

Supplementary Table 1 A whole of 992 differentially expressed long noncoding RNAs were obtained, of which 772 were up-regulated, and 220 were down-regulated

	logFC	logCPM	<i>P</i> Value	FDR
AC008555.5 ENSG00000271109 lincRNA	-4.662133475	7.18007363	6.14E-61	7.83E-57
AC007342.4 ENSG00000261804 lincRNA	-4.905266477	7.865876002	2.04E-54	1.30E-50
AC011453.1 ENSG00000269842 lincRNA	-4.305890618	3.509630199	8.55E-49	3.63E-45
AC239803.2 ENSG00000232265 lincRNA	-5.042441679	5.627730101	1.89E-45	6.04E-42
AP003419.4 ENSG00000275484 lincRNA	-3.939209808	4.414633064	3.64E-39	9.30E-36
AL138762.1 ENSG00000272572 antisense	-4.168487884	8.652520359	1.94E-37	4.12E-34
LIVAR ENSG00000266304 lincRNA	-5.309594519	6.382392163	4.98E-36	9.07E-33
AC005480.1 ENSG00000258891 antisense	-4.066883879	5.139186245	3.80E-35	6.06E-32
AC084048.1 ENSG00000249334 lincRNA	-4.16552384	4.501108196	1.19E-34	1.57E-31
AC009120.6 ENSG00000261404 lincRNA	-4.855816026	4.627741223	1.23E-34	1.57E-31
AC087276.3 ENSG00000254907 antisense	-4.239026839	4.334762425	1.66E-34	1.92E-31
AC005909.1 ENSG00000265425 lincRNA	-5.443181965	6.108958369	3.69E-34	3.92E-31
LINC01531 ENSG00000205786 lincRNA	-4.907704461	5.120568998	4.37E-34	4.29E-31
AC010967.1 ENSG00000228033 lincRNA	-3.449010371	2.691466662	1.37E-33	1.25E-30
AL161756.1 ENSG00000214770 antisense	-3.849261851	6.716574098	8.94E-33	7.60E-30
CNTN4-AS2 ENSG00000227588 lincRNA	-4.830327375	4.155302946	3.62E-32	2.88E-29
AC022081.1 ENSG00000256513 lincRNA	-3.434979651	0.301194913	2.13E-31	1.60E-28
LINC01903 ENSG00000265555 lincRNA	-4.134705326	2.213156148	1.62E-30	1.15E-27
AP003037.1 ENSG00000256220 processed_transcript	-4.109332493	1.099726822	4.63E-30	3.11E-27
LINC02445 ENSG00000257750 lincRNA	-4.763964518	3.215115245	7.42E-30	4.73E-27
ADAMTS9-AS1 ENSG00000241158 antisense	-2.813037249	4.618374873	1.02E-28	6.18E-26
AL163974.1 ENSG00000258576 sense_overlapping	-6.157411302	8.004415699	3.74E-28	2.17E-25

AC090124.1 ENSG00000254530 lincRNA	-4.244282708	2.480521172	3.66E-27	2.03E-24
AL137230.1 ENSG00000258792 lincRNA	-3.46872443	2.975890676	1.63E-26	8.65E-24
LINC02255 ENSG00000277718 lincRNA	-5.827926481	10.80592564	1.94E-26	9.89E-24
AC110491.1 ENSG00000261292 lincRNA	-3.827185471	1.876848949	6.82E-26	3.35E-23
AC144652.1 ENSG00000273117 lincRNA	-2.855270525	6.44046729	1.02E-24	4.83E-22
AL355388.2 ENSG00000273002 antisense	-3.678411459	6.323957206	1.17E-23	5.31E-21
AC018742.1 ENSG00000233005 lincRNA	-4.163241007	1.226949298	2.79E-23	1.23E-20
AL021396.1 ENSG00000229766 antisense	-4.695763574	5.554675006	5.16E-23	2.19E-20
AF064860.1 ENSG00000225330 sense_overlapping	-4.466807962	8.501232025	2.02E-22	8.31E-20
LINC01898 ENSG00000261194 lincRNA	-3.912136246	1.70462341	3.87E-22	1.54E-19
AC139718.2 ENSG00000250855 lincRNA	-3.862499756	4.786537291	5.19E-22	2.01E-19
AC007652.1 ENSG00000235464 lincRNA	-4.076093897	3.159651698	5.42E-21	1.99E-18
KIZ-AS1 ENSG00000232712 antisense	-3.018576908	6.313844865	5.47E-21	1.99E-18
AL513188.1 ENSG00000233848 antisense	-3.202158229	4.676363516	1.36E-20	4.81E-18
AP001046.1 ENSG00000225637 lincRNA	-3.236281646	2.24687779	1.59E-20	5.46E-18
DCTN1-AS1 ENSG00000237737 antisense	-2.927321824	3.479622447	2.10E-19	7.03E-17
AP000345.2 ENSG00000225413 lincRNA	-3.32177871	3.437891933	5.99E-19	1.96E-16
LINC01326 ENSG00000244321 lincRNA	-4.045001674	2.442163207	1.63E-18	5.21E-16
LINC00364 ENSG00000230040 lincRNA	-3.65278288	2.712743109	7.44E-18	2.31E-15
AC021491.3 ENSG00000250976 antisense	-3.493141051	3.716644471	8.00E-18	2.43E-15
UCKL1-AS1 ENSG00000280213 antisense	-2.033668985	5.963922957	8.92E-18	2.64E-15
AC091230.1 ENSG00000261606 processed_transcript	-3.65938082	0.636172769	1.53E-17	4.44E-15
LINC01829 ENSG00000236780 lincRNA	-2.912358026	4.392549947	3.76E-17	1.07E-14
LINC02106 ENSG00000251573 lincRNA	-2.408430627	2.661033883	4.34E-17	1.20E-14

AC106886.3 ENSG00000274678 lincRNA	-2.537421581	3.106109543	6.03E-17	1.60E-14
AC209005.1 ENSG00000250915 lincRNA	-2.878718602	-0.366563591	7.40E-17	1.93E-14
AC044791.1 ENSG00000259237 lincRNA	-3.300746831	1.2673235	7.74E-17	1.97E-14
AL356270.1 ENSG00000236915 antisense	-2.993408719	2.162476388	1.67E-16	4.18E-14
AC138305.1 ENSG00000260658 lincRNA	-2.939547524	3.229877296	3.35E-16	8.21E-14
AP001995.2 ENSG00000270160 lincRNA	-2.128260639	1.356149592	4.90E-16	1.18E-13
LINC00867 ENSG00000232139 lincRNA	-2.26474028	1.847363408	6.25E-16	1.48E-13
AC087633.2 ENSG00000277654 lincRNA	-3.26039616	3.409722157	8.02E-16	1.86E-13
CISTR ENSG00000260492 lincRNA	-2.603143244	0.493233808	9.24E-16	2.10E-13
LINC00955 ENSG00000216560 processed_transcript	-3.344148849	2.796139364	1.00E-15	2.24E-13
AL928768.1 ENSG00000253701 lincRNA	-3.783170416	4.835344085	1.03E-15	2.26E-13
AC007128.2 ENSG00000272328 lincRNA	4.258271615	3.364927067	1.51E-15	3.26E-13
AC061975.7 ENSG00000267259 lincRNA	-2.790810982	10.01005213	4.19E-15	8.90E-13
AL109930.1 ENSG00000271774 antisense	-2.33344409	2.526351705	4.78E-15	9.99E-13
AGAP2-AS1 ENSG00000255737 antisense	-2.360542941	11.58342157	6.00E-15	1.23E-12
AC013733.2 ENSG00000234595 antisense	-2.775229674	0.333775442	6.12E-15	1.24E-12
AC090376.1 ENSG00000267101 antisense	-3.36696733	4.89884226	7.59E-15	1.51E-12
AC027601.1 ENSG00000260005 antisense	3.970701308	7.896725057	8.15E-15	1.60E-12
AL023583.1 ENSG00000272209 lincRNA	-2.762398253	5.973646722	1.15E-14	2.23E-12
IL12A-AS1 ENSG00000244040 antisense	-2.45965377	2.885409747	3.50E-14	6.66E-12
AL020997.2 ENSG00000269971 sense_intronic	-2.494131978	1.263980698	6.86E-14	1.29E-11
AC106789.1 ENSG00000251628 lincRNA	-2.563832458	1.112458541	7.93E-14	1.47E-11
AC012531.1 ENSG00000260597 lincRNA	3.605207704	4.103956357	1.02E-13	1.86E-11
AC015727.1 ENSG00000263220 antisense	-2.864937301	4.070126221	1.25E-13	2.25E-11

LINC01946 ENSG00000223647 lincRNA	-2.724092242	3.500657196	1.64E-13	2.88E-11
LINC00346 ENSG00000255874 lincRNA	2.009103538	7.773677066	1.65E-13	2.88E-11
AC093879.2 ENSG00000249373 antisense	-3.779176133	6.1821455	2.02E-13	3.48E-11
DGCR9 ENSG00000273032 lincRNA	3.890292409	5.042288627	2.35E-13	4.00E-11
C20orf166-AS1 ENSG00000174403 antisense	-2.948728524	4.85429965	2.83E-13	4.76E-11
AC034236.3 ENSG00000272265 lincRNA	-2.148873554	2.285770936	3.24E-13	5.37E-11
AC055874.1 ENSG00000259446 antisense	-3.041246154	0.46674401	3.41E-13	5.57E-11
LINC00922 ENSG00000261742 lincRNA	4.862922058	2.921614599	3.50E-13	5.66E-11
AL022313.4 ENSG00000261675 sense_overlapping	-2.365155065	1.513672114	3.91E-13	6.24E-11
AL021026.1 ENSG00000225243 antisense	-2.549795966	1.387635153	4.94E-13	7.71E-11
AL512288.1 ENSG00000227050 antisense	-2.476380947	2.49680514	4.96E-13	7.71E-11
AC092422.1 ENSG00000237838 lincRNA	-2.713932326	1.322470389	6.33E-13	9.61E-11
LINC00514 ENSG00000262152 processed_transcript	-2.706175219	4.86990649	6.93E-13	1.04E-10
AC109460.1 ENSG00000260367 antisense	-2.396044483	8.835786182	2.13E-12	3.05E-10
AC074366.1 ENSG00000232518 antisense	2.242419143	1.664952067	2.32E-12	3.26E-10
AC243967.3 ENSG00000278239 lincRNA	-3.149422274	6.007443422	2.32E-12	3.26E-10
AC012085.2 ENSG00000258274 antisense	-2.637234725	3.122747886	2.45E-12	3.39E-10
L29074.1 ENSG00000227083 antisense	4.483968122	3.951801729	2.92E-12	4.00E-10
HOTAIR ENSG00000228630 antisense	5.746580686	5.858465439	4.79E-12	6.43E-10
AC068134.2 ENSG00000237087 lincRNA	6.570594065	4.989715468	6.73E-12	8.94E-10
AC104261.1 ENSG00000259747 lincRNA	-2.395673933	6.664765867	7.56E-12	9.82E-10
AL121820.2 ENSG00000259038 antisense	-2.365917249	6.996799625	7.66E-12	9.82E-10
LINC01050 ENSG00000271216 lincRNA	5.306944748	1.776934096	7.70E-12	9.82E-10
AC095057.2 ENSG00000250338 lincRNA	-2.50676035	0.992736307	7.99E-12	1.01E-09

LINC00332 ENSG00000230710 lincRNA	-3.081565168	0.597245613	9.78E-12	1.22E-09
DLEU1-AS1 ENSG00000229323 lincRNA	3.63367118	1.09349648	1.04E-11	1.28E-09
AC005670.1 ENSG00000261886 lincRNA	-2.387876655	3.684702267	1.28E-11	1.57E-09
AP000943.2 ENSG00000255666 lincRNA	3.802966255	3.023714101	1.29E-11	1.57E-09
LINC01711 ENSG00000268941 lincRNA	3.639274256	2.101242882	1.79E-11	2.13E-09
AL355607.2 ENSG00000260454 lincRNA	-2.919073226	2.397548379	1.85E-11	2.19E-09
ADAMTS9-AS2 ENSG00000241684 antisense	-2.585045314	5.106283241	1.93E-11	2.26E-09
UBXN10-AS1 ENSG00000225986 antisense	-3.291581258	4.077004255	2.06E-11	2.39E-09
AC104794.3 ENSG00000260476 lincRNA	3.773574158	1.776204671	2.22E-11	2.56E-09
AC025280.1 ENSG00000260859 sense_intronic	-2.931287705	1.675701285	3.47E-11	3.96E-09
ZNF582-AS1 ENSG00000267454 lincRNA	-2.677342031	9.87583276	3.55E-11	4.01E-09
PCDH9-AS1 ENSG00000234527 antisense	-3.207642883	4.774548441	3.84E-11	4.26E-09
AC124301.2 ENSG00000255335 antisense	-3.021770782	4.898698821	5.52E-11	6.02E-09
AL450468.1 ENSG00000235005 antisense	-3.347508372	8.35062517	5.58E-11	6.03E-09
LINC01980 ENSG00000225548 lincRNA	6.44423262	4.132079106	7.55E-11	8.09E-09
HUXC-AS3 ENSG00000251151 processed_transcript	6.836141982	4.288186813	8.24E-11	8.76E-09
AL122125.1 ENSG00000277050 antisense	-2.056257695	2.699514283	9.43E-11	9.94E-09
AC073323.1 ENSG00000232524 antisense	3.932043986	1.511201186	1.97E-10	2.03E-08
LINC02257 ENSG00000238042 lincRNA	3.83559327	2.83790552	2.03E-10	2.07E-08
CASC20 ENSG00000229876 lincRNA	4.40573689	2.477422995	2.05E-10	2.07E-08
AC022639.1 ENSG00000253554 antisense	5.490437076	1.40686526	2.83E-10	2.84E-08
MKX-AS1 ENSG00000230500 antisense	-2.122692622	0.768594066	3.67E-10	3.66E-08
AC012146.3 ENSG00000262693 antisense	-2.133281424	4.814579196	3.88E-10	3.83E-08
EGLN3-AS1 ENSG00000258897 antisense	-2.218095544	1.074692804	4.17E-10	4.06E-08

