



Figure S1 VCAN expression in BBCancer and ICGC dataset

(A) VCAN mRNA expression in extracellular vesicles (Evs) from 21 HCC patients and 6 controls in BBCancer. (B) VCAN mRNA expression in tumor tissues from ICGC-LIRI-JP (associated with virus) and ICGC-LICA-FR (secondary to alcohol and adiposity). (C) VCAN mRNA expression in 243 tumor tissues and 202 normal tissues from ICGC-LIRI-JP. (D) VCAN mRNA expression in 199 paired tumor tissues and normal tissues from ICGC-LIRI-JP.

Query	Gene	cor	pvalue
VCAN	COL1A2	0.861256	2.07E-111
VCAN	COL5A1	0.860885	3.28E-111
VCAN	COL1A1	0.859567	1.67E-110
VCAN	THBS2	0.855249	3.04E-108
VCAN	COL3A1	0.8473	2.87E-104
VCAN	ANTXR1	0.825271	2.43E-94
VCAN	MRC2	0.824756	3.99E-94
VCAN	FNDC1	0.824443	5.39E-94
VCAN	GEM	0.821923	5.92E-93
VCAN	ITGA11	0.817802	2.75E-91
VCAN	LUM	0.817009	5.70E-91
VCAN	SEMA3C	0.81698	5.85E-91
VCAN	CCDC80	0.815256	2.81E-90
VCAN	CDH11	0.815235	2.87E-90
VCAN	SLIT2	0.813957	9.07E-90
VCAN	FAP	0.813257	1.70E-89
VCAN	ISLR	0.811686	6.89E-89
VCAN	LOXL1	0.810751	1.57E-88
VCAN	MMP2	0.806206	8.19E-87
VCAN	SSC5D	0.805702	1.26E-86
VCAN	GLI2	0.804048	5.16E-86
VCAN	EMILIN1	0.803829	6.21E-86
VCAN	FMOD	0.798486	5.33E-84
VCAN	BGN	0.797413	1.28E-83
VCAN	MOXD1	0.795902	4.38E-83
VCAN	COL6A3	0.795681	5.24E-83
VCAN	HTRA3	0.795437	6.38E-83
VCAN	COL16A1	0.794922	9.66E-83
VCAN	TSHZ3	0.793898	2.20E-82
VCAN	PODN	0.793879	2.23E-82
VCAN	PMP22	0.792805	5.25E-82
VCAN	COL6A2	0.791966	1.02E-81
VCAN	COL8A2	0.791568	1.40E-81
VCAN	F2R	0.790469	3.32E-81
VCAN	FMNL3	0.79029	3.83E-81
VCAN	ADAMTS2	0.789644	6.35E-81
VCAN	AEBP1	0.788503	1.54E-80
VCAN	KIRREL1	0.78757	3.18E-80
VCAN	COL8A1	0.786088	9.95E-80
VCAN	EFEMP1	0.785439	1.64E-79
VCAN	ANOS1	0.784623	3.05E-79
VCAN	TGFB3	0.78384	5.52E-79
VCAN	POSTN	0.783186	9.05E-79
VCAN	MEDAG	0.782894	1.13E-78
VCAN	HEYL	0.782753	1.25E-78
VCAN	COL14A1	0.782603	1.40E-78

VCAN	ZNF469	0.780824	5.32E-78
VCAN	EPHA3	0.780685	5.90E-78
VCAN	PRELP	0.780158	8.74E-78
VCAN	MAP1A	0.77993	1.03E-77
VCAN	PCDH7	0.779552	1.37E-77
VCAN	FBN1	0.779261	1.70E-77
VCAN	CCDC8	0.778844	2.31E-77
VCAN	GFPT2	0.775384	2.90E-76
VCAN	PDE1A	0.775031	3.74E-76
VCAN	TMEM119	0.774652	4.92E-76
VCAN	PHLDB1	0.774234	6.66E-76
VCAN	CACNA1C	0.77329	1.31E-75
VCAN	CACNA2D1	0.772606	2.14E-75
VCAN	COL4A2	0.770453	9.88E-75
VCAN	DCLK1	0.770304	1.10E-74
VCAN	CALHM2	0.767801	6.35E-74
VCAN	CRISPLD2	0.76765	7.06E-74
VCAN	MXRA5	0.76689	1.20E-73
VCAN	FOXL1	0.766627	1.44E-73
VCAN	LXN	0.766377	1.71E-73
VCAN	LZTS1	0.765895	2.38E-73
VCAN	AFAP1	0.76587	2.42E-73
VCAN	COL12A1	0.765741	2.65E-73
VCAN	LTBP2	0.765708	2.71E-73
VCAN	PYGO1	0.765083	4.17E-73
VCAN	CREB3L1	0.764455	6.42E-73
VCAN	ADAMTS12	0.764084	8.28E-73
VCAN	LTBP4	0.762391	2.62E-72
VCAN	PTGIS	0.762047	3.31E-72
VCAN	ALDH1L2	0.761479	4.87E-72
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VCAN	DCN	0.75681	1.10E-70
VCAN	SNAI1	0.756534	1.32E-70
VCAN	ADGRA2	0.756506	1.34E-70
VCAN	ROR2	0.756233	1.61E-70
VCAN	LAMA2	0.755407	2.77E-70
VCAN	GPX8	0.754665	4.50E-70
VCAN	NAV1	0.754563	4.81E-70
VCAN	PTGIR	0.753466	9.83E-70
VCAN	GLT8D2	0.753244	1.13E-69
VCAN	MEIS3	0.75228	2.12E-69
VCAN	UNC5C	0.752149	2.31E-69

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VCAN	MXRA8	0.749704	1.11E-68
VCAN	HDGFL3	0.749555	1.22E-68
VCAN	XYLT1	0.749522	1.24E-68
VCAN	SULF1	0.748579	2.27E-68
VCAN	GUCY1A1	0.748095	3.08E-68
VCAN	MMP28	0.747556	4.33E-68
VCAN	TPM4	0.747059	5.93E-68
VCAN	LRR4C	0.746841	6.80E-68
VCAN	FHOD1	0.746415	8.89E-68
VCAN	LGI2	0.745912	1.22E-67
VCAN	SSPN	0.745769	1.33E-67
VCAN	CTBP2	0.745365	1.72E-67
VCAN	CERCAM	0.744793	2.45E-67
VCAN	VIM	0.743523	5.40E-67
VCAN	COL10A1	0.743314	6.15E-67
VCAN	DENND3	0.743097	7.04E-67
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VCAN	MYOF	0.741049	2.48E-66
VCAN	DACT1	0.740678	3.12E-66
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VCAN	HOXB2	0.730194	1.63E-63
VCAN	GLI3	0.730154	1.67E-63
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VCAN	PTPN13	0.721174	2.84E-61
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VCAN	HDAC7	0.705342	1.50E-57
VCAN	TMEM132f	0.704789	2.01E-57
VCAN	NTM	0.704285	2.61E-57
VCAN	CD93	0.703988	3.05E-57
VCAN	ID4	0.703831	3.31E-57
VCAN	PDE10A	0.703817	3.33E-57
VCAN	MMP16	0.703769	3.41E-57
VCAN	PKNOX2	0.703714	3.52E-57
VCAN	F3	0.703565	3.80E-57
VCAN	UNC5B	0.703161	4.68E-57
VCAN	TNXB	0.702441	6.80E-57
VCAN	TRERF1	0.702171	7.82E-57
VCAN	JAG1	0.702031	8.41E-57
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VCAN	FOXS1	0.69338	6.77E-55
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VCAN	AC015712.	0.692599	9.98E-55
VCAN	FOXF2	0.692542	1.03E-54
VCAN	COMP	0.692231	1.20E-54
VCAN	MYH11	0.692036	1.32E-54
VCAN	ITGBL1	0.691892	1.42E-54
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VCAN	CCDC102B	0.686749	1.76E-53
VCAN	LAMA1	0.686098	2.41E-53
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VCAN	PTGS2	0.681745	1.95E-52
VCAN	TUBA1A	0.681648	2.04E-52
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VCAN	MTHFD2	0.68125	2.46E-52
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VCAN	EDIL3	0.680932	2.86E-52
VCAN	GPBAR1	0.680879	2.93E-52

VCAN	CD248	0.680822	3.01E-52
VCAN	NALCN	0.680479	3.54E-52
VCAN	SFMBT2	0.680291	3.87E-52
VCAN	CAVIN1	0.680268	3.92E-52
VCAN	IGFBP7	0.680073	4.29E-52
VCAN	SFXN3	0.679847	4.78E-52
VCAN	FIBIN	0.679551	5.49E-52
VCAN	HOXB4	0.679219	6.42E-52
VCAN	CLIP3	0.679153	6.63E-52
VCAN	TPBG	0.67912	6.73E-52
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VCAN	FAM171B	0.678796	7.84E-52
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VCAN	DCHS1	0.672318	1.58E-50
VCAN	ABI3BP	0.672092	1.75E-50
VCAN	SLC9A1	0.671511	2.29E-50
VCAN	RBMS2	0.671408	2.40E-50
VCAN	CCL11	0.671147	2.70E-50
VCAN	CTHRC1	0.670673	3.35E-50
VCAN	ZFPM2	0.670535	3.57E-50
VCAN	MN1	0.670315	3.94E-50
VCAN	PLXDC2	0.6702	4.15E-50
VCAN	ADAMTS9-	0.67016	4.23E-50

VCAN	RHOJ	0.670113	4.32E-50
VCAN	LOXL2	0.669994	4.56E-50
VCAN	RBMS3	0.669425	5.90E-50
VCAN	P4HA3	0.669394	5.99E-50
VCAN	FZD2	0.669049	6.99E-50
VCAN	CHSY1	0.668808	7.80E-50
VCAN	MDFI	0.668747	8.02E-50
VCAN	ADAMTS7	0.668533	8.83E-50
VCAN	NTRK2	0.668521	8.88E-50
VCAN	ITGA3	0.668454	9.15E-50
VCAN	SCD5	0.668286	9.87E-50
VCAN	IGFBP5	0.668117	1.07E-49
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VCAN	CILP2	0.66588	2.90E-49
VCAN	ORAI2	0.665554	3.36E-49
VCAN	TCF4	0.665523	3.41E-49
VCAN	AC100803.	0.665356	3.67E-49
VCAN	PLXDC1	0.665327	3.72E-49
VCAN	WFDC1	0.664003	6.70E-49
VCAN	SERPINE2	0.663931	6.91E-49
VCAN	CPZ	0.663097	1.00E-48
VCAN	KIF26B	0.662988	1.05E-48
VCAN	AC125807.	0.662861	1.11E-48
VCAN	ARHGEF10	0.662712	1.18E-48
VCAN	SPRED3	0.662006	1.62E-48
VCAN	KIF26A	0.661748	1.81E-48
VCAN	DKK2	0.661533	1.99E-48
VCAN	VEGFC	0.660228	3.53E-48
VCAN	EHD2	0.660055	3.80E-48
VCAN	MAML2	0.65993	4.02E-48
VCAN	SGCA	0.659919	4.04E-48
VCAN	AP001189.	0.659803	4.25E-48
VCAN	TMEM159	0.65953	4.78E-48
VCAN	NOV	0.659326	5.22E-48
VCAN	RTL8B	0.659237	5.43E-48
VCAN	AC010931.	0.659139	5.67E-48
VCAN	EFS	0.659009	6.00E-48
VCAN	ZCCHC18	0.658002	9.29E-48
VCAN	HIC1	0.657988	9.34E-48
VCAN	OSBPL10	0.657942	9.53E-48
VCAN	LRRC17	0.657346	1.23E-47
VCAN	TGFB111	0.657328	1.24E-47
VCAN	ELF4	0.656942	1.47E-47
VCAN	CPNE5	0.656722	1.61E-47

