2	2.359156	6.897438	5.04E-12	2.63E-10
PGA5	-7.61365	9.681232	5.10E-12	2.65E-10
MSRB3	-2.29676	4.733801	5.65E-12	2.93E-10
PLAUR	2.408071	6.265413	5.79E-12	3.00E-10
ADCY5	-2.99777	4.48482	6.78E-12	3.50E-10
ATP13A5	-3.113	-1.30708	7.13E-12	3.65E-10
MYBPC3	-2.61753	0.253752	7.43E-12	3.79E-10
ESM1	4.698905	3.370166	7.45E-12	3.79E-10
KRT1	-5.18162	4.729806	7.52E-12	3.82E-10
AKAP6	-2.16504	2.772754	7.80E-12	3.95E-10
AURKA	2.264335	5.350085	8.09E-12	4.09E-10
NOVA1	-2.637	1.247931	8.84E-12	4.43E-10
RDH12	-3.19111	2.110162	8.99E-12	4.49E-10
SNAP91	-3.67521	-1.3681	9.07E-12	4.52E-10
SCNN1G	-3.81619	2.489731	9.54E-12	4.74E-10
DLGAP2	-2.818	-2.29873	9.63E-12	4.77E-10
KCTD8	-4.30967	-1.0896	1.00E-11	4.96E-10
SMYD1	-3.67614	-1.90215	1.04E-11	5.14E-10

ALOX12	-3.06666	3.649773	1.06E-11	5.23E-10
PDK4	-2.767	7.051956	1.07E-11	5.24E-10
GPR150	-2.54932	-0.80742	1.14E-11	5.57E-10
NLRP13	-4.4576	-3.86843	1.19E-11	5.81E-10
SMIM11A	-2.54493	-3.59682	1.23E-11	5.95E-10
MASP1	-2.71906	1.960269	1.24E-11	6.01E-10
C1QTNF3	-2.18889	2.140284	1.25E-11	6.05E-10
PDZD4	-2.61968	1.171367	1.27E-11	6.12E-10
KCNJ16	-4.55213	3.580513	1.34E-11	6.42E-10
SYNPO2L	-3.07464	0.252265	1.38E-11	6.60E-10
ASCL4	-3.25517	-4.40687	1.40E-11	6.67E-10
PDGFD	-2.27417	4.051524	1.47E-11	7.02E-10
CNTN1	-3.60479	3.130166	1.49E-11	7.08E-10
MT1M	-2.95695	2.627051	1.52E-11	7.20E-10
PPP1R1A	-3.25934	0.495224	1.65E-11	7.78E-10
LINGO2	-3.95678	-1.24949	1.68E-11	7.92E-10
HSPA2	-2.10861	4.23338	1.69E-11	7.95E-10
NGFR	-3.06108	2.830378	1.70E-11	8.00E-10
STON1	-2.33558	3.714646	1.80E-11	8.44E-10
NUDT10	-2.90493	-1.59956	1.82E-11	8.50E-10
NRXN1	-3.51062	0.55031	1.94E-11	9.05E-10
NR2E3	-2.24578	-1.43558	2.02E-11	9.39E-10
TRPM3	-3.10093	-0.42216	2.06E-11	9.57E-10
GNG7	-2.26729	2.658364	2.08E-11	9.60E-10
CLCNKB	-3.11882	-1.1033	2.23E-11	1.02E-09
UPK1A	-4.04118	1.485878	2.23E-11	1.02E-09
MICU3	-2.43537	1.39583	2.26E-11	1.03E-09
PNCK	-2.65034	0.502469	2.34E-11	1.07E-09
GNAO1	-2.86008	3.232233	2.62E-11	1.18E-09
GLP2R	-2.79174	-0.372	2.68E-11	1.21E-09
SORCS1	-3.69857	0.036922	2.77E-11	1.25E-09
AKR7A3	-2.38261	5.83816	2.79E-11	1.25E-09
STUM	-3.21916	1.884398	3.20E-11	1.42E-09
VSIG2	-2.87515	5.925552	3.39E-11	1.50E-09
PAIP2B	-2.72835	3.519956	3.45E-11	1.52E-09
NUF2	2.373117	4.082597	3.73E-11	1.64E-09
CAVIN2	-2.09019	4.069613	3.96E-11	1.74E-09
UBE2C	2.380675	5.815281	4.00E-11	1.75E-09
GABRD	3.507812	1.188724	4.08E-11	1.78E-09
LCN10	-3.27442	-1.1759	4.18E-11	1.82E-09
CSPG4	-2.04948	6.110859	4.25E-11	1.84E-09
GPM6A	-3.33209	0.549944	4.26E-11	1.84E-09
STIL	2.055729	5.325122	4.35E-11	1.87E-09
CFD	-2.62924	5.019484	4.71E-11	2.03E-09
TGFBR3	-2.02538	5.517281	5.25E-11	2.24E-09
SUSD4	-2.91272	3.816431	5.28E-11	2.25E-09
C1orf158	-3.36053	-3.65332	5.40E-11	2.28E-09

CHAD	-3.01101	2.384308	5.40E-11	2.28E-09
NPY2R	-4.21624	-4.09909	5.46E-11	2.31E-09
ITIH5	-2.09079	5.222879	5.63E-11	2.36E-09
CYP1A2	-3.02219	-3.49364	6.07E-11	2.54E-09
KIF23	2.009821	5.171106	6.29E-11	2.62E-09
AOC3	-2.37039	4.951909	7.22E-11	3.00E-09
ADCY8	-3.57983	-3.76257	7.53E-11	3.12E-09
DLG2	-2.38989	1.409625	7.69E-11	3.18E-09
TCEAL2	-3.98687	0.683986	8.35E-11	3.43E-09
CXCL1	3.969333	6.395345	8.41E-11	3.45E-09
MYOCD	-2.50614	3.118229	8.53E-11	3.49E-09
KIF18A	2.215454	3.89957	8.82E-11	3.60E-09
NEXN	-2.13318	4.360799	9.12E-11	3.71E-09
CACNA2D3	-2.31255	0.628155	1.00E-10	4.07E-09
GRIN2A	-3.07993	2.02793	1.02E-10	4.12E-09
CALD1	-2.06565	8.551374	1.05E-10	4.21E-09
SHCBP1L	-3.36675	-3.80571	1.06E-10	4.28E-09
BIRC5	2.344001	5.089995	1.07E-10	4.31E-09
TMEM211	-3.40135	-1.08266	1.14E-10	4.56E-09
MRVI1	-2.18189	5.46088	1.19E-10	4.73E-09
KCNJ13	-2.53618	0.98897	1.19E-10	4.73E-09
ACSM1	-2.19988	-0.04635	1.23E-10	4.90E-09
ATCAY	-2.73428	-1.85129	1.24E-10	4.91E-09
IQGAP3	2.267028	6.588682	1.27E-10	5.03E-09
NEK2	2.448413	4.514942	1.28E-10	5.04E-09
SPEG	-2.5002	4.265336	1.30E-10	5.12E-09
MUSK	-2.79932	-0.16571	1.34E-10	5.26E-09
FRMPD4	-3.38704	-2.99581	1.42E-10	5.56E-09
PGC	-5.12866	13.51537	1.42E-10	5.56E-09
C15orf59	-2.65339	1.343256	1.44E-10	5.62E-09
ZNF626	-2.49508	1.932577	1.52E-10	5.90E-09
CMTM5	-2.7649	-3.55521	1.53E-10	5.92E-09
SGCA	-2.78383	1.470526	1.59E-10	6.14E-09
STAR	-2.02192	-0.90882	1.62E-10	6.25E-09
NTN1	-2.31169	5.237773	1.64E-10	6.33E-09
NLRP8	-3.73573	-3.91143	1.68E-10	6.47E-09
TAGLN	-2.2135	7.033423	1.71E-10	6.54E-09
FOXG1	-3.24734	-1.56199	1.76E-10	6.71E-09
KIF4A	2.204677	5.017753	1.77E-10	6.75E-09
CATSPERD	-2.75001	-2.92465	1.79E-10	6.80E-09
BUB1	2.210691	5.490708	1.89E-10	7.12E-09
FBXL13	-2.2651	1.491244	1.91E-10	7.18E-09
PRUNE2	-2.86175	5.897639	1.96E-10	7.37E-09
PEG3	-2.37725	1.212711	2.00E-10	7.51E-09
AKR1C1	-2.49506	5.276848	2.01E-10	7.52E-09
OSR1	-2.14878	2.060039	2.22E-10	8.26E-09
ABI3BP	-2.85871	5.222944	2.22E-10	8.26E-09

