

Supplementary Table S1. Information of the samples

Sample id	Participant age	Information	Participant id
831	21	before guasha	1
832	21	after guasha	1
833	21	before guasha	2
834	21	after guasha	2
835	21	before guasha	3
836	21	after guasha	3
837	20	before guasha	4
838	20	after guasha	4
839	21	before guasha	5
840	21	after guasha	5
841	25	before guasha	6
842	25	after guasha	6
843	26	before guasha	7
844	26	after guasha	7
845	21	before guasha	8
846	21	after guasha	8
847	20	before guasha	9
848	20	after guasha	9

Supplementary Table S2-1. Differentially expressed gene (from DESeq2)

ensembl_gene_id	baseMean	log2FoldChange	lfcSE	Stat	P value	FDR	gene_name	description
ENSG000000214827	64.16297166	1.493942715	0.260220811	5.741057803	9.4087×10 ⁻⁹	0.000154256	MTCP1	mature T cell proliferation 1 [Source:HGNC Symbol;Acc:HGNC:7423] H1.3 linker histone, cluster member [Source:HGNC Symbol;Acc:HGNC:4717] H1.2 linker histone, cluster member [Source:HGNC Symbol;Acc:HGNC:4716] bone morphogenetic protein receptor type 2 [Source:HGNC Symbol;Acc:HGNC:1078] H1.4 linker histone, cluster member [Source:HGNC Symbol;Acc:HGNC:4718] FKBP prolyl isomerase 5 [Source:HGNC Symbol;Acc:HGNC:3721] COMM domain containing 9 [Source:HGNC Symbol;Acc:HGNC:25014] small ArfGAP2 [Source:HGNC Symbol;Acc:HGNC:25082] phospholipase A2 group X1IA [Source:HGNC Symbol;Acc:HGNC:18554] arrestin domain containing 3 [Source:HGNC Symbol;Acc:HGNC:29263] interleukin 13 receptor subunit alpha 1 [Source:HGNC Symbol;Acc:HGNC:5974] solute carrier family 38 member 2 [Source:HGNC Symbol;Acc:HGNC:13448]
ENSG000000124575	798.5727007	0.296755402	0.054441918	5.453139882	4.94881×10 ⁻⁸	0.000270453	H1-3	
ENSG000000187837	2289.23317	0.300660272	0.054600331	5.506565042	3.65903×10 ⁻⁸	0.000270453	H1-2	
ENSG000000204217	480.6833203	-0.406750982	0.080115793	-5.077038679	3.83363×10 ⁻⁷	0.001571308	BMPR2	
ENSG000000168298	1157.053419	0.328110533	0.067928283	4.830249209	1.36362×10 ⁻⁶	0.004471319	H1-4	
ENSG000000096060	979.6341952	-0.39402708	0.086629147	-4.548435393	5.40462×10 ⁻⁶	0.012658399	FKBP5	
ENSG000000110442	371.7090693	-0.600848784	0.131946879	-4.553717294	5.27062×10 ⁻⁶	0.012658399	COMMD9	
ENSG000000084070	1900.52367	-0.289763837	0.069497266	-4.169427832	3.05365×10 ⁻⁵	0.060009013	SMAP2	
ENSG000000123739	620.5511379	-0.483504896	0.116447888	-4.152113929	3.29418×10 ⁻⁵	0.060009013	PLA2G12A	
ENSG000000113369	11149.31946	0.311698679	0.076233343	4.088744733	4.33714×10 ⁻⁵	0.066977594	ARRDC3	
ENSG000000131724	2109.54573	-0.248040047	0.060786585	-4.080506378	4.49377×10 ⁻⁵	0.066977594	IL13RA1	
ENSG000000134294	4578.9579	-0.170354167	0.042931362	-3.968058736	7.24605×10 ⁻⁵	0.098999127	SLC38A2	

Supplementary Table S2-2. Differentially expressed gene (from edgeR)

ensembl_gene_id	logFC	logCPM	LR	P value	FDR	gene_name	Description
ENSG00000124575	0.309799605	5.487281968	43.38682354	4.49203×10 ⁻¹¹	7.60725×10 ⁻⁷	H1-3	H1.3 linker histone, cluster member [Source:HGNC Symbol;Acc:HGNC:4717]
ENSG000000187837	0.306963565	7.005778529	38.96442011	4.316×10 ⁻¹⁰	3.65458×10 ⁻⁶	H1-2	H1.2 linker histone, cluster member [Source:HGNC Symbol;Acc:HGNC:4716]
ENSG000000168298	0.333311562	6.020909117	32.60636959	1.12844×10 ⁻⁸	6.37006×10 ⁻⁵	H1-4	H1.4 linker histone, cluster member [Source:HGNC Symbol;Acc:HGNC:4718]
ENSG000000171570	1.384045622	-0.419382355	27.33424231	1.71154×10 ⁻⁷	0.000724621	RAB4B-EGLN2	RAB4B-EGLN2 readthrough (NMD candidate) [Source:HGNC Symbol;Acc:HGNC:44465]
ENSG0000000084070	-0.296305422	6.738678619	23.3404188	1.35718×10 ⁻⁶	0.004596764	SMAP2	small ArfGAP2 [Source:HGNC Symbol;Acc:HGNC:25082]
ENSG000000103528	0.742628658	0.660627565	19.89188104	8.19476×10 ⁻⁶	0.023129712	SVT17	synaptotagmin 17 [Source:HGNC Symbol;Acc:HGNC:24119]
chr3 - 45568133 45637894	0.329651452	2.961292083	17.95456028	2.26242×10 ⁻⁵	0.050928266		
chr7 - 120722088 120884459	0.220481038	5.424892423	17.79683804	2.45791×10 ⁻⁵	0.050928266		
chr6 . 70514778 70576433	0.317854207	4.057239769	17.61353566	2.70655×10 ⁻⁵	0.050928266		
ENSG000000231663	0.825028712	-0.002144218	16.76494125	4.23078×10 ⁻⁵	0.059048884	COA6-AS1	COA6 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:40825]
ENSG000000108932	0.217086639	5.293972707	16.72257685	4.32631×10 ⁻⁵	0.059048884	SLC16A6	solute carrier family 16 member 6 [Source:HGNC Symbol;Acc:HGNC:10927]
ENSG000000166091	-0.300489201	3.237928158	16.54552647	4.74959×10 ⁻⁵	0.059048884	CMTM5	CKLF like MARVEL transmembrane domain containing 5 [Source:HGNC Symbol;Acc:HGNC:19176]
ENSG000000152894	0.313897754	3.053789615	16.4911751	4.8877×10 ⁻⁵	0.059048884	PTPRK	protein tyrosine phosphatase receptor type K [Source:HGNC Symbol;Acc:HGNC:9674]
chr6 - 32888761 32941594	0.199017448	4.600545182	16.41005066	5.1014×10 ⁻⁵	0.059048884		
ENSG000000137822	-0.266919972	3.384625621	16.3627927	5.23019×10 ⁻⁵	0.059048884	TUBGCP4	tubulin gamma complex associated protein 4 [Source:HGNC Symbol;Acc:HGNC:16691]
ENSG000000119280	-0.296697647	2.935253383	16.03428476	6.22058×10 ⁻⁵	0.06412104	C1orf198	chromosome 1 open reading frame 198 [Source:HGNC Symbol;Acc:HGNC:25900]
ENSG000000134294	-0.191680164	8.004342413	15.96962062	6.43672×10 ⁻⁵	0.06412104	SLC38A2	solute carrier family 38 member 2 [Source:HGNC Symbol;Acc:HGNC:13448]

Continued

ensembl_gene_id	logFC	logCPM	LR	P value	FDR	gene_name	Description
chr12 - 70531159 70637922	0.217701182	4.973764891	15.5522941	8.02542×10 ⁻⁵	0.069985352		
ENSG00000184226	0.254850495	5.531625636	15.49664714	8.26517×10 ⁻⁵	0.069985352	PCDH9	protocadherin 9 [Source:HGNC Symbol;Acc:HGNC:8661]
ENSG00000096060	-0.373474055	5.778941128	15.24657113	9.43479×10 ⁻⁵	0.076084831	FKBP5	FKBP prolyl isomerase 5 [Source:HGNC Symbol;Acc:HGNC:3721]
ENSG00000214827	0.497508124	1.6432255066	14.67631358	0.00012764	0.098253989	MTCP1	mature T cell proliferation 1 [Source:HGNC Symbol;Acc:HGNC:7423]

Supplementary Table S2-3. Differentially expressed gene (from limma)

ensembl_gene_id	logFC	AveExpr	t	P value	FDR	gene_name	Description
ENSG00000124575	0.309467991	5.45596542	8.034084723	1.03714×10 ⁻⁶	0.017563963	H1-3	H1.3 linker histone, cluster member [Source:HGNC Symbol;Acc:HGNC:4717]
ENSG00000187837	0.306700585	6.983057696	7.180006826	3.88287×10 ⁻⁶	0.032878228	H1-2	H1.2 linker histone, cluster member [Source:HGNC Symbol;Acc:HGNC:4716]
ENSG00000168298	0.331759486	5.99733428	6.104367275	2.34919×10 ⁻⁵	0.09869282	H1-4	H1.4 linker histone, cluster member [Source:HGNC Symbol;Acc:HGNC:4718]
ENSG00000239839	-0.581143124	3.700863559	-5.981680364	2.91387×10 ⁻⁵	0.09869282	DEFA3	defensin alpha 3 [Source:HGNC Symbol;Acc:HGNC:2762]
ENSG00000118113	-0.46949816	1.537650125	-6.001373067	2.81445×10 ⁻⁵	0.09869282	MMP8	matrix metalloproteinase 8 [Source:HGNC Symbol;Acc:HGNC:7175]

Supplementary Table S3. Genes co-expressed with the histone genes

Positively correlated with any of the 3 histone genes		
gene_id	gene_name	description
chr1 159206700 159259435		
chr1 194171114 194228788		
chr1 207427008 207495537		
chr1 245830064 245894767		
chr1 83834678 83898454		
chr1 194802386 195020897		
chr1 223203232 223254391		
chr10 115789776 115862566		
chr10 122554706 122610613		
chr10 45811056 45869430		
chr10 94386918 94449856		
chr10 19528070 19776376		
chr11 12922704 13030579		
chr11 47575264 47638857		
chr11 90613452 90700432		
chr12 89746297 89813496		
chr12 70531159 70637922		
chr12 73837472 74520734		
chr12 125670090 125807925		
chr12 93335773 93399995		
chr13 111373422 111425791		
chr13 51655182 51744617		
chr14 67684777 67804580		
chr14 41446642 41665780		
chr14 76679393 76798796		
chr14 96116833 96391851		
chr15 38992240 39075671		
chr16 17119569 17196001		
chr18 52657888 52773094		
chr19 43355483 43848105		
chr2 203168419 203241046		
chr2 224467138 224589002		
chr2 48474305 48541793		
chr2 15241696 15302964		
chr2 19356810 19547825		
chr2 200897626 201040036		
chr2 57629712 57682247		
chr2 57933048 58152126		
chr2 177344688 177401786		
chr2 59390372 59445671		
chr22 33615421 33669061		
chr22 47571594 47626763		
chr3 40665056 40725353		
chr3 16656009 16739392		
chr3 45568133 45637894		
chr3 174159825 174235593		
chr4 14212543 14290278		
chr4 181070004 181386725		
chr4 115599538 115651576		
chr4 129369782 129440381		
chr4 161425635 161557295		
chr5 140624833 140710214		
chr5 53842444 53961009		
chr5 124235227 124290823		
chr5 159925731 160071218		
chr5 163721114 164759450		
chr5 28932855 29136851		
chr5 98263160 98318093		
chr6 70514778 70576433		
chr6 93227168 93291526		
chr6 26155505 26251614		
chr6 32888761 32941594		
chr6 135399683 135502452		
chr6 14140718 14405928		
chr6 25836178 25892831		
chr6 33217496 33270774		
chr7 123668761 123976987		
chr7 117752908 117824044		
chr7 120722088 120884459		
chr7 120898631 120988879		
chr7 50472798 50555232		
chr7 79110688 79235861		
chr8 24170899 24245300		
chr8 22551112 22652217		

chr8 + 79716615 79907107		
chr9 _ 83445277 83537682		
chr9 _ 102532205 102583684		
chr9 _ 3109714 3181630		
chrX _ 112642803 113302475		
chrX _ 16269217 16541411		
chrX _ 74744514 74869234		
chrX + 97828579 97894019		
chrY _ 13281057 13333259		
ENSG000000001460	STPG1	sperm tail PG-rich repeat containing 1 [Source:HGNC Symbol;Acc:HGNC:28070]
ENSG000000003059	NDUFAF7	NADH:ubiquinone oxidoreductase complex assembly factor 7 [Source:HGNC Symbol;Acc:HGNC:28816]
ENSG000000004139	SARM1	sterile alpha and TIR motif containing 1 [Source:HGNC Symbol;Acc:HGNC:17074]
ENSG000000004534	RBM6	RNA binding motif protein 6 [Source:HGNC Symbol;Acc:HGNC:9903]
ENSG000000004864	SLC25A13	solute carrier family 25 member 13 [Source:HGNC Symbol;Acc:HGNC:10983]
ENSG000000007047	MARK4	microtubule affinity regulating kinase 4 [Source:HGNC Symbol;Acc:HGNC:13538]
ENSG000000007129	CEACAM21	CEA cell adhesion molecule 21 [Source:HGNC Symbol;Acc:HGNC:28834]
ENSG000000008988	RPS20	ribosomal protein S20 [Source:HGNC Symbol;Acc:HGNC:10405]
ENSG000000010219	DYRK4	dual specificity tyrosine phosphorylation regulated kinase 4 [Source:HGNC Symbol;Acc:HGNC:3095]
ENSG000000018610	STEEP1	STING1 ER exit protein 1 [Source:HGNC Symbol;Acc:HGNC:26239]
ENSG000000023041	ZDHHC6	zinc finger DHHC-type palmitoyltransferase 6 [Source:HGNC Symbol;Acc:HGNC:19160]
ENSG000000023445	BIRC3	baculoviral IAP repeat containing 3 [Source:HGNC Symbol;Acc:HGNC:591]
ENSG000000025039	RRAGD	Ras related GTP binding D [Source:HGNC Symbol;Acc:HGNC:19903]
ENSG000000033170	FUT8	fucosyltransferase 8 [Source:HGNC Symbol;Acc:HGNC:4019]
ENSG000000035687	ADSS2	adenylosuccinate synthase 2 [Source:HGNC Symbol;Acc:HGNC:292]
ENSG000000042980	ADAM28	ADAM metalloproteinase domain 28 [Source:HGNC Symbol;Acc:HGNC:206]
ENSG000000049247	UTS2	urotensin 2 [Source:HGNC Symbol;Acc:HGNC:12636]
ENSG000000049541	RFC2	replication factor C subunit 2 [Source:HGNC Symbol;Acc:HGNC:9970]
ENSG000000050730	TNIP3	TNFAIP3 interacting protein 3 [Source:HGNC Symbol;Acc:HGNC:19315]
ENSG000000055044	NOP58	NOP58 ribonucleoprotein [Source:HGNC Symbol;Acc:HGNC:29926]
ENSG000000055950	MRPL43	mitochondrial ribosomal protein L43 [Source:HGNC Symbol;Acc:HGNC:14517]
ENSG000000058091	CDK14	cyclin dependent kinase 14 [Source:HGNC Symbol;Acc:HGNC:8883]
ENSG000000059691	GATB	glutamyl-tRNA amidotransferase subunit B [Source:HGNC Symbol;Acc:HGNC:8849]
ENSG000000064652	SNX24	sorting nexin 24 [Source:HGNC Symbol;Acc:HGNC:21533]
ENSG000000066557	LRRC40	leucine rich repeat containing 40 [Source:HGNC Symbol;Acc:HGNC:26004]
ENSG000000067221	STOML1	stomatin like 1 [Source:HGNC Symbol;Acc:HGNC:14560]
ENSG000000068024	HDAC4	histone deacetylase 4 [Source:HGNC Symbol;Acc:HGNC:14063]
ENSG000000070269	TMEM260	transmembrane protein 260 [Source:HGNC Symbol;Acc:HGNC:20185]
ENSG000000070423	RNF126	ring finger protein 126 [Source:HGNC Symbol;Acc:HGNC:21151]
ENSG000000072210	ALDH3A2	aldehyde dehydrogenase 3 family member A2 [Source:HGNC Symbol;Acc:HGNC:403]
ENSG000000075035	WSCD2	WSC domain containing 2 [Source:HGNC Symbol;Acc:HGNC:29117]
ENSG000000075239	ACAT1	acetyl-CoA acetyltransferase 1 [Source:HGNC Symbol;Acc:HGNC:93]
ENSG000000076641	PAG1	phosphoglycerate kinase 1 [Source:HGNC Symbol;Acc:HGNC:30043]
ENSG000000076924	XAB2	XPA binding protein 2 [Source:HGNC Symbol;Acc:HGNC:14089]
ENSG000000077585	GPR137B	G protein-coupled receptor 137B [Source:HGNC Symbol;Acc:HGNC:11862]
ENSG000000079999	KEAP1	kelch like ECH associated protein 1 [Source:HGNC Symbol;Acc:HGNC:23177]
ENSG000000080822	CLNDN1	claudin domain containing 1 [Source:HGNC Symbol;Acc:HGNC:1322]
ENSG000000080854	IGSF9B	immunoglobulin superfamily member 9B [Source:HGNC Symbol;Acc:HGNC:32326]
ENSG000000081189	MEF2C	myocyte enhancer factor 2C [Source:HGNC Symbol;Acc:HGNC:6996]
ENSG000000081692	JMJD4	jumonji domain containing 4 [Source:HGNC Symbol;Acc:HGNC:25724]
ENSG000000081721	DUSP12	dual specificity phosphatase 12 [Source:HGNC Symbol;Acc:HGNC:3067]
ENSG000000084092	NOA1	nitric oxide associated 1 [Source:HGNC Symbol;Acc:HGNC:28473]
ENSG000000085760	MTIF2	mitochondrial translational initiation factor 2 [Source:HGNC Symbol;Acc:HGNC:7441]
ENSG000000086712	TXLNG	taxilin gamma [Source:HGNC Symbol;Acc:HGNC:18578]
ENSG000000086827	ZW10	zw10 kinetochore protein [Source:HGNC Symbol;Acc:HGNC:13194]
ENSG000000088876	ZNF343	zinc finger protein 343 [Source:HGNC Symbol;Acc:HGNC:16017]
ENSG000000089195	TRMT6	tRNA methyltransferase 6 [Source:HGNC Symbol;Acc:HGNC:20900]
ENSG000000091536	MYO15A	myosin XVA [Source:HGNC Symbol;Acc:HGNC:7594]
ENSG000000092140	GZE3	G2/M-phase specific E3 ubiquitin protein ligase [Source:HGNC Symbol;Acc:HGNC:20338]
ENSG000000092820	EZR	ezrin [Source:HGNC Symbol;Acc:HGNC:12691]
ENSG000000095015	MAP3K1	mitogen-activated protein kinase kinase kinase 1 [Source:HGNC Symbol;Acc:HGNC:6848]
ENSG000000095261	PSMD5	proteasome 26S subunit, non-ATPase 5 [Source:HGNC Symbol;Acc:HGNC:9563]
ENSG000000096996	IL12RB1	interleukin 12 receptor subunit beta 1 [Source:HGNC Symbol;Acc:HGNC:5971]
ENSG000000100023	PPIL2	peptidylprolyl isomerase like 2 [Source:HGNC Symbol;Acc:HGNC:9261]
ENSG000000100029	PES1	pescadillo ribosomal biogenesis factor 1 [Source:HGNC Symbol;Acc:HGNC:8848]
ENSG000000100095	SEZ6L	seizure related 6 homolog like [Source:HGNC Symbol;Acc:HGNC:10763]
ENSG000000100220	RTCB	RNA 2',3'-cyclic phosphate and 5'-OH ligase [Source:HGNC Symbol;Acc:HGNC:26935]
ENSG000000100221	JOSD1	Josephin domain containing 1 [Source:HGNC Symbol;Acc:HGNC:28953]
ENSG000000100258	LMF2	lipase maturation factor 2 [Source:HGNC Symbol;Acc:HGNC:25096]
ENSG000000100288	CHKB	choline kinase beta [Source:HGNC Symbol;Acc:HGNC:1938]
ENSG000000100316	RPL3	ribosomal protein L3 [Source:HGNC Symbol;Acc:HGNC:10332]
ENSG000000100564	PIGH	phosphatidylinositol glycan anchor biosynthesis class H [Source:HGNC Symbol;Acc:HGNC:8964]
ENSG000000100721	TCL1A	TCL1 family AKT coactivator A [Source:HGNC Symbol;Acc:HGNC:11648]
ENSG000000101079	NDRG3	NDRG family member 3 [Source:HGNC Symbol;Acc:HGNC:14462]
ENSG000000101181	MTG2	mitochondrial ribosome associated GTPase 2 [Source:HGNC Symbol;Acc:HGNC:16239]
ENSG000000101412	EZF1	E2F transcription factor 1 [Source:HGNC Symbol;Acc:HGNC:3113]
ENSG000000101473	ACOT8	acyl-CoA thioesterase 8 [Source:HGNC Symbol;Acc:HGNC:15919]
ENSG000000101945	SUV39H1	suppressor of variegation 3-9 homolog 1 [Source:HGNC Symbol;Acc:HGNC:11479]
ENSG000000102977	ACD	ACD shelterin complex subunit and telomerase recruitment factor [Source:HGNC Symbol;Acc:HGNC:25070]
ENSG000000103051	COG4	component of oligomeric golgi complex 4 [Source:HGNC Symbol;Acc:HGNC:18620]
ENSG000000103174	NAGPA	N-acetylglucosamine-1-phosphodiester alpha-N-acetylglucosaminidase [Source:HGNC Symbol;Acc:HGNC:17378]
ENSG000000103591	AAGAB	alpha and gamma adaptin binding protein [Source:HGNC Symbol;Acc:HGNC:25662]

ENSG00000104518	GSDMD	gasdermin D [Source:HGNC Symbol;Acc:HGNC:25697]
ENSG00000104549	SQLE	squalene epoxidase [Source:HGNC Symbol;Acc:HGNC:11279]
ENSG00000104976	SNAPC2	small nuclear RNA activating complex polypeptide 2 [Source:HGNC Symbol;Acc:HGNC:11135]
ENSG00000105136	ZNF419	zinc finger protein 419 [Source:HGNC Symbol;Acc:HGNC:20648]
ENSG00000105329	TGFB1	transforming growth factor beta 1 [Source:HGNC Symbol;Acc:HGNC:11766]
ENSG00000105383	CD33	CD33 molecule [Source:HGNC Symbol;Acc:HGNC:1659]
ENSG00000105810	CDK6	cyclin dependent kinase 6 [Source:HGNC Symbol;Acc:HGNC:1777]
ENSG00000106100	NOD1	nucleotide binding oligomerization domain containing 1 [Source:HGNC Symbol;Acc:HGNC:16390]
ENSG00000106133	NSUN5P2	NSUN5 pseudogene 2 [Source:HGNC Symbol;Acc:HGNC:16609]
ENSG00000106328	FSCN3	fascin actin-bundling protein 3 [Source:HGNC Symbol;Acc:HGNC:3961]
ENSG00000106565	TMEM176B	transmembrane protein 176B [Source:HGNC Symbol;Acc:HGNC:29596]
ENSG00000107018	RLN1	relaxin 1 [Source:HGNC Symbol;Acc:HGNC:10026]
ENSG00000107447	DNIT	DNA nucleotidylexotransferase [Source:HGNC Symbol;Acc:HGNC:2983]
ENSG00000107719	PALD1	phosphatase domain containing paladin 1 [Source:HGNC Symbol;Acc:HGNC:23530]
ENSG00000107968	MAP3K8	mitogen-activated protein kinase kinase kinase 8 [Source:HGNC Symbol;Acc:HGNC:6860]
ENSG00000108561	C1QBP	complement C1q binding protein [Source:HGNC Symbol;Acc:HGNC:1243]
ENSG00000108932	SLC16A6	solute carrier family 16 member 6 [Source:HGNC Symbol;Acc:HGNC:10927]
ENSG00000109065	NAT9	N-acetyltransferase 9 (putative) [Source:HGNC Symbol;Acc:HGNC:23133]
ENSG00000109452	INPP4B	inositol polyphosphate-4-phosphatase type II B [Source:HGNC Symbol;Acc:HGNC:6075]
ENSG00000109929	SC5D	sterol-C5-desaturase [Source:HGNC Symbol;Acc:HGNC:10547]
ENSG00000110047	EHD1	EH domain containing 1 [Source:HGNC Symbol;Acc:HGNC:3242]
ENSG00000110492	MDK	midkine [Source:HGNC Symbol;Acc:HGNC:6972]
ENSG00000111237	VPS29	VPS29 retromer complex component [Source:HGNC Symbol;Acc:HGNC:14340]
ENSG00000111554	MDM1	Mdm1 nuclear protein [Source:HGNC Symbol;Acc:HGNC:29917]
ENSG00000111596	CNOT2	CCR4-NOT transcription complex subunit 2 [Source:HGNC Symbol;Acc:HGNC:7878]
ENSG00000111667	USP5	ubiquitin specific peptidase 5 [Source:HGNC Symbol;Acc:HGNC:12628]
ENSG00000111981	ULBP1	UL16 binding protein 1 [Source:HGNC Symbol;Acc:HGNC:14893]
ENSG00000112282	MED23	mediator complex subunit 23 [Source:HGNC Symbol;Acc:HGNC:2372]
ENSG00000112782	CLIC5	chloride intracellular channel 5 [Source:HGNC Symbol;Acc:HGNC:13517]
ENSG00000112902	SEMA5A	semaphorin 5A [Source:HGNC Symbol;Acc:HGNC:10736]
ENSG00000113013	HSPA9	heat shock protein family A (Hsp70) member 9 [Source:HGNC Symbol;Acc:HGNC:5244]
ENSG00000113088	GZMK	granzyme K [Source:HGNC Symbol;Acc:HGNC:4711]
ENSG00000113141	IK	IK cytokine [Source:HGNC Symbol;Acc:HGNC:5958]
ENSG00000113369	ARRDC3	arrestin domain containing 3 [Source:HGNC Symbol;Acc:HGNC:29263]
ENSG00000114120	SLC25A36	solute carrier family 25 member 36 [Source:HGNC Symbol;Acc:HGNC:25554]
ENSG00000114544	SLC41A3	solute carrier family 41 member 3 [Source:HGNC Symbol;Acc:HGNC:31046]
ENSG00000115556	PLCD4	phospholipase C delta 4 [Source:HGNC Symbol;Acc:HGNC:9062]
ENSG00000117593	DARS2	aspartyl-tRNA synthetase 2, mitochondrial [Source:HGNC Symbol;Acc:HGNC:25538]
ENSG00000119333	DYNC2I2	dynein 2 intermediate chain 2 [Source:HGNC Symbol;Acc:HGNC:28296]
ENSG00000119760	SUPT7L	SPT7 like, STAGA complex subunit gamma [Source:HGNC Symbol;Acc:HGNC:30632]
ENSG00000119977	TCTN3	tectonic family member 3 [Source:HGNC Symbol;Acc:HGNC:24519]
ENSG00000120333	MRPS14	mitochondrial ribosomal protein S14 [Source:HGNC Symbol;Acc:HGNC:14049]
ENSG00000120798	NR2C1	nuclear receptor subfamily 2 group C member 1 [Source:HGNC Symbol;Acc:HGNC:7971]
ENSG00000120800	UTP20	UTP20 small subunit processome component [Source:HGNC Symbol;Acc:HGNC:17897]
ENSG00000121716	PILRB	paired immunoglobulin like type 2 receptor beta [Source:HGNC Symbol;Acc:HGNC:18297]
ENSG00000123213	NLN	neurolysin [Source:HGNC Symbol;Acc:HGNC:16058]
ENSG00000123453	SARDH	sarcosine dehydrogenase [Source:HGNC Symbol;Acc:HGNC:10536]
ENSG00000123607	TTC21B	tetratricopeptide repeat domain 21B [Source:HGNC Symbol;Acc:HGNC:25660]
ENSG00000123689	GOS2	G0/G1 switch 2 [Source:HGNC Symbol;Acc:HGNC:30229]
ENSG00000123843	C4BPB	complement component 4 binding protein beta [Source:HGNC Symbol;Acc:HGNC:1328]
ENSG00000123989	CHPF	chondroitin polymerizing factor [Source:HGNC Symbol;Acc:HGNC:24291]
ENSG00000124205	EDN3	endothelin 3 [Source:HGNC Symbol;Acc:HGNC:3178]
ENSG00000124380	SNRNP27	small nuclear ribonucleoprotein U4/U6.U5 subunit 27 [Source:HGNC Symbol;Acc:HGNC:30240]
ENSG00000124508	BTN2A2	butyrophilin subfamily 2 member A2 [Source:HGNC Symbol;Acc:HGNC:1137]
ENSG00000124882	EREG	epiregulin [Source:HGNC Symbol;Acc:HGNC:3443]
ENSG00000125648	SLC25A23	solute carrier family 25 member 23 [Source:HGNC Symbol;Acc:HGNC:19375]
ENSG00000125863	MKKS	McKusick-Kaufman syndrome [Source:HGNC Symbol;Acc:HGNC:7108]
ENSG00000125870	SNRPB2	small nuclear ribonucleoprotein polypeptide B2 [Source:HGNC Symbol;Acc:HGNC:11155]
ENSG00000126070	AGO3	argonaute RISC catalytic component 3 [Source:HGNC Symbol;Acc:HGNC:18421]
ENSG00000126698	DNAJC8	DnaJ heat shock protein family (Hsp40) member C8 [Source:HGNC Symbol;Acc:HGNC:15470]
ENSG00000127074	RGS13	regulator of G protein signaling 13 [Source:HGNC Symbol;Acc:HGNC:9995]
ENSG00000127412	TRPV5	transient receptor potential cation channel subfamily V member 5 [Source:HGNC Symbol;Acc:HGNC:3145]
ENSG00000127837	AAMP	angio associated migratory cell protein [Source:HGNC Symbol;Acc:HGNC:18]
ENSG00000128394	APOBEC3F	apolipoprotein B mRNA editing enzyme catalytic subunit 3F [Source:HGNC Symbol;Acc:HGNC:17356]
ENSG00000128833	MYO5C	myosin VC [Source:HGNC Symbol;Acc:HGNC:7604]
ENSG00000129675	ARHGEF6	Rac/Cdc42 guanine nucleotide exchange factor 6 [Source:HGNC Symbol;Acc:HGNC:685]
ENSG00000131115	ZNF227	zinc finger protein 227 [Source:HGNC Symbol;Acc:HGNC:13020]
ENSG00000131381	RBSN	rabenosyn, RAB effector [Source:HGNC Symbol;Acc:HGNC:20759]
ENSG00000131845	ZNF304	zinc finger protein 304 [Source:HGNC Symbol;Acc:HGNC:13505]
ENSG00000132286	TIMM10B	translocase of inner mitochondrial membrane 10B [Source:HGNC Symbol;Acc:HGNC:4022]
ENSG00000132423	COQ3	coenzyme Q3, methyltransferase [Source:HGNC Symbol;Acc:HGNC:18175]
ENSG00000133119	RFC3	replication factor C subunit 3 [Source:HGNC Symbol;Acc:HGNC:9971]
ENSG00000133138	TBC1D8B	TBC1 domain family member 8B [Source:HGNC Symbol;Acc:HGNC:24715]
ENSG00000133316	WDR74	WD repeat domain 74 [Source:HGNC Symbol;Acc:HGNC:25529]
ENSG00000133401	PDZD2	PDZ domain containing 2 [Source:HGNC Symbol;Acc:HGNC:18486]
ENSG00000133424	LARGE1	LARGE xylosyl- and glucuronyltransferase 1 [Source:HGNC Symbol;Acc:HGNC:6511]
ENSG00000133740	E2F5	E2F transcription factor 5 [Source:HGNC Symbol;Acc:HGNC:3119]
ENSG00000133789	SWAP70	switching B cell complex subunit SWAP70 [Source:HGNC Symbol;Acc:HGNC:17070]
ENSG00000133863	TEX15	testis expressed 15, meiosis and synapsis associated [Source:HGNC Symbol;Acc:HGNC:11738]
ENSG00000134186	PRPF38B	pre-mRNA processing factor 38B [Source:HGNC Symbol;Acc:HGNC:25512]
ENSG00000135245	HILPDA	hypoxia inducible lipid droplet associated [Source:HGNC Symbol;Acc:HGNC:28859]

ENSG00000135299	ANKRD6	ankyrin repeat domain 6 [Source:HGNC Symbol;Acc:HGNC:17280]
ENSG00000135318	NT5E	5'-nucleotidase ecto [Source:HGNC Symbol;Acc:HGNC:8021]
ENSG00000135968	GCC2	GRIP and coiled-coil domain containing 2 [Source:HGNC Symbol;Acc:HGNC:23218]
ENSG00000136770	DNAJC1	DnaJ heat shock protein family (Hsp40) member C1 [Source:HGNC Symbol;Acc:HGNC:20090]
ENSG00000136813	ECPAS	Ecm29 proteasome adaptor and scaffold [Source:HGNC Symbol;Acc:HGNC:29020]
ENSG00000136891	TEX10	testis expressed 10 [Source:HGNC Symbol;Acc:HGNC:25988]
ENSG00000136925	TSTD2	thiosulfate sulfurtransferase like domain containing 2 [Source:HGNC Symbol;Acc:HGNC:30087]
ENSG00000137040	RANBP6	RAN binding protein 6 [Source:HGNC Symbol;Acc:HGNC:9851]
ENSG00000137074	APTXX	apratxin [Source:HGNC Symbol;Acc:HGNC:15984]
ENSG00000137200	CMTR1	cap methyltransferase 1 [Source:HGNC Symbol;Acc:HGNC:21077]
ENSG00000138002	IFT172	intraflagellar transport 172 [Source:HGNC Symbol;Acc:HGNC:30391]
ENSG00000138085	ATRAID	all-trans retinoic acid induced differentiation factor [Source:HGNC Symbol;Acc:HGNC:24090]
ENSG00000138119	MYOF	myoferlin [Source:HGNC Symbol;Acc:HGNC:3656]
ENSG00000138395	CDK15	cyclin dependent kinase 15 [Source:HGNC Symbol;Acc:HGNC:14434]
ENSG00000138606	SHF	Src homology 2 domain containing F [Source:HGNC Symbol;Acc:HGNC:25116]
ENSG00000138792	ENPEP	glutamyl aminopeptidase [Source:HGNC Symbol;Acc:HGNC:3355]
ENSG00000139651	ZNF740	zinc finger protein 740 [Source:HGNC Symbol;Acc:HGNC:27465]
ENSG00000139835	GRTP1	growth hormone regulated TBC protein 1 [Source:HGNC Symbol;Acc:HGNC:20310]
ENSG00000140876	NUDT7	nudix hydrolase 7 [Source:HGNC Symbol;Acc:HGNC:8054]
ENSG00000141026	MED9	mediator complex subunit 9 [Source:HGNC Symbol;Acc:HGNC:25487]
ENSG00000141194	OR4D1	olfactory receptor family 4 subfamily D member 1 [Source:HGNC Symbol;Acc:HGNC:8293]
ENSG00000141252	VPS53	VPS53 subunit of GARP complex [Source:HGNC Symbol;Acc:HGNC:25608]
ENSG00000141295	SCRN2	secernin 2 [Source:HGNC Symbol;Acc:HGNC:30381]
ENSG00000141428	C18orf21	chromosome 18 open reading frame 21 [Source:HGNC Symbol;Acc:HGNC:28802]
ENSG00000142937	RPS8	ribosomal protein S8 [Source:HGNC Symbol;Acc:HGNC:10441]
ENSG00000143314	MRPL24	mitochondrial ribosomal protein L24 [Source:HGNC Symbol;Acc:HGNC:14037]
ENSG00000143390	RFX5	regulatory factor X5 [Source:HGNC Symbol;Acc:HGNC:9986]
ENSG00000143924	EMAP4	EMAP like 4 [Source:HGNC Symbol;Acc:HGNC:1316]
ENSG00000143951	WDPCP	WD repeat containing planar cell polarity effector [Source:HGNC Symbol;Acc:HGNC:28027]
ENSG00000144381	HSPD1	heat shock protein family D (Hsp60) member 1 [Source:HGNC Symbol;Acc:HGNC:5261]
ENSG00000144554	FANCD2	FA complementation group D2 [Source:HGNC Symbol;Acc:HGNC:3585]
ENSG00000145020	AMT	aminomethyltransferase [Source:HGNC Symbol;Acc:HGNC:473]
ENSG00000145439	CBR4	carbonyl reductase 4 [Source:HGNC Symbol;Acc:HGNC:25891]
ENSG00000145736	GTF2H2	general transcription factor IIH subunit 2 [Source:HGNC Symbol;Acc:HGNC:4656]
ENSG00000145882	PCYOX1L	prenylcysteine oxidase 1 like [Source:HGNC Symbol;Acc:HGNC:28477]
ENSG00000145945	FAM50B	family with sequence similarity 50 member B [Source:HGNC Symbol;Acc:HGNC:18789]
ENSG00000146757	ZNF92	zinc finger protein 92 [Source:HGNC Symbol;Acc:HGNC:13168]
ENSG00000147224	PRPS1	phosphoribosyl pyrophosphate synthetase 1 [Source:HGNC Symbol;Acc:HGNC:9462]
ENSG00000147642	SYBU	syntabulin [Source:HGNC Symbol;Acc:HGNC:26011]
ENSG00000147697	GSDMC	gasdermin C [Source:HGNC Symbol;Acc:HGNC:7151]
ENSG00000147789	ZNF7	zinc finger protein 7 [Source:HGNC Symbol;Acc:HGNC:13139]
ENSG00000147813	NAPRT	nicotinate phosphoribosyltransferase [Source:HGNC Symbol;Acc:HGNC:30450]
ENSG00000147894	C9orf72	C9orf72-SMCR8 complex subunit [Source:HGNC Symbol;Acc:HGNC:28337]
ENSG00000147912	FBXO10	F-box protein 10 [Source:HGNC Symbol;Acc:HGNC:13589]
ENSG00000148672	GLUD1	glutamate dehydrogenase 1 [Source:HGNC Symbol;Acc:HGNC:4335]
ENSG00000148690	FRA10AC1	FRA10A associated CGG repeat 1 [Source:HGNC Symbol;Acc:HGNC:1162]
ENSG00000148824	MTG1	mitochondrial ribosome associated GTPase 1 [Source:HGNC Symbol;Acc:HGNC:32159]
ENSG00000149054	ZNF215	zinc finger protein 215 [Source:HGNC Symbol;Acc:HGNC:13007]
ENSG00000149084	HSD17B12	hydroxysteroid 17-beta dehydrogenase 12 [Source:HGNC Symbol;Acc:HGNC:18646]
ENSG00000149582	TMEM25	transmembrane protein 25 [Source:HGNC Symbol;Acc:HGNC:25890]
ENSG00000150787	PTS	6-pyruvoyltetrahydropterin synthase [Source:HGNC Symbol;Acc:HGNC:9689]
ENSG00000151715	TMEM45B	transmembrane protein 45B [Source:HGNC Symbol;Acc:HGNC:25194]
ENSG00000151876	FBXO4	F-box protein 4 [Source:HGNC Symbol;Acc:HGNC:13583]
ENSG00000152082	MZT2B	mitotic spindle organizing protein 2B [Source:HGNC Symbol;Acc:HGNC:25886]
ENSG00000152464	RPP38	ribonuclease P/MRP subunit p38 [Source:HGNC Symbol;Acc:HGNC:30329]
ENSG00000152492	CCDC50	coiled-coil domain containing 50 [Source:HGNC Symbol;Acc:HGNC:18111]
ENSG00000152785	BMP3	bone morphogenetic protein 3 [Source:HGNC Symbol;Acc:HGNC:1070]
ENSG00000153187	HNRNPU	heterogeneous nuclear ribonucleoprotein U [Source:HGNC Symbol;Acc:HGNC:5048]
ENSG00000153253	SCN3A	sodium voltage-gated channel alpha subunit 3 [Source:HGNC Symbol;Acc:HGNC:10590]
ENSG00000153487	ING1	inhibitor of growth family member 1 [Source:HGNC Symbol;Acc:HGNC:6062]
ENSG00000154016	GRAP	GRB2 related adaptor protein [Source:HGNC Symbol;Acc:HGNC:4562]
ENSG00000154767	XPC	XPC complex subunit, DNA damage recognition and repair factor [Source:HGNC Symbol;Acc:HGNC:12816]
ENSG00000155275	TRMT44	tRNA methyltransferase 44 homolog [Source:HGNC Symbol;Acc:HGNC:26653]
ENSG00000155329	ZCCHC10	zinc finger CCHC-type containing 10 [Source:HGNC Symbol;Acc:HGNC:25954]
ENSG00000156050	FAM161B	FAM161 centrosomal protein B [Source:HGNC Symbol;Acc:HGNC:19854]
ENSG00000156253	RWD2B	RWD domain containing 2B [Source:HGNC Symbol;Acc:HGNC:1302]
ENSG00000156256	USP16	ubiquitin specific peptidase 16 [Source:HGNC Symbol;Acc:HGNC:12614]
ENSG00000156299	TIAM1	TIAM Rac1 associated GEF 1 [Source:HGNC Symbol;Acc:HGNC:11805]
ENSG00000156398	SFXN2	sideroflexin 2 [Source:HGNC Symbol;Acc:HGNC:16086]
ENSG00000156531	PHF6	PHD finger protein 6 [Source:HGNC Symbol;Acc:HGNC:18145]
ENSG00000156738	MS4A1	membrane spanning 4-domains A1 [Source:HGNC Symbol;Acc:HGNC:7315]
ENSG00000157184	CPT2	carnitine palmitoyltransferase 2 [Source:HGNC Symbol;Acc:HGNC:2330]
ENSG00000158006	PAFAH2	platelet activating factor acetylhydrolase 2 [Source:HGNC Symbol;Acc:HGNC:8579]
ENSG00000158161	EYA3	EYA transcriptional coactivator and phosphatase 3 [Source:HGNC Symbol;Acc:HGNC:3521]
ENSG00000158481	CD1C	CD1c molecule [Source:HGNC Symbol;Acc:HGNC:1636]
ENSG00000158483	FAM86C1P	family with sequence similarity 86 member C1, pseudogene [Source:HGNC Symbol;Acc:HGNC:25561]
ENSG00000158887	MPZ	myelin protein zero [Source:HGNC Symbol;Acc:HGNC:7225]
ENSG00000159289	GOLGA6A	golgin A6 family member A [Source:HGNC Symbol;Acc:HGNC:13567]
ENSG00000159307	SCUBE1	signal peptide, CUB domain and EGF like domain containing 1 [Source:HGNC Symbol;Acc:HGNC:13441]
ENSG00000159882	ZNF230	zinc finger protein 230 [Source:HGNC Symbol;Acc:HGNC:13024]
ENSG00000159884	CCDC107	coiled-coil domain containing 107 [Source:HGNC Symbol;Acc:HGNC:28465]

ENSG00000160087	UBE2J2	ubiquitin conjugating enzyme E2 J2 [Source:HGNC Symbol;Acc:HGNC:19268]
ENSG00000160325	CACFD1	calcium channel flower domain containing 1 [Source:HGNC Symbol;Acc:HGNC:1365]
ENSG00000160679	CHTOP	chromatin target of PRMT1 [Source:HGNC Symbol;Acc:HGNC:24511]
ENSG00000160683	CXCR5	C-X-C motif chemokine receptor 5 [Source:HGNC Symbol;Acc:HGNC:1060]
ENSG00000160791	CCR5	C-C motif chemokine receptor 5 [Source:HGNC Symbol;Acc:HGNC:1606]
ENSG00000160813	PPP1R35	protein phosphatase 1 regulatory subunit 35 [Source:HGNC Symbol;Acc:HGNC:28320]
ENSG00000161010	MRNIP	MRN complex interacting protein [Source:HGNC Symbol;Acc:HGNC:30817]
ENSG00000161513	FDXR	ferredoxin reductase [Source:HGNC Symbol;Acc:HGNC:3642]
ENSG00000162086	ZNIF75A	zinc finger protein 75a [Source:HGNC Symbol;Acc:HGNC:13146]
ENSG00000162623	TYW3	tRNA-yW synthesizing protein 3 homolog [Source:HGNC Symbol;Acc:HGNC:24757]
ENSG00000162755	KLHDC9	kelch domain containing 9 [Source:HGNC Symbol;Acc:HGNC:28489]
ENSG00000162817	C1orf115	chromosome 1 open reading frame 115 [Source:HGNC Symbol;Acc:HGNC:25873]
ENSG00000162997	PRORS1P	poly(r)-RNA synthetase associated domain containing 1, pseudogene [Source:HGNC Symbol;Acc:HGNC:34379]
ENSG00000163291	PAQR3	progesterin and adipoQ receptor family member 3 [Source:HGNC Symbol;Acc:HGNC:30130]
ENSG00000163539	CLASP2	cytoplasmic linker associated protein 2 [Source:HGNC Symbol;Acc:HGNC:17078]
ENSG00000163584	RPL22L1	ribosomal protein L22 like 1 [Source:HGNC Symbol;Acc:HGNC:27610]
ENSG00000163599	CTLA4	cytotoxic T-lymphocyte associated protein 4 [Source:HGNC Symbol;Acc:HGNC:2505]
ENSG00000163629	PTPN13	protein tyrosine phosphatase non-receptor type 13 [Source:HGNC Symbol;Acc:HGNC:9646]
ENSG00000163683	SMIM14	small integral membrane protein 14 [Source:HGNC Symbol;Acc:HGNC:27321]
ENSG00000163728	TTC14	tetratricopeptide repeat domain 14 [Source:HGNC Symbol;Acc:HGNC:24697]
ENSG00000163755	HPS3	HPS3 biogenesis of lysosomal organelles complex 2 subunit 1 [Source:HGNC Symbol;Acc:HGNC:15597]
ENSG00000163875	MEAF6	MYST/ Esa1 associated factor 6 [Source:HGNC Symbol;Acc:HGNC:25674]
ENSG00000163958	ZDHHC19	zinc finger DHHC-type palmitoyltransferase 19 [Source:HGNC Symbol;Acc:HGNC:20713]
ENSG00000164136	IL15	interleukin 15 [Source:HGNC Symbol;Acc:HGNC:5977]
ENSG00000164332	UBLCP1	ubiquitin like domain containing CTD phosphatase 1 [Source:HGNC Symbol;Acc:HGNC:28110]
ENSG00000164609	SLU7	SLU7 homolog, splicing factor [Source:HGNC Symbol;Acc:HGNC:16939]
ENSG00000164751	PEX2	peroxisomal biogenesis factor 2 [Source:HGNC Symbol;Acc:HGNC:9717]
ENSG00000165516	KLHDC2	kelch domain containing 2 [Source:HGNC Symbol;Acc:HGNC:20231]
ENSG00000165675	ENOX2	ecto-NOX disulfide-thiol exchanger 2 [Source:HGNC Symbol;Acc:HGNC:2259]
ENSG00000165983	PTER	phosphotriesterase related [Source:HGNC Symbol;Acc:HGNC:9590]
ENSG00000166250	CLMP	CXADR like membrane protein [Source:HGNC Symbol;Acc:HGNC:24039]
ENSG00000166394	CYB5R2	cytochrome b5 reductase 2 [Source:HGNC Symbol;Acc:HGNC:24376]
ENSG00000166432	ZMAT1	zinc finger matrin-type 1 [Source:HGNC Symbol;Acc:HGNC:29377]
ENSG00000166454	ATMIN	ATM interactor [Source:HGNC Symbol;Acc:HGNC:29034]
ENSG00000166704	ZNIF606	zinc finger protein 606 [Source:HGNC Symbol;Acc:HGNC:25879]
ENSG00000166707	ZCCHC18	zinc finger CCHC-type containing 18 [Source:HGNC Symbol;Acc:HGNC:32459]
ENSG00000166736	HTR3A	5-hydroxytryptamine receptor 3A [Source:HGNC Symbol;Acc:HGNC:5297]
ENSG00000166908	PIP4K2C	phosphatidylinositol-5-phosphate 4-kinase type 2 gamma [Source:HGNC Symbol;Acc:HGNC:23786]
ENSG00000166876	ANKRD49	ankyrin repeat domain 49 [Source:HGNC Symbol;Acc:HGNC:25970]
ENSG00000166913	ENHO	energy homeostasis associated [Source:HGNC Symbol;Acc:HGNC:24838]
ENSG00000169116	PARM1	prostate androgen-regulated mucin-like protein 1 [Source:HGNC Symbol;Acc:HGNC:24536]
ENSG00000169507	SLC38A11	solute carrier family 38 member 11 [Source:HGNC Symbol;Acc:HGNC:26836]
ENSG00000169733	RFNG	RFNG O-fucosyltransferase 3-beta-N-acetylglucosaminyltransferase [Source:HGNC Symbol;Acc:HGNC:9974]
ENSG00000169738	DCXR	dicarbonyl and L-xylulose reductase [Source:HGNC Symbol;Acc:HGNC:18985]
ENSG00000169955	ZNIF747	zinc finger protein 747 [Source:HGNC Symbol;Acc:HGNC:28350]
ENSG00000169964	TMEM42	transmembrane protein 42 [Source:HGNC Symbol;Acc:HGNC:28444]
ENSG00000170128	GPR25	G protein-coupled receptor 25 [Source:HGNC Symbol;Acc:HGNC:4480]
ENSG00000170473	PYM1	PYM homolog 1, exon junction complex associated factor [Source:HGNC Symbol;Acc:HGNC:30258]
ENSG00000170855	TRIAP1	TP53 regulated inhibitor of apoptosis 1 [Source:HGNC Symbol;Acc:HGNC:26937]
ENSG00000170860	LSM3	LSM3 homolog, U6 small nuclear RNA and mRNA degradation associated [Source:HGNC Symbol;Acc:HGNC:17874]
ENSG00000170921	TANC2	tetratricopeptide repeat, ankyrin repeat and coiled-coil containing 2 [Source:HGNC Symbol;Acc:HGNC:30212]
ENSG00000171570	RAB4B-EGLN2	RAB4B-EGLN2 readthrough (NMD candidate) [Source:HGNC Symbol;Acc:HGNC:44465]
ENSG00000171643	S100Z	S100 calcium binding protein Z [Source:HGNC Symbol;Acc:HGNC:30367]
ENSG00000171747	LGALS4	galectin 4 [Source:HGNC Symbol;Acc:HGNC:6565]
ENSG00000171763	SPATA5L1	spermatogenesis associated 5 like 1 [Source:HGNC Symbol;Acc:HGNC:28762]
ENSG00000171766	GATM	glycine amidinotransferase [Source:HGNC Symbol;Acc:HGNC:4175]
ENSG00000171792	RHNO1	RAD9-HUS1-RAD1 interacting nuclear orphan 1 [Source:HGNC Symbol;Acc:HGNC:28206]
ENSG00000171861	MRM3	mitochondrial rRNA methyltransferase 3 [Source:HGNC Symbol;Acc:HGNC:18485]
ENSG00000171865	RNASEH1	ribonuclease H1 [Source:HGNC Symbol;Acc:HGNC:18466]
ENSG00000171889	MIR31HG	MIR31 host gene [Source:HGNC Symbol;Acc:HGNC:37187]
ENSG00000172059	KLF11	Kruppel like factor 11 [Source:HGNC Symbol;Acc:HGNC:11811]
ENSG00000172367	PDZD3	PDZ domain containing 3 [Source:HGNC Symbol;Acc:HGNC:19891]
ENSG00000174080	CTSF	cathepsin F [Source:HGNC Symbol;Acc:HGNC:2531]
ENSG00000174365	SNHG11	small nucleolar RNA host gene 11 [Source:HGNC Symbol;Acc:HGNC:25046]
ENSG00000174483	BBS1	Bardet-Biedl syndrome 1 [Source:HGNC Symbol;Acc:HGNC:966]
ENSG00000174720	LARP7	La ribonucleoprotein 7, transcriptional regulator [Source:HGNC Symbol;Acc:HGNC:24912]
ENSG00000175354	PTPN2	protein tyrosine phosphatase non-receptor type 2 [Source:HGNC Symbol;Acc:HGNC:9650]
ENSG00000175773	ZBTB44-DT	ZBTB44 divergent transcript [Source:HGNC Symbol;Acc:HGNC:54265]
ENSG00000176340	COX8A	cytochrome c oxidase subunit 8A [Source:HGNC Symbol;Acc:HGNC:2294]
ENSG00000176714	CCDC121	coiled-coil domain containing 121 [Source:HGNC Symbol;Acc:HGNC:25833]
ENSG00000177302	TOP3A	DNA topoisomerase III alpha [Source:HGNC Symbol;Acc:HGNC:11992]
ENSG00000177409	SAMD9L	sterile alpha motif domain containing 9 like [Source:HGNC Symbol;Acc:HGNC:1349]
ENSG00000177606	JUN	Jun proto-oncogene, AP-1 transcription factor subunit [Source:HGNC Symbol;Acc:HGNC:6204]
ENSG00000177613	CSTF2T	cleavage stimulation factor subunit 2 tau variant [Source:HGNC Symbol;Acc:HGNC:17086]
ENSG00000177854	TMEM187	transmembrane protein 187 [Source:HGNC Symbol;Acc:HGNC:13705]
ENSG00000178127	NDUFV2	NADH:ubiquinone oxidoreductase core subunit V2 [Source:HGNC Symbol;Acc:HGNC:7717]
ENSG00000178498	DTX3	deltex E3 ubiquitin ligase 3 [Source:HGNC Symbol;Acc:HGNC:24457]
ENSG00000178700	DHFR2	dihydrofolate reductase 2 [Source:HGNC Symbol;Acc:HGNC:27309]
ENSG00000178952	TUFM	Tu translation elongation factor, mitochondrial [Source:HGNC Symbol;Acc:HGNC:12420]
ENSG00000178996	SNX18	sorting nexin 18 [Source:HGNC Symbol;Acc:HGNC:19245]
ENSG00000179304	FAM156B	family with sequence similarity 156 member B [Source:HGNC Symbol;Acc:HGNC:31962]

ENSG00000179941	BBS10	Bardet-Biedl syndrome 10 [Source:HGNC Symbol;Acc:HGNC:26291]
ENSG00000179978	NAIPP2	NAIP pseudogene 2 [Source:HGNC Symbol;Acc:HGNC:16042]
ENSG00000180008	SOC54	suppressor of cytokine signaling 4 [Source:HGNC Symbol;Acc:HGNC:19392]
ENSG00000180096	SEPTIN1	septin 1 [Source:HGNC Symbol;Acc:HGNC:2879]
ENSG00000180425	C11orf71	chromosome 11 open reading frame 71 [Source:HGNC Symbol;Acc:HGNC:25937]
ENSG00000180902	D2HGDH	D-2-hydroxyglutarate dehydrogenase [Source:HGNC Symbol;Acc:HGNC:28358]
ENSG00000182185	RAD51B	RAD51, paralogue B [Source:HGNC Symbol;Acc:HGNC:9822]
ENSG00000182230	FAM153B	family with sequence similarity 153 member B [Source:HGNC Symbol;Acc:HGNC:27323]
ENSG00000182240	BACE2	beta-secretase 2 [Source:HGNC Symbol;Acc:HGNC:934]
ENSG00000182405	PGBD4	piggyBac transposable element derived 4 [Source:HGNC Symbol;Acc:HGNC:19401]
ENSG00000182814	FUND2P2	FUN14 domain containing 2 pseudogene 2 [Source:HGNC Symbol;Acc:HGNC:17247]
ENSG00000183298	RPSAP19	ribosomal protein SA pseudogene 19 [Source:HGNC Symbol;Acc:HGNC:36508]
ENSG00000183439	TRIM61	tripartite motif containing 61 [Source:HGNC Symbol;Acc:HGNC:24339]
ENSG00000183615	FAM167B	family with sequence similarity 167 member B [Source:HGNC Symbol;Acc:HGNC:28133]
ENSG00000183960	KCNH8	potassium voltage-gated channel subfamily H member 8 [Source:HGNC Symbol;Acc:HGNC:18864]
ENSG00000184226	PCDH9	protocadherin 9 [Source:HGNC Symbol;Acc:HGNC:8661]
ENSG00000184786	DYNLT2	dynein light chain Tctex-type 2 [Source:HGNC Symbol;Acc:HGNC:11695]
ENSG00000184897	H1-10	H1.10 linker histone [Source:HGNC Symbol;Acc:HGNC:4722]
ENSG00000185010	F8	coagulation factor VIII [Source:HGNC Symbol;Acc:HGNC:3546]
ENSG00000185271	KLHL33	kelch like family member 33 [Source:HGNC Symbol;Acc:HGNC:31952]
ENSG00000185278	ZBTB37	zinc finger and BTB domain containing 37 [Source:HGNC Symbol;Acc:HGNC:28365]
ENSG00000185475	TMEM179B	transmembrane protein 179B [Source:HGNC Symbol;Acc:HGNC:33744]
ENSG00000185483	ROR1	receptor tyrosine kinase like orphan receptor 1 [Source:HGNC Symbol;Acc:HGNC:10256]
ENSG00000185619	PCGF3	polycomb group ring finger 3 [Source:HGNC Symbol;Acc:HGNC:10066]
ENSG00000185650	ZFP36L1	ZFP36 ring finger protein like 1 [Source:HGNC Symbol;Acc:HGNC:1107]
ENSG00000185669	SNAI3	snail family transcriptional repressor 3 [Source:HGNC Symbol;Acc:HGNC:18411]
ENSG00000185798	WDR53	WD repeat domain 53 [Source:HGNC Symbol;Acc:HGNC:28786]
ENSG00000185880	TRIM69	tripartite motif containing 69 [Source:HGNC Symbol;Acc:HGNC:17857]
ENSG00000185909	KLHDC8B	kelch domain containing 8B [Source:HGNC Symbol;Acc:HGNC:28557]
ENSG00000185915	KLHL34	kelch like family member 34 [Source:HGNC Symbol;Acc:HGNC:26634]
ENSG00000185946	RNPC3	RNA binding region (RNP1, RRM) containing 3 [Source:HGNC Symbol;Acc:HGNC:18666]
ENSG00000186222	BLOC1S4	biogenesis of lysosomal organelles complex 1 subunit 4 [Source:HGNC Symbol;Acc:HGNC:24206]
ENSG00000187553	CYP26C1	cytochrome P450 family 26 subfamily C member 1 [Source:HGNC Symbol;Acc:HGNC:20577]
ENSG00000187554	TLR5	toll like receptor 5 [Source:HGNC Symbol;Acc:HGNC:11851]
ENSG00000187621	TCL6	T cell leukemia/lymphoma 6 [Source:HGNC Symbol;Acc:HGNC:13463]
ENSG00000187961	KLHL17	kelch like family member 17 [Source:HGNC Symbol;Acc:HGNC:24023]
ENSG00000188130	MAPK12	mitogen-activated protein kinase 12 [Source:HGNC Symbol;Acc:HGNC:6874]
ENSG00000188243	COMMD6	COMM domain containing 6 [Source:HGNC Symbol;Acc:HGNC:24015]
ENSG00000188611	ASAH2	N-acylsphingosine amidohydrolase 2 [Source:HGNC Symbol;Acc:HGNC:18860]
ENSG00000188785	ZNF548	zinc finger protein 548 [Source:HGNC Symbol;Acc:HGNC:26561]
ENSG000001896126	HLA-DRB1	major histocompatibility complex, class II, DR beta 1 [Source:HGNC Symbol;Acc:HGNC:4948]
ENSG000001896205	EEF1A1P5	eukaryotic translation elongation factor 1 alpha 1 pseudogene 5 [Source:HGNC Symbol;Acc:HGNC:3200]
ENSG000001896227	FAM217B	family with sequence similarity 217 member B [Source:HGNC Symbol;Acc:HGNC:16170]
ENSG000001896267	ZNF836	zinc finger protein 836 [Source:HGNC Symbol;Acc:HGNC:34333]
ENSG000001896507	TCEAL3	transcription elongation factor A like 3 [Source:HGNC Symbol;Acc:HGNC:28247]
ENSG000001896510	ANAPC7	anaphase promoting complex subunit 7 [Source:HGNC Symbol;Acc:HGNC:17380]
ENSG000001896526	AFAP1	actin filament associated protein 1 [Source:HGNC Symbol;Acc:HGNC:24017]
ENSG000001896632	WNK3	WNK lysine deficient protein kinase 3 [Source:HGNC Symbol;Acc:HGNC:14543]
ENSG000001896653	ZNF502	zinc finger protein 502 [Source:HGNC Symbol;Acc:HGNC:23718]
ENSG000001896735	HLA-DQA1	major histocompatibility complex, class II, DQ alpha 1 [Source:HGNC Symbol;Acc:HGNC:4942]
ENSG000001896821	ILRN	inflammation and lipid regulator with UBA-like and NBR1-like domains [Source:HGNC Symbol;Acc:HGNC:21215]
ENSG000001896950	SLC39A10	solute carrier family 39 member 10 [Source:HGNC Symbol;Acc:HGNC:20861]
ENSG000001897308	GATA3-AS1	GATA3 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:33786]
ENSG000001897385	ZNF860	zinc finger protein 860 [Source:HGNC Symbol;Acc:HGNC:34513]
ENSG000001897562	RAB40C	RAB40C, member RAS oncogene family [Source:HGNC Symbol;Acc:HGNC:18285]
ENSG000001897635	DPP4	dipeptidyl peptidase 4 [Source:HGNC Symbol;Acc:HGNC:3009]
ENSG000001897763	TXNRD3	thioredoxin reductase 3 [Source:HGNC Symbol;Acc:HGNC:20667]
ENSG000001897822	OCLN	occludin [Source:HGNC Symbol;Acc:HGNC:8104]
ENSG000001898198	SZT2	SZT2 subunit of KICSTOR complex [Source:HGNC Symbol;Acc:HGNC:29040]
ENSG000001898298	ZNF485	zinc finger protein 485 [Source:HGNC Symbol;Acc:HGNC:23440]
ENSG000001898408	OGA	O-GlcNAcase [Source:HGNC Symbol;Acc:HGNC:7056]
ENSG000001898464	ZNF480	zinc finger protein 480 [Source:HGNC Symbol;Acc:HGNC:23305]
ENSG000001898498	TMA16	translation machinery associated 16 homolog [Source:HGNC Symbol;Acc:HGNC:25638]
ENSG000001898502	HLA-DRB5	major histocompatibility complex, class II, DR beta 5 [Source:HGNC Symbol;Acc:HGNC:4953]
ENSG000001898551	ZNF627	zinc finger protein 627 [Source:HGNC Symbol;Acc:HGNC:30570]
ENSG000001898642	KLHL9	kelch like family member 9 [Source:HGNC Symbol;Acc:HGNC:18732]
ENSG000001898786	MT-ND5	mitochondrially encoded NADH:ubiquinone oxidoreductase core subunit 5 [Source:HGNC Symbol;Acc:HGNC:7461]
ENSG00000202222	Y_RNA	Y RNA [Source:RFAM;Acc:RF00019]
ENSG00000203441	LINC00449	long intergenic non-protein coding RNA 449 [Source:HGNC Symbol;Acc:HGNC:42786]
ENSG00000203865	ATP1A1-AS1	ATP1A1 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:28262]
ENSG00000203876	ADD3-AS1	ADD3 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:48682]
ENSG00000204220	PFDN6	prefoldin subunit 6 [Source:HGNC Symbol;Acc:HGNC:4926]
ENSG00000204237	OXLD1	oxidoreductase like domain containing 1 [Source:HGNC Symbol;Acc:HGNC:27901]
ENSG00000204282		
ENSG00000204396	VWA7	von Willebrand factor A domain containing 7 [Source:HGNC Symbol;Acc:HGNC:13939]
ENSG00000204576	PRR3	proline rich 3 [Source:HGNC Symbol;Acc:HGNC:21149]
ENSG00000204852	TCTN1	tectonic family member 1 [Source:HGNC Symbol;Acc:HGNC:26113]
ENSG00000205138	SDHAF1	succinate dehydrogenase complex assembly factor 1 [Source:HGNC Symbol;Acc:HGNC:33867]
ENSG00000205220	PSMB10	proteasome 20S subunit beta 10 [Source:HGNC Symbol;Acc:HGNC:9538]
ENSG00000205918	PDPK2P	3-phosphoinositide dependent protein kinase 2, pseudogene [Source:HGNC Symbol;Acc:HGNC:49897]
ENSG00000206784	Y_RNA	Y RNA [Source:RFAM;Acc:RF00019]

ENSG00000207523	SNORA66	small nucleolar RNA, H/ACA box 66 [Source:HGNC Symbol;Acc:HGNC:10223]
ENSG00000211655	IGLV1-36	immunoglobulin lambda variable 1-36 [Source:HGNC Symbol;Acc:HGNC:5876]
ENSG00000211697	TRGV5	T cell receptor gamma variable 5 [Source:HGNC Symbol;Acc:HGNC:12290]
ENSG00000211714	TRBV7-3	T cell receptor beta variable 7-3 [Source:HGNC Symbol;Acc:HGNC:12237]
ENSG00000211751	TRBC1	T cell receptor beta constant 1 [Source:HGNC Symbol;Acc:HGNC:12156]
ENSG00000211753	TRBV28	T cell receptor beta variable 28 [Source:HGNC Symbol;Acc:HGNC:12209]
ENSG00000211772	TRBC2	T cell receptor beta constant 2 [Source:HGNC Symbol;Acc:HGNC:12157]
ENSG00000211776	TRAV2	T cell receptor alpha variable 2 [Source:HGNC Symbol;Acc:HGNC:12116]
ENSG00000211778	TRAV4	T cell receptor alpha variable 4 [Source:HGNC Symbol;Acc:HGNC:12140]
ENSG00000211784	TRAV10	T cell receptor alpha variable 10 [Source:HGNC Symbol;Acc:HGNC:12103]
ENSG00000211800	TRAV20	T cell receptor alpha variable 20 [Source:HGNC Symbol;Acc:HGNC:12117]
ENSG00000211804	TRDV1	T cell receptor delta variable 1 [Source:HGNC Symbol;Acc:HGNC:12262]
ENSG00000211933	IGHV6-1	immunoglobulin heavy variable 6-1 [Source:HGNC Symbol;Acc:HGNC:5662]
ENSG00000211978	IGHV5-78	immunoglobulin heavy variable 5-78 (pseudogene) [Source:HGNC Symbol;Acc:HGNC:5660]
ENSG00000213015	ZNF580	zinc finger protein 580 [Source:HGNC Symbol;Acc:HGNC:29473]
ENSG00000213197	NUDCP1	nuclear distribution C pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:8046]
ENSG00000213297	ZNF625-ZNF20	ZNF625-ZNF20 readthrough (NMD candidate) [Source:HGNC Symbol;Acc:HGNC:48368]
ENSG00000213363	RPS3P6	ribosomal protein S3 pseudogene 6 [Source:HGNC Symbol;Acc:HGNC:36061]
ENSG00000213397	HAUS7	HAUS augmin like complex subunit 7 [Source:HGNC Symbol;Acc:HGNC:32979]
ENSG00000213563	C8orf82	chromosome 8 open reading frame 82 [Source:HGNC Symbol;Acc:HGNC:33826]
ENSG00000213693	SEC14L1P1	SEC14 like 1 pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:44189]
ENSG00000213741	RPS29	ribosomal protein S29 [Source:HGNC Symbol;Acc:HGNC:10419]
ENSG00000214013	GANC	glucosidase alpha, neutral C [Source:HGNC Symbol;Acc:HGNC:4139]
ENSG00000214827	MTCP1	mature T cell proliferation 1 [Source:HGNC Symbol;Acc:HGNC:7423]
ENSG00000215068		novel transcript, antisense to ANXA2R
ENSG00000215256	DHRS4-AS1	DHRS4 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:23175]
ENSG00000215271	HOMER	homeobox and leucine zipper encoding [Source:HGNC Symbol;Acc:HGNC:20164]
ENSG00000215571	GRK6P1	G protein-coupled receptor kinase 6 pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:4547]
ENSG00000217527	RPS16P5	ribosomal protein S16 pseudogene 5 [Source:HGNC Symbol;Acc:HGNC:36183]
ENSG00000221957	KIR2DS4	killer cell immunoglobulin like receptor, two Ig domains and short cytoplasmic tail 4 [Source:HGNC Symbol;Acc:HGNC:6336]
ENSG00000222012		novel transcript, antisense to PTPRN2
ENSG00000222078	RN7SKP110	RN7SK pseudogene 110 [Source:HGNC Symbol;Acc:HGNC:45834]
ENSG00000223547	ZNF844	zinc finger protein 844 [Source:HGNC Symbol;Acc:HGNC:25932]
ENSG00000223825	DAZAP2P1	DAZ associated protein 2 pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:43869]
ENSG00000223865	HLA-DPB1	major histocompatibility complex, class II, DP beta 1 [Source:HGNC Symbol;Acc:HGNC:4940]
ENSG00000224358	TMC01-AS1	TMC01 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:54046]
ENSG00000224609	FGGY-DT	FGGY divergent transcript [Source:HGNC Symbol;Acc:HGNC:55265]
ENSG00000224745		novel transcript, sense intronic to PTEN
ENSG00000224888		novel transcript, antisense to FAM38A
ENSG00000225032		novel transcript
ENSG00000225470	JPX	JPX transcript, XIST activator [Source:HGNC Symbol;Acc:HGNC:37191]
ENSG00000225578	NCBP2-AS1	NCBP2 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:40392]
ENSG00000225614	ZNF469	zinc finger protein 469 [Source:HGNC Symbol;Acc:HGNC:23216]
ENSG00000225921	NOL7	nucleolar protein 7 [Source:HGNC Symbol;Acc:HGNC:21040]
ENSG00000225972	MTND1P23	MT-ND1 pseudogene 23 [Source:HGNC Symbol;Acc:HGNC:42092]
ENSG00000226084		ribosomal protein L17 (RPL17) pseudogene
ENSG00000226254	PTP4A1P3	PTP4A1 pseudogene 3 [Source:HGNC Symbol;Acc:HGNC:41930]
ENSG00000226833		novel transcript
ENSG00000226864	ATE1-AS1	ATE1 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:49496]
ENSG00000227124	ZNF717	zinc finger protein 717 [Source:HGNC Symbol;Acc:HGNC:29448]
ENSG00000227258	SMIM2-AS1	SMIM2 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:42674]
ENSG00000227354	RBM26-AS1	RBM26 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:39805]
ENSG00000227495	KIF1C-AS1	KIF1C antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:40324]
ENSG00000227543	SPAG5-AS1	SPAG5 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:41140]
ENSG00000227775		ribosomal protein S7 (RPS7) pseudogene
ENSG00000227799	CDPF1P1	CDPF1 pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:54763]
ENSG00000227986	TRIM60P18	tripartite motif containing 60 pseudogene 18 [Source:HGNC Symbol;Acc:HGNC:38490]
ENSG00000228203	GRASLND	glycosaminoglycan regulatory associated long non-coding RNA [Source:HGNC Symbol;Acc:HGNC:30963]
ENSG00000228789	HCG22	HLA complex group 22 (gene/pseudogene) [Source:HGNC Symbol;Acc:HGNC:27780]
ENSG00000229106	BTBD6P1	BTB domain containing 6 pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:51542]
ENSG00000229151		novel transcript
ENSG00000229196		novel transcript
ENSG00000229512		novel transcript
ENSG00000230148	HOXB-AS1	HOXB cluster antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:43744]
ENSG00000230832	SSBL4P	SSB like 4, pseudogene [Source:HGNC Symbol;Acc:HGNC:54985]
ENSG00000231312	MAP4K3-DT	MAP4K3 divergent transcript [Source:HGNC Symbol;Acc:HGNC:54056]
ENSG00000231389	HLA-DPA1	major histocompatibility complex, class II, DP alpha 1 [Source:HGNC Symbol;Acc:HGNC:4938]
ENSG00000231916		coiled-coil-helix-coiled-coil-helix domain containing 10 (CHCHD10) pseudogene
ENSG00000232626		FK506 binding protein 8, 38kDa (FKBP8) pseudogene
ENSG00000234444	ZNF736	zinc finger protein 736 [Source:HGNC Symbol;Acc:HGNC:32467]
ENSG00000234534	CSNK1G2P1	casein kinase 1 gamma 2 pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:49739]
ENSG00000234608	MAPKAPK5-AS1	MAPKAPK5 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:24091]
ENSG00000234902		novel transcript
ENSG00000235192		novel transcript
ENSG00000235194	PPP1R3E	protein phosphatase 1 regulatory subunit 3E [Source:HGNC Symbol;Acc:HGNC:14943]
ENSG00000235248	OR13C1P	olfactory receptor family 13 subfamily C member 1 pseudogene [Source:HGNC Symbol;Acc:HGNC:14699]
ENSG00000236254	MTND4P14	MT-ND4 pseudogene 14 [Source:HGNC Symbol;Acc:HGNC:42201]
ENSG00000236409	NRADDP	neurotrophin receptor associated death domain, pseudogene [Source:HGNC Symbol;Acc:HGNC:19337]
ENSG00000236609	ZNF853	zinc finger protein 853 [Source:HGNC Symbol;Acc:HGNC:21767]
ENSG00000236804	RPS3AP12	RPS3A pseudogene 12 [Source:HGNC Symbol;Acc:HGNC:35527]
ENSG00000236830	CBR3-AS1	CBR3 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:43664]

ENSG00000237004	ZNRF2P1	zinc and ring finger 2 pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:42792]
ENSG00000237541	HLA-DQA2	major histocompatibility complex, class II, DQ alpha 2 [Source:HGNC Symbol;Acc:HGNC:4943]
ENSG00000237702	TRBV3-1	T cell receptor beta variable 3-1 [Source:HGNC Symbol;Acc:HGNC:12212]
ENSG00000237953	RPS13P5	ribosomal protein S13 pseudogene 5 [Source:HGNC Symbol;Acc:HGNC:36610]
ENSG00000238061		proteasome (prosome, macropain) 26S subunit, non-ATPase, 7 (Mov34 homolog) (PSMD7) pseudogene
ENSG00000239282	CASTOR1	cytosolic arginine sensor for mTORC1 subunit 1 [Source:HGNC Symbol;Acc:HGNC:34423]
ENSG00000239857	GET4	guided entry of tail-anchored proteins factor 4 [Source:HGNC Symbol;Acc:HGNC:21690]
ENSG00000240038	AMY2B	amylase alpha 2B [Source:HGNC Symbol;Acc:HGNC:478]
ENSG00000240767	RN7SL288P	RNA, 7SL, cytoplasmic 288, pseudogene [Source:HGNC Symbol;Acc:HGNC:46304]
ENSG00000240890		G2/M-phase specific E3 ubiquitin ligase (G2E3) pseudogene
ENSG00000241318	WDR82P2	WD repeat domain 82 pseudogene 2 [Source:HGNC Symbol;Acc:HGNC:33513]
ENSG00000241352		ribosomal protein S6 (RPS6) pseudogene
ENSG00000241560	ZBTB20-AS1	ZBTB20 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:40640]
ENSG00000241641	RPS23P6	ribosomal protein S23 pseudogene 6 [Source:HGNC Symbol;Acc:HGNC:36511]
ENSG00000241978		
ENSG00000242071	RPL7AP6	ribosomal protein L7a pseudogene 6 [Source:HGNC Symbol;Acc:HGNC:19785]
ENSG00000242574	HLA-DMB	major histocompatibility complex, class II, DM beta [Source:HGNC Symbol;Acc:HGNC:4935]
ENSG00000242583	KMT5AP3	KMT5A pseudogene 3 [Source:HGNC Symbol;Acc:HGNC:54728]
ENSG00000242798		novel transcript
ENSG00000242818	RN7SL846P	RNA, 7SL, cytoplasmic 846, pseudogene [Source:HGNC Symbol;Acc:HGNC:46862]
ENSG00000243149	LINC02040	long intergenic non-protein coding RNA 2040 [Source:HGNC Symbol;Acc:HGNC:52880]
ENSG00000243264	IGKV2D-29	immunoglobulin kappa variable 2D-29 [Source:HGNC Symbol;Acc:HGNC:5800]
ENSG00000243323	PTPRVP	protein tyrosine phosphatase receptor type V, pseudogene [Source:HGNC Symbol;Acc:HGNC:13421]
ENSG00000244710	RN7SL47P	RNA, 7SL, cytoplasmic 47, pseudogene [Source:HGNC Symbol;Acc:HGNC:46063]
ENSG00000245317		novel transcript
ENSG00000245556	SCAMP1-AS1	SCAMP1 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:50544]
ENSG00000246379		novel transcript
ENSG00000246582		novel transcript, antisense to TNFRSF10A
ENSG00000246863	GPR176-DT	GPR176-DT [Source:HGNC Symbol;Acc:HGNC:54389]
ENSG00000247774	PCED1B-AS1	PCED1B antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:44166]
ENSG00000248049	UBA6-AS1	UBA6 antisense RNA 1 (head to head) [Source:HGNC Symbol;Acc:HGNC:49083]
ENSG00000248309	MEF2C-AS1	MEF2C antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:48908]
ENSG00000248429	FAM198B-AS1	FAM198B antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:53132]
ENSG00000248487	ABHD14A	abhydrolase domain containing 14A [Source:HGNC Symbol;Acc:HGNC:24538]
ENSG00000248544		novel transcript, antisense to CYFIP2
ENSG00000248636		novel transcript
ENSG00000248671	ALG1L9P	ALG1 like 9, pseudogene [Source:NCBI gene (formerly Entrezgene);Acc:285407]
ENSG00000250299	MRPS31P4	mitochondrial ribosomal protein S31 pseudogene 4 [Source:HGNC Symbol;Acc:HGNC:42649]
ENSG00000250486	FAM218A	family with sequence similarity 218 member A [Source:HGNC Symbol;Acc:HGNC:26466]
ENSG00000250568		poly(A) binding protein, cytoplasmic 1 (PABPC1) pseudogene
ENSG00000251129	LINC02506	long intergenic non-protein coding RNA 2506 [Source:HGNC Symbol;Acc:HGNC:53495]
ENSG00000251149	MTND5P5	MT-ND5 pseudogene 5 [Source:HGNC Symbol;Acc:HGNC:42307]
ENSG00000251287	ALG1L2	ALG1 chitobiosylidiphosphodolichol beta-mannosyltransferase like 2 [Source:HGNC Symbol;Acc:HGNC:37258]
ENSG00000251323	LINC02728	long intergenic non-protein coding RNA 2728 [Source:HGNC Symbol;Acc:HGNC:54245]
ENSG00000251634	NAIP4	NAIP pseudogene 4 [Source:HGNC Symbol;Acc:HGNC:54494]
ENSG00000251791	SCARNA6	small Cajal body-specific RNA 6 [Source:HGNC Symbol;Acc:HGNC:32562]
ENSG00000252010	SCARNA5	small Cajal body-specific RNA 5 [Source:HGNC Symbol;Acc:HGNC:32561]
ENSG00000253106		novel transcript, antisense to TATDN1
ENSG00000253154		novel transcript
ENSG00000253180		ubiquitin-conjugating enzyme E2 variant 1 (UBE2V1) pseudogene
ENSG00000253352	TUG1	taurine up-regulated 1 [Source:HGNC Symbol;Acc:HGNC:26066]
ENSG00000253392		novel transcript, antisense to ZNF57
ENSG00000253690		novel transcript
ENSG00000253716	MINCR	MYC-induced long non-coding RNA [Source:HGNC Symbol;Acc:HGNC:51653]
ENSG00000254206	NPIP11	nuclear pore complex interacting protein family member B11 [Source:HGNC Symbol;Acc:HGNC:37453]
ENSG00000254266	PKIA-AS1	PKIA antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:51659]
ENSG00000254704		macrophage expressed 1 (MPEG1) pseudogene
ENSG00000254859		novel transcript
ENSG00000254860	TMEM9B-AS1	TMEM9B antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:19230]
ENSG00000255163	HSPE1P18	heat shock protein family E (Hsp10) member 1 pseudogene 18 [Source:HGNC Symbol;Acc:HGNC:49337]
ENSG00000255363	LINC02757	long intergenic non-protein coding RNA 2757 [Source:HGNC Symbol;Acc:HGNC:54277]
ENSG00000255422		novel transcript
ENSG00000255569	TRAV1-1	T cell receptor alpha variable 1-1 [Source:HGNC Symbol;Acc:HGNC:12101]
ENSG00000255874	PRECSIT	p53 regulated carcinoma associated Stat3 activating long intergenic non-protein coding transcript [Source:HGNC Symbol;Acc:HGNC:27492]
ENSG00000256006		novel transcript
ENSG00000256019	TAS2R63P	taste 2 receptor member 63 pseudogene [Source:HGNC Symbol;Acc:HGNC:20641]
ENSG00000256262	USP30-AS1	USP30 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:40909]
ENSG00000256280	ATP5MGPI	ATP synthase membrane subunit g pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:13214]
ENSG00000256574	OR13A1	olfactory receptor family 13 subfamily A member 1 [Source:HGNC Symbol;Acc:HGNC:14772]
ENSG00000256591		novel transcript
ENSG00000256660	CLEC12B	C-type lectin domain family 12 member B [Source:HGNC Symbol;Acc:HGNC:31966]
ENSG00000257497		novel transcript, antisense to GLIPR1
ENSG00000257594	GALNT4	polypeptide N-acetylglucosaminyltransferase 4 [Source:HGNC Symbol;Acc:HGNC:4126]
ENSG00000257764		novel transcript, antisense to LYZ
ENSG00000258181		novel transcript
ENSG00000258337		novel transcript, sense intronic to MED13L
ENSG00000258561		novel transcript
ENSG00000258644	SYNJ2BP-COX16	SYNJ2BP-COX16 readthrough [Source:HGNC Symbol;Acc:HGNC:48350]
ENSG00000258695		novel transcript, antisense to HEATR4
ENSG00000258733	LINC02328	long intergenic non-protein coding RNA 2328 [Source:HGNC Symbol;Acc:HGNC:53248]
ENSG00000259049		novel transcript, antisense to GNPAT1

ENSG00000259268		novel transcript
ENSG00000259804		novel transcript, antisense to CTCF
ENSG00000260103		coiled-coil-helix-coiled-coil-helix domain-containing protein 7 (CHCHD7) pseudogene
ENSG00000260339	HEXA-AS1	HEXA antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:25810]
ENSG00000260367		novel transcript, antisense to SPNS1
ENSG00000260409		novel transcript
ENSG00000260475		novel transcript
ENSG00000260774		novel transcript
ENSG00000260803		novel transcript
ENSG00000261033	SPECC1-DT	SPECC1 divergent transcript [Source:HGNC Symbol;Acc:HGNC:55376]
ENSG00000261136		novel transcript, antisense to FSIP1
ENSG00000261242		novel transcript, antisense to PPP2R5E
ENSG00000261324		novel transcript, overlapping HIST4H4
ENSG00000261359	PYCARD-AS1	PYCARD antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:45036]
ENSG00000261366	MANEA-DT	MANEA divergent transcript [Source:HGNC Symbol;Acc:HGNC:43732]
ENSG00000261654		novel transcript, sense overlapping C1orf103
ENSG00000261670		novel transcript
ENSG00000263731		novel transcript
ENSG00000263843	MIF4GD-DT	MIF4GD divergent transcript [Source:HGNC Symbol;Acc:HGNC:55335]
ENSG00000263934	SNORD3A	small nucleolar RNA, C/D box 3A [Source:HGNC Symbol;Acc:HGNC:33189]
ENSG00000264235	MYL12-AS1	MYL12A and MYL12B antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:55331]
ENSG00000264673		novel transcript
ENSG00000264812		novel transcript, sense intronic C17orf101
ENSG00000265399		novel transcript, antisense to MYOM1
ENSG00000265692	LINC01970	long intergenic non-protein coding RNA 1970 [Source:HGNC Symbol;Acc:HGNC:52796]
ENSG00000266680		novel transcript, antisense to PTP4A1
ENSG00000266922		novel transcript, sense intronic to ZNF823
ENSG00000267080	ASB16-AS1	ASB16 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:25442]
ENSG00000267321	SNHG30	small nucleolar RNA host gene 30 [Source:HGNC Symbol;Acc:HGNC:52836]
ENSG00000267360		novel protein
ENSG00000267361	SEC24AP1	SEC24 homolog A pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:53767]
ENSG00000267390	KDSR-DT	KDSR divergent transcript [Source:HGNC Symbol;Acc:HGNC:55299]
ENSG00000267506		novel transcript
ENSG00000267576		novel transcript, sense intronic to TSPAN16
ENSG00000267801		novel transcript, antisense to TRIM47
ENSG00000268201		novel transcript, sense intronic to ZNF544
ENSG00000268403		novel transcript, antisense to ZNF143
ENSG00000268584		novel transcript, antisense to USP54
ENSG00000269220	LINC00528	long intergenic non-protein coding RNA 528 [Source:HGNC Symbol;Acc:HGNC:26875]
ENSG00000269378	ITGB1P1	integrin subunit beta 1 pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:3781]
ENSG00000269533		novel transcript
ENSG00000269929	MIRLET7A1HG	miRlet-7a-1/let-7f-1/let-7d cluster host gene [Source:HGNC Symbol;Acc:HGNC:53970]
ENSG00000269934		novel transcript, antisense to OBSCN
ENSG00000269982		novel transcript, antisense to TMEM111
ENSG00000270062		novel transcript, sense intronic to NIN
ENSG00000270104		novel transcript
ENSG00000270379	HEATR9	HEAT repeat containing 9 [Source:HGNC Symbol;Acc:HGNC:26548]
ENSG00000271795		novel transcript, antisense to FAT2
ENSG00000272275		novel transcript
ENSG00000272316		novel transcript
ENSG00000272463		novel transcript
ENSG00000272512		novel transcript
ENSG00000272758	WDR5B-DT	WDR5B divergent transcript [Source:HGNC Symbol;Acc:HGNC:55192]
ENSG00000272933		novel transcript
ENSG00000273007		novel transcript, antisense to FGF2
ENSG00000273008	CSGALNACT2-DT	CSGALNACT2 divergent transcript [Source:HGNC Symbol;Acc:HGNC:55174]
ENSG00000273026		novel transcript, antisense to SLC39A1
ENSG00000273148	LINC00653	long intergenic non-protein coding RNA 653 [Source:HGNC Symbol;Acc:HGNC:44308]
ENSG00000273203		novel transcript
ENSG00000273270		novel transcript
ENSG00000273284		novel transcript, sense intronic to ANKRD12
ENSG00000273328		novel transcript
ENSG00000273350		novel transcript, sense intronic to SEC14L2
ENSG00000273576		novel transcript
ENSG00000273723	SUGT1-DT	SUGT1 divergent transcript [Source:HGNC Symbol;Acc:HGNC:54809]
ENSG00000273729		novel transcript, antisense to IRF2BPL
ENSG00000273893		novel transcript, sense intronic to SLC13A3
ENSG00000274173		novel transcript
ENSG00000274253		novel transcript, sense overlapping NIPA1
ENSG00000274292		novel transcript
ENSG00000274460		novel transcript
ENSG00000274828		novel transcript
ENSG00000274922		novel transcript
ENSG00000275084	SNORD91B	small nucleolar RNA, C/D box 91B [Source:HGNC Symbol;Acc:HGNC:32753]
ENSG00000275097		novel transcript, overlapping 3'UTR of FAM60A
ENSG00000275106		novel transcript
ENSG00000275413		novel transcript, antisense to TTC19
ENSG00000275765		novel transcript
ENSG00000276071		novel transcript
ENSG00000276302		novel protein
ENSG00000276405	TRBV13	T cell receptor beta variable 13 [Source:HGNC Symbol;Acc:HGNC:12188]