VCAN	MYOZ3	0.656721	1.62E-47
VCAN	FSTL1	0.656534	1.75E-47
VCAN	GPR68	0.65649	1.78E-47
VCAN	CTSK	0.656083	2.13E-47
VCAN	ALOX5	0.656041	2.16E-47
VCAN	ENDOD1	0.655826	2.37E-47
VCAN	PLCB4	0.655685	2.52E-47
VCAN	SRPX2	0.655478	2.76E-47
VCAN	MYO10	0.655029	3.34E-47
VCAN	TANC1	0.654974	3.42E-47
VCAN	OMD	0.65489	3.55E-47
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VCAN	AKT3	0.650489	2.30E-46
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VCAN	OLFML2B	0.649727	3.16E-46
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VCAN	VILL	0.622526	1.65E-41
VCAN	LIMCH1	0.621791	2.18E-41
VCAN	SFRP1	0.621775	2.19E-41
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VCAN	TSPAN18	0.618714	6.94E-41
VCAN	KLHL6	0.618587	7.28E-41
VCAN	BACE2	0.61836	7.92E-41
VCAN	NGFR	0.618156	8.55E-41
VCAN	STON1	0.617916	9.35E-41
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VCAN	SCARA5	0.610364	1.51E-39
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VCAN	KLF7	0.609518	2.05E-39
VCAN	C3orf52	0.609489	2.08E-39
VCAN	SLC7A7	0.608902	2.57E-39
VCAN	RARG	0.608799	2.66E-39
VCAN	ITGA10	0.608498	2.97E-39
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VCAN	RAB9B	0.608224	3.28E-39
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VCAN	PCDHGB7	0.608106	3.42E-39
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VCAN	LUZP1	0.608	3.56E-39
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VCAN	HSPA12A	0.606399	6.32E-39
VCAN	TMCC2	0.60623	6.72E-39
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VCAN	SHISA3	0.605537	8.60E-39
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VCAN	CDC42EP5	0.605041	1.03E-38
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VCAN	MARK1	0.604488	1.25E-38
VCAN	TRPC4	0.604284	1.35E-38
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VCAN	LINC02519	0.603618	1.70E-38
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VCAN	AC080100.	0.603167	2.00E-38
VCAN	DOCK8	0.602915	2.19E-38
VCAN	PLEKHO2	0.602682	2.37E-38
VCAN	HGF	0.602675	2.38E-38
VCAN	AL353593.	0.60261	2.44E-38
VCAN	PDLIM4	0.602566	2.47E-38
VCAN	IGFBP6	0.602557	2.48E-38
VCAN	RELT	0.602318	2.70E-38
VCAN	TLR7	0.602218	2.80E-38
VCAN	SLC9A9	0.602215	2.80E-38
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VCAN	PLAGL1	0.601957	3.07E-38
VCAN	CARD11	0.601939	3.09E-38
VCAN	SOX8	0.60193	3.10E-38
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VCAN	POM121L9	0.601269	3.91E-38
VCAN	NOD1	0.601103	4.15E-38
VCAN	BDKRB2	0.601048	4.22E-38
VCAN	FBLN5	0.600749	4.69E-38
VCAN	EFNA5	0.600536	5.06E-38
VCAN	ANK3	0.600478	5.16E-38
VCAN	GAPT	0.600432	5.25E-38
VCAN	SYNPO2	0.600097	5.90E-38

gene	lowMean	highMean	logFC	pValue	fdr
CRISPLD2	329.7213	1451.422	2.138148	1.19E-24	1.02E-22
LAMA1	29.48387	274.1514	3.216975	1.39E-26	2.10E-24
EDN3	2.120072	13.11892	2.629464	6.92E-05	0.000165
FKBP10	622.2948	2910.292	2.225494	1.45E-27	3.15E-25
LGI2	32.06004	153.0432	2.255091	3.10E-28	9.52E-26
KRT80	88.21147	532.9838	2.595053	1.79E-14	2.38E-13
TSPYL5	38.15233	265.8108	2.800557	3.83E-24	2.97E-22
AL355102.	34.39247	153.3135	2.15632	4.23E-11	3.35E-10
LINC02408	0.484767	2.302703	2.247965	5.15E-09	2.87E-08
LOXL1	97.16756	764.5514	2.976067	8.41E-26	1.00E-23
SLC8A2	3.52957	15.31351	2.117241	1.34E-06	4.61E-06
FCRL1	4.478495	19.48108	2.120988	0.000148	0.000328
APCDD1L-I	1.072581	6.562162	2.613085	4.72E-09	2.64E-08
SULF1	279.7007	1739.854	2.63701	1.05E-23	7.35E-22
SERPINE2	579.4803	2445.643	2.077382	1.24E-23	8.50E-22
DAPL1	1.90233	121.3622	5.995408	9.60E-08	4.17E-07
ARSI	29.10036	131.7243	2.178413	4.94E-20	1.72E-18
TNFAIP6	6.327061	92.51351	3.870057	1.54E-25	1.67E-23
ENTHD1	1.306452	8.081081	2.628895	6.38E-06	1.91E-05
GLIS1	1.364695	10.05946	2.881902	4.34E-15	6.33E-14
ARHGAP4C	8.426523	35.87568	2.089997	5.41E-09	3.00E-08
SFTA2	1.18638	20.13514	4.085077	5.13E-06	1.57E-05
SULT2B1	28.84319	136.5568	2.243198	9.23E-07	3.27E-06
MAB21L1	1.767921	15.15676	3.099835	1.03E-15	1.69E-14
VANGL2	53.68996	283.6811	2.401546	1.88E-24	1.54E-22
PSAPL1	2.994624	23.4	2.966062	1.57E-07	6.51E-07
BARX2	3.101254	23.30811	2.909908	1.63E-07	6.74E-07
KCNK15	12.1828	58.31351	2.258985	4.18E-16	7.19E-15
PGLYRP4	0.978495	5.135135	2.391766	1.00E-06	3.53E-06
DCN	1380.187	5790.2	2.068749	2.30E-19	7.07E-18
WDR63	1.728495	7.87027	2.186897	1.24E-08	6.41E-08
AC073115.	1.053763	4.427027	2.070787	1.41E-07	5.93E-07
AC087623.	0.218638	1.178378	2.430187	3.05E-12	2.88E-11
SFRP1	23.82885	142.6324	2.581521	2.72E-16	4.80E-15
DKK2	20.77061	92.97297	2.162268	1.69E-17	3.64E-16
F3	68.39158	279.8378	2.0327	1.78E-24	1.46E-22
DNAH9	2.001792	10.43243	2.381712	8.94E-15	1.24E-13
TTYH1	74.46505	383.0811	2.363014	2.07E-23	1.37E-21
GALNT3	42.25448	228.3784	2.43425	7.78E-05	0.000184
IGKV1-17	48.29839	217.5297	2.171166	4.54E-08	2.10E-07
FENDRR	3.328853	16.04865	2.269355	9.92E-17	1.87E-15
NFE4	1.489247	30.49189	4.35577	5.23E-07	1.95E-06
ITGBL1	88.51971	376.6973	2.089335	1.09E-19	3.55E-18
SHISAL1	6.291219	46.38919	2.882377	4.29E-17	8.73E-16
AC117489.	0.52509	5.967568	3.506507	3.69E-14	4.65E-13
LINC02381	61.74283	249.4	2.014118	1.95E-21	8.48E-20

SLIT2	81.48566	333.5838	2.033431	5.35E-22	2.63E-20
COL16A1	183.1183	1001.33	2.451069	8.34E-33	3.79E-29
WNT9A	10.08871	68.65946	2.766717	2.76E-24	2.16E-22
IL11	4.139785	136.1514	5.039512	9.05E-14	1.07E-12
ALX4	1.264337	26.59459	4.39468	7.55E-06	2.23E-05
MFAP4	286.3952	1458.789	2.348692	2.47E-19	7.54E-18
PHACTR3	2.301971	14.85946	2.69044	6.27E-11	4.85E-10
COL1A1	6797.729	42628.2	2.648683	3.84E-28	1.12E-25
GDAP1L1	3.422939	14.51892	2.084627	0.012328	0.01795
SNCA	12.43907	54.92432	2.142567	7.77E-24	5.57E-22
ERP27	46.10305	235.3946	2.352147	1.50E-15	2.37E-14
TGFB2	100.8118	419.8324	2.058149	1.85E-17	3.96E-16
CACNA1S	3.173835	12.8	2.011845	1.63E-11	1.37E-10
PLXNB3	58.19355	293.4595	2.33423	3.29E-16	5.74E-15
FOXN1	0.784946	7.621622	3.279432	1.04E-05	2.98E-05
NTRK3	7.339606	46.61622	2.667057	3.11E-19	9.29E-18
NLGN1	5.620968	46.97838	3.063106	7.07E-06	2.10E-05
AC006058.	1.370968	14.25946	3.378653	1.16E-07	4.94E-07
AL022344..	0.324373	1.578378	2.282719	1.92E-09	1.15E-08
WNT2	9.620072	41.35676	2.104004	6.35E-15	9.00E-14
SEMA3C	25.27778	264.7297	3.388579	5.40E-29	2.15E-26
ALKAL2	25.70161	167.573	2.704859	1.81E-15	2.81E-14
MXRA8	287.7133	1438.124	2.321485	2.83E-28	8.91E-26
DDR1	914.9839	3937.178	2.105344	9.70E-17	1.84E-15
ADGRB2	22.69624	131.2054	2.531302	4.20E-24	3.23E-22
ACTC1	3.455197	21.11892	2.611696	2.21E-10	1.56E-09
AC087623.	1.346774	7.405405	2.459071	3.26E-12	3.07E-11
ST6GAL2	15.90233	105.5351	2.730413	8.65E-19	2.38E-17
AEBP1	1326.043	7833.33	2.562498	1.96E-25	1.98E-23
ARHGAP8	3.031362	15	2.306924	3.65E-13	3.94E-12
CACNA2D1	38.50896	168.2432	2.127282	1.42E-25	1.56E-23
DCDC2	730.0941	3304.605	2.178324	9.79E-07	3.45E-06
GPAT2P1	1.776882	7.72973	2.12107	1.54E-05	4.25E-05
HOXD1	5.531362	23.87568	2.109835	1.12E-11	9.64E-11
NTNG1	0.577061	17.42162	4.916011	1.91E-06	6.38E-06
ANXA3	35.65771	358.8486	3.33109	1.52E-15	2.40E-14
KRT1	4.155914	25.19459	2.599877	0.021802	0.030096
HEYL	254.7509	1119.762	2.136033	5.85E-33	3.32E-29
FAM83B	6.269713	33.25946	2.407293	7.72E-11	5.87E-10
LINC00839	14.49642	70.82162	2.288494	2.88E-17	6.00E-16
DSC3	4.599462	80.37838	4.12727	1.14E-05	3.23E-05
OLFM1	69.91756	342.4108	2.292001	1.24E-17	2.74E-16
DLX3	2.422043	14.56757	2.588464	7.58E-11	5.77E-10
HAND2-AS	12.71147	82.28108	2.69443	1.38E-16	2.54E-15
DPYSL5	0.856631	17.31892	4.337531	1.35E-06	4.64E-06
AC010247.	32.17742	129.1297	2.004701	1.94E-08	9.64E-08
SLC5A1	18.14247	237.8811	3.712797	1.55E-14	2.08E-13