AC004158.1 ENSG00000260664 lincRNA	-2.096423421	7.590574161	5.59E-10	5.36E-08
AC106876.1 ENSG00000222001 processed_transcript	-2.598387246	5.946448016	5.84E-10	5.55E-08
LINC00989 ENSG00000250334 lincRNA	-2.751555731	3.64643409	6.68E-10	6.31E-08
AL158207.2 ENSG00000230684 antisense	-2.236210121	5.978320966	7.20E-10	6.75E-08
AP001180.2 ENSG00000264072 lincRNA	-2.987441174	7.585533543	7.48E-10	6.96E-08
AC105460.1 ENSG00000250920 lincRNA	6.7442192	7.671996153	7.94E-10	7.28E-08
AP000943.1 ENSG00000233536 lincRNA	5.867713128	5.271965815	9.01E-10	8.15E-08
AC104506.1 ENSG00000273204 antisense	-2.794302789	0.705239132	1.07E-09	9.60E-08
LINC00513 ENSG00000233559 lincRNA	2.109686165	7.024642389	1.27E-09	1.13E-07
AC006450.1 ENSG00000231227 sense_overlapping	-2.546592023	2.934815607	1.38E-09	1.22E-07
AC079385.3 ENSG00000257918 antisense	2.037045975	1.821378024	1.51E-09	1.33E-07
AL022328.4 ENSG00000273253 antisense NPSK1-	3.381693168	8.546696005	1.82E-09	1.57E-07
AS1 ENSG00000197085 processed_transcript	5.357274292	4.26624589	1.85E-09	1.59E-07
AC004691.1 ENSG00000229263 antisense	4.032488857	6.041468162	1.94E-09	1.64E-07
AC097505.1 ENSG00000272995 antisense	5.296859843	7.446622747	2.07E-09	1.72E-07
AC100843.2 ENSG00000267341 antisense	3.832876556	3.615115489	2.15E-09	1.78E-07
DSG2- AS1 ENSG00000264859 antisense	2.180352299	5.217123231	2.26E-09	1.86E-07
AC023158.2 ENSG00000273853 sense_intronic	-2.330913147	1.3945771	2.30E-09	1.88E-07
EFCAB14- AS1 ENSG00000228237 antisense	3.793137623	7.573286146	2.69E-09	2.18E-07
AL109615.3 ENSG00000237686 antisense HUXC-	2.505744468	6.417602095	2.76E-09	2.23E-07
AS2 ENSG00000250133 processed_transcript	4.777233474	4.482311691	2.90E-09	2.33E-07
CASK- AS1 ENSG00000233033 antisense	3.034035529	3.553694199	3.49E-09	2.75E-07
LINC00559 ENSG00000261446 lincRNA	-2.358605231	3.411257831	3.49E-09	2.75E-07
AC068580.2 ENSG00000230834 lincRNA	2.990236965	5.620967563	3.74E-09	2.93E-07

LMLN-AS1 ENSG00000232832 antisense	-2.66854874	6.680344545	4.31E-09	3.33E-07
AL391361.3 ENSG00000233342 lincRNA	-2.017415021	0.829606789	4.34E-09	3.34E-07
AC133485.2 ENSG00000260402 lincRNA	-3.71822836	1.350685552	4.72E-09	3.61E-07
AL670729.3 ENSG00000270104 lincRNA	2.212855189	0.781498848	4.76E-09	3.61E-07
AC051619.8 ENSG00000260035 sense_intronic	-3.104986066	0.227217585	4.93E-09	3.72E-07
AL109615.2 ENSG00000231881 lincRNA	2.936727143	1.157866467	5.07E-09	3.80E-07
AC245884.1 ENSG00000227407 antisense	-2.023284695	2.722869281	5.35E-09	3.99E-07
BVES-AS1 ENSG00000203808 antisense	-2.284995745	2.84808773	5.82E-09	4.31E-07
AL353811.1 ENSG00000269957 lincRNA	-2.320709403	0.204590429	6.29E-09	4.64E-07
PCAT18 ENSG00000265369 lincRNA	-3.30241406	3.06413681	7.12E-09	5.19E-07
LINC00682 ENSG00000245870 lincRNA	-2.741815944	0.255501072	7.31E-09	5.28E-07
AC068489.1 ENSG00000234446 lincRNA	3.183796171	1.362075728	8.00E-09	5.70E-07
AP000802.1 ENSG00000247416 antisense	-2.565109882	8.849143285	8.65E-09	6.13E-07
AC099792.1 ENSG00000231252 lincRNA	-2.210465472	4.577917086	9.06E-09	6.38E-07
AL157387.1 ENSG00000234918 lincRNA	4.119665202	1.93310219	9.30E-09	6.44E-07
AC015726.2 ENSG00000276406 lincRNA	5.04741869	1.79932519	9.46E-09	6.52E-07
AL136982.6 ENSG00000272508 processed_transcript	-2.47398169	0.841593628	1.01E-08	6.90E-07
AP001136.1 ENSG00000226771 antisense	-2.770540091	1.011416118	1.29E-08	8.71E-07
BARX1-AS1 ENSG00000235601 lincRNA	-2.480345123	4.114789162	1.31E-08	8.79E-07
AC079329.1 ENSG00000254680 antisense	4.704166129	1.880866316	1.33E-08	8.89E-07
AL049765.1 ENSG00000232465 lincRNA	-2.228978487	0.604085288	1.36E-08	8.99E-07
AC096888.1 ENSG00000244564 lincRNA	3.711908615	0.86446648	1.43E-08	9.41E-07
AC067930.3 ENSG00000254812 antisense	2.083205724	1.646035373	1.47E-08	9.63E-07
AC087521.1 ENSG00000244953 lincRNA	-2.612623464	2.676268485	1.49E-08	9.72E-07

AC004584.1 ENSG00000262298 antisense	2.324559509	2.281806477	1.51E-08	9.79E-07
AC006007.1 ENSG00000230746 lincRNA	-2.871681604	0.598019201	1.56E-08	1.00E-06
AC127496.6 ENSG00000263218 antisense	-2.194620608	1.17389255	1.58E-08	1.01E-06
LINC01297 ENSG00000274827 lincRNA	3.819942458	1.712638442	1.59E-08	1.01E-06
AC116337.3 ENSG00000249856 lincRNA	-2.106183546	1.120871548	1.77E-08	1.12E-06
AC010880.1 ENSG00000224400 lincRNA	-2.573357668	4.03535244	1.90E-08	1.18E-06
PGM5-AS1 ENSG00000224958 antisense	-2.221163974	5.931037154	2.02E-08	1.25E-06
AC090673.2 ENSG00000256083 antisense	4.531176299	0.095414967	2.14E-08	1.32E-06
AC103563.7 ENSG00000233850 antisense	-3.155978724	1.955570135	2.23E-08	1.36E-06
AC006231.1 ENSG00000250819 lincRNA	5.675826644	3.461488724	2.24E-08	1.36E-06
AL353052.2 ENSG00000236372 lincRNA	4.477824171	1.728726046	2.32E-08	1.40E-06
LINC00392 ENSG00000228295 lincRNA	8.61166742	5.350591907	2.37E-08	1.41E-06
LINC02163 ENSG00000251026 lincRNA	7.361286351	3.380924048	2.45E-08	1.45E-06
AC036108.2 ENSG00000261054 antisense	-2.134685302	2.354569715	2.51E-08	1.48E-06
FNDC1-IT1 ENSG00000235086 sense_intronic	3.749894845	0.143873163	2.89E-08	1.70E-06
Z97200.1 ENSG00000271811 lincRNA	2.622694515	6.516479908	3.04E-08	1.78E-06
MIR205HG ENSG00000230937 processed_transcript	-2.67776145	6.628463558	3.22E-08	1.88E-06
AC068389.2 ENSG00000254869 lincRNA	2.458436152	0.66596149	3.29E-08	1.90E-06
AC034223.1 ENSG00000249102 lincRNA	3.730518578	0.116826958	3.65E-08	2.10E-06
AC090809.1 ENSG00000253363 lincRNA	6.264608879	2.719243514	3.80E-08	2.17E-06
AP005230.1 ENSG00000263745 lincRNA	3.540761578	2.858707216	3.95E-08	2.25E-06
AL513123.1 ENSG00000236347 lincRNA	4.848880503	2.39663735	4.19E-08	2.37E-06
AC022150.1 ENSG00000268886 antisense	-2.367349135	-0.154053321	4.21E-08	2.37E-06
AC018682.2 ENSG00000253515 antisense	3.545082842	3.870756835	4.31E-08	2.40E-06

AC000067.1 ENSG00000225007 lincRNA	3.50772186	0.036403651	4.36E-08	2.42E-06
AC020913.2 ENSG00000269480 antisense	3.593280569	6.362620006	4.44E-08	2.45E-06
LINC01100 ENSG00000242107 lincRNA	-2.119657787	0.490375996	4.82E-08	2.64E-06
AC133106.1 ENSG00000228073 antisense	2.615530011	2.304184989	5.01E-08	2.73E-06
AL162724.1 ENSG00000227200 sense_intronic	2.443634432	4.244380211	5.40E-08	2.93E-06
LINC00941 ENSG00000235884 lincRNA	3.594805312	5.976383213	5.42E-08	2.93E-06
AC020891.3 ENSG00000259701 sense_intronic	3.061152092	3.389253329	6.09E-08	3.26E-06
AC124067.2 ENSG00000253414 sense_intronic	3.313432769	4.001039383	6.39E-08	3.40E-06
AC091489.1 ENSG00000260242 lincRNA	-2.368515958	2.934624836	6.68E-08	3.54E-06
AC105460.2 ENSG00000251577 antisense	6.359045141	2.058752417	7.33E-08	3.81E-06
AC010343.3 ENSG00000250697 lincRNA	3.717545481	2.449494453	7.35E-08	3.81E-06
AC020656.2 ENSG00000274979 lincRNA	2.119203594	8.302746875	7.38E-08	3.81E-06
AC010980.2 ENSG00000267034 lincRNA	-2.587089968	3.186401134	7.54E-08	3.88E-06
AC104024.1 ENSG00000230709 lincRNA	-2.254262198	1.678528399	7.60E-08	3.89E-06
AL136088.1 ENSG00000254489 antisense	-2.027917235	1.167892369	7.69E-08	3.92E-06
AC092691.1 ENSG00000239268 lincRNA	-2.804485116	0.566251171	7.74E-08	3.93E-06
AC090912.2 ENSG00000266850 antisense	2.340508239	3.879516994	7.87E-08	3.98E-06
AC005993.1 ENSG00000266869 lincRNA	5.921587609	2.38059546	7.98E-08	4.02E-06
NCOA7-AS1 ENSG00000232131 antisense	-2.218652052	1.1438501	8.28E-08	4.16E-06
AL121578.3 ENSG00000259977 lincRNA	3.64248554	1.459647439	9.00E-08	4.46E-06
AC036108.3 ENSG00000261616 antisense	-2.925660423	5.399026958	9.33E-08	4.61E-06
LINC02466 ENSG00000246876 lincRNA	3.265243665	1.190933001	9.40E-08	4.61E-06
LINC02268 ENSG00000248174 lincRNA	-2.74678969	2.547705555	9.77E-08	4.77E-06
AL358452.1 ENSG00000229242 antisense	-2.593963507	4.526630496	1.05E-07	5.11E-06

AP002360.4 ENSG00000272301 lincRNA	2.03884777	2.874193489	1.12E-07	5.41E-06
AC011287.2 ENSG00000237713 lincRNA	2.563616935	1.615588291	1.13E-07	5.43E-06
AC005021.1 ENSG00000273138 antisense	2.047071967	1.903320774	1.15E-07	5.51E-06
AC008514.1 ENSG00000253348 antisense	3.107166094	5.48865244	1.19E-07	5.68E-06
LINC01914 ENSG00000234362 lincRNA	3.823771977	2.859202309	1.21E-07	5.75E-06
PWAR6 ENSG00000257151 lincRNA	-2.59315525	5.328815911	1.22E-07	5.75E-06
AC073359.2 ENSG00000243969 lincRNA	4.14778902	2.016210855	1.24E-07	5.81E-06
LINC02109 ENSG00000259786 lincRNA	3.417575335	1.921130802	1.24E-07	5.83E-06
LINC01266 ENSG00000224957 lincRNA	-2.014654753	2.521263994	1.25E-07	5.86E-06
AC005009.2 ENSG00000233073 antisense	2.219942386	1.382345098	1.27E-07	5.91E-06
DLEU7-AS1 ENSG00000237152 antisense	2.227129032	2.727706697	1.35E-07	6.25E-06
AC007923.1 ENSG00000263567 lincRNA	3.412816062	1.499376644	1.37E-07	6.31E-06
AL513548.3 ENSG00000275846 lincRNA	4.255622714	4.258927079	1.38E-07	6.31E-06
AL118511.2 ENSG00000225656 lincRNA	4.122284468	0.726649316	1.45E-07	6.64E-06
AL161646.2 ENSG00000237761 lincRNA	-2.164443143	2.185883539	1.46E-07	6.67E-06
AC090116.1 ENSG00000277223 sense_intronic	2.828356351	1.80143765	1.48E-07	6.73E-06
LINC00460 ENSG00000233532 lincRNA	3.234434782	4.349922349	1.54E-07	6.96E-06
ASTN2-AS1 ENSG00000229105 antisense	4.888946464	4.594480552	1.60E-07	7.16E-06
AL078587.1 ENSG00000231081 lincRNA	2.070160966	4.649329021	1.61E-07	7.18E-06
AC026367.1 ENSG00000270482 lincRNA	3.294464245	7.11536233	1.62E-07	7.18E-06
LINC01149 ENSG00000230174 lincRNA	3.163910493	0.982383824	1.63E-07	7.18E-06
AC025465.4 ENSG00000251214 lincRNA	-2.014797216	0.35086388	1.64E-07	7.18E-06
AC119150.1 ENSG00000249916 antisense	3.094490784	1.37037507	1.66E-07	7.22E-06
AC141930.1 ENSG00000228613 antisense	2.360378438	1.067427101	1.68E-07	7.27E-06

AC003005.2 ENSG00000268266 lincRNA	2.638455214	1.002940074	1.72E-07	7.40E-06
AL359851.1 ENSG00000260585 lincRNA	2.122395122	1.618678328	1.73E-07	7.44E-06
FSIP2-AS1 ENSG00000231646 antisense	2.401994453	2.454739165	1.79E-07	7.64E-06
LINC00280 ENSG00000229643 lincRNA	7.07187969	6.767579345	1.94E-07	8.25E-06
AC061975.6 ENSG00000266830 lincRNA	4.453090992	2.032199737	2.04E-07	8.65E-06
LINC02029 ENSG00000241544 lincRNA	4.574734575	0.686250338	2.09E-07	8.76E-06
AL023803.3 ENSG00000277581 sense_intronic	4.080695535	6.789073325	2.10E-07	8.77E-06
LINC02253 ENSG00000259485 lincRNA	4.116761941	4.6656658	2.14E-07	8.86E-06
UG0898H09 ENSG00000274956 lincRNA	-2.132641335	3.866020274	2.19E-07	8.96E-06
LINC02119 ENSG00000248461 lincRNA	4.134494068	2.64085476	2.21E-07	9.02E-06
AC016907.2 ENSG00000233862 antisense	3.268273463	5.986487701	2.27E-07	9.21E-06
LINC00355 ENSG00000227674 lincRNA	5.624504236	3.623578992	2.29E-07	9.29E-06
AL136529.1 ENSG00000236648 lincRNA	3.980552992	3.403208178	2.31E-07	9.34E-06
AL157400.2 ENSG00000232936 antisense	2.390766819	0.799443443	2.35E-07	9.47E-06
LINC00582 ENSG00000229228 antisense	-2.398475631	1.92630256	2.46E-07	9.80E-06
AC106772.1 ENSG00000249650 antisense	2.211702416	2.153765989	2.53E-07	1.00E-05
LINC02342 ENSG00000280580 lincRNA	6.613304042	4.497769999	2.69E-07	1.06E-05
AC011472.4 ENSG00000273733 antisense	-2.180809575	3.040717159	2.71E-07	1.06E-05
AC125608.1 ENSG00000223812 lincRNA	5.522074235	2.93008511	2.79E-07	1.09E-05
AC026782.2 ENSG00000248870 lincRNA	4.728424586	1.045041998	2.89E-07	1.12E-05
LINC02405 ENSG00000249345 lincRNA	2.722038465	2.535622651	2.90E-07	1.13E-05
C10orf126 ENSG00000204365 lincRNA	3.910083034	2.369854216	2.91E-07	1.13E-05
AL807761.3 ENSG00000226047 lincRNA	5.105241045	5.306332222	3.05E-07	1.17E-05
BSN-AS1 ENSG00000235120 antisense	2.978257329	2.090049391	3.07E-07	1.18E-05