ENSG00000276517		novel transcript, sense intronic to BIRC6
ENSG00000276696	Y_RNA	Y RNA [Source:RFAM;Acc:RF00019]
ENSG00000276744		novel transcript, sense intronic to SIN3A
ENSG00000276966	H4C5	H4 clustered histone 5 [Source:HGNC Symbol;Acc:HGNC:4790]
ENSG00000276968		novel transcript, antisense to NUDT15
ENSG00000277203		
ENSG00000277297	ATP5F1AP10	ATP synthase F1 subunit alpha pseudogene 10 [Source:HGNC Symbol;Acc:HGNC:37668]
ENSG00000277534		novel transcript, sense intronic to KCTD1
ENSG00000277610	RNVU1-4	RNA, variant U1 small nuclear 4 [Source:HGNC Symbol;Acc:HGNC:48312]
ENSG00000277687		novel transcript, sense intronic to CACUL1
ENSG00000277734	TRAC	T cell receptor alpha constant [Source:HGNC Symbol;Acc:HGNC:12029]
ENSG00000277959		novel transcript, antisense to BNIP3
ENSG00000278383		novel transcript, antisense to ZNF337
ENSG00000279114		TEC
ENSG00000279394		TEC
ENSG00000279400		
ENSG00000279416		TEC
ENSG00000279520		tec
ENSG00000279571		novel transcript
ENSG00000279594		TEC
ENSG00000279633		TEC
ENSG00000279733		novel transcript
ENSG00000279765		novel protein
ENSG00000279907		TEC
ENSG00000280037		TEC
ENSG00000280173		TEC
ENSG00000280365		TEC
ENSG00000280594	BTG3-AS1	BTG3 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:53145]
ENSG00000281501	SEPSECS-AS1	SEPSECS antisense RNA 1 (head to head) [Source:HGNC Symbol;Acc:HGNC:27737]
ENSG00000283236		novel zinc finger protein pseudogene
ENSG00000283294		novel transcript
ENSG00000283597	FAM169B	family with sequence similarity 169 member B [Source:HGNC Symbol;Acc:HGNC:26835]
ENSG00000283930	PLD5P1	PLD5 pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:55072]
ENSG00000284234	TAF11L5	TATA-box binding protein associated factor 11 like 5 [Source:HGNC Symbol;Acc:HGNC:53848]
ENSG00000284713	SMIM38	small integral membrane protein 38 [Source:HGNC Symbol;Acc:HGNC:54074]
ENSG00000284825		novel transcript
ENSG00000285051	SLC7A14-AS1	SLC7A14 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:54092]
ENSG00000285171		novel protein, IL2RG-CXorf65 readthrough
ENSG00000285410	GABPB1-IT1	GABPB1 intronic transcript [Source:HGNC Symbol;Acc:HGNC:25469]
ENSG00000285589		novel transcript
ENSG00000285976		novel protein

Negatively correlated with any of the 3 histone genes

gene_id
chr1 144005314 144074390
chr1 158747426 158801166
chr1 116985627 117039224
chr1 207957114 208059882
chr1 90030019 90098410
chr1 208106419 208201063
chr10 70776768 70847826
chr10 90775543 90852946
chr10 59257983 59752743
chr11 79654581 79794703
chr12 112744061 112820241
chr12 31110180 31160289
chr12 81098493 81183646
chr12 92301894 92375172
chr12 70217861 70319851
chr12 77965089 78142976
chr13 25598341 25652477
chr13 32253656 32313677
chr14 77402830 77490884
chr14 95942314 95994519
chr15 58639427 58702773
chr15 91959573 92014695
chr15 66184374 66235689
chr16 17903483 18070277
chr18 44337512 44392055
chr18 60139742 60190656
chr18 65066339 65172769
chr18 71336816 71529060
chr19 21776809 21827368
chr2 43290436 43449539
chr2 60552307 60640166
chr2 114567701 114648605
chr2 16966629 169726974
chr2 171669137 171719741
chr2 231388338 231479819

chr2 - 3139254 3191203		
chr2+ 118900190 118972600		
chr2+ 64374995 64540547		
chr20+ 25676371 25743693		
chr22 - 30395067 30446578		
chr3 - 28606312 28799586		
chr3 - 76083132 76347126		
chr3 - 137724326 137780757		
chr3+ 44037207 44151833		
chr4 - 153171990 153242408		
chr4 - 115465843 115520219		
chr4 - 140296502 140374908		
chr4 - 15168602 15281140		
chr4 - 23897365 24290828		
chr4 - 37526876 37592421		
chr4 - 38596164 38666456		
chr5 - 130701924 130754450		
chr5 - 156131271 156321325		
chr5 - 161907479 162532166		
chr5 - 16274725 16336038		
chr5 - 95090586 95158696		
chr5+ 163272162 163632891		
chr5+ 28809150 28876078		
chr6 - 13859215 13912169		
chr6 - 85094762 85318808		
chr6+ 25987557 26046649		
chr6+ 74545518 74606906		
chr6+ 89794879 89855593		
chr7 - 35616561 35671230		
chr7 - 156421990 156473331		
chr7 - 17764637 17820685		
chr7+ 30413577 30478433		
chr8 - 108668357 108724591		
chr8 - 88553947 88746161		
chr8 - 95295330 95363347		
chr8+ 66625499 66700727		
chr8+ 71698777 71884470		
chr9 - 71155784 71238023		
chr9 - 79122333 79208904		
chr9+ 137365305 137525576		
chrX - 68066111 68116840		
chrX - 108241551 108431951		
chrX - 27011377 27192323		
chrX+ 151143265 151307801		
ENSG000000002016	RAD52	RAD52 homolog, DNA repair protein [Source:HGNC Symbol;Acc:HGNC:9824]
ENSG000000004700	RECQL	RecQ like helicase [Source:HGNC Symbol;Acc:HGNC:9948]
ENSG000000005007	UPF1	UPF1 RNA helicase and ATPase [Source:HGNC Symbol;Acc:HGNC:9962]
ENSG000000005100	DHX33	DEAH-box helicase 33 [Source:HGNC Symbol;Acc:HGNC:16718]
ENSG000000005249	PRKAR2B	protein kinase cAMP-dependent type II regulatory subunit beta [Source:HGNC Symbol;Acc:HGNC:9392]
ENSG000000005339	CREBBP	CREB binding protein [Source:HGNC Symbol;Acc:HGNC:2348]
ENSG000000005381	MPO	myeloperoxidase [Source:HGNC Symbol;Acc:HGNC:7218]
ENSG000000005486	RHBD2	rhomboid domain containing 2 [Source:HGNC Symbol;Acc:HGNC:23082]
ENSG000000005961	ITGA2B	integrin subunit alpha 2b [Source:HGNC Symbol;Acc:HGNC:6138]
ENSG000000007038	PRSS21	serine protease 21 [Source:HGNC Symbol;Acc:HGNC:9485]
ENSG000000007545	CRAMP1	cramped chromatin regulator homolog 1 [Source:HGNC Symbol;Acc:HGNC:14122]
ENSG000000009830	POMT2	protein O-mannosyltransferase 2 [Source:HGNC Symbol;Acc:HGNC:19743]
ENSG00000010278	CD9	CD9 molecule [Source:HGNC Symbol;Acc:HGNC:1709]
ENSG00000011028	MRC2	mannose receptor C type 2 [Source:HGNC Symbol;Acc:HGNC:16875]
ENSG00000012061	ERCC1	ERCC excision repair 1, endonuclease non-catalytic subunit [Source:HGNC Symbol;Acc:HGNC:3433]
ENSG000000120256	ZFP64	ZFP64 zinc finger protein [Source:HGNC Symbol;Acc:HGNC:15940]
ENSG000000122840	RNF10	ring finger protein 10 [Source:HGNC Symbol;Acc:HGNC:10055]
ENSG000000123572	GLRX2	glutaredoxin 2 [Source:HGNC Symbol;Acc:HGNC:16065]
ENSG000000123909	GCLM	glutamate-cysteine ligase modifier subunit [Source:HGNC Symbol;Acc:HGNC:4312]
ENSG000000126652	AGPAT4	1-acylglycerol-3-phosphate O-acyltransferase 4 [Source:HGNC Symbol;Acc:HGNC:20885]
ENSG000000134053	APBA2	amyloid beta precursor protein binding family A member 2 [Source:HGNC Symbol;Acc:HGNC:579]
ENSG000000134152	MAP2K3	mitogen-activated protein kinase kinase 3 [Source:HGNC Symbol;Acc:HGNC:6843]
ENSG000000135403	VCL	vinculin [Source:HGNC Symbol;Acc:HGNC:12665]
ENSG000000135928	RFC1	replication factor C subunit 1 [Source:HGNC Symbol;Acc:HGNC:9969]
ENSG000000139523	RIPOR1	RHO family interacting cell polarization regulator 1 [Source:HGNC Symbol;Acc:HGNC:25836]
ENSG000000140199	PHLPP2	PH domain and leucine rich repeat protein phosphatase 2 [Source:HGNC Symbol;Acc:HGNC:29149]
ENSG000000143093	DCUN1D1	defective in cullin neddylation 1 domain containing 1 [Source:HGNC Symbol;Acc:HGNC:18184]
ENSG000000143591	ADRB1	adrenocceptor beta 1 [Source:HGNC Symbol;Acc:HGNC:285]
ENSG000000147578	KATNIP	katanin interacting protein [Source:HGNC Symbol;Acc:HGNC:29068]
ENSG000000147597	XK	X-linked Kx blood group [Source:HGNC Symbol;Acc:HGNC:12811]
ENSG000000147648	ARHGAP6	Rho GTPase activating protein 6 [Source:HGNC Symbol;Acc:HGNC:676]
ENSG000000149656	CLPTM1L	CLPTM1 like [Source:HGNC Symbol;Acc:HGNC:24308]
ENSG000000150555	LAMC3	laminin subunit gamma 3 [Source:HGNC Symbol;Acc:HGNC:6494]
ENSG000000151382	PIK3CB	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit beta [Source:HGNC Symbol;Acc:HGNC:8976]
ENSG000000152795	FNIP2	folliculin interacting protein 2 [Source:HGNC Symbol;Acc:HGNC:29280]
ENSG000000154179	ENTPD2	ectonucleoside triphosphate diphosphohydrolase 2 [Source:HGNC Symbol;Acc:HGNC:3364]
ENSG000000154793	ATP9A	ATPase phospholipid transporting 9A (putative) [Source:HGNC Symbol;Acc:HGNC:13540]

ENSG00000060558	GNA15	G protein subunit alpha 15 [Source:HGNC Symbol;Acc:HGNC:4383]
ENSG00000061918	GUCY1B1	guanylate cyclase 1 soluble subunit beta 1 [Source:HGNC Symbol;Acc:HGNC:4687]
ENSG00000063169	BICRA	BRD4 interacting chromatin remodeling complex associated protein [Source:HGNC Symbol;Acc:HGNC:4332]
ENSG00000063854	HAGH	hydroxyacylglutathione hydrolase [Source:HGNC Symbol;Acc:HGNC:4805]
ENSG00000064989	CALCRL	calcitonin receptor like receptor [Source:HGNC Symbol;Acc:HGNC:16709]
ENSG00000065060	UHRF1BP1	UHRF1 binding protein 1 [Source:HGNC Symbol;Acc:HGNC:21216]
ENSG00000065308	TRAM2	translocation associated membrane protein 2 [Source:HGNC Symbol;Acc:HGNC:16855]
ENSG00000065491	TBC1D22B	TBC1 domain family member 22B [Source:HGNC Symbol;Acc:HGNC:21602]
ENSG00000065534	MYLK	myosin light chain kinase [Source:HGNC Symbol;Acc:HGNC:7590]
ENSG00000065559	MAP2K4	mitogen-activated protein kinase kinase 4 [Source:HGNC Symbol;Acc:HGNC:6844]
ENSG00000065978	YBX1	Y-box binding protein 1 [Source:HGNC Symbol;Acc:HGNC:8014]
ENSG00000066379	POLR1H	RNA polymerase I subunit H [Source:HGNC Symbol;Acc:HGNC:13182]
ENSG00000066827	ZFAT	zinc finger and AT-hook domain containing [Source:HGNC Symbol;Acc:HGNC:19899]
ENSG00000068796	KIF2A	kinesin family member 2A [Source:HGNC Symbol;Acc:HGNC:6318]
ENSG00000068878	PSME4	proteasome activator subunit 4 [Source:HGNC Symbol;Acc:HGNC:20635]
ENSG00000068976	PYGM	glycogen phosphorylase, muscle associated [Source:HGNC Symbol;Acc:HGNC:9726]
ENSG00000070087	PFN2	profilin 2 [Source:HGNC Symbol;Acc:HGNC:8882]
ENSG00000070182	SPTB	spectrin beta, erythrocytic [Source:HGNC Symbol;Acc:HGNC:11274]
ENSG00000071051	NCK2	NCK adaptor protein 2 [Source:HGNC Symbol;Acc:HGNC:7665]
ENSG00000072042	RDH11	retinol dehydrogenase 11 [Source:HGNC Symbol;Acc:HGNC:17964]
ENSG00000074590	NUAK1	NUAK family kinase 1 [Source:HGNC Symbol;Acc:HGNC:14311]
ENSG00000075785	RAB7A	RAB7A, member RAS oncogene family [Source:HGNC Symbol;Acc:HGNC:9788]
ENSG00000076043	REXO2	RNA exonuclease 2 [Source:HGNC Symbol;Acc:HGNC:17851]
ENSG00000077463	SIRT6	sirtuin 6 [Source:HGNC Symbol;Acc:HGNC:14934]
ENSG00000078399	HOXA9	homeobox A9 [Source:HGNC Symbol;Acc:HGNC:5109]
ENSG00000078814	MYH7B	myosin heavy chain 7B [Source:HGNC Symbol;Acc:HGNC:15906]
ENSG00000081014	AP4E1	adaptor related protein complex 4 subunit epsilon 1 [Source:HGNC Symbol;Acc:HGNC:573]
ENSG00000081181	ARG2	arginase 2 [Source:HGNC Symbol;Acc:HGNC:664]
ENSG00000082701	GSK3B	glycogen synthase kinase 3 beta [Source:HGNC Symbol;Acc:HGNC:4617]
ENSG00000084070	SMAP2	small ArfGAP2 [Source:HGNC Symbol;Acc:HGNC:25082]
ENSG00000085733	CTTN	cortactin [Source:HGNC Symbol;Acc:HGNC:3338]
ENSG00000086189	DIMT1	DIMT1 rRNA methyltransferase and ribosome maturation factor [Source:HGNC Symbol;Acc:HGNC:30217]
ENSG00000086232	EIF2AK1	eukaryotic translation initiation factor 2 alpha kinase 1 [Source:HGNC Symbol;Acc:HGNC:24921]
ENSG00000086548	CEACAM6	CEA cell adhesion molecule 6 [Source:HGNC Symbol;Acc:HGNC:1818]
ENSG00000088038	CNOT3	CCR4-NOT transcription complex subunit 3 [Source:HGNC Symbol;Acc:HGNC:7879]
ENSG00000088986	DYNLL1	dynein light chain LC8-type 1 [Source:HGNC Symbol;Acc:HGNC:15476]
ENSG00000088992	TESC	tescalcin [Source:HGNC Symbol;Acc:HGNC:26065]
ENSG00000089916	GPATCH2L	G-patch domain containing 2 like [Source:HGNC Symbol;Acc:HGNC:20210]
ENSG00000090013	BLVRB	biliverdin reductase B [Source:HGNC Symbol;Acc:HGNC:1063]
ENSG00000090061	CCNK	cyclin K [Source:HGNC Symbol;Acc:HGNC:1596]
ENSG00000091947	TMEM101	transmembrane protein 101 [Source:HGNC Symbol;Acc:HGNC:29653]
ENSG00000093010	COMT	catechol-O-methyltransferase [Source:HGNC Symbol;Acc:HGNC:2228]
ENSG00000095303	PTGS1	prostaglandin-endoperoxide synthase 1 [Source:HGNC Symbol;Acc:HGNC:9604]
ENSG00000096060	FKBP5	FKBP prolyl isomerase 5 [Source:HGNC Symbol;Acc:HGNC:3721]
ENSG00000099308	MAST3	microtubule associated serine/threonine kinase 3 [Source:HGNC Symbol;Acc:HGNC:19036]
ENSG00000099849	RASSF7	Ras association domain family member 7 [Source:HGNC Symbol;Acc:HGNC:1166]
ENSG00000099991	CABIN1	calcineurin binding protein 1 [Source:HGNC Symbol;Acc:HGNC:24187]
ENSG00000100024	UPB1	beta-ureidopropionase 1 [Source:HGNC Symbol;Acc:HGNC:16297]
ENSG00000100068	LRPL	LDL receptor related protein 5 like [Source:HGNC Symbol;Acc:HGNC:25323]
ENSG00000100104	SRRD	SRR1 domain containing [Source:HGNC Symbol;Acc:HGNC:33910]
ENSG00000100201	DDX17	DEAD-box helicase 17 [Source:HGNC Symbol;Acc:HGNC:2740]
ENSG00000100346	CACNA1I	calcium voltage-gated channel subunit alpha1.I [Source:HGNC Symbol;Acc:HGNC:1396]
ENSG00000100387	RBX1	ring-box 1 [Source:HGNC Symbol;Acc:HGNC:9928]
ENSG00000100614	PPM1A	protein phosphatase, Mg2+/Mn2+ dependent 1A [Source:HGNC Symbol;Acc:HGNC:9275]
ENSG00000100804	PSMB5	proteasome 20S subunit beta 5 [Source:HGNC Symbol;Acc:HGNC:9542]
ENSG00000101019	UQC1	ubiquinol-cytochrome c reductase complex assembly factor 1 [Source:HGNC Symbol;Acc:HGNC:15891]
ENSG00000101057	MYBL2	MYB proto-oncogene like 2 [Source:HGNC Symbol;Acc:HGNC:7548]
ENSG00000101162	TUBB1	tubulin beta 1 class VI [Source:HGNC Symbol;Acc:HGNC:16257]
ENSG00000101188	NTSR1	neurotensin receptor 1 [Source:HGNC Symbol;Acc:HGNC:8039]
ENSG00000101193	GID8	GID complex subunit 8 homolog [Source:HGNC Symbol;Acc:HGNC:15857]
ENSG00000101199	ARFGAP1	ADP ribosylation factor GTPase activating protein 1 [Source:HGNC Symbol;Acc:HGNC:15852]
ENSG00000101213	PTK6	protein tyrosine kinase 6 [Source:HGNC Symbol;Acc:HGNC:9617]
ENSG00000101255	TRIB3	tribbles pseudokinase 3 [Source:HGNC Symbol;Acc:HGNC:16228]
ENSG00000101266	CSNK2A1	casein kinase 2 alpha 1 [Source:HGNC Symbol;Acc:HGNC:2457]
ENSG00000101298	SNPH	syntrophin [Source:HGNC Symbol;Acc:HGNC:15931]
ENSG00000101337	TM9SF4	transmembrane 9 superfamily member 4 [Source:HGNC Symbol;Acc:HGNC:30797]
ENSG00000101361	NOP56	NOP56 ribonucleoprotein [Source:HGNC Symbol;Acc:HGNC:15911]
ENSG00000101928	MOSPD1	motile sperm domain containing 1 [Source:HGNC Symbol;Acc:HGNC:25235]
ENSG00000102362	SYTL4	synaptotagmin like 4 [Source:HGNC Symbol;Acc:HGNC:15588]
ENSG00000102786	INTS6	integrator complex subunit 6 [Source:HGNC Symbol;Acc:HGNC:14879]
ENSG00000102796	DHRS12	dehydrogenase/reductase 12 [Source:HGNC Symbol;Acc:HGNC:25832]
ENSG00000102837	OLFM4	olfactomedin 4 [Source:HGNC Symbol;Acc:HGNC:17190]
ENSG00000102981	PARD6A	par-6 family cell polarity regulator alpha [Source:HGNC Symbol;Acc:HGNC:15943]
ENSG00000103064	SLCTA6	solute carrier family 7 member 6 [Source:HGNC Symbol;Acc:HGNC:11064]
ENSG00000103184	SEC14L5	SEC14 like lipid binding 5 [Source:HGNC Symbol;Acc:HGNC:29032]
ENSG00000103275	UBE2I	ubiquitin conjugating enzyme E2 I [Source:HGNC Symbol;Acc:HGNC:12485]
ENSG00000103342	GSPT1	G1 to S phase transition 1 [Source:HGNC Symbol;Acc:HGNC:4621]
ENSG00000103769	RAB11A	RAB11A, member RAS oncogene family [Source:HGNC Symbol;Acc:HGNC:9760]
ENSG00000104205	SGK3	serum/glucocorticoid regulated kinase family member 3 [Source:HGNC Symbol;Acc:HGNC:10812]
ENSG00000104219	ZDHHC2	zinc finger DHHC-type palmitoyltransferase 2 [Source:HGNC Symbol;Acc:HGNC:18469]
ENSG00000104361	NIPAL2	NIPA like domain containing 2 [Source:HGNC Symbol;Acc:HGNC:25854]

ENSG00000104687	GSR	glutathione-disulfide reductase [Source:HGNC Symbol;Acc:HGNC:4623]
ENSG00000104957	CCDC130	coiled-coil domain containing 130 [Source:HGNC Symbol;Acc:HGNC:28118]
ENSG00000104973	MED25	mediator complex subunit 25 [Source:HGNC Symbol;Acc:HGNC:28845]
ENSG00000105393	BABAM1	BRISC and BRCA1 A complex member 1 [Source:HGNC Symbol;Acc:HGNC:25008]
ENSG00000105647	PIK3R2	phosphoinositide-3-kinase regulatory subunit 2 [Source:HGNC Symbol;Acc:HGNC:8980]
ENSG00000105887	MTPN	myotrophin [Source:HGNC Symbol;Acc:HGNC:15667]
ENSG00000105939	ZC3HAV1	zinc finger CCH-type containing, antiviral 1 [Source:HGNC Symbol;Acc:HGNC:23721]
ENSG00000105993	DNAJB6	DnaJ heat shock protein family (Hsp40) member B6 [Source:HGNC Symbol;Acc:HGNC:14888]
ENSG00000106144	CASP2	caspase 2 [Source:HGNC Symbol;Acc:HGNC:1503]
ENSG00000106785	TRIM14	tripartite motif containing 14 [Source:HGNC Symbol;Acc:HGNC:16283]
ENSG00000107789	MINPP1	multiple inositol-polyphosphate phosphatase 1 [Source:HGNC Symbol;Acc:HGNC:7102]
ENSG00000108094	CUL2	cullin 2 [Source:HGNC Symbol;Acc:HGNC:2552]
ENSG00000108448	TRIM16L	tripartite motif containing 16 like [Source:HGNC Symbol;Acc:HGNC:32670]
ENSG00000108591	DRG2	developmentally regulated GTP binding protein 2 [Source:HGNC Symbol;Acc:HGNC:3030]
ENSG00000108825	PTGES3L-AARSD	PTGES3L-AARSD1 readthrough [Source:HGNC Symbol;Acc:HGNC:43946]
ENSG00000108960	MMD	monocyte to macrophage differentiation associated [Source:HGNC Symbol;Acc:HGNC:7153]
ENSG00000109184	DCUN1D4	defective in cullin neddylation 1 domain containing 4 [Source:HGNC Symbol;Acc:HGNC:28998]
ENSG00000109272	PF4V1	platelet factor 4 variant 1 [Source:HGNC Symbol;Acc:HGNC:8862]
ENSG00000109790	KLHL5	kelch like family member 5 [Source:HGNC Symbol;Acc:HGNC:6356]
ENSG00000109881	CCDC34	coiled-coil domain containing 34 [Source:HGNC Symbol;Acc:HGNC:25079]
ENSG00000109906	ZBTB16	zinc finger and BTB domain containing 16 [Source:HGNC Symbol;Acc:HGNC:12930]
ENSG00000109971	HSPA8	heat shock protein family A (Hsp70) member 8 [Source:HGNC Symbol;Acc:HGNC:5241]
ENSG00000110218	PANX1	pannexin 1 [Source:HGNC Symbol;Acc:HGNC:8599]
ENSG00000110422	HIPK3	homeodomain interacting protein kinase 3 [Source:HGNC Symbol;Acc:HGNC:4915]
ENSG00000110442	COMM29	COMM domain containing 9 [Source:HGNC Symbol;Acc:HGNC:25014]
ENSG00000110711	AIP	aryl hydrocarbon receptor interacting protein [Source:HGNC Symbol;Acc:HGNC:358]
ENSG00000110799	VWFF	von Willebrand factor [Source:HGNC Symbol;Acc:HGNC:12726]
ENSG00000110801	PSMD9	proteasome 26S subunit, non-ATPase 9 [Source:HGNC Symbol;Acc:HGNC:9567]
ENSG00000110844	PRPF40B	pre-mRNA processing factor 40 homolog B [Source:HGNC Symbol;Acc:HGNC:25031]
ENSG00000110880	CORO1C	coronin 1C [Source:HGNC Symbol;Acc:HGNC:2254]
ENSG00000110958	PTGES3	prostaglandin E synthase 3 [Source:HGNC Symbol;Acc:HGNC:16049]
ENSG00000111012	CYP27B1	cytochrome P450 family 27 subfamily B member 1 [Source:HGNC Symbol;Acc:HGNC:2606]
ENSG00000111181	SLC6A12	solute carrier family 6 member 12 [Source:HGNC Symbol;Acc:HGNC:11045]
ENSG00000111203	ITFG2	integrin alpha FG-GAP repeat containing 2 [Source:HGNC Symbol;Acc:HGNC:30879]
ENSG00000111328	CDK2AP1	cyclin dependent kinase 2 associated protein 1 [Source:HGNC Symbol;Acc:HGNC:14002]
ENSG00000111364	DDX55	DEAD-box helicase 55 [Source:HGNC Symbol;Acc:HGNC:20085]
ENSG00000111641	NOP2	NOP2 nucleolar protein [Source:HGNC Symbol;Acc:HGNC:7867]
ENSG00000111790	FCFR1OP2	FCFR1 oncogene partner 2 [Source:HGNC Symbol;Acc:HGNC:23098]
ENSG00000112144	CILK1	ciliogenesis associated kinase 1 [Source:HGNC Symbol;Acc:HGNC:21219]
ENSG00000112146	FBXO9	F-box protein 9 [Source:HGNC Symbol;Acc:HGNC:13588]
ENSG00000112473	SLC39A7	solute carrier family 39 member 7 [Source:HGNC Symbol;Acc:HGNC:4927]
ENSG00000112561	TFEB	transcription factor EB [Source:HGNC Symbol;Acc:HGNC:11753]
ENSG00000112576	CCND3	cyclin D3 [Source:HGNC Symbol;Acc:HGNC:1585]
ENSG00000113140	SPARC	secreted protein acidic and cysteine rich [Source:HGNC Symbol;Acc:HGNC:11219]
ENSG00000113300	CNOT6	CCR4-NOT transcription complex subunit 6 [Source:HGNC Symbol;Acc:HGNC:14099]
ENSG00000113328	CCNG1	cyclin G1 [Source:HGNC Symbol;Acc:HGNC:1592]
ENSG00000113758	DBN1	drebrin 1 [Source:HGNC Symbol;Acc:HGNC:2695]
ENSG00000114166	KAT2B	lysine acetyltransferase 2B [Source:HGNC Symbol;Acc:HGNC:8638]
ENSG00000114473	IQCG	IQ motif containing G [Source:HGNC Symbol;Acc:HGNC:25251]
ENSG00000115170	ACVR1	activin A receptor type 1 [Source:HGNC Symbol;Acc:HGNC:171]
ENSG00000115266	APC2	APC regulator of WNT signaling pathway 2 [Source:HGNC Symbol;Acc:HGNC:24036]
ENSG00000115267	IFIH1	interferon induced with helicase C domain 1 [Source:HGNC Symbol;Acc:HGNC:18873]
ENSG00000115657	ABC86	ATP binding cassette subfamily B member 6 (Langereis blood group) [Source:HGNC Symbol;Acc:HGNC:47]
ENSG00000115942	ORC2	origin recognition complex subunit 2 [Source:HGNC Symbol;Acc:HGNC:8488]
ENSG00000116095	PLEKHA3	pleckstrin homology domain containing A3 [Source:HGNC Symbol;Acc:HGNC:14338]
ENSG00000116138	DNAJC16	DnaJ heat shock protein family (Hsp40) member C16 [Source:HGNC Symbol;Acc:HGNC:29157]
ENSG00000116212	LRRRC42	leucine rich repeat containing 42 [Source:HGNC Symbol;Acc:HGNC:28792]
ENSG00000116285	ERRFI1	ERBB receptor feedback inhibitor 1 [Source:HGNC Symbol;Acc:HGNC:18185]
ENSG00000116668	SWT1	SWT1 RNA endonuclease homolog [Source:HGNC Symbol;Acc:HGNC:16785]
ENSG00000116675	DNAJC6	DnaJ heat shock protein family (Hsp40) member C6 [Source:HGNC Symbol;Acc:HGNC:15469]
ENSG00000116678	LEPR	leptin receptor [Source:HGNC Symbol;Acc:HGNC:6554]
ENSG00000116717	GADD45A	growth arrest and DNA damage inducible alpha [Source:HGNC Symbol;Acc:HGNC:4095]
ENSG00000116871	MAP7D1	MAP7 domain containing 1 [Source:HGNC Symbol;Acc:HGNC:25514]
ENSG00000116922	C1orf109	chromosome 1 open reading frame 109 [Source:HGNC Symbol;Acc:HGNC:26039]
ENSG00000117013	KCNQ4	potassium voltage-gated channel subfamily Q member 4 [Source:HGNC Symbol;Acc:HGNC:6298]
ENSG00000117155	SSX2IP	SSX family member 2 interacting protein [Source:HGNC Symbol;Acc:HGNC:16509]
ENSG00000117523	PRRC2C	proline rich coiled-coil 2C [Source:HGNC Symbol;Acc:HGNC:24903]
ENSG00000118454	ANKRD13C	ankyrin repeat domain 13C [Source:HGNC Symbol;Acc:HGNC:25374]
ENSG00000118513	MYB	MYB proto-oncogene, transcription factor [Source:HGNC Symbol;Acc:HGNC:7545]
ENSG00000118520	ARG1	arginase 1 [Source:HGNC Symbol;Acc:HGNC:663]
ENSG00000118689	FOXO3	forkhead box O3 [Source:HGNC Symbol;Acc:HGNC:3821]
ENSG00000118816	CCNI	cyclin I [Source:HGNC Symbol;Acc:HGNC:1595]
ENSG00000119138	KLF9	Kruppel like factor 9 [Source:HGNC Symbol;Acc:HGNC:1123]
ENSG00000119280	C1orf198	chromosome 1 open reading frame 198 [Source:HGNC Symbol;Acc:HGNC:25900]
ENSG00000119681	LTBP2	latent transforming growth factor beta binding protein 2 [Source:HGNC Symbol;Acc:HGNC:6715]
ENSG00000119684	MLH3	mutL homolog 3 [Source:HGNC Symbol;Acc:HGNC:7128]
ENSG00000119862	LGALS1	galectin like [Source:HGNC Symbol;Acc:HGNC:25012]
ENSG00000119899	SLC17A5	solute carrier family 17 member 5 [Source:HGNC Symbol;Acc:HGNC:10933]
ENSG00000119950	MXI1	MAX interactor 1, dimerization protein [Source:HGNC Symbol;Acc:HGNC:7534]
ENSG00000120694	HSPH1	heat shock protein family H (Hsp110) member 1 [Source:HGNC Symbol;Acc:HGNC:16969]
ENSG00000120696	KBTBD7	kelch repeat and BTB domain containing 7 [Source:HGNC Symbol;Acc:HGNC:25266]

ENSG00000121057	AKAP1	A-kinase anchoring protein 1 [Source:HGNC Symbol;Acc:HGNC:367]
ENSG00000121104	FAM117A	family with sequence similarity 117 member A [Source:HGNC Symbol;Acc:HGNC:24179]
ENSG00000122025	FLT3	fms related receptor tyrosine kinase 3 [Source:HGNC Symbol;Acc:HGNC:3765]
ENSG00000122203	KIAA1191	KIAA1191 [Source:HGNC Symbol;Acc:HGNC:29209]
ENSG00000122335	SERAC1	serine active site containing 1 [Source:HGNC Symbol;Acc:HGNC:21061]
ENSG00000122367	LDB3	LIM domain binding 3 [Source:HGNC Symbol;Acc:HGNC:15710]
ENSG00000122481	RWDD3	RWD domain containing 3 [Source:HGNC Symbol;Acc:HGNC:21393]
ENSG00000122550	KLHL7	kelch like family member 7 [Source:HGNC Symbol;Acc:HGNC:15646]
ENSG00000122643	NT5C3A	5'-nucleotidase, cytosolic IIIA [Source:HGNC Symbol;Acc:HGNC:17820]
ENSG00000122696	SLC25A51	solute carrier family 25 member 51 [Source:HGNC Symbol;Acc:HGNC:23323]
ENSG00000122786	CALD1	caldesmon 1 [Source:HGNC Symbol;Acc:HGNC:1441]
ENSG00000123500	COL10A1	collagen type X alpha 1 chain [Source:HGNC Symbol;Acc:HGNC:2185]
ENSG00000123562	MORF4L2	mortality factor 4 like 2 [Source:HGNC Symbol;Acc:HGNC:16849]
ENSG00000123933	MXD4	MAX dimerization protein 4 [Source:HGNC Symbol;Acc:HGNC:13906]
ENSG00000124098	FAM210B	family with sequence similarity 210 member B [Source:HGNC Symbol;Acc:HGNC:16102]
ENSG00000124102	PI3	peptidase inhibitor 3 [Source:HGNC Symbol;Acc:HGNC:8947]
ENSG00000124196	GTSF1L	gametocyte specific factor 1 like [Source:HGNC Symbol;Acc:HGNC:16198]
ENSG00000124469	CEACAM8	CEA cell adhesion molecule 8 [Source:HGNC Symbol;Acc:HGNC:1820]
ENSG00000124496	TRERF1	transcriptional regulating factor 1 [Source:HGNC Symbol;Acc:HGNC:18273]
ENSG00000124784	RIOK1	RIO kinase 1 [Source:HGNC Symbol;Acc:HGNC:18656]
ENSG00000125037	EMC3	ER membrane protein complex subunit 3 [Source:HGNC Symbol;Acc:HGNC:23999]
ENSG00000125629	INSIG2	insulin induced gene 2 [Source:HGNC Symbol;Acc:HGNC:20452]
ENSG00000125633	CCDC93	coiled-coil domain containing 93 [Source:HGNC Symbol;Acc:HGNC:25611]
ENSG00000125650	PSPN	persephin [Source:HGNC Symbol;Acc:HGNC:9579]
ENSG00000125741	OPA3	outer mitochondrial membrane lipid metabolism regulator OPA3 [Source:HGNC Symbol;Acc:HGNC:8142]
ENSG00000126903	SLC10A3	solute carrier family 10 member 3 [Source:HGNC Symbol;Acc:HGNC:22979]
ENSG00000127314	RAP1B	RAP1B, member of RAS oncogene family [Source:HGNC Symbol;Acc:HGNC:9857]
ENSG00000127328	RAB3IP	RAB3A interacting protein [Source:HGNC Symbol;Acc:HGNC:16508]
ENSG00000127481	UBR4	ubiquitin protein ligase E3 component n-recogin 4 [Source:HGNC Symbol;Acc:HGNC:30313]
ENSG00000127483	HP1BP3	heterochromatin protein 1 binding protein 3 [Source:HGNC Symbol;Acc:HGNC:24973]
ENSG00000127533	F2RL3	F2R like thrombin or trypsin receptor 3 [Source:HGNC Symbol;Acc:HGNC:3540]
ENSG00000127666	TICAM1	toll like receptor adaptor molecule 1 [Source:HGNC Symbol;Acc:HGNC:18348]
ENSG00000127804	METTL16	methyltransferase like 16 [Source:HGNC Symbol;Acc:HGNC:28484]
ENSG00000128245	YWHAH	tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein eta [Source:HGNC Symbol;Acc:HGNC:12853]
ENSG00000128266	GNAZ	G protein subunit alpha z [Source:HGNC Symbol;Acc:HGNC:4395]
ENSG00000128272	ATF4	activating transcription factor 4 [Source:HGNC Symbol;Acc:HGNC:786]
ENSG00000128512	DOCK4	dedicator of cytokinesis 4 [Source:HGNC Symbol;Acc:HGNC:19192]
ENSG00000128585	MKLN1	muskelin 1 [Source:HGNC Symbol;Acc:HGNC:7109]
ENSG00000128590	DNAJB9	DnaJ heat shock protein family (Hsp40) member B9 [Source:HGNC Symbol;Acc:HGNC:6968]
ENSG00000128591	FLNC	filamin C [Source:HGNC Symbol;Acc:HGNC:3756]
ENSG00000128683	GAD1	glutamate decarboxylase 1 [Source:HGNC Symbol;Acc:HGNC:4092]
ENSG00000128708	HAT1	histone acetyltransferase 1 [Source:HGNC Symbol;Acc:HGNC:4821]
ENSG00000128731	HERC2	HECT and RLD domain containing E3 ubiquitin protein ligase 2 [Source:HGNC Symbol;Acc:HGNC:4868]
ENSG00000128886	ELL3	elongation factor for RNA polymerase II 3 [Source:HGNC Symbol;Acc:HGNC:23113]
ENSG00000128891	CCDC32	coiled-coil domain containing 32 [Source:HGNC Symbol;Acc:HGNC:28295]
ENSG00000128989	ARPP19	cAMP regulated phosphoprotein 19 [Source:HGNC Symbol;Acc:HGNC:16967]
ENSG00000130052	STARDB8	STAR related lipid transfer domain containing 8 [Source:HGNC Symbol;Acc:HGNC:19161]
ENSG00000130147	SH3BP4	SH3 domain binding protein 4 [Source:HGNC Symbol;Acc:HGNC:10826]
ENSG00000130165	ELOF1	elongation factor 1 homolog [Source:HGNC Symbol;Acc:HGNC:28691]
ENSG00000130176	CNN1	calponin 1 [Source:HGNC Symbol;Acc:HGNC:2155]
ENSG00000130227	XPO7	exportin 7 [Source:HGNC Symbol;Acc:HGNC:14108]
ENSG00000130558	OLFM1	olfactomedin 1 [Source:HGNC Symbol;Acc:HGNC:17187]
ENSG00000130669	PAK4	p21 (RAC1) activated kinase 4 [Source:HGNC Symbol;Acc:HGNC:16059]
ENSG00000130726	TRIM28	tripartite motif containing 28 [Source:HGNC Symbol;Acc:HGNC:16384]
ENSG00000130787	HIP1R	huntingtin interacting protein 1 related [Source:HGNC Symbol;Acc:HGNC:18415]
ENSG00000130821	SLC6A8	solute carrier family 6 member 8 [Source:HGNC Symbol;Acc:HGNC:11055]
ENSG00000131171	SH3BGR1	SH3 domain binding glutamate rich protein like [Source:HGNC Symbol;Acc:HGNC:10823]
ENSG00000131375	CAPN7	calpain 7 [Source:HGNC Symbol;Acc:HGNC:1484]
ENSG00000131508	UBE2D2	ubiquitin conjugating enzyme E2 D2 [Source:HGNC Symbol;Acc:HGNC:12475]
ENSG00000131724	IL13RA1	interleukin 13 receptor subunit alpha 1 [Source:HGNC Symbol;Acc:HGNC:5974]
ENSG00000131747	TOP2A	DNA topoisomerase II alpha [Source:HGNC Symbol;Acc:HGNC:11989]
ENSG00000132024	CC2D1A	coiled-coil and C2 domain containing 1A [Source:HGNC Symbol;Acc:HGNC:30237]
ENSG00000132128	LRRRC41	leucine rich repeat containing 41 [Source:HGNC Symbol;Acc:HGNC:16917]
ENSG00000132204	LINC00470	long intergenic non-protein coding RNA 470 [Source:HGNC Symbol;Acc:HGNC:1225]
ENSG00000132256	TRIM5	tripartite motif containing 5 [Source:HGNC Symbol;Acc:HGNC:16276]
ENSG00000132376	INPP5K	inositol polyphosphate-5-phosphatase K [Source:HGNC Symbol;Acc:HGNC:33882]
ENSG00000132535	DLG4	discs large MAGUK scaffold protein 4 [Source:HGNC Symbol;Acc:HGNC:2903]
ENSG00000132819	RBM38	RNA binding motif protein 38 [Source:HGNC Symbol;Acc:HGNC:15818]
ENSG00000132912	DCTN4	dyactin subunit 4 [Source:HGNC Symbol;Acc:HGNC:15518]
ENSG00000133101	CCNA1	cyclin A1 [Source:HGNC Symbol;Acc:HGNC:1577]
ENSG00000133112	TPT1	tumor protein, translationally-controlled 1 [Source:HGNC Symbol;Acc:HGNC:12022]
ENSG00000133193	FAM104A	family with sequence similarity 104 member A [Source:HGNC Symbol;Acc:HGNC:25918]
ENSG00000133477	FAM83F	family with sequence similarity 83 member F [Source:HGNC Symbol;Acc:HGNC:25148]
ENSG00000133606	MKRN1	makorin ring finger protein 1 [Source:HGNC Symbol;Acc:HGNC:7112]
ENSG00000133624	ZNF767P	zinc finger family member 767, pseudogene [Source:HGNC Symbol;Acc:HGNC:21884]
ENSG00000133816	MICAL2	microtubule associated monooxygenase, calponin and LIM domain containing 2 [Source:HGNC Symbol;Acc:HGNC:24693]
ENSG00000134070	IRAK2	interleukin 1 receptor associated kinase 2 [Source:HGNC Symbol;Acc:HGNC:6113]
ENSG00000134183	GNAI2	G protein subunit alpha transducin 2 [Source:HGNC Symbol;Acc:HGNC:4394]
ENSG00000134294	SLC38A2	solute carrier family 38 member 2 [Source:HGNC Symbol;Acc:HGNC:13448]
ENSG00000134318	ROCK2	Rho associated coiled-coil containing protein kinase 2 [Source:HGNC Symbol;Acc:HGNC:10252]
ENSG00000134324	LPIN1	lipin 1 [Source:HGNC Symbol;Acc:HGNC:13345]

ENSG00000134470	IL15RA	interleukin 15 receptor subunit alpha [Source:HGNC Symbol;Acc:HGNC:5978]
ENSG00000134644	PUM1	pumilio RNA binding family member 1 [Source:HGNC Symbol;Acc:HGNC:14957]
ENSG00000134882	UBAC2	UBA domain containing 2 [Source:HGNC Symbol;Acc:HGNC:20486]
ENSG00000135018	UBQLN1	ubiquilin 1 [Source:HGNC Symbol;Acc:HGNC:12508]
ENSG00000135249	RINT1	RAD50 interactor 1 [Source:HGNC Symbol;Acc:HGNC:21876]
ENSG00000135679	MDM2	MDM2 proto-oncogene [Source:HGNC Symbol;Acc:HGNC:6973]
ENSG00000135914	HTR2B	5-hydroxytryptamine receptor 2B [Source:HGNC Symbol;Acc:HGNC:5294]
ENSG00000135956	TMEM127	transmembrane protein 127 [Source:HGNC Symbol;Acc:HGNC:26038]
ENSG00000136068	FLNB	filamin B [Source:HGNC Symbol;Acc:HGNC:3755]
ENSG00000136141	LRCH1	leucine rich repeats and calponin homology domain containing 1 [Source:HGNC Symbol;Acc:HGNC:20309]
ENSG00000136231	IGF2BP3	insulin like growth factor 2 mRNA binding protein 3 [Source:HGNC Symbol;Acc:HGNC:28868]
ENSG00000136240	KDELRL2	KDEL endoplasmic reticulum protein retention receptor 2 [Source:HGNC Symbol;Acc:HGNC:6305]
ENSG00000136243	NUP42	nucleoporin 42 [Source:HGNC Symbol;Acc:HGNC:17010]
ENSG00000136450	SRSF1	serine and arginine rich splicing factor 1 [Source:HGNC Symbol;Acc:HGNC:10780]
ENSG00000136478	TEX2	testis expressed 2 [Source:HGNC Symbol;Acc:HGNC:30884]
ENSG00000136636	KCTD3	potassium channel tetramerization domain containing 3 [Source:HGNC Symbol;Acc:HGNC:21305]
ENSG00000136732	GYPC	glycophorin C (Gerbich blood group) [Source:HGNC Symbol;Acc:HGNC:4704]
ENSG00000136842	TMOD1	tropomodulin 1 [Source:HGNC Symbol;Acc:HGNC:11871]
ENSG00000136861	CDK5RAP2	CDK5 regulatory subunit associated protein 2 [Source:HGNC Symbol;Acc:HGNC:18672]
ENSG00000136867	SLC31A2	solute carrier family 31 member 2 [Source:HGNC Symbol;Acc:HGNC:11017]
ENSG00000137070	IL11RA	interleukin 11 receptor subunit alpha [Source:HGNC Symbol;Acc:HGNC:5967]
ENSG00000137193	PIM1	Pim-1 proto-oncogene, serine/threonine kinase [Source:HGNC Symbol;Acc:HGNC:8986]
ENSG00000137198	GMPR	guanosine monophosphate reductase [Source:HGNC Symbol;Acc:HGNC:4376]
ENSG00000137462	TLR2	toll like receptor 2 [Source:HGNC Symbol;Acc:HGNC:11848]
ENSG00000137547	MRPL15	mitochondrial ribosomal protein L15 [Source:HGNC Symbol;Acc:HGNC:14054]
ENSG00000137571	SLCO5A1	solute carrier organic anion transporter family member 5A1 [Source:HGNC Symbol;Acc:HGNC:19046]
ENSG00000137801	THBS1	thrombospondin 1 [Source:HGNC Symbol;Acc:HGNC:11785]
ENSG00000137822	TUBGCP4	tubulin gamma complex associated protein 4 [Source:HGNC Symbol;Acc:HGNC:16691]
ENSG00000137876	RSL24D1	ribosomal L24 domain containing 1 [Source:HGNC Symbol;Acc:HGNC:18479]
ENSG00000138069	RAB1A	RAB1A, member RAS oncogene family [Source:HGNC Symbol;Acc:HGNC:9758]
ENSG00000138381	ASNSD1	asparagine synthetase domain containing 1 [Source:HGNC Symbol;Acc:HGNC:24910]
ENSG00000138696	BMPR1B	bone morphogenetic protein receptor type 1B [Source:HGNC Symbol;Acc:HGNC:1077]
ENSG00000138698	RAP1GDS1	Rap1 GTPase-GDP dissociation stimulator 1 [Source:HGNC Symbol;Acc:HGNC:9859]
ENSG00000138722	MMRN1	multimerin 1 [Source:HGNC Symbol;Acc:HGNC:7178]
ENSG00000138755	CXCL9	C-X-C motif chemokine ligand 9 [Source:HGNC Symbol;Acc:HGNC:7098]
ENSG00000138798	EGF	epidermal growth factor [Source:HGNC Symbol;Acc:HGNC:3229]
ENSG00000138867	GUCD1	guanylyl cyclase domain containing 1 [Source:HGNC Symbol;Acc:HGNC:14237]
ENSG00000139197	PEX5	peroxisomal biogenesis factor 5 [Source:HGNC Symbol;Acc:HGNC:9719]
ENSG00000139579	NABP2	nucleic acid binding protein 2 [Source:HGNC Symbol;Acc:HGNC:28412]
ENSG00000139697	SBNO1	strawberry notch homolog 1 [Source:HGNC Symbol;Acc:HGNC:22973]
ENSG00000139734	DIAPH3	diaphanous related formin 3 [Source:HGNC Symbol;Acc:HGNC:15480]
ENSG00000140022	STON2	stonin 2 [Source:HGNC Symbol;Acc:HGNC:30652]
ENSG00000140374	ETFA	electron transfer flavoprotein subunit alpha [Source:HGNC Symbol;Acc:HGNC:3481]
ENSG00000140403	DNAJA4	DnaJ heat shock protein family (Hsp40) member A4 [Source:HGNC Symbol;Acc:HGNC:14885]
ENSG00000140416	TPM1	tropomyosin 1 [Source:HGNC Symbol;Acc:HGNC:12010]
ENSG00000140464	PML	PML nuclear body scaffold [Source:HGNC Symbol;Acc:HGNC:9113]
ENSG00000140986	RPL3L	ribosomal protein L3 like [Source:HGNC Symbol;Acc:HGNC:10351]
ENSG00000140992	PDPK1	3-phosphoinositide dependent protein kinase 1 [Source:HGNC Symbol;Acc:HGNC:8816]
ENSG00000141098	GFOD2	glucose-fructose oxidoreductase domain containing 2 [Source:HGNC Symbol;Acc:HGNC:28159]
ENSG00000141298	SSH2	slingshot protein phosphatase 2 [Source:HGNC Symbol;Acc:HGNC:30580]
ENSG00000141556	TBCD	tubulin folding cofactor D [Source:HGNC Symbol;Acc:HGNC:11581]
ENSG00000141622	RNF165	ring finger protein 165 [Source:HGNC Symbol;Acc:HGNC:31696]
ENSG00000141873	SLC39A3	solute carrier family 39 member 3 [Source:HGNC Symbol;Acc:HGNC:17128]
ENSG00000141934	PLPP2	phospholipid phosphatase 2 [Source:HGNC Symbol;Acc:HGNC:9230]
ENSG00000142546	NOSIP	nitric oxide synthase interacting protein [Source:HGNC Symbol;Acc:HGNC:17946]
ENSG00000142583	SLC2A5	solute carrier family 2 member 5 [Source:HGNC Symbol;Acc:HGNC:11010]
ENSG00000142599	RERE	arginine-glutamic acid dipeptide repeats [Source:HGNC Symbol;Acc:HGNC:9965]
ENSG00000143164	DCAF6	DDB1 and CUL4 associated factor 6 [Source:HGNC Symbol;Acc:HGNC:30002]
ENSG00000143321	HDGF	heparin binding growth factor [Source:HGNC Symbol;Acc:HGNC:4856]
ENSG00000143363	PRUNE1	prune exopolyphosphatase 1 [Source:HGNC Symbol;Acc:HGNC:13420]
ENSG00000143416	SELENBP1	selenium binding protein 1 [Source:HGNC Symbol;Acc:HGNC:10719]
ENSG00000143420	ENSA	endosulfine alpha [Source:HGNC Symbol;Acc:HGNC:3360]
ENSG00000143443	C1orf56	chromosome 1 open reading frame 56 [Source:HGNC Symbol;Acc:HGNC:26045]
ENSG00000143595	AQP10	aquaporin 10 [Source:HGNC Symbol;Acc:HGNC:16029]
ENSG00000143774	GUK1	guanylate kinase 1 [Source:HGNC Symbol;Acc:HGNC:4693]
ENSG00000143797	MBOAT2	membrane bound O-acyltransferase domain containing 2 [Source:HGNC Symbol;Acc:HGNC:25193]
ENSG00000144063	MALL	mal, T cell differentiation protein like [Source:HGNC Symbol;Acc:HGNC:6818]
ENSG00000144233	AMMECR1L	AMMECR1 like [Source:HGNC Symbol;Acc:HGNC:28658]
ENSG00000144893	MED12L	mediator complex subunit 12L [Source:HGNC Symbol;Acc:HGNC:16050]
ENSG00000145358	DDIT4L	DNA damage inducible transcript 4 like [Source:HGNC Symbol;Acc:HGNC:30555]
ENSG00000145703	IQGAP2	IQ motif containing GTPase activating protein 2 [Source:HGNC Symbol;Acc:HGNC:6111]
ENSG00000145715	RASA1	RAS p21 protein activator 1 [Source:HGNC Symbol;Acc:HGNC:9871]
ENSG00000145990	GFOD1	glucose-fructose oxidoreductase domain containing 1 [Source:HGNC Symbol;Acc:HGNC:21096]
ENSG00000146122	DAAM2	dishevelled associated activator of morphogenesis 2 [Source:HGNC Symbol;Acc:HGNC:18143]
ENSG00000146416	AIG1	androgen induced 1 [Source:HGNC Symbol;Acc:HGNC:21607]
ENSG00000146707	POMZP3	POM121 and ZP3 fusion [Source:HGNC Symbol;Acc:HGNC:9203]
ENSG00000147099	HDAC8	histone deacetylase 8 [Source:HGNC Symbol;Acc:HGNC:13315]
ENSG00000147119	CHST7	carbohydrate sulfotransferase 7 [Source:HGNC Symbol;Acc:HGNC:13817]
ENSG00000147145	LPAR4	lysophosphatidic acid receptor 4 [Source:HGNC Symbol;Acc:HGNC:4478]
ENSG00000147155	EBP	EBP cholesterol delta-isomerase [Source:HGNC Symbol;Acc:HGNC:3133]
ENSG00000147162	OGT	O-linked N-acetylglucosamine (GlcNAc) transferase [Source:HGNC Symbol;Acc:HGNC:8127]

ENSG00000147274	RBMX	RNA binding motif protein X-linked [Source:HGNC Symbol;Acc:HGNC:9910]
ENSG00000147324	MFHAS1	malignant fibrous histiocytoma amplified sequence 1 [Source:HGNC Symbol;Acc:HGNC:16982]
ENSG00000147394	ZNF185	zinc finger protein 185 with LIM domain [Source:HGNC Symbol;Acc:HGNC:12976]
ENSG00000147421	HMBOX1	homeobox containing 1 [Source:HGNC Symbol;Acc:HGNC:26137]
ENSG00000147434	CHRNA6	cholinergic receptor nicotinic alpha 6 subunit [Source:HGNC Symbol;Acc:HGNC:15963]
ENSG00000148773	MKI67	marker of proliferation Ki-67 [Source:HGNC Symbol;Acc:HGNC:7107]
ENSG00000148834	GSTO1	glutathione S-transferase omega 1 [Source:HGNC Symbol;Acc:HGNC:13312]
ENSG00000149136	SSRP1	structure specific recognition protein 1 [Source:HGNC Symbol;Acc:HGNC:11327]
ENSG00000149212	SESN3	sestrin 3 [Source:HGNC Symbol;Acc:HGNC:23060]
ENSG00000149289	ZC3H12C	zinc finger CCHH-type containing 12C [Source:HGNC Symbol;Acc:HGNC:29362]
ENSG00000149634	SPATA25	spermatogenesis associated 25 [Source:HGNC Symbol;Acc:HGNC:16158]
ENSG00000149781	FERMT3	fermitin family member 3 [Source:HGNC Symbol;Acc:HGNC:23151]
ENSG00000150681	RGS18	regulator of G protein signaling 18 [Source:HGNC Symbol;Acc:HGNC:14261]
ENSG00000151575	TEX9	testis expressed 9 [Source:HGNC Symbol;Acc:HGNC:29585]
ENSG00000151929	BAG3	BAG cochaperone 3 [Source:HGNC Symbol;Acc:HGNC:939]
ENSG00000152128	TMEM163	transmembrane protein 163 [Source:HGNC Symbol;Acc:HGNC:25380]
ENSG00000152223	EPG5	ectopic P-granules autophagy protein 5 homolog [Source:HGNC Symbol;Acc:HGNC:29331]
ENSG00000152240	HAUS1	HAUS augmin like complex subunit 1 [Source:HGNC Symbol;Acc:HGNC:25174]
ENSG00000152253	SPC25	SPC25 component of NDC80 kinetochore complex [Source:HGNC Symbol;Acc:HGNC:24031]
ENSG00000153046	CDYL	chromodomain Y like [Source:HGNC Symbol;Acc:HGNC:1811]
ENSG00000153066	TXNDC11	thioredoxin domain containing 11 [Source:HGNC Symbol;Acc:HGNC:28030]
ENSG00000153071	DAB2	DAB adaptor protein 2 [Source:HGNC Symbol;Acc:HGNC:2662]
ENSG00000153130	SCOC	short coiled-coil protein [Source:HGNC Symbol;Acc:HGNC:20335]
ENSG00000153162	BMP6	bone morphogenetic protein 6 [Source:HGNC Symbol;Acc:HGNC:1073]
ENSG00000154114	TBCEL	tubulin folding cofactor E like [Source:HGNC Symbol;Acc:HGNC:28115]
ENSG00000154122	ANKH	ANKH inorganic pyrophosphate transport regulator [Source:HGNC Symbol;Acc:HGNC:15492]
ENSG00000154479	CCDC173	coiled-coil domain containing 173 [Source:HGNC Symbol;Acc:HGNC:25064]
ENSG00000154556	SORBS2	sorbin and SH3 domain containing 2 [Source:HGNC Symbol;Acc:HGNC:24098]
ENSG00000154736	ADAMTSS	ADAM metalloproteinase with thrombospondin type 1 motif 5 [Source:HGNC Symbol;Acc:HGNC:221]
ENSG00000154803	FLCN	folliculin [Source:HGNC Symbol;Acc:HGNC:27310]
ENSG00000154839	SKA1	spindle and kinetochore associated complex subunit 1 [Source:HGNC Symbol;Acc:HGNC:28109]
ENSG00000154928	EPHB1	EPH receptor B1 [Source:HGNC Symbol;Acc:HGNC:3392]
ENSG00000155330	C16orf87	chromosome 16 open reading frame 87 [Source:HGNC Symbol;Acc:HGNC:33754]
ENSG00000155363	MOV10	Mov10 RISC complex RNA helicase [Source:HGNC Symbol;Acc:HGNC:7200]
ENSG00000155380	SLC16A1	solute carrier family 16 member 1 [Source:HGNC Symbol;Acc:HGNC:10922]
ENSG00000155893	PXYLP1	2-phosphoxylase phosphatase 1 [Source:HGNC Symbol;Acc:HGNC:26303]
ENSG00000156011	PSD3	pleckstrin and Sec7 domain containing 3 [Source:HGNC Symbol;Acc:HGNC:19093]
ENSG00000156017	CARNMT1	carnosine N-methyltransferase 1 [Source:HGNC Symbol;Acc:HGNC:23435]
ENSG00000156052	GNAQ	G protein subunit alpha q [Source:HGNC Symbol;Acc:HGNC:4390]
ENSG00000156127	BATF	basic leucine zipper ATF-like transcription factor [Source:HGNC Symbol;Acc:HGNC:958]
ENSG00000156265	MAP3K7CL	MAP3K7 C-terminal like [Source:HGNC Symbol;Acc:HGNC:16457]
ENSG00000156639	ZFAND3	zinc finger AN1-type containing 3 [Source:HGNC Symbol;Acc:HGNC:18019]
ENSG00000156795	NTAQ1	N-terminal glutamine amidase 1 [Source:HGNC Symbol;Acc:HGNC:25490]
ENSG00000157404	KIT	KIT proto-oncogene, receptor tyrosine kinase [Source:HGNC Symbol;Acc:HGNC:6342]
ENSG00000157514	TSC22D3	TSC22 domain family member 3 [Source:HGNC Symbol;Acc:HGNC:3051]
ENSG00000157703	SVOPL	SVOPL like [Source:HGNC Symbol;Acc:HGNC:27034]
ENSG00000157764	BRAF	B-Raf proto-oncogene, serine/threonine kinase [Source:HGNC Symbol;Acc:HGNC:1097]
ENSG00000157978	LDLRAP1	low density lipoprotein receptor adaptor protein 1 [Source:HGNC Symbol;Acc:HGNC:18640]
ENSG00000158113	LRRC43	leucine rich repeat containing 43 [Source:HGNC Symbol;Acc:HGNC:28562]
ENSG00000158169	FANCC	FA complementation group C [Source:HGNC Symbol;Acc:HGNC:3584]
ENSG00000158290	CUL4B	cullin 4B [Source:HGNC Symbol;Acc:HGNC:2555]
ENSG00000158480	SPATA2	spermatogenesis associated 2 [Source:HGNC Symbol;Acc:HGNC:14681]
ENSG00000158545	ZC3H18	zinc finger CCHH-type containing 18 [Source:HGNC Symbol;Acc:HGNC:25091]
ENSG00000158578	ALAS2	5-aminolevulinate synthase 2 [Source:HGNC Symbol;Acc:HGNC:397]
ENSG00000158715	SLC45A3	solute carrier family 45 member 3 [Source:HGNC Symbol;Acc:HGNC:8642]
ENSG00000158716	DUSP23	dual specificity phosphatase 23 [Source:HGNC Symbol;Acc:HGNC:21480]
ENSG00000158856	DMTN	dematin actin binding protein [Source:HGNC Symbol;Acc:HGNC:3382]
ENSG00000159069	FBXW5	F-box and WD repeat domain containing 5 [Source:HGNC Symbol;Acc:HGNC:13613]
ENSG00000159314	ARHGAP27	Rho GTPase activating protein 27 [Source:HGNC Symbol;Acc:HGNC:31813]
ENSG00000159363	ATP13A2	ATPase cation transporting 13A2 [Source:HGNC Symbol;Acc:HGNC:30213]
ENSG00000159592	GPBP1L1	GC-rich promoter binding protein 1 like 1 [Source:HGNC Symbol;Acc:HGNC:28843]
ENSG00000159761	C16orf86	chromosome 16 open reading frame 86 [Source:HGNC Symbol;Acc:HGNC:33755]
ENSG00000160145	KALRN	kallirin RhoGEF kinase [Source:HGNC Symbol;Acc:HGNC:4814]
ENSG00000160188	RSPH1	radial spoke head component 1 [Source:HGNC Symbol;Acc:HGNC:12371]
ENSG00000160208	RRP1B	ribosomal RNA processing 1B [Source:HGNC Symbol;Acc:HGNC:23818]
ENSG00000160218	TRAPPC10	trafficking protein particle complex 10 [Source:HGNC Symbol;Acc:HGNC:11868]
ENSG00000160298	C21orf58	chromosome 21 open reading frame 58 [Source:HGNC Symbol;Acc:HGNC:1300]
ENSG00000160539	PLPP7	phospholipid phosphatase 7 (inactive) [Source:HGNC Symbol;Acc:HGNC:28174]
ENSG00000160932	LY6E	lymphocyte antigen 6 family member E [Source:HGNC Symbol;Acc:HGNC:6727]
ENSG00000162063	CCNF	cyclin F [Source:HGNC Symbol;Acc:HGNC:1591]
ENSG00000162511	LAPTM5	lysosomal protein transmembrane 5 [Source:HGNC Symbol;Acc:HGNC:29612]
ENSG00000162599	NFIA	nuclear factor 1 A [Source:HGNC Symbol;Acc:HGNC:7784]
ENSG00000162616	DNAJB4	DnaJ heat shock protein family (Hsp40) member B4 [Source:HGNC Symbol;Acc:HGNC:14886]
ENSG00000162695	SLC30A7	solute carrier family 30 member 7 [Source:HGNC Symbol;Acc:HGNC:19306]
ENSG00000162722	TRIM58	tripartite motif containing 58 [Source:HGNC Symbol;Acc:HGNC:24150]
ENSG00000162929	KIAA1841	KIAA1841 [Source:HGNC Symbol;Acc:HGNC:29387]
ENSG00000163092	XIRP2	xin actin binding repeat containing 2 [Source:HGNC Symbol;Acc:HGNC:14303]
ENSG00000163155	LYSMD1	LysM domain containing 1 [Source:HGNC Symbol;Acc:HGNC:32070]
ENSG00000163349	HIPK1	homeodomain interacting protein kinase 1 [Source:HGNC Symbol;Acc:HGNC:19006]
ENSG00000163453	IGFBP7	insulin like growth factor binding protein 7 [Source:HGNC Symbol;Acc:HGNC:5476]
ENSG00000163468	CCT3	chaperonin containing TCP1 subunit 3 [Source:HGNC Symbol;Acc:HGNC:1616]

ENSG00000163602	RYBP	RING1 and YY1 binding protein [Source:HGNC Symbol;Acc:HGNC:10480]
ENSG00000163681	SLMAP	sarcolemma associated protein [Source:HGNC Symbol;Acc:HGNC:16643]
ENSG00000163736	PPBP	pro-platelet basic protein [Source:HGNC Symbol;Acc:HGNC:9240]
ENSG00000163794	UCN	urocortin [Source:HGNC Symbol;Acc:HGNC:12516]
ENSG00000163870	TPRA1	transmembrane protein adipocyte associated 1 [Source:HGNC Symbol;Acc:HGNC:30413]
ENSG00000163882	POLR2H	RNA polymerase II, I and III subunit H [Source:HGNC Symbol;Acc:HGNC:9195]
ENSG00000163964	PIGX	phosphatidylinositol glycan anchor biosynthesis class X [Source:HGNC Symbol;Acc:HGNC:26046]
ENSG00000164002	EXO5	exonuclease 5 [Source:HGNC Symbol;Acc:HGNC:26115]
ENSG00000164023	SGMS2	sphingomyelin synthase 2 [Source:HGNC Symbol;Acc:HGNC:28395]
ENSG00000164068	RNF123	ring finger protein 123 [Source:HGNC Symbol;Acc:HGNC:21148]
ENSG00000164070	HSPA4L	heat shock protein family A (Hsp70) member 4 like [Source:HGNC Symbol;Acc:HGNC:17041]
ENSG00000164074	ABHD18	abhydrolase domain containing 18 [Source:HGNC Symbol;Acc:HGNC:26111]
ENSG00000164109	MAD2L1	mitotic arrest deficient 2 like 1 [Source:HGNC Symbol;Acc:HGNC:6763]
ENSG00000164180	TMEM161B	transmembrane protein 161B [Source:HGNC Symbol;Acc:HGNC:28483]
ENSG00000164181	ELOVL7	ELOVL fatty acid elongase 7 [Source:HGNC Symbol;Acc:HGNC:26292]
ENSG00000164185	ZNF474	zinc finger protein 474 [Source:HGNC Symbol;Acc:HGNC:23245]
ENSG00000164244	PRRC1	proline rich coiled-coil 1 [Source:HGNC Symbol;Acc:HGNC:28164]
ENSG00000164610	RP9	RP9 pre-mRNA splicing factor [Source:HGNC Symbol;Acc:HGNC:10288]
ENSG00000164691	TAGAP	T cell activation RhoGTPase activating protein [Source:HGNC Symbol;Acc:HGNC:15669]
ENSG00000164808	SPIDR	scaffold protein involved in DNA repair [Source:HGNC Symbol;Acc:HGNC:28971]
ENSG00000164889	SLC4A2	solute carrier family 4 member 2 [Source:HGNC Symbol;Acc:HGNC:11028]
ENSG00000164983	TMEM65	transmembrane protein 65 [Source:HGNC Symbol;Acc:HGNC:25203]
ENSG00000165121		kinesin family member 27 (KIF27) pseudogene
ENSG00000165138	ANKS6	ankyrin repeat and sterile alpha motif domain containing 6 [Source:HGNC Symbol;Acc:HGNC:26724]
ENSG00000165185	KIAA1958	KIAA1958 [Source:HGNC Symbol;Acc:HGNC:23427]
ENSG00000165244	ZNF367	zinc finger protein 367 [Source:HGNC Symbol;Acc:HGNC:18320]
ENSG00000165282	PIGO	phosphatidylinositol glycan anchor biosynthesis class O [Source:HGNC Symbol;Acc:HGNC:23215]
ENSG00000165406	MARCHF8	membrane associated ring-CH-type finger 8 [Source:HGNC Symbol;Acc:HGNC:23356]
ENSG00000165434	PGM2L1	phosphoglucomutase 2 like 1 [Source:HGNC Symbol;Acc:HGNC:20898]
ENSG00000165476	REEP3	receptor accessory protein 3 [Source:HGNC Symbol;Acc:HGNC:23711]
ENSG00000165568	AKR1E2	aldo-keto reductase family 1 member E2 [Source:HGNC Symbol;Acc:HGNC:23437]
ENSG00000165632	TAF3	TATA-box binding protein associated factor 3 [Source:HGNC Symbol;Acc:HGNC:17303]
ENSG00000165689	ENTR1	endosome associated trafficking regulator 1 [Source:HGNC Symbol;Acc:HGNC:10667]
ENSG00000166086	JAM3	junctional adhesion molecule 3 [Source:HGNC Symbol;Acc:HGNC:15532]
ENSG00000166091	CMTM5	CKLF like MARVEL transmembrane domain containing 5 [Source:HGNC Symbol;Acc:HGNC:19176]
ENSG00000166135	HIF1AN	hypoxia inducible factor 1 subunit alpha inhibitor [Source:HGNC Symbol;Acc:HGNC:17113]
ENSG00000166147	FBN1	fibrillin 1 [Source:HGNC Symbol;Acc:HGNC:3603]
ENSG00000166169	POLL	DNA polymerase lambda [Source:HGNC Symbol;Acc:HGNC:9184]
ENSG00000166171	DPCD	deleted in primary ciliary dyskinesia homolog (mouse) [Source:HGNC Symbol;Acc:HGNC:24542]
ENSG00000166289	PLEKHF1	pleckstrin homology and FYVE domain containing 1 [Source:HGNC Symbol;Acc:HGNC:20764]
ENSG00000166348	USP54	ubiquitin specific peptidase 54 [Source:HGNC Symbol;Acc:HGNC:23513]
ENSG00000166436	TRIM66	tripartite motif containing 66 [Source:HGNC Symbol;Acc:HGNC:29005]
ENSG00000166483	WEE1	WEE1 G2 checkpoint kinase [Source:HGNC Symbol;Acc:HGNC:12761]
ENSG00000166922	SCG5	secretogranin V [Source:HGNC Symbol;Acc:HGNC:10816]
ENSG00000166963	MAP1A	microtubule associated protein 1A [Source:HGNC Symbol;Acc:HGNC:6835]
ENSG00000167034	NKX3-1	NK3 homeobox 1 [Source:HGNC Symbol;Acc:HGNC:7838]
ENSG00000167136	ENDOG	endonuclease G [Source:HGNC Symbol;Acc:HGNC:3346]
ENSG00000167377	ZNF23	zinc finger protein 23 [Source:HGNC Symbol;Acc:HGNC:13023]
ENSG00000167378	IRGQ	immunity related GTPase Q [Source:HGNC Symbol;Acc:HGNC:24868]
ENSG00000167460	TPM4	tropomyosin 4 [Source:HGNC Symbol;Acc:HGNC:12013]
ENSG00000167635	ZNF146	zinc finger protein 146 [Source:HGNC Symbol;Acc:HGNC:12931]
ENSG00000167716	WDR81	WD repeat domain 81 [Source:HGNC Symbol;Acc:HGNC:26600]
ENSG00000167740	CYB5D2	cytochrome b5 domain containing 2 [Source:HGNC Symbol;Acc:HGNC:28471]
ENSG00000167880	EVPL	envoplakin [Source:HGNC Symbol;Acc:HGNC:3503]
ENSG00000167895	TMC8	transmembrane channel like 8 [Source:HGNC Symbol;Acc:HGNC:20474]
ENSG00000167996	FTH1	ferritin heavy chain 1 [Source:HGNC Symbol;Acc:HGNC:3976]
ENSG00000168079	SCARA5	scavenger receptor class A member 5 [Source:HGNC Symbol;Acc:HGNC:28701]
ENSG00000168209	DDIT4	DNA damage inducible transcript 4 [Source:HGNC Symbol;Acc:HGNC:24944]
ENSG00000168286	THAP11	THAP domain containing 11 [Source:HGNC Symbol;Acc:HGNC:23194]
ENSG00000168300	PCMTD1	protein-L-isoaspartate (D-aspartate) O-methyltransferase domain containing 1 [Source:HGNC Symbol;Acc:HGNC:30483]
ENSG00000168306	ACOX2	acyl-CoA oxidase 2 [Source:HGNC Symbol;Acc:HGNC:120]
ENSG00000168386	FILIP1L	filamin A interacting protein 1 like [Source:HGNC Symbol;Acc:HGNC:24589]
ENSG00000168497	CAVIN2	caveolae associated protein 2 [Source:HGNC Symbol;Acc:HGNC:10690]
ENSG00000168785	TSPAN5	tetraspanin 5 [Source:HGNC Symbol;Acc:HGNC:17753]
ENSG00000168803	ADAL	adenosine deaminase like [Source:HGNC Symbol;Acc:HGNC:31853]
ENSG00000168874	ATOH8	atonal bHLH transcription factor 8 [Source:HGNC Symbol;Acc:HGNC:24126]
ENSG00000168939	SPRY3	sprouty RTK signaling antagonist 3 [Source:HGNC Symbol;Acc:HGNC:11271]
ENSG00000169519	METTL5	methyltransferase like 15 [Source:HGNC Symbol;Acc:HGNC:26606]
ENSG00000169756	LIMS1	LIM zinc finger domain containing 1 [Source:HGNC Symbol;Acc:HGNC:6616]
ENSG00000169764	UGP2	UDP-glucose pyrophosphorylase 2 [Source:HGNC Symbol;Acc:HGNC:12527]
ENSG00000169925	BRD3	bromodomain containing 3 [Source:HGNC Symbol;Acc:HGNC:1104]
ENSG00000169962	TAS1R3	taste 1 receptor member 3 [Source:HGNC Symbol;Acc:HGNC:15661]
ENSG00000169989	TIGD4	tigger transposable element derived 4 [Source:HGNC Symbol;Acc:HGNC:18335]
ENSG00000170035	UBE2E3	ubiquitin conjugating enzyme E2 E3 [Source:HGNC Symbol;Acc:HGNC:12479]
ENSG00000170293	CMTM8	CKLF like MARVEL transmembrane domain containing 8 [Source:HGNC Symbol;Acc:HGNC:19179]
ENSG00000170629	DPY19L2P2	DPY19L2 pseudogene 2 [Source:HGNC Symbol;Acc:HGNC:21764]
ENSG00000170791	CHCHD7	coiled-coil-helix-coiled-coil-helix domain containing 7 [Source:HGNC Symbol;Acc:HGNC:28314]
ENSG00000171100	MTM1	myotubularin 1 [Source:HGNC Symbol;Acc:HGNC:7448]
ENSG00000171345	KRT19	keratin 19 [Source:HGNC Symbol;Acc:HGNC:6436]
ENSG00000171451	DSEL	dermatan sulfate epimerase like [Source:HGNC Symbol;Acc:HGNC:18144]
ENSG00000171552	BCL2L1	BCL2 like 1 [Source:HGNC Symbol;Acc:HGNC:992]

ENSG00000171735	CAMTA1	calmodulin binding transcription activator 1 [Source:HGNC Symbol;Acc:HGNC:18806]
ENSG00000171843	MLLT3	MLLT3 super elongation complex subunit [Source:HGNC Symbol;Acc:HGNC:7136]
ENSG00000171914	TLN2	taln 2 [Source:HGNC Symbol;Acc:HGNC:15447]
ENSG00000171943	SRGAP2C	SLIT-ROBO Rho GTPase activating protein 2C [Source:HGNC Symbol;Acc:HGNC:30584]
ENSG00000171992	SYNPO	synaptopodin [Source:HGNC Symbol;Acc:HGNC:30672]
ENSG00000172292	CERS6	ceramide synthase 6 [Source:HGNC Symbol;Acc:HGNC:23826]
ENSG00000172409	CLP1	cleavage factor polyribonucleotide kinase subunit 1 [Source:HGNC Symbol;Acc:HGNC:16999]
ENSG00000173011	TADA2B	transcriptional adaptor 2B [Source:HGNC Symbol;Acc:HGNC:30781]
ENSG00000173542	MOB1B	MOB kinase activator 1B [Source:HGNC Symbol;Acc:HGNC:29801]
ENSG00000173548	SNX33	sorting nexin 33 [Source:HGNC Symbol;Acc:HGNC:28468]
ENSG00000173812	EIF1	eukaryotic translation initiation factor 1 [Source:HGNC Symbol;Acc:HGNC:3249]
ENSG00000173868	PHOSPHO1	phosphoethanolamine/phosphocholine phosphatase 1 [Source:HGNC Symbol;Acc:HGNC:16815]
ENSG00000173991	TCAP	titin-cap [Source:HGNC Symbol;Acc:HGNC:11610]
ENSG00000174032	SLC25A30	solute carrier family 25 member 30 [Source:HGNC Symbol;Acc:HGNC:27371]
ENSG00000174099	MSRB3	methionine sulfoxide reductase B3 [Source:HGNC Symbol;Acc:HGNC:27375]
ENSG00000174171		novel transcript, antisense to SPTBN5
ENSG00000174175	SELP	selectin P [Source:HGNC Symbol;Acc:HGNC:10721]
ENSG00000174197	MGA	MAX dimerization protein MGA [Source:HGNC Symbol;Acc:HGNC:14010]
ENSG00000174844	DNAH12	dynein axonemal heavy chain 12 [Source:HGNC Symbol;Acc:HGNC:2943]
ENSG00000175061	SNHG29	small nucleolar RNA host gene 29 [Source:HGNC Symbol;Acc:HGNC:28619]
ENSG00000175305	CCNE2	cyclin E2 [Source:HGNC Symbol;Acc:HGNC:1590]
ENSG00000175567	UCP2	uncoupling protein 2 [Source:HGNC Symbol;Acc:HGNC:12518]
ENSG00000175602	CCDC85B	coiled-coil domain containing 85B [Source:HGNC Symbol;Acc:HGNC:24926]
ENSG00000175826	CTDNBP1	CTD nuclear envelope phosphatase 1 [Source:HGNC Symbol;Acc:HGNC:19085]
ENSG00000176208	ATAD5	ATPase family AAA domain containing 5 [Source:HGNC Symbol;Acc:HGNC:25752]
ENSG00000176472	ZNF575	zinc finger protein 575 [Source:HGNC Symbol;Acc:HGNC:27606]
ENSG00000177189	RPS6KA3	ribosomal protein S6 kinase A3 [Source:HGNC Symbol;Acc:HGNC:10432]
ENSG00000178033	CALHM5	calcium homeostasis modulator family member 5 [Source:HGNC Symbol;Acc:HGNC:21568]
ENSG00000178307	TMEM11	transmembrane protein 11 [Source:HGNC Symbol;Acc:HGNC:16823]
ENSG00000178425	NT5DC1	5'-nucleotidase domain containing 1 [Source:HGNC Symbol;Acc:HGNC:21556]
ENSG00000178691	SUZ12	SUZ12 polycomb repressive complex 2 subunit [Source:HGNC Symbol;Acc:HGNC:17101]
ENSG00000178732	GP5	glycoprotein V platelet [Source:HGNC Symbol;Acc:HGNC:4443]
ENSG00000179021	C3orf38	chromosome 3 open reading frame 38 [Source:HGNC Symbol;Acc:HGNC:28384]
ENSG00000179532	DNHD1	dynein heavy chain domain 1 [Source:HGNC Symbol;Acc:HGNC:26532]
ENSG00000180185	FAHD1	fumarylacetoacetate hydrolase domain containing 1 [Source:HGNC Symbol;Acc:HGNC:14169]
ENSG00000180354	MTURN	maturin, neural progenitor differentiation regulator homolog [Source:HGNC Symbol;Acc:HGNC:25457]
ENSG00000180694	TMEM64	transmembrane protein 64 [Source:HGNC Symbol;Acc:HGNC:25441]
ENSG00000180776	ZDHHC20	zinc finger DHHC-type palmitoyltransferase 20 [Source:HGNC Symbol;Acc:HGNC:20749]
ENSG00000180855	ZNF443	zinc finger protein 443 [Source:HGNC Symbol;Acc:HGNC:20878]
ENSG00000180914	OXTR	oxytocin receptor [Source:HGNC Symbol;Acc:HGNC:8529]
ENSG00000181284	TMEM102	transmembrane protein 102 [Source:HGNC Symbol;Acc:HGNC:26722]
ENSG00000181555	SETD2	SET domain containing 2, histone lysine methyltransferase [Source:HGNC Symbol;Acc:HGNC:18420]
ENSG00000181652	ATG9B	autophagy related 9B [Source:HGNC Symbol;Acc:HGNC:21899]
ENSG00000181751	MACIR	macrophage immunometabolism regulator [Source:HGNC Symbol;Acc:HGNC:25052]
ENSG00000182093	GET1	guided entry of tail-anchored proteins factor 1 [Source:HGNC Symbol;Acc:HGNC:12790]
ENSG00000182224	CYB5D1	cytochrome b5 domain containing 1 [Source:HGNC Symbol;Acc:HGNC:26516]
ENSG00000182253	SYNM	synemin [Source:HGNC Symbol;Acc:HGNC:24466]
ENSG00000182324	KCNJ14	potassium inwardly rectifying channel subfamily J member 14 [Source:HGNC Symbol;Acc:HGNC:6260]
ENSG00000182378	PLCXD1	phosphatidylinositol specific phospholipase C X domain containing 1 [Source:HGNC Symbol;Acc:HGNC:23148]
ENSG00000182771	GRID1	glutamate ionotropic receptor delta type subunit 1 [Source:HGNC Symbol;Acc:HGNC:4575]
ENSG00000182973	CNOT10	CCR4-NOT transcription complex subunit 10 [Source:HGNC Symbol;Acc:HGNC:23817]
ENSG00000183011	NAA38	N-alpha-acetyltransferase 38, NatC auxiliary subunit [Source:HGNC Symbol;Acc:HGNC:28212]
ENSG00000183508	TENT5C	terminal nucleotidyltransferase 5C [Source:HGNC Symbol;Acc:HGNC:24712]
ENSG00000183763	TRAIIP	TRAF interacting protein [Source:HGNC Symbol;Acc:HGNC:30764]
ENSG00000183765	CHEK2	checkpoint kinase 2 [Source:HGNC Symbol;Acc:HGNC:16627]
ENSG00000183785	TUBA8	tubulin alpha 8 [Source:HGNC Symbol;Acc:HGNC:12410]
ENSG00000183850	ZNF730	zinc finger protein 730 [Source:HGNC Symbol;Acc:HGNC:32470]
ENSG00000184216	IRAK1	interleukin 1 receptor associated kinase 1 [Source:HGNC Symbol;Acc:HGNC:6112]
ENSG00000184292	TACSTD2	tumor associated calcium signal transducer 2 [Source:HGNC Symbol;Acc:HGNC:11530]
ENSG00000184575	XPOT	exportin for tRNA [Source:HGNC Symbol;Acc:HGNC:12826]
ENSG00000184743	ATL3	atlastin GTPase 3 [Source:HGNC Symbol;Acc:HGNC:24526]
ENSG00000184792	OSBP2	oxysterol binding protein 2 [Source:HGNC Symbol;Acc:HGNC:8504]
ENSG00000185164	NOMO2	NODAL modulator 2 [Source:HGNC Symbol;Acc:HGNC:22652]
ENSG00000185245	GP1BA	glycoprotein Ib platelet subunit alpha [Source:HGNC Symbol;Acc:HGNC:4439]
ENSG00000185291	IL3RA	interleukin 3 receptor subunit alpha [Source:HGNC Symbol;Acc:HGNC:6012]
ENSG00000185480	PARPBP	PARP1 binding protein [Source:HGNC Symbol;Acc:HGNC:26074]
ENSG00000185513	L3MBTL1	L3MBTL histone methyl-lysine binding protein 1 [Source:HGNC Symbol;Acc:HGNC:15905]
ENSG00000185722	ANKFY1	ankyrin repeat and FYVE domain containing 1 [Source:HGNC Symbol;Acc:HGNC:20763]
ENSG00000185955	C7orf61	chromosome 7 open reading frame 61 [Source:HGNC Symbol;Acc:HGNC:22135]
ENSG00000186187	ZNRF1	zinc and ring finger 1 [Source:HGNC Symbol;Acc:HGNC:18452]
ENSG00000186625	KATNA1	katanin catalytic subunit A1 [Source:HGNC Symbol;Acc:HGNC:6216]
ENSG00000186638	KIF24	kinesin family member 24 [Source:HGNC Symbol;Acc:HGNC:19916]
ENSG00000187172	BAGE2	BAGE family member 2 [Source:HGNC Symbol;Acc:HGNC:15723]
ENSG00000187244	BCAM	basal cell adhesion molecule (Lutheran blood group) [Source:HGNC Symbol;Acc:HGNC:6722]
ENSG00000187672	ERC2	ELKS/RAB6-interacting/CAST family member 2 [Source:HGNC Symbol;Acc:HGNC:31922]
ENSG00000187699	C2orf88	chromosome 2 open reading frame 88 [Source:HGNC Symbol;Acc:HGNC:28191]
ENSG00000187726	DNAJB13	DnaJ heat shock protein family (Hsp40) member B13 [Source:HGNC Symbol;Acc:HGNC:30718]
ENSG00000187902	SHISA7	shisa family member 7 [Source:HGNC Symbol;Acc:HGNC:35409]
ENSG00000187980	PLA2G2C	phospholipase A2 group IIC [Source:HGNC Symbol;Acc:HGNC:9032]
ENSG00000188234	AGAP4	ArfGAP with GTPase domain, ankyrin repeat and PH domain 4 [Source:HGNC Symbol;Acc:HGNC:23459]
ENSG00000188522	FAM83G	family with sequence similarity 83 member G [Source:HGNC Symbol;Acc:HGNC:32554]

