

S7 Table. liver-specific gene sets (Molecular Signatures Database) expression in Li-HLCs compared to parental livers.

Ensembl Transcript ID	Gene Symbol	C101					C496				
		Liver	Li-HLC	Li-HLC/Liver ^a	p-value	Li-HLC/Li-iPSC ^b	Liver	Li-HLC	Li-HLC/Liver ^a	p-value	Li-HLC/Li-iPSC ^b
ENSG0000023839	ABCC2	50.99	1.14	0.02	1.56E-07	1.4	73.08	13.59	0.19	1.00E-04	24.7
ENSG00000108846	ABCC3	44.93	2.33	0.05	8.83E-07	39.1	51.69	3.97	0.08	3.45E-06	26.3
ENSG00000163686	ABHD6	14.00	6.10	0.44	0.00E+00	1.9	14.14	14.98	1.06	2.20E-03	5.0
ENSG00000100412	ACO2	27.97	74.05	2.65	8.80E-03	1.2	22.70	108.94	4.80	NS	1.6
ENSG00000161533	ACOX1	55.87	17.86	0.32	7.51E-07	1.9	57.78	23.32	0.40	2.60E-06	2.8
ENSG00000168306	ACOX2	116.27	0.29	0.00	1.50E-08	0.1	166.28	4.61	0.03	3.85E-06	1.6
ENSG00000087008	ACOX3	8.23	9.97	1.21	1.00E-04	1.5	7.06	13.00	1.84	8.00E-04	2.0
ENSG00000143727	ACP1	21.52	64.73	3.01	NS	0.7	21.69	76.61	3.53	NS	0.8
ENSG00000134575	ACP2	39.18	58.75	1.50	9.00E-04	3.6	33.60	48.93	1.46	8.00E-04	2.7
ENSG00000166743	ACSM1	1.09	0.11	0.10	2.00E-04	1.2	0.40	0.18	0.46	7.00E-04	0.5
ENSG00000248144	ADH1C	944.48	0.00	0.00	1.11E-10	#DIV/0!	892.47	0.33	0.00	3.44E-09	2.3
ENSG00000197894	ADH5	54.27	102.56	1.89	9.00E-04	0.8	57.95	127.08	2.19	3.00E-03	0.9
ENSG00000101444	AHCY	51.43	119.04	2.31	2.40E-03	0.4	60.39	184.61	3.06	NS	0.5
ENSG00000151632	AKR1C2	26.54	0.22	0.01	8.37E-07	0.9	78.90	17.72	0.22	4.00E-04	29.5
ENSG00000196139	AKR1C3	41.27	0.29	0.01	5.06E-08	0.3	38.08	39.21	1.03	NS	14.8
ENSG00000023330	ALAS1	80.30	43.64	0.54	0.00E+00	1.0	92.31	61.93	0.67	1.00E-04	1.5
ENSG00000111275	ALDH2	1213.55	120.45	0.10	1.65E-07	2.0	1511.06	187.48	0.12	7.77E-07	3.2
ENSG00000143149	ALDH9A1	80.16	75.13	0.94	0.00E+00	0.9	89.10	72.28	0.81	0.00E+00	0.8
ENSG00000132855	ANGPTL3	242.72	0.00	0.00	5.64E-09	#DIV/0!	195.47	16.45	0.08	7.00E-04	269.0
ENSG00000138356	AOX1	241.67	1.14	0.00	3.63E-07	0.2	262.38	2.98	0.01	1.76E-06	0.4
ENSG00000134262	AP4B1	3.54	8.37	2.36	NS	1.2	3.15	7.79	2.47	NS	1.1
ENSG00000130203	APOE	2589.24	449.37	0.17	0.00E+00	1.3	2690.60	1522.84	0.57	6.00E-04	4.1
ENSG00000118520	ARG1	410.57	0.02	0.00	3.15E-09	0.2	376.90	0.31	0.00	2.61E-09	1.1
ENSG00000081181	ARG2	0.21	114.22	538.65	4.13E-06	2.0	0.12	100.17	829.42	5.57E-06	1.5
ENSG00000128989	ARPP19	8.43	148.54	17.62	1.50E-03	1.2	7.77	175.45	22.59	1.90E-03	1.4
ENSG00000126522	ASL	145.69	21.73	0.15	5.71E-06	1.1	135.89	26.98	0.20	0.00E+00	1.1
ENSG00000168874	ATOH8	3.54	0.04	0.01	1.59E-06	0.2	6.62	1.37	0.21	1.30E-03	3.6
ENSG00000174437	ATP2A2	10.67	84.29	7.90	NS	1.0	12.85	94.95	7.39	NS	1.0

ENSG00000050820	BCAR1	3.78	66.83	17.68	3.00E-04	2.7	4.24	47.86	11.28	4.80E-03	2.0
ENSG00000060982	BCAT1	0.27	76.99	281.31	0.00E+00	0.6	0.06	85.84	1346.09	0.00E+00	0.5
ENSG00000090013	BLVRB	66.94	74.93	1.12	4.00E-04	2.9	106.09	87.90	0.83	7.00E-04	3.0
ENSG00000137274	BPHL	43.37	12.37	0.29	0.00E+00	0.9	49.15	12.70	0.26	0.00E+00	0.9
ENSG00000104267	CA2	61.14	8.06	0.13	2.07E-06	0.7	69.17	28.19	0.41	1.00E-04	3.4
ENSG00000138794	CASP6	9.96	35.10	3.52	NS	1.5	9.91	47.46	4.79	NS	1.6
ENSG00000121691	CAT	341.00	10.86	0.03	1.54E-07	0.9	400.58	21.17	0.05	5.49E-07	1.5
ENSG00000159228	CBR1	106.87	28.48	0.27	4.13E-06	0.3	130.30	24.05	0.18	2.25E-06	0.3
ENSG00000131142	CCL25	0.32	0.44	1.38	NS	1.1	0.23	1.23	5.29	NS	1.5
ENSG00000158825	CDA	34.51	0.00	0.00	1.04E-08	0.0	36.58	0.32	0.01	1.99E-06	0.0
ENSG00000129596	CDO1	153.87	10.95	0.07	7.80E-08	0.5	153.12	32.11	0.21	0.00E+00	1.5
ENSG00000198848	CES1	701.00	0.04	0.00	4.74E-10	0.3	713.75	4.30	0.01	9.05E-09	1.1
ENSG00000243649	CFB	463.52	0.32	0.00	7.08E-08	9.3	359.88	1.70	0.00	3.80E-07	11.7
ENSG00000133313	CNDP2	20.68	59.50	2.88	5.10E-03	1.2	23.53	53.88	2.29	5.10E-03	1.1
ENSG00000093010	COMT	29.29	11.49	0.39	0.00E+00	3.0	33.39	12.35	0.37	0.00E+00	2.0
ENSG00000005469	CROT	7.03	5.81	0.83	1.00E-04	1.8	9.36	15.57	1.66	5.00E-03	5.3
ENSG00000139631	CSAD	43.59	9.29	0.21	1.00E-04	3.4	52.84	9.93	0.19	2.00E-04	3.2
ENSG00000166347	CYB5A	99.96	6.56	0.07	1.59E-07	0.4	117.69	16.00	0.14	3.65E-06	0.9
ENSG00000055163	CYFIP2	3.76	13.14	3.49	NS	0.5	3.12	40.83	13.10	NS	1.6
ENSG00000140465	CYP1A1	4.46	14.33	3.21	NS	25.6	21.25	34.58	1.63	NS	42.8
ENSG00000140505	CYP1A2	130.03	0.00	0.00	9.11E-08	0.0	421.27	0.22	0.00	3.28E-07	1.5
ENSG00000095596	CYP26A1	26.85	0.26	0.01	1.00E-04	0.1	3.05	4.05	1.33	7.10E-03	0.5
ENSG00000135929	CYP27A1	303.83	6.18	0.02	2.50E-08	1.0	374.56	19.40	0.05	8.89E-07	4.8
ENSG00000108242	CYP2C18	70.80	0.83	0.01	1.21E-07	5.4	67.77	0.91	0.01	3.77E-07	2.9
ENSG00000130649	CYP2E1	661.76	0.03	0.00	3.87E-09	2.0	1238.74	0.41	0.00	1.73E-08	1.9
ENSG00000134716	CYP2J2	44.90	0.36	0.01	3.03E-08	0.3	68.68	1.80	0.03	1.20E-06	0.9
ENSG00000167600	CYP2S1	0.38	23.44	61.32	4.20E-03	0.1	0.31	47.37	151.80	1.20E-03	0.2
ENSG00000169738	DCXR	770.67	38.77	0.05	8.46E-06	1.0	1180.46	62.79	0.05	0.00E+00	1.6
ENSG00000213722	DDAH2	5.73	31.78	5.54	NS	1.9	7.46	37.94	5.08	NS	1.7
ENSG00000132437	DDC	17.34	0.78	0.04	4.10E-07	7.9	15.58	6.56	0.42	0.00E+00	44.5
ENSG00000099977	DDT	98.30	17.01	0.17	4.12E-06	0.7	135.98	28.72	0.21	0.00E+00	1.2
ENSG00000095059	DHPS	19.24	32.46	1.69	4.10E-03	1.0	19.44	33.57	1.73	5.20E-03	0.9
ENSG00000157379	DHRS1	59.95	10.86	0.18	1.00E-04	2.1	90.41	11.52	0.13	1.00E-04	1.7

ENSG00000100612	DHRS7	21.15	39.71	1.88	1.00E-03	2.9	20.77	57.34	2.76	8.50E-03	2.7
ENSG00000104823	ECHI	172.35	52.06	0.30	4.18E-06	0.7	215.23	70.43	0.33	0.00E+00	0.8
ENSG00000012660	ELOVL5	24.80	140.67	5.67	NS	1.0	27.04	128.98	4.77	NS	0.9
ENSG00000138792	ENPEP	9.37	149.95	16.01	NS	229.8	10.35	58.28	5.63	NS	83.3
ENSG00000187097	ENTPD5	38.81	7.41	0.19	6.09E-06	3.0	44.70	9.00	0.20	8.88E-06	2.2
ENSG00000142627	EPHA2	3.98	144.97	36.47	8.09E-06	4.4	4.47	164.93	36.87	0.00E+00	6.0
ENSG00000143819	EPHX1	646.92	50.60	0.08	6.73E-08	0.9	700.07	111.99	0.16	4.84E-06	1.9
ENSG00000171503	ETFDH	31.63	7.04	0.22	0.00E+00	1.1	31.97	11.69	0.37	0.00E+00	1.6
ENSG00000157557	ETS2	19.99	89.75	4.49	NS	2.7	16.21	49.83	3.07	NS	1.9
ENSG00000126218	F10	77.41	0.29	0.00	3.90E-08	0.4	70.46	11.16	0.16	0.00E+00	4.3
ENSG00000163586	FABP1	833.54	0.87	0.00	3.11E-08	32.2	792.69	2.37	0.00	2.21E-06	16.0
ENSG00000103876	FAH	41.82	12.60	0.30	1.83E-06	2.3	53.48	9.19	0.17	0.00E+00	1.5
ENSG00000026103	FAS	6.49	32.96	5.07	NS	3.3	4.01	47.32	11.80	NS	9.9
ENSG00000077942	FBLN1	5.62	413.78	73.61	5.00E-04	6.6	0.56	223.88	396.42	3.00E-03	3.6
ENSG00000165140	FBP1	486.35	0.76	0.00	7.12E-09	0.2	549.27	1.30	0.00	1.53E-08	0.4
ENSG00000010932	FMO1	0.31	0.47	1.53	NS	25.9	0.12	3.63	31.37	4.10E-03	97.7
ENSG00000139112	GABARAPL1	45.19	134.94	2.99	NS	2.4	39.32	151.39	3.85	NS	3.1
ENSG00000159131	GART	3.49	45.64	13.07	NS	0.6	3.45	41.67	12.09	NS	0.6
ENSG00000131979	GCH1	32.99	22.78	0.69	0.00E+00	2.1	33.57	39.22	1.17	9.00E-04	2.6
ENSG00000084734	GCKR	108.84	0.58	0.01	3.55E-07	2.6	139.02	0.73	0.01	2.39E-06	2.2
ENSG00000001084	GCLC	22.08	18.19	0.82	0.00E+00	0.8	26.65	42.87	1.61	1.40E-03	1.8
ENSG00000111846	GCNT2	1.93	10.50	5.45	NS	0.4	2.10	24.03	11.42	NS	1.1
ENSG00000124713	GNMT	219.19	0.99	0.00	3.64E-08	0.4	218.39	0.98	0.00	8.88E-08	0.4
ENSG00000104687	GSR	20.26	58.68	2.90	NS	0.7	17.26	133.39	7.73	NS	1.7
ENSG00000100983	GSS	28.99	77.48	2.67	NS	2.0	31.72	91.31	2.88	NS	2.1
ENSG00000174156	GSTA3	1.31	0.11	0.09	2.53E-06	#DIV/0!	1.99	0.16	0.08	0.00E+00	#DIV/0!
ENSG00000168765	GSTM4	25.82	2.77	0.11	5.00E-04	0.4	7.78	9.16	1.18	5.60E-03	1.3
ENSG00000148834	GSTO1	154.17	332.41	2.16	7.20E-03	8.3	132.14	195.18	1.48	4.00E-04	8.7
ENSG00000099984	GSTT2	11.74	3.65	0.31	NS	0.4	4.79	0.85	0.18	8.00E-04	0.2
ENSG00000131373	HACL1	11.69	18.16	1.55	7.00E-04	0.5	18.49	26.67	1.44	2.90E-03	0.5
ENSG00000144485	HES6	1.32	8.65	6.56	NS	0.4	1.91	10.17	5.31	NS	0.4
ENSG00000109758	HGFAC	273.15	0.81	0.00	3.33E-06	6.9	339.75	0.41	0.00	1.21E-06	2.5
ENSG00000100292	HMOX1	21.36	1079.95	50.56	9.30E-03	33.2	5.71	628.24	110.09	NS	15.6

ENSG00000101076	HNF4A	100.42	0.57	0.01	3.22E-08	92.0	93.59	32.79	0.35	4.00E-04	553.1
ENSG00000165704	HPRT1	14.75	69.16	4.69	NS	0.9	15.46	39.13	2.53	NS	0.5
ENSG00000113905	HRG	1116.51	0.06	0.00	3.54E-09	0.7	965.07	0.82	0.00	1.09E-07	2.9
ENSG00000117594	HSD11B1	315.05	0.20	0.00	1.14E-08	#DIV/0!	305.94	0.19	0.00	1.94E-07	3.0
ENSG00000086696	HSD17B2	13.01	0.13	0.01	1.40E-07	#DIV/0!	12.59	5.82	0.46	5.00E-04	1642.7
ENSG00000115738	ID2	52.26	31.75	0.61	0.00E+00	1.0	58.39	156.29	2.68	NS	6.2
ENSG00000138413	IDH1	130.12	76.64	0.59	8.11E-06	0.3	125.10	176.61	1.41	1.20E-03	0.5
ENSG00000017427	IGF1	6.70	0.09	0.01	0.00E+00	11.2	5.37	1.74	0.32	7.00E-04	142.5
ENSG00000141753	IGFBP4	686.62	330.07	0.48	0.00E+00	2.5	546.56	125.63	0.23	1.00E-04	0.7
ENSG00000115594	IL1R1	18.48	295.17	15.97	2.00E-03	847.9	15.47	139.16	8.99	NS	371.3
ENSG00000140968	IRF8	4.51	0.84	0.19	9.66E-07	2.9	3.59	0.64	0.18	1.47E-06	2.3
ENSG00000055957	ITIH1	727.41	0.01	0.00	1.29E-09	#DIV/0!	764.58	0.27	0.00	3.43E-09	1.3
ENSG00000055955	ITIH4	1366.41	2.44	0.00	1.31E-09	4.6	1034.48	2.24	0.00	3.85E-08	2.5
ENSG00000173801	JUP	29.44	372.69	12.66	2.00E-04	5.9	27.78	351.69	12.66	6.40E-03	4.6
ENSG00000065427	KARS	17.20	169.37	9.85	5.20E-03	1.0	20.03	155.79	7.78	NS	0.9
ENSG00000115919	KYNU	3.61	0.21	0.06	6.13E-07	5.7	3.72	0.76	0.20	0.00E+00	23.9
ENSG00000213398	LCAT	110.40	30.81	0.28	1.88E-06	6.0	124.45	24.67	0.20	2.10E-06	5.5
ENSG00000164406	LEAP2	69.33	1.71	0.02	2.45E-07	1.0	59.29	1.64	0.03	3.33E-07	0.8
ENSG00000196365	LONP1	20.91	84.25	4.03	NS	0.9	21.76	99.42	4.57	NS	1.2
ENSG00000101577	LPIN2	28.14	28.91	1.03	1.00E-04	2.2	34.43	47.49	1.38	1.40E-03	3.4
ENSG00000111885	MAN1A1	52.89	85.74	1.62	3.30E-03	23.3	38.84	85.94	2.21	6.60E-03	25.1
ENSG00000189221	MAOA	48.58	2.71	0.06	5.37E-07	0.6	46.58	3.50	0.08	9.56E-07	0.7
ENSG00000145495	MARC6	13.92	58.16	4.18	NS	1.7	13.80	63.01	4.57	NS	1.7
ENSG00000165471	MBL2	38.25	0.28	0.01	7.57E-06	#DIV/0!	63.80	0.93	0.01	0.00E+00	50.1
ENSG00000131844	MCCC2	35.05	26.96	0.77	0.00E+00	0.4	32.98	33.43	1.01	1.00E-04	0.5
ENSG00000125148	MT2A	1369.60	379.63	0.28	2.00E-04	5.4	827.35	319.32	0.39	1.00E-04	2.6
ENSG00000100714	MTHFD1	53.10	37.93	0.71	1.00E-04	0.3	50.04	54.53	1.09	3.00E-04	0.4
ENSG00000165795	NDRG2	95.59	2.52	0.03	7.08E-08	0.4	113.32	6.23	0.06	3.92E-07	0.8
ENSG00000244005	NFS1	10.38	10.76	1.04	1.00E-04	1.1	11.37	12.97	1.14	3.00E-04	1.3
ENSG00000131669	NINJ1	21.81	11.80	0.54	2.39E-06	0.7	19.98	48.42	2.42	NS	2.5
ENSG00000136448	NMT1	19.97	78.89	3.95	NS	1.1	20.90	95.20	4.55	NS	1.2
ENSG00000141458	NPC1	1.47	52.94	35.91	7.00E-04	3.2	1.57	60.55	38.59	7.00E-04	3.4
ENSG00000181019	NQO1	0.38	303.69	809.49	1.00E-06	10.1	0.21	626.55	2962.00	1.18E-06	13.9

ENSG00000198682	PAPSS2	30.97	7.67	0.25	4.63E-06	0.3	31.27	22.68	0.73	2.00E-04	0.8
ENSG00000173599	PC	39.27	3.08	0.08	6.02E-07	0.4	36.26	9.69	0.27	8.61E-06	1.1
ENSG00000004799	PDK4	45.07	5.94	0.13	8.07E-06	73.5	99.37	4.03	0.04	0.00E+00	49.8
ENSG00000163110	PDLIM5	12.51	48.05	3.84	NS	2.2	12.67	34.45	2.72	NS	2.5
ENSG00000133027	PEMT	64.28	19.85	0.31	1.14E-06	0.6	76.71	19.92	0.26	1.94E-06	0.6
ENSG00000142657	PGD	26.29	196.36	7.47	6.70E-03	0.7	24.61	304.70	12.38	1.40E-03	0.9
ENSG00000101856	PGRMC1	398.83	228.67	0.57	2.73E-06	0.7	403.13	249.17	0.62	7.57E-06	0.7
ENSG00000158828	PINK1	40.96	44.73	1.09	0.00E+00	3.1	36.75	39.73	1.08	1.00E-04	3.3
ENSG00000122194	PLG	531.41	0.15	0.00	6.04E-09	7.3	580.42	0.29	0.00	2.06E-08	1.7
ENSG00000100417	PMM1	20.61	22.13	1.07	NS	6.2	15.91	28.61	1.80	NS	7.1
ENSG00000127948	POR	54.92	44.06	0.80	0.00E+00	1.2	60.24	41.83	0.69	0.00E+00	1.1
ENSG00000112033	PPARD	6.45	20.34	3.15	NS	1.3	4.20	23.44	5.58	NS	1.5
ENSG00000184500	PROS1	83.88	7.80	0.09	2.25E-06	6.1	74.24	49.81	0.67	1.00E-04	25.2
ENSG00000205220	PSMB10	18.54	18.29	0.99	2.00E-04	1.1	17.00	13.16	0.77	1.20E-03	0.8
ENSG00000107317	PTGDS	7.76	0.03	0.00	5.53E-06	0.2	3.10	1.43	0.46	1.30E-03	5.7
ENSG00000148344	PTGES	0.30	84.66	285.84	0.00E+00	20.0	0.10	63.02	636.52	2.00E-04	10.6
ENSG00000110958	PTGES3	45.43	252.13	5.55	NS	0.7	59.17	261.65	4.42	NS	0.6
ENSG00000106853	PTGR1	156.93	68.07	0.43	3.00E-04	4.2	191.26	404.26	2.11	NS	19.1
ENSG00000150787	PTS	13.44	46.23	3.44	NS	4.2	8.06	49.80	6.18	NS	4.8
ENSG00000183010	PYCR1	1.48	95.39	64.43	1.20E-03	0.8	3.44	108.82	31.63	1.10E-03	0.9
ENSG00000076864	RAP1GAP	4.96	1.55	0.31	0.00E+00	0.3	4.55	8.84	1.94	NS	1.4
ENSG00000138207	RBP4	7050.33	6.18	0.00	8.54E-08	8.9	7284.92	171.30	0.02	1.07E-06	121.3
ENSG00000042445	RETSAT	49.45	20.76	0.42	4.92E-06	1.8	55.79	39.89	0.71	1.00E-04	3.1
ENSG00000152700	SAR1B	17.66	12.34	0.70	6.20E-06	2.4	20.48	18.01	0.88	1.00E-04	3.4
ENSG00000106366	SERPINE1	6.63	623.82	94.12	2.00E-04	70.5	17.41	294.22	16.90	3.80E-03	30.8
ENSG00000197019	SERTAD1	5.51	31.68	5.75	NS	4.6	3.44	36.91	10.72	NS	3.9
ENSG00000182199	SHMT2	62.21	326.69	5.25	NS	2.4	71.70	290.96	4.06	NS	2.0
ENSG00000124067	SLC12A4	8.99	57.37	6.38	NS	4.8	7.19	69.15	9.61	NS	6.1
ENSG00000105281	SLC1A5	1.37	640.33	467.30	4.81E-06	3.2	1.02	449.17	440.21	0.00E+00	1.8
ENSG00000175003	SLC22A1	480.10	0.77	0.00	1.57E-09	3.0	501.68	0.90	0.00	2.10E-09	2.3
ENSG00000121073	SLC35B1	8.41	22.32	2.65	NS	1.2	11.58	23.93	2.07	NS	1.2
ENSG00000116704	SLC35D1	29.06	23.47	0.81	2.00E-04	6.3	28.84	22.87	0.79	2.00E-04	5.2
ENSG00000139508	SLC46A3	50.08	4.05	0.08	8.81E-08	10.4	46.22	3.28	0.07	9.46E-08	7.5

ENSG0000011181	SLC6A12	35.18	0.14	0.00	2.52E-09	0.6	31.24	0.41	0.01	9.35E-08	1.5
ENSG00000131389	SLC6A6	0.61	16.28	26.85	NS	0.2	0.20	30.98	157.19	9.10E-03	0.3
ENSG00000088826	SMOX	0.98	61.28	62.66	6.63E-06	7.0	0.98	74.16	75.90	0.00E+00	8.6
ENSG00000167642	SPINT2	1.84	220.06	119.54	1.36E-06	2.4	1.06	197.31	185.59	3.01E-06	2.0
ENSG00000114850	SSR3	17.58	218.13	12.41	9.90E-03	2.1	24.38	171.04	7.02	NS	1.5
ENSG00000198650	TAT	262.82	0.07	0.00	6.55E-08	1.1	369.98	0.28	0.00	1.28E-07	2.4
ENSG00000151790	TDO2	81.84	0.04	0.00	1.35E-06	3.4	56.20	1.23	0.02	5.33E-07	24.6
ENSG00000092969	TGFB2	0.20	46.28	227.08	2.22E-06	58.5	0.11	52.05	459.11	1.00E-04	126.6
ENSG00000139644	TMBIM6	349.10	644.92	1.85	7.00E-04	2.4	364.67	594.46	1.63	5.00E-04	2.1
ENSG00000106565	TMEM176B	729.37	4.81	0.01	8.81E-09	5.7	828.05	1.65	0.00	3.93E-07	1.8
ENSG00000109084	TMEM97	39.46	195.66	4.96	NS	1.5	44.19	148.19	3.35	NS	1.0
ENSG00000067182	TNFRSF1A	27.88	180.71	6.48	NS	6.3	20.46	154.69	7.56	NS	4.7
ENSG00000169902	TPST1	7.14	17.53	2.46	5.40E-03	1.4	6.00	27.33	4.55	NS	2.3
ENSG00000109814	UGDH	15.02	58.13	3.87	NS	1.0	19.49	53.10	2.72	NS	0.9
ENSG00000100024	UPB1	118.60	0.03	0.00	2.01E-07	0.4	148.34	1.37	0.01	0.00E+00	28.2
ENSG00000183696	UPP1	2.59	255.02	98.37	2.38E-06	14.1	2.26	124.64	55.25	1.10E-03	7.3
ENSG00000109072	VTN	3720.59	5.33	0.00	1.61E-08	23.5	3437.38	69.82	0.02	3.10E-08	91.4
ENSG00000158125	XDH	26.51	5.50	0.21	8.28E-06	5.5	33.67	0.86	0.03	0.00E+00	2.8

