

Supplemental Table 1: Information for donors from the Human Panceas Analysis Program (HPAP)

Donor ID	RRID	Sex	BMI	Age (Years)	Ancestry	Diabetes Status	Disease Duration (Years)	HbA1c	Tissue Source	10X Kit Chemistry
HPAP-019	RRID:SAMN19776450	Male	29.8	22	Caucasian	AAB		5.2	nPod	10x v2
HPAP-020	RRID:SAMN19776451	Male	13.2	14	Caucasian	T1D		NA	nPod	10x v2
HPAP-021	RRID:SAMN19776452	Female	21.4	13	Caucasian	T1D	7	NA	nPod	10x v2
HPAP-022	RRID:SAMN19776453	Female	34.7	39	Caucasian	ND		4.7	UPenn	10x v2
HPAP-023	RRID:SAMN19776454	Female	21.35	17	Caucasian	T1D	7	8.9	nPod	10x v2
HPAP-024	RRID:SAMN19776455	Male	24.3	18	Caucasian	AAB		5.5	nPod	10x v2
HPAP-026	RRID:SAMN19776457	Male	20.8	24	Caucasian	ND		4.9	nPod	10x v2
HPAP-027	RRID:SAMN19776458	Female	32.71	31	Caucasian	ND		4.4	UPenn	10x v2
HPAP-028	RRID:SAMN19776459	Male	17.3	4	Caucasian	T1D	3	9.8	nPod	10x v2
HPAP-029	RRID:SAMN19776460	Male	28.6	23	Caucasian	AAB		5.3	nPod	10x v2
HPAP-032	RRID:SAMN19776463	Female	16.3	10	Caucasian	T1D	3	9	nPod	10x v2
HPAP-034	RRID:SAMN19776465	Male	18.6	13	Caucasian	ND		5.2	UPenn	10x v2
HPAP-035	RRID:SAMN19776466	Male	26.91	35	Caucasian	ND		5.2	UPenn	10x v2
HPAP-036	RRID:SAMN19776467	Female	16	23	Caucasian	ND		5.2	nPod	10x v2
HPAP-037	RRID:SAMN19776468	Female	21.9	35	Caucasian	ND		5.3	UPenn	10x v2
HPAP-038	RRID:SAMN19776469	Male	18.34	13	Caucasian	AAB		5.7	nPod	10x v3
HPAP-039	RRID:SAMN19776470	Female	16.3	5	Caucasian	ND		6.8	nPod	10x v3
HPAP-040	RRID:SAMN19776471	Male	23.98	35	Caucasian	ND		5.4	UPenn	10x v3
HPAP-042	RRID:SAMN19776473	Male	17.9	1	Caucasian	ND		5.6	nPod	10x v3
HPAP-043	RRID:SAMN19776474	Male	24.07	15	Hispanic	AAB		5.9	nPod	10x v3
HPAP-044	RRID:SAMN19776475	Female	12	3	Caucasian	ND		5.3	nPod	10x v3
HPAP-045	RRID:SAMN19776476	Female	26.2	27	Caucasian	AAB		5.2	nPod	10x v3
HPAP-047	RRID:SAMN19776478	Male	16.82	8	Caucasian	ND		NA	UPenn	10x v3
HPAP-049	RRID:SAMN19776480	Male	37.2	29	Caucasian	AAB		5.4	nPod	10x v3
HPAP-050	RRID:SAMN19776481	Female	28.99	21	Hispanic	AAB		5.1	nPod	10x v3
HPAP-051	RRID:SAMN18741940	Female	45.49	43	African American	T2D	5-6	6.7	UPenn	10x v3
HPAP-052	RRID:SAMN19776482	Male	38.72	27	African American	ND		5.2	UPenn	10x v3
HPAP-053	RRID:SAMN19776483	Female	24.2	58	Caucasian	ND		5.6	UPenn	10x v3
HPAP-054	RRID:SAMN19776484	Female	30.85	40	Caucasian	ND		4.8	UPenn	10x v3
HPAP-055	RRID:SAMN19776485	Male	27.9	24	Hispanic	T1D	7	10.4	UPenn	10x v3
HPAP-056	RRID:SAMN19842585	Male	32.89	33	Caucasian	ND		5.6	UPenn	10x v3
HPAP-057	RRID:SAMN19842586	Female	30.49	50	Caucasian	T2D	0.666666667	5.8	UPenn	10x v3