ENSG00000188559	RALGAP2	Ral GTPase activating protein catalytic subunit alpha 2 [Source:HGNC Symbol;Acc:HGNC:16207]
ENSG00000189046	ALKBH2	alkB homolog 2, alpha-ketoglutarate dependent dioxygenase [Source:HGNC Symbol;Acc:HGNC:32487]
ENSG00000189180	ZNF33A	zinc finger protein 33A [Source:HGNC Symbol;Acc:HGNC:13096]
ENSG00000196091	MYBPC1	myosin binding protein C1 [Source:HGNC Symbol;Acc:HGNC:7549]
ENSG00000196182	STK40	serine/threonine kinase 40 [Source:HGNC Symbol;Acc:HGNC:21373]
ENSG00000196230	TUBB8	tubulin beta class I [Source:HGNC Symbol;Acc:HGNC:20778]
ENSG00000196369	SRGAP2B	SLIT-ROBO Rho GTPase activating protein 2B [Source:HGNC Symbol;Acc:HGNC:35237]
ENSG00000196497	IPO4	importin 4 [Source:HGNC Symbol;Acc:HGNC:19426]
ENSG00000196747	H2AC13	H2A clustered histone 13 [Source:HGNC Symbol;Acc:HGNC:4725]
ENSG00000196756	SNHG17	small nucleolar RNA host gene 17 [Source:HGNC Symbol;Acc:HGNC:48600]
ENSG00000196961	AP2A1	adaptor related protein complex 2 subunit alpha 1 [Source:HGNC Symbol;Acc:HGNC:561]
ENSG00000197111	PCBP2	poly(rC) binding protein 2 [Source:HGNC Symbol;Acc:HGNC:8648]
ENSG00000197223	C1D	C1D nuclear receptor corepressor [Source:HGNC Symbol;Acc:HGNC:29911]
ENSG00000197299	BLM	BLM RecQ like helicase [Source:HGNC Symbol;Acc:HGNC:1058]
ENSG00000197417	SHPK	sedoheptulokinase [Source:HGNC Symbol;Acc:HGNC:1492]
ENSG00000197461	PDGFA	platelet derived growth factor subunit A [Source:HGNC Symbol;Acc:HGNC:8799]
ENSG00000197776	KLHDC1	kelch domain containing 1 [Source:HGNC Symbol;Acc:HGNC:19836]
ENSG00000198108	CHSY3	chondroitin sulfate synthase 3 [Source:HGNC Symbol;Acc:HGNC:24293]
ENSG00000198171	DDRGL1	DDRGL domain containing 1 [Source:HGNC Symbol;Acc:HGNC:16110]
ENSG00000198265	HELZ	helicase with zinc finger [Source:HGNC Symbol;Acc:HGNC:16878]
ENSG00000198336	MYL4	myosin light chain 4 [Source:HGNC Symbol;Acc:HGNC:7585]
ENSG00000198478	SH3BGR12	SH3 domain binding glutamate rich protein like 2 [Source:HGNC Symbol;Acc:HGNC:15567]
ENSG00000198492	YTHDF2	YTH N6-methyladenosine RNA binding protein 2 [Source:HGNC Symbol;Acc:HGNC:31675]
ENSG00000198718	TOGARAM1	TOG array regulator of axonemal microtubules 1 [Source:HGNC Symbol;Acc:HGNC:19959]
ENSG00000198743	SLCSA3	solute carrier family 5 member 3 [Source:HGNC Symbol;Acc:HGNC:11038]
ENSG00000198805	PNP	purine nucleoside phosphorylase [Source:HGNC Symbol;Acc:HGNC:7892]
ENSG00000198876	DCAF12	DDI1 and CUL4 associated factor 12 [Source:HGNC Symbol;Acc:HGNC:19911]
ENSG00000198887	SMC5	structural maintenance of chromosomes 5 [Source:HGNC Symbol;Acc:HGNC:20465]
ENSG00000198909	MAP3K3	mitogen-activated protein kinase kinase kinase 3 [Source:HGNC Symbol;Acc:HGNC:6855]
ENSG00000198912	C1orf174	chromosome 1 open reading frame 174 [Source:HGNC Symbol;Acc:HGNC:27915]
ENSG00000198948	MFAP3L	microfibril associated protein 3 like [Source:HGNC Symbol;Acc:HGNC:29083]
ENSG00000198959	TGM2	transglutaminase 2 [Source:HGNC Symbol;Acc:HGNC:11778]
ENSG00000200913	SNORD46	small nucleolar RNA, C/D box 46 [Source:HGNC Symbol;Acc:HGNC:10186]
ENSG00000203618	GP1BB	glycoprotein Ib platelet subunit beta [Source:HGNC Symbol;Acc:HGNC:4440]
ENSG00000203705	TATDN3	TatD DNase domain containing 3 [Source:HGNC Symbol;Acc:HGNC:27010]
ENSG00000203709	MIR29B2CHG	MIR29B2 and MIR29C host gene [Source:HGNC Symbol;Acc:HGNC:32018]
ENSG00000203760	CENPW	centromere protein W [Source:HGNC Symbol;Acc:HGNC:21488]
ENSG00000203811	H3C14	H3 clustered histone 14 [Source:HGNC Symbol;Acc:HGNC:20503]
ENSG00000204131	NHSL2	NHS like 2 [Source:HGNC Symbol;Acc:HGNC:33737]
ENSG00000204217	BMPR2	bone morphogenetic protein receptor type 2 [Source:HGNC Symbol;Acc:HGNC:1078]
ENSG00000204291	COL15A1	collagen type XV alpha 1 chain [Source:HGNC Symbol;Acc:HGNC:2192]
ENSG00000204424	LY6G6F	lymphocyte antigen 6 family member G6F [Source:HGNC Symbol;Acc:HGNC:13933]
ENSG00000204610	TRIM15	tripartite motif containing 15 [Source:HGNC Symbol;Acc:HGNC:16284]
ENSG00000204851	PNMA8B	PNMA family member 8B [Source:HGNC Symbol;Acc:HGNC:29206]
ENSG00000205250	EZF4	E2F transcription factor 4 [Source:HGNC Symbol;Acc:HGNC:3118]
ENSG00000205356	TECPR1	teconin beta-propeller repeat containing 1 [Source:HGNC Symbol;Acc:HGNC:22214]
ENSG00000206560	ANKRD28	ankyrin repeat domain 28 [Source:HGNC Symbol;Acc:HGNC:29024]
ENSG00000206585	RNVU1-7	RNA, variant U1 small nuclear 7 [Source:HGNC Symbol;Acc:HGNC:37500]
ENSG00000207042	RNU6-196P	RNA, U6 small nuclear 196, pseudogene [Source:HGNC Symbol;Acc:HGNC:47159]
ENSG00000211749	TRBV23-1	T cell receptor beta variable 23-1 (non-functional) [Source:HGNC Symbol;Acc:HGNC:12201]
ENSG00000211976	IGHV3-73	immunoglobulin heavy variable 3-73 [Source:HGNC Symbol;Acc:HGNC:5623]
ENSG00000212607	SNORA3B	small nucleolar RNA, H/ACA box 3B [Source:HGNC Symbol;Acc:HGNC:32638]
ENSG00000213066	CEP43	centrosomal protein 43 [Source:HGNC Symbol;Acc:HGNC:17012]
ENSG00000213088	ACKR1	atypical chemokine receptor 1 (Duffy blood group) [Source:HGNC Symbol;Acc:HGNC:4035]
ENSG00000213090	SCYL2P1	SCYL2 pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:54685]
ENSG00000213699	SLC35F6	solute carrier family 35 member F6 [Source:HGNC Symbol;Acc:HGNC:26055]
ENSG00000213700	RPL17P50	ribosomal protein L17 pseudogene 50 [Source:HGNC Symbol;Acc:HGNC:45098]
ENSG00000214018	RRM2P3	ribonucleotide reductase M2 polypeptide pseudogene 3 [Source:HGNC Symbol;Acc:HGNC:10455]
ENSG00000214253	FIS1	fission, mitochondrial 1 [Source:HGNC Symbol;Acc:HGNC:21689]
ENSG00000214812		novel ADP-ribosylation factor family domain containing pseudogene
ENSG00000215022		novel transcript, antisense to PHACTR1
ENSG00000215030	RPL13P12	ribosomal protein L13 pseudogene 12 [Source:HGNC Symbol;Acc:HGNC:35701]
ENSG00000215251	FASTKD5	FAST kinase domains 5 [Source:HGNC Symbol;Acc:HGNC:25790]
ENSG00000216307		N(alpha)-acetyltransferase 40, NatD catalytic subunit, homolog (S. cerevisiae) (NAA40) pseudogene
ENSG00000217801		protein tyrosine phosphatase family pseudogene
ENSG00000221264	MIR1284	microRNA 1284 [Source:HGNC Symbol;Acc:HGNC:35362]
ENSG00000221571	RNU6ATAC35P	RNA, U6atac small nuclear 35, pseudogene [Source:HGNC Symbol;Acc:HGNC:46934]
ENSG00000221823	PPP3R1	protein phosphatase 3 regulatory subunit B, alpha [Source:HGNC Symbol;Acc:HGNC:9317]
ENSG00000221829	FANCG	FA complementation group G [Source:HGNC Symbol;Acc:HGNC:3588]
ENSG00000221926	TRIM16	tripartite motif containing 16 [Source:HGNC Symbol;Acc:HGNC:17241]
ENSG00000221949	LINC01465	long intergenic non-protein coding RNA 1465 [Source:HGNC Symbol;Acc:HGNC:26364]
ENSG00000222032		novel protein (LOC728009)
ENSG00000222179	RN7SKP26	RN7SK pseudogene 26 [Source:HGNC Symbol;Acc:HGNC:45750]
ENSG00000222714	RN7SKP38	RN7SK pseudogene 38 [Source:HGNC Symbol;Acc:HGNC:45762]
ENSG00000223519	KIF28P	kinesin family member 28, pseudogene [Source:HGNC Symbol;Acc:HGNC:49205]
ENSG00000223561		novel transcript
ENSG00000223704	LINC01422	long intergenic non-protein coding RNA 1422 [Source:HGNC Symbol;Acc:HGNC:50728]
ENSG00000224000		novel transcript
ENSG00000224116	INHBA-AS1	INHBA antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:40303]
ENSG00000224420	ADM5	adrenomedullin 5 (putative) [Source:HGNC Symbol;Acc:HGNC:27293]

ENSG00000224578	HNRNP1P48	heterogeneous nuclear ribonucleoprotein A1 pseudogene 48 [Source:HGNC Symbol;Acc:HGNC:48778]
ENSG00000224967		nuclear factor (erythroid-derived 2)-like 2 (NFE2L2) pseudogene
ENSG00000225067	RPL23AP2	ribosomal protein L23a pseudogene 2 [Source:HGNC Symbol;Acc:HGNC:10319]
ENSG00000225187		novel transcript
ENSG00000225528		novel protein similar to translation machinery associated 7 homolog (S. cerevisiae) TMA7
ENSG00000225611	LINC02158	long intergenic non-protein coding RNA 2158 [Source:HGNC Symbol;Acc:HGNC:53019]
ENSG00000225840		RNA, 18S ribosomal pseudogene
ENSG00000225975	LINC01534	long intergenic non-protein coding RNA 1534 [Source:HGNC Symbol;Acc:HGNC:51281]
ENSG00000226179	LINC00685	long intergenic non-protein coding RNA 685 [Source:HGNC Symbol;Acc:HGNC:27560]
ENSG00000226200	SGMS1-AS1	SGMS1 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:49683]
ENSG00000226450	CYP2D8P	cytochrome P450 family 2 subfamily D member 8, pseudogene [Source:HGNC Symbol;Acc:HGNC:2628]
ENSG00000226853		novel transcript
ENSG00000227082	LINC02798	long intergenic non-protein coding RNA 2798 [Source:HGNC Symbol;Acc:HGNC:54323]
ENSG00000227165	WDR11-AS1	WDR11 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:27437]
ENSG00000227388		novel transcript
ENSG00000227500	SCAMP4	secretory carrier membrane protein 4 [Source:HGNC Symbol;Acc:HGNC:30385]
ENSG00000228218	ATF4P3	activating transcription factor 4 pseudogene 3 [Source:HGNC Symbol;Acc:HGNC:788]
ENSG00000229093	OR51AB1P	olfactory receptor family 51 subfamily AB member 1 pseudogene [Source:HGNC Symbol;Acc:HGNC:31278]
ENSG00000229178		novel transcript
ENSG00000229798	KRT18P26	keratin 18 pseudogene 26 [Source:HGNC Symbol;Acc:HGNC:33395]
ENSG00000229820		DnaJ (Hsp40) homolog, subfamily C member 8 (DNAJC8) pseudogene
ENSG00000229898	MIR181A1HG	MIR181A1 host gene [Source:HGNC Symbol;Acc:HGNC:48659]
ENSG00000230063		novel transcript, sense intronic to PPP2R5A
ENSG00000230551		novel transcript
ENSG00000230587	LINC02580	long intergenic non-protein coding RNA 2580 [Source:HGNC Symbol;Acc:HGNC:53751]
ENSG00000231645	KRT17P6	keratin 17 pseudogene 6 [Source:HGNC Symbol;Acc:HGNC:50724]
ENSG00000231967		novel pseudogene
ENSG00000232063		novel transcript
ENSG00000232810	TNF	tumor necrosis factor [Source:HGNC Symbol;Acc:HGNC:11892]
ENSG00000232860	SMG7-AS1	SMG7 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:24518]
ENSG00000233016	SNHG7	small nucleolar RNA host gene 7 [Source:HGNC Symbol;Acc:HGNC:28254]
ENSG00000233494		pseudogene similar to part of plasminogen (PLG)
ENSG00000233524	RANP8	RAN pseudogene 8 [Source:HGNC Symbol;Acc:HGNC:39863]
ENSG00000233602	ER13-IT1	ER13 intronic transcript 1 [Source:HGNC Symbol;Acc:HGNC:41431]
ENSG00000233806	LINC01237	long intergenic non-protein coding RNA 1237 [Source:HGNC Symbol;Acc:HGNC:49793]
ENSG00000233892	PAIP1P1	poly(A) binding protein interacting protein 1 pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:18240]
ENSG00000234127	TRIM26	tripartite motif containing 26 [Source:HGNC Symbol;Acc:HGNC:12962]
ENSG00000234160		novel transcript
ENSG00000234424		kinesin family member 27 (KIF27) pseudogene
ENSG00000235111		novel transcript
ENSG00000235145	RPSAP16	ribosomal protein SA pseudogene 16 [Source:HGNC Symbol;Acc:HGNC:35478]
ENSG00000235530		novel transcript, antisense to TMEM11
ENSG00000235665	LINC00298	long intergenic non-protein coding RNA 298 [Source:HGNC Symbol;Acc:HGNC:49257]
ENSG00000235917	MTCO2P11	MT-CO2 pseudogene 11 [Source:HGNC Symbol;Acc:HGNC:52027]
ENSG00000236047	RPL13AP12	ribosomal protein L13a pseudogene 12 [Source:HGNC Symbol;Acc:HGNC:35673]
ENSG00000236204	LINC01376	long intergenic non-protein coding RNA 1376 [Source:HGNC Symbol;Acc:HGNC:50637]
ENSG00000236304		novel transcript
ENSG00000236320	SLFN14	schlafen family member 14 [Source:HGNC Symbol;Acc:HGNC:32689]
ENSG00000236829		ribosomal protein L23a (RPL23A) pseudogene
ENSG00000237273	RSL24D1P8	ribosomal L24 domain containing 1 pseudogene 8 [Source:HGNC Symbol;Acc:HGNC:37873]
ENSG00000237356		novel transcript
ENSG00000237440	ZNF737	zinc finger protein 737 [Source:HGNC Symbol;Acc:HGNC:32468]
ENSG00000239219		novel transcript, antisense to SEC62
ENSG00000239264	TXNDC5	thioredoxin domain containing 5 [Source:HGNC Symbol;Acc:HGNC:21073]
ENSG00000239839	DEFA3	defensin alpha 3 [Source:HGNC Symbol;Acc:HGNC:2762]
ENSG00000239932	RN7SL606P	RNA, 7SL, cytoplasmic 606, pseudogene [Source:HGNC Symbol;Acc:HGNC:46622]
ENSG00000240265		H1 histone family, member O, oocyte-specific (H1FOO) pseudogene
ENSG00000240929		
ENSG00000241175	RN7SL494P	RNA, 7SL, cytoplasmic 494, pseudogene [Source:HGNC Symbol;Acc:HGNC:46510]
ENSG00000241527	CA15P1	CA15 pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:44364]
ENSG00000241666		novel transcript
ENSG00000241889		dullard homolog (Xenopus laevis) (DULLARD) pseudogene
ENSG00000241945	PWP2	PWP2 small subunit processome component [Source:HGNC Symbol;Acc:HGNC:9711]
ENSG00000242220	TCP10L	t-complex 10 like [Source:HGNC Symbol;Acc:HGNC:11657]
ENSG00000242265	PEG10	paternally expressed 10 [Source:HGNC Symbol;Acc:HGNC:14005]
ENSG00000242539		novel transcript
ENSG00000242622		novel transcript
ENSG00000242856	VN1R105P	vomeroneasal 1 receptor 105 pseudogene [Source:HGNC Symbol;Acc:HGNC:37428]
ENSG00000243064	ABCC13	ATP binding cassette subfamily C member 13 (pseudogene) [Source:HGNC Symbol;Acc:HGNC:16022]
ENSG00000243156	MICAL3	microtubule associated monoxygenase, calponin and LIM domain containing 3 [Source:HGNC Symbol;Acc:HGNC:24694]
ENSG00000243290	IGKV1-12	immunoglobulin kappa variable 1-12 [Source:HGNC Symbol;Acc:HGNC:5730]
ENSG00000243508	DNAJB6P7	DNAJB6 pseudogene 7 [Source:HGNC Symbol;Acc:HGNC:54760]
ENSG00000243708	PLA2G4B	phospholipase A2 group IVB [Source:HGNC Symbol;Acc:HGNC:9036]
ENSG00000243960		novel transcript
ENSG00000244005		
ENSG00000245552	NFS1	NFS1 cysteine desulfurase [Source:HGNC Symbol;Acc:HGNC:15910]
ENSG00000246363		novel transcript, antisense to SESN3
ENSG00000246560	LINC02458	long intergenic non-protein coding RNA 2458 [Source:HGNC Symbol;Acc:HGNC:53394]
ENSG00000246922	UBE2D3-AS1	UBE2D3 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:54095]
ENSG00000247363	UBAP1L	ubiquitin associated protein 1 like [Source:HGNC Symbol;Acc:HGNC:40028]
ENSG00000248015		novel transcript
		novel transcript, antisense to NDUFS7

ENSG00000248265	FLJ12825	uncharacterized LOC440101 [Source:NCBI gene (formerly Entrezgene);Acc:440101]
ENSG00000248643	RBM14-RBM4	RBM14-RBM4 readthrough [Source:HGNC Symbol;Acc:HGNC:38840]
ENSG00000248746	ACTN3	actinin alpha 3 [Source:HGNC Symbol;Acc:HGNC:165]
ENSG00000248871	TNFSF12-TNFSF13	TNFSF12-TNFSF13 readthrough [Source:HGNC Symbol;Acc:HGNC:33537]
ENSG00000249307	LINC01088	long intergenic non-protein coding RNA 1088 [Source:HGNC Symbol;Acc:HGNC:49148]
ENSG00000249456		novel transcript, sense overlapping ZRANB1
ENSG00000249684		novel transcript, antisense to PROP1
ENSG00000249855	EEF1A1P19	eukaryotic translation elongation factor 1 alpha 1 pseudogene 19 [Source:HGNC Symbol;Acc:HGNC:37892]
ENSG00000249863		synaptotagmin binding, cytoplasmic RNA interacting protein (SYNCRIP) pseudogene
ENSG00000249961	TERB1	telomere repeat binding bouquet formation protein 1 [Source:HGNC Symbol;Acc:HGNC:26675]
ENSG00000250303	LINC02762	long intergenic non-protein coding RNA 2762 [Source:HGNC Symbol;Acc:HGNC:27443]
ENSG00000250574		sulfiredoxin 1 homolog (S. cerevisiae) (SRXN1) pseudogene
ENSG00000250765	SEPTIN14P5	septin 14 pseudogene 5 [Source:HGNC Symbol;Acc:HGNC:51689]
ENSG00000250771		tol-like receptor 2 pseudogene
ENSG00000250878	METTL21EP	methyltransferase like 21E, pseudogene [Source:HGNC Symbol;Acc:HGNC:41948]
ENSG00000251411		actin related protein 2/3 complex, subunit 1A, 41kDa (ARPC1A) pseudogene
ENSG00000251580	LINC02482	long intergenic non-protein coding RNA 2482 [Source:HGNC Symbol;Acc:HGNC:53458]
ENSG00000251623	FAM153B	family with sequence similarity 153 member B [Source:NCBI gene (formerly Entrezgene);Acc:202134]
ENSG00000251682		DEAD (Asp-Glu-Ala-Asp) box polypeptide 25 (DDX25) pseudogene
ENSG00000253409	TRBV7-4	T cell receptor beta variable 7-4 [Source:HGNC Symbol;Acc:HGNC:12238]
ENSG00000253982		novel transcript
ENSG00000254061		RNA binding motif protein 4 (RBM4) pseudogene
ENSG00000254450	ALG9-IT1	ALG9 intronic transcript 1 [Source:HGNC Symbol;Acc:HGNC:41409]
ENSG00000254512	PHBP2	prohibitin pseudogene 2 [Source:HGNC Symbol;Acc:HGNC:8914]
ENSG00000254673		novel protein
ENSG00000254718		novel transcript, antisense to PPM1A
ENSG00000254726	MEX3A	mex-3 RNA binding family member A [Source:HGNC Symbol;Acc:HGNC:33482]
ENSG00000254788	CKLF-CMTM1	CKLF-CMTM1 readthrough [Source:HGNC Symbol;Acc:HGNC:39977]
ENSG00000254986	DPP3	dipeptidyl peptidase 3 [Source:HGNC Symbol;Acc:HGNC:3008]
ENSG00000255397	NASPP1	nuclear autoantigenic sperm protein pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:29910]
ENSG00000255526	NEDD8-MDP1	NEDD8-MDP1 readthrough [Source:HGNC Symbol;Acc:HGNC:39551]
ENSG00000255655		novel transcript, antisense to MYO1H
ENSG00000256229	ZNF486	zinc finger protein 486 [Source:HGNC Symbol;Acc:HGNC:20807]
ENSG00000256235	SMIM3	small integral membrane protein 3 [Source:HGNC Symbol;Acc:HGNC:30248]
ENSG00000256347	OR8R1P	olfactory receptor family 8 subfamily R member 1 pseudogene [Source:HGNC Symbol;Acc:HGNC:15318]
ENSG00000256533		CCR4 carbon catabolite repression 4-like (S. cerevisiae) (CCR4L) pseudogene
ENSG00000257176		novel transcript, antisense to FAR2
ENSG00000257225		novel transcript, antisense to PRICKLE1
ENSG00000257315	ZBED6	zinc finger BED-type containing 6 [Source:HGNC Symbol;Acc:HGNC:33273]
ENSG00000257954		FGFR1 oncogene partner 2 (FGFR1OP2) pseudogene
ENSG00000258458		novel transcript, antisense to OXA1L
ENSG00000258484	SPESP1	sperm equatorial segment protein 1 [Source:HGNC Symbol;Acc:HGNC:15570]
ENSG00000258650	HSBP1P1	heat shock factor binding protein 1 pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:20053]
ENSG00000258796		ribosomal L24 domain containing 1 (RSL24D1) pseudogene
ENSG00000258819	LINC02289	long intergenic non-protein coding RNA 2289 [Source:HGNC Symbol;Acc:HGNC:53205]
ENSG00000258891		novel transcript, antisense to ZNF410
ENSG00000259207	ITGB3	integrin subunit beta 3 [Source:HGNC Symbol;Acc:HGNC:6156]
ENSG00000259291	ZNF710-AS1	ZNF710, antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:53141]
ENSG00000259522		novel protein
ENSG00000259630	FABP5P9	fatty acid binding protein 5 pseudogene 9 [Source:HGNC Symbol;Acc:HGNC:31064]
ENSG00000260032	NORAD	non-coding RNA activated by DNA damage [Source:HGNC Symbol;Acc:HGNC:44311]
ENSG00000260105	AOC4P	amine oxidase copper containing 4, pseudogene [Source:HGNC Symbol;Acc:HGNC:48869]
ENSG00000260244		novel transcript, overlapping GUCY1A3
ENSG00000260273		novel transcript, antisense to CD164
ENSG00000260331		novel transcript
ENSG00000260448	LCMT1-AS1	LCMT1 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:51177]
ENSG00000260490	MYL12BP1	MYL12B pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:51649]
ENSG00000260693		novel transcript
ENSG00000260711		novel transcript, intronic to CATSPERB
ENSG00000260852	FBXL19-AS1	FBXL19 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:27557]
ENSG00000260859		novel transcript, sense intronic to CRISPLD2
ENSG00000260948		novel transcript, sense overlapping WDR77 & OVGP1
ENSG00000261060		novel transcript, sense overlapping TDRD5
ENSG00000261279	ULK4P1	ULK4 pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:15775]
ENSG00000261474		novel transcript
ENSG00000261758	STAG1-DT	STAG1 divergent transcript [Source:HGNC Symbol;Acc:HGNC:55350]
ENSG00000261914	RPL23AP84	ribosomal protein L23a pseudogene 84 [Source:HGNC Symbol;Acc:HGNC:51575]
ENSG00000262187		centrosomal protein 192 (CEP192) pseudogene
ENSG00000263272		novel transcript, antisense to RPAIN
ENSG00000263335		novel transcript, antisense to MYH11
ENSG00000263724	DLGAP1-AS3	DLGAP1 antisense RNA 3 [Source:HGNC Symbol;Acc:HGNC:27317]
ENSG00000263917		novel transcript
ENSG00000265442	MIR3941	microRNA 3941 [Source:HGNC Symbol;Acc:HGNC:38949]
ENSG00000265787	CYP4F35P	cytochrome P450 family 4 subfamily F member 35, pseudogene [Source:HGNC Symbol;Acc:HGNC:39954]
ENSG00000265972	TXNIP	thioredoxin interacting protein [Source:HGNC Symbol;Acc:HGNC:16952]
ENSG00000266127	ZNF415P1	zinc finger protein 415 pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:49869]
ENSG00000266274	RN7SL138P	RNA, 7SL, cytoplasmic 138, pseudogene [Source:HGNC Symbol;Acc:HGNC:46154]
ENSG00000266718		novel transcript, antisense MYO1D
ENSG00000266733	TBC1D29P	TBC1 domain family member 29, pseudogene [Source:HGNC Symbol;Acc:HGNC:24509]
ENSG00000266876		syntaxin 18 (STX18) pseudogene

ENSG00000266907		glycerol-3-phosphate dehydrogenase 2 (mitochondrial), pseudogene
ENSG00000266946	MRPL37P1	mitochondrial ribosomal protein L37 pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:31003]
ENSG00000266962	HSD17B1-AS1	HSD17B1 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:55314]
ENSG00000266992	DHX40P1	DEAH-box helicase 40 pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:20687]
ENSG00000267022		novel protein
ENSG00000267064	UXT-AS1	UXT antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:49239]
ENSG00000267160		novel transcript, antisense to C17orf104
ENSG00000267228		novel transcript
ENSG00000267243		novel transcript
ENSG00000267293		U3 small nucleolar RNA-associated protein 18 homolog, pseudogene
ENSG00000267337	LINC01478	long intergenic non-protein coding RNA 1478 [Source:HGNC Symbol;Acc:HGNC:51121]
ENSG00000267376	ATP5MGF6	ATP synthase membrane subunit g pseudogene 6 [Source:HGNC Symbol;Acc:HGNC:38168]
ENSG00000267640		novel zinc finger protein pseudogene
ENSG00000267745		novel transcript
ENSG00000268516	ZNF8-DT	ZNF8 divergent transcript [Source:HGNC Symbol;Acc:HGNC:55280]
ENSG00000269038	SF1-DT	SF1 divergent transcript [Source:HGNC Symbol;Acc:HGNC:55278]
ENSG00000269711		novel protein
ENSG00000269743	SLC25A53	solute carrier family 25 member 53 [Source:HGNC Symbol;Acc:HGNC:31894]
ENSG00000269952		novel transcript, sense intronic to CREM
ENSG00000269970		novel transcript, sense intronic to PTGS1
ENSG00000269973		novel transcript
ENSG00000270074		novel transcript
ENSG00000270118		novel transcript
ENSG00000270179		novel transcript
ENSG00000271327		novel transcript
ENSG00000271452		novel transcript, sense intronic to MRPL19
ENSG00000271582		EIF2A eukaryotic translation initiation factor 2A, 65kDa, pseudogene
ENSG00000271601	LIX1L	limb and CNS expressed 1 like [Source:HGNC Symbol;Acc:HGNC:28715]
ENSG00000271853		novel transcript
ENSG00000271964		novel transcript, antisense to RFTN1
ENSG00000272256		novel transcript, antisense to TMEM66
ENSG00000272370		novel transcript
ENSG00000272498		novel transcript, antisense to RFTN1
ENSG00000272918		novel transcript, antisense to MLL5
ENSG00000272989	LINC02012	long intergenic non-protein coding RNA 2012 [Source:HGNC Symbol;Acc:HGNC:52847]
ENSG00000273184		novel transcript, readthrough between HILPDA-METTL2B
ENSG00000273302		novel transcript
ENSG00000273464		novel transcript, antisense to GRIK1
ENSG00000273599		novel transcript, antisense to CTBP2
ENSG00000273703	H2BC14	H2B clustered histone 14 [Source:HGNC Symbol;Acc:HGNC:4750]
ENSG00000273983	H3C8	H3 clustered histone 8 [Source:HGNC Symbol;Acc:HGNC:4772]
ENSG00000274259	SYNGAP1-AS1	SYNGAP1 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:53831]
ENSG00000274512	TBC1D3L	TBC1 domain family member 3L [Source:HGNC Symbol;Acc:HGNC:51246]
ENSG00000274808	TBC1D3B	TBC1 domain family member 3B [Source:HGNC Symbol;Acc:HGNC:27011]
ENSG00000274978	RNU11	RNA, U11 small nuclear [Source:HGNC Symbol;Acc:HGNC:10108]
ENSG00000275158	TRBV12-5	T cell receptor beta variable 12-5 [Source:HGNC Symbol;Acc:HGNC:12187]
ENSG00000275445		novel transcript, antisense to C16orf52
ENSG00000275993	SIK1B	salt inducible kinase 1B (putative) [Source:HGNC Symbol;Acc:HGNC:52389]
ENSG00000276043	UHRF1	ubiquitin like with PHD and ring finger domains 1 [Source:HGNC Symbol;Acc:HGNC:12556]
ENSG00000276345		
ENSG00000276952		novel transcript, antisense to PYGB
ENSG00000277481	PKD1L3	polycystin 1 like 3, transient receptor potential channel interacting [Source:HGNC Symbol;Acc:HGNC:21716]
ENSG00000277662		novel transcript, sense intronic to MTRF1
ENSG00000277726		
ENSG00000278090	LUNAR1	leukemia-associated non-coding IGF1R activator RNA 1 [Source:HGNC Symbol;Acc:HGNC:51199]
ENSG00000278112		novel transcript, sense intronic to RILPL1
ENSG00000278139	P3R3URF-PIK3R2	P3R3URF-PIK3R2 readthrough [Source:HGNC Symbol;Acc:HGNC:54999]
ENSG00000278318	ZNF229	zinc finger protein 229 [Source:HGNC Symbol;Acc:HGNC:13022]
ENSG00000278637	H4C1	H4 clustered histone 1 [Source:HGNC Symbol;Acc:HGNC:4781]
ENSG00000278765		novel transcript
ENSG00000278867		TEC
ENSG00000278950		novel transcript
ENSG00000279106		TEC
ENSG00000279204		TEC
ENSG00000279227		TEC
ENSG00000279333		novel transcript
ENSG00000279457	WASH9P	WAS protein family homolog 9, pseudogene [Source:HGNC Symbol;Acc:HGNC:53981]
ENSG00000279673		TEC
ENSG00000279803		TEC
ENSG00000279970		TEC
ENSG00000280047		TEC
ENSG00000280135		TEC
ENSG00000280164		novel transcript
ENSG00000280166		TEC
ENSG00000280195		novel transcript, antisense to RPL10
ENSG00000280206		novel transcript
ENSG00000280278	FLJ30679	uncharacterized protein FLJ30679 [Source:NCBI gene (formerly Entrezgene);Acc:146512]
ENSG00000280347		TEC
ENSG00000280353		TEC
ENSG00000280798	LINC00294	long intergenic non-protein coding RNA 294 [Source:HGNC Symbol;Acc:HGNC:27456]
ENSG00000280800		novel transcript, similar to YY1 associated myogenesis RNA 1 YAM1

ENSG00000281383		novel transcript, similar to YY1 associated myogenesis RNA 1 YAM1			
ENSG00000281852	LINC00891	long intergenic non-protein coding RNA 891 [Source:HGNC Symbol;Acc:HGNC:48577]			
ENSG00000281991	TMEM265	transmembrane protein 265 [Source:HGNC Symbol;Acc:HGNC:51241]			
ENSG00000283052	LINC02456	long intergenic non-protein coding RNA 2456 [Source:HGNC Symbol;Acc:HGNC:53389]			
ENSG00000284823		novel transcript, antisense to CDYL			
ENSG00000284999		novel transcript			
ENSG00000285130		novel protein			
ENSG00000285382		novel protein			
ENSG00000285557		novel transcript			
ENSG00000285650		Novel transcript, antisense to CENPP			
ENSG00000285710		novel transcript, antisense to DDX19A			
ENSG00000285884		novel transcript			
ENSG00000285953		novel protein			
Positively correlated with H1-2					
ensembl_gene_id	gene_name	description	rho	p	adjusted-p
ENSG00000169733	RFNG	RFNG O-fucosylpeptide 3-beta-N-acetylglucosaminyltransferase [Source:HGNC Symbol;Acc:HGNC:9974]	0.94427	3.9E-09	3.1E-05
ENSG00000108932	SLC16A6	solute carrier family 16 member 6 [Source:HGNC Symbol;Acc:HGNC:10927]	0.93601	1.2E-08	6.9E-05
ENSG00000245556	SCAMP1-AS1	SCAMP1 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:50544]	0.93189	1.9E-08	7.4E-05
ENSG00000223547	ZNF844	zinc finger protein 844 [Source:HGNC Symbol;Acc:HGNC:25932]	0.92157	5.6E-08	0.00015
ENSG00000150787	PTS	6-pyruvoyltetrahydropterin synthase [Source:HGNC Symbol;Acc:HGNC:9689]	0.91744	8.4E-08	0.0002
ENSG00000179304	FAM156B	family with sequence similarity 156 member B [Source:HGNC Symbol;Acc:HGNC:31962]	0.91331	1.2E-07	0.00024
ENSG00000277610	RNVU1-4	RNA, variant U1 small nuclear 4 [Source:HGNC Symbol;Acc:HGNC:48312]	0.90506	2.5E-07	0.00045
ENSG00000261654		novel transcript, sense overlapping C1orf103	0.90299	2.9E-07	0.00049
ENSG00000211778	TRAV4	T cell receptor alpha variable 4 [Source:HGNC Symbol;Acc:HGNC:12140]	0.89886	4E-07	0.00059
ENSG00000163875	MEAF6	MYST/Esa1 associated factor 6 [Source:HGNC Symbol;Acc:HGNC:25674]	0.89474	5.4E-07	0.00062
ENSG00000171570	RAB4B-EGLN2	RAB4B-EGLN2 readthrough (NMD candidate) [Source:HGNC Symbol;Acc:HGNC:44465]	0.89267	6.3E-07	0.00062
ENSG00000076924	XAB2	XPA binding protein 2 [Source:HGNC Symbol;Acc:HGNC:14089]	0.88854	8.4E-07	0.00077
ENSG00000176714	CCDC121	coiled-coil domain containing 121 [Source:HGNC Symbol;Acc:HGNC:25833]	0.88648	9.7E-07	0.00079
ENSG00000131845	ZNF304	zinc finger protein 304 [Source:HGNC Symbol;Acc:HGNC:13505]	0.87203	2.4E-06	0.00143
ENSG00000113369	ARRDC3	arrestin domain containing 3 [Source:HGNC Symbol;Acc:HGNC:29263]	0.86791	3.1E-06	0.00165
ENSG00000035687	ADSS2	adenylosuccinate synthase 2 [Source:HGNC Symbol;Acc:HGNC:292]	0.86584	3.4E-06	0.0017
ENSG00000139651	ZNF740	zinc finger protein 740 [Source:HGNC Symbol;Acc:HGNC:27465]	0.86584	3.4E-06	0.0017
ENSG00000185798	WDR53	WD repeat domain 53 [Source:HGNC Symbol;Acc:HGNC:28786]	0.86171	4.3E-06	0.00201
ENSG00000260339	HEXA-AS1	HEXA antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:25810]	0.85965	4.8E-06	0.00209
ENSG00000178498	DTX3	deltex E3 ubiquitin ligase 3 [Source:HGNC Symbol;Acc:HGNC:24457]	0.85759	5.4E-06	0.00221
ENSG00000182185	RAD51B	RAD51, paralog B [Source:HGNC Symbol;Acc:HGNC:9822]	0.85552	6E-06	0.00234
ENSG00000258733	LINC02328	long intergenic non-protein coding RNA 2328 [Source:HGNC Symbol;Acc:HGNC:53248]	0.85552	6E-06	0.00234
ENSG00000273284		novel transcript, sense intronic to ANKRD12	0.85346	6.7E-06	0.00252
chr10 + 19528070 19776376			0.84933	8.2E-06	0.00283
chr6 + 26155505 26251614			0.84933	8.2E-06	0.00283
ENSG00000139835	GRTP1	growth hormone regulated TBC protein 1 [Source:HGNC Symbol;Acc:HGNC:20310]	0.84933	8.2E-06	0.00283
ENSG00000225921	NOL7	nucleolar protein 7 [Source:HGNC Symbol;Acc:HGNC:21040]	0.84933	8.2E-06	0.00283
ENSG00000277687		novel transcript, sense intronic to CACUL1	0.84727	9.1E-06	0.00305
ENSG00000105136	ZNF419	zinc finger protein 419 [Source:HGNC Symbol;Acc:HGNC:20648]	0.84314	1.1E-05	0.00348
ENSG00000183439	TRIM61	tripartite motif containing 61 [Source:HGNC Symbol;Acc:HGNC:24339]	0.84314	1.1E-05	0.00348
ENSG00000227354	RBM26-AS1	RBM26 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:39805]	0.84107	1.2E-05	0.00372
ENSG00000266922		novel transcript, sense intronic to ZNF823	0.84048	1.3E-05	0.00372
chr6 + 3321.7496 33270774			0.83901	1.4E-05	0.00372
ENSG00000198198	SZT2	SZT2 subunit of KICSTOR complex [Source:HGNC Symbol;Acc:HGNC:29040]	0.83901	1.4E-05	0.00372
ENSG00000273008	CSGALNACT2-DT	CSGALNACT2 divergent transcript [Source:HGNC Symbol;Acc:HGNC:55174]	0.83901	1.4E-05	0.00372
ENSG00000228789	HCG22	HLA complex group 22 (gene/pseudogene) [Source:HGNC Symbol;Acc:HGNC:27780]	0.83882	1.4E-05	0.00372
ENSG00000161010	MRNIP	MRN complex interacting protein [Source:HGNC Symbol;Acc:HGNC:30817]	0.83695	1.5E-05	0.00384
ENSG00000255874	PRECSIT	p53 regulated carcinoma associated Stat3 activating long intergenic non-protein coding transcript [Source:HGNC Symbol;Acc:HGNC:27492]	0.83695	1.5E-05	0.00384
ENSG00000256660	CLEC12B	C-type lectin domain family 12 member B [Source:HGNC Symbol;Acc:HGNC:31966]	0.83695	1.5E-05	0.00384
ENSG00000158006	PAFAH2	platelet activating factor acetylhydrolase 2 [Source:HGNC Symbol;Acc:HGNC:8579]	0.83488	1.6E-05	0.004
ENSG00000203876	ADD3-AS1	ADD3 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:48682]	0.83488	1.6E-05	0.004
ENSG00000075035	WSCD2	WSC domain containing 2 [Source:HGNC Symbol;Acc:HGNC:29117]	0.83221	1.8E-05	0.00433
ENSG00000127412	TRPV5	transient receptor potential cation channel subfamily V member 5 [Source:HGNC Symbol;Acc:HGNC:3145]	0.83075	2E-05	0.00444
ENSG00000134186	PRPF38B	pre-mRNA processing factor 38B [Source:HGNC Symbol;Acc:HGNC:25512]	0.83075	2E-05	0.00444
ENSG00000274922		novel transcript	0.83075	2E-05	0.00444
ENSG00000196653	ZNF502	zinc finger protein 502 [Source:HGNC Symbol;Acc:HGNC:23718]	0.82869	2.1E-05	0.00459
ENSG00000261242		novel transcript, antisense to PPP2R5E	0.82869	2.1E-05	0.00459
ENSG00000261359	PYCARD-AS1	PYCARD antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:45036]	0.82663	2.3E-05	0.00489
ENSG00000283930	PLD5P1	PLD5 pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:55072]	0.82663	2.3E-05	0.00489
chr10 + 94386918 94449856			0.8225	2.8E-05	0.00535
chrX + 97828579 97894019			0.8225	2.8E-05	0.00535
ENSG00000283236		novel zinc finger protein pseudogene	0.82043	3E-05	0.00565
chr3 + 45568133 45637894			0.81837	3.3E-05	0.00578
ENSG00000104976	SNAPC2	small nuclear RNA activating complex polypeptide 2 [Source:HGNC Symbol;Acc:HGNC:11135]	0.81837	3.3E-05	0.00578
ENSG00000140876	NUDT7	nudix hydrolase 7 [Source:HGNC Symbol;Acc:HGNC:8054]	0.81837	3.3E-05	0.00578
ENSG00000224609	FGGY-DT	FGGY divergent transcript [Source:HGNC Symbol;Acc:HGNC:55265]	0.81837	3.3E-05	0.00578
ENSG00000227799	CDPF1P1	CDPF1 pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:54763]	0.81837	3.3E-05	0.00578
ENSG00000178700	DHFR2	dihydrofolate reductase 2 [Source:HGNC Symbol;Acc:HGNC:27309]	0.81631	3.6E-05	0.0059
ENSG00000198298	ZNF485	zinc finger protein 485 [Source:HGNC Symbol;Acc:HGNC:23440]	0.81631	3.6E-05	0.0059
ENSG00000151715	TMEM45B	transmembrane protein 45B [Source:HGNC Symbol;Acc:HGNC:25194]	0.81424	3.9E-05	0.00632
chr6 + 135399683 135502452			0.81218	4.2E-05	0.00654
ENSG00000156253	RWDD2B	RWD domain containing 2B [Source:HGNC Symbol;Acc:HGNC:1302]	0.81218	4.2E-05	0.00654
ENSG00000156256	USP16	ubiquitin specific peptidase 16 [Source:HGNC Symbol;Acc:HGNC:12614]	0.81218	4.2E-05	0.00654

ENSG00000163683	SMIM14	small integral membrane protein 14 [Source:HGNC Symbol;Acc:HGNC:27321]	0.81218	4.2E-05	0.00654
ENSG00000260803		novel transcript	0.81218	4.2E-05	0.00654
chr13 [111373422 111425791			0.81011	4.6E-05	0.00674
ENSG00000119333	DYNC2I2	dynein 2 intermediate chain 2 [Source:HGNC Symbol;Acc:HGNC:28296]	0.81011	4.6E-05	0.00674
ENSG00000153187	HNRNPU	heterogeneous nuclear ribonucleoprotein U [Source:HGNC Symbol;Acc:HGNC:5048]	0.81011	4.6E-05	0.00674
ENSG00000180425	C11orf71	chromosome 11 open reading frame 71 [Source:HGNC Symbol;Acc:HGNC:25937]	0.81011	4.6E-05	0.00674
ENSG00000227543	SPAG5-AS1	SPAG5 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:41140]	0.81011	4.6E-05	0.00674
ENSG00000285171		novel protein, IL2RG-CXorf65 readthrough	0.81011	4.6E-05	0.00674
ENSG00000182405	PGBD4	piggyBac transposable element derived 4 [Source:HGNC Symbol;Acc:HGNC:19401]	0.80805	5E-05	0.007
ENSG00000213563	C8orf82	chromosome 8 open reading frame 82 [Source:HGNC Symbol;Acc:HGNC:33826]	0.80805	5E-05	0.007
ENSG00000258561		novel transcript	0.80805	5E-05	0.007
ENSG00000204396	VWA7	von Willebrand factor A domain containing 7 [Source:HGNC Symbol;Acc:HGNC:13939]	0.80603	5.4E-05	0.00731
ENSG00000182240	BACE2	beta-secretase 2 [Source:HGNC Symbol;Acc:HGNC:934]	0.80599	5.4E-05	0.00731
ENSG00000268201		novel transcript, sense intronic to ZNF544	0.80599	5.4E-05	0.00731
ENSG000000092140	G2E3	G2/M-phase specific E3 ubiquitin protein ligase [Source:HGNC Symbol;Acc:HGNC:20338]	0.80392	5.8E-05	0.00764
ENSG00000171763	SPATA5L1	spermatogenesis associated 5 like 1 [Source:HGNC Symbol;Acc:HGNC:28762]	0.80392	5.8E-05	0.00764
ENSG00000267576		novel transcript, sense intronic to TSPAN16	0.80392	5.8E-05	0.00764
ENSG00000283597	FAM169B	family with sequence similarity 169 member B [Source:HGNC Symbol;Acc:HGNC:26835]	0.80392	5.8E-05	0.00764
chr12 [73837472 74520734			0.80186	6.3E-05	0.00798
chr6 [70514778 70576433			0.80186	6.3E-05	0.00798
ENSG00000275765		novel transcript	0.80186	6.3E-05	0.00798
ENSG00000182814	FUNDC2P2	FUN14 domain containing 2 pseudogene 2 [Source:HGNC Symbol;Acc:HGNC:17247]	0.80035	6.6E-05	0.00834
ENSG00000163728	TTC14	tetratricopeptide repeat domain 14 [Source:HGNC Symbol;Acc:HGNC:24697]	0.79979	6.8E-05	0.00834
ENSG00000234444	ZNF736	zinc finger protein 736 [Source:HGNC Symbol;Acc:HGNC:32467]	0.79979	6.8E-05	0.00834
ENSG00000121716	PILRB	paired immunoglobulin like type 2 receptor beta [Source:HGNC Symbol;Acc:HGNC:18297]	0.79773	7.3E-05	0.00877
ENSG00000165516	KLHDC2	kelch domain containing 2 [Source:HGNC Symbol;Acc:HGNC:20231]	0.79773	7.3E-05	0.00877
ENSG00000248487	ABHD14A	abhydrolase domain containing 14A [Source:HGNC Symbol;Acc:HGNC:24538]	0.79773	7.3E-05	0.00877
chr1 [194802386 195020897			0.79567	7.9E-05	0.00912
ENSG00000023445	BIRC3	baculoviral IAP repeat containing 3 [Source:HGNC Symbol;Acc:HGNC:591]	0.79567	7.9E-05	0.00912
ENSG00000112282	MED23	mediator complex subunit 23 [Source:HGNC Symbol;Acc:HGNC:2372]	0.79567	7.9E-05	0.00912
ENSG00000273203		novel transcript	0.79567	7.9E-05	0.00912
ENSG00000277734	TRAC	T cell receptor alpha constant [Source:HGNC Symbol;Acc:HGNC:12029]	0.79567	7.9E-05	0.00912
chr3 [40665056 40725353			0.7936	8.5E-05	0.00954
ENSG00000101412	E2F1	E2F transcription factor 1 [Source:HGNC Symbol;Acc:HGNC:3113]	0.7936	8.5E-05	0.00954
ENSG00000198408	OGA	O-GlcNAcase [Source:HGNC Symbol;Acc:HGNC:7056]	0.7936	8.5E-05	0.00954
ENSG00000102977	ACD	ACD shelterin complex subunit and telomerase recruitment factor [Source:HGNC Symbol;Acc:HGNC:25070]	0.79154	9.1E-05	0.00997
ENSG00000105383	CD33	CD33 molecule [Source:HGNC Symbol;Acc:HGNC:1659]	0.79154	9.1E-05	0.00997
ENSG00000165675	ENOX2	ecto-NOX disulfide-thiol exchanger 2 [Source:HGNC Symbol;Acc:HGNC:2259]	0.79154	9.1E-05	0.00997
ENSG00000250568		poly(A) binding protein, cytoplasmic 1 (PABPC1) pseudogene	0.79154	9.1E-05	0.00997
ENSG00000171747	LGALS4	galectin 4 [Source:HGNC Symbol;Acc:HGNC:6565]	0.78947	9.8E-05	0.01049
ENSG00000237953	RPS13P5	ribosomal protein S13 pseudogene 5 [Source:HGNC Symbol;Acc:HGNC:36610]	0.78947	9.8E-05	0.01049
chr3 [16656009 16739392			0.78741	0.00011	0.0109
chr5 [140624833 140710214			0.78741	0.00011	0.0109
ENSG00000198642	KLHL9	kelch like family member 9 [Source:HGNC Symbol;Acc:HGNC:18732]	0.78741	0.00011	0.0109
ENSG00000241978			0.78741	0.00011	0.0109
ENSG00000279765		novel protein	0.78741	0.00011	0.0109
ENSG00000106100	NOD1	nucleotide binding oligomerization domain containing 1 [Source:HGNC Symbol;Acc:HGNC:16390]	0.78535	0.00011	0.01139
ENSG00000175354	PTPN2	protein tyrosine phosphatase non-receptor type 2 [Source:HGNC Symbol;Acc:HGNC:9650]	0.78535	0.00011	0.01139
ENSG00000123843	C4BPB	complement component 4 binding protein beta [Source:HGNC Symbol;Acc:HGNC:1328]	0.78328	0.00012	0.01181
ENSG00000198551	ZNF627	zinc finger protein 627 [Source:HGNC Symbol;Acc:HGNC:30570]	0.78328	0.00012	0.01181
ENSG00000234534	CSNK1G2P1	casein kinase 1 gamma 2 pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:49739]	0.78328	0.00012	0.01181
ENSG00000239857	GET4	guided entry of tail-anchored proteins factor 4 [Source:HGNC Symbol;Acc:HGNC:21690]	0.78328	0.00012	0.01181
ENSG00000229196		novel transcript	0.78122	0.00013	0.01245
ENSG00000283294		novel transcript	0.78059	0.00013	0.01266
chr1 [63834678 63898454			0.77915	0.00014	0.01296
chr2 [19356810 19547825			0.77915	0.00014	0.01296
chr4 [115599538 115651576			0.77915	0.00014	0.01296
ENSG00000278383		novel transcript, antisense to ZNF337	0.77842	0.00014	0.01322
ENSG00000070423	RNF126	ring finger protein 126 [Source:HGNC Symbol;Acc:HGNC:21151]	0.77709	0.00015	0.01349
ENSG00000236409	NRADDP	neurotrophin receptor associated death domain, pseudogene [Source:HGNC Symbol;Acc:HGNC:19337]	0.77709	0.00015	0.01349
ENSG00000247774	PCED1B-AS1	PCED1B antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:44166]	0.77709	0.00015	0.01349
chr7 [117752908 117824044			0.77503	0.00016	0.01394
ENSG00000273026		novel transcript, antisense to SLC39A1	0.77503	0.00016	0.01394
ENSG00000100221	JOSD1	Josephin domain containing 1 [Source:HGNC Symbol;Acc:HGNC:28953]	0.77296	0.00017	0.01456
ENSG00000273148	LINC00653	long intergenic non-protein coding RNA 653 [Source:HGNC Symbol;Acc:HGNC:44308]	0.77296	0.00017	0.01456
ENSG00000276071		novel transcript	0.77296	0.00017	0.01456
ENSG00000261324		novel transcript, overlapping HIST4H4	0.7709	0.00018	0.01511
ENSG00000153253	SCN3A	sodium voltage-gated channel alpha subunit 3 [Source:HGNC Symbol;Acc:HGNC:10590]	0.76883	0.00019	0.01562
ENSG00000197635	DPP4	dipeptidyl peptidase 4 [Source:HGNC Symbol;Acc:HGNC:3009]	0.76883	0.00019	0.01562
ENSG00000222078	RN7SKP110	RN7SK pseudogene 110 [Source:HGNC Symbol;Acc:HGNC:45834]	0.76883	0.00019	0.01562
ENSG00000080854	IGSF9B	immunoglobulin superfamily member 9B [Source:HGNC Symbol;Acc:HGNC:32326]	0.76677	0.00021	0.016
ENSG00000277959		novel transcript, antisense to BNIP3	0.76677	0.00021	0.016
chr11 [47575264 47638857			0.76471	0.00022	0.01651
ENSG00000152785	BMP3	bone morphogenetic protein 3 [Source:HGNC Symbol;Acc:HGNC:1070]	0.76471	0.00022	0.01651
ENSG00000254860	TMEM9B-AS1	TMEM9B antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:19230]	0.76471	0.00022	0.01651
ENSG00000261136		novel transcript, antisense to FSIP1	0.76471	0.00022	0.01651
chr12 [70531159 70637922			0.76264	0.00023	0.01693
ENSG00000229512		novel transcript	0.76264	0.00023	0.01693
chr4 [129369782 129440381			0.76058	0.00025	0.01708
ENSG00000109452	INPP4B	inositol polyphosphate-4-phosphatase type II B [Source:HGNC Symbol;Acc:HGNC:6075]	0.76058	0.00025	0.01708
ENSG00000137200	CMTR1	cap methyltransferase 1 [Source:HGNC Symbol;Acc:HGNC:21077]	0.76058	0.00025	0.01708

ENSG00000185650	ZFP36L1	ZFP36 ring finger protein like 1 [Source:HGNC Symbol;Acc:HGNC:1107]	0.76058	0.00025	0.01708
ENSG000000211714	TRBV7-3	T cell receptor beta variable 7-3 [Source:HGNC Symbol;Acc:HGNC:12237]	0.76058	0.00025	0.01708
ENSG000000237702	TRBV3-1	T cell receptor beta variable 3-1 [Source:HGNC Symbol;Acc:HGNC:12212]	0.76058	0.00025	0.01708
ENSG000000242583	KMT5AP3	KMT5A pseudogene 3 [Source:HGNC Symbol;Acc:HGNC:54728]	0.76058	0.00025	0.01708
ENSG000000267361	SEC24AP1	SEC24 homolog A pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:53767]	0.76058	0.00025	0.01708
chr10 [45811056 45869430			0.75851	0.00026	0.0177
ENSG00000100029	PES1	pescadillo ribosomal biogenesis factor 1 [Source:HGNC Symbol;Acc:HGNC:8848]	0.75851	0.00026	0.0177
ENSG000000211776	TRAV2	T cell receptor alpha variable 2 [Source:HGNC Symbol;Acc:HGNC:12116]	0.75851	0.00026	0.0177
ENSG000000279114		TEC	0.75851	0.00026	0.0177
chr6 [32888761 32941594			0.75645	0.00028	0.018
ENSG000000004864	SLC25A13	solute carrier family 25 member 13 [Source:HGNC Symbol;Acc:HGNC:10983]	0.75645	0.00028	0.018
ENSG00000010219	DYRK4	dual specificity tyrosine phosphorylation regulated kinase 4 [Source:HGNC Symbol;Acc:HGNC:3095]	0.75645	0.00028	0.018
ENSG000000077585	GPR137B	G protein-coupled receptor 137B [Source:HGNC Symbol;Acc:HGNC:11862]	0.75645	0.00028	0.018
ENSG000000224358	TMCO1-AS1	TMCO1 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:54046]	0.75645	0.00028	0.018
ENSG000000235192		novel transcript	0.75645	0.00028	0.018
ENSG00000185915	KLHL34	kelch like family member 34 [Source:HGNC Symbol;Acc:HGNC:26634]	0.75439	0.0003	0.01876
ENSG000000270062		novel transcript, sense intronic to NIN	0.75439	0.0003	0.01876
ENSG00000107018	RLN1	relaxin 1 [Source:HGNC Symbol;Acc:HGNC:10026]	0.75232	0.00032	0.01921
ENSG000000143924	EML4	EMAP like 4 [Source:HGNC Symbol;Acc:HGNC:1316]	0.75232	0.00032	0.01921
ENSG00000178952	TUFM	Tu translation elongation factor, mitochondrial [Source:HGNC Symbol;Acc:HGNC:12420]	0.75232	0.00032	0.01921
ENSG000000227495	KIF1C-AS1	KIF1C antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:40324]	0.75232	0.00032	0.01921
chr2 [59390372 59445671			0.75208	0.00032	0.01929
chr2 [48474305 48541793			0.75026	0.00034	0.01977
ENSG000000095261	PSMD5	proteasome 26S subunit, non-ATPase 5 [Source:HGNC Symbol;Acc:HGNC:9563]	0.75026	0.00034	0.01977
ENSG000000155275	TRMT44	tRNA methyltransferase 44 homolog [Source:HGNC Symbol;Acc:HGNC:26653]	0.75026	0.00034	0.01977
ENSG000000211784	TRAV10	T cell receptor alpha variable 10 [Source:HGNC Symbol;Acc:HGNC:12103]	0.75026	0.00034	0.01977
ENSG000000240038	AMY2B	amylase alpha 2B [Source:HGNC Symbol;Acc:HGNC:478]	0.75026	0.00034	0.01977
ENSG000000243149	LINC02040	long intergenic non-protein coding RNA 2040 [Source:HGNC Symbol;Acc:HGNC:52880]	0.75026	0.00034	0.01977
ENSG000000104518	GSDMD	gasdermin D [Source:HGNC Symbol;Acc:HGNC:25697]	0.74819	0.00036	0.02036
ENSG00000159882	ZNF230	zinc finger protein 230 [Source:HGNC Symbol;Acc:HGNC:13024]	0.74819	0.00036	0.02036
ENSG000000166250	CLMP	CXADR like membrane protein [Source:HGNC Symbol;Acc:HGNC:24039]	0.74819	0.00036	0.02036
ENSG00000182230	FAM153B	family with sequence similarity 153 member B [Source:HGNC Symbol;Acc:HGNC:27323]	0.74819	0.00036	0.02036
ENSG000000185669	SNAI3	snail family transcriptional repressor 3 [Source:HGNC Symbol;Acc:HGNC:18411]	0.74613	0.00038	0.02122
ENSG00000187554	TLR5	toll like receptor 5 [Source:HGNC Symbol;Acc:HGNC:11851]	0.74613	0.00038	0.02122
ENSG000000197308	GATA3-AS1	GATA3 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:33786]	0.74613	0.00038	0.02122
ENSG000000205220	PSMB10	proteasome 20S subunit beta 10 [Source:HGNC Symbol;Acc:HGNC:9538]	0.74613	0.00038	0.02122
ENSG000000185271	KLHL33	kelch like family member 33 [Source:HGNC Symbol;Acc:HGNC:31952]	0.74407	0.0004	0.02176
ENSG000000196507	TCEAL3	transcription elongation factor A like 3 [Source:HGNC Symbol;Acc:HGNC:28247]	0.74407	0.0004	0.02176
ENSG000000211751	TRBC1	T cell receptor beta constant 1 [Source:HGNC Symbol;Acc:HGNC:12156]	0.74407	0.0004	0.02176
ENSG000000213197	NUDCP1	nuclear distribution C pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:8046]	0.74407	0.0004	0.02176
ENSG000000238061		proteasome (prosome, macropain) 26S subunit, non-ATPase, 7 (Mov34 homolog) (PSMD7) pseudogene	0.74407	0.0004	0.02176
ENSG000000274460		novel transcript	0.74407	0.0004	0.02176
ENSG000000042980	ADAM28	ADAM metalloproteinase domain 28 [Source:HGNC Symbol;Acc:HGNC:206]	0.742	0.00042	0.02242
ENSG00000133401	PDZD2	PDZ domain containing 2 [Source:HGNC Symbol;Acc:HGNC:18486]	0.742	0.00042	0.02242
ENSG000000264673		novel transcript	0.742	0.00042	0.02242
ENSG000000284713	SMIM38	small integral membrane protein 38 [Source:HGNC Symbol;Acc:HGNC:54074]	0.74146	0.00043	0.02267
chr7 [50472798 50555232			0.73994	0.00045	0.02286
ENSG00000100095	SEZ6L	seizure related 6 homolog like [Source:HGNC Symbol;Acc:HGNC:10763]	0.73994	0.00045	0.02286
ENSG00000183960	KCNH8	potassium voltage-gated channel subfamily H member 8 [Source:HGNC Symbol;Acc:HGNC:18864]	0.73994	0.00045	0.02286
ENSG000000242798		novel transcript	0.73994	0.00045	0.02286
ENSG000000270104		novel transcript	0.73964	0.00045	0.023
chr12 [125670090 125807925			0.73787	0.00047	0.02342
chr5 [159925731 160071218			0.73787	0.00047	0.02342
chr8 [79716615 79907107			0.73787	0.00047	0.02342
ENSG00000111237	VPS29	VPS29 retromer complex component [Source:HGNC Symbol;Acc:HGNC:14340]	0.73787	0.00047	0.02342
ENSG00000156398	SFXN2	sideroflexin 2 [Source:HGNC Symbol;Acc:HGNC:16086]	0.73787	0.00047	0.02342
ENSG00000177409	SAMD9L	sterile alpha motif domain containing 9 like [Source:HGNC Symbol;Acc:HGNC:1349]	0.73787	0.00047	0.02342
ENSG00000184226	PCDH9	protocadherin 9 [Source:HGNC Symbol;Acc:HGNC:8661]	0.73787	0.00047	0.02342
ENSG000000240767	RN7SL28BP	RNA, 7SL, cytoplasmic 28S, pseudogene [Source:HGNC Symbol;Acc:HGNC:46304]	0.73787	0.00047	0.02342
ENSG000000260367		novel transcript, antisense to SPNS1	0.73787	0.00047	0.02342
ENSG000000277534		novel transcript, sense intronic to KCTD1	0.73787	0.00047	0.02342
chr12 [89746297 89813496			0.73581	0.0005	0.02391
chr18 [52657886 52773094			0.73581	0.0005	0.02391
ENSG000000007129	CEACAM21	CEA cell adhesion molecule 21 [Source:HGNC Symbol;Acc:HGNC:28834]	0.73581	0.0005	0.02391
ENSG00000135968	GCC2	GRIP and coiled-coil domain containing 2 [Source:HGNC Symbol;Acc:HGNC:23218]	0.73581	0.0005	0.02391
ENSG00000143390	RFX5	regulatory factor X5 [Source:HGNC Symbol;Acc:HGNC:9986]	0.73581	0.0005	0.02391
ENSG00000166707	ZCCHC18	zinc finger CCHC-type containing 18 [Source:HGNC Symbol;Acc:HGNC:32459]	0.73581	0.0005	0.02391
ENSG000000243323	PTPRVP	protein tyrosine phosphatase receptor type V, pseudogene [Source:HGNC Symbol;Acc:HGNC:13421]	0.73581	0.0005	0.02391
ENSG000000260409		novel transcript	0.73581	0.0005	0.02391
chr1 [223203232 223254391			0.73375	0.00053	0.02448
ENSG00000008988	RPS20	ribosomal protein S20 [Source:HGNC Symbol;Acc:HGNC:10405]	0.73375	0.00053	0.02448
ENSG00000138606	SHF	Src homology 2 domain containing F [Source:HGNC Symbol;Acc:HGNC:25116]	0.73375	0.00053	0.02448
ENSG00000157184	CPT2	carnitine palmitoyltransferase 2 [Source:HGNC Symbol;Acc:HGNC:2330]	0.73375	0.00053	0.02448
ENSG00000196227	FAM217B	family with sequence similarity 217 member B [Source:HGNC Symbol;Acc:HGNC:16170]	0.73375	0.00053	0.02448
ENSG000000204576	PRR3	proline rich 3 [Source:HGNC Symbol;Acc:HGNC:21149]	0.73375	0.00053	0.02448
ENSG000000236830	CBR3-AS1	CBR3 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:43664]	0.73375	0.00053	0.02448
ENSG000000284825		novel transcript	0.73375	0.00053	0.02448
chr5 [53842444 53961009			0.73168	0.00056	0.02526
chr7 [120722088 120884459			0.73168	0.00056	0.02526
ENSG00000172059	KLFI1	Kruppel like factor 11 [Source:HGNC Symbol;Acc:HGNC:11811]	0.73168	0.00056	0.02526
ENSG000000211800	TRAV20	T cell receptor alpha variable 20 [Source:HGNC Symbol;Acc:HGNC:12117]	0.73168	0.00056	0.02526

ENSG00000211933	IGHV6-1	immunoglobulin heavy variable 6-1 [Source:HGNC Symbol;Acc:HGNC:5662]	0.73168	0.00056	0.02526
ENSG00000227775		ribosomal protein S7 (RPS7) pseudogene	0.73168	0.00056	0.02526
ENSG00000055950	MRPL43	mitochondrial ribosomal protein L43 [Source:HGNC Symbol;Acc:HGNC:14517]	0.72962	0.00059	0.02607
ENSG00000080822	CLDND1	claudin domain containing 1 [Source:HGNC Symbol;Acc:HGNC:1322]	0.72962	0.00059	0.02607
ENSG00000184897	H1-10	H1.10 linker histone [Source:HGNC Symbol;Acc:HGNC:4722]	0.72962	0.00059	0.02607
ENSG00000211978	IGHV5-78	immunoglobulin heavy variable 5-78 (pseudogene) [Source:HGNC Symbol;Acc:HGNC:5660]	0.72962	0.00059	0.02607
ENSG00000273729		novel transcript, antisense to IRF2BPL	0.72962	0.00059	0.02607
chr11 - 12922704 13030579			0.72896	0.0006	0.02642
ENSG00000269533		novel transcript	0.72896	0.0006	0.02642
chr2 - 57629712 57682247			0.72755	0.00062	0.0269
ENSG00000132286	TIMM10B	translocase of inner mitochondrial membrane 10B [Source:HGNC Symbol;Acc:HGNC:4022]	0.72755	0.00062	0.0269
ENSG00000156050	FAM161B	FAM161 centrosomal protein B [Source:HGNC Symbol;Acc:HGNC:19854]	0.72755	0.00062	0.0269
ENSG00000276517		novel transcript, sense intronic to BIRC6	0.72755	0.00062	0.0269
ENSG00000081189	MEF2C	myocyte enhancer factor 2C [Source:HGNC Symbol;Acc:HGNC:6996]	0.72549	0.00066	0.02742
ENSG00000100721	TCL1A	TCL1 family AKT coactivator A [Source:HGNC Symbol;Acc:HGNC:11648]	0.72549	0.00066	0.02742
ENSG00000120798	NR2C1	nuclear receptor subfamily 2 group C member 1 [Source:HGNC Symbol;Acc:HGNC:7971]	0.72549	0.00066	0.02742
ENSG00000164332	UBLCP1	ubiquitin like domain containing CTD phosphatase 1 [Source:HGNC Symbol;Acc:HGNC:28110]	0.72549	0.00066	0.02742
ENSG00000196632	WNK3	WNK lysine deficient protein kinase 3 [Source:HGNC Symbol;Acc:HGNC:14543]	0.72549	0.00066	0.02742
ENSG00000198786	MT-ND5	mitochondrially encoded NADH:ubiquinone oxidoreductase core subunit 5 [Source:HGNC Symbol;Acc:HGNC:7461]	0.72549	0.00066	0.02742
ENSG00000253532	TUG1	taurine up-regulated 1 [Source:HGNC Symbol;Acc:HGNC:26066]	0.72549	0.00066	0.02742
ENSG00000255163	HSPE1P18	heat shock protein family E (Hsp10) member 1 pseudogene 18 [Source:HGNC Symbol;Acc:HGNC:49337]	0.72549	0.00066	0.02742
ENSG00000279633		TEC	0.72549	0.00066	0.02742
chr5 + 98263160 98318093			0.72343	0.00069	0.02851
ENSG00000136891	TEX10	testis expressed 10 [Source:HGNC Symbol;Acc:HGNC:25988]	0.72343	0.00069	0.02851
ENSG00000185946	RNPC3	RNA binding region (RNP1, RRM) containing 3 [Source:HGNC Symbol;Acc:HGNC:18666]	0.72343	0.00069	0.02851
ENSG00000267390	KDSR-DT	KDSR divergent transcript [Source:HGNC Symbol;Acc:HGNC:55299]	0.72343	0.00069	0.02851
ENSG00000203441	LINC00449	long intergenic non-protein coding RNA 449 [Source:HGNC Symbol;Acc:HGNC:42786]	0.72277	0.0007	0.02894
ENSG00000072210	ALDH3A2	aldehyde dehydrogenase 3 family member A2 [Source:HGNC Symbol;Acc:HGNC:403]	0.72136	0.00073	0.02962
ENSG00000174483	BBS1	Bardet-Biedl syndrome 1 [Source:HGNC Symbol;Acc:HGNC:966]	0.72136	0.00073	0.02962
ENSG00000227124	ZNF717	zinc finger protein 717 [Source:HGNC Symbol;Acc:HGNC:29448]	0.72136	0.00073	0.02962
ENSG00000276744		novel transcript, sense intronic to SIN3A	0.72136	0.00073	0.02962
ENSG00000248636		novel transcript	0.72004	0.00075	0.03052
chr5 + 124235227 124290823			0.7193	0.00077	0.03052
ENSG00000033170	FUT8	fucosyltransferase 8 [Source:HGNC Symbol;Acc:HGNC:4019]	0.7193	0.00077	0.03052
ENSG00000049541	RFC2	replication factor C subunit 2 [Source:HGNC Symbol;Acc:HGNC:9970]	0.7193	0.00077	0.03052
ENSG00000131381	RBSN	rabenosyn, RAB effector [Source:HGNC Symbol;Acc:HGNC:20759]	0.7193	0.00077	0.03052
ENSG00000164136	IL15	interleukin 15 [Source:HGNC Symbol;Acc:HGNC:5977]	0.7193	0.00077	0.03052
ENSG00000170921	TANC2	tetratricopeptide repeat, ankyrin repeat and coiled-coil containing 2 [Source:HGNC Symbol;Acc:HGNC:30212]	0.7193	0.00077	0.03052
ENSG00000185278	ZBTB37	zinc finger and BTB domain containing 37 [Source:HGNC Symbol;Acc:HGNC:28365]	0.7193	0.00077	0.03052
ENSG00000224988		novel transcript, antisense to FAM38A	0.7193	0.00077	0.03052
ENSG00000269378	ITGB1P1	integrin subunit beta 1 pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:3781]	0.7193	0.00077	0.03052
chr14 - 67684777 67804580			0.71723	0.00081	0.03129
ENSG00000070269	TMEM260	transmembrane protein 260 [Source:HGNC Symbol;Acc:HGNC:20185]	0.71723	0.00081	0.03129
ENSG00000100220	RTCB	RNA 2',3'-cyclic phosphate and 5'-OH ligase [Source:HGNC Symbol;Acc:HGNC:26935]	0.71723	0.00081	0.03129
ENSG00000133789	SWAP70	switching B cell complex subunit SWAP70 [Source:HGNC Symbol;Acc:HGNC:17070]	0.71723	0.00081	0.03129
ENSG00000166908	PIP4K2C	phosphatidylinositol-5-phosphate 4-kinase type 2 gamma [Source:HGNC Symbol;Acc:HGNC:23786]	0.71723	0.00081	0.03129
ENSG00000177606	JUN	Jun proto-oncogene, AP-1 transcription factor subunit [Source:HGNC Symbol;Acc:HGNC:6204]	0.71723	0.00081	0.03129
ENSG00000177854	TMEM187	transmembrane protein 187 [Source:HGNC Symbol;Acc:HGNC:13705]	0.71723	0.00081	0.03129
ENSG00000213693	SEC14L1P1	SEC14 like 1 pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:44189]	0.71723	0.00081	0.03129
ENSG00000285051	SLC7A14-AS1	SLC7A14 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:54092]	0.71657	0.00082	0.03175
ENSG00000550444	NOP58	NOP58 ribonucleoprotein [Source:HGNC Symbol;Acc:HGNC:29926]	0.71517	0.00085	0.0324
ENSG00000138002	IFT172	intraflagellar transport 172 [Source:HGNC Symbol;Acc:HGNC:30391]	0.71517	0.00085	0.0324
ENSG00000166394	CYB5R2	cytochrome b5 reductase 2 [Source:HGNC Symbol;Acc:HGNC:24376]	0.71517	0.00085	0.0324
ENSG00000188785	ZNF548	zinc finger protein 548 [Source:HGNC Symbol;Acc:HGNC:26561]	0.71517	0.00085	0.0324
ENSG00000256006		novel transcript	0.71311	0.00089	0.03327
chr14 + 41446642 41665780			0.71311	0.00089	0.03327
ENSG00000076641	PAG1	phosphoprotein membrane anchor with glycosphingolipid microdomains 1 [Source:HGNC Symbol;Acc:HGNC:30043]	0.71311	0.00089	0.03327
ENSG00000138792	ENPEP	glutamyl aminopeptidase [Source:HGNC Symbol;Acc:HGNC:3355]	0.71311	0.00089	0.03327
ENSG00000204852	TCTN1	tectonic family member 1 [Source:HGNC Symbol;Acc:HGNC:26113]	0.71311	0.00089	0.03327
ENSG00000217527	RPS16P5	ribosomal protein S16 pseudogene 5 [Source:HGNC Symbol;Acc:HGNC:36183]	0.71311	0.00089	0.03327
ENSG00000274173		novel transcript	0.71311	0.00089	0.03327
chr1 - 245830064 245894767			0.71104	0.00094	0.03392
chrX - 74744514 74869234			0.71104	0.00094	0.03392
ENSG00000064652	SNX24	sorting nexin 24 [Source:HGNC Symbol;Acc:HGNC:21533]	0.71104	0.00094	0.03392
ENSG00000107968	MAP3K8	mitogen-activated protein kinase kinase kinase 8 [Source:HGNC Symbol;Acc:HGNC:6860]	0.71104	0.00094	0.03392
ENSG00000127074	RGS13	regulator of G protein signaling 13 [Source:HGNC Symbol;Acc:HGNC:9995]	0.71104	0.00094	0.03392
ENSG00000141428	C18orf21	chromosome 18 open reading frame 21 [Source:HGNC Symbol;Acc:HGNC:28802]	0.71104	0.00094	0.03392
ENSG00000178996	SNX18	sorting nexin 18 [Source:HGNC Symbol;Acc:HGNC:19245]	0.71104	0.00094	0.03392
ENSG00000225614	ZNF469	zinc finger protein 469 [Source:HGNC Symbol;Acc:HGNC:23216]	0.71104	0.00094	0.03392
ENSG00000285589		novel transcript	0.71104	0.00094	0.03392
ENSG00000196267	ZNF836	zinc finger protein 836 [Source:HGNC Symbol;Acc:HGNC:34333]	0.70898	0.00099	0.0349
ENSG00000273893		novel transcript, sense intronic to SLC13A3	0.70898	0.00099	0.0349
chr22 - 33615421 33669061			0.70691	0.00104	0.0356
ENSG00000003509	NDUFAF7	NADH:ubiquinone oxidoreductase complex assembly factor 7 [Source:HGNC Symbol;Acc:HGNC:28816]	0.70691	0.00104	0.0356
ENSG00000141252	VP53	VP53 subunit of GARP complex [Source:HGNC Symbol;Acc:HGNC:25608]	0.70691	0.00104	0.0356
ENSG00000160683	CXCR5	C-X-C motif chemokine receptor 5 [Source:HGNC Symbol;Acc:HGNC:1060]	0.70691	0.00104	0.0356
ENSG00000206784	Y_RNA	Y RNA [Source:RFAM;Acc:RF00019]	0.70691	0.00104	0.0356
ENSG00000215256	DHRS4-AS1	DHRS4 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:23175]	0.70691	0.00104	0.0356
ENSG00000226254	PTP4A1P3	PTP4A1 pseudogene 3 [Source:HGNC Symbol;Acc:HGNC:41930]	0.70691	0.00104	0.0356
ENSG00000229151		novel transcript	0.70691	0.00104	0.0356
ENSG00000253106		novel transcript, antisense to TATDN1	0.70691	0.00104	0.0356

ENSG00000258337		novel transcript, sense intronic to MED13L	0.70691	0.00104	0.0356
ENSG00000275413		novel transcript, antisense to TTC19	0.70691	0.00104	0.0356
ENSG00000162086	ZNF75A	zinc finger protein 75a [Source:HGNC Symbol;Acc:HGNC:13146]	0.70485	0.00109	0.0368
ENSG00000176340	COX8A	cytochrome c oxidase subunit 8A [Source:HGNC Symbol;Acc:HGNC:2294]	0.70485	0.00109	0.0368
ENSG00000250486	FAM218A	family with sequence similarity 218 member A [Source:HGNC Symbol;Acc:HGNC:26466]	0.70485	0.00109	0.0368
ENSG00000100316	RPL3	ribosomal protein L3 [Source:HGNC Symbol;Acc:HGNC:10332]	0.70279	0.00114	0.03788
ENSG00000135299	ANKRD6	ankyrin repeat domain 6 [Source:HGNC Symbol;Acc:HGNC:17280]	0.70279	0.00114	0.03788
ENSG00000148690	FRA10AC1	FRA10A associated CGG repeat 1 [Source:HGNC Symbol;Acc:HGNC:1162]	0.70279	0.00114	0.03788
ENSG00000154767	XPC	XPC complex subunit, DNA damage recognition and repair factor [Source:HGNC Symbol;Acc:HGNC:12816]	0.70279	0.00114	0.03788
ENSG00000203865	ATP1A1-AS1	ATP1A1 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:28262]	0.70279	0.00114	0.03788
ENSG00000234902		novel transcript	0.70279	0.00114	0.03788
ENSG00000126070	AGO3	argonaute RISC catalytic component 3 [Source:HGNC Symbol;Acc:HGNC:18421]	0.70072	0.0012	0.03887
ENSG00000166454	ATMIN	ATM interactor [Source:HGNC Symbol;Acc:HGNC:29034]	0.70072	0.0012	0.03887
ENSG00000223865	HLA-DPB1	major histocompatibility complex, class II, DP beta 1 [Source:HGNC Symbol;Acc:HGNC:4940]	0.70072	0.0012	0.03887
ENSG00000225032		novel transcript	0.70072	0.0012	0.03887
ENSG00000225470	JPX	JPX transcript, XiST activator [Source:HGNC Symbol;Acc:HGNC:37191]	0.70072	0.0012	0.03887
ENSG00000246863	GPR176-DT	GPR176-DT [Source:HGNC Symbol;Acc:HGNC:54389]	0.70072	0.0012	0.03887
ENSG00000277297	ATP5F1AP10	ATP synthase F1 subunit alpha pseudogene 10 [Source:HGNC Symbol;Acc:HGNC:37668]	0.70072	0.0012	0.03887
ENSG00000279571		novel transcript	0.69871	0.00126	0.04001
ENSG00000114120	SLC25A36	solute carrier family 25 member 36 [Source:HGNC Symbol;Acc:HGNC:25554]	0.69866	0.00126	0.04001
ENSG00000119977	TCTN3	tektonic family member 3 [Source:HGNC Symbol;Acc:HGNC:24519]	0.69866	0.00126	0.04001
ENSG00000160813	PPP1R35	protein phosphatase 1 regulatory subunit 35 [Source:HGNC Symbol;Acc:HGNC:28320]	0.69866	0.00126	0.04001
ENSG00000179941	BBS10	Bardet-Biedl syndrome 10 [Source:HGNC Symbol;Acc:HGNC:26291]	0.69866	0.00126	0.04001
ENSG00000196735	HLA-DQA1	major histocompatibility complex, class II, DQ alpha 1 [Source:HGNC Symbol;Acc:HGNC:4942]	0.69866	0.00126	0.04001
ENSG00000205138	SDHAF1	succinate dehydrogenase complex assembly factor 1 [Source:HGNC Symbol;Acc:HGNC:33867]	0.69866	0.00126	0.04001
ENSG00000267801		novel transcript, antisense to TRIM47	0.69866	0.00126	0.04001
ENSG00000273328		novel transcript	0.69814	0.00127	0.04038
ENSG00000276302		novel protein	0.69796	0.00128	0.04049
ENSG00000183615	FAM167B	family with sequence similarity 167 member B [Source:HGNC Symbol;Acc:HGNC:28133]	0.69731	0.0013	0.04085
ENSG00000007047	MARK4	microtubule affinity regulating kinase 4 [Source:HGNC Symbol;Acc:HGNC:13538]	0.69659	0.00132	0.04085
ENSG00000110047	EHD1	EH domain containing 1 [Source:HGNC Symbol;Acc:HGNC:3242]	0.69659	0.00132	0.04085
ENSG00000145882	PCYOX1L	prenylcysteine oxidase 1 like [Source:HGNC Symbol;Acc:HGNC:28477]	0.69659	0.00132	0.04085
ENSG00000149582	TMEM25	transmembrane protein 25 [Source:HGNC Symbol;Acc:HGNC:25890]	0.69659	0.00132	0.04085
ENSG00000166432	ZMAT1	zinc finger matrin-type 1 [Source:HGNC Symbol;Acc:HGNC:29377]	0.69659	0.00132	0.04085
ENSG00000170473	PYM1	PYM homolog 1, exon junction complex associated factor [Source:HGNC Symbol;Acc:HGNC:30258]	0.69659	0.00132	0.04085
ENSG00000196510	ANAPC7	anaphase promoting complex subunit 7 [Source:HGNC Symbol;Acc:HGNC:17380]	0.69659	0.00132	0.04085
ENSG00000197763	TXNRD3	thioredoxin reductase 3 [Source:HGNC Symbol;Acc:HGNC:20667]	0.69659	0.00132	0.04085
ENSG00000229106	BTBD6P1	BTB domain containing 6 pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:51542]	0.69659	0.00132	0.04085
ENSG00000256591		novel transcript	0.69659	0.00132	0.04085
ENSG00000171889	MIR31HG	MIR31 host gene [Source:HGNC Symbol;Acc:HGNC:37187]	0.69592	0.00134	0.04137
ENSG00000106133	NSUN5P2	NSUN5 pseudogene 2 [Source:HGNC Symbol;Acc:HGNC:16609]	0.69453	0.00138	0.04167
ENSG00000113141	IK	IK cytokine [Source:HGNC Symbol;Acc:HGNC:5958]	0.69453	0.00138	0.04167
ENSG00000115556	PLCD4	phospholipase C delta 4 [Source:HGNC Symbol;Acc:HGNC:9062]	0.69453	0.00138	0.04167
ENSG00000132423	COQ3	coenzyme Q3, methyltransferase [Source:HGNC Symbol;Acc:HGNC:18175]	0.69453	0.00138	0.04167
ENSG00000145439	CBR4	carbonyl reductase 4 [Source:HGNC Symbol;Acc:HGNC:25891]	0.69453	0.00138	0.04167
ENSG00000153487	ING1	inhibitor of growth family member 1 [Source:HGNC Symbol;Acc:HGNC:6062]	0.69453	0.00138	0.04167
ENSG00000197822	OCLN	occludin [Source:HGNC Symbol;Acc:HGNC:8104]	0.69453	0.00138	0.04167
ENSG00000242818	RN7SL846P	RNA, 7SL, cytoplasmic, 846, pseudogene [Source:HGNC Symbol;Acc:HGNC:46862]	0.69453	0.00138	0.04167
ENSG00000276966	H4C5	H4 clustered histone 5 [Source:HGNC Symbol;Acc:HGNC:4790]	0.69453	0.00138	0.04167
ENSG00000258181		novel transcript	0.69386	0.0014	0.04226
ENSG000000004139	SARM1	sterile alpha and TIR motif containing 1 [Source:HGNC Symbol;Acc:HGNC:17074]	0.69247	0.00145	0.04247
ENSG00000101181	MTG2	mitochondrial ribosome associated GTPase 2 [Source:HGNC Symbol;Acc:HGNC:16239]	0.69247	0.00145	0.04247
ENSG00000105810	CDK6	cyclin dependent kinase 6 [Source:HGNC Symbol;Acc:HGNC:1777]	0.69247	0.00145	0.04247
ENSG00000113088	GZMK	granzyme K [Source:HGNC Symbol;Acc:HGNC:4711]	0.69247	0.00145	0.04247
ENSG00000143951	WDPCP	WD repeat containing planar cell polarity effector [Source:HGNC Symbol;Acc:HGNC:28027]	0.69247	0.00145	0.04247
ENSG00000197562	RAB40C	RAB40C, member RAS oncogene family [Source:HGNC Symbol;Acc:HGNC:18285]	0.69247	0.00145	0.04247
ENSG00000248309	MEF2C-AS1	MEF2C antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:48908]	0.69247	0.00145	0.04247
ENSG00000281501	SEPSECS-AS1	SEPSECS antisense RNA 1 (head to head) [Source:HGNC Symbol;Acc:HGNC:27737]	0.69247	0.00145	0.04247
ENSG00000285410	GABPB1-IT1	GABPB1 intronic transcript [Source:HGNC Symbol;Acc:HGNC:25469]	0.69247	0.00145	0.04247
ENSG00000162755	KLHDC9	kelch domain containing 9 [Source:HGNC Symbol;Acc:HGNC:28489]	0.69179	0.00147	0.04291
ENSG00000241318	WDR82P2	WD repeat domain 82 pseudogene 2 [Source:HGNC Symbol;Acc:HGNC:33513]	0.69179	0.00147	0.04291
ENSG00000253392		novel transcript, antisense to ZNF57	0.69112	0.00149	0.04351
chr6:[93227168]93291526			0.6904	0.00152	0.04367
chr2:[203168419]203241046			0.6904	0.00152	0.04367
ENSG00000103051	COG4	component of oligomeric golgi complex 4 [Source:HGNC Symbol;Acc:HGNC:18620]	0.6904	0.00152	0.04367
ENSG00000133740	E2F5	E2F transcription factor 5 [Source:HGNC Symbol;Acc:HGNC:3119]	0.6904	0.00152	0.04367
ENSG00000158887	MPZ	myelin protein zero [Source:HGNC Symbol;Acc:HGNC:7225]	0.6904	0.00152	0.04367
ENSG00000274828		novel transcript	0.6904	0.00152	0.04367
ENSG00000211697	TRGV5	T cell receptor gamma variable 5 [Source:HGNC Symbol;Acc:HGNC:12290]	0.68973	0.00154	0.04423
ENSG00000105329	TGFB1	transforming growth factor beta 1 [Source:HGNC Symbol;Acc:HGNC:11766]	0.68834	0.00159	0.04512
ENSG00000123989	CHPF	chondroitin polymerizing factor [Source:HGNC Symbol;Acc:HGNC:24291]	0.68834	0.00159	0.04512
ENSG00000151876	FBXO4	F-box protein 4 [Source:HGNC Symbol;Acc:HGNC:13583]	0.68834	0.00159	0.04512
ENSG00000260774		novel transcript	0.68834	0.00159	0.04512
ENSG00000272463		novel transcript	0.68834	0.00159	0.04512
ENSG00000230832	SSBL4P	SSB like 4, pseudogene [Source:HGNC Symbol;Acc:HGNC:54985]	0.68777	0.00161	0.04558
ENSG00000131115	ZNF227	zinc finger protein 227 [Source:HGNC Symbol;Acc:HGNC:13020]	0.68627	0.00166	0.04558
ENSG00000141026	MED9	mediator complex subunit 9 [Source:HGNC Symbol;Acc:HGNC:25487]	0.68627	0.00166	0.04558
ENSG00000145736	GTF2H2	general transcription factor IIH subunit 2 [Source:HGNC Symbol;Acc:HGNC:4656]	0.68627	0.00166	0.04558
ENSG00000171861	MRM3	mitochondrial rRNA methyltransferase 3 [Source:HGNC Symbol;Acc:HGNC:18485]	0.68627	0.00166	0.04558
ENSG00000185483	ROR1	receptor tyrosine kinase like orphan receptor 1 [Source:HGNC Symbol;Acc:HGNC:10256]	0.68627	0.00166	0.04558
ENSG00000185880	TRIM69	tripartite motif containing 69 [Source:HGNC Symbol;Acc:HGNC:17857]	0.68627	0.00166	0.04558