AC022031.2 ENSG00000267284 lincRNA	3.175756698	2.39921474	3.13E-07	1.19E-05
AC245100.6 ENSG00000238107 lincRNA	3.232969873	3.938095833	3.21E-07	1.22E-05
AC007128.1 ENSG00000229970 antisense	5.897306515	4.358727493	3.22E-07	1.22E-05
AP003396.3 ENSG00000254740 antisense	-2.339778493	0.331404518	3.24E-07	1.22E-05
AC026688.2 ENSG00000254293 lincRNA	2.532741855	0.872147398	3.28E-07	1.24E-05
AC079160.1 ENSG00000250546 processed_transcript	3.34840601	2.88431677	3.30E-07	1.24E-05
LINC01981 ENSG00000229243 lincRNA	2.386759431	0.828158033	3.45E-07	1.29E-05
AC093817.1 ENSG00000249275 lincRNA	2.877056781	1.125354685	3.57E-07	1.33E-05
AC051619.7 ENSG00000259932 sense_intronic	4.409950752	4.847737395	3.61E-07	1.34E-05
AP002748.1 ENSG00000250105 lincRNA	5.678440774	3.206277419	3.68E-07	1.36E-05
AL513217.1 ENSG00000223774 antisense	-2.783887071	1.832477978	4.04E-07	1.49E-05
AL009176.1 ENSG00000226194 lincRNA	2.165801628	2.898948959	4.18E-07	1.54E-05
AL023754.1 ENSG00000224260 lincRNA	-2.918052632	0.9948942	4.20E-07	1.54E-05
AL161457.1 ENSG00000229019 sense_intronic	-2.365890015	0.803636106	4.23E-07	1.55E-05
AC084030.1 ENSG00000232328 lincRNA	-2.166996567	-0.049468796	4.34E-07	1.58E-05
AC007922.1 ENSG00000264695 lincRNA	3.441218405	1.568069064	4.42E-07	1.60E-05
FRGCA ENSG00000236663 antisense	4.541721481	1.479996049	4.53E-07	1.63E-05
OSTM1-AS1 ENSG00000225174 lincRNA	2.520358021	0.365892945	4.71E-07	1.69E-05
AL451074.6 ENSG00000273365 lincRNA	2.373687382	0.685004879	4.79E-07	1.71E-05
LINC01456 ENSG00000225882 lincRNA	3.020156881	1.055088749	4.84E-07	1.72E-05
LINC00973 ENSG00000240476 lincRNA	5.41666473	2.85988651	4.86E-07	1.72E-05
AC073062.1 ENSG00000229370 lincRNA	-2.117014897	4.439424095	4.92E-07	1.74E-05
AL590666.3 ENSG00000237588 lincRNA	-2.185889941	6.008258481	4.96E-07	1.75E-05
AC100791.2 ENSG00000262768 antisense	2.519125236	1.483364689	4.99E-07	1.75E-05

AL157832.2 ENSG00000237224 antisense	4.220191192	0.981300608	5.04E-07	1.76E-05
AL356417.2 ENSG00000233682 antisense	3.226729211	2.596052212	5.16E-07	1.80E-05
AC015849.1 ENSG00000270240 antisense	2.121960625	3.447829381	5.26E-07	1.83E-05
AC068643.1 ENSG00000257703 lincRNA	2.993438883	-0.212432908	5.59E-07	1.94E-05
AP002358.1 ENSG00000214797 lincRNA	-2.033046442	6.218041551	5.83E-07	2.01E-05
AC010595.1 ENSG00000250874 lincRNA	-2.190879953	2.753314378	6.31E-07	2.16E-05
AC090618.1 ENSG00000262052 lincRNA	-2.340577766	0.197124328	6.42E-07	2.19E-05
AC114928.1 ENSG00000249349 lincRNA	3.246305934	0.566407704	6.45E-07	2.19E-05
AC009055.1 ENSG00000260364 lincRNA	3.727582531	0.975345266	6.48E-07	2.20E-05
AC009487.3 ENSG00000251621 3prime_overlapping_ncRNA	3.862617197	2.214877808	6.87E-07	2.32E-05
AL135746.1 ENSG00000259028 lincRNA	2.650835818	0.096994878	7.16E-07	2.40E-05
AC002472.1 ENSG00000226872 antisense	-2.057769106	3.916148501	7.29E-07	2.44E-05
AP000821.1 ENSG00000261257 lincRNA	4.485477537	5.95054139	7.39E-07	2.47E-05
LINC01945 ENSG00000236485 lincRNA	-2.093012086	0.64427696	7.80E-07	2.58E-05
AC079779.1 ENSG00000227061 antisense	-2.263264787	4.184099078	8.01E-07	2.63E-05
LINC02473 ENSG00000261121 lincRNA	2.902319117	2.600168361	8.16E-07	2.67E-05
DIO2-AS1 ENSG00000258766 antisense	-2.568671909	0.191145232	8.22E-07	2.68E-05
EVX1-AS ENSG00000253405 antisense	3.594968221	1.859317089	8.28E-07	2.69E-05
PLCH1-AS2 ENSG00000242925 antisense	2.999695071	0.038241607	8.33E-07	2.70E-05
AC103957.1 ENSG00000253505 lincRNA	3.109885782	0.768750743	8.59E-07	2.77E-05
LINC01429 ENSG00000227964 lincRNA	2.790094299	1.932545777	8.71E-07	2.79E-05
AC113346.1 ENSG00000251144 lincRNA	3.447063551	1.482573274	8.72E-07	2.79E-05
LINC00626 ENSG00000225826 lincRNA	3.057407376	0.764976386	8.74E-07	2.79E-05
AL356019.1 ENSG00000258459 antisense	-2.467130613	4.913526809	8.85E-07	2.82E-05

AC244205.1 ENSG00000240040 processed_transcript	-2.21694902	2.934679314	9.13E-07	2.89E-05
AC073325.1 ENSG00000225537 lincRNA	-2.237248109	3.668392221	9.15E-07	2.89E-05
AF127577.3 ENSG00000235277 antisense	2.265351594	3.185419953	9.28E-07	2.93E-05
AC005865.1 ENSG00000236908 lincRNA	-2.050196335	5.676502495	9.43E-07	2.97E-05
HOXA11-AS ENSG00000240990 antisense	5.317383107	6.160554362	9.51E-07	2.99E-05
AL359881.2 ENSG00000270035 lincRNA	2.344576836	2.887891938	9.63E-07	3.02E-05
AL590502.1 ENSG00000224301 antisense	2.411521465	1.097760616	9.66E-07	3.02E-05
AC005165.1 ENSG00000223561 lincRNA	-2.018837201	4.739434527	9.89E-07	3.08E-05
AP006623.1 ENSG00000250397 antisense	2.128717658	7.492935508	1.04E-06	3.24E-05
AC245008.1 ENSG00000273406 lincRNA	2.932837423	2.311248178	1.06E-06	3.29E-05
AC134775.1 ENSG00000255165 sense_intronic	2.081047093	1.610350576	1.06E-06	3.29E-05
LINC01775 ENSG00000267201 lincRNA	3.44941734	3.850067492	1.07E-06	3.29E-05
AL353770.4 ENSG00000277350 lincRNA	-2.203987963	4.161916072	1.07E-06	3.31E-05
AC005906.2 ENSG00000256654 processed_transcript	-2.699350699	0.612977774	1.08E-06	3.33E-05
LINC02050 ENSG00000242781 lincRNA	4.733694195	0.3454997	1.11E-06	3.40E-05
LINC01498 ENSG00000247213 antisense	2.600127035	0.224895278	1.13E-06	3.44E-05
AL592182.1 ENSG00000233407 antisense	3.935556714	1.036561972	1.13E-06	3.44E-05
AC012170.3 ENSG00000259618 lincRNA	2.660591229	6.45016219	1.13E-06	3.44E-05
AL499627.1 ENSG00000260542 lincRNA	9.443962687	6.082848379	1.16E-06	3.51E-05
AL109910.1 ENSG00000230960 antisense	-2.030749483	2.202715164	1.21E-06	3.64E-05
HAND2-AS1 ENSG00000237125 antisense	-3.121644676	8.093888595	1.22E-06	3.66E-05
AC092167.1 ENSG00000226965 lincRNA	3.118799312	-0.009810334	1.27E-06	3.81E-05
AF274855.1 ENSG00000229967 antisense	3.282474749	3.81317837	1.32E-06	3.91E-05
LINC01798 ENSG00000232046 lincRNA	-2.179835613	2.073436204	1.37E-06	4.03E-05

AC019155.3 ENSG00000224899 lincRNA	6.358755765	1.730718572	1.38E-06	4.06E-05
LINC01968 ENSG00000237222 lincRNA	2.516264328	1.589427355	1.40E-06	4.10E-05
AC005774.1 ENSG00000261198 antisense	-2.233353661	2.099202231	1.42E-06	4.16E-05
AP002992.1 ENSG00000255236 antisense	2.339449258	2.313152729	1.43E-06	4.16E-05
AL139124.1 ENSG00000273450 antisense	2.230134733	3.970140821	1.46E-06	4.24E-05
LINC01055 ENSG00000235366 lincRNA	-2.291824948	2.365640973	1.49E-06	4.33E-05
AL627309.1 ENSG00000238009 lincRNA	3.593342029	6.377897304	1.52E-06	4.39E-05
AL138974.1 ENSG00000258028 lincRNA	2.677969638	2.052659029	1.52E-06	4.40E-05
AC009262.1 ENSG00000236212 lincRNA	3.534138399	0.218161928	1.56E-06	4.48E-05
AC087636.1 ENSG00000258773 lincRNA	2.203445523	0.197083045	1.61E-06	4.63E-05
MRGPRF-AS1 ENSG00000256508 antisense	-2.532355624	1.917300886	1.65E-06	4.74E-05
AL449423.1 ENSG00000266446 sense_intronic	3.141366856	0.295759018	1.68E-06	4.79E-05
AF279873.3 ENSG00000253642 lincRNA	3.9364122	2.732660533	1.70E-06	4.83E-05
AL365255.1 ENSG00000236948 lincRNA	7.061307952	3.910103666	1.72E-06	4.87E-05
AC011632.1 ENSG00000253706 antisense	3.035259953	3.484821594	1.73E-06	4.89E-05
AL133383.1 ENSG00000261729 lincRNA	2.256956282	2.57325995	1.74E-06	4.90E-05
AL161431.1 ENSG00000275216 lincRNA	4.381376651	8.014656944	1.75E-06	4.91E-05
POU6F2-AS2 ENSG00000233854 antisense	2.910050998	2.432814707	1.77E-06	4.97E-05
AL139023.1 ENSG00000257869 lincRNA	3.838217732	1.73237831	1.79E-06	5.01E-05
AC012494.1 ENSG00000229494 lincRNA	5.233174919	0.291766019	1.90E-06	5.30E-05
AC011944.1 ENSG00000177699 antisense	2.585530433	6.183976047	1.96E-06	5.43E-05
AC012354.1 ENSG00000225156 lincRNA	3.405652411	0.750475139	1.98E-06	5.46E-05
AC083967.1 ENSG00000254337 lincRNA	2.984504767	0.249000567	2.02E-06	5.55E-05
LINC01533 ENSG00000267779 lincRNA	3.040288119	0.009614308	2.13E-06	5.77E-05

AC022858.1 ENSG00000254031 antisense	2.434812476	1.080598094	2.13E-06	5.77E-05
LINC00554 ENSG00000260738 antisense	-2.686144949	11.62972856	2.22E-06	5.99E-05
AC008268.1 ENSG00000235584 lincRNA	-2.749083368	2.084918122	2.31E-06	6.19E-05
AC012676.4 ENSG00000277440 sense_intronic	2.165641132	5.048947971	2.31E-06	6.19E-05
AC243773.2 ENSG00000277268 antisense	6.463798235	1.790637499	2.39E-06	6.35E-05
AL353807.2 ENSG00000232519 antisense	2.706902325	0.714825925	2.44E-06	6.47E-05
AC019294.4 ENSG00000261043 lincRNA	2.586981754	0.143500109	2.45E-06	6.47E-05
AC004080.2 ENSG00000253508 lincRNA	2.785397417	3.786188715	2.48E-06	6.54E-05
AC061975.8 ENSG00000267644 lincRNA	2.604694657	0.928688711	2.49E-06	6.57E-05
AL354864.1 ENSG00000232335 antisense	3.264775726	2.249886057	2.60E-06	6.76E-05
LINC01778 ENSG00000223382 lincRNA	-2.037521191	2.778634848	2.66E-06	6.89E-05
AC114550.3 ENSG00000253774 lincRNA	4.837278967	0.034854426	2.79E-06	7.22E-05
AC005381.1 ENSG00000267243 lincRNA	4.275083824	3.591158828	2.86E-06	7.34E-05
LINC00898 ENSG00000205634 lincRNA	4.131359729	1.076984184	2.89E-06	7.40E-05
AL589743.4 ENSG00000277128 lincRNA	2.456364755	1.109081953	2.89E-06	7.40E-05
ANO1-AS2 ENSG00000254417 antisense	2.923309431	1.988795231	2.98E-06	7.63E-05
AC103719.1 ENSG00000254040 lincRNA	4.940473127	1.717558545	3.00E-06	7.64E-05
AC015845.2 ENSG00000265542 lincRNA	-2.225183645	0.775614084	3.03E-06	7.68E-05
AC073878.1 ENSG00000261570 antisense	3.026049536	5.770299911	3.06E-06	7.75E-05
LINC01738 ENSG00000227947 lincRNA	2.925308913	3.78928644	3.11E-06	7.86E-05
AC093702.1 ENSG00000231156 lincRNA	-2.510616177	1.37124524	3.23E-06	8.10E-05
AC026369.3 ENSG00000256948 antisense	-2.1977114	2.21606821	3.26E-06	8.14E-05
AC128689.1 ENSG00000240086 processed_transcript	2.541711822	2.38724358	3.34E-06	8.33E-05
AC026725.1 ENSG00000249713 antisense	2.464550025	2.675585016	3.43E-06	8.54E-05