Hallmark Bile Acid Metabolism

ENSG00000165029	ABCA1	16.96	15.04	0.89	1.60E-03	1.5	10.22	88.06	8.62	NS	11.7
ENSG00000107331	ABCA2	10.88	1.14	0.10	3.72E-07	0.2	9.70	5.46	0.56	3.00E-04	0.9
ENSG00000167972	ABCA3	0.57	2.61	4.56	NS	1.5	0.35	8.58	24.33	NS	1.4
ENSG00000198691	ABCA4	0.24	2.46	10.06	NS	5.5	0.13	2.69	19.96	NS	23.0
ENSG00000154265	ABCA5	10.80	7.14	0.66	0.00E+00	7.3	13.18	5.60	0.42	1.00E-04	6.1
ENSG00000154262	ABCA6	14.15	0.08	0.01	5.68E-07	0.0	11.88	0.04	0.00	3.40E-07	3.0
ENSG00000141338	ABCA8	12.34	0.06	0.00	0.00E+00	0.0	13.25	0.19	0.01	8.73E-08	20.9
ENSG00000154258	ABCA9	11.45	0.22	0.02	1.07E-07	5.6	6.61	0.14	0.02	8.91E-07	1.7
ENSG00000101986	ABCD1	4.18	11.78	2.82	NS	1.9	3.65	9.76	2.68	NS	2.2
ENSG00000173208	ABCD2	0.06	0.00	0.00	4.00E-04	0.6	0.02	0.30	14.80	NS	11.2
ENSG00000117528	ABCD3	22.77	24.28	1.07	1.00E-04	1.6	32.27	47.05	1.46	2.10E-03	3.0
ENSG00000172350	ABCG4	0.04	0.06	1.40	NS	1.0	0.02	0.18	10.78	NS	0.2
ENSG00000143921	ABCG8	65.92	0.00	0.00	1.60E-09	0.0	52.70	0.02	0.00	1.81E-08	0.2
ENSG00000151726	ACSL1	256.41	56.13	0.22	0.00E+00	8.0	291.26	48.01	0.16	0.00E+00	4.7

ENSG00000197142	ACSL5	54.68	11.74	0.21	5.15E-07	#DIV/0!	65.06	4.67	0.07	4.00E-04	150.9
ENSG00000172482	AGXT	943.53	0.00	0.00	3.34E-10	0.0	952.18	0.36	0.00	2.82E-09	2.0
ENSG00000122787	AKRID1	106.72	0.34	0.00	1.33E-06	2.4	150.69	6.09	0.04	3.04E-06	40.4
ENSG00000165092	ALDH1A1	346.80	1.14	0.00	5.24E-08	1.4	425.78	393.98	0.93	NS	290.7
ENSG00000118514	ALDH8A1	120.95	1.05	0.01	1.02E-08	5.7	117.98	0.88	0.01	2.59E-08	4.5
ENSG00000143149	ALDH9A1	80.16	75.13	0.94	0.00E+00	0.9	89.10	72.28	0.81	0.00E+00	0.8
ENSG00000242110	AMACR	44.64	10.09	0.23	1.61E-06	1.6	45.75	16.47	0.36	5.84E-06	2.3
ENSG00000118137	APOA1	11000.82	13.80	0.00	1.39E-07	21.7	8593.47	899.42	0.10	1.00E-04	429.3
ENSG00000103569	AQP9	294.35	0.00	0.00	3.18E-10	0.0	292.75	0.08	0.00	4.07E-09	1.3
ENSG00000169083	AR	15.33	0.43	0.03	4.30E-06	0.1	17.91	0.64	0.04	3.20E-06	0.1
ENSG00000124788	ATXN1	2.42	23.51	9.70	NS	8.1	2.56	11.88	4.65	NS	34.9
ENSG00000129151	BBOX1	37.01	0.08	0.00	1.69E-07	0.0	24.18	0.19	0.01	6.81E-07	4.6
ENSG00000137936	BCAR3	3.31	77.63	23.47	2.00E-04	11.6	3.16	34.39	10.87	NS	4.8
ENSG00000153162	BMP6	0.72	0.66	0.91	NS	0.9	0.20	103.67	531.46	NS	67.6
ENSG00000121691	CAT	341.00	10.86	0.03	1.54E-07	0.9	400.58	21.17	0.05	5.49E-07	1.5
ENSG00000138135	CH25H	0.19	0.00	0.00	4.00E-04	0.9	0.06	0.05	0.83	1.90E-03	0.1
ENSG00000005469	CROT	7.03	5.81	0.83	1.00E-04	1.8	9.36	15.57	1.66	5.00E-03	5.3
ENSG00000135929	CYP27A1	303.83	6.18	0.02	2.50E-08	1.0	374.56	19.40	0.05	8.89E-07	4.8
ENSG00000146233	CYP39A1	31.29	0.61	0.02	3.71E-07	0.4	24.01	0.92	0.04	4.43E-07	0.7
ENSG00000036530	CYP46A1	0.49	0.62	1.25	7.70E-03	0.9	0.59	0.72	1.23	NS	1.5
ENSG00000167910	CYP7A1	7.47	0.13	0.02	1.76E-06	0.0	6.67	0.01	0.00	5.91E-07	1.3
ENSG00000172817	CYP7B1	2.36	5.42	2.29	NS	2.1	2.76	6.99	2.53	NS	14.2
ENSG00000180432	CYP8B1	234.07	0.00	0.00	1.84E-10	0.0	194.32	0.11	0.00	4.09E-09	1.1
ENSG00000116133	DHCR24	379.13	61.59	0.16	2.34E-07	0.1	418.13	179.28	0.43	1.00E-04	0.3
ENSG00000211452	DIO1	116.20	0.17	0.00	5.87E-09	1.1	97.45	3.55	0.04	2.45E-06	12.9
ENSG00000211448	DIO2	0.00	0.28	85.76	1.20E-03	2.3	0.00	6.65	2388.71	9.00E-04	32.1
ENSG00000096093	EFHC1	2.31	12.02	5.20	NS	2.0	2.60	12.82	4.93	NS	1.4
ENSG00000120915	EPHX2	89.31	1.23	0.01	1.37E-07	0.3	100.87	4.30	0.04	8.65E-08	0.8
ENSG00000149485	FADS1	15.97	16.31	1.02	NS	1.0	12.07	46.72	3.87	NS	0.5
ENSG00000134824	FADS2	35.62	10.14	0.28	1.30E-03	0.1	29.15	45.89	1.57	NS	0.2
ENSG00000161513	FDXR	7.40	26.51	3.58	NS	2.1	4.26	39.61	9.30	NS	3.2
ENSG00000145321	GC	2359.12	0.00	0.00	8.36E-10	0.0	2207.74	0.55	0.00	1.10E-08	0.8
ENSG00000023909	GLCLM	8.19	82.35	10.05	NS	5.4	7.58	97.64	12.89	NS	7.4

ENSG00000124713	GNMT	219.19	0.99	0.00	3.64E-08	0.4	218.39	0.98	0.00	8.88E-08	0.4
ENSG00000116906	GNPAT	15.97	61.23	3.83	NS	1.7	15.99	70.84	4.43	NS	1.2
ENSG00000197448	GSTK1	93.68	41.79	0.45	5.26E-06	3.8	90.10	49.25	0.55	0.00E+00	4.2
ENSG00000131373	HACL1	11.69	18.16	1.55	7.00E-04	0.5	18.49	26.67	1.44	2.90E-03	0.5
ENSG00000101323	HAO1	346.96	0.00	0.00	2.23E-10	0.0	337.73	0.03	0.00	5.12E-09	#DIV/0!
ENSG00000198189	HSD17B11	80.42	22.96	0.29	0.00E+00	2.1	62.49	44.90	0.72	1.00E-04	3.6
ENSG00000133835	HSD17B4	51.12	25.51	0.50	6.27E-06	0.3	63.61	45.17	0.71	0.00E+00	0.4
ENSG00000025423	HSD17B6	581.14	1.49	0.00	3.30E-09	0.3	725.95	1.78	0.00	5.87E-09	0.4
ENSG00000203857	HSD3B1	0.70	89.26	127.59	5.00E-04	80.0	0.09	151.81	1778.03	NS	11453.5
ENSG00000099377	HSD3B7	42.16	6.63	0.16	1.00E-06	1.3	42.13	6.76	0.16	1.49E-06	1.6
ENSG00000138413	IDH1	130.12	76.64	0.59	8.11E-06	0.3	125.10	176.61	1.41	1.20E-03	0.5
ENSG00000182054	IDH2	147.13	60.03	0.41	3.00E-04	1.0	62.77	63.12	1.01	3.00E-04	1.0
ENSG00000067064	IDI1	28.99	28.70	0.99	2.00E-04	0.3	58.11	47.73	0.82	2.20E-03	0.5
ENSG00000066583	ISOC1	43.83	61.62	1.41	1.00E-04	1.2	44.48	57.50	1.29	2.00E-04	1.2
ENSG00000105610	KLF1	0.14	0.10	0.72	NS	1.3	0.04	0.17	4.21	NS	0.3
ENSG00000182866	LCK	2.38	0.09	0.04	0.00E+00	0.9	0.66	0.05	0.08	0.00E+00	0.0
ENSG00000079435	LIPE	0.21	1.41	6.68	NS	1.6	0.09	1.44	16.32	NS	0.5
ENSG00000102910	LONP2	32.25	30.58	0.95	0.00E+00	3.0	41.68	34.48	0.83	1.00E-04	3.6
ENSG00000103150	MLYCD	4.14	2.53	0.61	5.56E-06	0.9	4.71	2.87	0.61	0.00E+00	1.1
ENSG00000069869	NEDD4	4.23	50.09	11.83	NS	8.8	5.03	46.84	9.31	NS	21.9
ENSG00000141458	NPC1	1.47	52.94	35.91	7.00E-04	4.2	1.57	60.55	38.59	7.00E-04	3.4
ENSG00000131910	NR0B2	109.38	0.00	0.00	8.13E-07	0.0	66.45	0.00	0.00	7.58E-07	#DIV/0!
ENSG0000012504	NR1H4	34.61	0.01	0.00	1.28E-08	0.0	33.22	0.01	0.00	1.91E-08	0.7
ENSG00000144852	NR1I2	57.81	0.01	0.00	1.51E-08	0.0	69.81	0.21	0.00	7.22E-07	0.3
ENSG00000151623	NR3C2	2.41	0.46	0.19	0.00E+00	0.6	2.45	1.90	0.77	1.50E-03	3.9
ENSG00000112874	NUDT12	7.49	17.43	2.33	2.50E-03	1.4	8.95	22.42	2.50	8.10E-03	1.5
ENSG00000123240	OPTN	26.13	125.47	4.80	NS	3.8	18.74	97.75	5.22	NS	10.0
ENSG00000148832	PAOX	10.27	6.69	0.65	1.00E-04	2.0	12.52	5.47	0.44	1.00E-04	1.5
ENSG00000115425	PECR	55.56	4.17	0.08	6.85E-08	0.5	56.85	6.68	0.12	8.24E-07	0.8
ENSG00000127980	PEX1	3.47	16.88	4.87	NS	1.6	3.30	17.53	5.32	NS	1.1
ENSG00000166821	PEX11A	12.81	6.17	0.48	3.03E-06	2.6	15.87	7.70	0.48	0.00E+00	2.8
ENSG00000104883	PEX11G	11.82	5.02	0.42	1.00E-04	2.4	12.99	3.40	0.26	1.00E-04	1.9
ENSG00000108733	PEX12	3.89	10.75	2.76	5.10E-03	1.9	3.94	11.92	3.02	NS	3.4

ENSG00000162928	PEX13	6.65	22.53	3.39	NS	2.0	6.59	23.05	3.50	NS	1.9
ENSG00000121680	PEX16	14.11	17.81	1.26	3.20E-03	1.1	15.83	16.57	1.05	2.20E-03	1.5
ENSG00000162735	PEX19	29.35	50.66	1.73	5.00E-04	1.2	32.92	56.32	1.71	9.00E-04	0.8
ENSG00000215193	PEX26	2.75	10.38	3.77	NS	1.6	2.44	11.65	4.78	NS	1.1
ENSG00000124587	PEX6	11.90	14.56	1.22	1.00E-04	2.6	12.10	22.53	1.86	7.00E-04	2.2
ENSG00000112357	PEX7	4.74	10.97	2.32	6.00E-03	1.4	4.72	11.50	2.44	9.50E-03	1.0
ENSG00000152556	PFKM	2.38	16.44	6.91	7.60E-03	1.2	1.58	27.10	17.18	1.10E-03	0.6
ENSG00000107537	PHYH	202.87	25.58	0.13	9.82E-07	2.0	216.53	28.19	0.13	2.26E-06	2.1
ENSG00000179761	PIPOX	180.84	0.36	0.00	5.71E-09	0.0	157.03	0.89	0.01	5.39E-08	0.0
ENSG00000135241	PNPLA8	4.72	38.15	8.09	NS	4.0	4.52	39.67	8.77	NS	4.7
ENSG00000126432	PRDX5	184.20	521.41	2.83	NS	1.5	220.45	590.59	2.68	NS	1.5
ENSG00000176894	PXMP2	132.71	20.71	0.16	7.44E-07	1.7	142.84	22.53	0.16	1.15E-06	2.1
ENSG00000114115	RBP1	13.72	75.28	5.49	NS	3.3	5.45	30.98	5.69	NS	2.6
ENSG00000042445	RETSAT	49.45	20.76	0.42	4.92E-06	1.8	55.79	39.89	0.71	1.00E-04	3.1
ENSG00000186350	RXRA	37.87	17.85	0.47	8.40E-06	1.7	47.92	24.39	0.51	0.00E+00	1.9
ENSG00000143171	RXRG	0.14	0.01	0.10	6.00E-04	0.1	0.07	0.15	2.08	NS	1.5
ENSG00000116171	SCP2	129.48	21.53	0.17	1.41E-06	1.7	122.10	26.00	0.21	2.51E-06	2.1
ENSG00000170099	SERPINA6	213.87	0.04	0.00	7.70E-10	0.0	167.78	0.14	0.00	7.24E-09	2.6
ENSG00000110628	SLC22A18	7.43	4.03	0.54	9.79E-06	10.8	7.55	7.81	1.04	2.00E-04	12.8
ENSG00000170482	SLC23A1	12.02	0.11	0.01	2.35E-07	0.0	15.55	0.39	0.02	2.71E-07	#DIV/0!
ENSG00000089057	SLC23A2	20.70	86.00	4.16	NS	2.5	33.84	66.50	1.96	NS	3.3
ENSG00000140284	SLC27A2	110.22	1.38	0.01	2.08E-08	0.1	111.65	11.67	0.10	1.85E-06	0.8
ENSG00000083807	SLC27A5	161.74	0.48	0.00	8.08E-09	0.2	186.96	0.99	0.01	1.96E-08	0.2
ENSG00000112759	SLC29A1	56.74	75.46	1.33	8.60E-03	1.1	52.36	115.34	2.20	NS	0.5
ENSG00000157593	SLC35B2	20.46	85.97	4.20	NS	2.0	17.70	98.59	5.57	NS	2.3
ENSG00000084453	SLCO1A2	0.18	0.76	4.26	NS	1.1	0.35	0.40	1.13	NS	0.3
ENSG00000167780	SOAT2	2.16	0.15	0.07	6.00E-04	1.6	4.98	4.94	0.99	NS	311.9
ENSG00000142168	SOD1	416.76	112.95	0.27	4.32E-06	0.8	569.21	148.84	0.26	9.53E-06	0.9
ENSG00000173597	SULT1B1	3.39	0.08	0.02	5.43E-06	0.0	3.60	0.93	0.26	2.00E-04	102.8
ENSG00000088002	SULT2B1	0.11	0.12	1.07	NS	1.0	0.02	0.09	4.28	NS	0.2
ENSG00000115112	TFCP2L1	0.16	10.55	67.49	2.30E-03	5.6	0.04	9.15	256.82	3.30E-03	4.9
ENSG00000118271	TTR	3202.86	5.69	0.00	2.59E-07	7.9	3471.91	404.78	0.12	0.00E+00	501.0

Hallmark Fatty Acid Metabolism

ENSG00000109576	AADAT	36.78	12.74	0.35	8.34E-07	1.1	34.48	24.07	0.70	9.60E-06	2.0
ENSG00000060971	ACAA1	102.67	22.99	0.22	2.50E-06	2.3	182.69	53.93	0.30	1.00E-04	5.6
ENSG00000167315	ACAA2	164.36	54.06	0.33	3.70E-06	0.8	209.38	71.71	0.34	9.71E-06	0.9
ENSG00000115361	ACADL	12.51	5.11	0.41	1.42E-06	27.9	11.90	12.63	1.06	9.00E-04	52.0
ENSG00000117054	ACADM	50.53	30.87	0.61	0.00E+00	0.8	51.62	43.00	0.83	1.00E-04	1.1
ENSG00000122971	ACADS	111.56	14.42	0.13	2.77E-07	2.7	119.35	11.09	0.09	7.99E-07	2.2
ENSG00000072778	ACADV1	276.00	245.76	0.89	3.20E-03	4.7	365.27	136.33	0.37	1.70E-03	2.5
ENSG00000120437	ACAT2	28.37	24.15	0.85	3.00E-04	0.2	50.99	45.02	0.88	5.40E-03	0.3
ENSG00000100412	ACO2	27.97	74.05	2.65	8.80E-03	1.2	22.70	108.94	4.80	NS	1.6
ENSG00000119673	ACOT2	46.24	7.14	0.15	0.00E+00	1.1	69.82	8.52	0.12	0.00E+00	1.0
ENSG00000101473	ACOT8	5.05	9.15	1.81	8.00E-04	0.8	5.71	10.61	1.86	2.40E-03	1.0
ENSG00000161533	ACOX1	55.87	17.86	0.32	7.51E-07	1.9	57.78	23.32	0.40	2.60E-06	2.8
ENSG00000151726	ACSL1	256.41	56.13	0.22	0.00E+00	8.0	291.26	48.01	0.16	0.00E+00	4.7
ENSG00000068366	ACSL4	2.51	57.27	22.80	NS	1.2	0.29	28.64	100.10	NS	0.7
ENSG00000197142	ACSL5	54.68	11.74	0.21	5.15E-07	#DIV/0!	65.06	4.67	0.07	4.00E-04	150.9
ENSG00000005187	ACSM3	10.16	6.51	0.64	3.00E-04	6.4	23.54	5.29	0.22	2.00E-04	3.8
ENSG00000154930	ACSS1	1.56	0.17	0.11	0.00E+00	0.1	0.60	1.24	2.07	1.00E-02	1.6
ENSG00000248144	ADH1C	944.48	0.00	0.00	1.11E-10	#DIV/0!	892.47	0.33	0.00	3.44E-09	2.3
ENSG00000196344	ADH7	0.21	0.00	0.00	1.54E-07	#DIV/0!	0.17	0.00	0.00	3.72E-07	0.0
ENSG00000006831	ADIPOR2	31.60	58.78	1.86	5.00E-04	1.7	39.29	57.87	1.47	5.00E-04	1.6
ENSG00000239900	ADSL	5.88	31.83	5.41	NS	0.4	5.90	37.72	6.40	NS	0.4
ENSG00000148218	ALAD	101.27	15.88	0.16	2.23E-07	1.7	114.46	24.47	0.21	7.73E-07	2.6
ENSG00000165092	ALDH1A1	346.80	1.14	0.00	5.24E-08	1.4	425.78	393.98	0.93	NS	290.7
ENSG00000108602	ALDH3A1	0.17	0.09	0.56	8.00E-03	0.5	0.35	0.10	0.29	4.50E-03	0.6
ENSG00000072210	ALDH3A2	60.13	12.01	0.20	1.56E-06	0.3	89.82	46.49	0.52	3.00E-04	1.4
ENSG00000143149	ALDH9A1	80.16	75.13	0.94	0.00E+00	0.9	89.10	72.28	0.81	0.00E+00	0.8
ENSG00000149925	ALDOA	15.46	301.59	19.51	0.00E+00	1.0	12.04	262.38	21.80	2.00E-04	0.9
ENSG00000131471	AOC3	5.36	2.31	0.43	1.00E-04	2.3	3.22	1.54	0.48	0.00E+00	1.1
ENSG00000100823	APEX1	60.52	220.08	3.64	NS	0.5	67.71	331.55	4.90	NS	0.5
ENSG00000165269	AQP7	14.29	0.05	0.00	3.42E-07	1.2	12.42	0.47	0.04	6.28E-06	15.0
ENSG00000148090	AUH	9.81	23.76	2.42	2.80E-03	1.3	9.00	18.76	2.09	3.30E-03	1.1
ENSG00000083123	BCKDHB	19.92	17.94	0.90	1.00E-04	1.0	20.99	19.84	0.95	2.00E-04	1.0
ENSG00000106605	BLVRA	2.48	21.85	8.81	NS	0.6	0.87	18.69	21.47	NS	0.6

ENSG00000138696	BMPRI1B	0.21	1.85	8.71	5.60E-03	3.9	0.14	4.34	30.53	NS	4.3
ENSG00000137274	BPHL	43.37	12.37	0.29	0.00E+00	0.9	49.15	12.70	0.26	0.00E+00	0.9
ENSG00000104267	CA2	61.14	8.06	0.13	2.07E-06	0.7	69.17	28.19	0.41	1.00E-04	3.4
ENSG00000167434	CA4	0.03	0.80	26.43	7.00E-04	0.3	0.03	6.19	239.88	0.00E+00	3.4
ENSG00000159228	CBR1	106.87	28.48	0.27	4.13E-06	0.3	130.30	24.05	0.18	2.25E-06	0.3
ENSG00000159231	CBR3	0.31	2.62	8.35	NS	0.5	0.54	2.73	5.09	NS	0.8
ENSG00000160124	CCDC58	11.79	26.20	2.22	NS	0.6	9.87	33.14	3.36	NS	0.8
ENSG00000158473	CD1D	16.34	0.26	0.02	8.69E-07	0.1	14.16	0.72	0.05	4.82E-06	0.3
ENSG00000135218	CD36	3.83	0.01	0.00	1.93E-06	0.0	4.19	0.11	0.03	0.00E+00	0.3
ENSG00000170835	CEL	1.40	2.45	1.74	NS	1.3	1.10	12.62	11.50	NS	5.0
ENSG00000080819	CPOX	16.64	43.41	2.61	3.30E-03	1.6	22.58	40.24	1.78	3.40E-03	1.4
ENSG00000110090	CPT1A	13.01	33.13	2.55	NS	8.8	18.15	13.12	0.72	7.00E-04	3.7
ENSG00000157184	CPT2	39.48	19.74	0.50	6.90E-06	0.6	31.01	20.91	0.67	0.00E+00	0.7
ENSG00000095321	CRAT	66.79	17.71	0.27	1.34E-06	1.9	76.38	17.51	0.23	2.34E-06	1.8
ENSG00000116791	CRYZ	55.88	39.26	0.70	0.00E+00	1.3	52.36	25.01	0.48	1.00E-04	1.3
ENSG00000140465	CYP1A1	4.46	14.33	3.21	NS	25.6	21.25	34.58	1.63	NS	42.8
ENSG00000187048	CYP4A11	419.96	0.00	0.00	2.12E-10	0.0	555.30	0.11	0.00	2.03E-09	1.2
ENSG00000162365	CYP4A22	187.60	0.00	0.00	2.93E-10	0.0	188.06	0.07	0.00	1.30E-09	1.3
ENSG00000180902	D2HGDH	37.09	6.90	0.19	2.30E-03	1.5	47.17	9.84	0.21	3.90E-03	1.6
ENSG00000104325	DECRI	110.40	12.49	0.11	2.25E-07	0.6	82.53	14.53	0.18	6.47E-07	0.8
ENSG00000116133	DHCR24	379.13	61.59	0.16	2.34E-07	0.1	418.13	179.28	0.43	1.00E-04	0.3
ENSG00000091140	DLD	18.16	68.13	3.75	NS	1.3	18.15	69.14	3.81	NS	1.2
ENSG00000119689	DLST	22.97	105.59	4.60	NS	1.5	23.34	131.37	5.63	NS	1.3
ENSG00000104823	ECH1	172.35	52.06	0.30	4.18E-06	0.7	215.23	70.43	0.33	0.00E+00	0.8
ENSG00000127884	ECHS1	768.10	128.10	0.17	1.59E-06	0.8	763.36	172.03	0.23	5.05E-06	1.0
ENSG00000167969	ECI1	35.29	62.63	1.77	1.20E-03	2.3	37.84	65.78	1.74	2.10E-03	2.7
ENSG00000198721	ECI2	63.29	29.88	0.47	3.75E-06	0.9	64.61	31.74	0.49	7.99E-06	0.9
ENSG00000113790	EHHADH	139.27	7.80	0.06	2.61E-07	3.0	146.48	11.28	0.08	4.72E-07	5.1
ENSG00000012660	ELOVL5	24.80	140.67	5.67	NS	1.0	27.04	128.98	4.77	NS	0.9
ENSG00000111674	ENO2	1.65	5.52	3.34	NS	0.1	0.69	46.60	67.36	NS	0.8
ENSG00000108515	ENO3	109.23	2.28	0.02	2.70E-06	0.4	61.98	3.62	0.06	5.38E-06	0.5
ENSG00000143819	EPHX1	646.92	50.60	0.08	6.73E-08	0.9	700.07	111.99	0.16	4.84E-06	1.9
ENSG00000089248	ERP29	89.65	216.53	2.42	NS	1.7	93.53	280.32	3.00	NS	2.0