HPAP-058	RRID:SAMN19842587	Female	29.26	34	African American	T2D	<1	9.4	nPod	10x v3
HPAP-059	RRID:SAMN19842588	Male	37.96	35	Caucasian	ND		NA	UPenn	10x v3
HPAP-061	RRID:SAMN19842590	Female	38.27	59	African American	T2D		5.9	UPenn	10x v3
HPAP-063	RRID:SAMN19842592	Female	38.41	45	Caucasian	ND		6.3	UPenn	10x v3
HPAP-064	RRID:SAMN19842593	Male	16.98	24	African American	T1D		NA	UPenn	10x v3
HPAP-065	RRID:SAMN19842594	Male	37.47	40	African American	T2D	3	9.5	nPod	10x v3
HPAP-070	RRID:SAMN19842599	Male	17.09	55	African American	T2D	16	7	nPod	10x v3
HPAP-071	RRID:SAMN19842600	Female	15.42	12	Caucasian	T1D	3	9.8	nPod	10x v3
HPAP-072	RRID:SAMN19842601	Male	23.1	19	Hispanic	AAB		5.6	nPod	10x v3
HPAP-074	RRID:SAMN19842603	Female	36.88	40	Caucasian	ND		6.3	UPenn	10x v3
HPAP-075	RRID:SAMN19842604	Male	27.52	35	Caucasian	ND		6	UPenn	10x v3
HPAP-077	RRID:SAMN19842606	Male	32.78	47	Caucasian	ND		5.7	UPenn	10x v3
HPAP-079	RRID:SAMN19842608	Female	28.38	52	Hispanic	T2D	10	6.8	nPod	10x v3
HPAP-080	RRID:SAMN19842609	Male	35.71	22	African American	ND		5.4	nPod	10x v3
HPAP-081	RRID:SAMN19842610	Female	28.91	45	Caucasian	T2D	20	7.9	nPod	10x v3
HPAP-082	RRID:SAMN19842611	Male	23.96	25	Caucasian	ND		5.6	nPod	10x v3
HPAP-083	RRID:SAMN19842612	Male	35.62	45	African American	T2D	2-3	5	UPenn	10x v3
HPAP-084	RRID:SAMN19842613	Female	18.5	12	Caucasian	T1D		13.3	nPod	10x v3
HPAP-085	RRID:SAMN19842614	Female	39.78	48	Caucasian	T2D	6-10	NA	UPenn	10x v3
HPAP-087	RRID:SAMN19842616	Female	19.3	15	Caucasian	T1D	6-10	10.4	nPod	10x v3
HPAP-088	RRID:SAMN19842617	Male	32.81	37	Caucasian	T2D	<0.833	10.3	nPod	10x v3
HPAP-090	RRID:SAMN19842619	Female	32.23	59	Caucasian	T2D	>3	8.7	nPod	10x v3
HPAP-091	RRID:SAMN19842620	Female	35.58	50	Hispanic	T2D	0.25	NA	nPod	10x v3
HPAP-092	RRID:SAMN19842621	Male	25.59	21	Hispanic	AAB		5.6	nPod	10x v3
HPAP-093	RRID:SAMN19842622	Male	34.98	50	Caucasian	ND		4.9	UPenn	10x v3
HPAP-099	RRID:SAMN22562810	Female	24.7	28	Hispanic	ND		5	UPenn	10x v3
HPAP-100	RRID:SAMN22562811	Male	28.83	41	Caucasian	T2D	7-8	10.7	nPod	10x v3
HPAP-101	RRID:SAMN22562812	Female	38.01	55	Hispanic	ND		5	nPod	10x v3
HPAP-103	RRID:SAMN22562814	Female	36.44	48	Caucasian	ND		6	UPenn	10x v3
HPAP-104	RRID:SAMN22562815	Male	20.63	4	Hispanic	ND		4.9	UPenn	10x v3
HPAP-105	RRID:SAMN25600001	Female	28.1	51	Hispanic	ND		5.2	nPod	10x v3
HPAP-106	RRID:SAMN25600002	Male	28.12	55	Caucasian	T2D	3	5.8	UPenn	10x v3
HPAP-107	RRID:SAMN25600003	Male	23.59	15	Caucasian	AAB		5.3	nPod	10x v3
HPAP-108	RRID:SAMN25600004	Male	33	42	African American	T2D		10.8	nPod	10x v3
HPAP-109	RRID:SAMN25600005	Female	29.49	59	Hispanic	T2D	<5	7.5	nPod	10x v3