AC016257.1 ENSG00000257999 antise	2.543553853	3.905437746	3.43E-06	8.54E-05
LINC01163 ENSG00000280953 lincRNA	6.461655825	1.862378497	3.55E-06	8.80E-05
AP001058.1 ENSG00000232698 lincRNA	-2.307870644	-0.048726116	3.59E-06	8.86E-05
AC018716.1 ENSG00000254651 lincRNA	3.894081212	4.641412303	3.65E-06	9.00E-05
Z99916.3 ENSG00000279298 lincRNA	2.545910919	1.409451651	3.84E-06	9.42E-05
AL353768.1 ENSG00000224764 antise	-2.0161596	6.920584271	3.86E-06	9.42E-05
AC093895.1 ENSG00000249001 antise	5.783887191	2.322420131	3.86E-06	9.42E-05
AC137794.1 ENSG00000251072 lincRNA	2.573186264	0.836111351	3.88E-06	9.44E-05
LINC02450 ENSG00000257114 lincRNA	3.630487208	1.086327887	3.91E-06	9.50E-05
AC090502.1 ENSG00000251138 lincRNA	5.343682362	2.641492021	3.92E-06	9.50E-05
AP003086.2 ENSG00000254420 antise	2.771504757	6.826435139	3.95E-06	9.56E-05
LINC01518 ENSG00000233515 lincRNA	4.966166338	2.052614156	3.96E-06	9.56E-05
AC107398.3 ENSG00000260918 sense_overlapping	2.269372564	6.4119997	4.02E-06	9.67E-05
AC126763.1 ENSG00000257391 lincRNA	2.777071585	4.261519716	4.03E-06	9.68E-05
LINC02112 ENSG00000249781 lincRNA	3.100342247	0.438555082	4.08E-06	9.78E-05
MIR548XHG ENSG00000224141 lincRNA	6.072675306	2.910197237	4.16E-06	9.96E-05
LINC02434 ENSG00000248370 lincRNA	4.094174835	1.925065028	4.18E-06	9.96E-05
AC093001.1 ENSG00000244468 antise	4.854997043	5.456174946	4.30E-06	0.000101836
AC078878.2 ENSG00000256286 lincRNA	2.781723246	0.094996422	4.34E-06	0.000102769
LINC02219 ENSG00000253787 lincRNA	4.249418139	0.087326051	4.35E-06	0.000102769
AL357558.1 ENSG00000228503 lincRNA	3.525712016	-0.31547223	4.45E-06	0.000104662
LINC02418 ENSG00000214039 lincRNA	3.924329001	5.424040304	4.46E-06	0.000104684
LINC00613 ENSG00000248330 lincRNA	3.27384393	2.610651223	4.48E-06	0.000105016
AC060814.6 ENSG00000280881 lincRNA	4.488834353	1.963647341	4.49E-06	0.000105016

AL034405.1 ENSG00000235189 antise	2.437853819	4.193203617	4.53E-06	0.000105702
AC017048.2 ENSG00000236231 lincRNA	-2.064365912	-0.340871724	4.72E-06	0.000109881
AC134312.2 ENSG00000260162 lincRNA	2.630980099	1.509610192	4.80E-06	0.000111375
AC004637.1 ENSG00000267304 antise	-2.218136632	1.672921236	4.83E-06	0.000111901
LINC02474 ENSG00000228437 lincRNA	2.653365706	6.472202926	4.92E-06	0.000113542
AC016705.1 ENSG00000258010 antise	3.481631933	0.714918954	4.96E-06	0.00011417
AP001001.2 ENSG00000254580 lincRNA	4.521740578	5.190171551	5.06E-06	0.000116298
LINC01419 ENSG00000253898 lincRNA	6.605282118	3.209112782	5.38E-06	0.000122915
LINC01722 ENSG00000233048 lincRNA	2.067169282	0.701151594	5.42E-06	0.000123488
AP002478.1 ENSG00000266401 antise	4.860317665	3.028852251	5.43E-06	0.000123489
AL355596.1 ENSG00000259828 lincRNA	2.077262355	1.740011976	5.49E-06	0.000124495
AC092625.1 ENSG00000230991 lincRNA	2.965940606	-0.3179088	5.51E-06	0.000124915
AL022326.1 ENSG00000224794 antise	4.666028341	0.903531515	5.71E-06	0.000129027
LINC00507 ENSG00000256193 lincRNA	2.955246799	1.302767313	5.72E-06	0.000129127
LINC02461 ENSG00000258331 lincRNA	5.905971878	0.775241006	6.05E-06	0.000134542
AC004080.1 ENSG00000253308 lincRNA	3.389024802	1.001174056	6.07E-06	0.000134819
AC099520.1 ENSG00000251574 lincRNA	5.176563308	0.667110274	6.14E-06	0.000136262
AL391832.1 ENSG00000237520 lincRNA	3.192137958	1.130693115	6.17E-06	0.000136468
BX547991.1 ENSG00000264404 lincRNA	2.315146079	2.133509885	6.17E-06	0.000136468
AC092535.4 ENSG00000273179 antise	2.036048041	4.085837758	6.21E-06	0.000136714
LINC02154 ENSG00000235385 lincRNA	4.803053963	2.761557283	6.21E-06	0.000136714
LINC01146 ENSG00000258867 lincRNA	3.260755748	3.949779585	6.30E-06	0.00013818
AC018371.1 ENSG00000263382 lincRNA	2.67242131	-0.625302352	6.34E-06	0.000138582
AC108482.1 ENSG00000253572 lincRNA	4.83827922	0.222716181	6.34E-06	0.000138582

CARMN ENSG00000249669 lincRNA	-2.148713506	8.709364533	6.39E-06	0.000139036
AC007991.4 ENSG00000254287 antisense	-4.653269414	3.113767856	6.41E-06	0.000139285
AP001107.3 ENSG00000254458 antisense	2.508947051	7.064513852	6.47E-06	0.000140296
AL117355.1 ENSG00000257636 antisense	4.11398182	2.635237309	6.58E-06	0.00014183
LINC01833 ENSG00000259439 lincRNA	5.02357912	6.426798255	6.58E-06	0.00014183
AP003559.1 ENSG00000256443 lincRNA	2.202724493	3.607377872	6.68E-06	0.000143204
AC017076.1 ENSG00000271947 lincRNA	2.591318511	3.56803522	6.72E-06	0.000143558
AL589740.1 ENSG00000271860 lincRNA	5.062592893	0.171857759	6.88E-06	0.00014601
AC093010.2 ENSG00000241490 antisense	2.721681315	6.220080438	7.23E-06	0.000152376
AC023301.1 ENSG00000265579 sense_intronic	2.963457981	6.589160541	7.33E-06	0.000154179
LINC02261 ENSG00000249699 lincRNA	3.389840367	0.964607899	7.40E-06	0.000155059
LINC01913 ENSG00000214691 lincRNA	3.85202686	3.971910183	7.43E-06	0.000155373
AC090125.1 ENSG00000263655 lincRNA	2.970666522	-0.396167998	7.66E-06	0.0001593
AC113418.1 ENSG00000261036 lincRNA	2.688757426	-0.422755955	7.68E-06	0.000159607
LINC01929 ENSG00000267013 lincRNA	2.554052247	2.448023945	7.72E-06	0.000160122
LINC01697 ENSG00000232079 processed_transcript	-2.458834697	3.62623865	7.91E-06	0.00016378
AL450267.1 ENSG00000258885 antisense	5.450857191	0.436258151	8.14E-06	0.000167974
LINC00448 ENSG00000228669 lincRNA	3.769102439	2.329633056	8.19E-06	0.0001684
AL050344.1 ENSG00000233755 lincRNA	2.614156614	-0.100047169	8.23E-06	0.000169085
AC093281.1 ENSG00000212930 lincRNA	2.682614924	-0.134185215	8.25E-06	0.000169172
AJ009632.2 ENSG00000229425 lincRNA	3.227799074	1.498454938	8.61E-06	0.000175892
LINC01655 ENSG00000227925 lincRNA	3.210961358	1.909071258	8.62E-06	0.000175892
LINC01647 ENSG00000235643 lincRNA	2.534491775	2.644176448	8.94E-06	0.000180452
LINC00052 ENSG00000259527 lincRNA	4.900026342	0.06973883	9.01E-06	0.00018159

AF064858.2 ENSG00000237609 lincRNA	2.024255789	2.846784513	9.03E-06	0.000181689
AP001922.1 ENSG00000247867 antisense	4.64883375	-0.082650662	9.07E-06	0.000182171
AC007513.1 ENSG00000258272 lincRNA	2.961150023	2.741135147	9.19E-06	0.000184009
AC087857.1 ENSG00000229642 lincRNA	3.405367397	1.249806731	9.32E-06	0.000186212
AC007405.2 ENSG00000235934 antisense	3.673307466	1.366768566	9.54E-06	0.000190419
AL160270.1 ENSG00000230729 antisense	3.328843985	-0.222915759	9.60E-06	0.000191218
LINC01440 ENSG00000235166 lincRNA	4.904337213	0.269455916	9.72E-06	0.000193289
AC090735.1 ENSG00000253784 lincRNA	3.540236539	0.05540119	9.85E-06	0.000195455
AC124312.3 ENSG00000261069 lincRNA	-2.089348246	2.470353687	9.87E-06	0.000195455
AF240627.1 ENSG00000230233 lincRNA	2.713844392	-0.034281471	9.91E-06	0.000195615
AC090987.1 ENSG00000253656 lincRNA	5.022176952	0.148722723	9.98E-06	0.00019633
AC009139.1 ENSG00000260922 antisense	3.136223082	0.035777524	9.99E-06	0.00019633
AC022188.1 ENSG00000276807 lincRNA	3.067011587	0.565393438	1.05E-05	0.000203852
AC009119.3 ENSG00000260932 antisense	2.909674472	8.210265568	1.05E-05	0.000203978
AC013727.1 ENSG00000232597 lincRNA	4.522054031	4.681376631	1.09E-05	0.000209674
LINC01720 ENSG00000231175 lincRNA	2.391995382	1.786460424	1.09E-05	0.000210129
AC026992.2 ENSG00000261634 antisense	2.440392207	2.017794838	1.10E-05	0.00021127
AC091987.1 ENSG00000253584 lincRNA	3.765832002	0.443987065	1.11E-05	0.00021297
AC008109.1 ENSG00000266602 lincRNA	5.109386562	2.849171843	1.13E-05	0.000216365
LINC01187 ENSG00000249601 lincRNA	2.96343992	0.874750793	1.15E-05	0.000220467
AC104699.1 ENSG00000224220 antisense	-2.066289124	3.342213645	1.17E-05	0.000223165
AC008517.1 ENSG00000248588 lincRNA	4.398111567	3.242008036	1.18E-05	0.000224266
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AC137834.2 ENSG00000276727 antisense	2.849235056	3.985798223	1.24E-05	0.000233187
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LINC01614 ENSG00000230838 lincRNA	5.485659369	4.421949432	1.25E-05	0.000233937
LINC00677 ENSG00000259717 lincRNA	2.99184435	0.707535425	1.27E-05	0.000236423
AC002115.1 ENSG00000267626 lincRNA	3.771912187	5.294473047	1.29E-05	0.000240296
AC108733.1 ENSG00000239767 lincRNA	3.446914048	0.276241723	1.30E-05	0.000241773
LINC01742 ENSG00000275852 lincRNA	6.550212488	1.309197616	1.33E-05	0.000246781
LINC02151 ENSG00000236437 lincRNA	2.063818534	0.510616889	1.37E-05	0.000251846
AC093766.1 ENSG00000250501 lincRNA	2.598367117	2.390981991	1.37E-05	0.000251846
AC008443.3 ENSG00000248103 lincRNA	2.530393556	6.42024791	1.38E-05	0.000253809
LINC01625 ENSG00000238099 lincRNA	-2.048025596	0.569400178	1.40E-05	0.000256393
LUADT1 ENSG00000196634 lincRNA	2.855652151	0.009282466	1.41E-05	0.000258773
AL732372.3 ENSG00000237094 lincRNA	2.090438877	7.61195505	1.43E-05	0.000261444
AC233266.2 ENSG00000261600 lincRNA	-2.153904374	1.90761163	1.44E-05	0.000262123
AC087277.1 ENSG00000254566 lincRNA	4.038138373	1.507343348	1.46E-05	0.000265631
AC096659.1 ENSG00000235149 lincRNA	3.061859329	3.423541307	1.47E-05	0.000267666
Z98257.1 ENSG00000227066 lincRNA	3.197165975	4.775780698	1.48E-05	0.000267666
LINC01391 ENSG00000244578 lincRNA	2.24682666	1.487973765	1.48E-05	0.000268654
THSD4-AS1 ENSG00000259964 antisense	2.925765789	6.627596905	1.50E-05	0.000271877
AC011352.1 ENSG00000248362 antisense	5.454054012	0.900153116	1.51E-05	0.000271877
DLGAP1-AS3 ENSG00000263724 antisense	3.085741523	1.291653473	1.54E-05	0.000276851
AL158035.1 ENSG00000227012 lincRNA	4.998335966	0.734057827	1.54E-05	0.000276851
AC098859.2 ENSG00000250977 lincRNA	2.73241142	-0.619912988	1.56E-05	0.000278816
LINC01553 ENSG00000235931 lincRNA	3.262568211	0.417758893	1.59E-05	0.000284021