ENSG00000171503	ETFDH	31.63	7.04	0.22	0.00E+00	1.1	31.97	11.69	0.37	0.00E+00	1.6
ENSG00000163586	FABP1	833.54	0.87	0.00	3.11E-08	32.2	792.69	2.37	0.00	2.21E-06	16.0
ENSG00000169710	FASN	47.98	71.52	1.49	9.80E-03	0.2	132.73	113.10	0.85	NS	0.3
ENSG00000091483	FH	84.62	113.49	1.34	1.00E-04	1.1	89.92	106.04	1.18	1.00E-04	1.0
ENSG00000010932	FMO1	0.31	0.47	1.53	NS	25.9	0.12	3.63	31.37	4.10E-03	97.7
ENSG00000123689	G0S2	51.68	102.15	1.98	NS	191.4	63.54	27.10	0.43	2.00E-03	54.1
ENSG00000139112	GABARAPL1	45.19	134.94	2.99	NS	2.4	39.32	151.39	3.85	NS	3.1
ENSG00000136750	GAD2	0.00	0.01	3.23	NS	0.0	0.00	0.46	134.20	NS	1.0
ENSG00000105607	GCDH	34.09	8.91	0.26	4.47E-06	0.3	28.04	11.27	0.40	8.92E-06	0.4
ENSG00000135821	GLUL	123.27	68.81	0.56	5.81E-06	0.7	164.94	90.20	0.55	0.00E+00	0.9
ENSG00000167588	GPD1	72.90	0.59	0.01	6.93E-09	1.3	82.65	0.92	0.01	1.65E-08	1.9
ENSG00000115159	GPD2	1.07	38.54	36.08	2.00E-04	1.2	0.70	46.91	66.77	2.00E-04	1.4
ENSG00000137106	GRHPR	123.57	26.69	0.22	2.11E-06	1.3	133.12	34.88	0.26	5.48E-06	1.4
ENSG00000100577	GSTZ1	24.55	5.45	0.22	3.19E-06	0.8	24.23	7.71	0.32	7.91E-06	0.7
ENSG00000164032	H2AFZ	15.79	316.89	20.07	0.00E+00	0.5	16.82	403.56	23.99	1.00E-04	0.6
ENSG00000138796	HADH	61.90	34.63	0.56	7.92E-06	0.7	74.19	28.42	0.38	0.00E+00	0.6
ENSG00000138029	HADHB	58.30	105.93	1.82	9.00E-04	1.9	63.89	67.51	1.06	2.00E-04	1.6
ENSG00000116882	HAO2	217.00	0.06	0.00	1.41E-09	0.5	229.60	1.41	0.01	6.79E-06	6.2
ENSG00000004961	HCCS	5.51	45.81	8.31	NS	1.2	4.65	51.00	10.98	NS	1.3
ENSG00000198130	HIBCH	20.91	5.32	0.25	1.99E-06	0.5	17.45	7.74	0.44	7.67E-06	0.7
ENSG00000117305	HMGCL	66.64	15.46	0.23	1.46E-06	4.0	62.44	21.53	0.34	4.92E-06	4.6
ENSG00000112972	HMGCS1	27.60	39.38	1.43	1.50E-03	0.2	95.73	68.95	0.72	7.00E-03	0.2
ENSG00000134240	HMGCS2	874.78	2.85	0.00	1.00E-06	73.8	1059.55	27.36	0.03	1.64E-07	133.9
ENSG00000164120	HPGD	51.60	14.04	0.27	0.00E+00	18.6	30.41	46.87	1.54	4.90E-03	68.2
ENSG00000072506	HSD17B10	139.49	95.30	0.68	0.00E+00	0.7	149.84	120.90	0.81	1.00E-04	0.8
ENSG00000198189	HSD17B11	80.42	22.96	0.29	0.00E+00	2.1	62.49	44.90	0.72	1.00E-04	3.6
ENSG00000133835	HSD17B4	51.12	25.51	0.50	6.27E-06	0.3	63.61	45.17	0.71	0.00E+00	0.4
ENSG00000132196	HSD17B7	5.40	5.18	0.96	2.00E-04	0.5	10.19	5.09	0.50	3.00E-04	0.8
ENSG00000119471	HSDL2	49.55	52.23	1.05	1.00E-04	2.9	60.67	82.52	1.36	4.00E-04	3.0
ENSG00000080824	HSP90AA1	44.35	711.45	16.04	NS	1.0	87.59	1001.62	11.43	NS	1.0
ENSG00000120694	HSPH1	4.01	91.95	22.93	NS	1.2	7.09	85.66	12.08	NS	1.0
ENSG00000138413	IDH1	130.12	76.64	0.59	8.11E-06	0.3	125.10	176.61	1.41	1.20E-03	0.5
ENSG00000101365	IDH3B	28.77	68.35	2.38	NS	0.7	32.29	79.82	2.47	NS	0.8

ENSG0000067829	IDH3G	14.49	21.50	1.48	7.60E-03	0.8	14.65	29.45	2.01	NS	1.0
ENSG0000067064	IDH1	28.99	28.70	0.99	2.00E-04	0.3	58.11	47.73	0.82	2.20E-03	0.5
ENSG00000104951	IL4I1	0.37	1.92	5.16	NS	1.0	0.07	2.75	37.59	NS	1.3
ENSG00000241644	INMT	9.42	0.35	0.04	6.12E-06	0.9	3.09	1.53	0.49	1.00E-04	3.6
ENSG00000134333	LDHA	76.76	111.88	1.46	2.00E-04	0.5	89.44	90.66	1.01	2.00E-04	0.4
ENSG00000100097	LGALS1	47.85	5.94	0.12	6.45E-06	0.2	86.85	4.22	0.05	4.19E-06	0.3
ENSG00000213316	LTC4S	1.52	0.98	0.64	2.10E-03	1.9	1.63	0.61	0.38	6.00E-04	1.4
ENSG00000189221	MAOA	48.58	2.71	0.06	5.37E-07	0.6	46.58	3.50	0.08	9.56E-07	0.7
ENSG00000124370	MCCE	14.81	5.91	0.40	3.37E-06	0.8	16.45	7.38	0.45	0.00E+00	1.0
ENSG0000014641	MDH1	29.38	72.08	2.45	2.00E-03	0.5	31.13	102.58	3.29	NS	0.7
ENSG00000146701	MDH2	50.71	106.63	2.10	7.00E-04	0.7	49.98	122.38	2.45	2.80E-03	0.8
ENSG0000065833	ME1	3.30	38.69	11.72	2.50E-03	5.0	2.47	78.78	31.91	3.00E-04	10.6
ENSG00000164024	METAP1	7.83	76.43	9.76	NS	0.9	9.80	74.59	7.61	NS	0.8
ENSG0000074416	MGLL	21.04	21.20	1.01	1.00E-04	130.3	15.27	9.76	0.64	5.00E-04	64.8
ENSG00000240972	MIF	50.35	111.56	2.22	5.30E-03	0.5	78.77	130.61	1.66	NS	0.6
ENSG00000103150	MLYCD	4.14	2.53	0.61	5.56E-06	0.9	4.71	2.87	0.61	0.00E+00	1.1
ENSG00000104320	NBN	5.20	21.89	4.21	NS	0.8	4.29	23.35	5.45	NS	0.8
ENSG0000025770	NCAPH2	10.02	59.88	5.97	NS	1.3	12.09	73.68	6.09	NS	1.4
ENSG00000147383	NSDHL	13.39	31.03	2.32	6.20E-03	0.6	24.15	43.09	1.78	NS	0.8
ENSG0000065057	NTHL1	18.01	6.76	0.38	3.00E-04	0.2	25.09	9.33	0.37	5.00E-04	0.2
ENSG00000115758	ODC1	8.14	320.45	39.35	0.00E+00	2.5	7.10	328.92	46.34	1.00E-04	3.0
ENSG00000198856	OSTC	57.44	268.86	4.68	NS	1.5	64.56	252.65	3.91	NS	1.2
ENSG00000166228	PCBD1	157.37	48.31	0.31	3.61E-06	2.3	205.04	85.13	0.42	0.00E+00	2.7
ENSG00000131828	PDHA1	27.39	55.63	2.03	1.20E-03	0.9	27.95	66.24	2.37	5.10E-03	1.0
ENSG00000168291	PDHB	17.51	39.14	2.24	2.30E-03	0.4	22.22	53.05	2.39	NS	0.5
ENSG00000186951	PPARA	19.13	8.93	0.47	0.00E+00	4.6	21.65	11.64	0.54	1.00E-04	6.5
ENSG00000117592	PRDX6	236.83	520.02	2.20	2.00E-03	0.9	272.43	667.41	2.45	NS	1.2
ENSG00000992010	PSME1	83.56	117.90	1.41	1.00E-04	1.6	87.23	81.68	0.94	5.00E-04	0.8
ENSG00000144724	PTPRG	1.22	15.32	12.52	NS	0.5	1.43	17.84	12.51	NS	0.5
ENSG00000150787	PTS	13.44	46.23	3.44	NS	4.2	8.06	49.80	6.18	NS	4.8
ENSG00000138698	RAP1GDS1	4.43	35.98	8.12	NS	2.2	6.12	37.39	6.11	NS	2.1
ENSG0000072042	RDH11	35.49	45.53	1.28	6.00E-04	0.6	31.24	73.63	2.36	NS	0.7
ENSG00000139547	RDH16	160.54	0.70	0.00	1.39E-08	1.8	195.98	0.98	0.00	3.23E-08	1.9

ENSG00000115255	REEP6	151.23	3.54	0.02	6.89E-07	0.3	179.89	23.17	0.13	0.00E+00	1.8
ENSG00000042445	RETSAT	49.45	20.76	0.42	4.92E-06	1.8	55.79	39.89	0.71	1.00E-04	3.1
ENSG00000197747	S100A10	50.26	596.97	11.88	4.00E-03	5.0	23.66	651.20	27.53	4.30E-03	11.2
ENSG00000073578	SDHA	33.50	26.22	0.78	0.00E+00	0.9	35.16	30.57	0.87	0.00E+00	1.3
ENSG00000143252	SDHC	11.70	20.81	1.78	7.00E-04	1.1	11.65	22.88	1.96	1.30E-03	1.3
ENSG00000204370	SDHD	60.21	56.04	0.93	1.00E-04	0.8	61.49	62.95	1.02	1.00E-04	0.9
ENSG00000111897	SERINC1	78.83	297.69	3.78	NS	4.9	65.47	391.24	5.98	NS	5.8
ENSG00000197375	SLC22A5	2.41	17.69	7.35	NS	11.5	2.58	10.94	4.24	NS	7.4
ENSG00000102172	SMS	13.98	483.48	34.58	4.41E-06	1.4	13.01	238.15	18.31	1.90E-03	1.0
ENSG00000136143	SUCLA2	6.39	51.27	8.02	NS	1.0	7.36	75.72	10.28	NS	1.1
ENSG00000163541	SUCLG1	30.55	27.81	0.91	0.00E+00	1.4	25.33	39.15	1.55	3.00E-04	1.9
ENSG00000172340	SUCLG2	76.41	32.09	0.42	0.00E+00	0.7	74.04	49.31	0.67	1.00E-04	0.8
ENSG00000151790	TDO2	81.84	0.04	0.00	1.35E-06	3.4	56.20	1.23	0.02	5.33E-07	24.6
ENSG00000078804	TP53INP2	17.34	37.49	2.16	9.60E-03	6.7	15.35	63.01	4.10	NS	11.8
ENSG00000156587	UBE2L6	33.52	50.17	1.50	1.10E-03	0.8	25.91	32.27	1.25	1.20E-03	0.5
ENSG00000109814	UGDH	15.02	58.13	3.87	NS	1.0	19.49	53.10	2.72	NS	0.9
ENSG00000126088	UROD	43.10	51.55	1.20	1.00E-03	0.9	50.86	66.83	1.31	3.30E-03	1.0
ENSG00000188690	UROS	6.50	11.67	1.79	1.60E-03	0.6	6.34	14.02	2.21	4.80E-03	0.8
ENSG00000112299	VNN1	77.81	0.04	0.00	2.59E-08	#DIV/0!	63.72	0.06	0.00	7.48E-08	2.7
ENSG00000229807	XIST	38.62	1.73	0.04	NS	0.3	0.00	0.02	23.48	NS	0.6
ENSG00000128245	YWHAH	12.22	226.42	18.52	1.00E-04	0.9	10.02	211.14	21.08	4.00E-04	0.8

Hallmark Adipogenesis

ENSG00000165029	ABCA1	16.96	15.04	0.89	1.60E-03	1.5	10.22	88.06	8.62	NS	11.7
ENSG00000197150	ABCB8	4.71	13.12	2.78	NS	2.2	4.41	13.72	3.11	NS	2.2
ENSG00000167315	ACAA2	164.36	54.06	0.33	3.70E-06	0.8	209.38	71.71	0.34	9.71E-06	0.9
ENSG00000115361	ACADL	12.51	5.11	0.41	1.42E-06	27.9	11.90	12.63	1.06	9.00E-04	52.0
ENSG00000117054	ACADM	50.53	30.87	0.61	0.00E+00	0.8	51.62	43.00	0.83	1.00E-04	1.1
ENSG00000122971	ACADS	111.56	14.42	0.13	2.77E-07	2.7	119.35	11.09	0.09	7.99E-07	2.2
ENSG00000131473	ACLY	5.26	141.93	27.00	2.00E-04	0.4	6.08	197.91	32.57	1.00E-04	0.5
ENSG00000100412	ACO2	27.97	74.05	2.65	8.80E-03	1.2	22.70	108.94	4.80	NS	1.6
ENSG00000161533	ACOX1	55.87	17.86	0.32	7.51E-07	1.9	57.78	23.32	0.40	2.60E-06	2.8
ENSG00000174233	ADCY6	8.74	35.74	4.09	NS	3.3	11.83	37.41	3.16	NS	3.0
ENSG00000006831	ADIPOR2	31.60	58.78	1.86	5.00E-04	1.7	39.29	57.87	1.47	5.00E-04	1.6

ENSG00000160216	AGPAT3	17.83	20.85	1.17	0.00E+00	4.7	18.84	31.16	1.65	9.00E-04	15.7
ENSG00000156709	AIFM1	40.28	36.11	0.90	0.00E+00	0.6	39.59	41.89	1.06	0.00E+00	0.7
ENSG00000004455	AK2	30.52	44.94	1.47	1.00E-04	1.0	35.58	48.69	1.37	5.00E-04	1.0
ENSG00000111275	ALDH2	1213.55	120.45	0.10	1.65E-07	2.0	1511.06	187.48	0.12	7.77E-07	3.2
ENSG00000149925	ALDOA	15.46	301.59	19.51	0.00E+00	1.0	12.04	262.38	21.80	2.00E-04	0.9
ENSG00000154188	ANGPT1	0.25	0.10	0.39	5.30E-03	0.1	0.06	1.52	23.56	NS	2.0
ENSG00000167772	ANGPTL4	9.42	83.96	8.91	NS	72.2	18.56	31.54	1.70	NS	21.5
ENSG00000084234	APLP2	83.20	359.75	4.32	NS	1.8	78.12	914.32	11.70	NS	4.1
ENSG00000130203	APOE	2589.24	449.37	0.17	0.00E+00	1.3	2690.60	1522.84	0.57	6.00E-04	4.1
ENSG00000078061	ARAF	34.82	44.94	1.29	5.00E-04	1.6	37.63	64.34	1.71	4.30E-03	2.4
ENSG00000122644	ARL4A	1.60	6.51	4.08	NS	0.4	1.00	25.00	24.96	8.90E-03	1.4
ENSG00000119787	ATL2	13.37	41.50	3.10	7.90E-03	0.6	16.21	40.69	2.51	9.90E-03	0.8
ENSG00000069849	ATP1B3	2.05	122.61	59.80	1.00E-04	0.7	1.34	148.16	110.57	1.00E-04	0.8
ENSG00000241837	ATP5O	33.14	81.18	2.45	8.60E-03	0.7	39.23	121.68	3.10	NS	0.9
ENSG00000076108	BAZ2A	8.35	64.58	7.73	NS	1.3	11.50	72.89	6.34	NS	1.3
ENSG00000248098	BCKDHA	28.86	24.95	0.86	0.00E+00	0.8	28.99	27.68	0.95	0.00E+00	0.9
ENSG00000099968	BCL2L13	6.64	27.93	4.20	NS	1.4	7.42	30.38	4.10	NS	1.5
ENSG00000113916	BCL6	10.74	25.69	2.39	NS	10.4	10.04	27.15	2.71	NS	15.1
ENSG00000125730	C3	1773.54	14.49	0.01	1.54E-07	5.7	1456.62	7.61	0.01	0.00E+00	3.3
ENSG00000121691	CAT	341.00	10.86	0.03	1.54E-07	0.9	400.58	21.17	0.05	5.49E-07	1.5
ENSG00000138764	CCNG2	1.92	53.86	28.11	0.00E+00	12.0	1.29	26.95	20.92	NS	4.6
ENSG00000177697	CD151	44.89	104.06	2.32	NS	2.1	25.07	110.90	4.42	NS	2.3
ENSG00000241399	CD302	73.86	1.52	0.02	2.46E-07	1.3	62.93	4.20	0.07	6.66E-07	3.9
ENSG00000135218	CD36	3.83	0.01	0.00	1.93E-06	0.0	4.19	0.11	0.03	0.00E+00	0.3
ENSG00000123080	CDKN2C	0.62	0.44	0.72	1.00E-04	8.7	1.14	0.68	0.60	2.00E-04	11.4
ENSG00000250479	CHCHD10	42.30	3.53	0.08	1.47E-06	0.2	73.23	21.18	0.29	3.00E-04	1.0
ENSG00000213341	CHUK	2.97	18.85	6.35	NS	1.3	2.90	23.11	7.96	NS	1.6
ENSG00000164237	CMBL	113.11	17.00	0.15	2.82E-06	0.9	157.50	54.45	0.35	2.00E-04	2.8
ENSG00000162368	CMPK1	60.26	97.13	1.61	2.00E-04	2.7	63.67	108.52	1.70	5.00E-04	2.8
ENSG00000204291	COL15A1	0.25	1.91	7.64	NS	9.9	0.08	2.45	28.94	NS	8.9
ENSG00000187498	COL4A1	2.57	84.32	32.81	NS	1.6	1.24	601.28	483.68	1.20E-03	10.7
ENSG00000132423	COQ3	8.91	5.89	0.66	0.00E+00	0.2	8.83	10.75	1.22	5.00E-04	0.4
ENSG00000110871	COQ5	19.73	47.88	2.43	3.20E-03	1.7	21.09	53.97	2.56	9.10E-03	1.6

ENSG0000088682	COQ9	17.34	14.19	0.82	0.00E+00	0.9	17.82	18.98	1.07	1.00E-04	1.3
ENSG00000111775	COX6A1	133.21	163.36	1.23	8.00E-04	0.9	128.27	245.19	1.91	8.50E-03	1.4
ENSG00000131174	COX7B	34.01	31.18	0.92	1.00E-04	0.5	38.36	39.93	1.04	4.00E-04	0.7
ENSG00000176340	COX8A	233.95	388.62	1.66	5.80E-03	0.7	243.47	523.06	2.15	NS	0.9
ENSG00000157184	CPT2	39.48	19.74	0.50	6.90E-06	0.6	31.01	20.91	0.67	0.00E+00	0.7
ENSG00000095321	CRAT	66.79	17.71	0.27	1.34E-06	1.9	76.38	17.51	0.23	2.34E-06	1.8
ENSG00000062485	CS	19.58	97.81	5.00	NS	1.0	15.24	98.93	6.49	NS	1.0
ENSG00000179091	CYC1	45.67	81.05	1.77	3.00E-04	0.6	56.58	115.77	2.05	3.40E-03	0.8
ENSG00000137992	DBT	5.94	10.10	1.70	4.20E-03	1.1	6.06	11.55	1.91	5.70E-03	1.1
ENSG00000099977	DDT	98.30	17.01	0.17	4.12E-06	0.7	135.98	28.72	0.21	0.00E+00	1.2
ENSG00000104325	DECRI	110.40	12.49	0.11	2.25E-07	0.6	82.53	14.53	0.18	6.47E-07	0.8
ENSG00000185000	DGAT1	27.63	11.02	0.40	0.00E+00	1.0	30.40	21.06	0.69	4.00E-04	1.9
ENSG00000172893	DHCR7	54.07	9.52	0.18	0.00E+00	0.1	57.04	35.68	0.63	1.10E-03	0.4
ENSG00000100612	DHRS7	21.15	39.71	1.88	1.00E-03	2.9	20.77	57.34	2.76	8.50E-03	2.7
ENSG00000109016	DHRS7B	3.35	9.60	2.86	NS	2.1	3.11	12.61	4.06	NS	2.5
ENSG00000150768	DLAT	5.35	38.66	7.22	NS	0.6	3.44	58.86	17.13	NS	0.9
ENSG00000091140	DLD	18.16	68.13	3.75	NS	1.3	18.15	69.14	3.81	NS	1.2
ENSG00000128590	DNAJB9	18.34	71.72	3.91	NS	4.9	32.82	62.78	1.91	NS	3.6
ENSG00000120675	DNAJC15	6.62	25.50	3.85	NS	3.0	7.13	50.48	7.08	NS	5.6
ENSG00000156171	DRAM2	10.45	68.64	6.57	NS	3.3	13.05	72.15	5.53	NS	3.3
ENSG00000104823	ECH1	172.35	52.06	0.30	4.18E-06	0.7	215.23	70.43	0.33	0.00E+00	0.8
ENSG00000127884	ECHS1	768.10	128.10	0.17	1.59E-06	0.8	763.36	172.03	0.23	5.05E-06	1.0
ENSG00000115459	ELMOD3	5.46	8.02	1.47	8.10E-03	2.9	5.51	9.40	1.71	NS	3.5
ENSG00000170522	ELOVL6	12.45	29.92	2.40	6.70E-03	0.5	19.83	23.14	1.17	4.70E-03	0.3
ENSG00000136960	ENPP2	6.48	1.43	0.22	NS	1.3	0.61	16.02	26.11	NS	6.3
ENSG00000120915	EPHX2	89.31	1.23	0.01	1.37E-07	0.3	100.87	4.30	0.04	8.65E-08	0.8
ENSG00000173153	ESRRA	25.00	29.32	1.17	2.00E-04	1.3	26.17	29.48	1.13	3.00E-04	1.2
ENSG00000139641	ESYT1	22.20	132.87	5.98	NS	1.5	19.76	126.47	6.40	NS	1.5
ENSG00000105379	ETFB	59.67	6.80	0.11	5.10E-06	0.9	67.99	17.95	0.26	0.00E+00	1.7
ENSG00000170323	FABP4	1.29	0.00	0.00	1.00E-04	0.0	0.24	0.00	0.00	1.00E-04	#DIV/0!
ENSG00000103876	FAH	41.82	12.60	0.30	1.83E-06	2.3	53.48	9.19	0.17	0.00E+00	1.5
ENSG00000174804	FZD4	13.82	5.78	0.42	0.00E+00	0.7	12.39	51.91	4.19	NS	7.9
ENSG00000138757	G3BP2	9.25	96.73	10.45	NS	0.5	8.58	122.57	14.29	NS	0.7