ENSG00000226833		novel transcript	0.68627	0.00166	0.04558
ENSG00000253690		novel transcript	0.68627	0.00166	0.04558
ENSG00000264235	MYL12-AS1	MYL12A and MYL12B antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:55331]	0.68627	0.00166	0.04558
ENSG00000266680		novel transcript, antisense to PTP4A1	0.68627	0.00166	0.04558
ENSG00000272758	WDR5B-DT	WDR5B divergent transcript [Source:HGNC Symbol;Acc:HGNC:55192]	0.68627	0.00166	0.04558
ENSG00000284234	TAF11L5	TATA-box binding protein associated factor 11 like 5 [Source:HGNC Symbol;Acc:HGNC:53848]	0.68627	0.00166	0.04558
ENSG00000254266	PKIA-AS1	PKIA antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:51659]	0.6856	0.00169	0.046
chr14 + 96116833 96391851			0.68421	0.00174	0.0464
ENSG000000095015	MAP3K1	mitogen-activated protein kinase kinase kinase 1 [Source:HGNC Symbol;Acc:HGNC:6848]	0.68421	0.00174	0.0464
ENSG00000204237	OXLD1	oxidoreductase like domain containing 1 [Source:HGNC Symbol;Acc:HGNC:27901]	0.68421	0.00174	0.0464
ENSG00000213015	ZNF580	zinc finger protein 580 [Source:HGNC Symbol;Acc:HGNC:29473]	0.68421	0.00174	0.0464
ENSG00000224745		novel transcript, sense intronic to PTEN	0.68421	0.00174	0.0464
ENSG00000232626		FK506 binding protein 8, 38kDa (FKBP8) pseudogene	0.68421	0.00174	0.0464
ENSG00000235194	PPP1R3E	protein phosphatase 1 regulatory subunit 3E [Source:HGNC Symbol;Acc:HGNC:14943]	0.68421	0.00174	0.0464
ENSG00000246379		novel transcript	0.68421	0.00174	0.0464
ENSG00000263731		novel transcript	0.68421	0.00174	0.0464
ENSG00000269220	LINC00528	long intergenic non-protein coding RNA 528 [Source:HGNC Symbol;Acc:HGNC:26875]	0.68421	0.00174	0.0464
ENSG00000269929	MIRLET7A1HG	miRlet-7a-1/let-7f-1/let-7d cluster host gene [Source:HGNC Symbol;Acc:HGNC:53970]	0.68421	0.00174	0.0464
ENSG00000107447	DNIT	DNA nucleotidylexotransferase [Source:HGNC Symbol;Acc:HGNC:2983]	0.68353	0.00176	0.04698
ENSG00000149054	ZNF215	zinc finger protein 215 [Source:HGNC Symbol;Acc:HGNC:13007]	0.68215	0.00182	0.04751
ENSG00000160087	UBE2J2	ubiquitin conjugating enzyme E2 J2 [Source:HGNC Symbol;Acc:HGNC:19268]	0.68215	0.00182	0.04751
ENSG00000223825	DAZAP2P1	DAZ associated protein 2 pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:43869]	0.68215	0.00182	0.04751
ENSG00000267360		novel protein	0.68215	0.00182	0.04751
chrX - 112642803 113302475			0.68008	0.0019	0.04891
ENSG00000111554	MDM1	Mdm1 nuclear protein [Source:HGNC Symbol;Acc:HGNC:29917]	0.68008	0.0019	0.04891
ENSG00000211804	TRDV1	T cell receptor delta variable 1 [Source:HGNC Symbol;Acc:HGNC:12262]	0.68008	0.0019	0.04891
ENSG00000213741	RPS29	ribosomal protein S29 [Source:HGNC Symbol;Acc:HGNC:10419]	0.68008	0.0019	0.04891
ENSG00000244710	RN7SL47P	RNA, 7SL, cytoplasmic 47, pseudogene [Source:HGNC Symbol;Acc:HGNC:46063]	0.68008	0.0019	0.04891
ENSG00000279400			0.67872	0.00196	0.04971
ENSG00000108561	C1QBP	complement C1q binding protein [Source:HGNC Symbol;Acc:HGNC:1243]	0.67802	0.00199	0.04971
ENSG00000112902	SEMA5A	semaphorin 5A [Source:HGNC Symbol;Acc:HGNC:10736]	0.67802	0.00199	0.04971
ENSG00000120800	UTP20	UTP20 small subunit processome component [Source:HGNC Symbol;Acc:HGNC:17897]	0.67802	0.00199	0.04971
ENSG00000123689	G0S2	G0/G1 switch 2 [Source:HGNC Symbol;Acc:HGNC:30229]	0.67802	0.00199	0.04971
ENSG00000143314	MRPL24	mitochondrial ribosomal protein L24 [Source:HGNC Symbol;Acc:HGNC:14037]	0.67802	0.00199	0.04971
ENSG00000160679	CHTOP	chromatin target of PRMT1 [Source:HGNC Symbol;Acc:HGNC:24511]	0.67802	0.00199	0.04971
ENSG00000178127	NDUFV2	NADH:ubiquinone oxidoreductase core subunit V2 [Source:HGNC Symbol;Acc:HGNC:7717]	0.67802	0.00199	0.04971
ENSG00000179978	NAIPP2	NAIP pseudogene 2 [Source:HGNC Symbol;Acc:HGNC:16042]	0.67802	0.00199	0.04971
ENSG00000185010	F8	coagulation factor VIII [Source:HGNC Symbol;Acc:HGNC:3546]	0.67802	0.00199	0.04971
ENSG00000202222	Y_RNA	Y RNA [Source:RFAM;Acc:RF00019]	0.67802	0.00199	0.04971
ENSG00000211772	TRBC2	T cell receptor beta constant 2 [Source:HGNC Symbol;Acc:HGNC:12157]	0.67802	0.00199	0.04971
ENSG00000241641	RPS23P6	ribosomal protein S23 pseudogene 6 [Source:HGNC Symbol;Acc:HGNC:36511]	0.67802	0.00199	0.04971
ENSG00000276405	TRBV13	T cell receptor beta variable 13 [Source:HGNC Symbol;Acc:HGNC:12188]	0.67802	0.00199	0.04971

Negatively correlated with H1-2

ensembl_gene_id	gene_name	description	rho	p	adjusted-p
ENSG00000134294	SLC38A2	solute carrier family 38 member 2 [Source:HGNC Symbol;Acc:HGNC:13448]	-0.95046	1.6E-09	3.1E-05
ENSG00000141934	PLPP2	phospholipid phosphatase 2 [Source:HGNC Symbol;Acc:HGNC:9230]	-0.94634	2.9E-09	3.1E-05
ENSG00000122025	FLT3	fms related receptor tyrosine kinase 3 [Source:HGNC Symbol;Acc:HGNC:3765]	-0.93189	1.9E-08	7.4E-05
ENSG00000164074	ABHD18	abhydrolase domain containing 18 [Source:HGNC Symbol;Acc:HGNC:26111]	-0.92776	3E-08	0.0001
ENSG00000075785	RAB7A	RAB7A, member RAS oncogene family [Source:HGNC Symbol;Acc:HGNC:9788]	-0.9257	3.7E-08	0.00011
ENSG00000108591	DRG2	developmentally regulated GTP binding protein 2 [Source:HGNC Symbol;Acc:HGNC:3030]	-0.91538	1E-07	0.00022
ENSG00000122335	SERAC1	serine active site containing 1 [Source:HGNC Symbol;Acc:HGNC:21061]	-0.90093	3.4E-07	0.00054
chr1 - 116985627 117039224			-0.8968	4.7E-07	0.00062
ENSG00000169962	TAS1R3	taste 1 receptor member 3 [Source:HGNC Symbol;Acc:HGNC:15661]	-0.89474	5.4E-07	0.00062
chr4 - 37526876 37592421			-0.89267	6.3E-07	0.00062
ENSG00000007038	PRSS21	serine protease 21 [Source:HGNC Symbol;Acc:HGNC:9485]	-0.89267	6.3E-07	0.00062
ENSG00000137571	SLCO5A1	solute carrier organic anion transporter family member 5A1 [Source:HGNC Symbol;Acc:HGNC:19046]	-0.89267	6.3E-07	0.00062
ENSG00000164002	EXO5	exonuclease 5 [Source:HGNC Symbol;Acc:HGNC:26115]	-0.89267	6.3E-07	0.00062
ENSG00000102786	INTS6	integrator complex subunit 6 [Source:HGNC Symbol;Acc:HGNC:14879]	-0.88854	8.4E-07	0.00077
chr7 - 156421990 156473331			-0.88648	9.7E-07	0.00079
ENSG00000136231	IGF2BP3	insulin like growth factor 2 mRNA binding protein 3 [Source:HGNC Symbol;Acc:HGNC:28868]	-0.88648	9.7E-07	0.00079
ENSG00000162695	SLC30A7	solute carrier family 30 member 7 [Source:HGNC Symbol;Acc:HGNC:19306]	-0.88442	1.1E-06	0.00088
ENSG00000198492	YTHDF2	YTH N6-methyladenosine RNA binding protein 2 [Source:HGNC Symbol;Acc:HGNC:31675]	-0.88235	1.3E-06	0.00097
ENSG00000266992	DHX40P1	DEAH-box helicase 40 pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:20687]	-0.87707	1.8E-06	0.00131
ENSG00000261758	STAG1-DT	STAG1 divergent transcript [Source:HGNC Symbol;Acc:HGNC:55350]	-0.87616	1.9E-06	0.00131
ENSG00000279673		TEC	-0.87616	1.9E-06	0.00131
ENSG00000237356		novel transcript	-0.87558	1.9E-06	0.00132
ENSG00000101255	TRIB3	tribbles pseudokinase 3 [Source:HGNC Symbol;Acc:HGNC:16228]	-0.8741	2.1E-06	0.00133
ENSG00000128512	DOCK4	dedicator of cytokinesis 4 [Source:HGNC Symbol;Acc:HGNC:19192]	-0.8741	2.1E-06	0.00133
ENSG00000131375	CAPN7	calpain 7 [Source:HGNC Symbol;Acc:HGNC:1484]	-0.8741	2.1E-06	0.00133
ENSG00000099991	CABIN1	calineurin binding protein 1 [Source:HGNC Symbol;Acc:HGNC:24187]	-0.87203	2.4E-06	0.00143
ENSG00000143595	AQP10	aquaporin 10 [Source:HGNC Symbol;Acc:HGNC:16029]	-0.86997	2.7E-06	0.00153
ENSG00000164808	SPIDR	scaffold protein involved in DNA repair [Source:HGNC Symbol;Acc:HGNC:28971]	-0.86997	2.7E-06	0.00153
ENSG00000163882	POLR2H	RNA polymerase II, I and III subunit H [Source:HGNC Symbol;Acc:HGNC:9195]	-0.86791	3.1E-06	0.00165
ENSG00000230587	LINC02580	long intergenic non-protein coding RNA 2580 [Source:HGNC Symbol;Acc:HGNC:53751]	-0.86713	3.2E-06	0.00169
ENSG00000260490	MYL12BP1	MYL12B pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:51649]	-0.86584	3.4E-06	0.0017
ENSG00000260331		novel transcript	-0.86378	3.9E-06	0.00187
ENSG00000163092	XIRP2	xin actin binding repeat containing 2 [Source:HGNC Symbol;Acc:HGNC:14303]	-0.86171	4.3E-06	0.00201
ENSG00000165185	KIAA1958	KIAA1958 [Source:HGNC Symbol;Acc:HGNC:23427]	-0.85965	4.8E-06	0.00209

ENSG00000166171	DPCD	deleted in primary ciliary dyskinesia homolog (mouse) [Source:HGNC Symbol;Acc:HGNC:24542]	-0.85965	4.8E-06	0.00209
ENSG00000233016	SNHG7	small nucleolar RNA host gene 7 [Source:HGNC Symbol;Acc:HGNC:28254]	-0.85965	4.8E-06	0.00209
chr7 17764637 17820685			-0.85759	5.4E-06	0.00221
ENSG00000136240	KDELR2	KDEL endoplasmic reticulum protein retention receptor 2 [Source:HGNC Symbol;Acc:HGNC:6305]	-0.85759	5.4E-06	0.00221
ENSG00000131724	IL13RA1	interleukin 13 receptor subunit alpha 1 [Source:HGNC Symbol;Acc:HGNC:5974]	-0.85346	6.7E-06	0.00252
ENSG00000096060	FKBP5	FKBP prolyl isomerase 5 [Source:HGNC Symbol;Acc:HGNC:3721]	-0.85139	7.4E-06	0.00271
ENSG00000170293	CMTM8	CKLF like MARVEL transmembrane domain containing 8 [Source:HGNC Symbol;Acc:HGNC:19179]	-0.85139	7.4E-06	0.00271
ENSG00000164023	SGMS2	sphingomyelin synthase 2 [Source:HGNC Symbol;Acc:HGNC:28395]	-0.84933	8.2E-06	0.00283
ENSG00000174032	SLC25A30	solute carrier family 25 member 30 [Source:HGNC Symbol;Acc:HGNC:27371]	-0.84727	9.1E-06	0.00305
ENSG00000141098	GFOD2	glucose-fructose oxidoreductase domain containing 2 [Source:HGNC Symbol;Acc:HGNC:28159]	-0.8452	1E-05	0.00324
ENSG00000142583	SLC2A5	solute carrier family 2 member 5 [Source:HGNC Symbol;Acc:HGNC:11010]	-0.8452	1E-05	0.00324
ENSG00000162929	KIAA1841	KIAA1841 [Source:HGNC Symbol;Acc:HGNC:29387]	-0.8452	1E-05	0.00324
ENSG00000223519	KIF28P	kinesin family member 28, pseudogene [Source:HGNC Symbol;Acc:HGNC:49205]	-0.84107	1.2E-05	0.00372
ENSG00000007545	CRAMP1	cramped chromatin regulator homolog 1 [Source:HGNC Symbol;Acc:HGNC:14122]	-0.83901	1.4E-05	0.00372
ENSG00000101188	NTSR1	neurotensin receptor 1 [Source:HGNC Symbol;Acc:HGNC:8039]	-0.83901	1.4E-05	0.00372
ENSG00000182324	KCNJ14	potassium inwardly rectifying channel subfamily J member 14 [Source:HGNC Symbol;Acc:HGNC:6260]	-0.83901	1.4E-05	0.00372
ENSG00000280166		TEC	-0.83901	1.4E-05	0.00372
ENSG00000116138	DNAJC16	DnaJ heat shock protein family (Hsp40) member C16 [Source:HGNC Symbol;Acc:HGNC:29157]	-0.83695	1.5E-05	0.00384
ENSG00000124102	PI3	peptidase inhibitor 3 [Source:HGNC Symbol;Acc:HGNC:8947]	-0.83695	1.5E-05	0.00384
ENSG00000068796	KIF2A	kinesin family member 2A [Source:HGNC Symbol;Acc:HGNC:6318]	-0.83488	1.6E-05	0.004
ENSG00000168874	ATOH8	atonal bHLH transcription factor 8 [Source:HGNC Symbol;Acc:HGNC:24126]	-0.83488	1.6E-05	0.004
ENSG00000271582		EIF2A eukaryotic translation initiation factor 2A, 65kDa, pseudogene	-0.83488	1.6E-05	0.004
ENSG00000101019	UQCC1	ubiquinol-cytochrome c reductase complex assembly factor 1 [Source:HGNC Symbol;Acc:HGNC:15891]	-0.83282	1.8E-05	0.00425
ENSG00000137876	RSL24D1	ribosomal L24 domain containing 1 [Source:HGNC Symbol;Acc:HGNC:18479]	-0.83282	1.8E-05	0.00425
ENSG00000138722	MMRN1	multimerin 1 [Source:HGNC Symbol;Acc:HGNC:7178]	-0.83282	1.8E-05	0.00425
ENSG00000266733	TBC1D29P	TBC1 domain family member 29, pseudogene [Source:HGNC Symbol;Acc:HGNC:24509]	-0.83075	2E-05	0.00444
ENSG00000133477	FAM83F	family with sequence similarity 83 member F [Source:HGNC Symbol;Acc:HGNC:25148]	-0.82869	2.1E-05	0.00459
ENSG00000135679	MDM2	MDM2 proto-oncogene [Source:HGNC Symbol;Acc:HGNC:6973]	-0.82869	2.1E-05	0.00459
ENSG00000163453	IGFBP7	insulin like growth factor binding protein 7 [Source:HGNC Symbol;Acc:HGNC:5476]	-0.82869	2.1E-05	0.00459
ENSG00000203760	CENPW	centromere protein W [Source:HGNC Symbol;Acc:HGNC:21488]	-0.82869	2.1E-05	0.00459
ENSG00000198743	SLCSA3	solute carrier family 5 member 3 [Source:HGNC Symbol;Acc:HGNC:11038]	-0.82663	2.3E-05	0.00489
chr12 81098493 81183646			-0.82456	2.6E-05	0.00511
chr3 28606312 28799586			-0.82456	2.6E-05	0.00511
ENSG00000125741	OPA3	outer mitochondrial membrane lipid metabolism regulator OPA3 [Source:HGNC Symbol;Acc:HGNC:8142]	-0.82456	2.6E-05	0.00511
ENSG00000127314	RAP1B	RAP1B, member of RAS oncogene family [Source:HGNC Symbol;Acc:HGNC:9857]	-0.82456	2.6E-05	0.00511
ENSG00000130558	OLFML1	olfactomedin 1 [Source:HGNC Symbol;Acc:HGNC:17187]	-0.82456	2.6E-05	0.00511
ENSG00000280278	FLJ30679	uncharacterized protein FLJ30679 [Source:NCBI gene (formerly Entrezgene);Acc:146512]	-0.82263	2.8E-05	0.00535
ENSG00000137462	TLR2	toll like receptor 2 [Source:HGNC Symbol;Acc:HGNC:11848]	-0.8225	2.8E-05	0.00535
ENSG00000159314	ARHGAP27	Rho GTPase activating protein 27 [Source:HGNC Symbol;Acc:HGNC:31813]	-0.8225	2.8E-05	0.00535
ENSG00000130052	STARD8	STAR related lipid transfer domain containing 8 [Source:HGNC Symbol;Acc:HGNC:19161]	-0.82043	3E-05	0.00565
ENSG00000141873	SLC39A3	solute carrier family 39 member 3 [Source:HGNC Symbol;Acc:HGNC:17128]	-0.82043	3E-05	0.00565
ENSG00000174844	DNAH12	dynein axonemal heavy chain 12 [Source:HGNC Symbol;Acc:HGNC:2943]	-0.82043	3E-05	0.00565
ENSG00000242856	VN1R105P	vomeronasal 1 receptor 105 pseudogene [Source:HGNC Symbol;Acc:HGNC:37428]	-0.8199	3.1E-05	0.00573
chr7 35616561 35671230			-0.81837	3.3E-05	0.00578
ENSG00000267064	UXT-AS1	UXT antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:49239]	-0.81837	3.3E-05	0.00578
ENSG00000115267	IFIH1	interferon induced with helicase C domain 1 [Source:HGNC Symbol;Acc:HGNC:18873]	-0.81631	3.6E-05	0.0059
ENSG00000165244	ZNF367	zinc finger protein 367 [Source:HGNC Symbol;Acc:HGNC:18320]	-0.81631	3.6E-05	0.0059
ENSG00000170629	DPY19L2P2	DPY19L2 pseudogene 2 [Source:HGNC Symbol;Acc:HGNC:21764]	-0.81631	3.6E-05	0.0059
ENSG00000184743	ATL3	atlastin GTPase 3 [Source:HGNC Symbol;Acc:HGNC:24526]	-0.81631	3.6E-05	0.0059
ENSG00000225975	LINC01534	long intergenic non-protein coding RNA 1534 [Source:HGNC Symbol;Acc:HGNC:51281]	-0.81631	3.6E-05	0.0059
ENSG00000251411		actin related protein 2/3 complex, subunit 1A, 41kDa (ARPC1A) pseudogene	-0.81631	3.6E-05	0.0059
ENSG00000256533		CCR4 carbon catabolite repression 4-like (S. cerevisiae) (CCRN4L) pseudogene	-0.81631	3.6E-05	0.0059
ENSG00000274808	TBC1D3B	TBC1 domain family member 3B [Source:HGNC Symbol;Acc:HGNC:27011]	-0.81424	3.9E-05	0.00632
ENSG00000106785	TRIM14	tripartite motif containing 14 [Source:HGNC Symbol;Acc:HGNC:16283]	-0.81218	4.2E-05	0.00654
ENSG00000120694	HSPH1	heat shock protein family H (Hsp110) member 1 [Source:HGNC Symbol;Acc:HGNC:16969]	-0.81218	4.2E-05	0.00654
ENSG00000266274	RN7SL138P	RNA, 7SL, cytoplasmic 138, pseudogene [Source:HGNC Symbol;Acc:HGNC:46154]	-0.81149	4.4E-05	0.00668
ENSG00000113300	CNOT6	CCR4-NOT transcription complex subunit 6 [Source:HGNC Symbol;Acc:HGNC:14099]	-0.81011	4.6E-05	0.00674
ENSG00000187980	PLA2G2C	phospholipase A2 group IIC [Source:HGNC Symbol;Acc:HGNC:9032]	-0.80888	4.8E-05	0.007
ENSG00000147145	LPAR4	lysophosphatidic acid receptor 4 [Source:HGNC Symbol;Acc:HGNC:4478]	-0.80805	5E-05	0.007
ENSG00000167136	ENDOG	endonuclease G [Source:HGNC Symbol;Acc:HGNC:3346]	-0.80805	5E-05	0.007
ENSG00000269038	SF1-DT	SF1 divergent transcript [Source:HGNC Symbol;Acc:HGNC:55278]	-0.80805	5E-05	0.007
chr14 177402830 177490884			-0.80599	5.4E-05	0.00731
ENSG00000157978	LDLRAP1	low density lipoprotein receptor adaptor protein 1 [Source:HGNC Symbol;Acc:HGNC:18640]	-0.80599	5.4E-05	0.00731
ENSG00000279803		TEC	-0.80599	5.4E-05	0.00731
chr12 192301894 192375172			-0.80392	5.8E-05	0.00764
ENSG00000279204		TEC	-0.80392	5.8E-05	0.00764
ENSG00000285130		novel protein	-0.8033	6E-05	0.00777
ENSG00000166348	USP54	ubiquitin specific peptidase 54 [Source:HGNC Symbol;Acc:HGNC:23513]	-0.80186	6.3E-05	0.00798
ENSG00000179021	C3orf38	chromosome 3 open reading frame 38 [Source:HGNC Symbol;Acc:HGNC:28384]	-0.80186	6.3E-05	0.00798
ENSG00000110801	PSMD9	proteasome 26S subunit, non-ATPase 9 [Source:HGNC Symbol;Acc:HGNC:9567]	-0.79979	6.8E-05	0.00834
ENSG00000205250	E2F4	E2F transcription factor 4 [Source:HGNC Symbol;Acc:HGNC:3118]	-0.79979	6.8E-05	0.00834
ENSG00000233602	ER13-IT1	ER13 intronic transcript 1 [Source:HGNC Symbol;Acc:HGNC:41431]	-0.79979	6.8E-05	0.00834
ENSG00000260859		novel transcript, sense intronic to CRISPLD2	-0.79855	7.1E-05	0.00868
ENSG00000231645	KRT17P6	keratin 17 pseudogene 6 [Source:HGNC Symbol;Acc:HGNC:50724]	-0.79825	7.2E-05	0.00874
ENSG00000084070	SMAP2	small ArfGAP2 [Source:HGNC Symbol;Acc:HGNC:25082]	-0.79567	7.9E-05	0.00912
ENSG00000178691	SUZ12	SUZ12 polycomb repressive complex 2 subunit [Source:HGNC Symbol;Acc:HGNC:17101]	-0.79567	7.9E-05	0.00912
ENSG00000203572	GLRX2	glutaredoxin 2 [Source:HGNC Symbol;Acc:HGNC:16065]	-0.7936	8.5E-05	0.00954
ENSG00000250878	METTL21EP	methyltransferase like 21E, pseudogene [Source:HGNC Symbol;Acc:HGNC:41948]	-0.7936	8.5E-05	0.00954
ENSG00000270179		novel transcript	-0.7936	8.5E-05	0.00954
ENSG00000088986	DYNLL1	dynein light chain LC8-type 1 [Source:HGNC Symbol;Acc:HGNC:15476]	-0.79154	9.1E-05	0.00997
ENSG00000260693		novel transcript	-0.79154	9.1E-05	0.00997

ENSG00000104957	CCDC130	coiled-coil domain containing 130 [Source:HGNC Symbol;Acc:HGNC:28118]	-0.78947	9.8E-05	0.01049
ENSG00000136861	CDK5RAP2	CDK5 regulatory subunit associated protein 2 [Source:HGNC Symbol;Acc:HGNC:18672]	-0.78947	9.8E-05	0.01049
ENSG00000275445		novel transcript, antisense to C16orf52	-0.78943	9.8E-05	0.01049
ENSG00000110442	COMMD9	COMM domain containing 9 [Source:HGNC Symbol;Acc:HGNC:25014]	-0.78741	0.00011	0.0109
ENSG00000181751	MAC1R	macrophage immunometabolism regulator [Source:HGNC Symbol;Acc:HGNC:25052]	-0.78741	0.00011	0.0109
ENSG00000136478	TEX2	testis expressed 2 [Source:HGNC Symbol;Acc:HGNC:30884]	-0.78535	0.00011	0.01139
ENSG00000166963	MAP1A	microtubule associated protein 1A [Source:HGNC Symbol;Acc:HGNC:6835]	-0.78535	0.00011	0.01139
ENSG00000203811	H3C14	H3 clustered histone 14 [Source:HGNC Symbol;Acc:HGNC:20503]	-0.78535	0.00011	0.01139
ENSG00000236204	LINC01376	long intergenic non-protein coding RNA 1376 [Source:HGNC Symbol;Acc:HGNC:50637]	-0.78535	0.00011	0.01139
ENSG00000103064	SLC7A6	solute carrier family 7 member 6 [Source:HGNC Symbol;Acc:HGNC:11064]	-0.78328	0.00012	0.01181
ENSG00000109790	KLHL5	kelch like family member 5 [Source:HGNC Symbol;Acc:HGNC:6356]	-0.78328	0.00012	0.01181
ENSG00000136141	LRCH1	leucine rich repeats and calponin homology domain containing 1 [Source:HGNC Symbol;Acc:HGNC:20309]	-0.78328	0.00012	0.01181
ENSG00000166922	SCG5	secretogranin V [Source:HGNC Symbol;Acc:HGNC:10816]	-0.78328	0.00012	0.01181
ENSG00000155363	MOV10	Mov10 RISC complex RNA helicase [Source:HGNC Symbol;Acc:HGNC:7200]	-0.78122	0.00013	0.01245
ENSG00000230551		novel transcript	-0.78122	0.00013	0.01245
ENSG00000239264	TXNDC5	thioredoxin domain containing 5 [Source:HGNC Symbol;Acc:HGNC:21073]	-0.78122	0.00013	0.01245
ENSG00000143443	C1orf56	chromosome 1 open reading frame 56 [Source:HGNC Symbol;Acc:HGNC:26045]	-0.77915	0.00014	0.01296
ENSG00000243064	ABCC13	ATP binding cassette subfamily C member 13 (pseudogene) [Source:HGNC Symbol;Acc:HGNC:16022]	-0.77915	0.00014	0.01296
ENSG00000277662		novel transcript, sense intronic to MTRF1	-0.77915	0.00014	0.01296
ENSG00000269711		novel protein	-0.77785	0.00014	0.01341
ENSG00000146416	AIG1	androgen induced 1 [Source:HGNC Symbol;Acc:HGNC:21607]	-0.77709	0.00015	0.01349
ENSG00000174197	MGA	MAX dimerization protein MGA [Source:HGNC Symbol;Acc:HGNC:14010]	-0.77709	0.00015	0.01349
ENSG00000182771	GRID1	glutamate ionotropic receptor delta type subunit 1 [Source:HGNC Symbol;Acc:HGNC:4575]	-0.77646	0.00015	0.01371
chr4 -140296502 140374908			-0.77503	0.00016	0.01394
ENSG00000122481	RWDD3	RWD domain containing 3 [Source:HGNC Symbol;Acc:HGNC:21393]	-0.77503	0.00016	0.01394
ENSG00000168286	THAP11	THAP domain containing 11 [Source:HGNC Symbol;Acc:HGNC:23194]	-0.77503	0.00016	0.01394
ENSG00000173542	MOB1B	MOB kinase activator 1B [Source:HGNC Symbol;Acc:HGNC:29801]	-0.77503	0.00016	0.01394
ENSG00000186625	KATNA1	katanin catalytic subunit A1 [Source:HGNC Symbol;Acc:HGNC:6216]	-0.77503	0.00016	0.01394
ENSG00000221926	TRIM16	tripartite motif containing 16 [Source:HGNC Symbol;Acc:HGNC:17241]	-0.77503	0.00016	0.01394
ENSG00000132128	LRRC41	leucine rich repeat containing 41 [Source:HGNC Symbol;Acc:HGNC:16917]	-0.77296	0.00017	0.01456
ENSG00000137801	THBS1	thrombospondin 1 [Source:HGNC Symbol;Acc:HGNC:11785]	-0.77296	0.00017	0.01456
ENSG00000261060		novel transcript, sense overlapping TDRD5	-0.77296	0.00017	0.01456
ENSG00000278139	P3R3URF-PIK3R3	P3R3URF-PIK3R3 readthrough [Source:HGNC Symbol;Acc:HGNC:54999]	-0.77169	0.00018	0.01511
ENSG00000101361	NOP56	NOP56 ribonucleoprotein [Source:HGNC Symbol;Acc:HGNC:15911]	-0.7709	0.00018	0.01511
ENSG00000127804	METTL16	methyltransferase like 16 [Source:HGNC Symbol;Acc:HGNC:28484]	-0.7709	0.00018	0.01511
ENSG00000128245	YWHAH	tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein eta [Source:HGNC Symbol;Acc:HGNC:12853]	-0.7709	0.00018	0.01511
ENSG00000174171		novel transcript, antisense to SPTBN5	-0.7709	0.00018	0.01511
ENSG00000235530		novel transcript, antisense to TMEM11	-0.7709	0.00018	0.01511
ENSG00000274259	SYNGAP1-AS1	SYNGAP1 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:53831]	-0.7709	0.00018	0.01511
chr2 -171669137 171719741			-0.76883	0.00019	0.01562
ENSG00000101199	ARFGAP1	ADP ribosylation factor GTPase activating protein 1 [Source:HGNC Symbol;Acc:HGNC:15852]	-0.76883	0.00019	0.01562
ENSG00000160539	PLPP7	phospholipid phosphatase 7 (inactive) [Source:HGNC Symbol;Acc:HGNC:28174]	-0.76883	0.00019	0.01562
ENSG00000204217	BMPR2	bone morphogenetic protein receptor type 2 [Source:HGNC Symbol;Acc:HGNC:1078]	-0.76883	0.00019	0.01562
ENSG00000213699	SLC35F6	solute carrier family 35 member F6 [Source:HGNC Symbol;Acc:HGNC:26055]	-0.76883	0.00019	0.01562
ENSG00000259630	FABP5P9	fatty acid binding protein 5 pseudogene 9 [Source:HGNC Symbol;Acc:HGNC:31064]	-0.76883	0.00019	0.01562
chr12 +70217861 70319851			-0.76677	0.00021	0.016
chr2 -169666629 169726974			-0.76677	0.00021	0.016
ENSG00000100024	UPB1	beta-ureidopropionase 1 [Source:HGNC Symbol;Acc:HGNC:16297]	-0.76677	0.00021	0.016
ENSG00000132256	TRIM5	tripartite motif containing 5 [Source:HGNC Symbol;Acc:HGNC:16276]	-0.76677	0.00021	0.016
ENSG00000140986	RPL3L	ribosomal protein L3 like [Source:HGNC Symbol;Acc:HGNC:10351]	-0.76677	0.00021	0.016
ENSG00000149289	ZC3H12C	zinc finger CCH-type containing 12C [Source:HGNC Symbol;Acc:HGNC:29362]	-0.76677	0.00021	0.016
ENSG00000166086	JAM3	junctional adhesion molecule 3 [Source:HGNC Symbol;Acc:HGNC:15532]	-0.76677	0.00021	0.016
ENSG00000232810	TNF	tumor necrosis factor [Source:HGNC Symbol;Acc:HGNC:11892]	-0.76677	0.00021	0.016
ENSG00000234160		novel transcript	-0.76677	0.00021	0.016
ENSG00000275993	SIK1B	salt inducible kinase 1B (putative) [Source:HGNC Symbol;Acc:HGNC:52389]	-0.76677	0.00021	0.016
ENSG00000125650	PSPN	persephin [Source:HGNC Symbol;Acc:HGNC:9579]	-0.76471	0.00022	0.01651
ENSG00000139697	SBNO1	strawberry notch homolog 1 [Source:HGNC Symbol;Acc:HGNC:22973]	-0.76471	0.00022	0.01651
ENSG00000175602	CCDC85B	coiled-coil domain containing 85B [Source:HGNC Symbol;Acc:HGNC:24926]	-0.76471	0.00022	0.01651
ENSG00000180914	OXTR	oxytocin receptor [Source:HGNC Symbol;Acc:HGNC:8529]	-0.76471	0.00022	0.01651
ENSG00000204851	PNMA8B	PNMA family member 8B [Source:HGNC Symbol;Acc:HGNC:29206]	-0.76471	0.00022	0.01651
ENSG00000272370		novel transcript	-0.76471	0.00022	0.01651
chr15 -91959573 92014695			-0.76264	0.00023	0.01693
chr2 -231388338 231479819			-0.76264	0.00023	0.01693
chr8 -95295330 95363347			-0.76264	0.00023	0.01693
ENSG00000064989	CALCRL	calcitonin receptor like receptor [Source:HGNC Symbol;Acc:HGNC:16709]	-0.76264	0.00023	0.01693
ENSG00000065308	TRAM2	translocation associated membrane protein 2 [Source:HGNC Symbol;Acc:HGNC:16855]	-0.76264	0.00023	0.01693
ENSG00000136867	SLC31A2	solute carrier family 31 member 2 [Source:HGNC Symbol;Acc:HGNC:11017]	-0.76264	0.00023	0.01693
ENSG00000172292	CERS6	ceramide synthase 6 [Source:HGNC Symbol;Acc:HGNC:23826]	-0.76264	0.00023	0.01693
ENSG00000225528		novel protein similar to translation machinery associated 7 homolog (S. cerevisiae) TMA7	-0.76264	0.00023	0.01693
ENSG00000280195		novel transcript, antisense to RPL10	-0.76264	0.00023	0.01693
ENSG00000285557		novel transcript	-0.76264	0.00023	0.01693
ENSG00000283052	LINC02456	long intergenic non-protein coding RNA 2456 [Source:HGNC Symbol;Acc:HGNC:53389]	-0.762	0.00024	0.01708
ENSG00000109906	ZBTB16	zinc finger and BTB domain containing 16 [Source:HGNC Symbol;Acc:HGNC:12930]	-0.76058	0.00025	0.01708
ENSG00000132912	DCTN4	dynactin subunit 4 [Source:HGNC Symbol;Acc:HGNC:15518]	-0.76058	0.00025	0.01708
ENSG00000165434	PGM2L1	phosphoglucomutase 2 like 1 [Source:HGNC Symbol;Acc:HGNC:20898]	-0.76058	0.00025	0.01708
ENSG00000172409	CLP1	cleavage factor polyribonucleotide kinase subunit 1 [Source:HGNC Symbol;Acc:HGNC:16999]	-0.76058	0.00025	0.01708
ENSG00000175305	CCNE2	cyclin E2 [Source:HGNC Symbol;Acc:HGNC:1590]	-0.76058	0.00025	0.01708
ENSG00000182224	CYBD1	cytochrome b5 domain containing 1 [Source:HGNC Symbol;Acc:HGNC:26516]	-0.76058	0.00025	0.01708
ENSG00000196497	IPO4	importin 4 [Source:HGNC Symbol;Acc:HGNC:19426]	-0.76058	0.00025	0.01708
ENSG00000223561		novel transcript	-0.76058	0.00025	0.01708
ENSG00000233524	RANP8	RAN pseudogene 8 [Source:HGNC Symbol;Acc:HGNC:39863]	-0.76058	0.00025	0.01708

ENSG00000251580	LINC02482	long intergenic non-protein coding RNA 2482 [Source:HGNC Symbol;Acc:HGNC:53458]	-0.75994	0.00025	0.01736
ENSG00000279333		novel transcript	-0.7593	0.00026	0.01764
ENSG00000047578	KATNIP	katanin interacting protein [Source:HGNC Symbol;Acc:HGNC:29068]	-0.75851	0.00026	0.0177
ENSG00000111328	CDK2AP1	cyclin dependent kinase 2 associated protein 1 [Source:HGNC Symbol;Acc:HGNC:14002]	-0.75851	0.00026	0.0177
ENSG00000189180	ZNF33A	zinc finger protein 33A [Source:HGNC Symbol;Acc:HGNC:13096]	-0.75851	0.00026	0.0177
ENSG00000005381	MPO	myeloperoxidase [Source:HGNC Symbol;Acc:HGNC:7218]	-0.75645	0.00028	0.018
ENSG000000051382	PIK3CB	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit beta [Source:HGNC Symbol;Acc:HGNC:8976]	-0.75645	0.00028	0.018
ENSG00000076043	REXO2	RNA exonuclease 2 [Source:HGNC Symbol;Acc:HGNC:17851]	-0.75645	0.00028	0.018
ENSG00000110218	PANX1	pannexin 1 [Source:HGNC Symbol;Acc:HGNC:8599]	-0.75645	0.00028	0.018
ENSG00000111364	DDX55	DEAD-box helicase 55 [Source:HGNC Symbol;Acc:HGNC:20085]	-0.75645	0.00028	0.018
ENSG00000144063	MALL	mal, T cell differentiation protein like [Source:HGNC Symbol;Acc:HGNC:6818]	-0.75645	0.00028	0.018
ENSG00000162511	LAPTM5	lysosomal protein transmembrane 5 [Source:HGNC Symbol;Acc:HGNC:29612]	-0.75645	0.00028	0.018
ENSG00000164889	SLC4A2	solute carrier family 4 member 2 [Source:HGNC Symbol;Acc:HGNC:11028]	-0.75645	0.00028	0.018
ENSG00000267243		novel transcript	-0.75645	0.00028	0.018
ENSG00000280135		TEC	-0.75645	0.00028	0.018
ENSG00000005100	DHX33	DEAH-box helicase 33 [Source:HGNC Symbol;Acc:HGNC:16718]	-0.75439	0.0003	0.01876
ENSG00000115657	ABC86	ATP binding cassette subfamily B member 6 (Langereis blood group) [Source:HGNC Symbol;Acc:HGNC:47]	-0.75439	0.0003	0.01876
ENSG00000135914	HTR2B	5-hydroxytryptamine receptor 2B [Source:HGNC Symbol;Acc:HGNC:5294]	-0.75439	0.0003	0.01876
ENSG00000272989	LINC02012	long intergenic non-protein coding RNA 2012 [Source:HGNC Symbol;Acc:HGNC:52847]	-0.75439	0.0003	0.01876
ENSG00000273983	H3C8	H3 clustered histone 8 [Source:HGNC Symbol;Acc:HGNC:4772]	-0.75439	0.0003	0.01876
ENSG00000266876		syntaxin 18 (STX18) pseudogene	-0.75416	0.0003	0.01884
chr10 - 59257983 59752743			-0.75232	0.00032	0.01921
chr7 - 30413577 30478433			-0.75232	0.00032	0.01921
ENSG00000123933	MXD4	MAX dimerization protein 4 [Source:HGNC Symbol;Acc:HGNC:13906]	-0.75232	0.00032	0.01921
ENSG00000158169	FANCC	FA complementation group C [Source:HGNC Symbol;Acc:HGNC:3584]	-0.75232	0.00032	0.01921
ENSG00000166147	FBN1	fibrillin 1 [Source:HGNC Symbol;Acc:HGNC:3603]	-0.75232	0.00032	0.01921
ENSG00000198805	PNP	purine nucleoside phosphorylase [Source:HGNC Symbol;Acc:HGNC:7892]	-0.75232	0.00032	0.01921
ENSG00000221829	FANCG	FA complementation group G [Source:HGNC Symbol;Acc:HGNC:3588]	-0.75232	0.00032	0.01921
ENSG00000257954		FGFR1 oncogene partner 2 (FGFR1OP2) pseudogene	-0.75232	0.00032	0.01921
ENSG00000278867		TEC	-0.75232	0.00032	0.01921
chr14 - 95942314 95994519			-0.75026	0.00034	0.01977
ENSG00000088038	CNOT3	CCR4-NOT transcription complex subunit 3 [Source:HGNC Symbol;Acc:HGNC:7879]	-0.75026	0.00034	0.01977
ENSG00000173868	PHOSPHO1	phosphoethanolamine/phosphocholine phosphatase 1 [Source:HGNC Symbol;Acc:HGNC:16815]	-0.75026	0.00034	0.01977
ENSG00000185291	IL3RA	interleukin 3 receptor subunit alpha [Source:HGNC Symbol;Acc:HGNC:6012]	-0.75026	0.00034	0.01977
ENSG00000272918		novel transcript, antisense to MLL5	-0.75026	0.00034	0.01977
ENSG00000065559	MAP2K4	mitogen-activated protein kinase kinase 4 [Source:HGNC Symbol;Acc:HGNC:6844]	-0.74819	0.00036	0.02036
ENSG00000134324	LPIN1	lipin 1 [Source:HGNC Symbol;Acc:HGNC:13345]	-0.74819	0.00036	0.02036
ENSG00000153162	BMP6	bone morphogenetic protein 6 [Source:HGNC Symbol;Acc:HGNC:1073]	-0.74819	0.00036	0.02036
ENSG00000185164	NOMO2	NODAL modulator 2 [Source:HGNC Symbol;Acc:HGNC:22652]	-0.74819	0.00036	0.02036
ENSG00000187902	SHISA7	shisa family member 7 [Source:HGNC Symbol;Acc:HGNC:35409]	-0.74819	0.00036	0.02036
ENSG00000230063		novel transcript, sense intronic to PPP2R5A	-0.74819	0.00036	0.02036
ENSG00000269973		novel transcript	-0.74819	0.00036	0.02036
ENSG00000280206		novel transcript	-0.74819	0.00036	0.02036
ENSG00000047648	ARHGAP6	Rho GTPase activating protein 6 [Source:HGNC Symbol;Acc:HGNC:676]	-0.74613	0.00038	0.02122
ENSG00000133112	TPT1	tumor protein, translationally-controlled 1 [Source:HGNC Symbol;Acc:HGNC:12022]	-0.74613	0.00038	0.02122
ENSG00000263272		novel transcript, antisense to RPAIN	-0.74613	0.00038	0.02122
ENSG00000005961	ITGA2B	integrin subunit alpha 2b [Source:HGNC Symbol;Acc:HGNC:6138]	-0.74407	0.0004	0.02176
ENSG00000052795	FNIP2	folliculin interacting protein 2 [Source:HGNC Symbol;Acc:HGNC:29280]	-0.74407	0.0004	0.02176
ENSG00000101298	SNPH	syntrophin [Source:HGNC Symbol;Acc:HGNC:15931]	-0.74407	0.0004	0.02176
ENSG00000156639	ZFAND3	zinc finger AN1-type containing 3 [Source:HGNC Symbol;Acc:HGNC:18019]	-0.74407	0.0004	0.02176
ENSG00000185722	ANKFY1	ankyrin repeat and FYVE domain containing 1 [Source:HGNC Symbol;Acc:HGNC:20763]	-0.74407	0.0004	0.02176
ENSG00000243708	PLA2G4B	phospholipase A2 group IVB [Source:HGNC Symbol;Acc:HGNC:9036]	-0.74407	0.0004	0.02176
ENSG00000258458		novel transcript, antisense to OXAIL	-0.74407	0.0004	0.02176
ENSG00000273599		novel transcript, antisense to CTBP2	-0.74407	0.0004	0.02176
ENSG00000176472	ZNF575	zinc finger protein 575 [Source:HGNC Symbol;Acc:HGNC:27606]	-0.74379	0.0004	0.02183
ENSG00000248871	TNFSF12-TNFSF1	TNFSF12-TNFSF13 readthrough [Source:HGNC Symbol;Acc:HGNC:33537]	-0.74379	0.0004	0.02183
ENSG00000128591	FLNC	filamin C [Source:HGNC Symbol;Acc:HGNC:3756]	-0.74211	0.00042	0.02242
ENSG00000116717	GADD45A	growth arrest and DNA damage inducible alpha [Source:HGNC Symbol;Acc:HGNC:4095]	-0.742	0.00042	0.02242
ENSG00000145703	IQGAP2	IQ motif containing GTPase activating protein 2 [Source:HGNC Symbol;Acc:HGNC:6111]	-0.742	0.00042	0.02242
ENSG00000171992	SYNPO	synaptopodin [Source:HGNC Symbol;Acc:HGNC:30672]	-0.742	0.00042	0.02242
ENSG00000235665	LINC00298	long intergenic non-protein coding RNA 298 [Source:HGNC Symbol;Acc:HGNC:49257]	-0.742	0.00042	0.02242
ENSG00000242265	PEG10	paternally expressed 10 [Source:HGNC Symbol;Acc:HGNC:14005]	-0.742	0.00042	0.02242
ENSG00000272256		novel transcript, antisense to TMEM66	-0.742	0.00042	0.02242
ENSG00000108825	PTGES3L-AARSD	PTGES3L-AARSD1 readthrough [Source:HGNC Symbol;Acc:HGNC:43946]	-0.74135	0.00043	0.02267
ENSG00000254512	PHBP2	prohibitin pseudogene 2 [Source:HGNC Symbol;Acc:HGNC:8914]	-0.74135	0.00043	0.02267
ENSG00000104361	NIPAL2	NIPA like domain containing 2 [Source:HGNC Symbol;Acc:HGNC:25854]	-0.73994	0.00045	0.02286
ENSG00000110880	CORO1C	coronin 1C [Source:HGNC Symbol;Acc:HGNC:2254]	-0.73994	0.00045	0.02286
ENSG00000134318	ROCK2	Rho associated coiled-coil containing protein kinase 2 [Source:HGNC Symbol;Acc:HGNC:10252]	-0.73994	0.00045	0.02286
ENSG00000137822	TUBGCP4	tubulin gamma complex associated protein 4 [Source:HGNC Symbol;Acc:HGNC:16691]	-0.73994	0.00045	0.02286
ENSG00000158480	SPATA2	spermatogenesis associated 2 [Source:HGNC Symbol;Acc:HGNC:14681]	-0.73994	0.00045	0.02286
ENSG00000183763	TRAF1	TRAF interacting protein [Source:HGNC Symbol;Acc:HGNC:30764]	-0.73994	0.00045	0.02286
ENSG00000197111	PCBP2	poly(rC) binding protein 2 [Source:HGNC Symbol;Acc:HGNC:8648]	-0.73994	0.00045	0.02286
ENSG00000227500	SCAMP4	secretory carrier membrane protein 4 [Source:HGNC Symbol;Acc:HGNC:30385]	-0.73994	0.00045	0.02286
ENSG00000261279	ULK4P1	ULK4 pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:15775]	-0.73994	0.00045	0.02286
ENSG00000280798	LINC00294	long intergenic non-protein coding RNA 294 [Source:HGNC Symbol;Acc:HGNC:27456]	-0.73994	0.00045	0.02286
ENSG00000160298	C21orf58	chromosome 21 open reading frame 58 [Source:HGNC Symbol;Acc:HGNC:1300]	-0.73787	0.00047	0.02342
ENSG00000166135	HIF1AN	hypoxia inducible factor 1 subunit alpha inhibitor [Source:HGNC Symbol;Acc:HGNC:17113]	-0.73787	0.00047	0.02342
ENSG00000243156	MICAL3	microtubule associated monoxygenase, calponin and LIM domain containing 3 [Source:HGNC Symbol;Acc:HGNC:24694]	-0.73787	0.00047	0.02342
ENSG00000280347		TEC	-0.73787	0.00047	0.02342
ENSG00000111012	CYP27B1	cytochrome P450 family 27 subfamily B member 1 [Source:HGNC Symbol;Acc:HGNC:2606]	-0.73722	0.00048	0.02379
ENSG00000081014	AP4E1	adaptor related protein complex 4 subunit epsilon 1 [Source:HGNC Symbol;Acc:HGNC:573]	-0.73581	0.0005	0.02391

ENSG00000125633	CCDC93	coiled-coil domain containing 93 [Source:HGNC Symbol;Acc:HGNC:25611]	-0.73581	0.0005	0.02391
ENSG00000130147	SH3BP4	SH3 domain binding protein 4 [Source:HGNC Symbol;Acc:HGNC:10826]	-0.73581	0.0005	0.02391
ENSG00000152223	EPG5	ectopic P-granules autophagy protein 5 homolog [Source:HGNC Symbol;Acc:HGNC:29331]	-0.73581	0.0005	0.02391
ENSG00000165282	PIGO	phosphatidylinositol glycan anchor biosynthesis class O [Source:HGNC Symbol;Acc:HGNC:23215]	-0.73581	0.0005	0.02391
ENSG00000171943	SRGAP2C	SLIT-ROBO Rho GTPase activating protein 2C [Source:HGNC Symbol;Acc:HGNC:30584]	-0.73581	0.0005	0.02391
ENSG00000188522	FAM83G	family with sequence similarity 83 member G [Source:HGNC Symbol;Acc:HGNC:32554]	-0.73581	0.0005	0.02391
ENSG00000260032	NORAD	non-coding RNA activated by DNA damage [Source:HGNC Symbol;Acc:HGNC:44311]	-0.73581	0.0005	0.02391
ENSG00000202056	ZFP64	ZFP64 zinc finger protein [Source:HGNC Symbol;Acc:HGNC:15940]	-0.73375	0.00053	0.02448
ENSG00000109971	HSPA8	heat shock protein family A (Hsp70) member 8 [Source:HGNC Symbol;Acc:HGNC:5241]	-0.73375	0.00053	0.02448
ENSG00000112473	SLC39A7	solute carrier family 39 member 7 [Source:HGNC Symbol;Acc:HGNC:4927]	-0.73375	0.00053	0.02448
ENSG00000132024	CC2D1A	coiled-coil and C2 domain containing 1A [Source:HGNC Symbol;Acc:HGNC:30237]	-0.73375	0.00053	0.02448
ENSG00000175567	UCP2	uncoupling protein 2 [Source:HGNC Symbol;Acc:HGNC:12518]	-0.73375	0.00053	0.02448
ENSG00000177189	RPS6KA3	ribosomal protein S6 kinase A3 [Source:HGNC Symbol;Acc:HGNC:10432]	-0.73375	0.00053	0.02448
ENSG00000237440	ZNF737	zinc finger protein 737 [Source:HGNC Symbol;Acc:HGNC:32468]	-0.73375	0.00053	0.02448
ENSG00000279227		novel transcript	-0.73375	0.00053	0.02448
ENSG00000116285	ERRFI1	ERBB receptor feedback inhibitor 1 [Source:HGNC Symbol;Acc:HGNC:18185]	-0.73168	0.00056	0.02526
ENSG00000156127	BATF	basic leucine zipper ATF-like transcription factor [Source:HGNC Symbol;Acc:HGNC:958]	-0.73168	0.00056	0.02526
ENSG00000163349	HIPK1	homeodomain interacting protein kinase 1 [Source:HGNC Symbol;Acc:HGNC:19006]	-0.73168	0.00056	0.02526
ENSG00000163964	PIGX	phosphatidylinositol glycan anchor biosynthesis class X [Source:HGNC Symbol;Acc:HGNC:26046]	-0.73168	0.00056	0.02526
ENSG00000204424	LY6G6F	lymphocyte antigen 6 family member G6F [Source:HGNC Symbol;Acc:HGNC:13933]	-0.73168	0.00056	0.02526
ENSG00000271327		novel transcript	-0.73168	0.00056	0.02526
chr18 144337512 44392055			-0.72962	0.00059	0.02607
chr6 89794879 89855593			-0.72962	0.00059	0.02607
ENSG00000101162	TUBB1	tubulin beta 1 class VI [Source:HGNC Symbol;Acc:HGNC:16257]	-0.72962	0.00059	0.02607
ENSG00000110844	PRPF40B	pre-mRNA processing factor 40 homolog B [Source:HGNC Symbol;Acc:HGNC:25031]	-0.72962	0.00059	0.02607
ENSG00000120696	KBTBD7	kelch repeat and BTB domain containing 7 [Source:HGNC Symbol;Acc:HGNC:25266]	-0.72962	0.00059	0.02607
ENSG00000134070	IRAK2	interleukin 1 receptor associated kinase 2 [Source:HGNC Symbol;Acc:HGNC:6113]	-0.72962	0.00059	0.02607
ENSG00000182973	CNOT10	CCR4-NOT transcription complex subunit 10 [Source:HGNC Symbol;Acc:HGNC:23817]	-0.72962	0.00059	0.02607
ENSG00000122696	SLC25A51	solute carrier family 25 member 51 [Source:HGNC Symbol;Acc:HGNC:23323]	-0.72755	0.00062	0.0269
ENSG00000128891	CCDC32	coiled-coil domain containing 32 [Source:HGNC Symbol;Acc:HGNC:28295]	-0.72755	0.00062	0.0269
ENSG00000157764	BRAF	B-Raf proto-oncogene, serine/threonine kinase [Source:HGNC Symbol;Acc:HGNC:1097]	-0.72755	0.00062	0.0269
ENSG00000206585	RNVU1-7	RNA, variant U1 small nuclear 7 [Source:HGNC Symbol;Acc:HGNC:37500]	-0.72755	0.00062	0.0269
ENSG00000254726	MEX3A	mex-3 RNA binding family member A [Source:HGNC Symbol;Acc:HGNC:33482]	-0.72755	0.00062	0.0269
ENSG00000266907		glycerol-3-phosphate dehydrogenase 2 (mitochondrial), pseudogene	-0.72755	0.00062	0.0269
chr3 44037207 44151833			-0.72549	0.00066	0.02742
ENSG00000005007	UPF1	UPF1 RNA helicase and ATPase [Source:HGNC Symbol;Acc:HGNC:9962]	-0.72549	0.00066	0.02742
ENSG000000043591	ADRB1	adrenoreceptor beta 1 [Source:HGNC Symbol;Acc:HGNC:285]	-0.72549	0.00066	0.02742
ENSG000000066827	ZFAT	zinc finger and AT-hook domain containing [Source:HGNC Symbol;Acc:HGNC:19899]	-0.72549	0.00066	0.02742
ENSG000000078399	HOXA9	homeobox A9 [Source:HGNC Symbol;Acc:HGNC:5109]	-0.72549	0.00066	0.02742
ENSG00000145715	RASA1	RAS p21 protein activator 1 [Source:HGNC Symbol;Acc:HGNC:9871]	-0.72549	0.00066	0.02742
ENSG00000147119	CHST7	carbohydrate sulfotransferase 7 [Source:HGNC Symbol;Acc:HGNC:13817]	-0.72549	0.00066	0.02742
ENSG00000156017	CARNMT1	carnosine N-methyltransferase 1 [Source:HGNC Symbol;Acc:HGNC:23435]	-0.72549	0.00066	0.02742
ENSG00000171552	BCL2L1	BCL2 like 1 [Source:HGNC Symbol;Acc:HGNC:992]	-0.72549	0.00066	0.02742
ENSG00000225187		novel transcript	-0.72549	0.00066	0.02742
ENSG00000104205	SGK3	serum/glucocorticoid regulated kinase family member 3 [Source:HGNC Symbol;Acc:HGNC:10812]	-0.72343	0.00069	0.02851
ENSG00000116675	DNAJC6	DnaJ heat shock protein family (Hsp40) member C6 [Source:HGNC Symbol;Acc:HGNC:15469]	-0.72343	0.00069	0.02851
ENSG00000239839	DEFA3	defensin alpha 3 [Source:HGNC Symbol;Acc:HGNC:2762]	-0.72343	0.00069	0.02851
ENSG00000285953		novel protein	-0.72136	0.00073	0.02962
ENSG00000144233	AMMECR1L	AMMECR1 like [Source:HGNC Symbol;Acc:HGNC:28658]	-0.72136	0.00073	0.02962
ENSG00000241889		dullard homolog (Xenopus laevis) (DULLARD) pseudogene	-0.72136	0.00073	0.02962
ENSG00000248015		novel transcript, antisense to NDUF57	-0.7193	0.00077	0.03052
ENSG00000122786	CALD1	caldesmon 1 [Source:HGNC Symbol;Acc:HGNC:1441]	-0.7193	0.00077	0.03052
ENSG00000280047		TEC	-0.7193	0.00077	0.03052
ENSG00000285650		Novel transcript, antisense to CENPP	-0.71723	0.00081	0.03129
chr3 137724326 137780757			-0.71723	0.00081	0.03129
ENSG00000009830	POMT2	protein O-mannosyltransferase 2 [Source:HGNC Symbol;Acc:HGNC:19743]	-0.71723	0.00081	0.03129
ENSG00000102362	SYTL4	synaptotagmin like 4 [Source:HGNC Symbol;Acc:HGNC:15568]	-0.71723	0.00081	0.03129
ENSG00000160145	KALRN	kallirin RhoGEF kinase [Source:HGNC Symbol;Acc:HGNC:4814]	-0.71723	0.00081	0.03129
ENSG00000166289	PLEKHF1	pleckstrin homology and FYVE domain containing 1 [Source:HGNC Symbol;Acc:HGNC:20764]	-0.71723	0.00081	0.03129
ENSG00000180776	ZDHHC20	zinc finger DHHC-type palmitoyltransferase 20 [Source:HGNC Symbol;Acc:HGNC:20749]	-0.71723	0.00081	0.03129
ENSG00000184792	OSBP2	oxysterol binding protein 2 [Source:HGNC Symbol;Acc:HGNC:8504]	-0.71723	0.00081	0.03129
ENSG00000275158	TRBV12-5	T cell receptor beta variable 12-5 [Source:HGNC Symbol;Acc:HGNC:12187]	-0.71517	0.00085	0.0324
ENSG00000127328	RAB3A	RAB3A interacting protein [Source:HGNC Symbol;Acc:HGNC:16508]	-0.71517	0.00085	0.0324
ENSG00000133624	ZNF767P	zinc finger family member 767, pseudogene [Source:HGNC Symbol;Acc:HGNC:21884]	-0.71517	0.00085	0.0324
ENSG00000214812		novel ADP-ribosylation factor family domain containing pseudogene	-0.71517	0.00085	0.0324
ENSG00000257176		novel transcript, antisense to FAR2	-0.71311	0.00089	0.03327
chr2 118900190 118972600			-0.71311	0.00089	0.03327
ENSG0000010278	CD9	CD9 molecule [Source:HGNC Symbol;Acc:HGNC:1709]	-0.71311	0.00089	0.03327
ENSG000000086189	DIMT1	DIMT1 rRNA methyltransferase and ribosome maturation factor [Source:HGNC Symbol;Acc:HGNC:30217]	-0.71311	0.00089	0.03327
ENSG00000111641	NOP2	NOP2 nucleolar protein [Source:HGNC Symbol;Acc:HGNC:7867]	-0.71311	0.00089	0.03327
ENSG00000115170	ACVR1	activin A receptor type 1 [Source:HGNC Symbol;Acc:HGNC:171]	-0.71311	0.00089	0.03327
ENSG00000118454	ANKRD13C	ankyrin repeat domain 13C [Source:HGNC Symbol;Acc:HGNC:25374]	-0.71311	0.00089	0.03327
ENSG00000136243	NUP42	nucleoporin 42 [Source:HGNC Symbol;Acc:HGNC:17010]	-0.71311	0.00089	0.03327
ENSG00000147162	OGT	O-linked N-acetylglucosamine (GlcNAc) transferase [Source:HGNC Symbol;Acc:HGNC:8127]	-0.71311	0.00089	0.03327
ENSG00000236047	RPL13AP12	ribosomal protein L13a pseudogene 12 [Source:HGNC Symbol;Acc:HGNC:35673]	-0.71244	0.00091	0.03376
ENSG00000196091	MYBPC1	myosin binding protein C1 [Source:HGNC Symbol;Acc:HGNC:7549]	-0.71178	0.00092	0.03392
ENSG00000276345			-0.71104	0.00094	0.03392
chr12 31110180 31160289			-0.71104	0.00094	0.03392
chr13 125598341 25652477			-0.71104	0.00094	0.03392
ENSG00000127483	HP1BP3	heterochromatin protein 1 binding protein 3 [Source:HGNC Symbol;Acc:HGNC:24973]	-0.71104	0.00094	0.03392
ENSG00000198108	CHSY3	chondroitin sulfate synthase 3 [Source:HGNC Symbol;Acc:HGNC:24293]	-0.71104	0.00094	0.03392

ENSG00000235111		novel transcript	-0.71104	0.00094	0.03392
ENSG00000256235	SMIM3	small integral membrane protein 3 [Source:HGNC Symbol;Acc:HGNC:30248]	-0.71104	0.00094	0.03392
ENSG00000263335		novel transcript, antisense to MYH11	-0.71104	0.00094	0.03392
ENSG00000276043	UHRF1	ubiquitin like with PHD and ring finger domains 1 [Source:HGNC Symbol;Acc:HGNC:12556]	-0.71104	0.00094	0.03392
ENSG00000277481	PKD1L3	polycystin 1 like 3, transient receptor potential channel interacting [Source:HGNC Symbol;Acc:HGNC:21716]	-0.71104	0.00094	0.03392
ENSG00000217801		protein tyrosine phosphatase family pseudogene	-0.70992	0.00096	0.03479
chr1 - 90030019 90098410			-0.70898	0.00099	0.0349
ENSG00000117155	SSX2IP	SSX family member 2 interacting protein [Source:HGNC Symbol;Acc:HGNC:16509]	-0.70898	0.00099	0.0349
ENSG00000121104	FAM117A	family with sequence similarity 117 member A [Source:HGNC Symbol;Acc:HGNC:24179]	-0.70898	0.00099	0.0349
ENSG00000124784	RIOK1	RIO kinase 1 [Source:HGNC Symbol;Acc:HGNC:18656]	-0.70898	0.00099	0.0349
ENSG00000154736	ADAMTSS	ADAM metalloproteinase with thrombospondin type 1 motif 5 [Source:HGNC Symbol;Acc:HGNC:221]	-0.70898	0.00099	0.0349
ENSG00000180855	ZNF443	zinc finger protein 443 [Source:HGNC Symbol;Acc:HGNC:20878]	-0.70898	0.00099	0.0349
ENSG00000184216	IRAK1	interleukin 1 receptor associated kinase 1 [Source:HGNC Symbol;Acc:HGNC:6112]	-0.70898	0.00099	0.0349
ENSG00000187672	ERC2	ELKS/RAB6-interacting/CAST family member 2 [Source:HGNC Symbol;Acc:HGNC:31922]	-0.70898	0.00099	0.0349
ENSG00000248746	ACTN3	actinin alpha 3 [Source:HGNC Symbol;Acc:HGNC:165]	-0.70898	0.00099	0.0349
ENSG00000250771		tol-like receptor 2 pseudogene	-0.70898	0.00099	0.0349
ENSG00000272498		novel transcript, antisense to RFTN1	-0.70898	0.00099	0.0349
chr5 - 130701924 130754450			-0.70691	0.00104	0.0356
chrX - 68066111 68116840			-0.70691	0.00104	0.0356
ENSG00000068878	PSME4	proteasome activator subunit 4 [Source:HGNC Symbol;Acc:HGNC:20635]	-0.70691	0.00104	0.0356
ENSG00000147421	HMBX1	homeobox containing 1 [Source:HGNC Symbol;Acc:HGNC:26137]	-0.70691	0.00104	0.0356
ENSG00000159069	FBXW5	F-box and WD repeat domain containing 5 [Source:HGNC Symbol;Acc:HGNC:13613]	-0.70691	0.00104	0.0356
ENSG00000197417	SHPK	sedoheptulokinase [Source:HGNC Symbol;Acc:HGNC:1492]	-0.70691	0.00104	0.0356
ENSG00000226179	LINC00685	long intergenic non-protein coding RNA 685 [Source:HGNC Symbol;Acc:HGNC:27560]	-0.70691	0.00104	0.0356
ENSG00000258819	LINC02289	long intergenic non-protein coding RNA 2289 [Source:HGNC Symbol;Acc:HGNC:53205]	-0.70691	0.00104	0.0356
ENSG00000260711		novel transcript, intronic to CATSPERB	-0.70691	0.00104	0.0356
chr4 - 23897365 24290828			-0.70485	0.00109	0.0368
ENSG00000124469	CEACAM8	CEA cell adhesion molecule 8 [Source:HGNC Symbol;Acc:HGNC:1820]	-0.70485	0.00109	0.0368
ENSG00000164181	ELOVL7	ELOVL fatty acid elongase 7 [Source:HGNC Symbol;Acc:HGNC:26292]	-0.70485	0.00109	0.0368
ENSG00000165568	AKR1E2	aldo-keto reductase family 1 member E2 [Source:HGNC Symbol;Acc:HGNC:23437]	-0.70485	0.00109	0.0368
ENSG00000167635	ZNF146	zinc finger protein 146 [Source:HGNC Symbol;Acc:HGNC:12931]	-0.70485	0.00109	0.0368
ENSG00000173548	SNX33	sorting nexin 33 [Source:HGNC Symbol;Acc:HGNC:28468]	-0.70485	0.00109	0.0368
ENSG00000213090	SCYL2P1	SCYL2 pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:54685]	-0.70485	0.00109	0.0368
ENSG00000215022		novel transcript, antisense to PHACTR1	-0.70485	0.00109	0.0368
chr4 - 153171990 153242408			-0.70279	0.00114	0.03788
ENSG00000108960	MMD	monocyte to macrophage differentiation associated [Source:HGNC Symbol;Acc:HGNC:7153]	-0.70279	0.00114	0.03788
ENSG00000131747	TOP2A	DNA topoisomerase II alpha [Source:HGNC Symbol;Acc:HGNC:11989]	-0.70279	0.00114	0.03788
ENSG00000154839	SKA1	spindle and kinetochore associated complex subunit 1 [Source:HGNC Symbol;Acc:HGNC:28109]	-0.70279	0.00114	0.03788
ENSG00000180354	MTURN	maturin, neural progenitor differentiation regulator homolog [Source:HGNC Symbol;Acc:HGNC:25457]	-0.70279	0.00114	0.03788
ENSG00000186638	KIF24	kinesin family member 24 [Source:HGNC Symbol;Acc:HGNC:19916]	-0.70279	0.00114	0.03788
ENSG00000221823	PPP3R1	protein phosphatase 3 regulatory subunit B, alpha [Source:HGNC Symbol;Acc:HGNC:9317]	-0.70279	0.00114	0.03788
ENSG00000251623	FAM153B	family with sequence similarity 153 member B [Source:NCBI gene (formerly Entrezgene);Acc:202134]	-0.70279	0.00114	0.03788
chr8 - 66625499 66700727			-0.70072	0.0012	0.03887
ENSG00000090061	CCNK	cyclin K [Source:HGNC Symbol;Acc:HGNC:1596]	-0.70072	0.0012	0.03887
ENSG00000128683	GAD1	glutamate decarboxylase 1 [Source:HGNC Symbol;Acc:HGNC:4092]	-0.70072	0.0012	0.03887
ENSG00000138698	RAP1GDS1	Rap1 GTPase-GDP dissociation stimulator 1 [Source:HGNC Symbol;Acc:HGNC:9859]	-0.70072	0.0012	0.03887
ENSG00000147155	EBP	EBP cholesterol delta-isomerase [Source:HGNC Symbol;Acc:HGNC:3133]	-0.70072	0.0012	0.03887
ENSG00000171735	CAMTA1	calmodulin binding transcription activator 1 [Source:HGNC Symbol;Acc:HGNC:18806]	-0.70072	0.0012	0.03887
ENSG00000198265	HELZ	helicase with zinc finger [Source:HGNC Symbol;Acc:HGNC:16878]	-0.70072	0.0012	0.03887
ENSG00000242622		novel transcript	-0.70072	0.0012	0.03887
ENSG00000249855	EEF1A1P19	eukaryotic translation elongation factor 1 alpha 1 pseudogene 19 [Source:HGNC Symbol;Acc:HGNC:37892]	-0.70072	0.0012	0.03887
ENSG00000111181	SLC6A12	solute carrier family 6 member 12 [Source:HGNC Symbol;Acc:HGNC:11045]	-0.69866	0.00126	0.04001
ENSG00000163468	CCT3	chaperonin containing TCP1 subunit 3 [Source:HGNC Symbol;Acc:HGNC:1616]	-0.69866	0.00126	0.04001
ENSG00000183765	CHEK2	checkpoint kinase 2 [Source:HGNC Symbol;Acc:HGNC:16627]	-0.69866	0.00126	0.04001
ENSG00000261474		novel transcript	-0.69866	0.00126	0.04001
ENSG00000273464		novel transcript, antisense to GRIK1	-0.69866	0.00126	0.04001
ENSG00000274512	TBC1D3L	TBC1 domain family member 3L [Source:HGNC Symbol;Acc:HGNC:51246]	-0.69866	0.00126	0.04001
chr16 - 17903483 18070277			-0.69814	0.00127	0.04038
ENSG00000261914	RPL23AP84	ribosomal protein L23a pseudogene 84 [Source:HGNC Symbol;Acc:HGNC:51575]	-0.6975	0.00129	0.04085
chr9 - 79122333 79208904			-0.69659	0.00132	0.04085
ENSG00000078814	MYH7B	myosin heavy chain 7B [Source:HGNC Symbol;Acc:HGNC:15906]	-0.69659	0.00132	0.04085
ENSG00000116212	LRRC42	leucine rich repeat containing 42 [Source:HGNC Symbol;Acc:HGNC:28792]	-0.69659	0.00132	0.04085
ENSG00000128590	DNAJB9	DnaJ heat shock protein family (Hsp40) member B9 [Source:HGNC Symbol;Acc:HGNC:6968]	-0.69659	0.00132	0.04085
ENSG00000229989	MIR181A1HG	MIR181A1 host gene [Source:HGNC Symbol;Acc:HGNC:48659]	-0.69659	0.00132	0.04085
chr3 - 76083132 76347126			-0.69592	0.00134	0.04137
ENSG00000054793	ATP9A	ATPase phospholipid transporting 9A (putative) [Source:HGNC Symbol;Acc:HGNC:13540]	-0.69453	0.00138	0.04167
ENSG00000152253	SPC25	SPC25 component of NDC80 kinetochore complex [Source:HGNC Symbol;Acc:HGNC:24031]	-0.69453	0.00138	0.04167
ENSG00000160218	TRAPPC10	trafficking protein particle complex 10 [Source:HGNC Symbol;Acc:HGNC:11868]	-0.69453	0.00138	0.04167
ENSG00000167740	CYB5D2	cytochrome b5 domain containing 2 [Source:HGNC Symbol;Acc:HGNC:28471]	-0.69453	0.00138	0.04167
ENSG00000184575	XPOT	exportin for tRNA [Source:HGNC Symbol;Acc:HGNC:12826]	-0.69453	0.00138	0.04167
ENSG00000224000		novel transcript	-0.69453	0.00138	0.04167
ENSG00000241527	CA15P1	CA15 pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:44364]	-0.69453	0.00138	0.04167
ENSG00000241945	PWP2	PWP2 small subunit processome component [Source:HGNC Symbol;Acc:HGNC:9711]	-0.69453	0.00138	0.04167
ENSG00000278090	LUNAR1	leukemia-associated non-coding IGF1R activator RNA 1 [Source:HGNC Symbol;Acc:HGNC:51199]	-0.69453	0.00138	0.04167
ENSG00000280800		novel transcript, similar to YY1 associated myogenesis RNA 1 YAM1	-0.69453	0.00138	0.04167
ENSG00000115942	ORC2	origin recognition complex subunit 2 [Source:HGNC Symbol;Acc:HGNC:8488]	-0.69247	0.00145	0.04247
ENSG00000119684	MLH3	mutL homolog 3 [Source:HGNC Symbol;Acc:HGNC:7128]	-0.69247	0.00145	0.04247
ENSG00000127533	F2RL3	F2R like thrombin or trypsin receptor 3 [Source:HGNC Symbol;Acc:HGNC:3540]	-0.69247	0.00145	0.04247
ENSG00000128989	ARPP19	cAMP regulated phosphoprotein 19 [Source:HGNC Symbol;Acc:HGNC:16967]	-0.69247	0.00145	0.04247
ENSG00000135018	UBQLN1	ubiquilin 1 [Source:HGNC Symbol;Acc:HGNC:12508]	-0.69247	0.00145	0.04247
ENSG00000167716	WDR81	WD repeat domain 81 [Source:HGNC Symbol;Acc:HGNC:26600]	-0.69247	0.00145	0.04247

ENSG00000169925	BRD3	bromodomain containing 3 [Source:HGNC Symbol;Acc:HGNC:1104]	-0.69247	0.00145	0.04247
ENSG00000183785	TUBA8	tubulin alpha 8 [Source:HGNC Symbol;Acc:HGNC:12410]	-0.69247	0.00145	0.04247
ENSG00000198171	DDRKG1	DDRKG domain containing 1 [Source:HGNC Symbol;Acc:HGNC:16110]	-0.69247	0.00145	0.04247
ENSG00000222179	RN7SKP26	RN7SK pseudogene 26 [Source:HGNC Symbol;Acc:HGNC:45750]	-0.69247	0.00145	0.04247
ENSG00000249684		novel transcript, antisense to PROP1	-0.69247	0.00145	0.04247
ENSG00000257315	ZBED6	zinc finger BED-type containing 6 [Source:HGNC Symbol;Acc:HGNC:33273]	-0.69247	0.00145	0.04247
ENSG00000262187		centrosomal protein 192 (CEP192) pseudogene	-0.69179	0.00147	0.04291
ENSG00000066379	POLR1H	RNA polymerase I subunit H [Source:HGNC Symbol;Acc:HGNC:13182]	-0.69004	0.00152	0.04367
ENSG00000102981	PARD6A	par-6 family cell polarity regulator alpha [Source:HGNC Symbol;Acc:HGNC:15943]	-0.69004	0.00152	0.04367
ENSG00000265442	MIR3941	microRNA 3941 [Source:HGNC Symbol;Acc:HGNC:38949]	-0.69004	0.00152	0.04367
ENSG00000269970		novel transcript, sense intronic to PTGS1	-0.69004	0.00152	0.04367
ENSG00000278112		novel transcript, sense intronic to RILPL1	-0.69004	0.00152	0.04367
ENSG00000240929			-0.68973	0.00154	0.04423
ENSG00000104687	GSR	glutathione-disulfide reductase [Source:HGNC Symbol;Acc:HGNC:4623]	-0.68834	0.00159	0.04512
ENSG00000137070	IL11RA	interleukin 11 receptor subunit alpha [Source:HGNC Symbol;Acc:HGNC:5967]	-0.68834	0.00159	0.04512
ENSG00000198959	TGM2	transglutaminase 2 [Source:HGNC Symbol;Acc:HGNC:11778]	-0.68834	0.00159	0.04512
ENSG00000240265		H1 histone family, member O, oocyte-specific (H1FOO) pseudogene	-0.68834	0.00159	0.04512
chr10 j9077543 90852946			-0.68627	0.00166	0.04558
ENSG00000034152	MAP2K3	mitogen-activated protein kinase kinase 3 [Source:HGNC Symbol;Acc:HGNC:6843]	-0.68627	0.00166	0.04558
ENSG00000035403	VCL	vinculin [Source:HGNC Symbol;Acc:HGNC:12665]	-0.68627	0.00166	0.04558
ENSG00000072042	RDH11	retinol dehydrogenase 11 [Source:HGNC Symbol;Acc:HGNC:17964]	-0.68627	0.00166	0.04558
ENSG00000100104	SRRD	SRR1 domain containing [Source:HGNC Symbol;Acc:HGNC:33910]	-0.68627	0.00166	0.04558
ENSG00000107789	MINPP1	multiple inositol-polyphosphate phosphatase 1 [Source:HGNC Symbol;Acc:HGNC:7102]	-0.68627	0.00166	0.04558
ENSG00000110958	PTGES3	prostaglandin E synthase 3 [Source:HGNC Symbol;Acc:HGNC:16049]	-0.68627	0.00166	0.04558
ENSG00000122550	KLHL7	kelch like family member 7 [Source:HGNC Symbol;Acc:HGNC:15646]	-0.68627	0.00166	0.04558
ENSG00000149136	SSRP1	structure specific recognition protein 1 [Source:HGNC Symbol;Acc:HGNC:11327]	-0.68627	0.00166	0.04558
ENSG00000149781	FERMT3	fermitin family member 3 [Source:HGNC Symbol;Acc:HGNC:23151]	-0.68627	0.00166	0.04558
ENSG00000164070	HSPA4L	heat shock protein family A (Hsp70) member 4 like [Source:HGNC Symbol;Acc:HGNC:17041]	-0.68627	0.00166	0.04558
ENSG00000168079	SCARA5	scavenger receptor class A member 5 [Source:HGNC Symbol;Acc:HGNC:28701]	-0.68627	0.00166	0.04558
ENSG00000196230	TUBB	tubulin beta class I [Source:HGNC Symbol;Acc:HGNC:20778]	-0.68627	0.00166	0.04558
ENSG00000222032		novel protein (LOC728009)	-0.68627	0.00166	0.04558
ENSG00000253409	TRBV7-4	T cell receptor beta variable 7-4 [Source:HGNC Symbol;Acc:HGNC:12238]	-0.68627	0.00166	0.04558
ENSG00000267228		novel transcript	-0.68627	0.00166	0.04558
ENSG00000279106		TEC	-0.68627	0.00166	0.04558
ENSG00000221571	RNU6ATAC35P	RNA, U6atac small nuclear 35, pseudogene [Source:HGNC Symbol;Acc:HGNC:46934]	-0.6856	0.00169	0.046
ENSG00000254061		RNA binding motif protein 4 (RBM4) pseudogene	-0.6856	0.00169	0.046
ENSG00000254673		novel protein	-0.6856	0.00169	0.046
ENSG00000285710		novel transcript, antisense to DDX19A	-0.6856	0.00169	0.046
ENSG00000065060	UHRF1BP1	UHRF1 binding protein 1 [Source:HGNC Symbol;Acc:HGNC:21216]	-0.68421	0.00174	0.0464
ENSG00000162599	NFIA	nuclear factor I A [Source:HGNC Symbol;Acc:HGNC:7784]	-0.68421	0.00174	0.0464
ENSG00000164244	PRRC1	proline rich coiled-coil 1 [Source:HGNC Symbol;Acc:HGNC:28164]	-0.68421	0.00174	0.0464
ENSG00000185513	L3MBTL1	L3MBTL histone methyl-lysine binding protein 1 [Source:HGNC Symbol;Acc:HGNC:15905]	-0.68421	0.00174	0.0464
ENSG00000185955	C7orf61	chromosome 7 open reading frame 61 [Source:HGNC Symbol;Acc:HGNC:22135]	-0.68421	0.00174	0.0464
ENSG00000213700	RPL17P50	ribosomal protein L17 pseudogene 50 [Source:HGNC Symbol;Acc:HGNC:45098]	-0.68421	0.00174	0.0464
ENSG00000225840		RNA, 18S ribosomal pseudogene	-0.68421	0.00174	0.0464
ENSG00000267160		novel transcript, antisense to C17orf104	-0.68421	0.00174	0.0464
ENSG00000124196	GTSF1L	gametocyte specific factor 1 like [Source:HGNC Symbol;Acc:HGNC:16198]	-0.68353	0.00176	0.04698
chr5 j156131271 156321325			-0.68215	0.00182	0.04751
ENSG00000116668	SWT1	SWT1 RNA endoribonuclease homolog [Source:HGNC Symbol;Acc:HGNC:16785]	-0.68215	0.00182	0.04751
ENSG00000130669	PAK4	p21 (RAC1) activated kinase 4 [Source:HGNC Symbol;Acc:HGNC:16059]	-0.68215	0.00182	0.04751
ENSG00000140022	STON2	stonin 2 [Source:HGNC Symbol;Acc:HGNC:30652]	-0.68215	0.00182	0.04751
ENSG00000147274	RBMX	RNA binding motif protein X-linked [Source:HGNC Symbol;Acc:HGNC:9910]	-0.68215	0.00182	0.04751
ENSG00000152128	TMEM163	transmembrane protein 163 [Source:HGNC Symbol;Acc:HGNC:25380]	-0.68215	0.00182	0.04751
ENSG00000178425	NT5DC1	5'-nucleotidase domain containing 1 [Source:HGNC Symbol;Acc:HGNC:21556]	-0.68215	0.00182	0.04751
ENSG00000211749	TRBV23-1	T cell receptor beta variable 23-1 (non-functional) [Source:HGNC Symbol;Acc:HGNC:12201]	-0.68215	0.00182	0.04751
ENSG00000224420	ADM5	adrenomedullin 5 (putative) [Source:HGNC Symbol;Acc:HGNC:27293]	-0.68215	0.00182	0.04751
ENSG00000256347	OR8R1P	olfactory receptor family 8 subfamily R member 1 pseudogene [Source:HGNC Symbol;Acc:HGNC:15318]	-0.68215	0.00182	0.04751
ENSG00000260852	FBXL19-AS1	FBXL19 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:27557]	-0.68215	0.00182	0.04751
ENSG00000266962	HSD17B1-AS1	HSD17B1 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:55314]	-0.68215	0.00182	0.04751
ENSG00000267745		novel transcript	-0.68215	0.00182	0.04751
chr6 j25987557 26046649			-0.68008	0.0019	0.04891
ENSG00000005339	CREBBP	CREB binding protein [Source:HGNC Symbol;Acc:HGNC:2348]	-0.68008	0.0019	0.04891
ENSG00000109881	CCDC34	coiled-coil domain containing 34 [Source:HGNC Symbol;Acc:HGNC:25079]	-0.68008	0.0019	0.04891
ENSG00000133193	FAM104A	family with sequence similarity 104 member A [Source:HGNC Symbol;Acc:HGNC:25918]	-0.68008	0.0019	0.04891
ENSG00000139579	NABP2	nucleic acid binding protein 2 [Source:HGNC Symbol;Acc:HGNC:28412]	-0.68008	0.0019	0.04891
ENSG00000180694	TMEM64	transmembrane protein 64 [Source:HGNC Symbol;Acc:HGNC:25441]	-0.68008	0.0019	0.04891
ENSG00000249456		novel transcript, sense overlapping ZRANB1	-0.68008	0.0019	0.04891
ENSG00000258891		novel transcript, antisense to ZNF410	-0.68008	0.0019	0.04891
ENSG00000280164		novel transcript	-0.68008	0.0019	0.04891
ENSG00000132204	LINC00470	long intergenic non-protein coding RNA 470 [Source:HGNC Symbol;Acc:HGNC:1225]	-0.67804	0.00198	0.04971
chr13 j32253656 32313677			-0.67802	0.00199	0.04971
ENSG00000111203	ITFG2	integrin alpha FG-GAP repeat containing 2 [Source:HGNC Symbol;Acc:HGNC:30879]	-0.67802	0.00199	0.04971
ENSG00000128886	ELL3	elongation factor for RNA polymerase II 3 [Source:HGNC Symbol;Acc:HGNC:23113]	-0.67802	0.00199	0.04971
ENSG00000138696	BMPRI1B	bone morphogenetic protein receptor type 1B [Source:HGNC Symbol;Acc:HGNC:1077]	-0.67802	0.00199	0.04971
ENSG00000154928	EPHB1	EPH receptor B1 [Source:HGNC Symbol;Acc:HGNC:3392]	-0.67802	0.00199	0.04971
ENSG00000166169	POLL	DNA polymerase lambda [Source:HGNC Symbol;Acc:HGNC:9184]	-0.67802	0.00199	0.04971
ENSG00000198887	SMC5	structural maintenance of chromosomes 5 [Source:HGNC Symbol;Acc:HGNC:20465]	-0.67802	0.00199	0.04971
ENSG00000213088	ACKR1	atypical chemokine receptor 1 (Duffy blood group) [Source:HGNC Symbol;Acc:HGNC:4035]	-0.67802	0.00199	0.04971
ENSG00000236320	SLFN14	schlafen family member 14 [Source:HGNC Symbol;Acc:HGNC:32689]	-0.67802	0.00199	0.04971
ENSG00000263917		novel transcript	-0.67802	0.00199	0.04971
ENSG00000285884		novel transcript	-0.67802	0.00199	0.04971

