

Table S1. Heatmap data from RIP sequencing.

Ensembl ID	Gene symbol	INPUT1	INPUT2	RIP2	RIP1
ENSG00000264558		0	6.156032	7.497141	0
ENSG00000228499	TMSB10P1	4.239933	3.013998	9.351149	0
ENSG00000256393	RPL41P5	7.248753	8.558922	11.99438	0
ENSG00000252577	SCARNA20	4.863938	4.538662	8.414774	0
ENSG00000207501	RNVU1-14	5.789651	5.518692	9.239317	0
ENSG00000275538	RNVU1-19	5.680943	4.035448	8.688411	0
ENSG00000206600	RNU6-25P	5.975195	4.701549	10.04277	0
ENSG00000275254		4.515637	0	10.36979	0
ENSG00000270066		2.850599	0.010064	8.555107	0
ENSG00000277084	RNU2-4P	0	3.006298	6.976123	0
ENSG00000277764		0	2.919721	7.408228	0
ENSG00000222594	RN7SKP235	0	2.507414	6.883767	0
ENSG00000262402	MCURIP1	0	1.758303	7.35844	0
ENSG00000278876		1.057277	0.909965	7.627322	0
ENSG00000240231	RPS27P29	1.564134	1.036327	7.356135	0
ENSG00000239224	RN7SL546P	0.944109	0	6.853459	0
ENSG00000171097	KYAT1	0.323082	1.6107	7.322397	0.604071
ENSG00000230823	CBX1P1	0	0.437228	6.793376	0
ENSG00000242748	RPL23AP81	0	0.939603	6.713146	0
ENSG00000229046	HMGNI1P2	0	0.719841	7.023233	0
ENSG00000224114		0	0.75873	6.750097	0
ENSG00000226777	FAM30A	0	0	7.033797	0.650765
ENSG00000253516	HMGB1P41	0	0	6.480766	0
ENSG00000158104	HPD	0	0	6.594459	0
ENSG00000267026		0	0	6.454472	0
ENSG00000106004	HOXA5	0	0	6.862984	0
ENSG00000216516	ENSG00000216516	0	0	6.421055	0
ENSG00000231749	ABCA9-AS1	0	0	6.68069	0
ENSG00000274662	RN7SKP236	0	0	7.182007	0
ENSG00000259421		0	0	7.242431	0
ENSG00000238324	RN7SKP198	0	0	7.336614	0
ENSG00000239855	IGKV1-6	0	0	7.450073	0
ENSG00000224276	ARHGEF2-AS1	0	0	6.512527	0
ENSG00000223136	RN7SKP207	0	0	7.016519	0
ENSG00000223042	RN7SKP161	0	0	8.304908	0
ENSG00000226541		0	0	6.579799	0

ENSG00000250781		0	0	6.664326	0
ENSG00000267005		0	0	6.696272	0
ENSG00000273566	Metazoa_SRP	0	0	6.717553	0
ENSG00000271353		0	0	6.719635	0
ENSG00000241791	RN7SL817P	0	0	6.746541	0
ENSG00000166220	TBATA	0	0	7.321757	0
ENSG00000276413		0	0	7.574548	0
ENSG00000212424	RNU1-119P	0	0	7.614622	0
ENSG00000276997		0	0	7.62983	0
ENSG00000222583	RN7SKP222	0	0	8.471736	0
ENSG00000275930	Y_RNA	0	0	10.42543	0
ENSG00000200914	RNA5SP435	0	0	10.96724	0
ENSG00000283685	MIR522	0	0	12.31703	0
ENSG00000250580	SNRPCP8	0	0	9.738577	0
ENSG00000254683	SNRPCP6	0	0	9.182345	0
ENSG00000234565	COX6B1P1	0	0	8.630879	0
ENSG00000211725	TRBV5-5	0	0	8.107745	0
ENSG00000286399		0	0	8.010942	0
ENSG00000254755		0	0	7.992406	0
ENSG00000271609		0	0	7.944525	0
ENSG00000270354		0	0	7.773436	0
ENSG00000223282	RN7SKP165	0	0	7.448207	0
ENSG00000253765	IGKV2D-19	0	0	7.306171	0
ENSG00000231261	HMG2N2P10	0	0	7.253053	0
ENSG00000286243		0	0	7.220388	0
ENSG00000255786		0	0	7.177489	0
ENSG00000267135		0	0	7.115886	0
ENSG00000241604	RN7SL340P	0	0	7.11269	0
ENSG00000237183	KRTAP9-10P	0	0	7.106034	0
ENSG00000230980	RPL36AP39	0	0	7.102081	0
ENSG00000262154	EIF1P4	0	0	7.063201	0
ENSG00000241362	RPL36AP43	0	0	7.062197	0
ENSG00000235181		0	0	7.022168	0
ENSG00000278382		0	0	6.947947	0
ENSG00000233383		0	0	6.911572	0
ENSG00000169474	SPRR1A	0	0	6.879914	0
ENSG00000252490	RN7SKP66	0	0	6.806981	0
ENSG00000284670	RPSAP56	0	0	6.806401	0

ENSG00000200693	U3	0	0	6.781792	0
ENSG00000232135		0	0	6.780008	0
ENSG00000242653	RN7SL132P	0	0	6.767615	0
ENSG00000244544	RN7SL446P	0	0	6.767615	0
ENSG00000271138	IGLVIVOR22-1	0	0	6.74478	0
ENSG00000272100		0	0	6.664824	0
ENSG00000275788	Metazoa_SRP	0	0	6.663942	0
ENSG00000252960	RN7SKP258	0	0	6.658269	0
ENSG00000267518		0	0	6.567682	0
ENSG00000248105		0	0	6.562502	0
ENSG00000277308	Metazoa_SRP	0	0	6.554681	0
ENSG00000222404	RN7SKP281	0	0	6.544903	0
ENSG00000241834	RN7SL149P	0	0	6.533781	0
ENSG00000225919	LINC01745	0	0	6.530523	0
ENSG00000226573	ENSG00000226573	0	0	6.516677	0
ENSG00000225182		0	0	6.513459	0
ENSG00000253941	IGHVII-51-2	0	0	6.493439	0
ENSG00000249764		0	0	6.492286	0
ENSG00000237472		0	0	6.467606	0
ENSG00000257184		0	0	6.441815	0
ENSG00000244167		0	0	6.434862	0
ENSG00000237360	CHCHD4P2	0	0	6.434311	0
ENSG00000266944		0	0	6.446107	0
ENSG00000267402	TCF4-AS2	0	0	6.560654	0
ENSG00000240328		0	0	6.909533	0
ENSG00000241950	RPL29P23	0	0	7.140196	0
ENSG00000265352	LINC01899	0	0	7.314823	0
ENSG00000223321	RN7SKP293	0	0	7.39096	0
ENSG00000253895	IGHVII-44-2	0	0	8.273376	0
ENSG00000252936	RNA5SP423	0	0	9.893115	0
ENSG00000252414	RNU6-100P	0	0	10.11757	0
ENSG00000251861		0	0	10.97579	0
ENSG00000243333	RN7SL174P	0	0	6.581336	0
ENSG00000258482	TRAV15	0	0	6.903978	0
ENSG00000253579	SUMO2P16	0	0	7.134057	0
ENSG00000248350		0	0	7.313028	0
ENSG00000240382	IGKV1-17	0	0	7.509561	0
ENSG00000234274	COX7BP2	0	0	7.694734	0

ENSG00000241346	SNRPCP11	0	0	7.967174	0
ENSG00000207258	Y_RNA ENSG00000207258	0	0	9.673979	0
ENSG00000283429	MIR1244-3	0	0	11.44482	0
ENSG00000201612	RN7SKP15	0	0	7.710083	0
ENSG00000241487	RN7SL586P	0	0	7.550524	0
ENSG00000239964	RN7SL748P	0	0	7.349091	0
ENSG00000225333		0	0	6.864322	0
ENSG00000227842		0	0	6.781255	0
ENSG00000254030	IGLC5	0	0	6.523452	0
ENSG00000278477		0	0	6.877033	0
ENSG00000233720		0	0	7.075415	0
ENSG00000272096	RN7SL715P	0	0	7.257953	0
ENSG00000231726	HMG2P38	0	0	7.598953	0
ENSG00000222428	RNA5SP231	0	0	7.994172	0
ENSG00000274579		0	0	10.91959	0
ENSG00000261882		0	0	9.983735	0
ENSG00000241229	RN7SL443P	0	0	6.853459	0
ENSG00000231302	RPL36P2	0	0	7.372064	0
ENSG00000231619	ANAPC15P1	0	0	6.880551	0
ENSG00000271075		0	1.381283	1.892585	7.502983
ENSG00000266936		0	2.238481	0	8.889397
ENSG00000263345		0	1.505383	0	7.483929
ENSG00000248422		0	0	0	10.40281
ENSG00000222118	RNA5SP487	0	0	0	10.83454
ENSG00000206744	RNU6-620P	0	0	0	12.11796
ENSG00000206625	RNU6-1	0	0	0	13.66105
ENSG00000252103	RNU6-917P	0	0	0	12.9477
ENSG00000222308	RNA5SP198	0	0	0	10.47318
ENSG00000228930	MTCO1P3	0	0	0	9.660887
ENSG00000222111	RN7SKP148	0	0	0	8.960671
ENSG00000242325	RPS12P31	0	0	0	8.277562
ENSG00000252978	RN7SKP183	0	0	0	8.199815
ENSG00000267340	ENSG00000267340	0	0	0	7.998004
ENSG00000232879	GLRX5P2	0	0	0	7.947006
ENSG00000234640		0	0	0	7.89213
ENSG00000235802	HCFC1-AS1	0	0	0	7.849411
ENSG00000249930		0	0	0	7.753183
ENSG00000258283		0	0	0	7.649278

ENSG00000243049	RN7SL33P	0	0	0	7.485411
ENSG00000234262	ENSG00000234262	0	0	0	7.481646
ENSG00000201395	RN7SKP257	0	0	0	7.449198
ENSG00000243366	RN7SL60P	0	0	0	7.366838
ENSG00000226405		0	0	0	7.360917
ENSG00000233767	PSMA6P3	0	0	0	7.352035
ENSG00000233440	HMGA1P6	0	0	0	7.34211
ENSG00000239200	RPL22P20	0	0	0	7.276152
ENSG00000239494	RN7SL333P	0	0	0	7.270959
ENSG00000239413	RPS27P23	0	0	0	7.194126
ENSG00000218337		0	0	0	7.168672
ENSG00000214903	RPS15AP3	0	0	0	7.168171
ENSG00000232895		0	0	0	7.161081
ENSG00000273512		0	0	0	7.160537
ENSG00000256192	OOEPP2	0	0	0	7.134591
ENSG00000233979	RPL22P21	0	0	0	7.069863
ENSG00000263841	RN7SL44P	0	0	0	7.063039
ENSG00000241566	IGKV2D-24	0	0	0	7.016106
ENSG00000283123	RARRES2P11	0	0	0	6.987969
ENSG00000249312	ARL2BPP4	0	0	0	6.863951
ENSG00000253252		0	0	0	6.863108
ENSG00000276680		0	0	0	6.826536
ENSG00000260514		0	0	0	6.816344
ENSG00000233376		0	0	0	6.746917
ENSG00000231660	RPS8P6	0	0	0	6.733395
ENSG00000232454		0	0	0	6.730721
ENSG00000241568	RN7SL338P	0	0	0	6.682896
ENSG00000231589		0	0	0	6.680395
ENSG00000214867	SRSF9P1	0	0	0	6.630333
ENSG00000239953	RN7SL273P	0	0	0	6.595459
ENSG00000275337	RN7SL680P	0	0	0	6.595459
ENSG00000234958	FABP5P13	0	0	0	6.576356
ENSG00000229827		0	0	0	6.48496
ENSG00000261938		0	0	0	6.481573
ENSG00000243373	RN7SL173P	0	0	0	6.477774
ENSG00000277246		0	0	0	6.472
ENSG00000229485	KSR1P1	0	0	0	6.436628
ENSG00000257763	OR5BK1P	0	0	0	6.433293

ENSG00000248432	NA	0	0	0	7.352547
ENSG00000228626		0	0	0	7.452768
ENSG00000222685	RN7SKP119	0	0	0	7.514817
ENSG00000256984		0	0	0	7.541693
ENSG00000224797		0	0	0	7.65729
ENSG00000226046	AP1S2P1	0	0	0	7.720839
ENSG00000180389	ATP5F1EP2	0	0	0	7.738437
ENSG00000224906	SRP14P1	0	0	0	8.095529
ENSG00000243911	RN7SL430P	0	0	0	8.254462
ENSG00000242241	RN7SL306P	0	0	0	8.464758
ENSG00000280317		0	0	0	8.606146
ENSG00000278487		0	0	0	9.474205
ENSG00000271340		0	0	0	11.63901
ENSG00000201476	RNA5SP353	0	0	0	11.72529
ENSG00000270685	IGHV1OR15-6	0	0	0	7.39687
ENSG00000252704	RN7SKP277	0	0	0	7.347984
ENSG00000229508	PHKG1P4	0	0	0	7.198425
ENSG00000232470		0	0	0	7.132402
ENSG00000237358		0	0	0	7.049925
ENSG00000222452	RN7SKP59	0	0	0	7.037426
ENSG00000272837	OR10AE3P	0	0	0	7.032971
ENSG00000228874		0	0	0	6.848998
ENSG00000233849		0	0	0	6.774075
ENSG00000211959	IGHV4-39	0	0	0	6.73288
ENSG00000255629		0	0	0	6.654794
ENSG00000250645		0	0	0	6.62768
ENSG00000228431	ARL5AP3	0	0	0	6.614622
ENSG00000264754		0	0	0	6.524894
ENSG00000275362	Metazoa_SRP	0	0	0	7.744511
ENSG00000233819	LCEP1	0	0	0	7.823437
ENSG00000225443		0	0	0	7.823437
ENSG00000237349		0	0	0	8.022734
ENSG00000270405		0	0	0	8.954057
ENSG00000215037	VENTXP2	0	0	0	7.227067
ENSG00000223452	HMG2P18	0	0	0	6.835419
ENSG00000242365	NDUFA5P5	0	0	0	6.702754
ENSG00000250137		0	0	0	6.82009
ENSG00000222220	RN7SKP129	0	0	0	7.58798

ENSG00000234152	ELOBP1	0	0	0	7.720367
ENSG00000227432	ASIC4-AS1	0	0	0	6.834408
ENSG00000278877		0	0	0	7.223345
ENSG00000201423	RN7SKP246	0	0	0	7.344296
ENSG00000262471		0	0	0	6.646278
ENSG00000223118	RN7SKP102	0	0	0	6.737416
ENSG00000186967	KRTAP19-4	0	0	0	7.629029
ENSG00000237639		0	0	0	8.571957
ENSG00000243426	RN7SL454P	0	0	0	8.678716
ENSG00000251366	DBIP2	0	0	0	7.849755
ENSG00000251976	RN7SKP141	0	0	0	7.673691
ENSG00000254571		0	0	0	7.306271
ENSG00000253993		0	0	0	7.227818
ENSG00000265737		0	0	0	6.458382
ENSG00000249843		0	0	0	7.142352
ENSG00000244020	MT1HL1	0	0	0	6.974931
ENSG00000211647	IGLV5-48	0	0	0	6.664995
ENSG00000276179		0	0	0	6.979031
ENSG00000272444		0	0	0	7.119896
ENSG00000231228	ARPP19P1	0	0	0	7.179849
ENSG00000200492	U3	0	0	0	6.59689
ENSG00000255900		0	0	0	6.59689
ENSG00000284619		0	0	0	6.59689
ENSG00000248607		0	0	0	7.32446
ENSG00000249540		0	0	0	7.060609
ENSG00000204670	IGKV1OR2-3	0	0	0	6.949593
ENSG00000275586	Metazoa_SRP	0	0	0	7.846832
ENSG00000225208		0	0	0	8.324914
ENSG00000242101	RN7SL416P	0	0	0	8.435616
ENSG00000279001		0	0	0	7.115834
ENSG00000136488	CSH1	0	0	0	6.675604
ENSG00000258092	ENSG00000258092	0	0	0	6.517685
ENSG00000224142	AMMECR1-IT1	0	0	0	6.834319
ENSG00000270695		0	0	0	7.133718
ENSG00000222931	RN7SKP205	0	0	0	7.837035
ENSG00000265490		0	0	0	7.109664
ENSG00000271986	RN7SL827P	0	0	0	6.949605
ENSG00000253763	IGHV3-6	0	0	0	7.271631

ENSG00000227960		0	0	0	7.548013
ENSG00000234333	CYCSP53	0	0	0	7.337149
ENSG00000243437	RN7SL370P	0	0	0	7.74521
ENSG00000213133	PPP1R14BP5	0	0	0	6.500436
ENSG00000084110	HAL	0	0.275007	0	7.713407
ENSG00000272669		0	0.191563	0	7.207102
ENSG00000232387	SKA2P1	0.591679	0.271426	0	6.770274
ENSG00000107831	FGF8	0.578214	0	0	7.169855
ENSG00000213558	HMG2P32	0	0.532068	0	7.433877
ENSG00000264186	SNRPCP4	0	0.614474	0	6.791228
ENSG00000267383		0	0	0.549916	6.615872
ENSG00000224541		1.326537	0	0	7.653576
ENSG00000270983		2.12002	0.627607	0	7.54136
ENSG00000204620	ENSG00000204620	1.967906	0	0	7.007341
ENSG00000235174	RPL39P3	3.540771	1.928276	0	8.735058
ENSG00000278773		7.754874	0	0	11.17793
ENSG00000237887	RPL23AP32	2.948975	0	0	6.941728
ENSG00000271751		3.915903	0	0	7.25866
ENSG00000222460	RN7SKP271	3.41657	0	4.068241	7.888262
ENSG00000285723		0	5.749963	0	8.196115
ENSG00000254211	LINC01485	0	0	6.650492	4.380937
ENSG00000205856	C22orf42	0	0	6.464734	4.251492
ENSG00000213262	VDAC2P3	0	0	7.259395	4.75713
ENSG00000286032		0	0	6.648767	4.401835
ENSG00000261289		0	0	7.646184	5.191957
ENSG00000267252	LINC01255	0	0	7.953882	4.970348
ENSG00000232172	ENSG00000232172	0	0	7.128964	4.416097
ENSG00000267175		0	0	6.653662	4.2458
ENSG00000253274	IGHV1-67	0	0	7.387923	4.710779
ENSG00000231487		0	0	6.599467	4.192115
ENSG00000082397	EPB41L3	0	0	6.51398	4.184756
ENSG00000179915	NRXN1	0.867896	0.501821	7.524683	5.23764
ENSG00000240424		0	0	6.959191	3.996027
ENSG00000266128	RN7SL366P	0	0	6.948928	3.97159
ENSG00000255248	MIR100HG	0	0.151859	6.396485	4.769507
ENSG00000177294	FBXO39	0	0	6.32191	4.852948
ENSG00000248538		0	0	6.795741	5.2218
ENSG00000231232		0	0	6.384499	4.919102

ENSG00000268906		0	0.194087	6.886062	4.919388
ENSG00000211657	IGLV3-32	0	0	7.423545	5.181739
ENSG00000167117	ANKRD40CL	0	0	6.642644	4.700884
ENSG00000199975	RN7SKP243	0	0	6.456658	4.690529
ENSG00000064270	ATP2C2	1.533065	0.108357	7.340909	5.210467
ENSG00000175544	CABP4	0	0	7.112731	1.89724
ENSG00000165495	PKNOX2	0.168642	0	7.119003	3.08882
ENSG00000240870	RPL19P14	0	0	7.857931	2.811677
ENSG00000257444	SETP7	0	0	2.985318	7.138262
ENSG00000150394	CDH8	0	0	2.949908	7.322316
ENSG00000183160	TMEM119	0	0	2.570949	7.081893
ENSG00000248503		0	0	2.771463	7.294887
ENSG00000255074		0	0	2.678973	7.126023
ENSG00000140522	RLBP1	0	0	2.653748	7.829482
ENSG00000225336	HMGB3P1	0	0	2.425459	6.928512
ENSG00000239809		0	0	2.87519	9.316057
ENSG00000175445	LPL	0	0	2.215679	7.236445
ENSG00000251326	LINC02479	0	0	2.231125	7.31084
ENSG00000229722		0	0	2.029983	6.867822
ENSG00000258345		0	0	2.072106	7.451162
ENSG00000277315		1.267835	0	3.540771	8.847906
ENSG00000232807		0.312665	0.298658	1.681224	7.375248
ENSG00000273321		0	0	1.707083	7.537304
ENSG00000248474	LINC02122	0	0	4.497357	6.67772
ENSG00000240785	RPL36AP21	0	0	5.966615	8.847828
ENSG00000135549	PKIB	0	0	4.856289	7.128912
ENSG00000228430		0	0	4.922388	7.224185
ENSG00000258438	OR11K2P	0	0	4.610759	6.714479
ENSG00000270403		0	0	4.457726	6.484992
ENSG00000236762	RPL19P16	0	0	4.450419	6.449495
ENSG00000270734		0	0	4.510772	6.541174
ENSG00000272154		0	0	5.260741	7.594608
ENSG00000229749	COTL1P1	0	0	6.00724	8.678054
ENSG00000231397		0	0	4.603359	7.130323
ENSG00000196405	EVL	0	0	5.142291	7.972394
ENSG00000232751		0	0	4.671576	7.250876
ENSG00000123243	ITIH5	0	0	4.443341	6.863096
ENSG00000274867		0	0	4.182772	6.53669

ENSG00000137648	TMPRSS4	0.112367	0	5.027066	7.846412
ENSG00000213068		0	0	4.704817	7.083011
ENSG00000227814	MRPS17P9	0	0	4.62293	6.912758
ENSG00000132514	CLEC10A	0	0	4.767231	7.25948
ENSG00000234559	RPL22P7	0	0	5.645096	8.58825
ENSG00000106069	CHN2	0	0	4.266412	7.171957
ENSG00000199218	RN7SKP184	0	0	5.188994	8.465264
ENSG00000253154		0	0	5.378234	8.772229
ENSG00000182816	KRTAP13-2	0	0	4.108023	6.646825
ENSG00000265485	LINC01915	0	0	4.195899	6.811098
ENSG00000260965	RPL23AP91	0	0	4.430687	7.309922
ENSG00000260615	RPL23AP97	0	0	4.332493	6.969979
ENSG00000229738		0	0	5.371141	8.573147
ENSG00000275992	RN7SL327P	0	0	6.268809	10.00464
ENSG00000223513	ATP6V0E1P2	0	0	4.243898	6.738457
ENSG00000174514	MFSD4A	0.672652	0	4.516583	7.151494
ENSG00000114378	HYAL1	0.353888	0	4.941576	7.549654
ENSG00000009790	TRAF3IP3	0.536053	0.044044	5.193653	7.776143
ENSG00000177301	KCNA2	0.449957	0	4.649213	7.01363
ENSG00000090539	CHRD	0.643394	0.22033	4.673839	7.003827
ENSG00000150636	CCDC102B	0.60027	0.180148	4.493583	6.967353
ENSG00000099338	CATSPERG	0.37629	1.130931	5.239742	7.380106
ENSG00000099957	P2RX6	1.162855	1.822526	5.997676	8.302845
ENSG00000186496	ZNF396	0.276199	0.653519	5.033643	7.046491
ENSG00000254092		0	0.492622	5.619384	7.91708
ENSG00000184898	RBM43	0.448901	0.920674	5.171207	7.303954
ENSG00000228415	PTMAP1	0.443607	1.119024	5.753899	7.605057
ENSG00000261886	GOSR2-DT ENSG00000261886	0	0.68437	4.85992	7.579097
ENSG00000197405	C5AR1	0.035624	1.141433	4.635116	7.872595
ENSG00000270424		0	1.175045	3.77484	7.575085
ENSG00000275413		0	0	3.946544	7.06667
ENSG00000231407	GORAB-AS1	0	0	3.639116	6.642499
ENSG00000232675		0	0	4.13455	7.194855
ENSG00000169507	SLC38A11	0	0	3.853297	6.7377
ENSG00000260186	LINC02137	0.158337	0	3.891614	6.911392
ENSG00000162946	DISC1	0.158337	0.010064	4.253082	7.793239
ENSG00000232943	GGCTP2	0	0	3.333567	7.380175
ENSG00000270584		0	0	4.039051	8.672606

ENSG00000280197	C18orf12	0	0	3.441351	7.452398
ENSG00000225533	PAWRP1	0	0	3.853796	8.351151
ENSG00000105929	ATP6V0A4	0.126973	0	3.396159	7.345237
ENSG00000201201	RN7SKP118	0	0.360645	4.510835	8.618892
ENSG00000232080		0	0	3.356003	6.709111
ENSG00000164822	DEFA6	0	0	3.436828	6.84633
ENSG00000101204	CHRNA4	0	0	3.828936	7.618767
ENSG00000248377	HMGNI9	0	0	4.33985	8.546339
ENSG00000003147	ICA1	0	0	3.523436	6.937839
ENSG00000230101	TUBB3P2	0	0	4.513554	8.831991
ENSG00000230054	TEX53	0	0	3.839758	7.503627
ENSG00000166349	RAG1	0.02148	0	3.958935	7.721147
ENSG00000269903		0	0	4.021035	8.393163
ENSG00000274578		0	0	3.402449	6.969991
ENSG00000163873	GRIK3	0	0	3.37754	6.86379
ENSG00000143473	KCNH1	0	0	3.413188	6.920496
ENSG00000077279	DCX	0	0	3.773047	7.222341
ENSG00000205037		0	0	3.51929	6.739848
ENSG00000226556	NPM1P49	0	0	3.856587	7.179919
ENSG00000276213	Metazoa_SRP	2.182374	0	6.733259	9.477076
ENSG00000226059	HMGB3P20	2.454439	0	6.031108	7.589052
ENSG00000225222	CHCHD4P5	1.847195	0	6.449	6.472553
ENSG00000189030	VHLL	1.664483	0	6.610464	6.278319
ENSG00000141837	CACNA1A ENSG00000141837	2.279768	0.260628	7.913189	7.736287
ENSG00000229140	CCDC26	0	1.196607	5.65538	6.909905
ENSG00000263968	RN7SL381P	0.520045	2.479489	6.739754	7.963306
ENSG00000283349	PFN5P	0	0	6.14425	5.060826
ENSG00000118263	KLF7	0	0	6.996863	5.782775
ENSG00000157423	HYDIN	0.03984	0.00863	6.576855	5.434261
ENSG00000189238	LINC00943	0	0	6.772202	5.619002
ENSG00000108821	COL1A1 ENSG00000108821	0	0.094912	6.473365	5.26356
ENSG00000234806	RPL26P29 ENSG00000234806	0	0.226509	6.494672	5.221722
ENSG00000120903	CHRNA2	0	0.130931	6.079527	5.241306
ENSG00000254239		0	0	6.337069	5.398658
ENSG00000283547	MTATP6P8	0	0	7.212871	6.082532
ENSG00000250377		0	0	6.154656	5.462118
ENSG00000239396	RN7SL414P	0	0	6.341274	5.46444
ENSG00000233123	LINC01007	0	0	6.084702	5.29451

ENSG00000198795	ZNF521	0	0	7.731699	6.723982
ENSG00000242222		0	0	6.596741	5.728764
ENSG00000287858		0	0	6.203377	5.407659
ENSG00000272168	CASC15	0	0	6.498267	5.686893
ENSG00000228938	SNRPD2P1	0	0	7.653683	6.699538
ENSG00000213652	HMGB3P30	0	0	6.049783	5.291825
ENSG00000226891	LINC01359	0	0	5.940566	5.192589
ENSG00000171101	SIGLEC17P	0	0	6.229396	5.478033
ENSG00000287384	ENSG00000287384	0.332278	0	7.448058	6.214882
ENSG00000054356	PTPRN	0.361768	0	6.650032	5.316399
ENSG00000253438	PCAT1	0.823749	0.273814	6.786531	5.937227
ENSG00000205500	MAPRE3-AS1	0.716332	0	6.59431	5.628453
ENSG00000232973	CYP1B1-AS1 ENSG00000232973	0	0.803227	6.599243	5.192352
ENSG00000110169	HPX	0	0.655352	7.045268	5.776236
ENSG00000197847	SLC22A20P	0	0.659925	7.259734	5.915497
ENSG00000226803	ZNF451-AS1	0.607863	1.184598	6.903038	6.221258
ENSG00000202415	RN7SKP269	0	0.686164	8.31824	7.510424
ENSG00000214198	TTC41P	0	0.893751	6.429231	5.921341
ENSG00000231933	MYO18B-AS1 ENSG00000231933	1.070389	0	6.744107	6.876345
ENSG00000223836		1.22404	0	7.655896	7.720839
ENSG00000234222	LIX1L-AS1 ENSG00000234222	1.435095	0.530071	6.496654	6.534778
ENSG00000160862	AZGP1	0.885184	0	6.271015	6.428042
ENSG00000288573		1.037031	0.192825	6.063611	6.466203
ENSG00000186487	MYT1L	0.943359	0	6.770737	7.160648
ENSG00000146904	EPHA1	1.220949	0	6.045661	6.170546
ENSG00000167751	KLK2	0.553852	0	5.83605	6.158297
ENSG00000236829		0.507921	0	6.430369	6.688684
ENSG00000259140		0.745883	0	6.470748	6.779023
ENSG00000184144	CNTN2	0.992043	0	6.44566	6.102574
ENSG00000137726	FXVD6	0.720716	0	6.358115	6.227029
ENSG00000199683	RN7SKP185	1.052416	0.368489	7.006489	6.887147
ENSG00000145107	TM4SF19	0.75873	0.362891	6.231336	6.118941
ENSG00000214548	MEG3	0.407081	0	6.21181	6.062122
ENSG00000266256	LINC00683	0.572405	0	6.282273	6.004928
ENSG00000286215		0.43082	0	6.149849	5.806272
ENSG00000275963		0.538041	0	6.499399	6.119315

ENSG00000285219	HULC	1.275603	0.83754	6.963266	6.721031
ENSG00000158428	CATIP	0.874207	0.359521	7.00071	6.701909
ENSG00000232245	ENSG00000232245	0	0	5.745318	5.538724
ENSG00000267736	HMGB2P1	0	0	5.894187	5.681815
ENSG00000198390	KRTAP13-1	0	0	6.296696	6.071033
ENSG00000225080	PFN1P4	0	0	5.891492	5.682658
ENSG00000215483	LINC00598	0	0	5.751035	5.55462
ENSG00000216863	LY86-AS1	0	0	6.086253	5.890811
ENSG00000227101		0	0	5.822807	5.585263
ENSG00000222976	RN7SKP94	0	0	7.648724	7.331983
ENSG00000225933	RPS14P5	0	0	5.947596	5.713338
ENSG00000253149	IGHVII-28-1	0	0	6.345716	6.164042
ENSG00000196248	OR10S1	0.079975	0	6.03166	5.834762
ENSG00000253817		0	0	6.537778	6.217967
ENSG00000014257	ACP3	0	0	6.209239	5.899635
ENSG00000253637	IGLVV-58	0	0	6.014333	5.729689
ENSG00000237352	LINC01358	0	0	6.171327	5.838195
ENSG00000254857	MRGPRX12P	0	0	6.530711	6.176901
ENSG00000222024		0	0	5.776657	5.461758
ENSG00000133401	PDZD2	0.506907	0.402722	6.423007	6.141249
ENSG00000253314	LINC00293	0	0	5.814627	5.41792
ENSG00000104611	SH2D4A	0	0	6.033753	5.626644
ENSG00000170255	MRGPRX1	0	0	6.24062	5.825633
ENSG00000182985	CADM1	0	0	6.472293	6.043519
ENSG00000224271		0	0	6.223519	5.752695
ENSG00000230683	DDTP1	0	0	6.513459	6.011943
ENSG00000236790	LINC00299	0	0	6.41846	5.897845
ENSG00000223120	RN7SKP181	0	0	8.034397	7.357112
ENSG00000235836	KIF3AP1	0	0	6.302867	5.774418
ENSG00000127824	TUBA4A	0.098958	0	6.448934	5.791996
ENSG00000142515	KLK3	0	0	6.424049	5.764606
ENSG00000172016	REG3A	0	0	6.827692	6.145005
ENSG00000242759	LINC00882	0	0	6.372169	5.797791
ENSG00000241216	SNAPC5P1	0	0	6.351434	5.77112
ENSG00000117266	CDK18	0.467801	0.686164	6.63439	6.287472
ENSG00000236062	GSTM5P1	0	0.352759	6.040892	5.583339
ENSG00000226309	SMARCE1P2	0	0.173767	6.209707	6.208068
ENSG00000204869	IGFL4	0	0.211635	5.802142	5.862873

ENSG00000245750	DRAIC	0	0.031395	6.065852	5.982994
ENSG00000137709	POU2F3	0	0	5.772018	5.708849
ENSG00000284710		0	0	5.984316	5.932345
ENSG00000279764		0	0	5.794182	5.690054
ENSG00000115009	CCL20	0	0	5.624042	5.535244
ENSG00000202260	RN7SKP69	0	0	8.034551	7.864465
ENSG00000204677	FAM153CP	0	0.077243	5.935955	5.898305
ENSG00000101448	EPPIN	0	0	5.609962	5.671208
ENSG00000250174	MYLK-AS2 ENSG00000250174	0	0	5.733219	5.74779
ENSG00000173285	OR10K1	0	0	5.551578	5.654865
ENSG00000215351	PPIAP1	0	0	6.66741	6.817994
ENSG00000226087		0	0	6.467263	6.629386
ENSG00000215196	BASP1-AS1	0.206643	0.034216	5.642124	5.789103
ENSG00000215156		0.851999	0.678072	7.021879	7.283042
ENSG00000237222	LINC01968	0.171207	0	6.035426	6.085701
ENSG00000255342		0	0	6.606131	6.919018
ENSG00000232070	TMEM253	0	0	5.734249	5.997767
ENSG00000258774	NANOGP7	0	0	5.522684	5.79361
ENSG00000074706	IPCEF1	0	0	5.92792	6.241726
ENSG00000226621		0	0	6.922888	7.276887
ENSG00000243649	CFB	1.086784	1.044744	7.045148	7.363022
ENSG00000231419	LINC00689	0	0	5.457758	5.679762
ENSG00000261837		0	0	7.24542	7.563555
ENSG00000161249	DMKN	0	0	6.351293	6.578229
ENSG00000222068	RN7SKP154	0	0	5.730857	5.930856
ENSG00000265559	RN7SL652P	0	0	7.057212	7.467345
ENSG00000241746		0	0	5.568032	5.903472
ENSG00000155849	ELMO1	0	0	5.652314	6.00214
ENSG00000064886	CHI3L2	0	0	5.635522	6.006837
ENSG00000217085	HMGB3P19	0	0	5.800149	6.199869
ENSG00000166473	PKD1L2 ENSG00000166473	0	0.932817	6.031748	6.306645
ENSG00000243742	RPLP0P2	0	0.844787	6.025981	6.318136
ENSG00000242756	RHOT1P3	0	0.646163	6.451261	6.952077
ENSG00000140853	NLRC5	1.391768	0.209141	6.084149	6.805409
ENSG00000068615	REEP1	1.16092	0.309176	6.218258	7.188886
ENSG00000182472	CAPN12	0.676267	0	4.908861	6.632283
ENSG00000242020	RN7SL68P	0.483364	0	5.717841	7.714417

ENSG00000185847	LINC01405	0.629473	0	5.85823	7.740705
ENSG00000166546	BEAN1	0.618239	0	5.71518	7.123449
ENSG00000271818	RN7SKP4	0.452068	0	5.789051	7.060599
ENSG00000226457	RPL22P3	0	0.282143	5.192747	7.096178
ENSG00000220600		0	0	4.640794	6.454817
ENSG00000277599		0	0	6.861856	9.561439
ENSG00000221855	TAS2R41	0	0	5.146859	7.206086
ENSG00000238168	IFITM3P5 ENSG00000238168	0	0	5.576885	7.720408
ENSG00000254529	MRGPRX7P	0	0	5.243441	7.223654
ENSG00000138639	ARHGAP24	0	0	4.535618	6.457726
ENSG00000268849	SIGLEC22P	0	0	4.642413	6.657111
ENSG00000235621	LINC00494	0	0	4.495567	6.352564
ENSG00000121446	RGSL1	0	0	4.757557	6.465126
ENSG00000274594		0	0	6.47265	8.795686
ENSG00000273234	OR2A13P	0	0	4.958796	6.735306
ENSG00000273481		0	0	5.114159	6.957752
ENSG00000168490	PHYHIP	0	0	4.832738	6.552961
ENSG00000236907		0	0	5.918172	8.069831
ENSG00000163263	C1orf189	0	0	4.85818	6.552392
ENSG00000274461		0	0	4.79348	6.444816
ENSG00000231322	RPL13AP17	0	0	4.664824	6.271146
ENSG00000235142	LINC02532	0.166073	0	5.580417	7.585015
ENSG00000243592	RPL17P22	0.194087	0	4.969887	6.564119
ENSG00000243014	PTMAP8	0.405992	0	5.565719	7.146523
ENSG00000234439	KRT18P2	0	0	5.01712	6.186421
ENSG00000143119	CD53	0	0	5.073392	6.261211
ENSG00000254403	OR10Y1P	0	0	5.404529	6.62252
ENSG00000230256	FGFR1OP2P1	0	0	5.698941	7.1142
ENSG00000176900	OR51T1	0	0	5.063158	6.311594
ENSG00000270313	COX6CP16	0	0	6.447282	8.028553
ENSG00000222386	RN7SKP86	0	0	6.439972	7.993137
ENSG00000197093	GAL3ST4	0	0	5.517055	6.844536
ENSG00000211663	IGLV3-19	0	0	5.011809	6.21597
ENSG00000243365	RN7SL278P	0	0	5.904147	7.410273
ENSG00000219409		0	0	5.462478	6.852748
ENSG00000005379	TSPOAP1	0	0	5.165992	6.486521
ENSG00000167355	OR51B5	0	0	5.199947	6.530742
ENSG00000222842	RN7SKP168	0	0	5.591171	7.091277

ENSG00000249654	VN1R104P	0	0	5.014534	6.328944
ENSG00000010610	CD4	0	0.271426	6.079015	7.641344
ENSG00000150672	DLG2	0	0	5.350886	6.94296
ENSG00000259906		0	0	5.226509	6.773878
ENSG00000188488	SERPINA5	0	0	4.930359	6.376551
ENSG00000102359	SRPX2	0	0	4.808385	6.200045
ENSG00000010810	FYN	0	0	5.653089	7.266665
ENSG00000233621	LINC01137	0	0	5.012479	6.392043
ENSG00000204642	HLA-F	0	0	5.164545	6.581984
ENSG00000242079	RN7SL318P	0	0	6.617475	8.450139
ENSG00000267011		0	0	5.114992	6.540198
ENSG00000237314	RPL12P39	0	0	5.366637	6.868168
ENSG00000261714		0	0	4.923957	6.44791
ENSG00000260488		0	0	4.759316	6.242755
ENSG00000258603		0	0	5.102028	6.687551
ENSG00000271586		0	0	5.267985	6.90558
ENSG00000241097		0	0	6.910721	9.059782
ENSG00000106536	POU6F2	0	0	5.460284	7.178575
ENSG00000244623	OR2AE1	0	0	4.940261	6.490089
ENSG00000231812	SNRPCP9	0	0	6.116531	8.029895
ENSG00000275016		0	0	4.741898	6.190931
ENSG00000244318	RN7SL252P	0	0	4.914373	6.404256
ENSG00000258860		0	0	5.121388	6.671506
ENSG00000231809	NANOGP9	0	0	4.731618	6.288838
ENSG00000250307	TUBB8P3	0	0	4.828124	6.431255
ENSG00000271230		0	0	5.717841	7.627381
ENSG00000271377	IFITM3P8	0	0	4.868045	6.439324
ENSG00000109339	MAPK10 ENSG00000109339	0	0	5.259687	6.962468
ENSG00000265702		0.37629	0.786596	6.143944	7.01078
ENSG00000261644	CYLD-AS1	0	0.451013	5.45032	6.281995
ENSG00000249846	LINC02021	0	0.27262	5.451343	6.170546
ENSG00000006432	MAP3K9	0.387363	0.982583	6.117342	7.536154
ENSG00000278493		0	0.484396	5.787772	6.923732
ENSG00000126106	TMEM53	0.105678	0.668119	5.366042	6.463704
ENSG00000164520	RAET1E	0	0.563646	5.462052	6.417869
ENSG00000128510	CPA4	0.532068	0	5.533719	6.502569
ENSG00000277501		0.565597	0	6.111929	7.146482
ENSG00000260372	AQP4-AS1	0.308011	0	5.407863	6.239875

ENSG00000267769		0.405992	0	5.720552	6.686374
ENSG00000246379		0.495695	0	6.231605	6.83677
ENSG00000214140	PRCD	0.582074	0	5.677198	6.224581
ENSG00000175318	GRAMD2A	0.313826	0	5.695493	6.373979
ENSG00000251432	LINC02615	1.222805	0.960512	6.551485	7.247814
ENSG00000103742	IGDCC4	0.284514	0.476122	5.394548	6.418274
ENSG00000255920	CCND2-AS1	0	0.200379	5.316291	6.251624
ENSG00000231367	LINC02613 ENSG00000231367	0	0	5.310522	6.131651
ENSG00000132437	DDC	0	0	5.679705	6.560134
ENSG00000186529	CYP4F3	0	0	5.360154	6.195781
ENSG00000279586		0	0	5.676973	6.565628
ENSG00000108231	LGI1	0	0	5.175285	5.995055
ENSG00000178722	C5orf64 ENSG00000178722	0	0	6.271202	7.262396
ENSG00000141506	PIK3R5	0	0	5.964607	6.913153
ENSG00000226674	TEX41	0	0	5.948531	6.845603
ENSG00000212643	ZRSR2P1	0	0	5.142291	6.045508
ENSG00000243094	RPL32P2	0	0	5.875534	6.897749
ENSG00000100505	TRIM9	0	0	5.152792	6.018256
ENSG00000266050		0	0	9.232342	10.78084
ENSG00000264970		0	0	5.317557	6.205862
ENSG00000204655	MOG	0	0	5.601043	6.560027
ENSG00000140297	GCNT3	0	0	5.32535	6.23588
ENSG00000258975		0	0	5.176004	6.055521
ENSG00000226776	KRTAP3-4P	0	0	6.358889	7.396656
ENSG00000248994		0	0	5.180864	6.03503
ENSG00000198104	OR2T6	0	0	5.313101	6.184935
ENSG00000244356	RN7SL398P	0	0	5.876492	6.96907
ENSG00000159625	DRC7	0	0	5.498634	6.517354
ENSG00000229829	DUTP4	0	0	5.384568	6.39084
ENSG00000255105	PTMAP15	0	0	5.974919	7.072417
ENSG00000227306	LINC02708	0	0	5.946918	7.095661
ENSG00000236670	KRT18P5	0	0	5.064624	6.026756
ENSG00000249307	LINC01088	0	0.048236	5.210895	6.275231
ENSG00000265337		0	0	5.921127	7.090441
ENSG00000272832		0	0	6.566039	7.861633
ENSG00000228421		0	0	5.268809	6.299318
ENSG00000177182	CLVS1	0	0	5.93303	7.116282
ENSG00000176231	OR10H4	0	0	5.842401	7.019846

