

Table SI. Quantitative PCR primer sequences.

Gene	Direction of primer	Sequence (5'-3' direction)
CFTR	Forward	GGAGAGCATACCAGCAGTGACT
	Reverse	TTCCAAGGAGCCACAGCACAAC
RAB27B	Forward	TGGCAACAAGGCAGACCTACCA
	Reverse	CTCCACATTCTGTCCAGTTGCTG
ADRB1	Forward	TTCCTGCCCATCCTCATGCACT
	Reverse	GTAGAAGGAGACTACGGACGAG
DPYSL2	Forward	ACTGCCCAGAAGGCTGTAGGAA
	Reverse	CAGCCACAAACTGGTTCTCATCC
ATP6V0A4	Forward	TTGGAGAGCGTCAATGTGAGGC
	Reverse	CTTCTGCACCTTGATGAGCCAG
EREG	Forward	CTTATCACAGTCGTCGGTTCCAC
	Reverse	GCCATTCAGACTTGCGGCAACT
SFTPD	Forward	GGACAAAGGCATTCCTGGAGAC
	Reverse	TGAGAGAAAGCAGCCTGGAGGT
LOXL2	Forward	TGACTGCAAGCACACGGAGGAT
	Reverse	TCCGAATGTCCTCCACCTGGAT
HTR2B	Forward	GCTGGTTGGATTGTTTGTGATGC
	Reverse	CCACTGAAATGGCACAGAGATGC
SYT2	Forward	CGTGGACAACTCCACTGAGAGT
	Reverse	CAACCACAGCAATGGCGATCAG
ALOX15	Forward	ACCTTCCTGCTCGCCTAGTGTT
	Reverse	GGCTACAGAGAATGACGTTGGC
F2RL1	Forward	CTCCTCTCTGTCATCTGGTTCC
	Reverse	TGCACACTGAGGCAGGTCATGA
IL7R	Forward	ATCGCAGCACTCACTGACCTGT
	Reverse	TCAGGCACTTTACCTCCACGAG
PCSK9	Forward	GACACCAGCATAACAGAGTGACC
	Reverse	GTGCCATGACTGTCACACTTGC
ADRB2	Forward	TACCAGAGCCTGCTGACCAAGA
	Reverse	AGTCACAGCAGGTCTCATTGGC
GATA2	Forward	CAGCAAGGCTCGTTCCTGTTCA
	Reverse	ATGAGTGGTCGGTTCTGCCCAT
IGHM (GenBank accession no. BC017356.2)	Forward	CCTACAAGGTGACCAGCACACT
	Reverse	ACACATGGAGGACGCATTCTGC

MRC1	Forward	AGCCAACACCAGCTCCTCAAGA
	Reverse	CAAACGCTCGCGCATTGTCCA
GAPDH	Forward	GTCTCCTCTGACTTCAACAGCG
	Reverse	ACCACCCTGTTGCTGTAGCCAA

Table SII. Differential expressed genes of tumor tissues compared with paired paracancerous tissues in The Cancer Genome Atlas lung adenocarcinoma cohort.

EMBL	ENTREZID	Gene symbol	Base mean	Log fold change	LfcSE	Stat	P-value	Adjusted P-value	Change
ENSG00000000938	2268	FGR	1968.624	-2.178	0.169	-12.92	3.49x10-38a	1.04x10-36a	Down
ENSG00000001626	1080	CFTR	1185.861	-1.406	0.257	-5.468	4.55x10-08a	1.43x10-07a	Down
ENSG00000003137	56603	CYP26B1	310.995	-1.344	0.215	-6.243	4.30x10-10a	1.66x10-09a	Down
ENSG00000004776	126393	HSPB6	848.265	-2.24	0.238	-9.418	4.59x10-21a	4.67x10-20a	Down
ENSG00000004799	5166	PDK4	5363.415	-2.276	0.218	-10.455	1.39x10-25a	1.99x10-24a	Down
ENSG00000004838	51364	ZMYND10	836.626	-2.19	0.309	-7.078	1.46x10-12a	7.16x10-12a	Down
ENSG00000004939	6521	SLC4A1	21.175	-2.678	0.292	-9.164	5.01x10-20a	4.69x10-19a	Down
ENSG00000005102	4222	MEOX1	76.464	-1.226	0.284	-4.325	1.52x10-05a	3.54x10-05a	Down
ENSG00000005844	3683	ITGAL	2339.392	-1.287	0.165	-7.81	5.73x10-15a	3.56x10-14a	Down
ENSG00000006740	9912	ARHGAP44	1693.438	-1.656	0.159	-10.405	2.36x10-25a	3.32x10-24a	Down
ENSG00000007129	90273	CEACAM21	216.95	-1.432	0.2	-7.165	7.79x10-13a	3.92x10-12a	Down
ENSG00000007174	1770	DNAH9	685.896	-2.19	0.403	-5.438	5.38x10-08a	1.67x10-07a	Down
ENSG00000007264	4145	MATK	265.485	-1.219	0.175	-6.98	2.94x10-12a	1.41x10-11a	Down
ENSG00000007402	9254	CACNA2D2	6601.418	-2.562	0.284	-9.037	1.62x10-19a	1.45x10-18a	Down
ENSG00000007908	6401	SELE	411.385	-2.837	0.306	-9.274	1.79x10-20a	1.73x10-19a	Down
ENSG00000008226	9940	DLEC1	339.725	-1.683	0.289	-5.831	5.51x10-09a	1.90x10-08a	Down
ENSG00000008441	4784	NFIX	5108.317	-1.584	0.149	-10.646	1.81x10-26a	2.74x10-25a	Down
ENSG00000010319	56920	SEMA3G	1406.935	-3.397	0.18	-18.902	1.10x10-79a	3.23x10-77a	Down
ENSG00000010379	6540	SLC6A13	35.444	-3.388	0.204	-16.595	7.59x10-62a	7.40x10-60a	Down
ENSG00000010626	10233	LRRC23	772.13	-1.323	0.186	-7.128	1.02x10-12a	5.08x10-12a	Down
ENSG00000010671	695	BTK	955.565	-1.283	0.149	-8.603	7.73x10-18a	6.07x10-17a	Down
ENSG00000011201	3730	ANOS1	4970.521	-2.438	0.163	-14.962	1.31x10-50a	7.34x10-49a	Down
ENSG00000011600	7305	TYROBP	5485.222	-1.473	0.196	-7.506	6.09x10-14a	3.42x10-13a	Down
ENSG00000012171	7869	SEMA3B	2446.278	-1.997	0.21	-9.529	1.59x10-21a	1.67x10-20a	Down
ENSG00000012779	240	ALOX5	4056.645	-1.917	0.168	-11.44	2.64x10-30a	5.07x10-29a	Down
ENSG00000012822	57658	CALCOCO1	4211.603	-1.461	0.084	-17.307	4.16x10-67a	5.50x10-65a	Down
ENSG00000013297	5010	CLDN11	327.098	-1.349	0.203	-6.656	2.80x10-11a	1.22x10-10a	Down
ENSG00000013588	9052	GPRC5A	37170.79	-1.355	0.19	-7.123	1.06x10-12a	5.26x10-12a	Down
ENSG00000016402	53832	IL20RA	743.014	-1.389	0.21	-6.606	3.94x10-11a	1.68x10-10a	Down
ENSG00000018280	6556	SLC11A1	2586.556	-1.961	0.171	-11.437	2.75x10-30a	5.27x10-29a	Down
ENSG00000018625	477	ATP1A2	235.075	-2.562	0.222	-11.529	9.45x10-31a	1.86x10-29a	Down
ENSG00000019102	23584	VSIG2	1478.558	-2.332	0.241	-9.671	3.99x10-22a	4.42x10-21a	Down
ENSG00000019169	8685	MARCO	9153.546	-3.024	0.262	-11.522	1.02x10-30a	2.00x10-29a	Down
ENSG00000019485	56981	PRDM11	577.785	-1.221	0.103	-11.89	1.33x10-32a	2.87x10-31a	Down
ENSG00000021852	732	C8B	325.73	-3.226	0.353	-9.149	5.75x10-20a	5.35x10-19a	Down
ENSG00000022267	2273	FHL1	6758.051	-3.356	0.16	-20.932	2.72x10-97a	3.32x10-94a	Down
ENSG00000024422	30846	EHD2	9094.036	-1.328	0.154	-8.604	7.71x10-18a	6.05x10-17a	Down
ENSG00000025423	8630	HSD17B6	2333.478	-2.624	0.23	-11.387	4.87x10-30a	9.24x10-29a	Down
ENSG00000031081	57514	ARHGAP31	3700.312	-1.98	0.119	-16.58	9.79x10-62a	9.43x10-60a	Down
ENSG00000032444	10908	PNPLA6	4537.438	-1.668	0.116	-14.433	3.20x10-47a	1.53x10-45a	Down
ENSG00000034239	79645	EFCAB1	436.667	-2.304	0.351	-6.555	5.58x10-11a	2.35x10-10a	Down
ENSG00000035664	23604	DAPK2	1660.97	-2.143	0.151	-14.181	1.20x10-45a	5.36x10-44a	Down
ENSG00000036448	9172	MYOM2	118.692	-1.686	0.169	-9.946	2.62x10-23a	3.18x10-22a	Down
ENSG00000037280	2324	FLT4	1211.497	-1.417	0.141	-10.04	1.02x10-23a	1.28x10-22a	Down
ENSG00000038295	7092	TLL1	221.559	-1.399	0.168	-8.321	8.76x10-17a	6.30x10-16a	Down
ENSG00000038945	4481	MSR1	7194.723	-1.81	0.196	-9.21	3.26x10-20a	3.09x10-19a	Down
ENSG00000039523	79567	RIPOR1	3135.49	-1.317	0.125	-10.56	4.56x10-26a	6.71x10-25a	Down
ENSG00000039537	729	C6	366.908	-2.376	0.353	-6.734	1.66x10-11a	7.35x10-11a	Down
ENSG00000043591	153	ADRB1	607.163	-3.031	0.265	-11.423	3.21x10-30a	6.14x10-29a	Down
ENSG00000046653	2824	GPM6B	835.082	-1.814	0.161	-11.263	2.00x10-29a	3.66x10-28a	Down
ENSG00000046889	80243	PREX2	804.525	-1.3	0.201	-6.474	9.54x10-11a	3.92x10-10a	Down
ENSG00000047617	57101	ANO2	78.421	-1.747	0.215	-8.116	4.81x10-16a	3.27x10-15a	Down
ENSG00000047648	395	ARHGAP6	458.459	-2.343	0.128	-18.25	2.09x10-74a	4.25x10-72a	Down
ENSG00000050555	10319	LAMC3	1253.63	-1.78	0.181	-9.816	9.65x10-23a	1.12x10-21a	Down
ENSG00000055813	114800	CCDC85A	165.216	-2.731	0.18	-15.159	6.65x10-52a	3.93x10-50a	Down
ENSG00000058335	5923	RASGRF1	1734.58	-1.959	0.272	-7.209	5.66x10-13a	2.88x10-12a	Down
ENSG00000064042	22998	LIMCH1	11264.02	-1.488	0.141	-10.543	5.49x10-26a	8.02x10-25a	Down
ENSG00000064201	10077	TSPAN32	107.386	-1.597	0.167	-9.547	1.34x10-21a	1.42x10-20a	Down
ENSG00000064205	8839	CCN5	1058.003	-1.817	0.209	-8.692	3.55x10-18a	2.86x10-17a	Down
ENSG00000064886	1117	CHI3L2	1439.467	-1.945	0.256	-7.589	3.21x10-14a	1.86x10-13a	Down
ENSG00000064989	10203	CALCRL	4466.79	-2.44	0.143	-17.09	1.77x10-65a	2.17x10-63a	Down
ENSG00000065054	9351	SLC9A3R2	5464.385	-1.272	0.16	-7.94	2.02x10-15a	1.30x10-14a	Down
ENSG00000065325	9340	GLP2R	33.176	-1.217	0.336	-3.617	0.000298a	0.000588a	Down
ENSG00000065675	5588	PRKCQ	368.445	-1.422	0.164	-8.693	3.54x10-18a	2.85x10-17a	Down
ENSG00000066056	7075	TIE1	2218.164	-1.95	0.134	-14.573	4.18x10-48a	2.07x10-46a	Down
ENSG00000066336	6688	SPI1	2854.56	-1.64	0.173	-9.496	2.18x10-21a	2.27x10-20a	Down
ENSG00000066405	51208	CLDN18	20311.26	-4.245	0.345	-12.321	6.97x10-35a	1.72x10-33a	Down
ENSG00000066468	2263	FGFR2	2015.964	-1.768	0.168	-10.513	7.52x10-26a	1.09x10-24a	Down
ENSG00000066629	2009	EML1	971.81	-1.464	0.137	-10.722	8.01x10-27a	1.24x10-25a	Down
ENSG00000066735	26153	KIF26A	313.393	-1.376	0.231	-5.955	2.60x10-09a	9.27x10-09a	Down
ENSG00000067082	1316	KLF6	14304.25	-1.405	0.125	-11.27	1.84x10-29a	3.40x10-28a	Down
ENSG00000068001	8692	HYAL2	4327.347	-1.34	0.133	-10.063	8.04x10-24a	1.02x10-22a	Down
ENSG00000068615	65055	REEP1	269.587	-1.74	0.199	-8.749	2.15x10-18a	1.77x10-17a	Down
ENSG00000068831	10235	RASGRP2	393.439	-1.477	0.143	-10.324	5.51x10-25a	7.51x10-24a	Down
ENSG00000068976	5837	PYGM	69.805	-1.534	0.141	-10.904	1.10x10-27a	1.80x10-26a	Down
ENSG00000069535	4129	MAOB	1379.434	-1.432	0.18	-7.958	1.75x10-15a	1.13x10-14a	Down
ENSG00000069702	7049	TGFBR3	2018.803	-2.422	0.16	-15.105	1.51x10-51a	8.75x10-50a	Down
ENSG00000070193	2255	FGF10	64.294	-2.812	0.236	-11.911	1.03x10-32a	2.24x10-31a	Down
ENSG00000070614	3340	NDST1	7185.372	-1.541	0.104	-14.815	1.17x10-49a	6.26x10-48a	Down
ENSG00000070731	10610	ST6GALNAC2	1183.169	-1.344	0.177	-7.578	3.51x10-14a	2.02x10-13a	Down
ENSG00000070778	11099	PTPN21	2119.577	-2.366	0.117	-20.241	4.26x10-91a	3.01x10-88a	Down
ENSG00000070808	815	CAMK2A	41.667	-1.65	0.173	-9.529	1.60x10-21a	1.68x10-20a	Down
ENSG00000071282	29995	LMCD1	2643.23	-1.482	0.121	-12.252	1.65x10-34a	3.97x10-33a	Down
ENSG00000071967	79901	CYBRD1	11058.7	-1.619	0.141	-11.505	1.24x10-30a	2.43x10-29a	Down