MPZ	-2.06387	0.639423	2.26E-10	8.37E-09
FMOD	-2.26267	6.62671	2.30E-10	8.49E-09
FBP2	-2.92686	1.554364	2.36E-10	8.70E-09
SPX	-2.44288	-2.51306	2.37E-10	8.73E-09
CDKN3	2.251887	3.87984	2.38E-10	8.77E-09
ASXL3	-2.97323	0.82413	2.43E-10	8.92E-09
KCNG4	-3.05361	-3.82825	2.44E-10	8.92E-09
PRICKLE2	-2.03886	4.011701	2.47E-10	9.04E-09
ARHGDIG	-3.42881	1.409641	2.66E-10	9.69E-09
KLHDC8A	-2.2117	1.703634	2.72E-10	9.92E-09
ALOX15B	-2.90575	3.045445	2.77E-10	1.00E-08
HTR1E	-5.46858	-1.38032	2.82E-10	1.02E-08
WNT8A	-4.15481	-4.40091	2.93E-10	1.05E-08
CADM3	-3.61035	1.506336	3.03E-10	1.09E-08
CYP1B1	-2.88528	4.533282	3.14E-10	1.12E-08
SPINK13	-3.06928	-1.85721	3.37E-10	1.20E-08
UBE2T	2.188548	4.344899	3.59E-10	1.27E-08
FAM20A	-2.17356	3.080771	3.73E-10	1.32E-08
MT1F	-2.19758	3.99038	3.77E-10	1.33E-08
KCNT2	-2.69289	1.110526	3.79E-10	1.33E-08
HS3ST6	-4.16452	0.196173	3.82E-10	1.35E-08
ABCC9	-2.48022	3.93921	3.96E-10	1.39E-08
KRT3	-4.06463	-0.2309	4.07E-10	1.42E-08
ATOH8	-2.18606	2.115347	4.22E-10	1.47E-08
GABRA5	-3.9438	-2.02059	4.55E-10	1.58E-08
CDC25B	2.238927	7.208818	4.70E-10	1.63E-08
CHODL	-2.47489	-1.27406	5.01E-10	1.73E-08
KCNK2	-4.06448	1.389366	5.14E-10	1.77E-08
SUN5	-4.08038	-4.54892	5.22E-10	1.79E-08
MMP11	4.426123	5.785322	5.50E-10	1.88E-08
WIPF3	-2.2736	3.678008	5.62E-10	1.92E-08
CMA1	-3.49079	-1.3702	6.05E-10	2.06E-08
SMCO1	-2.61084	-4.24677	6.35E-10	2.16E-08
DIRAS1	-2.76395	1.299283	6.47E-10	2.19E-08
MYOT	-2.5472	-0.86094	6.59E-10	2.22E-08
LCN6	-2.97239	-1.64792	6.73E-10	2.27E-08
TROAP	2.063682	4.661429	6.86E-10	2.31E-08
CXCL8	4.462966	6.450254	6.93E-10	2.33E-08
PSAPL1	-3.6137	3.287188	7.08E-10	2.36E-08
MAP6	-2.41333	1.544756	7.08E-10	2.36E-08
APLP1	-3.03091	4.487644	7.16E-10	2.38E-08
IQCF6	-3.21862	-3.88523	7.33E-10	2.43E-08
MT1A	-2.48867	1.063317	7.96E-10	2.64E-08
KRT77	-3.27536	-3.73203	7.99E-10	2.64E-08
FAM19A4	-3.446	-3.06626	8.83E-10	2.90E-08
MYL3	-2.34299	-2.94454	9.00E-10	2.95E-08
GREM2	-3.28245	2.906265	9.40E-10	3.07E-08

ZAN	-2.97146	-1.38864	9.51E-10	3.10E-08
FMO5	-2.13216	5.3857	9.55E-10	3.11E-08
CRX	-2.43998	-2.52783	9.62E-10	3.13E-08
RECQL4	2.041453	5.287618	9.70E-10	3.15E-08
PDE1B	-2.32117	1.943067	1.06E-09	3.40E-08
LONRF2	-3.0374	3.934946	1.06E-09	3.41E-08
DLGAP5	2.078219	4.7809	1.07E-09	3.41E-08
CNTN3	-3.57701	0.492847	1.08E-09	3.45E-08
CABP5	-3.89781	-4.19107	1.09E-09	3.47E-08
LYPD4	-3.03248	-3.48715	1.15E-09	3.63E-08
PRAMEF20	-4.31509	-4.27248	1.17E-09	3.69E-08
KIF14	2.135499	4.416832	1.28E-09	4.05E-08
ANKRD30B	-3.13748	-3.18977	1.29E-09	4.06E-08
RAB44	-2.13462	-0.97076	1.31E-09	4.11E-08
HCN2	-2.13103	1.166759	1.34E-09	4.21E-08
ADH1A	-3.33809	-1.11731	1.54E-09	4.80E-08
WSCD2	-3.20696	0.929733	1.56E-09	4.84E-08
AC040162.4	-3.44836	-4.26044	1.62E-09	5.03E-08
GCNT4	-2.29439	3.057421	1.63E-09	5.03E-08
GDF7	-2.19315	1.256723	1.63E-09	5.03E-08
GYS2	-4.04143	1.101362	1.64E-09	5.04E-08
STOX2	-2.03046	3.138022	1.71E-09	5.23E-08
SKA3	2.324373	4.37753	1.84E-09	5.64E-08
SMIM10L2A	-2.49226	0.892499	1.85E-09	5.64E-08
RAB9B	-2.31288	1.122491	1.87E-09	5.69E-08
ADAMTSL3	-2.44068	2.882455	1.95E-09	5.94E-08
STON1-GTF2A1L	-2.66731	-2.81042	2.02E-09	6.12E-08
GADL1	-3.92585	-1.60326	2.07E-09	6.27E-08
CCKAR	-5.56703	1.94746	2.17E-09	6.55E-08
NPAS4	-2.68035	-1.77635	2.19E-09	6.61E-08
MUM1L1	-3.77169	-0.323	2.24E-09	6.75E-08
RGMA	-2.69496	4.577762	2.40E-09	7.20E-08
CCDC110	-2.31256	0.895011	2.54E-09	7.59E-08
ISG15	2.752936	6.000296	2.69E-09	8.01E-08
MEST	2.124688	5.82305	2.84E-09	8.42E-08
ADAMTS12	3.17338	4.431359	2.96E-09	8.76E-08
C1QTNF7	-2.55066	1.122861	2.97E-09	8.78E-08
MYOM2	-2.2783	0.975663	3.03E-09	8.92E-08
KIF18B	2.252927	5.35484	3.07E-09	9.03E-08
GNAZ	-2.04092	3.000095	3.12E-09	9.12E-08
MMP3	5.734118	6.027681	3.13E-09	9.14E-08
MAPT	-2.81049	2.158596	3.14E-09	9.16E-08
HOXB7	2.328229	4.004574	3.16E-09	9.19E-08
FBXO40	-2.43134	-3.30354	3.20E-09	9.28E-08
SCARA5	-3.36292	3.703595	3.26E-09	9.43E-08
GPR32	-3.61514	-4.1968	3.37E-09	9.72E-08
C10orf120	-3.47243	-4.46729	3.68E-09	1.06E-07

MAP1LC3C	-2.63421	-2.11204	3.78E-09	1.08E-07
TDO2	3.830191	2.252826	3.89E-09	1.11E-07
PHYHD1	-2.45075	2.854159	4.08E-09	1.16E-07
RNF165	-2.52906	-0.05002	4.14E-09	1.17E-07
CCNJL	-2.12475	2.417525	4.31E-09	1.21E-07
DDI1	-2.87765	-2.98161	4.33E-09	1.22E-07
UMOD	-3.35483	-3.28958	4.37E-09	1.23E-07
STRIP2	2.667493	3.752982	4.42E-09	1.24E-07
FREM3	-2.57909	-3.08446	4.63E-09	1.29E-07
AURKB	2.14548	4.314949	4.73E-09	1.32E-07
NELL2	-2.53674	2.477739	4.86E-09	1.35E-07
KIT	-2.32385	4.232475	4.88E-09	1.35E-07
TRPM1	-2.47901	-3.51036	4.93E-09	1.36E-07
NTNG1	-2.86401	-1.32333	5.10E-09	1.40E-07
ADAMTS1	-2.0332	6.025706	5.26E-09	1.45E-07
ADGRB3	-2.87244	-0.34068	5.57E-09	1.52E-07
ACTA2	-2.01318	7.451732	5.91E-09	1.61E-07
RSPH6A	-2.33419	-3.11145	6.01E-09	1.63E-07
ATP2B3	-2.46571	-3.17572	6.08E-09	1.65E-07
HAND2	-3.46941	-0.02562	6.10E-09	1.65E-07
FABP4	-2.80931	1.182741	6.19E-09	1.67E-07
HJURP	2.117531	4.532125	6.47E-09	1.74E-07
VIT	-2.99705	0.886852	6.63E-09	1.78E-07
SRPX	-2.16581	3.121769	6.85E-09	1.84E-07
PRNT	-3.7715	-4.37888	7.02E-09	1.88E-07
DGKB	-2.9812	0.203154	7.57E-09	2.02E-07
CDC20	2.032606	5.637109	7.61E-09	2.03E-07
LHCGR	-2.52597	-3.35142	7.73E-09	2.05E-07
ZIC3	-4.05669	-3.85321	7.73E-09	2.05E-07
SOX1	-3.05656	-4.43694	7.74E-09	2.05E-07
DEPDC1	2.040097	4.571429	7.84E-09	2.07E-07
FXYP1	-2.35377	-0.62358	7.95E-09	2.10E-07
NT5C1A	-2.94062	-3.1822	8.03E-09	2.12E-07
HELT	-3.29603	-4.52489	8.66E-09	2.27E-07
FOXS1	2.939616	1.142037	8.99E-09	2.35E-07
RTP1	-3.44513	-4.10022	9.01E-09	2.35E-07
ANKRD30BL	-2.32096	-3.5375	9.13E-09	2.38E-07
ZSCAN18	-2.09819	2.963141	9.17E-09	2.39E-07
GPIHBP1	-2.18908	-0.28275	9.77E-09	2.53E-07
CDCA5	2.10069	4.688305	9.99E-09	2.58E-07
FAM181A	-3.56174	-4.12285	1.02E-08	2.63E-07
RXRG	-2.74469	-1.90439	1.02E-08	2.63E-07
VHLL	-2.75892	-4.22058	1.03E-08	2.66E-07
IGFBP2	-2.21092	7.253797	1.06E-08	2.72E-07
RNF180	-2.10134	1.732161	1.08E-08	2.75E-07
SLIT3	-2.2157	5.745859	1.08E-08	2.77E-07
RNF150	-2.53654	3.193917	1.09E-08	2.79E-07