CHRM1	1.458781	27.51351	4.237305	0.000573	0.001118
CTSK	233.2375	2152.011	3.205814	2.60E-25	2.57E-23
RGS4	55.33692	385.6919	2.801135	1.29E-21	5.80E-20
IZUMO1R	0.590502	2.8	2.245413	1.57E-08	7.94E-08
SLC6A20	24.02151	113.6703	2.242457	5.51E-13	5.76E-12
SCN2B	1.276882	6.686486	2.388623	9.36E-10	5.89E-09
AL138930.	1.784946	7.643243	2.098304	1.29E-05	3.63E-05
PDGFD	240.0385	1127.005	2.231157	1.48E-13	1.70E-12
KSR2	7.996416	32.17838	2.008666	1.36E-11	1.16E-10
GRHL2	21.19534	156.3243	2.882723	1.89E-07	7.70E-07
MRC2	303.9884	1615.805	2.410166	4.07E-28	1.17E-25
MYL3	8.766129	79.44865	3.180011	2.17E-14	2.84E-13
CCIN	1.121864	4.540541	2.016967	1.41E-15	2.25E-14
SPEG	23.02778	272.1459	3.562933	9.35E-21	3.76E-19
C3orf52	21.20161	92.09189	2.1189	1.96E-21	8.51E-20
SOD3	298.2213	1661.595	2.478113	1.34E-24	1.13E-22
CDH3	10.71057	74.72973	2.802647	3.58E-14	4.53E-13
FOXF2	7.896057	74.6	3.239971	1.60E-30	1.65E-27
CPXM1	66.99373	276.8378	2.046943	3.66E-23	2.29E-21
COL17A1	11.31452	51.41081	2.183897	2.08E-11	1.73E-10
PSCA	9.506272	59.6	2.648361	7.39E-06	2.18E-05
GRIP1	6.964158	30.66486	2.138566	1.95E-10	1.39E-09
DNAH2	12.02061	50.15676	2.060934	1.38E-24	1.16E-22
ATP1A3	11.17204	57.60541	2.366311	1.21E-10	8.95E-10
TMEM159	64.89158	269.9838	2.05677	1.67E-24	1.39E-22
VCAN	632.4982	3634.308	2.522547	3.58E-30	3.01E-27
LINC01638	1.02957	7.216216	2.809201	6.50E-20	2.20E-18
C1orf116	88.34946	566.0324	2.679591	1.70E-14	2.26E-13
SCN3A	4.447133	23.95135	2.42916	1.52E-07	6.32E-07
PADI3	16.5	233.1405	3.820662	0.016971	0.023973
LCN15	1.65681	40.48108	4.610768	0.004616	0.007413
AL137186.	0.849462	4	2.235378	5.24E-10	3.45E-09
LAMB4	9.410394	52.43784	2.478281	1.99E-05	5.37E-05
PICART1	0.945341	5.610811	2.569303	6.16E-09	3.38E-08
CR2	9.453405	98.71351	3.384342	6.19E-07	2.27E-06
KLHL14	1.510753	10.27568	2.765894	7.32E-10	4.71E-09
HPSE2	3.299283	13.67027	2.050817	6.80E-05	0.000163
PITPNM3	23.68817	115.7135	2.288319	2.17E-13	2.43E-12
TDRD9	23.20968	104.1946	2.166482	3.44E-12	3.21E-11
KAZN	51.59319	214.4108	2.055125	5.09E-19	1.45E-17
TMEM132f	12.26434	50.66486	2.046516	8.56E-21	3.46E-19
WNT10A	9.230287	42.23243	2.193904	2.61E-13	2.88E-12
AC125807.	14.35932	58	2.014066	1.86E-22	1.01E-20
LINC01711	0.458781	5.259459	3.519036	7.62E-14	9.17E-13
IL17REL	1.169355	5.232432	2.161769	2.64E-06	8.56E-06
SGPP2	69.85753	332.8324	2.252309	1.52E-13	1.74E-12
CADM3	7.508065	49.07027	2.708336	2.94E-13	3.22E-12

SNAP91	1.44086	19.29189	3.742992	5.08E-06	1.55E-05
AL022316.	0.717742	4.005405	2.480411	1.48E-13	1.70E-12
AC068473.	0.988351	4.502703	2.187695	2.23E-08	1.10E-07
MSX2	2.638889	18.74054	2.82816	5.52E-15	7.90E-14
EMILIN1	607.2796	2799.638	2.204807	1.21E-27	2.74E-25
HAS1	4.760753	38.24865	3.006147	3.93E-23	2.45E-21
TGFA	124.3665	554.9189	2.157679	5.71E-18	1.34E-16
GGTLC4P	0.540323	2.162162	2.000582	6.51E-11	5.02E-10
SLC24A2	1.182796	4.935135	2.060889	0.001552	0.002762
RGS6	8.456989	34.57838	2.031654	7.73E-05	0.000183
TMEM130	8.242832	272.5351	5.047158	1.81E-24	1.49E-22
C2CD4C	16.57616	70.75135	2.093647	1.82E-12	1.78E-11
THBS2	671.8898	3733.238	2.474131	7.41E-26	9.04E-24
COL12A1	310.3226	1241.605	2.000366	1.78E-24	1.46E-22
ALOXE3	1.048387	7.124324	2.764582	6.92E-08	3.09E-07
PIP5K1B	17.38978	70.43243	2.018	3.39E-15	5.03E-14
HAPLN1	11.2491	95.31351	3.082871	0.000116	0.000263
AC010547.	4.092294	43.61081	3.413704	1.48E-13	1.70E-12
FANK1	5.403226	22.42162	2.052998	4.07E-15	5.94E-14
AC004947.	1.137097	6.464865	2.507265	2.17E-08	1.07E-07
SLC24A3	21.44265	131.4919	2.616419	3.82E-22	1.95E-20
THSD7B	9.459677	37.96757	2.004905	3.18E-13	3.46E-12
SCG2	8.282258	35.30811	2.091903	4.11E-26	5.33E-24
LINC02331	6.193548	27.03784	2.126142	4.65E-06	1.43E-05
BLACAT1	1.432796	11.90811	3.055039	4.80E-07	1.81E-06
FRMD5	2.11828	17.71351	3.063885	2.03E-05	5.46E-05
POSTN	280.1487	2080.703	2.892806	6.69E-24	4.85E-22
AC010931.	1.46595	8.416216	2.521336	1.62E-18	4.20E-17
PSORS1C1	15.77151	73.58919	2.222173	2.87E-16	5.05E-15
HS3ST3A1	8.932796	55.09189	2.624656	4.10E-11	3.26E-10
CCDC8	24.24373	128.7459	2.408844	3.73E-28	1.10E-25
AC087286.	0.438172	1.767568	2.012196	7.01E-10	4.52E-09
NTRK1	3.943548	20.92973	2.407987	5.73E-15	8.18E-14
FAXC	7.607527	36.1027	2.246607	1.05E-12	1.06E-11
BHLHE22	12.40054	52.69189	2.087178	2.46E-15	3.76E-14
SFRP2	28.30645	201.9405	2.834728	7.79E-10	4.98E-09
PRICKLE1	25.28674	110.9892	2.133966	4.56E-18	1.09E-16
LPO	1.980287	9.562162	2.271628	1.96E-05	5.29E-05
LRRC4C	6.929211	32.44865	2.227395	1.19E-23	8.17E-22
CPB1	9.114695	51.89189	2.509243	0.00466	0.00748
ERBB4	2.532258	19.93514	2.976817	1.37E-13	1.59E-12
TMEM51-A	9.49552	53.98378	2.507207	1.17E-21	5.32E-20
STK32A	5.408602	27.81622	2.362599	1.36E-16	2.51E-15
SCN3B	4.202509	17.58378	2.064923	1.94E-22	1.05E-20
GFAP	40.86738	173.7135	2.087688	0.000925	0.001728
FAM81B	0.948925	4.367568	2.202464	2.71E-05	7.08E-05
PCDHA3	6.014337	25.04324	2.057944	4.78E-07	1.80E-06