ENSG00000071991	28513	CDH19	74.426	-1.765	0.33	-5.347	8.93x10-08a	2.70x10-07a	Down
ENSG00000072163	55679	LIMS2	2193.135	-2.854	0.131	-21.709	1.69x10-104a	3.70x10-101a	Down
ENSG00000072657	29953	TRHDE	189.881	-2.655	0.284	-9.344	9.31x10-21a	9.30x10-20a	Down
ENSG00000073910	10129	FRY	2306.44	-1.363	0.121	-11.246	2.44x10-29a	4.44x10-28a	Down
ENSG00000074527	59277	NTN4	4023.937	-1.601	0.147	-10.875	1.52x10-27a	2.46x10-26a	Down
ENSG00000074660	8578	SCARF1	994.304	-1.492	0.115	-13.033	7.97x10-39a	2.47x10-37a	Down
ENSG00000076555	32	ACACB	873.754	-1.456	0.137	-10.6	2.98x10-26a	4.45x10-25a	Down
ENSG00000077327	9576	SPAG6	567.504	-1.648	0.347	-4.75	2.03x10-06a	5.26x10-06a	Down
ENSG00000077522	88	ACTN2	95.775	-3.237	0.18	-18.026	1.23x10-72a	2.21x10-70a	Down
ENSG00000077943	8516	ITGA8	1640.436	-1.847	0.16	-11.58	5.19x10-31a	1.04x10-29a	Down
ENSG00000078081	27074	LAMP3	14231.87	-2.762	0.206	-13.436	3.72x10-41a	1.33x10-39a	Down
ENSG00000078114	10529	NEBL	4735.88	-1.527	0.132	-11.587	4.79x10-31a	9.58x10-30a	Down
ENSG00000078401	1906	EDN1	2391.151	-1.582	0.205	-7.699	1.37x10-14a	8.22x10-14a	Down
ENSG00000078549	117	ADCYAP1R1	67.853	-1.794	0.203	-8.82	1.14x10-18a	9.58x10-18a	Down
ENSG00000078596	9452	ITM2A	1681.663	-1.986	0.165	-12.003	3.41x10-33a	7.67x10-32a	Down
ENSG00000079156	114880	OSBPL6	522.7	-1.562	0.203	-7.688	1.50x10-14a	8.96x10-14a	Down
ENSG00000079308	7145	TNS1	23498.76	-2.151	0.133	-16.138	1.38x10-58a	1.11x10-56a	Down
ENSG00000080546	27244	SESN1	1479.732	-1.621	0.11	-14.756	2.81x10-49a	1.48x10-47a	Down
ENSG00000080618	1361	CPB2	841.282	-3.958	0.318	-12.46	1.23x10-35a	3.16x10-34a	Down
ENSG00000081041	2920	CXCL2	4059.499	-2.376	0.278	-8.553	1.20x10-17a	9.24x10-17a	Down
ENSG00000081052	1286	COL4A4	1757.654	-1.42	0.178	-7.965	1.65x10-15a	1.07x10-14a	Down
ENSG00000085265	2219	FCN1	976.915	-1.563	0.216	-7.239	4.53x10-13a	2.33x10-12a	Down
ENSG00000085514	29992	PILRA	812.734	-1.316	0.16	-8.205	2.31x10-16a	1.61x10-15a	Down
ENSG00000085563	5243	ABCB1	305.87	-1.272	0.231	-5.52	3.38x10-08a	1.08x10-07a	Down
ENSG00000085741	7481	WNT11	117.41	-1.717	0.191	-8.987	2.54x10-19a	2.24x10-18a	Down
ENSG00000087074	23645	PPP1R15A	6396.681	-1.973	0.144	-13.696	1.08x10-42a	4.21x10-41a	Down
ENSG00000087589	57091	CASS4	697.607	-1.579	0.151	-10.478	1.09x10-25a	1.56x10-24a	Down
ENSG00000087903	5990	RFX2	987.919	-1.793	0.174	-10.303	6.80x10-25a	9.21x10-24a	Down
ENSG00000088320	28954	REM1	90.508	-1.655	0.145	-11.447	2.42x10-30a	4.68x10-29a	Down
ENSG00000089101	26074	CFAP61	127.641	-1.899	0.308	-6.173	6.72x10-10a	2.55x10-09a	Down
ENSG00000089169	22895	RPH3A	18.734	-1.92	0.242	-7.94	2.03x10-15a	1.31x10-14a	Down
ENSG00000089225	6910	TBX5	617.75	-1.328	0.156	-8.522	1.57x10-17a	1.20x10-16a	Down
ENSG00000089250	4842	NOS1	248.155	-2.259	0.341	-6.626	3.46x10-11a	1.49x10-10a	Down
ENSG00000090006	8425	LTBP4	9062.624	-2.327	0.172	-13.498	1.62x10-41a	5.91x10-40a	Down
ENSG00000090530	55214	P3H2	2590.932	-2.189	0.201	-10.909	1.04x10-27a	1.71x10-26a	Down
ENSG00000091106	58484	NLRC4	421.205	-1.866	0.142	-13.136	2.05x10-39a	6.63x10-38a	Down
ENSG00000091181	3568	IL5RA	231.581	-1.886	0.272	-6.944	3.80x10-12a	1.79x10-11a	Down
ENSG00000091428	11069	RAPGEF4	425.997	-1.671	0.127	-13.137	2.01x10-39a	6.52x10-38a	Down
ENSG00000092051	84502	JPH4	134.262	-2.71	0.141	-19.158	8.33x10-82a	2.77x10-79a	Down
ENSG00000092295	7051	TGM1	239.488	-3.139	0.166	-18.897	1.20x10-79a	3.46x10-77a	Down
ENSG00000092421	57556	SEMA6A	1092.974	-2.207	0.184	-12.022	2.72x10-33a	6.14x10-32a	Down
ENSG00000092529	825	CAPN3	102.394	-1.294	0.217	-5.962	2.49x10-09a	8.90x10-09a	Down
ENSG00000092850	27285	TEKT2	282.449	-2.146	0.324	-6.627	3.43x10-11a	1.48x10-10a	Down
ENSG00000092929	201294	UNC13D	3198.038	-1.215	0.16	-7.583	3.37x10-14a	1.94x10-13a	Down
ENSG00000092964	1808	DPYSL2	11359.57	-1.403	0.103	-13.57	6.07x10-42a	2.28x10-40a	Down
ENSG00000093134	55350	VNN3	80.5	-1.238	0.291	-4.256	2.08x10-05a	4.76x10-05a	Down
ENSG00000094963	2327	FMO2	6147.57	-3.043	0.17	-17.916	8.82x10-72a	1.49x10-69a	Down
ENSG00000095370	10044	SH2D3C	1746.464	-2.37	0.128	-18.451	5.08x10-76a	1.10x10-73a	Down
ENSG00000095637	10580	SORBS1	1759.927	-1.423	0.132	-10.743	6.39x10-27a	9.99x10-26a	Down
ENSG00000095713	55118	CRTAC1	3554.811	-2.764	0.262	-10.547	5.22x10-26a	7.65x10-25a	Down
ENSG00000095917	23430	TPSD1	152.96	-1.244	0.412	-3.021	0.002517b	0.004317b	Down
ENSG00000099260	54873	PALMD	1152.785	-1.832	0.141	-12.973	1.73x10-38a	5.28x10-37a	Down
ENSG00000099769	3483	IGFALS	105.802	-1.759	0.256	-6.874	6.23x10-12a	2.88x10-11a	Down
ENSG00000099860	4616	GADD45B	4616.217	-1.538	0.192	-7.998	1.26x10-15a	8.31x10-15a	Down
ENSG00000099957	9127	P2RX6	28.207	-1.526	0.219	-6.977	3.01x10-12a	1.44x10-11a	Down
ENSG00000099994	56241	SUSD2	14797.75	-2.714	0.253	-10.706	9.56x10-27a	1.47x10-25a	Down
ENSG00000100012	266629	SEC14L3	106.969	-4.429	0.337	-13.125	2.38x10-39a	7.65x10-38a	Down
ENSG00000100024	51733	UpB1	28.732	-1.241	0.218	-5.697	1.22x10-08a	4.08x10-08a	Down
ENSG00000100034	9647	PPM1F	1823.27	-1.279	0.089	-14.366	8.48x10-47a	3.99x10-45a	Down
ENSG00000100060	4242	MFNG	1112.466	-1.682	0.122	-13.753	4.86x10-43a	1.94x10-41a	Down
ENSG00000100078	50487	PLA2G3	122.493	-2.11	0.269	-7.836	4.65x10-15a	2.91x10-14a	Down
ENSG00000100191	6527	SLC5A4	34.866	-1.586	0.218	-7.286	3.19x10-13a	1.66x10-12a	Down
ENSG00000100218	27156	RSPH14	58.079	-1.829	0.32	-5.714	1.10x10-08a	3.69x10-08a	Down
ENSG00000100234	7078	TIMP3	1016.432	-1.438	0.204	-7.047	1.83x10-12a	8.93x10-12a	Down
ENSG00000100307	23492	CBX7	1856.64	-1.78	0.112	-15.941	3.30x10-57a	2.48x10-55a	Down
ENSG00000100311	5155	PDGFB	1567.651	-1.259	0.17	-7.416	1.21x10-13a	6.59x10-13a	Down
ENSG00000100312	49	ACR	12.187	-1.68	0.221	-7.592	3.14x10-14a	1.82x10-13a	Down
ENSG00000100362	5816	PVALB	24.675	-1.525	0.269	-5.661	1.50x10-08a	4.95x10-08a	Down
ENSG00000100427	23209	MLC1	84.006	-1.707	0.207	-8.258	1.48x10-16a	1.04x10-15a	Down
ENSG00000100448	1511	CTSG	131.251	-1.48	0.312	-4.738	2.15x10-06a	5.56x10-06a	Down
ENSG00000100626	57452	GALNT16	164.671	-1.282	0.204	-6.288	3.21x10-10a	1.25x10-09a	Down
ENSG00000100678	6547	SLC8A3	37.239	-1.452	0.188	-7.71	1.26x10-14a	7.57x10-14a	Down
ENSG00000101098	140730	RIMS4	98.859	-1.206	0.326	-3.699	0.000217a	0.000435a	Down
ENSG00000101162	81027	TUBB1	69.179	-2.35	0.225	-10.447	1.52x10-25a	2.16x10-24a	Down
ENSG00000101222	25876	SPEF1	137.626	-1.95	0.295	-6.621	3.58x10-11a	1.54x10-10a	Down
ENSG00000101280	51378	ANGPT4	142.984	-4.399	0.206	-21.386	1.79x10-101a	3.57x10-98a	Down
ENSG00000101282	343637	RSPO4	243.696	-2.131	0.276	-7.711	1.25x10-14a	7.54x10-14a	Down
ENSG00000101307	10326	SIRPB1	741.958	-2.678	0.185	-14.463	2.07x10-47a	1.01x10-45a	Down
ENSG00000101331	140706	CCM2L	315.439	-2.659	0.137	-19.368	1.44x10-83a	5.28x10-81a	Down
ENSG00000101335	10398	MYL9	12279.14	-1.541	0.164	-9.402	5.36x10-21a	5.43x10-20a	Down
ENSG00000101665	4092	SMAD7	1645.154	-1.207	0.094	-12.82	1.27x10-37a	3.62x10-36a	Down
ENSG00000101916	51311	TLR8	688.667	-1.311	0.2	-6.545	5.95x10-11a	2.50x10-10a	Down
ENSG00000101938	91851	CHRD1	2085.802	-2.019	0.238	-8.475	2.34x10-17a	1.77x10-16a	Down
ENSG00000101955	8406	SRPX	723.168	-1.515	0.19	-7.97	1.59x10-15a	1.04x10-14a	Down
ENSG00000102003	6855	SYP	184.799	-1.552	0.174	-8.923	4.55x10-19a	3.92x10-18a	Down
ENSG00000102010	660	BMX	100.629	-2.398	0.179	-13.408	5.45x10-41a	1.94x10-39a	Down
ENSG00000102104	6247	RS1	95.258	-3.937	0.223	-17.668	7.44x10-70a	1.14x10-67a	Down