ENSG00000283069	DUX4L32	0	0	5.296421	6.384033
ENSG00000234279	LINC01937	0	0	5.730395	6.988651
ENSG00000240432	KRTAP13-3	0	0	6.064495	7.386621
ENSG00000262085	ORIP1	0	0	5.158701	6.268247
ENSG00000241668	RPL19P11	0	0	6.498857	7.902592
ENSG00000133574	GIMAP4	0.108357	0	5.37695	6.086763
ENSG00000234548	LINC02020	0.104337	0	5.409493	6.161888
ENSG00000131018	SYNE1	0	0.007196	5.881273	6.539981
ENSG00000242595	RPL26P26 ENSG00000242595	0	0	6.742976	7.49971
ENSG00000017483	SLC38A5	0	0	5.299355	5.894114
ENSG00000236319		0	0	5.850724	6.499065
ENSG00000254298		0	0	6.923839	7.668382
ENSG00000272703		0	0	6.72021	7.486465
ENSG00000226261	PIMREGP1	0	0	5.506589	6.139203
ENSG00000271681		0	0	5.850524	6.539857
ENSG00000251579		0	0	5.922269	6.615446
ENSG00000287523		0	0	5.249142	5.86136
ENSG00000225096		0	0	5.382287	6.008361
ENSG00000255391		0	0	6.285643	7.015616
ENSG00000267088		0	0	5.603003	6.279267
ENSG00000261141		0	0	5.592846	6.277315
ENSG00000111452	ADGRD1 ENSG00000111452	0	0	5.793194	6.509094
ENSG00000134201	GSTM5	0	0	5.584932	6.291972
ENSG00000176299	OR4M1	0	0	5.299171	5.972991
ENSG00000106278	PTPRZ1	0	0	5.370897	6.059052
ENSG00000081237	PTPRC	0	0	5.801857	6.531116
ENSG00000235857	CTBP2P1	0	0	6.503603	7.318904
ENSG00000231898	MYO3B-AS1	0	0	5.388844	6.154008
ENSG00000240661		0	0	5.477127	6.248668
ENSG00000278698		0	0	5.935035	6.747616
ENSG00000148795	CYP17A1	0	0	6.762336	7.692316
ENSG00000106648	GALNTL5	0	0	5.2477	5.954499
ENSG00000146555	SDK1	0.041243	0	5.802917	6.574207
ENSG00000165949	IFI27	0.192825	0	5.70816	6.110781
ENSG00000048540	LMO3	0.168642	0	5.53456	6.093983
ENSG00000213050	TPM3P1	0.130931	0	6.025051	6.676944
ENSG00000160145	KALRN	0.151859	0.035624	6.042491	6.579376
ENSG00000119866	BCL11A	0	0.115033	5.989366	6.473365

ENSG00000252797	RN7SKP272	0	0	5.481622	6.043498
ENSG00000204241	LINC02731	0	0	5.506367	6.046295
ENSG00000249550	LINC01234	0	0	5.981373	6.571419
ENSG00000200895	RN7SKP245	0	0	7.077756	7.744511
ENSG00000228340	MIR646HG	0	0.073135	6.300838	6.787446
ENSG00000124097	HMGB1P1	0.437228	0.473008	6.092651	6.548483
ENSG00000223012	RN7SKP264	0	0	6.731821	7.25381
ENSG00000224243	SOX1-OT	0	0	5.452332	5.883205
ENSG00000110436	SLC1A2	0	0	6.137094	6.585338
ENSG00000255377	DUXAP5	0	0	6.748998	7.249417
ENSG00000243195	TUBBP11	0	0	6.625037	7.173967
ENSG00000277423		0	0	5.669339	6.14637
ENSG00000186977	KRTAP19-5	0	0	6.511199	7.074313
ENSG00000269353		0	0	5.910229	6.427975
ENSG00000137699	TRIM29	0	0	6.297375	6.850612
ENSG00000225937	PCA3	0	0	5.554374	6.053589
ENSG00000267107	PCAT19	0	0	5.423276	5.906578
ENSG00000207507	RNU6-9	10.97515	11.0549	0	11.07665
ENSG00000204196	RPL12P16	7.299803	7.239637	0.02148	7.278431
ENSG00000207357	RNU6-2	10.68087	10.59995	0	11.07665
ENSG00000278637	H4C1	8.263757	8.080961	0	6.927174
ENSG00000274091	SNORD1C	11.72297	11.91032	0	10.28082
ENSG00000207405	SNORA64	12.61915	12.27876	0	11.31861
ENSG00000276027	RNU12	10.29142	10.31402	0	9.635506
ENSG00000275143	SCARNA16	10.45595	10.25838	0	9.843126
ENSG00000199477	SNORA31	9.565237	10.15969	0	9.266107
ENSG00000147224	PRPS1	7.002556	7.078183	0	5.117612
ENSG00000207389	RNU1-4	10.22587	10.33292	0	7.352052
ENSG00000199568	RNU5A-1	13.11267	12.99188	0	10.30081
ENSG00000200394	SNORA38B	7.484178	7.422183	0	9.199
ENSG00000278099	RNVU1-2A	6.379049	6.831535	0	8.301286
ENSG00000200259	SNORD35A	9.043156	10.04348	0	12.51718
ENSG00000206602	SNORD58A	15.41687	15.51686	0	17.08265
ENSG00000239039	SNORD13	9.703047	10.36141	0	11.36336
ENSG00000206948	SNORA36A	7.339494	8.349803	0	9.132507
ENSG00000148671	ADIRF	6.733476	5.386811	0	6.887099
ENSG00000260999		5.997089	5.10228	0	8.496898
ENSG00000274210	RNVU1-27	7.462919	5.999098	0	11.54511

ENSG00000210825	SNORA40	7.17729	7.218064	0	10.54421
ENSG00000252804	RNU6-958P	7.627767	7.545636	0	12.16957
ENSG00000268942	CKS1BP3	4.845641	3.526945	0	8.229987
ENSG00000134056	MRPS36 ENSG00000134056	3.438958	4.496079	0	8.315684
ENSG00000201487	SNORD45B	6.918601	0	0	0
ENSG00000207063	SNORD116-1	6.743784	0	0	0
ENSG00000238344	SNORD126	7.356698	0	0	0
ENSG00000263776	SNORA4	7.57961	0	0	0
ENSG00000200354	SNORA71D	7.920549	0	0	0
ENSG00000273885		10.40745	0	0	0
ENSG00000222937	SNORD63B	9.7218	0	0	0
ENSG00000265706	SNORD53B	9.56311	0	0	0
ENSG00000284419	MIR663A	7.063859	0	0	0
ENSG00000207697	MIR573	6.678903	0	0	0
ENSG00000283956	MIR3610	6.93108	0	0	0
ENSG00000221241	SNORD88A	7.75813	0	0	0
ENSG00000206775	SNORD37	8.692316	0	0	0
ENSG00000238923	RNU7-1 ENSG00000238923	8.736541	0	0	0
ENSG00000201785	SNORD117	0	8.194619	0	0
ENSG00000212296	SNORD72	0	9.081542	0	0
ENSG00000277512	SNORD65	0	9.297253	0	0
ENSG00000275043	SNORD25	0	8.962728	0	0
ENSG00000199961	SNORD1B	0	8.704232	0	0
ENSG00000206688	SNORD116-18	0	8.615041	0	0
ENSG00000208797	SNORD73A ENSG00000208797	0	8.614537	0	0
ENSG00000201955	RNY3P1	0	8.095692	0	0
ENSG00000231587	SNORD62B	0	7.812781	0	0
ENSG00000239195	SNORD5	0	7.698906	0	0
ENSG00000210107	MT-TQ	0	7.660552	0	0
ENSG00000199667	Y_RNA	0	7.420777	0	0
ENSG00000270123	VTRNA2-1	0	7.349038	0	0
ENSG00000212163	SNORD91A	0	7.265324	0	0
ENSG00000272533	SNORA28	0	6.70958	0	0
ENSG00000222327	RNU6-855P	0	6.508017	0	0
ENSG00000212452	SNORD69	0	8.086439	0	0
ENSG00000252457	RNU7-65P	0	8.965525	0	0
ENSG00000200530	SNORD35B	4.134303	9.225364	0	0

ENSG00000238649	SNORD42A	13.34813	12.49072	13.3302	0
ENSG00000252481	SCARNA13	7.744181	8.075891	8.319252	0
ENSG00000252521	RNU5D-2P	13.08991	12.82182	15.06716	0
ENSG00000207523	SNORA66	9.161817	9.132184	10.28874	0
ENSG00000251705	RNA5-8SP6	7.689355	7.434703	9.22783	0
ENSG00000125356	NDUFA1	7.159296	6.928062	3.716771	0
ENSG00000196154	S100A4	7.936314	7.983632	4.100137	0
ENSG00000283958	MIR1248	11.4186	10.12399	8.397118	0
ENSG00000134453	RBM17 ENSG00000134453	7.415328	7.579225	6.152711	0
ENSG00000209582	SNORA48	11.05966	11.41379	9.34371	0
ENSG00000207392	SNORA20	9.929995	9.742513	8.353412	0
ENSG00000234664	HMG2P5	8.690909	8.39547	6.980711	0
ENSG00000270103		13.28495	13.24017	10.73319	0
ENSG00000115128	SF3B6	7.107541	7.319085	5.589554	0
ENSG00000207513	RNU1-3 ENSG00000207513	8.77277	9.07841	6.666245	0
ENSG00000201098	RNY1	12.59728	12.46261	9.602439	0
ENSG00000228474	OST4	6.864508	6.730844	5.222341	0
ENSG00000206760	SNORA6	9.689161	9.606207	7.285596	0
ENSG00000260549	MT1L	7.594929	7.610375	6.02381	0
ENSG00000201822	RNA5SP149	15.47059	15.3881	12.03981	0
ENSG00000173207	CKS1B	6.768251	6.774866	5.275827	0
ENSG00000120265	PCMT1	6.835343	7.332019	5.629561	0
ENSG00000206652	RNU1-1	10.70366	10.63149	7.659118	0
ENSG00000176340	COX8A	7.043312	6.619941	4.906313	0
ENSG00000207145	SNORA18	12.65421	12.78822	8.019808	0
ENSG00000134419	RPS15A	9.388032	9.32452	6.792933	1.585443
ENSG00000277918	RNVU1-28	10.09828	9.933137	6.666245	0
ENSG00000164919	COX6C	6.886672	6.70838	4.048236	0
ENSG00000275994	SNORA24	9.148314	10.52503	8.413996	0
ENSG00000209082	MT-TL1	13.29786	13.65912	13.25742	0
ENSG00000275215	RNA5-8SN3	10.82151	10.66149	10.49786	0
ENSG00000221539	SNORD99	14.07686	14.27421	13.3471	0
ENSG00000275221	H2AC15	8.740351	8.260101	7.747092	0
ENSG00000167088	SNRPD1	8.157367	8.476029	7.458087	0.827819
ENSG00000200983	SNORA3A	10.20959	10.1928	9.297382	0
ENSG00000199990	VTRNA1-1	11.98703	12.03842	10.65969	0
ENSG00000206693	SNORA56	8.225887	5.804647	0	0
ENSG00000221740	SNORD93	10.49284	7.425082	0	0

ENSG00000201920	RNA5SP442	6.552485	4.701383	0	0
ENSG00000206973	RNU6-1145P	6.963671	4.701383	0	0
ENSG00000201096	RNA5SP387	7.338879	5.860566	0	0
ENSG00000199839	RNA5SP150	8.645867	7.05995	0	0
ENSG00000225091	SNORA71A	7.202692	5.614239	0	0
ENSG00000220988	SNORD88C	6.701826	5.169284	0	0
ENSG00000285609	5S_rRNA	6.39705	4.8714	0	0
ENSG00000201754	SNORD52	7.411341	5.539686	0	0
ENSG00000206979	SNORD61	10.29813	5.644808	0	0
ENSG00000209480	SNORD83B	6.810713	9.127079	0	0
ENSG00000207008	SNORA54	6.123459	8.308758	0	0
ENSG00000200168	RNA5SP350	4.690417	6.335337	0	0
ENSG00000252636	RNU6-826P	5.245762	6.919078	0	0
ENSG00000235408	SNORA71B	6.033181	8.616141	0	0
ENSG00000201882		8.174551	11.36069	0	0
ENSG00000252213	SNORA74D	5.935978	7.428276	0	0
ENSG00000112245	PTP4A1	6.755088	6.434328	0.075875	1.382944
ENSG00000004961	HCCS	6.43306	6.087208	0.974529	0
ENSG00000173915	ATP5MK	7.679431	7.679649	1.496718	0
ENSG00000280496	SNORA17B	11.03713	10.63686	2.483364	0
ENSG00000207118	SNORD14D	10.97261	10.00283	0	0
ENSG00000202031	SNORD38A	9.756258	8.903722	0	0
ENSG00000207005	RNU1-2	10.49997	9.609932	0	0
ENSG00000238835	SCARNA18	6.740982	6.167759	0	0
ENSG00000258643	BCL2L2-PABPN1	5.938803	5.473332	0	0
ENSG00000207061	Y_RNA	7.714026	7.100957	0	0
ENSG00000200879	SNORD14E	9.386509	8.62356	0	0
ENSG00000210112	MT-TM	12.3342	11.32754	0	0
ENSG00000202300	RNU6-487P	8.020135	7.238624	0	0
ENSG00000212534	SNORD70	8.943142	8.084771	0	0
ENSG00000264229	RNU4ATAC	9.459278	8.562437	0	0
ENSG00000200278	RNA5SP352	6.531085	6.037953	0	0
ENSG00000212135	SNORD67	7.449074	6.914325	0	0
ENSG00000210195	MT-TT	11.4966	10.74011	0	0
ENSG00000252542	SNORD36C	12.01013	11.21613	0	0
ENSG00000207233	SNORA37	7.620293	6.627111	0	0
ENSG00000207360	RNU6-14P	8.04098	7.063298	0	0
ENSG00000207205	RNVU1-15	6.958216	6.138999	0	0

ENSG00000221066	SNORD111	7.596965	6.735549	0	0
ENSG00000236876	TMSB4XP1 ENSG00000236876	8.608987	7.385526	0	0
ENSG00000276700	RNA5-8SN4	5.985683	5.125775	0	0
ENSG00000207313	SNORA2B	8.61814	7.360066	0	0
ENSG00000238531	SNORD105B	9.135317	7.870241	0	0
ENSG00000207280	SNORD20	9.836669	8.346421	0	0
ENSG00000200816	SNORA38	7.077937	6.014378	0	0
ENSG00000281808		7.429649	6.202849	0	0
ENSG00000202093	SNORD58C	11.2809	12.03434	0	0
ENSG00000200494	Y_RNA	7.393811	7.903798	0	0
ENSG00000201805	RNU6-1180P	8.127164	8.648422	0	0
ENSG00000210196	MT-TP	12.3342	13.11141	0	0
ENSG00000200831	SNORD36B	9.944983	10.5589	0	0
ENSG00000275084	SNORD91B	9.272418	9.797417	0	0
ENSG00000238423	SNORD42B	10.4864	11.09523	0	0
ENSG00000207421	SNORD38B	9.636371	10.16171	0	0
ENSG00000210176	MT-TH	12.46799	13.11589	0	0
ENSG00000207001	SNORD116-2	6.755809	7.110645	0	0
ENSG00000206737	RNVU1-18	8.26622	8.707225	0	0
ENSG00000273544	SNORA44	9.991975	10.49967	0	0
ENSG00000201861	RNA5SP298	9.336125	9.676701	0	0
ENSG00000201801	RNU5E-4P	7.45559	7.75074	0	0
ENSG00000199744	SNORD36A	12.63448	13.11618	0	0
ENSG00000201302	SNORA65	7.946245	8.248895	0	0
ENSG00000206989	SNORD63	10.74979	11.15768	0	0
ENSG00000221676	RNU6ATAC	9.24727	9.681003	0	0
ENSG00000277864	SCARNA15	6.779023	7.089784	0	0
ENSG00000200463	SNORD118	10.20365	10.66211	0	0
ENSG00000212309	SNORD70B	8.897425	9.300275	0	0
ENSG00000210164	MT-TG	12.3342	12.85768	0	0
ENSG00000222365	SNORD12B ENSG00000222365	12.45289	13.00139	0	0
ENSG00000206634	SNORA22	11.90685	12.42612	0	0
ENSG00000147533	GOLGA7	5.524973	5.934564	0	0.126973
ENSG00000207406	SNORA41	6.152001	6.611468	0	0
ENSG00000229686	SNORD56	9.486775	10.20381	0	0
ENSG00000199436	SNORD9 ENSG00000199436	8.212457	8.817431	0	0

ENSG00000212447	SNORD90	7.228059	7.783994	0	0
ENSG00000222489	SNORA79B	8.166495	8.754219	0	0
ENSG00000202111	VTRNA1-2	12.68201	13.5909	0	0
ENSG00000210144	MT-TY	8.692242	9.419446	0	0
ENSG00000206611	SNORD24	10.52508	11.37226	0	0
ENSG00000252947	SCARNA1	7.88224	8.599905	0	0
ENSG00000207088	SNORA7B	8.205998	8.95709	0	0
ENSG00000249020	SNORA58	6.845703	7.455911	0	0
ENSG00000199753	SNORD104	8.174551	8.903731	0	0
ENSG00000271798	SNORA51	7.958959	8.673486	0	0
ENSG00000251920	RNA5SP216	5.697051	6.229126	0	0
ENSG00000221514	SNORD111B	9.838823	10.84519	0	0
ENSG00000271852	SNORD11B	7.236445	7.956022	0	0
ENSG00000209482	SNORD83A	8.537339	9.372959	0	0
ENSG00000272034	SNORD14A	9.16894	10.2128	0	0
ENSG00000200314	Y_RNA	6.402364	7.100957	0	0
ENSG00000272921		5.594728	6.211713	0	0
ENSG00000267059		6.002365	6.762548	0	0
ENSG00000202515	VTRNA1-3	9.875974	11.05842	0	0
ENSG00000207297	SNORD7	5.877916	6.58648	0	0
ENSG00000252301	RNA5SP134	5.922055	6.634666	0	0
ENSG00000210174	MT-TR	9.823789	11.13639	0	0
ENSG00000238363	SNORA13	6.431874	7.287204	0	0
ENSG00000200959	SNORA74A	7.263513	8.269744	0	0
ENSG00000212402	SNORA74B	6.236952	7.539492	0	0
ENSG00000264994	SNORD92	8.162452	9.470449	0	0
ENSG00000212464	SNORA12	6.856301	8.094822	0	0
ENSG00000207031	SNORD59A	8.5737	10.11048	0	0
ENSG00000206620	SNORD45C	8.975782	10.63316	0	0
ENSG00000283149		6.038897	6.12883	0	0.422233
ENSG00000199785	SNORA52 ENSG00000199785	8.400619	8.543163	0	0
ENSG00000277184	SNORA9	9.911504	10.09179	0	0
ENSG00000270722	RNVU1-31	11.39926	11.62188	0	0
ENSG00000210154	MT-TD	13.88655	14.15713	0	0
ENSG00000200275	RNA5SP199	10.75331	10.91976	0	0
ENSG00000201129	SNORA58B ENSG00000201129	7.632697	7.811413	0	0
ENSG00000207500	SNORD102	11.06876	11.32833	0	0

ENSG00000122026	RPL21	7.680887	7.85864	0	0
ENSG00000265236	SNORD84	8.996609	9.2143	0	0
ENSG00000199347	RNU5E-1	12.36564	12.63285	0	0
ENSG00000210184	MT-TS2	14.12566	14.4354	0	0
ENSG00000164941	INTS8	5.506875	5.661208	0	0
ENSG00000254341	SNORD87	12.67099	13.02993	0	0
ENSG00000200169	RNU5D-1	11.41729	11.73018	0	0
ENSG00000272296	SNORD96A	10.74326	11.02685	0	0
ENSG00000207112	SNORA25	7.734283	7.986331	0	0
ENSG00000207051	SNORA27	10.7256	11.04177	0	0
ENSG00000202400	SNORD82	10.1708	10.48671	0	0
ENSG00000206838	SNORA5A	9.314558	9.608482	0	0
ENSG00000221803	SNORD23 ENSG00000221803	6.691004	6.893957	0	0
ENSG00000210194	MT-TE	10.29896	10.61415	0	0
ENSG00000212607	SNORA3B	10.87999	10.82763	0	0
ENSG00000278815	Vault	12.1062	12.04397	0	0
ENSG00000199377	RNU5F-1	12.86579	12.79783	0	0
ENSG00000212283	SNORD89	8.93672	8.898604	0	0
ENSG00000210049	MT-TF	11.95159	11.86366	0	0
ENSG00000202444	RNU5E-6P	12.50192	12.40506	0	0
ENSG00000271982	SNORD58B	12.94332	12.84309	0	0
ENSG00000206603	SNORA22B	5.963798	5.914206	0	0
ENSG00000199293	SNORA21	8.936956	8.859311	0	0
ENSG00000238317	SNORD11	10.65362	10.62769	0	0
ENSG00000212304	SNORD12	10.95483	10.93337	0	0
ENSG00000275305	RNA5SP528	6.078802	6.070711	0	0
ENSG00000209702	SNORD41	12.56219	12.5448	0	0
ENSG00000265401		9.447193	9.445168	0	0
ENSG00000221491	SNORA2C	8.564839	8.584489	0	0
ENSG00000200687	RNA5SP335	6.724555	6.732446	0	0
ENSG00000249784	SCARNA22	8.690229	8.702543	0	0
ENSG00000200741	RNA5SP161	10.4888	10.50741	0	0
ENSG00000199631	SNORD33	12.49239	12.50044	0	0
ENSG00000272351	NA	8.309781	8.316662	0	0
ENSG00000206811	SNORA10	9.457927	9.579005	0	0
ENSG00000281311		9.870846	9.994509	0	0
ENSG00000200785	SNORD8	9.352423	9.44743	0	0
ENSG00000264549	SNORD95	12.08812	12.14062	0	0

ENSG00000221164	SNORA11F	8.392369	8.45839	0	0
ENSG00000200913	SNORD46	12.01492	12.10711	0	0
ENSG00000207344	SNORA22C	10.36783	10.4437	0	0
ENSG00000238650	SNORD54 ENSG00000238650	11.65154	10.99767	0	0
ENSG00000201457	SNORA55	5.984475	5.651109	0	0
ENSG00000200246	RNA5SP263	6.040871	5.709456	0	0
ENSG00000212158	SNORD66	9.786541	9.191792	0	0
ENSG00000280494		10.71726	10.08238	0	0
ENSG00000209645	SNORD105	6.58747	6.318877	0	0
ENSG00000199480	RNA5SP389	9.14795	8.772757	0	0
ENSG00000201104	RNU6-11P	6.963671	6.659168	0	0
ENSG00000207496	SNORA7A	10.20114	9.770523	0	0
ENSG00000207116	RNU6-31P	7.20182	6.894709	0	0
ENSG00000200408	RNA5SP74	6.391751	6.084234	0	0
ENSG00000206680	SNORD21	10.97926	10.45887	0	0
ENSG00000251890	RNA5SP497	5.874354	5.601399	0	0
ENSG00000239183	SNORA84	7.190615	6.85437	0	0
ENSG00000207165	SNORA70	11.37655	10.78995	0	0
ENSG00000281910	SNORA50A	7.810115	7.423494	0	0
ENSG00000207304	SNORA8	9.015853	8.569104	0	0
ENSG00000202411	RNA5SP259	8.493947	8.068203	0	0
ENSG00000280498	SNORA16A	9.250211	9.005801	0	0
ENSG00000206755	SNORA30	6.382408	6.217851	0	0
ENSG00000286171		8.135047	7.937115	0	0
ENSG00000281394	SCARNA4	9.516734	9.277729	0	0
ENSG00000226572	SNORD57	11.4892	11.20378	0	0
ENSG00000202314	SNORD6	8.804873	8.537393	0	0
ENSG00000275996	SNORD27	14.2995	13.87966	0	0
ENSG00000209042	SNORD12C	9.750643	9.474813	0	0
ENSG00000206585	RNVU1-7	9.189303	8.928024	0	0
ENSG00000199673	SNORD16	11.00955	10.70055	0	0
ENSG00000210100	MT-TI	14.6198	14.21817	0	0
ENSG00000200534	SNORA33	10.3089	10.02622	0	0
ENSG00000208772	SNORD94	8.880572	8.541557	0	0
ENSG00000223224	SNORD71	7.50628	7.231884	0	0
ENSG00000206834	SNORA1	7.840967	7.550747	0	0
ENSG00000206622	SNORA69	6.758676	6.518866	0	0
ENSG00000207181	SNORA14B	8.519927	8.241468	0	0

ENSG00000200418	SNORA63B	10.40439	10.06294	0	0
ENSG00000200972	RNU5A-8P	11.02555	10.65897	0	0
ENSG00000238886	SNORD121A	8.417312	8.146207	0	0
ENSG00000212443	SNORA53	6.925014	6.707539	0	0
ENSG00000278261	SNORD1A	8.900088	8.619926	0	0
ENSG00000238300	SNORD121B	8.513435	8.243079	0	0
ENSG00000201413	RNA5SP141	8.515424	8.246285	0	0
ENSG00000278274	SNORA61	10.61501	10.38895	0	0
ENSG00000210140	MT-TC	13.14834	12.87696	0	0
ENSG00000199415	RNA5SP370	11.32879	11.09483	0	0
ENSG00000202503	SNORD34	12.12435	11.88673	0	0
ENSG00000206885	SNORA75	9.521569	9.340969	0	0
ENSG00000206630	SNORD60	12.46593	12.32277	0	0
ENSG00000200156	RNU5B-1	12.2446	12.10709	0	0
ENSG00000210077	MT-TV	15.7241	15.53609	0	0
ENSG00000207468	SNORA19	7.688754	7.563745	0	0
ENSG00000207241	SNORD45A	13.09779	12.88144	0	0
ENSG00000164182	NDUFAF2 ENSG00000164182	7.218006	7.106453	0	0
ENSG00000252316	RNY4	14.15081	13.94209	0	0
ENSG00000221116	SNORD110	12.79552	12.61646	0	0
ENSG00000202354	RNY3	13.07886	12.8915	0	0

For genes in which gene symbols have not been identified, only Ensembl IDs are listed. RIP, RNA immunoprecipitation.

Table SII. K-means data from RIP sequencing.

Ensembl ID	Gene symbol	Cluster	RIP1	RIP2	INPUT1	INPUT2
ENSG00000210077	MT-TV	A	-7.81505	-7.81505	7.909052	7.721044
ENSG00000210100	MT-TI	A	-7.20949	-7.20949	7.410304	7.008678
ENSG00000210184	MT-TS2	A	-7.14027	-7.14027	6.985397	7.295137
ENSG00000275996	SNORD27	A	-7.04479	-7.04479	7.254711	6.83487
ENSG00000252316	RNY4	A	-7.02323	-7.02323	7.127585	6.918867
ENSG00000210154	MT-TD	A	-7.01092	-7.01092	6.875634	7.146206
ENSG00000202111	VTRNA1-2	A	-6.56823	-6.56823	6.113783	7.022674
ENSG00000210140	MT-TC	A	-6.50632	-6.50632	6.642015	6.370635
ENSG00000207241	SNORD45A	A	-6.49481	-6.49481	6.602981	6.386636
ENSG00000202354	RNY3	A	-6.49259	-6.49259	6.586273	6.398907
ENSG00000271982	SNORD58B	A	-6.4466	-6.4466	6.496719	6.396489
ENSG00000199744	SNORD36A	A	-6.43767	-6.43767	6.196817	6.678517
ENSG00000254341	SNORD87	A	-6.42523	-6.42523	6.245759	6.604698
ENSG00000199377	RNU5F-1	A	-6.4159	-6.4159	6.449883	6.381923
ENSG00000210176	MT-TH	A	-6.39597	-6.39597	6.072018	6.719922
ENSG00000210196	MT-TP	A	-6.3614	-6.3614	5.972794	6.750008
ENSG00000222365	SNORD12B ENSG00000222365	A	-6.36357	-6.36357	6.089323	6.637822
ENSG00000221116	SNORD110	A	-6.35299	-6.35299	6.442525	6.263464
ENSG00000201822	RNA5SP149	A	-10.7246	1.315183	4.745966	4.663475
ENSG00000210164	MT-TG	A	-6.29797	-6.29797	6.036225	6.559714
ENSG00000209702	SNORD41	A	-6.27675	-6.27675	6.285444	6.268054
ENSG00000199347	RNU5E-1	A	-6.24962	-6.24962	6.116014	6.38323
ENSG00000199631	SNORD33	A	-6.24821	-6.24821	6.244183	6.252233
ENSG00000202444	RNU5E-6P	A	-6.22674	-6.22674	6.275175	6.178312
ENSG00000206630	SNORD60	A	-6.19717	-6.19717	6.268754	6.125596
ENSG00000200156	RNU5B-1	A	-6.08792	-6.08792	6.156675	6.019166
ENSG00000206634	SNORA22	A	-6.08324	-6.08324	5.823606	6.34288
ENSG00000264549	SNORD95	A	-6.05719	-6.05719	6.030934	6.083437
ENSG00000278815	Vault	A	-6.03754	-6.03754	6.068654	6.006431
ENSG00000200913	SNORD46	A	-6.03051	-6.03051	5.98441	6.076603
ENSG00000221539	SNORD99	A	-10.4245	2.922555	3.652316	3.84967
ENSG00000202503	SNORD34	A	-6.00277	-6.00277	6.121578	5.88396
ENSG00000252521	RNU5D-2P	A	-10.2447	4.822435	2.84519	2.577098
ENSG00000210049	MT-TF	A	-5.95381	-5.95381	5.997778	5.909847
ENSG00000210112	MT-TM	A	-5.91543	-5.91543	6.418762	5.412103

ENSG00000202093	SNORD58C	A	-5.82881	-5.82881	5.452088	6.205532
ENSG00000252542	SNORD36C	A	-5.80657	-5.80657	6.203564	5.409568
ENSG00000209082	MT-TL1	A	-10.0536	3.203823	3.244262	3.605515
ENSG00000200169	RNU5D-1	A	-5.78687	-5.78687	5.630425	5.943313
ENSG00000270722	RNVU1-31	A	-5.75528	-5.75528	5.643977	5.866593
ENSG00000226572	SNORD57	A	-5.67324	-5.67324	5.815953	5.530533
ENSG00000238650	SNORD54 ENSG00000238650	A	-5.6623	-5.6623	5.989234	5.335371
ENSG00000238649	SNORD42A	A	-9.79226	3.537939	3.55587	2.698455
ENSG00000199415	RNA5SP370	A	-5.6059	-5.6059	5.722883	5.488926
ENSG00000207500	SNORD102	A	-5.59927	-5.59927	5.469487	5.729056
ENSG00000210195	MT-TT	A	-5.55918	-5.55918	5.937426	5.180931
ENSG00000207165	SNORA70	A	-5.54162	-5.54162	5.834924	5.248325
ENSG00000206611	SNORD24	A	-5.47433	-5.47433	5.050746	5.897922
ENSG00000206989	SNORD63	A	-5.47687	-5.47687	5.272925	5.680813
ENSG00000270103		A	-9.31458	1.418615	3.970376	3.925588
ENSG00000212304	SNORD12	A	-5.47205	-5.47205	5.48278	5.461317
ENSG00000272296	SNORD96A	A	-5.44253	-5.44253	5.300733	5.584321
ENSG00000207051	SNORA27	A	-5.44184	-5.44184	5.283761	5.599925
ENSG00000199673	SNORD16	A	-5.42753	-5.42753	5.582023	5.273027
ENSG00000212607	SNORA3B	A	-5.4269	-5.4269	5.453085	5.400724
ENSG00000200972	RNU5A-8P	A	-5.42113	-5.42113	5.604418	5.237841
ENSG00000200275	RNA5SP199	A	-5.41827	-5.41827	5.33504	5.501496
ENSG00000238423	SNORD42B	A	-5.39541	-5.39541	5.090996	5.699819
ENSG00000199568	RNU5A-1	A	1.19947	-9.10134	4.011332	3.890539
ENSG00000206680	SNORD21	A	-5.35953	-5.35953	5.619729	5.099336
ENSG00000238317	SNORD11	A	-5.32033	-5.32033	5.333296	5.307361
ENSG00000210174	MT-TR	A	-5.24004	-5.24004	4.583745	5.896344
ENSG00000207118	SNORD14D	A	-5.24386	-5.24386	5.728748	4.75897
ENSG00000278274	SNORA61	A	-5.25099	-5.25099	5.364022	5.137962
ENSG00000202515	VTRNA1-3	A	-5.2336	-5.2336	4.642374	5.824825
ENSG00000207405	SNORA64	A	2.264481	-9.05413	3.565022	3.224627
ENSG00000200741	RNA5SP161	A	-5.24905	-5.24905	5.239751	5.258355
ENSG00000210194	MT-TE	A	-5.22828	-5.22828	5.07068	5.385872
ENSG00000200463	SNORD118	A	-5.21644	-5.21644	4.987214	5.445667
ENSG00000280494		A	-5.19991	-5.19991	5.517349	4.882467
ENSG00000207344	SNORA22C	A	-5.20288	-5.20288	5.164947	5.240817
ENSG00000207145	SNORA18	A	-8.36556	-0.34575	4.288647	4.422665

ENSG00000221514	SNORD111B	A	-5.171	-5.171	4.667819	5.674188
ENSG00000202400	SNORD82	A	-5.16438	-5.16438	5.006422	5.322335
ENSG00000201098	RNY1	A	-8.66558	0.936857	3.931698	3.797028
ENSG00000200831	SNORD36B	A	-5.12597	-5.12597	4.819012	5.432929
ENSG00000273544	SNORA44	A	-5.12291	-5.12291	4.869065	5.376756
ENSG00000200418	SNORA63B	A	-5.11683	-5.11683	5.287555	4.946106
ENSG00000200534	SNORA33	A	-5.08378	-5.08378	5.225118	4.94244
ENSG00000207005	RNU1-2	A	-5.02747	-5.02747	5.472491	4.582458
ENSG00000199990	VTRNA1-1	A	-8.67129	1.988408	3.315744	3.367133
ENSG00000201882		A	-4.88381	-4.88381	3.290741	6.476878
ENSG00000277184	SNORA9	A	-5.00082	-5.00082	4.91068	5.090968
ENSG00000207496	SNORA7A	A	-4.99292	-4.99292	5.208227	4.777607
ENSG00000281311		A	-4.96634	-4.96634	4.904507	5.02817
ENSG00000207421	SNORD38B	A	-4.94952	-4.94952	4.68685	5.212191
ENSG00000206620	SNORD45C	A	-4.90224	-4.90224	4.073547	5.730924
ENSG00000274091	SNORD1C	A	1.802288	-8.47853	3.244445	3.431795
ENSG00000229686	SNORD56	A	-4.92265	-4.92265	4.564128	5.281166
ENSG00000280496	SNORA17B	A	-6.03934	-3.55597	4.99779	4.597522
ENSG00000272034	SNORD14A	A	-4.84544	-4.84544	4.323505	5.367365
ENSG00000209042	SNORD12C	A	-4.80636	-4.80636	4.944279	4.668449
ENSG00000207507	RNU6-9	A	2.799974	-8.27667	2.698479	2.778222
ENSG00000275084	SNORD91B	A	-4.76746	-4.76746	4.504959	5.029958
ENSG00000206811	SNORA10	A	-4.75923	-4.75923	4.698694	4.819772
ENSG00000201861	RNA5SP298	A	-4.75321	-4.75321	4.582918	4.923495
ENSG00000212158	SNORD66	A	-4.74458	-4.74458	5.041958	4.447209
ENSG00000221676	RNU6ATAC	A	-4.73207	-4.73207	4.515202	4.948935
ENSG00000206838	SNORA5A	A	-4.73076	-4.73076	4.583798	4.877722
ENSG00000265401		A	-4.72309	-4.72309	4.724103	4.722078
ENSG00000206885	SNORA75	A	-4.71563	-4.71563	4.805934	4.625335
ENSG00000207031	SNORD59A	A	-4.67105	-4.67105	3.902654	5.439437
ENSG00000200785	SNORD8	A	-4.69996	-4.69996	4.65246	4.747467
ENSG00000281394	SCARNA4	A	-4.69862	-4.69862	4.818118	4.579113
ENSG00000202031	SNORD38A	A	-4.66499	-4.66499	5.091263	4.238727
ENSG00000207357	RNU6-2	A	2.987282	-8.08937	2.591502	2.510583
ENSG00000209582	SNORA48	A	-7.95429	1.389421	3.105366	3.459503
ENSG00000275215	RNA5-8SN3	A	-7.99522	2.502645	2.826294	2.666277
ENSG00000221740	SNORD93	A	-4.47948	-4.47948	6.013363	2.9456
ENSG00000207280	SNORD20	A	-4.54577	-4.54577	5.290897	3.800648

ENSG00000280498	SNORA16A	A	-4.564	-4.564	4.686208	4.441798
ENSG00000265236	SNORD84	A	-4.55273	-4.55273	4.443882	4.661573
ENSG00000212309	SNORD70B	A	-4.54942	-4.54942	4.348	4.75085
ENSG00000210144	MT-TY	A	-4.52792	-4.52792	4.16432	4.891524
ENSG00000206585	RNVU1-7	A	-4.52933	-4.52933	4.659971	4.398692
ENSG00000264229	RNU4ATAC	A	-4.50543	-4.50543	4.953849	4.057008
ENSG00000200879	SNORD14E	A	-4.50252	-4.50252	4.883992	4.121042
ENSG00000273885		A	-2.60186	-2.60186	7.805586	-2.60186
ENSG00000209482	SNORD83A	A	-4.47757	-4.47757	4.059764	4.895384
ENSG00000199480	RNA5SP389	A	-4.48018	-4.48018	4.667774	4.29258
ENSG00000212283	SNORD89	A	-4.45883	-4.45883	4.477889	4.439773
ENSG00000283958	MIR1248	A	-7.48493	0.912192	3.933669	2.639065
ENSG00000199293	SNORA21	A	-4.44907	-4.44907	4.487889	4.410244
ENSG00000264994	SNORD92	A	-4.40823	-4.40823	3.754226	5.062224
ENSG00000275143	SCARNA16	A	2.203762	-7.63936	2.816589	2.619013
ENSG00000207304	SNORA8	A	-4.39624	-4.39624	4.619614	4.172865
ENSG00000278261	SNORD1A	A	-4.38	-4.38	4.520084	4.239923
ENSG00000276027	RNU12	A	2.075269	-7.56024	2.731187	2.75378
ENSG00000206652	RNU1-1	A	-7.24857	0.410552	3.455095	3.38292
ENSG00000208772	SNORD94	A	-4.35553	-4.35553	4.52504	4.186025
ENSG00000249784	SCARNA22	A	-4.34819	-4.34819	4.342036	4.35435
ENSG00000202314	SNORD6	A	-4.33557	-4.33557	4.469307	4.201827
ENSG00000206979	SNORD61	A	-3.98573	-3.98573	6.312396	1.659073
ENSG00000200983	SNORA3A	A	-7.42494	1.87244	2.784646	2.767856
ENSG00000207088	SNORA7B	A	-4.29077	-4.29077	3.915226	4.666318
ENSG00000221491	SNORA2C	A	-4.28733	-4.28733	4.277507	4.297157
ENSG00000199753	SNORD104	A	-4.26957	-4.26957	3.904981	4.634161
ENSG00000238531	SNORD105B	A	-4.25139	-4.25139	4.883927	3.618852
ENSG00000212534	SNORD70	A	-4.25698	-4.25698	4.686164	3.827793
ENSG00000199436	SNORD9	A	-4.25747	-4.25747	3.954985	4.559959
	ENSG00000199436					
ENSG00000206737	RNVU1-18	A	-4.24336	-4.24336	4.022859	4.463863
ENSG00000199785	SNORA52	A	-4.23595	-4.23595	4.164673	4.307218
	ENSG00000199785					
ENSG00000222489	SNORA79B	A	-4.23018	-4.23018	3.936316	4.524041
ENSG00000221164	SNORA11F	A	-4.21269	-4.21269	4.179679	4.2457
ENSG00000222937	SNORD63B	A	-2.43045	-2.43045	7.29135	-2.43045
ENSG00000207389	RNU1-4	A	0.374342	-6.97771	3.248159	3.35521

ENSG00000201805	RNU6-1180P	A	-4.1939	-4.1939	3.933267	4.454526
ENSG00000199477	SNORA31	A	2.018347	-7.24776	2.317477	2.911935
ENSG00000201413	RNA5SP141	A	-4.19043	-4.19043	4.324997	4.055857
ENSG00000207181	SNORA14B	A	-4.19035	-4.19035	4.329578	4.05112
ENSG00000238300	SNORD121B	A	-4.18913	-4.18913	4.324307	4.05395
ENSG00000271798	SNORA51	A	-4.15811	-4.15811	3.800848	4.515375
ENSG00000272351	NA	A	-4.15661	-4.15661	4.15317	4.160051
ENSG00000207523	SNORA66	A	-7.14568	3.143054	2.016132	1.986499
ENSG00000202411	RNA5SP259	A	-4.14054	-4.14054	4.35341	3.927666
ENSG00000238886	SNORD121A	A	-4.14088	-4.14088	4.276433	4.005327
ENSG00000265706	SNORD53B	A	-2.39078	-2.39078	7.172333	-2.39078
ENSG00000252947	SCARNA1	A	-4.12054	-4.12054	3.761703	4.479369
ENSG00000275994	SNORA24	A	-7.02184	1.392161	2.126479	3.503196
ENSG00000207392	SNORA20	A	-7.00648	1.346932	2.923515	2.736033
ENSG00000277918	RNVU1-28	A	-6.67442	-0.00817	3.423866	3.258721
ENSG00000209480	SNORD83B	A	-3.98445	-3.98445	2.826265	5.142631
ENSG00000201302	SNORA65	A	-4.04879	-4.04879	3.89746	4.20011
ENSG00000277512	SNORD65	A	-2.32431	-2.32431	-2.32431	6.97294
ENSG00000236876	TMSB4XP1 ENSG00000236876	A	-3.99863	-3.99863	4.610358	3.386898
ENSG00000207313	SNORA2B	A	-3.99455	-3.99455	4.623588	3.365514
ENSG00000286171		A	-4.01804	-4.01804	4.117007	3.919074
ENSG00000199839	RNA5SP150	A	-3.92645	-3.92645	4.719413	3.133496
ENSG00000206760	SNORA6	A	-6.64524	0.640355	3.04392	2.960966
ENSG00000212296	SNORD72	A	-2.27039	-2.27039	-2.27039	6.811157
ENSG00000207112	SNORA25	A	-3.93015	-3.93015	3.804129	4.056178
ENSG00000200959	SNORA74A	A	-3.88331	-3.88331	3.380199	4.38643
ENSG00000122026	RPL21	A	-3.88488	-3.88488	3.796005	3.973758
ENSG00000252457	RNU7-65P	A	-2.24138	-2.24138	-2.24138	6.724143
ENSG00000275043	SNORD25	A	-2.24068	-2.24068	-2.24068	6.722046
ENSG00000201129	SNORA58B ENSG00000201129	A	-3.86103	-3.86103	3.77167	3.950386
ENSG00000206834	SNORA1	A	-3.84793	-3.84793	3.993038	3.702818
ENSG00000200494	Y_RNA	A	-3.8244	-3.8244	3.569409	4.079395
ENSG00000202300	RNU6-487P	A	-3.81469	-3.81469	4.205445	3.423934
ENSG00000207468	SNORA19	A	-3.81312	-3.81312	3.875629	3.750621
ENSG00000281910	SNORA50A	A	-3.8084	-3.8084	4.001713	3.615092
ENSG00000271852	SNORD11B	A	-3.79812	-3.79812	3.438328	4.157905