Supplemental Table 2: Distribution of Clinical & Experimental Variables across Cell Type

Variable	Acinar	Active Stellate	Alpha	Alpha+Beta	Beta	Cycling Alpha	Delta	Ductal	Endothelial	Gamma+Epsilon	Macrophage	Mast	MUC5B+ Ductal	Quiescent Stellate	Total
Sex															
F	14442	3087	23770	1841	16685	205	1706	5268	2929	605	636	409	460	1529	73572
M	34919	4977	26441	2734	20489	496	1942	16779	3965	1028	1246	592	1046	1977	118631
Tissue Source															
nPod	40117	5991	28588	2540	25480	473	2285	18608	5476	972	1434	636	1174	2717	136491
UPenn	9244	2073	21623	2035	11694	228	1363	3439	1418	661	448	365	332	789	55712
Diabetes Status															
AAB+	5844	1449	7371	889	10143	200	563	3036	943	280	224	127	208	664	31941
ND	14419	2695	21197	1819	17671	279	1993	5461	2695	815	590	361	526	1350	71871
T1D	17658	1656	8635	613	2016	38	319	7850	1439	209	546	166	307	548	42000
T2D	11440	2264	13008	1254	7344	184	773	5700	1817	329	522	347	465	944	46391
Donor															
HPAP-019	1	302	304	176	2874	1	104	26	17	4	61	4	1	27	3902
HPAP-020	4850	409	686	64	113	8	36	2280	239	24	170	42	125	72	9118
HPAP-021	1984	228	429	36	59	5	5	2050	76	7	19	17	51	61	5027
HPAP-022	53	257	1696	331	590	3	133	68	127	48	29	44	7	77	3463
HPAP-023	188	37	42	16	15	1	3	269	42	7	3	4	15	8	650
HPAP-024	1081	48	57	11	82	0	10	278	17	4	7	6	14	7	1622
HPAP-026	152	4	87	7	92	0	12	35	8	11	2	0	0	4	414
HPAP-028	1649	211	591	64	682	2	58	518	142	22	56	4	13	74	4086
HPAP-029	430	89	510	51	693	2	55	282	27	35	7	7	3	36	2227
HPAP-032	1170	171	28	14	1	1	2	486	137	0	146	22	10	40	2228
HPAP-034	171	11	51	9	29	1	4	60	3	2	3	0	14	2	360
HPAP-035	354	49	664	48	417	0	35	170	66	15	17	2	4	29	1870
HPAP-036	595	21	524	34	311	0	34	122	25	28	17	4	4	8	1727
HPAP-037	1953	79	423	21	385	1	20	257	35	2	19	7	47	23	3272
HPAP-038	88	15	775	72	1084	15	87	59	5	46	3	10	3	5	2267
HPAP-039	2119	167	66	4	98	5	0	1164	43	5	102	4	87	49	3913
HPAP-040	467	23	1005	31	241	0	23	74	32	12	4	12	3	7	1934
HPAP-042	1544	151	63	46	106	1	12	485	149	3	10	35	5	62	2672
HPAP-043	768	40	100	17	312	2	17	136	49	28	11	5	6	19	1510
HPAP-044	1710	101	72	3	118	4	10	659	20	8	36	4	56	12	2813
HPAP-045	107	28	1337	80	374	0	33	61	9	18	4	7	1	2	2061
HPAP-047	1359	115	61	8	101	5	5	452	106	7	13	3	17	27	2279
HPAP-049	53	52	1307	64	894	31	46	28	134	17	6	15	0	121	2768
HPAP-050	470	41	952	44	307	1	10	55	72	7	9	3	4	43	2018
HPAP-051	55	51	596	26	116	2	25	23	33	19	16	18	0	12	992
HPAP-052	126	94	624	47	210	7	33	40	29	23	14	10	14	14	1285
HPAP-053	90	82	725	29	349	0	20	18	58	18	17	11	2	23	1442
HPAP-054	373	63	1047	56	380	0	48	162	15	13	12	12	5	13	2199
HPAP-055	222	12	1317	93	104	4	28	56	20	18	9	16	0	3	1902
HPAP-056	160	18	667	42	239	56	26	37	13	14	20	15	2	1	1310
HPAP-057	26	22	481	30	205	0	13	11	24	12	7	7	0	6	844
HPAP-058	159	80	521	30	289	0	45	46	58	7	16	24	16	35	1326
HPAP-059	485	91	199	10	143	4	27	261	23	12	18	15	12	14	1314
HPAP-061	136	58	886	44	281	0	25	82	18	9	7	7	2	19	1574
HPAP-063	51	129	1006	52	387	4	8	43	36	5	31	30	10	28	1820
HPAP-064	300	25	1164	84	143	1	26	128	5	8	11	9	5	13	1922
HPAP-065	696	29	11	9	69	0	1	398	10	3	7	9	63	8	1313
HPAP-070	148	32	235	26	119	2	24	293	8	5	5	5	15	2	919
HPAP-071	692	86	722	27	55	0	9	509	77	10	13	12	8	20	2240