ENSG00000102145	2623	GATA1	15.733	-1.613	0.187	-8.622	6.60x10-18a	5.22x10-17a	Down
ENSG00000102230	9468	PCYT1B	101.002	-1.906	0.254	-7.512	5.83x10-14a	3.28x10-13a	Down
ENSG00000102547	81617	CAB39L	838.537	-1.381	0.115	-11.968	5.22x10-33a	1.15x10-31a	Down
ENSG00000102575	54	ACP5	8850.51	-1.949	0.17	-11.469	1.88x10-30a	3.66x10-29a	Down
ENSG00000102683	6445	SGCG	100.179	-3.851	0.191	-20.182	1.42x10-90a	9.18x10-88a	Down
ENSG00000102760	28984	RGCC	6266.985	-2.845	0.142	-20.105	6.69x10-90a	4.08x10-87a	Down
ENSG00000102904	55815	TSNAXIP1	89.665	-1.91	0.261	-7.316	2.55x10-13a	1.34x10-12a	Down
ENSG00000102934	51090	PLLP	2067.338	-1.842	0.172	-10.732	7.24x10-27a	1.13x10-25a	Down
ENSG00000102935	23090	ZNF423	299.884	-1.468	0.163	-9.019	1.90x10-19a	1.69x10-18a	Down
ENSG00000103034	65009	NDRG4	795.816	-2.062	0.193	-10.699	1.03x10-26a	1.58x10-25a	Down
ENSG00000103175	58189	WFDC1	448.004	-1.715	0.189	-9.054	1.37x10-19a	1.24x10-18a	Down
ENSG00000103241	2294	FOXF1	1088.135	-2.709	0.157	-17.283	6.37x10-67a	8.32x10-65a	Down
ENSG00000103313	4210	MEFV	111.107	-1.445	0.176	-8.191	2.58x10-16a	1.79x10-15a	Down
ENSG00000103647	10391	CORO2B	305.051	-2.145	0.174	-12.359	4.34x10-35a	1.09x10-33a	Down
ENSG00000103710	51285	RASL12	897.041	-1.541	0.148	-10.421	2.00x10-25a	2.83x10-24a	Down
ENSG00000103740	23205	ACSBG1	53.143	-1.725	0.282	-6.109	1.00x10-09a	3.73x10-09a	Down
ENSG00000103811	1512	CTSH	27813.51	-1.241	0.201	-6.175	6.63x10-10a	2.52x10-09a	Down
ENSG00000104059	23359	FAM189A1	86.878	-2.618	0.21	-12.449	1.42x10-35a	3.61x10-34a	Down
ENSG00000104267	760	CA2	1553.722	-2.182	0.186	-11.732	8.70x10-32a	1.80x10-30a	Down
ENSG00000104918	56729	RETN	295.244	-3.55	0.289	-12.3	9.10x10-35a	2.23x10-33a	Down
ENSG00000104967	4858	NOVA2	430.563	-2.399	0.14	-17.127	9.28x10-66a	1.16x10-63a	Down
ENSG00000104974	11024	LILRA1	90.28	-1.428	0.157	-9.076	1.12x10-19a	1.02x10-18a	Down
ENSG00000105227	57716	PRX	2245.667	-3.816	0.191	-19.976	8.92x10-89a	4.78x10-86a	Down
ENSG00000105339	22898	DENND3	3385.024	-1.9	0.12	-15.825	2.09x10-56a	1.54x10-54a	Down
ENSG00000105374	4818	NKG7	653.283	-1.234	0.213	-5.791	6.98x10-09a	2.39x10-08a	Down
ENSG00000105376	7087	ICAM5	394.321	-1.319	0.198	-6.676	2.45x10-11a	1.07x10-10a	Down
ENSG00000105383	945	CD33	418.006	-1.294	0.168	-7.707	1.29x10-14a	7.76x10-14a	Down
ENSG00000105479	93233	CCDC114	310.292	-1.68	0.296	-5.684	1.31x10-08a	4.36x10-08a	Down
ENSG00000105501	8778	SIGLEC5	42.294	-1.362	0.206	-6.62	3.58x10-11a	1.54x10-10a	Down
ENSG00000105509	3036	HAS1	165.179	-2.926	0.39	-7.504	6.18x10-14a	3.46x10-13a	Down
ENSG00000105519	828	CAPS	3141.981	-1.633	0.289	-5.652	1.59x10-08a	5.22x10-08a	Down
ENSG00000105538	54922	RASIP1	1068.079	-2.316	0.146	-15.834	1.83x10-56a	1.35x10-54a	Down
ENSG00000105971	858	CAV2	9510.81	-2.304	0.152	-15.197	3.70x10-52a	2.23x10-50a	Down
ENSG00000105974	857	CAV1	27789.96	-3.406	0.179	-19.044	7.36x10-81a	2.27x10-78a	Down
ENSG00000106004	3202	HOXA5	392.457	-1.679	0.13	-12.907	4.12x10-38a	1.22x10-36a	Down
ENSG00000106025	23554	TSPAN12	2723.117	-1.318	0.128	-10.288	7.96x10-25a	1.08x10-23a	Down
ENSG00000106034	79974	CPED1	1071.317	-1.541	0.159	-9.665	4.24x10-22a	4.69x10-21a	Down
ENSG00000106123	2051	EPHB6	345.341	-1.504	0.182	-8.278	1.25x10-16a	8.89x10-16a	Down
ENSG00000106178	6369	CCL24	148.296	-2.377	0.309	-7.702	1.34x10-14a	8.07x10-14a	Down
ENSG00000106688	6505	SLC1A1	2005.166	-2.053	0.192	-10.713	8.90x10-27a	1.38x10-25a	Down
ENSG00000106809	4969	OGN	756.097	-1.876	0.279	-6.732	1.67x10-11a	7.42x10-11a	Down
ENSG00000106991	2022	ENG	10251.72	-1.607	0.143	-11.21	3.66x10-29a	6.61x10-28a	Down
ENSG00000106992	203	AK1	1024.639	-1.559	0.16	-9.765	1.59x10-22a	1.81x10-21a	Down
ENSG00000107165	7306	TYRP1	153.679	-1.241	0.243	-5.096	3.47x10-07a	9.84x10-07a	Down
ENSG00000107242	8395	PIP5K1B	902.734	-1.926	0.192	-10.036	1.05x10-23a	1.32x10-22a	Down
ENSG00000107295	6456	SH3GL2	93.627	-1.699	0.356	-4.777	1.78x10-06a	4.64x10-06a	Down
ENSG00000107317	5730	PTGDS	4780.989	-1.813	0.201	-9.006	2.13x10-19a	1.89x10-18a	Down
ENSG00000107593	9033	PKD2L1	63.805	-1.382	0.24	-5.753	8.78x10-09a	2.98x10-08a	Down
ENSG00000107719	27143	PALD1	956.324	-1.304	0.122	-10.672	1.37x10-26a	2.09x10-25a	Down
ENSG00000107738	64115	VSIR	3514.684	-1.586	0.121	-13.126	2.33x10-39a	7.52x10-38a	Down
ENSG00000107742	9806	SPOCK2	12752.05	-3.476	0.16	-21.771	4.33x10-105a	1.06x10-101a	Down
ENSG00000108342	1440	CSF3	1116.555	-5.417	0.417	-12.978	1.63x10-38a	4.98x10-37a	Down
ENSG00000108370	8787	RGS9	155.712	-2.38	0.156	-15.288	9.27x10-53a	5.78x10-51a	Down
ENSG00000108381	443	ASPA	145.537	-2.416	0.192	-12.586	2.52x10-36a	6.77x10-35a	Down
ENSG00000108387	5414	SEPTIN4	629.725	-1.456	0.111	-13.109	2.92x10-39a	9.33x10-38a	Down
ENSG00000108576	6532	SLC6A4	3405.184	-6.555	0.329	-19.929	2.28x10-88a	1.17x10-85a	Down
ENSG00000108622	3384	ICAM2	764.063	-1.359	0.141	-9.637	5.59x10-22a	6.12x10-21a	Down
ENSG00000108823	6442	SGCA	360.3	-1.949	0.189	-10.329	5.20x10-25a	7.09x10-24a	Down
ENSG00000108924	3131	HLF	1414.016	-1.432	0.233	-6.14	8.26x10-10a	3.11x10-09a	Down
ENSG00000109501	7466	WFS1	4453.78	-1.808	0.132	-13.708	9.15x10-43a	3.59x10-41a	Down
ENSG00000109846	1410	CRYAB	940.897	-1.953	0.161	-12.11	9.37x10-34a	2.17x10-32a	Down
ENSG00000109906	7704	ZBTB16	629.757	-1.738	0.317	-5.49	4.02x10-08a	1.27x10-07a	Down
ENSG00000110203	2352	FOLR3	85.983	-3.799	0.291	-13.066	5.13x10-39a	1.61x10-37a	Down
ENSG00000110328	374378	GALNT18	1755.983	-1.682	0.13	-12.986	1.47x10-38a	4.51x10-37a	Down
ENSG00000110446	51296	SLC15A3	2900.028	-1.465	0.151	-9.694	3.21x10-22a	3.58x10-21a	Down
ENSG00000110665	29125	C11orf21	125.329	-1.61	0.18	-8.926	4.43x10-19a	3.82x10-18a	Down
ENSG00000110786	84867	PTPN5	42.87	-3.825	0.262	-14.597	2.95x10-48a	1.48x10-46a	Down
ENSG00000110799	7450	VWF	21878.79	-2.084	0.184	-11.332	9.14x10-30a	1.71x10-28a	Down
ENSG00000110876	6404	SELPLG	2576.544	-1.428	0.152	-9.385	6.31x10-21a	6.36x10-20a	Down
ENSG00000111052	8825	LIN7A	535.026	-2.368	0.168	-14.075	5.44x10-45a	2.36x10-43a	Down
ENSG00000111058	79611	ACSS3	871.224	-1.597	0.152	-10.517	7.19x10-26a	1.04x10-24a	Down
ENSG00000111077	23371	TNS2	4808.283	-1.633	0.127	-12.886	5.43x10-38a	1.60x10-36a	Down
ENSG00000111181	6539	SLC6A12	168.723	-1.35	0.18	-7.507	6.05x10-14a	3.40x10-13a	Down
ENSG00000111275	217	ALDH2	12633.11	-1.651	0.145	-11.396	4.40x10-30a	8.37x10-29a	Down
ENSG00000111339	420	ART4	149.057	-2.217	0.208	-10.676	1.31x10-26a	2.00x10-25a	Down
ENSG00000111404	79785	RERGL	40.838	-1.903	0.302	-6.293	3.11x10-10a	1.22x10-09a	Down
ENSG00000111405	8909	ENDOU	16.201	-1.487	0.204	-7.287	3.16x10-13a	1.65x10-12a	Down
ENSG00000111452	283383	ADGRD1	2115.353	-1.599	0.207	-7.726	1.11x10-14a	6.70x10-14a	Down
ENSG00000111834	345895	RSPH4A	382.73	-1.981	0.307	-6.454	1.09x10-10a	4.44x10-10a	Down
ENSG00000111859	4739	NEDD9	10816.89	-1.397	0.154	-9.065	1.24x10-19a	1.13x10-18a	Down
ENSG00000111863	84830	ADTRP	428.33	-2.43	0.185	-13.144	1.84x10-39a	5.99x10-38a	Down
ENSG00000111961	23328	SASH1	2831.865	-1.652	0.12	-13.798	2.62x10-43a	1.07x10-41a	Down
ENSG00000112137	221692	PHACTR1	1552.686	-2.171	0.16	-13.542	8.86x10-42a	3.31x10-40a	Down
ENSG00000112139	266727	MDGA1	494.695	-1.928	0.187	-10.314	6.09x10-25a	8.27x10-24a	Down
ENSG00000112149	9308	CD83	2067.408	-1.753	0.162	-10.828	2.53x10-27a	4.07x10-26a	Down
ENSG00000112183	221662	RBM24	50.085	-1.257	0.247	-5.095	3.50x10-07a	9.92x10-07a	Down
ENSG00000112214	9457	FHL5	326.817	-2.569	0.187	-13.774	3.64x10-43a	1.46x10-41a	Down