SMIM17	-2.29314	-3.4483	1.16E-08	2.94E-07
RIC3	-2.68673	0.886616	1.20E-08	3.03E-07
PPP1R3G	-2.19533	1.34393	1.22E-08	3.09E-07
LAMP3	2.424625	4.49926	1.26E-08	3.18E-07
PBK	2.058616	4.391079	1.37E-08	3.42E-07
RD3	-2.3407	-3.01056	1.43E-08	3.56E-07
LY6G6C	-3.29226	2.581288	1.44E-08	3.59E-07
SEC14L3	-2.28091	-3.08249	1.49E-08	3.69E-07
HPCAL4	-2.60145	-0.57094	1.49E-08	3.70E-07
DCAF12L2	-2.82404	-3.10179	1.50E-08	3.72E-07
SNRPN	-2.00473	3.235867	1.59E-08	3.92E-07
DPP10	-4.39507	-0.59345	1.60E-08	3.94E-07
PRSS38	-3.29983	-4.47172	1.64E-08	4.02E-07
SCNN1B	-3.37916	4.287015	1.66E-08	4.05E-07
FXVD4	-2.95199	1.069747	1.72E-08	4.19E-07
DEPDC1B	2.17247	4.033849	1.74E-08	4.22E-07
TK1	2.033462	6.121897	1.74E-08	4.22E-07
TRPC3	-2.02978	-0.53245	1.79E-08	4.33E-07
FSIP2	-2.12368	2.845599	1.95E-08	4.70E-07
MICB	2.474586	3.496955	1.95E-08	4.70E-07
PIANP	-2.15791	-0.15232	2.03E-08	4.86E-07
MCM10	2.248595	3.866168	2.11E-08	5.04E-07
FAM153A	-2.53648	-0.75353	2.11E-08	5.04E-07
RAP1GAP	-2.09074	6.318788	2.17E-08	5.15E-07
ABCC12	-3.52857	-2.50705	2.26E-08	5.33E-07
LINC01314	-3.44267	2.045703	2.34E-08	5.49E-07
TTLL7	-2.02913	3.613509	2.52E-08	5.86E-07
LIPF	-5.76218	13.221	2.53E-08	5.88E-07
ANLN	2.182718	6.661425	2.56E-08	5.95E-07
DCLK1	-2.42449	2.461379	2.67E-08	6.15E-07
FKBP6	-2.55159	-3.85058	2.68E-08	6.17E-07
GRIK3	-3.24671	0.453625	2.72E-08	6.23E-07
BCHE	-2.81953	1.280209	2.73E-08	6.24E-07
EME1	2.072788	2.326161	2.74E-08	6.26E-07
TARM1	-3.09111	-3.91018	2.81E-08	6.40E-07
UGT1A7	-3.14977	0.639856	2.84E-08	6.42E-07
LHX3	-3.24507	-2.81323	3.11E-08	7.01E-07
CCDC150	2.033953	2.141501	3.12E-08	7.01E-07
CLDN3	3.471883	7.338234	3.14E-08	7.05E-07
CLEC4G	-2.79049	-1.72933	3.19E-08	7.14E-07
SLC35G3	-2.77897	-3.84397	3.29E-08	7.34E-07
TNFRSF11B	3.836562	4.070007	3.33E-08	7.41E-07
CHRNA3	-2.00351	-0.01865	3.33E-08	7.41E-07
C16orf96	-2.25155	-2.30007	3.35E-08	7.44E-07
MYH2	-2.99528	-4.08291	3.48E-08	7.72E-07
SYNC	-2.06133	1.219141	3.59E-08	7.95E-07
AKR1C2	-2.54664	5.012584	3.67E-08	8.08E-07

ELANE	-2.54366	-2.60258	3.78E-08	8.31E-07
FAM72D	2.338588	0.640439	3.80E-08	8.34E-07
TMEM35A	-2.65032	-0.0491	3.81E-08	8.35E-07
SNX10	2.096779	4.456463	3.85E-08	8.42E-07
ZSCAN5C	-2.25295	-3.42185	3.92E-08	8.54E-07
CXCL3	3.040731	5.223801	3.94E-08	8.58E-07
FOXP2	-2.38949	2.848203	3.96E-08	8.62E-07
LIF	2.298811	4.836951	4.06E-08	8.81E-07
PKHD1L1	-2.34578	0.5302	4.07E-08	8.82E-07
SH3GL3	-3.57419	-0.44217	4.23E-08	9.16E-07
ASB2	-2.02015	2.395938	4.25E-08	9.20E-07
ANK2	-2.37801	3.901905	4.38E-08	9.45E-07
ADAMTS15	-2.05794	3.191684	4.54E-08	9.70E-07
SVEP1	-2.12278	4.443337	4.58E-08	9.76E-07
MMP12	3.811846	5.145554	4.60E-08	9.79E-07
CENPA	2.079352	3.22816	4.62E-08	9.81E-07
NKPD1	-2.09011	0.41891	4.83E-08	1.02E-06
CDC45	2.012795	3.777062	5.33E-08	1.12E-06
DDIAS	2.004887	3.729977	5.47E-08	1.14E-06
PTGFR	-2.41315	1.86825	5.54E-08	1.15E-06
OR5C1	-2.72571	-4.22646	5.63E-08	1.17E-06
PIK3AP1	2.101596	5.532738	5.78E-08	1.20E-06
ACER1	-3.58975	0.367032	6.17E-08	1.28E-06
AADACL2	-3.15216	-1.42124	6.21E-08	1.28E-06
TOP2A	2.979289	8.608652	6.44E-08	1.33E-06
DCT	-2.33165	-2.72806	6.53E-08	1.34E-06
SLIT2	-2.55287	3.189677	6.80E-08	1.40E-06
KCNA1	-2.89535	-3.50283	7.04E-08	1.44E-06
SETBP1	-2.02617	4.010967	7.18E-08	1.47E-06
CTXN3	-3.32038	-4.28249	7.36E-08	1.50E-06
SLC26A9	-2.8455	5.372419	7.65E-08	1.55E-06
LAMA2	-2.13048	5.180732	7.87E-08	1.59E-06
KCNJ18	-3.67246	-3.12968	8.41E-08	1.69E-06
KCNQ1	-2.11584	6.769042	8.44E-08	1.70E-06
PTPRZ1	-2.66352	4.187807	8.52E-08	1.71E-06
TRIM15	3.315344	4.741353	8.54E-08	1.71E-06
CPXM2	-2.07011	3.897358	8.61E-08	1.72E-06
CXCL6	4.696751	4.389792	8.90E-08	1.78E-06
ACSM5	-2.5166	-1.12106	9.14E-08	1.82E-06
CPEB1	-2.23752	-0.32079	9.28E-08	1.85E-06
SLC16A12	-2.23047	-0.97113	9.44E-08	1.87E-06
MPPED1	-3.23285	-1.91364	9.52E-08	1.88E-06
CACNA1S	-2.35835	-3.15693	1.04E-07	2.04E-06
WASF3	-2.24579	2.981324	1.07E-07	2.09E-06
PRAMEF17	-3.82412	-4.31275	1.08E-07	2.10E-06
NUDT11	-2.20097	-0.51364	1.09E-07	2.12E-06
NKX6-2	-3.59984	0.069365	1.13E-07	2.19E-06