COL6A2	3206.731	12827.66	2.000083	3.94E-30	3.08E-27
ALOX5	138.2599	685.6378	2.310064	1.06E-26	1.66E-24
GIPR	27.87455	135.7568	2.284003	1.74E-12	1.71E-11
CEACAM6	11.90771	572.8811	5.588268	1.60E-08	8.10E-08
CTXN1	15.57348	92.71892	2.573773	8.01E-25	7.15E-23
BNC1	1.485663	15.46486	3.379815	2.64E-19	7.98E-18
NKILA	6.565412	36.43784	2.47248	3.91E-29	1.77E-26
CLDN10	54.21057	625.973	3.529454	1.32E-13	1.52E-12
SLC17A7	9.237455	37.9027	2.036733	5.19E-13	5.44E-12
IGHV2-26	16.69892	132.3189	2.986192	2.08E-10	1.48E-09
RUNX2	33.27778	133.8541	2.00803	6.08E-19	1.72E-17
FGF9	3.149642	12.65946	2.006956	1.60E-05	4.41E-05
B3GALT5	6.137097	129.6811	4.401268	4.67E-20	1.63E-18
PPP1R14C	3.429211	109.8216	5.001141	1.61E-13	1.83E-12
CTHRC1	168.7984	741.4919	2.13513	8.94E-26	1.05E-23
SLC7A4	5.125448	22.10811	2.108826	1.55E-10	1.13E-09
SLC5A5	4.886201	20.17838	2.046025	1.36E-08	6.99E-08
SBSN	1.78405	37.57297	4.396467	0.001976	0.003443
IGKV1-27	33.10932	156.5189	2.241028	8.76E-09	4.67E-08
AP001476.	2.00448	10.62703	2.406438	2.03E-07	8.23E-07
ZNF860	3.626344	15.04865	2.053046	9.02E-17	1.72E-15
CDR2L	126.0188	556.7514	2.143394	2.88E-32	9.34E-29
IGFBP5	1845.323	7707.827	2.062451	3.36E-18	8.25E-17
TMEM200C	25.03226	108.4324	2.114936	1.11E-23	7.70E-22
EFNB3	13.32706	71.19459	2.417409	1.48E-23	1.00E-21
MGP	756.6613	3668.146	2.277331	4.15E-29	1.80E-26
TULP1	0.609319	2.459459	2.013072	3.67E-07	1.42E-06
UCA1	11.55108	616.6486	5.73835	3.37E-10	2.30E-09
AC002401.	0.572581	3.924324	2.776893	2.03E-08	1.01E-07
TWIST1	6.276882	88.01081	3.809561	1.99E-20	7.47E-19
COL1A2	4291.009	25101.03	2.548358	2.48E-29	1.19E-26
HOXC8	3.636201	15.58919	2.100042	0.000555	0.001086
CPNE6	117.336	12.26486	-3.25804	0.029269	0.039286
PODNL1	12.87634	58.58919	2.185911	4.55E-23	2.78E-21
LINC01600	0.844086	4.432432	2.392637	1.47E-11	1.25E-10
CHST4	47.41129	380.4649	3.004461	2.18E-12	2.11E-11
LAMA2	198.052	889.2432	2.166699	3.02E-20	1.10E-18
SPINK4	6.392473	26.50811	2.051988	0.003082	0.005145
PQLC2L	2.542115	31.83784	3.646641	2.45E-10	1.72E-09
ROCR	1.531362	8.540541	2.479512	2.75E-06	8.90E-06
CEACAM5	13.29928	234.9622	4.143008	1.91E-05	5.16E-05
CUZD1	14.31541	184.5405	3.688297	0.002138	0.003698
PRRX1	73.26523	312.7892	2.09399	1.26E-19	4.06E-18
DUOXA2	142.0914	677.6919	2.25381	1.37E-06	4.70E-06
PYGO1	7.155018	45.91351	2.681892	2.27E-26	3.20E-24
PI3	63.10484	342.9351	2.442113	3.85E-07	1.48E-06
LINC01436	37.06362	150.8432	2.024974	2.05E-07	8.31E-07

CDCP1	105.4982	460.2541	2.125212	1.77E-20	6.76E-19
SLC6A6	260.4552	1106.432	2.086808	8.05E-27	1.30E-24
ESRP1	126.9677	716.8486	2.497207	3.49E-12	3.25E-11
GLI3	25.59767	123.9081	2.275186	2.31E-25	2.32E-23
SHISA9	6.165771	66.00541	3.420231	3.38E-10	2.31E-09
AL356417.	0.719534	3.518919	2.289997	1.77E-16	3.21E-15
TMEM125	29.3405	140.1351	2.255853	0.002666	0.004511
LINC01615	2.363799	16.2973	2.785453	5.26E-20	1.82E-18
IGFL2	1.505376	10.75135	2.836322	7.42E-06	2.19E-05
CRABP2	25.48566	160.2162	2.652262	1.23E-19	3.98E-18
LINC00322	1.071685	10.65946	3.314182	1.35E-07	5.69E-07
MEDAG	15.58244	79.91351	2.358519	2.13E-27	4.14E-25
DPT	112.9624	474.0703	2.069259	1.78E-10	1.27E-09
SOX21-AS1	1.817204	16.24324	3.160047	1.02E-14	1.40E-13
LINC02188	13.5224	56.01081	2.050354	3.97E-16	6.84E-15
PDPN	18.99014	153.4378	3.014332	7.13E-24	5.14E-22
AP000344.	1.396953	7.535135	2.431349	3.88E-07	1.49E-06
TNNT3	3.801075	47.34595	3.638761	3.90E-06	1.22E-05
TPTEP1	6.748208	28.73514	2.09024	2.62E-12	2.50E-11
HOXC10	21.05197	104.8108	2.31576	4.54E-05	0.000113
KCNH3	20.19803	88.2	2.126564	1.56E-15	2.45E-14
COL9A2	86.83065	425.0054	2.291205	6.04E-21	2.49E-19
OMD	8.849462	46.22703	2.385075	9.33E-15	1.29E-13
AC021683.	0.547491	3.978378	2.861273	5.01E-14	6.19E-13
SFTPA2	2.610215	13.58378	2.379645	7.98E-05	0.000188
CXCL14	87.17652	357	2.033913	1.18E-11	1.01E-10
KCNQ1	173.5197	838.9135	2.273423	1.47E-27	3.15E-25
TMEM119	57.90681	450.1459	2.958588	1.58E-27	3.33E-25
S100A3	10.85215	49.8973	2.200981	1.12E-17	2.50E-16
GAL3ST4	58.31541	243.6973	2.063141	1.68E-29	9.54E-27
FNDC1	57.29659	489.6649	3.095273	8.70E-26	1.03E-23
BIRC7	5.798387	85.8	3.887254	3.64E-11	2.92E-10
ATP8A2	6.761649	95.02162	3.812809	2.86E-22	1.48E-20
CRTAC1	7.53853	421.7784	5.806058	3.70E-14	4.66E-13
IGHV3-53	19.89427	149.3243	2.908025	6.93E-11	5.31E-10
LINC02268	0.931004	4.427027	2.24948	4.04E-09	2.29E-08
SUSD5	12.79301	98.4	2.943302	1.37E-20	5.33E-19
CHRNA1	3.645161	96.42162	4.725302	5.86E-12	5.28E-11
GALNT5	6.925627	91.38378	3.721922	3.07E-18	7.60E-17
PRSS21	6.489247	84.87568	3.709228	2.50E-10	1.75E-09
OXTR	25.77778	277.0595	3.425996	4.92E-18	1.16E-16
SHISA2	7.08871	41.97297	2.565866	4.62E-20	1.62E-18
CCL21	551.2876	2355.005	2.094853	2.35E-12	2.26E-11
AL022068.	1.401434	6.221622	2.150387	2.16E-08	1.07E-07
RASGEF1C	2.065412	8.935135	2.11306	4.00E-09	2.27E-08
TMEM35A	3.293011	15.05405	2.192673	4.38E-13	4.66E-12
SLITRK2	0.987455	9.232432	3.224924	7.04E-06	2.09E-05

ABCG4	3.336918	13.87568	2.05597	1.89E-14	2.49E-13
KIF3C	94.56272	405.6324	2.10083	1.26E-31	2.04E-28
DES	26.97312	318.8324	3.563204	2.72E-13	2.99E-12
GDF6	7.223118	29.97297	2.052968	4.54E-11	3.57E-10
SPDEF	36.47222	234.6486	2.685632	8.19E-10	5.21E-09
NKAIN4	1.320789	21.48649	4.023958	1.11E-15	1.81E-14
MATN4	3.944444	91.42162	4.534641	0.00423	0.006849
HOXB8	2.773297	18.73514	2.756072	5.18E-05	0.000127
FAM3D	3.891577	27.41081	2.816318	2.97E-06	9.52E-06
FAM189A1	5.423835	32.67568	2.590832	3.58E-08	1.69E-07
GPR78	0.432796	2.545946	2.556444	1.46E-12	1.45E-11
SLC26A9	11.67025	245.227	4.393211	4.86E-12	4.46E-11
KCNJ13	0.547491	6.037838	3.463125	8.50E-06	2.48E-05
OGN	42.92115	233.2108	2.441874	5.36E-12	4.88E-11
ANK3	176.6093	706.5784	2.000288	1.79E-17	3.85E-16
MUC12	25.67921	193.6595	2.914849	3.29E-16	5.74E-15
SLC18A1	0.945341	4.151351	2.134675	3.40E-05	8.72E-05
CLEC11A	133.4409	600.1892	2.169217	1.72E-27	3.45E-25
KCNG1	12.08423	77.59459	2.682831	1.29E-20	5.04E-19
MDFI	65.26075	311.4595	2.254757	7.76E-27	1.27E-24
DCHS2	5.196237	20.82703	2.002918	1.14E-09	7.09E-09
ADAMTS12	92.67025	417.2324	2.170673	9.33E-24	6.58E-22
SYNC	7.314516	30.08108	2.040022	3.11E-18	7.70E-17
ARL14	32.39606	188.7243	2.54239	2.39E-08	1.17E-07
LINC00968	0.437276	2.286486	2.386516	1.32E-07	5.58E-07
AC090673.	0.574373	3.427027	2.576898	2.73E-11	2.24E-10
PLAU	240.7159	980.9622	2.026866	1.01E-27	2.39E-25
GRIN2A	31.97401	128.9622	2.011976	1.46E-15	2.32E-14
FMN1	42.4776	181.7135	2.096892	1.27E-21	5.71E-20
COL6A3	1628.389	7465.097	2.196716	1.75E-26	2.57E-24
UGT1A10	35.53226	161.2216	2.181844	0.000163	0.000358
AC013565.	0.591398	2.535135	2.099862	3.75E-07	1.44E-06
SLC6A17	4.512545	40.25946	3.157315	2.50E-22	1.32E-20
TMSB15A	3.959677	24.72432	2.642476	1.33E-12	1.32E-11
LINC02519	0.814516	4.016216	2.301822	1.75E-16	3.18E-15
LINC01133	3.521505	15.4	2.128666	1.02E-09	6.38E-09
CEMIP	127.0815	583.6486	2.199346	7.65E-17	1.47E-15
ST8SIA2	0.494624	11.01081	4.476446	1.32E-09	8.11E-09
SIX2	24.73925	115.0919	2.217913	4.09E-05	0.000103
SLC4A11	47.92204	193.6216	2.014479	8.21E-19	2.27E-17
AL139241.	1.842294	7.972973	2.113615	3.55E-08	1.68E-07
FOLR1	24.87186	157	2.658178	1.94E-12	1.88E-11
AJAP1	4.991039	52.36216	3.391112	3.19E-15	4.77E-14
EPHB3	47.79659	280.3297	2.552145	4.53E-27	7.80E-25
AC126773.	0.525986	3.016216	2.519644	1.58E-13	1.80E-12
RLN2	0.630824	2.524324	2.000587	1.37E-08	7.05E-08
JPH3	3.22043	65.93514	4.355722	1.06E-07	4.55E-07