ENSG00000112232	202559	KHDRBS2	195.974	-1.301	0.254	-5.113	3.17x10-07a	9.03x10-07a	Down
ENSG00000112320	55084	SOBP	312.197	-1.342	0.139	-9.625	6.25x10-22a	6.82x10-21a	Down
ENSG00000112530	135138	PACRG	135.542	-2.209	0.304	-7.255	4.01x10-13a	2.07x10-12a	Down
ENSG00000112782	53405	CLIC5	7814.177	-3.849	0.193	-19.91	3.36x10-88a	1.67x10-85a	Down
ENSG00000112799	9450	LY86	679.541	-1.286	0.176	-7.319	2.50x10-13a	1.32x10-12a	Down
ENSG00000112902	9037	SEMA5A	2910.728	-2.159	0.169	-12.788	1.91x10-37a	5.40x10-36a	Down
ENSG00000112936	730	C7	7348.158	-1.669	0.224	-7.455	8.96x10-14a	4.95x10-13a	Down
ENSG00000112964	2690	GHR	222.572	-1.841	0.16	-11.526	9.74x10-31a	1.92x10-29a	Down
ENSG00000113070	1839	HBEGF	3079.603	-2.374	0.179	-13.293	2.54x10-40a	8.67x10-39a	Down
ENSG00000113231	8622	PDE8B	396.752	-1.309	0.141	-9.255	2.15x10-20a	2.06x10-19a	Down
ENSG00000113303	79908	BTNL8	42.041	-2.921	0.227	-12.858	7.72x10-38a	2.24x10-36a	Down
ENSG00000113389	4883	NPR3	1803.648	-1.417	0.197	-7.18	6.97x10-13a	3.52x10-12a	Down
ENSG00000113396	28965	SLC27A6	46.985	-2.482	0.317	-7.823	5.15x10-15a	3.21x10-14a	Down
ENSG00000113555	51294	PCDH12	1450.506	-1.532	0.143	-10.685	1.20x10-26a	1.83x10-25a	Down
ENSG00000113594	3977	LIFR	5631.39	-1.25	0.196	-6.369	1.90x10-10a	7.60x10-10a	Down
ENSG00000114113	5948	RBP2	70.718	-2.47	0.313	-7.888	3.07x10-15a	1.95x10-14a	Down
ENSG00000114200	590	BCHE	324.41	-2.915	0.194	-15.052	3.37x10-51a	1.92x10-49a	Down
ENSG00000114378	3373	HYAL1	1464.939	-2.25	0.226	-9.961	2.26x10-23a	2.76x10-22a	Down
ENSG00000114654	79825	EFCC1	481.798	-2.937	0.146	-20.101	7.31x10-90a	4.22x10-87a	Down
ENSG00000114771	13	AADAC	314.868	-1.599	0.346	-4.627	3.70x10-06a	9.29x10-06a	Down
ENSG00000114790	26084	ARHGEF26	2057.484	-2.551	0.154	-16.55	1.61x10-61a	1.53x10-59a	Down
ENSG00000114812	7433	VIPR1	2716.043	-3.513	0.202	-17.399	8.39x10-68a	1.15x10-65a	Down
ENSG00000114854	7134	TNNC1	1438.833	-3.955	0.219	-18.089	3.86x10-73a	7.07x10-71a	Down
ENSG00000115008	3552	IL1A	107.056	-1.726	0.234	-7.38	1.58x10-13a	8.54x10-13a	Down
ENSG00000115306	6711	SPTBN1	31150.57	-1.624	0.115	-14.172	1.37x10-45a	6.10x10-44a	Down
ENSG00000115361	33	ACADL	576.573	-3.287	0.24	-13.678	1.37x10-42a	5.32x10-41a	Down
ENSG00000115380	2202	EFEMP1	8586.356	-1.399	0.166	-8.427	3.54x10-17a	2.62x10-16a	Down
ENSG00000115602	9173	IL1RL1	1182.494	-2.066	0.349	-5.913	3.35x10-09a	1.18x10-08a	Down
ENSG00000115604	8809	IL18R1	385.087	-1.384	0.201	-6.885	5.77x10-12a	2.68x10-11a	Down
ENSG00000115896	5334	PLCL1	365.622	-1.475	0.12	-12.268	1.35x10-34a	3.28x10-33a	Down
ENSG00000116016	2034	EPAS1	48332.08	-2.775	0.133	-20.914	4.01x10-97a	4.64x10-94a	Down
ENSG00000116032	116444	GRIN3B	106.63	-1.34	0.305	-4.399	1.09x10-05a	2.58x10-05a	Down
ENSG00000116147	7143	TNR	154.569	-3.979	0.279	-14.271	3.34x10-46a	1.52x10-44a	Down
ENSG00000116194	9068	ANGPTL1	340.565	-1.538	0.24	-6.399	1.56x10-10a	6.30x10-10a	Down
ENSG00000116678	3953	LEPR	1807.007	-1.727	0.158	-10.962	5.85x10-28a	9.79x10-27a	Down
ENSG00000116690	10216	PRG4	1350.182	-3.106	0.323	-9.621	6.52x10-22a	7.09x10-21a	Down
ENSG00000116701	4688	NCF2	3419.88	-1.485	0.155	-9.595	8.41x10-22a	9.08x10-21a	Down
ENSG00000117069	81849	ST6GALNAC5	828.59	-1.586	0.179	-8.859	8.09x10-19a	6.88x10-18a	Down
ENSG00000117114	23266	ADGRL2	3422.39	-1.497	0.147	-10.158	3.05x10-24a	3.98x10-23a	Down
ENSG00000117245	57576	KIF17	181.126	-1.997	0.15	-13.3	2.31x10-40a	7.96x10-39a	Down
ENSG00000117318	3399	ID3	2561.66	-1.24	0.149	-8.334	7.85x10-17a	5.67x10-16a	Down
ENSG00000117501	80133	MROH9	58.265	-2.264	0.347	-6.518	7.12x10-11a	2.96x10-10a	Down
ENSG00000117791	54996	MTARC2	1120.638	-1.594	0.122	-13.024	8.98x10-39a	2.77x10-37a	Down
ENSG00000117834	200010	SLC5A9	238.137	-2.805	0.246	-11.416	3.48x10-30a	6.66x10-29a	Down
ENSG00000118194	7139	TNNT2	125.445	-1.279	0.223	-5.745	9.19x10-09a	3.10x10-08a	Down
ENSG00000118307	55259	CFAP94	137.159	-1.405	0.26	-5.408	6.38x10-08a	1.96x10-07a	Down
ENSG00000118407	27145	FILIP1	1134.272	-1.413	0.183	-7.702	1.33x10-14a	8.02x10-14a	Down
ENSG00000118432	1268	CNR1	407.771	-1.373	0.214	-6.419	1.37x10-10a	5.56x10-10a	Down
ENSG00000118492	79747	ADGB	88.291	-2.173	0.384	-5.661	1.51x10-08a	4.97x10-08a	Down
ENSG00000118526	6943	TCF21	1049.077	-2.927	0.2	-14.67	1.00x10-48a	5.16x10-47a	Down
ENSG00000118729	845	CASQ2	139.56	-2.606	0.26	-10.033	1.09x10-23a	1.36x10-22a	Down
ENSG00000118777	9429	ABCG2	480.035	-1.669	0.173	-9.663	4.32x10-22a	4.77x10-21a	Down
ENSG00000118946	27253	PCDH17	1731.689	-1.337	0.151	-8.873	7.10x10-19a	6.05x10-18a	Down
ENSG00000119138	687	KLF9	4370.614	-1.37	0.144	-9.547	1.33x10-21a	1.41x10-20a	Down
ENSG00000119147	84417	ECRG4	274.029	-2.998	0.266	-11.279	1.66x10-29a	3.08x10-28a	Down
ENSG00000119457	57864	SLC46A2	499.718	-2.281	0.261	-8.752	2.09x10-18a	1.72x10-17a	Down
ENSG00000119508	8013	NR4A3	1580.796	-1.921	0.274	-7.01	2.38x10-12a	1.15x10-11a	Down
ENSG00000119535	1441	CSF3R	3038.908	-1.647	0.195	-8.443	3.09x10-17a	2.31x10-16a	Down
ENSG00000119698	57718	PPP4R4	132.926	-1.994	0.245	-8.145	3.81x10-16a	2.61x10-15a	Down
ENSG00000119782	2281	FKBP1B	209.019	-1.203	0.158	-7.611	2.72x10-14a	1.58x10-13a	Down
ENSG00000119862	29094	LGALS1	1706.134	-1.754	0.137	-12.822	1.23x10-37a	3.52x10-36a	Down
ENSG00000120051	159686	CFAP58	102.84	-2.142	0.274	-7.828	4.95x10-15a	3.10x10-14a	Down
ENSG00000120057	6425	SFRP5	207.655	-1.82	0.358	-5.087	3.65x10-07a	1.03x10-06a	Down
ENSG00000120156	7010	TEK	2002.793	-2.979	0.148	-20.067	1.44x10-89a	8.11x10-87a	Down
ENSG00000120262	80129	CCDC170	677.431	-1.53	0.25	-6.108	1.01x10-09a	3.76x10-09a	Down
ENSG00000120279	80177	MYCT1	834.975	-2.092	0.126	-16.633	4.04x10-62a	4.01x10-60a	Down
ENSG00000120318	64411	ARAP3	1180.017	-1.422	0.108	-13.119	2.56x10-39a	8.20x10-38a	Down
ENSG00000120457	3762	KCNJ5	655.121	-1.723	0.198	-8.713	2.95x10-18a	2.39x10-17a	Down
ENSG00000120645	440073	IQSEC3	232.149	-2.94	0.175	-16.82	1.74x10-63a	1.87x10-61a	Down
ENSG00000120693	4093	SMAD9	651.552	-1.225	0.204	-6.01	1.85x10-09a	6.71x10-09a	Down
ENSG00000120738	1958	EGR1	19015.68	-1.629	0.228	-7.137	9.50x10-13a	4.74x10-12a	Down
ENSG00000120833	8835	SOCS2	1899.22	-1.952	0.198	-9.84	7.60x10-23a	8.86x10-22a	Down
ENSG00000120896	10174	SORBS3	3931.7	-1.259	0.127	-9.909	3.82x10-23a	4.57x10-22a	Down
ENSG00000120907	148	ADRA1A	60.602	-3.645	0.248	-14.682	8.38x10-49a	4.31x10-47a	Down
ENSG00000120913	64236	PDLIM2	1916.861	-1.844	0.129	-14.299	2.23x10-46a	1.03x10-44a	Down
ENSG00000121068	6909	TBX2	2054.122	-1.989	0.145	-13.684	1.26x10-42a	4.91x10-41a	Down
ENSG00000121075	9496	TBX4	952.02	-2.164	0.168	-12.897	4.66x10-38a	1.37x10-36a	Down
ENSG00000121316	79887	PLBD1	2576.94	-1.232	0.167	-7.362	1.81x10-13a	9.68x10-13a	Down
ENSG00000121552	1475	CSTA	498.528	-1.306	0.177	-7.366	1.76x10-13a	9.45x10-13a	Down
ENSG00000121671	1408	CRY2	2698.187	-1.287	0.115	-11.238	2.64x10-29a	4.80x10-28a	Down
ENSG00000121691	847	CAT	8023.06	-1.904	0.113	-16.874	7.04x10-64a	7.72x10-62a	Down
ENSG00000121797	9034	CCRL2	546.516	-1.566	0.154	-10.144	3.52x10-24a	4.55x10-23a	Down
ENSG00000122223	51744	CD244	136.772	-1.333	0.184	-7.227	4.93x10-13a	2.52x10-12a	Down
ENSG00000122367	11155	LDB3	122.995	-1.303	0.207	-6.278	3.42x10-10a	1.33x10-09a	Down
ENSG00000122420	5737	PTGFR	220.419	-1.479	0.219	-6.764	1.35x10-11a	6.02x10-11a	Down
ENSG00000122679	10268	RAMP3	2171.505	-3.427	0.171	-20.017	3.88x10-89a	2.13x10-86a	Down
ENSG00000122694	152007	GLIPR2	3582.841	-2.067	0.155	-13.3	2.32x10-40a	7.97x10-39a	Down