ENSG00000201801	RNU5E-4P	A	-3.80158	-3.80158	3.654008	3.949158
ENSG00000200530	SNORD35B	A	-3.33992	-3.33992	0.794386	5.885447
ENSG00000207360	RNU6-14P	A	-3.77607	-3.77607	4.264911	3.287228
ENSG00000238923	RNU7-1 ENSG00000238923	A	-2.18414	-2.18414	6.552405	-2.18414
ENSG00000235408	SNORA71B	A	-3.66233	-3.66233	2.37085	4.95381
ENSG00000199961	SNORD1B	A	-2.17606	-2.17606	-2.17606	6.528174
ENSG00000206775	SNORD37	A	-2.17308	-2.17308	6.519237	-2.17308
ENSG00000212464	SNORA12	A	-3.73778	-3.73778	3.11852	4.357041
ENSG00000212447	SNORD90	A	-3.75301	-3.75301	3.475046	4.03098
ENSG00000206688	SNORD116-18	A	-2.15376	-2.15376	-2.15376	6.461281
ENSG00000208797	SNORD73A ENSG00000208797	A	-2.15363	-2.15363	-2.15363	6.460903
ENSG00000207061	Y_RNA	A	-3.70375	-3.70375	4.01028	3.397211
ENSG00000207008	SNORA54	A	-3.60805	-3.60805	2.515405	4.700703
ENSG00000223224	SNORD71	A	-3.68454	-3.68454	3.821739	3.547343
ENSG00000207513	RNU1-3 ENSG00000207513	A	-6.12936	0.536889	2.643414	2.949053
ENSG00000206693	SNORA56	A	-3.50763	-3.50763	4.718253	2.297014
ENSG00000221066	SNORD111	A	-3.58313	-3.58313	4.013836	3.152421
ENSG00000212135	SNORD67	A	-3.59085	-3.59085	3.858224	3.323475
ENSG00000275221	H2AC15	A	-6.18689	1.560206	2.553465	2.073215
ENSG00000249020	SNORA58	A	-3.5754	-3.5754	3.2703	3.880507
ENSG00000164182	NDUFAF2 ENSG00000164182	A	-3.58111	-3.58111	3.636891	3.525338
ENSG00000207233	SNORA37	A	-3.56185	-3.56185	4.058442	3.06526
ENSG00000201785	SNORD117	A	-2.04865	-2.04865	-2.04865	6.145964
ENSG00000234664	HMG2P5	A	-6.01677	0.963938	2.674137	2.378697
ENSG00000207116	RNU6-31P	A	-3.52413	-3.52413	3.677688	3.370576
ENSG00000239183	SNORA84	A	-3.51125	-3.51125	3.679369	3.343124
ENSG00000173915	ATP5MK	A	-4.21395	-2.71723	3.465481	3.4657
ENSG00000201955	RNY3P1	A	-2.02392	-2.02392	-2.02392	6.071769
ENSG00000212452	SNORD69	A	-2.02161	-2.02161	-2.02161	6.064829
ENSG00000252481	SCARNA13	A	-6.03483	2.284421	1.70935	2.04106
ENSG00000212402	SNORA74B	A	-3.44411	-3.44411	2.792841	4.095381
ENSG00000277864	SCARNA15	A	-3.4672	-3.4672	3.311821	3.622582
ENSG00000207001	SNORD116-2	A	-3.46661	-3.46661	3.289195	3.644032
ENSG00000238363	SNORA13	A	-3.42977	-3.42977	3.002104	3.857435

ENSG00000281808		A	-3.40812	-3.40812	4.021525	2.794724
ENSG00000200354	SNORA71D	A	-1.98014	-1.98014	5.940412	-1.98014
ENSG00000212443	SNORA53	A	-3.40814	-3.40814	3.516876	3.2994
ENSG00000201104	RNU6-11P	A	-3.40571	-3.40571	3.557961	3.253458
ENSG00000278637	H4C1	A	1.1092	-5.81797	2.445784	2.262988
ENSG00000221803	SNORD23 ENSG00000221803	A	-3.39624	-3.39624	3.294764	3.497717
ENSG00000200314	Y_RNA	A	-3.37583	-3.37583	3.026534	3.725126
ENSG00000231587	SNORD62B	A	-1.9532	-1.9532	-1.9532	5.859585
ENSG00000252213	SNORA74D	A	-3.34106	-3.34106	2.594915	4.087213
ENSG00000200687	RNA5SP335	A	-3.36425	-3.36425	3.360305	3.368195
ENSG00000221241	SNORD88A	A	-1.93953	-1.93953	5.818597	-1.93953
ENSG00000201096	RNA5SP387	A	-3.29986	-3.29986	4.039018	2.560704
ENSG00000239195	SNORD5	A	-1.92473	-1.92473	-1.92473	5.77418
ENSG00000206622	SNORA69	A	-3.31939	-3.31939	3.439291	3.19948
ENSG00000210107	MT-TQ	A	-1.91514	-1.91514	-1.91514	5.745414
ENSG00000201754	SNORD52	A	-3.23776	-3.23776	4.173585	2.301929
ENSG00000200816	SNORA38	A	-3.27308	-3.27308	3.804859	2.741299
ENSG00000196154	S100A4	A	-5.00502	-0.90488	2.931293	2.978611
ENSG00000207205	RNVU1-15	A	-3.2743	-3.2743	3.683913	2.864695
ENSG00000263776	SNORA4	A	-1.8949	-1.8949	5.684708	-1.8949
ENSG00000225091	SNORA71A	A	-3.20423	-3.20423	3.998459	2.410006
ENSG00000238835	SCARNA18	A	-3.22719	-3.22719	3.513796	2.940574
ENSG00000209645	SNORD105	A	-3.22659	-3.22659	3.360883	3.09229
ENSG00000199667	Y_RNA	A	-1.85519	-1.85519	-1.85519	5.565583
ENSG00000267059		A	-3.19123	-3.19123	2.811137	3.57132
ENSG00000207406	SNORA41	A	-3.19087	-3.19087	2.961134	3.4206
ENSG00000238344	SNORD126	A	-1.83917	-1.83917	5.517524	-1.83917
ENSG00000270123	VTRNA2-1	A	-1.83726	-1.83726	-1.83726	5.511778
ENSG00000134419	RPS15A	A	-5.18729	0.020201	2.6153	2.551788
ENSG00000206755	SNORA30	A	-3.15006	-3.15006	3.232343	3.067786
ENSG00000252301	RNA5SP134	A	-3.13918	-3.13918	2.782875	3.495486
ENSG00000200278	RNA5SP352	A	-3.14226	-3.14226	3.388826	2.895694
ENSG00000212163	SNORD91A	A	-1.81633	-1.81633	-1.81633	5.448993
ENSG00000167088	SNRPD1	A	-5.40201	1.228261	1.927542	2.246204
ENSG00000204196	RPL12P16	A	1.818593	-5.43836	1.839966	1.779799
ENSG00000260549	MTIL	A	-5.30728	0.716531	2.287651	2.303097
ENSG00000207297	SNORD7	A	-3.1161	-3.1161	2.761817	3.470381

ENSG00000200408	RNA5SP74	A	-3.119	-3.119	3.272754	2.965238
ENSG00000134453	RBM17 ENSG00000134453	A	-5.28682	0.865895	2.128512	2.292409
ENSG00000252636	RNU6-826P	A	-3.04121	-3.04121	2.204552	3.877868
ENSG00000284419	MIR663A	A	-1.76596	-1.76596	5.297894	-1.76596
ENSG00000275305	RNA5SP528	A	-3.03738	-3.03738	3.041424	3.033333
ENSG00000206973	RNU6-1145P	A	-2.91626	-2.91626	4.047407	1.785119
ENSG00000220988	SNORD88C	A	-2.96778	-2.96778	3.734049	2.201506
ENSG00000283956	MIR3610	A	-1.73277	-1.73277	5.19831	-1.73277
ENSG00000201487	SNORD45B	A	-1.72965	-1.72965	5.188951	-1.72965
ENSG00000251920	RNA5SP216	A	-2.98154	-2.98154	2.715507	3.247582
ENSG00000112245	PTP4A1	A	-2.27911	-3.58618	3.093029	2.772269
ENSG00000206603	SNORA22B	A	-2.9695	-2.9695	2.994297	2.944705
ENSG00000115128	SF3B6	A	-5.00405	0.585509	2.103496	2.31504
ENSG00000272921		A	-2.95161	-2.95161	2.643117	3.260103
ENSG00000283149		A	-2.72526	-3.14749	2.891407	2.98134
ENSG00000200246	RNA5SP263	A	-2.93758	-2.93758	3.103289	2.771874
ENSG00000120265	PCMT1	A	-4.94923	0.68033	1.886112	2.382788
ENSG00000207063	SNORD116-1	A	-1.68595	-1.68595	5.057838	-1.68595
ENSG00000201457	SNORA55	A	-2.9089	-2.9089	3.075579	2.742213
ENSG00000004961	HCCS	A	-3.3737	-2.39917	3.05936	2.713509
ENSG00000125356	NDUFA1	A	-4.45103	-0.73426	2.708264	2.47703
ENSG00000272533	SNORA28	A	-1.6774	-1.6774	-1.6774	5.032185
ENSG00000207697	MIR573	A	-1.66973	-1.66973	5.009177	-1.66973
ENSG00000201920	RNA5SP442	A	-2.81347	-2.81347	3.739018	1.887916
ENSG00000147224	PRPS1	A	0.318024	-4.79959	2.202969	2.278595
ENSG00000251890	RNA5SP497	A	-2.86894	-2.86894	3.005416	2.732461
ENSG00000285609	5S_rRNA	A	-2.81711	-2.81711	3.579937	2.054288
ENSG00000258643	BCL2L2-PABPN1	A	-2.85303	-2.85303	3.085769	2.620298
ENSG00000147533	GOLGA7	A	-2.76965	-2.89663	2.628345	3.037936
ENSG00000222327	RNU6-855P	A	-1.627	-1.627	-1.627	4.881012
ENSG00000200168	RNA5SP350	A	-2.75644	-2.75644	1.933979	3.578898
ENSG00000176340	COX8A	A	-4.64239	0.263922	2.40092	1.97755
ENSG00000276700	RNA5-8SN4	A	-2.77786	-2.77786	3.207818	2.347911
ENSG00000164941	INTS8	A	-2.79202	-2.79202	2.714854	2.869187
ENSG00000228474	OST4	A	-4.70442	0.517918	2.160085	2.026421
ENSG00000173207	CKS1B	A	-4.70474	0.571091	2.063515	2.07013
ENSG00000164919	COX6C	A	-4.41082	-0.36259	2.47585	2.297558

ENSG00000286070		A	-4.12096	-0.93589	2.728599	2.328252
ENSG00000231878	SNRPF1	A	0.884813	-4.72403	1.977121	1.862093
ENSG00000164687	FABP5	A	-2.75815	-2.75815	2.899122	2.617171
ENSG00000252906	SCARNA3	A	-2.29204	-2.29204	4.444777	0.139311
ENSG00000139842	CUL4A	A	0.064459	-4.48924	2.340239	2.084543
ENSG00000175826	CTDNEP1	A	-1.90389	-3.45824	2.759926	2.602201
ENSG00000212409	RNY4P18	A	-1.57695	-1.57695	4.730858	-1.57695
ENSG00000208308	SNORA40B	A	-2.72982	-2.72982	2.737001	2.722642
ENSG00000004779	NDUFAB1	A	-4.63361	0.679276	2.123416	1.830914
ENSG00000145919	BOD1	A	-4.335	-0.32862	2.415148	2.248471
ENSG00000205362	MT1A	A	0.494823	-4.57565	2.229227	1.851602
ENSG00000201448	SNORA63C	A	-2.50038	-2.50038	0.99825	4.002519
ENSG00000099864	PALM	A	-4.52004	0.338836	1.8171	2.364105
ENSG00000171421	MRPL36	A	-4.60819	0.828775	1.97607	1.803342
ENSG00000184076	UQCR10	A	-4.34732	-0.14396	2.26413	2.227157
	ENSG00000184076					
ENSG00000200719	RNA5SP260	A	-2.65429	-2.65429	2.036631	3.271948
ENSG00000206633	SNORA80B	A	-2.67457	-2.67457	2.269769	3.079378
ENSG00000200164	Y_RNA	A	-2.68519	-2.68519	2.831521	2.538853
ENSG00000128245	YWHAH	A	-4.51683	0.453175	1.988814	2.074844
ENSG00000181218	H2AW	A	-4.58188	0.7857	1.831307	1.964875
ENSG00000269867		A	-3.78958	-1.27583	2.560036	2.505375
ENSG00000201772	SNORA5C	A	-2.58408	-2.58408	3.591068	1.577085
ENSG00000207072	RNU6-39P	A	-2.66783	-2.66783	2.330097	3.005559
ENSG00000166181	API5	A	-4.18509	-0.44017	2.506561	2.118695
ENSG00000281295		A	-2.61495	-2.61495	1.869059	3.360841
ENSG00000204463	BAG6	A	-4.46742	0.38518	1.974978	2.107259
ENSG00000168275	COA6	A	-3.98814	-0.85195	2.372946	2.46714
ENSG00000275924	MIR6807	A	-1.53448	-1.53448	4.60345	-1.53448
ENSG00000143436	MRPL9	A	-4.54836	0.871983	1.846287	1.830095
ENSG00000201168	RNA5SP368	A	-2.64775	-2.64775	2.385458	2.910033
ENSG00000206609	SNORD116-11	A	-1.53234	-1.53234	4.597024	-1.53234
ENSG00000221303	SNORA79	A	-2.62517	-2.62517	2.080862	3.169479
ENSG00000277258	PCGF2	A	-2.64341	-2.64341	2.934529	2.352297
ENSG00000148335	NTMT1	A	-4.36914	0.135159	2.203307	2.030677
ENSG00000112695	COX7A2	A	-4.00947	-0.73715	2.058745	2.687882
ENSG00000199677	Y_RNA	A	-1.52786	-1.52786	-1.52786	4.583571
ENSG00000202137	Y_RNA	A	-2.63806	-2.63806	2.781276	2.494845

ENSG00000278294	5_8S_rRNA	A	-2.63489	-2.63489	2.866676	2.403106
ENSG00000204435	CSNK2B	A	-4.4087	0.332157	2.106799	1.969746
ENSG00000201643	SNORA14A	A	-2.56693	-2.56693	3.417456	1.716401
ENSG00000181649	PHLDA2	A	-4.13681	-0.41139	2.041369	2.506832
ENSG00000116898	MRPS15	A	-4.37413	0.265334	2.242228	1.866567
ENSG00000006625	GGCT	A	-3.46844	-1.61964	2.699624	2.38845
ENSG00000202056	RNA5SP19	A	-2.58914	-2.58914	3.226207	1.952068
ENSG00000061794	MRPS35	A	-4.1934	-0.25023	2.254278	2.189353
ENSG00000106367	AP1S1 ENSG00000106367	A	-4.33799	0.183874	2.032781	2.121339
ENSG00000222370	SNORA36B	A	-2.55444	-2.55444	1.74898	3.35989
ENSG00000125901	MRPS26	A	-4.34288	0.245021	2.220686	1.877176
ENSG00000178531	CTXN1	A	-2.60403	-2.60403	2.253897	2.954172
ENSG00000111843	TMEM14C	A	-4.25085	-0.02357	2.377516	1.896905
ENSG00000184897	H1-10	A	-3.62763	-1.34053	2.498482	2.469682
ENSG00000101084	RAB51F	A	-4.41616	0.598864	1.767206	2.050091
ENSG00000213619	NDUFS3	A	-4.34731	0.395123	2.303751	1.648441
ENSG00000113312	TTC1	A	-3.92715	-0.76704	2.489892	2.204295
ENSG00000202357	Y_RNA	A	-2.58768	-2.58768	2.25314	2.92221
ENSG00000161654	LSM12	A	-4.31287	0.254618	1.904946	2.153303
ENSG00000137203	TFAP2A	A	-2.17736	-2.97008	2.698316	2.449119
ENSG00000229953		A	-2.58598	-2.58598	2.582139	2.589823
ENSG00000201649	RNY4P34	A	-1.49277	-1.49277	4.478313	-1.49277
ENSG00000207191	SNORD116-5	A	-1.49277	-1.49277	4.478313	-1.49277
ENSG00000168802	CHTF8	A	-1.17526	-3.67988	2.417455	2.437688
ENSG00000204568	MRPS18B	A	-4.23292	0.077418	1.864942	2.290562
ENSG00000051523	CYBA	A	-4.39861	0.741899	1.822806	1.833909
ENSG00000077721	UBE2A	A	-4.44678	1.130531	1.559431	1.756815
ENSG00000232112	TMA7	A	-4.3619	0.570868	1.977093	1.813942
ENSG00000128951	DUT	A	-2.87432	-2.23	2.650187	2.454126
ENSG00000273338		A	-2.54605	-2.54605	2.143308	2.948785
ENSG00000238961	SNORA47	A	-2.52597	-2.52597	3.081893	1.970045
ENSG00000264346	SNORA77B	A	-2.55199	-2.55199	2.415174	2.688816
ENSG00000081154	PCNP	A	-1.31228	-3.52516	2.674379	2.163052
ENSG00000222806	RNA5SP225	A	-2.46723	-2.46723	1.583967	3.350495
ENSG00000207067	SNORA72	A	-2.53593	-2.53593	2.806335	2.265534
ENSG00000197345	MRPL21	A	-4.32304	0.673123	1.943878	1.706038
ENSG00000202386	RNA5SP211	A	-2.53848	-2.53848	2.697055	2.379906

ENSG00000286172	RNVU1-8	A	-2.18002	-2.18002	4.014738	0.345299
ENSG00000274396		A	-1.46076	-1.46076	-1.46076	4.382291
ENSG00000207475	SNORA80E	A	-2.50224	-2.50224	1.981772	3.022704
ENSG00000099977	DDT	A	-2.50067	-2.50067	3.033699	1.967649
ENSG00000082515	MRPL22	A	-3.8596	-0.63463	2.180814	2.313411
ENSG00000200792	SNORA80A	A	-2.43612	-2.43612	1.554381	3.317859
ENSG00000111237	VPS29	A	-4.26277	0.624174	1.999911	1.63868
ENSG00000262814	MRPL12	A	-3.99128	-0.2973	2.131609	2.156962
ENSG00000198356	GET3	A	-4.22735	0.469816	1.993854	1.763677
ENSG00000262664	OVCA2	A	-2.50148	-2.50148	2.242414	2.760542
ENSG00000151239	TWF1	A	-4.24911	0.660236	2.123812	1.465058
ENSG00000157326	DHRS4	A	-4.33351	1.538234	1.180327	1.61495
ENSG00000243279	PRAF2	A	-2.50377	-2.50377	2.419004	2.588527
ENSG00000283685	MIR522	B	-3.07926	9.237773	-3.07926	-3.07926
ENSG00000283429	MIR1244-3	B	-2.8612	8.583614	-2.8612	-2.8612
ENSG00000251861		B	-2.74395	8.231843	-2.74395	-2.74395
ENSG00000200914	RNA5SP435	B	-2.74181	8.225431	-2.74181	-2.74181
ENSG00000274579		B	-2.7299	8.189695	-2.7299	-2.7299
ENSG00000275930	Y_RNA	B	-2.60636	7.819069	-2.60636	-2.60636
ENSG00000252414	RNU6-100P	B	-2.52939	7.588174	-2.52939	-2.52939
ENSG00000256393	RPL41P5	B	-6.95051	5.043868	0.298239	1.608408
ENSG00000261882		B	-2.49593	7.487801	-2.49593	-2.49593
ENSG00000252936	RNA5SP423	B	-2.47328	7.419836	-2.47328	-2.47328
ENSG00000275254		B	-3.72136	6.648436	0.794279	-3.72136
ENSG00000250580	SNRPCP8	B	-2.43464	7.303933	-2.43464	-2.43464
ENSG00000207258	Y_RNA ENSG00000207258	B	-2.41849	7.255484	-2.41849	-2.41849
ENSG00000254683	SNRPCP6	B	-2.29559	6.886759	-2.29559	-2.29559
ENSG00000234565	COX6B1P1	B	-2.15772	6.473159	-2.15772	-2.15772
ENSG00000222583	RN7SKP222	B	-2.11793	6.353802	-2.11793	-2.11793
ENSG00000223042	RN7SKP161	B	-2.07623	6.228681	-2.07623	-2.07623
ENSG00000206600	RNU6-25P	B	-5.17988	4.86289	0.795317	-0.47833
ENSG00000253895	IGHVII-44-2	B	-2.06834	6.205032	-2.06834	-2.06834
ENSG00000251705	RNA5-8SP6	B	-6.08797	3.139858	1.601383	1.346731
ENSG00000211725	TRBV5-5	B	-2.02694	6.080809	-2.02694	-2.02694
ENSG00000270066		B	-2.85394	5.701164	-0.00334	-2.84388
ENSG00000286399		B	-2.00274	6.008207	-2.00274	-2.00274
ENSG00000222428	RNA5SP231	B	-1.99854	5.995629	-1.99854	-1.99854

ENSG00000254755		B	-1.9981	5.994304	-1.9981	-1.9981
ENSG00000241346	SNRPCP11	B	-1.99179	5.975381	-1.99179	-1.99179
ENSG00000264558		B	-3.41329	4.083848	-3.41329	2.742739
ENSG00000271609		B	-1.98613	5.958394	-1.98613	-1.98613
ENSG00000228499	TMSB10P1	B	-4.15127	5.199879	0.088663	-1.13727
ENSG00000270354		B	-1.94336	5.830077	-1.94336	-1.94336
ENSG00000201612	RN7SKP15	B	-1.92752	5.782562	-1.92752	-1.92752
ENSG00000234274	COX7BP2	B	-1.92368	5.77105	-1.92368	-1.92368
ENSG00000207501	RNVU1-14	B	-5.13692	4.102402	0.652736	0.381777
ENSG00000276997		B	-1.90746	5.722373	-1.90746	-1.90746
ENSG00000212424	RNU1-119P	B	-1.90366	5.710966	-1.90366	-1.90366
ENSG00000231726	HMG2P38	B	-1.89974	5.699215	-1.89974	-1.89974
ENSG00000276413		B	-1.89364	5.680911	-1.89364	-1.89364
ENSG00000241487	RN7SL586P	B	-1.88763	5.662893	-1.88763	-1.88763
ENSG00000240382	IGKV1-17	B	-1.87739	5.632171	-1.87739	-1.87739
ENSG00000239855	IGKV1-6	B	-1.86252	5.587555	-1.86252	-1.86252
ENSG00000223282	RN7SKP165	B	-1.86205	5.586155	-1.86205	-1.86205
ENSG00000240870	RPL19P14	B	0.144275	5.190529	-2.6674	-2.6674
ENSG00000223321	RN7SKP293	B	-1.84774	5.54322	-1.84774	-1.84774
ENSG00000231302	RPL36P2	B	-1.84302	5.529048	-1.84302	-1.84302
ENSG00000239964	RN7SL748P	B	-1.83727	5.511818	-1.83727	-1.83727
ENSG00000238324	RN7SKP198	B	-1.83415	5.50246	-1.83415	-1.83415
ENSG00000166220	TBATA	B	-1.83044	5.491318	-1.83044	-1.83044
ENSG00000265352	LINC01899	B	-1.82871	5.486118	-1.82871	-1.82871
ENSG00000248350		B	-1.82826	5.484771	-1.82826	-1.82826
ENSG00000253765	IGKV2D-19	B	-1.82654	5.479628	-1.82654	-1.82654
ENSG00000272096	RN7SL715P	B	-1.81449	5.443465	-1.81449	-1.81449
ENSG00000231261	HMG2P10	B	-1.81326	5.43979	-1.81326	-1.81326
ENSG00000275538	RNVU1-19	B	-4.6012	4.087211	1.079743	-0.56575
ENSG00000259421		B	-1.81061	5.431823	-1.81061	-1.81061
ENSG00000286243		B	-1.8051	5.415291	-1.8051	-1.8051
ENSG00000274662	RN7SKP236	B	-1.7955	5.386505	-1.7955	-1.7955
ENSG00000255786		B	-1.79437	5.383117	-1.79437	-1.79437
ENSG00000241950	RPL29P23	B	-1.78505	5.355147	-1.78505	-1.78505
ENSG00000253579	SUMO2P16	B	-1.78351	5.350542	-1.78351	-1.78351
ENSG00000267135		B	-1.77897	5.336915	-1.77897	-1.77897
ENSG00000241604	RN7SL340P	B	-1.77817	5.334517	-1.77817	-1.77817
ENSG00000237183	KRTAP9-10P	B	-1.77651	5.329526	-1.77651	-1.77651

ENSG00000230980	RPL36AP39	B	-1.77552	5.326561	-1.77552	-1.77552
ENSG00000233720		B	-1.76885	5.306561	-1.76885	-1.76885
ENSG00000262154	EIF1P4	B	-1.7658	5.297401	-1.7658	-1.7658
ENSG00000241362	RPL36AP43	B	-1.76555	5.296648	-1.76555	-1.76555
ENSG00000278876		B	-2.39864	5.228681	-1.34136	-1.48868
ENSG00000235181		B	-1.75554	5.266626	-1.75554	-1.75554
ENSG00000223136	RN7SKP207	B	-1.75413	5.262389	-1.75413	-1.75413
ENSG00000277764		B	-2.58199	4.826241	-2.58199	0.337734
ENSG00000262402	MCUR1P1	B	-2.27919	5.079254	-2.27919	-0.52088
ENSG00000278382		B	-1.73699	5.21096	-1.73699	-1.73699
ENSG00000233383		B	-1.72789	5.183679	-1.72789	-1.72789
ENSG00000240328		B	-1.72738	5.18215	-1.72738	-1.72738
ENSG00000258482	TRAV15	B	-1.72599	5.177984	-1.72599	-1.72599
ENSG00000252577	SCARNA20	B	-4.45434	3.96043	0.409595	0.084319
ENSG00000231619	ANAPC15P1	B	-1.72014	5.160413	-1.72014	-1.72014
ENSG00000169474	SPRR1A	B	-1.71998	5.159936	-1.71998	-1.71998
ENSG00000278477		B	-1.71926	5.157774	-1.71926	-1.71926
ENSG00000225333		B	-1.71608	5.148242	-1.71608	-1.71608
ENSG00000106004	HOXA5	B	-1.71575	5.147238	-1.71575	-1.71575
ENSG00000241229	RN7SL443P	B	-1.71336	5.140094	-1.71336	-1.71336
ENSG00000226777	FAM30A	B	-1.27038	5.112657	-1.92114	-1.92114
ENSG00000229046	HMGN1P2	B	-1.93577	5.087465	-1.93577	-1.21593
ENSG00000252490	RN7SKP66	B	-1.70175	5.105236	-1.70175	-1.70175
ENSG00000284670	RPSAP56	B	-1.7016	5.104801	-1.7016	-1.7016
ENSG00000200693	U3	B	-1.69545	5.086344	-1.69545	-1.69545
ENSG00000227842		B	-1.69531	5.085941	-1.69531	-1.69531
ENSG00000232135		B	-1.695	5.085006	-1.695	-1.695
ENSG00000242653	RN7SL132P	B	-1.6919	5.075711	-1.6919	-1.6919
ENSG00000244544	RN7SL446P	B	-1.6919	5.075711	-1.6919	-1.6919
ENSG00000241791	RN7SL817P	B	-1.68664	5.059906	-1.68664	-1.68664
ENSG00000271138	IGLVIVOR22-1	B	-1.6862	5.058585	-1.6862	-1.6862
ENSG00000175544	CABP4	B	-0.35525	4.860238	-2.25249	-2.25249
ENSG00000271353		B	-1.67991	5.039726	-1.67991	-1.67991
ENSG00000273566	Metazoa_SRP	B	-1.67939	5.038165	-1.67939	-1.67939
ENSG00000267005		B	-1.67407	5.022204	-1.67407	-1.67407
ENSG00000231749	ABCA9-AS1	B	-1.67017	5.010518	-1.67017	-1.67017
ENSG00000165495	PKNOX2	B	0.494704	4.524887	-2.42547	-2.59412
ENSG00000272100		B	-1.66621	4.998618	-1.66621	-1.66621

ENSG00000250781		B	-1.66608	4.998245	-1.66608	-1.66608
ENSG00000275788	Metazoa_SRP	B	-1.66599	4.997957	-1.66599	-1.66599
ENSG00000230823	CBX1P1	B	-1.80765	4.985725	-1.80765	-1.37042
ENSG00000252960	RN7SKP258	B	-1.66457	4.993701	-1.66457	-1.66457
ENSG00000240231	RPS27P29	B	-2.48915	4.866986	-0.92501	-1.45282
ENSG00000277084	RNU2-4P	B	-2.49561	4.480518	-2.49561	0.510693
ENSG00000239224	RN7SL546P	B	-1.94939	4.904067	-1.00528	-1.94939
ENSG00000158104	HPD	B	-1.64861	4.945844	-1.64861	-1.64861
ENSG00000243333	RN7SL174P	B	-1.64533	4.936002	-1.64533	-1.64533
ENSG00000226541		B	-1.64495	4.934849	-1.64495	-1.64495
ENSG00000171097	KYAT1	B	-1.86099	4.857334	-2.14198	-0.85436
ENSG00000267518		B	-1.64192	4.925762	-1.64192	-1.64192
ENSG00000248105		B	-1.64063	4.921876	-1.64063	-1.64063
ENSG00000267402	TCF4-AS2	B	-1.64016	4.92049	-1.64016	-1.64016
ENSG00000277308	Metazoa_SRP	B	-1.63867	4.916011	-1.63867	-1.63867
ENSG00000222404	RN7SKP281	B	-1.63623	4.908677	-1.63623	-1.63623
ENSG00000224114		B	-1.87721	4.872891	-1.87721	-1.11848
ENSG00000241834	RN7SL149P	B	-1.63345	4.900336	-1.63345	-1.63345
ENSG00000225919	LINC01745	B	-1.63263	4.897893	-1.63263	-1.63263
ENSG00000254030	IGLC5	B	-1.63086	4.892589	-1.63086	-1.63086
ENSG00000226573	ENSG00000226573	B	-1.62917	4.887508	-1.62917	-1.62917
ENSG00000225182		B	-1.62836	4.885094	-1.62836	-1.62836
ENSG00000224276	ARHGEF2-AS1	B	-1.62813	4.884395	-1.62813	-1.62813
ENSG00000222594	RN7SKP235	B	-2.3478	4.535972	-2.3478	0.159619
ENSG00000253941	IGHVII-51-2	B	-1.62336	4.870079	-1.62336	-1.62336
ENSG00000249764		B	-1.62307	4.869214	-1.62307	-1.62307
ENSG00000253516	HMGB1P41	B	-1.62019	4.860574	-1.62019	-1.62019
ENSG00000237472		B	-1.6169	4.850704	-1.6169	-1.6169
ENSG00000242748	RPL23AP81	B	-1.91319	4.799959	-1.91319	-0.97358
ENSG00000267026		B	-1.61362	4.840854	-1.61362	-1.61362
ENSG00000266944		B	-1.61153	4.83458	-1.61153	-1.61153
ENSG00000257184		B	-1.61045	4.831362	-1.61045	-1.61045
ENSG00000244167		B	-1.60872	4.826146	-1.60872	-1.60872
ENSG00000237360	CHCHD4P2	B	-1.60858	4.825733	-1.60858	-1.60858
ENSG00000216516	ENSG00000216516	B	-1.60526	4.815791	-1.60526	-1.60526
ENSG00000280185		B	-1.60494	4.814806	-1.60494	-1.60494
ENSG00000231867		B	-1.60318	4.809548	-1.60318	-1.60318
ENSG00000267523		B	-2.25191	4.546583	-2.25191	-0.04277

ENSG00000226243	RPL37AP1	B	-1.78894	4.776095	-1.19822	-1.78894
ENSG00000213556		B	-1.59661	4.789837	-1.59661	-1.59661
ENSG00000242066	RN7SL214P	B	-1.59661	4.789837	-1.59661	-1.59661
ENSG00000273077		B	-1.59632	4.788957	-1.59632	-1.59632
ENSG00000274943		B	-1.5944	4.783194	-1.5944	-1.5944
ENSG00000230641	USP12-AS2	B	-1.59364	4.780914	-1.59364	-1.59364
ENSG00000242281	RN7SL159P	B	-1.59245	4.777335	-1.59245	-1.59245
ENSG00000232238	RPS29P8	B	-1.59169	4.775083	-1.59169	-1.59169
ENSG00000230215	LINC01840 ENSG00000230215	B	-1.59116	4.773469	-1.59116	-1.59116
ENSG00000275927		B	-1.5888	4.766394	-1.5888	-1.5888
ENSG00000253428	LINC01942	B	-1.58829	4.764873	-1.58829	-1.58829
ENSG00000270814	DMAC1P1	B	-1.58799	4.763973	-1.58799	-1.58799
ENSG00000272715		B	-1.58638	4.759127	-1.58638	-1.58638
ENSG00000214124	SNRPEP9	B	-1.58311	4.74933	-1.58311	-1.58311
ENSG00000231966	LINC02818	B	-1.58268	4.748053	-1.58268	-1.58268
ENSG00000222574	RN7SKP61	B	-1.58179	4.745375	-1.58179	-1.58179
ENSG00000235018		B	-1.72928	4.723168	-1.72928	-1.26461
ENSG00000278400		B	-1.57662	4.729861	-1.57662	-1.57662
ENSG00000243125	RN7SL807P	B	-1.5748	4.724406	-1.5748	-1.5748
ENSG00000214881	TMEM14DP	B	-1.57472	4.724159	-1.57472	-1.57472
ENSG00000230519	HMGB1P49	B	-1.57365	4.720938	-1.57365	-1.57365
ENSG00000225907	RPS27P16	B	-1.57323	4.719683	-1.57323	-1.57323
ENSG00000260795		B	-1.57135	4.714038	-1.57135	-1.57135
ENSG00000199497	RNU1-94P	B	-1.5713	4.713899	-1.5713	-1.5713
ENSG00000168477	TNXB	B	-0.75983	4.63195	-1.99808	-1.87404
ENSG00000260518	BMS1P8	B	-1.6034	4.687206	-1.6034	-1.4804
ENSG00000260981		B	-1.56003	4.680078	-1.56003	-1.56003
ENSG00000238037	OOSP1P1	B	-1.55875	4.676235	-1.55875	-1.55875
ENSG00000275929		B	-1.55815	4.674452	-1.55815	-1.55815
ENSG00000255977		B	-1.55804	4.674107	-1.55804	-1.55804
ENSG00000227416		B	-1.55641	4.669216	-1.55641	-1.55641
ENSG00000273650		B	-1.55641	4.669216	-1.55641	-1.55641
ENSG00000259359		B	-2.22017	4.451637	-2.06442	-0.16705
ENSG00000286901		B	-1.55486	4.664594	-1.55486	-1.55486
ENSG00000274898		B	-1.55459	4.663766	-1.55459	-1.55459
ENSG00000276638		B	-1.55453	4.663577	-1.55453	-1.55453
ENSG00000276088	RN7SL620P	B	-1.55438	4.663141	-1.55438	-1.55438

ENSG00000278701	Metazoa_SRP	B	-1.55438	4.663127	-1.55438	-1.55438
ENSG00000201600	RN7SKP124	B	-1.55433	4.662996	-1.55433	-1.55433
ENSG00000231024		B	-1.55368	4.661031	-1.55368	-1.55368
ENSG00000211713	TRBV6-4	B	-1.55339	4.660171	-1.55339	-1.55339
ENSG00000274569		B	-1.55268	4.658055	-1.55268	-1.55268
ENSG00000240271		B	-1.55261	4.657821	-1.55261	-1.55261
ENSG00000265078	RN7SL664P	B	-1.71436	4.644318	-1.2156	-1.71436
ENSG00000272870	SAP30-DT	B	-0.00163	4.391788	-2.19508	-2.19508
ENSG00000237027		B	-1.5518	4.655393	-1.5518	-1.5518
ENSG00000214301		B	-1.55084	4.652533	-1.55084	-1.55084
ENSG00000066468	FGFR2	B	-1.74399	4.585524	-0.8284	-2.01313
ENSG00000255513		B	-2.60539	3.507791	-2.60539	1.702987
ENSG00000243051	RN7SL269P	B	-1.54774	4.643213	-1.54774	-1.54774
ENSG00000282876		B	-2.058	4.478018	-0.36201	-2.058
ENSG00000255289		B	-1.54268	4.628045	-1.54268	-1.54268
ENSG00000205861	PCOTH	B	-2.22177	4.407189	-2.02265	-0.16276
ENSG00000223040	RN7SKP144	B	-1.53877	4.616296	-1.53877	-1.53877
ENSG00000228365		B	-1.53465	4.603942	-1.53465	-1.53465
ENSG00000287058		B	-1.53387	4.601605	-1.53387	-1.53387
ENSG00000242162		B	-1.53355	4.60065	-1.53355	-1.53355
ENSG00000220154		B	-1.53349	4.600481	-1.53349	-1.53349
ENSG00000231445	TIMM8AP1	B	-2.30769	4.162835	0.452536	-2.30769
ENSG00000211654	IGLV5-37	B	-1.53251	4.597534	-1.53251	-1.53251
ENSG00000224967		B	-1.63719	4.589645	-1.63719	-1.31526
ENSG00000258179		B	-1.53172	4.595152	-1.53172	-1.53172
ENSG00000270255		B	-1.53055	4.591663	-1.53055	-1.53055
ENSG00000227409	ZMYM4-AS1	B	-1.53042	4.591274	-1.53042	-1.53042
ENSG00000278112		B	-1.73606	4.566627	-1.09451	-1.73606
ENSG00000111181	SLC6A12	B	0.080764	4.298766	-2.18977	-2.18977
ENSG00000255091		B	-1.52641	4.579227	-1.52641	-1.52641
ENSG00000232403	RPL27P5	B	-1.52516	4.575481	-1.52516	-1.52516
ENSG00000231470	HMGB3P2	B	-1.52497	4.574897	-1.52497	-1.52497
ENSG00000255480		B	-1.52492	4.574771	-1.52492	-1.52492
ENSG00000222784	RN7SKP91	B	-1.6756	4.56212	-1.6756	-1.21093
ENSG00000241963	RN7SL655P	B	-1.52384	4.571532	-1.52384	-1.52384
ENSG00000277946	RN7SL478P	B	-1.52384	4.571532	-1.52384	-1.52384
ENSG00000261651		B	-1.52352	4.57055	-1.52352	-1.52352
ENSG00000266897		B	-1.52174	4.565215	-1.52174	-1.52174

ENSG00000145934	TENM2	B	0.283979	4.199198	-2.24159	-2.24159
ENSG00000240322	RN7SL481P	B	-1.52041	4.561244	-1.52041	-1.52041
ENSG00000235990	RPL23AP20	B	-1.75494	4.529283	-1.01941	-1.75494
ENSG00000270264	NDUFB8P2	B	-2.18401	4.258963	0.109063	-2.18401
ENSG00000211782	TRAV8-1	B	-1.51887	4.556601	-1.51887	-1.51887
ENSG00000274011	Metazoa_SRP	B	-1.51666	4.549987	-1.51666	-1.51666
ENSG00000242113	RN7SL124P	B	-1.51575	4.547255	-1.51575	-1.51575
ENSG00000211715	TRBV5-3	B	-1.51513	4.545392	-1.51513	-1.51513
ENSG00000263196	MTND3P13	B	-1.51513	4.545392	-1.51513	-1.51513
ENSG00000271174		B	-1.51513	4.545392	-1.51513	-1.51513
ENSG00000234112		B	-1.51361	4.540843	-1.51361	-1.51361
ENSG00000273870		B	-1.51256	4.53768	-1.51256	-1.51256
ENSG00000240404		B	-1.51202	4.536046	-1.51202	-1.51202
ENSG00000258930		B	-2.39929	3.883036	-2.39929	0.915549
ENSG00000272265		B	0.273385	4.174815	-2.2241	-2.2241
ENSG00000234705	HMGA1P4	B	-3.02502	3.392592	-2.00924	1.641675
ENSG00000228366		B	-1.96772	4.502605	-1.21241	-1.32248
ENSG00000263794	RN7SL457P	B	-1.50831	4.524919	-1.50831	-1.50831
ENSG00000258204		B	-1.50826	4.524786	-1.50826	-1.50826
ENSG00000271114		B	-1.50753	4.522603	-1.50753	-1.50753
ENSG00000202241	RN7SKP186	B	-1.5069	4.520714	-1.5069	-1.5069
ENSG00000259931		B	-1.50626	4.518788	-1.50626	-1.50626
ENSG00000018625	ATP1A2	B	0.653943	3.926448	-1.62434	-2.95605
ENSG00000272406		B	-1.50608	4.51824	-1.50608	-1.50608
ENSG00000268879	IGFL1P1	B	-1.50599	4.517957	-1.50599	-1.50599
ENSG00000241155	ARHGAP31-AS1	B	-1.7738	4.476626	-1.7738	-0.92902
ENSG00000219747	RPL32P16	B	-2.24794	4.368517	-1.68821	-0.43237
ENSG00000240692	RN7SL538P	B	-1.50358	4.51075	-1.50358	-1.50358
ENSG00000258968		B	-1.60935	4.503826	-1.60935	-1.28512
ENSG00000266983	RANBP3-DT	B	-1.50055	4.501656	-1.50055	-1.50055
ENSG00000211968	IGHV1-58	B	-1.5002	4.500592	-1.5002	-1.5002
ENSG00000257847	LSM3P2	B	-1.49802	4.494066	-1.49802	-1.49802
ENSG00000230599		B	-1.49752	4.492552	-1.49752	-1.49752
ENSG00000228701	TNKS2-AS1	B	-1.49731	4.491939	-1.49731	-1.49731
ENSG00000237959	RPL36AP10 ENSG00000237959	B	-1.49461	4.483836	-1.49461	-1.49461
ENSG00000214188	ST7-OT4	B	-2.30164	3.973223	-2.30164	0.630048
ENSG00000168785	TSPAN5	B	0.634726	3.963909	-2.09144	-2.5072