BHLHE41	85.34677	359.4216	2.074269	9.13E-21	3.68E-19
GPR84	7.804659	34.37838	2.139094	5.02E-15	7.22E-14
ITGB6	26.35753	174.7784	2.72924	8.02E-13	8.22E-12
KCNK12	1.447133	17.96757	3.634126	4.62E-15	6.68E-14
MAP1A	66.43638	362.7351	2.448871	1.04E-31	1.89E-28
CLMP	26.87993	114.1135	2.085868	1.68E-12	1.65E-11
IBSP	11.59677	98.98919	3.093547	7.91E-05	0.000187
DUSP27	1.375448	10.4973	2.932044	1.14E-09	7.10E-09
MSLN	10.31541	268.8865	4.704124	2.11E-06	7.00E-06
SPATA12	1.296595	6.578378	2.343004	1.33E-15	2.14E-14
BDNF	9.386201	39.01081	2.055261	5.20E-10	3.43E-09
SOX21	2.954301	18.01622	2.608407	3.20E-10	2.20E-09
AC011479.	1.639785	7.032432	2.100517	5.42E-07	2.01E-06
ZDHHC8P1	5.241935	36.79459	2.811322	1.54E-13	1.76E-12
DCLK1	20.71774	131.4703	2.665798	1.63E-27	3.37E-25
AC108860.	3.373656	16.86486	2.321636	5.94E-06	1.79E-05
XKR5	1.137993	4.589189	2.011748	0.000117	0.000265
MAP1LC3C	2.590502	14.16216	2.450738	4.30E-14	5.36E-13
SFRP4	83.69982	475.6162	2.506501	1.11E-22	6.27E-21
C6orf132	77.45609	381.1946	2.299077	9.61E-18	2.16E-16
KLHDC8A	12.21774	56.23784	2.202563	4.74E-17	9.54E-16
PROM2	23.41308	287.7027	3.619192	1.35E-13	1.56E-12
AL049629.	1.746416	20.65405	3.563956	2.62E-10	1.83E-09
GRAMD4P.	0.755376	3.178378	2.073023	6.94E-07	2.52E-06
LAMP5	19.90143	270.6162	3.765304	1.70E-22	9.23E-21
SVOPL	1.435484	7.605405	2.405488	0.001353	0.002438
CRYBB1	15.32796	261.1514	4.090649	5.88E-08	2.66E-07
CPEB1	3.896057	55.02703	3.820054	9.82E-22	4.50E-20
KCND2	4.699821	35.72432	2.926229	6.42E-18	1.50E-16
TPBG	68.88082	297.4324	2.110388	5.24E-25	4.86E-23
CDX1	3.248208	33.9027	3.383684	3.19E-17	6.61E-16
AC080038.	1.626344	7.713514	2.245756	4.01E-20	1.42E-18
PCDHA10	7.782258	37.98378	2.287123	3.88E-11	3.10E-10
COL11A1	15.63889	484.4216	4.953053	7.74E-26	9.40E-24
VEPH1	41.58244	315.8919	2.925385	1.88E-19	5.87E-18
MMP10	27.32437	137.4541	2.330689	2.19E-14	2.86E-13
EPCAM	1048.653	4337.411	2.048296	1.10E-10	8.19E-10
SLC4A3	38.45161	281.3568	2.871285	2.35E-21	1.01E-19
RNF182	1.859319	12.77838	2.780859	7.63E-11	5.81E-10
SLC35F3	6.636201	39.9027	2.588057	1.02E-10	7.61E-10
HMGA2	66.03136	326.5838	2.30623	6.61E-09	3.61E-08
FLRT2	65.35215	380.3622	2.541067	1.07E-18	2.87E-17
SSC5D	49.66935	257.1135	2.371978	1.60E-25	1.71E-23
CRLF1	35.51523	252.0541	2.827223	1.93E-18	4.92E-17
SRRM3	80.08871	396.1189	2.306263	8.58E-16	1.42E-14
COX7A1	106.3728	517.8324	2.283357	1.97E-13	2.21E-12
PPP1R1B	44.93996	345.9676	2.944566	7.70E-07	2.77E-06

MFAP5	6.635305	31.56216	2.249961	4.41E-14	5.49E-13
KCNIP1	2.312724	11.72432	2.34184	8.44E-13	8.62E-12
RASSF10	2.540323	11.84865	2.221639	3.17E-06	1.01E-05
PRSS2	18.46237	969.4216	5.714465	1.06E-05	3.04E-05
SLC44A4	51.03405	278.2432	2.446815	0.010329	0.015302
RAB36	19.09946	113.0865	2.565823	9.32E-19	2.53E-17
LOXL1-AS1	13.41039	77.35135	2.528075	1.40E-20	5.42E-19
PCDHA6	4.71147	22.07027	2.227855	1.76E-06	5.91E-06
TMPRSS4	9.037634	111.1243	3.620086	2.53E-07	1.01E-06
AC069360.	0.582437	3.713514	2.67261	1.70E-05	4.64E-05
KLK11	3.879032	160.8595	5.37396	1.41E-09	8.58E-09
CDC20B	10.74462	50.94595	2.245352	6.25E-08	2.81E-07
AC116351.	15.47849	105.7027	2.771675	1.62E-18	4.21E-17
TDRD1	8.714158	41.76216	2.260763	7.20E-12	6.42E-11
MYL9	1624.351	8044.086	2.308065	1.88E-26	2.71E-24
MGAT5B	6.645161	47.27027	2.830557	3.59E-14	4.54E-13
SPSB4	2.53405	10.24324	2.015156	9.40E-10	5.92E-09
KRT17	88.23387	448.2649	2.344947	7.94E-10	5.06E-09
HOXC13	2.33871	18.47568	2.981842	1.33E-06	4.57E-06
GGT6	35.6595	193.9135	2.443055	5.76E-10	3.77E-09
LHFPL3	3.962366	18.4	2.215272	9.36E-10	5.89E-09
UPK1B	3.232975	14.14054	2.128903	0.00045	0.000896
ROR1-AS1	0.541219	5.875676	3.440471	1.18E-11	1.02E-10
ENTPD3	8.830645	41.95135	2.248127	4.20E-09	2.37E-08
IGLV7-46	21.35036	124.9405	2.548909	4.46E-06	1.38E-05
MEOX1	12.04839	56.7027	2.234577	1.35E-20	5.23E-19
NDRG4	66.18638	470.6378	2.830011	1.31E-14	1.78E-13
MAGEL2	1.837814	8.254054	2.167112	1.39E-17	3.05E-16
TCL1A	10.03226	43.37838	2.11233	3.68E-05	9.38E-05
TMEM63C	19.41756	78.18919	2.009607	1.35E-09	8.24E-09
LHFPL3-AS	24.68817	101.2486	2.036011	5.64E-11	4.38E-10
GJB3	16.28226	79.90811	2.295041	5.07E-10	3.36E-09
OLFM4	7.387993	731.0757	6.628694	4.98E-08	2.28E-07
MMP28	19.25179	93.2973	2.276843	4.20E-29	1.80E-26
PCDHB17P	1.137993	7.567568	2.733338	7.28E-08	3.23E-07
EPHA3	86.30735	469.4541	2.443429	5.32E-24	3.99E-22
FGFR1	290.6389	1420.957	2.289563	1.63E-32	6.16E-29
SEZ6L	2.777778	88.76757	4.99803	5.31E-10	3.50E-09
PTGDS	2975.531	17260.38	2.536245	5.88E-15	8.38E-14
XIRP1	3.629032	17.50811	2.270366	3.62E-14	4.57E-13
RHOV	19.63351	199.2486	3.34318	5.99E-14	7.31E-13
CDH6	207.0125	980.2973	2.243501	3.73E-19	1.10E-17
COL14A1	485.9928	2182.87	2.167219	2.99E-21	1.27E-19
TMEM132C	3.895161	27.18378	2.802991	7.39E-13	7.61E-12
AL449403.	0.62724	10.27568	4.034072	3.57E-10	2.43E-09
SLC14A2-A	0.311828	1.481081	2.247828	6.42E-11	4.96E-10
SLC14A1	35.1371	157.5189	2.164458	1.05E-05	3.02E-05