ENSG00000122735	27019	DNAI1	222.984	-2.133	0.354	-6.02	1.74x10-09a	6.33x10-09a	Down
ENSG00000122756	1271	CNTFR	57.306	-2.574	0.277	-9.287	1.59x10-20a	1.55x10-19a	Down
ENSG00000122852	653509	SFTPA1	365249.1	-2.871	0.323	-8.901	5.55x10-19a	4.75x10-18a	Down
ENSG00000122877	1959	EGR2	1234.175	-1.756	0.193	-9.079	1.09x10-19a	9.93x10-19a	Down
ENSG00000123119	64168	NECAB1	510.519	-3.133	0.169	-18.494	2.33x10-76a	5.16x10-74a	Down
ENSG00000123146	976	ADGRE5	7156.866	-1.307	0.137	-9.572	1.05x10-21a	1.12x10-20a	Down
ENSG00000123178	57213	SPRYD7	884.008	-1.318	0.085	-15.514	2.80x10-54a	1.91x10-52a	Down
ENSG00000123243	80760	ITIH5	1665.975	-2.259	0.187	-12.06	1.73x10-33a	3.95x10-32a	Down
ENSG00000123342	4327	MMP19	1599.129	-1.691	0.213	-7.953	1.81x10-15a	1.17x10-14a	Down
ENSG00000123358	3164	NR4A1	8968.795	-1.966	0.24	-8.179	2.85x10-16a	1.97x10-15a	Down
ENSG00000123360	5153	PDE1B	330.733	-1.682	0.15	-11.25	2.32x10-29a	4.23x10-28a	Down
ENSG00000123838	722	C4BPA	11651.99	-1.335	0.293	-4.553	5.28x10-06a	1.30x10-05a	Down
ENSG00000124019	79843	FAM124B	142.76	-1.596	0.162	-9.846	7.15x10-23a	8.36x10-22a	Down
ENSG00000124107	6590	SLPI	20674.34	-1.939	0.251	-7.718	1.18x10-14a	7.12x10-14a	Down
ENSG00000124191	84969	TOX2	528.59	-1.309	0.182	-7.188	6.58x10-13a	3.33x10-12a	Down
ENSG00000124237	128602	C20orf85	859.772	-2.66	0.441	-6.027	1.67x10-09a	6.06x10-09a	Down
ENSG00000124440	64344	HIF3A	841.672	-1.267	0.278	-4.558	5.16x10-06a	1.27x10-05a	Down
ENSG00000124469	1088	CEACAM8	56.827	-2.444	0.397	-6.162	7.18x10-10a	2.72x10-09a	Down
ENSG00000124615	4337	MOCS1	810.621	-1.44	0.117	-12.314	7.66x10-35a	1.88x10-33a	Down
ENSG00000124713	1.07E+08	GNMT	37.046	-1.286	0.192	-6.7	2.08x10-11a	9.16x10-11a	Down
ENSG00000124713	27232	GNMT	37.046	-1.286	0.192	-6.7	2.08x10-11a	9.16x10-11a	Down
ENSG00000124713	1.07E+08	CNPY3-GNMT	37.046	-1.286	0.192	-6.7	2.08x10-11a	9.16x10-11a	Down
ENSG00000124713	27232	CNPY3-GNMT	37.046	-1.286	0.192	-6.7	2.08x10-11a	9.16x10-11a	Down
ENSG00000124780	89822	KCNK17	121.141	-1.522	0.222	-6.859	6.95x10-12a	3.20x10-11a	Down
ENSG00000124785	51299	NRN1	574.543	-2.186	0.168	-13.036	7.60x10-39a	2.37x10-37a	Down
ENSG00000124920	745	MYRF	2827.204	-2.153	0.239	-9.012	2.02x10-19a	1.79x10-18a	Down
ENSG00000124942	79026	AHNAK	56702.46	-1.769	0.152	-11.669	1.83x10-31a	3.73x10-30a	Down
ENSG00000125409	64518	TEKT3	46.643	-2.214	0.275	-8.039	9.02x10-16a	6.01x10-15a	Down
ENSG00000125414	4620	MYH2	29.262	-3.074	0.253	-12.15	5.73x10-34a	1.35x10-32a	Down
ENSG00000125740	2354	FOSB	16768.05	-3.197	0.335	-9.552	1.28x10-21a	1.35x10-20a	Down
ENSG00000125810	22918	CD93	8944.072	-1.81	0.147	-12.328	6.37x10-35a	1.58x10-33a	Down
ENSG00000125845	650	BMP2	2041.716	-1.6	0.182	-8.806	1.30x10-18a	1.08x10-17a	Down
ENSG00000125848	23767	FLRT3	3568.581	-1.777	0.194	-9.162	5.08x10-20a	4.75x10-19a	Down
ENSG00000125895	55321	TMEM74B	154.41	-1.784	0.159	-11.198	4.16x10-29a	7.47x10-28a	Down
ENSG00000125900	128646	SIRPD	11.516	-1.924	0.172	-11.219	3.30x10-29a	5.97x10-28a	Down
ENSG00000125910	8698	S1PR4	444.565	-2.054	0.159	-12.881	5.75x10-38a	1.69x10-36a	Down
ENSG00000125931	4435	CITED1	23.096	-1.379	0.279	-4.936	7.96x10-07a	2.17x10-06a	Down
ENSG00000125999	92747	BPIFB1	6542.188	-1.394	0.45	-3.099	0.001942b	0.003385b	Down
ENSG00000126218	2159	F10	215.938	-1.885	0.154	-12.214	2.63x10-34a	6.27x10-33a	Down
ENSG00000126458	6237	RRAS	2942.602	-1.518	0.158	-9.622	6.48x10-22a	7.05x10-21a	Down
ENSG00000126759	5199	CFP	317.545	-2.143	0.17	-12.617	1.71x10-36a	4.66x10-35a	Down
ENSG00000126785	57381	RHOJ	909.27	-1.6	0.118	-13.519	1.20x10-41a	4.42x10-40a	Down
ENSG00000126895	554	AVPR2	61.352	-2.307	0.181	-12.758	2.80x10-37a	7.87x10-36a	Down
ENSG00000127084	89846	FGD3	859.186	-1.317	0.115	-11.472	1.83x10-30a	3.55x10-29a	Down
ENSG00000127241	5648	MASP1	344.272	-2.918	0.21	-13.892	7.04x10-44a	2.91x10-42a	Down
ENSG00000127249	84239	ATP13A4	2381.201	-1.395	0.248	-5.621	1.90x10-08a	6.20x10-08a	Down
ENSG00000127329	5787	PTPRB	5181.307	-2.249	0.184	-12.217	2.52x10-34a	6.03x10-33a	Down
ENSG00000127528	10365	KLF2	1974.712	-1.67	0.185	-9.04	1.56x10-19a	1.41x10-18a	Down
ENSG00000127533	9002	F2RL3	477.157	-1.734	0.236	-7.36	1.84x10-13a	9.85x10-13a	Down
ENSG00000127920	2791	GNG11	3083.305	-1.548	0.199	-7.777	7.45x10-15a	4.58x10-14a	Down
ENSG00000128016	7538	ZFP36	19608.1	-1.69	0.21	-8.057	7.80x10-16a	5.20x10-15a	Down
ENSG00000128268	4248	MGAT3	1305.57	-3.479	0.192	-18.112	2.58x10-73a	4.80x10-71a	Down
ENSG00000128284	80833	APOL3	2322.833	-1.306	0.14	-9.306	1.32x10-20a	1.30x10-19a	Down
ENSG00000128536	222256	CDHR3	935.474	-1.842	0.33	-5.585	2.34x10-08a	7.58x10-08a	Down
ENSG00000128849	84952	CGNL1	3587.392	-2.34	0.141	-16.554	1.51x10-61a	1.44x10-59a	Down
ENSG00000128918	8854	ALDH1A2	535.027	-1.795	0.244	-7.344	2.07x10-13a	1.10x10-12a	Down
ENSG00000129048	51554	ACKR4	137.514	-2.373	0.201	-11.837	2.53x10-32a	5.34x10-31a	Down
ENSG00000129226	968	CD68	194.489	-1.33	0.228	-5.833	5.43x10-09a	1.88x10-08a	Down
ENSG00000129244	482	ATP1B2	162.156	-1.421	0.181	-7.856	3.95x10-15a	2.49x10-14a	Down
ENSG00000129250	10749	KIF1C	8330.392	-1.432	0.1	-14.277	3.04x10-46a	1.39x10-44a	Down
ENSG00000129437	43847	KLK14	26.783	-2.029	0.282	-7.199	6.08x10-13a	3.09x10-12a	Down
ENSG00000129451	5655	KLK10	654.456	-1.498	0.303	-4.941	7.79x10-07a	2.13x10-06a	Down
ENSG00000129467	196883	ADCY4	627.455	-1.955	0.128	-15.309	6.70x10-53a	4.23x10-51a	Down
ENSG00000129596	1036	CDO1	233.273	-2.674	0.171	-15.676	2.21x10-55a	1.56x10-53a	Down
ENSG00000129749	57053	CHRNA10	34.781	-1.303	0.15	-8.656	4.89x10-18a	3.90x10-17a	Down
ENSG00000129993	863	CBFA2T3	370.012	-1.2	0.167	-7.18	6.97x10-13a	3.52x10-12a	Down
ENSG00000130037	3741	KCNA5	71.754	-2.31	0.228	-10.116	4.68x10-24a	6.00x10-23a	Down
ENSG00000130052	9754	STARD8	1085.659	-1.964	0.141	-13.936	3.84x10-44a	1.60x10-42a	Down
ENSG00000130164	3949	LDLR	8951.706	-1.886	0.171	-11.061	1.94x10-28a	3.34x10-27a	Down
ENSG00000130176	1264	CNN1	973.519	-1.309	0.199	-6.583	4.61x10-11a	1.96x10-10a	Down
ENSG00000130208	341	APOC1	6919.406	-1.457	0.223	-6.546	5.90x10-11a	2.48x10-10a	Down
ENSG00000130226	1804	DPP6	83.061	-3.403	0.223	-15.231	2.21x10-52a	1.33x10-50a	Down
ENSG00000130307	83878	USHBP1	257.314	-2.576	0.117	-21.982	4.28x10-107a	1.18x10-103a	Down
ENSG00000130433	59285	CACNG6	107.421	-2.53	0.361	-7.006	2.44x10-12a	1.18x10-11a	Down
ENSG00000130518	80726	IQC�	720.044	-2.709	0.241	-11.217	3.35x10-29a	6.06x10-28a	Down
ENSG00000130522	3727	JUND	8438.048	-1.528	0.155	-9.853	6.68x10-23a	7.83x10-22a	Down
ENSG00000130528	3270	HRC	47.839	-1.224	0.176	-6.971	3.15x10-12a	1.50x10-11a	Down
ENSG00000130595	7140	TNNT3	35.865	-2.543	0.274	-9.267	1.92x10-20a	1.85x10-19a	Down
ENSG00000130598	7136	TNNI2	134.949	-2.276	0.211	-10.81	3.09x10-27a	4.95x10-26a	Down
ENSG00000130700	140628	GATA5	64.065	-1.654	0.217	-7.611	2.71x10-14a	1.58x10-13a	Down
ENSG00000130755	9535	GMFG	1567.539	-1.426	0.163	-8.758	1.99x10-18a	1.64x10-17a	Down
ENSG00000130940	54897	CASZ1	935.865	-1.273	0.145	-8.765	1.87x10-18a	1.55x10-17a	Down
ENSG00000131044	164395	TTL9	79.359	-1.31	0.3	-4.37	1.24x10-05a	2.93x10-05a	Down
ENSG00000131055	84701	COX4I2	401.819	-2.498	0.171	-14.609	2.45x10-48a	1.23x10-46a	Down
ENSG00000131097	51751	HIGD1B	374.943	-2.927	0.181	-16.165	8.88x10-59a	7.25x10-57a	Down
ENSG00000131355	84658	ADGRE3	132.556	-2.583	0.219	-11.82	3.07x10-32a	6.47x10-31a	Down
ENSG00000131370	9467	SH3BP5	802.289	-1.375	0.127	-10.833	2.40x10-27a	3.86x10-26a	Down