ENSG00000116717	GADD45A	42.67	188.41	4.42	NS	23.6	45.42	189.69	4.18	NS	21.9
ENSG00000114480	GBE1	21.86	30.94	1.42	8.00E-04	4.4	17.66	36.42	2.06	1.50E-03	4.3
ENSG00000165678	GHITM	115.60	380.54	3.29	NS	2.3	112.97	429.12	3.80	NS	2.7
ENSG00000119927	GPAM	54.08	13.38	0.25	0.00E+00	0.9	68.46	13.78	0.20	0.00E+00	1.0
ENSG00000115159	GPD2	1.07	38.54	36.08	2.00E-04	1.2	0.70	46.91	66.77	2.00E-04	1.4
ENSG00000171723	GPHN	6.45	7.76	1.20	2.00E-04	0.9	9.49	11.09	1.17	6.00E-04	0.9
ENSG00000211445	GPX3	108.25	4.71	0.04	1.80E-07	0.2	70.65	67.16	0.95	2.00E-03	1.7
ENSG00000167468	GPX4	197.85	209.81	1.06	1.60E-03	1.2	286.71	358.68	1.25	NS	1.9
ENSG00000109519	GRPEL1	12.54	30.35	2.42	1.90E-03	1.2	15.06	23.99	1.59	6.00E-04	0.9
ENSG00000138796	HADH	61.90	34.63	0.56	7.92E-06	0.7	74.19	28.42	0.38	0.00E+00	0.6
ENSG00000198130	HIBCH	20.91	5.32	0.25	1.99E-06	0.5	17.45	7.74	0.44	7.67E-06	0.7
ENSG00000152137	HSPB8	0.48	184.76	386.48	1.00E-04	7.7	0.25	248.70	1002.98	1.00E-04	16.2
ENSG00000138413	IDH1	130.12	76.64	0.59	8.11E-06	0.3	125.10	176.61	1.41	1.20E-03	0.5
ENSG00000166411	IDH3A	3.98	15.02	3.77	NS	1.1	4.31	15.70	3.64	NS	1.3
ENSG00000067829	IDH3G	14.49	21.50	1.48	7.60E-03	0.8	14.65	29.45	2.01	NS	1.0
ENSG00000027697	IFNGR1	22.46	116.91	5.21	NS	3.6	15.81	156.62	9.91	NS	4.1
ENSG00000132305	IMMT	18.44	101.58	5.51	NS	1.1	17.81	110.07	6.18	NS	1.0
ENSG00000135424	ITGA7	1.95	2.66	1.36	2.90E-03	0.1	1.51	9.25	6.14	NS	0.3
ENSG00000123243	ITIH5	0.44	0.80	1.81	NS	0.5	0.16	3.68	22.82	NS	2.4
ENSG00000205726	ITSN1	3.35	15.73	4.69	NS	0.8	3.24	19.10	5.89	NS	1.0
ENSG00000171135	JAGN1	30.35	52.00	1.71	3.00E-03	1.2	30.99	54.69	1.76	4.00E-03	1.3
ENSG00000112769	LAMA4	1.17	0.04	0.03	6.70E-06	0.1	0.49	0.41	0.84	6.00E-04	0.8
ENSG00000113594	LIFR	7.24	32.21	4.45	NS	4.1	3.72	124.40	33.42	NS	14.6
ENSG00000079435	LIPE	0.21	1.41	6.68	NS	0.4	0.09	1.44	16.32	NS	0.5
ENSG00000111684	LPCAT3	23.02	34.58	1.50	2.00E-04	0.9	23.42	41.17	1.76	7.00E-04	1.0
ENSG00000175445	LPL	0.08	44.52	532.69	7.00E-04	6.4	0.00	24.00	5041.67	3.30E-03	2.3
ENSG00000213316	LTC4S	1.52	0.98	0.64	2.10E-03	1.9	1.63	0.61	0.38	6.00E-04	1.4
ENSG00000011566	MAP4K3	4.43	68.01	15.36	5.40E-03	1.3	3.96	42.82	10.80	NS	0.9
ENSG00000078070	MCCC1	21.70	15.40	0.71	0.00E+00	0.8	17.80	20.12	1.13	1.00E-04	1.2
ENSG00000146701	MDH2	50.71	106.63	2.10	7.00E-04	0.7	49.98	122.38	2.45	2.80E-03	0.8
ENSG00000065833	ME1	3.30	38.69	11.72	2.50E-03	5.0	2.47	78.78	31.91	3.00E-04	10.6
ENSG00000074416	MGLL	21.04	21.20	1.01	1.00E-04	130.3	15.27	9.76	0.64	5.00E-04	64.8
ENSG00000143198	MGST3	7.32	29.56	4.04	NS	2.8	9.02	25.79	2.86	NS	1.9

ENSG00000137547	MRPL15	28.47	166.99	5.86	NS	1.1	28.23	146.95	5.21	NS	0.9
ENSG00000109919	MTCH2	73.38	92.51	1.26	1.00E-04	1.0	81.91	120.31	1.47	5.00E-04	1.4
ENSG00000065534	MYLK	6.76	39.77	5.88	NS	9.7	5.71	11.75	2.06	NS	2.4
ENSG00000128609	NDUFA5	8.10	14.84	1.83	1.00E-03	0.8	7.30	16.99	2.33	3.00E-03	0.9
ENSG00000004779	NDUFAB1	42.03	72.13	1.72	2.80E-03	0.6	55.73	92.43	1.66	NS	0.9
ENSG00000099795	NDUFB7	171.09	200.80	1.17	3.20E-03	1.0	226.45	235.57	1.04	5.50E-03	1.2
ENSG00000213619	NDUFS3	21.86	41.48	1.90	9.40E-03	0.8	27.19	48.09	1.77	NS	0.9
ENSG00000197885	NKIRAS1	3.77	7.68	2.04	6.00E-04	1.9	4.90	9.82	2.00	3.50E-03	2.0
ENSG00000136448	NMT1	19.97	78.89	3.95	NS	1.1	20.90	95.20	4.55	NS	1.2
ENSG00000229314	ORM1	9562.54	0.18	0.00	6.16E-10	0.5	5834.23	2.41	0.00	1.25E-08	1.4
ENSG00000150593	PDCD4	15.03	54.95	3.65	NS	4.7	12.85	43.46	3.38	NS	4.0
ENSG00000133027	PEMT	64.28	19.85	0.31	1.14E-06	0.6	76.71	19.92	0.26	1.94E-06	0.6
ENSG00000142655	PEX14	13.22	27.16	2.05	NS	1.6	14.49	34.96	2.41	NS	2.1
ENSG00000170525	PFKFB3	11.53	49.90	4.33	NS	2.4	1.62	49.73	30.60	NS	2.3
ENSG00000141959	PFKL	21.56	68.92	3.20	NS	2.3	22.41	62.65	2.80	NS	1.9
ENSG00000079739	PGM1	90.55	47.35	0.52	6.54E-06	0.9	104.33	59.08	0.57	0.00E+00	1.7
ENSG00000019144	PHLDB1	0.78	8.65	11.12	1.80E-03	1.1	0.50	10.83	21.47	2.30E-03	1.0
ENSG00000107537	PHYH	202.87	25.58	0.13	9.82E-07	2.0	216.53	28.19	0.13	2.26E-06	2.1
ENSG00000198355	PIM3	17.46	51.38	2.94	NS	1.9	20.67	49.04	2.37	NS	3.1
ENSG00000147872	PLIN2	59.84	213.27	3.56	NS	12.0	50.42	139.53	2.77	NS	6.5
ENSG00000127948	POR	54.92	44.06	0.80	0.00E+00	1.2	60.24	41.83	0.69	0.00E+00	1.1
ENSG00000132170	PPARG	2.43	15.37	6.34	NS	117.0	2.97	10.43	3.51	NS	107.0
ENSG00000138032	PPM1B	8.70	38.39	4.41	NS	0.4	7.09	35.00	4.94	NS	0.5
ENSG00000158615	PPP1R15B	9.63	109.04	11.32	NS	2.5	11.14	96.27	8.64	NS	2.2
ENSG00000162976	PQLC3	7.77	27.14	3.49	NS	1.7	4.49	18.11	4.03	NS	1.4
ENSG00000165672	PRDX3	94.31	133.25	1.41	4.00E-04	0.7	99.03	194.23	1.96	2.20E-03	0.9
ENSG00000138073	PREB	18.31	68.69	3.75	NS	1.1	29.00	48.99	1.69	NS	1.1
ENSG00000132300	PTCD3	8.35	23.10	2.76	3.30E-03	0.5	9.63	30.69	3.19	NS	0.7
ENSG00000050628	PTGER3	0.04	0.12	3.27	NS	0.3	0.02	0.30	15.63	NS	1.1
ENSG00000177469	PTRF	9.59	229.79	23.97	5.00E-04	5.0	4.03	94.28	23.38	NS	2.7
ENSG00000151552	QDPR	69.50	34.80	0.50	6.55E-06	2.1	70.61	39.33	0.56	0.00E+00	2.0
ENSG00000109113	RAB34	1.67	92.76	55.40	9.00E-06	0.7	0.88	84.34	96.03	0.00E+00	0.8
ENSG00000129625	REEP5	41.53	112.57	2.71	4.40E-03	2.3	39.75	89.98	2.26	1.40E-03	1.9

ENSG00000115255	REEP6	151.23	3.54	0.02	6.89E-07	0.3	179.89	23.17	0.13	0.00E+00	1.8
ENSG00000042445	RETSAT	49.45	20.76	0.42	4.92E-06	1.8	55.79	39.89	0.71	1.00E-04	3.1
ENSG00000101782	RIOK3	19.84	111.08	5.60	NS	8.0	18.32	94.95	5.18	NS	6.7
ENSG00000123091	RNF11	18.93	84.41	4.46	NS	1.7	18.99	128.74	6.78	NS	2.2
ENSG00000124782	RREB1	5.42	17.97	3.32	NS	3.2	5.57	16.69	3.00	NS	2.4
ENSG00000133318	RTN3	19.01	84.75	4.46	NS	0.7	18.37	114.46	6.23	NS	1.0
ENSG00000100347	SAMM50	6.40	24.56	3.84	NS	0.8	7.21	29.57	4.10	NS	0.9
ENSG00000073060	SCARB1	50.16	1.62	0.03	4.87E-08	0.1	53.88	23.34	0.43	7.00E-04	1.1
ENSG00000116171	SCP2	129.48	21.53	0.17	1.41E-06	1.7	122.10	26.00	0.21	2.51E-06	2.1
ENSG00000117118	SDHB	65.44	42.91	0.66	5.48E-06	0.8	69.59	60.35	0.87	1.00E-04	1.1
ENSG00000143252	SDHC	11.70	20.81	1.78	7.00E-04	1.1	11.65	22.88	1.96	1.30E-03	1.3
ENSG00000168497	SDPR	5.23	0.15	0.03	1.00E-04	3.6	1.80	0.91	0.51	1.20E-03	21.9
ENSG00000173638	SLC19A1	2.55	3.43	1.34	4.30E-03	0.3	3.79	5.01	1.32	NS	0.5
ENSG00000105281	SLC1A5	1.37	640.33	467.30	4.81E-06	3.2	1.02	449.17	440.21	0.00E+00	1.8
ENSG00000100075	SLC25A1	76.35	69.39	0.91	1.00E-04	0.6	108.64	145.24	1.34	3.70E-03	1.1
ENSG00000183048	SLC25A10	61.47	7.87	0.13	3.27E-06	0.3	81.60	14.07	0.17	0.00E+00	0.6
ENSG00000130304	SLC27A1	3.63	6.05	1.66	NS	2.5	2.86	3.44	1.20	3.60E-03	1.1
ENSG00000138074	SLC5A6	9.08	200.55	22.09	3.00E-04	1.7	13.61	93.77	6.89	NS	1.1
ENSG00000173267	SNCG	1.25	2.94	2.35	NS	0.5	0.79	2.56	3.26	NS	0.3
ENSG00000142168	SOD1	416.76	112.95	0.27	4.32E-06	0.8	569.21	148.84	0.26	9.53E-06	0.9
ENSG00000095637	SORBS1	9.77	0.62	0.06	8.91E-08	0.0	10.03	4.84	0.48	2.00E-04	0.3
ENSG00000152583	SPARCL1	6.31	0.35	0.06	0.00E+00	0.2	2.74	3.22	1.18	6.30E-03	2.1
ENSG00000137767	SQRDL	20.72	7.73	0.37	3.70E-06	31.0	20.78	5.78	0.28	1.00E-04	39.0
ENSG00000123096	SSPN	0.36	2.62	7.31	NS	3.9	0.16	1.08	6.64	NS	1.7
ENSG00000126561	STAT5A	3.52	6.41	1.82	6.00E-04	1.3	2.87	3.64	1.27	1.00E-03	1.0
ENSG00000148175	STOM	132.96	119.84	0.90	4.00E-04	3.0	77.20	136.79	1.77	6.00E-04	4.6
ENSG00000163541	SUCLG1	30.55	27.81	0.91	0.00E+00	1.4	25.33	39.15	1.55	3.00E-04	1.9
ENSG00000196502	SULT1A1	31.27	1.17	0.04	3.53E-07	1.2	27.11	2.78	0.10	4.83E-06	1.5
ENSG00000177156	TALDO1	39.47	145.33	3.68	NS	0.8	42.14	178.58	4.24	NS	1.1
ENSG00000136560	TANK	7.04	21.26	3.02	NS	2.9	6.52	20.58	3.15	NS	2.6
ENSG00000163931	TKT	7.33	221.55	30.22	8.42E-06	0.9	8.19	206.24	25.17	1.00E-04	0.7
ENSG00000141232	TOB1	39.19	45.55	1.16	1.00E-04	2.2	45.59	52.14	1.14	1.00E-04	2.3
ENSG00000128311	TST	207.39	23.39	0.11	7.67E-07	1.1	255.45	25.04	0.10	1.64E-06	1.2

ENSG00000150991	UBC	226.49	1280.90	5.66	NS	2.4	251.97	1330.75	5.28	NS	2.4
ENSG00000135018	UBQLN1	11.52	87.70	7.61	NS	1.2	13.05	90.82	6.96	NS	1.2
ENSG00000130717	UCK1	16.36	39.05	2.39	2.00E-03	1.0	19.24	45.88	2.39	5.40E-03	1.2
ENSG00000175567	UCP2	4.74	4.24	0.90	NS	0.2	1.28	17.62	13.74	NS	0.4
ENSG00000184076	UQCR10	73.22	109.81	1.50	7.00E-04	0.8	84.69	171.41	2.02	8.80E-03	1.1
ENSG00000127540	UQCR11	52.54	48.40	0.92	7.00E-04	0.7	60.85	75.45	1.24	4.90E-03	1.1
ENSG00000010256	UQCRC1	73.65	157.49	2.14	2.50E-03	1.0	85.49	138.73	1.62	1.50E-03	0.9
ENSG00000164405	UQCRQ	150.51	46.07	0.31	1.00E-04	0.6	149.63	75.66	0.51	3.00E-04	1.0
ENSG00000173511	VEGFB	15.79	57.19	3.62	NS	2.0	15.36	78.50	5.11	NS	3.1
ENSG00000170027	YWHAG	19.25	269.63	14.01	5.60E-03	0.8	22.10	290.78	13.16	8.10E-03	0.9

Hallmark Cholesterol Homeostasis

ENSG00000107331	ABCA2	10.88	1.14	0.10	3.72E-07	0.2	9.70	5.46	0.56	3.00E-04	0.9
ENSG00000120437	ACAT2	28.37	24.15	0.85	3.00E-04	0.2	50.99	45.02	0.88	5.40E-03	0.3
ENSG00000131069	ACSS2	43.22	18.11	0.42	1.00E-04	1.3	61.85	18.34	0.30	1.00E-04	0.9
ENSG00000184009	ACTG1	218.07	4348.52	19.94	1.00E-04	2.0	212.39	3291.27	15.50	9.00E-04	1.4
ENSG00000198099	ADH4	1838.30	0.06	0.00	7.80E-08	0.5	2589.75	0.45	0.00	2.47E-09	1.0
ENSG00000170017	ALCAM	14.36	16.39	1.14	1.00E-04	0.5	12.93	67.72	5.24	NS	2.9
ENSG00000109107	ALDOC	47.39	3.17	0.07	8.69E-06	0.1	33.94	5.58	0.16	0.00E+00	0.1
ENSG00000163297	ANTXR2	4.91	35.30	7.19	NS	11.0	4.41	14.97	3.39	NS	6.1
ENSG00000104537	ANXA13	9.08	0.00	0.00	2.00E-04	#DIV/0!	3.50	0.01	0.00	3.00E-04	#DIV/0!
ENSG00000164111	ANXA5	25.16	769.00	30.57	1.00E-04	3.2	13.22	614.27	46.46	3.00E-04	2.9
ENSG00000162772	ATF3	0.90	145.28	161.34	4.28E-06	14.4	1.06	146.83	138.73	6.21E-06	16.5
ENSG00000169136	ATF5	462.12	54.49	0.12	3.47E-06	3.5	435.87	78.94	0.18	8.16E-06	3.2
ENSG00000204842	ATXN2	3.50	17.56	5.02	NS	2.1	3.52	18.28	5.19	NS	2.1
ENSG00000166148	AVPR1A	3.64	0.14	0.04	0.00E+00	0.7	2.23	4.89	2.19	NS	22.5
ENSG00000160200	CBS	36.94	46.42	1.26	6.00E-04	0.4	79.97	72.93	0.91	3.10E-03	0.7
ENSG00000010278	CD9	6.62	228.24	34.50	1.00E-04	2.3	5.29	97.34	18.39	NS	0.9
ENSG00000110721	CHKA	27.97	72.99	2.61	NS	1.4	27.72	74.21	2.68	NS	1.3
ENSG00000120885	CLU	859.16	23.62	0.03	1.77E-08	0.2	749.50	52.36	0.07	2.38E-07	0.7
ENSG00000137449	CPEB2	5.43	16.06	2.96	NS	17.1	5.93	16.46	2.77	NS	23.8
ENSG00000168036	CTNNB1	32.31	339.00	10.49	NS	2.1	28.64	314.71	10.99	NS	1.4
ENSG00000161921	CXCL16	12.05	11.82	0.98	6.90E-03	2.8	5.33	10.45	1.96	4.30E-03	7.6
ENSG00000001630	CYP51A1	56.30	42.22	0.75	6.00E-04	0.5	76.79	59.42	0.77	2.00E-03	0.6

ENSG00000172893	DHCR7	54.07	9.52	0.18	0.00E+00	0.1	57.04	35.68	0.63	1.10E-03	0.4
ENSG00000147155	EBP	147.24	27.70	0.19	1.00E-04	0.4	162.11	43.59	0.27	3.00E-04	0.6
ENSG00000104823	ECH1	172.35	52.06	0.30	4.18E-06	0.7	215.23	70.43	0.33	0.00E+00	0.8
ENSG00000116285	ERRF11	219.19	654.42	2.99	8.00E-03	9.5	299.96	673.86	2.25	8.70E-03	9.1
ENSG00000105755	ETHE1	22.33	43.94	1.97	7.60E-03	2.6	18.11	41.26	2.28	5.10E-03	2.7
ENSG00000164687	FABP5	0.25	13.37	54.14	4.00E-04	0.1	0.32	29.89	93.00	1.00E-04	0.3
ENSG00000134824	FADS2	35.62	10.14	0.28	1.30E-03	0.1	29.15	45.89	1.57	NS	0.2
ENSG00000135842	FAM129A	0.58	66.41	114.44	6.00E-04	2.9	0.17	40.68	243.72	1.60E-03	2.0
ENSG00000169710	FASN	47.98	71.52	1.49	9.80E-03	0.2	132.73	113.10	0.85	NS	0.3
ENSG00000116663	FBXO6	8.16	18.18	2.23	4.70E-03	32.5	6.93	23.87	3.44	NS	22.2
ENSG00000079459	FDFT1	13.70	93.15	6.80	NS	0.5	28.64	83.14	2.90	NS	0.4
ENSG00000160752	FDPS	123.69	50.11	0.41	3.10E-03	0.3	109.04	71.74	0.66	7.20E-03	0.4
ENSG00000178445	GLDC	49.51	28.24	0.57	0.00E+00	0.3	36.34	69.71	1.92	2.10E-03	0.8
ENSG00000127955	GNAH1	6.59	17.41	2.64	4.80E-03	1.5	8.17	20.29	2.49	NS	1.6
ENSG00000164294	GPX8	0.44	90.42	204.64	0.00E+00	2.6	0.23	92.80	400.20	0.00E+00	2.1
ENSG00000213366	GSTM2	33.51	0.99	0.03	2.70E-03	0.4	5.89	2.63	0.45	9.40E-03	1.0
ENSG00000169919	GUSB	48.77	41.66	0.85	0.00E+00	1.6	39.45	44.71	1.13	1.00E-04	1.6
ENSG00000113161	HMGCR	6.57	47.49	7.23	NS	0.3	11.27	63.72	5.66	NS	0.4
ENSG00000112972	HMGS1	27.60	39.38	1.43	1.50E-03	0.2	95.73	68.95	0.72	7.00E-03	0.2
ENSG00000132196	HSD17B7	5.40	5.18	0.96	2.00E-04	0.5	10.19	5.09	0.50	3.00E-04	0.8
ENSG00000067064	IDI1	28.99	28.70	0.99	2.00E-04	0.3	58.11	47.73	0.82	2.20E-03	0.5
ENSG00000101384	JAG1	1.63	22.79	14.02	NS	1.8	0.98	33.54	34.14	5.10E-03	2.8
ENSG00000130164	LDLR	2.44	76.32	31.33	NS	1.8	5.97	30.68	5.14	NS	0.7
ENSG00000131981	LGALS3	4.18	85.85	20.56	1.40E-03	19.9	2.04	97.56	47.71	5.90E-03	17.7
ENSG00000100600	LGMN	22.16	64.88	2.93	NS	1.7	19.00	74.32	3.91	NS	1.3
ENSG00000175445	LPL	0.08	44.52	532.69	7.00E-04	6.4	0.00	24.00	5041.67	3.30E-03	2.3
ENSG00000160285	LSS	46.38	23.43	0.51	1.00E-03	0.3	53.37	42.15	0.79	6.00E-03	0.5
ENSG00000167508	MVD	5.20	11.33	2.18	NS	0.4	17.98	23.85	1.33	NS	0.5
ENSG00000110921	MVK	8.59	6.45	0.75	3.00E-04	1.1	15.07	6.85	0.45	5.00E-04	1.0
ENSG00000165030	NFIL3	12.40	104.97	8.46	NS	6.7	7.14	84.18	11.79	NS	5.0
ENSG00000147383	NSDHL	13.39	31.03	2.32	6.20E-03	0.6	24.15	43.09	1.78	NS	0.8
ENSG00000185813	PCYT2	35.69	15.16	0.42	1.00E-04	1.1	43.05	43.36	1.01	4.80E-03	3.1
ENSG00000067992	PDK3	1.05	5.91	5.62	NS	0.4	0.68	7.67	11.27	NS	0.5