TMEM26	2.215057	0.72501	1.14E-07	2.21E-06
KCNA4	-3.07853	-4.28778	1.16E-07	2.24E-06
FAM71B	-3.51809	-4.47215	1.18E-07	2.29E-06
KIF2B	-3.8549	-4.60045	1.23E-07	2.36E-06
ADAMTS18	-2.59913	0.806975	1.25E-07	2.40E-06
BMPR1B	-2.40048	2.091809	1.25E-07	2.40E-06
WNT2	3.500709	2.128661	1.28E-07	2.45E-06
LY6E	2.168868	8.111467	1.32E-07	2.53E-06
ABCA8	-2.47687	3.599437	1.33E-07	2.53E-06
MYBL2	2.274144	6.781351	1.35E-07	2.56E-06
CELA2A	-2.28833	-2.83954	1.37E-07	2.59E-06
IL11	3.701072	2.03666	1.37E-07	2.60E-06
PRDM14	-2.70371	-3.96199	1.41E-07	2.67E-06
SYCN	-3.17219	-3.22113	1.43E-07	2.70E-06
SALL3	-3.64641	-3.16357	1.48E-07	2.77E-06
MT4	-4.57937	-3.30418	1.48E-07	2.78E-06
PRR30	-3.28045	-4.27132	1.51E-07	2.82E-06
SCN2B	-2.60946	-0.72231	1.55E-07	2.88E-06
SLC22A6	-3.40563	-4.06468	1.57E-07	2.92E-06
TUSC5	-2.82425	-2.77377	1.58E-07	2.93E-06
FCHO1	2.056447	3.921112	1.72E-07	3.17E-06
BEND5	-2.01651	-0.07631	1.73E-07	3.19E-06
CDH20	-2.1483	-2.59586	1.75E-07	3.23E-06
KCNK7	-2.07433	0.515365	1.77E-07	3.25E-06
E2F7	2.017465	3.886683	1.85E-07	3.38E-06
CELA3A	-3.15593	-0.10903	1.89E-07	3.46E-06
PLA2G7	2.602022	3.113946	1.96E-07	3.58E-06
GPHA2	-2.74007	-2.60792	2.00E-07	3.64E-06
SCTR	-2.62756	0.982196	2.25E-07	4.07E-06
CYP4F22	-3.27522	2.829582	2.27E-07	4.10E-06
LIPG	2.437592	5.243934	2.31E-07	4.17E-06
LGI3	-3.07596	0.491077	2.31E-07	4.17E-06
CATSPER4	-2.58052	-3.42881	2.36E-07	4.23E-06
CCDC80	-2.45617	6.743666	2.38E-07	4.26E-06
CDC6	2.896104	5.654752	2.43E-07	4.33E-06
C9orf47	-2.22327	-1.0555	2.49E-07	4.42E-06
ADAD1	-3.19331	-4.33055	2.50E-07	4.43E-06
COL4A3	-2.2373	2.045549	2.54E-07	4.50E-06
PGPEP1L	-2.4161	-3.15968	2.55E-07	4.52E-06
LMAN1L	-2.56338	-4.0021	2.56E-07	4.52E-06
FAM72B	2.181618	1.242471	2.61E-07	4.60E-06
F13A1	-2.36096	3.929934	2.64E-07	4.64E-06
SNCG	-2.03818	2.067227	2.77E-07	4.84E-06
MAPK4	-2.95941	0.953855	2.78E-07	4.86E-06
SSC5D	-2.01322	4.054804	2.81E-07	4.89E-06
MMD2	-3.18906	-3.62004	2.90E-07	5.02E-06
BHMT	-2.92486	-0.31493	2.94E-07	5.09E-06

MTFR2	2.081593	2.924331	3.04E-07	5.23E-06
NLRP5	-3.17791	-3.16989	3.04E-07	5.23E-06
SFRP1	-2.88587	3.919254	3.05E-07	5.24E-06
TRIP13	2.626409	5.055319	3.10E-07	5.32E-06
SCN7A	-2.76351	2.520825	3.13E-07	5.36E-06
ERFE	2.568753	1.712994	3.19E-07	5.45E-06
ANGPT2	2.140412	4.454455	3.24E-07	5.53E-06
ANGPTL7	-2.12391	-1.06372	3.26E-07	5.56E-06
ANKS1B	-2.19361	-0.03781	3.31E-07	5.62E-06
DEFB119	-2.98376	-4.56929	3.36E-07	5.71E-06
ELAVL3	-2.14426	-2.44786	3.42E-07	5.80E-06
C3orf84	-2.90241	-4.45818	3.45E-07	5.85E-06
CADM2	-3.60657	1.612025	3.72E-07	6.24E-06
SDS	3.09741	3.230641	3.73E-07	6.25E-06
CPA2	-4.37245	4.60857	3.81E-07	6.37E-06
ULBP1	3.175627	1.076424	3.81E-07	6.37E-06
KCNA2	-2.81613	-0.6535	3.84E-07	6.41E-06
SLITRK2	-2.52199	-2.33765	3.86E-07	6.43E-06
ACAN	2.959462	3.711897	3.87E-07	6.45E-06
UBE2U	-3.74217	-1.97193	3.88E-07	6.46E-06
PDILT	-5.17622	2.684593	3.94E-07	6.56E-06
ADAM8	2.162544	5.220905	3.99E-07	6.63E-06
ERP27	-2.08826	1.746664	4.20E-07	6.95E-06
ITIH3	-2.36828	0.404565	4.22E-07	6.98E-06
G6PC2	-2.60632	-2.8885	4.39E-07	7.26E-06
OR11A1	-3.36936	-4.45317	4.55E-07	7.48E-06
SNTG2	-2.02332	-1.99667	4.58E-07	7.53E-06
SEC14L6	-2.14548	-0.71922	4.78E-07	7.83E-06
ADAM33	-2.28927	2.726956	5.01E-07	8.17E-06
PCSK9	3.169039	4.857287	5.08E-07	8.27E-06
TNFSF11	2.705026	0.887007	5.22E-07	8.48E-06
IBSP	4.194264	0.612215	5.51E-07	8.89E-06
OPALIN	-3.25319	-4.46396	5.52E-07	8.90E-06
CFC1	-4.26121	-2.22322	5.60E-07	9.02E-06
GPRIN1	2.081044	4.327822	5.68E-07	9.12E-06
BMPER	-2.45163	0.660974	5.82E-07	9.32E-06
ENAM	-2.70576	0.621585	5.85E-07	9.37E-06
SLC2A7	-2.55929	-3.94252	5.91E-07	9.44E-06
PLAU	2.653924	6.347489	6.20E-07	9.87E-06
KRT76	-3.38478	-3.28003	6.34E-07	1.01E-05
COL10A1	4.884748	4.129971	6.35E-07	1.01E-05
C8orf86	-2.59371	-4.20649	6.59E-07	1.04E-05
PRR5L	2.219825	3.531977	6.65E-07	1.05E-05
ADGRB1	-2.2218	1.299547	6.86E-07	1.08E-05
PMEPA1	2.327191	7.624631	6.90E-07	1.09E-05
PRR23A	-3.2653	-4.56213	7.03E-07	1.10E-05
NDST3	-2.56747	-0.56721	7.44E-07	1.17E-05

CHRNA1	2.820725	-0.02778	7.46E-07	1.17E-05
CCDC105	-2.95107	-4.36794	7.72E-07	1.21E-05
PRR23B	-3.42133	-4.62241	7.76E-07	1.21E-05
AC131097.2	-2.34196	-3.1344	8.07E-07	1.25E-05
TBL1Y	-3.21375	-1.90924	8.31E-07	1.29E-05
AL139392.1	-2.24657	-0.96338	8.67E-07	1.34E-05
NANOGNB	-2.86035	-4.43844	8.81E-07	1.36E-05
RESP18	-3.41037	-4.60822	9.12E-07	1.40E-05
ADIPOQ	-3.77981	-1.39314	9.12E-07	1.40E-05
MELTF	2.776972	5.856159	9.42E-07	1.44E-05
NWD1	-2.07717	2.056086	9.76E-07	1.48E-05
CAPN13	-2.26176	3.809174	9.99E-07	1.51E-05
PLA2G5	-2.119	-0.30054	1.07E-06	1.61E-05
NEU2	-3.09435	-4.27941	1.09E-06	1.64E-05
SAA2	4.05186	3.763067	1.12E-06	1.67E-05
TRIM63	-2.20986	-2.40431	1.15E-06	1.72E-05
RP1	-2.19566	-1.04193	1.19E-06	1.77E-05
KCNMB2	-2.46668	-0.81796	1.20E-06	1.78E-05
CSRP3	-2.50668	-3.34516	1.28E-06	1.89E-05
SOX21	-2.75677	3.44835	1.32E-06	1.95E-05
KRT79	-2.54603	-2.53492	1.33E-06	1.95E-05
L3MBTL4	-2.04667	1.206331	1.35E-06	1.97E-05
CHRD1	-3.07993	4.003126	1.36E-06	1.98E-05
CST1	4.377442	4.813797	1.38E-06	2.00E-05
ZNF536	-2.19513	0.104492	1.38E-06	2.01E-05
HOXB9	3.425127	4.313316	1.39E-06	2.01E-05
TRAPPC3L	-2.25788	-2.85735	1.40E-06	2.03E-05
ZIM3	-2.78968	-4.36399	1.45E-06	2.09E-05
OR8S1	-2.3666	-4.22336	1.54E-06	2.20E-05
GJA10	-3.20398	-4.42895	1.55E-06	2.22E-05
BOC	-2.10432	4.040423	1.57E-06	2.25E-05
CES1	-2.53092	4.025936	1.63E-06	2.32E-05
PVALB	-2.52902	-3.15881	1.64E-06	2.33E-05
CLDN4	2.12813	8.758279	1.65E-06	2.34E-05
ADAM12	2.5293	3.786795	1.71E-06	2.42E-05
SLC6A2	-2.48516	-2.31156	1.72E-06	2.43E-05
PCDH10	-3.21285	0.803922	1.73E-06	2.43E-05
ERBB4	-3.05991	0.55983	1.76E-06	2.48E-05
CILP	-2.88464	3.784533	1.89E-06	2.63E-05
DMRT2	-2.68082	-2.21773	1.90E-06	2.65E-05
FZD2	2.465854	3.131311	1.94E-06	2.70E-05
SOX30	3.194602	1.498594	1.99E-06	2.76E-05
OLR1	3.513322	2.786615	2.03E-06	2.80E-05
TCEAL5	-2.45112	-2.9661	2.04E-06	2.82E-05
MTRNR2L5	-2.46367	-4.18392	2.07E-06	2.85E-05
ISM2	-3.24702	0.52501	2.16E-06	2.96E-05
IL17C	4.46639	0.639171	2.18E-06	2.98E-05