ENSG00000131409	94030	LRRC4B	109.392	-1.65	0.172	-9.586	9.14x10-22a	9.83x10-21a	Down
ENSG00000131471	8639	AOC3	6546.376	-2.448	0.158	-15.47	5.53x10-54a	3.72x10-52a	Down
ENSG00000131477	10266	RAMP2	1844.871	-2.979	0.145	-20.509	1.80x10-93a	1.36x10-90a	Down
ENSG00000131634	79652	TMEM204	1433.733	-1.838	0.15	-12.224	2.31x10-34a	5.52x10-33a	Down
ENSG00000131831	10742	RAI2	920.223	-1.958	0.142	-13.772	3.76x10-43a	1.51x10-41a	Down
ENSG00000131910	8431	NR0B2	132.785	-1.401	0.32	-4.374	1.22x10-05a	2.88x10-05a	Down
ENSG00000132031	4148	MATN3	740.773	-1.46	0.216	-6.768	1.31x10-11a	5.86x10-11a	Down
ENSG00000132170	5468	PPARG	1295.47	-1.703	0.189	-8.988	2.51x10-19a	2.21x10-18a	Down
ENSG00000132259	1262	CNGA4	80.255	-2.64	0.309	-8.531	1.45x10-17a	1.12x10-16a	Down
ENSG00000132321	79781	IQCA1	364.961	-1.398	0.216	-6.473	9.62x10-11a	3.95x10-10a	Down
ENSG00000132376	51763	INPP5K	2224.121	-1.234	0.103	-12	3.57x10-33a	7.98x10-32a	Down
ENSG00000132554	26166	RGS22	198.889	-1.964	0.265	-7.418	1.19x10-13a	6.52x10-13a	Down
ENSG00000132622	116835	HSPA12B	770.166	-2.795	0.142	-19.644	6.54x10-86a	2.87x10-83a	Down
ENSG00000132854	163782	KANK4	191.732	-1.84	0.211	-8.724	2.69x10-18a	2.18x10-17a	Down
ENSG00000132965	241	ALOX5AP	3670.03	-1.887	0.19	-9.907	3.87x10-23a	4.63x10-22a	Down
ENSG00000132970	10810	WASF3	752.186	-1.918	0.152	-12.633	1.39x10-36a	3.79x10-35a	Down
ENSG00000133026	4628	MYH10	7608.457	-1.335	0.137	-9.772	1.48x10-22a	1.69x10-21a	Down
ENSG00000133101	8900	CCNA1	85.244	-1.369	0.321	-4.258	2.06x10-05a	4.71x10-05a	Down
ENSG00000133115	161003	STOML3	166.434	-2.586	0.392	-6.596	4.22x10-11a	1.80x10-10a	Down
ENSG00000133116	9365	KL	398.354	-2.674	0.168	-15.94	3.34x10-57a	2.50x10-55a	Down
ENSG00000133121	90627	STARD13	1274.9	-1.708	0.112	-15.222	2.52x10-52a	1.52x10-50a	Down
ENSG00000133169	55859	BEX1	35.948	-1.785	0.296	-6.03	1.64x10-09a	5.96x10-09a	Down
ENSG00000133246	84106	PRAM1	493.407	-2.542	0.168	-15.097	1.69x10-51a	9.80x10-50a	Down
ENSG00000133392	4629	MYH11	8539.613	-1.749	0.201	-8.714	2.95x10-18a	2.39x10-17a	Down
ENSG00000133401	23037	PDZD2	2572.188	-2.2	0.19	-11.593	4.49x10-31a	9.01x10-30a	Down
ENSG00000133488	284904	SEC14L4	296.074	-1.97	0.247	-7.977	1.50x10-15a	9.79x10-15a	Down
ENSG00000133561	474344	GIMAP6	2181.784	-1.913	0.141	-13.597	4.19x10-42a	1.58x10-40a	Down
ENSG00000133574	55303	GIMAP4	2222.96	-1.299	0.135	-9.641	5.35x10-22a	5.86x10-21a	Down
ENSG00000133661	6441	SFTPD	19715.44	-2.693	0.28	-9.614	6.98x10-22a	7.57x10-21a	Down
ENSG00000133665	84332	DYDC2	161.366	-2.144	0.315	-6.811	9.66x10-12a	4.39x10-11a	Down
ENSG00000133800	10894	LYVE1	1362.768	-2.72	0.204	-13.312	1.97x10-40a	6.82x10-39a	Down
ENSG00000133874	79845	RNF122	621.106	-1.241	0.136	-9.12	7.48x10-20a	6.88x10-19a	Down
ENSG00000134020	157310	PEBP4	2740.377	-3.118	0.307	-10.157	3.09x10-24a	4.02x10-23a	Down
ENSG00000134030	9811	CTIF	1641.989	-1.27	0.099	-12.883	5.62x10-38a	1.65x10-36a	Down
ENSG00000134115	27255	CNTN6	333.138	-3.858	0.227	-17.001	8.05x10-65a	9.30x10-63a	Down
ENSG00000134201	2949	GSTM5	359.396	-1.952	0.19	-10.289	7.93x10-25a	1.07x10-23a	Down
ENSG00000134256	9398	CD101	545.904	-2.798	0.174	-16.101	2.51x10-58a	1.95x10-56a	Down
ENSG00000134508	91768	CABLES1	1773.01	-1.243	0.128	-9.686	3.47x10-22a	3.86x10-21a	Down
ENSG00000134531	2012	EMP1	10113.09	-1.24	0.175	-7.074	1.50x10-12a	7.37x10-12a	Down
ENSG00000134917	11095	ADAMTS8	1014.69	-3.618	0.23	-15.749	7.02x10-56a	5.07x10-54a	Down
ENSG00000134962	152831	KLB	255.074	-1.863	0.294	-6.345	2.23x10-10a	8.85x10-10a	Down
ENSG00000135063	9413	FAM189A2	1661.537	-3.342	0.161	-20.804	4.02x10-96a	4.01x10-93a	Down
ENSG00000135111	6926	TBX3	1044.358	-1.999	0.155	-12.905	4.25x10-38a	1.26x10-36a	Down
ENSG00000135205	57639	CCDC146	464.203	-1.398	0.214	-6.546	5.92x10-11a	2.49x10-10a	Down
ENSG00000135218	948	CD36	4244.181	-3.033	0.191	-15.84	1.64x10-56a	1.21x10-54a	Down
ENSG00000135363	4005	LMO2	978.289	-1.85	0.115	-16.082	3.44x10-58a	2.66x10-56a	Down
ENSG00000135406	5630	PRPH	22.303	-1.758	0.297	-5.928	3.06x10-09a	1.08x10-08a	Down
ENSG00000135519	23416	KCNH3	82.872	-1.322	0.296	-4.473	7.71x10-06a	1.86x10-05a	Down
ENSG00000135540	57224	NHSL1	1864.02	-1.792	0.134	-13.39	6.91x10-41a	2.44x10-39a	Down
ENSG00000135604	8676	STX11	1074.614	-2.86	0.148	-19.356	1.83x10-83a	6.58x10-81a	Down
ENSG00000135917	80704	SLC19A3	556.59	-3.295	0.182	-18.092	3.68x10-73a	6.79x10-71a	Down
ENSG00000135929	1593	CYP27A1	4931.229	-1.962	0.166	-11.835	2.58x10-32a	5.44x10-31a	Down
ENSG00000136048	55332	DRAM1	8055.212	-1.228	0.16	-7.683	1.55x10-14a	9.28x10-14a	Down
ENSG00000136114	55901	THSD1	432.109	-2.175	0.133	-16.406	1.72x10-60a	1.55x10-58a	Down
ENSG00000136153	4008	LMO7	15716.39	-1.326	0.141	-9.405	5.18x10-21a	5.26x10-20a	Down
ENSG00000136160	1910	EDNRB	3390.219	-3.494	0.158	-22.109	2.58x10-108a	9.44x10-105a	Down
ENSG00000136244	3569	IL6	1140.709	-2.313	0.296	-7.809	5.77x10-15a	3.58x10-14a	Down
ENSG00000136546	6332	SCN7A	1965.205	-2.026	0.203	-9.961	2.26x10-23a	2.76x10-22a	Down
ENSG00000136630	3142	HLX	553.773	-1.319	0.132	-9.975	1.96x10-23a	2.39x10-22a	Down
ENSG00000136732	2995	GYPC	1492.261	-1.687	0.131	-12.877	6.03x10-38a	1.77x10-36a	Down
ENSG00000136826	9314	KLF4	3503.999	-2.198	0.197	-11.183	4.92x10-29a	8.80x10-28a	Down
ENSG00000136842	7111	TMOD1	283.071	-1.6	0.158	-10.131	4.01x10-24a	5.17x10-23a	Down
ENSG00000136867	1318	SLC31A2	171.427	-1.26	0.147	-8.558	1.15x10-17a	8.89x10-17a	Down
ENSG00000136918	401551	WDR38	283.965	-2.56	0.371	-6.895	5.38x10-12a	2.51x10-11a	Down
ENSG00000137033	90865	IL33	2651.911	-2.066	0.185	-11.156	6.72x10-29a	1.19x10-27a	Down
ENSG00000137070	3590	IL11RA	501.198	-1.223	0.117	-10.413	2.16x10-25a	3.04x10-24a	Down
ENSG00000137098	26206	SPAG8	121.373	-1.625	0.243	-6.693	2.19x10-11a	9.59x10-11a	Down
ENSG00000137393	255488	RNF144B	2773.156	-1.428	0.118	-12.153	5.55x10-34a	1.31x10-32a	Down
ENSG00000137441	83888	FGFBP2	125.085	-3.825	0.242	-15.787	3.83x10-56a	2.80x10-54a	Down
ENSG00000137473	83894	TTC29	130.348	-2.3	0.354	-6.506	7.71x10-11a	3.19x10-10a	Down
ENSG00000137486	408	ARRB1	3427.908	-1.334	0.115	-11.649	2.33x10-31a	4.72x10-30a	Down
ENSG00000137507	2615	LRRC32	3563.976	-2.149	0.17	-12.628	1.48x10-36a	4.03x10-35a	Down
ENSG00000137561	7274	TTPA	28.351	-1.715	0.244	-7.018	2.26x10-12a	1.09x10-11a	Down
ENSG00000137726	53826	FXVD6	1533.424	-1.648	0.153	-10.772	4.66x10-27a	7.37x10-26a	Down
ENSG00000137819	54852	PAQR5	896.908	-1.455	0.175	-8.298	1.06x10-16a	7.55x10-16a	Down
ENSG00000137834	4091	SMAD6	1418.235	-2.724	0.168	-16.22	3.64x10-59a	3.05x10-57a	Down
ENSG00000137857	53905	DUOX1	4907.749	-2.92	0.216	-13.522	1.17x10-41a	4.31x10-40a	Down
ENSG00000137872	80031	SEMA6D	552.238	-2.003	0.202	-9.922	3.34x10-23a	4.02x10-22a	Down
ENSG00000137878	145781	GCOM1	49.738	-2.64	0.18	-14.688	7.71x10-49a	3.97x10-47a	Down
ENSG00000137880	2644	GCHFR	431.48	-1.291	0.165	-7.838	4.58x10-15a	2.87x10-14a	Down
ENSG00000137960	54810	GIPC2	276.872	-1.345	0.212	-6.342	2.26x10-10a	8.97x10-10a	Down
ENSG00000137976	58511	DNASE2B	89.526	-3.142	0.265	-11.836	2.56x10-32a	5.40x10-31a	Down
ENSG00000138193	51196	PLCE1	1191.583	-1.296	0.144	-9.029	1.73x10-19a	1.54x10-18a	Down
ENSG00000138207	5950	RBP4	591.665	-2.375	0.28	-8.475	2.36x10-17a	1.78x10-16a	Down
ENSG00000138311	22891	ZNF365	194.641	-1.691	0.165	-10.219	1.64x10-24a	2.17x10-23a	Down
ENSG00000138400	130752	MDH1B	122.967	-1.638	0.275	-5.965	2.44x10-09a	8.72x10-09a	Down
ENSG00000138593	9728	SECISBP2L	5171.917	-1.439	0.115	-12.515	6.18x10-36a	1.62x10-34a	Down

ENSG00000138639	83478	ARHGAP24	1008.858	-1.216	0.113	-10.765	5.04x10-27a	7.95x10-26a	Down
ENSG00000138650	57575	PCDH10	59.311	-1.373	0.266	-5.161	2.46x10-07a	7.10x10-07a	Down
ENSG00000138669	5593	PRKG2	297.096	-2.361	0.174	-13.599	4.04x10-42a	1.53x10-40a	Down
ENSG00000138685	2247	FGF2	410.055	-1.624	0.162	-10.032	1.10x10-23a	1.37x10-22a	Down
ENSG00000138722	22915	MMRN1	1030.147	-2.176	0.202	-10.76	5.35x10-27a	8.41x10-26a	Down
ENSG00000138759	80144	FRAS1	1266.453	-1.313	0.208	-6.319	2.63x10-10a	1.04x10-09a	Down
ENSG00000138772	306	ANXA3	4753.785	-1.954	0.178	-10.962	5.84x10-28a	9.79x10-27a	Down
ENSG00000138821	64116	SLC39A8	14491.94	-2.237	0.16	-14.009	1.37x10-44a	5.81x10-43a	Down
ENSG00000139304	374462	PTPRQ	148.242	-3.927	0.255	-15.396	1.73x10-53a	1.13x10-51a	Down
ENSG00000139537	85478	CCDC65	234.646	-1.392	0.218	-6.393	1.63x10-10a	6.56x10-10a	Down
ENSG00000139549	50846	DHH	19.174	-2.024	0.212	-9.565	1.12x10-21a	1.19x10-20a	Down
ENSG00000139567	94	ACVRL1	3806.071	-2.461	0.133	-18.455	4.73x10-76a	1.04x10-73a	Down
ENSG00000139714	283385	MORN3	131.658	-1.346	0.202	-6.676	2.45x10-11a	1.07x10-10a	Down
ENSG00000139874	6751	SSTR1	395.656	-2.957	0.235	-12.557	3.64x10-36a	9.69x10-35a	Down
ENSG00000139970	6252	RTN1	544.07	-1.318	0.19	-6.924	4.39x10-12a	2.06x10-11a	Down
ENSG00000140044	122953	JDP2	1878.443	-1.475	0.119	-12.39	2.94x10-35a	7.45x10-34a	Down
ENSG00000140057	122481	AK7	354.598	-1.561	0.232	-6.729	1.71x10-11a	7.58x10-11a	Down
ENSG00000140090	123041	SLC24A4	103.384	-2.149	0.157	-13.691	1.16x10-42a	4.51x10-41a	Down
ENSG00000140092	10516	FBLN5	3772.558	-1.9	0.15	-12.702	5.77x10-37a	1.61x10-35a	Down
ENSG00000140254	90527	DUOXA1	1208.395	-2.307	0.213	-10.813	2.99x10-27a	4.79x10-26a	Down
ENSG00000140538	4916	NTRK3	159.078	-1.499	0.219	-6.848	7.47x10-12a	3.43x10-11a	Down
ENSG00000140795	91807	MYLK3	63.702	-1.928	0.251	-7.673	1.67x10-14a	9.97x10-14a	Down
ENSG00000140807	85407	NKD1	494.196	-1.744	0.188	-9.285	1.62x10-20a	1.57x10-19a	Down
ENSG00000140932	146225	CMTM2	36.644	-2.187	0.189	-11.57	5.84x10-31a	1.16x10-29a	Down
ENSG00000140945	1012	CDH13	1036.457	-1.284	0.195	-6.59	4.40x10-11a	1.87x10-10a	Down
ENSG00000141052	93649	MYOCD	180.702	-1.673	0.25	-6.704	2.03x10-11a	8.94x10-11a	Down
ENSG00000141161	146862	UNC45B	36.709	-2.628	0.193	-13.6	4.03x10-42a	1.53x10-40a	Down
ENSG00000141294	90506	LRRC46	556.598	-2.057	0.309	-6.648	2.97x10-11a	1.29x10-10a	Down
ENSG00000141338	10351	ABCA8	1342.456	-2.617	0.203	-12.907	4.10x10-38a	1.22x10-36a	Down
ENSG00000141448	2627	GATA6	1100.213	-1.918	0.153	-12.507	6.82x10-36a	1.79x10-34a	Down
ENSG00000141469	6563	SLC14A1	296.383	-2.634	0.271	-9.733	2.19x10-22a	2.47x10-21a	Down
ENSG00000141497	84225	ZMYND15	339.839	-1.62	0.131	-12.324	6.70x10-35a	1.66x10-33a	Down
ENSG00000141505	432	ASGR1	204.057	-1.515	0.163	-9.314	1.23x10-20a	1.22x10-19a	Down
ENSG00000141639	5596	MAPK4	311.375	-2.105	0.314	-6.701	2.07x10-11a	9.09x10-11a	Down
ENSG00000141665	201456	FBXO15	105.034	-1.471	0.233	-6.318	2.65x10-10a	1.04x10-09a	Down
ENSG00000142449	84467	FBN3	256.42	-1.312	0.343	-3.824	0.000131a	0.000271a	Down
ENSG00000142609	85452	CFAP74	190.782	-2.048	0.324	-6.317	2.67x10-10a	1.05x10-09a	Down
ENSG00000142611	63976	PRDM16	670.848	-1.303	0.226	-5.779	7.53x10-09a	2.57x10-08a	Down
ENSG00000142621	114827	FHAD1	369.285	-1.252	0.243	-5.146	2.66x10-07a	7.66x10-07a	Down
ENSG00000142748	8547	FCN3	4102.351	-4.736	0.278	-17.059	2.99x10-65a	3.55x10-63a	Down
ENSG00000142871	3491	CCN1	13706.2	-1.227	0.174	-7.044	1.87x10-12a	9.10x10-12a	Down
ENSG00000142973	1580	CYP4B1	11788.28	-2.712	0.311	-8.731	2.52x10-18a	2.05x10-17a	Down
ENSG00000143110	128346	C1orf162	1662.35	-1.753	0.15	-11.658	2.10x10-31a	4.26x10-30a	Down
ENSG00000143167	10223	GPA33	347.578	-3.673	0.241	-15.239	1.94x10-52a	1.18x10-50a	Down
ENSG00000143171	6258	RXRG	140.32	-2.726	0.269	-10.13	4.08x10-24a	5.26x10-23a	Down
ENSG00000143382	54507	ADAMTSL4	2108.928	-1.951	0.148	-13.159	1.51x10-39a	4.95x10-38a	Down
ENSG00000143416	8991	SELENBP1	11087.95	-1.629	0.203	-8.032	9.59x10-16a	6.38x10-15a	Down
ENSG00000143554	11000	SLC27A3	2038.304	-1.603	0.135	-11.915	9.93x10-33a	2.16x10-31a	Down
ENSG00000143768	7044	LEFTY2	87.386	-2.003	0.248	-8.063	7.42x10-16a	4.96x10-15a	Down
ENSG00000143816	7483	WNT9A	540.17	-1.423	0.16	-8.91	5.11x10-19a	4.39x10-18a	Down
ENSG00000144218	3899	AFF3	826.212	-2.373	0.228	-10.39	2.76x10-25a	3.86x10-24a	Down
ENSG00000144230	2840	GPR17	57.5	-1.841	0.269	-6.839	7.95x10-12a	3.64x10-11a	Down
ENSG00000144285	6323	SCN1A	286.617	-1.471	0.277	-5.309	1.10x10-07a	3.31x10-07a	Down
ENSG00000144331	151126	ZNF385B	1226.772	-1.57	0.262	-5.985	2.16x10-09a	7.77x10-09a	Down
ENSG00000144655	64651	CSRNP1	5266.004	-2.282	0.166	-13.783	3.21x10-43a	1.30x10-41a	Down
ENSG00000144681	6769	STAC	714.735	-1.932	0.209	-9.223	2.88x10-20a	2.74x10-19a	Down
ENSG00000144791	8994	LIMD1	3512.536	-1.252	0.111	-11.321	1.03x10-29a	1.92x10-28a	Down
ENSG00000144837	51365	PLA1A	434.313	-1.515	0.192	-7.871	3.53x10-15a	2.23x10-14a	Down
ENSG00000144843	141	ADPRH	1148.212	-1.447	0.095	-15.308	6.79x10-53a	4.27x10-51a	Down
ENSG00000144891	185	AGTR1	176.541	-2.364	0.185	-12.781	2.09x10-37a	5.89x10-36a	Down
ENSG00000145147	9353	SLIT2	2794.68	-2.135	0.142	-15.078	2.25x10-51a	1.29x10-49a	Down
ENSG00000145284	79966	SCD5	1364.844	-1.386	0.171	-8.086	6.14x10-16a	4.15x10-15a	Down
ENSG00000145335	6622	SNCA	202.81	-1.379	0.145	-9.526	1.63x10-21a	1.71x10-20a	Down
ENSG00000145491	83853	ROPN1L	220.314	-2.187	0.315	-6.952	3.60x10-12a	1.70x10-11a	Down
ENSG00000145569	54491	OTULINL	2257.185	-1.309	0.167	-7.839	4.56x10-15a	2.86x10-14a	Down
ENSG00000145777	85480	TSLP	52.451	-1.557	0.221	-7.052	1.76x10-12a	8.58x10-12a	Down
ENSG00000145861	114898	C1QTNF2	114.985	-1.681	0.182	-9.228	2.75x10-20a	2.62x10-19a	Down
ENSG00000145990	54438	GFOD1	715.03	-1.637	0.148	-11.03	2.75x10-28a	4.69x10-27a	Down
ENSG00000146038	51473	DCDC2	399.628	-1.231	0.253	-4.858	1.19x10-06a	3.16x10-06a	Down
ENSG00000146151	54511	HMGCLL1	101.994	-1.375	0.177	-7.764	8.25x10-15a	5.05x10-14a	Down
ENSG00000146221	202500	TCTE1	106.121	-2.704	0.357	-7.583	3.37x10-14a	1.94x10-13a	Down
ENSG00000146250	167681	PRSS35	69.653	-2.238	0.201	-11.148	7.33x10-29a	1.29x10-27a	Down
ENSG00000146469	7432	VIP	12.099	-1.677	0.219	-7.67	1.72x10-14a	1.02x10-13a	Down
ENSG00000146966	27147	DENND2A	711.916	-1.586	0.147	-10.768	4.90x10-27a	7.74x10-26a	Down
ENSG00000147027	83604	TMEM47	1701.267	-1.265	0.146	-8.681	3.94x10-18a	3.16x10-17a	Down
ENSG00000147113	79742	DIPK2B	1057.935	-1.563	0.163	-9.561	1.16x10-21a	1.24x10-20a	Down
ENSG00000147206	56000	NXF3	105.054	-2.415	0.288	-8.4	4.47x10-17a	3.28x10-16a	Down
ENSG00000147231	55086	RADX	191.029	-1.669	0.193	-8.647	5.30x10-18a	4.21x10-17a	Down
ENSG00000147257	2719	GPC3	3065.505	-2.144	0.203	-10.542	5.55x10-26a	8.11x10-25a	Down
ENSG00000147443	9046	DOK2	1364.93	-1.909	0.175	-10.931	8.17x10-28a	1.36x10-26a	Down
ENSG00000147526	6867	TACC1	8677.084	-1.548	0.127	-12.152	5.62x10-34a	1.32x10-32a	Down
ENSG00000147614	245972	ATP6V0D2	243.261	-1.595	0.304	-5.251	1.51x10-07a	4.47x10-07a	Down
ENSG00000147655	340419	RSPO2	199.775	-2.241	0.271	-8.267	1.38x10-16a	9.77x10-16a	Down
ENSG00000148053	4915	NTRK2	651.161	-2.876	0.258	-11.149	7.27x10-29a	1.29x10-27a	Down
ENSG00000148082	53358	SHC3	731.038	-1.836	0.193	-9.505	2.01x10-21a	2.09x10-20a	Down
ENSG00000148339	114789	SLC25A25	1679.886	-1.615	0.155	-10.405	2.36x10-25a	3.31x10-24a	Down
ENSG00000148357	256158	HMCN2	259.887	-1.235	0.217	-5.691	1.26x10-08a	4.20x10-08a	Down