LINC00454 ENSG00000226921 lincRNA	5.37548778	1.957552582	1.60E-05	0.000285088
AC140125.1 ENSG00000248943 lincRNA	4.035050042	-0.422127677	1.66E-05	0.000293138
AC106875.1 ENSG00000228496 sense_intronic	6.929040854	2.817150568	1.67E-05	0.000294827
AC004947.1 ENSG00000233760 lincRNA	2.417997685	6.137352681	1.69E-05	0.000297302
LINC02046 ENSG00000242440 lincRNA	5.10975828	0.200050886	1.69E-05	0.000297437
LINC02008 ENSG00000239440 lincRNA	2.570987568	2.04229231	1.73E-05	0.000303881
AC064874.1 ENSG00000222007 antisense	2.5668784	5.896498524	1.77E-05	0.000309115
AC027801.1 ENSG00000204584 antisense	2.644528053	5.871395983	1.77E-05	0.000309115
LINC02281 ENSG00000257748 lincRNA	3.750683702	-0.54794259	1.80E-05	0.000313458
LINC01159 ENSG00000229743 processed_transcript	2.480189557	2.433493941	1.82E-05	0.000316312
AC010395.1 ENSG00000248428 lincRNA	3.191842776	5.359958048	1.84E-05	0.000318462
AC025016.1 ENSG00000255257 lincRNA	2.851728312	0.919985029	1.85E-05	0.000320118
LINC0001 ENSG00000253641 lincRNA	2.360710916	4.410599862	1.86E-05	0.000320267
AL713866.1 ENSG00000261642 lincRNA	2.772788907	0.137286167	1.90E-05	0.000325744
AC005618.3 ENSG00000279855 antisense	-2.312398872	6.054450211	1.93E-05	0.000330577
AF130417.1 ENSG00000227330 lincRNA	4.303396348	6.850155429	1.93E-05	0.000330786
AC009803.1 ENSG00000257407 lincRNA	2.758787263	-0.001581061	1.97E-05	0.000335517
AC084116.3 ENSG00000253530 lincRNA	4.815006161	0.005853208	2.02E-05	0.000342244
AC087721.1 ENSG00000259396 sense_intronic	2.358013008	1.072963001	2.04E-05	0.000344789
AC096736.2 ENSG00000249479 antisense	2.335645523	0.836245267	2.04E-05	0.000345326
AL357054.4 ENSG00000272463 lincRNA	-2.190217584	5.10684241	2.06E-05	0.000347232
AL353801.1 ENSG00000223462 lincRNA	2.720713512	1.317197226	2.09E-05	0.000351904
AC107057.1 ENSG00000232835 lincRNA	2.649164254	-0.244492779	2.17E-05	0.000364053
AC007182.1 ENSG00000224721 antisense	-2.269872491	2.652172076	2.18E-05	0.00036564

AL391095.2 ENSG00000275285 lincRNA	5.583834047	0.555898859	2.22E-05	0.00037035
AC009121.1 ENSG00000262703 antisense	2.027888426	1.98537783	2.23E-05	0.000372098
AL390961.2 ENSG00000234296 lincRNA	5.841662688	0.723564051	2.27E-05	0.000376526
AC083809.1 ENSG00000277247 antisense	3.756098888	4.17808641	2.27E-05	0.000376526
LINC01639 ENSG00000236117 lincRNA	5.371181321	0.853084053	2.31E-05	0.000381824
KCNMB2-AS1 ENSG00000237978 antisense	5.529410504	4.824203619	2.31E-05	0.000381908
AC011747.1 ENSG00000231083 lincRNA	2.278523705	1.246081016	2.32E-05	0.000383653
AP001973.1 ENSG00000255546 lincRNA	4.66153696	1.154669471	2.33E-05	0.000383653
AC106799.1 ENSG00000231291 lincRNA	3.709456125	0.519962504	2.37E-05	0.000389462
LINC01676 ENSG00000230768 lincRNA	2.09426401	0.35109193	2.41E-05	0.000395247
AC122685.1 ENSG00000258763 antisense	2.17772079	1.538190208	2.44E-05	0.000398155
AL158817.1 ENSG00000223342 lincRNA	2.314958933	-0.222648757	2.44E-05	0.000398228
AC012313.4 ENSG00000268307 lincRNA	-2.431675212	3.160126603	2.48E-05	0.000403177
AC069120.3 ENSG00000254100 lincRNA	4.239818119	1.548815255	2.51E-05	0.000408088
AC130456.1 ENSG00000259871 sense_intronic	2.187491049	5.599069438	2.52E-05	0.000408274
LINC02241 ENSG00000251629 lincRNA	7.182589748	3.397004777	2.54E-05	0.000411485
ARHGAP2b-AS1 ENSG00000243069 processed_transcript	-2.30229839	3.474942406	2.55E-05	0.000413298
AC007406.3 ENSG00000256540 lincRNA	2.549588302	3.749940301	2.56E-05	0.000413789
AC123788.1 ENSG00000254592 antisense	2.673789433	-0.352205336	2.60E-05	0.000419122
AC106729.1 ENSG00000259995 lincRNA	2.09960931	0.809736443	2.60E-05	0.000419612
AC004692.2 ENSG00000228680 antisense	2.142582878	1.706379098	2.64E-05	0.000424318
AL109610.1 ENSG00000225785 lincRNA	2.801088604	-0.395212078	2.69E-05	0.000431596
AC007750.1 ENSG00000236841 antisense	3.278207343	2.626514077	2.71E-05	0.000432731
AL596188.1 ENSG00000227723 lincRNA	-2.251838438	7.50991255	2.78E-05	0.000441713

AC109454.3 ENSG00000250564 lincRNA	3.181040205	3.308067856	2.78E-05	0.00044214
PSG8-AS1 ENSG00000225877 lincRNA	2.345975128	0.911552767	2.79E-05	0.000442471
AC007099.1 ENSG00000231172 antisense	5.923339191	3.282774569	2.85E-05	0.00045105
AL133329.1 ENSG00000233103 lincRNA	3.610076704	1.240434077	2.93E-05	0.000461229
LINC01077 ENSG00000233456 lincRNA	4.053204588	0.115568997	3.02E-05	0.00047366
AC020734.1 ENSG00000249882 lincRNA	3.32625814	-0.638973861	3.03E-05	0.000475359
AL136018.1 ENSG00000258657 antisense	2.999094193	0.385720301	3.05E-05	0.000476934
DLX2-AS1 ENSG00000236651 lincRNA	4.972263672	0.479539084	3.12E-05	0.000486424
AC011352.3 ENSG00000251320 antisense	3.636471741	0.780697565	3.15E-05	0.000490283
LINC00343 ENSG00000226620 processed_transcript	2.022466101	1.063922802	3.17E-05	0.000492432
LINC02335 ENSG00000278630 lincRNA	-2.183504904	7.862551913	3.22E-05	0.000500131
LINC01378 ENSG00000236922 lincRNA	3.034219129	5.375567996	3.25E-05	0.000503781
AC008060.1 ENSG00000218672 lincRNA	4.124011859	-0.192061473	3.34E-05	0.000516785
AL163195.2 ENSG00000258573 antisense	2.923658305	0.143615007	3.35E-05	0.000517305
AL035252.2 ENSG00000230725 lincRNA	4.226720481	1.800096289	3.35E-05	0.000517712
AC018761.1 ENSG00000267004 lincRNA	2.539201154	4.083671258	3.37E-05	0.000519465
CASC21 ENSG00000253929 lincRNA	3.203561073	2.239099563	3.38E-05	0.000519854
AC138150.1 ENSG00000224505 antisense	2.133793298	5.267880959	3.46E-05	0.000530789
AC006272.1 ENSG00000268316 lincRNA	3.155589574	2.551453014	3.56E-05	0.000545412
SNHG14 ENSG00000224078 processed_transcript	-2.020367371	8.373683076	3.70E-05	0.000563871
AL355385.1 ENSG00000272170 antisense	2.615172548	3.351148401	3.71E-05	0.000565086
AC022915.1 ENSG00000253455 lincRNA	2.013956455	-0.562921758	3.72E-05	0.000565086
AC109439.2 ENSG00000250284 lincRNA	6.434740097	1.199212664	3.76E-05	0.000570649
FP236241.1 ENSG00000277991 lincRNA	2.922113303	8.634778415	3.92E-05	0.000589495

AL109659.1 ENSG00000223720 lincRNA	3.668589996	2.224512053	3.94E-05	0.000590081
LINC01583 ENSG00000259518 lincRNA	4.140108807	0.83077911	3.94E-05	0.000590081
AC008056.1 ENSG00000258637 antisense	-2.195890973	-0.082709473	3.95E-05	0.000591174
AL355483.3 ENSG00000232762 antisense	2.618412586	0.545790833	3.99E-05	0.000593258
AC128685.1 ENSG00000241168 lincRNA	2.604681958	2.762467786	4.03E-05	0.00059942
AL162727.1 ENSG00000233817 lincRNA	3.296464014	1.930168476	4.10E-05	0.000607527
AC002384.1 ENSG00000228742 lincRNA	5.443606934	5.853077461	4.16E-05	0.000616624
AC126175.1 ENSG00000277738 lincRNA	3.659733581	2.366060759	4.18E-05	0.000617579
AC107973.1 ENSG00000254734 lincRNA	2.413035563	-0.382483366	4.19E-05	0.000617579
LINC00551 ENSG00000272274 lincRNA	-2.116408497	0.420263639	4.23E-05	0.000618859
AC067969.2 ENSG00000269445 antisense	2.757140497	-0.614732985	4.41E-05	0.000640563
AL591222.1 ENSG00000261402 lincRNA	2.818449776	0.20194278	4.42E-05	0.000640902
LINC01490 ENSG00000257741 lincRNA	2.904156398	0.354638404	4.48E-05	0.00064788
AC034223.2 ENSG00000251281 lincRNA	2.639130154	0.240393304	4.50E-05	0.000649959
AP002784.1 ENSG00000250519 lincRNA	3.84803207	1.86956502	4.53E-05	0.000653405
AL359378.1 ENSG00000232234 lincRNA	2.390806512	0.311443495	4.55E-05	0.000654912
LINC01191 ENSG00000234199 lincRNA	2.508767593	0.789436685	4.57E-05	0.000656757
AL359555.1 ENSG00000206249 antisense	2.901287289	-0.096941569	4.63E-05	0.000662735
AC026333.3 ENSG00000256249 lincRNA	2.627735267	4.342452393	4.65E-05	0.000664315
LINC02438 ENSG00000248238 lincRNA	3.218287593	0.319838682	4.66E-05	0.000665897
OSTN-AS1 ENSG00000233308 antisense	-2.25540582	1.623385256	4.77E-05	0.000678017
AL353997.2 ENSG00000264177 antisense	-2.104667743	1.82892073	4.79E-05	0.000679248
AP000534.1 ENSG00000233408 antisense	2.273298347	-0.171390035	4.89E-05	0.00068884
AC022784.1 ENSG00000248538 lincRNA	3.479144884	6.226924503	4.91E-05	0.000691011

AC016550.3 ENSG00000250124 lincRNA	4.00556146	-0.434227671	4.96E-05	0.000697443
AL732323.1 ENSG00000225002 lincRNA	3.298219212	5.660726226	5.00E-05	0.000701915
LINC01108 ENSG00000226673 lincRNA	3.229446134	2.011588193	5.05E-05	0.000707516
LINC01689 ENSG00000224832 lincRNA	3.416759579	-0.230631178	5.11E-05	0.000715317
AC024603.1 ENSG00000269256 antisense	2.14024223	0.195137989	5.24E-05	0.000728935
AC131097.3 ENSG00000224272 antisense	3.024326236	4.254027641	5.26E-05	0.000729354
SLC5A4-AS1 ENSG00000242082 antisense	2.068944892	3.437488804	5.30E-05	0.000735047
HOXC-AS1 ENSG00000250451 antisense	4.261327381	3.584985997	5.31E-05	0.000735047
AC107208.1 ENSG00000251244 lincRNA	2.571125131	2.086022617	5.32E-05	0.000735354
UCA1 ENSG00000214049 processed_transcript	3.220888359	9.119381804	5.35E-05	0.000737789
AC025244.1 ENSG00000251185 lincRNA	2.129725694	1.670349349	5.43E-05	0.00074663
AC079466.1 ENSG00000266976 lincRNA	6.211731141	5.78453414	5.49E-05	0.000750828
AP005057.1 ENSG00000264080 lincRNA	3.692887408	0.668181172	5.51E-05	0.000751848
AC016526.1 ENSG00000258402 lincRNA	-2.010062348	6.894945971	5.51E-05	0.000751848
AL356123.1 ENSG00000203688 lincRNA	-2.346932824	5.559101463	5.51E-05	0.000751848
AC044839.2 ENSG00000255226 lincRNA	5.056593603	1.80793426	5.52E-05	0.000752436
AC011523.1 ENSG00000267968 antisense	2.36726785	1.589551713	5.63E-05	0.000761806
LINC02093 ENSG00000234634 lincRNA	2.022628102	-0.182249648	5.89E-05	0.000792181
AC092332.1 ENSG00000260064 sense_intronic	2.621234503	-0.087820684	6.18E-05	0.00082524
AC087286.4 ENSG00000259453 sense_intronic	2.876033514	6.373501121	6.22E-05	0.000828782
AL807757.1 ENSG00000230815 sense_intronic	2.708551485	1.222573279	6.24E-05	0.000830456
LINC02270 ENSG00000251210 lincRNA	2.646824665	0.062340368	6.28E-05	0.00083494
AC107419.1 ENSG00000228933 lincRNA	5.025772277	1.602973275	6.32E-05	0.000839118
AC025252.1 ENSG00000255945 lincRNA	2.410830222	-0.620345079	6.33E-05	0.000840205

AC053503.4 ENSG00000234638 antisense	-2.392468051	2.609226761	6.41E-05	0.000848605
AC069281.1 ENSG00000225807 lincRNA	3.059242463	0.117432527	6.44E-05	0.000852421
AC010547.2 ENSG00000260015 sense_intronic	3.856707794	3.281756457	6.47E-05	0.000854123
AC097478.1 ENSG00000251095 antisense	4.947097559	4.897113145	6.55E-05	0.000862306
AC091133.2 ENSG00000250838 antisense	5.700480627	0.611071294	6.55E-05	0.000862306
LINC01180 ENSG00000266979 lincRNA	3.721981142	0.750041452	6.66E-05	0.000873684
BX324167.1 ENSG00000235091 lincRNA	3.618192925	0.21081438	6.74E-05	0.00088293
AC024884.2 ENSG00000276272 lincRNA	2.416542386	1.485338383	6.81E-05	0.000889422
HOXA10-AS ENSG00000253187 antisense	4.86522776	4.50158534	7.04E-05	0.000914023
AC092198.1 ENSG00000223486 lincRNA	2.212995481	3.203886753	7.17E-05	0.00092608
MYCNUT ENSG00000223850 lincRNA	5.281125517	0.449451457	7.20E-05	0.000929776
AC010789.1 ENSG00000224817 lincRNA	4.542460018	3.19328128	7.32E-05	0.000943268
AL162582.1 ENSG00000230234 lincRNA	2.70575614	1.649267171	7.44E-05	0.000954661
AC112493.1 ENSG00000242021 lincRNA	2.590967747	0.705899651	7.58E-05	0.000970972
AC132807.2 ENSG00000274840 lincRNA	3.506004355	1.780685815	7.90E-05	0.001008633
AC100797.1 ENSG00000254207 sense_intronic	3.676035003	2.18435533	7.92E-05	0.001009918
AL121832.1 ENSG00000233017 antisense	3.48654557	3.252602817	8.03E-05	0.001021697
AP002505.1 ENSG00000267177 antisense	2.339968693	-0.17506979	8.24E-05	0.00104591
AP000525.1 ENSG00000272872 sense_intronic	4.058107522	2.352032862	8.29E-05	0.001050587
LINC01592 ENSG00000253658 lincRNA	2.356071136	0.606200669	8.30E-05	0.001050587
AP001178.2 ENSG00000265490 antisense	2.16067357	8.757222717	8.33E-05	0.001052588
LINC00858 ENSG00000229404 lincRNA	4.319760472	4.483902077	8.37E-05	0.001055955
AP002518.2 ENSG00000256947 antisense	-2.210250386	0.080171347	8.51E-05	0.001070409
AC022075.3 ENSG00000256288 lincRNA	3.659036128	-0.089825335	8.56E-05	0.001075064