DNER	48.53763	386.827	2.994513	9.66E-05	0.000223
PAEP	215.9884	1456.578	2.753558	2.64E-06	8.57E-06
ADRA2A	58.85394	303.9784	2.368758	2.37E-20	8.75E-19
PURG	0.974014	3.902703	2.002459	2.24E-12	2.16E-11
COL11A2	50.81004	323.2486	2.669459	1.00E-07	4.32E-07
SCN5A	3.327061	24.35135	2.871682	1.30E-10	9.59E-10
GJA3	4.086918	23.05405	2.495935	1.53E-07	6.35E-07
SPON1	63.75269	303.2703	2.250046	6.98E-19	1.95E-17
LINC01915	0.569892	2.481081	2.122207	1.35E-17	2.98E-16
CHRD1	23.74194	157.2595	2.727637	1.87E-14	2.47E-13
RNF150	24.69534	155.5946	2.655481	8.43E-24	6.00E-22
FRAS1	183.7357	1088.043	2.566032	1.33E-18	3.52E-17
PCDH10	1.351254	8.535135	2.659115	1.43E-05	3.97E-05
CLDN6	8.403226	35.62162	2.083738	1.68E-06	5.66E-06
ITIH5	131.9955	3107.319	4.557109	8.40E-22	3.94E-20
AMPH	6.583333	49.8	2.919256	3.43E-23	2.16E-21
MACC1	29.7733	158.2919	2.410496	9.11E-17	1.74E-15
GP2	145.9032	959.3784	2.717088	7.29E-08	3.24E-07
C16orf89	10.19086	374.0811	5.198003	3.71E-09	2.12E-08
DMBX1	6.876344	28.36216	2.044254	3.65E-05	9.30E-05
SNCB	0.731183	3.578378	2.291002	1.23E-10	9.06E-10
IGHV3-13	7.96147	42.7027	2.423221	1.35E-08	6.94E-08
COL8A1	142.5932	623.6973	2.128941	1.01E-25	1.15E-23
SCNN1B	16.95968	115.5243	2.768016	9.21E-06	2.67E-05
ITGB8	62.07437	332.4432	2.421038	4.48E-21	1.87E-19
IGLV2-11	103.914	489.2973	2.235322	1.10E-08	5.77E-08
ISLR	165.5358	1353.919	3.031926	6.64E-26	8.20E-24
WNT7B	8.065412	213.9189	4.729172	9.60E-16	1.58E-14
KCNK17	13.79391	66.01622	2.258789	2.39E-10	1.68E-09
PTPRZ1	5.472222	25.11892	2.198576	6.44E-17	1.26E-15
TENM4	18.48387	85.27568	2.205867	1.47E-27	3.15E-25
EPN3	12.51792	113.6811	3.182925	2.42E-12	2.32E-11
MFAP2	51.1353	289.1622	2.499487	3.33E-28	1.01E-25
ASCL5	1.782258	7.594595	2.091267	5.53E-08	2.52E-07
DLL3	2.065412	16.81081	3.024888	1.68E-06	5.66E-06
NCAM1	46.35394	410.1189	3.145278	1.42E-11	1.21E-10
FBLN2	428.5466	1915.341	2.160077	5.76E-19	1.63E-17
PNMA8A	34.48387	146.1676	2.08363	2.22E-17	4.70E-16
AL731567.	1.791219	7.232432	2.013539	3.33E-12	3.12E-11
CRYAB	441.0385	1897.8	2.105351	1.35E-16	2.50E-15
AC013275.	41.69176	174.8757	2.068496	2.32E-13	2.58E-12
ATP2C2-AS	0.895161	4.421622	2.304356	3.88E-12	3.60E-11
C1QL4	9.572581	42.23784	2.141556	4.88E-08	2.24E-07
GPR173	9.169355	41.10811	2.164531	1.21E-26	1.85E-24
LINC01559	8.703405	81.34595	3.224419	5.10E-09	2.84E-08
KIRREL1	231.2616	950.4811	2.039132	4.35E-29	1.81E-26
PCYT1B	3.715054	39.52432	3.411286	2.44E-17	5.13E-16

MYBPC3	3.898746	25.31351	2.698826	1.94E-06	6.48E-06
CHST1	90.26434	390.7459	2.114003	2.24E-27	4.27E-25
RFLNA	33.65591	273.1622	3.020826	4.06E-21	1.70E-19
FUT3	20.36738	165.8486	3.025535	0.000305	0.000629
ADGRE3	3.775986	15.52973	2.040108	0.000261	0.000547
AC011352.	0.689964	4.740541	2.780458	3.59E-13	3.88E-12
IQCA1	14.53853	90.47027	2.637562	4.47E-18	1.07E-16
IL13RA2	32.16308	169.5351	2.398107	0.002317	0.003974
SLITRK6	2.78405	13.41081	2.268139	4.91E-08	2.26E-07
CCL19	172.1093	1061.124	2.624197	1.32E-09	8.10E-09
PCSK1N	104.8925	430.2378	2.036223	3.69E-09	2.11E-08
RGS22	1.777778	7.778378	2.129394	2.42E-08	1.18E-07
AC027130.	0.770609	3.724324	2.272907	0.000736	0.001403
ISYNA1	572.7007	2457.065	2.101083	2.95E-23	1.88E-21
CRYBA2	1.94086	58.10811	4.903971	0.022306	0.030732
HOXB9	4.503584	68.21081	3.920855	1.16E-08	6.05E-08
PTHLH	61.94624	328.1568	2.405297	1.19E-16	2.22E-15
EFEMP1	578.6989	2589.016	2.161519	5.37E-19	1.53E-17
ANXA8L1	3.202509	64.23243	4.326027	2.52E-10	1.76E-09
C5orf38	0.505376	14.96216	4.887817	6.36E-09	3.48E-08
RPS20P22	0.677419	2.864865	2.080346	3.72E-09	2.12E-08
AC005481.	0.44086	2.162162	2.294082	1.85E-08	9.27E-08
RTL1	3.376344	129.8432	5.265165	9.65E-08	4.18E-07
AC008514.	1.324373	10.68649	3.012406	1.84E-15	2.84E-14
TSPAN2	15.36649	62.0973	2.014743	4.03E-23	2.50E-21
MYBPC2	2.47043	33.46486	3.759813	2.23E-13	2.49E-12
C10orf55	2.546595	10.98919	2.109444	1.03E-12	1.04E-11
NDNF	3.791219	38.12973	3.330183	6.25E-08	2.81E-07
KCTD19	0.921147	3.837838	2.058791	1.15E-09	7.11E-09
CCNA1	0.786738	6.113514	2.958046	2.47E-06	8.06E-06
FAP	40.22312	254.0595	2.659069	7.10E-28	1.90E-25
PLA2G4D	0.891577	3.908108	2.132039	1.05E-05	3.00E-05
PKP1	9.374552	39.77838	2.085163	1.66E-13	1.88E-12
IL17RD	21.70161	104.6162	2.269232	2.03E-26	2.91E-24
OMG	13.00717	68.65946	2.400152	7.33E-12	6.53E-11
CPA1	4.086022	664.7892	7.346056	5.28E-06	1.61E-05
FIBCD1	14.35215	65.50811	2.190407	1.87E-12	1.82E-11
MMP1	59.76971	330.2649	2.466137	0.001156	0.002119
ADAM28	57.51344	230.8865	2.005213	1.22E-22	6.79E-21
P3H2	88.9991	382.2	2.102465	1.69E-21	7.46E-20
LINC02154	1.417563	10.4973	2.888533	9.74E-07	3.43E-06
TRIM63	2.985663	110.9676	5.215943	2.13E-06	7.05E-06
IGHV3-73	26.4328	166.0324	2.651064	1.32E-08	6.82E-08
MXRA5Y	0.88172	9.12973	3.372179	1.85E-12	1.80E-11
GJB4	1.522401	16.94595	3.476519	0.00218	0.003763
GFPT2	28.85036	240.7027	3.060591	1.13E-30	1.35E-27
IGLV5-45	16.93459	76.36216	2.172885	9.88E-09	5.22E-08

PITX2	8.614695	68.36757	2.98844	3.45E-09	1.98E-08
LINC02544	2.115591	9.027027	2.09319	5.41E-14	6.65E-13
HPCAL4	1.137993	5.275676	2.212864	1.59E-11	1.34E-10
SPIB	30.3647	333.1135	3.455547	3.53E-15	5.22E-14
SLC34A2	86.32348	2576.319	4.899414	1.00E-16	1.89E-15
TEKT2	2.942652	14.31892	2.282734	2.15E-09	1.28E-08
VSTM5	3.002688	13.85405	2.205982	2.40E-15	3.67E-14
NOG	0.889785	4.097297	2.203144	1.28E-09	7.86E-09
TFF2	79.53495	352.373	2.147442	2.81E-05	7.32E-05
LINC02407	1.5681	7.032432	2.165006	1.22E-16	2.28E-15
FMOD	218.2473	1313.405	2.589277	1.32E-28	4.61E-26
OVOL2	10.98746	47.76216	2.120011	2.53E-07	1.00E-06
ARHGEF38	26.20789	107.1297	2.031286	8.09E-08	3.55E-07
LUM	712.0179	3805.362	2.418048	2.55E-22	1.34E-20
B4GALNT4	47.06004	338.9514	2.848504	6.46E-18	1.50E-16
C1QTNF7	13.71416	57.24865	2.061576	3.31E-20	1.19E-18
CDH11	189.2832	758.6703	2.002927	8.79E-28	2.15E-25
PTGIS	100.1971	553.5622	2.465904	2.72E-23	1.74E-21
IRX2	1.157706	9.767568	3.07673	2.67E-06	8.64E-06
PTCHD1	3.148746	12.68108	2.009829	2.16E-05	5.77E-05
KLK6	1.290323	25.87027	4.325491	1.67E-05	4.58E-05
MFSD6L	2.72491	16.36757	2.586559	3.79E-11	3.03E-10
CLIC6	23.17384	213.9243	3.206532	2.85E-19	8.55E-18
AC027031.	11.79928	55.14595	2.224556	4.09E-17	8.36E-16
COL3A1	4926.392	31384.51	2.671449	1.22E-27	2.74E-25
INSM1	2.61828	15.01622	2.51983	5.76E-08	2.61E-07
SFRP5	49.28047	1309.957	4.732359	3.24E-15	4.82E-14
ITGB4	445.8056	1956.065	2.133468	3.50E-20	1.25E-18
CTSE	96.12814	390.9459	2.023938	1.24E-06	4.28E-06
CILP	24.01882	117.9297	2.29569	8.37E-18	1.90E-16
AC091806.	1.83871	7.875676	2.09871	2.64E-14	3.40E-13
STRA6	11.72939	95.4973	3.025332	8.76E-24	6.21E-22
NECTIN4	23.92652	144.0162	2.589549	2.20E-08	1.08E-07
AC005381.	3.887097	18.99459	2.288824	0.000409	0.00082
TLR10	23.72133	103.427	2.124357	1.13E-10	8.37E-10
CERCAM	162.1828	866.9351	2.418303	6.02E-34	4.56E-30
SCD5	57.43369	826.2811	3.846663	9.15E-26	1.07E-23
KRT19	368.2903	2795.189	2.924031	2.15E-14	2.82E-13
KRT14	26.75179	116.6757	2.124796	0.000177	0.000385
AC015712.	1.224014	5.762162	2.23499	1.22E-08	6.35E-08
PCDH7	19.05376	111.1514	2.544378	6.36E-22	3.06E-20
LINC01480	20.39516	105.4541	2.370316	5.99E-09	3.29E-08
CPA2	12.82527	676.8324	5.721738	0.01038	0.015367
AC087045.	0.86828	4.989189	2.522574	0.000543	0.001065
LINC01561	0.380824	8.448649	4.471523	8.27E-12	7.30E-11
CXCL6	151.4274	866.5405	2.516641	5.68E-10	3.73E-09
KCNH2	56.5233	293.5622	2.376748	2.06E-17	4.37E-16