Table SIII. Endocytosis-associated gene set.

Gene symbol
CAV1
CAV3
CLN3
MAPK1
MAPK3
MLC1
NEDD4L
PACSIN2
PROM2
SRC
UNC119
AAK1
AP2A1
AP2A2
AP2B1
AP2M1
AP2S1
BMP2K
BTBD8
CANX
CLTA
CLTB
CLTC
DAB2
DGKD
DLL1
DNAJC6
DNM2
FCHO1
FCHO2
FCHSD2
FNBP1L
GAK
GPR107
HIP1

HIP1R
INPP5F
ITGA4
ITSN1
ITSN2
LMBRD1
NEU3
PICALM
PIK3CB
PIP5K1C
SCYL2
SGIP1
SH3GL3
SIGLEC1
SLC9B2
SMAP1
SNAP91
TNK2
UBQLN2
WASL
ABCA1
ABCA13
ABCA2
ABCA7
ABL1
ABL2
ACHE
ACKR2
ACKR3
ACKR4
ACTB
ADIPOQ
ADM
ADRB2
ADRB3
AGER
AHI1

AHSG
AIF1
ALOX15
AMN
AMPH
ANGPT1
ANK2
ANKFY1
ANKRD13A
ANKRD13B
ANKRD13D
ANO6
ANXA2
AP1G1
AP1G2
AP1S1
AP3M1
AP3M2
AP4E1
APELA
APLN
APLP1
APOA5
APOBR
APOC1
APOC2
APOC3
APOE
APP
APPL1
APPL2
ARC
ARF1
ARF6
ARFGAP1
ARHGAP12
ARHGAP25

ARHGAP27

ARR3

ARRB1

ARRB2

ASGR1

ASGR2

ATAD1

ATP6V1H

ATP9A

ATP9B

ATXN2

AXL

B2M

BCL2L1

BECN1

BICD1

BIN1

BIN2

BIN3

BTBD9

C3

C4BPA

C4BPB

C9orf72

CACNG2

CACNG3

CACNG4

CACNG5

CACNG7

CACNG8

CALCRL

CALY

CAP1

CAV2

CBL

CBLL1

CCL19

CCL21
CD14
CD151
CD163
CD163L1
CD177
CD209
CD22
CD2AP
CD300A
CD320
CD36
CD5
CD5L
CD6
CD63
CD81
CD9
CDC42
CDH13
CDK5
CEACAM1
CEL
CFI
CLCN3
CLCN5
CLEC10A
CLEC4F
CLEC7A
CLINT1
CLIP3
CLTCL1
CLU
CNTN2
COLEC10
COLEC11
COLEC12

CRP
CSNK1E
CSNK1G1
CSNK1G2
CSNK1G3
CTSL
CTTN
CUBN
CXCL16
CXCL8
CXCR1
CXCR2
CYTH2
DENND1A
DENND1B
DENND1C
DGKQ
DKK1
DLG4
DMBT1
DNAJC13
DNER
DNM1
DNM1L
DNM3
DOCK1
DOCK2
DPYSL2
DRD2
DRD3
DRD4
DTNBP1
EEA1
EFNB2
EGF
EHBP1
EHD1

EHD2
EHD3
EHD4
ELMO1
ENDOU
ENPP1
ENPP2
ENTHD1
EPHA3
EPN1
EPN3
EPS15
EPS15L1
EQTN
ESYT2
EZR
F2RL1
FCER1G
FCGR1A
FCGR2B
FCN1
FCN2
FCN3
FKBP15
FLOT1
FMR1
FNBP1
FOLR1
FPR2
GAPVD1
GATA2
GH1
GHR
GPC3
GRB2
GREM1
GRIA1

GRK4
GSG1L
GSN
GULP1
HAVCR1
HEATR5A
HEATR5B
HFE
HHIPL1
HNRNPK
HOOK2
HPCA
HRAS
HSPG2
HTR1B
HTR2B
IGF2R
IGHD
IGHG1
IGHM
IGHV1-69
IGKC
IGLC1
IGLL1
IGLL5
IL10RA
IL4
ILDR1
INPPL1
INSR
ITGA2
ITGAM
ITGAV
ITGB1
ITGB2
ITGB3
JMJD6

KIAA1109
LBP
LDLR
LDLRAD3
LDLRAP1
LGALS3
LGALS3BP
LILRB1
LILRB4
LMBR1L
LOXL2
LOXL3
LOXL4
LRP1
LRP10
LRP12
LRP1B
LRP2
LRP3
LRP4
LRP5
LRP6
LRP8
LRPAP1
LRRK2
LRRTM1
LRRTM2
LRSAM1
LY75
M6PR
MAGI2
MAPKAPK2
MAPKAPK3
MARCO
MBL2
MCTP1
MEGF10

MFGE8
MIA3
MIB1
MICALL1
MIR205
MKLN1
MRC1
MRC2
MSR1
MTMR2
MTMR6
MTMR9
MYH9
MYO1E
MYO6
NCKAP1L
NCKIPSD
NECAB2
NECAP1
NECAP2
NEDD4
NEURL1B
NLGN1
NLGN2
NLGN3
NLGN4X
NLGN4Y
NME1
NOSTRIN
NPC1
NR1H2
NR1H3
NTF3
NUMB
OCIAD1
OCIAD2
OLR1

OPHN1
PACSIN1
PACSIN3
PCSK9
PDLIM7
PEAR1
PGBD1
PI4KB
PICK1
PIK3C2A
PIK3C3
PIK3CG
PIKFYVE
PLA2G5
PLA2R1
PLCG2
PPP3CA
PPP3CB
PPP3CC
PPT1
PRG4
PRKD1
PRSS12
PSEN1
PSTPIP1
PTPN1
PTX3
PYCARD
RAB17
RAB1A
RAB21
RAB22A
RAB27B
RAB31
RAB4B
RAB5A
RAB5B

RAB5C
RAB7A
RABEP1
RABEP2
RABEPK
RABGAP1L
RABGEF1
RAC1
RAC2
RALBP1
RAMP1
RAMP2
RAMP3
REPS1
REPS2
RHOBTB1
RHOBTB2
RHOG
RHOH
RHOJ
RHOQ
RHOU
RHOV
RIN1
RIN2
RIN3
RIT2
ROCK1
RSPO1
RUFY1
RUFY2
SAG
SCAMP1
SCAMP5
SCARA3
SCARA5
SCARB1

SCARB2
SCARF1
SCARF2
SCART1
SCRIB
SDCBP
SELE
SERPINE1
SFRP4
SFTPD
SH3BP1
SH3BP4
SH3GL1
SH3GL2
SH3KBP1
SHH
SLC17A7
SLC2A4
SMPD1
SNAP25
SNCA
SNCB
SNCG
SNX1
SNX10
SNX12
SNX17
SNX18
SNX2
SNX33
SNX5
SNX9
SORL1
SORT1
SPHK1
SRL
SSC5D

STAB1
STAB2
STAP1
STEAP2
STON1
STON2
STX1A
STX1B
SURF4
SYK
SYNJ1
SYNJ2
SYNRG
SYP
SYT1
SYT11
SYT2
SYT4
SYT5
SYT8
TBC1D5
TEX261
TF
TFR2
TFRC
TGFBR2
THBS1
TMEM108
TMPRSS13
TMPRSS15
TMPRSS2
TMPRSS3
TMPRSS4
TMPRSS5
TOM1
TOR1A
TPCN1

TPCN2
TRBC1
TREM2
TRIP10
TSC2
TSG101
TUB
TULP1
UBE3A
USP20
USP33
VAMP2
VAMP4
VAMP7
VEGFA
VLDLR
VPS28
WASF1
WASF2
WDR54
WNT5A
XKR4
XKR6
XKR7
XKR8
ZFYVE16
ZFYVE9
ACAP1
ACAP2
ACAP3
ADRB1
AGAP1
AGAP2
ARAP1
ARAP3
ARFGAP2
ARFGAP3