ENSG00000227394	RPL11P1	B	-1.4922	4.476604	-1.4922	-1.4922
ENSG00000120500	ARR3	B	-1.49188	4.475636	-1.49188	-1.49188
ENSG00000256994	LINC02378	B	-1.49075	4.472259	-1.49075	-1.49075
ENSG00000225997	OR4A8	B	0.643931	3.957175	-2.30055	-2.30055
ENSG00000099250	NRP1	B	-0.25163	4.288719	-2.04179	-1.9953
ENSG00000159339	PADI4	B	-1.48858	4.465734	-1.48858	-1.48858
ENSG00000225831	RPS18P1	B	-1.48772	4.463166	-1.48772	-1.48772
ENSG00000286257		B	-1.48771	4.463131	-1.48771	-1.48771
ENSG00000248542		B	-1.48697	4.460925	-1.48697	-1.48697
ENSG00000239868	RN7SL34P	B	-2.05074	4.250336	-0.14886	-2.05074
ENSG00000238260		B	-1.48529	4.455865	-1.48529	-1.48529
ENSG00000222451	RN7SKP143	B	-1.48408	4.452249	-1.48408	-1.48408
ENSG00000234268		B	-2.44035	4.127435	0.158725	-1.84581
ENSG00000243193	PRKAR2B-AS1	B	-1.48352	4.450551	-1.48352	-1.48352
ENSG00000244050	DEFB109F	B	-1.4819	4.445691	-1.4819	-1.4819
ENSG00000253195		B	-1.4809	4.442701	-1.4809	-1.4809
ENSG00000259013	ENSG00000259013	B	-1.48084	4.442522	-1.48084	-1.48084
ENSG00000227765	MYL12BP2	B	-1.47938	4.438128	-1.47938	-1.47938
ENSG00000284735		B	-1.59755	4.420816	-1.59755	-1.22571
ENSG00000272148		B	-1.61863	4.414416	-1.17715	-1.61863
ENSG00000243328		B	-1.4751	4.425306	-1.4751	-1.4751
ENSG00000114279	FGF12	B	0.19619	4.093003	-2.37379	-1.91541
ENSG00000253789	NARS1P2	B	-1.47418	4.422531	-1.47418	-1.47418
ENSG00000236549	RPS27AP7	B	-1.47232	4.416959	-1.47232	-1.47232
ENSG00000276309	RN7SKP251	B	-1.47149	4.414474	-1.47149	-1.47149
ENSG00000202406	RN7SKP187	B	-1.47145	4.414345	-1.47145	-1.47145
ENSG00000226471		B	-1.89393	4.304388	-0.51653	-1.89393
ENSG00000186971	KRTAP13-4	B	0.696637	3.875256	-2.28595	-2.28595
ENSG00000250066		B	-1.47003	4.410092	-1.47003	-1.47003
ENSG00000255424	MRGPRX9P	B	-1.46921	4.407627	-1.46921	-1.46921
ENSG00000236118		B	-1.46625	4.398752	-1.46625	-1.46625
ENSG00000224448		B	-2.41065	4.172809	-1.58202	-0.18014
ENSG00000273243		B	-2.14646	4.058382	0.234544	-2.14646
ENSG00000253874	IGLVIV-66-1	B	-1.46423	4.392702	-1.46423	-1.46423
ENSG00000233640	KRTAP13-5P	B	-1.46344	4.39031	-1.46344	-1.46344
ENSG00000267939		B	-1.46256	4.387687	-1.46256	-1.46256
ENSG00000270889	PPP1R14BP4	B	-1.46256	4.387687	-1.46256	-1.46256
ENSG00000228723	SRGAP3-AS2	B	-1.46247	4.387424	-1.46247	-1.46247

ENSG00000232925	MRPS16P2	B	-1.46101	4.383026	-1.46101	-1.46101
ENSG00000115361	ACADL	B	-1.45971	4.379119	-1.45971	-1.45971
ENSG00000243015	RN7SL737P	B	-2.0268	4.158574	-2.0268	-0.10498
ENSG00000232696		B	-1.45788	4.373642	-1.45788	-1.45788
ENSG00000280093		B	-1.4576	4.372806	-1.4576	-1.4576
ENSG00000257738		B	-1.45683	4.370483	-1.45683	-1.45683
ENSG00000248221	STX18-IT1	B	-1.45652	4.369568	-1.45652	-1.45652
ENSG00000242863	RN7SL677P	B	-1.4562	4.368614	-1.4562	-1.4562
ENSG00000264270		B	-1.45556	4.366684	-1.45556	-1.45556
ENSG00000236391		B	-1.45477	4.36431	-1.45477	-1.45477
ENSG00000103888	CEMIP	B	-0.12252	4.152581	-1.98224	-2.04782
ENSG00000228950	ENSG00000228950	B	-1.61288	4.34911	-1.12334	-1.61288
ENSG00000231663	COA6-AS1	B	-1.90631	4.233506	-1.90631	-0.42088
ENSG00000271563	HIRAP1	B	-1.45343	4.360297	-1.45343	-1.45343
ENSG00000007038	PRSS21	B	-1.45279	4.358372	-1.45279	-1.45279
ENSG00000246528		B	-1.4526	4.357794	-1.4526	-1.4526
ENSG00000277282	IGHV1OR21-1	B	-1.45204	4.356134	-1.45204	-1.45204
ENSG00000269873		B	-1.45204	4.356115	-1.45204	-1.45204
ENSG00000275385	CCL18	B	-1.45181	4.35542	-1.45181	-1.45181
ENSG00000211728	TRBV5-6	B	-1.45108	4.353234	-1.45108	-1.45108
ENSG00000267659	LINC01482	B	0.394676	3.95544	-2.17506	-2.17506
ENSG00000181392	SYNE4	B	-1.05115	4.31982	-1.39731	-1.87135
ENSG00000257956	NOP56P3	B	-1.44893	4.346786	-1.44893	-1.44893
ENSG00000204173	LRRC37A5P	B	0.552802	3.878599	-2.2157	-2.2157
ENSG00000280029		B	0.445876	3.925048	-2.18546	-2.18546
ENSG00000228879	RPL35AP6	B	-1.44726	4.341788	-1.44726	-1.44726
ENSG00000235858		B	-1.44663	4.339888	-1.44663	-1.44663
ENSG00000231032	CEP19P1 ENSG00000231032	B	-1.44618	4.338555	-1.44618	-1.44618
ENSG00000214657	RPLP1P5	B	-1.44562	4.336846	-1.44562	-1.44562
ENSG00000229306		B	-1.44432	4.332946	-1.44432	-1.44432
ENSG00000226247	SUPT4HIP1	B	-1.44395	4.331841	-1.44395	-1.44395
ENSG00000266049		B	-1.44298	4.328954	-1.44298	-1.44298
ENSG00000231221	LINC01593	B	-1.44252	4.327567	-1.44252	-1.44252
ENSG00000234458	OR7E130P	B	0.455217	3.903069	-2.17914	-2.17914
ENSG00000206602	SNORD58A	C	5.078553	-12.0041	3.412772	3.512769
ENSG00000206625	RNU6-1	C	10.24579	-3.41526	-3.41526	-3.41526
ENSG00000252103	RNU6-917P	C	9.710772	-3.23692	-3.23692	-3.23692

ENSG00000206744	RNU6-620P	C	9.088473	-3.02949	-3.02949	-3.02949
ENSG00000201476	RNA5SP353	C	8.79397	-2.93132	-2.93132	-2.93132
ENSG00000271340		C	8.729258	-2.90975	-2.90975	-2.90975
ENSG00000278773		C	6.444729	-4.7332	3.021673	-4.7332
ENSG00000200259	SNORD35A	C	4.616228	-7.90095	1.142202	2.142524
ENSG00000222118	RNA5SP487	C	8.125907	-2.70864	-2.70864	-2.70864
ENSG00000239039	SNORD13	C	3.506405	-7.85695	1.846094	2.504454
ENSG00000222308	RNA5SP198	C	7.854884	-2.61829	-2.61829	-2.61829
ENSG00000248422		C	7.802107	-2.6007	-2.6007	-2.6007
ENSG00000252804	RNU6-958P	C	5.333825	-6.83574	0.792024	0.709893
ENSG00000228930	MTCO1P3	C	7.245665	-2.41522	-2.41522	-2.41522
ENSG00000274210	RNVU1-27	C	5.293331	-6.25178	1.211136	-0.25268
ENSG00000278487		C	7.105654	-2.36855	-2.36855	-2.36855
ENSG00000222111	RN7SKP148	C	6.720503	-2.24017	-2.24017	-2.24017
ENSG00000270405		C	6.715543	-2.23851	-2.23851	-2.23851
ENSG00000210825	SNORA40	C	4.30932	-6.23489	0.942399	0.983173
ENSG00000239809		C	6.268246	-0.17262	-3.04781	-3.04781
ENSG00000243426	RN7SL454P	C	6.509037	-2.16968	-2.16968	-2.16968
ENSG00000280317		C	6.45461	-2.15154	-2.15154	-2.15154
ENSG00000237639		C	6.428968	-2.14299	-2.14299	-2.14299
ENSG00000242241	RN7SL306P	C	6.348569	-2.11619	-2.11619	-2.11619
ENSG00000242101	RN7SL416P	C	6.326712	-2.1089	-2.1089	-2.1089
ENSG00000266936		C	6.107428	-2.78197	-2.78197	-0.54349
ENSG00000206948	SNORA36A	C	2.927056	-6.20545	1.134043	2.144352
ENSG00000225208		C	6.243686	-2.08123	-2.08123	-2.08123
ENSG00000285723		C	4.709596	-3.48652	-3.48652	2.263444
ENSG00000242325	RPS12P31	C	6.208171	-2.06939	-2.06939	-2.06939
ENSG00000243911	RN7SL430P	C	6.190846	-2.06362	-2.06362	-2.06362
ENSG00000200394	SNORA38B	C	3.17266	-6.02634	1.457838	1.395842
ENSG00000252978	RN7SKP183	C	6.149861	-2.04995	-2.04995	-2.04995
ENSG00000224906	SRP14P1	C	6.071647	-2.02388	-2.02388	-2.02388
ENSG00000237349		C	6.01705	-2.00568	-2.00568	-2.00568
ENSG00000267340	ENSG00000267340	C	5.998503	-1.9995	-1.9995	-1.9995
ENSG00000232879	GLRX5P2	C	5.960254	-1.98675	-1.98675	-1.98675
ENSG00000234640		C	5.919097	-1.97303	-1.97303	-1.97303
ENSG00000251366	DBIP2	C	5.887317	-1.96244	-1.96244	-1.96244
ENSG00000235802	HCFC1-AS1	C	5.887059	-1.96235	-1.96235	-1.96235
ENSG00000275586	Metazoa_SRP	C	5.885124	-1.96171	-1.96171	-1.96171

ENSG00000222931	RN7SKP205	C	5.877776	-1.95926	-1.95926	-1.95926
ENSG00000225443		C	5.867578	-1.95586	-1.95586	-1.95586
ENSG00000233819	LCEP1	C	5.867578	-1.95586	-1.95586	-1.95586
ENSG00000277315		C	5.433778	0.126643	-2.14629	-3.41413
ENSG00000249930		C	5.814887	-1.9383	-1.9383	-1.9383
ENSG00000243437	RN7SL370P	C	5.808908	-1.9363	-1.9363	-1.9363
ENSG00000275362	Metazoa_SRP	C	5.808383	-1.93613	-1.93613	-1.93613
ENSG00000180389	ATP5F1EP2	C	5.803828	-1.93461	-1.93461	-1.93461
ENSG00000226046	AP1S2P1	C	5.79063	-1.93021	-1.93021	-1.93021
ENSG00000234152	ELOBP1	C	5.790276	-1.93009	-1.93009	-1.93009
ENSG00000251976	RN7SKP141	C	5.755268	-1.91842	-1.91842	-1.91842
ENSG00000224797		C	5.742967	-1.91432	-1.91432	-1.91432
ENSG00000258283		C	5.736958	-1.91232	-1.91232	-1.91232
ENSG00000186967	KRTAP19-4	C	5.721772	-1.90726	-1.90726	-1.90726
ENSG00000084110	HAL	C	5.716304	-1.9971	-1.9971	-1.7221
ENSG00000222220	RN7SKP129	C	5.690985	-1.89699	-1.89699	-1.89699
ENSG00000227960		C	5.66101	-1.887	-1.887	-1.887
ENSG00000256984		C	5.65627	-1.88542	-1.88542	-1.88542
ENSG00000222685	RN7SKP119	C	5.636112	-1.8787	-1.8787	-1.8787
ENSG00000235174	RPL39P3	C	5.184032	-3.55103	-0.01026	-1.62275
ENSG00000243049	RN7SL33P	C	5.614058	-1.87135	-1.87135	-1.87135
ENSG00000234262	ENSG00000234262	C	5.611235	-1.87041	-1.87041	-1.87041
ENSG00000228626		C	5.589576	-1.86319	-1.86319	-1.86319
ENSG00000201395	RN7SKP257	C	5.586899	-1.8623	-1.8623	-1.8623
ENSG00000270685	IGHV1OR15-6	C	5.547653	-1.84922	-1.84922	-1.84922
ENSG00000140522	RLBP1	C	5.208674	0.032941	-2.62081	-2.62081
ENSG00000243366	RN7SL60P	C	5.525128	-1.84171	-1.84171	-1.84171
ENSG00000226405		C	5.520688	-1.84023	-1.84023	-1.84023
ENSG00000278099	RNVU1-2A	C	2.923318	-5.37797	1.001082	1.453568
ENSG00000248432	NA	C	5.51441	-1.83814	-1.83814	-1.83814
ENSG00000233767	PSMA6P3	C	5.514026	-1.83801	-1.83801	-1.83801
ENSG00000252704	RN7SKP277	C	5.510988	-1.837	-1.837	-1.837
ENSG00000201423	RN7SKP246	C	5.508222	-1.83607	-1.83607	-1.83607
ENSG00000233440	HMGAI1P6	C	5.506583	-1.83553	-1.83553	-1.83553
ENSG00000234333	CYCSP53	C	5.502862	-1.83429	-1.83429	-1.83429
ENSG00000248607		C	5.493345	-1.83111	-1.83111	-1.83111
ENSG00000224541		C	5.408548	-2.24503	-0.91849	-2.24503
ENSG00000254571		C	5.479704	-1.82657	-1.82657	-1.82657

ENSG00000239200	RPL22P20	C	5.457114	-1.81904	-1.81904	-1.81904
ENSG00000213558	HMG2N2P32	C	5.442391	-1.99149	-1.99149	-1.45942
ENSG00000253763	IGHV3-6	C	5.453723	-1.81791	-1.81791	-1.81791
ENSG00000239494	RN7SL333P	C	5.453219	-1.81774	-1.81774	-1.81774
ENSG00000253993		C	5.420864	-1.80695	-1.80695	-1.80695
ENSG00000215037	VENTXP2	C	5.4203	-1.80677	-1.80677	-1.80677
ENSG00000278877		C	5.417509	-1.80584	-1.80584	-1.80584
ENSG00000229508	PHKG1P4	C	5.398819	-1.79961	-1.79961	-1.79961
ENSG00000239413	RPS27P23	C	5.395595	-1.79853	-1.79853	-1.79853
ENSG00000231228	ARPP19P1	C	5.384887	-1.79496	-1.79496	-1.79496
ENSG00000218337		C	5.376504	-1.79217	-1.79217	-1.79217
ENSG00000214903	RPS15AP3	C	5.376128	-1.79204	-1.79204	-1.79204
ENSG00000232895		C	5.370811	-1.79027	-1.79027	-1.79027
ENSG00000273512		C	5.370403	-1.79013	-1.79013	-1.79013
ENSG00000273321		C	5.226207	-0.60401	-2.3111	-2.3111
ENSG00000272669		C	5.357436	-1.84967	-1.84967	-1.6581
ENSG00000249843		C	5.356764	-1.78559	-1.78559	-1.78559
ENSG00000260999		C	3.597831	-4.89907	1.098022	0.203213
ENSG00000256192	OOEPP2	C	5.350943	-1.78365	-1.78365	-1.78365
ENSG00000270695		C	5.350288	-1.78343	-1.78343	-1.78343
ENSG00000232470		C	5.349302	-1.7831	-1.7831	-1.7831
ENSG00000263345		C	5.236601	-2.24733	-2.24733	-0.74195
ENSG00000272444		C	5.339922	-1.77997	-1.77997	-1.77997
ENSG00000279001		C	5.336876	-1.77896	-1.77896	-1.77896
ENSG00000265490		C	5.332248	-1.77742	-1.77742	-1.77742
ENSG00000233979	RPL22P21	C	5.302397	-1.76747	-1.76747	-1.76747
ENSG00000263841	RN7SL44P	C	5.297279	-1.76576	-1.76576	-1.76576
ENSG00000249540		C	5.295457	-1.76515	-1.76515	-1.76515
ENSG00000237358		C	5.287444	-1.76248	-1.76248	-1.76248
ENSG00000222452	RN7SKP59	C	5.27807	-1.75936	-1.75936	-1.75936
ENSG00000258345		C	5.070345	-0.30871	-2.38082	-2.38082
ENSG00000272837	OR10AE3P	C	5.274729	-1.75824	-1.75824	-1.75824
ENSG00000241566	IGKV2D-24	C	5.26208	-1.75403	-1.75403	-1.75403
ENSG00000271751		C	4.465019	-2.79364	1.122262	-2.79364
ENSG00000107831	FGF8	C	5.232838	-1.93702	-1.3588	-1.93702
ENSG00000283123	RARRES2P11	C	5.240977	-1.74699	-1.74699	-1.74699
ENSG00000276179		C	5.234273	-1.74476	-1.74476	-1.74476
ENSG00000244020	MT1HL1	C	5.231198	-1.74373	-1.74373	-1.74373

ENSG00000271986	RN7SL827P	C	5.212204	-1.7374	-1.7374	-1.7374
ENSG00000204670	IGKV1OR2-3	C	5.212195	-1.7374	-1.7374	-1.7374
ENSG00000150394	CDH8	C	4.75426	0.381852	-2.56806	-2.56806
ENSG00000251326	LINC02479	C	4.925349	-0.15437	-2.38549	-2.38549
ENSG00000248503		C	4.7783	0.254875	-2.51659	-2.51659
ENSG00000249312	ARL2BPP4	C	5.147963	-1.71599	-1.71599	-1.71599
ENSG00000253252		C	5.147331	-1.71578	-1.71578	-1.71578
ENSG00000270983		C	4.969113	-2.57225	-0.45223	-1.94464
ENSG00000228874		C	5.136749	-1.71225	-1.71225	-1.71225
ENSG00000134056	MRPS36 ENSG00000134056	C	4.253004	-4.06268	-0.62372	0.433399
ENSG00000223452	HMG2P18	C	5.126564	-1.70885	-1.70885	-1.70885
ENSG00000227432	ASIC4-AS1	C	5.125806	-1.7086	-1.7086	-1.7086
ENSG00000224142	AMMECRI-IT1	C	5.12574	-1.70858	-1.70858	-1.70858
ENSG00000276680		C	5.119902	-1.70663	-1.70663	-1.70663
ENSG00000175445	LPL	C	4.873414	-0.14735	-2.36303	-2.36303
ENSG00000250137		C	5.115067	-1.70502	-1.70502	-1.70502
ENSG00000260514		C	5.112258	-1.70409	-1.70409	-1.70409
ENSG00000268942	CKS1BP3	C	4.079344	-4.15064	0.694997	-0.6237
ENSG00000233849		C	5.080557	-1.69352	-1.69352	-1.69352
ENSG00000233376		C	5.060188	-1.68673	-1.68673	-1.68673
ENSG00000223118	RN7SKP102	C	5.053062	-1.68435	-1.68435	-1.68435
ENSG00000232807		C	4.958299	-0.73572	-2.10428	-2.11829
ENSG00000231660	RPS8P6	C	5.050046	-1.68335	-1.68335	-1.68335
ENSG00000211959	IGHV4-39	C	5.04966	-1.68322	-1.68322	-1.68322
ENSG00000232454		C	5.048041	-1.68268	-1.68268	-1.68268
ENSG00000255074		C	4.674774	0.227724	-2.45125	-2.45125
ENSG00000242365	NDUFA5P5	C	5.027066	-1.67569	-1.67569	-1.67569
ENSG00000241568	RN7SL338P	C	5.012172	-1.67072	-1.67072	-1.67072
ENSG00000231589		C	5.010296	-1.6701	-1.6701	-1.6701
ENSG00000183160	TMEM119	C	4.668683	0.157738	-2.41321	-2.41321
ENSG00000136488	CSH1	C	5.006703	-1.6689	-1.6689	-1.6689
ENSG00000211647	IGLV5-48	C	4.998746	-1.66625	-1.66625	-1.66625
ENSG00000255629		C	4.991095	-1.6637	-1.6637	-1.6637
ENSG00000262471		C	4.984708	-1.66157	-1.66157	-1.66157
ENSG00000214867	SRSF9P1	C	4.972749	-1.65758	-1.65758	-1.65758
ENSG00000250645		C	4.97076	-1.65692	-1.65692	-1.65692
ENSG00000204620	ENSG00000204620	C	4.763529	-2.24381	-0.27591	-2.24381

ENSG00000228431	ARL5AP3	C	4.960966	-1.65366	-1.65366	-1.65366
ENSG00000264186	SNRPCP4	C	4.939802	-1.85143	-1.85143	-1.23695
ENSG00000271075		C	4.80877	-0.80163	-2.69421	-1.31293
ENSG00000200492	U3	C	4.947668	-1.64922	-1.64922	-1.64922
ENSG00000255900		C	4.947668	-1.64922	-1.64922	-1.64922
ENSG00000284619		C	4.947668	-1.64922	-1.64922	-1.64922
ENSG00000239953	RN7SL273P	C	4.946594	-1.64886	-1.64886	-1.64886
ENSG00000275337	RN7SL680P	C	4.946594	-1.64886	-1.64886	-1.64886
ENSG00000234958	FABP5P13	C	4.932267	-1.64409	-1.64409	-1.64409
ENSG00000237887	RPL23AP32	C	4.469053	-2.47268	0.476299	-2.47268
ENSG00000225336	HMGB3P1	C	4.59002	0.086966	-2.33849	-2.33849
ENSG00000264754		C	4.893671	-1.63122	-1.63122	-1.63122
ENSG00000258092	ENSG00000258092	C	4.888264	-1.62942	-1.62942	-1.62942
ENSG00000232387	SKA2P1	C	4.861929	-1.90834	-1.31667	-1.63692
ENSG00000213133	PPP1R14BP5	C	4.875327	-1.62511	-1.62511	-1.62511
ENSG00000229827		C	4.86372	-1.62124	-1.62124	-1.62124
ENSG00000261938		C	4.86118	-1.62039	-1.62039	-1.62039
ENSG00000229722		C	4.643371	-0.19447	-2.22445	-2.22445
ENSG00000243373	RN7SL173P	C	4.858331	-1.61944	-1.61944	-1.61944
ENSG00000148671	ADIRF	C	2.135252	-4.75185	1.98163	0.634964
ENSG00000277246		C	4.854	-1.618	-1.618	-1.618
ENSG00000222460	RN7SKP271	C	4.044994	0.224973	-0.4267	-3.84327
ENSG00000265737		C	4.843787	-1.6146	-1.6146	-1.6146
ENSG00000267383		C	4.824425	-1.24153	-1.79145	-1.79145
ENSG00000229485	KSR1P1	C	4.827471	-1.60916	-1.60916	-1.60916
ENSG00000257763	OR5BK1P	C	4.82497	-1.60832	-1.60832	-1.60832
ENSG00000269811	SCGB2B3P	C	4.815779	-1.60526	-1.60526	-1.60526
ENSG00000110203	FOLR3	C	4.814591	-1.60486	-1.60486	-1.60486
ENSG00000276131		C	4.664242	-2.09086	-0.48252	-2.09086
ENSG00000253506	NACA2	C	4.390765	0.351523	-2.51162	-2.23067
ENSG00000188850		C	4.795911	-1.59864	-1.59864	-1.59864
ENSG00000218902	PTMAP3	C	4.788504	-1.59617	-1.59617	-1.59617
ENSG00000173810	PPIAP7	C	4.784053	-1.59468	-1.59468	-1.59468
ENSG00000105122	RASAL3	C	4.781671	-1.59389	-1.59389	-1.59389
ENSG00000276223	ENSG00000276223	C	4.780862	-1.59362	-1.59362	-1.59362
ENSG00000239825	RN7SL549P	C	4.779623	-1.59321	-1.59321	-1.59321
ENSG00000277543		C	4.773298	-1.5911	-1.5911	-1.5911
ENSG00000238259	PHF5GP	C	4.77101	-1.59034	-1.59034	-1.59034

ENSG00000267669	ENSG00000267669	C	4.770142	-1.59005	-1.59005	-1.59005
ENSG00000253242	IGLVIV-64	C	4.760444	-1.58681	-1.58681	-1.58681
ENSG00000259547	CYCSP2	C	4.760444	-1.58681	-1.58681	-1.58681
ENSG00000011566	MAP4K3 ENSG00000011566	C	2.736995	-4.56625	1.204054	0.625198
ENSG00000235840		C	4.757009	-1.58567	-1.58567	-1.58567
ENSG00000241634		C	4.653971	-2.36769	-1.50692	-0.77936
ENSG00000254463	PPIAP41	C	4.513623	-0.15429	-2.17967	-2.17967
ENSG00000261082	LINC01228	C	4.725958	-1.57532	-1.57532	-1.57532
ENSG00000213238		C	4.724873	-1.57496	-1.57496	-1.57496
ENSG00000279629		C	4.723743	-1.60802	-1.60802	-1.50771
ENSG00000258851		C	4.720704	-1.57357	-1.57357	-1.57357
ENSG00000271680		C	4.717044	-1.57235	-1.57235	-1.57235
ENSG00000172548	NIPAL4	C	4.57321	-0.45815	-1.88967	-2.22538
ENSG00000264174		C	4.714884	-1.57163	-1.57163	-1.57163
ENSG00000243828		C	4.713372	-1.57112	-1.57112	-1.57112
ENSG00000253153		C	4.707582	-1.56919	-1.56919	-1.56919
ENSG00000201715	RN7SKP133	C	4.702897	-1.56763	-1.56763	-1.56763
ENSG00000108849	PPY	C	4.698459	-1.56615	-1.56615	-1.56615
ENSG00000177736	FXNP2	C	4.697389	-1.5658	-1.5658	-1.5658
ENSG00000259645		C	4.69256	-1.56419	-1.56419	-1.56419
ENSG00000280014		C	4.594586	-0.64144	-1.97658	-1.97658
ENSG00000275878	RN7SL43P	C	4.674726	-1.55824	-1.55824	-1.55824
ENSG00000264273		C	4.44196	-2.67833	-1.46048	-0.30315
ENSG00000243264	IGKV2D-29	C	4.668334	-1.55611	-1.55611	-1.55611
ENSG00000211802	TRAV22	C	4.661977	-1.55399	-1.55399	-1.55399
ENSG00000223604	RPL17P13	C	4.661206	-1.55374	-1.55374	-1.55374
ENSG00000169862	CTNND2	C	4.398777	-0.04586	-2.17646	-2.17646
ENSG00000256923		C	4.649357	-1.54979	-1.54979	-1.54979
ENSG00000237711	MTCO3P11	C	4.646378	-1.54879	-1.54879	-1.54879
ENSG00000230558	CEACAMP2	C	4.641078	-1.54703	-1.54703	-1.54703
ENSG00000249338	HMGB1P47	C	4.638999	-1.54633	-1.54633	-1.54633
ENSG00000167701	GPT	C	4.487376	-0.40174	-2.04282	-2.04282
ENSG00000265125		C	4.628991	-1.543	-1.543	-1.543
ENSG00000213237	PTMAP10	C	4.591602	-1.97287	-1.53884	-1.07989
ENSG00000234922	TSEN15P3	C	4.619949	-1.53998	-1.53998	-1.53998
ENSG00000241745	RN7SL788P ENSG00000241745	C	4.609808	-1.5366	-1.5366	-1.5366

ENSG00000260507		C	4.609778	-1.53659	-1.53659	-1.53659
ENSG00000279735		C	4.603712	-1.53457	-1.53457	-1.53457
ENSG00000239820	RN7SL213P	C	4.600265	-1.53342	-1.53342	-1.53342
ENSG00000100218	RSPH14	C	4.56874	-1.76374	-1.76374	-1.04127
ENSG00000264812		C	4.350305	-0.05937	-2.14547	-2.14547
ENSG00000217527	RPS16P5	C	4.225589	-2.94569	-1.18781	-0.09209
ENSG00000248161		C	4.577702	-1.5259	-1.5259	-1.5259
ENSG00000213935	RPL22P16	C	4.577308	-1.52577	-1.52577	-1.52577
ENSG00000240853	RN7SL328P	C	4.576364	-1.52545	-1.52545	-1.52545
ENSG00000249318		C	4.572655	-1.52422	-1.52422	-1.52422
ENSG00000278580		C	4.570297	-1.52343	-1.52343	-1.52343
ENSG00000229943		C	4.568727	-1.52291	-1.52291	-1.52291
ENSG00000257529	RPL36A-HNRNPH2	C	4.277954	-2.17123	-2.17123	0.0645
ENSG00000272371		C	4.558877	-1.51963	-1.51963	-1.51963
ENSG00000276508		C	4.556473	-1.51882	-1.51882	-1.51882
ENSG00000224189	HAGLR	C	4.254834	0.091213	-2.17302	-2.17302
ENSG00000136931	NR5A1	C	4.491997	-0.84471	-1.82364	-1.82364
ENSG00000244217	RPS4XP10	C	4.538676	-1.51289	-1.51289	-1.51289
ENSG00000270553		C	4.538252	-1.51275	-1.51275	-1.51275
ENSG00000280360		C	4.537174	-1.51239	-1.51239	-1.51239
ENSG00000260260	SNHG19	C	2.718958	-4.32874	0.70921	0.900575
ENSG00000278933		C	4.534082	-1.51136	-1.51136	-1.51136
ENSG00000253744		C	3.715352	-2.46165	1.207945	-2.46165
ENSG00000188580	NKAIN2	C	4.223025	0.130805	-2.17692	-2.17692
ENSG00000240579		C	4.426554	-0.70106	-2.19317	-1.53233
ENSG00000146001	PCDHB18P	C	4.191025	0.192178	-2.06189	-2.32131
ENSG00000251697	RN7SKP24	C	4.517575	-1.50586	-1.50586	-1.50586
ENSG00000271355		C	4.514726	-1.50491	-1.50491	-1.50491
ENSG00000259086	KIAA1143P1	C	4.155623	-3.03763	-0.44045	-0.67754
ENSG00000229854		C	4.500828	-1.50028	-1.50028	-1.50028
ENSG00000287903		C	4.49978	-1.49993	-1.49993	-1.49993
ENSG00000232096	YPEL5P1	C	4.494389	-1.49813	-1.49813	-1.49813
ENSG00000253730		C	4.493624	-1.49787	-1.49787	-1.49787
ENSG00000287802		C	4.276689	-0.14613	-2.06528	-2.06528
ENSG00000254500	RANP3	C	4.464543	-1.68922	-1.0861	-1.68922
ENSG00000272192	PDE7A-DT	C	4.483252	-1.49442	-1.49442	-1.49442
ENSG00000254495		C	4.116178	0.301915	-2.20905	-2.20905
ENSG00000272459	FAM193B-DT	C	4.331972	-2.43249	-1.3009	-0.59859

ENSG00000230188		C	4.476656	-1.49222	-1.49222	-1.49222
ENSG00000178762	H2BC2P	C	4.473957	-1.49132	-1.49132	-1.49132
ENSG00000228473	LIN28AP2	C	4.470001	-1.49	-1.49	-1.49
ENSG00000236281	NDUFB9P2	C	4.449508	-1.67559	-1.09834	-1.67559
ENSG00000230820		C	4.465665	-1.48855	-1.48855	-1.48855
ENSG00000260590		C	4.463341	-1.48778	-1.48778	-1.48778
ENSG00000237747		C	4.461048	-1.48702	-1.48702	-1.48702
ENSG00000149380	P4HA3	C	4.129822	0.185665	-2.15774	-2.15774
ENSG00000231492		C	4.44956	-1.48319	-1.48319	-1.48319
ENSG00000226609		C	4.237873	-0.13732	-2.02477	-2.07579
ENSG00000243359	RN7SL815P	C	4.448159	-1.48272	-1.48272	-1.48272
ENSG00000196782	MAML3	C	4.100435	0.252843	-2.17664	-2.17664
ENSG00000229941	PDE11A-AS1	C	4.443503	-1.48117	-1.48117	-1.48117
ENSG00000242770	CD200R1L-AS1	C	4.443307	-1.4811	-1.4811	-1.4811
ENSG00000228884	RPL23AP26	C	4.440649	-1.48022	-1.48022	-1.48022
ENSG00000277651		C	4.43963	-1.47988	-1.47988	-1.47988
ENSG00000267927	ENSG00000267927	C	4.43811	-1.47937	-1.47937	-1.47937
ENSG00000104415	CCN4	C	4.326331	-0.52347	-1.90143	-1.90143
ENSG00000277728		C	4.080874	-2.30287	-2.04706	0.269054
ENSG00000233456	LINC01077	C	4.433049	-1.47768	-1.47768	-1.47768
ENSG00000274612		C	4.43206	-1.47735	-1.47735	-1.47735
ENSG00000229131	ENSG00000229131	C	4.431015	-1.47701	-1.47701	-1.47701
ENSG00000236546	MYCL-AS1	C	4.161173	0.021751	-1.92075	-2.26217
ENSG00000234777	LINC02529	C	4.425107	-1.47504	-1.47504	-1.47504
ENSG00000278464		C	4.270734	-0.35768	-1.95653	-1.95653
ENSG00000261486	RARRES2P9	C	4.416685	-1.47223	-1.47223	-1.47223
ENSG00000256176		C	4.415589	-1.47186	-1.47186	-1.47186
ENSG00000244063		C	4.415553	-1.47185	-1.47185	-1.47185
ENSG00000268810		C	4.138412	-0.7354	-2.82151	-0.5815
ENSG00000261151		C	4.411395	-1.47047	-1.47047	-1.47047
ENSG00000283020	DUX4L37	C	4.408216	-1.46941	-1.46941	-1.46941
ENSG00000224438	RPL23AP14 ENSG00000224438	C	4.369568	-1.72893	-1.72893	-0.91171
ENSG00000242978	PPIAP83	C	4.403679	-1.46789	-1.46789	-1.46789
ENSG00000242860	RN7SL180P	C	4.403476	-1.46783	-1.46783	-1.46783
ENSG00000261071		C	4.112275	-0.00053	-2.55044	-1.5613
ENSG00000235459	RPS26P31	C	4.240345	-2.39769	-0.46147	-1.38119
ENSG00000223811		C	4.399643	-1.46655	-1.46655	-1.46655

ENSG00000232261		C	4.397006	-1.46567	-1.46567	-1.46567
ENSG00000232022	FAAHP1	C	3.958727	-2.74081	0.345294	-1.56321
ENSG00000267703		C	4.393281	-1.46443	-1.46443	-1.46443
ENSG00000234854	LINC00676	C	4.393113	-1.46437	-1.46437	-1.46437
ENSG00000272255		C	4.39016	-1.46339	-1.46339	-1.46339
ENSG00000288532		C	4.388456	-1.46282	-1.46282	-1.46282
ENSG00000258443		C	4.329517	-0.77988	-1.77482	-1.77482
ENSG00000274214		C	4.383214	-1.46107	-1.46107	-1.46107
ENSG00000244632	RN7SL863P ENSG00000244632	C	4.381631	-1.46054	-1.46054	-1.46054
ENSG00000231278	OR9S24P	C	4.380952	-1.46032	-1.46032	-1.46032
ENSG00000255434		C	4.378987	-1.45966	-1.45966	-1.45966
ENSG00000258352	IFITM3P6	C	4.374838	-1.45828	-1.45828	-1.45828
ENSG00000270400		C	4.374041	-1.45801	-1.45801	-1.45801
ENSG00000223381	LINC02661	C	4.365383	-1.45513	-1.45513	-1.45513
ENSG00000165164	CFAP47	C	4.138127	-0.07089	-2.03362	-2.03362
ENSG00000271788		C	4.364042	-1.45468	-1.45468	-1.45468
ENSG00000260183		C	4.359913	-1.4533	-1.4533	-1.4533
ENSG00000278973		C	4.044144	-0.10085	-1.20761	-2.73568
ENSG00000230825		C	3.992382	0.313189	-2.15279	-2.15279
ENSG00000171509	RXFP1	C	4.354878	-1.45163	-1.45163	-1.45163
ENSG00000285772		C	4.061187	0.128141	-2.09466	-2.09466
ENSG00000218143	ERHP2	C	4.349452	-1.44982	-1.44982	-1.44982
ENSG00000211643	IGLV5-52	C	4.343646	-1.44788	-1.44788	-1.44788
ENSG00000254805	SNRPCP14	C	4.343333	-1.44778	-1.44778	-1.44778
ENSG00000260048	IGHV1OR16-3	C	4.343235	-1.44775	-1.44775	-1.44775
ENSG00000257074	RPL29P33	C	4.318898	-1.82751	-1.36076	-1.13063
ENSG00000224426	SLC31A1P1	C	4.333023	-1.5623	-1.20842	-1.5623
ENSG00000225253	ENSG00000225253	C	4.338044	-1.44601	-1.44601	-1.44601
ENSG00000286882		C	4.305785	-0.95187	-1.67696	-1.67696
ENSG00000278472		C	4.245124	-1.82675	-0.59163	-1.82675
ENSG00000253616		C	4.005144	-2.11371	-2.11371	0.222284
ENSG00000243516	RPL12P40	C	4.32937	-1.44312	-1.44312	-1.44312
ENSG00000232540	RPL36P19	C	4.32834	-1.44278	-1.44278	-1.44278
ENSG00000240905	RN7SL798P	C	4.32834	-1.44278	-1.44278	-1.44278
ENSG00000256739		C	4.328003	-1.44267	-1.44267	-1.44267
ENSG00000225669	RPL23AP27	C	4.327368	-1.44246	-1.44246	-1.44246
ENSG00000279527	ENSG00000279527	C	4.326317	-1.44211	-1.44211	-1.44211

ENSG00000271624		C	4.149388	-0.23162	-1.95889	-1.95889
ENSG00000130558	OLFM1	C	4.20496	-0.45565	-1.87465	-1.87465
ENSG00000266050		D	5.777541	4.229048	-5.00329	-5.00329
ENSG00000275992	RN7SL327P	D	5.936279	2.200446	-4.06836	-4.06836
ENSG00000277599		D	5.455615	2.756032	-4.10582	-4.10582
ENSG00000241097		D	5.067157	2.918095	-3.99263	-3.99263
ENSG00000202260	RN7SKP69	D	3.889711	4.059797	-3.97475	-3.97475
ENSG00000274594		D	4.978602	2.655566	-3.81708	-3.81708
ENSG00000223120	RN7SKP181	D	3.509235	4.18652	-3.84788	-3.84788
ENSG00000240785	RPL36AP21	D	5.144217	2.263004	-3.70361	-3.70361
ENSG00000242079	RN7SL318P	D	4.683236	2.850571	-3.7669	-3.7669
ENSG00000202415	RN7SKP269	D	3.381717	4.189533	-4.12871	-3.44254
ENSG00000229749	COTL1P1	D	5.006731	2.335917	-3.67132	-3.67132
ENSG00000222976	RN7SKP94	D	3.586806	3.903548	-3.74518	-3.74518
ENSG00000253154		D	5.234613	1.840618	-3.53762	-3.53762
ENSG00000276213	Metazoa_SRP	D	4.878899	2.135082	-2.4158	-4.59818
ENSG00000200895	RN7SKP245	D	4.038944	3.372189	-3.70557	-3.70557
ENSG00000234559	RPL22P7	D	5.029913	2.08676	-3.55834	-3.55834
ENSG00000261837		D	3.861311	3.543176	-3.70224	-3.70224
ENSG00000230101	TUBB3P2	D	5.495605	1.177168	-3.33639	-3.33639
ENSG00000229738		D	5.087075	1.885069	-3.48607	-3.48607
ENSG00000270313	COX6CP16	D	4.409594	2.828323	-3.61896	-3.61896
ENSG00000254298		D	4.020327	3.275783	-3.64806	-3.64806
ENSG00000222386	RN7SKP86	D	4.384859	2.831695	-3.60828	-3.60828
ENSG00000272832		D	4.254715	2.959121	-3.60692	-3.60692
ENSG00000241668	RPL19P11	D	4.30223	2.898495	-3.60036	-3.60036
ENSG00000265559	RN7SL652P	D	3.836206	3.426073	-3.63114	-3.63114
ENSG00000198795	ZNF521	D	3.110061	4.117779	-3.61392	-3.61392
ENSG00000148795	CYP17A1	D	4.078653	3.148673	-3.61366	-3.61366
ENSG00000199218	RN7SKP184	D	5.0517	1.77543	-3.41356	-3.41356
ENSG00000228938	SNRPD2P1	D	3.111232	4.065378	-3.58831	-3.58831
ENSG00000231812	SNRPCP9	D	4.493288	2.579925	-3.53661	-3.53661
ENSG00000236907		D	4.57283	2.421171	-3.497	-3.497
ENSG00000270584		D	5.494692	0.861137	-3.17791	-3.17791
ENSG00000242595	RPL26P26 ENSG00000242595	D	3.939039	3.182305	-3.56067	-3.56067
ENSG00000223836		D	3.570646	3.505702	-2.92615	-4.15019
ENSG00000272703		D	3.934796	3.168541	-3.55167	-3.55167

ENSG00000226621		D	3.726944	3.372944	-3.54994	-3.54994
ENSG00000248377	HMG1P9	D	5.324792	1.118303	-3.22155	-3.22155
ENSG00000201201	RN7SKP118	D	5.246299	1.138242	-3.37259	-3.01195
ENSG00000255377	DUXAP5	D	3.749813	3.249394	-3.4996	-3.4996
ENSG00000223012	RN7SKP264	D	3.757402	3.235414	-3.49641	-3.49641
ENSG00000235857	CTBP2P1	D	3.863277	3.047976	-3.45563	-3.45563
ENSG00000269903		D	5.289613	0.917486	-3.10355	-3.10355
ENSG00000226776	KRTAP3-4P	D	3.95777	2.920002	-3.43889	-3.43889
ENSG00000243195	TUBBP11	D	3.724216	3.175286	-3.44975	-3.44975
ENSG00000225533	PAWRP1	D	5.299914	0.802559	-3.05124	-3.05124
ENSG00000196405	EVL	D	4.693723	1.86362	-3.27867	-3.27867
ENSG00000238168	IFITM3P5 ENSG00000238168	D	4.396085	2.252562	-3.32432	-3.32432
ENSG0000010610	CD4	D	4.143398	2.581069	-3.49795	-3.22652
ENSG00000271230		D	4.291075	2.381536	-3.33631	-3.33631
ENSG00000186977	KRTAP19-5	D	3.677935	3.114821	-3.39638	-3.39638
ENSG00000178722	C5orf64 ENSG00000178722	D	3.878996	2.887802	-3.3834	-3.3834
ENSG00000267252	LINC01255	D	1.73929	4.722825	-3.23106	-3.23106
ENSG00000240432	KRTAP13-3	D	4.023842	2.701716	-3.36278	-3.36278
ENSG00000255342		D	3.537731	3.224844	-3.38129	-3.38129
ENSG00000215351	PPIAP1	D	3.446643	3.296059	-3.37135	-3.37135
ENSG00000243365	RN7SL278P	D	4.081668	2.575542	-3.32861	-3.32861
ENSG00000254092		D	4.409808	2.112112	-3.50727	-3.01465
ENSG00000287384	ENSG00000287384	D	2.716078	3.949254	-3.16653	-3.4988
ENSG00000141837	CACNA1A ENSG00000141837	D	3.188819	3.365721	-2.2677	-4.28684
ENSG00000283547	MTATP6P8	D	2.758682	3.88902	-3.32385	-3.32385
ENSG00000137648	TMPRSS4	D	4.599951	1.780605	-3.13409	-3.24646
ENSG00000255391		D	3.690301	2.960328	-3.32531	-3.32531
ENSG00000235142	LINC02532	D	4.252139	2.247541	-3.1668	-3.33288
ENSG00000261289		D	1.982422	4.436649	-3.20954	-3.20954
ENSG00000272154		D	4.380771	2.046904	-3.21384	-3.21384
ENSG00000242020	RN7SL68P	D	4.235512	2.238935	-2.99554	-3.47891
ENSG00000185847	LINC01405	D	4.183603	2.301128	-2.92763	-3.5571
ENSG00000137699	TRIM29	D	3.563615	3.010378	-3.287	-3.287
ENSG00000177182	CLVS1	D	3.853954	2.670702	-3.26233	-3.26233
ENSG00000227306	LINC02708	D	3.835016	2.686273	-3.26064	-3.26064