Positively correlated with H1-3

ensembl_gene_id	gene_name	description	rho	p	adjusted-p
ENSG000000171570	RAB4B-EGLN2	RAB4B-EGLN2 readthrough (NMD candidate) [Source:HGNC Symbol;Acc:HGNC:44465]	0.9257	3.7E-08	0.00018
ENSG000000169733	RFNG	RFNG O-fucosylpeptide 3-beta-N-acetylglucosaminyltransferase [Source:HGNC Symbol;Acc:HGNC:9974]	0.92363	4.6E-08	0.00018
ENSG000000035687	ADSS2	adenylosuccinate synthase 2 [Source:HGNC Symbol;Acc:HGNC:292]	0.91538	1E-07	0.00027
ENSG000000182405	PGBD4	piggyBac transposable element derived 4 [Source:HGNC Symbol;Acc:HGNC:19401]	0.91125	1.5E-07	0.00029
ENSG000000178700	DHFR2	dihydrofolate reductase 2 [Source:HGNC Symbol;Acc:HGNC:27309]	0.90299	2.9E-07	0.00049
ENSG000000197763	TXNRD3	thioredoxin reductase 3 [Source:HGNC Symbol;Acc:HGNC:20667]	0.89886	4E-07	0.00063
ENSG00000266922		novel transcript, sense intronic to ZNF823	0.89623	4.9E-07	0.00072
ENSG000000131845	ZNF304	zinc finger protein 304 [Source:HGNC Symbol;Acc:HGNC:13505]	0.88854	8.4E-07	0.00087
ENSG000000211978	IGHV5-78	immunoglobulin heavy variable 5-78 (pseudogene) [Source:HGNC Symbol;Acc:HGNC:5660]	0.88648	9.7E-07	0.00092
ENSG000000225921	NOL7	nucleolar protein 7 [Source:HGNC Symbol;Acc:HGNC:21040]	0.88648	9.7E-07	0.00092
ENSG000000111981	ULBP1	UL16 binding protein 1 [Source:HGNC Symbol;Acc:HGNC:14893]	0.88235	1.3E-06	0.00108
ENSG000000279114		TEC	0.87822	1.6E-06	0.00131
ENSG000000227354	RBM26-AS1	RBM26 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:39805]	0.8741	2.1E-06	0.00144
ENSG000000107968	MAP3K8	mitogen-activated protein kinase kinase kinase 8 [Source:HGNC Symbol;Acc:HGNC:6860]	0.87203	2.4E-06	0.00154
ENSG000000224609	FGGY-DT	FGGY divergent transcript [Source:HGNC Symbol;Acc:HGNC:55265]	0.86378	3.9E-06	0.00204
ENSG000000277687		novel transcript, sense intronic to CACUL1	0.86378	3.9E-06	0.00204
ENSG000000217527	RPS16P5	ribosomal protein S16 pseudogene 5 [Source:HGNC Symbol;Acc:HGNC:36183]	0.86171	4.3E-06	0.00209
ENSG000000258337		novel transcript, sense intronic to MED13L	0.85965	4.8E-06	0.00216
ENSG000000234444	ZNF736	zinc finger protein 736 [Source:HGNC Symbol;Acc:HGNC:32467]	0.85759	5.4E-06	0.00225
chrX - 16269217 16541411			0.85552	6E-06	0.0023
ENSG000000104976	SNAPC2	small nuclear RNA activating complex polypeptide 2 [Source:HGNC Symbol;Acc:HGNC:11135]	0.85552	6E-06	0.0023
ENSG000000162086	ZNF75A	zinc finger protein 75a [Source:HGNC Symbol;Acc:HGNC:13146]	0.85346	6.7E-06	0.00241
ENSG000000196227	FAM217B	family with sequence similarity 217 member B [Source:HGNC Symbol;Acc:HGNC:16170]	0.84933	8.2E-06	0.00257
ENSG000000254860	TMEM9B-AS1	TMEM9B antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:19230]	0.84727	9.1E-06	0.00267
chr12 - 70531159 70637922			0.8452	1E-05	0.00275
ENSG000000211778	TRAV4	T cell receptor alpha variable 4 [Source:HGNC Symbol;Acc:HGNC:12140]	0.8452	1E-05	0.00275
ENSG000000267576		novel transcript, sense intronic to TSPAN16	0.8452	1E-05	0.00275
ENSG000000150787	PTS	6-pyruvoyltetrahydropterin synthase [Source:HGNC Symbol;Acc:HGNC:9689]	0.84314	1.1E-05	0.00291
ENSG000000188785	ZNF548	zinc finger protein 548 [Source:HGNC Symbol;Acc:HGNC:26561]	0.84314	1.1E-05	0.00291
ENSG000000197635	DPP4	dipeptidyl peptidase 4 [Source:HGNC Symbol;Acc:HGNC:3009]	0.84314	1.1E-05	0.00291
ENSG000000108932	SLC16A6	solute carrier family 16 member 6 [Source:HGNC Symbol;Acc:HGNC:10927]	0.84107	1.2E-05	0.00307
ENSG000000120798	NR2C1	nuclear receptor subfamily 2 group C member 1 [Source:HGNC Symbol;Acc:HGNC:7971]	0.84107	1.2E-05	0.00307
ENSG000000158006	PAFAH2	platelet activating factor acetylhydrolase 2 [Source:HGNC Symbol;Acc:HGNC:8579]	0.83901	1.4E-05	0.00331
ENSG000000250568		poly(A) binding protein, cytoplasmic 1 (PABPC1) pseudogene	0.83282	1.8E-05	0.00398
ENSG000000256019	TAS2R63P	taste 2 receptor member 63 pseudogene [Source:HGNC Symbol;Acc:HGNC:20641]	0.83282	1.8E-05	0.00398
ENSG000000196526	AFAP1	actin filament associated protein 1 [Source:HGNC Symbol;Acc:HGNC:24017]	0.83075	2E-05	0.0042
ENSG000000274922		novel transcript	0.83075	2E-05	0.0042
ENSG000000278383		novel transcript, antisense to ZNF337	0.83032	2E-05	0.00424
ENSG000000161010	MRNIP	MRN complex interacting protein [Source:HGNC Symbol;Acc:HGNC:30817]	0.82869	2.1E-05	0.00447
ENSG000000265399		novel transcript, antisense to MYOM1	0.82456	2.6E-05	0.00483
ENSG000000225972	MTND1P23	MT-ND1 pseudogene 23 [Source:HGNC Symbol;Acc:HGNC:42092]	0.82349	2.7E-05	0.00501
ENSG000000273008	CSGALNACT2-DT	CSGALNACT2 divergent transcript [Source:HGNC Symbol;Acc:HGNC:55174]	0.8225	2.8E-05	0.00507
ENSG000000276302		novel protein	0.822	2.9E-05	0.00513
chr3 - 16656009 16739392			0.82043	3E-05	0.00528
chr5 + 98263160 98318093			0.81837	3.3E-05	0.00554
ENSG000000070423	RNF126	ring finger protein 126 [Source:HGNC Symbol;Acc:HGNC:21151]	0.81837	3.3E-05	0.00554
ENSG000000223547	ZNF844	zinc finger protein 844 [Source:HGNC Symbol;Acc:HGNC:25932]	0.81837	3.3E-05	0.00554
ENSG000000221957	KIR2DS4	killer cell immunoglobulin like receptor, two Ig domains and short cytoplasmic tail 4 [Source:HGNC Symbol;Acc:HGNC:6336]	0.81631	3.6E-05	0.00574
ENSG000000279594		TEC	0.81631	3.6E-05	0.00574
ENSG000000204396	VWA7	von Willebrand factor A domain containing 7 [Source:HGNC Symbol;Acc:HGNC:13939]	0.81433	3.9E-05	0.00588
chr10 - 94386918 94449856			0.81424	3.9E-05	0.00588
ENSG000000106100	NOD1	nucleotide binding oligomerization domain containing 1 [Source:HGNC Symbol;Acc:HGNC:16390]	0.81424	3.9E-05	0.00588
ENSG000000263843	MIF4GD-DT	MIF4GD divergent transcript [Source:HGNC Symbol;Acc:HGNC:55335]	0.81424	3.9E-05	0.00588
ENSG000000080854	IGSF9B	immunoglobulin superfamily member 9B [Source:HGNC Symbol;Acc:HGNC:32326]	0.81218	4.2E-05	0.0063
chr11 - 47575264 47638857			0.81011	4.6E-05	0.00646
chr12 _ 89746297 89813496			0.81011	4.6E-05	0.00646
ENSG000000182185	RAD51B	RAD51 paralogue B [Source:HGNC Symbol;Acc:HGNC:9822]	0.81011	4.6E-05	0.00646
ENSG000000253106		novel transcript, antisense to TATDN1	0.81011	4.6E-05	0.00646
ENSG000000007047	MARK4	microtubule affinity regulating kinase 4 [Source:HGNC Symbol;Acc:HGNC:13538]	0.80805	5E-05	0.00668
ENSG000000196653	ZNF502	zinc finger protein 502 [Source:HGNC Symbol;Acc:HGNC:23718]	0.80805	5E-05	0.00668
ENSG000000211776	TRAV2	T cell receptor alpha variable 2 [Source:HGNC Symbol;Acc:HGNC:12116]	0.80805	5E-05	0.00668
chr3 - 45568133 45637894			0.80599	5.4E-05	0.0068
chr6 + 14140718 14405928			0.80599	5.4E-05	0.0068
ENSG000000147789	ZNF7	zinc finger protein 7 [Source:HGNC Symbol;Acc:HGNC:13139]	0.80599	5.4E-05	0.0068
ENSG000000198198	SZT2	SZT2 subunit of KICSTOR complex [Source:HGNC Symbol;Acc:HGNC:29040]	0.80599	5.4E-05	0.0068
chr1 + 194802396 195020897			0.80392	5.8E-05	0.00695
ENSG000000156253	RWDD2B	RWD domain containing 2B [Source:HGNC Symbol;Acc:HGNC:1302]	0.80392	5.8E-05	0.00695
ENSG000000245556	SCAMP1-AS1	SCAMP1 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:50544]	0.80392	5.8E-05	0.00695
ENSG000000253154		novel transcript	0.80392	5.8E-05	0.00695
ENSG000000279733		novel transcript	0.80124	6.4E-05	0.00741
ENSG000000104549	SQLE	squalene epoxidase [Source:HGNC Symbol;Acc:HGNC:11279]	0.79979	6.8E-05	0.0076
ENSG000000136770	DNAJC1	DnaJ heat shock protein family (Hsp40) member C1 [Source:HGNC Symbol;Acc:HGNC:20090]	0.79979	6.8E-05	0.0076
ENSG000000274173		novel transcript	0.79979	6.8E-05	0.0076
chr7 - 120722088 120884459			0.79773	7.3E-05	0.00789
ENSG000000059691	GATB	glutamyl-tRNA amidotransferase subunit B [Source:HGNC Symbol;Acc:HGNC:8849]	0.79773	7.3E-05	0.00789
ENSG000000143924	EML4	EMAP like 4 [Source:HGNC Symbol;Acc:HGNC:1316]	0.79773	7.3E-05	0.00789

ENSG00000238061		proteasome (prosome, macropain) 26S subunit, non-ATPase, 7 (Mov34 homolog) (PSMD7) pseudogene	0.79773	7.3E-05	0.00789
ENSG00000241560	ZBTB20-AS1	ZBTB20 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:40640]	0.79773	7.3E-05	0.00789
ENSG00000100029	PES1	pescadillo ribosomal biogenesis factor 1 [Source:HGNC Symbol;Acc:HGNC:8848]	0.79567	7.9E-05	0.00831
ENSG00000105810	CDK6	cyclin dependent kinase 6 [Source:HGNC Symbol;Acc:HGNC:1777]	0.79567	7.9E-05	0.00831
ENSG00000236830	CBR3-AS1	CBR3 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:43664]	0.79567	7.9E-05	0.00831
chr5[+][124235227][124290823			0.7936	8.5E-05	0.00856
ENSG000000055044	NOP58	NOP58 ribonucleoprotein [Source:HGNC Symbol;Acc:HGNC:29926]	0.7936	8.5E-05	0.00856
ENSG000000064652	SNX24	sorting nexin 24 [Source:HGNC Symbol;Acc:HGNC:21533]	0.7936	8.5E-05	0.00856
ENSG00000248487	ABHD14A	abhydrolase domain containing 14A [Source:HGNC Symbol;Acc:HGNC:24538]	0.7936	8.5E-05	0.00856
ENSG00000271795		novel transcript, antisense to FAT2	0.7936	8.5E-05	0.00856
ENSG00000163875	MEAF6	MYST/Esal1 associated factor 6 [Source:HGNC Symbol;Acc:HGNC:25674]	0.79154	9.1E-05	0.00905
ENSG00000250299	MRPS31P4	mitochondrial ribosomal protein S31 pseudogene 4 [Source:HGNC Symbol;Acc:HGNC:42649]	0.78947	9.8E-05	0.00945
chr12[+][125670090][125807925			0.78741	0.00011	0.00977
ENSG000000085760	MTIF2	mitochondrial translational initiation factor 2 [Source:HGNC Symbol;Acc:HGNC:7441]	0.78741	0.00011	0.00977
ENSG00000196950	SLC39A10	solute carrier family 39 member 10 [Source:HGNC Symbol;Acc:HGNC:20861]	0.78741	0.00011	0.00977
ENSG00000198298	ZNF485	zinc finger protein 485 [Source:HGNC Symbol;Acc:HGNC:23440]	0.78741	0.00011	0.00977
ENSG00000276517		novel transcript, sense intronic to BIRC6	0.78535	0.00011	0.01018
ENSG00000159307	SCUBE1	signal peptide, CUB domain and EGF like domain containing 1 [Source:HGNC Symbol;Acc:HGNC:13441]	0.78472	0.00012	0.01036
chr8[+][79716615][79907107			0.78328	0.00012	0.01036
chrX[+][112642803][113302475			0.78328	0.00012	0.01036
ENSG00000152464	RPP38	ribonuclease P/MRP subunit p38 [Source:HGNC Symbol;Acc:HGNC:30329]	0.78328	0.00012	0.01036
ENSG00000156256	USP16	ubiquitin specific peptidase 16 [Source:HGNC Symbol;Acc:HGNC:12614]	0.78328	0.00012	0.01036
ENSG00000163728	TTC14	tetratricopeptide repeat domain 14 [Source:HGNC Symbol;Acc:HGNC:24697]	0.78328	0.00012	0.01036
ENSG00000171792	RHNO1	RAD9-HUS1-RAD1 interacting nuclear orphan 1 [Source:HGNC Symbol;Acc:HGNC:28206]	0.78328	0.00012	0.01036
ENSG00000196821	ILRUN	inflammation and lipid regulator with UBA-like and NBR1-like domains [Source:HGNC Symbol;Acc:HGNC:21215]	0.78328	0.00012	0.01036
ENSG00000264673		novel transcript	0.78328	0.00012	0.01036
ENSG00000273026		novel transcript, antisense to SLC39A1	0.78328	0.00012	0.01036
ENSG00000123607	TTC21B	tetratricopeptide repeat domain 21B [Source:HGNC Symbol;Acc:HGNC:25660]	0.78122	0.00013	0.01079
ENSG00000196735	HLA-DQA1	major histocompatibility complex, class II, DQ alpha 1 [Source:HGNC Symbol;Acc:HGNC:4942]	0.78122	0.00013	0.01079
ENSG00000256006		novel transcript	0.78122	0.00013	0.01079
ENSG00000112282	MED23	mediator complex subunit 23 [Source:HGNC Symbol;Acc:HGNC:2372]	0.77915	0.00014	0.01112
ENSG00000165983	PTER	phosphotriesterase related [Source:HGNC Symbol;Acc:HGNC:9590]	0.77915	0.00014	0.01112
ENSG00000248309	MEF2C-AS1	MEF2C antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:48908]	0.77915	0.00014	0.01112
ENSG00000260367		novel transcript, antisense to SPNS1	0.77915	0.00014	0.01112
chr3[+][40665056][40725353			0.77709	0.00015	0.01154
ENSG00000003509	NDUFAF7	NADH:ubiquinone oxidoreductase complex assembly factor 7 [Source:HGNC Symbol;Acc:HGNC:28816]	0.77709	0.00015	0.01154
ENSG00000114544	SLC41A3	solute carrier family 41 member 3 [Source:HGNC Symbol;Acc:HGNC:31046]	0.77503	0.00016	0.01183
ENSG00000133138	TBC1D8B	TBC1 domain family member 8B [Source:HGNC Symbol;Acc:HGNC:24715]	0.77503	0.00016	0.01183
ENSG00000241352		ribosomal protein S6 (RPS6) pseudogene	0.77503	0.00016	0.01183
ENSG00000275084	SNORD91B	small nucleolar RNA, C/D box 91B [Source:HGNC Symbol;Acc:HGNC:32753]	0.77503	0.00016	0.01183
ENSG00000273350		novel transcript, sense intronic to SEC14L2	0.77365	0.00017	0.01233
ENSG00000068024	HDAC4	histone deacetylase 4 [Source:HGNC Symbol;Acc:HGNC:14063]	0.77296	0.00017	0.01244
chr7[+][117752908][117824044			0.7709	0.00018	0.01281
ENSG00000125863	MKKS	McKusick-Kaufman syndrome [Source:HGNC Symbol;Acc:HGNC:7108]	0.7709	0.00018	0.01281
chr6[+][32888761][32941594			0.76883	0.00019	0.01312
chr9[+][3109714][3181630			0.76883	0.00019	0.01312
ENSG00000148672	GLUD1	glutamate dehydrogenase 1 [Source:HGNC Symbol;Acc:HGNC:4335]	0.76883	0.00019	0.01312
ENSG00000180902	D2HGDH	D-2-hydroxyglutarate dehydrogenase [Source:HGNC Symbol;Acc:HGNC:28358]	0.76883	0.00019	0.01312
ENSG00000222012		novel transcript, antisense to PTPRN2	0.7682	0.0002	0.01334
chr5[+][163721114][164759450			0.76677	0.00021	0.01356
ENSG00000207523	SNORA66	small nucleolar RNA, H/ACA box 66 [Source:HGNC Symbol;Acc:HGNC:10223]	0.76677	0.00021	0.01356
ENSG00000227258	SMIM2-AS1	SMIM2 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:42674]	0.76677	0.00021	0.01356
ENSG00000267080	ASB16-AS1	ASB16 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:25442]	0.76613	0.00021	0.01379
chr13[+][111373422][111425791			0.76471	0.00022	0.01402
ENSG00000004534	RBM6	RNA binding motif protein 6 [Source:HGNC Symbol;Acc:HGNC:9903]	0.76471	0.00022	0.01402
ENSG00000132423	COQ3	coenzyme Q3, methyltransferase [Source:HGNC Symbol;Acc:HGNC:18175]	0.76471	0.00022	0.01402
ENSG00000151715	TMEM45B	transmembrane protein 45B [Source:HGNC Symbol;Acc:HGNC:25194]	0.76471	0.00022	0.01402
ENSG00000180008	SOC54	suppressor of cytokine signaling 4 [Source:HGNC Symbol;Acc:HGNC:19392]	0.76471	0.00022	0.01402
ENSG00000100288	CHKB	choline kinase beta [Source:HGNC Symbol;Acc:HGNC:1938]	0.76264	0.00023	0.01469
ENSG00000141194	OR4D1	olfactory receptor family 4 subfamily D member 1 [Source:HGNC Symbol;Acc:HGNC:8293]	0.76264	0.00023	0.01469
ENSG00000185475	TMEM179B	transmembrane protein 179B [Source:HGNC Symbol;Acc:HGNC:33744]	0.76264	0.00023	0.01469
ENSG00000121716	PILRB	paired immunoglobulin like type 2 receptor beta [Source:HGNC Symbol;Acc:HGNC:18297]	0.76058	0.00025	0.01518
ENSG00000144381	HSPD1	heat shock protein family D (Hsp60) member 1 [Source:HGNC Symbol;Acc:HGNC:5261]	0.76058	0.00025	0.01518
ENSG00000183439	TRIM61	tripartite motif containing 61 [Source:HGNC Symbol;Acc:HGNC:24339]	0.76058	0.00025	0.01518
chr2[+][48474305][48541793			0.75851	0.00026	0.0157
ENSG000000055950	MRPL43	mitochondrial ribosomal protein L43 [Source:HGNC Symbol;Acc:HGNC:14517]	0.75851	0.00026	0.0157
ENSG00000149084	HSD17B12	hydroxysteroid 17-beta dehydrogenase 12 [Source:HGNC Symbol;Acc:HGNC:18646]	0.75851	0.00026	0.0157
ENSG00000228789	HCG22	HLA complex group 22 (gene/pseudogene) [Source:HGNC Symbol;Acc:HGNC:27780]	0.75683	0.00028	0.01616
ENSG00000145020	AMT	aminomethyltransferase [Source:HGNC Symbol;Acc:HGNC:473]	0.75645	0.00028	0.01616
ENSG00000177613	CSTF2T	cleavage stimulation factor subunit 2 tau variant [Source:HGNC Symbol;Acc:HGNC:17086]	0.75645	0.00028	0.01616
ENSG00000284234	TAF11L5	TATA-box binding protein associated factor 11 like 5 [Source:HGNC Symbol;Acc:HGNC:53848]	0.75645	0.00028	0.01616
chr12[+][93335773][93399995			0.75439	0.0003	0.01676
ENSG00000250486	FAM218A	family with sequence similarity 218 member A [Source:HGNC Symbol;Acc:HGNC:26466]	0.75439	0.0003	0.01676
ENSG00000281501	SEPSECS-AS1	SEPSECS antisense RNA 1 (head to head) [Source:HGNC Symbol;Acc:HGNC:27737]	0.75439	0.0003	0.01676
ENSG00000113369	ARRDC3	arrestin domain containing 3 [Source:HGNC Symbol;Acc:HGNC:29263]	0.75232	0.00032	0.01751
ENSG00000133119	RFC3	replication factor C subunit 3 [Source:HGNC Symbol;Acc:HGNC:9971]	0.75232	0.00032	0.01751
ENSG00000165516	KLHDC2	kelch domain containing 2 [Source:HGNC Symbol;Acc:HGNC:20231]	0.75232	0.00032	0.01751
ENSG00000255363	LINC02757	long intergenic non-protein coding RNA 2757 [Source:HGNC Symbol;Acc:HGNC:54277]	0.75232	0.00032	0.01751
chr6[+][135399683][135502452			0.75026	0.00034	0.01819
ENSG00000155275	TRMT44	tRNA methyltransferase 44 homolog [Source:HGNC Symbol;Acc:HGNC:26653]	0.75026	0.00034	0.01819
ENSG00000177302	TOP3A	DNA topoisomerase III alpha [Source:HGNC Symbol;Acc:HGNC:11992]	0.75026	0.00034	0.01819

chr2 - 57933048 58152126			0.74819	0.00036	0.01874
ENSG00000174720	LARP7	La ribonucleoprotein 7, transcriptional regulator [Source:HGNC Symbol;Acc:HGNC:24912]	0.74819	0.00036	0.01874
ENSG00000229196		novel transcript	0.74819	0.00036	0.01874
ENSG00000259804		novel transcript, antisense to CTCF	0.74819	0.00036	0.01874
ENSG00000267360		novel protein	0.74819	0.00036	0.01874
ENSG00000160791	CCR5	C-C motif chemokine receptor 5 [Source:HGNC Symbol;Acc:HGNC:1606]	0.74613	0.00038	0.01939
ENSG00000204237	OXLD1	oxidoreductase like domain containing 1 [Source:HGNC Symbol;Acc:HGNC:27901]	0.74613	0.00038	0.01939
ENSG00000228203	GRASLND	glycosaminoglycan regulatory associated long non-coding RNA [Source:HGNC Symbol;Acc:HGNC:30963]	0.74613	0.00038	0.01939
ENSG00000229512		novel transcript	0.74613	0.00038	0.01939
chr4 + 129369782 129440381			0.74407	0.0004	0.01993
chrX + 97828579 97894019			0.74407	0.0004	0.01993
ENSG00000109452	INPP4B	inositol polyphosphate-4-phosphatase type II B [Source:HGNC Symbol;Acc:HGNC:6075]	0.74407	0.0004	0.01993
ENSG00000127074	RGS13	regulator of G protein signaling 13 [Source:HGNC Symbol;Acc:HGNC:9995]	0.74407	0.0004	0.01993
ENSG00000260339	HEXA-AS1	HEXA antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:25810]	0.74407	0.0004	0.01993
ENSG00000276071		novel transcript	0.74407	0.0004	0.01993
ENSG00000151876	FBXO4	F-box protein 4 [Source:HGNC Symbol;Acc:HGNC:13583]	0.742	0.00042	0.02054
ENSG00000178498	DTX3	deltex E3 ubiquitin ligase 3 [Source:HGNC Symbol;Acc:HGNC:24457]	0.742	0.00042	0.02054
ENSG00000257497		novel transcript, antisense to GLIPR1	0.742	0.00042	0.02054
ENSG00000267321	SNHG30	small nucleolar RNA host gene 30 [Source:HGNC Symbol;Acc:HGNC:52836]	0.742	0.00042	0.02054
ENSG00000277959		novel transcript, antisense to BNIP3	0.742	0.00042	0.02054
ENSG00000283597	FAM169B	family with sequence similarity 169 member B [Source:HGNC Symbol;Acc:HGNC:26835]	0.742	0.00042	0.02054
ENSG00000089195	TRMT6	tRNA methyltransferase 6 [Source:HGNC Symbol;Acc:HGNC:20900]	0.73994	0.00045	0.02122
ENSG00000170128	GPR25	G protein-coupled receptor 25 [Source:HGNC Symbol;Acc:HGNC:4480]	0.73994	0.00045	0.02122
ENSG00000285976		novel protein	0.73994	0.00045	0.02122
chr3 + 174159825 174235593			0.73787	0.00047	0.022
ENSG00000248429	FAM198B-AS1	FAM198B antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:53132]	0.73787	0.00047	0.022
ENSG00000273576		novel transcript	0.73787	0.00047	0.022
ENSG00000004864	SLC25A13	solute carrier family 25 member 13 [Source:HGNC Symbol;Acc:HGNC:10983]	0.73581	0.0005	0.02268
ENSG00000076924	XAB2	XPA binding protein 2 [Source:HGNC Symbol;Acc:HGNC:14089]	0.73581	0.0005	0.02268
ENSG00000152492	CCDC50	coiled-coil domain containing 50 [Source:HGNC Symbol;Acc:HGNC:18111]	0.73581	0.0005	0.02268
ENSG00000158161	EYA3	EYA transcriptional coactivator and phosphatase 3 [Source:HGNC Symbol;Acc:HGNC:3521]	0.73581	0.0005	0.02268
ENSG00000124205	EDN3	endothelin 3 [Source:HGNC Symbol;Acc:HGNC:3178]	0.73516	0.00051	0.02299
chr14 - 67684777 67804580			0.73375	0.00053	0.02341
ENSG00000066557	LRRC40	leucine rich repeat containing 40 [Source:HGNC Symbol;Acc:HGNC:26004]	0.73375	0.00053	0.02341
ENSG000000092140	G2E3	G2/M-phase specific E3 ubiquitin protein ligase [Source:HGNC Symbol;Acc:HGNC:20338]	0.73375	0.00053	0.02341
ENSG00000123453	SARDH	sarcosine dehydrogenase [Source:HGNC Symbol;Acc:HGNC:10536]	0.73375	0.00053	0.02341
ENSG00000166454	ATMIN	ATM interactor [Source:HGNC Symbol;Acc:HGNC:29034]	0.73375	0.00053	0.02341
ENSG00000176714	CCDC121	coiled-coil domain containing 121 [Source:HGNC Symbol;Acc:HGNC:25833]	0.73375	0.00053	0.02341
ENSG00000260475		novel transcript	0.73375	0.00053	0.02341
chr6 + 25836178 25892831			0.73309	0.00054	0.02375
chr6 - 70514778 70576433			0.73168	0.00056	0.02398
ENSG00000153253	SCN3A	sodium voltage-gated channel alpha subunit 3 [Source:HGNC Symbol;Acc:HGNC:10590]	0.73168	0.00056	0.02398
ENSG00000203865	ATP1A1-AS1	ATP1A1 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:28262]	0.73168	0.00056	0.02398
ENSG00000213297	ZNF625-ZNF20	ZNF625-ZNF20 readthrough (NMD candidate) [Source:HGNC Symbol;Acc:HGNC:48368]	0.73168	0.00056	0.02398
ENSG00000213363	RPS3P6	ribosomal protein S3 pseudogene 6 [Source:HGNC Symbol;Acc:HGNC:36061]	0.73168	0.00056	0.02398
ENSG00000253716	MINCR	MYC-induced long non-coding RNA [Source:HGNC Symbol;Acc:HGNC:51653]	0.73168	0.00056	0.02398
ENSG00000259049		novel transcript, antisense to GNPAT1	0.73168	0.00056	0.02398
ENSG00000277610	RNVU1-4	RNA, variant U1 small nuclear 4 [Source:HGNC Symbol;Acc:HGNC:48312]	0.73168	0.00056	0.02398
chr2 - 19356810 19547825			0.72962	0.00059	0.02491
ENSG00000147642	SYBU	syntabulin [Source:HGNC Symbol;Acc:HGNC:26011]	0.72962	0.00059	0.02491
ENSG00000270062		novel transcript, sense intronic to NIN	0.72962	0.00059	0.02491
ENSG00000272512		novel transcript	0.72861	0.0006	0.02538
ENSG00000279571		novel transcript	0.72765	0.00062	0.02538
ENSG00000096996	IL12RB1	interleukin 12 receptor subunit beta 1 [Source:HGNC Symbol;Acc:HGNC:5971]	0.72755	0.00062	0.02538
ENSG00000101473	ACOT8	acyl-CoA thioesterase 8 [Source:HGNC Symbol;Acc:HGNC:15919]	0.72755	0.00062	0.02538
ENSG00000111596	CNOT2	CCR4-NOT transcription complex subunit 2 [Source:HGNC Symbol;Acc:HGNC:7878]	0.72755	0.00062	0.02538
ENSG00000117593	DARS2	aspartyl-tRNA synthetase 2, mitochondrial [Source:HGNC Symbol;Acc:HGNC:25538]	0.72755	0.00062	0.02538
ENSG00000119333	DYNC2I2	dynein 2 intermediate chain 2 [Source:HGNC Symbol;Acc:HGNC:28296]	0.72755	0.00062	0.02538
ENSG00000159289	GOLGA6A	golgin A6 family member A [Source:HGNC Symbol;Acc:HGNC:13567]	0.72755	0.00062	0.02538
ENSG00000166707	ZCCHC18	zinc finger CCHC-type containing 18 [Source:HGNC Symbol;Acc:HGNC:32459]	0.72755	0.00062	0.02538
ENSG00000174365	SNHG11	small nucleolar RNA host gene 11 [Source:HGNC Symbol;Acc:HGNC:25046]	0.72755	0.00062	0.02538
ENSG00000166736	HTR3A	5-hydroxytryptamine receptor 3A [Source:HGNC Symbol;Acc:HGNC:5297]	0.7269	0.00063	0.02572
chr5 + 159925731 160071218			0.72549	0.00066	0.02575
ENSG00000086712	TXLNG	taxilin gamma [Source:HGNC Symbol;Acc:HGNC:18578]	0.72549	0.00066	0.02575
ENSG00000123843	C4BPB	complement component 4 binding protein beta [Source:HGNC Symbol;Acc:HGNC:1328]	0.72549	0.00066	0.02575
ENSG00000145882	PCYOX1L	prenylcysteine oxidase 1 like [Source:HGNC Symbol;Acc:HGNC:28477]	0.72549	0.00066	0.02575
ENSG00000158483	FAM86C1P	family with sequence similarity 86 member C1, pseudogene [Source:HGNC Symbol;Acc:HGNC:25561]	0.72549	0.00066	0.02575
ENSG00000165675	ENOX2	ecto-NOX disulfide-thiol exchanger 2 [Source:HGNC Symbol;Acc:HGNC:2259]	0.72549	0.00066	0.02575
ENSG00000235248	OR13C1P	olfactory receptor family 13 subfamily C member 1 pseudogene [Source:HGNC Symbol;Acc:HGNC:14699]	0.72549	0.00066	0.02575
ENSG00000257764		novel transcript, antisense to LYZ	0.72549	0.00066	0.02575
chr4 + 161425635 161557295			0.72483	0.00067	0.0261
chr10 - 122554706 122610613			0.72343	0.00069	0.02644
ENSG00000160325	CACFD1	calcium channel flower domain containing 1 [Source:HGNC Symbol;Acc:HGNC:1365]	0.72343	0.00069	0.02644
ENSG00000179304	FAM156B	family with sequence similarity 156 member B [Source:HGNC Symbol;Acc:HGNC:31962]	0.72343	0.00069	0.02644
ENSG00000280594	BTG3-AS1	BTG3 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:53145]	0.72277	0.0007	0.02684
chrY - 13281057 13333259			0.72136	0.00073	0.02737
ENSG00000050730	TNIP3	TNFAIP3 interacting protein 3 [Source:HGNC Symbol;Acc:HGNC:19315]	0.72136	0.00073	0.02737
ENSG00000139651	ZNF740	zinc finger protein 740 [Source:HGNC Symbol;Acc:HGNC:27465]	0.72136	0.00073	0.02737
ENSG00000204282			0.72136	0.00073	0.02737
ENSG00000204852	TCTN1	tectonic family member 1 [Source:HGNC Symbol;Acc:HGNC:26113]	0.72136	0.00073	0.02737
ENSG00000001460	STPG1	sperm tail PG-rich repeat containing 1 [Source:HGNC Symbol;Acc:HGNC:28070]	0.7193	0.00077	0.02786

ENSG00000164136	IL15	interleukin 15 [Source:HGNC Symbol;Acc:HGNC:5977]	0.7193	0.00077	0.02786
ENSG00000224358	TMCO1-AS1	TMCO1 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:54046]	0.7193	0.00077	0.02786
ENSG00000227543	SPAG5-AS1	SPAG5 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:41140]	0.7193	0.00077	0.02786
ENSG00000234902		novel transcript	0.7193	0.00077	0.02786
ENSG00000242583	KMT5AP3	KMT5A pseudogene 3 [Source:HGNC Symbol;Acc:HGNC:54728]	0.7193	0.00077	0.02786
ENSG00000268584		novel transcript, antisense to USP54	0.7193	0.00077	0.02786
ENSG00000269378	ITGB1P1	integrin subunit beta 1 pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:3781]	0.7193	0.00077	0.02786
chr22 + 47571594 47626763			0.71723	0.00081	0.02854
chr4 _ 181070004 181386725			0.71723	0.00081	0.02854
chr7 + 79110688 79235861			0.71723	0.00081	0.02854
ENSG00000008189	MEF2C	myocyte enhancer factor 2C [Source:HGNC Symbol;Acc:HGNC:6996]	0.71723	0.00081	0.02854
ENSG00000101181	MTG2	mitochondrial ribosome associated GTPase 2 [Source:HGNC Symbol;Acc:HGNC:16239]	0.71723	0.00081	0.02854
ENSG00000138792	ENPEP	glutamyl aminopeptidase [Source:HGNC Symbol;Acc:HGNC:3355]	0.71723	0.00081	0.02854
ENSG00000185798	WDR53	WD repeat domain 53 [Source:HGNC Symbol;Acc:HGNC:28786]	0.71723	0.00081	0.02854
ENSG00000226864	ATE1-AS1	ATE1 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:49496]	0.71723	0.00081	0.02854
ENSG00000256262	USP30-AS1	USP30 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:40909]	0.71723	0.00081	0.02854
ENSG00000275106		novel transcript	0.71723	0.00081	0.02854
ENSG00000280173		TEC	0.71723	0.00081	0.02854
ENSG00000254206	NPIP811	nuclear pore complex interacting protein family member B11 [Source:HGNC Symbol;Acc:HGNC:37453]	0.71657	0.00082	0.02893
chr15 _ 38992240 39075671			0.71517	0.00085	0.02925
chr2 _ 224467138 224589002			0.71517	0.00085	0.02925
ENSG00000127412	TRPV5	transient receptor potential cation channel subfamily V member 5 [Source:HGNC Symbol;Acc:HGNC:3145]	0.71517	0.00085	0.02925
ENSG00000163584	RPL22L1	ribosomal protein L22 like 1 [Source:HGNC Symbol;Acc:HGNC:27610]	0.71517	0.00085	0.02925
ENSG00000171766	GATM	glycine amidotransferase [Source:HGNC Symbol;Acc:HGNC:4175]	0.71517	0.00085	0.02925
ENSG00000196507	TCEAL3	transcription elongation factor A like 3 [Source:HGNC Symbol;Acc:HGNC:28247]	0.71517	0.00085	0.02925
ENSG00000211655	IGLV1-36	immunoglobulin lambda variable 1-36 [Source:HGNC Symbol;Acc:HGNC:5876]	0.71517	0.00085	0.02925
ENSG00000214827	MTCP1	mature T cell proliferation 1 [Source:HGNC Symbol;Acc:HGNC:7423]	0.71517	0.00085	0.02925
ENSG00000275765		novel transcript	0.71517	0.00085	0.02925
ENSG00000258181		novel transcript	0.71451	0.00086	0.02964
chr9 _ 83445277 83537682			0.71311	0.00089	0.03024
ENSG00000100721	TCL1A	TCL1 family AKT coactivator A [Source:HGNC Symbol;Acc:HGNC:11648]	0.71311	0.00089	0.03024
ENSG00000186222	BLOC1S4	biogenesis of lysosomal organelles complex 1 subunit 4 [Source:HGNC Symbol;Acc:HGNC:24206]	0.71311	0.00089	0.03024
ENSG00000279907		TEC	0.71311	0.00089	0.03024
ENSG00000075035	WSCD2	WSC domain containing 2 [Source:HGNC Symbol;Acc:HGNC:29117]	0.71244	0.00091	0.03069
ENSG00000101945	SUV39H1	suppressor of variegation 3-9 homolog 1 [Source:HGNC Symbol;Acc:HGNC:11479]	0.71104	0.00094	0.031
ENSG00000104518	GSDMD	gasdermin D [Source:HGNC Symbol;Acc:HGNC:25697]	0.71104	0.00094	0.031
ENSG00000110492	MDK	midkine [Source:HGNC Symbol;Acc:HGNC:6972]	0.71104	0.00094	0.031
ENSG00000137200	CMTR1	cap methyltransferase 1 [Source:HGNC Symbol;Acc:HGNC:21077]	0.71104	0.00094	0.031
ENSG00000185271	KLHL33	kelch like family member 33 [Source:HGNC Symbol;Acc:HGNC:31952]	0.71104	0.00094	0.031
ENSG00000222078	RN7SKP110	RN7SK pseudogene 110 [Source:HGNC Symbol;Acc:HGNC:45834]	0.71104	0.00094	0.031
ENSG00000227799	CDPF1P1	CDPF1 pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:54763]	0.71104	0.00094	0.031
chr11 + 90613452 90700432			0.70898	0.00099	0.03187
chr16 _ 17119569 17196001			0.70898	0.00099	0.03187
chr6 _ 26155505 26251614			0.70898	0.00099	0.03187
ENSG00000102977	ACD	ACD shelterin complex subunit and telomerase recruitment factor [Source:HGNC Symbol;Acc:HGNC:25070]	0.70898	0.00099	0.03187
ENSG00000105383	CD33	CD33 molecule [Source:HGNC Symbol;Acc:HGNC:1659]	0.70898	0.00099	0.03187
ENSG00000159884	CCDC107	coiled-coil domain containing 107 [Source:HGNC Symbol;Acc:HGNC:28465]	0.70898	0.00099	0.03187
chr2 _ 200897626 201040036			0.70852	0.001	0.03218
ENSG00000132286	TIMM10B	translocase of inner mitochondrial membrane 10B [Source:HGNC Symbol;Acc:HGNC:4022]	0.70691	0.00104	0.03276
ENSG00000143390	RFX5	regulatory factor X5 [Source:HGNC Symbol;Acc:HGNC:9986]	0.70691	0.00104	0.03276
ENSG00000147912	FBXO10	F-box protein 10 [Source:HGNC Symbol;Acc:HGNC:13589]	0.70691	0.00104	0.03276
ENSG00000213197	NUDCP1	nuclear distribution C pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:8046]	0.70691	0.00104	0.03276
ENSG00000231312	MAP4K3-DT	MAP4K3 divergent transcript [Source:HGNC Symbol;Acc:HGNC:54056]	0.70691	0.00104	0.03276
ENSG00000267361	SEC24AP1	SEC24 homolog A pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:53767]	0.70691	0.00104	0.03276
ENSG00000272316		novel transcript	0.70691	0.00104	0.03276
ENSG00000273284		novel transcript, sense intronic to ANKRD12	0.70485	0.00109	0.03343
chr1 _ 194171114 194228788			0.70485	0.00109	0.03343
ENSG00000095261	PSMD5	proteasome 26S subunit, non-ATPase 5 [Source:HGNC Symbol;Acc:HGNC:9563]	0.70485	0.00109	0.03343
ENSG00000103591	AAGAB	alpha and gamma adaptin binding protein [Source:HGNC Symbol;Acc:HGNC:25662]	0.70485	0.00109	0.03343
ENSG00000105329	TGFB1	transforming growth factor beta 1 [Source:HGNC Symbol;Acc:HGNC:11766]	0.70485	0.00109	0.03343
ENSG00000174483	BBS1	Bardet-Biedl syndrome 1 [Source:HGNC Symbol;Acc:HGNC:966]	0.70485	0.00109	0.03343
ENSG00000185915	KLHL34	kelch like family member 34 [Source:HGNC Symbol;Acc:HGNC:26634]	0.70485	0.00109	0.03343
ENSG00000188130	MAPK12	mitogen-activated protein kinase 12 [Source:HGNC Symbol;Acc:HGNC:6874]	0.70485	0.00109	0.03343
ENSG00000197308	GATA3-AS1	GATA3 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:33786]	0.70485	0.00109	0.03343
ENSG00000198498	TMA16	translation machinery associated 16 homolog [Source:HGNC Symbol;Acc:HGNC:25638]	0.70485	0.00109	0.03343
ENSG00000223865	HLA-DPB1	major histocompatibility complex, class II, DP beta 1 [Source:HGNC Symbol;Acc:HGNC:4940]	0.70485	0.00109	0.03343
ENSG00000224745		novel transcript, sense intronic to PTEN	0.70485	0.00109	0.03343
chr2 _ 203168419 203241046			0.70279	0.00114	0.03425
ENSG00000075239	ACAT1	acetyl-CoA acetyltransferase 1 [Source:HGNC Symbol;Acc:HGNC:93]	0.70279	0.00114	0.03425
ENSG00000086827	ZW10	zw10 kinetochore protein [Source:HGNC Symbol;Acc:HGNC:13194]	0.70279	0.00114	0.03425
ENSG00000163539	CLASP2	cytoplasmic linker associated protein 2 [Source:HGNC Symbol;Acc:HGNC:17078]	0.70279	0.00114	0.03425
ENSG00000227775		ribosomal protein S7 (RPS7) pseudogene	0.70279	0.00114	0.03425
ENSG00000261359	PYCARD-AS1	PYCARD antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:45036]	0.70279	0.00114	0.03425
ENSG00000049247	UTS2	urotensin 2 [Source:HGNC Symbol;Acc:HGNC:12636]	0.70072	0.0012	0.03522
ENSG00000107719	PALD1	phosphatase domain containing paladin 1 [Source:HGNC Symbol;Acc:HGNC:23530]	0.70072	0.0012	0.03522
ENSG00000147224	PRPS1	phosphoribosyl pyrophosphate synthetase 1 [Source:HGNC Symbol;Acc:HGNC:9462]	0.70072	0.0012	0.03522
ENSG00000198642	KLHL9	kelch like family member 9 [Source:HGNC Symbol;Acc:HGNC:18732]	0.70072	0.0012	0.03522
ENSG00000258561		novel transcript	0.70072	0.0012	0.03522
ENSG00000273007		novel transcript, antisense to FGF2	0.70072	0.0012	0.03522
ENSG00000254859		novel transcript	0.69938	0.00124	0.03629
chr19 + 43355483 43848105			0.69866	0.00126	0.03636

ENSG000000081721	DUSP12	dual specificity phosphatase 12 [Source:HGNC Symbol;Acc:HGNC:3067]	0.69866	0.00126	0.03636
ENSG00000114120	SLC25A36	solute carrier family 25 member 36 [Source:HGNC Symbol;Acc:HGNC:25554]	0.69866	0.00126	0.03636
ENSG00000224888		novel transcript, antisense to FAM38A	0.69866	0.00126	0.03636
ENSG00000236804	RPS3AP12	RPS3A pseudogene 12 [Source:HGNC Symbol;Acc:HGNC:35527]	0.69866	0.00126	0.03636
ENSG00000251287	ALG1L2	ALG1 chitobiosylidiphosphodolichol beta-mannosyltransferase like 2 [Source:HGNC Symbol;Acc:HGNC:37258]	0.69866	0.00126	0.03636
ENSG00000251634	NAIPP4	NAIP pseudogene 4 [Source:HGNC Symbol;Acc:HGNC:54494]	0.69866	0.00126	0.03636
ENSG00000269982		novel transcript, antisense to TMEM111	0.69866	0.00126	0.03636
ENSG00000276968		novel transcript, antisense to NUDT15	0.69866	0.00126	0.03636
ENSG00000070269	TMEM260	transmembrane protein 260 [Source:HGNC Symbol;Acc:HGNC:20185]	0.69659	0.00132	0.03739
ENSG00000141295	SCRN2	secernin 2 [Source:HGNC Symbol;Acc:HGNC:30381]	0.69659	0.00132	0.03739
ENSG00000156398	SFXN2	sideroflexin 2 [Source:HGNC Symbol;Acc:HGNC:16086]	0.69659	0.00132	0.03739
ENSG00000169955	ZNF747	zinc finger protein 747 [Source:HGNC Symbol;Acc:HGNC:28350]	0.69659	0.00132	0.03739
ENSG00000236254	MTND4P14	MT-ND4 pseudogene 14 [Source:HGNC Symbol;Acc:HGNC:42201]	0.69659	0.00132	0.03739
ENSG00000254704		macrophage expressed 1 (MPEG1) pseudogene	0.69659	0.00132	0.03739
ENSG00000279416		TEC	0.69659	0.00132	0.03739
ENSG00000111667	USP5	ubiquitin specific peptidase 5 [Source:HGNC Symbol;Acc:HGNC:12628]	0.69453	0.00138	0.03836
ENSG00000141252	VPS53	VPS53 subunit of GARP complex [Source:HGNC Symbol;Acc:HGNC:25608]	0.69453	0.00138	0.03836
ENSG00000180096	SEPTIN1	septin 1 [Source:HGNC Symbol;Acc:HGNC:2879]	0.69453	0.00138	0.03836
ENSG00000239282	CASTOR1	cytosolic arginine sensor for mTORC1 subunit 1 [Source:HGNC Symbol;Acc:HGNC:34423]	0.69453	0.00138	0.03836
ENSG00000240890		G2/M-phase specific E3 ubiquitin ligase (G2E3) pseudogene	0.69453	0.00138	0.03836
ENSG00000253180		ubiquitin-conjugating enzyme E2 variant 1 (UBE2V1) pseudogene	0.69453	0.00138	0.03836
ENSG00000260409		novel transcript	0.69453	0.00138	0.03836
ENSG00000275413		novel transcript, antisense to TTC19	0.69453	0.00138	0.03836
ENSG00000279394		TEC	0.69453	0.00138	0.03836
chr6 [93227168 93291526			0.69318	0.00142	0.03941
chr2 [177344688 177401786			0.69247	0.00145	0.03941
chr4 [141212543 14290278			0.69247	0.00145	0.03941
ENSG00000076641	PAG1	phosphoprotein membrane anchor with glycosphingolipid microdomains 1 [Source:HGNC Symbol;Acc:HGNC:30043]	0.69247	0.00145	0.03941
ENSG00000175773	ZBTB44-DT	ZBTB44 divergent transcript [Source:HGNC Symbol;Acc:HGNC:54265]	0.69247	0.00145	0.03941
ENSG00000176340	COX8A	cytochrome c oxidase subunit 8A [Source:HGNC Symbol;Acc:HGNC:2294]	0.69247	0.00145	0.03941
ENSG00000177409	SAMD9L	sterile alpha motif domain containing 9 like [Source:HGNC Symbol;Acc:HGNC:1349]	0.69247	0.00145	0.03941
ENSG00000230148	HOXB-AS1	HOXB cluster antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:43744]	0.69247	0.00145	0.03941
ENSG00000241978			0.69247	0.00145	0.03941
ENSG00000261654		novel transcript, sense overlapping C1orf103	0.69247	0.00145	0.03941
ENSG00000255422		novel transcript	0.69179	0.00147	0.03983
ENSG00000269934		novel transcript, antisense to OBSCN	0.69179	0.00147	0.03983
ENSG000000049541	RFC2	replication factor C subunit 2 [Source:HGNC Symbol;Acc:HGNC:9970]	0.6904	0.00152	0.0403
ENSG00000106133	NSUN5P2	NSUN5 pseudogene 2 [Source:HGNC Symbol;Acc:HGNC:16609]	0.6904	0.00152	0.0403
ENSG00000161513	FDXR	ferredoxin reductase [Source:HGNC Symbol;Acc:HGNC:3642]	0.6904	0.00152	0.0403
ENSG00000229151		novel transcript	0.6904	0.00152	0.0403
ENSG00000258733	LINC02328	long intergenic non-protein coding RNA 2328 [Source:HGNC Symbol;Acc:HGNC:53248]	0.6904	0.00152	0.0403
ENSG00000273723	SUGT1-DT	SUGT1 divergent transcript [Source:HGNC Symbol;Acc:HGNC:54809]	0.6904	0.00152	0.0403
ENSG00000283930	PLDSP1	PLD5 pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:55072]	0.6904	0.00152	0.0403
chr13 [51655182 51744617			0.68834	0.00159	0.04127
ENSG00000123213	NLN	neurolysin [Source:HGNC Symbol;Acc:HGNC:16058]	0.68834	0.00159	0.04127
ENSG00000135245	HILPDA	hypoxia inducible lipid droplet associated [Source:HGNC Symbol;Acc:HGNC:28859]	0.68834	0.00159	0.04127
ENSG00000198464	ZNF480	zinc finger protein 480 [Source:HGNC Symbol;Acc:HGNC:23305]	0.68834	0.00159	0.04127
ENSG00000256574	OR13A1	olfactory receptor family 13 subfamily A member 1 [Source:HGNC Symbol;Acc:HGNC:14772]	0.68834	0.00159	0.04127
ENSG00000273729		novel transcript, antisense to IRF2BPL	0.68834	0.00159	0.04127
chr1 [159206700 159259435			0.68627	0.00166	0.04199
chr1 [207427008 207495537			0.68627	0.00166	0.04199
chr14 [76679393 76798796			0.68627	0.00166	0.04199
ENSG00000112902	SEMA5A	semaphorin 5A [Source:HGNC Symbol;Acc:HGNC:10736]	0.68627	0.00166	0.04199
ENSG00000136925	TSTD2	thiosulfate sulfurtransferase like domain containing 2 [Source:HGNC Symbol;Acc:HGNC:30087]	0.68627	0.00166	0.04199
ENSG00000203876	ADD3-AS1	ADD3 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:48682]	0.68627	0.00166	0.04199
ENSG00000213397	HAUS7	HAUS augmin like complex subunit 7 [Source:HGNC Symbol;Acc:HGNC:32979]	0.68627	0.00166	0.04199
ENSG00000231916		coiled-coil-helix-coiled-coil-helix domain containing 10 (CHCHD10) pseudogene	0.68627	0.00166	0.04199
ENSG00000264812		novel transcript, sense intronic C17orf101	0.68627	0.00166	0.04199
ENSG00000269533		novel transcript	0.6856	0.00169	0.04257
ENSG00000183298	RPSAP19	ribosomal protein SA pseudogene 19 [Source:HGNC Symbol;Acc:HGNC:36508]	0.68535	0.00169	0.04276
chr10 [19528070 19776376			0.68421	0.00174	0.0431
chr8 [22551112 22652217			0.68421	0.00174	0.0431
ENSG00000204576	PRR3	proline rich 3 [Source:HGNC Symbol;Acc:HGNC:21149]	0.68421	0.00174	0.0431
ENSG00000236609	ZNF853	zinc finger protein 853 [Source:HGNC Symbol;Acc:HGNC:21767]	0.68421	0.00174	0.0431
ENSG00000243264	IGKV2D-29	immunoglobulin kappa variable 2D-29 [Source:HGNC Symbol;Acc:HGNC:5800]	0.68421	0.00174	0.0431
ENSG00000245317		novel transcript	0.68421	0.00174	0.0431
ENSG00000251129	LINC02506	long intergenic non-protein coding RNA 2506 [Source:HGNC Symbol;Acc:HGNC:53495]	0.68421	0.00174	0.0431
ENSG00000256280	ATP5MGF1	ATP synthase membrane subunit g pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:13214]	0.68421	0.00174	0.0431
ENSG00000256591		novel transcript	0.68421	0.00174	0.0431
ENSG00000225578	NCBP2-AS1	NCBP2 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:40392]	0.68353	0.00176	0.0437
chr1 [245830064 245894767			0.68215	0.00182	0.0442
chr2 [15241696 15302964			0.68215	0.00182	0.0442
ENSG00000143314	MRPL24	mitochondrial ribosomal protein L24 [Source:HGNC Symbol;Acc:HGNC:14037]	0.68215	0.00182	0.0442
ENSG00000185909	KLHDC8B	kelch domain containing 8B [Source:HGNC Symbol;Acc:HGNC:28557]	0.68215	0.00182	0.0442
ENSG00000205918	PDPK2P	3-phosphoinositide dependent protein kinase 2, pseudogene [Source:HGNC Symbol;Acc:HGNC:49897]	0.68215	0.00182	0.0442
ENSG00000251791	SCARNA6	small Cajal body-specific RNA 6 [Source:HGNC Symbol;Acc:HGNC:32562]	0.68215	0.00182	0.0442
ENSG00000261366	MANEA-DT	MANEA divergent transcript [Source:HGNC Symbol;Acc:HGNC:43732]	0.68215	0.00182	0.0442
ENSG00000215571	GRK6P1	G protein-coupled receptor kinase 6 pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:4547]	0.68147	0.00184	0.04481
ENSG00000128833	MYO5C	myosin VC [Source:HGNC Symbol;Acc:HGNC:7604]	0.68008	0.0019	0.04542
ENSG00000138085	ATRAID	all-trans retinoic acid induced differentiation factor [Source:HGNC Symbol;Acc:HGNC:24090]	0.68008	0.0019	0.04542
ENSG00000142937	RPS8	ribosomal protein S8 [Source:HGNC Symbol;Acc:HGNC:10441]	0.68008	0.0019	0.04542

ENSG00000147813	NAPRT	nicotinate phosphoribosyltransferase [Source:HGNC Symbol;Acc:HGNC:30450]	0.68008	0.0019	0.04542
ENSG000000211753	TRBV28	T cell receptor beta variable 28 [Source:HGNC Symbol;Acc:HGNC:12209]	0.68008	0.0019	0.04542
ENSG00000248049	UBA6-AS1	UBA6 antisense RNA 1 (head to head) [Source:HGNC Symbol;Acc:HGNC:49083]	0.68008	0.0019	0.04542
ENSG00000283236		novel zinc finger protein pseudogene	0.68008	0.0019	0.04542
chr7 j123668761 123976987			0.67802	0.00199	0.04666
ENSG00000280365		TEC	0.67802	0.00199	0.04666
ENSG00000270104		novel transcript	0.6774	0.00201	0.04724
chr8 j24170899 24245300			0.67595	0.00207	0.04757
ENSG00000113088	GZMK	granzyme K [Source:HGNC Symbol;Acc:HGNC:47111]	0.67595	0.00207	0.04757
ENSG00000124882	EREG	epiregulin [Source:HGNC Symbol;Acc:HGNC:3443]	0.67595	0.00207	0.04757
ENSG00000128394	APOBEC3F	apolipoprotein B mRNA editing enzyme catalytic subunit 3F [Source:HGNC Symbol;Acc:HGNC:17356]	0.67595	0.00207	0.04757
ENSG00000133316	WDR74	WD repeat domain 74 [Source:HGNC Symbol;Acc:HGNC:25529]	0.67595	0.00207	0.04757
ENSG00000145945	FAM50B	family with sequence similarity 50 member B [Source:HGNC Symbol;Acc:HGNC:18789]	0.67595	0.00207	0.04757
ENSG00000225470	JPX	JPX transcript, XIST activator [Source:HGNC Symbol;Acc:HGNC:37191]	0.67595	0.00207	0.04757
ENSG00000256660	CLEC12B	C-type lectin domain family 12 member B [Source:HGNC Symbol;Acc:HGNC:31966]	0.67595	0.00207	0.04757
ENSG00000279633		TEC	0.67595	0.00207	0.04757
ENSG00000237541	HLA-DQA2	major histocompatibility complex, class II, DQ alpha 2 [Source:HGNC Symbol;Acc:HGNC:4943]	0.67527	0.0021	0.04807
ENSG00000265692	LINC01970	long intergenic non-protein coding RNA 1970 [Source:HGNC Symbol;Acc:HGNC:52796]	0.67527	0.0021	0.04807
chr7 j120898631 120988879			0.67389	0.00217	0.04898
ENSG00000137040	RANBP6	RAN binding protein 6 [Source:HGNC Symbol;Acc:HGNC:9851]	0.67389	0.00217	0.04898
ENSG00000248544		novel transcript, antisense to CYFIP2	0.67389	0.00217	0.04898
ENSG00000276696	Y_RNA	Y RNA [Source:RFAM;Acc:RF00019]	0.67389	0.00217	0.04898

Negatively correlated with H1-3

ensembl_gene_id	gene_name	description	rho	p	adjusted-p
ENSG00000007038	PRSS21	serine protease 21 [Source:HGNC Symbol;Acc:HGNC:9485]	-0.95872	3.7E-10	8.8E-06
ENSG00000223519	KIF28P	kinesin family member 28, pseudogene [Source:HGNC Symbol;Acc:HGNC:49205]	-0.9484	2.1E-09	2.6E-05
ENSG00000137571	SLCO5A1	solute carrier organic anion transporter family member 5A1 [Source:HGNC Symbol;Acc:HGNC:19046]	-0.93395	1.5E-08	0.00012
ENSG00000136231	IGF2BP3	insulin like growth factor 2 mRNA binding protein 3 [Source:HGNC Symbol;Acc:HGNC:28868]	-0.92363	4.6E-08	0.00018
ENSG00000134294	SLC38A2	solute carrier family 38 member 2 [Source:HGNC Symbol;Acc:HGNC:13448]	-0.91744	8.4E-08	0.00025
ENSG00000279803		TEC	-0.91744	8.4E-08	0.00025
ENSG00000138722	MMRN1	multimerin 1 [Source:HGNC Symbol;Acc:HGNC:7178]	-0.91125	1.5E-07	0.00029
ENSG00000143595	AQP10	aquaporin 10 [Source:HGNC Symbol;Acc:HGNC:16029]	-0.91125	1.5E-07	0.00029
ENSG00000164808	SPIDR	scaffold protein involved in DNA repair [Source:HGNC Symbol;Acc:HGNC:28971]	-0.90299	2.9E-07	0.00049
chr2 j169666629 169726974			-0.89474	5.4E-07	0.00076
ENSG000000005961			-0.89267	6.3E-07	0.00083
chr15 j91959573 92014695	ITGA2B	integrin subunit alpha 2b [Source:HGNC Symbol;Acc:HGNC:6138]	-0.89061	7.3E-07	0.00087
ENSG00000108960	MMD	monocyte to macrophage differentiation associated [Source:HGNC Symbol;Acc:HGNC:7153]	-0.88954	8.4E-07	0.00087
ENSG00000163349	HIPK1	homeodomain interacting protein kinase 1 [Source:HGNC Symbol;Acc:HGNC:19006]	-0.88954	8.4E-07	0.00087
ENSG00000280166		TEC	-0.88954	8.4E-07	0.00087
ENSG00000124102	PI3	peptidase inhibitor 3 [Source:HGNC Symbol;Acc:HGNC:8947]	-0.88235	1.3E-06	0.00108
ENSG00000131724	IL13RA1	interleukin 13 receptor subunit alpha 1 [Source:HGNC Symbol;Acc:HGNC:5974]	-0.88235	1.3E-06	0.00108
ENSG00000101162	TUBB1	tubulin beta 1 class VI [Source:HGNC Symbol;Acc:HGNC:16257]	-0.87822	1.6E-06	0.00131
ENSG00000128591	FLNC	filamin C [Source:HGNC Symbol;Acc:HGNC:3756]	-0.87666	1.8E-06	0.00135
ENSG00000157978	LDLRAP1	low density lipoprotein receptor adaptor protein 1 [Source:HGNC Symbol;Acc:HGNC:18640]	-0.87616	1.9E-06	0.00135
ENSG00000203811	H3C14	H3 clustered histone 14 [Source:HGNC Symbol;Acc:HGNC:20503]	-0.87616	1.9E-06	0.00135
ENSG00000120696	KBTBD7	kelch repeat and BTB domain containing 7 [Source:HGNC Symbol;Acc:HGNC:25266]	-0.8741	2.1E-06	0.00144
ENSG00000076043	REXO2	RNA exonuclease 2 [Source:HGNC Symbol;Acc:HGNC:17851]	-0.87203	2.4E-06	0.00154
ENSG00000110442	COMMD9	COMM domain containing 9 [Source:HGNC Symbol;Acc:HGNC:25014]	-0.86997	2.7E-06	0.0017
ENSG00000101199	ARFGAP1	ADP ribosylation factor GTPase activating protein 1 [Source:HGNC Symbol;Acc:HGNC:15852]	-0.86791	3.1E-06	0.00186
ENSG00000110801	PSMD9	proteasome 26S subunit, non-ATPase 9 [Source:HGNC Symbol;Acc:HGNC:9567]	-0.86584	3.4E-06	0.00199
ENSG00000128512	DOCK4	dedicator of cytokinesis 4 [Source:HGNC Symbol;Acc:HGNC:19192]	-0.86584	3.4E-06	0.00199
ENSG00000034152	MAP2K3	mitogen-activated protein kinase kinase 3 [Source:HGNC Symbol;Acc:HGNC:6843]	-0.86378	3.9E-06	0.00204
ENSG00000166348	USP54	ubiquitin specific peptidase 54 [Source:HGNC Symbol;Acc:HGNC:23513]	-0.86378	3.9E-06	0.00204
ENSG00000119684	MLH3	mutl. homolog 3 [Source:HGNC Symbol;Acc:HGNC:7128]	-0.86171	4.3E-06	0.00209
ENSG00000166922	SCG5	secretogranin V [Source:HGNC Symbol;Acc:HGNC:10816]	-0.86171	4.3E-06	0.00209
ENSG00000277726		novel protein	-0.86171	4.3E-06	0.00209
ENSG00000269711			-0.85984	4.8E-06	0.00216
ENSG00000153162	BMP6	bone morphogenetic protein 6 [Source:HGNC Symbol;Acc:HGNC:1073]	-0.85965	4.8E-06	0.00216
ENSG00000260032	NORAD	non-coding RNA activated by DNA damage [Source:HGNC Symbol;Acc:HGNC:44311]	-0.85965	4.8E-06	0.00216
ENSG00000119681	LTBP2	latent transforming growth factor beta binding protein 2 [Source:HGNC Symbol;Acc:HGNC:6715]	-0.85759	5.4E-06	0.00225
ENSG00000143443	C1orf56	chromosome 1 open reading frame 56 [Source:HGNC Symbol;Acc:HGNC:26045]	-0.85759	5.4E-06	0.00225
ENSG00000198959	TGM2	transglutaminase 2 [Source:HGNC Symbol;Acc:HGNC:11778]	-0.85759	5.4E-06	0.00225
ENSG00000123933	MXD4	MAX dimerization protein 4 [Source:HGNC Symbol;Acc:HGNC:13906]	-0.85552	6E-06	0.0023
ENSG00000154928	EPHB1	EPH receptor B1 [Source:HGNC Symbol;Acc:HGNC:3392]	-0.85552	6E-06	0.0023
ENSG00000250878	METTL21EP	methyltransferase like 21E, pseudogene [Source:HGNC Symbol;Acc:HGNC:41948]	-0.85552	6E-06	0.0023
ENSG00000127314	RAP1B	RAP1B, member of RAS oncogene family [Source:HGNC Symbol;Acc:HGNC:9857]	-0.85346	6.7E-06	0.00241
ENSG00000274259	SYNGAP1-AS1	SYNGAP1 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:53831]	-0.85346	6.7E-06	0.00241
ENSG00000275993	SIK1B	salt inducible kinase 1B (putative) [Source:HGNC Symbol;Acc:HGNC:52389]	-0.85346	6.7E-06	0.00241
ENSG00000100201	DDX17	DEAD-box helicase 17 [Source:HGNC Symbol;Acc:HGNC:2740]	-0.85139	7.4E-06	0.00248
ENSG00000101298	SNPH	syntaphilin [Source:HGNC Symbol;Acc:HGNC:15931]	-0.85139	7.4E-06	0.00248
ENSG00000236320	SLFN14	schlafen family member 14 [Source:HGNC Symbol;Acc:HGNC:32689]	-0.85139	7.4E-06	0.00248
ENSG00000261758	STAG1-DT	STAG1 divergent transcript [Source:HGNC Symbol;Acc:HGNC:55350]	-0.85139	7.4E-06	0.00248
ENSG00000271582		EIF2A eukaryotic translation initiation factor 2A, 65kDa, pseudogene	-0.85139	7.4E-06	0.00248
ENSG00000135679	MDM2	MDM2 proto-oncogene [Source:HGNC Symbol;Acc:HGNC:6973]	-0.84933	8.2E-06	0.00257
ENSG00000136240	KDELRL2	KDEL endoplasmic reticulum protein retention receptor 2 [Source:HGNC Symbol;Acc:HGNC:6305]	-0.84933	8.2E-06	0.00257
ENSG00000248746	ACTN3	actinin alpha 3 [Source:HGNC Symbol;Acc:HGNC:165]	-0.84933	8.2E-06	0.00257
ENSG00000259207	ITGB3	integrin subunit beta 3 [Source:HGNC Symbol;Acc:HGNC:6156]	-0.84933	8.2E-06	0.00257
ENSG00000112561	TFEB	transcription factor EB [Source:HGNC Symbol;Acc:HGNC:11753]	-0.84727	9.1E-06	0.00267

ENSG00000137822	TUBGCP4	tubulin gamma complex associated protein 4 [Source:HGNC Symbol;Acc:HGNC:16691]	-0.84727	9.1E-06	0.00267
ENSG00000180914	OXTR	oxytocin receptor [Source:HGNC Symbol;Acc:HGNC:8529]	-0.84727	9.1E-06	0.00267
ENSG00000253409	TRBV7-4	T cell receptor beta variable 7-4 [Source:HGNC Symbol;Acc:HGNC:12238]	-0.84727	9.1E-06	0.00267
ENSG00000128266	GNAZ	G protein subunit alpha z [Source:HGNC Symbol;Acc:HGNC:4395]	-0.8452	1E-05	0.00275
ENSG00000171992	SYNPO	synaptotagmin [Source:HGNC Symbol;Acc:HGNC:30672]	-0.8452	1E-05	0.00275
ENSG00000251411		actin related protein 2/3 complex, subunit 1A, 41kDa (ARPC1A) pseudogene	-0.8452	1E-05	0.00275
chrX [68066111 68116840			-0.84314	1.1E-05	0.00291
ENSG00000147099	HDAC8	histone deacetylase 8 [Source:HGNC Symbol;Acc:HGNC:13315]	-0.84107	1.2E-05	0.00307
ENSG00000198492	YTHDF2	YTH N6-methyladenosine RNA binding protein 2 [Source:HGNC Symbol;Acc:HGNC:31675]	-0.84107	1.2E-05	0.00307
ENSG00000227500	SCAMP4	secretory carrier membrane protein 4 [Source:HGNC Symbol;Acc:HGNC:30385]	-0.83901	1.4E-05	0.00331
ENSG00000226450	CYP2D8P	cytochrome P450 family 2 subfamily D member 8, pseudogene [Source:HGNC Symbol;Acc:HGNC:2628]	-0.83841	1.4E-05	0.00337
ENSG00000160145	KALRN	kalirin RhoGEF kinase [Source:HGNC Symbol;Acc:HGNC:4814]	-0.83695	1.5E-05	0.0035
ENSG00000180776	ZDHHC20	zinc finger DHHC-type palmitoyltransferase 20 [Source:HGNC Symbol;Acc:HGNC:20749]	-0.83695	1.5E-05	0.0035
ENSG00000256533		CCR4 carbon catabolite repression 4-like (S. cerevisiae) (CCR4L) pseudogene	-0.83695	1.5E-05	0.0035
ENSG00000051382	PIK3CB	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit beta [Source:HGNC Symbol;Acc:HGNC:8976]	-0.83488	1.6E-05	0.00373
ENSG00000122786	CALD1	caldesmon 1 [Source:HGNC Symbol;Acc:HGNC:1441]	-0.83488	1.6E-05	0.00373
ENSG00000279673		TEC	-0.83488	1.6E-05	0.00373
ENSG00000258891		novel transcript, antisense to ZNF410	-0.83282	1.8E-05	0.00398
ENSG000000075785	RAB7A	RAB7A, member RAS oncogene family [Source:HGNC Symbol;Acc:HGNC:9788]	-0.83075	2E-05	0.0042
ENSG00000117523	PRRC2C	proline rich coiled-coil 2C [Source:HGNC Symbol;Acc:HGNC:24903]	-0.83075	2E-05	0.0042
ENSG000000078399	HOXA9	homeobox A9 [Source:HGNC Symbol;Acc:HGNC:5109]	-0.82869	2.1E-05	0.00447
ENSG00000104957	CCDC130	coiled-coil domain containing 130 [Source:HGNC Symbol;Acc:HGNC:28118]	-0.82663	2.3E-05	0.00472
ENSG00000116871	MAP7D1	MAP7 domain containing 1 [Source:HGNC Symbol;Acc:HGNC:25514]	-0.82663	2.3E-05	0.00472
ENSG00000141934	PLPP2	phospholipid phosphatase 2 [Source:HGNC Symbol;Acc:HGNC:9230]	-0.82663	2.3E-05	0.00472
ENSG00000165434	PGM2L1	phosphoglucomutase 2 like 1 [Source:HGNC Symbol;Acc:HGNC:20898]	-0.82663	2.3E-05	0.00472
ENSG00000242856	VN1R105P	vomeroneasal 1 receptor 105 pseudogene [Source:HGNC Symbol;Acc:HGNC:37428]	-0.8262	2.4E-05	0.00477
ENSG00000104973	MED25	mediator complex subunit 25 [Source:HGNC Symbol;Acc:HGNC:28845]	-0.82456	2.6E-05	0.00483
ENSG00000133193	FAM104A	family with sequence similarity 104 member A [Source:HGNC Symbol;Acc:HGNC:25918]	-0.82456	2.6E-05	0.00483
ENSG00000156017	CARNMT1	carnosine N-methyltransferase 1 [Source:HGNC Symbol;Acc:HGNC:23435]	-0.82456	2.6E-05	0.00483
ENSG00000171552	BCL2L1	BCL2 like 1 [Source:HGNC Symbol;Acc:HGNC:992]	-0.82456	2.6E-05	0.00483
ENSG00000243156	MICAL3	microtubule associated monoxygenase, calponin and LIM domain containing 3 [Source:HGNC Symbol;Acc:HGNC:24694]	-0.82456	2.6E-05	0.00483
ENSG00000254718		novel transcript, antisense to PPM1A	-0.82456	2.6E-05	0.00483
chr5 [156131271 156321325			-0.8225	2.8E-05	0.00507
ENSG00000005249	PRKAR2B	protein kinase cAMP-dependent type II regulatory subunit beta [Source:HGNC Symbol;Acc:HGNC:9392]	-0.8225	2.8E-05	0.00507
ENSG00000118513	MYB	MYB proto-oncogene, transcription factor [Source:HGNC Symbol;Acc:HGNC:7545]	-0.8225	2.8E-05	0.00507
ENSG000000050100	DHX33	DEAH-box helicase 33 [Source:HGNC Symbol;Acc:HGNC:16718]	-0.82043	3E-05	0.00528
ENSG000000077463	SIRT6	sirtuin 6 [Source:HGNC Symbol;Acc:HGNC:14934]	-0.82043	3E-05	0.00528
ENSG00000101255	TRIB3	tribbles pseudokinase 3 [Source:HGNC Symbol;Acc:HGNC:16228]	-0.82043	3E-05	0.00528
ENSG00000165244	ZNF367	zinc finger protein 367 [Source:HGNC Symbol;Acc:HGNC:18320]	-0.82043	3E-05	0.00528
ENSG000000086232	EIF2AK1	eukaryotic translation initiation factor 2 alpha kinase 1 [Source:HGNC Symbol;Acc:HGNC:24921]	-0.81937	3.3E-05	0.00554
ENSG00000158715	SLC45A3	solute carrier family 45 member 3 [Source:HGNC Symbol;Acc:HGNC:8642]	-0.81937	3.3E-05	0.00554
ENSG00000102078	CD9	CD9 molecule [Source:HGNC Symbol;Acc:HGNC:1709]	-0.81631	3.6E-05	0.00574
ENSG00000121104	FAM117A	family with sequence similarity 117 member A [Source:HGNC Symbol;Acc:HGNC:24179]	-0.81631	3.6E-05	0.00574
ENSG00000122025	FLT3	fms related receptor tyrosine kinase 3 [Source:HGNC Symbol;Acc:HGNC:3765]	-0.81631	3.6E-05	0.00574
ENSG00000185291	IL3RA	interleukin 3 receptor subunit alpha [Source:HGNC Symbol;Acc:HGNC:6012]	-0.81631	3.6E-05	0.00574
ENSG00000237440	ZNF737	zinc finger protein 737 [Source:HGNC Symbol;Acc:HGNC:32468]	-0.81631	3.6E-05	0.00574
ENSG00000158480	SPATA2	spermatogenesis associated 2 [Source:HGNC Symbol;Acc:HGNC:14681]	-0.81424	3.9E-05	0.00588
ENSG00000167980	EVPL	envoplakin [Source:HGNC Symbol;Acc:HGNC:3503]	-0.81424	3.9E-05	0.00588
ENSG00000182224	CYB5D1	cytochrome b5 domain containing 1 [Source:HGNC Symbol;Acc:HGNC:26516]	-0.81424	3.9E-05	0.00588
ENSG00000198478	SH3BGR12	SH3 domain binding glutamate rich protein like 2 [Source:HGNC Symbol;Acc:HGNC:15567]	-0.81424	3.9E-05	0.00588
ENSG00000280798	LINC00294	long intergenic non-protein coding RNA 294 [Source:HGNC Symbol;Acc:HGNC:27456]	-0.81424	3.9E-05	0.00588
ENSG00000182973	CNOT10	CCR4-NOT transcription complex subunit 10 [Source:HGNC Symbol;Acc:HGNC:23817]	-0.81218	4.2E-05	0.0063
ENSG00000196091	MYBPC1	myosin binding protein C1 [Source:HGNC Symbol;Acc:HGNC:7549]	-0.81156	4.3E-05	0.00641
ENSG00000137462	TLR2	toll like receptor 2 [Source:HGNC Symbol;Acc:HGNC:11848]	-0.81011	4.6E-05	0.00646
ENSG00000164983	TMEM65	transmembrane protein 65 [Source:HGNC Symbol;Acc:HGNC:25203]	-0.81011	4.6E-05	0.00646
ENSG00000166147	FBN1	fibrillin 1 [Source:HGNC Symbol;Acc:HGNC:3603]	-0.81011	4.6E-05	0.00646
ENSG00000267640		novel zinc finger protein pseudogene	-0.81011	4.6E-05	0.00646
ENSG00000258484	SPESP1	sperm equatorial segment protein 1 [Source:HGNC Symbol;Acc:HGNC:15570]	-0.8095	4.7E-05	0.00658
ENSG00000047648	ARHGAP6	Rho GTPase activating protein 6 [Source:HGNC Symbol;Acc:HGNC:676]	-0.80805	5E-05	0.00668
ENSG00000066827	ZFAT	zinc finger and AT-hook domain containing [Source:HGNC Symbol;Acc:HGNC:19899]	-0.80805	5E-05	0.00668
ENSG00000229820		DnaJ (Hsp40) homolog, subfamily C member 8 (DNAJC8) pseudogene	-0.80805	5E-05	0.00668
ENSG00000263272		novel transcript, antisense to RPA1N	-0.80805	5E-05	0.00668
ENSG00000230587	LINC02580	long intergenic non-protein coding RNA 2580 [Source:HGNC Symbol;Acc:HGNC:53751]	-0.80665	5.2E-05	0.0068
chr14 [77402830 77490884			-0.80599	5.4E-05	0.0068
ENSG00000178307	TMEM11	transmembrane protein 11 [Source:HGNC Symbol;Acc:HGNC:16823]	-0.80599	5.4E-05	0.0068
ENSG00000180354	MTURN	maturin, neural progenitor differentiation regulator homolog [Source:HGNC Symbol;Acc:HGNC:25457]	-0.80599	5.4E-05	0.0068
ENSG00000230551		novel transcript	-0.80599	5.4E-05	0.0068
ENSG00000235917	MTCO2P11	MT-CO2 pseudogene 11 [Source:HGNC Symbol;Acc:HGNC:52027]	-0.80599	5.4E-05	0.0068
ENSG00000266733	TBC1D29P	TBC1 domain family member 29, pseudogene [Source:HGNC Symbol;Acc:HGNC:24509]	-0.80599	5.4E-05	0.0068
ENSG00000182771	GRID1	glutamate ionotropic receptor delta type subunit 1 [Source:HGNC Symbol;Acc:HGNC:4575]	-0.80537	5.5E-05	0.00693
ENSG00000009630	POMT2	protein O-mannosyltransferase 2 [Source:HGNC Symbol;Acc:HGNC:19743]	-0.80392	5.8E-05	0.00695
ENSG00000064989	CALCRL	calcitonin receptor like receptor [Source:HGNC Symbol;Acc:HGNC:16709]	-0.80392	5.8E-05	0.00695
ENSG00000118454	ANKRD13C	ankyrin repeat domain 13C [Source:HGNC Symbol;Acc:HGNC:25374]	-0.80392	5.8E-05	0.00695
ENSG00000158545	ZC3H18	zinc finger CCH-type containing 18 [Source:HGNC Symbol;Acc:HGNC:25091]	-0.80392	5.8E-05	0.00695
ENSG00000183011	NAA38	N-alpha-acetyltransferase 38, NatC auxiliary subunit [Source:HGNC Symbol;Acc:HGNC:28212]	-0.80392	5.8E-05	0.00695
ENSG00000240265		H1 histone family, member O, oocyte-specific (H1FOO) pseudogene	-0.80392	5.8E-05	0.00695
ENSG00000096060	FKBP5	FKBP prolyl isomerase 5 [Source:HGNC Symbol;Acc:HGNC:3721]	-0.80186	6.3E-05	0.00728
ENSG00000102981	PARD6A	par-6 family cell polarity regulator alpha [Source:HGNC Symbol;Acc:HGNC:15943]	-0.80186	6.3E-05	0.00728
ENSG00000110711	AIP	aryl hydrocarbon receptor interacting protein [Source:HGNC Symbol;Acc:HGNC:358]	-0.80186	6.3E-05	0.00728
ENSG00000155893	PXYLP1	2-phosphoxylase phosphatase 1 [Source:HGNC Symbol;Acc:HGNC:26303]	-0.80186	6.3E-05	0.00728
ENSG00000156011	PSD3	pleckstrin and Sec7 domain containing 3 [Source:HGNC Symbol;Acc:HGNC:19093]	-0.80186	6.3E-05	0.00728