ASAP1
ASAP2
ASAP3
CBLB
CBLC
CCR5
CHMP1B
CHMP2A
CHMP2B
CHMP4B
CHMP4C
CHMP5
CHMP6
CSF1R
CXCR4
EGFR
ERBB3
ERBB4
F2R
FGFR2
FGFR3
FGFR4
FLT1
GIT1
GIT2
GRK1
GRK5
GRK6
GRK7
HGS
HLA-A
HLA-B
HLA-C
HLA-E
HLA-F
HLA-G
HSPA1L

HSPA2
HSPA6
IGF1R
IL2RA
IL2RB
IL2RG
IQSEC1
IQSEC2
IQSEC3
ITCH
KDR
KIT
MDM2
MET
MVB12A
MVB12B
NTRK1
PARD3
PARD6A
PARD6B
PARD6G
PDCD6IP
PDGFRA
PIP4K2B
PIP5K1A
PIP5K1B
PLD1
PLD2
PRKCI
PRKCZ
PSD
PSD2
PSD3
PSD4
RAB11A
RAB11B
RAB11FIP1

RAB11FIP2
RAB11FIP3
RAB11FIP4
RAB11FIP5
RET
RNF41
SH3GLB1
SH3GLB2
SMAP2
SMURF1
SMURF2
SNF8
STAM
STAM2
STAMBP
TRAF6
USP8
VPS25
VPS36
VPS37A
VPS37B
VPS37C
VPS37D
VPS45
VPS4A
VPS4B
VTA1
WWP1
AGFG1
AGTR1
APOB
AREG
AVP
AVPR2
BTC
CD3D
CD3G

CD4
CFTR
CHRM2
COPS2
COPS3
COPS4
COPS5
COPS6
COPS7A
COPS7B
COPS8
DVL2
EREG
FZD4
GPS1
HBEGF
IL7R
KIAA0319
NEDD8
RPS27A
SLC18A3
SLC2A8
SYT9
TACR1
TGFA
TGOLN2
TOR1B
UBA52
UBB
UBC
UBQLN1
VAMP3
VAMP8
ACTR2
ACTR3
ARPC1A
ARPC2

ARPC3

ARPC4

ARPC5

OCRL

ATP6AP1

ATP6V0A1

ATP6V0A2

ATP6V0A4

ATP6V0B

ATP6V0C

ATP6V0D1

ATP6V0D2

ATP6V0E1

ATP6V0E2

ATP6V1A

ATP6V1B1

ATP6V1B2

ATP6V1C1

ATP6V1C2

ATP6V1D

ATP6V1E1

ATP6V1E2

ATP6V1G1

ATP6V1G2

ATP6V1G3

MCOLN1

STEAP3

TCIRG1

Table SIV. Univariate Cox regression test results of differential expressed genes associated with endocytosis.

Gene symbol	β -value	HR	95% CI	P-value
EPN3	0.024	1.025	0.926-1.130	6.380x10-01a
SYT1	0.041	1.042	0.975-1.110	2.260x10-01a
AMPH	-0.048	0.954	0.881-1.030	2.360x10-01a
SYNJ2	0.042	1.043	0.895-1.220	5.890x10-01a
CEACAM1	-0.066	0.936	0.836-1.050	2.460x10-01a
ACHE	-0.065	0.937	0.874-1.000	6.740x10-02a
TF	-0.029	0.972	0.923-1.020	2.760x10-01a
NECAB2	0.019	1.020	0.951-1.090	5.860x10-01a
RHOV	0.170	1.185	1.100-1.270	2.810x10-06b
APLP1	0.015	1.015	0.942-1.090	6.990x10-01a
MET	0.060	1.062	0.984-1.150	1.210x10-01a
STX1A	0.062	1.064	0.963-1.180	2.200x10-01a
TFR2	-0.026	0.974	0.872-1.090	6.400x10-01a
SFRP4	-0.053	0.948	0.876-1.030	1.840x10-01a
DNM1	-0.014	0.986	0.888-1.090	7.900x10-01a
DKK1	0.122	1.130	1.080-1.180	3.890x10-07b
TULP1	0.042	1.043	0.941-1.160	4.230x10-01a
WASF1	0.094	1.099	0.975-1.240	1.220x10-01a
HPCA	-0.062	0.940	0.845-1.050	2.520x10-01a
C4BPB	-0.041	0.960	0.907-1.020	1.610x10-01a
PACSIN1	-0.061	0.941	0.862-1.030	1.740x10-01a
SYT5	0.046	1.048	0.989-1.110	1.150x10-01a
RAMP1	0.030	1.030	0.949-1.120	4.750x10-01a
IL2RA	-0.053	0.949	0.862-1.040	2.820x10-01a
TMPRSS4	-0.049	0.952	0.891-1.020	1.440x10-01a
ITGAV	0.094	1.098	0.953-1.270	1.950x10-01a
EGF	-0.024	0.976	0.905-1.050	5.250x10-01a
CBLC	0.103	1.109	1.000-1.230	5.020x10-02a
ATP6V1C2	-0.027	0.973	0.895-1.060	5.300x10-01a
ACKR2	-0.006	0.994	0.924-1.070	8.640x10-01a
OCIAD2	0.067	1.069	0.936-1.220	3.230x10-01a
MEGF10	0.006	1.006	0.936-1.080	8.780x10-01a
PROM2	0.033	1.034	0.938-1.140	5.030x10-01a
PSD3	-0.068	0.934	0.814-1.070	3.340x10-01a
LRP8	0.049	1.050	0.930-1.180	4.290x10-01a
STEAP2	0.057	1.058	0.966-1.160	2.250x10-01a
TGFA	0.051	1.052	0.960-1.150	2.790x10-01a
ITGA2	0.072	1.075	0.988-1.170	9.490x10-02a
RET	-0.032	0.968	0.907-1.030	3.360x10-01a
AMN	0.047	1.048	0.975-1.130	2.040x10-01a
GREM1	0.054	1.055	0.991-1.120	9.130x10-02a
LRP1B	0.021	1.021	0.961-1.080	4.970x10-01a
SNCG	0.031	1.031	0.966-1.100	3.590x10-01a
VPS37D	0.046	1.047	0.944-1.160	3.850x10-01a

SCAMP5	-0.041	0.960	0.853-1.080	4.990x10-01a
IGKC	-0.068	0.934	0.873-1.000	5.170x10-02a
IGHG1	-0.059	0.943	0.885-1.000	6.880x10-02a
IGHD	-0.045	0.956	0.911-1.000	6.250x10-02a
IGHV1-69	-0.043	0.958	0.907-1.010	1.300x10-01a
NME1	0.093	1.098	0.957-1.260	1.840x10-01a
APELA	-0.008	0.992	0.928-1.060	8.090x10-01a
IGLL5	-0.046	0.955	0.889-1.030	2.130x10-01a
ITGB3	-0.019	0.981	0.903-1.070	6.540x10-01a
SELE	-0.029	0.971	0.894-1.050	4.820x10-01a
MARCO	-0.027	0.973	0.915-1.030	3.810x10-01a
EHD2	0.052	1.053	0.935-1.190	3.950x10-01a
MSR1	-0.057	0.945	0.862-1.040	2.250x10-01a
CALCRL	-0.089	0.915	0.813-1.030	1.430x10-01a
MLC1	-0.038	0.963	0.879-1.060	4.170x10-01a
CAV2	0.089	1.093	0.983-1.210	1.010x10-01a
CAV1	0.065	1.067	0.970-1.170	1.820x10-01a
PIP5K1B	-0.079	0.924	0.841-1.010	9.820x10-02a
SH3GL2	-0.021	0.979	0.916-1.050	5.420x10-01a
ENDOU	-0.086	0.918	0.818-1.030	1.410x10-01a
HBEGF	0.043	1.044	0.935-1.170	4.440x10-01a
PRG4	-0.061	0.941	0.883-1.000	5.960x10-02a
ARAP3	-0.056	0.945	0.818-1.090	4.440x10-01a
IQSEC3	0.025	1.025	0.928-1.130	6.280x10-01a
RAMP3	-0.073	0.930	0.834-1.040	1.910x10-01a
RHOJ	-0.067	0.935	0.813-1.080	3.460x10-01a
ACKR4	-0.060	0.941	0.852-1.040	2.380x10-01a
LDLR	0.044	1.045	0.929-1.180	4.620x10-01a
APOC1	-0.062	0.940	0.861-1.030	1.680x10-01a
RAMP2	-0.073	0.929	0.819-1.050	2.550x10-01a
CD36	-0.071	0.932	0.850-1.020	1.270x10-01a
CDH13	-0.017	0.983	0.881-1.100	7.580x10-01a
ASGR1	-0.080	0.923	0.818-1.040	1.950x10-01a
SNCA	-0.082	0.921	0.822-1.030	1.590x10-01a
ATP6V0D2	-0.067	0.935	0.863-1.010	1.040x10-01a
ANGPT1	-0.090	0.914	0.835-1.000	5.050x10-02a
GRIA1	-0.137	0.872	0.818-0.930	3.300x10-05b
RAB11FIP1	-0.100	0.905	0.808-1.010	8.250x10-02a
COLEC12	-0.085	0.919	0.841-1.000	5.980x10-02a
FGFR4	0.012	1.012	0.930-1.100	7.870x10-01a
NOSTRIN	-0.069	0.933	0.828-1.050	2.600x10-01a
CXCR1	-0.028	0.973	0.899-1.050	4.920x10-01a
TGFBR2	-0.112	0.894	0.782-1.020	1.010x10-01a
PTX3	0.070	1.072	0.982-1.170	1.210x10-01a
PRSS12	-0.002	0.998	0.935-1.070	9.510x10-01a
SCARA3	-0.016	0.984	0.896-1.080	7.400x10-01a

SCARA5	-0.051	0.950	0.894-1.010	9.620x10-02a
FPR2	-0.019	0.981	0.910-1.060	6.300x10-01a
APLN	0.047	1.048	0.961-1.140	2.880x10-01a
OLR1	-0.077	0.926	0.850-1.010	7.870x10-02a
FZD4	-0.016	0.984	0.852-1.140	8.310x10-01a
ERBB4	-0.041	0.960	0.897-1.030	2.380x10-01a
CXCR2	-0.069	0.933	0.853-1.020	1.310x10-01a
COLEC10	-0.042	0.959	0.867-1.060	4.210x10-01a
APOBR	-0.057	0.944	0.854-1.040	2.650x10-01a
SRL	-0.062	0.940	0.841-1.050	2.690x10-01a
PEAR1	0.005	1.005	0.896-1.130	9.360x10-01a
LRRK2	-0.063	0.939	0.880-1.000	5.590x10-02a
ARC	-0.080	0.924	0.852-1.000	5.160x10-02a
GRK5	-0.064	0.938	0.829-1.060	3.070x10-01a
HLA_E	-0.080	0.923	0.802-1.060	2.660x10-01a

HR, hazard ratio; CI, confidence interval. aP \geq 0.05; bP<0.001.

Table SV. Functions of 18 genes in the novel prognostic signature.

Gene	Description	Function
CFTR	CF transmembrane conductance regulator	Chloride channel protein that controls ion and water secretion and absorption in epithelial tissues
RAB27B	RAB27B, member of RAS oncogene family	Membrane-bound protein that regulates homeostasis of the late endocytic pathway
ADRB1	Adrenoceptor β 1	Guanine nucleotide binding regulatory protein-coupled receptor that mediates the physiological effects of the hormone epinephrine and the neurotransmitter norepinephrine
DPYSL2	Dihydropyrimidinase-like 2	Collapsin response mediator protein that forms homo- and hetero-tetramers, and facilitates neuron guidance, growth and polarity
ATP6V0A4	ATPase H ⁺ transporting V0 subunit A4	A component of vacuolar ATPase, a multisubunit enzyme that mediates acidification of intracellular compartments of eukaryotic cells
EREG	Epiregulin	A ligand of EGFR that is structurally related to ERBB4, which is involved in a wide range of biological processes including inflammation, wounding healing, oocyte maturation and cell proliferation
SFTPD	Surfactant protein D	Contributes to the defense of the lungs against bacterial infections and modulates leukocyte action in immune response
LOXL2	Lysyl oxidase like 2	A member of the lysyl oxidase gene family that is essential to the biogenesis of connective tissue, encoding an extracellular copper-dependent amine oxidase that catalyzes the first step in the formation of crosslinks in collagens and elastin
HTR2B	5-hydroxytryptamine receptor 2B	A receptor for serotonin that mediates regulation of cardiovascular functions and impulsive behavior
SYT2	Synaptotagmin 2	A synaptic vesicle membrane protein that functions as a calcium sensor in vesicular trafficking and exocytosis
ALOX15	Arachidonate 15-lipoxygenase	Acts on various polyunsaturated fatty acid substrates to generate various bioactive lipid mediators
F2RL1	F2R-like trypsin receptor 1	A member of the G-protein couple receptor 1 family of proteins that is important in vascular smooth muscle relaxation and inflammatory response
IL7R	Interleukin 7 receptor	Receptor for IL-7 which serves a role in Variable (Diversity) Joining recombination during lymphocyte development
PCSK9	Proprotein convertase subtilisin/kexin type 9	Has an important role in the regulation of plasma cholesterol homeostasis
ADRB2	Adrenoceptor β 2	B-adrenergic receptor which mediates the catecholamine-induced activation of adenylate cyclase through the action of G proteins

GATA2	GATA binding protein 2	Serves an essential role in regulating transcription of genes involved in the development and proliferation of hematopoietic and endocrine cell lineages
IGHM	Immunoglobulin heavy constant μ	C region of the μ heavy chain for IgM isotype of antibodies
MRC1	Mannose receptor C-type 1	Also named after CD206, mediates the endocytosis of glycoproteins by macrophages

CF, cystic fibrosis; F2R, factor II receptor.