ENSG00000255105	PTMAP15	D	3.810583	2.713085	-3.26183	-3.26183
ENSG0000010810	FYN	D	4.036726	2.42315	-3.22994	-3.22994
ENSG00000265337		D	3.837549	2.668235	-3.25289	-3.25289
ENSG00000226087		D	3.355224	3.193101	-3.27416	-3.27416
ENSG00000186487	MYT1L	D	3.441962	3.052051	-2.77533	-3.71869
ENSG00000228340	MIR646HG	D	3.497091	3.010483	-3.29035	-3.21722
ENSG00000172016	REG3A	D	2.901831	3.584518	-3.24317	-3.24317
ENSG00000211657	IGLV3-32	D	2.030418	4.272224	-3.15132	-3.15132
ENSG00000176231	OR10H4	D	3.804285	2.626839	-3.21556	-3.21556
ENSG00000230256	FGFR1OP2P1	D	3.910915	2.495655	-3.20329	-3.20329
ENSG00000141506	PIK3R5	D	3.693713	2.745167	-3.21944	-3.21944
ENSG00000244356	RN7SL398P	D	3.757679	2.665102	-3.21139	-3.21139
ENSG00000009790	TRAF3IP3	D	4.38867	1.80618	-2.85142	-3.34343
ENSG00000161249	DMKN	D	3.345849	3.118912	-3.23238	-3.23238
ENSG00000118263	KLF7	D	2.587866	3.801954	-3.19491	-3.19491
ENSG00000162946	DISC1	D	4.739559	1.199401	-2.89534	-3.04362
ENSG00000106536	POU6F2	D	4.01886	2.300569	-3.15971	-3.15971
ENSG00000222842	RN7SKP168	D	3.920665	2.420559	-3.17061	-3.17061
ENSG00000226674	TEX41	D	3.64707	2.749997	-3.19853	-3.19853
ENSG00000243094	RPL32P2	D	3.704428	2.682214	-3.19332	-3.19332
ENSG00000234279	LINC01937	D	3.808889	2.550634	-3.17976	-3.17976
ENSG00000166349	RAG1	D	4.795756	1.033545	-2.90391	-2.92539
ENSG00000242756	RHOT1P3	D	3.439702	2.938885	-3.51238	-2.86621
ENSG00000277501		D	3.69048	2.655927	-2.8904	-3.456
ENSG00000215156		D	3.324294	3.063131	-3.10675	-3.28068
ENSG00000254529	MRGPRX7P	D	4.106881	2.126667	-3.11677	-3.11677
ENSG00000253817		D	3.029031	3.348841	-3.18894	-3.18894
ENSG00000110436	SLC1A2	D	3.40473	2.956486	-3.18061	-3.18061
ENSG00000278698		D	3.576953	2.764373	-3.17066	-3.17066
ENSG00000254857	MRGPRX12P	D	2.999998	3.353808	-3.1769	-3.1769
ENSG00000114378	HYAL1	D	4.338374	1.730296	-2.85739	-3.21128
ENSG00000197847	SLC22A20P	D	2.456708	3.800945	-3.45879	-2.79886
ENSG00000221855	TAS2R41	D	4.11785	2.058623	-3.08824	-3.08824
ENSG00000253274	IGHV1-67	D	1.686104	4.363247	-3.02468	-3.02468
ENSG00000231933	MYO18B-AS1 ENSG00000231933	D	3.203635	3.071397	-2.60232	-3.67271
ENSG00000101204	CHRNA4	D	4.756841	0.96701	-2.86193	-2.86193
ENSG00000236829		D	3.28194	3.023625	-2.89882	-3.40674

ENSG00000246379		D	3.445752	2.840588	-2.89532	-3.39102
ENSG00000213050	TPM3P1	D	3.468713	2.816819	-3.0773	-3.20823
ENSG00000249550	LINC01234	D	3.433221	2.843175	-3.1382	-3.1382
ENSG00000251579		D	3.481017	2.78784	-3.13443	-3.13443
ENSG00000228430		D	4.187542	1.885745	-3.03664	-3.03664
ENSG00000259140		D	3.28011	2.971835	-2.75303	-3.49891
ENSG00000230683	DDTP1	D	2.880592	3.382109	-3.13135	-3.13135
ENSG00000271818	RN7SKP4	D	3.735169	2.463622	-2.87336	-3.32543
ENSG00000132514	CLEC10A	D	4.252802	1.760553	-3.00668	-3.00668
ENSG00000182985	CADM1	D	2.914566	3.34334	-3.12895	-3.12895
ENSG00000213262	VDAC2P3	D	1.752999	4.255264	-3.00413	-3.00413
ENSG00000243014	PTMAP8	D	3.866964	2.28616	-2.87357	-3.27956
ENSG00000253149	IGHVII-28-1	D	3.036603	3.218276	-3.12744	-3.12744
ENSG00000199683	RN7SKP185	D	3.058512	3.177853	-2.77622	-3.46015
ENSG00000197093	GAL3ST4	D	3.754138	2.426657	-3.0904	-3.0904
ENSG00000150672	DLG2	D	3.869499	2.277425	-3.07346	-3.07346
ENSG00000189238	LINC00943	D	2.521201	3.674401	-3.0978	-3.0978
ENSG00000158428	CATIP	D	2.967823	3.266623	-2.85988	-3.37457
ENSG00000006432	MAP3K9	D	3.780294	2.361481	-3.3685	-2.77328
ENSG00000219409		D	3.773942	2.383671	-3.07881	-3.07881
ENSG00000230054	TEX53	D	4.667781	1.003912	-2.83585	-2.83585
ENSG00000232751		D	4.270263	1.690963	-2.98061	-2.98061
ENSG00000160145	KALRN	D	3.377039	2.840154	-3.05048	-3.16671
ENSG00000109339	MAPK10 ENSG00000109339	D	3.906929	2.204148	-3.05554	-3.05554
ENSG00000131018	SYNE1	D	3.432868	2.774161	-3.10711	-3.09992
ENSG00000271681		D	3.442261	2.752929	-3.0976	-3.0976
ENSG00000260965	RPL23AP91	D	4.37477	1.495535	-2.93515	-2.93515
ENSG00000237314	RPL12P39	D	3.809467	2.307936	-3.0587	-3.0587
ENSG00000166546	BEAN1	D	3.759232	2.350963	-2.74598	-3.36422
ENSG00000135549	PKIB	D	4.132612	1.859988	-2.9963	-2.9963
ENSG00000261886	GOSR2-DT ENSG00000261886	D	4.29825	1.579073	-3.28085	-2.59648
ENSG00000271586		D	3.862188	2.224594	-3.04339	-3.04339
ENSG00000242222		D	2.647388	3.515365	-3.08138	-3.08138
ENSG00000146555	SDK1	D	3.469616	2.698325	-3.06335	-3.10459
ENSG00000236319		D	3.411617	2.763277	-3.08745	-3.08745
ENSG00000081237	PTPRC	D	3.447873	2.718614	-3.08324	-3.08324

ENSG00000198390	KRTAP13-1	D	2.979101	3.204764	-3.09193	-3.09193
ENSG00000119866	BCL11A	D	3.328924	2.844925	-3.14444	-3.02941
ENSG00000269353		D	3.343424	2.825678	-3.08455	-3.08455
ENSG00000278493		D	3.624757	2.488797	-3.29897	-2.81458
ENSG00000273481		D	3.939774	2.096181	-3.01798	-3.01798
ENSG00000111452	ADGRD1 ENSG00000111452	D	3.433522	2.717622	-3.07557	-3.07557
ENSG00000236790	LINC00299	D	2.818769	3.339384	-3.07908	-3.07908
ENSG00000110169	HPX	D	2.407022	3.676054	-3.36921	-2.71386
ENSG00000197405	C5AR1	D	4.451403	1.213924	-3.38557	-2.27976
ENSG00000226457	RPL22P3	D	3.953411	2.04998	-3.14277	-2.86062
ENSG00000279586		D	3.504978	2.616323	-3.06065	-3.06065
ENSG00000132437	DDC	D	3.500174	2.619745	-3.05996	-3.05996
ENSG00000243649	CFB	D	3.228098	2.910224	-3.04814	-3.09018
ENSG00000280197	C18orf12	D	4.728961	0.717914	-2.72344	-2.72344
ENSG00000231397		D	4.196903	1.669939	-2.93342	-2.93342
ENSG00000213068		D	4.136054	1.75786	-2.94696	-2.94696
ENSG00000226309	SMARCE1P2	D	3.060183	3.061821	-3.14789	-2.97412
ENSG00000272168	CASC15	D	2.640603	3.451977	-3.04629	-3.04629
ENSG00000204655	MOG	D	3.51976	2.560775	-3.04027	-3.04027
ENSG00000142515	KLK3	D	2.717443	3.376885	-3.04716	-3.04716
ENSG00000248538		D	2.217415	3.791356	-3.00439	-3.00439
ENSG00000259906		D	3.773781	2.226412	-3.0001	-3.0001
ENSG00000242759	LINC00882	D	2.755301	3.329679	-3.04249	-3.04249
ENSG00000127824	TUBA4A	D	2.707024	3.363962	-2.98601	-3.08497
ENSG00000074706	IPCEF1	D	3.199314	2.885509	-3.04241	-3.04241
ENSG00000232172	ENSG00000232172	D	1.529832	4.242698	-2.88627	-2.88627
ENSG00000106069	CHN2	D	4.312365	1.406819	-2.85959	-2.85959
ENSG00000263968	RN7SL381P	D	3.537658	2.314105	-3.9056	-1.94616
ENSG00000241216	SNAPC5P1	D	2.740481	3.320796	-3.03064	-3.03064
ENSG00000254403	OR10Y1P	D	3.615758	2.397766	-3.00676	-3.00676
ENSG00000232943	GGCTP2	D	4.70174	0.655131	-2.67844	-2.67844
ENSG00000232675		D	4.362504	1.302198	-2.83235	-2.83235
ENSG00000228415	PTMAP1	D	3.874661	2.023502	-3.28679	-2.61137
ENSG00000014257	ACP3	D	2.872416	3.18202	-3.02722	-3.02722
ENSG00000275963		D	2.830126	3.210211	-2.75115	-3.28919
ENSG00000159625	DRC7	D	3.513357	2.494637	-3.004	-3.004
ENSG00000235836	KIF3AP1	D	2.755097	3.283546	-3.01932	-3.01932

ENSG00000267769		D	3.483145	2.517322	-2.79724	-3.20323
ENSG00000170255	MRGPRX1	D	2.80907	3.224056	-3.01656	-3.01656
ENSG00000068615	REEP1	D	3.469576	2.498948	-2.55839	-3.41013
ENSG00000157423	HYDIN	D	2.419365	3.561958	-2.97506	-3.00627
ENSG00000265702		D	3.431377	2.564542	-3.20311	-2.79281
ENSG00000077279	DCX	D	4.473494	1.0242	-2.74885	-2.74885
ENSG00000237352	LINC01358	D	2.835815	3.168946	-3.00238	-3.00238
ENSG00000245750	DRAIC	D	2.962933	3.045792	-3.02006	-2.98867
ENSG00000217085	HMGB3P19	D	3.199864	2.800145	-3	-3
ENSG00000258603		D	3.740156	2.154633	-2.94739	-2.94739
ENSG00000226556	NPM1P49	D	4.420792	1.097461	-2.75913	-2.75913
ENSG00000105929	ATP6V0A4	D	4.628144	0.679067	-2.59012	-2.71709
ENSG00000258860		D	3.723282	2.173165	-2.94822	-2.94822
ENSG00000224271		D	2.758642	3.229466	-2.99405	-2.99405
ENSG00000227814	MRPS17P9	D	4.028836	1.739008	-2.88392	-2.88392
ENSG00000216863	LY86-AS1	D	2.896545	3.091987	-2.99427	-2.99427
ENSG00000273234	OR2A13P	D	3.81178	2.035271	-2.92353	-2.92353
ENSG00000237222	LINC01968	D	3.012617	2.962343	-2.90188	-3.07308
ENSG00000268906		D	1.919503	3.886178	-2.99988	-2.8058
ENSG00000267088		D	3.308699	2.632436	-2.97057	-2.97057
ENSG00000134201	GSTM5	D	3.322746	2.615706	-2.96923	-2.96923
ENSG00000284710		D	2.95318	3.005151	-2.97917	-2.97917
ENSG00000204642	HLA-F	D	3.645352	2.227913	-2.93663	-2.93663
ENSG00000137726	FXVD6	D	2.900564	3.03165	-2.60575	-3.32646
ENSG00000261141		D	3.309775	2.625305	-2.96754	-2.96754
ENSG00000260615	RPL23AP97	D	4.144361	1.506875	-2.82562	-2.82562
ENSG00000226059	HMGB3P20	D	3.570402	2.012459	-1.56421	-4.01865
ENSG00000214548	MEG3	D	2.891868	3.041557	-2.76317	-3.17025
ENSG00000160862	AZGP1	D	3.031982	2.874955	-2.51088	-3.39606
ENSG00000167355	OR51B5	D	3.59807	2.267275	-2.93267	-2.93267
ENSG00000239396	RN7SL414P	D	2.513011	3.389846	-2.95143	-2.95143
ENSG00000275413		D	4.313367	1.19324	-2.7533	-2.7533
ENSG00000229829	DUTP4	D	3.446988	2.440716	-2.94385	-2.94385
ENSG00000179915	NRXN1	D	1.70463	3.991673	-2.66511	-3.03119
ENSG00000277423		D	3.192443	2.715411	-2.95393	-2.95393
ENSG00000267011		D	3.6264	2.201194	-2.9138	-2.9138
ENSG00000123243	ITIH5	D	4.036487	1.616732	-2.82661	-2.82661
ENSG00000099957	P2RX6	D	3.981369	1.676201	-3.15862	-2.49895

ENSG00000254239		D	2.464726	3.403137	-2.93393	-2.93393
ENSG00000175318	GRAMD2A	D	3.278154	2.599668	-2.782	-3.09582
ENSG00000005379	TSPOAPI	D	3.573393	2.252864	-2.91313	-2.91313
ENSG00000196248	OR10S1	D	2.848163	3.045061	-2.90662	-2.9866
ENSG00000117266	CDK18	D	2.768515	3.115433	-3.05116	-2.83279
ENSG00000283069	DUX4L32	D	3.463919	2.376307	-2.92011	-2.92011
ENSG00000240661		D	3.317219	2.545678	-2.93145	-2.93145
ENSG00000054356	PTPRN	D	2.234349	3.567982	-2.72028	-3.08205
ENSG00000108821	COL1A1 ENSG00000108821	D	2.305601	3.515406	-2.95796	-2.86305
ENSG00000204677	FAM153CP	D	2.920429	2.958079	-2.97788	-2.90063
ENSG00000171101	SIGLEC17P	D	2.551176	3.302538	-2.92686	-2.92686
ENSG00000253637	IGLVV-58	D	2.793683	3.078328	-2.93601	-2.93601
ENSG00000266256	LINC00683	D	2.790027	3.067372	-2.6425	-3.2149
ENSG00000124097	HMGB1P1	D	3.16064	2.704809	-2.95061	-2.91483
ENSG00000232070	TMEM253	D	3.064763	2.801245	-2.933	-2.933
ENSG00000240424		D	1.257223	4.220386	-2.7388	-2.7388
ENSG00000177301	KCNA2	D	3.98543	1.621013	-2.57824	-3.0282
ENSG00000253438	PCAT1	D	2.481896	3.331201	-2.63158	-3.18152
ENSG00000258438	OR11K2P	D	3.88317	1.77945	-2.83131	-2.83131
ENSG00000266128	RN7SL366P	D	1.24146	4.218799	-2.73013	-2.73013
ENSG00000257444	SETP7	D	4.607367	0.454423	-2.53089	-2.53089
ENSG00000226261	PIMREGP1	D	3.227755	2.595141	-2.91145	-2.91145
ENSG00000104611	SH2D4A	D	2.711544	3.118654	-2.9151	-2.9151
ENSG00000167117	ANKRD40CL	D	1.865002	3.806762	-2.83588	-2.83588
ENSG00000225933	RPS14P5	D	2.798105	3.032362	-2.91523	-2.91523
ENSG00000287858		D	2.5049	3.300618	-2.90276	-2.90276
ENSG00000222068	RN7SKP154	D	3.015427	2.815429	-2.91543	-2.91543
ENSG00000155849	ELMO1	D	3.088526	2.738701	-2.91361	-2.91361
ENSG00000251432	LINC02615	D	3.25216	2.555831	-2.77285	-3.03514
ENSG00000133401	PDZD2	D	2.772778	3.054536	-2.86156	-2.96575
ENSG00000228421		D	3.407286	2.376777	-2.89203	-2.89203
ENSG00000163263	C1orf189	D	3.699749	2.005537	-2.85264	-2.85264
ENSG00000250377		D	2.557924	3.250463	-2.90419	-2.90419
ENSG00000064886	CHI3L2	D	3.096247	2.724933	-2.91059	-2.91059
ENSG00000268849	SIGLEC22P	D	3.83223	1.817532	-2.82488	-2.82488
ENSG00000184144	CNTN2	D	2.717505	3.060591	-2.39303	-3.38507
ENSG00000174514	MFSD4A	D	4.066312	1.431401	-2.41253	-3.08518

ENSG00000165949	IFI27	D	3.107839	2.705218	-2.81012	-3.00294
ENSG00000168490	PHYHIP	D	3.706536	1.986313	-2.84642	-2.84642
ENSG00000244623	OR2AE1	D	3.632501	2.082673	-2.85759	-2.85759
ENSG00000234806	RPL26P29 ENSG00000234806	D	2.235997	3.508946	-2.98573	-2.75922
ENSG00000140297	GCNT3	D	3.345573	2.435043	-2.89031	-2.89031
ENSG00000205500	MAPRE3-AS1	D	2.393679	3.359536	-2.51844	-3.23477
ENSG00000229140	CCDC26	D	3.469432	2.214907	-3.44047	-2.24387
ENSG00000225937	PCA3	D	3.151598	2.652383	-2.90199	-2.90199
ENSG00000270424		D	4.443843	0.643597	-3.13124	-1.9562
ENSG00000186529	CYP4F3	D	3.306797	2.47117	-2.88898	-2.88898
ENSG00000265485	LINC01915	D	4.059349	1.444149	-2.75175	-2.75175
ENSG00000128510	CPA4	D	3.36048	2.39163	-2.61002	-3.14209
ENSG00000231898	MYO3B-AS1	D	3.268295	2.503131	-2.88571	-2.88571
ENSG00000285219	HULC	D	2.771671	3.013906	-2.67376	-3.11182
ENSG00000248474	LINC02122	D	3.883951	1.703588	-2.79377	-2.79377
ENSG00000264970		D	3.325007	2.436703	-2.88085	-2.88085
ENSG00000267736	HMGB2P1	D	2.787814	3.000187	-2.894	-2.894
ENSG00000225080	PFN1P4	D	2.78912	2.997955	-2.89354	-2.89354
ENSG00000204241	LINC02731	D	3.158129	2.618202	-2.88817	-2.88817
ENSG00000261714		D	3.604943	2.080991	-2.84297	-2.84297
ENSG00000233621	LINC01137	D	3.540912	2.161349	-2.85113	-2.85113
ENSG00000243742	RPLP0P2	D	3.02091	2.728755	-3.29723	-2.45244
ENSG00000099338	CATSPERG	D	3.848339	1.707974	-3.15548	-2.40084
ENSG00000243592	RPL17P22	D	3.632096	2.037864	-2.73794	-2.93202
ENSG00000198104	OR2T6	D	3.310426	2.438592	-2.87451	-2.87451
ENSG00000252797	RN7SKP272	D	3.162218	2.600342	-2.88128	-2.88128
ENSG00000286215		D	2.709537	3.053113	-2.66591	-3.09674
ENSG00000214198	TTC41P	D	2.61026	3.11815	-3.31108	-2.41733
ENSG00000249307	LINC01088	D	3.39164	2.327305	-2.88359	-2.83535
ENSG00000223513	ATP6V0E1P2	D	3.992868	1.498309	-2.74559	-2.74559
ENSG00000274578		D	4.376881	0.809339	-2.59311	-2.59311
ENSG00000262085	OR1P1	D	3.41151	2.301964	-2.85674	-2.85674
ENSG00000184898	RBM43	D	3.84277	1.710023	-3.01228	-2.54051
ENSG00000271377	IFITM3P8	D	3.612482	2.041203	-2.82684	-2.82684
ENSG00000003147	ICA1	D	4.32252	0.908118	-2.61532	-2.61532
ENSG00000186496	ZNF396	D	3.794028	1.78118	-2.97626	-2.59894
ENSG00000234548	LINC02020	D	3.242958	2.490563	-2.81459	-2.91893

ENSG00000244318	RN7SL252P	D	3.574599	2.084716	-2.82966	-2.82966
ENSG00000176900	OR51T1	D	3.467906	2.21947	-2.84369	-2.84369
ENSG00000231367	LINC02613 ENSG00000231367	D	3.271108	2.449979	-2.86054	-2.86054
ENSG00000286032		D	1.639185	3.886117	-2.76265	-2.76265
ENSG00000064270	ATP2C2	D	1.662267	3.79271	-2.01513	-3.43984
ENSG00000249654	VN1R104P	D	3.493075	2.178664	-2.83587	-2.83587
ENSG00000231232		D	2.093202	3.558599	-2.8259	-2.8259
ENSG00000188488	SERPINA5	D	3.549823	2.103631	-2.82673	-2.82673
ENSG00000048540	LMO3	D	3.144687	2.585264	-2.78065	-2.9493
ENSG00000254211	LINC01485	D	1.62308	3.892634	-2.75786	-2.75786
ENSG00000166473	PKD1L2 ENSG00000166473	D	2.988842	2.713946	-3.3178	-2.38499
ENSG00000250307	TUBB8P3	D	3.61641	2.013279	-2.81484	-2.81484
ENSG00000279764		D	2.818995	2.923123	-2.87106	-2.87106
ENSG00000241746		D	3.035596	2.700156	-2.86788	-2.86788
ENSG00000137709	POU2F3	D	2.838633	2.901801	-2.87022	-2.87022
ENSG00000250174	MYLK-AS2 ENSG00000250174	D	2.877538	2.862967	-2.87025	-2.87025
ENSG00000121446	RGSL1	D	3.659455	1.951886	-2.80567	-2.80567
ENSG00000274461		D	3.635242	1.983906	-2.80957	-2.80957
ENSG00000189030	VHLL	D	2.640003	2.972147	-1.97383	-3.63832
ENSG00000167751	KLK2	D	3.021247	2.699001	-2.5832	-3.13705
ENSG00000260186	LINC02137	D	4.171056	1.151278	-2.582	-2.74034
ENSG00000106278	PTPRZ1	D	3.201565	2.513409	-2.85749	-2.85749
ENSG00000143473	KCNH1	D	4.337075	0.829767	-2.58342	-2.58342
ENSG00000143119	CD53	D	3.42756	2.239741	-2.83365	-2.83365
ENSG00000204869	IGFL4	D	2.89371	2.832979	-2.96916	-2.75753
ENSG00000140853	NLRC5	D	3.182792	2.461533	-2.23085	-3.41348
ENSG00000255920	CCND2-AS1	D	3.309551	2.374217	-2.94207	-2.74169
ENSG00000233123	LINC01007	D	2.449707	3.239899	-2.8448	-2.8448
ENSG00000225096		D	3.160699	2.534625	-2.84766	-2.84766
ENSG00000164520	RAET1E	D	3.306977	2.35116	-3.11089	-2.54725
ENSG00000199975	RN7SKP243	D	1.903732	3.669862	-2.7868	-2.7868
ENSG00000267175		D	1.520934	3.928797	-2.72487	-2.72487
ENSG00000270734		D	3.778188	1.747786	-2.76299	-2.76299
ENSG00000227101		D	2.733246	2.970789	-2.85202	-2.85202
ENSG00000260372	AQP4-AS1	D	3.250938	2.418925	-2.68093	-2.98894

ENSG00000226803	ZNF451-AS1	D	2.492069	3.173849	-3.12133	-2.54459
ENSG00000249846	LINC02021	D	3.196919	2.477716	-2.97363	-2.70101
ENSG00000133574	GIMAP4	D	3.193745	2.483933	-2.78466	-2.89302
ENSG00000213652	HMGB3P30	D	2.456423	3.214381	-2.8354	-2.8354
ENSG00000220600		D	3.680914	1.866891	-2.7739	-2.7739
ENSG00000225222	CHCHD4P5	D	2.780366	2.756813	-1.84499	-3.69219
ENSG00000288573		D	3.026285	2.623693	-2.40289	-3.24709
ENSG00000214140	PRCD	D	3.103617	2.556235	-2.53889	-3.12096
ENSG00000177294	FBXO39	D	2.059233	3.528196	-2.79371	-2.79371
ENSG00000163873	GRIK3	D	4.303457	0.817208	-2.56033	-2.56033
ENSG00000261644	CYLD-AS1	D	3.236163	2.404488	-3.04583	-2.59482
ENSG00000164822	DEFA6	D	4.275541	0.866039	-2.57079	-2.57079
ENSG00000211663	IGLV3-19	D	3.409025	2.204864	-2.80694	-2.80694
ENSG00000224243	SOX1-OT	D	3.049321	2.618448	-2.83388	-2.83388
ENSG00000267107	PCAT19	D	3.074115	2.590812	-2.83246	-2.83246
ENSG00000169507	SLC38A11	D	4.089951	1.205548	-2.64775	-2.64775
ENSG00000182816	KRTAP13-2	D	3.958113	1.419311	-2.68871	-2.68871
ENSG00000234439	KRT18P2	D	3.385536	2.216235	-2.80089	-2.80089
ENSG00000138639	ARHGAP24	D	3.70939	1.787282	-2.74834	-2.74834
ENSG00000258774	NANOGP7	D	2.964536	2.69361	-2.82907	-2.82907
ENSG00000090539	CHRD	D	3.868479	1.538491	-2.49195	-2.91502
ENSG00000231487		D	1.49422	3.901571	-2.6979	-2.6979
ENSG00000176299	OR4M1	D	3.154951	2.481131	-2.81804	-2.81804
ENSG00000270403		D	3.749313	1.722046	-2.73568	-2.73568
ENSG00000283349	PFN5P	D	2.259557	3.342981	-2.80127	-2.80127
ENSG00000215483	LINC00598	D	2.728206	2.924621	-2.82641	-2.82641
ENSG00000236062	GSTM5P1	D	2.589091	3.046645	-2.99425	-2.64149
ENSG00000258975		D	3.24764	2.368122	-2.80788	-2.80788
ENSG00000232245	ENSG00000232245	D	2.717714	2.924307	-2.82101	-2.82101
ENSG00000101448	EPPIN	D	2.850916	2.789669	-2.82029	-2.82029
ENSG00000248994		D	3.231057	2.37689	-2.80397	-2.80397
ENSG00000236762	RPL19P16	D	3.724517	1.725441	-2.72498	-2.72498
ENSG00000212643	ZRSR2P1	D	3.248559	2.345341	-2.79695	-2.79695
ENSG00000150636	CCDC102B	D	3.907015	1.433245	-2.46007	-2.88019
ENSG00000120903	CHRNA2	D	2.378365	3.216586	-2.86294	-2.73201
ENSG00000255248	MIR100HG	D	1.940045	3.567022	-2.82946	-2.6776
ENSG00000222024		D	2.652154	2.967053	-2.8096	-2.8096
ENSG00000106648	GALNTL5	D	3.153949	2.44715	-2.80055	-2.80055

ENSG00000253314	LINC00293	D	2.609783	3.00649	-2.80814	-2.80814
ENSG00000145107	TM4SF19	D	2.750967	2.863362	-2.60924	-3.00508
ENSG00000231809	NANOGP9	D	3.533724	1.976504	-2.75511	-2.75511
ENSG00000100505	TRIM9	D	3.225494	2.36003	-2.79276	-2.79276
ENSG00000108231	LGII	D	3.20247	2.3827	-2.79258	-2.79258
ENSG00000017483	SLC38A5	D	3.095747	2.500987	-2.79837	-2.79837
ENSG00000205037		D	4.175064	0.954506	-2.56478	-2.56478
ENSG00000232973	CYP1B1-AS1 ENSG00000232973	D	2.043646	3.450538	-3.14871	-2.34548
ENSG00000274867		D	3.856825	1.502906	-2.67987	-2.67987
ENSG00000173285	OR10K1	D	2.853254	2.749967	-2.80161	-2.80161
ENSG00000260488		D	3.492237	2.008798	-2.75052	-2.75052
ENSG00000215196	BASP1-AS1	D	2.871082	2.724102	-2.71138	-2.88381
ENSG00000082397	EPB4IL3	D	1.510072	3.839296	-2.67468	-2.67468
ENSG00000126106	TMEM53	D	3.312818	2.215156	-3.04521	-2.48277
ENSG00000226891	LINC01359	D	2.4093	3.157277	-2.78329	-2.78329
ENSG00000102359	SRPX2	D	3.447938	2.056277	-2.75211	-2.75211
ENSG00000182472	CAPN12	D	3.57793	1.854508	-2.37809	-3.05435
ENSG00000236670	KRT18P5	D	3.253911	2.291779	-2.77285	-2.77285
ENSG00000231322	RPL13AP17	D	3.537153	1.930832	-2.73399	-2.73399
ENSG00000205856	C22orf42	D	1.572436	3.785677	-2.67906	-2.67906
ENSG00000235621	LINC00494	D	3.640531	1.783534	-2.71203	-2.71203
ENSG00000115009	CCL20	D	2.745423	2.834221	-2.78982	-2.78982
ENSG00000103742	IGDCC4	D	3.274909	2.251184	-2.85885	-2.66724
ENSG00000287523		D	3.083734	2.471516	-2.77763	-2.77763
ENSG00000231419	LINC00689	D	2.895382	2.673378	-2.78438	-2.78438
ENSG00000234222	LIX1L-AS1 ENSG00000234222	D	2.785628	2.747505	-2.31405	-3.21908
ENSG00000146904	EPHA1	D	2.811257	2.686372	-2.13834	-3.35929
ENSG00000232080		D	4.192833	0.839724	-2.51628	-2.51628
ENSG00000231407	GORAB-AS1	D	4.072095	1.068712	-2.5704	-2.5704
ENSG00000275016		D	3.457724	2.008691	-2.73321	-2.73321
ENSG00000223229	RN7SKP270	D	3.173848	2.356393	-2.76512	-2.76512
ENSG00000235257	ITGA9-AS1	D	2.298393	3.179308	-2.22833	-3.24937
ENSG00000138100	TRIM54	D	3.189409	2.336534	-2.76297	-2.76297
ENSG00000271338		D	2.914807	2.639039	-2.77692	-2.77692
ENSG00000243505	RN7SL240P	D	3.605566	1.802199	-2.70388	-2.70388
ENSG00000285770		D	3.455983	1.994429	-2.59489	-2.85552

ENSG00000228242	XPC-AS1	D	3.171616	2.161301	-3.61217	-1.72075
ENSG00000226279	RPL12P10	D	2.527624	2.984275	-3.07348	-2.43842
ENSG00000225406	ELF2P4 ENSG00000225406	D	3.493109	1.935834	-2.71447	-2.71447
ENSG00000258703		D	3.287559	2.196714	-2.74214	-2.74214
ENSG00000236590	MTATP6P4	D	3.590006	1.777209	-2.9932	-2.37402
ENSG00000227538	HNRNPF1	D	2.308827	3.191363	-2.7501	-2.7501
ENSG00000256995		D	2.446431	3.071259	-2.75884	-2.75884
ENSG00000239877	IGSF11-AS1	D	3.484736	1.941798	-2.71327	-2.71327
ENSG00000243234		D	3.128607	2.376873	-2.75274	-2.75274
ENSG00000104888	SLC17A7	D	2.718674	2.788581	-3.11362	-2.39364
ENSG00000259020		D	1.207308	3.965169	-2.52645	-2.64602
ENSG00000125378	BMP4	D	1.854026	3.542061	-2.69804	-2.69804
ENSG00000276251		D	3.264695	2.211365	-2.73803	-2.73803
ENSG00000250782	TAF11L14	D	3.094135	2.410632	-2.75238	-2.75238
ENSG00000180934	OR56A1	D	3.542036	1.850626	-2.69633	-2.69633
ENSG00000177338	LINC00469	D	3.511548	1.889406	-2.70048	-2.70048
ENSG00000250897	HMGB3P15	D	3.842649	1.400932	-2.62179	-2.62179
ENSG00000266904	LINC00663 ENSG00000266904	D	3.466164	1.886151	-2.14361	-3.2087
ENSG00000250903	GMD5-DT	D	2.910134	2.594246	-2.96776	-2.53662
ENSG00000163435	ELF3	D	1.219674	3.948153	-2.52109	-2.64674
ENSG00000221989	OR2A2	D	1.695661	3.645942	-2.6708	-2.6708
ENSG00000285677		D	1.557417	3.738379	-2.6479	-2.6479
ENSG00000254101	LINC02055	D	2.517108	2.984562	-2.75469	-2.74698
ENSG00000221937	TAS2R40	D	2.924343	2.581312	-2.75283	-2.75283
ENSG00000274507		D	4.112628	0.910523	-2.51158	-2.51158
ENSG00000183239	ENSG00000183239	D	3.598695	1.754226	-2.67646	-2.67646
ENSG00000237356		D	2.997914	2.498883	-2.7484	-2.7484
ENSG00000260828	HMGB3P32	D	3.018584	2.476113	-2.74735	-2.74735
ENSG00000262484	CCER2	D	3.217968	2.226137	-3.04144	-2.40267
ENSG00000232393	RPL5P6	D	3.739329	1.544821	-2.64208	-2.64208
ENSG00000223863	LINC01805	D	3.28985	2.158805	-2.72433	-2.72433
ENSG00000229316	HMGB1P45	D	3.190877	2.277848	-2.73436	-2.73436
ENSG00000272900	OR10Q2P	D	4.274765	0.565048	-2.41991	-2.41991
ENSG00000267264		D	1.302022	3.87008	-2.94378	-2.22832
ENSG00000267650		D	3.070204	2.41228	-2.74124	-2.74124
ENSG00000217447		D	2.741353	2.760802	-2.75108	-2.75108

ENSG00000204290	BTNL2	D	3.980379	1.140685	-2.56053	-2.56053
ENSG00000235770	LINC00607	D	2.69087	2.808963	-2.74992	-2.74992
ENSG00000198821	CD247	D	2.749601	2.742443	-2.5376	-2.95444
ENSG00000180475	OR10Q1	D	2.568149	2.925454	-2.7468	-2.7468
ENSG00000238099	LINC01625	D	3.149399	2.318507	-2.73395	-2.73395
ENSG00000232299		D	3.030483	2.453483	-2.74198	-2.74198
ENSG00000265801		D	3.188727	2.268348	-2.72854	-2.72854
ENSG00000196832	OR11G2	D	2.054715	3.362465	-2.70859	-2.70859
ENSG00000229657		D	2.636265	2.855848	-2.74606	-2.74606
ENSG00000240405	SAMMSON	D	2.893838	2.595097	-2.74447	-2.74447
ENSG00000091513	TF	D	2.385667	3.076346	-2.53074	-2.93128
ENSG00000169347	GP2	D	3.684093	1.60665	-2.64537	-2.64537
ENSG00000271268		D	2.437012	3.034018	-2.73552	-2.73552
ENSG00000142748	FCN3	D	2.953417	2.524267	-2.73884	-2.73884
ENSG00000233817		D	3.225416	2.213082	-2.67515	-2.76334
ENSG00000249346	LINC01016	D	2.674135	2.808976	-2.74156	-2.74156
ENSG00000158321	AUTS2	D	2.155481	3.264509	-2.6419	-2.77809
ENSG00000186847	KRT14	D	2.979763	2.479403	-2.72958	-2.72958
ENSG00000231507	LINC01353 ENSG00000231507	D	2.738425	2.730935	-2.73468	-2.73468
ENSG00000186409	CCDC30	D	2.772922	2.644375	-3.23555	-2.18175
ENSG00000233111	RAB1C	D	4.304812	0.427244	-2.36603	-2.36603
ENSG00000197403	OR6N1	D	1.878146	3.471667	-2.67491	-2.67491
ENSG00000078295	ADCY2	D	2.544399	2.916071	-2.73024	-2.73024
ENSG00000162873	KLHDC8A	D	4.302926	0.427317	-2.36512	-2.36512
ENSG00000251434		D	3.655636	1.613609	-2.63462	-2.63462
ENSG00000253208	PSME2P5	D	3.663118	1.508659	-3.20833	-1.96344
ENSG00000149243	KLHL35	D	1.36287	3.810083	-2.75889	-2.41406
ENSG00000248951	MTCO2P32	D	3.294004	2.099488	-2.69675	-2.69675
ENSG00000079337	RAPGEF3	D	3.136515	2.289343	-2.7029	-2.72296
ENSG00000227012	LINC02527	D	3.493208	1.835069	-2.66414	-2.66414
ENSG00000260386	LDC1P	D	2.532547	2.916155	-2.72435	-2.72435
ENSG00000154975	CA10	D	3.774138	1.420391	-2.59726	-2.59726
ENSG00000272937	OR6U2P	D	2.800706	2.650833	-2.72577	-2.72577
ENSG00000257884		D	3.19073	2.216428	-2.70358	-2.70358
ENSG00000215386	MIR99AHG	D	2.369362	3.025731	-2.27555	-3.11954
ENSG00000259541		D	1.159382	3.924287	-2.54183	-2.54183
ENSG00000225746	MEG8	D	3.313738	2.058697	-2.68622	-2.68622

ENSG00000113303	BTNL8	D	2.123335	3.255245	-2.49782	-2.88076
ENSG00000253146	CIR1P1	D	3.088826	2.324403	-2.55964	-2.85359
ENSG00000059377	TBXAS1	D	3.432815	1.895591	-2.49864	-2.82977
ENSG00000267046	E2F3P1	D	2.740111	2.702528	-2.72132	-2.72132
ENSG00000231028	LINC00271	D	3.162358	2.241084	-2.70304	-2.7004
ENSG00000223586	LINC01312	D	3.229325	2.149896	-2.68961	-2.68961
ENSG00000287187		D	3.334186	2.018376	-2.67628	-2.67628
ENSG00000160593	JAML	D	3.219167	2.16171	-2.69044	-2.69044
ENSG00000282602		D	3.983109	1.031654	-2.50738	-2.50738
ENSG00000251002		D	1.756193	3.528807	-2.6425	-2.6425
ENSG00000080910	CFHR2	D	3.385168	1.949849	-2.66751	-2.66751
ENSG00000233974		D	3.128789	2.26566	-2.63965	-2.7548
ENSG00000261371	PECAM1	D	1.135077	3.920776	-2.52793	-2.52793
ENSG00000234722	LINC01287	D	2.38529	3.01609	-2.87679	-2.52459
ENSG00000235281	ENSG00000235281	D	2.724916	2.695576	-2.71025	-2.71025
ENSG00000268628		D	3.397543	1.921318	-2.65943	-2.65943
ENSG00000185527	PDE6G	D	2.185367	3.186501	-2.68593	-2.68593
ENSG00000124731	TREM1	D	3.371496	1.953152	-2.66232	-2.66232
ENSG00000133805	AMPD3	D	3.309691	1.864368	-1.70997	-3.46409
ENSG00000172938	MRGPRD	D	2.418566	2.982849	-2.70071	-2.70071
ENSG00000181609	OR52D1	D	2.559737	2.817783	-2.26797	-3.10955
ENSG00000230568	SF3A3P1	D	2.495583	2.907118	-2.6051	-2.7976
ENSG00000227592	PIGFP3	D	3.898886	1.150463	-2.52467	-2.52467
ENSG00000121380	BCL2L14	D	3.660057	1.525169	-2.44563	-2.73959
ENSG00000066923	STAG3	D	3.149621	2.20959	-2.81942	-2.53979
ENSG00000227209	WARS2P1	D	3.303363	2.01977	-2.66157	-2.66157
ENSG00000049540	ELN	D	3.391661	1.874463	-2.99254	-2.27358
ENSG00000226762	LINC02668	D	2.944643	2.441348	-2.693	-2.693
ENSG00000169903	TM4SF4	D	3.935482	1.066212	-2.50085	-2.50085
ENSG00000166535	A2ML1	D	3.713154	1.438296	-2.56357	-2.58788
ENSG00000249669	CARMN	D	2.73813	2.657834	-2.68866	-2.7073
ENSG00000224699	LAMTOR5-AS1	D	3.132877	2.182464	-3.09937	-2.21597
ENSG00000132274	TRIM22	D	1.011918	3.850674	-1.58889	-3.27371
ENSG00000224776	RPSAP50	D	3.415646	1.862411	-2.63903	-2.63903
ENSG00000264672	SEPTIN4-AS1	D	3.079422	2.281059	-2.68024	-2.68024
ENSG00000198967	OR10Z1	D	3.217145	2.116345	-2.66674	-2.66674
ENSG00000232756	DDX3ILA1	D	2.512322	2.868418	-2.69037	-2.69037
ENSG00000162727	OR2M5	D	1.785036	3.467474	-2.62625	-2.62625

ENSG00000287781		D	3.327495	1.960302	-2.86288	-2.42492
ENSG00000141968	VAV1	D	2.95755	2.41177	-2.68466	-2.68466
ENSG00000255085		D	2.192645	3.147363	-2.67	-2.67
ENSG00000179066		D	3.289905	2.014422	-2.65216	-2.65216
ENSG00000219565	ZNF259P1	D	2.359045	3.000966	-2.68001	-2.68001
ENSG00000109458	GAB1	D	4.019437	0.840587	-2.07581	-2.78422
ENSG00000255226	LINC02690	D	2.674455	2.703187	-2.68882	-2.68882
ENSG00000168918	INPP5D	D	2.12225	3.200686	-2.66147	-2.66147
ENSG00000255514	OR4B2P	D	2.818672	2.554494	-2.68658	-2.68658
ENSG00000259108	LINC01595	D	3.029872	2.226719	-3.31783	-1.93876
ENSG00000224397	PELATON	D	3.151772	2.171412	-2.46788	-2.8553
ENSG00000261033	SPECC1-DT	D	2.464599	2.900652	-2.68263	-2.68263
ENSG00000259516	ANP32AP1	D	2.53552	2.815909	-2.35872	-2.99271
ENSG00000284543	LINC01226	D	2.230375	3.089277	-2.34323	-2.97642
ENSG00000171962	DRC3	D	3.919312	1.015321	-2.85407	-2.08056
ENSG00000215368	BOD1P2	D	3.833887	1.205938	-2.51991	-2.51991
ENSG00000171840	NINJ2	D	3.603024	1.572078	-2.58755	-2.58755
ENSG00000261738	MIR3976HG	D	2.123621	3.192542	-2.64521	-2.67095
ENSG00000232824	PRR13P1	D	3.790086	1.276591	-2.53334	-2.53334
ENSG00000201782	RN7SKP226	D	3.120347	2.209225	-2.66479	-2.66479
ENSG00000277463		D	3.703747	1.3674	-2.96705	-2.1041
ENSG00000271231	KRT18P9	D	3.170115	2.144105	-2.52981	-2.78441
ENSG00000225155	TOMM22P5	D	3.889996	1.100735	-2.49537	-2.49537
ENSG00000233306	TRGV2	D	4.120285	0.652547	-2.38642	-2.38642
ENSG00000285734		D	2.558025	2.801113	-2.6174	-2.74173
ENSG00000243022	MARK3P3	D	4.210423	0.443322	-2.32687	-2.32687
ENSG00000265843	LINC01029	D	3.09598	2.230798	-2.66339	-2.66339
ENSG00000259790	ANP32BP1	D	2.644079	2.716879	-2.68048	-2.68048
ENSG00000175538	KCNE3	D	4.145747	0.586928	-2.36634	-2.36634
ENSG00000163017	ACTG2	D	3.333564	1.931894	-2.63273	-2.63273
ENSG00000236544		D	2.952741	2.390213	-2.67148	-2.67148
ENSG00000247809	NR2F2-AS1	D	3.767528	1.184884	-3.1224	-1.83001
ENSG00000262223		D	2.908593	2.436681	-2.67264	-2.67264
ENSG00000161609	KASH5	D	4.111754	0.651874	-2.38181	-2.38181
ENSG00000213809	KLRK1	D	3.931098	1.005492	-2.4683	-2.4683
ENSG00000199640	RN7SKP294	D	2.635609	2.71538	-2.67549	-2.67549
ENSG00000110680	CALCA	D	3.545943	1.630901	-2.58842	-2.58842
ENSG00000226406	RBMX2P1	D	2.128821	3.117214	-2.07118	-3.17485