AC026471.3 ENSG00000260740 antisense	2.041954709	3.271875185	8.78E-05	0.001099787
LRP1-AS ENSG00000259125 antisense	2.585610413	4.501809188	8.81E-05	0.00110213
AC023469.2 ENSG00000228064 antisense	4.699948142	-0.05337193	8.88E-05	0.001109303
AL033527.3 ENSG00000261798 antisense	2.095687406	2.479187376	8.91E-05	0.001111777
AC013356.3 ENSG00000259364 antisense	2.746291432	9.167361099	8.92E-05	0.001111195
AP000459.1 ENSG00000227716 lincRNA	3.205491806	-0.317977015	9.00E-05	0.0011203
AC015983.2 ENSG00000234418 lincRNA	3.146162	0.132636209	9.01E-05	0.001121465
AL356364.1 ENSG00000238232 lincRNA	2.682699913	2.611988168	9.03E-05	0.001121724
AL359915.1 ENSG00000227712 lincRNA	2.55275525	3.193286857	9.20E-05	0.001136654
AP000997.1 ENSG00000255599 lincRNA	2.032486464	0.451008595	9.46E-05	0.001162527
FOXG1-AS1 ENSG00000257126 antisense	3.722751201	-0.230248166	9.61E-05	0.001178707
AC090192.2 ENSG00000253227 lincRNA	4.531190552	2.85329438	9.81E-05	0.001197302
SAMSN1-AS1 ENSG00000223662 antisense	2.045825879	1.155177623	9.85E-05	0.001199264
LINC02162 ENSG00000249830 lincRNA	2.466203995	-0.420189746	9.98E-05	0.001213441
LINC02254 ENSG00000259664 lincRNA	4.758444573	2.652378798	0.000101004	0.001224432
AP002754.2 ENSG00000255947 lincRNA	2.211809286	-0.067067503	0.000102294	0.001236546
STPG3-AS1 ENSG00000275549 antisense	2.506431605	2.423548688	0.000103574	0.001246547
AC079062.1 ENSG00000263711 processed_transcript	4.194283637	5.971549655	0.000105336	0.001264927
AC133065.5 ENSG00000275673 sense_intronic	2.048443267	-0.188146901	0.000106379	0.001275047
AC108174.1 ENSG00000248112 lincRNA	5.635781326	1.534837663	0.000106726	0.001278007
AL049833.2 ENSG00000259026 lincRNA	2.3858141	-0.518668314	0.000107329	0.001283173
MYB-AS1 ENSG00000236703 antisense	2.639842016	2.042430896	0.000108483	0.00129298
LINC02223 ENSG00000249937 lincRNA	2.984440649	0.139617632	0.000109797	0.001306192
AC020922.4 ENSG00000276831 lincRNA	3.339000977	0.029599041	0.000110245	0.001307864

LINC01584 ENSG00000260477 antisense	2.127565196	0.069334369	0.000110753	0.001312673
AC117945.1 ENSG00000234481 antisense	5.751416147	5.65933197	0.000111919	0.001325264
LINC00940 ENSG00000235049 lincRNA	-2.162376851	1.511623268	0.000114478	0.001353042
KCCAT198 ENSG00000257642 antisense	3.716168893	0.112909498	0.000115698	0.001363672
AL136418.1 ENSG00000257831 antisense	2.317061957	4.164702148	0.000116201	0.001367076
AC007728.2 ENSG00000261644 antisense	2.961794673	6.478914974	0.000116476	0.001369051
AC107982.2 ENSG00000264273 antisense	2.364518951	7.96034858	0.000118694	0.001388724
LINC02266 ENSG00000272727 lincRNA	2.999706305	1.788923095	0.000119068	0.001390847
AC078860.1 ENSG00000257761 antisense	3.453617338	1.331563763	0.000119094	0.001390847
LINC02275 ENSG00000248319 lincRNA	2.472635184	0.612232556	0.0001202	0.001397591
AC012363.1 ENSG00000224789 antisense	4.115904774	3.138731665	0.000121819	0.001411044
AC023886.1 ENSG00000249509 antisense	2.214824602	-0.115016379	0.000122343	0.001414539
AC114550.1 ENSG00000253130 lincRNA	2.271929529	0.523668769	0.000123137	0.00142096
AC124067.4 ENSG00000254290 lincRNA	2.623529305	6.696737535	0.000125744	0.001444537
U62317.1 ENSG00000226738 antisense	2.453754547	3.292272724	0.000126011	0.001445155
AL121827.1 ENSG00000203900 antisense	2.271962557	0.023031109	0.000127551	0.001460198
AC007278.1 ENSG00000234389 sense_intronic	2.526302654	9.55223112	0.00013303	0.001512057
AC084116.2 ENSG00000253427 lincRNA	2.89739483	-0.347687805	0.00013367	0.001517977
AC005150.1 ENSG00000248431 lincRNA	2.944728037	-0.050856615	0.000134281	0.001523565
DUXAP8 ENSG00000206195 processed_transcript	3.833915449	6.819039273	0.000136229	0.001540697
NKX2-2-AS1 ENSG00000258197 antisense	2.927142916	1.892439575	0.000136274	0.001540697
AL080314.1 ENSG00000229654 lincRNA	5.636775472	1.52667607	0.000139195	0.001569171
AP000322.2 ENSG00000272958 lincRNA	2.567276229	0.054515732	0.000140525	0.001578732
WASIR1 ENSG00000185203 antisense	2.814614355	0.529098641	0.000140629	0.001578732

AC069277.1 ENSG00000189229 lincRNA	3.102926919	2.923794681	0.000141152	0.001581818
LINC01435 ENSG00000229981 lincRNA	2.504038119	0.817893587	0.000141659	0.001586113
LINC02477 ENSG00000249425 lincRNA	4.90711986	0.053939482	0.000144975	0.00162039
LINC00976 ENSG00000281657 lincRNA	3.237479773	-0.14049707	0.000146407	0.001633537
LINC01385 ENSG00000251604 lincRNA	4.821322553	0.383557192	0.000146542	0.001633614
AL645924.1 ENSG00000248399 sense_intronic	3.815812792	0.312321847	0.000147906	0.001644504
AC096554.1 ENSG00000228968 lincRNA	2.075513868	0.831779479	0.000149628	0.001659308
AC137770.1 ENSG00000250842 lincRNA	2.655371099	5.374946411	0.000150102	0.001661679
LINC01400 ENSG00000232920 lincRNA	2.975746353	-0.412043797	0.000151587	0.001675203
LINC02200 ENSG00000250358 lincRNA	3.236710889	5.843490226	0.000151891	0.001677113
AP002008.1 ENSG00000254980 antisense	2.010248451	-0.050573372	0.000154408	0.001700818
AC012467.1 ENSG00000271916 antisense	2.196574628	1.590442474	0.000154497	0.001700818
AL360219.1 ENSG00000273264 lincRNA	2.766956184	11.03243254	0.000155443	0.001707458
LINC01571 ENSG00000260057 lincRNA	-2.017424343	0.0841753	0.000156665	0.001719404
AL160408.4 ENSG00000241475 lincRNA	4.827244785	0.41408019	0.00015736	0.001725552
AP003555.2 ENSG00000254605 lincRNA	2.512322917	4.499151752	0.000157874	0.001728846
IGF2-AS ENSG00000099869 antisense	2.751995881	2.448538031	0.000157932	0.001728846
AP001554.1 ENSG00000270403 lincRNA	-2.256248221	0.987813831	0.000159802	0.001746316
AC078980.1 ENSG00000242029 lincRNA	2.042991608	0.436259893	0.000163198	0.001778854
AL355096.1 ENSG00000258460 lincRNA	5.0088421	0.564495812	0.000164924	0.001793883
LINC00200 ENSG00000229205 lincRNA	4.699615394	2.837881365	0.000166183	0.001802158
LINC00524 ENSG00000259023 lincRNA	2.707281836	1.868262968	0.000168194	0.001822411
GPK1-AS ENSG00000279220 processed_transcript	4.476826063	2.785813241	0.000169086	0.001829696
AP005233.2 ENSG00000260877 lincRNA	2.230502119	3.939524202	0.000171033	0.00184367

NOVA1- AS1 ENSG00000257842 antisense	4.605640215	2.714888993	0.000173814	0.001869012
AL121899.1 ENSG00000226644 lincRNA	2.120997263	4.036936271	0.000174254	0.001872168
AC008568.1 ENSG00000229855 lincRNA	2.066683224	0.697866701	0.000175228	0.001879467
AC073651.3 ENSG00000256953 lincRNA	2.846235738	0.195641487	0.000175558	0.001881419
AL359237.1 ENSG00000258807 lincRNA	2.988245946	0.243319048	0.000181619	0.001938902
AL445193.2 ENSG00000235038 lincRNA	2.055393192	0.224864144	0.000183665	0.001957323
AC074237.1 ENSG00000265980 lincRNA	3.155375016	2.380061077	0.000183868	0.001957323
UCHL1- AS1 ENSG00000251173 antisense	-2.036123706	9.005932133	0.000184129	0.001958322
AC093515.1 ENSG00000260289 lincRNA	3.185669654	0.295942635	0.000184269	0.001958322
AC068672.2 ENSG00000253377 lincRNA	2.297768823	1.319594254	0.000186139	0.001974905
AL391813.2 ENSG00000272827 lincRNA	3.9843451	0.028471618	0.000187059	0.001981366
LINC01811 ENSG00000226320 lincRNA	2.441926001	1.208363416	0.000188808	0.00199657
AC008440.3 ENSG00000232324 lincRNA	2.552876376	3.440250764	0.000189912	0.002003269
AC004944.1 ENSG00000253510 lincRNA	2.260497229	-0.120597774	0.000192254	0.002024622
AL022324.3 ENSG00000272942 lincRNA	2.284339822	0.413996707	0.000192698	0.002027621
AL929472.2 ENSG00000230955 antisense	2.812014914	-0.829033178	0.000194637	0.002046337
AC244035.3 ENSG00000236889 lincRNA	2.215672746	0.310603155	0.000196467	0.002060481
FP325330.2 ENSG00000278890 lincRNA	2.034873286	0.193885108	0.000204896	0.002138333
ERVMER61- 1 ENSG00000230426 lincRNA	2.648834913	5.585094008	0.000212734	0.002207485
AC005291.1 ENSG00000264067 antisense	2.658544809	0.654990769	0.000213653	0.002213416
AC087286.1 ENSG00000259276 antisense	2.179571971	6.776981876	0.000217678	0.002245997
AC003986.2 ENSG00000232821 antisense	2.920201109	10.03134672	0.000218246	0.002248219
AC125603.2 ENSG00000257883 lincRNA	2.319427906	3.981938149	0.00022177	0.002275786
AC078925.1 ENSG00000256810 lincRNA	-2.193481582	0.321043548	0.000221993	0.002275786

AC025437.4 ENSG00000253673 lincRNA	4.649999551	2.811736075	0.000224364	0.002294563
AC009987.1 ENSG00000231138 antisense	-2.156849981	10.95702525	0.00022639	0.002313423
LINC02061 ENSG00000250885 lincRNA	2.588456652	1.324913954	0.000227641	0.002323828
AC136285.1 ENSG00000261095 lincRNA	2.222587382	-0.414861828	0.000227773	0.002323828
AC022028.2 ENSG00000270002 antisense	2.201967821	0.567779786	0.000229082	0.00233532
AL359881.1 ENSG00000269978 lincRNA	2.202472019	1.550662863	0.000229462	0.002337328
AL031658.2 ENSG00000278012 sense_intronic	3.830826335	0.779655164	0.000230048	0.002341421
C1orf143 ENSG00000228208 lincRNA	3.356814761	0.329733982	0.000232735	0.002363894
LINC01141 ENSG00000236963 lincRNA	3.025220121	0.439580266	0.000232812	0.002363894
LINC02419 ENSG00000256906 lincRNA	3.340597413	0.756744125	0.000233656	0.002368692
AC079793.1 ENSG00000258268 antisense	2.765338096	0.119191454	0.000233849	0.002368767
AC124067.1 ENSG00000253388 lincRNA	2.43989212	-0.484534933	0.000234195	0.002370393
LINC01235 ENSG00000270547 lincRNA	2.803042518	5.239712982	0.000234495	0.002371547
AL138759.1 ENSG00000244332 sense_overlapping	2.997031898	0.916822011	0.000236453	0.002387562
AL136972.1 ENSG00000237874 lincRNA	3.71357514	-0.190267101	0.000238592	0.002401547
LINC01618 ENSG00000250302 lincRNA	2.443074412	0.176796884	0.000239118	0.002401935
LINC01018 ENSG00000250056 lincRNA	-2.169666184	3.927264902	0.000239918	0.002405403
AL121721.1 ENSG00000243810 antisense	4.570660336	1.924307817	0.000241395	0.002412623
AC096759.2 ENSG00000250735 lincRNA	5.494776496	1.097054426	0.000241666	0.002413444
CNTFR-AS1 ENSG00000237159 antisense	2.157371406	2.741163434	0.000242077	0.002415652
AC109830.1 ENSG00000251199 lincRNA	5.070283089	0.161862349	0.000245548	0.002444552
AC060835.1 ENSG00000250341 lincRNA	3.730646114	0.532212735	0.000250183	0.002482947
AC104809.1 ENSG00000223991 antisense	3.807363532	0.263084026	0.000252128	0.002496415
CU104787.1 ENSG00000279973 lincRNA	2.912585198	0.829786992	0.000253674	0.002509778