ENSG00000171943	SRGAP2C	SLIT-ROBO Rho GTPase activating protein 2C [Source:HGNC Symbol;Acc:HGNC:30584]	-0.80186	6.3E-05	0.00728
ENSG00000109881	CCDC34	coiled-coil domain containing 34 [Source:HGNC Symbol;Acc:HGNC:25079]	-0.79979	6.8E-05	0.0076
ENSG00000114166	KAT2B	lysine acetyltransferase 2B [Source:HGNC Symbol;Acc:HGNC:8638]	-0.79979	6.8E-05	0.0076
ENSG00000124469	CEACAM8	CEA cell adhesion molecule 8 [Source:HGNC Symbol;Acc:HGNC:1820]	-0.79979	6.8E-05	0.0076
ENSG00000225067	RPL23AP2	ribosomal protein L23a pseudogene 2 [Source:HGNC Symbol;Acc:HGNC:10319]	-0.79887	7E-05	0.00782
ENSG00000266992	DHX40P1	DEAH-box helicase 40 pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:20687]	-0.79855	7.1E-05	0.00787
ENSG00000166171	DPDC	deleted in primary ciliary dyskinesia homolog (mouse) [Source:HGNC Symbol;Acc:HGNC:24542]	-0.79773	7.3E-05	0.00789
ENSG00000115266	APC2	APC regulator of WNT signaling pathway 2 [Source:HGNC Symbol;Acc:HGNC:24036]	-0.79711	7.5E-05	0.00803
ENSG00000112473	SLC39A7	solute carrier family 39 member 7 [Source:HGNC Symbol;Acc:HGNC:4927]	-0.79567	7.9E-05	0.00831
ENSG00000105887	MTPN	myotrophin [Source:HGNC Symbol;Acc:HGNC:15667]	-0.7936	8.5E-05	0.00856
ENSG00000108094	CUL2	cullin 2 [Source:HGNC Symbol;Acc:HGNC:2552]	-0.7936	8.5E-05	0.00856
ENSG00000128891	CCDC32	coiled-coil domain containing 32 [Source:HGNC Symbol;Acc:HGNC:28295]	-0.7936	8.5E-05	0.00856
ENSG00000130821	SLC6A8	solute carrier family 6 member 8 [Source:HGNC Symbol;Acc:HGNC:11055]	-0.7936	8.5E-05	0.00856
ENSG00000138798	EGF	epidermal growth factor [Source:HGNC Symbol;Acc:HGNC:3229]	-0.7936	8.5E-05	0.00856
ENSG00000237356		novel transcript	-0.79298	8.7E-05	0.00871
ENSG00000256229	ZNF486	zinc finger protein 486 [Source:HGNC Symbol;Acc:HGNC:20807]	-0.79154	9.1E-05	0.00905
ENSG00000260490	MYL12BP1	MYL12B pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:51649]	-0.79154	9.1E-05	0.00905
ENSG00000005381	MPO	myeloperoxidase [Source:HGNC Symbol;Acc:HGNC:7218]	-0.78947	9.8E-05	0.00945
ENSG000000068796	KIF2A	kinesin family member 2A [Source:HGNC Symbol;Acc:HGNC:6318]	-0.78947	9.8E-05	0.00945
ENSG00000127483	HP1BP3	heterochromatin protein 1 binding protein 3 [Source:HGNC Symbol;Acc:HGNC:24973]	-0.78947	9.8E-05	0.00945
ENSG00000165476	REEP3	receptor accessory protein 3 [Source:HGNC Symbol;Acc:HGNC:23711]	-0.78947	9.8E-05	0.00945
ENSG00000198909	MAP3K3	mitogen-activated protein kinase kinase kinase 3 [Source:HGNC Symbol;Acc:HGNC:6855]	-0.78947	9.8E-05	0.00945
ENSG00000243508	DNAJB6P7	DNAJB6 pseudogene 7 [Source:HGNC Symbol;Acc:HGNC:54760]	-0.78947	9.8E-05	0.00945
ENSG00000283052	LINC02456	long intergenic non-protein coding RNA 2456 [Source:HGNC Symbol;Acc:HGNC:53389]	-0.78885	1E-04	0.00962
ENSG00000005007	UPF1	UPF1 RNA helicase and ATPase [Source:HGNC Symbol;Acc:HGNC:9962]	-0.78741	0.00011	0.00977
ENSG00000131375	CAPN7	calpain 7 [Source:HGNC Symbol;Acc:HGNC:1484]	-0.78741	0.00011	0.00977
ENSG00000203760	CENPW	centromere protein W [Source:HGNC Symbol;Acc:HGNC:21488]	-0.78741	0.00011	0.00977
ENSG000000050555	LAMC3	laminin subunit gamma 3 [Source:HGNC Symbol;Acc:HGNC:6494]	-0.78735	0.00011	0.00977
ENSG00000280278	FLJ30679	uncharacterized protein FLJ30679 [Source:NCBI gene (formerly Entrezgene);Acc:146512]	-0.78735	0.00011	0.00977
ENSG00000110218	PANX1	pannexin 1 [Source:HGNC Symbol;Acc:HGNC:8599]	-0.78535	0.00011	0.01018
ENSG00000170293	CMTM8	CKLF like MARVEL transmembrane domain containing 8 [Source:HGNC Symbol;Acc:HGNC:19179]	-0.78535	0.00011	0.01018
ENSG00000182324	KCNJ14	potassium inwardly rectifying channel subfamily J member 14 [Source:HGNC Symbol;Acc:HGNC:6260]	-0.78535	0.00011	0.01018
ENSG00000239839	DEFA3	defensin alpha 3 [Source:HGNC Symbol;Acc:HGNC:2762]	-0.78535	0.00011	0.01018
ENSG00000267243		novel transcript	-0.78535	0.00011	0.01018
ENSG00000270179		novel transcript	-0.78535	0.00011	0.01018
ENSG00000142546	NOSIP	nitric oxide synthase interacting protein [Source:HGNC Symbol;Acc:HGNC:17946]	-0.78328	0.00012	0.01036
ENSG00000154736	ADAMTSS	ADAM metalloproteinase with thrombospondin type 1 motif 5 [Source:HGNC Symbol;Acc:HGNC:221]	-0.78328	0.00012	0.01036
ENSG00000187172	BAGE2	BAGE family member 2 [Source:HGNC Symbol;Acc:HGNC:15723]	-0.78328	0.00012	0.01036
ENSG00000278950		novel transcript	-0.78328	0.00012	0.01036
ENSG00000162695	SLC30A7	solute carrier family 30 member 7 [Source:HGNC Symbol;Acc:HGNC:19306]	-0.78122	0.00013	0.01079
ENSG00000163736	PPBP	pro-platelet basic protein [Source:HGNC Symbol;Acc:HGNC:9240]	-0.78122	0.00013	0.01079
ENSG00000236304		novel transcript	-0.78122	0.00013	0.01079
ENSG00000263335		novel transcript, antisense to MYH11	-0.78122	0.00013	0.01079
ENSG00000272370		novel transcript	-0.78122	0.00013	0.01079
ENSG00000047597	XK	X-linked Kx blood group [Source:HGNC Symbol;Acc:HGNC:12811]	-0.77915	0.00014	0.01112
ENSG00000088986	DYNLL1	dynein light chain LC8-type 1 [Source:HGNC Symbol;Acc:HGNC:15476]	-0.77915	0.00014	0.01112
ENSG00000137193	PIM1	Pim-1 proto-oncogene, serine/threonine kinase [Source:HGNC Symbol;Acc:HGNC:8986]	-0.77915	0.00014	0.01112
ENSG00000166135	HIF1AN	hypoxia inducible factor 1 subunit alpha inhibitor [Source:HGNC Symbol;Acc:HGNC:17113]	-0.77915	0.00014	0.01112
ENSG00000167716	WDR81	WD repeat domain 81 [Source:HGNC Symbol;Acc:HGNC:26600]	-0.77915	0.00014	0.01112
ENSG00000173868	PHOSPHO1	phosphoethanolamine/phosphocholine phosphatase 1 [Source:HGNC Symbol;Acc:HGNC:16815]	-0.77915	0.00014	0.01112
ENSG00000280195		novel transcript, antisense to RPL10	-0.77915	0.00014	0.01112
ENSG00000061918	GUCY1B1	guanylate cyclase 1 soluble subunit beta 1 [Source:HGNC Symbol;Acc:HGNC:4687]	-0.77709	0.00015	0.01154
ENSG00000104205	SGK3	serum/glucocorticoid regulated kinase family member 3 [Source:HGNC Symbol;Acc:HGNC:10812]	-0.77709	0.00015	0.01154
ENSG00000157404	KIT	KIT proto-oncogene, receptor tyrosine kinase [Source:HGNC Symbol;Acc:HGNC:6342]	-0.77709	0.00015	0.01154
ENSG00000168386	FILIP1L	filamin A interacting protein 1 like [Source:HGNC Symbol;Acc:HGNC:24589]	-0.77709	0.00015	0.01154
ENSG00000174032	SLC25A30	solute carrier family 25 member 30 [Source:HGNC Symbol;Acc:HGNC:27371]	-0.77709	0.00015	0.01154
ENSG00000183850	ZNF730	zinc finger protein 730 [Source:HGNC Symbol;Acc:HGNC:32470]	-0.77709	0.00015	0.01154
ENSG00000225611	LINC02158	long intergenic non-protein coding RNA 2158 [Source:HGNC Symbol;Acc:HGNC:53019]	-0.77709	0.00015	0.01154
ENSG00000070182	SPTB	spectrin beta, erythrocytic [Source:HGNC Symbol;Acc:HGNC:11274]	-0.77503	0.00016	0.01183
ENSG00000127804	METTL16	methyltransferase like 16 [Source:HGNC Symbol;Acc:HGNC:28484]	-0.77503	0.00016	0.01183
ENSG00000142583	SLC2A5	solute carrier family 2 member 5 [Source:HGNC Symbol;Acc:HGNC:11010]	-0.77503	0.00016	0.01183
ENSG00000174844	DNAH12	dynein axonemal heavy chain 12 [Source:HGNC Symbol;Acc:HGNC:2943]	-0.77503	0.00016	0.01183
ENSG00000178732	GP5	glycoprotein V platelet [Source:HGNC Symbol;Acc:HGNC:4443]	-0.77503	0.00016	0.01183
ENSG00000203618	GP1BB	glycoprotein Ib platelet subunit beta [Source:HGNC Symbol;Acc:HGNC:4440]	-0.77503	0.00016	0.01183
ENSG00000249456		novel transcript, sense overlapping ZRANB1	-0.77503	0.00016	0.01183
ENSG00000253982		novel transcript	-0.77503	0.00016	0.01183
ENSG00000266718		novel transcript, antisense MYO1D	-0.77503	0.00016	0.01183
ENSG00000111364	DDX55	DEAD-box helicase 55 [Source:HGNC Symbol;Acc:HGNC:20085]	-0.77296	0.00017	0.01244
ENSG00000166169	POLL	DNA polymerase lambda [Source:HGNC Symbol;Acc:HGNC:9184]	-0.77296	0.00017	0.01244
ENSG00000274512	TBC1D3L	TBC1 domain family member 3L [Source:HGNC Symbol;Acc:HGNC:51246]	-0.77296	0.00017	0.01244
ENSG00000060558	GNA15	G protein subunit alpha 15 [Source:HGNC Symbol;Acc:HGNC:4383]	-0.7709	0.00018	0.01281
ENSG00000093010	COMT	catechol-O-methyltransferase [Source:HGNC Symbol;Acc:HGNC:2228]	-0.7709	0.00018	0.01281
ENSG00000108591	DRG2	developmentally regulated GTP binding protein 2 [Source:HGNC Symbol;Acc:HGNC:3030]	-0.7709	0.00018	0.01281
ENSG00000109272	PF4V1	platelet factor 4 variant 1 [Source:HGNC Symbol;Acc:HGNC:8862]	-0.7709	0.00018	0.01281
ENSG00000116095	PLEKHA3	pleckstrin homology domain containing A3 [Source:HGNC Symbol;Acc:HGNC:14338]	-0.7709	0.00018	0.01281
ENSG00000116138	DNAJC16	DnaJ heat shock protein family (Hsp40) member C16 [Source:HGNC Symbol;Acc:HGNC:29157]	-0.7709	0.00018	0.01281
ENSG00000133101	CCNA1	cyclin A1 [Source:HGNC Symbol;Acc:HGNC:1577]	-0.7709	0.00018	0.01281
ENSG00000160298	C21orf58	chromosome 21 open reading frame 58 [Source:HGNC Symbol;Acc:HGNC:1300]	-0.7709	0.00018	0.01281
ENSG00000185245	GP1BA	glycoprotein Ib platelet subunit alpha [Source:HGNC Symbol;Acc:HGNC:4439]	-0.7709	0.00018	0.01281
ENSG00000260693		novel transcript	-0.7709	0.00018	0.01281
ENSG00000113140	SPARC	secreted protein acidic and cysteine rich [Source:HGNC Symbol;Acc:HGNC:11219]	-0.76883	0.00019	0.01312

ENSG00000122335	SERAC1	serine active site containing 1 [Source:HGNC Symbol;Acc:HGNC:21061]	-0.76883	0.00019	0.01312
ENSG00000137198	GMPR	guanosine monophosphate reductase [Source:HGNC Symbol;Acc:HGNC:4376]	-0.76883	0.00019	0.01312
ENSG00000146416	AIG1	androgen induced 1 [Source:HGNC Symbol;Acc:HGNC:21607]	-0.76883	0.00019	0.01312
ENSG00000160188	RSPH1	radial spoke head component 1 [Source:HGNC Symbol;Acc:HGNC:12371]	-0.76883	0.00019	0.01312
ENSG00000178033	CALHM5	calcium homeostasis modulator family member 5 [Source:HGNC Symbol;Acc:HGNC:21568]	-0.76883	0.00019	0.01312
ENSG00000198336	MYL4	myosin light chain 4 [Source:HGNC Symbol;Acc:HGNC:7585]	-0.76883	0.00019	0.01312
ENSG00000221823	PPP3R1	protein phosphatase 3 regulatory subunit B, alpha [Source:HGNC Symbol;Acc:HGNC:9317]	-0.76883	0.00019	0.01312
ENSG00000221829	FANCG	FA complementation group G [Source:HGNC Symbol;Acc:HGNC:3588]	-0.76883	0.00019	0.01312
ENSG00000242539		novel transcript	-0.76883	0.00019	0.01312
ENSG00000064070	SMAP2	small ArfGAP2 [Source:HGNC Symbol;Acc:HGNC:25082]	-0.76677	0.00021	0.01356
ENSG00000125741	OPA3	outer mitochondrial membrane lipid metabolism regulator OPA3 [Source:HGNC Symbol;Acc:HGNC:8142]	-0.76677	0.00021	0.01356
ENSG00000156795	NTAQ1	N-terminal glutamine amidase 1 [Source:HGNC Symbol;Acc:HGNC:25490]	-0.76677	0.00021	0.01356
ENSG00000164074	ABHD18	abhydrolase domain containing 18 [Source:HGNC Symbol;Acc:HGNC:26111]	-0.76677	0.00021	0.01356
ENSG00000166091	CTMT5	CKLF like MARVEL transmembrane domain containing 5 [Source:HGNC Symbol;Acc:HGNC:19176]	-0.76677	0.00021	0.01356
ENSG00000168497	CAVIN2	caveolae associated protein 2 [Source:HGNC Symbol;Acc:HGNC:10690]	-0.76677	0.00021	0.01356
ENSG00000225975	LINC01534	long intergenic non-protein coding RNA 1534 [Source:HGNC Symbol;Acc:HGNC:51281]	-0.76677	0.00021	0.01356
ENSG00000101193	GID8	GID complex subunit 8 homolog [Source:HGNC Symbol;Acc:HGNC:15857]	-0.76471	0.00022	0.01402
ENSG00000159314	ARHGAP27	Rho GTPase activating protein 27 [Source:HGNC Symbol;Acc:HGNC:31813]	-0.76471	0.00022	0.01402
ENSG00000162722	TRIM58	tripartite motif containing 58 [Source:HGNC Symbol;Acc:HGNC:24150]	-0.76471	0.00022	0.01402
ENSG00000229798	KRT18P26	keratin 18 pseudogene 26 [Source:HGNC Symbol;Acc:HGNC:33395]	-0.76471	0.00022	0.01402
ENSG00000250765	SEPTIN14P5	septin 14 pseudogene 5 [Source:HGNC Symbol;Acc:HGNC:51689]	-0.76471	0.00022	0.01402
chr3 137724326 137780757			-0.76264	0.00023	0.01469
ENSG00000116717	GADD45A	growth arrest and DNA damage inducible alpha [Source:HGNC Symbol;Acc:HGNC:4095]	-0.76264	0.00023	0.01469
ENSG00000138867	GUCD1	guanylyl cyclase domain containing 1 [Source:HGNC Symbol;Acc:HGNC:14237]	-0.76264	0.00023	0.01469
ENSG00000224967		nuclear factor (erythroid-derived 2)-like 2 (NFE2L2) pseudogene	-0.76136	0.00024	0.01518
ENSG00000065559	MAP2K4	mitogen-activated protein kinase kinase 4 [Source:HGNC Symbol;Acc:HGNC:6844]	-0.76058	0.00025	0.01518
ENSG00000136478	TEX2	testis expressed 2 [Source:HGNC Symbol;Acc:HGNC:30884]	-0.76058	0.00025	0.01518
ENSG00000162616	DNAJB4	DnaJ heat shock protein family (Hsp40) member B4 [Source:HGNC Symbol;Acc:HGNC:14886]	-0.76058	0.00025	0.01518
ENSG00000163964	PIGX	phosphatidylinositol glycan anchor biosynthesis class X [Source:HGNC Symbol;Acc:HGNC:26046]	-0.76058	0.00025	0.01518
ENSG00000165185	KIAA1958	KIAA1958 [Source:HGNC Symbol;Acc:HGNC:23427]	-0.76058	0.00025	0.01518
ENSG00000198912	C1orf174	chromosome 1 open reading frame 174 [Source:HGNC Symbol;Acc:HGNC:27915]	-0.76058	0.00025	0.01518
ENSG00000285884		novel transcript	-0.76058	0.00025	0.01518
ENSG00000100024	UPB1	beta-ureidopropionase 1 [Source:HGNC Symbol;Acc:HGNC:16297]	-0.75851	0.00026	0.0157
ENSG00000100614	PPM1A	protein phosphatase, Mg2+/Mn2+ dependent 1A [Source:HGNC Symbol;Acc:HGNC:9275]	-0.75851	0.00026	0.0157
ENSG00000101337	TM9SF4	transmembrane 9 superfamily member 4 [Source:HGNC Symbol;Acc:HGNC:30797]	-0.75851	0.00026	0.0157
ENSG00000109790	KLHL5	kelch like family member 5 [Source:HGNC Symbol;Acc:HGNC:6356]	-0.75851	0.00026	0.0157
ENSG00000139734	DIAPH3	diaphanous related formin 3 [Source:HGNC Symbol;Acc:HGNC:15480]	-0.75851	0.00026	0.0157
ENSG00000163453	IGFBP7	insulin like growth factor binding protein 7 [Source:HGNC Symbol;Acc:HGNC:5476]	-0.75851	0.00026	0.0157
ENSG00000169962	TAS1R3	taste 1 receptor member 3 [Source:HGNC Symbol;Acc:HGNC:15661]	-0.75851	0.00026	0.0157
ENSG00000247363		novel transcript	-0.75851	0.00026	0.0157
chr10 59257983 59752743			-0.75645	0.00028	0.01616
ENSG00000127481	UBR4	ubiquitin protein ligase E3 component n-recognin 4 [Source:HGNC Symbol;Acc:HGNC:30313]	-0.75645	0.00028	0.01616
ENSG00000144063	MALL	mal, T cell differentiation protein like [Source:HGNC Symbol;Acc:HGNC:6818]	-0.75645	0.00028	0.01616
ENSG00000152253	SPC25	SPC25 component of NDC80 kinetochore complex [Source:HGNC Symbol;Acc:HGNC:24031]	-0.75645	0.00028	0.01616
ENSG00000154803	FLCN	folliculin [Source:HGNC Symbol;Acc:HGNC:27310]	-0.75645	0.00028	0.01616
ENSG00000198108	CHSY3	chondroitin sulfate synthase 3 [Source:HGNC Symbol;Acc:HGNC:24293]	-0.75645	0.00028	0.01616
ENSG00000198876	DCAF12	DDB1 and CUL4 associated factor 12 [Source:HGNC Symbol;Acc:HGNC:19911]	-0.75645	0.00028	0.01616
ENSG00000261279	ULK4P1	ULK4 pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:15775]	-0.75645	0.00028	0.01616
ENSG00000280206		novel transcript	-0.75645	0.00028	0.01616
chr12 92301894 92375172			-0.75439	0.0003	0.01676
chr2 231388338 231479819			-0.75439	0.0003	0.01676
ENSG00000130052	STARD8	STAR related lipid transfer domain containing 8 [Source:HGNC Symbol;Acc:HGNC:19161]	-0.75439	0.0003	0.01676
ENSG00000133477	FAM83F	family with sequence similarity 83 member F [Source:HGNC Symbol;Acc:HGNC:25148]	-0.75439	0.0003	0.01676
ENSG00000145703	IQGAP2	IQ motif containing GTPase activating protein 2 [Source:HGNC Symbol;Acc:HGNC:6111]	-0.75439	0.0003	0.01676
ENSG00000147394	ZNF185	zinc finger protein 185 with LIM domain [Source:HGNC Symbol;Acc:HGNC:12976]	-0.75439	0.0003	0.01676
ENSG00000163155	LYSMD1	LysM domain containing 1 [Source:HGNC Symbol;Acc:HGNC:32070]	-0.75439	0.0003	0.01676
chr1 116985627 117039224			-0.75232	0.00032	0.01751
ENSG00000136636	KCTD3	potassium channel tetramerization domain containing 3 [Source:HGNC Symbol;Acc:HGNC:21305]	-0.75232	0.00032	0.01751
ENSG00000182253	SYNM	synemin [Source:HGNC Symbol;Acc:HGNC:24466]	-0.75232	0.00032	0.01751
ENSG00000285382		novel protein	-0.75208	0.00032	0.01758
ENSG00000255655		novel transcript, antisense to MYO1H	-0.75168	0.00032	0.01775
ENSG00000217801		protein tyrosine phosphatase family pseudogene	-0.75144	0.00032	0.01783
chr9 79122333 79208904			-0.75026	0.00034	0.01819
ENSG00000164023	SGMS2	sphingomyelin synthase 2 [Source:HGNC Symbol;Acc:HGNC:28395]	-0.75026	0.00034	0.01819
ENSG00000164181	ELOVL7	ELOVL fatty acid elongase 7 [Source:HGNC Symbol;Acc:HGNC:26292]	-0.75026	0.00034	0.01819
ENSG00000124196	GTSF1L	gametocyte specific factor 1 like [Source:HGNC Symbol;Acc:HGNC:16198]	-0.74961	0.00034	0.01849
chr7 35616561 35671230			-0.74819	0.00036	0.01874
ENSG00000105393	BABAM1	BRIS and BRCA1 A complex member 1 [Source:HGNC Symbol;Acc:HGNC:25008]	-0.74819	0.00036	0.01874
ENSG00000157514	TSC22D3	TSC22 domain family member 3 [Source:HGNC Symbol;Acc:HGNC:3051]	-0.74819	0.00036	0.01874
ENSG00000164889	SLC4A2	solute carrier family 4 member 2 [Source:HGNC Symbol;Acc:HGNC:11028]	-0.74819	0.00036	0.01874
ENSG00000168874	ATOH8	atonal bHLH transcription factor 8 [Source:HGNC Symbol;Acc:HGNC:24126]	-0.74819	0.00036	0.01874
ENSG00000233016	SNHG7	small nucleolar RNA host gene 7 [Source:HGNC Symbol;Acc:HGNC:28254]	-0.74819	0.00036	0.01874
ENSG00000258819	LINC02289	long intergenic non-protein coding RNA 2289 [Source:HGNC Symbol;Acc:HGNC:53205]	-0.74819	0.00036	0.01874
ENSG00000259522		novel protein	-0.74755	0.00036	0.01904
ENSG00000095303	PTGS1	prostaglandin-endoperoxide synthase 1 [Source:HGNC Symbol;Acc:HGNC:9604]	-0.74613	0.00038	0.01939
ENSG00000134070	IRAK2	interleukin 1 receptor associated kinase 2 [Source:HGNC Symbol;Acc:HGNC:6113]	-0.74613	0.00038	0.01939
ENSG00000148773	MKI67	marker of proliferation Ki-67 [Source:HGNC Symbol;Acc:HGNC:7107]	-0.74613	0.00038	0.01939
ENSG00000166086	JAM3	junctional adhesion molecule 3 [Source:HGNC Symbol;Acc:HGNC:15532]	-0.74613	0.00038	0.01939
ENSG00000168939	SPRY3	sprouty RTK signaling antagonist 3 [Source:HGNC Symbol;Acc:HGNC:11271]	-0.74613	0.00038	0.01939
ENSG00000188559	RALGAP2	Ral GTPase activating protein catalytic subunit alpha 2 [Source:HGNC Symbol;Acc:HGNC:16207]	-0.74613	0.00038	0.01939
ENSG00000005486	RHBDD2	rhomboid domain containing 2 [Source:HGNC Symbol;Acc:HGNC:23082]	-0.74407	0.0004	0.01993

ENSG00000012061	ERCC1	ERCC excision repair 1, endonuclease non-catalytic subunit [Source:HGNC Symbol;Acc:HGNC:3433]	-0.74407	0.0004	0.01993
ENSG000000103184	SEC14L5	SEC14 like lipid binding 5 [Source:HGNC Symbol;Acc:HGNC:29032]	-0.74407	0.0004	0.01993
ENSG000000136450	SRSF1	serine and arginine rich splicing factor 1 [Source:HGNC Symbol;Acc:HGNC:10780]	-0.74407	0.0004	0.01993
ENSG000000140022	STON2	stonin 2 [Source:HGNC Symbol;Acc:HGNC:30652]	-0.74407	0.0004	0.01993
ENSG000000158856	DMTN	dematin actin binding protein [Source:HGNC Symbol;Acc:HGNC:3382]	-0.74407	0.0004	0.01993
ENSG000000163882	POLR2H	RNA polymerase II, I and III subunit H [Source:HGNC Symbol;Acc:HGNC:9195]	-0.74407	0.0004	0.01993
ENSG000000241945	PWP2	PWP2 small subunit processome component [Source:HGNC Symbol;Acc:HGNC:9711]	-0.74407	0.0004	0.01993
ENSG00000049656	CLPTM1L	CLPTM1 like [Source:HGNC Symbol;Acc:HGNC:24308]	-0.742	0.00042	0.02054
ENSG000000105939	ZC3HAV1	zinc finger CCH-type containing, antiviral 1 [Source:HGNC Symbol;Acc:HGNC:23721]	-0.742	0.00042	0.02054
ENSG000000118689	FOXO3	forkhead box O3 [Source:HGNC Symbol;Acc:HGNC:3821]	-0.742	0.00042	0.02054
ENSG000000139197	PEX5	peroxisomal biogenesis factor 5 [Source:HGNC Symbol;Acc:HGNC:9719]	-0.742	0.00042	0.02054
ENSG000000155330	C16orf87	chromosome 16 open reading frame 87 [Source:HGNC Symbol;Acc:HGNC:33754]	-0.742	0.00042	0.02054
ENSG000000189180	ZNF33A	zinc finger protein 33A [Source:HGNC Symbol;Acc:HGNC:13096]	-0.742	0.00042	0.02054
ENSG000000205356	TECPR1	tectonin beta-propeller repeat containing 1 [Source:HGNC Symbol;Acc:HGNC:22214]	-0.742	0.00042	0.02054
chr2L 43290436 43449539			-0.73994	0.00045	0.02122
ENSG000000065491	TBC1D22B	TBC1 domain family member 22B [Source:HGNC Symbol;Acc:HGNC:21602]	-0.73994	0.00045	0.02122
ENSG000000103342	GSPT1	G1 to S phase transition 1 [Source:HGNC Symbol;Acc:HGNC:4621]	-0.73994	0.00045	0.02122
ENSG000000128272	ATF4	activating transcription factor 4 [Source:HGNC Symbol;Acc:HGNC:786]	-0.73994	0.00045	0.02122
ENSG000000143774	GUK1	guanylate kinase 1 [Source:HGNC Symbol;Acc:HGNC:4693]	-0.73994	0.00045	0.02122
ENSG000000178425	NT5DC1	5'-nucleotidase domain containing 1 [Source:HGNC Symbol;Acc:HGNC:21556]	-0.73994	0.00045	0.02122
ENSG000000236204	LINC01376	long intergenic non-protein coding RNA 1376 [Source:HGNC Symbol;Acc:HGNC:50637]	-0.73994	0.00045	0.02122
ENSG000000256347	OR8R1P	olfactory receptor family 8 subfamily R member 1 pseudogene [Source:HGNC Symbol;Acc:HGNC:15318]	-0.73994	0.00045	0.02122
ENSG000000270074		novel transcript	-0.73994	0.00045	0.02122
ENSG000000088038	CNOT3	CCR4-NOT transcription complex subunit 3 [Source:HGNC Symbol;Acc:HGNC:7879]	-0.73787	0.00047	0.022
ENSG000000143363	PRUNE1	prune exopolyphosphatase 1 [Source:HGNC Symbol;Acc:HGNC:13420]	-0.73787	0.00047	0.022
ENSG000000143416	SELENBP1	selenium binding protein 1 [Source:HGNC Symbol;Acc:HGNC:10719]	-0.73787	0.00047	0.022
ENSG000000170629	DPY19L2P2	DPY19L2 pseudogene 2 [Source:HGNC Symbol;Acc:HGNC:21764]	-0.73787	0.00047	0.022
ENSG000000196182	STK40	serine/threonine kinase 40 [Source:HGNC Symbol;Acc:HGNC:21373]	-0.73787	0.00047	0.022
ENSG000000205250	E2F4	E2F transcription factor 4 [Source:HGNC Symbol;Acc:HGNC:3118]	-0.73787	0.00047	0.022
ENSG000000260448	LCMT1-AS1	LCMT1 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:51177]	-0.73787	0.00047	0.022
ENSG000000284823		novel transcript, antisense to CDYL	-0.73756	0.00048	0.02214
chr8L 108668357 108724591			-0.73581	0.0005	0.02268
ENSG0000000082701	GSK3B	glycogen synthase kinase 3 beta [Source:HGNC Symbol;Acc:HGNC:4617]	-0.73581	0.0005	0.02268
ENSG000000090013	BLVRB	biliverdin reductase B [Source:HGNC Symbol;Acc:HGNC:1063]	-0.73581	0.0005	0.02268
ENSG000000108448	TRIM16L	tripartite motif containing 16 like [Source:HGNC Symbol;Acc:HGNC:32670]	-0.73581	0.0005	0.02268
ENSG000000166963	MAP1A	microtubule associated protein 1A [Source:HGNC Symbol;Acc:HGNC:6835]	-0.73581	0.0005	0.02268
ENSG000000168785	TSPAN5	tetraspanin 5 [Source:HGNC Symbol;Acc:HGNC:17753]	-0.73581	0.0005	0.02268
ENSG000000184292	TACSTD2	tumor associated calcium signal transducer 2 [Source:HGNC Symbol;Acc:HGNC:11530]	-0.73581	0.0005	0.02268
ENSG000000255526	NEDD8-MDP1	NEDD8-MDP1 readthrough [Source:HGNC Symbol;Acc:HGNC:39551]	-0.73581	0.0005	0.02268
ENSG000000222714	RN7SKP38	RN7SK pseudogene 38 [Source:HGNC Symbol;Acc:HGNC:45762]	-0.73516	0.00051	0.02299
chr2L 60552307 60640166			-0.73375	0.00053	0.02341
ENSG000000187672	ERC2	ELKS/RAB6-interacting/CAST family member 2 [Source:HGNC Symbol;Acc:HGNC:31922]	-0.73375	0.00053	0.02341
ENSG000000279204		TEC	-0.73375	0.00053	0.02341
ENSG000000284999		novel transcript	-0.7337	0.00053	0.02341
ENSG000000065534	MYLK	myosin light chain kinase [Source:HGNC Symbol;Acc:HGNC:7590]	-0.73168	0.00056	0.02398
ENSG000000099991	CABIN1	calcineurin binding protein 1 [Source:HGNC Symbol;Acc:HGNC:24187]	-0.73168	0.00056	0.02398
ENSG000000116675	DNAJC6	DnaJ heat shock protein family (Hsp40) member C6 [Source:HGNC Symbol;Acc:HGNC:15469]	-0.73168	0.00056	0.02398
ENSG000000163794	UCN	urocortin [Source:HGNC Symbol;Acc:HGNC:12516]	-0.73168	0.00056	0.02398
ENSG000000203709	MIR29B2CHG	MIR29B2 and MIR29C host gene [Source:HGNC Symbol;Acc:HGNC:32018]	-0.73168	0.00056	0.02398
ENSG000000260948		novel transcript, sense overlapping WDR77 & OVGP1	-0.73168	0.00056	0.02398
ENSG000000269743	SLC25A53	solute carrier family 25 member 53 [Source:HGNC Symbol;Acc:HGNC:31894]	-0.73168	0.00056	0.02398
chr1L 90030019 90098410			-0.72962	0.00059	0.02491
chr19L 21776809 21827368			-0.72962	0.00059	0.02491
ENSG00000015267	IFIH1	interferon induced with helicase C domain 1 [Source:HGNC Symbol;Acc:HGNC:18873]	-0.72962	0.00059	0.02491
ENSG000000153046	CDYL	chromodomain Y like [Source:HGNC Symbol;Acc:HGNC:1811]	-0.72962	0.00059	0.02491
ENSG000000176208	ATAD5	ATPase family AAA domain containing 5 [Source:HGNC Symbol;Acc:HGNC:25752]	-0.72962	0.00059	0.02491
ENSG000000198171	DDRKG1	DDRKG domain containing 1 [Source:HGNC Symbol;Acc:HGNC:16110]	-0.72962	0.00059	0.02491
ENSG000000242220	TCP10L	t-complex 10 like [Source:HGNC Symbol;Acc:HGNC:11657]	-0.72926	0.00059	0.0251
ENSG000000229093	OR51AB1P	olfactory receptor family 51 subfamily AB member 1 pseudogene [Source:HGNC Symbol;Acc:HGNC:31278]	-0.72896	0.0006	0.02525
chr9L 71155784 71238023			-0.72755	0.00062	0.02538
ENSG000000107789	MINPP1	multiple inositol-polyphosphate phosphatase 1 [Source:HGNC Symbol;Acc:HGNC:7102]	-0.72755	0.00062	0.02538
ENSG000000130227	XPO7	exportin 7 [Source:HGNC Symbol;Acc:HGNC:14108]	-0.72755	0.00062	0.02538
ENSG000000197417	SHPK	sedoheptulokinase [Source:HGNC Symbol;Acc:HGNC:1492]	-0.72755	0.00062	0.02538
ENSG000000207042	RNU6-196P	RNA, U6 small nuclear 196, pseudogene [Source:HGNC Symbol;Acc:HGNC:47159]	-0.72755	0.00062	0.02538
ENSG000000224420	ADM5	adrenomedullin 5 (putative) [Source:HGNC Symbol;Acc:HGNC:27293]	-0.72755	0.00062	0.02538
ENSG000000261060		novel transcript, sense overlapping TDRD5	-0.72755	0.00062	0.02538
ENSG000000266946	MRPL37P1	mitochondrial ribosomal protein L37 pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:31003]	-0.72755	0.00062	0.02538
ENSG000000054179	ENTPD2	ectonucleoside triphosphate diphosphohydrolase 2 [Source:HGNC Symbol;Acc:HGNC:3364]	-0.7269	0.00063	0.02572
ENSG000000085733	CTTN	contactin [Source:HGNC Symbol;Acc:HGNC:3338]	-0.72549	0.00066	0.02575
ENSG000000101057	MYBL2	MYB proto-oncogene like 2 [Source:HGNC Symbol;Acc:HGNC:7548]	-0.72549	0.00066	0.02575
ENSG000000128245	YVHAH	tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein eta [Source:HGNC Symbol;Acc:HGNC:12853]	-0.72549	0.00066	0.02575
ENSG000000132535	DLG4	discs large MAGUK scaffold protein 4 [Source:HGNC Symbol;Acc:HGNC:2903]	-0.72549	0.00066	0.02575
ENSG000000158716	DUSP23	dual specificity phosphatase 23 [Source:HGNC Symbol;Acc:HGNC:21480]	-0.72549	0.00066	0.02575
ENSG000000159363	ATP13A2	ATPase cation transporting 13A2 [Source:HGNC Symbol;Acc:HGNC:30213]	-0.72549	0.00066	0.02575
ENSG000000162929	KIAA1841	KIAA1841 [Source:HGNC Symbol;Acc:HGNC:29387]	-0.72549	0.00066	0.02575
ENSG000000165406	MARCHF8	membrane associated ring-CH-type finger 8 [Source:HGNC Symbol;Acc:HGNC:23356]	-0.72549	0.00066	0.02575
ENSG000000167136	ENDOG	endonuclease G [Source:HGNC Symbol;Acc:HGNC:3346]	-0.72549	0.00066	0.02575
ENSG000000169756	LIMS1	LIM zinc finger domain containing 1 [Source:HGNC Symbol;Acc:HGNC:6616]	-0.72549	0.00066	0.02575
ENSG000000196747	H2AC13	H2A clustered histone 13 [Source:HGNC Symbol;Acc:HGNC:4725]	-0.72549	0.00066	0.02575
ENSG000000229178		novel transcript	-0.72549	0.00066	0.02575
ENSG000000274978	RNU11	RNA, U11 small nuclear [Source:HGNC Symbol;Acc:HGNC:10108]	-0.72549	0.00066	0.02575

ENSG00000248871	TNFSF12-TNFSF1	TNFSF12-TNFSF13 readthrough [Source:HGNC Symbol;Acc:HGNC:33537]	-0.72511	0.00066	0.02595
ENSG00000187980	PLA2G2C	phospholipase A2 group IIC [Source:HGNC Symbol;Acc:HGNC:9032]	-0.72417	0.00068	0.02644
ENSG00000260859		novel transcript, sense intronic to CRISPLD2	-0.72417	0.00068	0.02644
ENSG00000007545	CRAMP1	cramped chromatin regulator homolog 1 [Source:HGNC Symbol;Acc:HGNC:14122]	-0.72343	0.00069	0.02644
ENSG00000116668	SWT1	SWT1 RNA endoribonuclease homolog [Source:HGNC Symbol;Acc:HGNC:16785]	-0.72343	0.00069	0.02644
ENSG00000136861	CDK5RAP2	CDK5 regulatory subunit associated protein 2 [Source:HGNC Symbol;Acc:HGNC:18672]	-0.72343	0.00069	0.02644
ENSG00000157764	BRAF	B-Raf proto-oncogene, serine/threonine kinase [Source:HGNC Symbol;Acc:HGNC:1097]	-0.72343	0.00069	0.02644
ENSG00000160218	TRAPPC10	trafficking protein particle complex 10 [Source:HGNC Symbol;Acc:HGNC:11868]	-0.72343	0.00069	0.02644
ENSG00000167740	CYB5D2	cytochrome b5 domain containing 2 [Source:HGNC Symbol;Acc:HGNC:28471]	-0.72343	0.00069	0.02644
ENSG00000187244	BCAM	basal cell adhesion molecule (Lutheran blood group) [Source:HGNC Symbol;Acc:HGNC:6722]	-0.72343	0.00069	0.02644
ENSG00000198743	SLCSA3	solute carrier family 5 member 3 [Source:HGNC Symbol;Acc:HGNC:11038]	-0.72343	0.00069	0.02644
ENSG00000226853		novel transcript	-0.72343	0.00069	0.02644
chr12]-[81098493]81183646			-0.72136	0.00073	0.02737
ENSG00000135018	UBQLN1	ubiquilin 1 [Source:HGNC Symbol;Acc:HGNC:12508]	-0.72136	0.00073	0.02737
ENSG00000143321	HDFG	heparin binding growth factor [Source:HGNC Symbol;Acc:HGNC:4856]	-0.72136	0.00073	0.02737
ENSG00000165121		kinesin family member 27 (KIF27) pseudogene	-0.72136	0.00073	0.02737
ENSG00000168300	PCMTD1	protein-L-isoaspartate (D-aspartate) O-methyltransferase domain containing 1 [Source:HGNC Symbol;Acc:HGNC:30483]	-0.72136	0.00073	0.02737
ENSG00000266274	RN7SL138P	RNA, 7SL, cytoplasmic 138, pseudogene [Source:HGNC Symbol;Acc:HGNC:46154]	-0.72109	0.00073	0.02752
ENSG00000071051	NCK2	NCK adaptor protein 2 [Source:HGNC Symbol;Acc:HGNC:7665]	-0.7193	0.00077	0.02786
ENSG00000110958	PTGES3	prostaglandin E synthase 3 [Source:HGNC Symbol;Acc:HGNC:16049]	-0.7193	0.00077	0.02786
ENSG00000125629	INSIG2	insulin induced gene 2 [Source:HGNC Symbol;Acc:HGNC:20452]	-0.7193	0.00077	0.02786
ENSG00000133816	MICAL2	microtubule associated monooxygenase, calponin and LIM domain containing 2 [Source:HGNC Symbol;Acc:HGNC:24693]	-0.7193	0.00077	0.02786
ENSG00000138696	BMPRI1B	bone morphogenetic protein receptor type 1B [Source:HGNC Symbol;Acc:HGNC:1077]	-0.7193	0.00077	0.02786
ENSG00000146122	DAAM2	dishevelled associated activator of morphogenesis 2 [Source:HGNC Symbol;Acc:HGNC:18143]	-0.7193	0.00077	0.02786
ENSG00000155380	SLC16A1	solute carrier family 16 member 1 [Source:HGNC Symbol;Acc:HGNC:10922]	-0.7193	0.00077	0.02786
ENSG00000162063	CCNF	cyclin F [Source:HGNC Symbol;Acc:HGNC:1591]	-0.7193	0.00077	0.02786
ENSG00000206560	ANKRD28	ankyrin repeat domain 28 [Source:HGNC Symbol;Acc:HGNC:29024]	-0.7193	0.00077	0.02786
ENSG00000212264	MIR1284	microRNA 1284 [Source:HGNC Symbol;Acc:HGNC:35362]	-0.7193	0.00077	0.02786
ENSG00000246560	UBE2D3-AS1	UBE2D3 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:54095]	-0.7193	0.00077	0.02786
ENSG00000257225		novel transcript, antisense to PRICKLE1	-0.7193	0.00077	0.02786
ENSG00000278765		novel transcript	-0.7193	0.00077	0.02786
ENSG00000216307		N(alpha)-acetyltransferase 40, NatD catalytic subunit, homolog (S. cerevisiae) (NAA40) pseudogene	-0.71889	0.00077	0.0281
ENSG00000022840	RNF10	ring finger protein 10 [Source:HGNC Symbol;Acc:HGNC:10055]	-0.71723	0.00081	0.02854
ENSG00000099308	MAST3	microtubule associated serine/threonine kinase 3 [Source:HGNC Symbol;Acc:HGNC:19036]	-0.71723	0.00081	0.02854
ENSG00000136867	SLC31A2	solute carrier family 31 member 2 [Source:HGNC Symbol;Acc:HGNC:11017]	-0.71723	0.00081	0.02854
ENSG00000150681	RGS18	regulator of G protein signaling 18 [Source:HGNC Symbol;Acc:HGNC:14261]	-0.71723	0.00081	0.02854
ENSG00000165689	ENTR1	endosome associated trafficking regulator 1 [Source:HGNC Symbol;Acc:HGNC:10667]	-0.71723	0.00081	0.02854
ENSG00000237273	RSL24D1P8	ribosomal L24 domain containing 1 pseudogene 8 [Source:HGNC Symbol;Acc:HGNC:37873]	-0.71723	0.00081	0.02854
ENSG00000176472	ZNF575	zinc finger protein 575 [Source:HGNC Symbol;Acc:HGNC:27606]	-0.71681	0.00082	0.0288
chr5]-[161907479]162532166			-0.71517	0.00085	0.02925
ENSG00000103769	RAB11A	RAB11A, member RAS oncogene family [Source:HGNC Symbol;Acc:HGNC:9760]	-0.71517	0.00085	0.02925
ENSG00000131171	SH3BGR1	SH3 domain binding glutamate rich protein like [Source:HGNC Symbol;Acc:HGNC:10823]	-0.71517	0.00085	0.02925
ENSG00000147274	RBMX	RNA binding motif protein X-linked [Source:HGNC Symbol;Acc:HGNC:9910]	-0.71517	0.00085	0.02925
ENSG00000183508	TENT5C	terminal nucleotidyltransferase 5C [Source:HGNC Symbol;Acc:HGNC:24712]	-0.71517	0.00085	0.02925
ENSG00000185164	NOMO2	NODAL modulator 2 [Source:HGNC Symbol;Acc:HGNC:22652]	-0.71517	0.00085	0.02925
ENSG00000279457	WASH9P	WAS protein family homolog 9, pseudogene [Source:HGNC Symbol;Acc:HGNC:53981]	-0.71517	0.00085	0.02925
ENSG00000147434	CHRNA6	cholinergic receptor nicotinic alpha 6 subunit [Source:HGNC Symbol;Acc:HGNC:15963]	-0.71451	0.00086	0.02964
ENSG00000141622	RNF165	ring finger protein 165 [Source:HGNC Symbol;Acc:HGNC:31696]	-0.71311	0.00089	0.03024
ENSG00000148834	GSTO1	glutathione S-transferase omega 1 [Source:HGNC Symbol;Acc:HGNC:13312]	-0.71311	0.00089	0.03024
ENSG00000165568	AKR1E2	aldo-keto reductase family 1 member E2 [Source:HGNC Symbol;Acc:HGNC:23437]	-0.71311	0.00089	0.03024
ENSG00000231967		novel pseudogene	-0.71311	0.00089	0.03024
ENSG00000246363	LINC02458	long intergenic non-protein coding RNA 2458 [Source:HGNC Symbol;Acc:HGNC:53394]	-0.71311	0.00089	0.03024
ENSG00000260244		novel transcript, overlapping GUCY1A3	-0.71311	0.00089	0.03024
ENSG00000109906	ZBTB16	zinc finger and BTB domain containing 16 [Source:HGNC Symbol;Acc:HGNC:12930]	-0.71104	0.00094	0.031
ENSG00000110799	VWF	von Willebrand factor [Source:HGNC Symbol;Acc:HGNC:12726]	-0.71104	0.00094	0.031
ENSG00000113328	CCNG1	cyclin G1 [Source:HGNC Symbol;Acc:HGNC:1592]	-0.71104	0.00094	0.031
ENSG00000118520	ARG1	arginase 1 [Source:HGNC Symbol;Acc:HGNC:663]	-0.71104	0.00094	0.031
ENSG00000122203	KIAA1191	KIAA1191 [Source:HGNC Symbol;Acc:HGNC:29209]	-0.71104	0.00094	0.031
ENSG00000124098	FAM210B	family with sequence similarity 210 member B [Source:HGNC Symbol;Acc:HGNC:16102]	-0.71104	0.00094	0.031
ENSG00000164002	EXO5	exonuclease 5 [Source:HGNC Symbol;Acc:HGNC:26115]	-0.71104	0.00094	0.031
ENSG00000168803	ADAL	adenosine deaminase like [Source:HGNC Symbol;Acc:HGNC:31853]	-0.71104	0.00094	0.031
ENSG00000232860	SMG7-AS1	SMG7 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:24518]	-0.71104	0.00094	0.031
ENSG00000251682		DEAD (Asp-Glu-Ala-Asp) box polypeptide 25 (DDX25) pseudogene	-0.71104	0.00094	0.031
ENSG00000275445		novel transcript, antisense to C16orf52	-0.71059	0.00095	0.03129
ENSG00000101928	MOSPD1	motile sperm domain containing 1 [Source:HGNC Symbol;Acc:HGNC:25235]	-0.70898	0.00099	0.03187
ENSG00000128708	HAT1	histone acetyltransferase 1 [Source:HGNC Symbol;Acc:HGNC:4821]	-0.70898	0.00099	0.03187
ENSG00000156265	MAP3K7CL	MAP3K7 C-terminal like [Source:HGNC Symbol;Acc:HGNC:16457]	-0.70898	0.00099	0.03187
ENSG00000174171		novel transcript, antisense to SPTBN5	-0.70898	0.00099	0.03187
ENSG00000178691	SUZ12	SUZ12 polycomb repressive complex 2 subunit [Source:HGNC Symbol;Acc:HGNC:17101]	-0.70898	0.00099	0.03187
ENSG00000233806	LINC01237	long intergenic non-protein coding RNA 1237 [Source:HGNC Symbol;Acc:HGNC:49793]	-0.70898	0.00099	0.03187
ENSG00000242265	PEG10	paternally expressed 10 [Source:HGNC Symbol;Acc:HGNC:14005]	-0.70898	0.00099	0.03187
ENSG00000279970		TEC	-0.70898	0.00099	0.03187
ENSG00000280164		novel transcript	-0.70898	0.00099	0.03187
ENSG00000102796	DHRS12	dehydrogenase/reductase 12 [Source:HGNC Symbol;Acc:HGNC:25832]	-0.70691	0.00104	0.03276
ENSG00000110880	CORO1C	coronin 1C [Source:HGNC Symbol;Acc:HGNC:2254]	-0.70691	0.00104	0.03276
ENSG00000134183	GNAT2	G protein subunit alpha transducin 2 [Source:HGNC Symbol;Acc:HGNC:4394]	-0.70691	0.00104	0.03276
ENSG00000146707	POMZP3	POM121 and ZP3 fusion [Source:HGNC Symbol;Acc:HGNC:9203]	-0.70691	0.00104	0.03276
ENSG00000151575	TEX9	testis expressed 9 [Source:HGNC Symbol;Acc:HGNC:29585]	-0.70691	0.00104	0.03276
ENSG00000159761	C16orf86	chromosome 16 open reading frame 86 [Source:HGNC Symbol;Acc:HGNC:33755]	-0.70691	0.00104	0.03276
ENSG00000224578	HNRNP1A1P48	heterogeneous nuclear ribonucleoprotein A1 pseudogene 48 [Source:HGNC Symbol;Acc:HGNC:48778]	-0.70691	0.00104	0.03276
chr8]-[88553947]88746161			-0.70625	0.00105	0.03324

chr20 + 25676371 25743693			-0.70485	0.00109	0.03343
ENSG000000111328	CDK2AP1	cyclin dependent kinase 2 associated protein 1 [Source:HGNC Symbol;Acc:HGNC:14002]	-0.70485	0.00109	0.03343
ENSG000000115942	ORC2	origin recognition complex subunit 2 [Source:HGNC Symbol;Acc:HGNC:8488]	-0.70485	0.00109	0.03343
ENSG000000127533	F2RL3	F2R like thrombin or trypsin receptor 3 [Source:HGNC Symbol;Acc:HGNC:3540]	-0.70485	0.00109	0.03343
ENSG000000135914	HTR2B	5-hydroxytryptamine receptor 2B [Source:HGNC Symbol;Acc:HGNC:5294]	-0.70485	0.00109	0.03343
ENSG000000135956	TMEM127	transmembrane protein 127 [Source:HGNC Symbol;Acc:HGNC:26038]	-0.70485	0.00109	0.03343
ENSG000000141098	GFOD2	glucose-fructose oxidoreductase domain containing 2 [Source:HGNC Symbol;Acc:HGNC:28159]	-0.70485	0.00109	0.03343
ENSG000000169764	UGP2	UDP-glucose pyrophosphorylase 2 [Source:HGNC Symbol;Acc:HGNC:12527]	-0.70485	0.00109	0.03343
ENSG000000170791	CHCHD7	coiled-coil-helix-coiled-coil-helix domain containing 7 [Source:HGNC Symbol;Acc:HGNC:28314]	-0.70485	0.00109	0.03343
ENSG000000227165	WDR11-AS1	WDR11 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:27437]	-0.70485	0.00109	0.03343
chr5 + 163272162 163632891			-0.70279	0.00114	0.03425
ENSG000000040199	PHLPP2	PH domain and leucine rich repeat protein phosphatase 2 [Source:HGNC Symbol;Acc:HGNC:29149]	-0.70279	0.00114	0.03425
ENSG000000104219	ZDHHC2	zinc finger DHHC-type palmitoyltransferase 2 [Source:HGNC Symbol;Acc:HGNC:18469]	-0.70279	0.00114	0.03425
ENSG000000111790	FGFR1OP2	FGFR1 oncogene partner 2 [Source:HGNC Symbol;Acc:HGNC:23098]	-0.70279	0.00114	0.03425
ENSG000000122550	KLHL7	kelch like family member 7 [Source:HGNC Symbol;Acc:HGNC:15646]	-0.70279	0.00114	0.03425
ENSG000000127328	RAB3IP	RAB3A interacting protein [Source:HGNC Symbol;Acc:HGNC:16508]	-0.70279	0.00114	0.03425
ENSG000000134470	IL15RA	interleukin 15 receptor subunit alpha [Source:HGNC Symbol;Acc:HGNC:5978]	-0.70279	0.00114	0.03425
ENSG000000167895	TMC8	transmembrane channel like 8 [Source:HGNC Symbol;Acc:HGNC:20474]	-0.70279	0.00114	0.03425
ENSG000000173011	TADA2B	transcriptional adaptor 2B [Source:HGNC Symbol;Acc:HGNC:30781]	-0.70279	0.00114	0.03425
ENSG000000215251	FASTKD5	FAST kinase domains 5 [Source:HGNC Symbol;Acc:HGNC:25790]	-0.70279	0.00114	0.03425
ENSG000000267022		novel protein	-0.70279	0.00114	0.03425
ENSG000000267228		novel transcript	-0.70279	0.00114	0.03425
ENSG000000269973		novel transcript	-0.70279	0.00114	0.03425
ENSG000000279333		novel transcript	-0.70145	0.00118	0.03522
chr6 + 85094762 85318808			-0.70072	0.0012	0.03522
ENSG000000122643	NT5C3A	5'-nucleotidase, cytosolic IIIA [Source:HGNC Symbol;Acc:HGNC:17820]	-0.70072	0.0012	0.03522
ENSG000000136141	LRCH1	leucine rich repeats and calponin homology domain containing 1 [Source:HGNC Symbol;Acc:HGNC:20309]	-0.70072	0.0012	0.03522
ENSG000000143797	MBOAT2	membrane bound O-acyltransferase domain containing 2 [Source:HGNC Symbol;Acc:HGNC:25193]	-0.70072	0.0012	0.03522
ENSG000000181751	MAC1R	macrophage immunometabolism regulator [Source:HGNC Symbol;Acc:HGNC:25052]	-0.70072	0.0012	0.03522
ENSG000000196961	AP2A1	adaptor related protein complex 2 subunit alpha 1 [Source:HGNC Symbol;Acc:HGNC:561]	-0.70072	0.0012	0.03522
ENSG000000212607	SNORA3B	small nucleolar RNA, H/A box 3B [Source:HGNC Symbol;Acc:HGNC:32638]	-0.70072	0.0012	0.03522
ENSG000000243960		novel transcript	-0.70072	0.0012	0.03522
ENSG000000280347		TEC	-0.70072	0.0012	0.03522
chr4 + 37526876 37592421			-0.69866	0.00126	0.03636
ENSG000000100068	LRP5L	LDL receptor related protein 5 like [Source:HGNC Symbol;Acc:HGNC:25323]	-0.69866	0.00126	0.03636
ENSG000000156127	BATF	basic leucine zipper ATF-like transcription factor [Source:HGNC Symbol;Acc:HGNC:958]	-0.69866	0.00126	0.03636
ENSG000000224116	INHBA-AS1	INHBA antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:40303]	-0.69799	0.00128	0.03688
ENSG000000043093	DCUN1D1	defective in cullin neddylation 1 domain containing 1 [Source:HGNC Symbol;Acc:HGNC:18184]	-0.69659	0.00132	0.03739
ENSG000000113758	DBN1	drebrin 1 [Source:HGNC Symbol;Acc:HGNC:2695]	-0.69659	0.00132	0.03739
ENSG000000132376	INPP5K	inositol polyphosphate-5-phosphatase K [Source:HGNC Symbol;Acc:HGNC:33882]	-0.69659	0.00132	0.03739
ENSG000000137547	MRPL15	mitochondrial ribosomal protein L15 [Source:HGNC Symbol;Acc:HGNC:14054]	-0.69659	0.00132	0.03739
ENSG000000137876	RSL24D1	ribosomal L24 domain containing 1 [Source:HGNC Symbol;Acc:HGNC:18479]	-0.69659	0.00132	0.03739
ENSG000000147145	LPAR4	lysophosphatidic acid receptor 4 [Source:HGNC Symbol;Acc:HGNC:4478]	-0.69659	0.00132	0.03739
ENSG000000167377	ZNF23	zinc finger protein 23 [Source:HGNC Symbol;Acc:HGNC:13023]	-0.69659	0.00132	0.03739
ENSG000000180185	FAHD1	fumarylacetoacetate hydrolase domain containing 1 [Source:HGNC Symbol;Acc:HGNC:14169]	-0.69659	0.00132	0.03739
ENSG000000112146	FBXO9	F-box protein 9 [Source:HGNC Symbol;Acc:HGNC:13588]	-0.69453	0.00138	0.03836
ENSG000000131508	UBE2D2	ubiquitin conjugating enzyme E2 D2 [Source:HGNC Symbol;Acc:HGNC:12475]	-0.69453	0.00138	0.03836
ENSG000000147324	MFHAS1	malignant fibrous histiocytoma amplified sequence 1 [Source:HGNC Symbol;Acc:HGNC:16982]	-0.69453	0.00138	0.03836
ENSG000000149634	SPATA25	spermatogenesis associated 25 [Source:HGNC Symbol;Acc:HGNC:16158]	-0.69453	0.00138	0.03836
ENSG000000153071	DAB2	DAB adaptor protein 2 [Source:HGNC Symbol;Acc:HGNC:2662]	-0.69453	0.00138	0.03836
ENSG000000158578	ALAS2	5-aminolevulinatase synthase 2 [Source:HGNC Symbol;Acc:HGNC:397]	-0.69453	0.00138	0.03836
ENSG000000164691	TAGAP	T cell activation RhoGTPase activating protein [Source:HGNC Symbol;Acc:HGNC:15669]	-0.69453	0.00138	0.03836
ENSG000000188522	FAM83G	family with sequence similarity 83 member G [Source:HGNC Symbol;Acc:HGNC:32554]	-0.69453	0.00138	0.03836
ENSG000000196369	SRGAP2B	SLIT-ROBO Rho GTPase activating protein 2B [Source:HGNC Symbol;Acc:HGNC:35237]	-0.69453	0.00138	0.03836
ENSG000000111012	CYP27B1	cytochrome P450 family 27 subfamily B member 1 [Source:HGNC Symbol;Acc:HGNC:2606]	-0.69386	0.0014	0.03891
ENSG000000100387	RBX1	ring-box 1 [Source:HGNC Symbol;Acc:HGNC:9928]	-0.69247	0.00145	0.03941
ENSG000000130165	ELOF1	elongation factor 1 homolog [Source:HGNC Symbol;Acc:HGNC:28691]	-0.69247	0.00145	0.03941
ENSG000000130558	OLFM1	olfactomedin 1 [Source:HGNC Symbol;Acc:HGNC:17187]	-0.69247	0.00145	0.03941
ENSG000000138381	ASNSD1	asparagine synthetase domain containing 1 [Source:HGNC Symbol;Acc:HGNC:24910]	-0.69247	0.00145	0.03941
ENSG000000158113	LRRCD3	leucine rich repeat containing 43 [Source:HGNC Symbol;Acc:HGNC:28562]	-0.69247	0.00145	0.03941
ENSG000000171843	MLLT3	MLLT3 super elongation complex subunit [Source:HGNC Symbol;Acc:HGNC:7136]	-0.69247	0.00145	0.03941
ENSG000000203818			-0.69179	0.00147	0.03983
ENSG000000257613			-0.69179	0.00147	0.03983
chr2 + 171669137 17179741			-0.6904	0.00152	0.0403
ENSG000000063854	HAGH	hydroxyacylglutathione hydrolase [Source:HGNC Symbol;Acc:HGNC:4805]	-0.6904	0.00152	0.0403
ENSG000000111181	SLC6A12	solute carrier family 6 member 12 [Source:HGNC Symbol;Acc:HGNC:11045]	-0.6904	0.00152	0.0403
ENSG000000112576	CCND3	cyclin D3 [Source:HGNC Symbol;Acc:HGNC:1585]	-0.6904	0.00152	0.0403
ENSG000000126903	SLC10A3	solute carrier family 10 member 3 [Source:HGNC Symbol;Acc:HGNC:22979]	-0.6904	0.00152	0.0403
ENSG000000128585	MKLN1	muskelin 1 [Source:HGNC Symbol;Acc:HGNC:7109]	-0.6904	0.00152	0.0403
ENSG000000163870	TPRA1	transmembrane protein adipocyte associated 1 [Source:HGNC Symbol;Acc:HGNC:30413]	-0.6904	0.00152	0.0403
ENSG000000196230	TUBB	tubulin beta class I [Source:HGNC Symbol;Acc:HGNC:20778]	-0.6904	0.00152	0.0403
ENSG000000256235	SMIM3	small integral membrane protein 3 [Source:HGNC Symbol;Acc:HGNC:30248]	-0.6904	0.00152	0.0403
ENSG000000273599		novel transcript, antisense to CTBP2	-0.6904	0.00152	0.0403
ENSG000000221571	RNU6ATAC35P	RNA, U6atac small nuclear 35, pseudogene [Source:HGNC Symbol;Acc:HGNC:46934]	-0.68973	0.00154	0.04082
ENSG000000233494		pseudogene similar to part of plasminogen (PLG)	-0.68973	0.00154	0.04082
chr3 + 28606312 28799586			-0.68834	0.00159	0.04127
ENSG000000011028	MRC2	mannose receptor C type 2 [Source:HGNC Symbol;Acc:HGNC:16875]	-0.68834	0.00159	0.04127
ENSG000000043591	ADRB1	adrenoceptor beta 1 [Source:HGNC Symbol;Acc:HGNC:285]	-0.68834	0.00159	0.04127
ENSG000000100804	PSMB5	proteasome 20S subunit beta 5 [Source:HGNC Symbol;Acc:HGNC:9542]	-0.68834	0.00159	0.04127
ENSG000000106785	TRIM14	tripartite motif containing 14 [Source:HGNC Symbol;Acc:HGNC:16283]	-0.68834	0.00159	0.04127
ENSG000000153130	SCOC	short coiled-coil protein [Source:HGNC Symbol;Acc:HGNC:20335]	-0.68834	0.00159	0.04127

ENSG00000154114	TBCEL	tubulin folding cofactor E like [Source:HGNC Symbol;Acc:HGNC:28115]	-0.68834	0.00159	0.04127
ENSG00000184792	OSBP2	oxysterol binding protein 2 [Source:HGNC Symbol;Acc:HGNC:8504]	-0.68834	0.00159	0.04127
ENSG00000187699	C2orf88	chromosome 2 open reading frame 88 [Source:HGNC Symbol;Acc:HGNC:28191]	-0.68834	0.00159	0.04127
ENSG00000189046	ALKBH2	alkB homolog 2, alpha-ketoglutarate dependent dioxygenase [Source:HGNC Symbol;Acc:HGNC:32487]	-0.68834	0.00159	0.04127
ENSG00000241889		dullard homolog (Xenopus laevis) (DULLARD) pseudogene	-0.68834	0.00159	0.04127
ENSG00000243064	ABCC13	ATP binding cassette subfamily C member 13 (pseudogene) [Source:HGNC Symbol;Acc:HGNC:16022]	-0.68834	0.00159	0.04127
ENSG00000119280	C1orf198	chromosome 1 open reading frame 198 [Source:HGNC Symbol;Acc:HGNC:25900]	-0.68627	0.00166	0.04199
ENSG00000119899	SLC17A5	solute carrier family 17 member 5 [Source:HGNC Symbol;Acc:HGNC:10933]	-0.68627	0.00166	0.04199
ENSG00000125037	EMC3	ER membrane protein complex subunit 3 [Source:HGNC Symbol;Acc:HGNC:23999]	-0.68627	0.00166	0.04199
ENSG00000130726	TRIM28	tripartite motif containing 28 [Source:HGNC Symbol;Acc:HGNC:16384]	-0.68627	0.00166	0.04199
ENSG00000133606	MKRN1	makorin ring finger protein 1 [Source:HGNC Symbol;Acc:HGNC:7112]	-0.68627	0.00166	0.04199
ENSG00000143164	DCAF6	DDB1 and CUL4 associated factor 6 [Source:HGNC Symbol;Acc:HGNC:30002]	-0.68627	0.00166	0.04199
ENSG00000149781	FERMT3	fermitin family member 3 [Source:HGNC Symbol;Acc:HGNC:23151]	-0.68627	0.00166	0.04199
ENSG00000163602	RYBP	RING1 and YY1 binding protein [Source:HGNC Symbol;Acc:HGNC:10480]	-0.68627	0.00166	0.04199
ENSG00000164185	ZNFA74	zinc finger protein 474 [Source:HGNC Symbol;Acc:HGNC:23245]	-0.68627	0.00166	0.04199
ENSG00000171100	MTM1	myotubularin 1 [Source:HGNC Symbol;Acc:HGNC:7448]	-0.68627	0.00166	0.04199
ENSG00000185480	PARBP	PARP1 binding protein [Source:HGNC Symbol;Acc:HGNC:26074]	-0.68627	0.00166	0.04199
ENSG00000186638	KIF24	kinesin family member 24 [Source:HGNC Symbol;Acc:HGNC:19916]	-0.68627	0.00166	0.04199
ENSG00000197776	KLHDC1	kelch domain containing 1 [Source:HGNC Symbol;Acc:HGNC:19836]	-0.68627	0.00166	0.04199
ENSG00000204424	LY6G6F	lymphocyte antigen 6 family member G6F [Source:HGNC Symbol;Acc:HGNC:13933]	-0.68627	0.00166	0.04199
ENSG00000214018	RRM2P3	ribonucleotide reductase M2 polypeptide pseudogene 3 [Source:HGNC Symbol;Acc:HGNC:10455]	-0.68627	0.00166	0.04199
ENSG00000236829		ribosomal protein L23a (RPL23A) pseudogene	-0.68627	0.00166	0.04199
ENSG00000278637	H4C1	H4 clustered histone 1 [Source:HGNC Symbol;Acc:HGNC:4781]	-0.68627	0.00166	0.04199
ENSG00000273184		novel transcript, readthrough between HILPDA-METTL2B	-0.68467	0.00172	0.0431
ENSG00000140374	ETFA	electron transfer flavoprotein subunit alpha [Source:HGNC Symbol;Acc:HGNC:3481]	-0.68421	0.00174	0.0431
ENSG00000156052	GNAQ	G protein subunit alpha q [Source:HGNC Symbol;Acc:HGNC:4390]	-0.68421	0.00174	0.0431
ENSG00000164610	RP9	RP9 pre-mRNA splicing factor [Source:HGNC Symbol;Acc:HGNC:10288]	-0.68421	0.00174	0.0431
ENSG00000177189	RPS6KA3	ribosomal protein S6 kinase A3 [Source:HGNC Symbol;Acc:HGNC:10432]	-0.68421	0.00174	0.0431
ENSG00000211976	IGHV3-73	immunoglobulin heavy variable 3-73 [Source:HGNC Symbol;Acc:HGNC:5623]	-0.68421	0.00174	0.0431
ENSG00000273703	H2BC14	H2B clustered histone 14 [Source:HGNC Symbol;Acc:HGNC:4750]	-0.68421	0.00174	0.0431
chr1 + 208106419 208201063			-0.68285	0.00179	0.0442
ENSG00000039523	RIPOR1	RHO family interacting cell polarization regulator 1 [Source:HGNC Symbol;Acc:HGNC:25836]	-0.68215	0.00182	0.0442
ENSG00000101266	CSNK2A1	casein kinase 2 alpha 1 [Source:HGNC Symbol;Acc:HGNC:2457]	-0.68215	0.00182	0.0442
ENSG00000102786	INTS6	integrator complex subunit 6 [Source:HGNC Symbol;Acc:HGNC:14879]	-0.68215	0.00182	0.0442
ENSG00000140416	TPM1	tropomyosin 1 [Source:HGNC Symbol;Acc:HGNC:12010]	-0.68215	0.00182	0.0442
ENSG00000149212	SESN3	sestrin 3 [Source:HGNC Symbol;Acc:HGNC:23060]	-0.68215	0.00182	0.0442
ENSG00000167034	NKX3-1	NK3 homeobox 1 [Source:HGNC Symbol;Acc:HGNC:7838]	-0.68215	0.00182	0.0442
ENSG00000172409	CLP1	cleavage factor polyribonucleotide kinase subunit 1 [Source:HGNC Symbol;Acc:HGNC:16999]	-0.68215	0.00182	0.0442
ENSG00000198805	PNP	purine nucleoside phosphorylase [Source:HGNC Symbol;Acc:HGNC:7892]	-0.68215	0.00182	0.0442
ENSG00000213066	CEP43	centrosomal protein 43 [Source:HGNC Symbol;Acc:HGNC:17012]	-0.68215	0.00182	0.0442
ENSG00000245552		novel transcript, antisense to SESN3	-0.68215	0.00182	0.0442
ENSG00000074590	NUAK1	NUAK family kinase 1 [Source:HGNC Symbol;Acc:HGNC:14311]	-0.68008	0.0019	0.04542
ENSG00000151929	BAG3	BAG cochaperone 3 [Source:HGNC Symbol;Acc:HGNC:939]	-0.68008	0.0019	0.04542
ENSG00000164068	RNF123	ring finger protein 123 [Source:HGNC Symbol;Acc:HGNC:21148]	-0.68008	0.0019	0.04542
ENSG00000164180	TMEM161B	transmembrane protein 161B [Source:HGNC Symbol;Acc:HGNC:28483]	-0.68008	0.0019	0.04542
ENSG00000174175	SELP	selectin P [Source:HGNC Symbol;Acc:HGNC:10721]	-0.68008	0.0019	0.04542
ENSG00000197223	C1D	C1D nuclear receptor corepressor [Source:HGNC Symbol;Acc:HGNC:29911]	-0.68008	0.0019	0.04542
ENSG00000197461	PDGFA	platelet derived growth factor subunit A [Source:HGNC Symbol;Acc:HGNC:8799]	-0.68008	0.0019	0.04542
ENSG00000249855	EEF1A1P19	eukaryotic translation elongation factor 1 alpha 1 pseudogene 19 [Source:HGNC Symbol;Acc:HGNC:37892]	-0.68008	0.0019	0.04542
ENSG00000259291	ZNFT10-AS1	ZNFT10 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:53141]	-0.68008	0.0019	0.04542
ENSG00000267376	ATP5MGF6	ATP synthase membrane subunit g pseudogene 6 [Source:HGNC Symbol;Acc:HGNC:38168]	-0.6794	0.00193	0.04604
ENSG00000231645	KRT17P6	keratin 17 pseudogene 6 [Source:HGNC Symbol;Acc:HGNC:50724]	-0.67835	0.00197	0.04666
chr10 7 07767688 70847826			-0.67802	0.00199	0.04666
ENSG00000068976	PYGM	glycogen phosphorylase, muscle associated [Source:HGNC Symbol;Acc:HGNC:9726]	-0.67802	0.00199	0.04666
ENSG00000088992	TESC	tescalcin [Source:HGNC Symbol;Acc:HGNC:26065]	-0.67802	0.00199	0.04666
ENSG00000100104	SRRD	SRR1 domain containing [Source:HGNC Symbol;Acc:HGNC:33910]	-0.67802	0.00199	0.04666
ENSG00000109184	DCUN1D4	defective in cullin neddylation 1 domain containing 4 [Source:HGNC Symbol;Acc:HGNC:28998]	-0.67802	0.00199	0.04666
ENSG00000118816	CCNI	cyclin I [Source:HGNC Symbol;Acc:HGNC:1595]	-0.67802	0.00199	0.04666
ENSG00000121057	AKAP1	A-kinase anchoring protein 1 [Source:HGNC Symbol;Acc:HGNC:367]	-0.67802	0.00199	0.04666
ENSG00000131747	TOP2A	DNA topoisomerase II alpha [Source:HGNC Symbol;Acc:HGNC:11989]	-0.67802	0.00199	0.04666
ENSG00000136732	GYPC	glycophorin C (Gerbich blood group) [Source:HGNC Symbol;Acc:HGNC:4704]	-0.67802	0.00199	0.04666
ENSG00000137801	THBS1	thrombospondin 1 [Source:HGNC Symbol;Acc:HGNC:11785]	-0.67802	0.00199	0.04666
ENSG00000142599	RERE	arginine-glutamic acid dipeptide repeats [Source:HGNC Symbol;Acc:HGNC:9965]	-0.67802	0.00199	0.04666
ENSG00000170035	UBE2E3	ubiquitin conjugating enzyme E2 E3 [Source:HGNC Symbol;Acc:HGNC:12479]	-0.67802	0.00199	0.04666
ENSG00000266907		glycerol-3-phosphate dehydrogenase 2 (mitochondrial), pseudogene	-0.67802	0.00199	0.04666
ENSG00000241175	RN7SL494P	RNA, 7SL, cytoplasmic 494, pseudogene [Source:HGNC Symbol;Acc:HGNC:46510]	-0.67734	0.00201	0.04725
ENSG00000170113	KCNQ4	potassium voltage-gated channel subfamily Q member 4 [Source:HGNC Symbol;Acc:HGNC:6298]	-0.67694	0.00203	0.04757
chr5 16274725 16336038			-0.67595	0.00207	0.04757
ENSG00000065978	YBX1	Y-box binding protein 1 [Source:HGNC Symbol;Acc:HGNC:8014]	-0.67595	0.00207	0.04757
ENSG00000116678	LEPR	leptin receptor [Source:HGNC Symbol;Acc:HGNC:6554]	-0.67595	0.00207	0.04757
ENSG00000119862	LGALS1	galactin like [Source:HGNC Symbol;Acc:HGNC:25012]	-0.67595	0.00207	0.04757
ENSG00000119950	MX1	MAX interactor 1, dimerization protein [Source:HGNC Symbol;Acc:HGNC:7534]	-0.67595	0.00207	0.04757
ENSG00000132819	RBM38	RNA binding motif protein 38 [Source:HGNC Symbol;Acc:HGNC:15818]	-0.67595	0.00207	0.04757
ENSG00000138069	RAB1A	RAB1A, member RAS oncogene family [Source:HGNC Symbol;Acc:HGNC:9758]	-0.67595	0.00207	0.04757
ENSG00000140403	DNAJA4	DnaJ heat shock protein family (Hsp40) member A4 [Source:HGNC Symbol;Acc:HGNC:14885]	-0.67595	0.00207	0.04757
ENSG00000167460	TPM4	tropomyosin 4 [Source:HGNC Symbol;Acc:HGNC:12013]	-0.67595	0.00207	0.04757
ENSG00000174099	MSRB3	methionine sulfoxide reductase B3 [Source:HGNC Symbol;Acc:HGNC:27375]	-0.67595	0.00207	0.04757
ENSG00000232063		novel transcript	-0.67595	0.00207	0.04757
ENSG00000234424		kinesin family member 27 (KIF27) pseudogene	-0.67595	0.00207	0.04757
ENSG00000243290	IGKV1-12	immunoglobulin kappa variable 1-12 [Source:HGNC Symbol;Acc:HGNC:5730]	-0.67595	0.00207	0.04757
ENSG00000171345	KRT19	keratin 19 [Source:HGNC Symbol;Acc:HGNC:6436]	-0.67532	0.0021	0.04807

ENSG00000130176	CNN1	calponin 1 [Source:HGNC Symbol;Acc:HGNC:2155]	-0.67527	0.0021	0.04807
ENSG000000281991	TMEM265	transmembrane protein 265 [Source:HGNC Symbol;Acc:HGNC:51241]	-0.67524	0.00211	0.04807
ENSG00000102837	OLFM4	olfactomedin 4 [Source:HGNC Symbol;Acc:HGNC:17190]	-0.67389	0.00217	0.04898
ENSG00000103275	UBE2I	ubiquitin conjugating enzyme E2 I [Source:HGNC Symbol;Acc:HGNC:12485]	-0.67389	0.00217	0.04898
ENSG00000116285	ERRFI1	ERBB receptor feedback inhibitor 1 [Source:HGNC Symbol;Acc:HGNC:18185]	-0.67389	0.00217	0.04898
ENSG00000134318	ROCK2	Rho associated coiled-coil containing protein kinase 2 [Source:HGNC Symbol;Acc:HGNC:10252]	-0.67389	0.00217	0.04898
ENSG00000186187	ZNRF1	zinc and ring finger 1 [Source:HGNC Symbol;Acc:HGNC:18452]	-0.67389	0.00217	0.04898
ENSG00000204131	NHSL2	NHS like 2 [Source:HGNC Symbol;Acc:HGNC:33737]	-0.67389	0.00217	0.04898
ENSG00000187726	DNAJB13	DnaJ heat shock protein family (Hsp40) member B13 [Source:HGNC Symbol;Acc:HGNC:30718]	-0.67325	0.0022	0.04959