SLC6A14	3.796185	6.03891	2.32E-06	3.16E-05
IGF2BP3	3.182806	4.506421	2.32E-06	3.16E-05
METTL27	2.229435	1.973091	2.33E-06	3.18E-05
VSTM2A	-3.03303	-1.49013	2.35E-06	3.20E-05
PRPH	-2.29975	-1.25286	2.42E-06	3.27E-05
PLCXD3	-3.28601	3.037391	2.60E-06	3.50E-05
SPP1	4.377983	6.819233	2.63E-06	3.54E-05
LGI1	-2.72778	-1.41948	2.67E-06	3.59E-05
MFAP5	-2.6032	3.974022	2.68E-06	3.60E-05
CSF2	4.24428	-0.08771	2.71E-06	3.63E-05
SLITRK4	-2.08697	-0.84006	2.72E-06	3.64E-05
HSPB8	-2.2262	5.248883	2.72E-06	3.64E-05
HEPACAM	-2.38615	-3.62903	2.79E-06	3.71E-05
FUT9	-2.97908	4.035587	2.81E-06	3.73E-05
BARX1	-2.90135	2.565604	2.82E-06	3.74E-05
RBM20	-2.03793	0.518334	2.83E-06	3.76E-05
DEFB118	-2.67042	-4.45574	2.88E-06	3.81E-05
METTL7B	2.102234	4.495424	2.90E-06	3.83E-05
AKR1B15	-2.38588	0.740358	2.96E-06	3.90E-05
IFI6	2.409619	7.986999	3.13E-06	4.08E-05
PIWIL1	5.227866	2.837494	3.19E-06	4.16E-05
CTHRC1	2.434615	4.823145	3.36E-06	4.36E-05
TRIM31	2.657621	6.281279	3.38E-06	4.37E-05
LRRC4	-2.03121	2.563967	3.42E-06	4.41E-05
POU3F1	-2.58636	0.882193	3.45E-06	4.44E-05
NOX1	4.555335	3.583431	3.56E-06	4.58E-05
B4GALNT2	-3.34796	3.262559	3.69E-06	4.74E-05
FBLN1	-2.08214	7.108366	3.71E-06	4.76E-05
SEZ6L	-2.62933	-1.4153	3.74E-06	4.79E-05
IRX4	-3.11015	1.305625	3.81E-06	4.87E-05
KRTAP4-1	6.630192	-0.00602	3.81E-06	4.87E-05
MAS1L	-2.91871	-3.92015	4.03E-06	5.12E-05
PRMT8	-2.15344	-3.51039	4.06E-06	5.16E-05
FGFR4	2.01896	6.303137	4.14E-06	5.25E-05
CCNE1	2.642358	4.414398	4.18E-06	5.28E-05
DUSP13	-2.56824	-2.72695	4.30E-06	5.42E-05
PLCZ1	-2.71535	-1.18675	4.31E-06	5.42E-05
ZNF365	-2.64888	2.441821	4.38E-06	5.49E-05
HOXC11	2.92012	2.730338	4.38E-06	5.50E-05
SMOC2	-2.08481	5.41904	4.39E-06	5.51E-05
SMKR1	2.23582	0.051753	4.43E-06	5.55E-05
NPPC	-3.08179	-0.93539	4.54E-06	5.68E-05
PLA2G4D	-2.19057	0.799879	4.59E-06	5.74E-05
LHX9	-2.79839	-1.75938	4.66E-06	5.81E-05
KRT74	-2.50918	-3.90152	4.70E-06	5.84E-05
ZNF695	2.345764	1.485344	4.87E-06	6.03E-05
CXCL5	6.019658	6.132271	5.05E-06	6.22E-05

CTSG	-2.69767	-0.43043	5.13E-06	6.28E-05
ADCYAP1	-2.45057	0.519913	5.19E-06	6.34E-05
OR1K1	-2.25683	-4.06058	5.20E-06	6.35E-05
CHAT	-2.74542	-4.01228	5.22E-06	6.36E-05
DNMT3B	2.024982	3.571432	5.33E-06	6.48E-05
ACCSL	-2.34713	-4.35748	5.37E-06	6.51E-05
SAA1	3.695869	5.310585	5.42E-06	6.56E-05
FAM25G	-2.84979	-4.34418	5.42E-06	6.57E-05
HTR3C	-2.56901	-3.59712	5.51E-06	6.67E-05
F5	3.47522	6.386332	5.55E-06	6.71E-05
NANOS2	-2.72214	-4.27207	5.58E-06	6.74E-05
CBSL	-2.76898	-1.69251	5.60E-06	6.75E-05
BAMBI	3.038797	4.727846	5.64E-06	6.79E-05
DAO	-2.62339	-3.22894	5.70E-06	6.86E-05
ACTL8	7.224514	4.048911	5.74E-06	6.90E-05
IL13RA2	3.02879	0.921586	5.81E-06	6.96E-05
RBFOX3	-2.13518	-0.18166	5.83E-06	6.98E-05
TSHB	-2.43512	-4.25716	5.89E-06	7.04E-05
MGAT4D	-2.75993	-4.36931	6.07E-06	7.23E-05
OGN	-2.50049	4.164643	6.35E-06	7.53E-05
IFITM1	2.062453	6.730219	6.37E-06	7.54E-05
PPP1R3C	-2.29363	4.011895	6.41E-06	7.58E-05
PHF21B	-2.22222	-2.25952	6.43E-06	7.60E-05
ARGFX	-2.36824	-4.18754	6.47E-06	7.63E-05
TREM1	3.07543	1.755264	6.54E-06	7.71E-05
SEL1L2	-2.47062	-3.8343	6.58E-06	7.75E-05
ADAMTS14	2.118664	3.734973	7.08E-06	8.27E-05
FAM72C	2.205367	0.005769	7.14E-06	8.33E-05
ACTN2	-2.68737	0.74401	7.28E-06	8.46E-05
GLYATL1	-2.34953	-0.42879	7.34E-06	8.53E-05
DCLK3	2.298814	-0.39071	7.35E-06	8.53E-05
RXFP2	-2.76214	-4.56541	7.41E-06	8.59E-05
HIST1H3B	2.663687	-2.01495	7.60E-06	8.79E-05
COCH	2.692491	2.753054	7.62E-06	8.82E-05
MYT1L	-2.67682	-3.02934	7.63E-06	8.83E-05
PAEP	5.666974	-0.19449	7.68E-06	8.86E-05
C4BPA	4.739907	3.547891	7.73E-06	8.91E-05
PPBP	4.91474	0.813943	7.77E-06	8.95E-05
PAK3	-2.22036	1.928663	7.79E-06	8.97E-05
CLDN6	6.899599	2.874185	7.81E-06	8.98E-05
TAS2R38	3.409572	-1.18619	7.83E-06	8.99E-05
FAM153B	-2.44485	-0.56618	8.02E-06	9.19E-05
TERT	2.984601	1.276073	8.30E-06	9.50E-05
ULBP2	2.517638	2.336596	8.43E-06	9.62E-05
CYP1A1	-3.65578	1.993805	8.73E-06	9.94E-05
NUP62CL	2.142959	2.243947	8.77E-06	9.97E-05
IGSF11	-2.23223	0.107372	9.03E-06	0.000102