ENSG00000232303	DFFBP1	D	2.999996	2.327214	-2.6636	-2.6636
ENSG00000177694	NAALADL2	D	2.543377	2.801615	-2.6725	-2.6725
ENSG00000228940		D	2.887118	2.447086	-2.7865	-2.54771
ENSG00000234089		D	3.472322	1.707147	-2.28438	-2.89508
ENSG0000019186	CYP24A1	D	3.274142	1.99299	-2.63357	-2.63357
ENSG00000228486	C2orf92	D	2.175259	3.120445	-2.46831	-2.82739
ENSG00000255172	OR5AM1P	D	3.005567	2.312323	-2.65894	-2.65894
ENSG00000155893	PXYLP1	D	3.281978	1.976362	-2.60708	-2.65126
ENSG00000223168	RN7SKP142	D	3.668868	1.429601	-2.54923	-2.54923
ENSG00000157551	KCNJ15	D	2.008575	3.255979	-2.63228	-2.63228
ENSG00000130528	HRC	D	2.923584	2.38451	-2.37754	-2.93056
ENSG00000187556	NANOS3	D	3.599323	1.169763	-3.56261	-1.20647
ENSG00000234948	LINC01524	D	2.76942	2.55912	-2.52498	-2.80356
ENSG00000231301	RPL13AP	D	2.94477	2.372526	-2.65865	-2.65865
ENSG00000217482	HMGB1P17	D	2.216969	3.079842	-2.64841	-2.64841
ENSG00000095932	SMIM24	D	2.740417	2.589918	-2.66517	-2.66517
ENSG00000240505	TNFRSF13B	D	3.523185	1.626423	-2.80031	-2.3493
ENSG00000165188	RNF183	D	2.68815	2.642478	-2.66531	-2.66531
ENSG00000285785		D	3.675475	1.408425	-2.54195	-2.54195
ENSG00000202351	RN7SKP204	D	1.226279	3.787005	-2.50664	-2.50664
ENSG00000253301	LINC01606	D	2.584767	2.744287	-2.66453	-2.66453
ENSG00000166984	TCP10L2	D	2.571861	2.756637	-2.66425	-2.66425
ENSG00000226094	RPL7P3	D	3.063926	2.232808	-2.64837	-2.64837
ENSG00000251414		D	2.518676	2.806337	-2.66251	-2.66251
ENSG00000245526	LINC00461	D	2.88904	2.418918	-2.44232	-2.86563
ENSG00000221957	KIR2DS4	D	2.68296	2.610119	-2.22535	-3.06773
ENSG00000233901	LINC01503 ENSG00000233901	D	1.99738	3.254129	-2.65957	-2.59194
ENSG00000259744		D	3.211364	2.050961	-2.63116	-2.63116
ENSG00000182652	OR4Q3	D	3.241727	2.012786	-2.62726	-2.62726
ENSG00000240086		D	2.961914	2.3044	-2.18473	-3.08158
ENSG00000274930		D	3.163882	2.107357	-2.63562	-2.63562
ENSG00000164325	TMEM174 ENSG00000164325	D	0.820746	4.001549	-2.41115	-2.41115
ENSG00000154928	EPHB1	D	4.125694	0.558326	-2.34201	-2.34201
ENSG00000236501		D	1.815634	3.386912	-2.60127	-2.60127
ENSG00000267834	ENSG00000267834	D	3.985574	0.84613	-2.41585	-2.41585
ENSG00000164241	C5orf63	D	2.450735	2.856648	-2.55239	-2.755

ENSG00000235824	LINC00837	D	3.719937	1.31432	-2.38742	-2.64684
ENSG00000204257	HLA-DMA	D	2.773297	2.432934	-1.86454	-3.34169
ENSG00000272625		D	1.930147	3.296674	-2.61341	-2.61341
ENSG00000229956	ZRANB2-AS2	D	2.840551	2.467839	-2.70233	-2.60606
ENSG00000179136	LINC00670	D	2.865638	2.440156	-2.6529	-2.6529
ENSG00000118308	IRAG2	D	3.908779	0.981464	-2.29991	-2.59033
ENSG00000241472	PTPRG-AS1	D	3.298885	1.924283	-2.61158	-2.61158
ENSG00000244088	RPL23AP44	D	2.344151	2.950999	-2.64757	-2.64757
ENSG00000254974		D	0.878024	3.964417	-2.42122	-2.42122
ENSG00000235641	LINC00484	D	2.680748	2.629896	-2.65532	-2.65532
ENSG00000234810		D	3.654264	1.413378	-2.53382	-2.53382
ENSG00000127990	SGCE	D	3.014518	2.253509	-2.37525	-2.89277
ENSG00000111859	NEDD9	D	4.034007	0.730629	-2.30639	-2.45825
ENSG00000189348	FAM90A27P	D	2.53494	2.769528	-2.65223	-2.65223
ENSG00000249978	TRGV7	D	2.500929	2.801662	-2.6513	-2.6513
ENSG00000254613	OR6M2P	D	3.546247	1.573243	-2.55975	-2.55975
ENSG00000260042		D	3.672767	1.377706	-2.52524	-2.52524
ENSG00000148655	LRMDA	D	0.888837	3.952716	-2.42078	-2.42078
ENSG00000224763	FDPSP8	D	3.462579	1.676206	-2.78158	-2.3572
ENSG00000169554	ZEB2	D	2.335225	2.923578	-2.9902	-2.26861
ENSG00000140795	MYLK3	D	2.925522	2.209871	-1.7146	-3.4208
ENSG00000227456	LINC00310	D	3.329983	1.855573	-2.80815	-2.37741
ENSG00000133878	DUSP26	D	3.676199	1.362768	-2.51948	-2.51948
ENSG00000249142		D	3.055726	2.206384	-2.63105	-2.63105
ENSG00000243385		D	1.180135	3.784916	-2.48253	-2.48253
ENSG00000240338		D	3.503715	1.619656	-2.56169	-2.56169
ENSG00000075651	PLD1	D	2.243995	3.021148	-2.63257	-2.63257
ENSG00000184012	TMPRSS2	D	3.806919	1.137294	-2.47211	-2.47211
ENSG00000205488	CALML3-AS1	D	3.060267	2.195336	-2.6278	-2.6278
ENSG00000233117	LINC00702	D	3.638168	1.402489	-2.7206	-2.32006
ENSG00000236172	MIR7515HG	D	2.552173	2.73465	-2.64341	-2.64341
ENSG00000271623		D	2.977401	2.286362	-2.63188	-2.63188
ENSG00000229433	LINC02069	D	2.433511	2.844535	-2.63902	-2.63902
ENSG00000254961	TUBB4BP4	D	1.305707	3.700884	-2.5033	-2.5033
ENSG00000213495	RPL26P13	D	2.950018	2.315479	-2.63275	-2.63275
ENSG00000131401	NAPSB	D	1.818708	3.353139	-2.58592	-2.58592
ENSG00000143297	FCRL5	D	1.705196	3.435321	-2.57026	-2.57026
ENSG00000245080	MIR3150BHG	D	1.871008	3.310318	-2.62928	-2.55204

ENSG00000213434	VTI1BP2	D	3.411049	1.731927	-2.57149	-2.57149
ENSG00000175155	YPEL2	D	3.455968	1.651707	-2.82137	-2.28631
ENSG00000163879	DNALI1	D	2.555475	2.717358	-2.49003	-2.78281
ENSG00000230102	LINC02028	D	1.866672	3.309915	-2.58829	-2.58829
ENSG00000255291	HMGB1P40	D	3.372534	1.781795	-2.57716	-2.57716
ENSG00000157429	ZNF19	D	3.129238	2.094718	-2.6418	-2.58216
ENSG00000251575	C5orf64-AS1	D	2.641851	2.632645	-2.63725	-2.63725
ENSG00000287197		D	2.970106	2.280808	-2.62546	-2.62546
ENSG00000163554	SPTA1	D	1.915588	3.260523	-2.35363	-2.82248
ENSG00000272906		D	3.023031	2.217753	-2.62039	-2.62039
ENSG00000171561	OR2AT4	D	2.900841	2.356677	-2.64021	-2.61731
ENSG00000253394	LINC00534	D	2.200968	3.001245	-3.04057	-2.16165
ENSG00000245651		D	3.071782	2.133195	-2.26345	-2.94152
ENSG00000228021		D	2.590562	2.666784	-2.87159	-2.38575
ENSG00000132698	RAB25	D	2.360703	2.892612	-2.69475	-2.55856
ENSG00000091536	MYO15A	D	2.01857	3.144369	-2.10307	-3.05987
ENSG00000234200		D	4.021	0.687045	-2.35402	-2.35402
ENSG00000242525	OR7E100P	D	3.037807	2.174527	-2.30603	-2.9063
ENSG00000242512	LINC01206	D	2.281936	2.943285	-2.29723	-2.92799
ENSG00000269177		D	3.529384	1.543295	-2.53634	-2.53634
ENSG00000232044	SILC1	D	3.121378	2.08822	-2.49154	-2.71805
ENSG00000186517	ARHGAP30	D	3.566646	1.481507	-2.65651	-2.39164
ENSG00000227115	LINC01630	D	2.53916	2.720847	-2.63	-2.63
ENSG00000197580	BCO2	D	2.894105	2.346762	-2.44759	-2.79328
ENSG00000205444	KU-MEL-3	D	3.562866	1.486708	-2.52479	-2.52479
ENSG00000234170	LINC02645 ENSG00000234170	D	2.464523	2.787036	-2.62578	-2.62578
ENSG00000131183	SLC34A1	D	3.075232	2.044984	-1.90059	-3.21963
ENSG00000214204	HNRNPA1P43	D	3.591429	1.438367	-2.5149	-2.5149
ENSG00000279051	OR6Q1	D	2.666705	2.587803	-2.62725	-2.62725
ENSG00000118495	PLAGL1	D	1.844051	3.306654	-2.57535	-2.57535
ENSG00000232799	CRYGFP	D	2.233476	2.991556	-2.61252	-2.61252
ENSG00000280115		D	2.871386	2.368843	-2.62011	-2.62011
ENSG00000287444		D	3.123704	2.075788	-2.59975	-2.59975
ENSG00000226355		D	2.233518	2.991027	-2.61227	-2.61227
ENSG00000172367	PDZD3	D	1.828558	3.309629	-2.37047	-2.76772
ENSG00000232677	LINC00665	D	3.100755	2.082465	-2.90016	-2.28306
ENSG00000223741	PSMD4P1	D	2.431351	2.812257	-2.6218	-2.6218

ENSG00000160883	HK3	D	3.561479	1.474746	-2.51811	-2.51811
ENSG00000267275	KLF2-DT	D	3.696788	1.25794	-2.38475	-2.56998
ENSG00000275945	EIF3FP1	D	2.389462	2.788177	-2.01876	-3.15888
ENSG00000115525	ST3GAL5	D	1.979582	3.195253	-2.50081	-2.67402
ENSG00000253559	OSGEPL1-AS1	D	3.962485	0.765268	-2.5442	-2.18355
ENSG00000225849	MKRN7P	D	1.985634	3.190331	-2.58798	-2.58798
ENSG00000248424	OR51K1P	D	2.18099	3.029283	-2.60514	-2.60514
ENSG00000214417	KRT18P13	D	3.924169	0.847665	-2.38592	-2.38592
ENSG00000242593		D	2.619092	2.624575	-2.62183	-2.62183
ENSG00000262628	OR1D5	D	1.841494	3.2981	-2.5698	-2.5698
ENSG00000117507	FMO6P	D	2.664451	2.57649	-2.62047	-2.62047
ENSG00000230886	HMGB1P25	D	2.076072	3.113011	-2.59454	-2.59454
ENSG00000118322	ATP10B	D	2.699224	2.537587	-2.61841	-2.61841
ENSG00000166091	CMTM5	D	3.38163	1.722397	-2.55201	-2.55201
ENSG00000196549	MME	D	2.092754	3.095636	-2.59419	-2.59419
ENSG00000122852	SFTPA1	D	2.146052	3.048436	-2.58187	-2.61262
ENSG00000010626	LRRC23	D	2.654099	2.566653	-2.37146	-2.84929
ENSG00000234899	SOX9-AS1	D	3.332619	1.764494	-2.2624	-2.83471
ENSG00000170745	KCNS3	D	2.935955	2.27442	-2.60519	-2.60519
ENSG00000226763	SRRM5	D	3.112548	2.057383	-2.49202	-2.67791
ENSG00000263797		D	2.622291	2.601364	-2.61183	-2.61183
ENSG00000053747	LAMA3	D	2.697401	2.524474	-2.61094	-2.61094
ENSG00000105246	EBI3	D	3.352965	1.74361	-2.54829	-2.54829
ENSG00000260261		D	3.502517	1.52793	-2.5999	-2.43055
ENSG00000234665	LERFS	D	1.594839	3.457188	-2.45989	-2.59214
ENSG00000258082		D	2.984108	2.092558	-1.80105	-3.27562
ENSG00000025423	HSD17B6	D	1.232157	3.690168	-2.46116	-2.46116
ENSG00000255297	OR4A41P	D	2.889926	2.313865	-2.6019	-2.6019
ENSG00000218754	RPL18AP8	D	2.833235	2.375483	-2.60436	-2.60436
ENSG00000224957	LINC01266	D	2.302886	2.877471	-2.27126	-2.9091
ENSG00000235538		D	2.773784	2.435533	-2.60466	-2.60466
ENSG00000265593	NPM1P45	D	3.586408	1.391328	-2.48887	-2.48887
ENSG00000254708	MMADHCP2	D	3.3487	1.732805	-2.39201	-2.68949
ENSG00000286288		D	2.871088	2.327116	-2.57289	-2.62531
ENSG00000231883		D	3.797128	1.035933	-2.41653	-2.41653
ENSG00000214754		D	1.591015	3.450353	-2.52068	-2.52068
ENSG00000108442	TVP23BP2	D	2.059857	3.096694	-2.57828	-2.57828
ENSG00000213082	PPP1R14BP2	D	3.502298	1.408779	-1.81803	-3.09304

ENSG00000274749	KRTAP7-1	D	3.859618	0.913543	-2.38658	-2.38658
ENSG00000226478	UPF3AP1 ENSG00000226478	D	2.259589	2.831243	-1.82861	-3.26222
ENSG00000288022		D	2.690353	2.486836	-2.21265	-2.96454
ENSG00000233395	LINC00841	D	3.87962	0.87218	-2.3759	-2.3759
ENSG00000251396	LINC01301	D	2.212863	2.962594	-2.4665	-2.70895
ENSG00000283405		D	3.791196	1.035712	-2.41345	-2.41345
ENSG00000286374		D	3.455187	1.577987	-2.51659	-2.51659
ENSG00000237171	ENSG00000237171	D	2.086552	3.071697	-2.57912	-2.57912
ENSG00000233754		D	3.356151	1.717981	-2.53707	-2.53707
ENSG00000231095	GYG1P3	D	2.754917	2.444011	-2.59946	-2.59946
ENSG00000259696		D	3.054163	2.105943	-2.58005	-2.58005
ENSG00000251381	LINC00958	D	2.498084	2.594182	-1.79471	-3.29755
ENSG00000287317		D	2.910204	2.270673	-2.59044	-2.59044
ENSG00000277952		D	2.879467	2.303519	-2.59149	-2.59149
ENSG00000228203	GRASLND	D	2.601326	2.590915	-2.76924	-2.423
ENSG00000251276	MAGI2-AS1	D	2.754173	2.438262	-2.59622	-2.59622
ENSG00000126467	TSKS	D	3.424615	1.566135	-2.06818	-2.92257
ENSG00000187862	TTC24	D	3.38719	1.660086	-2.52364	-2.52364
ENSG00000213604		D	3.133417	1.994128	-2.56377	-2.56377
ENSG00000104722	NEFM	D	2.521503	2.667888	-2.5947	-2.5947
ENSG00000115602	IL1RL1	D	3.466997	1.540947	-2.50397	-2.50397
ENSG00000258256		D	2.353203	2.825045	-2.58912	-2.58912
ENSG00000228550		D	3.334376	1.728709	-2.53154	-2.53154
ENSG00000168952	STXBP6	D	1.581353	3.435986	-2.42756	-2.58977
ENSG00000253842		D	2.365285	2.811885	-2.58859	-2.58859
ENSG00000180090	OR3A1	D	2.869353	2.301347	-2.58535	-2.58535
ENSG00000287610		D	3.463467	1.541074	-2.50227	-2.50227
ENSG00000213215	OR2F1	D	3.485529	1.503922	-2.49473	-2.49473
ENSG00000213234	ST13P10	D	3.073988	2.055689	-2.56484	-2.56484
ENSG00000118557	PMFBP1	D	2.503801	2.67373	-2.63824	-2.53929
ENSG00000254275	LINC00824	D	3.063892	2.066571	-2.56523	-2.56523
ENSG00000250895	TUBAP15	D	3.301726	1.760297	-2.53101	-2.53101
ENSG00000187536	TPM3P7	D	2.181091	2.833493	-1.65863	-3.35596
ENSG00000287698		D	2.085432	3.045579	-2.56551	-2.56551
ENSG00000140937	CDH11	D	1.673639	3.361891	-2.51777	-2.51777
ENSG00000279249		D	2.897818	2.244505	-2.32298	-2.81934
ENSG00000231724	ENSG00000231724	D	3.138241	1.967953	-2.5531	-2.5531

ENSG00000227036	LINC00511	D	2.800478	2.274421	-1.8929	-3.182
ENSG00000228824	MIR4500HG ENSG00000228824	D	2.58402	2.58402	-2.58402	-2.58402
ENSG00000201564	RN7SKP50	D	3.393524	1.61981	-2.50667	-2.50667
ENSG00000260228		D	2.682114	2.483556	-2.58283	-2.58283
ENSG00000235903	CPB2-AS1	D	3.309869	1.736527	-2.5232	-2.5232
ENSG00000204983	PRSS1	D	2.778685	2.377499	-2.57809	-2.57809
ENSG00000176601	MAP3K19	D	2.783098	2.369022	-2.44394	-2.70818
ENSG00000135409	AMHR2	D	3.242714	1.822063	-2.53239	-2.53239
ENSG00000243130	PSG11	D	2.887847	2.255388	-2.57162	-2.57162
ENSG00000269894	NA	D	3.278753	1.772366	-2.52556	-2.52556
ENSG00000243701	DUBR	D	3.016932	2.103662	-2.56605	-2.55455
ENSG00000171819	ANGPTL7	D	3.963577	0.571289	-2.64935	-1.88551
ENSG00000266573		D	2.483804	2.672226	-2.57802	-2.57802
ENSG00000258863	SETP1	D	2.580574	2.575841	-2.57821	-2.57821
ENSG00000232794	HNRNPDP1	D	2.642249	2.51237	-2.63082	-2.5238
ENSG00000287566		D	3.155319	1.919759	-2.6798	-2.39528
ENSG00000263201	DPEP2NB	D	2.52034	2.629217	-2.66485	-2.4847
ENSG00000285960		D	2.649989	2.499503	-2.57475	-2.57475
ENSG00000171936	OR10H3	D	3.522551	1.404941	-2.46375	-2.46375
ENSG00000235848	RMDN2-AS1 ENSG00000235848	D	2.340819	2.79872	-2.56977	-2.56977
ENSG00000276409	CCL14	D	3.143721	1.932373	-2.46602	-2.61007
ENSG00000125462	MIR9-1HG	D	2.989917	2.110582	-2.31731	-2.78318
ENSG00000123560	PLP1	D	3.290538	1.740054	-2.5153	-2.5153
ENSG00000277504		D	3.196988	1.862915	-2.52995	-2.52995
ENSG00000248846	LINC02065	D	1.745806	3.284589	-2.5152	-2.5152
ENSG00000012124	CD22	D	2.344412	2.714013	-3.17088	-1.88755
ENSG00000255538	OR10V2P	D	2.276767	2.852034	-2.5644	-2.5644
ENSG00000240128	KRT18P43	D	3.445112	1.489672	-2.1564	-2.77839
ENSG00000220666	RCC2P7	D	2.161162	2.950714	-2.55594	-2.55594
ENSG00000135094	SDS	D	3.600705	1.269089	-2.4349	-2.4349
ENSG00000172554	SNTG2	D	3.754134	0.997397	-2.24545	-2.50608
ENSG00000270196	GTF3C6P3	D	1.538725	3.424297	-2.48151	-2.48151
ENSG00000225538	OR5BE1P	D	2.494763	2.643147	-2.56896	-2.56896
ENSG00000184148	SPRR4	D	2.785932	2.343482	-2.56471	-2.56471
ENSG00000273051	OR51F4P	D	2.333123	2.794627	-2.56388	-2.56388
ENSG00000233300	EIF4A1P1	D	2.874612	2.244085	-2.55935	-2.55935

ENSG00000225084		D	2.924467	2.184608	-2.55454	-2.55454
ENSG00000228793		D	3.31553	1.607997	-1.88464	-3.03889
ENSG00000258051		D	1.713182	3.297395	-2.50529	-2.50529
ENSG00000274251		D	3.424185	0.964447	-3.62052	-0.76812
ENSG00000127780	ORIE2	D	2.728977	2.288078	-1.77384	-3.24321
ENSG00000159961	OR3A3	D	3.330452	1.665247	-2.49785	-2.49785
ENSG00000228784	LINC00954	D	2.96885	2.121453	-2.7294	-2.36091
ENSG00000231210	COMETT	D	1.402731	3.508566	-2.45565	-2.45565
ENSG00000253361		D	2.609009	2.522425	-2.56572	-2.56572
ENSG00000286510		D	3.098721	1.969538	-2.53413	-2.53413
ENSG00000235227	VN1R38P	D	3.662455	1.148171	-2.40531	-2.40531
ENSG00000234859		D	3.016979	2.038811	-2.17679	-2.879
ENSG00000257771	LINC02395	D	2.117984	2.972966	-2.54547	-2.54547
ENSG00000184481	FOXO4	D	1.934434	3.095971	-2.12728	-2.90313
ENSG00000285527		D	2.098936	2.981213	-2.72766	-2.35249
ENSG00000113361	CDH6	D	3.185402	1.850106	-2.51775	-2.51775
ENSG00000159208	CIART	D	3.72885	1.023255	-2.37605	-2.37605
ENSG00000283258		D	3.234321	1.784336	-2.50933	-2.50933
ENSG00000171004	HS6ST2	D	3.561895	1.30455	-2.38712	-2.47933
ENSG00000229596	MYL12BP3	D	3.665514	1.132708	-2.39911	-2.39911
ENSG00000226624		D	1.500357	3.431998	-2.60129	-2.33106
ENSG00000183876	ARSI	D	2.570914	2.548461	-2.55969	-2.55969
ENSG00000115607	IL18RAP	D	2.054768	3.018934	-2.53685	-2.53685
ENSG00000204393	NOL4L-DT	D	3.46252	1.455409	-2.45896	-2.45896
ENSG00000226833		D	2.583277	2.509555	-2.89841	-2.19442
ENSG00000227023	OR51A3P	D	3.147856	1.890399	-2.51913	-2.51913
ENSG00000111728	ST8SIA1	D	3.206237	1.813405	-2.50982	-2.50982
ENSG00000283444	GPR141BP	D	2.882872	2.20968	-2.54628	-2.54628
ENSG00000166250	CLMP	D	1.721816	3.273513	-2.53408	-2.46125
ENSG00000276058	STMN1P1	D	1.385633	3.497108	-2.65087	-2.23187
ENSG00000120251	GRIA2	D	1.902308	3.135387	-2.51885	-2.51885
ENSG00000196189	SEMA4A	D	2.458859	2.651241	-2.55505	-2.55505
ENSG00000287784		D	1.434944	3.470023	-2.45248	-2.45248
ENSG00000215094		D	2.682564	2.425829	-2.5542	-2.5542
ENSG00000267452	LINC02073	D	2.708049	2.392552	-2.37392	-2.72668
	ENSG00000267452					
ENSG00000142163	ORIE3	D	2.906102	2.1791	-2.5426	-2.5426
ENSG00000004799	PKD4	D	3.227611	1.776412	-2.40623	-2.59779

ENSG00000126562	WNK4	D	3.717409	0.935511	-2.86932	-1.7836
ENSG00000261758	STAG1-DT	D	3.111963	1.928095	-2.55411	-2.48594
ENSG00000253688		D	1.977407	3.035421	-2.05143	-2.9614
ENSG00000221996	OR52B4	D	2.564167	2.544134	-2.55415	-2.55415
ENSG00000257109	OR4F28P	D	3.25328	1.739442	-2.49636	-2.49636
ENSG00000230461	PROX1-AS1	D	1.809534	3.200488	-2.45351	-2.55651
ENSG00000242979	RPS15AP18	D	3.713663	1.024756	-2.36921	-2.36921
ENSG00000230013	CT70 ENSG00000230013	D	3.012605	2.047136	-2.52987	-2.52987
ENSG00000225101	OR52K3P	D	2.476885	2.545361	-3.15898	-1.86326
ENSG00000112137	PHACTR1	D	2.871763	2.21067	-2.46269	-2.61974
ENSG00000177186	OR2M7	D	2.882271	2.199538	-2.5409	-2.5409
ENSG00000235683		D	3.303735	1.665524	-2.44464	-2.52462
ENSG00000257875		D	3.961329	0.526213	-2.24377	-2.24377
ENSG00000089169	RPH3A	D	3.578896	1.221777	-2.07404	-2.72664
ENSG00000002933	TMEM176A	D	3.089439	1.867213	-3.07914	-1.87751
ENSG00000227080		D	2.882349	2.196882	-2.53962	-2.53962
ENSG00000239605	STPG4	D	2.247794	2.835346	-2.54157	-2.54157
ENSG00000272666	KLHDC7B-DT	D	3.337192	1.612804	-2.475	-2.475
ENSG00000214832	UPF3AP2	D	2.336052	2.75226	-2.59869	-2.48963
ENSG00000230559	RPL17P12	D	3.508307	1.356633	-2.43247	-2.43247
ENSG00000213486		D	2.627429	2.468284	-2.54786	-2.54786
ENSG00000251209	LINC00923	D	3.408627	1.506847	-2.45774	-2.45774
ENSG00000262950		D	3.178139	1.826176	-2.50216	-2.50216
ENSG00000171658	NMRAL2P	D	3.242703	1.737372	-2.38561	-2.59446
ENSG00000119535	CSF3R	D	2.284889	2.793747	-2.53932	-2.53932
ENSG00000279719		D	3.126931	1.887	-2.50697	-2.50697
ENSG00000142149	HUNK	D	2.53442	2.314889	-1.33953	-3.50978
ENSG00000231534	FBXO36-IT1	D	2.96746	2.082479	-2.52497	-2.52497
ENSG00000263041		D	2.591835	2.495071	-2.54345	-2.54345
ENSG00000101342	TLDC2	D	2.886517	2.168335	-2.3546	-2.70025
ENSG00000253302	STAU2-AS1	D	3.496994	1.359035	-2.44512	-2.41091
ENSG00000284513		D	3.388399	1.523274	-2.45584	-2.45584
ENSG00000243083	LINC00870	D	3.044589	1.985034	-2.51481	-2.51481
ENSG00000113721	PDGFRB	D	2.32318	2.718795	-2.94338	-2.09859
ENSG00000111913	RIPOR2	D	2.58314	2.501387	-2.54226	-2.54226
ENSG00000205420	KRT6A	D	3.045068	1.984024	-2.51455	-2.51455
ENSG00000287074		D	3.176377	1.815495	-2.49594	-2.49594
ENSG00000279171		D	3.28008	1.675141	-2.47761	-2.47761

ENSG00000261336	EIF4BP5	D	2.517274	2.534272	-2.91572	-2.13583
ENSG00000182866	LCK	D	2.431623	2.647575	-2.5396	-2.5396
ENSG00000108823	SGCA ENSG00000108823	D	3.020885	2.008579	-2.51473	-2.51473
ENSG00000124233	SEMGI	D	2.889309	2.1644	-2.52685	-2.52685
ENSG00000236383	CCDC200	D	2.653342	2.381119	-2.97298	-2.06148
ENSG00000183122	OR2A3P	D	3.497003	1.349627	-2.42331	-2.42331
ENSG00000261440	DUX4L45	D	3.996308	0.397437	-2.19687	-2.19687
ENSG00000089127	OASI	D	2.766143	2.299477	-2.60584	-2.45978
ENSG00000178836		D	3.286542	1.657781	-2.47216	-2.47216
ENSG00000267423		D	2.654958	2.418804	-2.53688	-2.53688
ENSG00000105339	DENND3	D	2.213832	2.803631	-2.96766	-2.0498
ENSG00000235207	TUBBP6	D	1.273447	3.542559	-2.408	-2.408
ENSG00000287930		D	2.002137	3.021456	-2.5118	-2.5118
ENSG00000231013	SCTR-AS1	D	2.570257	2.500747	-2.64876	-2.42225
ENSG00000286585		D	2.668629	2.401612	-2.53512	-2.53512
ENSG00000253400		D	3.296929	1.639594	-2.46826	-2.46826
ENSG00000221938	OR2A14	D	3.260932	1.689493	-2.47521	-2.47521
ENSG00000175147	TMEM51-AS1 ENSG00000175147	D	2.75769	2.283806	-2.19491	-2.84659
ENSG00000250900	TRIM7-AS1	D	3.573696	1.089116	-1.65861	-3.0042
ENSG00000237159	CNTFR-AS1	D	1.264928	3.543796	-2.32455	-2.48418
ENSG00000227892	OR5P4P	D	2.575459	2.496689	-2.53607	-2.53607
ENSG00000287082		D	2.930088	2.10635	-2.51822	-2.51822
ENSG00000218107		D	2.929751	2.106501	-2.51813	-2.51813
ENSG00000139445	FOXN4	D	3.679807	1.030904	-2.35536	-2.35536
ENSG00000237979	DNAJB12P1	D	2.124913	2.910963	-2.40099	-2.63488
ENSG00000183022	TPM3P8	D	3.360485	1.288838	-1.342	-3.30732
ENSG00000164299	SPZ1	D	2.77567	2.280332	-2.528	-2.528
ENSG00000280419		D	3.136808	1.847298	-2.49205	-2.49205
ENSG00000226472		D	1.92141	3.076869	-2.49914	-2.49914
ENSG00000141738	GRB7	D	3.361746	1.532255	-2.35003	-2.54397
ENSG00000269376		D	3.714806	0.954758	-2.33478	-2.33478
ENSG00000229365		D	3.744985	0.898558	-2.32177	-2.32177
ENSG00000214819	CDRT15L2	D	3.960159	0.449418	-2.20479	-2.20479
ENSG00000181733	OR2Z1 ENSG00000181733	D	3.432508	1.371723	-1.95408	-2.85015
ENSG00000236541	VN2R9P	D	2.50425	2.555505	-2.52988	-2.52988
ENSG00000213755		D	3.191886	1.766419	-2.47915	-2.47915

ENSG00000233311	MTCO1P54	D	2.560906	2.497889	-2.5294	-2.5294
ENSG00000244244	RPS3AP42	D	2.585686	2.472009	-2.52885	-2.52885
ENSG00000084453	SLCO1A2	D	3.761686	0.861754	-2.32459	-2.29885
ENSG00000187513	GJA4	D	2.923617	2.100205	-2.51191	-2.51191
ENSG00000261260		D	2.933794	2.085897	-2.50985	-2.50985
ENSG00000225639	PGAM1P2	D	3.133833	1.836915	-2.48537	-2.48537
ENSG00000112559	MDFI	D	2.071401	2.945124	-2.50826	-2.50826
ENSG00000249156	TAF11L12	D	2.416667	2.633901	-2.52528	-2.52528
ENSG00000206014	OR7E161P	D	1.946488	3.045493	-2.49599	-2.49599
ENSG00000064763	FAR2	D	1.860986	2.960453	-1.4974	-3.32404
ENSG00000236965	OR52N3P	D	1.752131	3.19493	-2.47353	-2.47353
ENSG00000267515		D	2.593351	2.45517	-2.52426	-2.52426
ENSG00000236352		D	1.414176	3.429724	-2.42195	-2.42195
ENSG00000227509	LINC01839	D	2.989232	2.012288	-2.50076	-2.50076
ENSG00000253951	CCT3P1	D	3.212672	1.724431	-2.46855	-2.46855
ENSG00000267649	ENSG00000267649	D	3.515785	1.277561	-2.39667	-2.39667
ENSG00000185811	IKZF1	D	1.901804	3.076748	-2.48928	-2.48928
ENSG00000255437		D	1.698969	3.229779	-2.51989	-2.40886
ENSG00000176547	OR4C3	D	2.815592	2.212763	-2.51418	-2.51418
ENSG00000261394		D	3.34782	1.532032	-2.43993	-2.43993
ENSG00000163531	NFASC	D	3.014919	1.975714	-2.50564	-2.48499
ENSG00000254519		D	2.028442	2.971441	-2.49994	-2.49994
ENSG00000223896	CCNJP2 ENSG00000223896	D	1.678804	3.222196	-2.11011	-2.79089
ENSG00000228564	LINC01005	D	0.9223	3.718001	-2.32015	-2.32015
ENSG00000184385	UMODL1-AS1	D	2.682385	2.350382	-2.67735	-2.35542
ENSG00000266711		D	3.644619	1.049142	-2.34688	-2.34688
ENSG00000255923		D	3.250951	1.661147	-2.45605	-2.45605
ENSG00000135480	KRT7	D	2.998242	1.974906	-2.2468	-2.72634
ENSG00000242766	IGKV1D-17	D	3.957806	0.40724	-2.18252	-2.18252
ENSG00000224090		D	2.848979	2.163025	-2.506	-2.506
ENSG00000286679		D	2.836145	2.177093	-2.46323	-2.55001
ENSG00000104327	CALB1 ENSG00000104327	D	2.831327	2.180204	-2.39498	-2.61655
ENSG00000233058	LINC00884	D	2.21094	2.796821	-2.71392	-2.29384
ENSG00000239978	OR7E53P	D	3.714623	0.912695	-2.31366	-2.31366
ENSG00000226527		D	2.510101	2.521381	-2.41618	-2.6153
ENSG00000273901		D	3.141844	1.800884	-2.47136	-2.47136

ENSG00000248717	LINC02222	D	2.981417	2.000464	-2.49094	-2.49094
ENSG00000255986	MT1JP	D	2.727729	2.290563	-2.50915	-2.50915
ENSG00000244682	FCGR2C	D	2.71755	2.301215	-2.50938	-2.50938
ENSG00000167281	RBFOX3	D	2.592262	2.433733	-2.513	-2.513
ENSG00000256654		D	1.8676	3.077314	-2.67763	-2.26729
ENSG00000180353	HCLS1	D	2.656237	2.363436	-2.50984	-2.50984
ENSG00000227877	MRLN	D	2.920047	2.067454	-2.49375	-2.49375
ENSG00000187391	MAGI2 ENSG00000187391	D	2.947756	2.025086	-2.28341	-2.68943
ENSG00000185296		D	2.67853	2.339155	-2.50884	-2.50884
ENSG00000185101	ANO9	D	1.99746	2.975674	-2.57664	-2.39649
ENSG00000214691	LINC01913	D	0.87335	3.726204	-2.29978	-2.29978
ENSG00000262881		D	2.827465	2.171254	-2.49936	-2.49936
ENSG00000181961	OR4A16	D	2.903634	2.081281	-2.49246	-2.49246
ENSG00000124157	SEMG2 ENSG00000124157	D	2.8325	2.161536	-2.49702	-2.49702
ENSG00000224640	SRSF1P1	D	2.86273	2.126069	-2.4944	-2.4944
ENSG00000136367	ZFHX2	D	2.269311	2.734112	-2.48463	-2.5188
ENSG00000171476	HOPX	D	2.070326	2.908297	-2.53202	-2.4466
ENSG00000160716	CHRNA2	D	3.069235	1.868423	-2.37109	-2.56656
ENSG00000065534	MYLK	D	1.323623	3.44952	-2.19685	-2.57629
ENSG00000275493		D	3.811342	0.683125	-2.24723	-2.24723
ENSG00000198848	CES1	D	2.887671	2.089707	-2.48869	-2.48869
ENSG00000237354	OR52S1P	D	2.841759	2.141856	-2.49181	-2.49181
ENSG00000270773		D	2.17806	2.808859	-2.49346	-2.49346
ENSG00000263460	BOD1P1	D	3.50155	1.243173	-2.37236	-2.37236
ENSG00000243830		D	3.060876	1.873701	-2.46729	-2.46729
ENSG00000261079		D	3.060425	1.8519	-2.764	-2.14832
ENSG00000255367		D	1.560934	3.291838	-2.42639	-2.42639
ENSG00000240698	RPS2P39	D	2.097958	2.87545	-2.4867	-2.4867
ENSG00000131044	TTLL9	D	2.454267	2.519938	-2.8639	-2.1103
ENSG00000242661	RPS3AP43	D	2.204237	2.781503	-2.49287	-2.49287
ENSG00000229859	PGA3	D	2.099696	2.812273	-1.88953	-3.02244
ENSG00000232883		D	2.63628	2.358699	-2.49749	-2.49749
ENSG00000279168		D	3.431708	1.34406	-2.38788	-2.38788
ENSG00000186431	FCAR	D	3.225703	1.58728	-1.91703	-2.89596
ENSG00000148215	OR5C1	D	2.128007	2.842336	-2.48517	-2.48517
ENSG00000205930	C21orf62-AS1	D	2.700389	2.283479	-2.58708	-2.39678

ENSG00000276789	MRGPRX8P	D	2.119462	2.847147	-2.4833	-2.4833
ENSG00000250331	LINC01340	D	3.683376	0.906631	-2.295	-2.295
ENSG00000221933	OR2A25	D	3.338153	1.477144	-2.40765	-2.40765
ENSG00000240015		D	2.518775	2.472653	-2.49571	-2.49571

For genes in which gene symbols have not been identified, only Ensembl IDs are listed. RIP, RNA immunoprecipitation.

Table III. Details of the upregulated KRAS_SIGNALING_DN pathway in GSEA for RIP1 + RIP2 vs. INPUT1 + INPUT2.