ENSG0000011422	PLAUR	0.31	45.46	148.18	1.00E-04	6.4	0.08	10.44	123.99	NS	1.0
ENSG00000188313	PLSCR1	3.74	67.71	18.10	NS	3.9	3.26	50.38	15.44	NS	2.7
ENSG00000163344	PMVK	45.55	28.92	0.63	0.00E+00	0.7	51.46	44.98	0.87	2.00E-04	1.3
ENSG00000146278	PNRC1	28.12	33.02	1.17	2.00E-04	2.2	19.53	29.68	1.52	4.00E-04	2.3
ENSG00000132170	PPARG	2.43	15.37	6.34	NS	117.0	2.97	10.43	3.51	NS	107.0
ENSG00000163191	SI00A11	24.52	3158.97	128.81	9.71E-06	12.0	12.42	1898.00	152.78	1.00E-04	7.0
ENSG00000099194	SCD	586.39	21.85	0.04	0.00E+00	0.0	361.18	168.63	0.47	1.00E-03	0.2
ENSG00000012171	SEMA3B	2.02	1.28	0.63	NS	0.7	1.78	7.15	4.02	NS	4.2
ENSG00000104549	SQLE	2.06	35.04	16.97	NS	0.3	10.33	42.15	4.08	NS	0.3
ENSG00000198911	SREBF2	15.99	64.67	4.04	NS	0.6	27.88	117.29	4.21	NS	1.1
ENSG00000164211	STARD4	5.14	21.75	4.23	NS	0.5	9.08	32.58	3.59	NS	0.7
ENSG00000162236	STX5	15.87	86.90	5.48	NS	3.8	21.64	80.21	3.71	NS	3.0
ENSG00000149809	TM7SF2	41.70	6.32	0.15	0.00E+00	0.4	54.64	16.98	0.31	1.00E-04	0.6
ENSG00000109084	TMEM97	39.46	195.66	4.96	NS	1.5	44.19	148.19	3.35	NS	1.0
ENSG00000006327	TNFRSF12A	1.48	284.84	192.49	2.44E-06	4.7	0.95	228.89	241.42	4.59E-06	4.2
ENSG00000164938	TP53INP1	42.38	65.36	1.54	6.20E-03	6.2	31.31	117.26	3.75	NS	12.7
ENSG00000101255	TRIB3	8.67	118.04	13.62	6.00E-04	12.4	7.53	98.69	13.10	4.60E-03	6.2

Hallmark Glycolysis

ENSG00000115657	ABCB6	9.48	17.33	1.83	1.10E-03	1.0	0.68	7.67	11.27	NS	0.5
ENSG00000170425	ADORA2B	0.03	9.37	326.20	5.00E-04	2.9	1.46	48.13	33.00	4.30E-03	3.5
ENSG00000162688	AGL	14.73	15.42	1.05	1.30E-03	0.9	13.53	41.65	3.08	NS	3.2
ENSG00000188157	AGRN	8.71	73.23	8.41	NS	1.6	0.30	6.19	20.29	3.80E-03	0.5
ENSG00000147853	AK3	61.90	70.65	1.14	1.00E-04	2.1	9.07	10.03	1.11	6.00E-04	6.7
ENSG00000162433	AK4	32.04	4.41	0.14	2.17E-07	0.1	9.26	40.09	4.33	NS	2.0
ENSG00000117448	AKRIA1	122.26	63.01	0.52	1.00E-04	0.5	89.10	72.28	0.81	2.00E-04	0.8
ENSG00000164904	ALDH7A1	43.55	24.47	0.56	7.35E-06	0.4	6.54	3.58	0.55	0.00E+00	4.5
ENSG00000143149	ALDH9A1	80.16	75.13	0.94	0.00E+00	0.9	12.72	14.37	1.13	0.00E+00	2.7
ENSG00000149925	ALDOA	15.46	301.59	19.51	0.00E+00	1.0	0.65	17.41	26.90	2.00E-04	3.5
ENSG00000136872	ALDOB	4282.19	0.16	0.00	1.72E-09	#DIV/0!	3707.62	0.99	0.00	1.42E-09	1.5
ENSG00000033011	ALG1	3.19	11.20	3.51	NS	0.6	23.83	87.79	3.68	NS	0.6
ENSG00000214274	ANG	548.51	2.55	0.00	7.74E-09	0.9	710.63	7.80	0.01	6.41E-08	3.0
ENSG00000167772	ANGPTL4	9.42	83.96	8.91	NS	72.2	11.65	22.88	1.96	NS	1.3
ENSG00000163516	ANKZF1	13.26	33.88	2.56	NS	1.6	4.32	6.29	1.46	NS	0.9

ENSG00000128989	ARPP19	8.43	148.54	17.62	1.50E-03	1.2	2.47	78.78	31.91	1.90E-03	10.6
ENSG00000117407	ARTN	0.05	0.66	14.26	NS	0.1	0.09	0.92	10.71	NS	0.2
ENSG00000087586	AURKA	0.61	26.49	43.51	1.00E-04	0.4	28.23	514.46	18.23	3.00E-04	19.2
ENSG00000176022	B3GALT6	5.12	21.19	4.14	NS	1.6	72.17	419.93	5.82	NS	85.5
ENSG00000109956	B3GAT1	1.21	0.40	0.33	0.00E+00	0.0	124.93	408.41	3.27	NS	0.7
ENSG00000149541	B3GAT3	12.63	32.36	2.56	NS	1.8	3.70	16.94	4.58	NS	0.8
ENSG00000179913	B3GNT3	0.52	3.61	6.95	NS	1.6	1.45	11.87	8.17	NS	0.5
ENSG00000086062	B4GALT1	25.34	149.78	5.91	NS	8.5	7.81	49.04	6.28	NS	3.0
ENSG00000117411	B4GALT2	11.42	44.93	3.94	NS	1.1	17.15	25.00	1.46	NS	1.2
ENSG00000121578	B4GALT4	3.43	41.85	12.20	3.00E-04	1.8	0.39	4.42	11.23	1.00E-03	0.4
ENSG00000027847	B4GALT7	4.29	12.41	2.89	NS	1.6	17.54	24.04	1.37	NS	1.5
ENSG00000100290	BIK	0.33	4.93	14.80	NS	1.7	0.02	6.58	300.85	NS	2.6
ENSG00000162813	BPNT1	8.38	17.84	2.13	1.30E-03	1.3	29.96	47.67	1.59	NS	3.8
ENSG00000196557	CACNA1H	18.99	1.00	0.05	1.78E-06	0.1	36.88	3.85	0.10	0.00E+00	0.2
ENSG00000149260	CAPN5	22.69	10.48	0.46	3.40E-06	0.6	28.65	15.06	0.53	0.00E+00	0.8
ENSG00000138794	CASP6	9.96	35.10	3.52	NS	1.5	5.18	26.34	5.09	NS	1.7
ENSG00000026508	CD44	1.45	63.99	44.23	7.80E-03	11.3	1.29	25.34	19.68	NS	14.8
ENSG00000170312	CDK1	0.31	52.56	169.24	2.00E-04	0.7	0.07	56.15	755.85	2.00E-04	0.7
ENSG00000115163	CENPA	0.11	16.29	147.01	0.00E+00	0.7	0.03	16.79	531.95	1.00E-04	0.9
ENSG00000123989	CHPF	22.19	89.89	4.05	NS	1.6	6.66	20.21	3.03	NS	1.6
ENSG00000033100	CHPF2	7.48	34.87	4.66	NS	1.7	4.77	35.72	7.49	NS	1.5
ENSG00000175264	CHST1	0.52	5.47	10.53	2.60E-03	3.8	17.08	42.83	2.51	NS	20.0
ENSG00000136213	CHST12	2.44	9.09	3.72	NS	1.0	1.43	14.17	9.89	NS	0.6
ENSG00000175040	CHST2	0.42	2.47	5.95	NS	0.2	7.77	175.45	22.59	NS	1.4
ENSG00000140835	CHST4	1.08	0.02	0.01	7.28E-07	0.0	0.75	0.03	0.05	5.67E-06	0.0
ENSG00000183196	CHST6	0.00	0.35	120.79	0.00E+00	0.0	0.00	0.49	200.44	0.00E+00	0.0
ENSG00000164442	CITED2	23.57	191.12	8.11	NS	3.0	0.15	1.08	7.46	NS	0.4
ENSG00000165215	CLDN3	16.86	3.50	0.21	0.00E+00	0.2	569.21	148.84	0.26	1.00E-04	0.9
ENSG00000213937	CLDN9	6.28	5.00	0.80	NS	1.6	115.24	81.65	0.71	NS	0.7
ENSG00000128973	CLN6	5.64	44.32	7.86	NS	0.9	8.19	37.82	4.62	NS	1.3
ENSG00000135775	COG2	1.70	9.24	5.44	NS	0.8	129.51	491.81	3.80	NS	1.6
ENSG00000130635	COL5A1	1.95	505.09	258.91	1.07E-06	52.7	0.17	72.40	430.69	2.20E-03	4.1
ENSG00000184432	COPB2	10.89	79.60	7.31	NS	1.4	1.79	10.81	6.05	NS	0.6

ENSG00000116761	CTH	23.60	60.01	2.54	7.00E-03	2.2	6.00	27.33	4.55	NS	2.3
ENSG00000121966	CXCR4	1.51	1.22	0.80	6.00E-04	0.5	3.14	45.06	14.34	NS	2.8
ENSG00000166347	CYB5A	99.96	6.56	0.07	1.59E-07	0.4	117.69	16.00	0.14	3.65E-06	0.9
ENSG00000011465	DCN	16.72	2.79	0.17	2.00E-04	9.4	0.69	0.25	0.36	1.00E-04	0.4
ENSG00000168209	DDIT4	28.76	911.04	31.68	1.00E-04	47.5	4.85	43.65	9.00	1.90E-03	5.5
ENSG00000024526	DEPDC1	0.06	12.15	195.82	0.00E+00	0.5	0.04	9.03	232.48	2.00E-04	0.3
ENSG00000091140	DLD	18.16	68.13	3.75	NS	1.3	3.99	16.31	4.09	NS	1.1
ENSG00000151640	DPYSL4	0.19	4.98	25.90	1.70E-03	0.2	0.05	28.55	620.96	4.00E-04	1.3
ENSG00000134755	DSC2	1.10	58.68	53.19	2.00E-04	3.9	1.43	103.91	72.46	3.00E-04	2.3
ENSG00000122882	ECD	5.01	34.41	6.87	NS	0.7	2.09	23.84	11.41	NS	2.8
ENSG00000143590	EFNA3	0.27	1.73	6.43	NS	0.2	23.01	227.23	9.88	NS	3.5
ENSG00000146648	EGFR	13.47	60.53	4.49	NS	24.7	2.53	6.51	2.57	NS	1.5
ENSG00000129521	EGLN3	0.16	0.30	1.90	NS	0.0	0.09	11.12	130.76	NS	0.9
ENSG00000163435	ELF3	3.81	6.76	1.77	NS	1.0	13.16	57.68	4.38	NS	2.0
ENSG00000074800	ENO1	94.71	811.54	8.57	NS	0.6	13.24	121.50	9.18	6.40E-03	2.4
ENSG00000111674	ENO2	1.65	5.52	3.34	NS	0.1	0.64	64.90	101.05	NS	1.1
ENSG00000182197	EXT1	7.16	59.75	8.34	NS	4.8	9.22	115.50	12.53	NS	2.4
ENSG00000151348	EXT2	7.28	75.44	10.36	NS	2.1	7.30	42.39	5.81	NS	0.9
ENSG00000114023	FAM162A	25.72	8.74	0.34	0.00E+00	0.4	28.90	15.34	0.53	1.00E-04	0.6
ENSG00000004478	FKBP4	13.76	110.85	8.06	NS	0.8	0.46	1.17	2.53	NS	1.8
ENSG00000033170	FUT8	0.37	105.12	282.81	1.00E-04	11.3	0.32	470.42	1491.26	3.00E-04	4.7
ENSG00000160211	G6PD	1.69	84.74	50.09	6.05E-06	2.0	0.15	3.70	25.14	7.81E-06	1.1
ENSG00000128242	GAL3ST1	1.55	0.31	0.20	1.20E-03	0.1	125.10	176.61	1.41	NS	0.5
ENSG00000117308	GALE	19.78	62.24	3.15	NS	5.3	0.81	2.82	3.49	NS	0.2
ENSG00000108479	GALK1	59.61	9.81	0.16	1.91E-06	0.8	36.26	9.69	0.27	3.24E-06	1.1
ENSG00000156958	GALK2	2.45	7.85	3.20	NS	1.8	32.26	47.59	1.48	8.90E-03	2.0
ENSG00000001084	GCLC	22.08	18.19	0.82	0.00E+00	0.8	11.50	28.10	2.44	1.40E-03	5.4
ENSG00000198380	GFPT1	3.95	136.85	34.65	1.60E-03	2.7	1.00	31.13	31.14	1.60E-03	3.5
ENSG00000138604	GLCE	4.52	7.19	1.59	5.00E-03	0.8	43.91	101.34	2.31	2.90E-03	1.9
ENSG00000173221	GLRX	13.79	4.79	0.35	3.92E-06	1.0	26.65	42.87	1.61	3.10E-03	1.8
ENSG00000144591	GMPPA	9.72	21.56	2.22	NS	1.5	55.54	98.87	1.78	NS	3.6
ENSG00000173540	GMPPB	3.50	17.12	4.89	NS	1.3	31.13	102.58	3.29	NS	0.7
ENSG00000159921	GNE	45.35	10.86	0.24	5.03E-06	1.0	8.53	4.29	0.50	8.74E-06	104.9

ENSG00000113552	GNPDA1	5.31	127.08	23.92	0.00E+00	1.6	3.90	174.07	44.67	0.00E+00	2.2
ENSG00000120053	GOT1	100.17	156.18	1.56	3.00E-04	2.6	18.86	16.79	0.89	2.00E-04	1.1
ENSG00000125166	GOT2	108.15	88.16	0.82	0.00E+00	0.5	162.47	108.38	0.67	1.00E-04	0.5
ENSG00000063660	GPC1	7.18	39.18	5.46	NS	2.5	8.48	46.42	5.47	NS	1.1
ENSG00000147257	GPC3	1.68	36.42	21.62	4.20E-03	0.3	0.34	142.72	424.23	2.00E-04	1.9
ENSG00000076716	GPC4	0.56	45.10	80.37	0.00E+00	0.2	0.30	49.05	163.89	2.00E-04	2.9
ENSG00000138271	GPR87	0.08	97.26	1281.04	2.97E-06	187.5	0.01	87.77	6766.40	4.16E-06	430.0
ENSG00000169919	GUSB	48.77	41.66	0.85	0.00E+00	1.6	12.87	38.45	2.99	1.00E-04	2.2
ENSG00000104812	GYS1	8.59	30.05	3.50	NS	1.0	21.32	81.13	3.81	NS	1.5
ENSG00000111713	GYS2	99.32	0.10	0.00	8.55E-09	0.6	68.29	0.29	0.00	7.81E-08	2.1
ENSG00000143575	HAX1	29.75	128.37	4.31	NS	2.6	13.06	50.71	3.88	NS	2.6
ENSG00000115677	HDLBP	43.63	174.45	4.00	NS	1.5	26.53	172.82	6.51	NS	0.8
ENSG00000159399	HK2	0.12	64.11	513.67	4.00E-04	1.1	0.09	70.20	755.89	4.00E-04	1.2
ENSG00000072571	HMMR	0.35	17.59	50.63	1.00E-04	0.3	0.87	61.92	71.32	1.00E-03	3.3
ENSG00000152413	HOMER1	0.18	12.31	67.43	7.00E-04	0.4	0.05	14.72	289.58	6.00E-04	0.4
ENSG00000153936	HS2ST1	5.17	21.83	4.23	NS	0.9	0.88	16.83	19.09	NS	5.3
ENSG00000171004	HS6ST2	0.00	3.08	623.31	5.63E-06	0.4	0.02	12.67	751.50	2.56E-06	2.0
ENSG00000044574	HSPA5	62.71	682.50	10.88	NS	1.4	2.78	34.02	12.24	NS	2.4
ENSG00000138413	IDH1	130.12	76.64	0.59	8.11E-06	0.3	8.75	18.05	2.06	1.20E-03	2.0
ENSG00000127415	IDUA	6.63	2.73	0.41	NS	3.1	96.66	97.54	1.01	NS	0.4
ENSG00000137331	IER3	1.60	33.86	21.13	4.00E-04	4.1	20.30	160.26	7.89	2.10E-03	25.7
ENSG00000146674	IGFBP3	105.99	669.73	6.32	NS	110.2	2.10	11.68	5.56	NS	1.0
ENSG00000131724	IL13RA1	55.02	64.87	1.18	1.00E-04	6.8	73.71	101.25	1.37	2.00E-04	1.1
ENSG00000185950	IRS2	2.87	67.71	23.56	1.00E-03	6.9	1.43	14.54	10.16	NS	1.3
ENSG00000172183	ISG20	0.48	2.20	4.54	NS	3.1	0.58	2.64	4.55	NS	0.8
ENSG00000100196	KDELR3	8.06	12.74	1.58	NS	1.1	118.56	1254.64	10.58	NS	0.9
ENSG00000112984	KIF20A	0.13	18.64	143.87	8.00E-04	0.3	0.05	13.87	292.36	2.30E-03	0.2
ENSG00000068796	KIF2A	0.96	58.43	61.10	5.00E-04	1.1	1.29	72.75	56.25	5.00E-04	6.9
ENSG00000115850	LCT	0.00	0.23	60.90	2.55E-06	7.4	0.00	0.11	35.71	4.00E-04	7.6
ENSG00000134333	LDHA	76.76	111.88	1.46	2.00E-04	0.5	46.97	61.84	1.32	2.00E-04	5.6
ENSG00000166796	LDHC	1.61	0.41	0.25	NS	0.4	1.29	0.22	0.17	NS	0.2
ENSG00000107902	LHPP	17.24	3.73	0.22	2.19E-06	0.4	18.64	6.35	0.34	0.00E+00	0.5
ENSG00000143355	LHX9	0.11	0.00	0.00	0.00E+00	0.0	0.04	0.67	18.56	NS	16.1

ENSG00000014641	MDH1	29.38	72.08	2.45	2.00E-03	0.5	5.99	18.92	3.16	NS	0.8
ENSG000000146701	MDH2	50.71	106.63	2.10	7.00E-04	0.7	49.98	122.38	2.45	2.80E-03	0.8
ENSG000000065833	ME1	3.30	38.69	11.72	2.50E-03	5.0	4.34	186.60	43.04	3.00E-04	11.2
ENSG000000082212	ME2	1.83	14.31	7.83	NS	0.5	1.93	65.80	34.14	NS	2.2
ENSG000000008838	MED24	8.36	38.11	4.56	NS	0.9	125.79	616.12	4.90	NS	1.1
ENSG000000153208	MERTK	3.93	40.75	10.38	NS	6.6	23.45	170.46	7.27	NS	9.8
ENSG000000105976	MET	14.53	52.96	3.64	NS	5.4	78.77	130.61	1.66	NS	0.6
ENSG000000240972	MIF	50.35	111.56	2.22	5.30E-03	0.5	16.55	10.38	0.63	NS	5.5
ENSG000000100253	MIOX	0.29	3.40	11.91	NS	12.1	27.64	135.98	4.92	NS	1.0
ENSG000000178802	MPI	3.62	4.83	1.34	1.00E-04	0.7	42.62	46.01	1.08	3.00E-04	6.2
ENSG000000119950	MX11	10.51	15.03	1.43	4.00E-04	2.7	24.15	43.09	1.78	NS	0.8
ENSG000000170191	NANP	1.58	12.18	7.69	NS	1.2	3.77	55.35	14.68	NS	4.4
ENSG000000132780	NASP	12.80	70.33	5.49	NS	0.2	1.74	13.59	7.81	NS	1.8
ENSG000000164100	NDST3	0.31	2.96	9.44	NS	3.9	0.04	2.81	67.49	NS	4.5
ENSG000000160194	NDUFV3	9.08	15.37	1.69	2.20E-03	0.9	8.47	18.30	2.16	6.90E-03	1.0
ENSG000000140939	NOL3	11.74	12.02	1.02	NS	11.2	39.45	44.71	1.13	NS	1.6
ENSG000000147383	NSDHL	13.39	31.03	2.32	6.20E-03	0.6	17.54	35.76	2.04	NS	4.9
ENSG000000135318	NT5E	19.79	78.19	3.95	NS	38.2	48.96	37.69	0.77	3.30E-03	0.5
ENSG000000122884	P4HA1	3.62	40.60	11.23	NS	1.6	12.04	262.38	21.80	NS	0.9
ENSG000000072682	P4HA2	1.41	20.48	14.55	1.00E-04	9.1	2.85	77.75	27.29	3.00E-04	3.0
ENSG000000145730	PAM	1.80	54.54	30.36	3.90E-03	3.2	0.20	12.08	59.97	4.40E-03	0.2
ENSG000000157212	PAXIP1	1.54	10.27	6.65	NS	0.5	68.19	326.46	4.79	NS	0.7
ENSG000000173599	PC	39.27	3.08	0.08	6.02E-07	0.4	62.21	10.73	0.17	8.61E-06	0.7
ENSG000000067992	PDK3	1.05	5.91	5.62	NS	0.4	0.41	1.17	2.82	NS	0.8
ENSG000000158571	PFKFB1	45.24	0.57	0.01	9.62E-08	1.6	47.83	0.53	0.01	1.09E-07	1.1
ENSG000000067057	PFKP	0.49	203.10	410.48	2.88E-07	3.3	1.17	253.44	216.83	1.08E-06	27.6
ENSG000000171314	PGAM1	23.53	129.13	5.49	NS	0.4	20.68	181.29	8.77	NS	0.5
ENSG000000164708	PGAM2	2.25	0.04	0.02	5.00E-04	0.0	1.63	0.21	0.13	2.70E-03	0.1
ENSG000000102144	PGK1	27.69	164.38	5.94	NS	0.8	2.98	35.91	12.03	NS	0.9
ENSG000000130313	PGLS	12.97	69.90	5.39	NS	2.9	2.03	13.59	6.70	NS	2.9
ENSG000000169299	PGM2	5.80	102.10	17.60	6.40E-03	4.4	0.13	0.81	6.33	NS	4.8
ENSG000000044446	PHKA2	16.85	22.66	1.34	1.00E-04	1.4	2.37	1.93	0.81	4.00E-04	0.3
ENSG000000057294	PKP2	5.62	190.88	33.95	1.00E-03	7.5	0.69	46.60	67.36	1.90E-03	0.8

ENSG0000083444	PLOD1	32.39	49.67	1.53	3.00E-04	1.5	34.20	62.46	1.83	1.50E-03	1.7
ENSG00000152952	PLOD2	6.92	22.57	3.26	NS	1.6	8.54	24.24	2.84	NS	1.9
ENSG00000140650	PMM2	4.32	16.67	3.86	NS	0.7	4.77	20.51	4.30	NS	0.9
ENSG00000161980	POLR3K	2.96	11.68	3.95	NS	0.3	13.40	92.87	6.93	NS	1.6
ENSG00000143847	PPF1A4	0.11	0.05	0.47	7.20E-03	0.0	0.03	0.47	18.20	NS	0.2
ENSG00000196262	PPIA	72.46	326.11	4.50	NS	0.7	18.56	31.54	1.70	NS	21.5
ENSG00000104695	PPP2CB	15.06	127.15	8.44	NS	2.6	13.20	85.80	6.50	NS	0.3
ENSG00000147224	PRPS1	18.35	46.99	2.56	2.20E-03	0.2	11.13	28.08	2.52	2.10E-03	1.9
ENSG00000013275	PSMC4	20.25	117.83	5.82	NS	0.9	6.77	42.03	6.21	NS	9.0
ENSG00000100994	PYGB	6.35	109.30	17.21	1.00E-04	2.0	0.46	24.63	54.03	1.60E-03	0.3
ENSG00000100504	PYGL	51.08	54.29	1.06	1.00E-04	1.6	3.06	6.11	2.00	4.90E-03	0.5
ENSG00000116260	QSOX1	6.56	30.55	4.66	NS	1.3	3.78	104.44	27.61	NS	4.0
ENSG00000113643	RARS	14.07	92.27	6.56	NS	0.9	3.14	17.71	5.65	NS	0.4
ENSG00000125826	RBCK1	30.87	67.97	2.20	NS	2.9	93.50	121.49	1.30	NS	1.9
ENSG00000197713	RPE	5.53	48.72	8.82	NS	1.0	5.80	58.70	10.11	NS	1.0
ENSG00000025039	RRAGD	2.27	17.86	7.86	NS	1.4	7.45	79.14	10.62	NS	2.3
ENSG00000164105	SAP30	1.48	9.71	6.57	NS	0.4	17.92	106.53	5.95	NS	0.9
ENSG00000115884	SDC1	253.36	47.37	0.19	2.28E-06	0.7	108.14	34.97	0.32	0.00E+00	0.5
ENSG00000169439	SDC2	87.32	12.06	0.14	3.22E-07	0.2	254.85	72.05	0.28	0.00E+00	1.4
ENSG00000162512	SDC3	6.00	97.68	16.28	NS	4.7	6.24	219.26	35.13	NS	4.6
ENSG00000143252	SDHC	11.70	20.81	1.78	7.00E-04	1.1	21.70	45.68	2.10	1.30E-03	0.3
ENSG00000141526	SLC16A3	0.49	45.34	92.28	0.00E+00	67.5	0.27	42.51	155.51	7.50E-03	0.2
ENSG00000183048	SLC25A10	61.47	7.87	0.13	3.27E-06	0.3	49.35	12.15	0.25	0.00E+00	1.1
ENSG00000004864	SLC25A13	59.11	73.06	1.24	1.00E-04	0.8	4.69	3.20	0.68	5.00E-04	1.2
ENSG00000117620	SLC35A3	7.69	14.56	1.89	2.40E-03	1.6	25.44	86.86	3.41	5.20E-03	3.4
ENSG00000137700	SLC37A4	55.53	16.26	0.29	1.17E-06	0.7	51.61	17.23	0.33	3.32E-06	0.7
ENSG00000142168	SOD1	416.76	112.95	0.27	4.32E-06	0.8	81.60	14.07	0.17	9.53E-06	0.6
ENSG00000125398	SOX9	1.89	145.55	77.17	3.76E-06	23.8	4.45	264.45	59.46	0.00E+00	5.2
ENSG00000061656	SPAG4	0.89	0.37	0.41	1.00E-04	0.6	21.81	7.26	0.33	1.00E-04	0.7
ENSG00000128039	SRD5A3	3.17	7.44	2.35	5.50E-03	0.7	28.50	134.36	4.71	8.10E-03	1.2
ENSG00000159167	STC1	0.10	2.02	20.16	8.50E-03	0.0	0.05	1.85	40.88	NS	0.1
ENSG00000113739	STC2	0.07	217.72	3214.39	4.68E-09	9.5	0.05	198.62	3647.04	1.16E-08	7.4
ENSG00000117632	STMN1	2.46	181.58	73.68	1.32E-06	1.1	2.53	202.66	80.04	2.33E-06	1.0