NOX4	2.310838	1.427659	9.04E-06	0.000102
KCNB1	-2.79688	2.284942	9.08E-06	0.000103
WNT3A	-2.04834	-1.55352	9.46E-06	0.000106
PGA3	-5.3015	9.821787	9.61E-06	0.000108
CBS	-2.0959	-1.385	9.94E-06	0.000111
SP8	5.299466	-0.03392	1.01E-05	0.000113
ACHE	3.371114	5.231482	1.02E-05	0.000113
GAD1	2.868136	2.728312	1.04E-05	0.000115
UBE2QL1	-2.36787	1.485165	1.05E-05	0.000116
ELFN2	3.50058	2.080099	1.11E-05	0.000122
PGGHG	2.091117	5.868405	1.15E-05	0.000126
C6orf223	3.353172	3.964291	1.16E-05	0.000127
HMX1	-2.33184	-4.42715	1.17E-05	0.000128
GDA	2.328288	6.010378	1.18E-05	0.000128
MLXIPL	2.740707	4.653545	1.22E-05	0.000132
CAPN9	-2.2354	3.455512	1.24E-05	0.000134
NTRK2	-2.15476	4.184311	1.24E-05	0.000134
HOXC9	2.517989	1.804734	1.25E-05	0.000135
GOLGA8T	-2.14169	-4.49322	1.29E-05	0.000139
FOXI2	-2.51297	-1.59819	1.31E-05	0.000141
DMBX1	3.096292	0.752863	1.32E-05	0.000142
ALOX12B	-2.37665	2.445946	1.33E-05	0.000144
IGFALS	-2.49537	2.693362	1.35E-05	0.000145
PLA2G1B	-2.57886	-1.22162	1.36E-05	0.000146
APOC1	2.620946	4.340195	1.40E-05	0.000149
VIL1	2.60792	7.406365	1.45E-05	0.000154
NAP1L2	-2.025	-0.06788	1.45E-05	0.000154
NR5A2	2.233446	4.32921	1.48E-05	0.000157
TERB2	-2.20519	-4.57854	1.52E-05	0.00016
ADAD2	-2.18092	-1.64128	1.54E-05	0.000162
CCL15	2.788958	1.67766	1.56E-05	0.000163
EVX1	4.24646	0.918339	1.57E-05	0.000164
TRIM10	2.38575	1.810565	1.58E-05	0.000165
KHDRBS2	-2.36617	-3.72701	1.65E-05	0.000171
HTR3E	-2.19298	-2.31577	1.67E-05	0.000173
ZBED2	-2.17352	1.353543	1.68E-05	0.000174
AIPL1	-2.23265	-3.84502	1.73E-05	0.000179
RNF225	-2.86866	1.087204	1.76E-05	0.000181
LOR	-2.57589	-2.67758	1.76E-05	0.000181
C2orf82	2.853976	3.214821	1.83E-05	0.000188
CLEC5A	2.597176	1.484081	1.87E-05	0.000192
RNF157	2.201523	4.225706	1.89E-05	0.000193
AC010616.1	2.220903	-1.02459	1.89E-05	0.000193
ETV4	2.089263	5.867248	1.93E-05	0.000196
LYPD8	7.106675	2.656374	1.93E-05	0.000196
PTF1A	-3.72434	-2.89764	1.95E-05	0.000198
CST9L	-2.92028	-4.4715	1.97E-05	0.000199

CXCL2	2.099387	5.103349	1.97E-05	0.000199
CACNG7	-2.11848	-3.62998	1.99E-05	0.000201
AADACL3	-2.46481	-4.60087	2.04E-05	0.000206
OTOP3	-3.10344	2.563116	2.09E-05	0.000211
CACNG2	-2.07143	-4.34905	2.13E-05	0.000215
SPOCK3	-2.66641	-1.91258	2.14E-05	0.000215
TMEM235	-2.09506	-4.2349	2.15E-05	0.000216
SPHKAP	-3.1801	-2.98898	2.16E-05	0.000216
CXCL17	-2.44671	6.412374	2.20E-05	0.00022
CD55	2.100121	8.537459	2.25E-05	0.000224
PGA4	-5.96764	5.656498	2.30E-05	0.000228
CFB	2.109125	5.671677	2.31E-05	0.000229
KRT31	-3.59255	-0.60554	2.31E-05	0.000229
NTRK3	-2.25249	0.794008	2.35E-05	0.000232
MMP9	2.972209	5.132042	2.36E-05	0.000232
CAPZA3	-2.76331	-2.64165	2.39E-05	0.000235
CRISP3	-3.16534	4.487079	2.46E-05	0.000241
YBX2	2.751504	3.857726	2.54E-05	0.000248
BIRC7	5.463465	1.55129	2.56E-05	0.00025
AOX1	-2.30198	3.383934	2.62E-05	0.000255
HOXC6	2.206353	2.620566	2.63E-05	0.000256
SLC35F3	-2.13339	-1.13208	2.68E-05	0.00026
NEU4	3.441158	1.927822	2.70E-05	0.000261
DMRTA1	-2.05881	1.474531	2.80E-05	0.00027
ECHDC3	-2.00209	3.285845	2.83E-05	0.000272
VSTM1	-2.07011	-3.29959	2.84E-05	0.000272
MMP1	3.222637	7.542047	2.90E-05	0.000278
ZP4	-2.78153	-4.18475	2.91E-05	0.000278
DAPL1	-2.66769	2.176126	2.93E-05	0.00028
RDM1	2.030432	0.387566	3.01E-05	0.000287
CCDC160	-2.03962	-1.86314	3.04E-05	0.000289
TTLL2	2.518951	-0.16262	3.05E-05	0.00029
KLRG2	-2.34226	0.116949	3.10E-05	0.000294
ODF4	-2.97675	-3.94731	3.10E-05	0.000294
CPA1	-2.54137	-3.63516	3.10E-05	0.000294
SHISA3	-2.12419	0.990222	3.12E-05	0.000295
SERPINB12	-3.64473	-0.8099	3.25E-05	0.000305
ANKRD7	-2.03192	-3.90309	3.28E-05	0.000308
GPR26	-2.12067	-3.75265	3.34E-05	0.000312
CDKN2A	2.306767	5.377569	3.37E-05	0.000315
LGALS7	-3.23014	2.996266	3.41E-05	0.000318
QPCT	2.641948	3.713732	3.48E-05	0.000323
CHIA	-5.07933	6.687623	3.58E-05	0.000332
AMH	2.361582	2.664122	3.59E-05	0.000333
APOE	2.67759	7.001638	3.59E-05	0.000333
OSM	2.577692	1.151438	3.62E-05	0.000335
AQP9	2.674161	2.227125	3.69E-05	0.00034

GALNTL5	-2.1601	-4.11487	3.71E-05	0.000342
SALL4	3.03628	3.146791	3.88E-05	0.000355
MYBPH	-2.1402	-3.36103	3.88E-05	0.000355
ADH1B	-2.43449	3.900366	4.14E-05	0.000376
PIK3C2G	-2.43236	4.383068	4.14E-05	0.000376
RGS1	2.458753	5.63179	4.20E-05	0.000381
TINAG	4.1176	0.703813	4.22E-05	0.000382
CREG2	2.592729	2.367178	4.26E-05	0.000385
DCSTAMP	3.095253	-1.21413	4.34E-05	0.000391
PRELP	-2.06256	5.103559	4.34E-05	0.000392
IL24	2.653499	2.41412	4.35E-05	0.000392
PTGIS	-2.19384	4.792411	4.42E-05	0.000397
SLC6A7	3.446771	0.672953	4.57E-05	0.000409
SLC22A31	-2.50878	0.359101	4.67E-05	0.000417
CLVS2	-2.83993	-1.68431	4.70E-05	0.000419
HHIP	-2.08207	2.874694	4.83E-05	0.000429
FOXN1	-2.43476	2.228662	5.07E-05	0.000448
CRTAC1	-2.23073	0.75468	5.07E-05	0.000448
CCL15-CCL14	2.728562	-1.26905	5.12E-05	0.000451
LAMB4	-2.04084	-0.2046	5.16E-05	0.000454
CHD5	-2.00823	1.749378	5.17E-05	0.000455
AGT	2.636667	5.509112	5.28E-05	0.000463
DMRTC2	-2.27206	-3.70103	5.36E-05	0.000467
PTH	-2.89093	-3.86647	5.36E-05	0.000467
CCL4L2	2.398944	1.594108	5.49E-05	0.000477
EVA1A	2.66986	1.573268	5.60E-05	0.000484
VMO1	2.771875	1.831653	5.69E-05	0.000491
FAM46B	-2.05176	4.319261	5.83E-05	0.000502
TOPAZ1	-2.38533	-4.31427	5.87E-05	0.000504
C6	-2.37676	1.182832	6.05E-05	0.000518
IGFBP1	4.894114	1.131247	6.09E-05	0.000521
CTLA4	2.056047	1.739376	6.09E-05	0.000521
LRRC38	-2.03413	-3.20266	6.20E-05	0.000529
MUC3A	2.927609	8.641726	6.21E-05	0.00053
ASPG	-2.13364	2.066068	6.34E-05	0.00054
GRM7	-2.05368	-1.96365	6.36E-05	0.00054
COL11A1	4.636848	3.877272	6.38E-05	0.000542
ST8SIA5	-2.00992	-0.96584	6.55E-05	0.000555
MFAP2	2.093999	3.598097	6.68E-05	0.000565
DEFB136	-2.65382	-4.55932	6.85E-05	0.000577
OR9Q1	-2.19341	-4.25947	6.87E-05	0.000578
POPDC3	-2.31408	0.208027	6.88E-05	0.000578
C20orf204	2.736257	1.791791	7.18E-05	0.000601
C2orf71	-2.22967	-3.26066	7.48E-05	0.000623
MAT1A	4.272067	1.471477	7.64E-05	0.000635
PDX1	2.031594	4.257288	7.67E-05	0.000637
HOXC8	2.282037	1.541549	7.96E-05	0.000657