CLCNKB	1.824373	7.654054	2.068824	1.42E-09	8.64E-09
IGFN1	3.691756	615.6703	7.381707	1.04E-18	2.80E-17
SPOCD1	14.56093	74.78378	2.360623	4.85E-15	6.99E-14
PRSS16	32.80287	168.0324	2.356846	4.15E-12	3.84E-11
PLD5	12.6371	99.55676	2.977854	1.49E-08	7.58E-08
KRT81	13.37545	56.93514	2.089732	7.77E-07	2.80E-06
SOX11	4.189964	24.46486	2.545702	9.52E-15	1.31E-13
AL049775.	0.668459	5.891892	3.13982	9.51E-18	2.14E-16
KRT7	1239.47	5075.297	2.033768	9.06E-09	4.82E-08
TRARG1	1.370072	205.3081	7.227395	0.004186	0.006786
LINC00494	16.56452	81.4973	2.298656	1.13E-11	9.76E-11
GPRIN2	4.163978	73.4	4.139746	6.19E-13	6.44E-12
BNC2	17.3853	112.7027	2.696582	1.71E-27	3.45E-25
L1CAM	11.69982	62.98919	2.428618	5.79E-11	4.50E-10
CYP1A1	5587.492	1385.935	-2.01134	0.000738	0.001407
TPSAB1	51.73208	207.7135	2.005464	6.25E-10	4.06E-09
GOLGA7B	81.30735	405.8865	2.319619	6.80E-20	2.29E-18
CCDC160	0.409498	6.648649	4.021132	2.00E-13	2.25E-12
IGLC7	16.59498	75.41622	2.184128	7.29E-08	3.23E-07
LEP	1.376344	26.16216	4.248569	0.000164	0.00036
SCTR	57.181	912.4973	3.996212	8.55E-13	8.74E-12
DPYSL3	330.4391	1421.735	2.105197	7.07E-29	2.69E-26
GABRP	11.8414	358.0811	4.918375	7.52E-15	1.05E-13
DEGS2	38.46416	167.3135	2.120967	7.31E-06	2.16E-05
VIPR2	4.669355	30.71892	2.717832	3.56E-17	7.33E-16
APCDD1L	1.448029	32.59459	4.492471	9.03E-16	1.49E-14
SPINT1	466.1595	3367.708	2.852872	1.20E-17	2.67E-16
SLC35F1	6.997312	28.81081	2.041738	6.87E-09	3.74E-08
IGHV1-58	7.236559	89.50811	3.628643	2.43E-10	1.71E-09
CHRNA3	4.908602	34.27027	2.803573	7.39E-09	4.00E-08
PLPP4	4.143369	66.98919	4.015052	3.85E-22	1.96E-20
LY6K	26.19713	147.1568	2.489873	0.000381	0.000769
PCDH19	6.836918	36.61622	2.421065	1.61E-12	1.58E-11
PTN	58.34588	332.9081	2.512421	2.19E-14	2.86E-13
PRELP	300.974	1706.784	2.503569	2.02E-22	1.08E-20
AC079834.	0.879032	5.021622	2.514165	1.53E-06	5.20E-06
WISP2	37.02509	163.5243	2.14293	2.14E-14	2.80E-13
TNC	475.8683	2206.324	2.213011	3.65E-17	7.49E-16
PCDHGA12	15.20878	76.44324	2.329484	3.81E-18	9.28E-17
PRSS22	9.276882	229	4.625564	2.28E-17	4.82E-16
AP000757.	6.548387	27.97838	2.095101	2.75E-06	8.88E-06
IL31RA	4.234767	19.62162	2.21209	1.58E-05	4.35E-05
KCTD16	2.255376	12.5027	2.4708	0.000212	0.000454
TBX20	0.534946	2.864865	2.421001	2.85E-08	1.38E-07
STAC2	3.227599	19.32432	2.581885	1.97E-10	1.40E-09
PCDHB6	11.53495	53.64865	2.217531	2.70E-12	2.57E-11
HUNK	84.63082	512.3622	2.597909	1.47E-15	2.33E-14

CCDC80	462.4588	2830.697	2.613761	1.98E-24	1.60E-22
GLP2R	5.466846	38.67027	2.822444	3.46E-20	1.24E-18
RSPO1	1.085125	5.32973	2.296201	1.18E-09	7.27E-09
NCCRP1	5.5681	49.36757	3.148306	1.06E-09	6.61E-09
UNC5A	15.5009	90.42703	2.544402	4.65E-13	4.93E-12
KRT16	13.8172	101.3243	2.874443	0.000249	0.000524
SPACA6P- <i>f</i>	0.5	2.221622	2.151613	8.58E-09	4.59E-08
FNDC11	1.557348	7.118919	2.192567	2.18E-13	2.44E-12
AC010616.	5.033154	22.57838	2.165407	2.33E-13	2.58E-12
TMC4	283.0977	1757.762	2.634368	1.21E-10	8.93E-10
TMEM72	14.319	94.71351	2.72564	6.96E-08	3.10E-07
HTR1F	1.225806	5.535135	2.174887	0.001148	0.002106
IGHV1-3	5.865591	34.45946	2.554552	1.08E-06	3.77E-06
PI16	4.516129	20	2.146841	6.81E-11	5.24E-10
AC134312.	1.489247	8.421622	2.499515	3.67E-13	3.95E-12
AL445933.	1.241039	5.691892	2.197359	3.69E-08	1.74E-07
MBOAT2	46.29928	269.9351	2.543551	3.23E-26	4.31E-24
IGHV4-4	7.804659	33.10811	2.084777	6.74E-08	3.01E-07
GALNT14	22.40502	127.6757	2.51059	4.09E-09	2.31E-08
PLEKHG4B	18.32437	111.1622	2.60083	1.53E-09	9.30E-09
DUOX2	634.3226	4049.238	2.674362	1.19E-08	6.20E-08
HAND2	28.26523	211.973	2.90678	1.37E-18	3.63E-17
ZNF469	38.51075	192.7459	2.323367	3.00E-26	4.05E-24
FLJ16779	0.623656	18.17297	4.8649	1.00E-06	3.53E-06
LAMC2	51.98835	959.3459	4.205791	9.96E-22	4.55E-20
C2orf70	2.354839	10.98378	2.221675	6.54E-11	5.04E-10
ADGRB3	4.065412	25.88649	2.670726	2.06E-14	2.71E-13
ATP2C2	9.114695	89.29189	3.292263	7.97E-14	9.56E-13
TACSTD2	62.09677	645.1243	3.376987	2.64E-13	2.91E-12
AC108134.	2.657706	13.15676	2.30755	8.69E-08	3.80E-07
PLCE1-AS1	0.723118	10.52973	3.864093	3.41E-11	2.75E-10
STMN2	35.67384	276.2108	2.952832	2.29E-19	7.04E-18
CXCL1	224.8047	969.8541	2.109096	6.61E-11	5.09E-10
MMP2	580.6658	4050.038	2.802155	5.38E-31	7.19E-28
WNK2	268.7697	1493.335	2.474095	2.06E-17	4.37E-16
SYNPO2L	1.632616	8.167568	2.322721	3.91E-12	3.63E-11
AC243562.	2.195341	8.875676	2.015412	2.28E-09	1.35E-08
CCNJL	27.92832	131.3784	2.233927	2.71E-26	3.70E-24
FAM181B	0.859319	5.362162	2.641549	1.98E-12	1.92E-11
MMP7	164.6864	1613.67	3.292553	5.21E-17	1.04E-15
SULT1C4	45.6362	241.6486	2.40466	1.74E-16	3.16E-15
KIRREL2	4.109319	513.4757	6.965253	1.01E-05	2.90E-05
VTCN1	23.4776	790.7081	5.073788	7.44E-18	1.71E-16
ADGRF4	2.112007	21.27027	3.332152	6.99E-10	4.51E-09
GPR20	2.740143	13.22162	2.270576	1.49E-18	3.89E-17
KCNJ16	24.04391	298.6162	3.634549	1.52E-13	1.73E-12
GABRG1	2.144265	9.508108	2.148675	7.87E-12	6.97E-11

BICDL2	30.22401	175.0216	2.533766	6.23E-16	1.05E-14
LTBP2	592.2249	2691.611	2.184253	1.23E-30	1.40E-27
CALB2	2.768817	28.91892	3.384672	3.64E-17	7.48E-16
AL021940.	11.41039	2.681081	-2.08946	0.001616	0.002865
NTRK2	45.80376	381.0595	3.056478	2.88E-16	5.06E-15
AC027348.	0.621864	2.562162	2.042691	5.83E-09	3.22E-08
NRG3	8.188172	62.38378	2.929558	2.81E-17	5.87E-16
CHIT1	119.9498	602.0108	2.327358	5.89E-11	4.57E-10
PLA2R1	31.57975	141.7838	2.166621	8.97E-25	7.86E-23
AP000757.	5.600358	35.53514	2.665655	1.06E-14	1.45E-13
MAMDC2	12.47849	68.83243	2.463645	1.84E-16	3.34E-15
EPS8L1	84.74462	402.6973	2.248502	2.53E-21	1.09E-19
KRT5	42.22043	172.5784	2.031239	2.13E-05	5.68E-05
GPA33	1.848566	7.589189	2.037539	4.96E-08	2.28E-07
HSPB7	31.57258	138.4108	2.132213	1.65E-26	2.45E-24
NDP	0.532258	5.048649	3.245699	2.18E-13	2.44E-12
PAX2	11.43638	48.01081	2.069729	4.12E-05	0.000104
PLXDC1	178.1882	729.1135	2.032742	1.15E-26	1.77E-24
IGKV1D-17	6.546595	34.49189	2.397441	4.61E-06	1.42E-05
WISP1	37.79659	178.3027	2.238	5.98E-24	4.41E-22
VWA2	1.734767	20.35676	3.552694	6.69E-12	5.99E-11
BEND6	6.232079	27.72432	2.153367	2.64E-19	7.98E-18
COL8A2	39.0233	272.9459	2.806208	8.57E-30	5.56E-27
CCL11	5.75448	27.96216	2.280718	1.20E-17	2.66E-16
KLC3	17.51792	72.4	2.047158	4.49E-11	3.54E-10
KLK13	1.345878	25.8	4.260751	1.69E-08	8.50E-08
ARMCX2	74.41039	304.4108	2.032444	6.48E-27	1.10E-24
AL512274.	5.023297	21.48108	2.09636	8.87E-11	6.68E-10
COL10A1	10.56362	175.6054	4.055161	4.19E-22	2.10E-20
CFTR	67.31362	1584.259	4.556766	3.46E-13	3.74E-12
SPOCK3	43.24104	229.5514	2.408344	0.036702	0.048255
COX6B2	2.576165	20.12973	2.966031	1.00E-05	2.89E-05
CAPN6	76.06631	451.4324	2.569181	2.67E-11	2.19E-10
PRKG2	2.045699	14.11892	2.786964	1.89E-08	9.43E-08
FBN2	8.861111	42.94054	2.276781	2.52E-14	3.26E-13
AC147651.	4.607527	48.94054	3.408966	1.60E-09	9.69E-09
PROM1	49.58513	761.9027	3.941627	2.27E-17	4.79E-16
HTRA3	127.0708	751.4541	2.564052	1.74E-27	3.48E-25
ADAM33	22.84677	94.64865	2.050591	1.85E-14	2.44E-13
SLC39A2	0.575269	2.913514	2.340452	7.75E-16	1.29E-14
ZPLD1	55.75986	246.0865	2.141867	5.79E-11	4.50E-10
RASAL1	29.49014	151.6432	2.362376	1.44E-17	3.15E-16
AC080038.	0.704301	4.194595	2.574267	4.47E-16	7.64E-15
BMP7	16.52419	158.9459	3.265884	7.60E-14	9.15E-13
DSCAML1	13.9319	81.73514	2.552564	1.29E-16	2.39E-15
LINC01659	1.061828	7.097297	2.74072	4.05E-08	1.90E-07
LRRC15	11.30824	92.82703	3.03717	3.41E-15	5.05E-14