No.	Gene symbol	Title	Rank in gene list	Rank metric score	Running es	Core enrichment
1	SERPINA10	serpin family A member 10 [Source:HGNC Symbol;Acc:HGNC:15996]	87	4.952	0.0138	Yes
2	TENT5C	terminal nucleotidyltransferase 5C [Source:HGNC Symbol;Acc:HGNC:24712]	444	4.828	0.0208	Yes
3	RYR2	ryanodine receptor 2 [Source:HGNC Symbol;Acc:HGNC:10484]	572	4.786	0.0332	Yes
4	KCNN1	potassium calcium-activated channel subfamily N member 1 [Source:HGNC Symbol;Acc:HGNC:6290]	645	4.770	0.0468	Yes
5	P2RY4	pyrimidinergic receptor P2Y4 [Source:HGNC Symbol;Acc:HGNC:8542]	797	4.719	0.0583	Yes
6	TG	thyroglobulin [Source:HGNC Symbol;Acc:HGNC:11764]	807	4.715	0.0732	Yes
7	PCDHB1	protocadherin beta 1 [Source:HGNC Symbol;Acc:HGNC:8680]	1029	4.631	0.0828	Yes
8	SCN10A	sodium voltage-gated channel alpha subunit 10 [Source:HGNC Symbol;Acc:HGNC:10582]	1138	4.585	0.0950	Yes
9	SELENOP	selenoprotein P [Source:HGNC Symbol;Acc:HGNC:10751]	1169	4.575	0.1090	Yes
10	CHRNA3	cholinergic receptor nicotinic gamma subunit [Source:HGNC Symbol;Acc:HGNC:1967]	1183	4.569	0.1233	Yes
11	ATP6V1B1	ATPase H ⁺ transporting V1 subunit B1 [Source:HGNC Symbol;Acc:HGNC:853]	1598	4.390	0.1275	Yes
12	HTR1D	5-hydroxytryptamine receptor 1D [Source:HGNC	1656	4.362	0.1402	Yes

		Symbol;Acc:HGNC:5289]				
13	HTR1B	5-hydroxytryptamine receptor 1B [Source:HGNC Symbol;Acc:HGNC:5287]	1738	4.322	0.1521	Yes
14	SLC5A5	solute carrier family 5 member 5 [Source:HGNC Symbol;Acc:HGNC:11040]	1859	4.241	0.1629	Yes
15	THNSL2	threonine synthase like 2 [Source:HGNC Symbol;Acc:HGNC:25602]	1953	4.179	0.1741	Yes
16	THRB	thyroid hormone receptor beta [Source:HGNC Symbol;Acc:HGNC:11799]	1959	4.177	0.1874	Yes
17	ABCG4	ATP binding cassette subfamily G member 4 [Source:HGNC Symbol;Acc:HGNC:13884]	2082	4.099	0.1976	Yes
18	DTNB	dystrobrevin beta [Source:HGNC Symbol;Acc:HGNC:3058]	2173	4.032	0.2084	Yes
19	CLDN16	claudin 16 [Source:HGNC Symbol;Acc:HGNC:2037]	2195	4.014	0.2208	Yes
20	CPA2	carboxypeptidase A2 [Source:HGNC Symbol;Acc:HGNC:2297]	2303	3.928	0.2309	Yes
21	NPY4R	neuropeptide Y receptor Y4 [Source:HGNC Symbol;Acc:HGNC:9329]	2399	3.862	0.2410	Yes
22	KCND1	potassium voltage-gated channel subfamily D member 1 [Source:HGNC Symbol;Acc:HGNC:6237]	2576	3.709	0.2487	Yes
23	BRDT	bromodomain testis associated [Source:HGNC Symbol;Acc:HGNC:1105]	2765	3.565	0.2557	Yes
24	MYOT	myotilin [Source:HGNC Symbol;Acc:HGNC:12399]	2996	3.384	0.2611	Yes
25	IRS4	insulin receptor substrate 4 [Source:HGNC	3104	3.310	0.2691	Yes

		Symbol;Acc:HGNC:6128]				
26	KRT1	keratin 1 [Source:HGNC Symbol;Acc:HGNC:6412]	3251	3.217	0.2760	Yes
27	KCNMB1	potassium calcium-activated channel subfamily M regulatory beta subunit 1 [Source:HGNC Symbol;Acc:HGNC:6285]	3326	3.164	0.2844	Yes
28	PLAG1	PLAG1 zinc finger [Source:HGNC Symbol;Acc:HGNC:9045]	3370	3.137	0.2934	Yes
29	KRT4	keratin 4 [Source:HGNC Symbol;Acc:HGNC:6441]	3627	2.993	0.2969	Yes
30	NUDT11	nudix hydrolase 11 [Source:HGNC Symbol;Acc:HGNC:18011]	3658	2.974	0.3058	Yes
31	IGFBP2	insulin like growth factor binding protein 2 [Source:HGNC Symbol;Acc:HGNC:5471]	3805	2.889	0.3115	Yes
32	NOS1	nitric oxide synthase 1 [Source:HGNC Symbol;Acc:HGNC:7872]	3807	2.889	0.3208	Yes
33	TCL1A	TCL1 family AKT coactivator A [Source:HGNC Symbol;Acc:HGNC:11648]	3871	2.851	0.3285	Yes
34	STAG3	stromal antigen 3 [Source:HGNC Symbol;Acc:HGNC:11356]	3949	2.810	0.3356	Yes
35	GPRC5C	G protein-coupled receptor class C group 5 member C [Source:HGNC Symbol;Acc:HGNC:13309]	4060	2.737	0.3418	Yes
36	YPEL1	yippee like 1 [Source:HGNC Symbol;Acc:HGNC:12845]	4074	2.729	0.3503	Yes
37	SLC6A3	solute carrier family 6 member 3 [Source:HGNC Symbol;Acc:HGNC:11049]	4097	2.719	0.3585	Yes
38	PAX3	paired box 3 [Source:HGNC Symbol;Acc:HGNC:8617]	4106	2.715	0.3670	Yes

39	ITIH3	inter-alpha-trypsin inhibitor heavy chain 3 [Source:HGNC Symbol;Acc:HGNC:6168]	4375	2.570	0.3688	Yes
40	MSH5	mutS homolog 5 [Source:HGNC Symbol;Acc:HGNC:7328]	4391	2.562	0.3767	Yes
41	CLDN8	claudin 8 [Source:HGNC Symbol;Acc:HGNC:2050]	4451	2.538	0.3835	Yes
42	NRIP2	nuclear receptor interacting protein 2 [Source:HGNC Symbol;Acc:HGNC:23078]	4519	2.499	0.3899	Yes
43	NR6A1	nuclear receptor subfamily 6 group A member 1 [Source:HGNC Symbol;Acc:HGNC:7985]	4773	2.376	0.3915	Yes
44	MEFV	MEFV innate immunity regulator, pyrin [Source:HGNC Symbol;Acc:HGNC:6998]	4794	2.367	0.3986	Yes
45	COL2A1	collagen type II alpha 1 chain [Source:HGNC Symbol;Acc:HGNC:2200]	4834	2.348	0.4052	Yes
46	MYO15A	myosin XVA [Source:HGNC Symbol;Acc:HGNC:7594]	4870	2.335	0.4119	Yes
47	DLK2	delta like non-canonical Notch ligand 2 [Source:HGNC Symbol;Acc:HGNC:21113]	4997	2.277	0.4162	Yes
48	MX1	MX dynamin like GTPase 1 [Source:HGNC Symbol;Acc:HGNC:7532]	5003	2.274	0.4234	Yes
49	CYP11B2	cytochrome P450 family 11 subfamily B member 2 [Source:HGNC Symbol;Acc:HGNC:2592]	5282	2.170	0.4237	Yes
50	ACTC1	actin alpha cardiac muscle 1 [Source:HGNC Symbol;Acc:HGNC:143]	5417	2.125	0.4273	Yes
51	WNT16	Wnt family member 16 [Source:HGNC Symbol;Acc:HGNC:16267]	5526	2.086	0.4314	Yes

52	CCR8	C-C motif chemokine receptor 8 [Source:HGNC Symbol;Acc:HGNC:1609]	5794	2.006	0.4315	Yes
53	TEX15	testis expressed 15, meiosis and synapsis associated [Source:HGNC Symbol;Acc:HGNC:11738]	6266	1.871	0.4262	Yes
54	SIDT1	SID1 transmembrane family member 1 [Source:HGNC Symbol;Acc:HGNC:25967]	6400	1.834	0.4289	Yes
55	ZBTB16	zinc finger and BTB domain containing 16 [Source:HGNC Symbol;Acc:HGNC:12930]	6401	1.834	0.4348	Yes
56	FGF16	fibroblast growth factor 16 [Source:HGNC Symbol;Acc:HGNC:3672]	6460	1.822	0.4393	Yes
57	KRT15	keratin 15 [Source:HGNC Symbol;Acc:HGNC:6421]	6511	1.807	0.4439	Yes
58	TAS2R4	taste 2 receptor member 4 [Source:HGNC Symbol;Acc:HGNC:14911]	6696	1.758	0.4452	Yes
59	PKP1	plakophilin 1 [Source:HGNC Symbol;Acc:HGNC:9023]	6700	1.757	0.4507	Yes
60	EDN1	endothelin 1 [Source:HGNC Symbol;Acc:HGNC:3176]	7010	1.670	0.4487	Yes
61	ABCB11	ATP binding cassette subfamily B member 11 [Source:HGNC Symbol;Acc:HGNC:42]	7072	1.655	0.4526	Yes
62	EFHD1	EF-hand domain family member D1 [Source:HGNC Symbol;Acc:HGNC:29556]	7080	1.651	0.4577	Yes
63	IFI44L	interferon induced protein 44 like [Source:HGNC Symbol;Acc:HGNC:17817]	7169	1.629	0.4608	Yes
64	COQ8A	coenzyme Q8A [Source:HGNC Symbol;Acc:HGNC:16812]	7461	1.562	0.4589	Yes

65	DCC	DCC netrin 1 receptor [Source:HGNC Symbol;Acc:HGNC:2701]	7566	1.535	0.4613	Yes
66	MTHFR	methylenetetrahydrofolate reductase [Source:HGNC Symbol;Acc:HGNC:7436]	7744	1.493	0.4619	Yes
67	CDH16	cadherin 16 [Source:HGNC Symbol;Acc:HGNC:1755]	7873	1.467	0.4636	Yes
68	PAX4	paired box 4 [Source:HGNC Symbol;Acc:HGNC:8618]	7937	1.454	0.4667	Yes
69	GP2	glycoprotein 2 [Source:HGNC Symbol;Acc:HGNC:4441]	7989	1.441	0.4701	Yes
70	TFAP2B	transcription factor AP-2 beta [Source:HGNC Symbol;Acc:HGNC:11743]	8062	1.425	0.4730	Yes
71	CPB1	carboxypeptidase B1 [Source:HGNC Symbol;Acc:HGNC:2299]	8403	1.359	0.4692	Yes
72	P2RX6	purinergic receptor P2X 6 [Source:HGNC Symbol;Acc:HGNC:8538]	8451	1.348	0.4724	Yes
73	FSHB	follicle stimulating hormone subunit beta [Source:HGNC Symbol;Acc:HGNC:3964]	8621	1.319	0.4726	Yes
74	GP1BA	glycoprotein Ib platelet subunit alpha [Source:HGNC Symbol;Acc:HGNC:4439]	8820	1.286	0.4720	Yes
75	SYNPO	synaptopodin [Source:HGNC Symbol;Acc:HGNC:30672]	8893	1.273	0.4744	Yes
76	GRID2	glutamate ionotropic receptor delta type subunit 2 [Source:HGNC Symbol;Acc:HGNC:4576]	8971	1.258	0.4766	Yes
77	ADRA2C	adrenoceptor alpha 2C [Source:HGNC Symbol;Acc:HGNC:283]	9017	1.251	0.4795	Yes
78	LYPD3	LY6/PLAUR domain containing 3 [Source:HGNC Symbol;Acc:HGNC:24880]	9051	1.245	0.4827	Yes

79	PRKN	parkin RBR E3 ubiquitin protein ligase [Source:HGNC Symbol;Acc:HGNC:8607]	9110	1.235	0.4853	Yes
80	IL12B	interleukin 12B [Source:HGNC Symbol;Acc:HGNC:5970]	9130	1.232	0.4888	Yes
81	RYR1	ryanodine receptor 1 [Source:HGNC Symbol;Acc:HGNC:10483]	9382	1.194	0.4867	Yes
82	GDNF	glial cell derived neurotrophic factor [Source:HGNC Symbol;Acc:HGNC:4232]	9707	1.146	0.4826	Yes
83	SLC30A3	solute carrier family 30 member 3 [Source:HGNC Symbol;Acc:HGNC:11014]	9883	1.117	0.4820	Yes
84	EDAR	ectodysplasin A receptor [Source:HGNC Symbol;Acc:HGNC:2895]	10049	1.095	0.4816	Yes
85	EPHA5	EPH receptor A5 [Source:HGNC Symbol;Acc:HGNC:3389]	10050	1.095	0.4851	Yes
86	CAMK1D	calcium/calmodulin dependent protein kinase ID [Source:HGNC Symbol;Acc:HGNC:19341]	10252	1.065	0.4837	Yes
87	EGF	epidermal growth factor [Source:HGNC Symbol;Acc:HGNC:3229]	10360	1.049	0.4845	Yes
88	CELSR2	cadherin EGF LAG seven-pass G-type receptor 2 [Source:HGNC Symbol;Acc:HGNC:3231]	10380	1.047	0.4874	Yes
89	ENTPD7	ectonucleoside triphosphate diphosphohydrolase 7 [Source:HGNC Symbol;Acc:HGNC:19745]	10387	1.047	0.4906	Yes
90	TNNI3	troponin I3, cardiac type [Source:HGNC Symbol;Acc:HGNC:11947]	10408	1.044	0.4935	Yes
91	CPEB3	cytoplasmic polyadenylation element binding protein 3 [Source:HGNC Symbol;Acc:HGNC:21746]	10525	1.026	0.4940	Yes
92	KLHDC8A	kelch domain containing 8A	10544	1.023	0.4969	Yes

		[Source:HGNC Symbol;Acc:HGNC:25573]				
93	TENM2	teneurin transmembrane protein 2 [Source:HGNC Symbol;Acc:HGNC:29943]	10603	1.015	0.4988	Yes
94	MAGIX	MAGI family member, X-linked [Source:HGNC Symbol;Acc:HGNC:30006]	10648	1.008	0.5010	Yes
95	SLC38A3	solute carrier family 38 member 3 [Source:HGNC Symbol;Acc:HGNC:18044]	10700	1.001	0.5030	Yes
96	YBX2	Y-box binding protein 2 [Source:HGNC Symbol;Acc:HGNC:17948]	10771	0.991	0.5045	Yes
97	SLC12A3	solute carrier family 12 member 3 [Source:HGNC Symbol;Acc:HGNC:10912]	10917	0.971	0.5041	Yes
98	MYH7	myosin heavy chain 7 [Source:HGNC Symbol;Acc:HGNC:7577]	10927	0.970	0.5070	Yes
99	PDE6B	phosphodiesterase 6B [Source:HGNC Symbol;Acc:HGNC:8786]	11042	0.955	0.5074	Yes
100	FGF22	fibroblast growth factor 22 [Source:HGNC Symbol;Acc:HGNC:3679]	11070	0.950	0.5098	Yes
101	CHST2	carbohydrate sulfotransferase 2 [Source:HGNC Symbol;Acc:HGNC:1970]	11425	0.910	0.5042	No
102	SMPX	small muscle protein X-linked [Source:HGNC Symbol;Acc:HGNC:11122]	11779	0.905	0.4987	No
103	KRT5	keratin 5 [Source:HGNC Symbol;Acc:HGNC:6442]	11847	0.904	0.5000	No
104	CD80	CD80 molecule [Source:HGNC Symbol;Acc:HGNC:1700]	13140	0.888	0.4720	No
105	KLK7	kallikrein related peptidase 7	13483	0.882	0.4666	No

		[Source:HGNC Symbol;Acc:HGNC:6368]				
106	CD207	CD207 molecule [Source:HGNC Symbol;Acc:HGNC:17935]	13802	0.876	0.4618	No
107	CD40LG	CD40 ligand [Source:HGNC Symbol;Acc:HGNC:11935]	13808	0.876	0.4645	No
108	CALCB	calcitonin related polypeptide beta [Source:HGNC Symbol;Acc:HGNC:1438]	13885	0.874	0.4655	No
109	SLC16A7	solute carrier family 16 member 7 [Source:HGNC Symbol;Acc:HGNC:10928]	13892	0.874	0.4682	No
110	PTGFR	prostaglandin F receptor [Source:HGNC Symbol;Acc:HGNC:9600]	14049	0.870	0.4672	No
111	NTF3	neurotrophin 3 [Source:HGNC Symbol;Acc:HGNC:8023]	14070	0.870	0.4696	No
112	SCGB1A1	secretoglobin family 1A member 1 [Source:HGNC Symbol;Acc:HGNC:12523]	14097	0.869	0.4717	No
113	PROP1	PROP paired-like homeobox 1 [Source:HGNC Symbol;Acc:HGNC:9455]	14119	0.869	0.4740	No
114	PNMT	phenylethanolamine N-methyltransferase [Source:HGNC Symbol;Acc:HGNC:9160]	14427	0.861	0.4694	No
115	ATP4A	ATPase H+/K+ transporting subunit alpha [Source:HGNC Symbol;Acc:HGNC:819]	14488	0.859	0.4708	No
116	SOX10	SRY-box transcription factor 10 [Source:HGNC Symbol;Acc:HGNC:11190]	14590	0.856	0.4711	No
117	SPRR3	small proline rich protein 3 [Source:HGNC Symbol;Acc:HGNC:11268]	14681	0.854	0.4717	No
118	CACNA1F	calcium voltage-gated channel subunit	14969	0.844	0.4675	No

		alpha1 F [Source:HGNC Symbol;Acc:HGNC:1393]				
119	ALOX12B	arachidonate 12-lipoxygenase, 12R type [Source:HGNC Symbol;Acc:HGNC:430]	15112	0.838	0.4668	No
120	RGS11	regulator of G protein signaling 11 [Source:HGNC Symbol;Acc:HGNC:9993]	15120	0.838	0.4694	No
121	TGM1	transglutaminase 1 [Source:HGNC Symbol;Acc:HGNC:11777]	15453	0.824	0.4641	No
122	NR4A2	nuclear receptor subfamily 4 group A member 2 [Source:HGNC Symbol;Acc:HGNC:7981]	15502	0.822	0.4656	No
123	AMBN	ameloblastin [Source:HGNC Symbol;Acc:HGNC:452]	15560	0.819	0.4668	No
124	BMPR1B	bone morphogenetic protein receptor type 1B [Source:HGNC Symbol;Acc:HGNC:1077]	15761	0.809	0.4647	No
125	SERPINB2	serpin family B member 2 [Source:HGNC Symbol;Acc:HGNC:8584]	15844	0.804	0.4653	No
126	NPHS1	NPHS1 adhesion molecule, nephrin [Source:HGNC Symbol;Acc:HGNC:7908]	15848	0.804	0.4678	No
127	KCNE2	potassium voltage-gated channel subfamily E regulatory subunit 2 [Source:HGNC Symbol;Acc:HGNC:6242]	15958	0.798	0.4677	No
128	KRT13	keratin 13 [Source:HGNC Symbol;Acc:HGNC:6415]	16376	0.770	0.4602	No
129	SNN	stannin [Source:HGNC Symbol;Acc:HGNC:11149]	16417	0.767	0.4618	No
130	TFCP2L1	transcription factor CP2 like 1 [Source:HGNC Symbol;Acc:HGNC:17925]	16457	0.764	0.4633	No

131	ZC2HC1C	zinc finger C2HC-type containing 1C [Source:HGNC Symbol;Acc:HGNC:20354]	16470	0.763	0.4654	No
132	NGB	neuroglobin [Source:HGNC Symbol;Acc:HGNC:14077]	16653	0.746	0.4635	No
133	TLX1	T cell leukemia homeobox 1 [Source:HGNC Symbol;Acc:HGNC:5056]	16798	0.732	0.4624	No
134	TGFB2	transforming growth factor beta 2 [Source:HGNC Symbol;Acc:HGNC:11768]	17009	0.709	0.4597	No
135	PDCD1	programmed cell death 1 [Source:HGNC Symbol;Acc:HGNC:8760]	17227	0.682	0.4567	No
136	SLC6A14	solute carrier family 6 member 14 [Source:HGNC Symbol;Acc:HGNC:11047]	17417	0.654	0.4542	No
137	RSAD2	radical S-adenosyl methionine domain containing 2 [Source:HGNC Symbol;Acc:HGNC:30908]	17594	0.631	0.4521	No
138	LFNG	LFNG O-fucosylpeptide 3-beta-N- acetylglucosaminyltransferase [Source:HGNC Symbol;Acc:HGNC:6560]	18037	0.559	0.4433	No
139	RIBC2	RIB43A domain with coiled-coils 2 [Source:HGNC Symbol;Acc:HGNC:13241]	18200	0.527	0.4411	No
140	MAST3	microtubule associated serine/threonine kinase 3 [Source:HGNC Symbol;Acc:HGNC:19036]	18229	0.523	0.4421	No
141	SLC29A3	solute carrier family 29 member 3 [Source:HGNC Symbol;Acc:HGNC:23096]	18261	0.516	0.4430	No
142	KMT2D	lysine methyltransferase 2D [Source:HGNC Symbol;Acc:HGNC:7133]	18264	0.515	0.4446	No

143	SPTBN2	spectrin beta, non-erythrocytic 2 [Source:HGNC Symbol;Acc:HGNC:11276]	18354	0.498	0.4441	No
144	GAMT	guanidinoacetate N-methyltransferase [Source:HGNC Symbol;Acc:HGNC:4136]	18481	0.470	0.4426	No
145	PRODH	proline dehydrogenase 1 [Source:HGNC Symbol;Acc:HGNC:9453]	18502	0.467	0.4436	No
146	ITGB1BP2	integrin subunit beta 1 binding protein 2 [Source:HGNC Symbol;Acc:HGNC:6154]	18638	0.437	0.4418	No
147	ASB7	ankyrin repeat and SOCS box containing 7 [Source:HGNC Symbol;Acc:HGNC:17182]	18821	0.392	0.4387	No
148	FGGY	FGGY carbohydrate kinase domain containing [Source:HGNC Symbol;Acc:HGNC:25610]	18913	0.370	0.4377	No
149	SPHK2	sphingosine kinase 2 [Source:HGNC Symbol;Acc:HGNC:18859]	18944	0.362	0.4382	No
150	HNF1A	HNF1 homeobox A [Source:HGNC Symbol;Acc:HGNC:11621]	18945	0.362	0.4393	No
151	COPZ2	COPI coat complex subunit zeta 2 [Source:HGNC Symbol;Acc:HGNC:19356]	19063	0.332	0.4376	No
152	CDKAL1	CDK5 regulatory subunit associated protein 1 like 1 [Source:HGNC Symbol;Acc:HGNC:21050]	19148	0.311	0.4366	No
153	TCF7L1	transcription factor 7 like 1 [Source:HGNC Symbol;Acc:HGNC:11640]	19205	0.295	0.4362	No
154	HSD11B2	hydroxysteroid 11-beta dehydrogenase 2 [Source:HGNC Symbol;Acc:HGNC:5209]	19253	0.282	0.4360	No
155	UPK3B	uropod 3B [Source:HGNC	19629	0.168	0.4276	No

		Symbol;Acc:HGNC:21444]				
156	BTG2	BTG anti-proliferation factor 2 [Source:HGNC Symbol;Acc:HGNC:1131]	19709	0.138	0.4261	No
157	LGALS7	galectin 7 [Source:HGNC Symbol;Acc:HGNC:6568]	20184	0.000	0.4148	No
158	CKM	creatine kinase, M-type [Source:HGNC Symbol;Acc:HGNC:1994]	20309	0.000	0.4118	No
159	SSTR4	somatostatin receptor 4 [Source:HGNC Symbol;Acc:HGNC:11333]	21930	0.000	0.3731	No
160	CLPS	colipase [Source:HGNC Symbol;Acc:HGNC:2085]	21971	0.000	0.3721	No
161	AKR1B10	aldo-keto reductase family 1 member B10 [Source:HGNC Symbol;Acc:HGNC:382]	23728	0.000	0.3302	No
162	CCNA1	cyclin A1 [Source:HGNC Symbol;Acc:HGNC:1577]	24231	0.000	0.3182	No
163	CALML5	calmodulin like 5 [Source:HGNC Symbol;Acc:HGNC:18180]	26692	0.000	0.2593	No
164	IL5	interleukin 5 [Source:HGNC Symbol;Acc:HGNC:6016]	27037	0.000	0.2511	No
165	UGT2B17	UDP glucuronosyltransferase family 2 member B17 [Source:HGNC Symbol;Acc:HGNC:12547]	27323	0.000	0.2443	No
166	OXT	oxytocin/neurophysin I prepropeptide [Source:HGNC Symbol;Acc:HGNC:8528]	28415	0.000	0.2182	No
167	CACNG1	calcium voltage-gated channel auxiliary subunit gamma 1 [Source:HGNC Symbol;Acc:HGNC:1405]	28814	0.000	0.2087	No
168	IFNG	interferon gamma [Source:HGNC Symbol;Acc:HGNC:5438]	28884	0.000	0.2071	No
169	CYP39A1	cytochrome P450 family 39 subfamily A member 1 [Source:HGNC	29057	0.000	0.2029	No

		Symbol;Acc:HGNC:17449]				
170	ARPP21	cAMP regulated phosphoprotein 21 [Source:HGNC Symbol;Acc:HGNC:16968]	30723	0.000	0.1631	No
171	INSL5	insulin like 5 [Source:HGNC Symbol;Acc:HGNC:6088]	31315	0.000	0.1490	No
172	TSHB	thyroid stimulating hormone subunit beta [Source:HGNC Symbol;Acc:HGNC:12372]	31429	0.000	0.1463	No
173	VPREB1	V-set pre-B cell surrogate light chain 1 [Source:HGNC Symbol;Acc:HGNC:12709]	32756	0.000	0.1146	No
174	GPR19	G protein-coupled receptor 19 [Source:HGNC Symbol;Acc:HGNC:4473]	33287	-0.006	0.1020	No
175	CAPN9	calpain 9 [Source:HGNC Symbol;Acc:HGNC:1486]	33417	-0.052	0.0990	No
176	GPR3	G protein-coupled receptor 3 [Source:HGNC Symbol;Acc:HGNC:4484]	33720	-0.133	0.0922	No
177	CCDC106	coiled-coil domain containing 106 [Source:HGNC Symbol;Acc:HGNC:30181]	33873	-0.165	0.0891	No
178	CLSTN3	calsyntenin 3 [Source:HGNC Symbol;Acc:HGNC:18371]	34144	-0.237	0.0834	No
179	VPS50	VPS50 subunit of EARP/GARPII complex [Source:HGNC Symbol;Acc:HGNC:25956]	34897	-0.432	0.0669	No
180	SGK1	serum/glucocorticoid regulated kinase 1 [Source:HGNC Symbol;Acc:HGNC:10810]	35173	-0.502	0.0619	No
181	EDN2	endothelin 2 [Source:HGNC Symbol;Acc:HGNC:3177]	35499	-0.583	0.0560	No
182	TFF2	trefoil factor 2 [Source:HGNC	35739	-0.642	0.0523	No

		Symbol;Acc:HGNC:11756]				
183	SNCB	synuclein beta [Source:HGNC Symbol;Acc:HGNC:11140]	36224	-0.761	0.0432	No
184	KLK8	kallikrein related peptidase 8 [Source:HGNC Symbol;Acc:HGNC:6369]	36621	-0.851	0.0365	No
185	SHOX2	short stature homeobox 2 [Source:HGNC Symbol;Acc:HGNC:10854]	36632	-0.855	0.0390	No
186	PDK2	pyruvate dehydrogenase kinase 2 [Source:HGNC Symbol;Acc:HGNC:8810]	36769	-0.887	0.0386	No
187	SLC25A23	solute carrier family 25 member 23 [Source:HGNC Symbol;Acc:HGNC:19375]	37062	-0.969	0.0347	No
188	IDUA	alpha-L-iduronidase [Source:HGNC Symbol;Acc:HGNC:5391]	37297	-1.057	0.0325	No
189	PTPRJ	protein tyrosine phosphatase receptor type J [Source:HGNC Symbol;Acc:HGNC:9673]	37461	-1.132	0.0323	No
190	MFSD6	major facilitator superfamily domain containing 6 [Source:HGNC Symbol;Acc:HGNC:24711]	37878	-1.319	0.0265	No
191	C5	complement C5 [Source:HGNC Symbol;Acc:HGNC:1331]	38587	-1.635	0.0149	No
192	FGFR3	fibroblast growth factor receptor 3 [Source:HGNC Symbol;Acc:HGNC:3690]	38898	-1.767	0.0131	No
193	ARHGDIG	Rho GDP dissociation inhibitor gamma [Source:HGNC Symbol;Acc:HGNC:680]	39117	-1.878	0.0140	No
194	ZNF112	zinc finger protein 112 [Source:HGNC Symbol;Acc:HGNC:12892]	39877	-2.300	0.0032	No
195	CNTFR	ciliary neurotrophic factor receptor [Source:HGNC Symbol;Acc:HGNC:2170]	39965	-2.344	0.0087	No

196	SKIL	SKI like proto-oncogene [Source:HGNC Symbol;Acc:HGNC:10897]	40023	-2.388	0.0150	No
197	BARD1	BRCA1 associated RING domain 1 [Source:HGNC Symbol;Acc:HGNC:952]	40057	-2.415	0.0219	No
198	GTF3C5	general transcription factor IIIC subunit 5 [Source:HGNC Symbol;Acc:HGNC:4668]	40283	-2.574	0.0248	No
199	KCNQ2	potassium voltage-gated channel subfamily Q member 2 [Source:HGNC Symbol;Acc:HGNC:6296]	40308	-2.592	0.0326	No
200	MACROH2A2	macroH2A.2 histone [Source:HGNC Symbol;Acc:HGNC:14453]	40389	-2.646	0.0392	No

GSEA; Gene Set Enrichment Analysis; RIP, RNA immunoprecipitation (sample).

Table SIV. Details of the upregulated KRAS_SIGNALING_DN pathway in GSEA for RIP1 vs. INPUT1.

No.	Gene symbol	Title	Rank in gene list	Rank metric score	Running es	Core enrichment
1	KRT4	keratin 4 [Source:HGNC Symbol;Acc:HGNC:6441]	308	4.971	0.0017	Yes
2	SERPINA10	serpin family A member 10 [Source:HGNC Symbol;Acc:HGNC:15996]	410	4.965	0.0084	Yes
3	P2RX6	purinergic receptor P2X 6 [Source:HGNC Symbol;Acc:HGNC:8538]	471	4.961	0.0161	Yes
4	RYR2	ryanodine receptor 2 [Source:HGNC Symbol;Acc:HGNC:10484]	516	4.958	0.0241	Yes
5	KLHDC8A	kelch domain containing 8A [Source:HGNC Symbol;Acc:HGNC:25573]	589	4.951	0.0315	Yes
6	GP2	glycoprotein 2 [Source:HGNC Symbol;Acc:HGNC:4441]	768	4.938	0.0363	Yes
7	RSAD2	radical S-adenosyl methionine domain containing 2 [Source:HGNC Symbol;Acc:HGNC:30908]	860	4.932	0.0431	Yes
8	PDE6B	phosphodiesterase 6B [Source:HGNC Symbol;Acc:HGNC:8786]	1063	4.919	0.0473	Yes
9	STAG3	stromal antigen 3 [Source:HGNC Symbol;Acc:HGNC:11356]	1200	4.910	0.0531	Yes
10	COL2A1	collagen type II alpha 1 chain [Source:HGNC Symbol;Acc:HGNC:2200]	1223	4.910	0.0616	Yes
11	RYR1	ryanodine receptor 1 [Source:HGNC Symbol;Acc:HGNC:10483]	1298	4.905	0.0688	Yes
12	SLC38A3	solute carrier family 38 member 3 [Source:HGNC Symbol;Acc:HGNC:18044]	1567	4.888	0.0713	Yes
13	TENT5C	terminal nucleotidyltransferase 5C	1597	4.886	0.0796	Yes

		[Source:HGNC Symbol;Acc:HGNC:24712]				
14	SMPX	small muscle protein X-linked [Source:HGNC Symbol;Acc:HGNC:11122]	1607	4.886	0.0883	Yes
15	SYNPO	synaptopodin [Source:HGNC Symbol;Acc:HGNC:30672]	1641	4.884	0.0965	Yes
16	FSHB	follicle stimulating hormone subunit beta [Source:HGNC Symbol;Acc:HGNC:3964]	1991	4.862	0.0971	Yes
17	PAX3	paired box 3 [Source:HGNC Symbol;Acc:HGNC:8617]	2119	4.853	0.1029	Yes
18	MEFV	MEFV innate immunity regulator, pyrin [Source:HGNC Symbol;Acc:HGNC:6998]	2278	4.841	0.1080	Yes
19	TNNI3	troponin I3, cardiac type [Source:HGNC Symbol;Acc:HGNC:11947]	2314	4.839	0.1161	Yes
20	ABCB11	ATP binding cassette subfamily B member 11 [Source:HGNC Symbol;Acc:HGNC:42]	2658	4.816	0.1167	Yes
21	DCC	DCC netrin 1 receptor [Source:HGNC Symbol;Acc:HGNC:2701]	2900	4.799	0.1197	Yes
22	ITIH3	inter-alpha-trypsin inhibitor heavy chain 3 [Source:HGNC Symbol;Acc:HGNC:6168]	2916	4.798	0.1282	Yes
23	KRT13	keratin 13 [Source:HGNC Symbol;Acc:HGNC:6415]	3056	4.787	0.1336	Yes
24	ABCG4	ATP binding cassette subfamily G member 4 [Source:HGNC Symbol;Acc:HGNC:13884]	3104	4.784	0.1412	Yes
25	EDAR	ectodysplasin A receptor [Source:HGNC Symbol;Acc:HGNC:2895]	3283	4.770	0.1457	Yes
26	PCDHB1	protocadherin beta 1 [Source:HGNC Symbol;Acc:HGNC:8680]	3489	4.753	0.1495	Yes

27	NUDT11	nudix hydrolase 11 [Source:HGNC Symbol;Acc:HGNC:18011]	3629	4.741	0.1549	Yes
28	TG	thyroglobulin [Source:HGNC Symbol;Acc:HGNC:11764]	3737	4.732	0.1610	Yes
29	MYO15A	myosin XVA [Source:HGNC Symbol;Acc:HGNC:7594]	3882	4.721	0.1662	Yes
30	GDNF	glial cell derived neurotrophic factor [Source:HGNC Symbol;Acc:HGNC:4232]	3916	4.718	0.1741	Yes
31	TCL1A	TCL1 family AKT coactivator A [Source:HGNC Symbol;Acc:HGNC:11648]	3977	4.711	0.1813	Yes
32	PAX4	paired box 4 [Source:HGNC Symbol;Acc:HGNC:8618]	4051	4.703	0.1882	Yes
33	SLC16A7	solute carrier family 16 member 7 [Source:HGNC Symbol;Acc:HGNC:10928]	4168	4.692	0.1940	Yes
34	ACTC1	actin alpha cardiac muscle 1 [Source:HGNC Symbol;Acc:HGNC:143]	4209	4.688	0.2016	Yes
35	THNSL2	threonine synthase like 2 [Source:HGNC Symbol;Acc:HGNC:25602]	4256	4.684	0.2091	Yes
36	KCNMB1	potassium calcium-activated channel subfamily M regulatory beta subunit 1 [Source:HGNC Symbol;Acc:HGNC:6285]	4353	4.675	0.2154	Yes
37	P2RY4	pyrimidinergic receptor P2Y4 [Source:HGNC Symbol;Acc:HGNC:8542]	4397	4.671	0.2229	Yes
38	FGF16	fibroblast growth factor 16 [Source:HGNC Symbol;Acc:HGNC:3672]	4570	4.654	0.2273	Yes
39	ATP6V1B1	ATPase H ⁺ transporting V1 subunit B1 [Source:HGNC Symbol;Acc:HGNC:853]	4878	4.621	0.2285	Yes
40	EFHD1	EF-hand domain family member D1	4913	4.617	0.2361	Yes

		[Source:HGNC Symbol;Acc:HGNC:29556]				
41	CHRNA3	cholinergic receptor nicotinic gamma subunit [Source:HGNC Symbol;Acc:HGNC:1967]	4942	4.614	0.2439	Yes
42	THRB	thyroid hormone receptor beta [Source:HGNC Symbol;Acc:HGNC:11799]	5018	4.606	0.2506	Yes
43	PLAG1	PLAG1 zinc finger [Source:HGNC Symbol;Acc:HGNC:9045]	5029	4.604	0.2588	Yes
44	SLC30A3	solute carrier family 30 member 3 [Source:HGNC Symbol;Acc:HGNC:11014]	5280	4.573	0.2612	Yes
45	SCN10A	sodium voltage-gated channel alpha subunit 10 [Source:HGNC Symbol;Acc:HGNC:10582]	5317	4.570	0.2687	Yes
46	MX1	MX dynamin like GTPase 1 [Source:HGNC Symbol;Acc:HGNC:7532]	5551	4.544	0.2714	Yes
47	CPA2	carboxypeptidase A2 [Source:HGNC Symbol;Acc:HGNC:2297]	5597	4.538	0.2787	Yes
48	IFI44L	interferon induced protein 44 like [Source:HGNC Symbol;Acc:HGNC:17817]	5683	4.525	0.2850	Yes
49	GP1BA	glycoprotein Ib platelet subunit alpha [Source:HGNC Symbol;Acc:HGNC:4439]	5858	4.504	0.2890	Yes
50	CD40LG	CD40 ligand [Source:HGNC Symbol;Acc:HGNC:11935]	6039	4.481	0.2930	Yes
51	GRID2	glutamate ionotropic receptor delta type subunit 2 [Source:HGNC Symbol;Acc:HGNC:4576]	6262	4.452	0.2958	Yes
52	SLC6A3	solute carrier family 6 member 3 [Source:HGNC	6280	4.449	0.3036	Yes

		Symbol;Acc:HGNC:11049]				
53	SIDT1	SID1 transmembrane family member 1 [Source:HGNC Symbol;Acc:HGNC:25967]	6399	4.431	0.3089	Yes
54	KCNN1	potassium calcium-activated channel subfamily N member 1 [Source:HGNC Symbol;Acc:HGNC:6290]	6660	4.387	0.3107	Yes
55	CHST2	carbohydrate sulfotransferase 2 [Source:HGNC Symbol;Acc:HGNC:1970]	6682	4.384	0.3182	Yes
56	KRT15	keratin 15 [Source:HGNC Symbol;Acc:HGNC:6421]	6686	4.384	0.3262	Yes
57	EPHA5	EPH receptor A5 [Source:HGNC Symbol;Acc:HGNC:3389]	6790	4.364	0.3317	Yes
58	NRIP2	nuclear receptor interacting protein 2 [Source:HGNC Symbol;Acc:HGNC:23078]	6839	4.353	0.3386	Yes
59	NOS1	nitric oxide synthase 1 [Source:HGNC Symbol;Acc:HGNC:7872]	6917	4.340	0.3447	Yes
60	HTR1D	5-hydroxytryptamine receptor 1D [Source:HGNC Symbol;Acc:HGNC:5289]	7087	4.310	0.3485	Yes
61	PKP1	plakophilin 1 [Source:HGNC Symbol;Acc:HGNC:9023]	7163	4.294	0.3546	Yes
62	CYP11B2	cytochrome P450 family 11 subfamily B member 2 [Source:HGNC Symbol;Acc:HGNC:2592]	7201	4.287	0.3616	Yes
63	SLC5A5	solute carrier family 5 member 5 [Source:HGNC Symbol;Acc:HGNC:11040]	7268	4.272	0.3678	Yes
64	CPEB3	cytoplasmic polyadenylation element binding protein 3 [Source:HGNC Symbol;Acc:HGNC:21746]	7373	4.250	0.3731	Yes
65	HTR1B	5-hydroxytryptamine receptor 1B	7397	4.243	0.3804	Yes

		[Source:HGNC Symbol;Acc:HGNC:5287]				
66	SOX10	SRY-box transcription factor 10 [Source:HGNC Symbol;Acc:HGNC:11190]	7472	4.231	0.3863	Yes
67	TAS2R4	taste 2 receptor member 4 [Source:HGNC Symbol;Acc:HGNC:14911]	7627	4.199	0.3904	Yes
68	TENM2	teneurin transmembrane protein 2 [Source:HGNC Symbol;Acc:HGNC:29943]	7902	4.132	0.3914	Yes
69	IL12B	interleukin 12B [Source:HGNC Symbol;Acc:HGNC:5970]	7969	4.115	0.3973	Yes
70	KCND1	potassium voltage-gated channel subfamily D member 1 [Source:HGNC Symbol;Acc:HGNC:6237]	8097	4.085	0.4018	Yes
71	SELENOP	selenoprotein P [Source:HGNC Symbol;Acc:HGNC:10751]	8182	4.061	0.4072	Yes
72	ZBTB16	zinc finger and BTB domain containing 16 [Source:HGNC Symbol;Acc:HGNC:12930]	8192	4.058	0.4145	Yes
73	NR6A1	nuclear receptor subfamily 6 group A member 1 [Source:HGNC Symbol;Acc:HGNC:7985]	8354	4.022	0.4180	Yes
74	DTNB	dystrobrevin beta [Source:HGNC Symbol;Acc:HGNC:3058]	8406	4.009	0.4241	Yes
75	TEX15	testis expressed 15, meiosis and synapsis associated [Source:HGNC Symbol;Acc:HGNC:11738]	8537	3.968	0.4283	Yes
76	TGFB2	transforming growth factor beta 2 [Source:HGNC Symbol;Acc:HGNC:11768]	8572	3.957	0.4347	Yes
77	IGFBP2	insulin like growth factor binding protein 2 [Source:HGNC Symbol;Acc:HGNC:5471]	8684	3.926	0.4393	Yes

78	CLDN16	claudin 16 [Source:HGNC Symbol;Acc:HGNC:2037]	8756	3.903	0.4447	Yes
79	KRT1	keratin 1 [Source:HGNC Symbol;Acc:HGNC:6412]	8977	3.829	0.4465	Yes
80	MYOT	myotilin [Source:HGNC Symbol;Acc:HGNC:12399]	9089	3.788	0.4508	Yes
81	NPY4R	neuropeptide Y receptor Y4 [Source:HGNC Symbol;Acc:HGNC:9329]	9283	3.725	0.4530	Yes
82	PRKN	parkin RBR E3 ubiquitin protein ligase [Source:HGNC Symbol;Acc:HGNC:8607]	9444	3.669	0.4559	Yes
83	MAGIX	MAGI family member, X-linked [Source:HGNC Symbol;Acc:HGNC:30006]	9661	3.599	0.4573	Yes
84	EDN1	endothelin 1 [Source:HGNC Symbol;Acc:HGNC:3176]	9693	3.583	0.4631	Yes
85	BRDT	bromodomain testis associated [Source:HGNC Symbol;Acc:HGNC:1105]	9730	3.569	0.4688	Yes
86	GPRC5C	G protein-coupled receptor class C group 5 member C [Source:HGNC Symbol;Acc:HGNC:13309]	9733	3.567	0.4753	Yes
87	ADRA2C	adrenoceptor alpha 2C [Source:HGNC Symbol;Acc:HGNC:283]	9957	3.471	0.4763	Yes
88	RIBC2	RIB43A domain with coiled-coils 2 [Source:HGNC Symbol;Acc:HGNC:13241]	10123	3.398	0.4786	Yes
89	SLC12A3	solute carrier family 12 member 3 [Source:HGNC Symbol;Acc:HGNC:10912]	10246	3.340	0.4818	Yes
90	IRS4	insulin receptor substrate 4 [Source:HGNC Symbol;Acc:HGNC:6128]	10325	3.302	0.4860	Yes

91	CELSR2	cadherin EGF LAG seven-pass G-type receptor 2 [Source:HGNC Symbol;Acc:HGNC:3231]	10355	3.288	0.4914	Yes
92	CPB1	carboxypeptidase B1 [Source:HGNC Symbol;Acc:HGNC:2299]	10394	3.266	0.4964	Yes
93	ITGB1BP2	integrin subunit beta 1 binding protein 2 [Source:HGNC Symbol;Acc:HGNC:6154]	10555	3.200	0.4985	Yes
94	HSD11B2	hydroxysteroid 11-beta dehydrogenase 2 [Source:HGNC Symbol;Acc:HGNC:5209]	10737	3.112	0.4999	Yes
95	LFNG	LFNG O-fucosylpeptide 3-beta-N-acetylglucosaminyltransferase [Source:HGNC Symbol;Acc:HGNC:6560]	10805	3.077	0.5039	Yes
96	CDH16	cadherin 16 [Source:HGNC Symbol;Acc:HGNC:1755]	10834	3.062	0.5088	Yes
97	CAMK1D	calcium/calmodulin dependent protein kinase ID [Source:HGNC Symbol;Acc:HGNC:19341]	10949	2.993	0.5116	Yes
98	CCR8	C-C motif chemokine receptor 8 [Source:HGNC Symbol;Acc:HGNC:1609]	10968	2.981	0.5166	Yes
99	TCF7L1	transcription factor 7 like 1 [Source:HGNC Symbol;Acc:HGNC:11640]	11144	2.890	0.5177	Yes
100	YPEL1	yippee like 1 [Source:HGNC Symbol;Acc:HGNC:12845]	11271	2.817	0.5199	Yes
101	TFAP2B	transcription factor AP-2 beta [Source:HGNC Symbol;Acc:HGNC:11743]	11495	2.685	0.5195	Yes
102	KMT2D	lysine methyltransferase 2D [Source:HGNC Symbol;Acc:HGNC:7133]	11589	2.615	0.5221	Yes

103	CLDN8	claudin 8 [Source:HGNC Symbol;Acc:HGNC:2050]	11791	2.475	0.5218	Yes
104	WNT16	Wnt family member 16 [Source:HGNC Symbol;Acc:HGNC:16267]	11881	2.417	0.5241	Yes
105	SLC29A3	solute carrier family 29 member 3 [Source:HGNC Symbol;Acc:HGNC:23096]	11960	2.363	0.5266	Yes
106	LYPD3	LY6/PLAUR domain containing 3 [Source:HGNC Symbol;Acc:HGNC:24880]	12000	2.335	0.5299	Yes
107	MSH5	mutS homolog 5 [Source:HGNC Symbol;Acc:HGNC:7328]	12097	2.279	0.5318	Yes
108	MTHFR	methylenetetrahydrofolate reductase [Source:HGNC Symbol;Acc:HGNC:7436]	12239	2.185	0.5324	Yes
109	CDKAL1	CDK5 regulatory subunit associated protein 1 like 1 [Source:HGNC Symbol;Acc:HGNC:21050]	12499	2.003	0.5299	Yes
110	COPZ2	COPI coat complex subunit zeta 2 [Source:HGNC Symbol;Acc:HGNC:19356]	12555	1.967	0.5322	Yes
111	DLK2	delta like non-canonical Notch ligand 2 [Source:HGNC Symbol;Acc:HGNC:21113]	12607	1.922	0.5345	Yes
112	BTG2	BTG anti-proliferation factor 2 [Source:HGNC Symbol;Acc:HGNC:1131]	12637	1.902	0.5373	Yes
113	SNN	stannin [Source:HGNC Symbol;Acc:HGNC:11149]	12931	1.693	0.5334	No
114	COQ8A	coenzyme Q8A [Source:HGNC Symbol;Acc:HGNC:16812]	12980	1.658	0.5353	No
115	ASB7	ankyrin repeat and SOCS box containing 7 [Source:HGNC Symbol;Acc:HGNC:17182]	13220	1.479	0.5323	No