SAA2-SAA4	3.800629	0.213506	8.16E-05	0.000671
CST2	3.242276	0.649581	8.17E-05	0.000672
HOXC12	5.427329	2.695062	8.23E-05	0.000675
ADAMDEC1	2.368641	2.65003	8.23E-05	0.000675
PCP4L1	-2.23039	1.329323	8.26E-05	0.000678
CCL7	3.675427	-1.90045	8.30E-05	0.000681
HOXC10	2.546325	4.15362	8.34E-05	0.000683
SPINK8	-3.10051	-2.73217	8.50E-05	0.000692
NEURL3	2.542723	1.931399	8.53E-05	0.000694
GFY	5.671739	-0.62076	8.56E-05	0.000697
C4orf17	-2.62586	-4.6227	8.65E-05	0.000703
PROP1	-2.11972	-3.86994	8.97E-05	0.000723
ALPP	4.392603	1.868515	9.08E-05	0.000731
COX6B2	2.644588	1.559601	9.09E-05	0.000731
TP53AIP1	-2.04249	0.028457	9.33E-05	0.000748
CST4	3.989984	-0.61109	9.37E-05	0.00075
FAM25A	-3.39996	2.064552	9.46E-05	0.000757
TRABD2A	2.376255	4.240457	9.53E-05	0.000762
SHISA6	-2.02179	0.848541	9.65E-05	0.00077
GRB14	2.446854	2.694098	9.66E-05	0.00077
DYNLRB2	-2.11181	-3.25539	9.74E-05	0.000776
CA9	-2.18578	5.710414	9.81E-05	0.00078
AKR1C4	3.309614	1.082794	9.92E-05	0.000788
HKDC1	2.098163	5.873124	0.000102	0.000804
INSRR	-2.10417	-0.65782	0.000102	0.000804
SPERT	3.533992	-1.15852	0.000106	0.000833
ZNF728	-2.32158	-2.46288	0.000107	0.000838
MOGAT3	3.103403	2.953511	0.000109	0.000855
ANXA13	3.535876	4.852174	0.000114	0.000888
GDF15	2.155426	6.061588	0.000114	0.000888
EPHA6	-2.23201	-1.82032	0.000114	0.00089
FOXJ1	3.430545	3.789108	0.000115	0.000892
BEND2	-2.14579	-4.24871	0.000117	0.00091
TGM6	-3.27774	-1.6936	0.000117	0.00091
DBX2	-2.3242	-4.05534	0.000126	0.00097
TISP43	-2.18243	-4.45046	0.000126	0.000971
GREM1	-2.0369	7.733808	0.000127	0.000981
MTNR1A	3.372791	-0.45556	0.000129	0.000992
MYO18B	-2.20625	1.533639	0.000129	0.000992
ALDOB	-2.19407	5.674152	0.000134	0.001023
BPIFA2	4.916077	-1.14513	0.000135	0.001033
CT83	3.549573	2.191089	0.000136	0.001039
C20orf173	-2.01731	-3.85666	0.000138	0.001047
CLDN9	2.888753	1.738147	0.000138	0.001047
ARPP21	-3.13786	-3.37881	0.000139	0.001053
MAGEE2	-2.19461	-3.97191	0.000145	0.001096
SUCNR1	2.961263	2.270908	0.000146	0.001099

LCN2	2.460937	10.65377	0.00015	0.001123
WDR72	2.708209	5.287869	0.000151	0.00113
TMEM229A	-2.22787	0.30255	0.000152	0.001135
SLC35D3	4.079396	1.861988	0.000153	0.001144
AC024940.1	4.045165	2.435538	0.000155	0.001155
MMP10	2.521052	2.64585	0.00016	0.001189
CLRN3	2.392476	4.365689	0.000161	0.001192
TFF2	-2.52718	7.233583	0.000161	0.001192
SAA4	3.86447	0.105177	0.000161	0.001193
HCN1	-2.40383	-2.35902	0.000166	0.001223
RFX8	2.349805	-0.50581	0.000166	0.001225
CYP4B1	-2.10002	2.124847	0.000169	0.001244
EPHX4	2.336507	1.417445	0.00017	0.001248
HIST3H2BB	2.189342	0.531057	0.00017	0.001249
STRA6	2.616666	3.744629	0.000174	0.001277
APLN	2.262676	3.528949	0.000175	0.001285
NPFFR1	2.405465	1.783792	0.00019	0.001373
SPATA4	-2.17767	-3.56704	0.000192	0.001382
EVPLL	-2.05572	-2.25051	0.0002	0.001438
PF4V1	3.346193	-1.99484	0.000204	0.001459
PRRX2	2.126026	3.043371	0.000204	0.00146
SLITRK5	-2.01492	-0.3335	0.000211	0.001503
DLX4	2.033056	1.01405	0.000215	0.001526
FCGR3A	2.11026	4.488456	0.000215	0.001529
IRS4	-2.72821	-2.54837	0.00022	0.001555
HIST1H2BI	2.176042	-2.8632	0.000221	0.001562
NLRP6	3.282162	2.386314	0.000227	0.001601
ENDOU	-2.67712	3.197268	0.000228	0.001604
CIDEA	-2.79952	-0.92853	0.000228	0.001604
HS3ST4	-2.88489	-0.97728	0.000232	0.001628
EPHA7	-2.16914	2.513262	0.000235	0.00165
KRT7	2.200711	7.625059	0.000242	0.001687
FETUB	-2.92081	-0.63723	0.000243	0.00169
SCGB1A1	-2.66468	0.053351	0.000246	0.00171
SLC25A31	-2.0389	-4.18475	0.000253	0.001756
CCL3	2.193607	1.293684	0.000253	0.001757
ZNF280A	4.452512	-1.67261	0.000258	0.001783
CD177	3.91399	3.862955	0.000265	0.001825
DUSP27	5.583262	3.139456	0.00027	0.001859
GLYATL1P3	3.240835	-3.19162	0.000272	0.00187
NKD2	2.376133	3.455688	0.000273	0.001873
DSG1	-2.87198	5.335666	0.000274	0.00188
RGR	-2.08902	-3.38272	0.000276	0.00189
RNF186	2.521996	2.905436	0.000279	0.00191
RSPO3	-2.07724	3.099003	0.000287	0.001956
PPP1R1B	3.911857	9.306445	0.000288	0.001964
CCR8	2.003419	-0.89978	0.000294	0.001995

SLC7A9	2.806613	1.26431	0.00032	0.00215
IGFL1	-2.72705	1.965632	0.000322	0.002161
KLK14	-2.121	1.705079	0.000326	0.002188
MCEMP1	2.428377	-0.33613	0.00034	0.002259
SLCO1B3	4.258143	1.99802	0.000341	0.002264
DPCR1	-2.47474	7.942358	0.000342	0.002266
HS6ST3	-2.24781	0.934787	0.000346	0.002289
EFNA2	2.464494	2.248317	0.000353	0.002327
MUC12	3.574456	5.892198	0.00036	0.002368
KCNS1	2.60752	0.628838	0.000362	0.002379
CYP2W1	3.501405	5.246352	0.000368	0.002406
FFAR2	2.696484	1.732507	0.000368	0.002409
NUPR2	-2.88677	-0.60414	0.000374	0.002439
CILP2	2.742392	1.869575	0.000382	0.002479
IL23A	2.085874	1.647329	0.000384	0.002486
AKAP4	4.255028	-2.97736	0.000385	0.002494
DNAJC12	2.674038	2.703334	0.000392	0.002529
RELN	-2.09809	1.536188	0.000396	0.002544
ANXA10	-2.10828	6.300096	0.000398	0.002554
PCDH11X	-2.02658	-3.23203	0.000399	0.002557
RTL4	-3.04059	-4.59335	0.000405	0.002588
VNN1	2.894988	6.426299	0.000409	0.002615
BEST2	-2.30506	0.026003	0.000415	0.002648
LCK	2.01499	4.139542	0.000417	0.002655
NGB	-2.59393	-2.84369	0.000419	0.002666
SP9	-2.70684	-2.65634	0.00042	0.002669
SLC39A12	-2.18397	-3.80225	0.000424	0.00269
HIST1H2AB	2.321899	-3.78089	0.000427	0.002711
CELA3B	-2.33739	0.117024	0.000434	0.00274
KPRP	-3.6181	2.602958	0.000435	0.002743
GNLY	2.331092	2.867938	0.000439	0.002765
DHRS7C	-2.23671	-4.60404	0.000444	0.002791
BNIP1	-2.08421	2.832549	0.000444	0.002794
KRT2	-2.34583	-0.91181	0.000447	0.002806
LPAR3	-2.08801	1.702483	0.000447	0.002806
CLDN8	-2.6774	-0.03695	0.00045	0.002819
GUCA2A	4.074649	0.445594	0.000456	0.002853
FFAR4	2.52062	2.133138	0.000468	0.002913
C6orf118	-2.46685	-3.35423	0.000475	0.002949
AOC1	2.138537	7.23884	0.000484	0.002994
CSN2	-2.8727	-4.52081	0.000491	0.003032
SLC2A2	6.63481	2.157714	0.000495	0.003056
ALPPL2	4.74366	3.643815	0.000507	0.003119
MRGPRX3	-2.18172	-3.12038	0.000523	0.003201
INHBE	4.042665	1.442709	0.000523	0.003201
DOC2A	2.319653	0.951623	0.000525	0.003209
ASB4	5.915589	3.36507	0.000527	0.003217