ENSG00000177156	TALDO1	39.47	145.33	3.68	NS	0.8	9.91	47.46	4.79	NS	1.6
ENSG00000160180	TFF3	2.38	0.04	0.02	3.00E-04	0.1	0.39	0.04	0.09	2.00E-04	0.1
ENSG00000163235	TGFA	1.24	4.09	3.29	NS	1.5	42.14	178.58	4.24	NS	1.1
ENSG00000120708	TGFBI	18.48	611.96	33.11	0.00E+00	59.1	4.76	42.46	8.91	NS	0.8
ENSG00000007350	TKTL1	0.03	0.00	0.00	NS	0.0	0.01	0.11	19.14	NS	0.6
ENSG00000146242	TPBG	0.34	54.12	159.40	2.84E-07	2.6	0.19	22.98	119.42	0.00E+00	74.3
ENSG00000111669	TPH1	102.36	308.82	3.02	NS	0.6	18.15	69.14	3.81	NS	1.2
ENSG00000169902	TPST1	7.14	17.53	2.46	5.40E-03	1.4	39.31	154.63	3.93	NS	2.6
ENSG00000104522	TSTA3	9.76	21.64	2.22	NS	0.9	5.92	13.03	2.20	NS	1.8
ENSG00000136810	TXN	129.33	561.16	4.34	NS	1.7	45.51	216.30	4.75	NS	1.7
ENSG00000169764	UGP2	114.56	74.60	0.65	0.00E+00	0.3	3.55	6.32	1.78	1.00E-04	0.6
ENSG00000038427	VCAN	0.29	9.71	33.72	2.30E-03	0.1	0.46	179.38	388.85	0.00E+00	1.5
ENSG00000112715	VEGFA	40.78	45.00	1.10	9.00E-04	6.2	89.44	90.66	1.01	1.20E-03	0.4
ENSG00000147852	VLDLR	0.34	46.55	136.97	9.36E-07	2.1	0.25	25.42	102.62	2.89E-06	1.2
ENSG00000015532	XYLT2	4.44	16.07	3.62	NS	1.1	14.16	43.33	3.06	NS	1.1
ENSG00000188994	ZNF292	1.42	39.45	27.87	2.90E-03	2.5	0.82	57.70	70.52	2.40E-03	3.0

Hallmark Heme Metabolism

ENSG00000115657	ABCB6	9.48	17.33	1.83	1.10E-03	1.0	13.53	41.65	3.08	NS	3.2
ENSG00000118777	ABCG2	12.05	53.14	4.41	NS	14.1	15.74	85.56	5.44	NS	21.5
ENSG00000102575	ACP5	9.39	1.38	0.15	0.00E+00	0.3	4.95	0.59	0.12	7.92E-06	0.1
ENSG00000164398	ACSL6	0.93	0.03	0.03	1.96E-06	0.1	0.53	0.39	0.74	2.30E-03	0.6
ENSG00000087274	ADD1	11.27	61.89	5.49	NS	2.0	9.50	67.87	7.14	NS	2.1
ENSG00000075340	ADD2	0.04	0.66	18.08	3.00E-04	0.0	0.02	4.90	212.45	1.70E-03	0.1
ENSG00000159346	ADIPOR1	30.42	136.13	4.48	NS	2.0	27.86	139.74	5.02	NS	2.1
ENSG00000026652	AGPAT4	0.23	7.93	33.90	3.00E-04	0.5	0.13	11.27	86.17	1.00E-04	0.7
ENSG00000169877	AHSP	0.22	0.00	0.00	4.70E-03	0.0	0.11	0.00	0.00	5.10E-03	0.0
ENSG00000148218	ALAD	101.27	15.88	0.16	2.23E-07	1.7	114.46	24.47	0.21	7.73E-07	2.6
ENSG00000144908	ALDH1L1	93.84	0.09	0.00	6.07E-08	0.3	92.35	2.02	0.02	1.97E-06	4.7
ENSG00000119711	ALDH6A1	70.02	11.16	0.16	0.00E+00	0.8	84.75	30.54	0.36	1.00E-04	1.6
ENSG00000029534	ANK1	0.03	0.51	17.27	1.70E-03	0.1	0.02	4.25	275.27	1.90E-03	1.2
ENSG00000165272	AQP3	32.40	2.20	0.07	1.82E-07	0.9	33.32	32.82	0.98	2.20E-03	9.3
ENSG00000196914	ARHGEF12	8.48	28.81	3.40	NS	2.9	7.81	26.56	3.40	NS	2.5
ENSG00000102931	ARL2BP	14.38	115.08	8.00	NS	3.8	13.77	122.44	8.89	NS	4.6

ENSG00000070669	ASNS	1.84	315.62	171.91	8.05E-06	4.6	1.98	371.26	187.46	8.70E-06	4.5
ENSG00000101844	ATG4A	7.19	13.90	1.93	8.00E-04	3.1	6.51	16.75	2.57	4.20E-03	4.5
ENSG00000033627	ATP6V0A1	7.17	25.23	3.52	NS	1.9	6.71	34.21	5.10	NS	2.4
ENSG00000156273	BACH1	2.68	39.98	14.90	NS	2.5	3.03	43.91	14.48	NS	2.3
ENSG00000187244	BCAM	9.49	33.39	3.52	NS	0.7	6.71	70.46	10.49	NS	1.8
ENSG00000106605	BLVRA	2.48	21.85	8.81	NS	0.6	0.87	18.69	21.47	NS	0.6
ENSG00000090013	BLVRB	66.94	74.93	1.12	4.00E-04	2.9	106.09	87.90	0.83	7.00E-04	3.0
ENSG00000138756	BMP2K	3.31	19.97	6.03	NS	2.1	2.82	24.84	8.82	NS	2.5
ENSG00000104765	BNIP3L	8.24	70.31	8.54	NS	1.9	7.63	70.98	9.30	NS	1.9
ENSG00000172331	BPGM	3.07	14.99	4.89	NS	0.8	3.39	21.69	6.39	NS	1.0
ENSG00000172270	BSG	31.25	217.92	6.97	NS	0.6	26.52	257.95	9.73	9.90E-03	0.7
ENSG00000159388	BTG2	3.89	100.21	25.78	3.00E-03	22.6	1.07	214.14	199.33	1.00E-03	37.7
ENSG00000166167	BTRC	4.20	22.71	5.41	NS	1.3	4.06	25.29	6.24	NS	1.3
ENSG00000125730	C3	1773.54	14.49	0.01	1.54E-07	5.7	1456.62	7.61	0.01	0.00E+00	3.3
ENSG00000104267	CA2	61.14	8.06	0.13	2.07E-06	0.7	69.17	28.19	0.41	1.00E-04	3.4
ENSG00000153113	CAST	10.61	74.21	7.00	NS	6.8	9.32	60.19	6.46	NS	5.1
ENSG00000121691	CAT	341.00	10.86	0.03	1.54E-07	0.9	400.58	21.17	0.05	5.49E-07	1.5
ENSG00000024862	CCDC28A	35.34	34.49	0.98	1.00E-03	2.2	23.52	26.61	1.13	1.00E-03	1.7
ENSG00000112576	CCND3	2.45	33.83	13.81	6.00E-04	3.3	1.59	32.98	20.76	4.40E-03	3.6
ENSG00000004897	CDC27	4.70	34.16	7.26	NS	1.1	5.05	53.99	10.69	NS	1.6
ENSG00000140743	CDR2	3.94	18.72	4.75	NS	0.6	4.47	21.49	4.80	NS	0.7
ENSG00000138433	CIR1	8.27	35.89	4.34	NS	2.2	8.53	31.08	3.64	NS	1.8
ENSG00000109572	CLCN3	5.22	50.33	9.64	NS	2.8	4.81	66.82	13.90	NS	3.2
ENSG00000155962	CLIC2	2.34	0.55	0.23	1.00E-03	1.2	0.87	0.47	0.53	7.00E-04	0.9
ENSG00000080819	CPOX	16.64	43.41	2.61	3.30E-03	1.6	22.58	40.24	1.78	3.40E-03	1.4
ENSG00000215908	CROCCP2	37.43	20.23	0.54	3.70E-03	1.6	44.32	18.51	0.42	2.60E-03	1.1
ENSG00000040531	CTNS	7.18	34.65	4.83	NS	2.1	7.08	42.14	5.95	NS	2.6
ENSG00000164733	CTSB	153.65	419.75	2.73	NS	30.7	100.71	281.13	2.79	6.70E-03	23.8
ENSG00000196188	CTSE	0.01	0.41	44.50	NS	31.3	0.07	13.75	195.65	1.00E-04	#DIV/0!
ENSG00000100592	DAAMI	2.85	10.15	3.56	NS	0.9	2.92	22.09	7.56	NS	1.7
ENSG00000122741	DCAF10	4.16	30.18	7.25	NS	4.3	4.47	26.96	6.03	NS	3.8
ENSG00000100897	DCAF11	66.78	32.32	0.48	4.67E-06	1.0	64.18	37.69	0.59	0.00E+00	0.9
ENSG00000043093	DCUN1D1	6.50	19.81	3.05	NS	1.1	6.16	19.39	3.15	NS	1.0

ENSG0000007968	EZF2	0.09	3.61	38.47	2.50E-03	0.8	0.02	4.24	221.94	2.00E-03	0.8
ENSG00000086232	EIF2AK1	25.81	62.97	2.44	2.00E-03	1.0	25.12	83.79	3.34	NS	1.1
ENSG00000118985	ELL2	23.01	54.46	2.37	1.40E-03	5.0	27.17	53.12	1.96	1.60E-03	4.5
ENSG00000149218	ENDOD1	2.03	53.61	26.46	4.00E-04	16.4	1.44	32.94	22.84	NS	11.0
ENSG00000159023	EPB41	10.94	25.67	2.35	1.60E-03	0.4	11.02	33.57	3.05	NS	0.6
ENSG00000187266	EPOR	11.16	9.49	0.85	NS	1.0	9.23	9.02	0.98	NS	0.9
ENSG00000164010	ERMAP	12.59	10.46	0.83	3.00E-04	3.7	8.55	8.95	1.05	4.00E-04	3.2
ENSG00000108799	EZH1	7.14	21.25	2.98	NS	1.9	7.70	20.23	2.63	NS	1.7
ENSG00000183508	FAM46C	2.51	1.61	0.64	1.00E-03	2.3	1.20	2.71	2.26	4.10E-03	3.4
ENSG00000178974	FBXO34	2.70	22.66	8.39	NS	1.7	2.50	32.08	12.81	NS	2.1
ENSG00000100225	FBXO7	23.38	63.72	2.73	NS	2.7	20.11	56.25	2.80	NS	2.3
ENSG00000112146	FBXO9	11.73	14.16	1.21	1.00E-04	1.1	10.53	14.90	1.41	3.00E-04	1.2
ENSG00000066926	FECH	8.78	44.39	5.05	NS	2.7	9.23	75.57	8.19	NS	3.0
ENSG00000167363	FN3K	27.31	4.88	0.18	0.00E+00	1.2	21.41	10.93	0.51	4.00E-04	2.7
ENSG00000065970	FOXJ2	3.56	30.50	8.58	6.70E-03	3.8	3.58	35.63	9.94	8.90E-03	4.1
ENSG00000118689	FOXO3	4.80	56.46	11.77	NS	4.3	4.22	39.09	9.27	NS	3.0
ENSG00000160282	FTCD	418.94	0.39	0.00	1.74E-07	0.6	677.61	1.75	0.00	5.37E-07	2.0
ENSG00000165219	GAPVD1	2.39	19.66	8.23	NS	1.5	2.57	24.86	9.68	NS	2.1
ENSG00000001084	GCLC	22.08	18.19	0.82	0.00E+00	0.8	26.65	42.87	1.61	1.40E-03	1.8
ENSG00000023909	GCLM	8.19	82.35	10.05	NS	7.4	7.58	97.64	12.89	NS	7.4
ENSG00000006007	GDE1	10.34	56.48	5.46	NS	1.5	10.43	70.02	6.71	NS	1.8
ENSG00000182512	GLRX5	22.89	55.83	2.44	2.40E-03	1.0	30.04	95.45	3.18	NS	1.4
ENSG00000163655	GMPS	2.71	36.63	13.53	1.90E-03	0.5	2.84	31.47	11.09	NS	0.5
ENSG00000136732	GYPC	2.84	34.52	12.16	3.40E-03	2.5	1.70	29.93	17.56	NS	1.9
ENSG00000197465	GYPE	0.18	0.00	0.00	7.60E-03	0.0	0.02	0.10	5.03	NS	6.5
ENSG00000189060	H1FO	101.20	377.14	3.73	NS	3.4	66.28	356.51	5.38	NS	3.7
ENSG00000063854	HAGH	54.31	10.06	0.19	4.63E-06	2.0	61.62	15.53	0.25	0.00E+00	3.2
ENSG00000244734	HBB	173.68	0.00	0.00	2.39E-06	#DIV/0!	32.39	0.08	0.00	7.11E-06	#DIV/0!
ENSG00000223609	HBD	0.41	0.00	0.00	2.00E-04	#DIV/0!	0.14	0.00	0.00	3.00E-04	#DIV/0!
ENSG00000086506	HBQ1	0.05	0.07	1.49	NS	0.0	0.04	0.48	12.43	NS	0.4
ENSG00000143321	HDGF	82.77	229.33	2.77	4.90E-03	0.8	105.13	224.21	2.13	6.30E-03	0.7
ENSG00000013583	HEBP1	24.35	45.07	1.85	3.00E-04	2.2	29.55	44.80	1.52	6.00E-04	2.0
ENSG00000256269	HMBS	3.93	10.58	2.69	NS	0.3	6.41	14.94	2.33	NS	0.4

ENSG00000109854	HTATIP2	15.44	43.78	2.83	5.40E-03	2.2	15.33	61.13	3.99	NS	3.0
ENSG00000115317	HTRA2	9.14	28.75	3.15	NS	2.2	8.94	28.86	3.23	NS	2.0
ENSG00000105371	ICAM4	0.15	0.10	0.66	NS	0.2	0.04	0.34	7.76	NS	0.4
ENSG00000143061	IGSF3	0.21	132.88	639.27	2.44E-07	4.5	0.23	90.81	402.73	2.42E-06	2.4
ENSG00000135070	ISCA1	8.55	43.91	5.14	NS	1.3	9.63	53.26	5.53	NS	1.1
ENSG00000114166	KAT2B	11.20	4.25	0.38	0.00E+00	5.3	10.20	8.51	0.83	2.00E-04	10.0
ENSG00000197993	KEL	0.03	0.25	7.95	NS	0.4	0.05	4.70	98.29	1.00E-04	3.4
ENSG00000100441	KHNYN	12.06	95.74	7.94	NS	5.9	11.91	90.00	7.56	NS	4.0
ENSG00000105610	KLF1	0.14	0.10	0.72	NS	0.1	0.04	0.17	4.21	NS	0.3
ENSG00000109787	KLF3	12.92	93.17	7.21	NS	8.5	12.29	63.21	5.14	NS	4.6
ENSG00000005893	LAMP2	43.74	113.26	2.59	NS	4.8	36.59	137.60	3.76	NS	6.1
ENSG00000135363	LMO2	4.53	0.20	0.04	0.00E+00	0.1	1.87	3.90	2.09	6.10E-03	3.3
ENSG00000101577	LPIN2	28.14	28.91	1.03	1.00E-04	2.2	34.43	47.49	1.38	1.40E-03	3.4
ENSG00000197324	LRP10	8.95	86.30	9.64	8.40E-03	8.1	6.15	82.51	13.42	NS	6.9
ENSG00000034152	MAP2K3	21.65	19.91	0.92	1.00E-04	0.8	20.87	19.97	0.96	1.00E-04	0.8
ENSG00000117791	MARC2	121.94	11.47	0.09	3.37E-07	1.5	135.21	8.72	0.06	2.48E-06	1.0
ENSG00000165406	MARC8	4.35	8.58	1.97	2.00E-03	1.4	3.80	9.40	2.48	3.40E-03	1.6
ENSG00000075413	MARK3	6.23	36.28	5.82	NS	1.4	6.01	39.12	6.51	NS	1.2
ENSG00000143797	MBOAT2	0.28	71.87	253.89	3.02E-06	8.4	0.32	32.31	100.20	3.00E-04	3.3
ENSG00000147324	MFHAS1	2.62	62.22	23.77	2.60E-03	1.4	1.88	48.76	25.87	9.80E-03	1.2
ENSG00000143198	MGST3	7.32	29.56	4.04	NS	2.8	9.02	25.79	2.86	NS	1.9
ENSG00000107789	MINPP1	8.35	25.92	3.11	7.60E-03	0.8	12.42	32.67	2.63	NS	1.0
ENSG00000133606	MKRN1	11.88	60.77	5.12	NS	1.1	11.77	58.75	4.99	NS	1.2
ENSG00000075643	MOCOS	9.26	5.91	0.64	0.00E+00	0.6	10.25	4.23	0.41	0.00E+00	0.5
ENSG00000101928	MOSPD1	1.74	75.14	43.10	1.00E-04	4.3	1.79	82.86	46.20	1.00E-04	5.3
ENSG00000130830	MPP1	8.90	5.02	0.56	0.00E+00	0.6	6.80	11.69	1.72	5.00E-04	1.3
ENSG00000119950	MXI1	10.51	15.03	1.43	4.00E-04	2.7	11.50	28.10	2.44	NS	5.4
ENSG00000198336	MYL4	0.19	0.48	2.47	NS	1.1	0.14	196.95	1404.31	1.60E-03	302.0
ENSG00000141562	NARF	4.90	9.77	1.99	NS	0.6	4.78	12.67	2.65	NS	0.8
ENSG00000266412	NCOA4	83.67	186.59	2.23	NS	2.4	73.05	180.91	2.48	7.90E-03	2.1
ENSG00000151414	NEK7	6.81	42.91	6.30	NS	4.9	6.34	37.57	5.92	NS	4.7
ENSG00000123405	NFE2	0.21	0.42	2.02	NS	0.2	0.09	0.58	6.28	NS	0.2
ENSG00000082641	NFE2L1	61.28	217.11	3.54	NS	1.5	46.76	231.17	4.94	NS	1.6

ENSG00000112992	NNT	34.74	41.59	1.20	1.60E-03	3.2	22.20	36.50	1.64	1.20E-03	2.7
ENSG00000113580	NR3C1	9.04	24.56	2.72	NS	6.7	9.21	32.14	3.49	NS	5.7
ENSG00000173598	NUDT4	3.60	12.81	3.56	NS	1.1	4.93	31.59	6.41	NS	2.6
ENSG00000123240	OPTN	26.13	125.47	4.80	NS	13.5	18.74	97.75	5.22	NS	10.0
ENSG00000184792	OSBP2	0.18	0.73	3.99	NS	0.2	0.18	1.56	8.49	NS	0.5
ENSG00000072682	P4HA2	1.41	20.48	14.55	1.00E-04	9.1	1.29	25.34	19.68	3.00E-04	14.8
ENSG00000173599	PC	39.27	3.08	0.08	6.02E-07	0.4	36.26	9.69	0.27	8.61E-06	1.1
ENSG00000162366	PDZK1IP1	0.29	0.00	0.00	2.76E-06	0.0	0.52	0.06	0.12	0.00E+00	0.7
ENSG00000130313	PGLS	12.97	69.90	5.39	NS	2.9	13.16	57.68	4.38	NS	2.0
ENSG00000073921	PICALM	23.21	196.98	8.49	NS	4.4	21.89	144.06	6.58	NS	3.5
ENSG00000007541	PIGQ	7.93	18.21	2.30	NS	1.5	8.85	16.82	1.90	NS	1.4
ENSG00000143224	PPOX	5.46	7.85	1.44	NS	0.8	5.06	7.56	1.49	NS	0.8
ENSG00000068971	PPP2R5B	4.14	11.64	2.81	NS	2.7	3.75	13.94	3.72	NS	3.5
ENSG00000122490	PQLC1	47.76	17.94	0.38	1.00E-04	3.2	53.76	16.16	0.30	1.00E-04	3.6
ENSG00000167815	PRDX2	74.84	118.20	1.58	3.00E-04	0.4	83.89	175.46	2.09	5.80E-03	0.7
ENSG00000110801	PSMD9	3.87	16.60	4.29	NS	2.7	4.16	18.61	4.47	NS	2.9
ENSG00000179262	RAD23A	37.61	127.74	3.40	NS	2.4	50.40	154.52	3.07	NS	3.4
ENSG00000141084	RANBP10	23.99	22.49	0.94	6.00E-04	1.7	21.82	23.36	1.07	8.00E-04	1.7
ENSG00000076864	RAP1GAP	4.96	1.55	0.31	0.00E+00	0.3	4.55	8.84	1.94	NS	1.4
ENSG00000132819	RBM38	3.75	54.28	14.46	2.00E-04	0.9	2.74	42.67	15.56	1.70E-03	0.8
ENSG00000003756	RBM5	18.02	74.22	4.12	NS	3.5	20.01	75.54	3.77	NS	2.7
ENSG00000120158	RCL1	16.40	12.87	0.78	0.00E+00	0.7	27.04	13.70	0.51	1.00E-04	0.7
ENSG00000188672	RHCE	0.90	0.43	0.48	2.50E-03	2.4	0.40	0.19	0.48	3.00E-04	2.4
ENSG00000101782	RIOK3	19.84	111.08	5.60	NS	8.0	18.32	94.95	5.18	NS	6.7
ENSG00000164068	RNF123	19.80	14.72	0.74	1.00E-04	1.1	21.12	15.44	0.73	1.00E-04	1.0
ENSG00000034677	RNF19A	8.73	47.38	5.43	NS	6.1	6.88	43.45	6.32	NS	7.4
ENSG00000137575	SDCBP	16.67	340.17	20.40	1.90E-03	5.2	14.39	251.11	17.45	NS	3.7
ENSG00000129657	SEC14L1	3.52	55.22	15.70	NS	2.7	1.81	48.28	26.75	NS	2.4
ENSG00000143416	SELENBP1	221.61	0.98	0.00	5.69E-07	0.1	271.49	4.58	0.02	1.87E-06	0.3
ENSG00000149577	SIDT2	8.01	9.08	1.13	0.00E+00	1.5	7.88	11.44	1.45	2.00E-04	1.9
ENSG00000126903	SLC10A3	3.98	73.93	18.59	1.00E-04	6.7	2.71	50.83	18.75	3.70E-03	5.2
ENSG00000110911	SLC11A2	6.15	17.89	2.91	6.50E-03	0.9	8.21	28.90	3.52	NS	1.2
ENSG00000197208	SLC22A4	0.21	11.06	52.93	4.06E-06	32.8	0.23	1.91	8.19	NS	4.7