GRM1	1.979391	8.005405	2.015918	0.000118	0.000267
PDZRN3	25.13978	180.9297	2.847385	6.05E-25	5.49E-23
ANOS1	27.76613	133.1676	2.261845	1.22E-27	2.74E-25
SPINT2	677.9507	3622.984	2.417926	4.41E-16	7.54E-15
CILP2	20.89158	90.41081	2.113574	3.83E-22	1.95E-20
BMPR1B	7.060932	63.69189	3.173179	1.51E-18	3.95E-17
GRIA4	1.250896	6.648649	2.410099	0.000143	0.000318
NEFL	3.077061	89.3027	4.859079	9.46E-13	9.59E-12
IGHV3-66	14.80197	85.03784	2.522316	9.14E-10	5.77E-09
PKHD1	148.8477	916.3514	2.622064	4.77E-10	3.18E-09
GRAMD2A	2.930108	16.6973	2.510589	3.05E-08	1.46E-07
PLEKHB1	134.629	633.1189	2.233487	1.51E-14	2.02E-13
IGF1R	132.5986	594.627	2.16492	2.26E-28	7.23E-26
CXCL5	189.5332	826.6865	2.12489	1.06E-08	5.55E-08
IFNL3P1	0.626344	3.075676	2.295876	2.55E-07	1.01E-06
DUOXA1	6.003584	31.32973	2.383636	5.60E-07	2.07E-06
MOXD1	69.34498	445.7784	2.684463	2.66E-26	3.66E-24
FAM9C	0.682796	5.016216	2.877074	0.009744	0.014526
TMEM132A	224.0565	1639.395	2.871229	5.95E-32	1.50E-28
FOXE1	2.472222	18.25405	2.884337	5.11E-07	1.91E-06
NUP210L	3.104839	15.75135	2.342885	0.008842	0.013294
IGHV4-31	46.86649	197.8216	2.077572	3.12E-07	1.22E-06
PTPN13	41.18369	237.5514	2.528094	1.01E-22	5.77E-21
PIWIL4	40.41219	190.8378	2.239485	4.11E-17	8.39E-16
PAX9	2.72043	14.90811	2.454191	9.33E-05	0.000216
PTX3	14.78943	73.07568	2.304825	1.56E-14	2.08E-13
GEM	157.009	721.9243	2.201001	1.63E-27	3.37E-25
AC021683	0.59319	4.8	3.016468	4.55E-10	3.04E-09
AQP1	1615.434	9511.465	2.557746	1.71E-18	4.40E-17
SYT13	41.1353	963.5135	4.549856	1.59E-19	5.02E-18
SRPX2	100.4722	499.4541	2.313555	2.78E-18	6.96E-17
EFNA5	65.38799	315.5351	2.270703	4.32E-19	1.25E-17
TFAP2C	12.27509	50.55135	2.042016	4.14E-11	3.28E-10
FZD2	22.50986	122.0108	2.43838	7.38E-28	1.93E-25
PKNOX2	18.81183	76.86486	2.030684	1.30E-22	7.21E-21
JPH2	17.75269	89.43784	2.332848	2.19E-20	8.14E-19
COMP	28.44355	327.0865	3.523499	1.24E-21	5.59E-20
KLHL30	19.56183	87.88108	2.167511	1.56E-17	3.39E-16
ANO4	5.977599	40.24865	2.751302	4.40E-19	1.27E-17
KCNF1	26.69265	142.7892	2.419372	9.24E-18	2.08E-16
ST6GALNA	5.435484	28.57838	2.394444	1.80E-13	2.03E-12
AC027288	3.303763	18.05946	2.450572	2.20E-07	8.86E-07
HCN4	3.414875	41.36757	3.598596	1.18E-14	1.61E-13
SPTSSB	36.1586	166.1081	2.199712	2.47E-06	8.05E-06
NPTX1	3.700717	59.91351	4.017005	8.15E-18	1.85E-16
GABBR1	100.3091	446.427	2.153971	4.19E-23	2.58E-21
LYPD6B	29.14785	157.2649	2.431735	1.64E-12	1.62E-11

KLK10	3.508961	49.94054	3.831096	4.09E-09	2.31E-08
AC245041.	21.35842	105.6703	2.306693	1.26E-05	3.53E-05
MYOF	336.0591	1435.33	2.094595	1.56E-27	3.32E-25
CYS1	29.17921	277.173	3.247774	1.10E-19	3.59E-18
KIAA1549L	5.09767	69.58378	3.770841	2.10E-22	1.12E-20
CLSTN2	35.7948	293.3892	3.034994	2.37E-17	5.00E-16
ERN2	8.115591	82.65405	3.348317	0.03625	0.047724
AC109779.	1.103943	5.978378	2.437089	3.20E-06	1.02E-05
LEFTY2	1.708781	13.99459	3.03383	3.35E-09	1.93E-08
NPHS1	8.163978	44.98919	2.462234	7.67E-05	0.000182
CCDC74A	21.08513	96.05946	2.187702	4.55E-26	5.87E-24
NXNL2	1.607527	8.567568	2.414043	3.77E-18	9.19E-17
AC024940.	4.407706	47.25946	3.422503	2.19E-07	8.81E-07
KCNS1	4.755376	27.48649	2.531091	3.69E-09	2.11E-08
DPP10	18.47222	74.75676	2.016847	8.09E-06	2.37E-05
TMEM132f	16.49194	79.91351	2.276679	7.51E-07	2.71E-06
SGCA	28.28943	119.0054	2.072692	2.50E-21	1.07E-19
HRH2	6.051971	29.45405	2.282989	3.40E-16	5.91E-15
CCDC74B	4.238351	28.1027	2.729134	1.43E-18	3.75E-17
PDE1C	22.87545	96.52973	2.077173	8.20E-13	8.40E-12
AC002398.	2.591398	11.17838	2.108908	9.83E-06	2.83E-05
PODN	160.0161	794.2595	2.311393	4.34E-23	2.66E-21
AGR3	4.91129	33.48649	2.769405	2.35E-08	1.15E-07
KRT15	11.2276	47.13514	2.069753	9.38E-09	4.97E-08
FAM83E	4.705197	36.74595	2.965258	4.05E-10	2.73E-09
SLC28A3	3.605735	104.8324	4.861648	7.05E-22	3.35E-20
PMEPA1	319.0744	2278.903	2.836375	3.13E-30	2.77E-27
FABP3	144.7572	603.4757	2.059661	1.72E-08	8.65E-08
GAS1	32.7957	132.0054	2.009018	1.45E-19	4.61E-18
CHST3	135.6694	588.4757	2.116888	3.38E-29	1.57E-26
MYO10	310.922	1421.07	2.192353	1.26E-19	4.06E-18
MXRA5	131.4427	885.4	2.751896	1.97E-24	1.60E-22
AP3B2	5.846774	23.67568	2.017693	9.03E-12	7.91E-11
SRPX	62.07885	456.9946	2.880003	6.58E-17	1.29E-15
HAS2	21.75179	133.373	2.61626	7.14E-17	1.39E-15
FGF1	32.54839	136.8703	2.072151	2.15E-19	6.64E-18
WNT6	11.67832	63.08649	2.433499	6.99E-06	2.07E-05
SYNGR3	16.47939	81.0973	2.298991	4.28E-14	5.34E-13
PRRX2	5.896953	29.45405	2.320425	4.93E-14	6.10E-13
ANTXR1	318.7876	1561.368	2.292143	1.42E-28	4.83E-26
RAB25	87.93907	590.1027	2.74639	2.04E-10	1.45E-09
PCDHA5	1.954301	8.67027	2.149424	2.41E-09	1.42E-08
ADCY2	1.412186	8.475676	2.585398	2.36E-13	2.62E-12
ALKAL1	2.619176	16.6973	2.67243	5.89E-12	5.30E-11
COL5A1	958.9158	5234.346	2.448533	6.02E-28	1.63E-25
ITGA3	391.4418	2369.724	2.59785	1.17E-27	2.74E-25
MANCR	4.811828	22.87568	2.249157	8.88E-10	5.62E-09

BX470102.	1.405914	5.632432	2.00225	1.88E-09	1.13E-08
MMP16	13.23029	68.12973	2.36444	1.69E-25	1.79E-23
PLN	21.5681	153.0811	2.827325	1.25E-15	2.02E-14
GJB6	10.8414	65.4	2.59274	0.001578	0.002803
NMNAT2	10.41129	92.32973	3.148646	2.34E-20	8.64E-19
MYEOV	85.98387	548.6919	2.673858	0.002089	0.003622
CST6	1.021505	8.340541	3.029444	2.51E-15	3.83E-14
RYR1	32.77688	132.1135	2.011028	4.21E-17	8.59E-16
CPZ	2.408602	15.77297	2.711187	1.23E-19	3.98E-18
OR13A1	1.673835	8.691892	2.376513	1.67E-07	6.88E-07
ANXA8	7.112007	57.21622	3.008095	2.07E-09	1.23E-08
AC016705.	11.44624	58.14054	2.344671	3.37E-12	3.15E-11
LEFTY1	27.50896	155.3459	2.497511	1.73E-09	1.04E-08
SPATA22	0.826165	5.297297	2.680755	0.011377	0.01669
AC011352.	0.790323	3.47027	2.134534	4.51E-08	2.09E-07
TRIM72	4.663978	60.37297	3.69427	1.19E-08	6.18E-08
TMEM158	25.73387	159.1622	2.628757	4.85E-19	1.39E-17
CHRNA7	0.880824	7.881081	3.161467	1.34E-17	2.96E-16
L1TD1	1.325269	11.24865	3.085395	2.32E-07	9.31E-07
SMIM22	41.33692	168.3784	2.026204	6.04E-08	2.72E-07
PDZRN4	4.267025	17.47027	2.033599	1.06E-09	6.62E-09
NPPB	2.25448	13.38378	2.569619	0.000984	0.001828