VNN3	2.767761	1.327016	0.000529	0.003228
ODAM	-2.22278	3.53037	0.000537	0.003266
AGTR1	-2.25756	0.27336	0.000544	0.003305
GABRA1	-2.89356	-3.16848	0.000552	0.003346
CCL3L1	2.261581	0.572047	0.000566	0.003412
VTN	5.260927	5.964768	0.000569	0.003428
ADH7	-2.92495	4.259941	0.00057	0.003432
TNNI3	3.062778	-0.24117	0.000584	0.003495
MYOG	-2.05239	-4.44208	0.000593	0.003542
TMEM63C	-2.0314	2.930649	0.000599	0.003569
PAGE2B	8.102565	0.220328	0.0006	0.003576
IDO1	3.028882	5.1674	0.000601	0.003577
KIAA1549L	2.274419	3.423797	0.000605	0.003596
AHSG	6.327845	1.886254	0.000607	0.003607
IL19	4.206241	0.874646	0.000608	0.003615
RBP2	3.458896	0.977611	0.000611	0.003625
SAGE1	6.824598	1.617927	0.000633	0.003734
MS4A15	4.664794	0.364274	0.000642	0.003779
RNASE2	4.025447	1.912539	0.000644	0.00379
HPN	-2.14568	3.746497	0.000655	0.003843
ONECUT2	2.332009	6.671086	0.00067	0.003917
KCNF1	2.359017	0.920177	0.000672	0.003925
ELOVL3	2.323021	-1.03487	0.000676	0.003943
STK31	2.172786	3.619698	0.000689	0.004004
CEL	4.229761	4.825449	0.000692	0.004014
NTSR1	3.636655	3.804746	0.000697	0.00404
DKK2	2.219393	1.28272	0.000708	0.004094
MGAM2	2.597008	6.909186	0.000711	0.004109
DCD	-2.0583	-4.50668	0.000719	0.004136
CFAP74	4.503319	3.16127	0.00073	0.004193
VSIG10L	-2.00551	5.542308	0.000736	0.004219
UPK3A	2.767716	0.310468	0.000745	0.004262
MIEN1	2.544105	7.676213	0.000748	0.004276
MUC16	4.076278	4.570253	0.000759	0.004333
SLC28A3	2.116382	4.137735	0.000775	0.004409
GSDMB	2.349786	7.126745	0.000811	0.004581
GRB7	2.430304	7.755666	0.000819	0.004619
REG1B	7.659486	7.168462	0.00083	0.004665
FAT2	-2.17946	5.258405	0.000848	0.004748
FPR2	2.371824	1.123332	0.00085	0.004756
SIX3	3.847551	1.22511	0.000884	0.004916
TMEM249	2.591834	-1.20555	0.000886	0.004923
MC4R	-2.04127	-4.03371	0.000886	0.004924
GBP5	2.221703	4.508917	0.000902	0.004987
CREB3L3	2.919866	3.072057	0.000904	0.004998
CCDC63	-2.21007	-3.82652	0.000951	0.005213
SLC6A3	3.366757	-0.28193	0.000985	0.005364

CRP	10.08471	4.382087	0.000989	0.005379
MMP7	3.212068	7.068056	0.000992	0.005393
APOA2	6.08694	2.967379	0.000993	0.005395
MAGEA6	6.433243	3.059273	0.000998	0.005418
USH1G	-2.33395	1.591604	0.001005	0.005448
PLPPR3	2.858472	-0.90892	0.001009	0.005463
CYSRT1	-2.03502	4.314272	0.001031	0.005565
CACNG8	2.167497	0.818494	0.001041	0.005611
MESP2	2.334709	0.133973	0.001057	0.005684
NNAT	3.578535	4.572002	0.001062	0.005704
CCL24	2.450764	1.579087	0.001064	0.005713
VGLL1	3.120844	1.704209	0.001066	0.005718
GDF10	-2.0488	-1.41747	0.001079	0.005775
ABCC8	-2.08057	1.554022	0.001127	0.005992
MAGEA3	6.100331	3.471917	0.001127	0.005992
CALHM3	3.498663	-0.04049	0.001129	0.005999
PNMA5	5.52841	1.333595	0.001144	0.006063
PON1	2.949963	-0.42817	0.001145	0.006068
HSPA6	3.047742	4.599727	0.001157	0.006116
FOXE1	-2.5337	3.198693	0.001203	0.006321
ALPI	3.356245	2.554119	0.001207	0.006333
OPRM1	-2.00696	-3.75259	0.001214	0.006357
PKP1	-2.334	7.889535	0.001219	0.006381
NKAIN4	3.546509	0.701812	0.001247	0.006512
CSAG3	5.369464	-0.65701	0.001247	0.006512
COL11A2	3.306492	2.958571	0.001256	0.006542
DNAH2	2.278569	3.641289	0.001258	0.006548
KISS1R	2.980604	-0.82489	0.001278	0.006627
CCK	3.201118	1.696678	0.00128	0.006636
STARD3	2.052547	6.998641	0.001286	0.006655
LYPD1	2.312528	0.666677	0.001291	0.006675
DDC	2.101995	5.071306	0.00134	0.006888
FGL1	5.846462	2.35738	0.001346	0.00691
CNFN	-2.42984	7.43936	0.001356	0.00695
KRTAP5-3	-2.1123	-4.30667	0.001358	0.006955
IL17A	3.136961	-0.98212	0.001362	0.00697
LRRC3B	-2.04756	-2.90983	0.001363	0.006974
RPTN	-2.94223	1.339223	0.001378	0.007042
ERVV-1	5.56078	0.863665	0.001409	0.007189
CCL20	2.248914	6.010406	0.001422	0.007241
ANXA8	-2.14813	3.41315	0.001447	0.007359
KRT32	-2.4644	-2.28967	0.001489	0.007525
NLRP10	-2.03323	-3.71479	0.001494	0.007543
ZNF735	-2.66902	-4.45806	0.001511	0.007614
ACTBL2	2.413561	-0.43103	0.001512	0.007615
MAGEC2	10.12377	1.655317	0.00153	0.007692
IL37	2.064087	-2.22923	0.001538	0.00773

MAGEA1	7.269483	1.067055	0.001539	0.007731
MYADML2	2.209506	-0.43979	0.001541	0.007742
CALCR	3.385801	-0.29013	0.001549	0.007775
MAL	-2.55141	7.303598	0.001568	0.007844
RASGRF1	2.476826	1.876812	0.001574	0.007868
TBX10	2.58899	-0.6139	0.00161	0.008027
GIP	-2.22592	-3.52314	0.001621	0.008069
SLC18A3	-2.6409	-1.78784	0.00166	0.00822
HTR1D	2.348544	2.983632	0.001691	0.008342
TBX4	3.024668	1.059787	0.001733	0.008503
GSC	2.446515	-1.39411	0.001789	0.008736
F7	2.355204	0.127665	0.001806	0.008805
CLLU1OS	2.925563	-3.37891	0.00188	0.009101
FGF19	5.586127	4.3268	0.001904	0.009207
CEACAM7	2.818568	6.008878	0.001906	0.009209
SEMG1	3.528933	1.217122	0.001911	0.009225
FNDC1	2.26771	4.755605	0.00194	0.009344
FOLH1	2.454899	2.551868	0.00195	0.009374
KRT23	2.843444	5.119008	0.001976	0.009469
TREML2	2.483149	1.199714	0.002	0.009557
WNT11	2.580329	3.200973	0.002033	0.009688
EGR4	2.499563	1.446873	0.002041	0.009714
UGT2B15	-2.02338	3.433469	0.002046	0.009725

CMP, counts per million; FC, fold change; FDR, false discovery rate.