ENSG00000147454	SLC25A37	15.25	43.10	2.83	NS	2.6	20.64	27.11	1.31	NS	1.5
ENSG00000144659	SLC25A38	33.50	52.33	1.56	7.00E-04	1.0	36.56	85.22	2.33	NS	1.6
ENSG00000117394	SLC2A1	0.55	199.17	365.17	0.00E+00	1.1	0.19	192.83	997.52	1.00E-04	0.9
ENSG00000170385	SLC30A1	24.53	68.89	2.81	NS	5.2	18.27	86.06	4.71	NS	6.7
ENSG00000196660	SLC30A10	8.51	0.12	0.01	5.01E-06	0.5	10.73	0.92	0.09	0.00E+00	7.6
ENSG00000130821	SLC6A8	0.20	9.27	45.40	1.00E-04	0.2	0.12	21.51	182.91	0.00E+00	0.4
ENSG00000196517	SLC6A9	0.10	60.74	611.17	0.00E+00	5.3	0.19	38.33	201.73	1.00E-04	3.5
ENSG00000151012	SLC7A11	0.02	74.85	4224.00	3.87E-08	3.3	0.03	164.71	5440.14	1.81E-07	6.8
ENSG00000088826	SMOX	0.98	61.28	62.66	6.63E-06	7.0	0.98	74.16	75.90	0.00E+00	8.6
ENSG00000145335	SNCA	0.08	1.03	13.08	NS	0.1	0.02	5.44	349.01	NS	0.7
ENSG00000070182	SPTB	0.08	0.11	1.42	NS	0.1	0.04	1.36	36.95	NS	1.8
ENSG00000159082	SYNJ1	2.36	9.17	3.89	NS	6.6	2.13	11.13	5.22	NS	5.8
ENSG00000162367	TAL1	0.86	0.01	0.01	1.09E-06	0.2	0.48	0.03	0.06	2.64E-06	0.6
ENSG00000187735	TCEA1	12.82	155.94	12.17	NS	1.4	13.69	174.03	12.71	NS	1.7
ENSG00000114126	TFDP2	2.15	10.04	4.66	NS	0.3	2.28	13.27	5.82	NS	0.3
ENSG00000072274	TFRC	3.89	109.65	28.20	2.10E-03	1.4	7.52	144.40	19.21	1.50E-03	1.9
ENSG00000133069	TMCC2	0.18	3.92	21.34	5.60E-03	0.9	0.05	5.03	107.82	5.60E-03	1.2
ENSG00000175348	TMEM9B	8.03	38.83	4.83	NS	3.7	5.80	49.55	8.54	NS	4.7
ENSG00000100354	TNRC6B	1.84	9.27	5.05	NS	0.8	2.38	9.91	4.17	NS	0.9
ENSG00000079308	TNS1	20.02	7.71	0.39	5.08E-06	4.2	13.31	4.52	0.34	1.00E-04	1.8
ENSG00000198900	TOPI	12.87	91.97	7.14	NS	0.7	12.87	103.94	8.08	NS	0.7
ENSG00000115993	TRAK2	3.62	22.87	6.31	NS	1.9	3.08	32.31	10.48	NS	2.4
ENSG00000204613	TRIM10	1.40	0.00	0.00	2.75E-08	0.0	1.02	0.00	0.00	4.97E-08	0.0
ENSG00000162722	TRIM58	0.02	8.06	355.02	1.00E-03	5.2	0.01	5.74	888.02	3.30E-03	2.8
ENSG00000168785	TSPAN5	0.22	11.71	53.98	7.00E-04	1.2	0.37	15.73	42.14	5.00E-04	1.4
ENSG00000130560	UBAC1	9.39	34.61	3.69	NS	0.7	10.36	41.68	4.02	NS	0.9
ENSG00000175567	UCP2	4.74	4.24	0.90	NS	0.2	1.28	17.62	13.74	NS	0.4
ENSG00000126088	UROD	43.10	51.55	1.20	1.00E-03	0.9	50.86	66.83	1.31	3.30E-03	1.0
ENSG00000188690	UROS	6.50	11.67	1.79	1.60E-03	0.6	6.34	14.02	2.21	4.80E-03	0.8
ENSG00000135655	USP15	4.69	9.79	2.09	7.00E-04	1.6	5.24	11.03	2.10	1.90E-03	1.6
ENSG00000136451	VEZF1	6.06	73.19	12.08	1.20E-03	1.9	5.15	65.46	12.70	6.50E-03	1.5
ENSG00000047597	XK	0.44	0.38	0.86	6.00E-04	0.3	0.32	0.51	1.58	1.10E-03	0.4
ENSG00000130227	XPO7	5.72	50.47	8.83	NS	0.7	6.11	65.79	10.76	NS	0.9

ENSG00000119801	YPEL5	21.88	179.98	8.23	4.70E-03	8.0	22.39	91.27	4.08	NS	4.9
Hallmark Coagulation											
ENSG00000175899	A2M	280.44	3.74	0.01	2.18E-07	5.7	275.03	15.46	0.06	1.26E-06	34.8
ENSG00000168306	ACOX2	116.27	0.29	0.00	1.50E-08	0.1	166.28	4.61	0.03	3.85E-06	1.6
ENSG00000168615	ADAM9	1.33	165.50	124.29	3.30E-03	14.0	1.26	208.89	165.63	2.80E-03	15.0
ENSG00000214274	ANG	548.51	2.55	0.00	7.74E-09	0.9	710.63	7.80	0.01	6.41E-08	3.0
ENSG00000135046	ANXA1	2.77	737.14	265.84	0.00E+00	82.9	1.23	412.95	335.69	3.00E-04	133.1
ENSG00000118137	APOA1	11000.82	13.80	0.00	1.39E-07	21.7	8593.47	899.42	0.10	1.00E-04	429.3
ENSG00000130208	APOC1	5444.72	12.09	0.00	5.89E-07	0.3	5644.64	204.01	0.04	0.00E+00	3.4
ENSG00000234906	APOC2	3348.84	0.52	0.00	6.04E-09	18.9	2704.47	2.86	0.00	5.31E-08	6.4
ENSG00000110245	APOC3	10956.82	0.79	0.00	1.36E-08	10.2	12127.76	9.24	0.00	3.69E-08	4.8
ENSG00000168374	ARF4	39.23	322.32	8.22	NS	1.5	47.98	338.02	7.05	NS	1.7
ENSG00000168487	BMP1	14.68	74.84	5.10	NS	29.2	19.65	41.01	2.09	NS	13.2
ENSG00000173372	CIQA	67.20	0.00	0.00	4.08E-06	#DIV/0!	22.25	0.03	0.00	5.95E-06	1.2
ENSG00000159403	C1R	793.04	0.48	0.00	6.51E-10	0.1	660.37	5.11	0.01	2.11E-06	1.0
ENSG00000182326	C1S	722.07	1.59	0.00	3.18E-09	0.5	647.15	13.04	0.02	6.05E-07	2.4
ENSG00000166278	C2	81.25	0.20	0.00	9.58E-09	2.1	68.43	0.26	0.00	1.25E-08	2.0
ENSG00000125730	C3	1773.54	14.49	0.01	1.54E-07	5.7	1456.62	7.61	0.01	0.00E+00	3.3
ENSG00000157131	C8A	278.31	0.11	0.00	1.08E-07	#DIV/0!	266.03	0.27	0.00	6.62E-08	3.8
ENSG00000021852	C8B	228.79	0.12	0.00	3.52E-07	9.6	227.71	0.57	0.00	4.82E-07	15.5
ENSG00000176919	C8G	304.86	0.26	0.00	3.51E-07	1.3	190.17	0.42	0.00	3.47E-08	3.2
ENSG00000113600	C9	432.26	0.04	0.00	8.24E-08	1.2	183.18	0.12	0.00	1.34E-07	0.6
ENSG00000162909	CAPN2	8.40	383.97	45.71	0.00E+00	25.4	3.61	265.81	73.71	1.00E-04	19.4
ENSG00000149260	CAPN5	22.69	10.48	0.46	3.40E-06	0.6	28.65	15.06	0.53	0.00E+00	0.8
ENSG00000132906	CASP9	4.95	7.96	1.61	NS	0.9	2.95	9.86	3.34	NS	0.9
ENSG00000010278	CD9	6.62	228.24	34.50	1.00E-04	2.3	5.29	97.34	18.39	NS	0.9
ENSG00000243649	CFB	463.52	0.32	0.00	7.08E-08	9.3	359.88	1.70	0.00	3.80E-07	11.7
ENSG00000197766	CFD	1.14	0.12	0.11	1.00E-03	0.5	0.32	0.73	2.24	NS	1.9
ENSG00000000971	CFH	354.48	0.00	0.00	1.96E-09	0.0	287.45	0.37	0.00	1.19E-07	6.5
ENSG00000205403	CFI	300.31	0.22	0.00	1.93E-08	#DIV/0!	224.35	6.86	0.03	1.95E-06	265.5
ENSG00000120885	CLU	859.16	23.62	0.03	1.77E-08	0.2	749.50	52.36	0.07	2.38E-07	0.7
ENSG00000105664	COMP	0.09	0.01	0.14	NS	0.2	0.01	0.10	14.40	NS	0.6
ENSG00000080618	CPB2	715.57	0.00	0.00	7.47E-10	#DIV/0!	545.00	0.20	0.00	2.77E-09	1.5

ENSG00000120054	CPN1	25.92	0.33	0.01	2.75E-08	2.1	23.18	10.47	0.45	3.00E-04	13.6
ENSG00000182809	CRIP2	5.60	0.26	0.05	9.86E-07	0.2	4.47	3.83	0.86	8.40E-03	2.9
ENSG00000159176	CSRP1	17.24	50.82	2.95	NS	7.1	15.99	35.90	2.25	NS	5.2
ENSG00000164733	CTSB	153.65	419.75	2.73	NS	30.7	100.71	281.13	2.79	6.70E-03	23.8
ENSG00000196188	CTSE	0.01	0.41	44.50	NS	31.3	0.07	13.75	195.65	1.00E-04	#DIV/0!
ENSG00000103811	CTSH	15.38	1.44	0.09	1.67E-06	0.2	32.69	4.18	0.13	0.00E+00	0.7
ENSG00000143387	CTSK	6.94	6.64	0.96	7.90E-03	1.0	4.79	6.78	1.42	7.40E-03	1.0
ENSG00000256043	CTSO	18.67	8.72	0.47	0.00E+00	9.7	15.74	6.99	0.44	2.00E-04	8.0
ENSG00000080166	DCT	0.30	0.09	0.31	5.00E-04	3.5	0.14	2.97	21.91	NS	67.0
ENSG00000197635	DPP4	14.18	9.55	0.67	1.00E-04	2.5	24.22	137.71	5.69	NS	42.3
ENSG00000276023	DUSP14	2.89	36.78	12.72	1.30E-03	3.7	3.54	44.36	12.53	1.40E-03	4.8
ENSG00000139318	DUSP6	17.32	48.77	2.82	NS	0.7	11.26	36.12	3.21	NS	0.3
ENSG00000126218	F10	77.41	0.29	0.00	3.90E-08	0.4	70.46	11.16	0.16	0.00E+00	4.3
ENSG00000088926	F11	92.80	0.02	0.00	7.33E-10	0.0	120.20	0.04	0.00	3.75E-09	0.2
ENSG00000131187	F12	350.76	0.55	0.00	1.11E-07	0.4	557.22	1.40	0.00	5.76E-07	1.4
ENSG00000143278	F13B	74.90	0.00	0.00	4.18E-08	#DIV/0!	82.96	0.09	0.00	3.10E-07	6.2
ENSG00000180210	F2	987.30	1.17	0.00	7.84E-08	11.0	834.58	20.52	0.02	1.21E-07	98.8
ENSG00000164220	F2RL2	0.66	0.27	0.40	NS	0.2	0.09	10.38	121.91	NS	38.2
ENSG00000117525	F3	1.20	24.73	20.65	4.00E-04	2.7	0.43	66.00	154.20	4.00E-04	13.9
ENSG00000185010	F8	2.69	1.47	0.55	3.30E-03	1.4	1.32	0.89	0.68	1.30E-03	0.6
ENSG00000101981	F9	279.73	0.00	0.00	6.28E-09	#DIV/0!	195.21	0.08	0.00	1.85E-08	1.0
ENSG00000166147	FBN1	0.75	10.97	14.57	NS	2.0	0.38	27.22	71.28	NS	5.4
ENSG00000171560	FGA	3563.87	33.57	0.01	7.81E-07	48.3	2533.82	502.27	0.20	5.32E-06	633.0
ENSG00000171557	FGG	2253.42	21.40	0.01	1.67E-06	55.8	1507.47	173.50	0.12	1.00E-04	410.9
ENSG00000115414	FN1	272.71	1865.14	6.84	NS	31.9	256.27	2388.22	9.32	NS	62.2
ENSG00000140564	FURIN	102.48	173.72	1.70	1.20E-03	5.9	91.83	125.72	1.37	7.00E-04	5.0
ENSG00000010810	FYN	5.78	48.64	8.41	4.70E-03	2.2	4.22	48.76	11.55	NS	2.0
ENSG00000119125	GDA	16.42	0.43	0.03	2.33E-08	0.9	14.14	0.52	0.04	5.00E-07	1.9
ENSG00000172354	GNB2	37.17	190.71	5.13	NS	2.2	39.85	187.88	4.71	NS	2.2
ENSG00000172380	GNG12	9.69	90.15	9.31	NS	2.6	8.06	77.13	9.57	NS	2.0
ENSG00000148180	GSN	6.57	44.00	6.69	NS	4.3	2.43	59.43	24.42	NS	5.9
ENSG00000134240	HMGCS2	874.78	2.85	0.00	1.00E-06	73.8	1059.55	27.36	0.03	1.64E-07	133.9
ENSG00000101076	HNF4A	100.42	0.57	0.01	3.22E-08	92.0	93.59	32.79	0.35	4.00E-04	553.1

ENSG00000105707	HPN	374.09	15.06	0.04	1.72E-06	1.4	396.67	30.54	0.08	5.11E-06	3.0
ENSG00000113905	HRG	1116.51	0.06	0.00	3.54E-09	0.7	965.07	0.82	0.00	1.09E-07	2.9
ENSG00000166033	HTRA1	45.34	1.15	0.03	7.40E-08	0.0	31.27	12.11	0.39	0.00E+00	0.4
ENSG00000136003	ISCU	18.78	72.31	3.85	NS	2.1	19.06	86.56	4.54	NS	2.5
ENSG00000164171	ITGA2	0.08	256.71	3326.75	1.00E-07	41.4	0.06	63.24	999.25	0.00E+00	15.9
ENSG00000259207	ITGB3	0.95	3.41	3.59	NS	25.0	0.63	5.51	8.72	NS	45.4
ENSG00000055957	ITIH1	727.41	0.01	0.00	1.29E-09	#DIV/0!	764.58	0.27	0.00	3.43E-09	1.3
ENSG00000118263	KLF7	2.31	22.59	9.79	NS	2.1	2.11	13.40	6.34	NS	1.1
ENSG00000129455	KLK8	0.01	1.76	134.77	7.71E-06	1.3	0.01	1.44	128.58	NS	1.3
ENSG00000164344	KLKB1	164.07	0.32	0.00	1.33E-09	0.0	170.45	0.27	0.00	5.59E-09	0.0
ENSG00000005893	LAMP2	43.74	113.26	2.59	NS	4.8	36.59	137.60	3.76	NS	6.1
ENSG00000143768	LEFTY2	0.07	0.18	2.56	NS	0.0	0.06	2.87	46.97	NS	0.2
ENSG00000100600	LGMN	22.16	64.88	2.93	NS	1.7	19.00	74.32	3.91	NS	1.3
ENSG00000123384	LRP1	44.14	76.99	1.74	9.00E-04	1.7	39.32	111.59	2.84	9.60E-03	2.5
ENSG00000111144	LTA4H	7.78	35.05	4.51	NS	0.5	6.12	35.92	5.86	NS	0.5
ENSG00000185022	MAFF	0.32	27.25	84.69	1.00E-04	8.6	0.14	16.31	115.54	3.00E-04	6.8
ENSG00000009724	MASP2	61.33	0.02	0.00	4.24E-10	0.1	66.83	0.13	0.00	6.53E-09	0.2
ENSG00000165471	MBL2	38.25	0.28	0.01	7.57E-06	#DIV/0!	63.80	0.93	0.01	0.00E+00	50.1
ENSG00000112818	MEP1A	0.01	0.75	91.25	NS	32.1	0.02	2.89	137.86	NS	#DIV/0!
ENSG00000196611	MMP1	0.01	0.19	15.66	NS	0.6	0.01	11.82	1116.54	7.00E-04	719.2
ENSG00000166670	MMP10	0.01	0.20	14.66	1.00E-03	0.3	0.01	0.74	62.73	5.00E-04	3.3
ENSG00000099953	MMP11	0.19	0.56	2.90	NS	0.3	0.08	2.77	32.77	1.50E-03	1.3
ENSG00000157227	MMP14	5.72	525.09	91.87	3.78E-06	9.9	3.10	498.85	161.03	7.19E-06	6.3
ENSG00000102996	MMP15	19.50	56.58	2.90	NS	1.6	20.52	55.21	2.69	NS	1.6
ENSG00000087245	MMP2	2.86	269.63	94.41	0.00E+00	10.6	1.11	127.41	114.57	NS	5.5
ENSG00000149968	MMP3	0.01	0.08	6.71	NS	#DIV/0!	0.01	0.04	3.94	NS	2.5
ENSG00000137673	MMP7	0.47	0.02	0.04	1.00E-04	#DIV/0!	0.94	0.05	0.06	2.00E-04	#DIV/0!
ENSG00000100985	MMP9	0.52	41.98	80.33	1.00E-04	13.8	0.10	5.16	52.57	NS	1.3
ENSG00000148450	MSRB2	23.18	19.67	0.85	1.00E-04	2.3	26.87	23.78	0.89	1.00E-04	2.2
ENSG00000173531	MST1	233.30	5.38	0.02	8.84E-06	3.2	223.95	7.11	0.03	0.00E+00	4.3
ENSG00000173391	OLR1	0.14	0.24	1.77	NS	#DIV/0!	0.03	5.54	162.38	NS	523.0
ENSG00000169860	P2RY1	0.08	1.49	18.58	NS	0.1	0.04	1.45	33.43	NS	0.1
ENSG00000100311	PDGFB	1.88	59.13	31.41	2.00E-04	10.2	2.61	30.43	11.65	NS	9.1

ENSG00000261371	PECAMI	3.94	0.08	0.02	0.00E+00	0.2	1.58	0.18	0.12	2.00E-04	0.4
ENSG00000162517	PEF1	21.61	115.51	5.35	NS	2.4	28.10	134.10	4.77	NS	2.6
ENSG00000163737	PF4	0.69	0.00	0.00	2.80E-03	0.0	0.14	0.00	0.00	2.90E-03	0.0
ENSG00000104368	PLAT	1.41	7.52	5.33	NS	2.8	0.31	5.01	16.05	NS	0.8
ENSG00000122861	PLAU	0.93	136.95	147.74	9.51E-06	4.1	0.37	28.48	76.00	2.80E-03	0.8
ENSG00000115956	PLEK	3.12	0.06	0.02	1.00E-04	6.0	1.06	0.08	0.07	1.00E-04	1.9
ENSG00000122194	PLG	531.41	0.15	0.00	6.04E-09	7.3	580.42	0.29	0.00	2.06E-08	1.7
ENSG00000085377	PREP	6.19	38.87	6.28	NS	0.7	5.49	37.05	6.75	NS	0.6
ENSG00000115718	PROC	291.96	0.08	0.00	1.81E-08	0.1	321.57	1.16	0.00	2.27E-07	1.9
ENSG00000184500	PROS1	83.88	7.80	0.09	2.25E-06	6.1	74.24	49.81	0.67	1.00E-04	25.2
ENSG00000126231	PROZ	184.70	0.14	0.00	6.02E-07	7.3	106.03	0.84	0.01	2.74E-06	14.0
ENSG00000150687	PRSS23	1.73	44.92	25.99	5.00E-04	15.0	1.04	56.86	54.92	5.00E-04	26.5
ENSG00000183155	RAB1F	3.09	23.29	7.53	NS	2.0	3.68	28.95	7.86	NS	2.9
ENSG00000136238	RAC1	46.35	308.54	6.66	NS	1.4	41.01	287.37	7.01	NS	1.3
ENSG00000079337	RAPGEF3	0.85	1.40	1.64	3.30E-03	1.1	0.62	1.03	1.66	7.00E-04	0.5
ENSG00000130988	RGN	162.41	0.37	0.00	4.15E-07	0.2	171.48	3.79	0.02	6.98E-07	3.2
ENSG00000160678	S100A1	0.89	0.13	0.14	8.69E-06	1.0	0.68	0.41	0.60	1.00E-04	0.9
ENSG00000189171	S100A13	13.43	128.35	9.56	2.60E-03	5.3	6.82	107.30	15.72	NS	3.9
ENSG00000197249	SERPINA1	3218.49	2.16	0.00	2.41E-08	28.9	2099.11	11.57	0.01	6.39E-07	23.5
ENSG00000197632	SERPINB2	0.01	0.98	110.63	2.78E-06	2.1	0.01	1.56	205.10	NS	#DIV/0!
ENSG00000117601	SERPINC1	2139.15	0.79	0.00	1.82E-09	#DIV/0!	2028.29	11.99	0.01	5.63E-07	20.7
ENSG00000106366	SERPINE1	6.63	623.82	94.12	2.00E-04	70.5	17.41	294.22	16.90	3.80E-03	30.8
ENSG00000149131	SERPING1	1068.32	133.31	0.12	1.16E-06	4.3	759.02	93.00	0.12	0.00E+00	2.4
ENSG00000160999	SH2B2	0.72	5.99	8.36	6.10E-03	0.8	0.45	8.58	19.22	2.50E-03	1.1
ENSG00000068903	SIRT2	11.16	20.47	1.83	9.00E-04	6.6	10.74	24.90	2.32	4.30E-03	8.5
ENSG00000113140	SPARC	29.27	577.14	19.71	NS	2.7	13.68	828.99	60.61	6.90E-03	3.9
ENSG00000091513	TF	2547.50	0.99	0.00	1.17E-08	13.3	2049.92	12.10	0.01	1.52E-07	23.6
ENSG00000105825	TFPI2	0.44	84.87	192.84	NS	9.0	0.35	20.34	57.72	NS	2.2
ENSG00000178726	THBD	1.69	50.17	29.62	4.00E-04	110.8	0.51	33.32	65.64	1.30E-03	101.2
ENSG00000137801	THBS1	2.79	458.39	164.53	2.00E-04	14.8	0.89	139.88	157.07	2.90E-03	5.1
ENSG00000102265	TIMP1	50.91	148.58	2.92	NS	2.8	17.47	146.55	8.39	NS	2.6
ENSG00000100234	TIMP3	18.35	281.81	15.36	3.60E-03	40.0	13.89	215.61	15.52	NS	23.2
ENSG00000187045	TMPRSS6	130.48	0.11	0.00	1.77E-07	3.4	135.29	0.84	0.01	1.80E-07	10.4

ENSG00000102226	USP11	4.23	54.76	12.96	2.00E-04	0.9	4.42	64.25	14.53	4.00E-04	1.2
ENSG00000110799	VWF	2.20	1.73	0.79	4.30E-03	3.4	0.76	0.77	1.02	2.50E-03	0.5
ENSG00000071127	WDR1	11.41	340.01	29.81	0.00E+00	2.4	10.60	325.80	30.73	1.00E-04	2.3