116	YBX2	Y-box binding protein 2 [Source:HGNC Symbol;Acc:HGNC:17948]	13235	1.466	0.5346	No
117	GAMT	guanidinoacetate N-methyltransferase [Source:HGNC Symbol;Acc:HGNC:4136]	13408	1.348	0.5330	No
118	MYH7	myosin heavy chain 7 [Source:HGNC Symbol;Acc:HGNC:7577]	13639	1.177	0.5296	No
119	VPS50	VPS50 subunit of EARP/GARPII complex [Source:HGNC Symbol;Acc:HGNC:25956]	14062	0.837	0.5211	No
120	EGF	epidermal growth factor [Source:HGNC Symbol;Acc:HGNC:3229]	14268	0.678	0.5174	No
121	ENTPD7	ectonucleoside triphosphate diphosphohydrolase 7 [Source:HGNC Symbol;Acc:HGNC:19745]	14323	0.619	0.5173	No
122	FGF22	fibroblast growth factor 22 [Source:HGNC Symbol;Acc:HGNC:3679]	14434	0.516	0.5156	No
123	KLK7	kallikrein related peptidase 7 [Source:HGNC Symbol;Acc:HGNC:6368]	14468	0.487	0.5157	No
124	ZC2HC1C	zinc finger C2HC-type containing 1C [Source:HGNC Symbol;Acc:HGNC:20354]	15026	0.030	0.5024	No
125	LGALS7	galectin 7 [Source:HGNC Symbol;Acc:HGNC:6568]	15154	0.000	0.4994	No
126	CKM	creatine kinase, M-type [Source:HGNC Symbol;Acc:HGNC:1994]	15319	0.000	0.4955	No
127	CALML5	calmodulin like 5 [Source:HGNC Symbol;Acc:HGNC:18180]	16542	0.000	0.4663	No
128	HNF1A	HNF1 homeobox A [Source:HGNC Symbol;Acc:HGNC:11621]	16874	0.000	0.4583	No
129	IL5	interleukin 5 [Source:HGNC Symbol;Acc:HGNC:6016]	16968	0.000	0.4561	No

130	SERPINB2	serpin family B member 2 [Source:HGNC Symbol;Acc:HGNC:8584]	17038	0.000	0.4545	No
131	UGT2B17	UDP glucuronosyltransferase family 2 member B17 [Source:HGNC Symbol;Acc:HGNC:12547]	17359	0.000	0.4468	No
132	KCNE2	potassium voltage-gated channel subfamily E regulatory subunit 2 [Source:HGNC Symbol;Acc:HGNC:6242]	18262	0.000	0.4253	No
133	PNMT	phenylethanolamine N-methyltransferase [Source:HGNC Symbol;Acc:HGNC:9160]	18818	0.000	0.4120	No
134	SSTR4	somatostatin receptor 4 [Source:HGNC Symbol;Acc:HGNC:11333]	19797	0.000	0.3886	No
135	CLPS	colipase [Source:HGNC Symbol;Acc:HGNC:2085]	19851	0.000	0.3873	No
136	SLC6A14	solute carrier family 6 member 14 [Source:HGNC Symbol;Acc:HGNC:11047]	20006	0.000	0.3837	No
137	ALOX12B	arachidonate 12-lipoxygenase, 12R type [Source:HGNC Symbol;Acc:HGNC:430]	21099	0.000	0.3576	No
138	SCGB1A1	secretoglobin family 1A member 1 [Source:HGNC Symbol;Acc:HGNC:12523]	21317	0.000	0.3524	No
139	AMBN	ameloblastin [Source:HGNC Symbol;Acc:HGNC:452]	21550	0.000	0.3468	No
140	AKR1B10	aldo-keto reductase family 1 member B10 [Source:HGNC Symbol;Acc:HGNC:382]	22318	0.000	0.3285	No
141	PRODH	proline dehydrogenase 1 [Source:HGNC Symbol;Acc:HGNC:9453]	23040	0.000	0.3112	No
142	CCNA1	cyclin A1 [Source:HGNC Symbol;Acc:HGNC:1577]	23052	0.000	0.3110	No
143	CD207	CD207 molecule [Source:HGNC	23545	0.000	0.2992	No

		Symbol;Acc:HGNC:17935]				
144	PROP1	PROP paired-like homeobox 1 [Source:HGNC Symbol;Acc:HGNC:9455]	23730	0.000	0.2948	No
145	CALCB	calcitonin related polypeptide beta [Source:HGNC Symbol;Acc:HGNC:1438]	24056	0.000	0.2870	No
146	NGB	neuroglobin [Source:HGNC Symbol;Acc:HGNC:14077]	25117	0.000	0.2617	No
147	OXT	oxytocin/neurophysin I prepropeptide [Source:HGNC Symbol;Acc:HGNC:8528]	25560	0.000	0.2511	No
148	CACNG1	calcium voltage-gated channel auxiliary subunit gamma 1 [Source:HGNC Symbol;Acc:HGNC:1405]	26136	0.000	0.2374	No
149	SPRR3	small proline rich protein 3 [Source:HGNC Symbol;Acc:HGNC:11268]	26167	0.000	0.2367	No
150	NR4A2	nuclear receptor subfamily 4 group A member 2 [Source:HGNC Symbol;Acc:HGNC:7981]	26230	0.000	0.2352	No
151	IFNG	interferon gamma [Source:HGNC Symbol;Acc:HGNC:5438]	26246	0.000	0.2348	No
152	PDCD1	programmed cell death 1 [Source:HGNC Symbol;Acc:HGNC:8760]	26451	0.000	0.2300	No
153	CYP39A1	cytochrome P450 family 39 subfamily A member 1 [Source:HGNC Symbol;Acc:HGNC:17449]	26467	0.000	0.2296	No
154	CACNA1F	calcium voltage-gated channel subunit alpha1 F [Source:HGNC Symbol;Acc:HGNC:1393]	27609	0.000	0.2023	No
155	KRT5	keratin 5 [Source:HGNC Symbol;Acc:HGNC:6442]	27805	0.000	0.1977	No
156	TLX1	T cell leukemia homeobox 1	27900	0.000	0.1954	No

		[Source:HGNC Symbol;Acc:HGNC:5056]				
157	ATP4A	ATPase H+/K+ transporting subunit alpha [Source:HGNC Symbol;Acc:HGNC:819]	28126	0.000	0.1900	No
158	ARPP21	cAMP regulated phosphoprotein 21 [Source:HGNC Symbol;Acc:HGNC:16968]	28783	0.000	0.1743	No
159	EDN2	endothelin 2 [Source:HGNC Symbol;Acc:HGNC:3177]	28955	0.000	0.1703	No
160	INSL5	insulin like 5 [Source:HGNC Symbol;Acc:HGNC:6088]	29523	0.000	0.1567	No
161	TSHB	thyroid stimulating hormone subunit beta [Source:HGNC Symbol;Acc:HGNC:12372]	29679	0.000	0.1530	No
162	CD80	CD80 molecule [Source:HGNC Symbol;Acc:HGNC:1700]	30514	0.000	0.1331	No
163	CAPN9	calpain 9 [Source:HGNC Symbol;Acc:HGNC:1486]	31263	0.000	0.1152	No
164	BMPR1B	bone morphogenetic protein receptor type 1B [Source:HGNC Symbol;Acc:HGNC:1077]	32088	0.000	0.0955	No
165	VPREB1	V-set pre-B cell surrogate light chain 1 [Source:HGNC Symbol;Acc:HGNC:12709]	32100	0.000	0.0952	No
166	SPHK2	sphingosine kinase 2 [Source:HGNC Symbol;Acc:HGNC:18859]	32800	-0.058	0.0786	No
167	SGK1	serum/glucocorticoid regulated kinase 1 [Source:HGNC Symbol;Acc:HGNC:10810]	32892	-0.132	0.0767	No
168	SHOX2	short stature homeobox 2 [Source:HGNC Symbol;Acc:HGNC:10854]	32973	-0.173	0.0751	No
169	FGGY	FGGY carbohydrate kinase domain containing [Source:HGNC Symbol;Acc:HGNC:25610]	33290	-0.348	0.0682	No

170	PTPRJ	protein tyrosine phosphatase receptor type J [Source:HGNC Symbol;Acc:HGNC:9673]	33541	-0.472	0.0631	No
171	GPR19	G protein-coupled receptor 19 [Source:HGNC Symbol;Acc:HGNC:4473]	33607	-0.509	0.0624	No
172	MAST3	microtubule associated serine/threonine kinase 3 [Source:HGNC Symbol;Acc:HGNC:19036]	33608	-0.509	0.0634	No
173	MFSD6	major facilitator superfamily domain containing 6 [Source:HGNC Symbol;Acc:HGNC:24711]	34007	-0.738	0.0552	No
174	PTGFR	prostaglandin F receptor [Source:HGNC Symbol;Acc:HGNC:9600]	34063	-0.770	0.0553	No
175	UPK3B	uroplakin 3B [Source:HGNC Symbol;Acc:HGNC:21444]	34095	-0.791	0.0560	No
176	TFCP2L1	transcription factor CP2 like 1 [Source:HGNC Symbol;Acc:HGNC:17925]	34530	-1.057	0.0476	No
177	NTF3	neurotrophin 3 [Source:HGNC Symbol;Acc:HGNC:8023]	34795	-1.226	0.0435	No
178	RGS11	regulator of G protein signaling 11 [Source:HGNC Symbol;Acc:HGNC:9993]	34844	-1.263	0.0447	No
179	IDUA	alpha-L-iduronidase [Source:HGNC Symbol;Acc:HGNC:5391]	35098	-1.395	0.0412	No
180	SLC25A23	solute carrier family 25 member 23 [Source:HGNC Symbol;Acc:HGNC:19375]	35154	-1.421	0.0425	No
181	SNCB	synuclein beta [Source:HGNC Symbol;Acc:HGNC:11140]	35380	-1.547	0.0399	No
182	TGM1	transglutaminase 1 [Source:HGNC Symbol;Acc:HGNC:11777]	35758	-1.751	0.0341	No
183	GPR3	G protein-coupled receptor 3	35872	-1.815	0.0347	No

		[Source:HGNC Symbol;Acc:HGNC:4484]				
184	FGFR3	fibroblast growth factor receptor 3 [Source:HGNC Symbol;Acc:HGNC:3690]	36183	-1.986	0.0310	No
185	SKIL	SKI like proto-oncogene [Source:HGNC Symbol;Acc:HGNC:10897]	36269	-2.028	0.0327	No
186	NPHS1	NPHS1 adhesion molecule, nephrin [Source:HGNC Symbol;Acc:HGNC:7908]	36688	-2.268	0.0268	No
187	TFF2	trefoil factor 2 [Source:HGNC Symbol;Acc:HGNC:11756]	36773	-2.322	0.0291	No
188	BARD1	BRCA1 associated RING domain 1 [Source:HGNC Symbol;Acc:HGNC:952]	37254	-2.602	0.0224	No
189	KCNQ2	potassium voltage-gated channel subfamily Q member 2 [Source:HGNC Symbol;Acc:HGNC:6296]	37345	-2.647	0.0251	No
190	ZNF112	zinc finger protein 112 [Source:HGNC Symbol;Acc:HGNC:12892]	39046	-3.578	-0.0090	No
191	PDK2	pyruvate dehydrogenase kinase 2 [Source:HGNC Symbol;Acc:HGNC:8810]	39410	-3.784	-0.0108	No
192	SPTBN2	spectrin beta, non-erythrocytic 2 [Source:HGNC Symbol;Acc:HGNC:11276]	40030	-4.111	-0.0180	No
193	C5	complement C5 [Source:HGNC Symbol;Acc:HGNC:1331]	40098	-4.147	-0.0120	No
194	KLK8	kallikrein related peptidase 8 [Source:HGNC Symbol;Acc:HGNC:6369]	40131	-4.165	-0.0051	No
195	ARHGDIG	Rho GDP dissociation inhibitor gamma [Source:HGNC Symbol;Acc:HGNC:680]	40272	-4.241	-0.0007	No
196	CNTFR	ciliary neurotrophic factor receptor [Source:HGNC	40311	-4.256	0.0062	No

		Symbol;Acc:HGNC:2170]				
197	MACROH2A2	macroH2A.2 histone [Source:HGNC Symbol;Acc:HGNC:14453]	40610	-4.413	0.0071	No
198	CCDC106	coiled-coil domain containing 106 [Source:HGNC Symbol;Acc:HGNC:30181]	41291	-4.752	-0.0004	No
199	CLSTN3	calsyntenin 3 [Source:HGNC Symbol;Acc:HGNC:18371]	41627	-4.882	0.0005	No
200	GTF3C5	general transcription factor IIIC subunit 5 [Source:HGNC Symbol;Acc:HGNC:4668]	41707	-4.916	0.0077	No

GSEA; Gene Set Enrichment Analysis; RIP, RNA immunoprecipitation (sample).

Table SV. Details of the upregulated KRAS_SIGNALING_DN pathway in GSEA for RIP2 vs. INPUT2.

No.	Gene symbol	Title	Rank in gene list	Rank metric score	Runnig es	Core enrichment
1	EGF	epidermal growth factor [Source:HGNC Symbol;Acc:HGNC:3229]	484	4.953	-0.0036	Yes
2	GDNF	glial cell derived neurotrophic factor [Source:HGNC Symbol;Acc:HGNC:4232]	579	4.945	0.0020	Yes
3	TENM2	teneurin transmembrane protein 2 [Source:HGNC Symbol;Acc:HGNC:29943]	615	4.942	0.0091	Yes
4	IFI44L	interferon induced protein 44 like [Source:HGNC Symbol;Acc:HGNC:17817]	628	4.941	0.0168	Yes
5	MYO15A	myosin XVA [Source:HGNC Symbol;Acc:HGNC:7594]	742	4.932	0.0220	Yes
6	ATP6V1B1	ATPase H ⁺ transporting VI subunit B1 [Source:HGNC Symbol;Acc:HGNC:853]	758	4.931	0.0295	Yes
7	SLC12A3	solute carrier family 12 member 3 [Source:HGNC Symbol;Acc:HGNC:10912]	968	4.916	0.0324	Yes
8	THRB	thyroid hormone receptor beta [Source:HGNC Symbol;Acc:HGNC:11799]	1146	4.903	0.0360	Yes
9	SELENOP	selenoprotein P [Source:HGNC Symbol;Acc:HGNC:10751]	1269	4.896	0.0409	Yes
10	PRKN	parkin RBR E3 ubiquitin protein ligase [Source:HGNC Symbol;Acc:HGNC:8607]	1344	4.892	0.0470	Yes
11	NTF3	neurotrophin 3 [Source:HGNC Symbol;Acc:HGNC:8023]	1437	4.886	0.0526	Yes
12	YPEL1	yippee like 1 [Source:HGNC Symbol;Acc:HGNC:12845]	1492	4.882	0.0592	Yes
13	KRT5	keratin 5 [Source:HGNC Symbol;Acc:HGNC:6442]	1630	4.875	0.0637	Yes
14	KCNN1	potassium calcium-activated channel	1696	4.870	0.0700	Yes

		subfamily N member 1 [Source:HGNC Symbol;Acc:HGNC:6290]				
15	NUDT11	nudix hydrolase 11 [Source:HGNC Symbol;Acc:HGNC:18011]	1885	4.857	0.0733	Yes
16	GPRC5C	G protein-coupled receptor class C group 5 member C [Source:HGNC Symbol;Acc:HGNC:13309]	1894	4.857	0.0808	Yes
17	PKP1	plakophilin 1 [Source:HGNC Symbol;Acc:HGNC:9023]	2189	4.839	0.0816	Yes
18	PAX4	paired box 4 [Source:HGNC Symbol;Acc:HGNC:8618]	2341	4.829	0.0857	Yes
19	RYR2	ryanodine receptor 2 [Source:HGNC Symbol;Acc:HGNC:10484]	2416	4.825	0.0917	Yes
20	MX1	MX dynamin like GTPase 1 [Source:HGNC Symbol;Acc:HGNC:7532]	2715	4.806	0.0922	Yes
21	KCND1	potassium voltage-gated channel subfamily D member 1 [Source:HGNC Symbol;Acc:HGNC:6237]	2901	4.796	0.0955	Yes
22	GP1BA	glycoprotein Ib platelet subunit alpha [Source:HGNC Symbol;Acc:HGNC:4439]	3010	4.789	0.1006	Yes
23	NR6A1	nuclear receptor subfamily 6 group A member 1 [Source:HGNC Symbol;Acc:HGNC:7985]	3154	4.781	0.1048	Yes
24	KRT4	keratin 4 [Source:HGNC Symbol;Acc:HGNC:6441]	3223	4.777	0.1109	Yes
25	STAG3	stromal antigen 3 [Source:HGNC Symbol;Acc:HGNC:11356]	3421	4.764	0.1138	Yes
26	CHRNA3	cholinergic receptor nicotinic gamma subunit [Source:HGNC Symbol;Acc:HGNC:1967]	3431	4.763	0.1212	Yes
27	P2RY4	pyrimidinergic receptor P2Y4 [Source:HGNC Symbol;Acc:HGNC:8542]	3567	4.755	0.1256	Yes
28	SYNPO	synaptopodin [Source:HGNC	3624	4.751	0.1319	Yes

		Symbol;Acc:HGNC:30672]				
29	GP2	glycoprotein 2 [Source:HGNC Symbol;Acc:HGNC:4441]	3859	4.738	0.1339	Yes
30	IGFBP2	insulin like growth factor binding protein 2 [Source:HGNC Symbol;Acc:HGNC:5471]	3920	4.734	0.1400	Yes
31	DCC	DCC netrin 1 receptor [Source:HGNC Symbol;Acc:HGNC:2701]	4057	4.724	0.1444	Yes
32	PAX3	paired box 3 [Source:HGNC Symbol;Acc:HGNC:8617]	4144	4.718	0.1499	Yes
33	ATP4A	ATPase H+/K+ transporting subunit alpha [Source:HGNC Symbol;Acc:HGNC:819]	4316	4.706	0.1533	Yes
34	TG	thyroglobulin [Source:HGNC Symbol;Acc:HGNC:11764]	4463	4.695	0.1573	Yes
35	CPA2	carboxypeptidase A2 [Source:HGNC Symbol;Acc:HGNC:2297]	4497	4.693	0.1641	Yes
36	MAGIX	MAGI family member, X-linked [Source:HGNC Symbol;Acc:HGNC:30006]	4650	4.684	0.1680	Yes
37	TAS2R4	taste 2 receptor member 4 [Source:HGNC Symbol;Acc:HGNC:14911]	4701	4.681	0.1743	Yes
38	MEFV	MEFV innate immunity regulator, pyrin [Source:HGNC Symbol;Acc:HGNC:6998]	4948	4.662	0.1758	Yes
39	COL2A1	collagen type II alpha 1 chain [Source:HGNC Symbol;Acc:HGNC:2200]	4992	4.659	0.1823	Yes
40	SIDT1	SID1 transmembrane family member 1 [Source:HGNC Symbol;Acc:HGNC:25967]	5077	4.653	0.1877	Yes
41	NPHS1	NPHS1 adhesion molecule, nephrin [Source:HGNC Symbol;Acc:HGNC:7908]	5166	4.645	0.1931	Yes
42	SERPINA10	serpin family A member 10 [Source:HGNC Symbol;Acc:HGNC:15996]	5226	4.641	0.1991	Yes
43	CD80	CD80 molecule [Source:HGNC Symbol;Acc:HGNC:1700]	5270	4.638	0.2055	Yes

44	WNT16	Wnt family member 16 [Source:HGNC Symbol;Acc:HGNC:16267]	5460	4.624	0.2084	Yes
45	ZBTB16	zinc finger and BTB domain containing 16 [Source:HGNC Symbol;Acc:HGNC:12930]	5521	4.619	0.2144	Yes
46	NOS1	nitric oxide synthase 1 [Source:HGNC Symbol;Acc:HGNC:7872]	5524	4.619	0.2217	Yes
47	P2RX6	purinergic receptor P2X 6 [Source:HGNC Symbol;Acc:HGNC:8538]	5611	4.612	0.2271	Yes
48	ITIH3	inter-alpha-trypsin inhibitor heavy chain 3 [Source:HGNC Symbol;Acc:HGNC:6168]	5725	4.602	0.2317	Yes
49	SCN10A	sodium voltage-gated channel alpha subunit 10 [Source:HGNC Symbol;Acc:HGNC:10582]	5764	4.599	0.2382	Yes
50	TGM1	transglutaminase 1 [Source:HGNC Symbol;Acc:HGNC:11777]	6201	4.565	0.2351	Yes
51	TENT5C	terminal nucleotidyltransferase 5C [Source:HGNC Symbol;Acc:HGNC:24712]	6270	4.560	0.2408	Yes
52	PCDHB1	protocadherin beta 1 [Source:HGNC Symbol;Acc:HGNC:8680]	6404	4.548	0.2449	Yes
53	THNSL2	threonine synthase like 2 [Source:HGNC Symbol;Acc:HGNC:25602]	6536	4.537	0.2490	Yes
54	TCL1A	TCL1 family AKT coactivator A [Source:HGNC Symbol;Acc:HGNC:11648]	7143	4.483	0.2417	Yes
55	CD207	CD207 molecule [Source:HGNC Symbol;Acc:HGNC:17935]	7151	4.482	0.2487	Yes
56	TFCP2L1	transcription factor CP2 like 1 [Source:HGNC Symbol;Acc:HGNC:17925]	7223	4.474	0.2542	Yes
57	CPB1	carboxypeptidase B1 [Source:HGNC Symbol;Acc:HGNC:2299]	7237	4.473	0.2611	Yes
58	KCNMB1	potassium calcium-activated channel	7403	4.458	0.2643	Yes

		subfamily M regulatory beta subunit 1 [Source:HGNC Symbol;Acc:HGNC:6285]				
59	CALCB	calcitonin related polypeptide beta [Source:HGNC Symbol;Acc:HGNC:1438]	7405	4.458	0.2714	Yes
60	EDN1	endothelin 1 [Source:HGNC Symbol;Acc:HGNC:3176]	7623	4.433	0.2733	Yes
61	PTGFR	prostaglandin F receptor [Source:HGNC Symbol;Acc:HGNC:9600]	7767	4.420	0.2770	Yes
62	HTR1D	5-hydroxytryptamine receptor 1D [Source:HGNC Symbol;Acc:HGNC:5289]	7884	4.406	0.2812	Yes
63	SCGB1A1	secretoglobin family 1A member 1 [Source:HGNC Symbol;Acc:HGNC:12523]	7982	4.394	0.2860	Yes
64	PROP1	PROP paired-like homeobox 1 [Source:HGNC Symbol;Acc:HGNC:9455]	8052	4.388	0.2913	Yes
65	RGS11	regulator of G protein signaling 11 [Source:HGNC Symbol;Acc:HGNC:9993]	8055	4.388	0.2983	Yes
66	HTR1B	5-hydroxytryptamine receptor 1B [Source:HGNC Symbol;Acc:HGNC:5287]	8072	4.385	0.3050	Yes
67	RYR1	ryanodine receptor 1 [Source:HGNC Symbol;Acc:HGNC:10483]	8077	4.385	0.3119	Yes
68	FGF22	fibroblast growth factor 22 [Source:HGNC Symbol;Acc:HGNC:3679]	8094	4.384	0.3186	Yes
69	FSHB	follicle stimulating hormone subunit beta [Source:HGNC Symbol;Acc:HGNC:3964]	8459	4.342	0.3168	Yes
70	ABCG4	ATP binding cassette subfamily G member 4 [Source:HGNC Symbol;Acc:HGNC:13884]	8504	4.337	0.3227	Yes
71	ACTC1	actin alpha cardiac muscle 1 [Source:HGNC Symbol;Acc:HGNC:143]	8707	4.310	0.3248	Yes
72	SPTBN2	spectrin beta, non-erythrocytic 2 [Source:HGNC Symbol;Acc:HGNC:11276]	8811	4.297	0.3292	Yes
73	PNMT	phenylethanolamine N-methyltransferase	8883	4.288	0.3344	Yes

		[Source:HGNC Symbol;Acc:HGNC:9160]				
74	KLHDC8A	kelch domain containing 8A [Source:HGNC Symbol;Acc:HGNC:25573]	8970	4.278	0.3392	Yes
75	CDH16	cadherin 16 [Source:HGNC Symbol;Acc:HGNC:1755]	9067	4.267	0.3437	Yes
76	YBX2	Y-box binding protein 2 [Source:HGNC Symbol;Acc:HGNC:17948]	9274	4.232	0.3456	Yes
77	SLC5A5	solute carrier family 5 member 5 [Source:HGNC Symbol;Acc:HGNC:11040]	9425	4.208	0.3487	Yes
78	SPRR3	small proline rich protein 3 [Source:HGNC Symbol;Acc:HGNC:11268]	9477	4.201	0.3543	Yes
79	MYOT	myotilin [Source:HGNC Symbol;Acc:HGNC:12399]	9737	4.157	0.3547	Yes
80	FGF16	fibroblast growth factor 16 [Source:HGNC Symbol;Acc:HGNC:3672]	9953	4.125	0.3562	Yes
81	CLDN16	claudin 16 [Source:HGNC Symbol;Acc:HGNC:2037]	10073	4.106	0.3599	Yes
82	CACNA1F	calcium voltage-gated channel subunit alpha 1 F [Source:HGNC Symbol;Acc:HGNC:1393]	10169	4.090	0.3642	Yes
83	KLK7	kallikrein related peptidase 7 [Source:HGNC Symbol;Acc:HGNC:6368]	10226	4.079	0.3694	Yes
84	DTNB	dystrobrevin beta [Source:HGNC Symbol;Acc:HGNC:3058]	10305	4.062	0.3741	Yes
85	LYPD3	LY6/PLAUR domain containing 3 [Source:HGNC Symbol;Acc:HGNC:24880]	10315	4.060	0.3803	Yes
86	SLC6A3	solute carrier family 6 member 3 [Source:HGNC Symbol;Acc:HGNC:11049]	10341	4.054	0.3862	Yes
87	TFAP2B	transcription factor AP-2 beta [Source:HGNC Symbol;Acc:HGNC:11743]	10352	4.053	0.3925	Yes
88	ALOX12B	arachidonate 12-lipoxygenase, 12R type	10508	4.019	0.3952	Yes

		[Source:HGNC Symbol;Acc:HGNC:430]				
89	TLX1	T cell leukemia homeobox 1 [Source:HGNC Symbol;Acc:HGNC:5056]	10546	4.012	0.4008	Yes
90	MYH7	myosin heavy chain 7 [Source:HGNC Symbol;Acc:HGNC:7577]	10606	3.997	0.4058	Yes
91	NPY4R	neuropeptide Y receptor Y4 [Source:HGNC Symbol;Acc:HGNC:9329]	10742	3.973	0.4089	Yes
92	KRT15	keratin 15 [Source:HGNC Symbol;Acc:HGNC:6421]	11304	3.846	0.4017	Yes
93	NR4A2	nuclear receptor subfamily 4 group A member 2 [Source:HGNC Symbol;Acc:HGNC:7981]	11351	3.836	0.4067	Yes
94	CCR8	C-C motif chemokine receptor 8 [Source:HGNC Symbol;Acc:HGNC:1609]	11380	3.829	0.4122	Yes
95	AMBN	ameloblastin [Source:HGNC Symbol;Acc:HGNC:452]	11484	3.804	0.4158	Yes
96	BMPRI1B	bone morphogenetic protein receptor type 1B [Source:HGNC Symbol;Acc:HGNC:1077]	11908	3.697	0.4116	Yes
97	CYP11B2	cytochrome P450 family 11 subfamily B member 2 [Source:HGNC Symbol;Acc:HGNC:2592]	12065	3.652	0.4138	Yes
98	SERPIN2	serpin family B member 2 [Source:HGNC Symbol;Acc:HGNC:8584]	12072	3.649	0.4195	Yes
99	KCNE2	potassium voltage-gated channel subfamily E regulatory subunit 2 [Source:HGNC Symbol;Acc:HGNC:6242]	12306	3.587	0.4196	Yes
100	BRDT	bromodomain testis associated [Source:HGNC Symbol;Acc:HGNC:1105]	12387	3.560	0.4234	Yes
101	EFHD1	EF-hand domain family member D1 [Source:HGNC Symbol;Acc:HGNC:29556]	12520	3.517	0.4259	Yes
102	MTHFR	methylenetetrahydrofolate reductase	12609	3.491	0.4294	Yes

		[Source:HGNC Symbol;Acc:HGNC:7436]				
103	SLC38A3	solute carrier family 38 member 3 [Source:HGNC Symbol;Acc:HGNC:18044]	12775	3.438	0.4310	Yes
104	TNNI3	troponin I3, cardiac type [Source:HGNC Symbol;Acc:HGNC:11947]	12777	3.438	0.4365	Yes
105	KRT1	keratin 1 [Source:HGNC Symbol;Acc:HGNC:6412]	12906	3.392	0.4388	Yes
106	EDAR	ectodysplasin A receptor [Source:HGNC Symbol;Acc:HGNC:2895]	12951	3.375	0.4432	Yes
107	PLAG1	PLAG1 zinc finger [Source:HGNC Symbol;Acc:HGNC:9045]	12976	3.367	0.4480	Yes
108	IRS4	insulin receptor substrate 4 [Source:HGNC Symbol;Acc:HGNC:6128]	13137	3.318	0.4495	Yes
109	NGB	neuroglobin [Source:HGNC Symbol;Acc:HGNC:14077]	13679	3.099	0.4415	Yes
110	ABCB11	ATP binding cassette subfamily B member 11 [Source:HGNC Symbol;Acc:HGNC:42]	13770	3.057	0.4443	Yes
111	PDE6B	phosphodiesterase 6B [Source:HGNC Symbol;Acc:HGNC:8786]	13815	3.040	0.4481	Yes
112	GRID2	glutamate ionotropic receptor delta type subunit 2 [Source:HGNC Symbol;Acc:HGNC:4576]	13904	3.003	0.4508	Yes
113	MSH5	mutS homolog 5 [Source:HGNC Symbol;Acc:HGNC:7328]	14040	2.949	0.4523	Yes
114	FGGY	FGGY carbohydrate kinase domain containing [Source:HGNC Symbol;Acc:HGNC:25610]	14339	2.807	0.4497	Yes
115	NRIP2	nuclear receptor interacting protein 2 [Source:HGNC Symbol;Acc:HGNC:23078]	14419	2.761	0.4522	Yes
116	CLSTN3	calsyntenin 3 [Source:HGNC Symbol;Acc:HGNC:18371]	14539	2.703	0.4537	Yes

117	CLDN8	claudin 8 [Source:HGNC Symbol;Acc:HGNC:2050]	14735	2.598	0.4532	Yes
118	PDCD1	programmed cell death 1 [Source:HGNC Symbol;Acc:HGNC:8760]	14740	2.596	0.4573	Yes
119	DLK2	delta like non-canonical Notch ligand 2 [Source:HGNC Symbol;Acc:HGNC:21113]	14822	2.561	0.4594	Yes
120	RSAD2	radical S-adenosyl methionine domain containing 2 [Source:HGNC Symbol;Acc:HGNC:30908]	15091	2.412	0.4569	Yes
121	SLC6A14	solute carrier family 6 member 14 [Source:HGNC Symbol;Acc:HGNC:11047]	15109	2.399	0.4603	Yes
122	EPHA5	EPH receptor A5 [Source:HGNC Symbol;Acc:HGNC:3389]	15375	2.253	0.4576	Yes
123	SNN	stannin [Source:HGNC Symbol;Acc:HGNC:11149]	15442	2.206	0.4596	Yes
124	GPR19	G protein-coupled receptor 19 [Source:HGNC Symbol;Acc:HGNC:4473]	15681	2.070	0.4572	Yes
125	TEX15	testis expressed 15, meiosis and synapsis associated [Source:HGNC Symbol;Acc:HGNC:11738]	15879	1.946	0.4556	Yes
126	CELSR2	cadherin EGF LAG seven-pass G-type receptor 2 [Source:HGNC Symbol;Acc:HGNC:3231]	15971	1.887	0.4565	Yes
127	MAST3	microtubule associated serine/threonine kinase 3 [Source:HGNC Symbol;Acc:HGNC:19036]	16098	1.812	0.4563	Yes
128	SLC29A3	solute carrier family 29 member 3 [Source:HGNC Symbol;Acc:HGNC:23096]	16195	1.737	0.4568	Yes
129	SLC30A3	solute carrier family 30 member 3 [Source:HGNC Symbol;Acc:HGNC:11014]	16318	1.658	0.4566	Yes
130	CAMK1D	calcium/calmodulin dependent protein kinase ID [Source:HGNC Symbol;Acc:HGNC:19341]	16336	1.649	0.4588	Yes

131	ENTPD7	ectonucleoside triphosphate diphosphohydrolase 7 [Source:HGNC Symbol;Acc:HGNC:19745]	16373	1.628	0.4606	Yes
132	SPHK2	sphingosine kinase 2 [Source:HGNC Symbol;Acc:HGNC:18859]	16390	1.618	0.4628	Yes
133	ZC2HC1C	zinc finger C2HC-type containing 1C [Source:HGNC Symbol;Acc:HGNC:20354]	16430	1.582	0.4644	Yes
134	COQ8A	coenzyme Q8A [Source:HGNC Symbol;Acc:HGNC:16812]	16557	1.485	0.4637	Yes
135	UPK3B	uroplakin 3B [Source:HGNC Symbol;Acc:HGNC:21444]	16610	1.449	0.4648	Yes
136	PRODH	proline dehydrogenase 1 [Source:HGNC Symbol;Acc:HGNC:9453]	16708	1.382	0.4647	No
137	GPR3	G protein-coupled receptor 3 [Source:HGNC Symbol;Acc:HGNC:4484]	16805	1.310	0.4645	No
138	IL12B	interleukin 12B [Source:HGNC Symbol;Acc:HGNC:5970]	16971	1.195	0.4625	No
139	ITGB1BP2	integrin subunit beta 1 binding protein 2 [Source:HGNC Symbol;Acc:HGNC:6154]	17192	1.042	0.4589	No
140	CCDC106	coiled-coil domain containing 106 [Source:HGNC Symbol;Acc:HGNC:30181]	17206	1.033	0.4602	No
141	HNF1A	HNF1 homeobox A [Source:HGNC Symbol;Acc:HGNC:11621]	17306	0.968	0.4594	No
142	CPEB3	cytoplasmic polyadenylation element binding protein 3 [Source:HGNC Symbol;Acc:HGNC:21746]	17763	0.626	0.4495	No
143	ADRA2C	adrenoceptor alpha 2C [Source:HGNC Symbol;Acc:HGNC:283]	17925	0.521	0.4465	No
144	HSD11B2	hydroxysteroid 11-beta dehydrogenase 2 [Source:HGNC Symbol;Acc:HGNC:5209]	18301	0.233	0.4379	No
145	PDK2	pyruvate dehydrogenase kinase 2	18442	0.124	0.4348	No

		[Source:HGNC Symbol;Acc:HGNC:8810]				
146	LGALS7	galectin 7 [Source:HGNC Symbol;Acc:HGNC:6568]	18675	0.000	0.4292	No
147	CKM	creatine kinase, M-type [Source:HGNC Symbol;Acc:HGNC:1994]	18817	0.000	0.4259	No
148	CALML5	calmodulin like 5 [Source:HGNC Symbol;Acc:HGNC:18180]	19844	0.000	0.4013	No
149	SSTR4	somatostatin receptor 4 [Source:HGNC Symbol;Acc:HGNC:11333]	21372	0.000	0.3648	No
150	CLPS	colipase [Source:HGNC Symbol;Acc:HGNC:2085]	21418	0.000	0.3637	No
151	AKR1B10	aldo-keto reductase family 1 member B10 [Source:HGNC Symbol;Acc:HGNC:382]	23422	0.000	0.3159	No
152	CCNA1	cyclin A1 [Source:HGNC Symbol;Acc:HGNC:1577]	23982	0.000	0.3025	No
153	SOX10	SRY-box transcription factor 10 [Source:HGNC Symbol;Acc:HGNC:11190]	24857	0.000	0.2816	No
154	SMPX	small muscle protein X-linked [Source:HGNC Symbol;Acc:HGNC:11122]	25479	0.000	0.2668	No
155	IL5	interleukin 5 [Source:HGNC Symbol;Acc:HGNC:6016]	26042	0.000	0.2533	No
156	UGT2B17	UDP glucuronosyltransferase family 2 member B17 [Source:HGNC Symbol;Acc:HGNC:12547]	26360	0.000	0.2457	No
157	CD40LG	CD40 ligand [Source:HGNC Symbol;Acc:HGNC:11935]	26756	0.000	0.2363	No
158	OXT	oxytocin/neurophysin I prepropeptide [Source:HGNC Symbol;Acc:HGNC:8528]	27557	0.000	0.2172	No
159	CACNG1	calcium voltage-gated channel auxiliary subunit gamma 1 [Source:HGNC Symbol;Acc:HGNC:1405]	28017	0.000	0.2062	No
160	KLK8	kallikrein related peptidase 8 [Source:HGNC Symbol;Acc:HGNC:6369]	28029	0.000	0.2059	No

161	TFF2	trefoil factor 2 [Source:HGNC Symbol;Acc:HGNC:11756]	28043	0.000	0.2056	No
162	IFNG	interferon gamma [Source:HGNC Symbol;Acc:HGNC:5438]	28103	0.000	0.2042	No
163	CYP39A1	cytochrome P450 family 39 subfamily A member 1 [Source:HGNC Symbol;Acc:HGNC:17449]	28294	0.000	0.1997	No
164	ARPP21	cAMP regulated phosphoprotein 21 [Source:HGNC Symbol;Acc:HGNC:16968]	30172	0.000	0.1548	No
165	INSL5	insulin like 5 [Source:HGNC Symbol;Acc:HGNC:6088]	30814	0.000	0.1395	No
166	TSHB	thyroid stimulating hormone subunit beta [Source:HGNC Symbol;Acc:HGNC:12372]	30940	0.000	0.1365	No
167	VPREB1	V-set pre-B cell surrogate light chain 1 [Source:HGNC Symbol;Acc:HGNC:12709]	32728	0.000	0.0938	No
168	CHST2	carbohydrate sulfotransferase 2 [Source:HGNC Symbol;Acc:HGNC:1970]	33367	-0.054	0.0786	No
169	CAPN9	calpain 9 [Source:HGNC Symbol;Acc:HGNC:1486]	33455	-0.108	0.0767	No
170	ASB7	ankyrin repeat and SOCS box containing 7 [Source:HGNC Symbol;Acc:HGNC:17182]	33528	-0.144	0.0752	No
171	GAMT	guanidinoacetate N-methyltransferase [Source:HGNC Symbol;Acc:HGNC:4136]	33587	-0.189	0.0741	No
172	SGK1	serum/glucocorticoid regulated kinase 1 [Source:HGNC Symbol;Acc:HGNC:10810]	35320	-1.133	0.0345	No
173	SLC16A7	solute carrier family 16 member 7 [Source:HGNC Symbol;Acc:HGNC:10928]	35684	-1.325	0.0280	No
174	IDUA	alpha-L-iduronidase [Source:HGNC	35777	-1.374	0.0280	No

		Symbol;Acc:HGNC:5391]				
175	KMT2D	lysine methyltransferase 2D [Source:HGNC Symbol;Acc:HGNC:7133]	36158	-1.577	0.0214	No
176	LFNG	LFNG O-fucosylpeptide 3-beta-N-acetylglucosaminyltransferase [Source:HGNC Symbol;Acc:HGNC:6560]	36635	-1.824	0.0130	No
177	MFSD6	major facilitator superfamily domain containing 6 [Source:HGNC Symbol;Acc:HGNC:24711]	36669	-1.845	0.0151	No
178	SLC25A23	solute carrier family 25 member 23 [Source:HGNC Symbol;Acc:HGNC:19375]	36762	-1.896	0.0160	No
179	EDN2	endothelin 2 [Source:HGNC Symbol;Acc:HGNC:3177]	36889	-1.959	0.0161	No
180	CDKAL1	CDK5 regulatory subunit associated protein 1 like 1 [Source:HGNC Symbol;Acc:HGNC:21050]	37074	-2.067	0.0150	No
181	BARD1	BRCA1 associated RING domain 1 [Source:HGNC Symbol;Acc:HGNC:952]	37421	-2.252	0.0103	No
182	SNCB	synuclein beta [Source:HGNC Symbol;Acc:HGNC:11140]	37498	-2.288	0.0122	No
183	COPZ2	COPI coat complex subunit zeta 2 [Source:HGNC Symbol;Acc:HGNC:19356]	37643	-2.359	0.0125	No
184	PTPRJ	protein tyrosine phosphatase receptor type J [Source:HGNC Symbol;Acc:HGNC:9673]	38149	-2.611	0.0046	No
185	SKIL	SKI like proto-oncogene [Source:HGNC Symbol;Acc:HGNC:10897]	38287	-2.673	0.0056	No
186	TGFB2	transforming growth factor beta 2 [Source:HGNC Symbol;Acc:HGNC:11768]	38413	-2.745	0.0071	No
187	ZNF112	zinc finger protein 112 [Source:HGNC Symbol;Acc:HGNC:12892]	38574	-2.824	0.0078	No
188	BTG2	BTG anti-proliferation factor 2	38602	-2.838	0.0117	No

		[Source:HGNC Symbol;Acc:HGNC:1131]				
189	TCF7L1	transcription factor 7 like 1 [Source:HGNC Symbol;Acc:HGNC:11640]	38674	-2.867	0.0146	No
190	SHOX2	short stature homeobox 2 [Source:HGNC Symbol;Acc:HGNC:10854]	38697	-2.884	0.0187	No
191	GTF3C5	general transcription factor IIIC subunit 5 [Source:HGNC Symbol;Acc:HGNC:4668]	38802	-2.945	0.0209	No
192	C5	complement C5 [Source:HGNC Symbol;Acc:HGNC:1331]	39064	-3.086	0.0196	No
193	MACROH2A2	macroH2A.2 histone [Source:HGNC Symbol;Acc:HGNC:14453]	39322	-3.235	0.0186	No
194	VPS50	VPS50 subunit of EARP/GARPII complex [Source:HGNC Symbol;Acc:HGNC:25956]	39664	-3.403	0.0159	No
195	RIBC2	RIB43A domain with coiled-coils 2 [Source:HGNC Symbol;Acc:HGNC:13241]	39863	-3.505	0.0168	No
196	CNTFR	ciliary neurotrophic factor receptor [Source:HGNC Symbol;Acc:HGNC:2170]	40168	-3.676	0.0154	No
197	KCNQ2	potassium voltage-gated channel subfamily Q member 2 [Source:HGNC Symbol;Acc:HGNC:6296]	40307	-3.760	0.0182	No
198	ARHGDIG	Rho GDP dissociation inhibitor gamma [Source:HGNC Symbol;Acc:HGNC:680]	41402	-4.517	-0.0007	No
199	FGFR3	fibroblast growth factor receptor 3 [Source:HGNC Symbol;Acc:HGNC:3690]	41663	-4.782	0.0007	No
200	KRT13	keratin 13 [Source:HGNC Symbol;Acc:HGNC:6415]	41867	-4.979	0.0038	No

GSEA; Gene Set Enrichment Analysis; RIP, RNA immunoprecipitation (sample).