Positively correlated with H1-4

ensembl_gene_id	gene_name	description	rho	p	adjusted-p
ENSG000000225921	NOL7	nucleolar protein 7 [Source:HGNC Symbol;Acc:HGNC:21040]	0.98142	6.7E-13	1.6E-08
ENSG00000182405	PGBD4	piggyBac transposable element derived 4 [Source:HGNC Symbol;Acc:HGNC:19401]	0.96078	2.5E-10	2E-06
ENSG00000278383		novel transcript, antisense to ZNF337	0.94034	6.7E-09	4E-05
ENSG00000267576		novel transcript, sense intronic to TSPAN16	0.93602	1.2E-08	5.5E-05
chr3 40665056 40725353			0.92157	5.6E-08	0.00018
ENSG00000196735	HLA-DQA1	major histocompatibility complex, class II, DQ alpha 1 [Source:HGNC Symbol;Acc:HGNC:4942]	0.91331	1.2E-07	0.00026
ENSG00000131845	ZNF304	zinc finger protein 304 [Source:HGNC Symbol;Acc:HGNC:13505]	0.8968	4.7E-07	0.00065
ENSG00000108932	SLC16A6	solute carrier family 16 member 6 [Source:HGNC Symbol;Acc:HGNC:10927]	0.89474	5.4E-07	0.00072
ENSG00000236830	CBR3-AS1	CBR3 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:43664]	0.89061	7.3E-07	0.00079
ENSG00000055044	NOP58	NOP58 ribonucleoprotein [Source:HGNC Symbol;Acc:HGNC:29926]	0.88854	8.4E-07	0.00079
ENSG00000104976	SNAPC2	small nuclear RNA activating complex polypeptide 2 [Source:HGNC Symbol;Acc:HGNC:11135]	0.88854	8.4E-07	0.00079
ENSG00000111667	USP5	ubiquitin specific peptidase 5 [Source:HGNC Symbol;Acc:HGNC:12628]	0.88854	8.4E-07	0.00079
ENSG00000276302		novel protein	0.88717	9.2E-07	0.00079
ENSG00000211778	TRAV4	T cell receptor alpha variable 4 [Source:HGNC Symbol;Acc:HGNC:12140]	0.88648	9.7E-07	0.00079
ENSG000000007047	MARK4	microtubule affinity regulating kinase 4 [Source:HGNC Symbol;Acc:HGNC:13538]	0.88235	1.3E-06	0.00081
ENSG000000085760	MTIF2	mitochondrial translational initiation factor 2 [Source:HGNC Symbol;Acc:HGNC:7441]	0.88235	1.3E-06	0.00081
ENSG00000100288	CHKB	choline kinase beta [Source:HGNC Symbol;Acc:HGNC:1938]	0.88235	1.3E-06	0.00081
ENSG00000250486	FAM218A	family with sequence similarity 218 member A [Source:HGNC Symbol;Acc:HGNC:26466]	0.88235	1.3E-06	0.00081
ENSG00000264673		novel transcript	0.88235	1.3E-06	0.00081
ENSG00000109452	INPP4B	inositol polyphosphate-4-phosphatase type II B [Source:HGNC Symbol;Acc:HGNC:6075]	0.88029	1.4E-06	0.00084
chr8 79716615 79907107			0.87822	1.6E-06	0.00089
ENSG00000229512		novel transcript	0.87822	1.6E-06	0.00089
ENSG00000204852	TCTN1	tectonic family member 1 [Source:HGNC Symbol;Acc:HGNC:26113]	0.8741	2.1E-06	0.0011
ENSG00000227354	RBM26-AS1	RBM26 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:39805]	0.8741	2.1E-06	0.0011
ENSG00000188785	ZNF548	zinc finger protein 548 [Source:HGNC Symbol;Acc:HGNC:26561]	0.86791	3.1E-06	0.00145
ENSG00000274922		novel transcript	0.86378	3.9E-06	0.0018
ENSG00000148672	GLUD1	glutamate dehydrogenase 1 [Source:HGNC Symbol;Acc:HGNC:4335]	0.85965	4.8E-06	0.00194
ENSG00000171570	RAB4B-EGLN2	RAB4B-EGLN2 readthrough (NMD candidate) [Source:HGNC Symbol;Acc:HGNC:44465]	0.85965	4.8E-06	0.00194
ENSG00000197385	ZNF860	zinc finger protein 860 [Source:HGNC Symbol;Acc:HGNC:34513]	0.85552	6E-06	0.00223
ENSG00000238061		proteasome (prosome, macropain) 26S subunit, non-ATPase, 7 (Mov34 homolog) (PSMD7) pseudogene	0.85552	6E-06	0.00223
ENSG00000163728	TTC14	tetratricopeptide repeat domain 14 [Source:HGNC Symbol;Acc:HGNC:24697]	0.85346	6.7E-06	0.00241
chr3 45568133 45637894			0.84727	9.1E-06	0.00271
ENSG00000150787	PTS	6-pyruvoyltetrahydropterin synthase [Source:HGNC Symbol;Acc:HGNC:9689]	0.84727	9.1E-06	0.00271
ENSG00000111981	ULBP1	UL16 binding protein 1 [Source:HGNC Symbol;Acc:HGNC:14893]	0.8452	1E-05	0.00289
ENSG0000023865	HLA-DPB1	major histocompatibility complex, class II, DP beta 1 [Source:HGNC Symbol;Acc:HGNC:4940]	0.8452	1E-05	0.00289
ENSG00000180008	SOCS4	suppressor of cytokine signaling 4 [Source:HGNC Symbol;Acc:HGNC:19392]	0.84314	1.1E-05	0.00301
ENSG00000183439	TRIM61	tripartite motif containing 61 [Source:HGNC Symbol;Acc:HGNC:24339]	0.84314	1.1E-05	0.00301
ENSG00000224609	FGGY-DT	FGGY divergent transcript [Source:HGNC Symbol;Acc:HGNC:55265]	0.84314	1.1E-05	0.00301
ENSG00000055950	MRPL43	mitochondrial ribosomal protein L43 [Source:HGNC Symbol;Acc:HGNC:14517]	0.84107	1.2E-05	0.0032
ENSG00000162086	ZNF75A	zinc finger protein 75a [Source:HGNC Symbol;Acc:HGNC:13146]	0.84107	1.2E-05	0.0032
ENSG00000248309	MEF2C-AS1	MEF2C antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:48908]	0.84107	1.2E-05	0.0032
chr12 89746297 89813496			0.83901	1.4E-05	0.00345
ENSG00000169733	RFNG	RFNG O-fucosylpeptide 3-beta-N-acetylglucosaminyltransferase [Source:HGNC Symbol;Acc:HGNC:9974]	0.83695	1.5E-05	0.00368
ENSG00000169738	DCXR	dicarbonyl and L-xylulose reductase [Source:HGNC Symbol;Acc:HGNC:18985]	0.83695	1.5E-05	0.00368
ENSG00000180902	D2HGDH	D-2-hydroxyglutarate dehydrogenase [Source:HGNC Symbol;Acc:HGNC:28358]	0.83488	1.6E-05	0.0038
ENSG00000103051	COG4	component of oligomeric golgi complex 4 [Source:HGNC Symbol;Acc:HGNC:18620]	0.83075	2E-05	0.00428
ENSG00000106133	NSUN5P2	NSUN5 pseudogene 2 [Source:HGNC Symbol;Acc:HGNC:16609]	0.83075	2E-05	0.00428
ENSG00000143314	MRPL24	mitochondrial ribosomal protein L24 [Source:HGNC Symbol;Acc:HGNC:14037]	0.83075	2E-05	0.00428
ENSG00000253106		novel transcript, antisense to TATDN1	0.83075	2E-05	0.00428
chr6 26155505 26251614			0.82869	2.1E-05	0.00455
ENSG00000211776	TRAV2	T cell receptor alpha variable 2 [Source:HGNC Symbol;Acc:HGNC:12116]	0.82869	2.1E-05	0.00455
ENSG00000273007		novel transcript, antisense to FGF2	0.82869	2.1E-05	0.00455
chr11 47575264 47638857			0.82663	2.3E-05	0.00461
ENSG00000151715	TMEM45B	transmembrane protein 45B [Source:HGNC Symbol;Acc:HGNC:25194]	0.82663	2.3E-05	0.00461
ENSG00000160325	CACFD1	calcium channel flower domain containing 1 [Source:HGNC Symbol;Acc:HGNC:1365]	0.82663	2.3E-05	0.00461
ENSG00000081189	MEF2C	myocyte enhancer factor 2C [Source:HGNC Symbol;Acc:HGNC:6996]	0.82456	2.6E-05	0.00475
ENSG00000103591	AAGAB	alpha and gamma adaptin binding protein [Source:HGNC Symbol;Acc:HGNC:25662]	0.82456	2.6E-05	0.00475
ENSG000000001460	STPG1	sperm tail PG-rich repeat containing 1 [Source:HGNC Symbol;Acc:HGNC:28070]	0.8225	2.8E-05	0.00492
ENSG00000155275	TRMT44	tRNA methyltransferase 44 homolog [Source:HGNC Symbol;Acc:HGNC:26653]	0.82043	3E-05	0.00495
ENSG00000198298	ZNF485	zinc finger protein 485 [Source:HGNC Symbol;Acc:HGNC:23440]	0.82043	3E-05	0.00495
chr10 94386918 94449856			0.81837	3.3E-05	0.00495
chr6 32888761 32941594			0.81837	3.3E-05	0.00495
chr6 70514778 70576433			0.81837	3.3E-05	0.00495
chr7 120722088 120884459			0.81837	3.3E-05	0.00495
ENSG00000107968	MAP3K8	mitogen-activated protein kinase kinase kinase 8 [Source:HGNC Symbol;Acc:HGNC:6860]	0.81837	3.3E-05	0.00495
ENSG00000158161	EYA3	EYA transcriptional coactivator and phosphatase 3 [Source:HGNC Symbol;Acc:HGNC:3521]	0.81837	3.3E-05	0.00495
ENSG00000229196		novel transcript	0.81837	3.3E-05	0.00495

chr1 + 194802386 195020897			0.81631	3.6E-05	0.00518
chr7 + 79110688 79235861			0.81631	3.6E-05	0.00518
ENSG00000258561		novel transcript	0.81631	3.6E-05	0.00518
ENSG00000225972	MTND1P23	MT-ND1 pseudogene 23 [Source:HGNC Symbol;Acc:HGNC:42092]	0.81508	3.8E-05	0.00534
ENSG000000068024	HDAC4	histone deacetylase 4 [Source:HGNC Symbol;Acc:HGNC:14063]	0.81424	3.9E-05	0.00534
ENSG00000070423	RNF126	ring finger protein 126 [Source:HGNC Symbol;Acc:HGNC:21151]	0.81424	3.9E-05	0.00534
ENSG00000263843	MIF4GD-DT	MIF4GD divergent transcript [Source:HGNC Symbol;Acc:HGNC:55335]	0.81424	3.9E-05	0.00534
ENSG00000257497		novel transcript, antisense to GLIPR1	0.81218	4.2E-05	0.00563
ENSG00000119333	DYNC2I2	dynein 2 intermediate chain 2 [Source:HGNC Symbol;Acc:HGNC:28296]	0.81011	4.6E-05	0.0059
ENSG00000141295	SCRN2	secernin 2 [Source:HGNC Symbol;Acc:HGNC:30381]	0.80805	5E-05	0.00616
ENSG00000151876	FBXO4	F-box protein 4 [Source:HGNC Symbol;Acc:HGNC:13583]	0.80805	5E-05	0.00616
ENSG00000241352		ribosomal protein S6 (RPS6) pseudogene	0.80805	5E-05	0.00616
ENSG00000197822	OCLN	occludin [Source:HGNC Symbol;Acc:HGNC:8104]	0.80599	5.4E-05	0.00639
ENSG00000178700	DHFR2	dihydrofolate reductase 2 [Source:HGNC Symbol;Acc:HGNC:27309]	0.80392	5.8E-05	0.00658
ENSG00000101945	SUV39H1	suppressor of variegation 3-9 homolog 1 [Source:HGNC Symbol;Acc:HGNC:11479]	0.80186	6.3E-05	0.00682
ENSG00000263934	SNORD3A	small nucleolar RNA, C/D box 3A [Source:HGNC Symbol;Acc:HGNC:33189]	0.80186	6.3E-05	0.00682
ENSG00000270379	HEATR9	HEAT repeat containing 9 [Source:HGNC Symbol;Acc:HGNC:26548]	0.80186	6.3E-05	0.00682
ENSG00000166704	ZNF606	zinc finger protein 606 [Source:HGNC Symbol;Acc:HGNC:25879]	0.79979	6.8E-05	0.00706
ENSG00000141252	VPS53	VPS53 subunit of GARP complex [Source:HGNC Symbol;Acc:HGNC:25608]	0.79773	7.3E-05	0.00729
ENSG00000168913	ENHO	energy homeostasis associated [Source:HGNC Symbol;Acc:HGNC:24838]	0.79773	7.3E-05	0.00729
chr12 + 93335773 93399995			0.79567	7.9E-05	0.00773
ENSG00000125870	SNRPB2	small nuclear ribonucleoprotein polypeptide B2 [Source:HGNC Symbol;Acc:HGNC:11155]	0.7936	8.5E-05	0.00805
ENSG00000133119	RFC3	replication factor C subunit 3 [Source:HGNC Symbol;Acc:HGNC:9971]	0.7936	8.5E-05	0.00805
ENSG00000147789	ZNF7	zinc finger protein 7 [Source:HGNC Symbol;Acc:HGNC:13139]	0.7936	8.5E-05	0.00805
ENSG00000177613	CSTF2T	cleavage stimulation factor subunit 2 tau variant [Source:HGNC Symbol;Acc:HGNC:17086]	0.7936	8.5E-05	0.00805
ENSG00000227543	SPAG5-AS1	SPAG5 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:41140]	0.7936	8.5E-05	0.00805
ENSG00000267360		novel protein	0.7936	8.5E-05	0.00805
chr3 + 16656009 16739392			0.79154	9.1E-05	0.00848
ENSG00000196227	FAM217B	family with sequence similarity 217 member B [Source:HGNC Symbol;Acc:HGNC:16170]	0.79154	9.1E-05	0.00848
ENSG00000205220	PSMB10	proteasome 20S subunit beta 10 [Source:HGNC Symbol;Acc:HGNC:9538]	0.79154	9.1E-05	0.00848
ENSG00000277959		novel transcript, antisense to BNIP3	0.79154	9.1E-05	0.00848
ENSG00000076924	XAB2	XPA binding protein 2 [Source:HGNC Symbol;Acc:HGNC:14089]	0.78947	9.8E-05	0.00884
ENSG00000077585	GPR137B	G protein-coupled receptor 137B [Source:HGNC Symbol;Acc:HGNC:11862]	0.78947	9.8E-05	0.00884
ENSG00000148824	MTG1	mitochondrial ribosome associated GTPase 1 [Source:HGNC Symbol;Acc:HGNC:32159]	0.78947	9.8E-05	0.00884
ENSG00000169964	TMEM42	transmembrane protein 42 [Source:HGNC Symbol;Acc:HGNC:28444]	0.78947	9.8E-05	0.00884
ENSG00000227775		ribosomal protein S7 (RPS7) pseudogene	0.78947	9.8E-05	0.00884
ENSG00000242583	KMT5AP3	KMT5A pseudogene 3 [Source:HGNC Symbol;Acc:HGNC:54728]	0.78947	9.8E-05	0.00884
ENSG00000254860	TMEM9B-AS1	TMEM9B antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:19230]	0.78947	9.8E-05	0.00884
ENSG00000125648	SLC25A23	solute carrier family 25 member 23 [Source:HGNC Symbol;Acc:HGNC:19375]	0.78741	0.00011	0.00917
ENSG00000177302	TOP3A	DNA topoisomerase III alpha [Source:HGNC Symbol;Acc:HGNC:11992]	0.78741	0.00011	0.00917
ENSG00000196653	ZNF502	zinc finger protein 502 [Source:HGNC Symbol;Acc:HGNC:23718]	0.78741	0.00011	0.00917
ENSG00000250568		poly(A) binding protein, cytoplasmic 1 (PABPC1) pseudogene	0.78741	0.00011	0.00917
ENSG00000257764		novel transcript, antisense to LYZ	0.78741	0.00011	0.00917
chr7 + 120898631 120988879			0.78535	0.00011	0.00943
ENSG00000106565	TMEM176B	transmembrane protein 176B [Source:HGNC Symbol;Acc:HGNC:29596]	0.78535	0.00011	0.00943
ENSG00000113369	ARRDC3	arrestin domain containing 3 [Source:HGNC Symbol;Acc:HGNC:29263]	0.78535	0.00011	0.00943
ENSG00000223547	ZNF844	zinc finger protein 844 [Source:HGNC Symbol;Acc:HGNC:25932]	0.78535	0.00011	0.00943
ENSG00000239282	CASTOR1	cytosolic arginine sensor for mTORC1 subunit 1 [Source:HGNC Symbol;Acc:HGNC:34423]	0.78535	0.00011	0.00943
ENSG00000248544		novel transcript, antisense to CYFIP2	0.78535	0.00011	0.00943
ENSG00000258733	LINC02328	long intergenic non-protein coding RNA 2328 [Source:HGNC Symbol;Acc:HGNC:53248]	0.78535	0.00011	0.00943
ENSG00000267361	SEC24AP1	SEC24 homolog A pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:53767]	0.78535	0.00011	0.00943
ENSG00000277687		novel transcript, sense intronic to CACUL1	0.78328	0.00012	0.00979
chr8 + 22551112 22652217			0.78328	0.00012	0.00979
ENSG00000109929	SC5D	sterol-C5-desaturase [Source:HGNC Symbol;Acc:HGNC:10547]	0.78328	0.00012	0.00979
ENSG00000141194	OR4D1	olfactory receptor family 4 subfamily D member 1 [Source:HGNC Symbol;Acc:HGNC:8293]	0.78328	0.00012	0.00979
ENSG00000260103		coiled-coil-helix-coiled-coil-helix domain-containing protein 7 (CHCHD7) pseudogene	0.78328	0.00012	0.00979
ENSG00000279594		TEC	0.78328	0.00012	0.00979
ENSG00000204396	VWA7	von Willebrand factor A domain containing 7 [Source:HGNC Symbol;Acc:HGNC:13939]	0.78321	0.00012	0.00979
ENSG00000004534	RBM6	RNA binding motif protein 6 [Source:HGNC Symbol;Acc:HGNC:9903]	0.78122	0.00013	0.01018
ENSG00000110492	MDK	midkine [Source:HGNC Symbol;Acc:HGNC:6972]	0.78122	0.00013	0.01018
ENSG00000153253	SCN3A	sodium voltage-gated channel alpha subunit 3 [Source:HGNC Symbol;Acc:HGNC:10590]	0.78122	0.00013	0.01018
ENSG00000035687	ADSS2	adenylosuccinate synthase 2 [Source:HGNC Symbol;Acc:HGNC:292]	0.77915	0.00014	0.01072
ENSG00000102977	ACD	ACD shelterin complex subunit and telomerase recruitment factor [Source:HGNC Symbol;Acc:HGNC:25070]	0.77915	0.00014	0.01072
ENSG00000256280	ATP5MGPI	ATP synthase membrane subunit g pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:13214]	0.77915	0.00014	0.01072
ENSG00000242071	RPL7AP6	ribosomal protein L7a pseudogene 6 [Source:HGNC Symbol;Acc:HGNC:19785]	0.77852	0.00014	0.01091
ENSG00000230041	ZDHHC6	zinc finger DHHC-type palmitoyltransferase 6 [Source:HGNC Symbol;Acc:HGNC:19160]	0.77709	0.00015	0.01107
ENSG00000144554	FANCD2	FA complementation group D2 [Source:HGNC Symbol;Acc:HGNC:3585]	0.77709	0.00015	0.01107
ENSG00000213197	NUDCP1	nuclear distribution C pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:8046]	0.77709	0.00015	0.01107
ENSG00000227799	CDPF1P1	CDPF1 pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:54763]	0.77709	0.00015	0.01107
chr12 + 70531159 70637922			0.77503	0.00016	0.01137
ENSG00000070269	TMEM260	transmembrane protein 260 [Source:HGNC Symbol;Acc:HGNC:20185]	0.77503	0.00016	0.01137
ENSG00000126698	DNAJC8	DnaJ heat shock protein family (Hsp40) member C8 [Source:HGNC Symbol;Acc:HGNC:15470]	0.77503	0.00016	0.01137
ENSG00000139651	ZNF740	zinc finger protein 740 [Source:HGNC Symbol;Acc:HGNC:27465]	0.77503	0.00016	0.01137
ENSG00000176340	COX8A	cytochrome c oxidase subunit 8A [Source:HGNC Symbol;Acc:HGNC:2294]	0.77503	0.00016	0.01137
ENSG00000260367		novel transcript, antisense to SPNS1	0.77503	0.00016	0.01137
ENSG00000274173		novel transcript	0.77503	0.00016	0.01137
ENSG00000280037		TEC	0.77503	0.00016	0.01137
ENSG00000269934		novel transcript, antisense to OBSCN	0.77439	0.00016	0.01153
ENSG00000228789	HCG22	HLA complex group 22 (gene/pseudogene) [Source:HGNC Symbol;Acc:HGNC:27780]	0.77365	0.00017	0.01178
ENSG00000127837	AAMP	angio associated migratory cell protein [Source:HGNC Symbol;Acc:HGNC:18]	0.77296	0.00017	0.01189
ENSG00000197635	DPP4	dipeptidyl peptidase 4 [Source:HGNC Symbol;Acc:HGNC:3009]	0.77296	0.00017	0.01189

ENSG00000196821	ILRUN	inflammation and lipid regulator with UBA-like and NBR1-like domains [Source:HGNC Symbol;Acc:HGNC:21215]	0.7709	0.00018	0.01244
ENSG00000221957	KIR2DS4	killer cell immunoglobulin like receptor, two Ig domains and short cytoplasmic tail 4 [Source:HGNC Symbol;Acc:HGNC:6336]	0.7709	0.00018	0.01244
ENSG00000213297	ZNF625-ZNF20	ZNF625-ZNF20 readthrough (NMD candidate) [Source:HGNC Symbol;Acc:HGNC:48368]	0.76883	0.00019	0.01297
ENSG00000112282	MED23	mediator complex subunit 23 [Source:HGNC Symbol;Acc:HGNC:2372]	0.76677	0.00021	0.01323
ENSG00000243264	IGKV2D-29	immunoglobulin kappa variable 2D-29 [Source:HGNC Symbol;Acc:HGNC:5800]	0.76677	0.00021	0.01323
ENSG00000248049	UBA6-AS1	UBA6 antisense RNA 1 (head to head) [Source:HGNC Symbol;Acc:HGNC:49083]	0.76677	0.00021	0.01323
ENSG00000248429	FAM198B-AS1	FAM198B antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:53132]	0.76677	0.00021	0.01323
chr18 J52657886 52773094			0.76471	0.00022	0.01383
ENSG00000120333	MRPS14	mitochondrial ribosomal protein S14 [Source:HGNC Symbol;Acc:HGNC:14049]	0.76471	0.00022	0.01383
ENSG00000158006	PAFAH2	platelet activating factor acetylhydrolase 2 [Source:HGNC Symbol;Acc:HGNC:8579]	0.76471	0.00022	0.01383
ENSG00000256019	TAS2R63P	taste 2 receptor member 63 pseudogene [Source:HGNC Symbol;Acc:HGNC:20641]	0.76264	0.00023	0.01434
ENSG00000260475		novel transcript	0.76264	0.00023	0.01434
ENSG00000279416		TEC	0.76264	0.00023	0.01434
ENSG00000089195	TRMT6	tRNA methyltransferase 6 [Source:HGNC Symbol;Acc:HGNC:20900]	0.76058	0.00025	0.01458
ENSG00000161513	FDXR	ferredoxin reductase [Source:HGNC Symbol;Acc:HGNC:3642]	0.76058	0.00025	0.01458
ENSG00000164136	IL15	interleukin 15 [Source:HGNC Symbol;Acc:HGNC:5977]	0.76058	0.00025	0.01458
ENSG00000165516	KLHDC2	kelch domain containing 2 [Source:HGNC Symbol;Acc:HGNC:20231]	0.76058	0.00025	0.01458
ENSG00000168876	ANKRD49	ankyrin repeat domain 49 [Source:HGNC Symbol;Acc:HGNC:25970]	0.76058	0.00025	0.01458
ENSG00000284234	TAF11L5	TATA-box binding protein associated factor 11 like 5 [Source:HGNC Symbol;Acc:HGNC:53848]	0.76058	0.00025	0.01458
ENSG00000258181		novel transcript	0.75994	0.00025	0.01483
ENSG00000128394	APOBEC3F	apolipoprotein B mRNA editing enzyme catalytic subunit 3F [Source:HGNC Symbol;Acc:HGNC:17356]	0.75851	0.00026	0.01513
ENSG00000163875	MEAF6	MYST/Esa1 associated factor 6 [Source:HGNC Symbol;Acc:HGNC:25674]	0.75851	0.00026	0.01513
ENSG00000165983	PTER	phosphotriesterase related [Source:HGNC Symbol;Acc:HGNC:9590]	0.75851	0.00026	0.01513
ENSG00000270062		novel transcript, sense intronic to NIN	0.75851	0.00026	0.01513
ENSG00000279765		novel protein	0.75851	0.00026	0.01513
ENSG00000179941	BBS10	Bardet-Biedl syndrome 10 [Source:HGNC Symbol;Acc:HGNC:26291]	0.75645	0.00028	0.01578
ENSG00000180425	C11orf71	chromosome 11 open reading frame 71 [Source:HGNC Symbol;Acc:HGNC:25937]	0.75645	0.00028	0.01578
ENSG00000253690		novel transcript	0.75645	0.00028	0.01578
ENSG000000067221	STOML1	stomatin like 1 [Source:HGNC Symbol;Acc:HGNC:14560]	0.75439	0.0003	0.01622
ENSG000000086712	TXLNG	taxilin gamma [Source:HGNC Symbol;Acc:HGNC:18578]	0.75439	0.0003	0.01622
ENSG00000105810	CDK6	cyclin dependent kinase 6 [Source:HGNC Symbol;Acc:HGNC:1777]	0.75439	0.0003	0.01622
ENSG00000117593	DARS2	aspartyl-tRNA synthetase 2, mitochondrial [Source:HGNC Symbol;Acc:HGNC:25538]	0.75232	0.00032	0.01707
ENSG00000261359	PYCARD-AS1	PYCARD antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:45036]	0.75232	0.00032	0.01707
ENSG00000147642	SYBU	syntabulin [Source:HGNC Symbol;Acc:HGNC:26011]	0.75026	0.00034	0.01771
ENSG00000185475	TMEM179B	transmembrane protein 179B [Source:HGNC Symbol;Acc:HGNC:33744]	0.75026	0.00034	0.01771
ENSG00000236254	MTND4P14	MT-ND4 pseudogene 14 [Source:HGNC Symbol;Acc:HGNC:42201]	0.75026	0.00034	0.01771
ENSG000000059691	GATB	glutamyl-tRNA amidotransferase subunit B [Source:HGNC Symbol;Acc:HGNC:8849]	0.74819	0.00036	0.01849
ENSG00000100564	PIGH	phosphatidylinositol glycan anchor biosynthesis class H [Source:HGNC Symbol;Acc:HGNC:8964]	0.74819	0.00036	0.01849
ENSG00000229151		novel transcript	0.74819	0.00036	0.01849
ENSG00000107719	PALD1	phosphatase domain containing paladin 1 [Source:HGNC Symbol;Acc:HGNC:23530]	0.74613	0.00038	0.0193
ENSG00000162623	TYW3	tRNA-YW synthesizing protein 3 homolog [Source:HGNC Symbol;Acc:HGNC:24757]	0.74613	0.00038	0.0193
ENSG00000274253		novel transcript, sense overlapping NIPA1	0.74613	0.00038	0.0193
chr5 H98263160 98318093			0.74407	0.0004	0.01989
ENSG000000088876	ZNF343	zinc finger protein 343 [Source:HGNC Symbol;Acc:HGNC:16017]	0.74407	0.0004	0.01989
ENSG00000183960	KCNH8	potassium voltage-gated channel subfamily H member 8 [Source:HGNC Symbol;Acc:HGNC:18864]	0.74407	0.0004	0.01989
ENSG00000214827	MTCP1	mature T cell proliferation 1 [Source:HGNC Symbol;Acc:HGNC:7423]	0.74407	0.0004	0.01989
ENSG00000224358	TMCO1-AS1	TMCO1 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:54046]	0.74407	0.0004	0.01989
ENSG00000268201		novel transcript, sense intronic to ZNF544	0.74407	0.0004	0.01989
ENSG00000100029	PES1	pescadillo ribosomal biogenesis factor 1 [Source:HGNC Symbol;Acc:HGNC:8848]	0.742	0.00042	0.02054
ENSG00000124380	SNRNP27	small nuclear ribonucleoprotein U4/U6.U5 subunit 27 [Source:HGNC Symbol;Acc:HGNC:30240]	0.742	0.00042	0.02054
ENSG00000161010	MRNP	MRN complex interacting protein [Source:HGNC Symbol;Acc:HGNC:30817]	0.742	0.00042	0.02054
ENSG00000197763	TXNRD3	thioredoxin reductase 3 [Source:HGNC Symbol;Acc:HGNC:20667]	0.742	0.00042	0.02054
ENSG00000279520		tec	0.74135	0.00043	0.02074
ENSG00000164751	PEX2	peroxisomal biogenesis factor 2 [Source:HGNC Symbol;Acc:HGNC:9717]	0.73994	0.00045	0.02105
ENSG00000182185	RAD51B	RAD51 paralog B [Source:HGNC Symbol;Acc:HGNC:9822]	0.73994	0.00045	0.02105
ENSG00000182240	BACE2	beta-secretase 2 [Source:HGNC Symbol;Acc:HGNC:934]	0.73994	0.00045	0.02105
ENSG00000203876	ADD3-AS1	ADD3 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:48682]	0.73994	0.00045	0.02105
ENSG00000133789	SWAP70	switching B cell complex subunit SWAP70 [Source:HGNC Symbol;Acc:HGNC:17070]	0.73787	0.00047	0.02158
ENSG00000185669	SNAI3	snail family transcriptional repressor 3 [Source:HGNC Symbol;Acc:HGNC:18411]	0.73787	0.00047	0.02158
ENSG00000246582		novel transcript, antisense to TNFRSF10A	0.73787	0.00047	0.02158
ENSG00000265399		novel transcript, antisense to MYO1	0.73787	0.00047	0.02158
ENSG00000178952	TUFM	Tu translation elongation factor, mitochondrial [Source:HGNC Symbol;Acc:HGNC:12420]	0.73581	0.0005	0.02234
ENSG00000251323	LINC02728	long intergenic non-protein coding RNA 2728 [Source:HGNC Symbol;Acc:HGNC:54245]	0.73581	0.0005	0.02234
ENSG00000285171		novel protein, IL2RG-CXorf65 readthrough	0.73581	0.0005	0.02234
ENSG00000095261	PSMD5	proteasome 26S subunit, non-ATPase 5 [Source:HGNC Symbol;Acc:HGNC:9563]	0.73375	0.00053	0.02308
ENSG00000198642	KLHL9	kelch like family member 9 [Source:HGNC Symbol;Acc:HGNC:18732]	0.73375	0.00053	0.02308
ENSG00000251149	MTND5P5	MT-ND5 pseudogene 5 [Source:HGNC Symbol;Acc:HGNC:42307]	0.73375	0.00053	0.02308
ENSG00000273203		novel transcript	0.73375	0.00053	0.02308
chr13 J111373422 11425791			0.73168	0.00056	0.02377
ENSG00000155329	ZCCHC10	zinc finger CCHC-type containing 10 [Source:HGNC Symbol;Acc:HGNC:25954]	0.73168	0.00056	0.02377
ENSG00000258337		novel transcript, sense intronic to MED13L	0.73168	0.00056	0.02377
ENSG00000258695		novel transcript, antisense to HEATR4	0.73168	0.00056	0.02377
ENSG00000079999	KEAP1	kelch like ECH associated protein 1 [Source:HGNC Symbol;Acc:HGNC:23177]	0.72962	0.00059	0.02452
ENSG00000100023	PPIL2	peptidylprolyl isomerase like 2 [Source:HGNC Symbol;Acc:HGNC:9261]	0.72962	0.00059	0.02452
ENSG00000101181	MTG2	mitochondrial ribosome associated GTPase 2 [Source:HGNC Symbol;Acc:HGNC:16239]	0.72962	0.00059	0.02452
ENSG00000113013	HSPA9	heat shock protein family A (Hsp70) member 9 [Source:HGNC Symbol;Acc:HGNC:5244]	0.72962	0.00059	0.02452
ENSG00000164609	SLU7	SLU7 homolog, splicing factor [Source:HGNC Symbol;Acc:HGNC:16939]	0.72962	0.00059	0.02452
ENSG00000170860	LSM3	LSM3 homolog, U6 small nuclear RNA and mRNA degradation associated [Source:HGNC Symbol;Acc:HGNC:17874]	0.72962	0.00059	0.02452
ENSG00000196950	SLC39A10	solute carrier family 39 member 10 [Source:HGNC Symbol;Acc:HGNC:20861]	0.72962	0.00059	0.02452
ENSG00000211978	IGHV5-78	immunoglobulin heavy variable 5-78 (pseudogene) [Source:HGNC Symbol;Acc:HGNC:5660]	0.72962	0.00059	0.02452
ENSG00000241978			0.72962	0.00059	0.02452

ENSG00000283597	FAM169B	family with sequence similarity 169 member B [Source:HGNC Symbol;Acc:HGNC:26835]	0.72962	0.00059	0.02452
ENSG00000265692	LINC01970	long intergenic non-protein coding RNA 1970 [Source:HGNC Symbol;Acc:HGNC:52796]	0.72896	0.0006	0.02481
ENSG00000137074	APTX	aprataxin [Source:HGNC Symbol;Acc:HGNC:15984]	0.72755	0.00062	0.02482
ENSG00000153187	HNRNP-U	heterogeneous nuclear ribonucleoprotein U [Source:HGNC Symbol;Acc:HGNC:5048]	0.72755	0.00062	0.02482
ENSG00000162817	C1orf115	chromosome 1 open reading frame 115 [Source:HGNC Symbol;Acc:HGNC:25873]	0.72755	0.00062	0.02482
ENSG00000163629	PTPN13	protein tyrosine phosphatase non-receptor type 13 [Source:HGNC Symbol;Acc:HGNC:9646]	0.72755	0.00062	0.02482
ENSG00000188611	ASAH2	N-acylsphingosine amidohydrolase 2 [Source:HGNC Symbol;Acc:HGNC:18860]	0.72755	0.00062	0.02482
ENSG00000275765		novel transcript	0.72755	0.00062	0.02482
ENSG00000267080	ASB16-AS1	ASB16 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:25442]	0.7269	0.00063	0.02521
ENSG00000049247	UTS2	urotensin 2 [Source:HGNC Symbol;Acc:HGNC:12636]	0.72549	0.00066	0.02558
ENSG00000170855	TRIAP1	TP53 regulated inhibitor of apoptosis 1 [Source:HGNC Symbol;Acc:HGNC:26937]	0.72549	0.00066	0.02558
ENSG00000185915	KLHL34	kelch like family member 34 [Source:HGNC Symbol;Acc:HGNC:26634]	0.72549	0.00066	0.02558
ENSG00000227986	TRIM60P18	tripartite motif containing 60 pseudogene 18 [Source:HGNC Symbol;Acc:HGNC:38490]	0.72549	0.00066	0.02558
ENSG00000245556	SCAMP1-AS1	SCAMP1 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:50544]	0.72549	0.00066	0.02558
ENSG00000277734	TRAC	T cell receptor alpha constant [Source:HGNC Symbol;Acc:HGNC:12029]	0.72549	0.00066	0.02558
ENSG00000254206	NPIP811	nuclear pore complex interacting protein family member B11 [Source:HGNC Symbol;Acc:HGNC:37453]	0.72483	0.00067	0.02593
ENSG00000254266	PKIA-AS1	PKIA antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:51659]	0.72483	0.00067	0.02593
ENSG00000105383	CD33	CD33 molecule [Source:HGNC Symbol;Acc:HGNC:1659]	0.72136	0.00073	0.0272
ENSG00000145882	PCYOX1L	prenylcysteine oxidase 1 like [Source:HGNC Symbol;Acc:HGNC:28477]	0.72136	0.00073	0.0272
ENSG00000152082	MZT2B	mitotic spindle organizing protein 2B [Source:HGNC Symbol;Acc:HGNC:25886]	0.72136	0.00073	0.0272
ENSG00000171865	RNASEH1	ribonuclease H1 [Source:HGNC Symbol;Acc:HGNC:18466]	0.72136	0.00073	0.0272
ENSG00000184786	DYNLT2	dynein light chain Tctex-type 2 [Source:HGNC Symbol;Acc:HGNC:11695]	0.72136	0.00073	0.0272
ENSG00000198502	HLA-DRB5	major histocompatibility complex, class II, DR beta 5 [Source:HGNC Symbol;Acc:HGNC:4953]	0.72136	0.00073	0.0272
ENSG00000256660	CLEC12B	C-type lectin domain family 12 member B [Source:HGNC Symbol;Acc:HGNC:31966]	0.72136	0.00073	0.0272
ENSG00000261324		novel transcript, overlapping HIST4H4	0.72136	0.00073	0.0272
ENSG00000279114		TEC	0.72136	0.00073	0.0272
chr2 - 200897626 201040036			0.72096	0.00074	0.02739
chr1 - 245830064 245894767			0.7193	0.00077	0.02786
ENSG000000064652	SNX24	sorting nexin 24 [Source:HGNC Symbol;Acc:HGNC:21533]	0.7193	0.00077	0.02786
ENSG000000081692	JMJD4	jumonji domain containing 4 [Source:HGNC Symbol;Acc:HGNC:25724]	0.7193	0.00077	0.02786
ENSG00000104518	GSDMD	gasdermin D [Source:HGNC Symbol;Acc:HGNC:25697]	0.7193	0.00077	0.02786
ENSG00000124508	BTN2A2	butyrophilin subfamily 2 member A2 [Source:HGNC Symbol;Acc:HGNC:1137]	0.7193	0.00077	0.02786
ENSG00000133424	LARGE1	LARGE xylosyl- and glucuronyltransferase 1 [Source:HGNC Symbol;Acc:HGNC:6511]	0.7193	0.00077	0.02786
ENSG00000198198	SZT2	SZT2 subunit of KICSTOR complex [Source:HGNC Symbol;Acc:HGNC:29040]	0.7193	0.00077	0.02786
ENSG00000234902		novel transcript	0.7193	0.00077	0.02786
ENSG00000264812		novel transcript, sense intronic C17orf101	0.7193	0.00077	0.02786
ENSG00000276968		novel transcript, antisense to NUDT15	0.7193	0.00077	0.02786
ENSG00000084092	NOA1	nitric oxide associated 1 [Source:HGNC Symbol;Acc:HGNC:28473]	0.71723	0.00081	0.02884
ENSG00000105329	TGFB1	transforming growth factor beta 1 [Source:HGNC Symbol;Acc:HGNC:11766]	0.71723	0.00081	0.02884
ENSG00000149084	HSD17B12	hydroxysteroid 17-beta dehydrogenase 12 [Source:HGNC Symbol;Acc:HGNC:18646]	0.71723	0.00081	0.02884
ENSG00000196205	EEF1A1P5	eukaryotic translation elongation factor 1 alpha 1 pseudogene 5 [Source:HGNC Symbol;Acc:HGNC:3200]	0.71723	0.00081	0.02884
ENSG00000174365	SNHG11	small nucleolar RNA host gene 11 [Source:HGNC Symbol;Acc:HGNC:25046]	0.71517	0.00085	0.02986
ENSG00000175354	PTPN2	protein tyrosine phosphatase non-receptor type 2 [Source:HGNC Symbol;Acc:HGNC:9650]	0.71517	0.00085	0.02986
ENSG00000196126	HLA-DRB1	major histocompatibility complex, class II, DR beta 1 [Source:HGNC Symbol;Acc:HGNC:4948]	0.71517	0.00085	0.02986
ENSG00000196526	AFAP1	actin filament associated protein 1 [Source:HGNC Symbol;Acc:HGNC:24017]	0.71517	0.00085	0.02986
chr8 - 24170899 24245300			0.71311	0.00089	0.03085
ENSG00000138395	CDK15	cyclin dependent kinase 15 [Source:HGNC Symbol;Acc:HGNC:14434]	0.71311	0.00089	0.03085
ENSG00000163291	PAQR3	progesterin and adipoQ receptor family member 3 [Source:HGNC Symbol;Acc:HGNC:30130]	0.71311	0.00089	0.03085
ENSG00000185798	WDR53	WD repeat domain 53 [Source:HGNC Symbol;Acc:HGNC:28786]	0.71311	0.00089	0.03085
ENSG00000187621	TCL6	T cell leukemia/lymphoma 6 [Source:HGNC Symbol;Acc:HGNC:13463]	0.71311	0.00089	0.03085
ENSG00000204237	OXLD1	oxidoeductase like domain containing 1 [Source:HGNC Symbol;Acc:HGNC:27901]	0.71311	0.00089	0.03085
ENSG00000215068		novel transcript, antisense to ANXA2R	0.71311	0.00089	0.03085
ENSG00000261033	SPECC1-DT	SPECC1 divergent transcript [Source:HGNC Symbol;Acc:HGNC:55376]	0.71311	0.00089	0.03085
ENSG00000273350		novel transcript, sense intronic to SEC14L2	0.71268	0.0009	0.03104
ENSG00000237541	HLA-DQA2	major histocompatibility complex, class II, DQ alpha 2 [Source:HGNC Symbol;Acc:HGNC:4943]	0.71244	0.00091	0.03109
ENSG00000279733		novel transcript	0.71244	0.00091	0.03109
ENSG00000156531	PHF6	PHD finger protein 6 [Source:HGNC Symbol;Acc:HGNC:18145]	0.71104	0.00094	0.03139
ENSG00000169116	PARM1	prostate androgen-regulated mucin-like protein 1 [Source:HGNC Symbol;Acc:HGNC:24536]	0.71104	0.00094	0.03139
ENSG00000185619	PCGF3	polycomb group ring finger 3 [Source:HGNC Symbol;Acc:HGNC:10066]	0.71104	0.00094	0.03139
ENSG00000214013	GANC	glucosidase alpha, neutral C [Source:HGNC Symbol;Acc:HGNC:4139]	0.71104	0.00094	0.03139
ENSG00000276071		novel transcript	0.71104	0.00094	0.03139
ENSG00000080854	IGSF9B	immunoglobulin superfamily member 9B [Source:HGNC Symbol;Acc:HGNC:32326]	0.70898	0.00099	0.03224
ENSG00000156256	USP16	ubiquitin specific peptidase 16 [Source:HGNC Symbol;Acc:HGNC:12614]	0.70898	0.00099	0.03224
ENSG00000172367	PDZD3	PDZ domain containing 3 [Source:HGNC Symbol;Acc:HGNC:19891]	0.70898	0.00099	0.03224
ENSG00000211784	TRAV10	T cell receptor alpha variable 10 [Source:HGNC Symbol;Acc:HGNC:12103]	0.70898	0.00099	0.03224
ENSG00000248671	ALG1L9P	ALG1 like 9, pseudogene [Source:NCBI gene (formerly Entrezgene);Acc:285407]	0.70898	0.00099	0.03224
ENSG00000261242		novel transcript, antisense to PPP2R5E	0.70898	0.00099	0.03224
ENSG00000183298	RPSAP19	ribosomal protein SA pseudogene 19 [Source:HGNC Symbol;Acc:HGNC:36508]	0.70848	0.001	0.03227
ENSG00000226084		ribosomal protein L17 (RPL17) pseudogene	0.70848	0.001	0.03227
ENSG00000285051	SLC7A14-AS1	SLC7A14 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:54092]	0.70831	0.001	0.03274
chr5 + 124235227 124290823			0.70691	0.00104	0.03281
ENSG00000075239	ACAT1	acetyl-CoA acetyltransferase 1 [Source:HGNC Symbol;Acc:HGNC:93]	0.70691	0.00104	0.03281
ENSG00000092820	EZR	ezrin [Source:HGNC Symbol;Acc:HGNC:12691]	0.70691	0.00104	0.03281
ENSG00000101079	NDRG3	NDRG family member 3 [Source:HGNC Symbol;Acc:HGNC:14462]	0.70691	0.00104	0.03281
ENSG00000101473	ACOT8	acyl-CoA thioesterase 8 [Source:HGNC Symbol;Acc:HGNC:15919]	0.70691	0.00104	0.03281
ENSG00000106328	FSCN3	fascin actin-bundling protein 3 [Source:HGNC Symbol;Acc:HGNC:3961]	0.70691	0.00104	0.03281
ENSG00000136813	ECPAS	Ecm29 proteasome adaptor and scaffold [Source:HGNC Symbol;Acc:HGNC:29020]	0.70691	0.00104	0.03281
ENSG00000137040	RANBP6	RAN binding protein 6 [Source:HGNC Symbol;Acc:HGNC:9851]	0.70691	0.00104	0.03281
ENSG00000147894	C9orf72	C9orf72-M2C8R complex subunit [Source:HGNC Symbol;Acc:HGNC:28337]	0.70691	0.00104	0.03281
ENSG00000156738	MS4A1	membrane spanning 4-domains A1 [Source:HGNC Symbol;Acc:HGNC:7315]	0.70691	0.00104	0.03281
ENSG00000163584	RPL22L1	ribosomal protein L22 like 1 [Source:HGNC Symbol;Acc:HGNC:27610]	0.70691	0.00104	0.03281

ENSG00000204220	PFDN6	prefoldin subunit 6 [Source:HGNC Symbol;Acc:HGNC:4926]	0.70691	0.00104	0.03281
ENSG00000214560	ZBTB20-AS1	ZBTB20 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:40640]	0.70691	0.00104	0.03281
chr6 [93227168 93291526			0.70558	0.00107	0.03377
chr4 [14212543 14290278			0.70485	0.00109	0.03382
ENSG00000103174	NAGPA	N-acetylglucosamine-1-phosphodiester alpha-N-acetylglucosaminidase [Source:HGNC Symbol;Acc:HGNC:17378]	0.70485	0.00109	0.03382
ENSG00000133138	TBC1D8B	TBC1 domain family member 8B [Source:HGNC Symbol;Acc:HGNC:24715]	0.70485	0.00109	0.03382
ENSG00000135318	NT5E	5'-nucleotidase ecto [Source:HGNC Symbol;Acc:HGNC:8021]	0.70485	0.00109	0.03382
ENSG00000138119	MYOF	myoferlin [Source:HGNC Symbol;Acc:HGNC:3656]	0.70485	0.00109	0.03382
ENSG00000184226	PCDH9	protocadherin 9 [Source:HGNC Symbol;Acc:HGNC:8661]	0.70485	0.00109	0.03382
ENSG00000234608	MAPKAPK5-AS1	MAPKAPK5 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:24091]	0.70485	0.00109	0.03382
ENSG00000255569	TRAV1-1	T cell receptor alpha variable 1-1 [Source:HGNC Symbol;Acc:HGNC:12101]	0.70485	0.00109	0.03382
ENSG00000256591		novel transcript	0.70485	0.00109	0.03382
ENSG00000272512		novel transcript	0.7037	0.00112	0.03451
chr1 [159206700 159259435			0.70279	0.00114	0.03451
ENSG00000127412	TRPV5	transient receptor potential cation channel subfamily V member 5 [Source:HGNC Symbol;Acc:HGNC:3145]	0.70279	0.00114	0.03451
ENSG00000178996	SNX18	sorting nexin 18 [Source:HGNC Symbol;Acc:HGNC:19245]	0.70279	0.00114	0.03451
ENSG00000187961	KLHL17	kelch like family member 17 [Source:HGNC Symbol;Acc:HGNC:24023]	0.70279	0.00114	0.03451
ENSG00000215271	HOMEZ	homeobox and leucine zipper encoding [Source:HGNC Symbol;Acc:HGNC:20164]	0.70279	0.00114	0.03451
ENSG00000250299	MRPS31P4	mitochondrial ribosomal protein S31 pseudogene 4 [Source:HGNC Symbol;Acc:HGNC:42649]	0.70279	0.00114	0.03451
chr9 [83445277 83537682			0.70072	0.0012	0.03531
ENSG00000109065	NAT9	N-acetyltransferase 9 (putative) [Source:HGNC Symbol;Acc:HGNC:23133]	0.70072	0.0012	0.03531
ENSG00000154016	GRAP	GRB2 related adaptor protein [Source:HGNC Symbol;Acc:HGNC:4562]	0.70072	0.0012	0.03531
ENSG00000196632	WNK3	WNK lysine deficient protein kinase 3 [Source:HGNC Symbol;Acc:HGNC:14543]	0.70072	0.0012	0.03531
ENSG00000211804	TRDV1	T cell receptor delta variable 1 [Source:HGNC Symbol;Acc:HGNC:12262]	0.70072	0.0012	0.03531
ENSG00000235248	OR13C1P	olfactory receptor family 13 subfamily C member 1 pseudogene [Source:HGNC Symbol;Acc:HGNC:14699]	0.70072	0.0012	0.03531
ENSG00000242574	HLA-DMB	major histocompatibility complex, class II, DM beta [Source:HGNC Symbol;Acc:HGNC:4935]	0.70072	0.0012	0.03531
ENSG00000275106		novel transcript	0.70072	0.0012	0.03531
ENSG00000163958	ZDHHC19	zinc finger DHHC-type palmitoyltransferase 19 [Source:HGNC Symbol;Acc:HGNC:20713]	0.70005	0.00122	0.03582
chr5 [28932855 29136851			0.69866	0.00126	0.03645
chr6 [33217496 33270774			0.69866	0.00126	0.03645
ENSG00000156299	TIAM1	TIAM Rac1 associated GEF 1 [Source:HGNC Symbol;Acc:HGNC:11805]	0.69866	0.00126	0.03645
ENSG00000185946	RNPC3	RNA binding region (RNP1, RRM) containing 3 [Source:HGNC Symbol;Acc:HGNC:18666]	0.69866	0.00126	0.03645
ENSG00000252010	SCARNA5	small Cajal body-specific RNA 5 [Source:HGNC Symbol;Acc:HGNC:32561]	0.69866	0.00126	0.03645
ENSG00000268403		novel transcript, antisense to ZNF143	0.69866	0.00126	0.03645
ENSG00000269378	ITGB1P1	integrin subunit beta 1 pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:3781]	0.69866	0.00126	0.03645
ENSG00000091536	MYO15A	myosin XVA [Source:HGNC Symbol;Acc:HGNC:7594]	0.69799	0.00128	0.03681
ENSG00000266922		novel transcript, sense intronic to ZNF823	0.69799	0.00128	0.03681
ENSG0000018610	STEEP1	STING1 ER exit protein 1 [Source:HGNC Symbol;Acc:HGNC:26239]	0.69659	0.00132	0.03748
ENSG00000120798	NR2C1	nuclear receptor subfamily 2 group C member 1 [Source:HGNC Symbol;Acc:HGNC:7971]	0.69659	0.00132	0.03748
ENSG00000158481	CD1C	CD1c molecule [Source:HGNC Symbol;Acc:HGNC:1636]	0.69659	0.00132	0.03748
ENSG00000273026		novel transcript, antisense to SLC39A1	0.69659	0.00132	0.03748
ENSG00000133863	TEX15	testis expressed 15, meiosis and synapsis associated [Source:HGNC Symbol;Acc:HGNC:11738]	0.69592	0.00134	0.03797
ENSG00000049541	RFC2	replication factor C subunit 2 [Source:HGNC Symbol;Acc:HGNC:9970]	0.69453	0.00138	0.03854
ENSG00000166707	ZCCHC18	zinc finger CCHC-type containing 18 [Source:HGNC Symbol;Acc:HGNC:32459]	0.69453	0.00138	0.03854
ENSG00000258644	SYNJ2BP-COX16	SYNJ2BP-COX16 readthrough [Source:HGNC Symbol;Acc:HGNC:48350]	0.69453	0.00138	0.03854
ENSG00000259804		novel transcript, antisense to CTCF	0.69453	0.00138	0.03854
ENSG00000276405	TRBV13	T cell receptor beta variable 13 [Source:HGNC Symbol;Acc:HGNC:12188]	0.69453	0.00138	0.03854
chr11 [12922704 13030579			0.69386	0.0014	0.03904
chr10 [115789776 115862566			0.69247	0.00145	0.03963
ENSG00000112782	CLIC5	chloride intracellular channel 5 [Source:HGNC Symbol;Acc:HGNC:13517]	0.69247	0.00145	0.03963
ENSG00000129675	ARHGEF6	Rac/Cdc42 guanine nucleotide exchange factor 6 [Source:HGNC Symbol;Acc:HGNC:685]	0.69247	0.00145	0.03963
ENSG00000138085	ATRAID	all-trans retinoic acid induced differentiation factor [Source:HGNC Symbol;Acc:HGNC:24090]	0.69247	0.00145	0.03963
ENSG00000163755	HPS3	HPS3 biogenesis of lysosomal organelles complex 2 subunit 1 [Source:HGNC Symbol;Acc:HGNC:15597]	0.69247	0.00145	0.03963
ENSG00000166454	ATMIN	ATM interactor [Source:HGNC Symbol;Acc:HGNC:29034]	0.69247	0.00145	0.03963
ENSG00000217527	RPS16P5	ribosomal protein S16 pseudogene 5 [Source:HGNC Symbol;Acc:HGNC:36183]	0.69247	0.00145	0.03963
ENSG00000272933		novel transcript	0.69247	0.00145	0.03963
ENSG00000141428	C18orf21	chromosome 18 open reading frame 21 [Source:HGNC Symbol;Acc:HGNC:28802]	0.6904	0.00152	0.0408
ENSG00000152492	CCDC50	coiled-coil domain containing 50 [Source:HGNC Symbol;Acc:HGNC:18111]	0.6904	0.00152	0.0408
ENSG00000257594	GALNT4	polypeptide N-acetylglucosaminyltransferase 4 [Source:HGNC Symbol;Acc:HGNC:4126]	0.6904	0.00152	0.0408
ENSG00000279571		novel transcript	0.68837	0.00159	0.04195
chr6 [135399683 135502452			0.68834	0.00159	0.04195
chr7 [117752908 117824044			0.68834	0.00159	0.04195
ENSG00000042980	ADAM28	ADAM metalloproteinase domain 28 [Source:HGNC Symbol;Acc:HGNC:206]	0.68834	0.00159	0.04195
ENSG00000072210	ALDH3A2	aldehyde dehydrogenase 3 family member A2 [Source:HGNC Symbol;Acc:HGNC:403]	0.68834	0.00159	0.04195
ENSG00000123453	SARDH	sarcosine dehydrogenase [Source:HGNC Symbol;Acc:HGNC:10536]	0.68834	0.00159	0.04195
ENSG00000235194	PPP1R3E	protein phosphatase 1 regulatory subunit 3E [Source:HGNC Symbol;Acc:HGNC:14943]	0.68834	0.00159	0.04195
ENSG00000256574	OR13A1	olfactory receptor family 13 subfamily A member 1 [Source:HGNC Symbol;Acc:HGNC:14772]	0.68834	0.00159	0.04195
ENSG00000222012		novel transcript, antisense to PTPRN2	0.68766	0.00161	0.04249
ENSG00000171643	S100Z	S100 calcium binding protein Z [Source:HGNC Symbol;Acc:HGNC:30367]	0.68627	0.00166	0.0429
ENSG00000174080	CTSF	cathepsin F [Source:HGNC Symbol;Acc:HGNC:2531]	0.68627	0.00166	0.0429
ENSG00000261670		novel transcript	0.68627	0.00166	0.0429
ENSG00000273008	CSGALNACT2-DT	CSGALNACT2 divergent transcript [Source:HGNC Symbol;Acc:HGNC:55174]	0.68627	0.00166	0.0429
ENSG00000274292		novel transcript	0.68627	0.00166	0.0429
ENSG00000285976		novel protein	0.68627	0.00166	0.0429
chr9 [102532205 102583684			0.68421	0.00174	0.04379
ENSG00000100258	LMF2	lipase maturation factor 2 [Source:HGNC Symbol;Acc:HGNC:25096]	0.68421	0.00174	0.04379
ENSG00000146757	ZNF92	zinc finger protein 92 [Source:HGNC Symbol;Acc:HGNC:13168]	0.68421	0.00174	0.04379
ENSG00000147697	GSDMC	gasdermin C [Source:HGNC Symbol;Acc:HGNC:7151]	0.68421	0.00174	0.04379
ENSG00000187553	CYP26C1	cytochrome P450 family 26 subfamily C member 1 [Source:HGNC Symbol;Acc:HGNC:20577]	0.68421	0.00174	0.04379
ENSG00000231389	HLA-DPA1	major histocompatibility complex, class II, DP alpha 1 [Source:HGNC Symbol;Acc:HGNC:4938]	0.68421	0.00174	0.04379
ENSG00000239857	GET4	guided entry of tail-anchored proteins factor 4 [Source:HGNC Symbol;Acc:HGNC:21690]	0.68421	0.00174	0.04379

ENSG000000267506		novel transcript	0.68421	0.00174	0.04379
ENSG000000273270		novel transcript	0.68421	0.00174	0.04379
ENSG000000275097		novel transcript, overlapping 3'UTR of FAM60A	0.68421	0.00174	0.04379
chr4 + 161425635 161557295			0.68353	0.00176	0.04435
ENSG000000272275		novel transcript	0.68353	0.00176	0.04435
chrX + 97828579 97894019			0.68215	0.00182	0.04494
ENSG000000003509	NDUFAF7	NADH:ubiquinone oxidoreductase complex assembly factor 7 [Source:HGNC Symbol;Acc:HGNC:28816]	0.68215	0.00182	0.04494
ENSG000000188243	COMMD6	COMM domain containing 6 [Source:HGNC Symbol;Acc:HGNC:24015]	0.68215	0.00182	0.04494
ENSG000000237004	ZNRF2P1	zinc and ring finger 2 pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:42792]	0.68215	0.00182	0.04494
ENSG000000259268		novel transcript	0.68215	0.00182	0.04494
ENSG000000163683	SMIM14	small integral membrane protein 14 [Source:HGNC Symbol;Acc:HGNC:27321]	0.68008	0.0019	0.04654
ENSG000000277203			0.68008	0.0019	0.04654
chr15 _ 38992240 39075671			0.67802	0.00199	0.04795
ENSG000000058091	CDK14	cyclin dependent kinase 14 [Source:HGNC Symbol;Acc:HGNC:8883]	0.67802	0.00199	0.04795
ENSG000000162997	PRORS1P	prolyl-4RNA synthetase associated domain containing 1, pseudogene [Source:HGNC Symbol;Acc:HGNC:34379]	0.67802	0.00199	0.04795
ENSG000000163599	CTLA4	cytotoxic T-lymphocyte associated protein 4 [Source:HGNC Symbol;Acc:HGNC:2505]	0.67802	0.00199	0.04795
ENSG000000185278	ZBTB37	zinc finger and BTB domain containing 37 [Source:HGNC Symbol;Acc:HGNC:28365]	0.67802	0.00199	0.04795
ENSG000000267390	KDSR-DT	KDSR divergent transcript [Source:HGNC Symbol;Acc:HGNC:55299]	0.67802	0.00199	0.04795
ENSG000000025039	RRAGD	Ras related GTP binding D [Source:HGNC Symbol;Acc:HGNC:19903]	0.67595	0.00207	0.0487
ENSG000000111237	VPS29	VPS29 retromer complex component [Source:HGNC Symbol;Acc:HGNC:14340]	0.67595	0.00207	0.0487
ENSG000000119760	SUPT7L	SPT7 like, STAGA complex subunit gamma [Source:HGNC Symbol;Acc:HGNC:30632]	0.67595	0.00207	0.0487
ENSG000000135245	HILPDA	hypoxia inducible lipid droplet associated [Source:HGNC Symbol;Acc:HGNC:28859]	0.67595	0.00207	0.0487
ENSG000000169507	SLC38A11	solute carrier family 38 member 11 [Source:HGNC Symbol;Acc:HGNC:26836]	0.67595	0.00207	0.0487
ENSG000000227258	SMIM2-AS1	SMIM2 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:42674]	0.67595	0.00207	0.0487
ENSG000000273893		novel transcript, sense intronic to SLC13A3	0.67595	0.00207	0.0487
Negatively correlated with H1-4					
ensembl_gene_id	gene_name	description	rho	p	adjusted-p
ENSG000000137571	SLCO5A1	solute carrier organic anion transporter family member 5A1 [Source:HGNC Symbol;Acc:HGNC:19046]	-0.96285	1.6E-10	1.9E-06
chrX _ 6806611 68116840			-0.92157	5.6E-08	0.00018
chr15 _ 91959573 92014695			-0.9195	6.9E-08	0.00018
ENSG000000185291			-0.9195	6.9E-08	0.00018
chr14 _ 77402830 77490884	IL3RA	interleukin 3 receptor subunit alpha [Source:HGNC Symbol;Acc:HGNC:6012]	-0.91331	1.2E-07	0.00026
ENSG000000135679	MDM2	MDM2 proto-oncogene [Source:HGNC Symbol;Acc:HGNC:6973]	-0.91125	1.5E-07	0.00027
ENSG000000237440	ZNF737	zinc finger protein 737 [Source:HGNC Symbol;Acc:HGNC:32468]	-0.91125	1.5E-07	0.00027
ENSG000000122025	FLT3	fms related receptor tyrosine kinase 3 [Source:HGNC Symbol;Acc:HGNC:3765]	-0.90299	2.9E-07	0.00046
ENSG000000223519	KIF28P	kinesin family member 28, pseudogene [Source:HGNC Symbol;Acc:HGNC:49205]	-0.90299	2.9E-07	0.00046
ENSG000000007038	PRSS21	serine protease 21 [Source:HGNC Symbol;Acc:HGNC:9485]	-0.90093	3.4E-07	0.00051
ENSG000000153162	BMP6	bone morphogenetic protein 6 [Source:HGNC Symbol;Acc:HGNC:1073]	-0.89267	6.3E-07	0.00079
chr2 _ 43290436 43449539			-0.88954	8.4E-07	0.00079
ENSG000000166348	USP54	ubiquitin specific peptidase 54 [Source:HGNC Symbol;Acc:HGNC:23513]	-0.88954	8.4E-07	0.00079
chr12 _ 92301894 92375172			-0.88648	9.7E-07	0.00079
ENSG000000131724	IL13RA1	interleukin 13 receptor subunit alpha 1 [Source:HGNC Symbol;Acc:HGNC:5974]	-0.88648	9.7E-07	0.00079
ENSG000000096060	FKBP5	FKBP prolyl isomerase 5 [Source:HGNC Symbol;Acc:HGNC:3721]	-0.88442	1.1E-06	0.00081
ENSG000000157514	TSC22D3	TSC22 domain family member 3 [Source:HGNC Symbol;Acc:HGNC:3051]	-0.88442	1.1E-06	0.00081
ENSG000000260490	MYL12BP1	MYL12B pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:51649]	-0.88235	1.3E-06	0.00081
chr5 _ 161907479 162532166			-0.88029	1.4E-06	0.00084
ENSG000000005381	MPO	myeloperoxidase [Source:HGNC Symbol;Acc:HGNC:7218]	-0.88029	1.4E-06	0.00084
ENSG000000076043	REXO2	RNA exonuclease 2 [Source:HGNC Symbol;Acc:HGNC:17851]	-0.88029	1.4E-06	0.00084
ENSG000000119684	MLH3	mutl. homolog 3 [Source:HGNC Symbol;Acc:HGNC:7128]	-0.87822	1.6E-06	0.00089
ENSG000000137822	TUBGCP4	tubulin gamma complex associated protein 4 [Source:HGNC Symbol;Acc:HGNC:16691]	-0.87203	2.4E-06	0.00121
ENSG000000136231	IGF2BP3	insulin like growth factor 2 mRNA binding protein 3 [Source:HGNC Symbol;Acc:HGNC:28868]	-0.86997	2.7E-06	0.00134
chr7 _ 35616561 35671230			-0.86791	3.1E-06	0.00145
ENSG000000118454	ANKRD13C	ankyrin repeat domain 13C [Source:HGNC Symbol;Acc:HGNC:25374]	-0.86171	4.3E-06	0.0019
ENSG000000256533		CCR4 carbon catabolite repression 4-like (S. cerevisiae) (CCR4L) pseudogene	-0.86171	4.3E-06	0.0019
ENSG000000258891		novel transcript, antisense to ZNF410	-0.86171	4.3E-06	0.0019
ENSG000000230587	LINC02580	long intergenic non-protein coding RNA 2580 [Source:HGNC Symbol;Acc:HGNC:53751]	-0.86065	4.6E-06	0.00194
ENSG000000141934	PLPP2	phospholipid phosphatase 2 [Source:HGNC Symbol;Acc:HGNC:9230]	-0.85965	4.8E-06	0.00194
ENSG000000221823	PPP3R1	protein phosphatase 3 regulatory subunit B, alpha [Source:HGNC Symbol;Acc:HGNC:9317]	-0.85965	4.8E-06	0.00194
ENSG000000134882	UBAC2	UBA domain containing 2 [Source:HGNC Symbol;Acc:HGNC:20486]	-0.85759	5.4E-06	0.0021
ENSG000000160145	KALRN	kallirin RhoGEF kinase [Source:HGNC Symbol;Acc:HGNC:4814]	-0.85759	5.4E-06	0.0021
ENSG000000271582		EIF2A eukaryotic translation initiation factor 2A, 65kDa, pseudogene	-0.85552	6E-06	0.00223
ENSG000000127314	RAP1B	RAP1B, member of RAS oncogene family [Source:HGNC Symbol;Acc:HGNC:9857]	-0.85346	6.7E-06	0.00241
ENSG000000134294	SLC38A2	solute carrier family 38 member 2 [Source:HGNC Symbol;Acc:HGNC:13448]	-0.85139	7.4E-06	0.00256
ENSG000000163349	HIPK1	homeodomain interacting protein kinase 1 [Source:HGNC Symbol;Acc:HGNC:19006]	-0.85139	7.4E-06	0.00256
ENSG000000258819	LINC02289	long intergenic non-protein coding RNA 2289 [Source:HGNC Symbol;Acc:HGNC:53205]	-0.85139	7.4E-06	0.00256
chr1 _ 144005314 144074380			-0.84933	8.2E-06	0.00264
ENSG000000074590	NUAK1	NUAK family kinase 1 [Source:HGNC Symbol;Acc:HGNC:14311]	-0.84933	8.2E-06	0.00264
ENSG000000108591	DRG2	developmentally regulated GTP binding protein 2 [Source:HGNC Symbol;Acc:HGNC:3030]	-0.84933	8.2E-06	0.00264
ENSG000000189180	ZNF33A	zinc finger protein 33A [Source:HGNC Symbol;Acc:HGNC:13096]	-0.84933	8.2E-06	0.00264
ENSG000000254718		novel transcript, antisense to PPM1A	-0.84933	8.2E-06	0.00264
ENSG000000233494		pseudogene similar to part of plasminogen (PLG)	-0.84874	8.5E-06	0.00269
ENSG000000207042	RNU6-196P	RNA, U6 small nuclear 196, pseudogene [Source:HGNC Symbol;Acc:HGNC:47159]	-0.84727	9.1E-06	0.00271
ENSG000000236320	SLFN14	schlafen family member 14 [Source:HGNC Symbol;Acc:HGNC:32689]	-0.84727	9.1E-06	0.00271
ENSG000000285884		novel transcript	-0.84727	9.1E-06	0.00271
ENSG000000147434	CHRNA6	cholinergic receptor nicotinic alpha 6 subunit [Source:HGNC Symbol;Acc:HGNC:15963]	-0.84667	9.4E-06	0.00275
ENSG000000122550	KLHL7	kelch like family member 7 [Source:HGNC Symbol;Acc:HGNC:15646]	-0.84314	1.1E-05	0.00301
ENSG000000253409	TRBV7-4	T cell receptor beta variable 7-4 [Source:HGNC Symbol;Acc:HGNC:12238]	-0.84314	1.1E-05	0.00301
ENSG000000198912	C1orf174	chromosome 1 open reading frame 174 [Source:HGNC Symbol;Acc:HGNC:27915]	-0.83901	1.4E-05	0.00345

ENSG00000165121		kinesin family member 27 (KIF27) pseudogene	-0.83695	1.5E-05	0.00368
ENSG00000124196	GTSF1L	gametocyte specific factor 1 like [Source:HGNC Symbol;Acc:HGNC:16198]	-0.83634	1.5E-05	0.00374
ENSG00000104205	SGK3	serum/glucocorticoid regulated kinase family member 3 [Source:HGNC Symbol;Acc:HGNC:10812]	-0.83488	1.6E-05	0.0038
ENSG00000124496	TRERF1	transcriptional regulating factor 1 [Source:HGNC Symbol;Acc:HGNC:18273]	-0.83488	1.6E-05	0.0038
ENSG00000155380	SLC16A1	solute carrier family 16 member 1 [Source:HGNC Symbol;Acc:HGNC:10922]	-0.83488	1.6E-05	0.0038
ENSG00000198108	CHSY3	chondroitin sulfate synthase 3 [Source:HGNC Symbol;Acc:HGNC:24293]	-0.83488	1.6E-05	0.0038
ENSG00000196091	MYBP1	myosin binding protein C1 [Source:HGNC Symbol;Acc:HGNC:7549]	-0.83428	1.7E-05	0.00387
ENSG00000125741	OPA3	outer mitochondrial membrane lipid metabolism regulator OPA3 [Source:HGNC Symbol;Acc:HGNC:8142]	-0.83282	1.8E-05	0.00405
ENSG00000138722	MMRN1	multimerin 1 [Source:HGNC Symbol;Acc:HGNC:7178]	-0.83282	1.8E-05	0.00405
ENSG00000034152	MAP2K3	mitogen-activated protein kinase kinase 3 [Source:HGNC Symbol;Acc:HGNC:6843]	-0.82663	2.3E-05	0.00461
ENSG00000108448	TRIM16L	tripartite motif containing 16 like [Source:HGNC Symbol;Acc:HGNC:32670]	-0.82663	2.3E-05	0.00461
ENSG00000111364	DDX55	DEAD-box helicase 55 [Source:HGNC Symbol;Acc:HGNC:20085]	-0.82663	2.3E-05	0.00461
ENSG00000139697	SBNO1	strawberry notch homolog 1 [Source:HGNC Symbol;Acc:HGNC:22973]	-0.82663	2.3E-05	0.00461
ENSG00000165434	PGM2L1	phosphoglucosyltransferase 2 like 1 [Source:HGNC Symbol;Acc:HGNC:20898]	-0.82663	2.3E-05	0.00461
ENSG00000180914	OCTR	oxytocin receptor [Source:HGNC Symbol;Acc:HGNC:8529]	-0.82663	2.3E-05	0.00461
ENSG00000128591	FLNC	filamin C [Source:HGNC Symbol;Acc:HGNC:3756]	-0.8262	2.4E-05	0.00461
ENSG00000269711		novel protein	-0.8262	2.4E-05	0.00461
ENSG00000101162	TUBB1	tubulin beta 1 class VI [Source:HGNC Symbol;Acc:HGNC:16257]	-0.82456	2.6E-05	0.00475
ENSG00000128512	DOCK4	dedicator of cytokinesis 4 [Source:HGNC Symbol;Acc:HGNC:19192]	-0.82456	2.6E-05	0.00475
ENSG00000156017	CARNMT1	carnosine N-methyltransferase 1 [Source:HGNC Symbol;Acc:HGNC:23435]	-0.82456	2.6E-05	0.00475
ENSG00000182771	GRID1	glutamate ionotropic receptor delta type subunit 1 [Source:HGNC Symbol;Acc:HGNC:4575]	-0.82395	2.6E-05	0.00484
ENSG00000165476	REEP3	receptor accessory protein 3 [Source:HGNC Symbol;Acc:HGNC:23711]	-0.8225	2.8E-05	0.00492
ENSG00000180354	MTURN	maturin, neural progenitor differentiation regulator homolog [Source:HGNC Symbol;Acc:HGNC:25457]	-0.8225	2.8E-05	0.00492
ENSG00000266733	TBC1D29P	TBC1 domain family member 29, pseudogene [Source:HGNC Symbol;Acc:HGNC:24509]	-0.8225	2.8E-05	0.00492
ENSG00000267243		novel transcript	-0.8225	2.8E-05	0.00492
ENSG00000279457	WASH9P	WAS protein family homolog 9, pseudogene [Source:HGNC Symbol;Acc:HGNC:53981]	-0.8225	2.8E-05	0.00492
ENSG00000088038	CNOT3	CCR4-NOT transcription complex subunit 3 [Source:HGNC Symbol;Acc:HGNC:7879]	-0.82043	3E-05	0.00495
ENSG00000119681	LTBP2	latent transforming growth factor beta binding protein 2 [Source:HGNC Symbol;Acc:HGNC:6715]	-0.82043	3E-05	0.00495
ENSG00000148773	MKI67	marker of proliferation Ki-67 [Source:HGNC Symbol;Acc:HGNC:7107]	-0.82043	3E-05	0.00495
ENSG00000160298	C21orf58	chromosome 21 open reading frame 58 [Source:HGNC Symbol;Acc:HGNC:1300]	-0.82043	3E-05	0.00495
ENSG00000165244	ZNF367	zinc finger protein 367 [Source:HGNC Symbol;Acc:HGNC:18320]	-0.82043	3E-05	0.00495
ENSG00000247363		novel transcript	-0.82043	3E-05	0.00495
ENSG00000280164		novel transcript	-0.82043	3E-05	0.00495
ENSG00000099991	CABIN1	calcineurin binding protein 1 [Source:HGNC Symbol;Acc:HGNC:24187]	-0.81837	3.3E-05	0.00495
ENSG00000101298	SNPH	syntrophin [Source:HGNC Symbol;Acc:HGNC:15931]	-0.81837	3.3E-05	0.00495
ENSG00000110218	PANX1	pannexin 1 [Source:HGNC Symbol;Acc:HGNC:8599]	-0.81837	3.3E-05	0.00495
ENSG00000121057	AKAP1	A-kinase anchoring protein 1 [Source:HGNC Symbol;Acc:HGNC:367]	-0.81837	3.3E-05	0.00495
ENSG00000127481	UBR4	ubiquitin protein ligase E3 component n-recogin 4 [Source:HGNC Symbol;Acc:HGNC:30313]	-0.81837	3.3E-05	0.00495
ENSG00000138798	EGF	epidermal growth factor [Source:HGNC Symbol;Acc:HGNC:3229]	-0.81837	3.3E-05	0.00495
ENSG00000203811	H3C14	H3 clustered histone 14 [Source:HGNC Symbol;Acc:HGNC:20503]	-0.81837	3.3E-05	0.00495
ENSG00000270179		novel transcript	-0.81837	3.3E-05	0.00495
ENSG00000077463	SIRT6	sirtuin 6 [Source:HGNC Symbol;Acc:HGNC:14934]	-0.81631	3.6E-05	0.00518
ENSG00000225975	LINC01534	long intergenic non-protein coding RNA 1534 [Source:HGNC Symbol;Acc:HGNC:51281]	-0.81631	3.6E-05	0.00518
ENSG00000260693		novel transcript	-0.81631	3.6E-05	0.00518
ENSG00000005961	ITGA2B	integrin subunit alpha 2b [Source:HGNC Symbol;Acc:HGNC:6138]	-0.81424	3.9E-05	0.00534
ENSG00000108960	MMD	monocyte to macrophage differentiation associated [Source:HGNC Symbol;Acc:HGNC:7153]	-0.81424	3.9E-05	0.00534
ENSG00000138696	BMPIR1B	bone morphogenetic protein receptor type 1B [Source:HGNC Symbol;Acc:HGNC:1077]	-0.81424	3.9E-05	0.00534
ENSG00000160208	RRP1B	ribosomal RNA processing 1B [Source:HGNC Symbol;Acc:HGNC:23818]	-0.81424	3.9E-05	0.00534
ENSG00000164889	SLC4A2	solute carrier family 4 member 2 [Source:HGNC Symbol;Acc:HGNC:11028]	-0.81424	3.9E-05	0.00534
ENSG00000084070	SMAP2	small ArfGAP2 [Source:HGNC Symbol;Acc:HGNC:25082]	-0.81218	4.2E-05	0.00563
ENSG00000181751	MAC1R	macrophage immunometabolism regulator [Source:HGNC Symbol;Acc:HGNC:25052]	-0.81218	4.2E-05	0.00563
ENSG00000240265		H1 histone family, member O, oocyte-specific (H1FOO) pseudogene	-0.81218	4.2E-05	0.00563
ENSG00000259291	ZNF710-AS1	ZNF710 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:53141]	-0.81218	4.2E-05	0.00563
ENSG00000007545	CRAMP1	cramped chromatin regulator homolog 1 [Source:HGNC Symbol;Acc:HGNC:14122]	-0.81011	4.6E-05	0.0059
ENSG00000068796	KIF2A	kinesin family member 2A [Source:HGNC Symbol;Acc:HGNC:6318]	-0.81011	4.6E-05	0.0059
ENSG00000134644	PUM1	pumilio RNA binding family member 1 [Source:HGNC Symbol;Acc:HGNC:14957]	-0.81011	4.6E-05	0.0059
ENSG00000157764	BRAF	B-Raf proto-oncogene, serine/threonine kinase [Source:HGNC Symbol;Acc:HGNC:1097]	-0.81011	4.6E-05	0.0059
ENSG00000163964	PIGX	phosphatidylinositol glycan anchor biosynthesis class X [Source:HGNC Symbol;Acc:HGNC:26046]	-0.81011	4.6E-05	0.0059
chr2-[169666629]169726974			-0.80805	5E-05	0.00616
chr2-[3139254]3191203			-0.80805	5E-05	0.00616
ENSG00000114166	KAT2B	lysine acetyltransferase 2B [Source:HGNC Symbol;Acc:HGNC:8638]	-0.80805	5E-05	0.00616
ENSG00000128245	YWHAH	tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein eta [Source:HGNC Symbol;Acc:HGNC:12853]	-0.80805	5E-05	0.00616
ENSG00000279333		novel transcript	-0.80682	5.2E-05	0.00639
chr10-[59257983]59752743			-0.80599	5.4E-05	0.00639
ENSG00000112576	CCND3	cyclin D3 [Source:HGNC Symbol;Acc:HGNC:1585]	-0.80599	5.4E-05	0.00639
ENSG00000125629	INSIG2	insulin induced gene 2 [Source:HGNC Symbol;Acc:HGNC:20452]	-0.80599	5.4E-05	0.00639
ENSG00000162695	SLC30A7	solute carrier family 30 member 7 [Source:HGNC Symbol;Acc:HGNC:19306]	-0.80599	5.4E-05	0.00639
ENSG00000166963	MAP1A	microtubule associated protein 1A [Source:HGNC Symbol;Acc:HGNC:6835]	-0.80599	5.4E-05	0.00639
ENSG00000280798	LINC00294	long intergenic non-protein coding RNA 294 [Source:HGNC Symbol;Acc:HGNC:27456]	-0.80599	5.4E-05	0.00639
ENSG00000237356		novel transcript	-0.80537	5.5E-05	0.00651
ENSG00000284999		novel transcript	-0.80518	5.5E-05	0.00653
chr3-[28606312]28799586			-0.80392	5.8E-05	0.00658
ENSG00000147145	LPAR4	lysophosphatidic acid receptor 4 [Source:HGNC Symbol;Acc:HGNC:4478]	-0.80392	5.8E-05	0.00658
ENSG00000164074	ABHD18	abhydrolase domain containing 18 [Source:HGNC Symbol;Acc:HGNC:26111]	-0.80392	5.8E-05	0.00658
ENSG00000171992	SYNPO	synaptopodin [Source:HGNC Symbol;Acc:HGNC:30672]	-0.80392	5.8E-05	0.00658
ENSG00000203760	CENPW	centromere protein W [Source:HGNC Symbol;Acc:HGNC:21488]	-0.80392	5.8E-05	0.00658
ENSG00000237273	RSL24D1P8	ribosomal L24 domain containing 1 pseudogene 8 [Source:HGNC Symbol;Acc:HGNC:37873]	-0.80392	5.8E-05	0.00658
ENSG00000277726			-0.80392	5.8E-05	0.00658
ENSG00000104957	CCDC130	coiled-coil domain containing 130 [Source:HGNC Symbol;Acc:HGNC:28118]	-0.80186	6.3E-05	0.00682
ENSG00000171943	SRGAP2C	SLIT-ROBO Rho GTPase activating protein 2C [Source:HGNC Symbol;Acc:HGNC:30584]	-0.80186	6.3E-05	0.00682
ENSG00000196230	TUBB	tubulin beta class I [Source:HGNC Symbol;Acc:HGNC:20778]	-0.80186	6.3E-05	0.00682

ENSG00000230551		novel transcript	-0.80186	6.3E-05	0.00682
ENSG00000250765	SEPTIN14P5	septin 14 pseudogene 5 [Source:HGNC Symbol;Acc:HGNC:51689]	-0.80186	6.3E-05	0.00682
ENSG00000266946	MRPL37P1	mitochondrial ribosomal protein L37 pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:31003]	-0.80186	6.3E-05	0.00682
ENSG00000258484	SPESP1	sperm equatorial segment protein 1 [Source:HGNC Symbol;Acc:HGNC:15570]	-0.80124	6.4E-05	0.00694
ENSG00000100024	UPB1	beta-ureidopropionase 1 [Source:HGNC Symbol;Acc:HGNC:16297]	-0.79979	6.8E-05	0.00706
ENSG00000116138	DNAJC16	DnaJ heat shock protein family (Hsp40) member C16 [Source:HGNC Symbol;Acc:HGNC:29157]	-0.79979	6.8E-05	0.00706
ENSG00000124102	PI3	peptidase inhibitor 3 [Source:HGNC Symbol;Acc:HGNC:8947]	-0.79979	6.8E-05	0.00706
ENSG00000133101	CCNA1	cyclin A1 [Source:HGNC Symbol;Acc:HGNC:15777]	-0.79979	6.8E-05	0.00706
ENSG00000158113	LRRC43	leucine rich repeat containing 43 [Source:HGNC Symbol;Acc:HGNC:28562]	-0.79979	6.8E-05	0.00706
ENSG00000166483	WEE1	WEE1 G2 checkpoint kinase [Source:HGNC Symbol;Acc:HGNC:12761]	-0.79979	6.8E-05	0.00706
ENSG00000171914	TLN2	talin 2 [Source:HGNC Symbol;Acc:HGNC:15447]	-0.79979	6.8E-05	0.00706
chr9 [71155784 71238023			-0.79773	7.3E-05	0.00729
ENSG00000116285	ERRF1	ERBB receptor feedback inhibitor 1 [Source:HGNC Symbol;Acc:HGNC:18185]	-0.79773	7.3E-05	0.00729
ENSG00000156639	ZFAND3	zinc finger AN1-type containing 3 [Source:HGNC Symbol;Acc:HGNC:18019]	-0.79773	7.3E-05	0.00729
ENSG00000162722	TRIM58	tripartite motif containing 58 [Source:HGNC Symbol;Acc:HGNC:24150]	-0.79773	7.3E-05	0.00729
ENSG00000182253	SYNM	synemin [Source:HGNC Symbol;Acc:HGNC:24466]	-0.79773	7.3E-05	0.00729
ENSG00000183850	ZNF730	zinc finger protein 730 [Source:HGNC Symbol;Acc:HGNC:32470]	-0.79773	7.3E-05	0.00729
ENSG00000239839	DEFA3	defensin alpha 3 [Source:HGNC Symbol;Acc:HGNC:2762]	-0.79773	7.3E-05	0.00729
ENSG00000279673		TEC	-0.79773	7.3E-05	0.00729
ENSG00000119862	LGALS1	galectin like [Source:HGNC Symbol;Acc:HGNC:25012]	-0.79567	7.9E-05	0.00773
ENSG00000169962	TAS1R3	taste 1 receptor member 3 [Source:HGNC Symbol;Acc:HGNC:15661]	-0.79567	7.9E-05	0.00773
ENSG00000285382		novel protein	-0.79565	7.9E-05	0.00773
ENSG00000173991	TCAP	titin-cap [Source:HGNC Symbol;Acc:HGNC:11610]	-0.7936	8.5E-05	0.00805
ENSG00000269743	SLC25A53	solute carrier family 25 member 53 [Source:HGNC Symbol;Acc:HGNC:31894]	-0.7936	8.5E-05	0.00805
ENSG00000066827	ZFAT	zinc finger and AT-hook domain containing [Source:HGNC Symbol;Acc:HGNC:19899]	-0.79154	9.1E-05	0.00848
ENSG00000242539		novel transcript	-0.78947	9.8E-05	0.00884
ENSG00000124469	CEACAM8	CEA cell adhesion molecule 8 [Source:HGNC Symbol;Acc:HGNC:1820]	-0.78741	0.00011	0.00917
ENSG00000136240	KDELRL2	KDEL endoplasmic reticulum protein retention receptor 2 [Source:HGNC Symbol;Acc:HGNC:6305]	-0.78741	0.00011	0.00917
ENSG00000166922	SCG5	secretogranin V [Source:HGNC Symbol;Acc:HGNC:10816]	-0.78741	0.00011	0.00917
ENSG00000198959	TGM2	transglutaminase 2 [Source:HGNC Symbol;Acc:HGNC:11778]	-0.78741	0.00011	0.00917
chr6 + 74545518 74606906			-0.78535	0.00011	0.00943
ENSG00000086232	EIF2AK1	eukaryotic translation initiation factor 2 alpha kinase 1 [Source:HGNC Symbol;Acc:HGNC:24921]	-0.78535	0.00011	0.00943
ENSG00000127483	HP1BP3	heterochromatin protein 1 binding protein 3 [Source:HGNC Symbol;Acc:HGNC:24973]	-0.78535	0.00011	0.00943
ENSG00000010278	CD9	CD9 molecule [Source:HGNC Symbol;Acc:HGNC:1709]	-0.78328	0.00012	0.00979
ENSG00000034053	APBA2	amyloid beta precursor protein binding family A member 2 [Source:HGNC Symbol;Acc:HGNC:579]	-0.78328	0.00012	0.00979
ENSG00000164180	TMEM161B	transmembrane protein 161B [Source:HGNC Symbol;Acc:HGNC:28483]	-0.78328	0.00012	0.00979
ENSG00000248871	TNFSF12-TNFSF1	TNFSF12-TNFSF13 readthrough [Source:HGNC Symbol;Acc:HGNC:33537]	-0.78321	0.00012	0.00979
ENSG00000065559	MAP2K4	mitogen-activated protein kinase kinase 4 [Source:HGNC Symbol;Acc:HGNC:6844]	-0.78122	0.00013	0.01018
ENSG00000102837	OLFML4	olfactomedin 4 [Source:HGNC Symbol;Acc:HGNC:17190]	-0.78122	0.00013	0.01018
ENSG00000182324	KCNJ14	potassium inwardly rectifying channel subfamily J member 14 [Source:HGNC Symbol;Acc:HGNC:6260]	-0.78122	0.00013	0.01018
ENSG00000197417	SHPK	sedoheptulokinase [Source:HGNC Symbol;Acc:HGNC:1492]	-0.78122	0.00013	0.01018
ENSG00000273599		novel transcript, antisense to CTBP2	-0.78122	0.00013	0.01018
ENSG00000109790	KLHL5	kelch like family member 5 [Source:HGNC Symbol;Acc:HGNC:6356]	-0.77915	0.00014	0.01072
ENSG00000184216	IRAK1	interleukin 1 receptor associated kinase 1 [Source:HGNC Symbol;Acc:HGNC:6112]	-0.77915	0.00014	0.01072
ENSG00000204291	COL15A1	collagen type XV alpha 1 chain [Source:HGNC Symbol;Acc:HGNC:2192]	-0.77842	0.00014	0.01091
ENSG00000035928	RFC1	replication factor C subunit 1 [Source:HGNC Symbol;Acc:HGNC:9969]	-0.77709	0.00015	0.01107
ENSG00000162616	DNAJB4	DnaJ heat shock protein family (Hsp40) member B4 [Source:HGNC Symbol;Acc:HGNC:14886]	-0.77709	0.00015	0.01107
ENSG00000198743	SLCSA3	solute carrier family 5 member 3 [Source:HGNC Symbol;Acc:HGNC:11038]	-0.77709	0.00015	0.01107
ENSG00000204131	NHSL2	NHSL like 2 [Source:HGNC Symbol;Acc:HGNC:33737]	-0.77709	0.00015	0.01107
ENSG00000213699	SLC35F6	solute carrier family 35 member F6 [Source:HGNC Symbol;Acc:HGNC:26055]	-0.77709	0.00015	0.01107
ENSG00000134070	IRAK2	interleukin 1 receptor associated kinase 2 [Source:HGNC Symbol;Acc:HGNC:6113]	-0.77503	0.00016	0.01137
ENSG00000135956	TMEM127	transmembrane protein 127 [Source:HGNC Symbol;Acc:HGNC:26038]	-0.77503	0.00016	0.01137
ENSG00000143443	C1orf56	chromosome 1 open reading frame 56 [Source:HGNC Symbol;Acc:HGNC:26045]	-0.77503	0.00016	0.01137
ENSG00000178691	SUZ12	SUZ12 polycomb repressive complex 2 subunit [Source:HGNC Symbol;Acc:HGNC:17101]	-0.77503	0.00016	0.01137
ENSG00000198948	MFAP3L	microfibril associated protein 3 like [Source:HGNC Symbol;Acc:HGNC:29083]	-0.77503	0.00016	0.01137
ENSG00000050555	LAMC3	laminin subunit gamma 3 [Source:HGNC Symbol;Acc:HGNC:6494]	-0.77491	0.00016	0.01138
ENSG00000197111	PCBP2	poly(rC) binding protein 2 [Source:HGNC Symbol;Acc:HGNC:8648]	-0.77296	0.00017	0.01189
ENSG00000265442	MIR3941	microRNA 3941 [Source:HGNC Symbol;Acc:HGNC:38949]	-0.77296	0.00017	0.01189
ENSG00000147099	HDAC8	histone deacetylase 8 [Source:HGNC Symbol;Acc:HGNC:13315]	-0.7709	0.00018	0.01244
ENSG00000179532	DNHD1	dynein heavy chain domain 1 [Source:HGNC Symbol;Acc:HGNC:26532]	-0.7709	0.00018	0.01244
ENSG00000182378	PLCXD1	phosphatidylinositol specific phospholipase C X domain containing 1 [Source:HGNC Symbol;Acc:HGNC:23148]	-0.7709	0.00018	0.01244
ENSG00000229820		DnaJ (Hsp40) homolog, subfamily C member 8 (DNAJC8) pseudogene	-0.7709	0.00018	0.01244
ENSG00000266718		novel transcript, antisense MYO1D	-0.76883	0.00019	0.01297
chr2 [114567701 114648605			-0.76883	0.00019	0.01297
ENSG00000051382	PIK3CB	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit beta [Source:HGNC Symbol;Acc:HGNC:8976]	-0.76883	0.00019	0.01297
ENSG00000114473	IQCG	IQ motif containing G [Source:HGNC Symbol;Acc:HGNC:25251]	-0.76883	0.00019	0.01297
ENSG00000118816	CCNI	cyclin I [Source:HGNC Symbol;Acc:HGNC:1595]	-0.76883	0.00019	0.01297
ENSG00000166147	FBN1	fibrillin 1 [Source:HGNC Symbol;Acc:HGNC:3603]	-0.76883	0.00019	0.01297
ENSG00000168803	ADAL	adenosine deaminase like [Source:HGNC Symbol;Acc:HGNC:31853]	-0.76883	0.00019	0.01297
ENSG00000168874	ATOX8	atonal bHLH transcription factor 8 [Source:HGNC Symbol;Acc:HGNC:24126]	-0.76883	0.00019	0.01297
ENSG00000005100	DHX33	DEAH-box helicase 33 [Source:HGNC Symbol;Acc:HGNC:16718]	-0.76677	0.00021	0.01323
ENSG00000047597	XK	X-linked Kx blood group [Source:HGNC Symbol;Acc:HGNC:12811]	-0.76677	0.00021	0.01323
ENSG00000143595	AQP10	aquaporin 10 [Source:HGNC Symbol;Acc:HGNC:16029]	-0.76677	0.00021	0.01323
ENSG00000165568	AKR1E2	aldo-keto reductase family 1 member E2 [Source:HGNC Symbol;Acc:HGNC:23437]	-0.76677	0.00021	0.01323
ENSG00000167136	ENDOG	endonuclease G [Source:HGNC Symbol;Acc:HGNC:3346]	-0.76677	0.00021	0.01323
ENSG00000174171		novel transcript, antisense to SPTBN5	-0.76677	0.00021	0.01323
ENSG00000174844	DNAH12	dynein axonemal heavy chain 12 [Source:HGNC Symbol;Acc:HGNC:2943]	-0.76677	0.00021	0.01323
ENSG00000187172	BAGE2	BAGE family member 2 [Source:HGNC Symbol;Acc:HGNC:15723]	-0.76677	0.00021	0.01323
ENSG00000187672	ERC2	ELKS/RAB6-interacting/CAST family member 2 [Source:HGNC Symbol;Acc:HGNC:31922]	-0.76677	0.00021	0.01323
ENSG00000196756	SNHG17	small nucleolar RNA host gene 17 [Source:HGNC Symbol;Acc:HGNC:48600]	-0.76677	0.00021	0.01323
ENSG00000235530		novel transcript, antisense to TMEM11	-0.76677	0.00021	0.01323