LINC01257 ENSG00000204603 lincRNA	3.153760873	6.626501025	0.000254959	0.002520535
AP003121.1 ENSG00000272642 lincRNA	2.380933343	-0.281874039	0.000258173	0.002548355
AC023932.1 ENSG00000265994 lincRNA	2.766330911	0.264239068	0.000260388	0.002564753
AC090709.1 ENSG00000257191 antisense	3.314270917	2.329089885	0.000260846	0.002566799
AP003351.1 ENSG00000253585 lincRNA	3.385807209	0.958965098	0.000264348	0.002599252
AC244102.1 ENSG00000231447 antisense	2.671615232	2.210394793	0.00027267	0.002665989
ISPD-AS1 ENSG00000229688 antisense	2.180752684	7.703439871	0.000272808	0.002665989
IQCF5-AS1 ENSG00000235455 antisense	2.168907844	-0.322067208	0.000273271	0.002668471
AC106771.1 ENSG00000248783 lincRNA	2.109950217	2.119358457	0.000275717	0.002690301
AC079949.2 ENSG00000278266 lincRNA	2.211167977	5.91469243	0.000278199	0.002712441
AL352955.1 ENSG00000258496 lincRNA	2.008891296	-0.575627613	0.000279386	0.002721933
AC016717.2 ENSG00000273301 lincRNA	3.110060523	4.010564575	0.000283127	0.002754172
AC010834.1 ENSG00000253722 antisense	3.748476256	0.347312681	0.000287465	0.002792071
AC026336.3 ENSG00000276122 lincRNA	3.42493667	3.883859736	0.00028768	0.002792071
LINC02321 ENSG00000258884 lincRNA	2.611759521	2.256489121	0.000290605	0.002816178
LINC01021 ENSG00000250337 lincRNA	4.106099875	4.558511456	0.000294468	0.002840727
KRT7-AS ENSG00000257671 antisense	3.190091309	4.964902634	0.000295878	0.002849953
MYO16-AS1 ENSG00000236242 antisense	2.308220396	1.420939318	0.000298913	0.002873844
AC004817.3 ENSG00000269927 lincRNA	2.340816818	1.625296619	0.000301073	0.002891249
AC009630.2 ENSG00000253174 antisense	2.582560991	0.15566575	0.000301991	0.00289789
AC135371.1 ENSG00000226434 lincRNA	3.509172935	-0.421234242	0.000307384	0.002945203
AC092484.1 ENSG00000225107 lincRNA	3.175963752	0.400318978	0.000311741	0.002975774
LINC01805 ENSG00000223863 lincRNA	2.735127411	5.823356159	0.000314268	0.002997642
BOK-AS1 ENSG00000234235 antisense	2.915709916	2.605739914	0.000314765	0.002997642

AL161757.5 ENSG00000259133 antisense	2.253924202	2.310260583	0.000318531	0.003029247
ST8SIA6-AS1 ENSG00000204832 antisense	5.255165489	5.263581726	0.000319086	0.003030791
ARMC2-AS1 ENSG00000230290 antisense	2.483249486	0.374758814	0.000319168	0.003030791
LINC02088 ENSG00000227685 lincRNA	2.010530161	-0.184316309	0.000319563	0.003032284
H19 ENSG00000130600 processed_transcript	2.292352462	10.89420138	0.000329602	0.003109036
LINC01961 ENSG00000234148 lincRNA	2.098811697	3.130698943	0.00033943	0.003183169
AL357033.2 ENSG00000223669 antisense	2.288247953	1.879057573	0.000339708	0.003183169
AL365204.2 ENSG00000237414 lincRNA	2.977251175	1.786078593	0.000340901	0.003192006
U95743.1 ENSG00000262267 lincRNA	2.397682149	-0.198090154	0.00035226	0.003264802
AC011287.1 ENSG00000229618 lincRNA	3.924730182	3.526958353	0.000352867	0.003265681
AC016687.3 ENSG00000250954 lincRNA	2.514778116	-0.027205849	0.000354334	0.003274504
AP001085.1 ENSG00000255440 sense_intronic	3.691685155	-0.006107147	0.000355074	0.003278974
AC087612.1 ENSG00000259672 lincRNA	5.247747345	2.640407876	0.00036878	0.003388362
AC106799.3 ENSG00000260763 lincRNA	3.776815082	1.406509576	0.000370718	0.003401269
AC011900.1 ENSG00000237750 antisense	4.061254235	-0.062024123	0.000372881	0.003418661
AL117382.1 ENSG00000226812 antisense	2.397012831	5.58114746	0.000376021	0.003442496
AC010486.3 ENSG00000249842 lincRNA	2.982741594	-0.216917262	0.000382647	0.003490628
AC105020.3 ENSG00000260235 antisense	2.090544404	2.43501296	0.000385707	0.003514161
AC022294.1 ENSG00000241231 lincRNA	2.187144916	-0.031211447	0.000385778	0.003514161
LINC02365 ENSG00000254233 lincRNA	3.792321852	4.031376711	0.000388168	0.003530892
AC011524.2 ENSG00000267240 lincRNA	2.779899946	-0.362965381	0.000396377	0.00359442
AL954650.1 ENSG00000228215 lincRNA	3.653451355	-0.322445648	0.000402376	0.003636784
AP003717.1 ENSG00000255847 antisense	2.972651005	0.317786099	0.000406807	0.003669027
AC092634.3 ENSG00000226581 lincRNA	2.016156394	5.57330951	0.000408794	0.003676556

CECR3 ENSG00000241832 lincRNA	2.751782292	1.004204876	0.000411878	0.003698787
LINC00658 ENSG00000226995 lincRNA	2.317661585	1.317268155	0.000412136	0.003698787
AC112192.1 ENSG00000248736 lincRNA	2.753857073	1.858593438	0.000413055	0.003699456
AC010760.1 ENSG00000260739 lincRNA	3.261258361	1.28421234	0.00041619	0.003719459
PART1 ENSG00000152931 lincRNA	-2.123101972	6.761610283	0.000427641	0.003797842
AL391056.1 ENSG00000227619 lincRNA	2.823877189	5.927151565	0.000430156	0.003817523
AC079612.1 ENSG00000196758 lincRNA	2.689596754	-0.232468553	0.000432096	0.003826749
FEZF1-AS1 ENSG00000230316 antisense	4.773599037	6.929536667	0.000434732	0.00383943
MUC19 ENSG00000205592 processed_transcript	3.044489781	2.838463481	0.000441916	0.003889406
AC022405.1 ENSG00000259254 sense_intronic	2.509491313	0.832582939	0.000443418	0.003896447
CALML3-AS1 ENSG00000205488 antisense	-2.156110692	4.768923893	0.000443632	0.003896447
AC145625.1 ENSG00000226992 lincRNA	2.452603407	0.453441082	0.00044931	0.003938179
AL035443.1 ENSG00000224765 antisense	4.28959652	0.798038981	0.000452414	0.003959938
AC093583.1 ENSG00000242048 processed_transcript	-2.060793657	3.785097598	0.000452937	0.003961804
AC019117.1 ENSG00000236039 lincRNA	2.34585255	4.474846864	0.000453674	0.003965527
Z93022.1 ENSG00000235834 sense_intronic	2.036492281	1.760709873	0.000456745	0.003984108
LINC01300 ENSG00000253595 antisense	2.231443318	3.55245898	0.000457049	0.003984108
AL023802.1 ENSG00000226954 lincRNA	2.874036708	0.881816902	0.000458201	0.003988691
LEMD1-AS1 ENSG00000226235 antisense	2.793012816	1.997954112	0.0004589	0.003990077
LINC01593 ENSG00000231221 lincRNA	3.006098423	1.238963624	0.000459867	0.003990077
AC008474.1 ENSG00000267557 antisense	3.091947375	0.356003172	0.000459924	0.003990077
AMMECR1-IT1 ENSG00000224142 sense_intronic	2.82135741	6.734534365	0.000472392	0.004078821
LINC00982 ENSG00000177133 antisense	-2.291874949	7.175814635	0.000472736	0.004079029
AC010998.1 ENSG00000227307 lincRNA	3.170366451	1.107099743	0.000474822	0.004085968

AC104241.2 ENSG00000255079 lincRNA NA LBXL- AS1 ENSG00000227128 processed_transcript	2.026311399	0.948073461	0.000477989	0.004105902
OVAAL ENSG00000236719 lincRNA	2.52102609	4.062025045	0.000479323	0.004110835
AC090578.1 ENSG00000271156 lincRNA	2.028312764	0.865918354	0.000482303	0.004130832
LINC01782 ENSG00000267204 lincRNA	2.516448191	2.85203633	0.000483246	0.004136128
AC096746.1 ENSG00000246541 lincRNA	2.647086747	0.248249082	0.000491378	0.004197283
AC008871.1 ENSG00000250383 antisense	2.581394622	6.07566789	0.000494446	0.004215019
LINC01694 ENSG00000233922 lincRNA	2.52177145	5.660002668	0.000498686	0.00424549
AL163953.1 ENSG00000225680 lincRNA	2.146345206	2.738063439	0.000499547	0.004249978
AC091179.2 ENSG00000242407 lincRNA	3.437675991	3.484670267	0.000499881	0.004249986
AL078623.1 ENSG00000269931 lincRNA	2.971970223	2.571161769	0.000503	0.004273655
AP003181.1 ENSG00000254998 lincRNA	4.288282601	1.228164984	0.000507977	0.004310199
LINC02103 ENSG00000249785 lincRNA	2.208372484	2.95275602	0.000511158	0.004328549
AC034213.1 ENSG00000250509 lincRNA	2.156025972	1.447273818	0.000511684	0.004330128
AC092723.1 ENSG00000269667 lincRNA	3.114047501	1.175333936	0.000515047	0.004352937
LINC00648 ENSG00000259129 lincRNA	4.096764494	4.390984394	0.000522291	0.004399453
AC018521.3 ENSG00000264243 lincRNA	2.093304734	0.355652439	0.000526385	0.004425173
AC087380.1 ENSG00000167355 processed_transcript	2.513883001	1.207599164	0.000530074	0.004447808
AL035045.1 ENSG00000233625 lincRNA	2.076902225	6.043440469	0.000530124	0.004447808
AC108463.3 ENSG00000271590 lincRNA	3.017203667	2.420210512	0.000533565	0.004470796
AC092326.1 ENSG00000260126 lincRNA	3.317859487	0.419217385	0.000536383	0.004489067
AL589678.1 ENSG00000224935 lincRNA	2.179311894	-0.219972122	0.00053711	0.004489662
AC087269.1 ENSG00000254367 lincRNA	2.852412451	3.48859402	0.000537225	0.004489662
SLCO4A1- AS1 ENSG00000232803 antisense	3.510125607	7.08894511	0.000542463	0.004523459

AC132216.1 ENSG00000184566 antisense	2.305362618	-0.616869058	0.000542687	0.004523459
AC068135.2 ENSG00000260142 lincRNA	2.423675371	2.260206919	0.000543515	0.004524523
AC012593.1 ENSG00000226994 lincRNA	2.068386156	0.205898403	0.000547977	0.004555637
LINC01109 ENSG00000271167 lincRNA	2.384730405	3.267704794	0.000557628	0.004620828
GACAT3 ENSG00000236289 lincRNA	2.85029988	2.795304357	0.000558265	0.004620828
AC068858.1 ENSG00000254654 lincRNA	2.4533344	0.297127992	0.000558352	0.004620828
AC019129.2 ENSG00000273106 antisense	2.416586203	0.056893135	0.000561961	0.004647654
C8orf87 ENSG00000279847 lincRNA	2.883143149	-0.061615765	0.000569236	0.00468958
TCERG1L-AS1 ENSG00000230098 antisense	3.112533252	-0.05837742	0.000577525	0.004747462
LINC02366 ENSG00000256888 lincRNA	2.224683049	3.117008914	0.000578381	0.004749575
LINC01558 ENSG00000146521 lincRNA	2.018663546	4.625718952	0.00058025	0.004761855
AL157401.1 ENSG00000228636 lincRNA	3.60317753	0.351178437	0.000583946	0.004786033
AC046168.1 ENSG00000259362 lincRNA	3.29579977	1.197136621	0.000587683	0.004808411
AC104777.1 ENSG00000224048 lincRNA	3.029749272	-0.459593113	0.000588179	0.004808411
GATA3-AS1 ENSG00000197308 lincRNA	2.639955309	0.778214087	0.000588641	0.004808411
AP000346.1 ENSG00000211683 processed_transcript	2.030944826	7.378375411	0.000589221	0.004808411
AC008114.1 ENSG00000255649 antisense	2.828354454	1.414274755	0.000601528	0.004876848
AC100782.1 ENSG00000254238 antisense	3.010083168	0.630936876	0.000614553	0.00496666
AC091073.1 ENSG00000259602 antisense	2.15298727	2.770292169	0.000621221	0.004998381
AC092666.1 ENSG00000241449 lincRNA	2.290480957	2.627263722	0.000622622	0.005006494
AL591885.1 ENSG00000226828 lincRNA	2.396175814	0.432936046	0.000629591	0.005046624
AC097375.3 ENSG00000251249 processed_transcript	2.534667702	0.589232377	0.000631412	0.00505804
PCAT5 ENSG00000280719 lincRNA	2.301365812	0.816006255	0.000642694	0.005122675
LINC02042 ENSG00000240893 lincRNA	3.540926081	1.556922185	0.000646729	0.005148402

AC141930.2 ENSG00000231482 lincRNA	2.000575821	0.066672952	0.00066583	0.00528725
AC079612.2 ENSG00000227459 lincRNA	2.160220832	-0.292585108	0.000671641	0.005320851
AP005203.1 ENSG00000266268 lincRNA	2.50630499	2.202204837	0.00067173	0.005320851
AC117465.1 ENSG00000226782 lincRNA	2.535258915	0.325848199	0.000673563	0.005332062
FOXCUT ENSG00000280916 lincRNA	2.719990207	0.686879469	0.000687603	0.005414289
LINC02188 ENSG00000261175 lincRNA	2.931389772	4.667183333	0.000689771	0.005423333
AC090227.2 ENSG00000267674 lincRNA	3.123616694	-0.001560639	0.000696197	0.00546712
AC011478.1 ENSG00000267760 lincRNA	2.764160753	-0.172166424	0.000703455	0.005517319
AL136501.1 ENSG00000259077 lincRNA	2.023501862	1.301375265	0.000708892	0.005546322
AP001330.2 ENSG00000253679 lincRNA	2.302950226	0.103355724	0.000724208	0.005628169
LINC01800 ENSG00000234572 lincRNA	2.502280105	2.550649889	0.000728986	0.005658407
AC002463.1 ENSG00000223646 lincRNA	4.316903574	0.771689078	0.000730584	0.005667362
AC073130.1 ENSG00000237870 processed_transcript	2.004545838	7.932069035	0.000740593	0.00571718
LINC01938 ENSG00000254066 lincRNA	3.745309707	-0.027932131	0.000742815	0.005730865
AC068707.1 ENSG00000224265 lincRNA	3.96299129	0.527489248	0.000754537	0.00580725
AC114776.1 ENSG00000235881 lincRNA	2.271406114	0.465795964	0.000758068	0.005823879
SLC39A12-AS1 ENSG00000226083 antisense	2.929476949	-0.224198309	0.00076217	0.00584132
LINC01549 ENSG00000232560 lincRNA	4.188868918	0.91125271	0.000773826	0.005919981
AC093426.1 ENSG00000259776 lincRNA	3.063597899	0.926103324	0.000779218	0.005950521
AC105219.3 ENSG00000254574 antisense	2.598669488	0.002461167	0.000779769	0.005951167
AC005281.1 ENSG00000225606 antisense	2.129063372	7.54172089	0.000787366	0.005994796
AP000785.1 ENSG00000254933 antisense	3.419691484	0.488052937	0.000787962	0.005995754
LINC01729 ENSG00000225640 lincRNA	2.308334789	-0.024915148	0.000807732	0.006124854
NCRNA00250 ENSG00000253433 lincRNA	3.459290867	0.115282184	0.00080781	0.006124854