Hallmark Complement

ENSG00000077522	ACTN2	0.02	2.49	112.92	1.00E-04	1.6	0.02	1.79	95.10	NS	1.1
ENSG00000168615	ADAM9	1.33	165.50	124.29	3.30E-03	14.0	1.26	208.89	165.63	2.80E-03	15.0
ENSG00000274286	ADRA2B	4.02	0.72	0.18	6.35E-06	0.1	3.06	1.06	0.35	2.00E-04	0.2
ENSG00000108599	AKAP10	3.88	30.25	7.80	NS	2.6	3.67	35.10	9.57	NS	2.9
ENSG00000214274	ANG	548.51	2.55	0.00	7.74E-09	0.9	710.63	7.80	0.01	6.41E-08	3.0
ENSG00000164111	ANXA5	25.16	769.00	30.57	1.00E-04	3.2	13.22	614.27	46.46	3.00E-04	2.9
ENSG00000110244	APOA4	28.41	4.83	0.17	5.00E-04	71.6	10.25	61.28	5.98	NS	2667.0
ENSG00000128394	APOBEC3F	1.44	3.92	2.72	NS	1.3	0.76	2.77	3.65	NS	1.0
ENSG00000239713	APOBEC3G	1.47	2.07	1.41	NS	3.2	0.47	0.75	1.61	5.10E-03	1.1
ENSG00000130208	APOC1	5444.72	12.09	0.00	5.89E-07	0.3	5644.64	204.01	0.04	0.00E+00	3.4
ENSG00000177556	ATOX1	13.69	11.87	0.87	6.00E-04	1.3	18.87	15.30	0.81	1.40E-03	1.7
ENSG00000096070	BRPF3	4.86	65.16	13.42	NS	2.3	6.40	67.14	10.49	NS	2.3
ENSG00000173372	C1QA	67.20	0.00	0.00	4.08E-06	#DIV/0!	22.25	0.03	0.00	5.95E-06	1.2
ENSG00000159189	C1QC	32.85	0.00	0.00	1.00E-04	#DIV/0!	7.72	0.00	0.00	1.00E-04	#DIV/0!
ENSG00000159403	C1R	793.04	0.48	0.00	6.51E-10	0.1	660.37	5.11	0.01	2.11E-06	1.0
ENSG00000182326	C1S	722.07	1.59	0.00	3.18E-09	0.5	647.15	13.04	0.02	6.05E-07	2.4
ENSG00000166278	C2	81.25	0.20	0.00	9.58E-09	2.1	68.43	0.26	0.00	1.25E-08	2.0
ENSG00000125730	C3	1773.54	14.49	0.01	1.54E-07	5.7	1456.62	7.61	0.01	0.00E+00	3.3
ENSG00000123843	C4BPB	144.00	0.48	0.00	1.48E-08	#DIV/0!	144.81	2.67	0.02	2.56E-07	#DIV/0!
ENSG00000113600	C9	432.26	0.04	0.00	8.24E-08	1.2	183.18	0.12	0.00	1.34E-07	0.6
ENSG00000104267	CA2	61.14	8.06	0.13	2.07E-06	0.7	69.17	28.19	0.41	1.00E-04	3.4
ENSG00000198668	CALM1	31.51	143.60	4.56	NS	1.3	32.73	188.25	5.75	NS	1.1
ENSG00000160014	CALM3	45.77	201.24	4.40	NS	0.9	47.59	273.20	5.74	NS	1.1
ENSG00000137752	CASP1	3.78	0.24	0.06	0.00E+00	#DIV/0!	1.68	0.23	0.14	0.00E+00	13.0
ENSG00000003400	CASP10	3.12	0.36	0.12	2.88E-07	0.1	2.30	2.17	0.94	1.10E-03	1.5
ENSG00000164305	CASP3	12.54	110.74	8.83	2.30E-03	0.9	9.73	82.36	8.47	NS	0.7
ENSG00000196954	CASP4	5.72	7.03	1.23	1.20E-03	51.0	3.33	6.20	1.86	NS	134.2
ENSG00000137757	CASP5	0.05	0.07	1.57	NS	#DIV/0!	0.03	0.13	5.03	NS	#DIV/0!
ENSG00000165806	CASP7	6.25	24.41	3.91	NS	6.5	8.02	15.74	1.96	NS	3.6

ENSG00000132906	CASP9	4.95	7.96	1.61	NS	0.9	2.95	9.86	3.34	NS	0.9
ENSG00000114423	CBLB	1.99	17.64	8.85	7.40E-03	2.0	2.37	16.30	6.87	NS	1.9
ENSG00000271503	CCL5	6.67	0.05	0.01	0.00E+00	0.4	1.45	0.03	0.02	0.00E+00	0.6
ENSG00000135218	CD36	3.83	0.01	0.00	1.93E-06	0.0	4.19	0.11	0.03	0.00E+00	0.3
ENSG00000102245	CD40LG	0.42	0.00	0.00	5.26E-06	#DIV/0!	0.32	0.00	0.00	6.31E-06	#DIV/0!
ENSG00000117335	CD46	22.36	97.91	4.38	NS	1.5	26.52	99.17	3.74	NS	1.4
ENSG00000196352	CD55	2.09	32.23	15.43	NS	2.8	1.47	87.61	59.57	8.10E-03	8.2
ENSG00000085063	CD59	39.62	186.94	4.72	NS	5.1	34.45	141.54	4.11	NS	4.0
ENSG00000158825	CDA	34.51	0.00	0.00	1.04E-08	0.0	36.58	0.32	0.01	1.99E-06	0.0
ENSG00000140945	CDH13	0.16	1.75	10.88	NS	1.1	0.03	2.80	107.60	NS	3.5
ENSG00000176749	CDK5R1	0.81	6.15	7.57	NS	0.7	0.76	16.15	21.32	NS	1.6
ENSG00000172216	CEBPB	46.16	85.80	1.86	1.50E-03	10.2	58.76	78.50	1.34	1.20E-03	9.1
ENSG00000243649	CFB	463.52	0.32	0.00	7.08E-08	9.3	359.88	1.70	0.00	3.80E-07	11.7
ENSG00000000971	CFH	354.48	0.00	0.00	1.96E-09	0.0	287.45	0.37	0.00	1.19E-07	6.5
ENSG00000120885	CLU	859.16	23.62	0.03	1.77E-08	0.2	749.50	52.36	0.07	2.38E-07	0.7
ENSG00000134871	COL4A2	3.34	81.45	24.36	7.50E-03	1.6	1.65	341.85	207.09	7.00E-04	7.2
ENSG00000047457	CP	352.74	0.03	0.00	7.60E-08	0.0	196.89	3.79	0.02	2.00E-04	4.5
ENSG00000135678	CPM	6.01	2.18	0.36	1.00E-04	4.5	4.96	2.02	0.41	3.00E-04	6.2
ENSG00000203710	CR1	0.21	0.00	0.00	3.80E-03	0.0	0.02	0.02	0.71	NS	0.1
ENSG00000117322	CR2	0.02	0.06	2.24	NS	0.0	0.01	0.18	14.21	NS	0.0
ENSG00000159176	CSRP1	17.24	50.82	2.95	NS	7.1	15.99	35.90	2.25	NS	5.2
ENSG00000164733	CTSB	153.65	419.75	2.73	NS	30.7	100.71	281.13	2.79	6.70E-03	23.8
ENSG00000109861	CTSC	4.07	13.15	3.23	NS	0.2	0.77	11.32	14.65	NS	0.1
ENSG00000117984	CTSD	361.54	209.38	0.58	0.00E+00	1.3	254.41	468.06	1.84	2.40E-03	3.0
ENSG00000103811	CTSH	15.38	1.44	0.09	1.67E-06	0.2	32.69	4.18	0.13	0.00E+00	0.7
ENSG00000256043	CTSO	18.67	8.72	0.47	0.00E+00	9.7	15.74	6.99	0.44	2.00E-04	8.0
ENSG00000163131	CTSS	12.91	0.13	0.01	0.00E+00	8.6	5.49	0.08	0.01	0.00E+00	1.5
ENSG00000163739	CXCL1	1.00	3.41	3.41	NS	2.5	0.60	2.14	3.59	NS	1.0
ENSG00000058866	DGKG	0.14	0.13	0.90	1.30E-03	0.6	0.10	0.34	3.35	NS	1.2
ENSG00000102780	DGKH	0.44	8.08	18.52	1.60E-03	2.9	0.35	4.43	12.57	NS	1.6
ENSG00000135905	DOCK10	0.89	0.03	0.03	1.00E-04	0.1	0.52	0.48	0.93	3.60E-03	1.2
ENSG00000128512	DOCK4	2.70	14.85	5.49	NS	1.3	2.65	14.46	5.45	NS	1.1
ENSG00000088387	DOCK9	2.34	60.04	25.65	9.00E-04	4.8	1.98	75.87	38.40	6.10E-03	9.7

ENSG00000197635	DPP4	14.18	9.55	0.67	1.00E-04	2.5	24.22	137.71	5.69	NS	42.3
ENSG00000138166	DUSP5	3.86	264.36	68.56	0.00E+00	7.5	2.19	139.50	63.83	4.00E-04	4.0
ENSG00000139318	DUSP6	17.32	48.77	2.82	NS	0.7	11.26	36.12	3.21	NS	0.3
ENSG00000127334	DYRK2	0.94	20.07	21.38	NS	1.2	0.89	13.78	15.45	NS	0.7
ENSG00000110047	EHD1	5.86	60.32	10.29	1.00E-03	3.8	5.90	64.74	10.97	3.20E-03	4.3
ENSG00000164308	ERAP2	5.50	10.93	1.99	NS	84.1	0.79	0.30	0.38	1.30E-03	6.2
ENSG00000126218	F10	77.41	0.29	0.00	3.90E-08	0.4	70.46	11.16	0.16	0.00E+00	4.3
ENSG00000180210	F2	987.30	1.17	0.00	7.84E-08	11.0	834.58	20.52	0.02	1.21E-07	98.8
ENSG00000117525	F3	1.20	24.73	20.65	4.00E-04	2.7	0.43	66.00	154.20	4.00E-04	13.9
ENSG00000198734	F5	49.86	0.06	0.00	1.25E-06	1.0	51.44	1.43	0.03	0.00E+00	11.4
ENSG00000057593	F7	89.93	0.10	0.00	6.11E-07	0.3	116.37	2.56	0.02	5.20E-06	6.4
ENSG00000185010	F8	2.69	1.47	0.55	3.30E-03	1.4	1.32	0.89	0.68	1.30E-03	0.6
ENSG00000158869	FCER1G	14.87	0.99	0.07	1.00E-04	1.7	6.19	1.84	0.30	4.00E-04	2.3
ENSG00000085265	FCN1	0.92	0.00	0.00	6.54E-07	#DIV/0!	0.51	0.01	0.02	2.65E-06	#DIV/0!
ENSG00000137714	FDX1	22.41	25.03	1.12	0.00E+00	1.8	22.47	34.04	1.51	2.00E-04	2.3
ENSG00000115414	FN1	272.71	1865.14	6.84	NS	31.9	256.27	2388.22	9.32	NS	62.2
ENSG00000010810	FYN	5.78	48.64	8.41	4.70E-03	2.2	4.22	48.76	11.55	NS	2.0
ENSG00000107485	GATA3	0.50	208.29	420.47	7.72E-07	747.8	0.29	184.56	639.65	2.45E-06	607.1
ENSG00000115271	GCA	2.59	28.06	10.83	2.50E-03	1.2	2.09	25.07	12.00	NS	0.9
ENSG00000197045	GMFB	3.98	61.61	15.50	9.50E-03	1.1	3.19	97.26	30.47	3.80E-03	1.2
ENSG00000114353	GNAI2	25.45	41.03	1.61	2.00E-04	0.6	21.28	61.83	2.91	4.40E-03	0.7
ENSG00000065135	GNAI3	2.19	23.73	10.85	1.40E-03	1.7	2.09	21.20	10.14	NS	1.4
ENSG00000172354	GNB2	37.17	190.71	5.13	NS	2.2	39.85	187.88	4.71	NS	2.2
ENSG00000114450	GNB4	0.31	35.25	113.24	NS	1.6	0.15	43.40	291.43	NS	1.8
ENSG00000186469	GNG2	1.04	1.16	1.11	9.70E-03	0.1	0.58	17.81	30.60	NS	1.0
ENSG00000167083	GNGT2	0.51	0.00	0.00	0.00E+00	0.0	0.20	0.05	0.26	1.00E-04	0.1
ENSG00000115159	GPD2	1.07	38.54	36.08	2.00E-04	1.2	0.70	46.91	66.77	2.00E-04	1.4
ENSG00000177885	GRB2	15.97	80.56	5.05	NS	1.2	16.18	90.04	5.57	NS	1.3
ENSG00000145649	GZMA	3.44	0.00	0.00	3.23E-06	#DIV/0!	1.68	0.00	0.00	3.33E-06	#DIV/0!
ENSG00000100453	GZMB	1.19	0.00	0.00	0.00E+00	#DIV/0!	0.35	0.03	0.08	0.00E+00	#DIV/0!
ENSG00000113088	GZMK	1.87	0.00	0.00	1.57E-06	#DIV/0!	0.84	0.03	0.03	6.28E-06	1.2
ENSG00000101076	HNF4A	100.42	0.57	0.01	3.22E-08	92.0	93.59	32.79	0.35	4.00E-04	553.1
ENSG00000116983	HPCAL4	0.01	0.14	9.19	5.40E-03	0.1	0.00	1.14	270.77	NS	1.4

ENSG00000204389	HSPA1A	16.31	72.22	4.43	NS	2.2	39.60	71.08	1.79	NS	2.2
ENSG00000044574	HSPA5	62.71	682.50	10.88	NS	1.4	125.79	616.12	4.90	NS	1.1
ENSG00000136244	IL6	0.04	0.32	8.95	NS	0.5	0.01	0.74	73.22	NS	2.0
ENSG00000125347	IRF1	6.24	27.62	4.42	NS	14.9	4.19	12.01	2.87	NS	5.6
ENSG00000168310	IRF2	12.32	12.93	1.05	1.00E-04	1.4	10.69	9.15	0.86	0.00E+00	1.1
ENSG00000185507	IRF7	6.51	9.20	1.41	NS	4.3	9.80	12.07	1.23	NS	3.7
ENSG00000169896	ITGAM	0.89	0.01	0.01	6.04E-06	0.0	0.47	0.05	0.10	0.00E+00	0.1
ENSG00000055957	ITIH1	727.41	0.01	0.00	1.29E-09	#DIV/0!	764.58	0.27	0.00	3.43E-09	1.3
ENSG00000096968	JAK2	1.49	14.39	9.67	NS	5.5	1.02	13.49	13.20	NS	5.9
ENSG00000120049	KCNIP2	0.96	1.27	1.31	3.70E-03	0.5	0.79	1.63	2.05	NS	0.6
ENSG00000115041	KCNIP3	0.40	0.11	0.27	0.00E+00	0.2	0.25	0.55	2.18	NS	0.9
ENSG00000068796	KIF2A	0.96	58.43	61.10	5.00E-04	1.1	0.64	64.90	101.05	5.00E-04	1.1
ENSG00000167748	KLK1	0.03	0.08	2.57	NS	0.0	0.01	0.05	5.92	NS	0.0
ENSG00000164344	KLKB1	164.07	0.32	0.00	1.33E-09	0.0	170.45	0.27	0.00	5.59E-09	0.0
ENSG00000115919	KYNU	3.61	0.21	0.06	6.13E-07	5.7	3.72	0.76	0.20	0.00E+00	23.9
ENSG00000154655	L3MBTL4	2.97	2.49	0.84	0.00E+00	2.1	2.79	1.36	0.49	0.00E+00	1.6
ENSG00000005893	LAMP2	43.74	113.26	2.59	NS	4.8	36.59	137.60	3.76	NS	6.1
ENSG00000002549	LAP3	40.50	56.58	1.40	3.00E-04	1.4	38.80	50.01	1.29	3.00E-04	1.1
ENSG00000182866	LCK	2.38	0.09	0.04	0.00E+00	0.0	0.66	0.05	0.08	0.00E+00	0.0
ENSG00000043462	LCP2	2.25	0.03	0.01	0.00E+00	0.1	0.80	0.06	0.07	0.00E+00	0.3
ENSG00000131981	LGALS3	4.18	85.85	20.56	1.40E-03	19.9	2.04	97.56	47.71	5.90E-03	17.7
ENSG00000100600	LGMN	22.16	64.88	2.93	NS	1.7	19.00	74.32	3.91	NS	1.3
ENSG00000107798	LIPA	23.02	20.57	0.89	3.00E-03	0.6	15.39	33.20	2.16	8.80E-03	0.6
ENSG00000123384	LRP1	44.14	76.99	1.74	9.00E-04	1.7	39.32	111.59	2.84	9.60E-03	2.5
ENSG00000111144	LTA4H	7.78	35.05	4.51	NS	0.5	6.12	35.92	5.86	NS	0.5
ENSG00000012223	LTF	0.34	0.04	0.13	6.00E-04	0.1	0.26	0.10	0.38	2.60E-03	0.2
ENSG00000254087	LYN	4.58	56.45	12.33	NS	0.9	3.02	34.54	11.44	NS	0.6
ENSG00000185022	MAFF	0.32	27.25	84.69	1.00E-04	8.6	0.14	16.31	115.54	3.00E-04	6.8
ENSG00000065833	ME1	3.30	38.69	11.72	2.50E-03	5.0	2.47	78.78	31.91	3.00E-04	10.6
ENSG00000157227	MMP14	5.72	525.09	91.87	3.78E-06	9.9	3.10	498.85	161.03	7.19E-06	6.3
ENSG00000102996	MMP15	19.50	56.58	2.90	NS	1.6	20.52	55.21	2.69	NS	1.6
ENSG00000204301	NOTCH4	2.88	0.15	0.05	1.05E-06	0.5	1.58	0.22	0.14	2.19E-06	0.6
ENSG00000173391	OLR1	0.14	0.24	1.77	NS	#DIV/0!	0.03	5.54	162.38	NS	523.0

ENSG00000186472	PCLO	0.04	7.58	202.80	4.00E-04	3.6	0.00	5.46	1196.81	8.00E-04	2.6
ENSG00000169174	PCSK9	14.62	0.02	0.00	5.67E-08	0.0	9.48	0.23	0.02	4.88E-07	0.0
ENSG00000100311	PDGFB	1.88	59.13	31.41	2.00E-04	10.2	2.61	30.43	11.65	NS	9.1
ENSG00000164951	PDP1	0.77	37.92	49.44	1.00E-04	1.4	0.76	29.44	38.57	2.00E-04	1.2
ENSG00000108518	PFN1	193.15	1633.35	8.46	5.40E-03	1.4	197.08	1234.39	6.26	NS	1.0
ENSG00000102174	PHEX	0.00	0.88	230.66	3.40E-03	3.3	0.00	0.41	124.86	NS	2.4
ENSG00000121879	PIK3CA	2.21	20.34	9.20	NS	3.3	2.22	17.71	7.99	NS	2.8
ENSG00000105851	PIK3CG	0.23	0.00	0.00	2.00E-04	0.0	0.09	0.00	0.00	1.00E-04	#DIV/0!
ENSG00000141506	PIK3R5	1.07	0.04	0.04	5.95E-06	0.0	0.48	0.13	0.28	0.00E+00	0.0
ENSG00000137193	PIM1	5.04	82.13	16.31	4.00E-04	1.3	6.22	120.98	19.44	3.00E-04	2.2
ENSG00000116711	PLA2G4A	0.40	2.55	6.39	NS	1.1	0.33	12.11	37.11	NS	5.6
ENSG00000146070	PLA2G7	0.87	5.06	5.84	NS	1.3	0.57	1.83	3.22	NS	0.3
ENSG00000104368	PLAT	1.41	7.52	5.33	NS	2.8	0.31	5.01	16.05	NS	0.8
ENSG00000011422	PLAUR	0.31	45.46	148.18	1.00E-04	6.4	0.08	10.44	123.99	NS	1.0
ENSG00000115956	PLEK	3.12	0.06	0.02	1.00E-04	6.0	1.06	0.08	0.07	1.00E-04	1.9
ENSG00000122194	PLG	531.41	0.15	0.00	6.04E-09	7.3	580.42	0.29	0.00	2.06E-08	1.7
ENSG00000188313	PLSCR1	3.74	67.71	18.10	NS	3.9	3.26	50.38	15.44	NS	2.7
ENSG00000104695	PPP2CB	15.06	127.15	8.44	NS	2.6	13.24	121.50	9.18	NS	2.4
ENSG00000149923	PPP4C	27.38	120.32	4.39	NS	1.4	25.84	112.76	4.36	NS	1.3
ENSG00000137509	PRCP	7.50	13.95	1.86	8.70E-03	0.7	5.50	16.69	3.04	NS	0.8
ENSG00000110851	PRDM4	3.05	54.33	17.83	3.00E-04	3.1	2.61	51.57	19.78	9.00E-04	3.2
ENSG00000085377	PREP	6.19	38.87	6.28	NS	0.7	5.49	37.05	6.75	NS	0.6
ENSG00000163932	PRKCD	4.08	39.89	9.77	2.60E-03	1.7	3.13	29.98	9.57	NS	1.3
ENSG00000010438	PRSS3	1.82	0.05	0.03	3.00E-04	0.1	0.35	0.29	0.82	1.10E-03	0.7
ENSG00000178226	PRSS36	0.77	0.22	0.29	0.00E+00	0.5	1.03	0.20	0.19	0.00E+00	0.5
ENSG00000080815	PSEN1	5.02	44.54	8.88	8.70E-03	2.8	4.04	56.55	13.99	7.30E-03	2.6
ENSG00000240065	PSMB9	4.12	0.74	0.18	6.12E-06	0.6	2.76	0.22	0.08	0.00E+00	0.4
ENSG00000183155	RAB1F	3.09	23.29	7.53	NS	2.0	3.68	28.95	7.86	NS	2.9
ENSG00000132155	RAF1	14.97	41.14	2.75	3.70E-03	0.8	16.14	50.00	3.10	NS	1.0
ENSG00000172575	RASGRP1	0.36	1.62	4.50	NS	1.0	0.06	3.83	62.17	NS	2.0
ENSG00000173653	RCE1	3.07	27.72	9.02	5.10E-03	1.2	2.92	29.77	10.18	7.20E-03	1.3
ENSG00000177105	RHOG	9.23	52.91	5.73	NS	1.6	7.41	50.54	6.82	NS	1.8
ENSG00000063978	RNF4	4.34	35.57	8.20	6.80E-03	0.8	3.97	41.59	10.48	NS	0.9

ENSG00000189171	SI00A13	13.43	128.35	9.56	2.60E-03	5.3	6.82	107.30	15.72	NS	3.9
ENSG00000163220	SI00A9	6.56	114.91	17.52	NS	955.6	2.82	77.74	27.57	NS	1385.4
ENSG00000104112	SCG3	0.01	11.83	1606.74	7.94E-07	0.2	0.02	15.16	803.11	1.73E-06	0.3
ENSG00000197249	SERPINA1	3218.49	2.16	0.00	2.41E-08	28.9	2099.11	11.57	0.01	6.39E-07	23.5
ENSG00000197632	SERPINB2	0.01	0.98	110.63	2.78E-06	2.1	0.01	1.56	205.10	NS	#DIV/0!
ENSG00000117601	SERPINC1	2139.15	0.79	0.00	1.82E-09	#DIV/0!	2028.29	11.99	0.01	5.63E-07	20.7
ENSG00000106366	SERPINE1	6.63	623.82	94.12	2.00E-04	70.5	17.41	294.22	16.90	3.80E-03	30.8
ENSG00000149131	SERPING1	1068.32	133.31	0.12	1.16E-06	4.3	759.02	93.00	0.12	0.00E+00	2.4
ENSG00000111252	SH2B3	7.34	18.39	2.50	NS	0.6	5.62	16.72	2.98	NS	0.6
ENSG00000077463	SIRT6	4.66	21.64	4.64	NS	1.8	4.05	21.69	5.36	NS	1.7
ENSG00000107742	SPOCK2	1.29	1.17	0.91	3.00E-03	1.2	0.52	3.36	6.48	NS	4.5
ENSG00000197122	SRC	2.40	75.51	31.40	0.00E+00	4.5	1.41	65.12	46.21	1.00E-04	3.1
ENSG00000103496	STX4	12.60	19.85	1.58	NS	1.2	12.11	19.95	1.65	NS	1.2
ENSG00000105825	TFPI2	0.44	84.87	192.84	NS	9.0	0.35	20.34	57.72	NS	2.2
ENSG00000102265	TIMP1	50.91	148.58	2.92	NS	2.8	17.47	146.55	8.39	NS	2.6
ENSG00000035862	TIMP2	11.84	80.83	6.83	NS	3.2	4.89	87.12	17.81	NS	3.1
ENSG00000187045	TMPRSS6	130.48	0.11	0.00	1.77E-07	3.4	135.29	0.84	0.01	1.80E-07	10.4
ENSG00000118503	TNFAIP3	4.21	21.66	5.14	NS	5.2	4.34	16.37	3.77	NS	7.1
ENSG00000101557	USP14	7.87	78.54	9.98	3.90E-03	1.1	8.76	85.26	9.73	7.50E-03	1.0
ENSG00000135655	USP15	4.69	9.79	2.09	7.00E-04	1.6	5.24	11.03	2.10	1.90E-03	1.6
ENSG00000156256	USP16	6.72	23.12	3.44	NS	1.2	5.72	21.92	3.83	NS	1.2
ENSG00000138592	USP8	2.01	14.30	7.13	NS	1.3	2.14	13.98	6.53	NS	1.2
ENSG00000175073	VCIPI1	1.99	17.88	8.98	NS	1.8	2.09	14.44	6.92	NS	1.6
ENSG00000015285	WAS	4.30	0.80	0.19	1.00E-04	2.2	1.46	1.16	0.79	1.00E-04	2.0
ENSG00000108039	XPNPEP1	4.50	49.84	11.08	1.00E-03	2.0	3.64	45.85	12.59	5.90E-03	1.5
ENSG00000148516	ZEB1	2.57	2.74	1.06	1.00E-03	3.5	1.86	5.86	3.16	NS	5.6
ENSG00000169946	ZFPM2	0.35	0.27	0.80	4.60E-03	2.7	0.17	3.11	18.09	NS	26.1

- a.** Genes with equal or greater expression in Li-HLCs compared to parental liver highlighted in black.
b. Genes induced during the differentiation (Li-HLCs/Li-iPSCs > 1) highlighted in grey.