ENSG00000241889		dullard homolog (Xenopus laevis) (DULLARD) pseudogene	-0.76677	0.00021	0.01323
ENSG00000154928	EPHB1	EPH receptor B1 [Source:HGNC Symbol;Acc:HGNC:3392]	-0.76471	0.00022	0.01383
ENSG00000157978	LDLRAP1	low density lipoprotein receptor adaptor protein 1 [Source:HGNC Symbol;Acc:HGNC:18640]	-0.76471	0.00022	0.01383
ENSG00000200913	SNORD46	small nucleolar RNA, C/D box 46 [Source:HGNC Symbol;Acc:HGNC:10186]	-0.76471	0.00022	0.01383
ENSG00000279803		TEC	-0.76471	0.00022	0.01383
ENSG00000267376	ATP5MGF6	ATP synthase membrane subunit g pseudogene 6 [Source:HGNC Symbol;Acc:HGNC:38168]	-0.76407	0.00022	0.01406
ENSG00000022840	RNF10	ring finger protein 10 [Source:HGNC Symbol;Acc:HGNC:10055]	-0.76264	0.00023	0.01434
ENSG00000106144	CASP2	caspase 2 [Source:HGNC Symbol;Acc:HGNC:1503]	-0.76264	0.00023	0.01434
ENSG00000110422	HIPK3	homeodomain interacting protein kinase 3 [Source:HGNC Symbol;Acc:HGNC:4915]	-0.76264	0.00023	0.01434
ENSG00000151929	BAG3	BAG cochaperone 3 [Source:HGNC Symbol;Acc:HGNC:939]	-0.76264	0.00023	0.01434
ENSG00000231967		novel pseudogene	-0.76264	0.00023	0.01434
ENSG00000251411		actin related protein 2/3 complex, subunit 1A, 41kDa (ARPC1A) pseudogene	-0.76264	0.00023	0.01434
chr4 - 37526876 37592421			-0.76058	0.00025	0.01458
chr7 + 30413577 30478433			-0.76058	0.00025	0.01458
ENSG00000101188	NTSR1	neurotensin receptor 1 [Source:HGNC Symbol;Acc:HGNC:8039]	-0.76058	0.00025	0.01458
ENSG00000109184	DCUN1D4	defective in cullin neddylation 1 domain containing 4 [Source:HGNC Symbol;Acc:HGNC:28998]	-0.76058	0.00025	0.01458
ENSG00000112561	TFEB	transcription factor EB [Source:HGNC Symbol;Acc:HGNC:11753]	-0.76058	0.00025	0.01458
ENSG00000123933	MXD4	MAX dimerization protein 4 [Source:HGNC Symbol;Acc:HGNC:13906]	-0.76058	0.00025	0.01458
ENSG00000137462	TLR2	toll like receptor 2 [Source:HGNC Symbol;Acc:HGNC:11848]	-0.76058	0.00025	0.01458
ENSG00000165185	KIAA1958	KIAA1958 [Source:HGNC Symbol;Acc:HGNC:23427]	-0.76058	0.00025	0.01458
ENSG00000174032	SLC25A30	solute carrier family 25 member 30 [Source:HGNC Symbol;Acc:HGNC:27371]	-0.76058	0.00025	0.01458
ENSG00000185722	ANKFY1	ankyrin repeat and FYVE domain containing 1 [Source:HGNC Symbol;Acc:HGNC:20763]	-0.76058	0.00025	0.01458
ENSG00000246560	UBE2D3-AS1	UBE2D3 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:54095]	-0.76058	0.00025	0.01458
ENSG00000250574		sulfiredoxin 1 homolog (S. cerevisiae) (SRXN1) pseudogene	-0.76058	0.00025	0.01458
ENSG00000131375	CAPN7	calpain 7 [Source:HGNC Symbol;Acc:HGNC:1484]	-0.75851	0.00026	0.01513
ENSG00000164808	SPIDR	scaffold protein involved in DNA repair [Source:HGNC Symbol;Acc:HGNC:28971]	-0.75851	0.00026	0.01513
ENSG00000196182	STK40	serine/threonine kinase 40 [Source:HGNC Symbol;Acc:HGNC:21373]	-0.75851	0.00026	0.01513
ENSG00000198492	YTHDF2	YTH N6-methyladenosine RNA binding protein 2 [Source:HGNC Symbol;Acc:HGNC:31675]	-0.75851	0.00026	0.01513
ENSG00000149781	FERMT3	fermitin family member 3 [Source:HGNC Symbol;Acc:HGNC:23151]	-0.75645	0.00028	0.01578
ENSG00000162511	LAPTM5	lysosomal protein transmembrane 5 [Source:HGNC Symbol;Acc:HGNC:29612]	-0.75645	0.00028	0.01578
ENSG00000166171	DCPD	deleted in primary ciliary dyskinesia homolog (mouse) [Source:HGNC Symbol;Acc:HGNC:24542]	-0.75645	0.00028	0.01578
ENSG00000188234	AGAP4	ArfGAP with GTPase domain, ankyrin repeat and PH domain 4 [Source:HGNC Symbol;Acc:HGNC:23459]	-0.75645	0.00028	0.01578
ENSG00000257954		FGFR1 oncogene partner 2 (FGFR1OP2) pseudogene	-0.75439	0.0003	0.01622
chr1 - 207957114 208059882			-0.75439	0.0003	0.01622
chr20 + 25676371 25743693			-0.75439	0.0003	0.01622
ENSG00000070182	SPTB	spectrin beta, erythrocytic [Source:HGNC Symbol;Acc:HGNC:11274]	-0.75439	0.0003	0.01622
ENSG00000115267	IFIH1	interferon induced with helicase C domain 1 [Source:HGNC Symbol;Acc:HGNC:18873]	-0.75439	0.0003	0.01622
ENSG00000128590	DNAJB9	DnaJ heat shock protein family (Hsp40) member B9 [Source:HGNC Symbol;Acc:HGNC:6968]	-0.75439	0.0003	0.01622
ENSG00000128731	HERC2	HECT and RLD domain containing E3 ubiquitin protein ligase 2 [Source:HGNC Symbol;Acc:HGNC:4868]	-0.75439	0.0003	0.01622
ENSG00000165406	MARCHF8	membrane associated ring-CH-type finger 8 [Source:HGNC Symbol;Acc:HGNC:23356]	-0.75439	0.0003	0.01622
ENSG00000170629	DPY19L2P2	DPY19L2 pseudogene 2 [Source:HGNC Symbol;Acc:HGNC:21764]	-0.75439	0.0003	0.01622
ENSG00000171552	BCL2L1	BCL2 like 1 [Source:HGNC Symbol;Acc:HGNC:992]	-0.75439	0.0003	0.01622
ENSG00000249456		novel transcript, sense overlapping ZRANB1	-0.75439	0.0003	0.01622
ENSG00000280347		TEC	-0.75439	0.0003	0.01622
ENSG00000119280	C1orf198	chromosome 1 open reading frame 198 [Source:HGNC Symbol;Acc:HGNC:25900]	-0.75232	0.00032	0.01707
ENSG00000158480	SPATA2	spermatogenesis associated 2 [Source:HGNC Symbol;Acc:HGNC:14681]	-0.75232	0.00032	0.01707
ENSG00000283052	LINC02456	long intergenic non-protein coding RNA 2456 [Source:HGNC Symbol;Acc:HGNC:53389]	-0.75168	0.00032	0.01735
chr12 - 81098493 81183646			-0.75026	0.00034	0.01771
ENSG00000115942	ORC2	origin recognition complex subunit 2 [Source:HGNC Symbol;Acc:HGNC:8488]	-0.75026	0.00034	0.01771
ENSG00000116922	C1orf109	chromosome 1 open reading frame 109 [Source:HGNC Symbol;Acc:HGNC:26039]	-0.75026	0.00034	0.01771
ENSG00000142546	NOSIP	nitric oxide synthase interacting protein [Source:HGNC Symbol;Acc:HGNC:17946]	-0.75026	0.00034	0.01771
ENSG00000164109	MAD2L1	mitotic arrest deficient 2 like 1 [Source:HGNC Symbol;Acc:HGNC:6763]	-0.75026	0.00034	0.01771
ENSG00000227388		novel transcript	-0.75026	0.00034	0.01771
chr11 - 79654581 79794703			-0.74961	0.00034	0.018
ENSG00000102796	DHRS12	dehydrogenase/reductase 12 [Source:HGNC Symbol;Acc:HGNC:25832]	-0.74819	0.00036	0.01849
ENSG00000168209	DDIT4	DNA damage inducible transcript 4 [Source:HGNC Symbol;Acc:HGNC:24944]	-0.74819	0.00036	0.01849
ENSG00000183508	TENT5C	terminal nucleotidyltransferase 5C [Source:HGNC Symbol;Acc:HGNC:24712]	-0.74819	0.00036	0.01849
chr18 - 65066339 65172769			-0.74613	0.00038	0.0193
ENSG00000136842	TMOD1	tropomodulin 1 [Source:HGNC Symbol;Acc:HGNC:11871]	-0.74613	0.00038	0.0193
ENSG00000167996	FTH1	ferritin heavy chain 1 [Source:HGNC Symbol;Acc:HGNC:3976]	-0.74613	0.00038	0.0193
ENSG00000197223	C1D	C1D nuclear receptor corepressor [Source:HGNC Symbol;Acc:HGNC:29911]	-0.74613	0.00038	0.0193
ENSG00000091947	TMEM101	transmembrane protein 101 [Source:HGNC Symbol;Acc:HGNC:28653]	-0.74407	0.0004	0.01989
ENSG00000101199	ARFGAP1	ADP ribosylation factor GTPase activating protein 1 [Source:HGNC Symbol;Acc:HGNC:15852]	-0.74407	0.0004	0.01989
ENSG00000102981	PARD6A	par-6 family cell polarity regulator alpha [Source:HGNC Symbol;Acc:HGNC:15943]	-0.74407	0.0004	0.01989
ENSG00000107789	MINPP1	multiple inositol-polyphosphate phosphatase 1 [Source:HGNC Symbol;Acc:HGNC:7102]	-0.74407	0.0004	0.01989
ENSG00000116668	SWT1	SWT1 RNA endoribonuclease homolog [Source:HGNC Symbol;Acc:HGNC:16785]	-0.74407	0.0004	0.01989
ENSG00000127328	RAB3IP	RAB3A interacting protein [Source:HGNC Symbol;Acc:HGNC:16508]	-0.74407	0.0004	0.01989
ENSG00000174197	MGA	MAX dimerization protein MGA [Source:HGNC Symbol;Acc:HGNC:14010]	-0.74407	0.0004	0.01989
ENSG00000285710		novel transcript, antisense to DDX19A	-0.74342	0.00041	0.02021
ENSG00000187980	PLA2G2C	phospholipase A2 group IIC [Source:HGNC Symbol;Acc:HGNC:9032]	-0.74277	0.00041	0.02053
chr9 _ 79122333 79208904			-0.742	0.00042	0.02054
ENSG00000163453	IGFBP7	insulin like growth factor binding protein 7 [Source:HGNC Symbol;Acc:HGNC:5476]	-0.742	0.00042	0.02054
ENSG00000169925	BRD3	bromodomain containing 3 [Source:HGNC Symbol;Acc:HGNC:1104]	-0.742	0.00042	0.02054
ENSG00000169989	TIGD4	tigger transposable element derived 4 [Source:HGNC Symbol;Acc:HGNC:18335]	-0.742	0.00042	0.02054
ENSG00000196747	H2AC13	H2A clustered histone 13 [Source:HGNC Symbol;Acc:HGNC:4725]	-0.742	0.00042	0.02054
ENSG00000239932	RN7SL606P	RNA, 7SL, cytoplasmic 606, pseudogene [Source:HGNC Symbol;Acc:HGNC:46622]	-0.742	0.00042	0.02054
chr8 _ 88553947 88746161			-0.74135	0.00043	0.02074
ENSG00000224116	INHBA-AS1	INHBA antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:40303]	-0.74135	0.00043	0.02074
ENSG00000241666		novel transcript	-0.74135	0.00043	0.02074
chr5 _ 156131271 156321325			-0.73994	0.00045	0.02105
ENSG00000109906	ZBTB16	zinc finger and BTB domain containing 16 [Source:HGNC Symbol;Acc:HGNC:12930]	-0.73994	0.00045	0.02105

ENSG00000147274	RBMX	RNA binding motif protein X-linked [Source:HGNC Symbol;Acc:HGNC:9910]	-0.73994	0.00045	0.02105
ENSG00000164983	TMEM65	transmembrane protein 65 [Source:HGNC Symbol;Acc:HGNC:25203]	-0.73994	0.00045	0.02105
ENSG00000227500	SCAMP4	secretory carrier membrane protein 4 [Source:HGNC Symbol;Acc:HGNC:30385]	-0.73994	0.00045	0.02105
ENSG00000257225		novel transcript, antisense to PRICKLE1	-0.73994	0.00045	0.02105
ENSG00000258796		ribosomal L24 domain containing 1 (RSL24D1) pseudogene	-0.73994	0.00045	0.02105
ENSG00000261758	STAG1-DT	STAG1 divergent transcript [Source:HGNC Symbol;Acc:HGNC:55350]	-0.73994	0.00045	0.02105
ENSG00000255655		novel transcript, antisense to MYO1H	-0.73929	0.00046	0.02138
chr18 144337512 44392055			-0.73787	0.00047	0.02158
ENSG00000064989	CALCRL	calcitonin receptor like receptor [Source:HGNC Symbol;Acc:HGNC:16709]	-0.73787	0.00047	0.02158
ENSG00000110801	PSMD9	proteasome 26S subunit, non-ATPase 9 [Source:HGNC Symbol;Acc:HGNC:9567]	-0.73787	0.00047	0.02158
ENSG00000112144	CILK1	clioogenesis associated kinase 1 [Source:HGNC Symbol;Acc:HGNC:21219]	-0.73787	0.00047	0.02158
ENSG00000130770	IL11RA	interleukin 11 receptor subunit alpha [Source:HGNC Symbol;Acc:HGNC:5967]	-0.73787	0.00047	0.02158
ENSG00000183011	NAA38	N-alpha-acetyltransferase 38, NatC auxiliary subunit [Source:HGNC Symbol;Acc:HGNC:28212]	-0.73787	0.00047	0.02158
ENSG00000233806	LINC01237	long intergenic non-protein coding RNA 1237 [Source:HGNC Symbol;Acc:HGNC:49793]	-0.73787	0.00047	0.02158
ENSG00000243156	MICAL3	microtubule associated monooxygenase, calponin and LIM domain containing 3 [Source:HGNC Symbol;Acc:HGNC:24694]	-0.73787	0.00047	0.02158
ENSG00000243290	IGKV1-12	immunoglobulin kappa variable 1-12 [Source:HGNC Symbol;Acc:HGNC:5730]	-0.73787	0.00047	0.02158
ENSG00000274259	SYNGAP1-AS1	SYNGAP1 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:53831]	-0.73787	0.00047	0.02158
ENSG00000280195		novel transcript, antisense to RPL10	-0.73787	0.00047	0.02158
chr18 171336816 71529060			-0.73581	0.0005	0.02234
ENSG00000155893	PXYLP1	2-phosphoxylase phosphatase 1 [Source:HGNC Symbol;Acc:HGNC:26303]	-0.73581	0.0005	0.02234
ENSG00000169519	METTL15	methyltransferase like 15 [Source:HGNC Symbol;Acc:HGNC:26606]	-0.73581	0.0005	0.02234
ENSG00000187244	BCAM	basal cell adhesion molecule (Lutheran blood group) [Source:HGNC Symbol;Acc:HGNC:6722]	-0.73581	0.0005	0.02234
ENSG00000250303	LINC02762	long intergenic non-protein coding RNA 2762 [Source:HGNC Symbol;Acc:HGNC:27443]	-0.73581	0.0005	0.02234
ENSG00000267640		novel zinc finger protein pseudogene	-0.73581	0.0005	0.02234
ENSG00000272370		novel transcript	-0.73581	0.0005	0.02234
ENSG00000280206		novel transcript	-0.73581	0.0005	0.02234
chr15 166184374 66235689			-0.73375	0.00053	0.02308
chr3 1137724326 137780757			-0.73375	0.00053	0.02308
ENSG00000049656	CLPTM1L	CLPTM1 like [Source:HGNC Symbol;Acc:HGNC:24308]	-0.73375	0.00053	0.02308
ENSG00000101255	TRIB3	tribbles pseudokinase 3 [Source:HGNC Symbol;Acc:HGNC:16228]	-0.73375	0.00053	0.02308
ENSG00000141556	TBCD	tubulin folding cofactor D [Source:HGNC Symbol;Acc:HGNC:11581]	-0.73375	0.00053	0.02308
ENSG00000154736	ADAMTSS	ADAM metalloproteinase with thrombospondin type 1 motif 5 [Source:HGNC Symbol;Acc:HGNC:221]	-0.73375	0.00053	0.02308
ENSG00000173811	EIF1	eukaryotic translation initiation factor 1 [Source:HGNC Symbol;Acc:HGNC:3249]	-0.73375	0.00053	0.02308
ENSG00000254986	DPP3	dipeptidyl peptidase 3 [Source:HGNC Symbol;Acc:HGNC:3008]	-0.73375	0.00053	0.02308
ENSG00000270118		novel transcript	-0.73309	0.00054	0.02344
ENSG00000130227	XPO7	exportin 7 [Source:HGNC Symbol;Acc:HGNC:14108]	-0.73168	0.00056	0.02377
ENSG00000130787	HIP1R	huntingtin interacting protein 1 related [Source:HGNC Symbol;Acc:HGNC:18415]	-0.73168	0.00056	0.02377
ENSG00000134470	IL15RA	interleukin 15 receptor subunit alpha [Source:HGNC Symbol;Acc:HGNC:5978]	-0.73168	0.00056	0.02377
ENSG00000164070	HSPA4L	heat shock protein family A (Hsp70) member 4 like [Source:HGNC Symbol;Acc:HGNC:17041]	-0.73168	0.00056	0.02377
ENSG00000167378	IRGQ	immunity related GTPase Q [Source:HGNC Symbol;Acc:HGNC:24868]	-0.73168	0.00056	0.02377
ENSG00000178425	NT5DC1	5'-nucleotidase domain containing 1 [Source:HGNC Symbol;Acc:HGNC:21556]	-0.73168	0.00056	0.02377
ENSG00000184292	TACSTD2	tumor associated calcium signal transducer 2 [Source:HGNC Symbol;Acc:HGNC:11530]	-0.73168	0.00056	0.02377
ENSG00000243508	DNAJB6P7	DNAJB6 pseudogene 7 [Source:HGNC Symbol;Acc:HGNC:54760]	-0.73168	0.00056	0.02377
ENSG00000280166		TEC	-0.73168	0.00056	0.02377
chr6 189794879 89855593			-0.72962	0.00059	0.02452
ENSG00000078399	HOXA9	homeobox A9 [Source:HGNC Symbol;Acc:HGNC:5109]	-0.72962	0.00059	0.02452
ENSG00000181652	ATG9B	autophagy related 9B [Source:HGNC Symbol;Acc:HGNC:21899]	-0.72962	0.00059	0.02452
ENSG00000187726	DNAJB13	DnaJ heat shock protein family (Hsp40) member B13 [Source:HGNC Symbol;Acc:HGNC:30718]	-0.72926	0.00059	0.0247
ENSG00000254061		RNA binding motif protein 4 (RBM4) pseudogene	-0.72896	0.0006	0.02481
chr9 1137365305 137525576			-0.72755	0.00062	0.02482
ENSG00000068878	PSME4	proteasome activator subunit 4 [Source:HGNC Symbol;Acc:HGNC:20635]	-0.72755	0.00062	0.02482
ENSG00000100346	CACNA1I	calcium voltage-gated channel subunit alpha1 I [Source:HGNC Symbol;Acc:HGNC:1396]	-0.72755	0.00062	0.02482
ENSG00000131747	TOP2A	DNA topoisomerase II alpha [Source:HGNC Symbol;Acc:HGNC:11989]	-0.72755	0.00062	0.02482
ENSG00000135249	RINT1	RAD50 interactor 1 [Source:HGNC Symbol;Acc:HGNC:21876]	-0.72755	0.00062	0.02482
ENSG00000143420	ENSA	endosulfine alpha [Source:HGNC Symbol;Acc:HGNC:3360]	-0.72755	0.00062	0.02482
ENSG00000198909	MAP3K3	mitogen-activated protein kinase kinase kinase 3 [Source:HGNC Symbol;Acc:HGNC:6855]	-0.72755	0.00062	0.02482
ENSG00000204424	LY6G6F	lymphocyte antigen 6 family member G6F [Source:HGNC Symbol;Acc:HGNC:13933]	-0.72755	0.00062	0.02482
ENSG00000206560	ANKRD28	ankyrin repeat domain 28 [Source:HGNC Symbol;Acc:HGNC:29024]	-0.72755	0.00062	0.02482
ENSG00000214018	RRM2P3	ribonucleotide reductase M2 polypeptide pseudogene 3 [Source:HGNC Symbol;Acc:HGNC:10455]	-0.72755	0.00062	0.02482
ENSG00000223561		novel transcript	-0.72755	0.00062	0.02482
ENSG00000266127	ZNF415P1	zinc finger protein 415 pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:49869]	-0.72755	0.00062	0.02482
ENSG00000267228		novel transcript	-0.72755	0.00062	0.02482
ENSG00000280353		TEC	-0.72755	0.00062	0.02482
ENSG00000281852	LINC00891	long intergenic non-protein coding RNA 891 [Source:HGNC Symbol;Acc:HGNC:48577]	-0.72755	0.00062	0.02482
chrX 108241551 108431951			-0.72549	0.00066	0.02558
ENSG00000153046	CDYL	chromodomain Y like [Source:HGNC Symbol;Acc:HGNC:1811]	-0.72549	0.00066	0.02558
ENSG00000163092	XIRP2	xin actin binding repeat containing 2 [Source:HGNC Symbol;Acc:HGNC:14303]	-0.72549	0.00066	0.02558
ENSG00000164181	ELOVL7	ELOVL fatty acid elongase 7 [Source:HGNC Symbol;Acc:HGNC:26292]	-0.72549	0.00066	0.02558
ENSG00000173868	PHOSPHO1	phosphoethanolamine/phosphocholine phosphatase 1 [Source:HGNC Symbol;Acc:HGNC:16815]	-0.72549	0.00066	0.02558
ENSG00000249855	EEF1A1P19	eukaryotic translation elongation factor 1 alpha 1 pseudogene 19 [Source:HGNC Symbol;Acc:HGNC:37892]	-0.72549	0.00066	0.02558
ENSG00000277662		novel transcript, sense intronic to MTRF1	-0.72549	0.00066	0.02558
ENSG00000002016	RAD52	RAD52 homolog, DNA repair protein [Source:HGNC Symbol;Acc:HGNC:9824]	-0.72343	0.00069	0.02657
ENSG00000023909	GCLM	glutamate-cysteine ligase modifier subunit [Source:HGNC Symbol;Acc:HGNC:4312]	-0.72343	0.00069	0.02657
ENSG00000040199	PHLPP2	PH domain and leucine rich repeat protein phosphatase 2 [Source:HGNC Symbol;Acc:HGNC:29149]	-0.72343	0.00069	0.02657
ENSG00000136861	CDK5RAP2	CDK5 regulatory subunit associated protein 2 [Source:HGNC Symbol;Acc:HGNC:18672]	-0.72343	0.00069	0.02657
ENSG00000146707	POMZP3	POM121 and ZP3 fusion [Source:HGNC Symbol;Acc:HGNC:9203]	-0.72343	0.00069	0.02657
ENSG00000154556	SORBS2	sorbin and SH3 domain containing 2 [Source:HGNC Symbol;Acc:HGNC:24098]	-0.72343	0.00069	0.02657
ENSG00000259630	FABP5P9	fatty acid binding protein 5 pseudogene 9 [Source:HGNC Symbol;Acc:HGNC:31064]	-0.72343	0.00069	0.02657
ENSG00000215030	RPL13P12	ribosomal protein L13 pseudogene 12 [Source:HGNC Symbol;Acc:HGNC:35701]	-0.72319	0.0007	0.02668
chrX 127011377 27192323			-0.72136	0.00073	0.0272
ENSG00000060558	GNA15	G protein subunit alpha 15 [Source:HGNC Symbol;Acc:HGNC:4383]	-0.72136	0.00073	0.0272

ENSG00000101928	MOSPD1	motile sperm domain containing 1 [Source:HGNC Symbol;Acc:HGNC:25235]	-0.72136	0.00073	0.0272
ENSG00000127666	TICAM1	toll like receptor adaptor molecule 1 [Source:HGNC Symbol;Acc:HGNC:18348]	-0.72136	0.00073	0.0272
ENSG00000142583	SLC2A5	solute carrier family 2 member 5 [Source:HGNC Symbol;Acc:HGNC:11010]	-0.72136	0.00073	0.0272
ENSG00000166086	JAM3	junctional adhesion molecule 3 [Source:HGNC Symbol;Acc:HGNC:15532]	-0.72136	0.00073	0.0272
ENSG00000185245	GP1BA	glycoprotein 1b platelet subunit alpha [Source:HGNC Symbol;Acc:HGNC:4439]	-0.72136	0.00073	0.0272
ENSG00000229989	MIR181A1HG	MIR181A1 host gene [Source:HGNC Symbol;Acc:HGNC:48659]	-0.72136	0.00073	0.0272
ENSG00000260105	AOC4P	amine oxidase copper containing 4, pseudogene [Source:HGNC Symbol;Acc:HGNC:48869]	-0.72096	0.00074	0.02739
chr18 [60139742 60190656			-0.7193	0.00077	0.02786
ENSG00000128891	CCDC32	coiled-coil domain containing 32 [Source:HGNC Symbol;Acc:HGNC:28295]	-0.7193	0.00077	0.02786
ENSG00000136478	TEX2	testis expressed 2 [Source:HGNC Symbol;Acc:HGNC:30884]	-0.7193	0.00077	0.02786
ENSG00000137801	THBS1	thrombospondin 1 [Source:HGNC Symbol;Acc:HGNC:11785]	-0.7193	0.00077	0.02786
ENSG00000153071	DAB2	DAB adaptor protein 2 [Source:HGNC Symbol;Acc:HGNC:2662]	-0.7193	0.00077	0.02786
ENSG00000182224	CYB5D1	cytochrome b5 domain containing 1 [Source:HGNC Symbol;Acc:HGNC:26516]	-0.7193	0.00077	0.02786
chr12 [+ 77965089 78142976			-0.71723	0.00081	0.02884
chr2 [231388338 231479819			-0.71723	0.00081	0.02884
ENSG00000147162	OGT	O-linked N-acetylglucosamine (GlcNAc) transferase [Source:HGNC Symbol;Acc:HGNC:8127]	-0.71723	0.00081	0.02884
ENSG00000163155	LYSMD1	LysM domain containing 1 [Source:HGNC Symbol;Acc:HGNC:32070]	-0.71723	0.00081	0.02884
ENSG00000163681	SLMAP	sarcolemma associated protein [Source:HGNC Symbol;Acc:HGNC:16643]	-0.71723	0.00081	0.02884
ENSG00000166091	CMTM5	CKLF like MARVEL transmembrane domain containing 5 [Source:HGNC Symbol;Acc:HGNC:19176]	-0.71723	0.00081	0.02884
ENSG00000248746	ACTN3	actinin alpha 3 [Source:HGNC Symbol;Acc:HGNC:165]	-0.71723	0.00081	0.02884
ENSG00000070087	PFN2	profilin 2 [Source:HGNC Symbol;Acc:HGNC:8882]	-0.71517	0.00085	0.02986
ENSG00000071051	NCK2	NCK adaptor protein 2 [Source:HGNC Symbol;Acc:HGNC:7665]	-0.71517	0.00085	0.02986
ENSG00000159761	C16orf86	chromosome 16 open reading frame 86 [Source:HGNC Symbol;Acc:HGNC:33755]	-0.71517	0.00085	0.02986
ENSG00000168386	FILIP1L	filamin A interacting protein 1 like [Source:HGNC Symbol;Acc:HGNC:24589]	-0.71517	0.00085	0.02986
ENSG00000170035	UBE2E3	ubiquitin conjugating enzyme E2 E3 [Source:HGNC Symbol;Acc:HGNC:12479]	-0.71517	0.00085	0.02986
ENSG00000260032	NORAD	non-coding RNA activated by DNA damage [Source:HGNC Symbol;Acc:HGNC:44311]	-0.71517	0.00085	0.02986
ENSG00000261060		novel transcript, sense overlapping TDRD5	-0.71517	0.00085	0.02986
ENSG00000168306	ACOX2	acyl-CoA oxidase 2 [Source:HGNC Symbol;Acc:HGNC:120]	-0.71474	0.00086	0.03013
ENSG00000065308	TRAM2	translocation associated membrane protein 2 [Source:HGNC Symbol;Acc:HGNC:16855]	-0.71311	0.00089	0.03085
ENSG00000175567	UCP2	uncoupling protein 2 [Source:HGNC Symbol;Acc:HGNC:12518]	-0.71311	0.00089	0.03085
ENSG00000246363	LINC02458	long intergenic non-protein coding RNA 2458 [Source:HGNC Symbol;Acc:HGNC:53394]	-0.71311	0.00089	0.03085
ENSG00000242856	VN1R105P	vomeronaal 1 receptor 105 pseudogene [Source:HGNC Symbol;Acc:HGNC:37428]	-0.71268	0.0009	0.03104
ENSG00000258650	HSBP1P1	heat shock factor binding protein 1 pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:20053]	-0.71268	0.0009	0.03104
ENSG00000226450	CYP2D8P	cytochrome P450 family 2 subfamily D member 8, pseudogene [Source:HGNC Symbol;Acc:HGNC:2628]	-0.71244	0.00091	0.03109
ENSG00000005249	PRKAR2B	protein kinase cAMP-dependent type II regulatory subunit beta [Source:HGNC Symbol;Acc:HGNC:9392]	-0.71104	0.00094	0.03139
ENSG00000102786	INTS6	integrator complex subunit 6 [Source:HGNC Symbol;Acc:HGNC:14879]	-0.71104	0.00094	0.03139
ENSG00000143164	DCAF6	DDB1 and CUL4 associated factor 6 [Source:HGNC Symbol;Acc:HGNC:30002]	-0.71104	0.00094	0.03139
ENSG00000146416	AIG1	androgen induced 1 [Source:HGNC Symbol;Acc:HGNC:21607]	-0.71104	0.00094	0.03139
ENSG00000164002	EXO5	exonuclease 5 [Source:HGNC Symbol;Acc:HGNC:26115]	-0.71104	0.00094	0.03139
ENSG00000167034	NKX3-1	NK3 homeobox 1 [Source:HGNC Symbol;Acc:HGNC:7838]	-0.71104	0.00094	0.03139
ENSG00000167895	TMC8	transmembrane channel like 8 [Source:HGNC Symbol;Acc:HGNC:20474]	-0.71104	0.00094	0.03139
ENSG00000221829	FANCG	FA complementation group G [Source:HGNC Symbol;Acc:HGNC:3588]	-0.71104	0.00094	0.03139
ENSG00000254450	ALG9-IT1	ALG9 intronic transcript 1 [Source:HGNC Symbol;Acc:HGNC:41409]	-0.71104	0.00094	0.03139
ENSG00000255526	NEDD8-MDP1	NEDD8-MDP1 readthrough [Source:HGNC Symbol;Acc:HGNC:39551]	-0.71104	0.00094	0.03139
ENSG00000263917		novel transcript	-0.71104	0.00094	0.03139
ENSG00000271853		novel transcript	-0.71104	0.00094	0.03139
chr12 [112744061 112820241			-0.70898	0.00099	0.03224
ENSG00000101337	TM9SF4	transmembrane 9 superfamily member 4 [Source:HGNC Symbol;Acc:HGNC:30797]	-0.70898	0.00099	0.03224
ENSG00000127804	METTL16	methyltransferase like 16 [Source:HGNC Symbol;Acc:HGNC:28484]	-0.70898	0.00099	0.03224
ENSG00000138381	ASNSD1	asparagine synthetase domain containing 1 [Source:HGNC Symbol;Acc:HGNC:24910]	-0.70898	0.00099	0.03224
ENSG00000229178		novel transcript	-0.70898	0.00099	0.03224
ENSG00000268516	ZNF8-DT	ZNF8 divergent transcript [Source:HGNC Symbol;Acc:HGNC:55280]	-0.70898	0.00099	0.03224
ENSG00000271452		novel transcript, sense intronic to MRPL19	-0.70898	0.00099	0.03224
ENSG00000122367	LDB3	LIM domain binding 3 [Source:HGNC Symbol;Acc:HGNC:15710]	-0.70831	0.001	0.03274
chr4 [115465843 115520219			-0.70691	0.00104	0.03281
chr5 [130701924 130754450			-0.70691	0.00104	0.03281
ENSG00000075785	RAB7A	RAB7A, member RAS oncogene family [Source:HGNC Symbol;Acc:HGNC:9788]	-0.70691	0.00104	0.03281
ENSG00000101193	GID8	GID complex subunit 8 homolog [Source:HGNC Symbol;Acc:HGNC:15857]	-0.70691	0.00104	0.03281
ENSG00000136068	FLNB	filamin B [Source:HGNC Symbol;Acc:HGNC:3755]	-0.70691	0.00104	0.03281
ENSG00000138755	CXCL9	C-X-C motif chemokine ligand 9 [Source:HGNC Symbol;Acc:HGNC:7098]	-0.70691	0.00104	0.03281
ENSG00000164185	ZNF474	zinc finger protein 474 [Source:HGNC Symbol;Acc:HGNC:23245]	-0.70691	0.00104	0.03281
ENSG00000167880	EVPL	envoplakin [Source:HGNC Symbol;Acc:HGNC:3503]	-0.70691	0.00104	0.03281
ENSG00000214253	FIS1	fission, mitochondrial 1 [Source:HGNC Symbol;Acc:HGNC:21689]	-0.70691	0.00104	0.03281
ENSG00000274512	TBC1D3L	TBC1 domain family member 3L [Source:HGNC Symbol;Acc:HGNC:51246]	-0.70691	0.00104	0.03281
ENSG00000115266	APC2	APC regulator of WNT signaling pathway 2 [Source:HGNC Symbol;Acc:HGNC:24036]	-0.70625	0.00105	0.03329
chr6 [85094762 85318808			-0.70485	0.00109	0.03382
ENSG00000124784	RIOK1	RIO kinase 1 [Source:HGNC Symbol;Acc:HGNC:18656]	-0.70485	0.00109	0.03382
ENSG00000128989	ARPP19	cAMP regulated phosphoprotein 19 [Source:HGNC Symbol;Acc:HGNC:16967]	-0.70485	0.00109	0.03382
ENSG00000266274	RN7SL138P	RNA, 7SL, cytoplasmic 138, pseudogene [Source:HGNC Symbol;Acc:HGNC:46154]	-0.70427	0.0011	0.03424
chrX [+ 151143265 151307801			-0.70418	0.00111	0.03427
chr5 [95090586 95158696			-0.70279	0.00114	0.03451
ENSG00000105887	MTPN	myotrophin [Source:HGNC Symbol;Acc:HGNC:15667]	-0.70279	0.00114	0.03451
ENSG00000113140	SPARC	secreted protein acidic and cysteine rich [Source:HGNC Symbol;Acc:HGNC:11219]	-0.70279	0.00114	0.03451
ENSG00000117523	PRRC2C	proline rich coiled-coil 2C [Source:HGNC Symbol;Acc:HGNC:24903]	-0.70279	0.00114	0.03451
ENSG00000122203	KIAA1191	KIAA1191 [Source:HGNC Symbol;Acc:HGNC:29209]	-0.70279	0.00114	0.03451
ENSG00000158856	DMTN	dematin actin binding protein [Source:HGNC Symbol;Acc:HGNC:3382]	-0.70279	0.00114	0.03451
ENSG00000163882	POLR2H	RNA polymerase II, I and III subunit H [Source:HGNC Symbol;Acc:HGNC:9195]	-0.70279	0.00114	0.03451
ENSG00000166169	POLL	DNA polymerase lambda [Source:HGNC Symbol;Acc:HGNC:9184]	-0.70279	0.00114	0.03451
ENSG00000175061	SNHG29	small nucleolar RNA host gene 29 [Source:HGNC Symbol;Acc:HGNC:28619]	-0.70279	0.00114	0.03451
ENSG00000198718	TOGARAM1	TOG array regulator of axonemal microtubules 1 [Source:HGNC Symbol;Acc:HGNC:19959]	-0.70279	0.00114	0.03451
ENSG00000224420	ADM5	adrenomedullin 5 (putative) [Source:HGNC Symbol;Acc:HGNC:27293]	-0.70279	0.00114	0.03451

ENSG00000217601	LIX1L	limb and CNS expressed 1 like [Source:HGNC Symbol;Acc:HGNC:28715]	-0.70279	0.00114	0.03451
ENSG00000277481	PKD1L3	polycystin 1 like 3, transient receptor potential channel interacting [Source:HGNC Symbol;Acc:HGNC:21716]	-0.70279	0.00114	0.03451
ENSG00000145358	DDIT4L	DNA damage inducible transcript 4 like [Source:HGNC Symbol;Acc:HGNC:30555]	-0.70212	0.00116	0.03496
ENSG00000267293		U3 small nucleolar RNA-associated protein 18 homolog, pseudogene	-0.70212	0.00116	0.03496
ENSG00000105939	ZC3HAV1	zinc finger CCH-type containing, antiviral 1 [Source:HGNC Symbol;Acc:HGNC:23721]	-0.70072	0.0012	0.03531
ENSG00000120696	KBTBD7	kelch repeat and BTB domain containing 7 [Source:HGNC Symbol;Acc:HGNC:25266]	-0.70072	0.0012	0.03531
ENSG00000121104	FAM117A	family with sequence similarity 117 member A [Source:HGNC Symbol;Acc:HGNC:24179]	-0.70072	0.0012	0.03531
ENSG00000133193	FAM104A	family with sequence similarity 104 member A [Source:HGNC Symbol;Acc:HGNC:25918]	-0.70072	0.0012	0.03531
ENSG00000139197	PEX5	peroxisomal biogenesis factor 5 [Source:HGNC Symbol;Acc:HGNC:9719]	-0.70072	0.0012	0.03531
ENSG00000166135	HIF1AN	hypoxia inducible factor 1 subunit alpha inhibitor [Source:HGNC Symbol;Acc:HGNC:17113]	-0.70072	0.0012	0.03531
ENSG00000221949	LINC01465	long intergenic non-protein coding RNA 1465 [Source:HGNC Symbol;Acc:HGNC:26364]	-0.70072	0.0012	0.03531
ENSG00000249307	LINC01088	long intergenic non-protein coding RNA 1088 [Source:HGNC Symbol;Acc:HGNC:49148]	-0.70072	0.0012	0.03531
ENSG00000255397	NASPP1	nuclear autoantigenic sperm protein pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:29910]	-0.70072	0.0012	0.03531
ENSG00000269952		novel transcript, sense intronic to CREM	-0.70072	0.0012	0.03531
ENSG00000181555	SETD2	SET domain containing 2, histone lysine methyltransferase [Source:HGNC Symbol;Acc:HGNC:18420]	-0.69866	0.00126	0.03645
ENSG00000233892	PAIP1P1	poly(A) binding protein interacting protein 1 pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:18240]	-0.69866	0.00126	0.03645
ENSG00000267337	LINC01478	long intergenic non-protein coding RNA 1478 [Source:HGNC Symbol;Acc:HGNC:51121]	-0.69866	0.00126	0.03645
ENSG00000269973		novel transcript	-0.69866	0.00126	0.03645
ENSG00000271964		novel transcript, antisense to RFTN1	-0.69866	0.00126	0.03645
chr5 + 28809150 28876078			-0.69814	0.00127	0.03681
ENSG00000265787	CYP4F35P	cytochrome P450 family 4 subfamily F member 35, pseudogene [Source:HGNC Symbol;Acc:HGNC:39954]	-0.69799	0.00128	0.03681
ENSG00000204610	TRIM15	tripartite motif containing 15 [Source:HGNC Symbol;Acc:HGNC:16284]	-0.69796	0.00128	0.03681
chr2 + 118900190 118972600			-0.69659	0.00132	0.03748
ENSG00000110442	COMMMD9	COMM domain containing 9 [Source:HGNC Symbol;Acc:HGNC:25014]	-0.69659	0.00132	0.03748
ENSG00000147394	ZNF185	zinc finger protein 185 with LIM domain [Source:HGNC Symbol;Acc:HGNC:12976]	-0.69659	0.00132	0.03748
ENSG00000166436	TRIM66	tripartite motif containing 66 [Source:HGNC Symbol;Acc:HGNC:29005]	-0.69659	0.00132	0.03748
ENSG00000235145	RPSAP16	ribosomal protein SA pseudogene 16 [Source:HGNC Symbol;Acc:HGNC:35478]	-0.69659	0.00132	0.03748
ENSG00000259207	ITGB3	integrin subunit beta 3 [Source:HGNC Symbol;Acc:HGNC:6156]	-0.69659	0.00132	0.03748
ENSG00000276952		novel transcript, antisense to PYGB	-0.69659	0.00132	0.03748
ENSG00000262187		centrosomal protein 192 (CEP192) pseudogene	-0.69592	0.00134	0.03797
chr2 + 64374995 64540547			-0.69453	0.00138	0.03854
ENSG00000086548	CEACAM6	CEA cell adhesion molecule 6 [Source:HGNC Symbol;Acc:HGNC:1818]	-0.69453	0.00138	0.03854
ENSG00000104361	NIPAL2	NIPA like domain containing 2 [Source:HGNC Symbol;Acc:HGNC:25854]	-0.69453	0.00138	0.03854
ENSG00000158290	CUL4B	cullin 4B [Source:HGNC Symbol;Acc:HGNC:2555]	-0.69453	0.00138	0.03854
ENSG00000175826	CTDNBP1	CTD nuclear envelope phosphatase 1 [Source:HGNC Symbol;Acc:HGNC:19085]	-0.69453	0.00138	0.03854
ENSG00000203705	TATDN3	TatD DNase domain containing 3 [Source:HGNC Symbol;Acc:HGNC:27010]	-0.69453	0.00138	0.03854
ENSG00000254788	CKLF-CMTM1	CKLF-CMTM1 readthrough [Source:HGNC Symbol;Acc:HGNC:39977]	-0.69453	0.00138	0.03854
ENSG00000274808	TBC1D3B	TBC1 domain family member 3B [Source:HGNC Symbol;Acc:HGNC:27011]	-0.69453	0.00138	0.03854
ENSG00000278637	H4C1	H4 clustered histone 1 [Source:HGNC Symbol;Acc:HGNC:4781]	-0.69453	0.00138	0.03854
ENSG00000123500	COL10A1	collagen type X alpha 1 chain [Source:HGNC Symbol;Acc:HGNC:2185]	-0.69386	0.0014	0.03904
ENSG00000225067	RPL23AP2	ribosomal protein L23a pseudogene 2 [Source:HGNC Symbol;Acc:HGNC:10319]	-0.69376	0.00141	0.03908
ENSG00000153066	TXNDC11	thioredoxin domain containing 11 [Source:HGNC Symbol;Acc:HGNC:28030]	-0.69247	0.00145	0.03963
ENSG00000162929	KIAA1841	KIAA1841 [Source:HGNC Symbol;Acc:HGNC:29387]	-0.69247	0.00145	0.03963
ENSG00000180776	ZDHHC20	zinc finger DHHC-type palmitoyltransferase 20 [Source:HGNC Symbol;Acc:HGNC:20749]	-0.69247	0.00145	0.03963
ENSG00000244005	NFS1	NFS1 cysteine desulfurase [Source:HGNC Symbol;Acc:HGNC:15910]	-0.69247	0.00145	0.03963
ENSG00000265972	TXNIP	thioredoxin interacting protein [Source:HGNC Symbol;Acc:HGNC:16952]	-0.69247	0.00145	0.03963
ENSG00000263724	DLGAP1-AS3	DLGAP1 antisense RNA 3 [Source:HGNC Symbol;Acc:HGNC:27317]	-0.69179	0.00147	0.04019
ENSG00000261914	RPL23AP4	ribosomal protein L23a pseudogene 4 [Source:HGNC Symbol;Acc:HGNC:51575]	-0.69116	0.00149	0.04071
ENSG00000278139	P3R3URF-PIK3R3	P3R3URF-PIK3R3 readthrough [Source:HGNC Symbol;Acc:HGNC:54999]	-0.69112	0.00149	0.04071
ENSG00000004700	RECQL	RecQ like helicase [Source:HGNC Symbol;Acc:HGNC:9948]	-0.6904	0.00152	0.0408
ENSG00000054793	ATP9A	ATPase phospholipid transporting 9A (putative) [Source:HGNC Symbol;Acc:HGNC:13540]	-0.6904	0.00152	0.0408
ENSG00000132128	LRRC41	leucine rich repeat containing 41 [Source:HGNC Symbol;Acc:HGNC:16917]	-0.6904	0.00152	0.0408
ENSG00000197299	BLM	BLM RecQ like helicase [Source:HGNC Symbol;Acc:HGNC:1058]	-0.6904	0.00152	0.0408
ENSG00000198336	MYL4	myosin light chain 4 [Source:HGNC Symbol;Acc:HGNC:7585]	-0.6904	0.00152	0.0408
ENSG00000198876	DCAF12	DDB1 and CUL4 associated factor 12 [Source:HGNC Symbol;Acc:HGNC:19911]	-0.6904	0.00152	0.0408
ENSG00000224578	HNRNPA1P48	heterogeneous nuclear ribonucleoprotein A1 pseudogene 48 [Source:HGNC Symbol;Acc:HGNC:48778]	-0.6904	0.00152	0.0408
ENSG00000256347	OR8R1P	olfactory receptor family 8 subfamily R member 1 pseudogene [Source:HGNC Symbol;Acc:HGNC:15318]	-0.6904	0.00152	0.0408
ENSG00000263335		novel transcript, antisense to MYH11	-0.6904	0.00152	0.0408
ENSG00000089916	GPATCH2L	G-patch domain containing 2 like [Source:HGNC Symbol;Acc:HGNC:20210]	-0.68834	0.00159	0.04195
ENSG00000132024	CC2D1A	coiled-coil and C2 domain containing 1A [Source:HGNC Symbol;Acc:HGNC:30237]	-0.68834	0.00159	0.04195
ENSG00000145990	GOD1	glucose-fructose oxidoreductase domain containing 1 [Source:HGNC Symbol;Acc:HGNC:21096]	-0.68834	0.00159	0.04195
ENSG00000159592	GPBP1L1	GC-rich promoter binding protein 1 like 1 [Source:HGNC Symbol;Acc:HGNC:28843]	-0.68834	0.00159	0.04195
ENSG00000165138	ANKS6	ankyrin repeat and sterile alpha motif domain containing 6 [Source:HGNC Symbol;Acc:HGNC:26724]	-0.68834	0.00159	0.04195
ENSG00000239219		novel transcript, antisense to SEC62	-0.68834	0.00159	0.04195
ENSG00000249961	TERB1	telomere repeat binding bouquet formation protein 1 [Source:HGNC Symbol;Acc:HGNC:26675]	-0.68834	0.00159	0.04195
ENSG00000272918		novel transcript, antisense to MLL5	-0.68834	0.00159	0.04195
ENSG00000275445		novel transcript, antisense to C16orf52	-0.68777	0.00161	0.04244
chr8 + 71698777 71884470			-0.68627	0.00166	0.0429
ENSG00000081181	ARG2	arginase 2 [Source:HGNC Symbol;Acc:HGNC:664]	-0.68627	0.00166	0.0429
ENSG00000082701	GSK3B	glycogen synthase kinase 3 beta [Source:HGNC Symbol;Acc:HGNC:4617]	-0.68627	0.00166	0.0429
ENSG00000105993	DNAJB6	DnaJ heat shock protein family (Hsp40) member B6 [Source:HGNC Symbol;Acc:HGNC:14888]	-0.68627	0.00166	0.0429
ENSG00000119138	KLF9	Kruppel like factor 9 [Source:HGNC Symbol;Acc:HGNC:1123]	-0.68627	0.00166	0.0429
ENSG00000157404	KIT	KIT proto-oncogene, receptor tyrosine kinase [Source:HGNC Symbol;Acc:HGNC:6342]	-0.68627	0.00166	0.0429
ENSG00000158169	FANCC	FA complementation group C [Source:HGNC Symbol;Acc:HGNC:3584]	-0.68627	0.00166	0.0429
ENSG00000168785	TSpan5	tetraspanin 5 [Source:HGNC Symbol;Acc:HGNC:17753]	-0.68627	0.00166	0.0429
ENSG00000213066	CEP43	centrosomal protein 43 [Source:HGNC Symbol;Acc:HGNC:17012]	-0.68627	0.00166	0.0429
ENSG00000223704	LINC01422	long intergenic non-protein coding RNA 1422 [Source:HGNC Symbol;Acc:HGNC:50728]	-0.68627	0.00166	0.0429
ENSG00000249863		synaptotagmin binding, cytoplasmic RNA interacting protein (SYNCRIP) pseudogene	-0.68627	0.00166	0.0429
ENSG00000260711		novel transcript, intronic to CATSPERB	-0.68627	0.00166	0.0429
ENSG00000278318	ZNF229	zinc finger protein 229 [Source:HGNC Symbol;Acc:HGNC:13022]	-0.68627	0.00166	0.0429
chr15 + 58639427 58702773			-0.68421	0.00174	0.04379

ENSG00000099849	RASSF7	Ras association domain family member 7 [Source:HGNC Symbol;Acc:HGNC:1166]	-0.68421	0.00174	0.04379
ENSG00000115657	ABCB6	ATP binding cassette subfamily B member 6 (Langereis blood group) [Source:HGNC Symbol;Acc:HGNC:47]	-0.68421	0.00174	0.04379
ENSG00000137876	RSL24D1	ribosomal L24 domain containing 1 [Source:HGNC Symbol;Acc:HGNC:18479]	-0.68421	0.00174	0.04379
ENSG00000152240	HAUS1	HAUS augmin like complex subunit 1 [Source:HGNC Symbol;Acc:HGNC:25174]	-0.68421	0.00174	0.04379
ENSG00000155330	C16orf87	chromosome 16 open reading frame 87 [Source:HGNC Symbol;Acc:HGNC:33754]	-0.68421	0.00174	0.04379
ENSG00000158545	ZC3H18	zinc finger CCHC-type containing 18 [Source:HGNC Symbol;Acc:HGNC:25091]	-0.68421	0.00174	0.04379
ENSG00000160932	LY6E	lymphocyte antigen 6 family member E [Source:HGNC Symbol;Acc:HGNC:6727]	-0.68421	0.00174	0.04379
ENSG00000165632	TAF3	TATA-box binding protein associated factor 3 [Source:HGNC Symbol;Acc:HGNC:17303]	-0.68421	0.00174	0.04379
ENSG00000178732	GP5	glycoprotein V platelet [Source:HGNC Symbol;Acc:HGNC:4443]	-0.68421	0.00174	0.04379
ENSG00000227082	LINC02798	long intergenic non-protein coding RNA 2798 [Source:HGNC Symbol;Acc:HGNC:54323]	-0.68421	0.00174	0.04379
ENSG00000248265	FLJ12825	uncharacterized LOC440101 [Source:NCBI gene (formerly Entrezgene);Acc:440101]	-0.68421	0.00174	0.04379
ENSG00000260273		novel transcript, antisense to CD164	-0.68421	0.00174	0.04379
chr4-[15168602]15281140			-0.68215	0.00182	0.04494
chr4-[38596164]38666456			-0.68215	0.00182	0.04494
chr6-[13859215]13912169			-0.68215	0.00182	0.04494
ENSG00000063169	BICRA	BRD4 interacting chromatin remodeling complex associated protein [Source:HGNC Symbol;Acc:HGNC:4332]	-0.68215	0.00182	0.04494
ENSG00000123562	MORF4L2	mortality factor 4 like 2 [Source:HGNC Symbol;Acc:HGNC:16849]	-0.68215	0.00182	0.04494
ENSG00000141298	SSH2	slingshot protein phosphatase 2 [Source:HGNC Symbol;Acc:HGNC:30580]	-0.68215	0.00182	0.04494
ENSG00000182093	GET1	guided entry of tail-anchored proteins factor 1 [Source:HGNC Symbol;Acc:HGNC:12790]	-0.68215	0.00182	0.04494
ENSG00000198478	SH3BGR12	SH3 domain binding glutamate rich protein like 2 [Source:HGNC Symbol;Acc:HGNC:15567]	-0.68215	0.00182	0.04494
ENSG00000248643	RBM14-RBM4	RBM14-RBM4 readthrough [Source:HGNC Symbol;Acc:HGNC:38840]	-0.68215	0.00182	0.04494
ENSG00000261279	ULK4P1	ULK4 pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:15775]	-0.68215	0.00182	0.04494
ENSG00000267022		novel protein	-0.68215	0.00182	0.04494
ENSG00000266992	DHX40P1	DEAH-box helicase 40 pseudogene 1 [Source:HGNC Symbol;Acc:HGNC:20687]	-0.68079	0.00187	0.04622
ENSG00000133112	TPT1	tumor protein, translationally-controlled 1 [Source:HGNC Symbol;Acc:HGNC:12022]	-0.68008	0.0019	0.04654
ENSG00000140464	PML	PML nuclear body scaffold [Source:HGNC Symbol;Acc:HGNC:9113]	-0.68008	0.0019	0.04654
ENSG00000147155	EBP	EBP cholesterol delta-isomerase [Source:HGNC Symbol;Acc:HGNC:3133]	-0.68008	0.0019	0.04654
ENSG00000157703	SVOP1	SVOP like [Source:HGNC Symbol;Acc:HGNC:27034]	-0.68008	0.0019	0.04654
ENSG00000171451	DSEL	dermatan sulfate epimerase like [Source:HGNC Symbol;Acc:HGNC:18144]	-0.68008	0.0019	0.04654
ENSG00000228218	ATF4P3	activating transcription factor 4 pseudogene 3 [Source:HGNC Symbol;Acc:HGNC:788]	-0.68008	0.0019	0.04654
chr1-[158747426]158801166			-0.67802	0.00199	0.04795
chr5-[163272162]163632891			-0.67802	0.00199	0.04795
ENSG00000144893	MED12L	mediator complex subunit 12L [Source:HGNC Symbol;Acc:HGNC:16050]	-0.67802	0.00199	0.04795
ENSG00000154122	ANKH	ANKH inorganic pyrophosphate transport regulator [Source:HGNC Symbol;Acc:HGNC:15492]	-0.67802	0.00199	0.04795
ENSG00000164691	TAGAP	T cell activation RhoGTPase activating protein [Source:HGNC Symbol;Acc:HGNC:15669]	-0.67802	0.00199	0.04795
ENSG00000186187	ZNRF1	zinc and ring finger 1 [Source:HGNC Symbol;Acc:HGNC:18452]	-0.67802	0.00199	0.04795
ENSG00000226200	SGMS1-AS1	SGMS1 antisense RNA 1 [Source:HGNC Symbol;Acc:HGNC:49683]	-0.67802	0.00199	0.04795
ENSG00000257176		novel transcript, antisense to FAR2	-0.67802	0.00199	0.04795
ENSG00000280278	FLJ30679	uncharacterized protein FLJ30679 [Source:NCBI gene (formerly Entrezgene);Acc:146512]	-0.6774	0.00201	0.04854
chr1-[90030019]90098410			-0.67595	0.00207	0.0487
chr2-[160552307]60640166			-0.67595	0.00207	0.0487
chr7-[17764637]17820685			-0.67595	0.00207	0.0487
ENSG00000005007	UPF1	UPF1 RNA helicase and ATPase [Source:HGNC Symbol;Acc:HGNC:9962]	-0.67595	0.00207	0.0487
ENSG00000026652	AGPAT4	1-acylglycerol-3-phosphate O-acyltransferase 4 [Source:HGNC Symbol;Acc:HGNC:20885]	-0.67595	0.00207	0.0487
ENSG00000101213	PTK6	protein tyrosine kinase 6 [Source:HGNC Symbol;Acc:HGNC:9617]	-0.67595	0.00207	0.0487
ENSG00000105647	PIK3R2	phosphoinositide-3-kinase regulatory subunit 2 [Source:HGNC Symbol;Acc:HGNC:8980]	-0.67595	0.00207	0.0487
ENSG00000118689	FOXO3	forkhead box O3 [Source:HGNC Symbol;Acc:HGNC:3821]	-0.67595	0.00207	0.0487
ENSG00000128266	GNAZ	G protein subunit alpha z [Source:HGNC Symbol;Acc:HGNC:4395]	-0.67595	0.00207	0.0487
ENSG00000133477	FAM83F	family with sequence similarity 83 member F [Source:HGNC Symbol;Acc:HGNC:25148]	-0.67595	0.00207	0.0487
ENSG00000140992	PDPK1	3-phosphoinositide dependent protein kinase 1 [Source:HGNC Symbol;Acc:HGNC:8816]	-0.67595	0.00207	0.0487
ENSG00000143416	SELENBP1	selenium binding protein 1 [Source:HGNC Symbol;Acc:HGNC:10719]	-0.67595	0.00207	0.0487
ENSG00000154479	CCDC173	coiled-coil domain containing 173 [Source:HGNC Symbol;Acc:HGNC:25064]	-0.67595	0.00207	0.0487
ENSG00000164023	SGMS2	sphingomyelin synthase 2 [Source:HGNC Symbol;Acc:HGNC:28395]	-0.67595	0.00207	0.0487
ENSG00000181284	TMEM102	transmembrane protein 102 [Source:HGNC Symbol;Acc:HGNC:26722]	-0.67595	0.00207	0.0487
ENSG00000205250	EZF4	EZF transcription factor 4 [Source:HGNC Symbol;Acc:HGNC:3118]	-0.67595	0.00207	0.0487
ENSG00000221926	TRIM16	tripartite motif containing 16 [Source:HGNC Symbol;Acc:HGNC:17241]	-0.67595	0.00207	0.0487
ENSG00000234127	TRIM26	tripartite motif containing 26 [Source:HGNC Symbol;Acc:HGNC:12962]	-0.67595	0.00207	0.0487
ENSG00000246922	UBAP1L	ubiquitin associated protein 1 like [Source:HGNC Symbol;Acc:HGNC:40028]	-0.67595	0.00207	0.0487
ENSG00000273302		novel transcript	-0.67595	0.00207	0.0487
chr22-[30395067]30446578			-0.67484	0.00212	0.04976
ENSG00000281383		novel transcript, similar to YY1 associated myogenesis RNA 1 YAM1	-0.67484	0.00212	0.04976

Supplementary Table S4. Enriched GO terms of genes co-expressed with the 3 histone genes

co-expression set	GO category	ID	Description	GeneRatio	BgRatio	P value	FDR	gene ID
Positively co-expressed	CC	GO:0042101	T cell receptor complex	13/412	135/21872	1.70549x10 ⁻⁶	0.000740185	TRGV5/TRBC1/TRBC2/TRAV2/TRAV4/TRAV10/TRAV20/TRDV1/TRBV3-1/TRBV13/TRAC/TRBV28/TRAV1-1
Negatively co-expressed	BP	GO:0030168	platelet activation	19/643	184/21081	3.78922x10 ⁻⁶	0.014034576	ITGA2B/CD9/VCL/PIK3CB/F2RL3/FERMT3/ENTPD2/GNA15/PF4 V1/VWF/GNAQ/DMTN/SELP/GP5/GP1BA/PDGFA/GP1B8/ITGB3/PDPK1
Negatively co-expressed	BP	GO:0002576	platelet degranulation	16/643	140/21081	5.98362x10 ⁻⁶	0.014034576	ITGA2B/CD9/VCL/SYTL4/THBS1/MMRN1/FERMT3/LV6GG6F/VWF/SPARC/EGF/DMTN/PPBP/SELP/PDGFA/ITGB3
Negatively co-expressed	BP	GO:0031331	positive regulation of cellular catabolic process	31/643	441/21081	1.5926x10 ⁻⁵	0.022382635	UPF1/PIK3CB/TRIB3/TRIM14/METTL16/SH3BP4/TRIM5/ROCK2/UBQLN1/MDM2/MOV10/PLEKHF1/ENDOG/SNX33/DDRGK1/YTHDF2/TNF/SIRT6/GSK3B/RBX1/ZC3HAV1/TFEB/FOXO3/EGF/ESN3/BAG3/DAB2/SCOC/FLCN/TICAM1/PUM1
Negatively co-expressed	BP	GO:0072401	signal transduction involved in DNA integrity checkpoint	11/643	82/21081	3.82905x10 ⁻⁵	0.022382635	CNOT3/CNOT6/GADD45A/MDM2/CNOT10/CHEK2/E2F4/BABA M1/CASP2/RINT1/PM1
Negatively co-expressed	BP	GO:0072422	signal transduction involved in DNA damage checkpoint	11/643	82/21081	3.82905x10 ⁻⁵	0.022382635	CNOT3/CNOT6/GADD45A/MDM2/CNOT10/CHEK2/E2F4/BABA M1/CASP2/RINT1/PM1
Negatively co-expressed	BP	GO:0072413	signal transduction involved in mitotic cell cycle checkpoint	10/643	68/21081	3.83568x10 ⁻⁵	0.022382635	CNOT3/CNOT6/GADD45A/MDM2/CNOT10/CHEK2/E2F4/CASP2/RINT1/PM1
Negatively co-expressed	BP	GO:1902402	signal transduction involved in mitotic DNA damage checkpoint	10/643	68/21081	3.83568x10 ⁻⁵	0.022382635	CNOT3/CNOT6/GADD45A/MDM2/CNOT10/CHEK2/E2F4/CASP2/RINT1/PM1
Negatively co-expressed	BP	GO:1902403	signal transduction involved in mitotic DNA integrity checkpoint	10/643	68/21081	3.83568x10 ⁻⁵	0.022382635	CNOT3/CNOT6/GADD45A/MDM2/CNOT10/CHEK2/E2F4/CASP2/RINT1/PM1
Negatively co-expressed	BP	GO:0072395	signal transduction involved in cell cycle checkpoint	11/643	83/21081	4.29426x10 ⁻⁵	0.022382635	CNOT3/CNOT6/GADD45A/MDM2/CNOT10/CHEK2/E2F4/BABA M1/CASP2/RINT1/PM1
Negatively co-expressed	BP	GO:0045652	regulation of megakaryocyte differentiation	11/643	84/21081	4.80728x10 ⁻⁵	0.022550949	ITGA2B/THBS1/MOV10/MTURN/L3MBTL1/H3C14/H3C8/TEC/KAT2B/GP1BA/H4C1
Negatively co-expressed	BP	GO:0031589	cell-substrate adhesion	27/643	393/21081	8.16793x10 ⁻⁵	0.032790264	ITGA2B/VCL/ARHGAP6/PIK3CB/CORO1C/ROCK2/THBS1/RASA1/FERMT3/EPHB1/JAM3/ACTN3/LAMC3/GSK3B/CTTN/OLFM4/VWF/MLKL1/RAB1A/DMTN/LIMS1/TACSTD2/BCAM/ITGB3/CEA/CAM6/PDPK1/TBCD
Negatively co-expressed	BP	GO:0009266	response to temperature stimulus	21/643	269/21081	8.54454x10 ⁻⁵	0.032790264	CREBBP/GLRX2/ADRB1/NTSR1/HSPA8/PTGES3/HSPH1/HTR2B/NUP42/THBS1/EPHB1/IGFBP7/SCARA5/UCP2/IRAK1/GSK3B/GMPR/DNAJ4/BAG3/DNAJB4/DNAJB6
Negatively co-expressed	BP	GO:0006936	muscle contraction	26/643	374/21081	9.08705x10 ⁻⁵	0.032790264	MARCKS/VCL/CALCRL/CALD1/DOCK4/ROCK2/HTR2B/RAP1GDS1/OXTR/MYBPC1/ACTN3/MYLK/CTTN/CNN1/SLC6A8/TPM1/GS
Negatively co-expressed	BP	GO:0030219	megakaryocyte differentiation	12/643	108/21081	0.000113029	0.037121885	TO1/KIT/UCN/TPM4/SYNN/MYL4/ARG2/TMOD1/SLMAP/TCAP/ITGA2B/THBS1/MOV10/MTURN/L3MBTL1/H3C14/H3C8/TEC/KAT2B/KIT/GP1BA/H4C1

Continued								
co-expression set	GO category	ID	Description	GeneRatio	BgRatio	P value	FDR	gene ID
Negatively co-expressed	BP	GO:0007160	cell-matrix adhesion	20/643	257/21081	0.000130468	0.037121885	ITGA2B/VCL/ARHGAP6/PIK3CB/CORO1C/ROCK2/THBS1/RASA1/FERMT3/JAM3/ACTN3/GSK3B/CTTN/MKLN1/DMTN/LIMS1/BCAM/ITGB3/CEACAM6/PDPK1
Negatively co-expressed	BP	GO:0003012	muscle system process	31/643	494/21081	0.000132949	0.037121885	MAP2K3/VCL/CALCRL/MAP2K4/ERRF1/CALD1/DOCK4/ROCK2/HTR2B/RAP1GDS1/OXTR/MYBPC1/ACTN3/MYLK/CTTN/MTPN/FOXO3/CNN1/SLC6A8/TPM1/GSTO1/KIT/UCN/TPM4/SYNN/MYL4/ARG2/TMOD1/SORBS2/SLMAP/TCAP
Negatively co-expressed	BP	GO:0042770	signal transduction in response to DNA damage	14/643	144/21081	0.000134569	0.037121885	CNOT3/CNOT6/GADD45A/MDM2/BATF/CNOT10/CHEK2/E2F4/BABAM1/FOXO3/ATAD5/CASP2/RINT1/PML
Negatively co-expressed	BP	GO:0007093	mitotic cell cycle checkpoint	17/643	200/21081	0.000143505	0.037121885	CNOT3/CNOT6/GADD45A/MDM2/CDK5RAP2/NABP2/CL2L1/CNOT10/CHEK2/E2F4/CASP2/RINT1/PML/MAD2L1/WEE1/BLM
Negatively co-expressed	BP	GO:0006977	DNA damage response, signal transduction by p53 class mediator resulting in cell cycle arrest	9/643	65/21081	0.000150355	0.037121885	CNOT3/CNOT6/GADD45A/MDM2/CNOT10/CHEK2/E2F4/CASP2/PML
Negatively co-expressed	BP	GO:0072431	signal transduction involved in mitotic G1 DNA damage checkpoint	9/643	66/21081	0.000169454	0.037852724	CNOT3/CNOT6/GADD45A/MDM2/CNOT10/CHEK2/E2F4/CASP2/PML
Negatively co-expressed	BP	GO:1902400	intracellular signal transduction involved in G1 DNA damage checkpoint	9/643	66/21081	0.000169454	0.037852724	CNOT3/CNOT6/GADD45A/MDM2/CNOT10/CHEK2/E2F4/CASP2/PML
Negatively co-expressed	BP	GO:0036293	response to decreased oxygen levels	27/643	415/21081	0.000199619	0.0390948	CREBBP/PSME4/PSMD9/RWDD3/HP1BP3/ROCK2/UBQLN1/MDM2/TLR2/THBS1/HIF1AN/ENDOG/UCP2/OXTR/IRAK1/RBX1/PSMB5/TM9SF4/CUL2/MYB/FOXO3/ATF4/ALAS2/NKX3-1/PML/DDIT4/FIS1
Negatively co-expressed	BP	GO:0072331	signal transduction by p53 class mediator	22/643	307/21081	0.000201959	0.0390948	CNOT3/NOP2/CNOT6/GADD45A/ELL3/MDM2/SSRP1/BATF/HIPK1/CNOT10/CHEK2/L3MBTL1/E2F4/NUAK1/CSNK2A1/FOXO3/ATAD5/CASP2/PML/TAFA3/DDIT4/BLM
Negatively co-expressed	BP	GO:0030049	muscle filament sliding	7/643	41/21081	0.000216684	0.0390948	MYBPC1/ACTN3/TPM1/TPM4/MYL4/TMOD1/TCAP
Negatively co-expressed	BP	GO:0033275	actin-myosin filament sliding	7/643	41/21081	0.000216684	0.0390948	MYBPC1/ACTN3/TPM1/TPM4/MYL4/TMOD1/TCAP
Negatively co-expressed	BP	GO:1901889	negative regulation of cell junction assembly	7/643	41/21081	0.000216684	0.0390948	ARHGAP6/CORO1C/ROCK2/TLR2/THBS1/TNFR/DMTN
Negatively co-expressed	BP	GO:0051494	negative regulation of cytoskeleton organization	15/643	170/21081	0.000231628	0.040243291	ARHGAP6/CDK5RAP2/SPTB/MTPN/KAT2B/APC2/INPP5K/DMTN/CCNF/TACSTD2/PFN2/HIP1R/TMOD1/SSH2/TBCD
Negatively co-expressed	BP	GO:0051261	protein depolymerization	12/643	117/21081	0.000242369	0.040605398	KIF2A/HSPA8/DNAJC6/MAP1A/KIF24/MICAL3/SPTB/MTPN/APC2/MICAL2/DMTN/TMOD1
Negatively co-expressed	BP	GO:0007596	blood coagulation	25/643	378/21081	0.000265392	0.042929379	ITGA2B/CD9/VCL/PIK3CB/F2RL3/THBS1/MMMRN1/FERMT3/H3C14/H3C8/PRKAR2B/ENTPD2/GNA15/PFAV1/VWF/AKAP1/GNAQ1/DMTN/SELP/GP5/GP1BA/PDGFA/GP1BB/ITGB3/PDPK1

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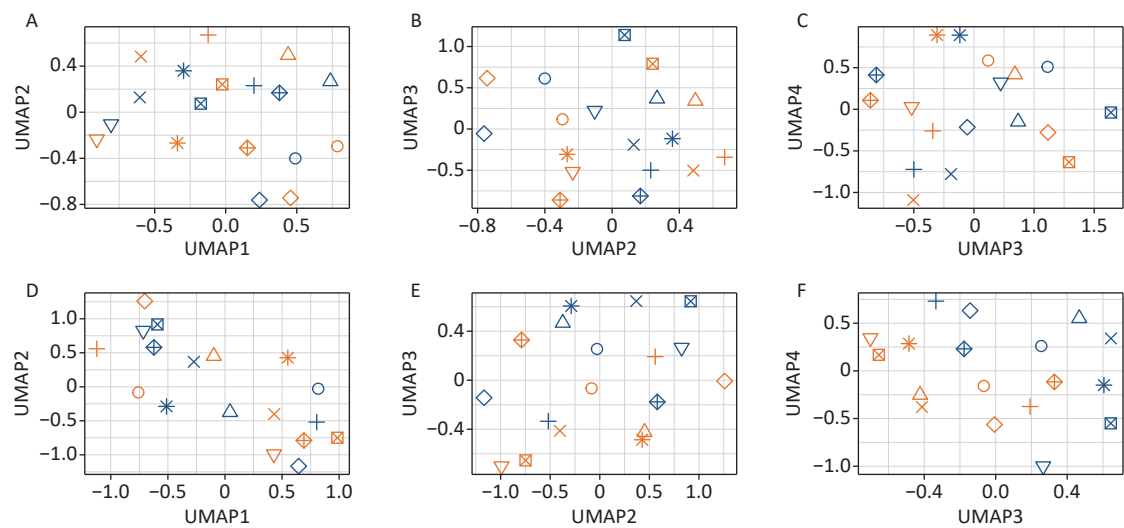
co-expression set	GO category	ID	Description	GeneRatio	BgRatio	P value	FDR	gene ID
Negatively co-expressed	BP	GO:0031571	mitotic G1 DNA damage checkpoint	9/643	72/21081	0.000331393	0.049274038	CNOT3/CNOT6/GADD45A/MDM2/CNOT10/CHEK2/E2F4/CASP2/PML
Negatively co-expressed	BP	GO:0007599	hemostasis	25/643	384/21081	0.000336126	0.049274038	ITGA2B/CD9/VCL/PIK3CB/F2RL3/THBS1/MMRN1/FERMT3/H3C14/H3C8/PRKAR2B/ENTPD2/GNA15/PF4V1/VWF/AKAP1/GNAQ/DMTN/SELP/GP5/GP1BA/PDGFA/GP1BB/ITGB3/PDPK1
Negatively co-expressed	BP	GO:0050817	coagulation	25/643	384/21081	0.000336126	0.049274038	ITGA2B/CD9/VCL/PIK3CB/F2RL3/THBS1/MMRN1/FERMT3/H3C14/H3C8/PRKAR2B/ENTPD2/GNA15/PF4V1/VWF/AKAP1/GNAQ/DMTN/SELP/GP5/GP1BA/PDGFA/GP1BB/ITGB3/PDPK1
Negatively co-expressed	MF	GO:0003779	actin binding	35/659	470/20616	3.54915x10 ⁻⁶	0.002825125	VCL/MYH7B/KLHL5/PANX1/CORO1C/CALD1/YWHAH/FLNC/IQG/AP2/XIRP2/MAP1A/SYNPO/MYBPC1/MICAL3/ACTN3/MYLK/SP/TB/CTTN/DBN1/CNN1/MICAL2/DIAPH3/TPM1/DAAM2/ZNF185/DMTN/TPM4/MYL4/PFN2/LDB3/HIP1R/FLNB/TMOD1/SSH2/TLN2
Negatively co-expressed	MF	GO:0046982	protein heterodimerization activity	27/659	330/20616	8.61374x10 ⁻⁶	0.003428269	ADRB1/GADD45A/CEACAM8/YWHAH/TOP2A/IRAK2/BMP6/JA M3/BCL2L1/SRGAP2C/IRAK1/KATNA1/CENPW/H3C14/H3C8/AT F4/TPM1/TPM4/RALGAP2/H2AC13/PDGFA/H2BC14/H4C1/CE ACAM6/PIK3R2/HIP1R/TAF3
Negatively co-expressed	MF	GO:0008307	structural constituent of muscle	8/659	45/20616	7.91105x10 ⁻⁵	0.020990665	MYBPC1/ACTN3/TPM1/TPM4/KRT19/SYNNM/SORBS2/TCAP
Negatively co-expressed	MF	GO:0004674	protein serine/threonine kinase activity	31/659	469/20616	0.000120427	0.022651572	MAP2K3/MAP2K4/CNK/SGK3/ACVR1/RIOK1/PAK4/IRAK2/RO CK2/BMPRI1/BRAF/KALRN/HIPK1/RPS6KA3/CHEK2/IRAK1/BM PR2/SIK1B/MYLK/NUAK1/GSK3B/EIF2AK1/MAST3/CNK2A1/CC ND3/PIM1/STK40/MAP3K3/HIPK3/CILK1/PDPK1
Negatively co-expressed	MF	GO:0060589	nucleoside-triphosphatase regulator activity	27/659	390/20616	0.000154577	0.022651572	ARHGAP6/FNIP2/SMAP2/ARFGAP1/ERRF1/HSPH1/DOCK4/STA RD8/SH3BP4/HTR2B/RAP1GDS1/IQGAP2/RASA1/ARHGAP27/T BC1D3/TBC1D3B/TBC1D22B/RGS18/BAG3/FLCN/GNAQ/DNAJB 4/TAGAP/RALGAP2/DNAJB6/TBCD/AGAP4
Negatively co-expressed	MF	GO:0016538	cyclin-dependent protein serine/threonine kinase regulator activity	8/659	50/20616	0.000171227	0.022651572	CCNK/CCNE2/CCND3/CCNG1/KAT2B/CCNI/CCNA1/CCNF
Negatively co-expressed	MF	GO:0035615	clathrin adaptor activity	5/659	18/20616	0.000199197	0.022651572	STON2/LDLRAP1/DAB2/AP2A1/HIP1R
Negatively co-expressed	MF	GO:0140312	cargo adaptor activity	5/659	19/20616	0.000263261	0.026194518	STON2/LDLRAP1/DAB2/AP2A1/HIP1R
Negatively co-expressed	CC	GO:0031091	platelet alpha granule	14/668	102/21872	2.67402x10 ⁻⁶	0.000845285	ITGA2B/CD9/SYTL4/THBS1/MMRN1/FERMT3/LY6G6F/VWF/SP ARC/EGF/PPBP/SELP/PDGFA/ITGB3
Negatively co-expressed	CC	GO:0031092	platelet alpha granule membrane	7/668	23/21872	3.84295x10 ⁻⁶	0.000845285	ITGA2B/CD9/SYTL4/LY6G6F/SPARC/SELP/ITGB3
Negatively co-expressed	CC	GO:0030016	myofibril	22/668	239/21872	4.61904x10 ⁻⁶	0.000845285	VCL/CORO1C/CALD1/FLNC/DCTN4/XIRP2/SYNPO/MYBPC1/KAT 2B/TPM1/BAG3/TPM4/MTM1/KRT19/SYNNM/MYL4/DNAJB6/LD B3/FLNB/TMOD1/SORBS2/TCAP

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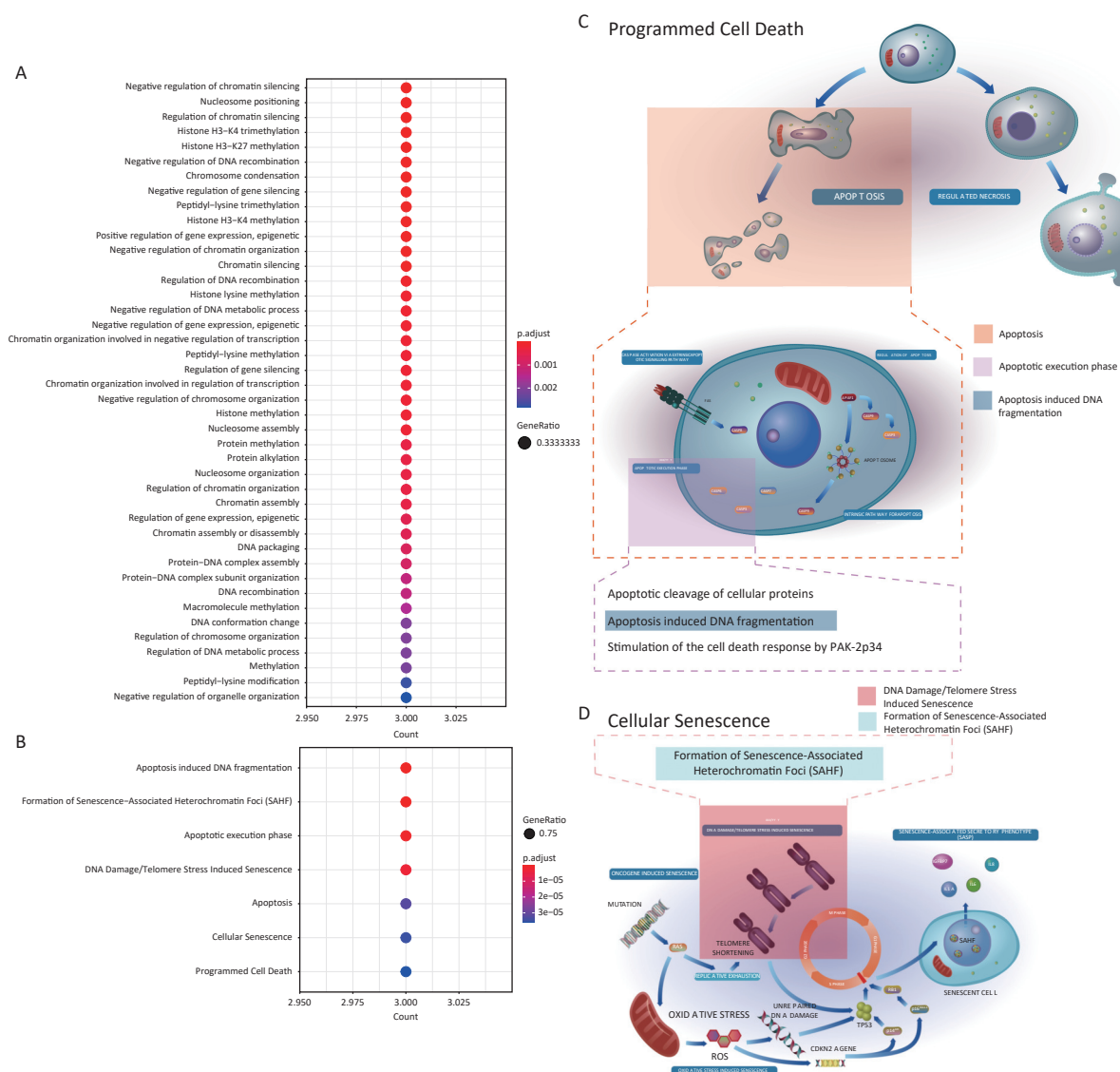
co-expression set	GO category	ID	Description	GeneRatio	BgRatio	P value	FDR	gene ID
Negatively co-expressed	CC	GO:0043292	contractile fiber	22/668	251/21872	1.01267×10 ⁻⁵	0.001389892	VCL/CORO1C/CALD1/FLNC/DCTN4/XIRP2/SYNPO/MYBPC1/KAT2B/TPM1/BAG3/TPM4/MTM1/KRT19/SYNN/MYL4/DNAJB6/LDB3/FLNB/TMOD1/SORBS2/TCAP
Negatively co-expressed	CC	GO:0042641	actomyosin	11/668	81/21872	3.45542×10 ⁻⁵	0.003794051	DCTN4/XIRP2/SYNPO/MYLK/DBN1/KAT2B/TPM1/BAG3/TPM4/LDB3/FLNB
Negatively co-expressed	CC	GO:0030017	sarcomere	18/668	219/21872	0.000144378	0.013210542	CORO1C/FLNC/DCTN4/XIRP2/SYNPO/KAT2B/TPM1/BAG3/TPM4/MTM1/KRT19/MYL4/DNAJB6/LDB3/FLNB/TMOD1/SORBS2/TCAP
Negatively co-expressed	CC	GO:0030055	cell-substrate junction	30/668	483/21872	0.00020871	0.016368807	ITGA2B/CD9/VCL/REXO2/HSPA8/CORO1C/FLNC/STARD8/PAK4/DCTN4/FERMT3/XIRP2/SLC4A2/PCBP2/TGM2/ACTN3/MRC2/CTTN/CNN1/DCAF6/PRUNE1/ZNF185/DAB2/TPM4/LIMS1/ITGB3/FLNB/PDPK1/SORBS2/TLN2
Negatively co-expressed	CC	GO:0001725	stress fiber	9/668	71/21872	0.000301135	0.017529376	DCTN4/XIRP2/SYNPO/MYLK/TPM1/BAG3/TPM4/LDB3/FLNB
Negatively co-expressed	CC	GO:0097517	contractile actin filament bundle	9/668	71/21872	0.000301135	0.017529376	DCTN4/XIRP2/SYNPO/MYLK/TPM1/BAG3/TPM4/LDB3/FLNB
Negatively co-expressed	CC	GO:0000307	cyclin-dependent protein kinase holoenzyme complex	7/668	44/21872	0.000344238	0.017529376	CCNK/CCNE2/CCND3/CCNG1/CCNI/CCNA1/CCNF
Negatively co-expressed	CC	GO:0005925	focal adhesion	29/668	475/21872	0.000351226	0.017529376	ITGA2B/CD9/VCL/REXO2/HSPA8/CORO1C/FLNC/STARD8/PAK4/DCTN4/XIRP2/SLC4A2/PCBP2/TGM2/ACTN3/MRC2/CTTN/CNN1/DCAF6/PRUNE1/ZNF185/DAB2/TPM4/LIMS1/ITGB3/FLNB/PDPK1/SORBS2/TLN2
Negatively co-expressed	CC	GO:0005884	actin filament	12/668	124/21872	0.000420981	0.019259866	ARHGAP6/JAM3/ACTN3/CTTN/DBN1/APC2/MICAL2/TPM1/DMTN/TPM4/LDB3/TMOD1
Negatively co-expressed	CC	GO:0032432	actin filament bundle	9/668	79/21872	0.000670616	0.028320644	DCTN4/XIRP2/SYNPO/MYLK/TPM1/BAG3/TPM4/LDB3/FLNB

Supplementary Table S5. Enriched Reactome pathways of genes co-expressed with the 3 histone genes

co-expression set	ID	Description	GeneRatio	BgRatio	P value	FDR	gene ID
Positively co-expressed	R-HSA-202427	Phosphorylation of CD3 and TCR zeta chains	7/241	22/10856	3.12608×10^{-7}	0.000242271	PAG1/HLA-DRB1/HLA-DQA1/HLA-DRB5/HLA-DPB1/HLA-DPA1/HLA-DQA2
Positively co-expressed	R-HSA-202430	Translocation of ZAP-70 to Immunological synapse	6/241	19/10856	2.39515×10^{-6}	0.000928119	HLA-DRB1/HLA-DQA1/HLA-DRB5/HLA-DPB1/HLA-DPA1/HLA-DQA2
Positively co-expressed	R-HSA-389948	PD-1 signaling	6/241	23/10856	8.27074×10^{-6}	0.002136609	HLA-DRB1/HLA-DQA1/HLA-DRB5/HLA-DPB1/HLA-DPA1/HLA-DQA2
Positively co-expressed	R-HSA-202433	Generation of second messenger molecules	6/241	34/10856	8.98002×10^{-5}	0.017398789	HLA-DRB1/HLA-DQA1/HLA-DRB5/HLA-DPB1/HLA-DPA1/HLA-DQA2
Positively co-expressed	R-HSA-388841	Costimulation by the CD28 family	8/241	69/10856	0.000136543	0.021164141	MAP3K8/CTLA4/HLA-DRB1/HLA-DQA1/HLA-DRB5/HLA-DPB1/HLA-DPA1/HLA-DQA2
Negatively co-expressed	R-HSA-76002	Platelet activation, signaling and aggregation	25/418	263/10856	2.81052×10^{-5}	0.031421596	ITGA2B/CD9/VCL/PIK3CB/GNA15/SYTL4/PIK3R2/VWF/SPARC/RAP1B/F2RL3/THBS1/MMRN1/EGF/PDPK1/FERMT3/GNAQ/PPBP/SELP/GP5/GP1BA/PDGFA/GP1BB/LY6G6F/ITGB3
Negatively co-expressed	R-HSA-76009	Platelet Aggregation (Plug Formation)	8/418	39/10856	9.7169×10^{-5}	0.039158317	ITGA2B/VWF/RAP1B/PDPK1/GP5/GP1BA/GP1BB/ITGB3
Negatively co-expressed	R-HSA-114608	Platelet degranulation	15/418	129/10856	0.00012681	0.039158317	ITGA2B/CD9/VCL/SYTL4/VWF/SPARC/THBS1/MMRN1/EGF/FERMT3/PPBP/SELP/PDGFA/LY6G6F/ITGB3
Negatively co-expressed	R-HSA-5683057	MAPK family signaling cascades	27/418	325/10856	0.000140101	0.039158317	ITGA2B/VCL/PIK3CB/PSME4/SPTB/RBX1/PSMB5/PIK3R2/VWF/PSMD9/CCND3/FOXO3/KBTBD7/FLT3/PSPN/RAP1B/DLG4/EGF/RASA1/MOV10/KIT/BRAF/KALRN/BCL2L1/LI3RA/PDGFA/ITGB3
Negatively co-expressed	R-HSA-76005	Response to elevated platelet cytosolic Ca ²⁺	15/418	134/10856	0.000194527	0.043496173	ITGA2B/CD9/VCL/SYTL4/VWF/SPARC/THBS1/MMRN1/EGF/FERMT3/PPBP/SELP/PDGFA/LY6G6F/ITGB3



Supplementary Figure S1. Effects of Gua Sha on the total blood transcriptome. The figure shows the UMAP analysis plots of the study participants before and after Gua Sha based on (A–C) the original expression levels of all genes and vlincRNAs or (D–F) after the individual-specific variance was removed.



Supplementary Figure S2. Enriched GO terms and Reactome pathways of the 3 histone genes. (A) Enriched GO terms in the Biological Process (BP) category. (B) Enriched Reactome pathways. (C&D) Diagrams of the (C) “Programmed Cell Death” and (D) “Cell Senescence” Reactome pathways with the enriched pathways highlighted. These two panels are derivatives of figures from Reactome website which are licensed under Creative Commons Attribution 4.0 International (CC BY 4.0) License.