AC004870.2 ENSG00000223829 processed_transcript	3.883523982	2.553279181	0.000819711	0.006203458
LINC02149 ENSG00000248486 lincRNA	2.192297443	-0.297707137	0.000829336	0.006247205
LINC01762 ENSG00000233154 lincRNA	2.500974243	2.014866436	0.000834245	0.00627677
FP325330.3 ENSG00000279712 lincRNA	3.748240109	2.573232166	0.000851385	0.006393601
FLJ36000 ENSG00000276399 lincRNA	5.09481839	1.160741593	0.000851778	0.006393601
AC016550.1 ENSG00000248195 lincRNA	2.349882496	-0.496647731	0.000855747	0.006408304
AC068992.1 ENSG00000253496 lincRNA	3.55753949	0.677855959	0.000864519	0.006466403
BX546450.1 ENSG00000214915 lincRNA	2.316295862	2.039789965	0.000874814	0.006539567
ATP11AUN ENSG00000197595 lincRNA	2.672401693	0.199032013	0.000876241	0.006542568
AC004231.1 ENSG00000234477 antisense	2.239779955	3.08986355	0.000879454	0.006562716
LINC00469 ENSG00000177338 lincRNA	2.790981816	-0.070081153	0.000880942	0.006569973
AC005616.1 ENSG00000267423 lincRNA	2.317221983	3.982765697	0.000885067	0.006585335
LINC02345 ENSG00000259225 lincRNA	3.335296126	3.194274535	0.000885644	0.006585786
AL354863.1 ENSG00000238276 processed_transcript	3.31473126	0.20992076	0.000898591	0.006658767
AC109588.1 ENSG00000250038 lincRNA	4.08679139	1.174644292	0.000908692	0.0067258
AC012640.1 ENSG00000248968 antisense	2.146554638	1.327633334	0.0009113	0.006741187
AC027312.1 ENSG00000253591 antisense	3.604168991	1.242964168	0.000914035	0.006749044
AL133167.1 ENSG00000258516 lincRNA	2.800954285	3.219988389	0.000914479	0.006749044
AC005606.1 ENSG00000260107 lincRNA	2.355494263	-0.397219896	0.000916456	0.006755815
AL357060.1 ENSG00000230533 lincRNA	2.902983704	2.184265099	0.000920987	0.006777467
KC877982.1 ENSG00000269993 lincRNA	4.199786715	0.025450275	0.000927264	0.00681897
AC008750.7 ENSG00000268889 lincRNA	2.669766116	0.73145835	0.000930483	0.006831574
PTGES2-AS1 ENSG00000232850 lincRNA	3.158938472	3.675974594	0.000931787	0.006834454
AC090164.3 ENSG00000277210 lincRNA	2.56818165	1.097176844	0.00093207	0.006834454

AC007326.2 ENSG00000280418 lincRNA	2.430318803	0.655368561	0.000934476	0.006845129
DLX6-AS1 ENSG00000231764 antisense	2.975979125	4.980970962	0.000940432	0.006880852
LINC02260 ENSG00000250456 lincRNA	2.139989218	-0.481241997	0.000943666	0.006898233
AC016588.1 ENSG00000267124 antisense	3.37955281	-0.143624538	0.000946962	0.006916729
LINC01672 ENSG00000228750 lincRNA	2.449111066	0.016614516	0.000963411	0.007012608
AC138646.1 ENSG00000253659 lincRNA	2.67673505	0.287671626	0.000963938	0.007012608
AP002884.5 ENSG00000268472 antisense	2.128403187	7.08350262	0.000972799	0.007064982
LINC00393 ENSG00000224853 lincRNA	4.220107437	2.300211091	0.000975186	0.00707426
AC005392.3 ENSG00000272396 antisense	3.478996219	-0.166018734	0.000977507	0.00708304
AC006967.3 ENSG00000269446 lincRNA	3.528379992	0.888008928	0.000979228	0.007091479
AP000640.2 ENSG00000255355 processed_transcript	2.16563644	0.767690825	0.000980235	0.007091954
AC131532.1 ENSG00000258815 lincRNA	3.591703044	2.304836093	0.000980962	0.007091954
AC113146.2 ENSG00000259450 lincRNA	2.097719035	1.369412438	0.000999125	0.007194714
AC012508.1 ENSG00000260163 lincRNA	2.964484819	0.56201463	0.001005106	0.007229617
LINC00603 ENSG00000250048 lincRNA	2.352150744	0.372120361	0.001007814	0.007240796
AC138035.2 ENSG00000250765 lincRNA	3.259779086	8.826614756	0.001008219	0.007240796
LAMP5-AS1 ENSG00000225988 antisense	2.097021	0.533786169	0.001008363	0.007240796
LINC02134 ENSG00000260450 lincRNA	2.829655296	7.225103178	0.001026661	0.007347366
AC127522.1 ENSG00000259277 antisense	2.173822934	-0.436141215	0.001030312	0.007361106
AL606804.1 ENSG00000236817 antisense	2.926487176	-0.360077494	0.001035722	0.007393016
AC010336.6 ENSG00000269813 antisense	3.085312829	7.517489351	0.001037069	0.007393016
AC084759.2 ENSG00000259669 lincRNA	3.435708668	1.145306411	0.001060246	0.007529549
AL137246.2 ENSG00000278445 lincRNA	2.396086439	0.317072815	0.001063059	0.00754015
AC007952.7 ENSG00000263394 lincRNA	3.382938602	0.827727523	0.001114801	0.007863417

AL161908.1 ENSG00000224842 antisense	2.397800355	1.193009675	0.001116392	0.007870287
AL049646.2 ENSG00000237259 antisense	2.195296637	4.649571072	0.00112704	0.007932199
AC022509.1 ENSG00000255750 antisense	3.155448167	2.660931874	0.001136768	0.007978208
AC024600.1 ENSG00000224714 lincRNA	2.869322032	0.657449046	0.001143706	0.008014113
AL445584.2 ENSG00000275649 lincRNA	3.841153478	0.422092294	0.001158757	0.008085789
LINC01514 ENSG00000237579 lincRNA	2.07151438	-0.114179937	0.001160115	0.008085789
LINC02327 ENSG00000258038 lincRNA	3.782336022	2.111462873	0.001161741	0.008085789
AC005863.1 ENSG00000205325 lincRNA	3.548684012	0.131068463	0.001164946	0.008088866
AC023830.2 ENSG00000261789 antisense	2.203369444	0.467992906	0.001167657	0.008092967
AC021079.1 ENSG00000280776 lincRNA	3.323979813	-0.105119535	0.00118353	0.00817636
HRAT17 ENSG00000234520 lincRNA	3.096559412	9.86949586	0.00119594	0.008244228
AL356479.1 ENSG00000228971 lincRNA	2.30489963	5.375317775	0.001201256	0.0082764
FIRRE ENSG00000213468 lincRNA	3.345620676	4.464901873	0.001227818	0.008436621
AC126323.3 ENSG00000259878 lincRNA	2.137797827	-0.284101193	0.001265906	0.008660996
AC145207.7 ENSG00000264735 lincRNA	2.585212935	-0.116540886	0.001287977	0.008779035
AC099684.1 ENSG00000228133 antisense	2.185550908	7.604107039	0.001300527	0.008855111
AC012499.1 ENSG00000229941 antisense	2.457600169	1.228429074	0.001314023	0.008932696
AC126323.6 ENSG00000261296 lincRNA	3.540804049	0.377621851	0.001314782	0.008933089
RBAKDN ENSG00000273313 lincRNA	2.578525775	0.95593143	0.001330384	0.009019877
AC120498.4 ENSG00000260710 lincRNA	3.063832943	2.512176047	0.00136114	0.0091796
PHKA1-AS1 ENSG00000231944 antisense	2.97223377	-0.054550124	0.001376476	0.00926424
AC233309.1 ENSG00000276144 lincRNA	2.548648516	0.591201148	0.001376608	0.00926424
LINC01906 ENSG00000265786 lincRNA	2.770889213	6.719078611	0.001377441	0.00926424
LINC02065 ENSG00000248846 lincRNA	2.728515789	1.008803816	0.001378049	0.00926424

AL591846.2 ENSG00000237605 antisense	2.007372349	0.795034264	0.001380126	0.009273313
AC110772.1 ENSG00000249742 lincRNA	3.2593694	0.354292476	0.001382835	0.009286621
AC011676.2 ENSG00000254019 antisense	2.90469049	0.955655778	0.001402396	0.009388322
AP003400.1 ENSG00000255429 lincRNA	2.608585499	1.027837648	0.001407579	0.009418075
AC034229.1 ENSG00000249807 lincRNA	3.576544365	-0.044650156	0.001422149	0.009505588
TTY4B ENSG00000235412 lincRNA	2.699738272	-0.684254	0.001441313	0.009588451
TSPEAR-AS2 ENSG00000182912 antisense	2.039298202	6.106882456	0.001459925	0.009702149
AC007179.2 ENSG00000233891 lincRNA	2.37190128	-0.119569177	0.001468037	0.009750979
AC093536.2 ENSG00000260715 lincRNA	3.366465514	-0.022794809	0.001473705	0.009783532
AC025254.1 ENSG00000258125 lincRNA	2.845961543	0.401707916	0.001494484	0.009906003

Supplementary Table 2 Sixty-three lncRNAs were associated with the survival of GC by univariate COX regression analysis

lncRNAname	HR	P
AC079385.3 ENSG00000257918 antisense	1.200302529	7.99E-05
AL049833.2 ENSG00000259026 lincRNA	1.273987661	0.001736168
AC025465.4 ENSG00000251214 lincRNA	1.200062805	0.002117447
AF274855.1 ENSG00000229967 antisense	1.106639654	0.002127255
AC090809.1 ENSG00000253363 lincRNA	1.098784624	0.002538723
LINC02466 ENSG00000246876 lincRNA	1.151744689	0.004236125
AC008568.1 ENSG00000229855 lincRNA	1.169543102	0.004513786
AL022313.4 ENSG00000261675 sense_overlapping	1.146012627	0.005091837
AC107057.1 ENSG00000232835 lincRNA	1.236708065	0.005162272
GACAT3 ENSG00000236289 lincRNA	1.135237757	0.005460444
AC100797.1 ENSG00000254207 sense_intronic	0.880179979	0.005638477
LINC02266 ENSG00000272727 lincRNA	1.119422251	0.005687029
AC125608.1 ENSG00000223812 lincRNA	1.096781561	0.006132216
AP001136.1 ENSG00000226771 antisense	1.148912099	0.006272226
AL122125.1 ENSG00000277050 antisense	1.125630231	0.007083402
AC124067.1 ENSG00000253388 lincRNA	1.248891631	0.008184118
AC007991.4 ENSG00000254287 antisense	0.905970856	0.009337766
AC090125.1 ENSG00000263655 lincRNA	1.216345416	0.010180127
AL109615.2 ENSG00000231881 lincRNA	1.143691111	0.010426629
AC010486.3 ENSG00000249842 lincRNA	1.176305344	0.010802659
AL049765.1 ENSG00000232465 lincRNA	1.156549042	0.011807004
AC109588.1 ENSG00000250038 lincRNA	1.127060102	0.012027839
AC006450.1 ENSG00000231227 sense_overlapping	1.088268623	0.014083905
AC005009.2 ENSG00000233073 antisense	1.143961861	0.014137231
CASK-AS1 ENSG00000233033 antisense	1.136005562	0.0155081
AL358452.1 ENSG00000229242 antisense	1.067985742	0.015968908
AC021079.1 ENSG00000280776 lincRNA	1.169709347	0.016123635
AL499627.1 ENSG00000260542 lincRNA	1.108188158	0.018616576
LINC01159 ENSG00000229743 processed_transcript	1.097591351	0.019690816
AL391361.3 ENSG00000233342 lincRNA	1.150477803	0.019872488
AL121820.2 ENSG00000259038 antisense	1.087232626	0.021040625
AC023158.2 ENSG00000273853 sense_intronic	1.113661803	0.021458771
AC005618.3 ENSG00000279855 antisense	1.052046506	0.022231709
AC114928.1 ENSG00000249349 lincRNA	1.134902031	0.022918275
AC026369.3 ENSG00000256948 antisense	0.909554719	0.023018285
AC108733.1 ENSG00000239767 lincRNA	1.129359488	0.024971433
AP001046.1 ENSG00000225637 lincRNA	1.116190025	0.025960992
AL590666.3 ENSG00000237588 lincRNA	1.067255964	0.026295112
AC092625.1 ENSG00000230991 lincRNA	1.189321038	0.026441185
AC140125.1 ENSG00000248943 lincRNA	1.195111874	0.026518259
AC110772.1 ENSG00000249742 lincRNA	1.163507289	0.027488735
AC087277.1 ENSG00000254566 lincRNA	1.16164464	0.028322714
C8orf87 ENSG00000279847 lincRNA	1.150496868	0.029474942
AC022031.2 ENSG00000267284 lincRNA	1.085982245	0.029633539
AL160408.4 ENSG00000241475 lincRNA	1.125347123	0.031784237
EGLN3-AS1 ENSG00000258897 antisense	1.117932604	0.031807614
AC010880.1 ENSG00000224400 lincRNA	1.068788721	0.032404281
AP000534.1 ENSG00000233408 antisense	1.166957632	0.032645644
AC106771.1 ENSG00000248783 lincRNA	1.086547286	0.032721122
AL355596.1 ENSG00000259828 lincRNA	1.114339975	0.034192413
LINC00955 ENSG00000216560 processed_transcript	1.085310458	0.034443716

AL513188.1	ENSG00000233848 antisense	1.078281138	0.035325388
AC093515.1	ENSG00000260289 lincRNA	1.117310858	0.035785933
AL139023.1	ENSG00000257869 lincRNA	1.079779435	0.036522745
AC068643.1	ENSG00000257703 lincRNA	1.171248251	0.037099474
LINC00626	ENSG00000225826 lincRNA	1.126044805	0.039391218
LINC01592	ENSG00000253658 lincRNA	1.120249833	0.040522682
LINC01782	ENSG00000267204 lincRNA	1.076351508	0.044617799
LINC02438	ENSG00000248238 lincRNA	1.11433255	0.04509649
AC034236.3	ENSG00000272265 lincRNA	1.100772374	0.045128514
AL353801.1	ENSG00000223462 lincRNA	0.894573181	0.047535628
CNTN4-AS2	ENSG00000227588 lincRNA	1.08418181	0.047787187
CU104787.1	ENSG00000279973 lincRNA	1.117627878	0.048761862