HPAP-072	131	37	490	24	243	16	27	54	36	6	19	6	7	29	1125
HPAP-074	7	48	505	54	305	0	30	7	9	7	7	3	2	7	991
HPAP-075	98	22	813	46	221	0	43	13	39	16	23	27	0	11	1372
HPAP-077	122	49	1108	134	296	105	50	51	26	15	22	18	11	35	2042
HPAP-079	111	62	272	28	80	8	11	10	39	9	15	13	2	8	668
HPAP-080	106	66	1165	80	742	42	47	35	113	36	22	13	8	27	2502
HPAP-081	117	159	950	35	440	1	27	103	50	9	12	12	3	29	1947
HPAP-082	788	94	67	21	198	2	12	289	40	0	43	8	44	35	1641
HPAP-083	499	38	438	30	105	3	28	183	13	7	13	12	21	2	1392
HPAP-084	484	62	475	77	453	4	107	283	49	67	12	15	49	33	2170
HPAP-085	236	179	326	68	714	0	38	128	113	9	11	11	19	66	1918
HPAP-087	6119	415	3181	138	391	12	45	1271	652	46	107	25	31	224	12657
HPAP-088	749	124	280	52	212	2	19	332	48	13	46	14	40	34	1965
HPAP-090	157	161	3263	212	1149	146	141	146	180	78	67	63	21	74	5858
HPAP-091	46	103	279	37	350	1	22	49	72	10	11	8	1	50	1039
HPAP-092	1477	262	12	38	14	13	2	1669	182	4	48	11	86	63	3881
HPAP-099	375	84	1614	74	705	2	45	62	31	29	10	10	4	19	3064
HPAP-100	1163	225	1673	92	1590	2	108	1322	190	25	49	45	126	89	6699
HPAP-101	318	531	2115	195	3944	0	455	132	917	164	31	27	47	501	9377
HPAP-103	644	83	993	70	1353	7	90	274	26	10	25	5	18	43	3641
HPAP-104	41	79	1380	161	2738	10	441	447	209	276	13	9	101	78	5983
HPAP-105	158	184	2457	206	2973	20	330	44	497	36	30	33	2	201	7171
HPAP-106	841	312	1834	437	937	13	99	332	309	55	77	52	12	217	5527
HPAP-107	1238	535	1527	312	3266	119	172	388	395	111	49	53	83	312	8560
HPAP-108	1925	315	299	20	206	4	54	700	230	14	68	5	24	112	3976
HPAP-109	4376	314	664	78	482	0	93	1542	422	45	95	42	100	181	8434

Supplemental Table 3: Established marker genes for pancreatic islet cell types

Gene Symbol	Ensembl ID	Gene Name	Cell Type
<i>INS</i>	ENSG00000254647	Insulin	Beta Cells
<i>IAPP</i>	ENSG00000121351	Islet Amyloid Polypeptide	Beta Cells
<i>GCG</i>	ENSG00000115263	Glucagon	Alpha Cells
<i>MKI67</i>	ENSG00000148773	Marker of Proliferation Ki 67	Proliferating Cells; Cycling Alpha Cells
<i>CDK1</i>	ENSG00000170312	Cell Dependent Kinase 1	Proliferating Cells; Cycling Alpha Cells
<i>SST</i>	ENSG00000157005	Somatostatin	Delta Cells
<i>PPY</i>	ENSG00000108849	Pancreatic Polypeptide	Gamma Cells
<i>GHRL</i>	ENSG00000157017	Ghrelin and Obestatin Prepropeptide	Epsilon Cells
<i>CFTR</i>	ENSG00000001626	CF Transmembrane Conductance Regulator	Ductal Cells
<i>MUC5B</i>	ENSG00000117983	Mucin 5B, Oligomeric Mucus/Gel-Forming	MUC5B+ Ductal Cells
<i>REG1A</i>	ENSG00000115386	Regenerating Family Member 1 Alpha	Acinar Cells
<i>CTRB2</i>	ENSG00000168928	Chymotrypsinogen B2	Acinar Cells
<i>PRSS1</i>	ENSG00000204983	Serine Protease 1	Acinar Cells
<i>PRSS2</i>	ENSG00000275896	Serine Protease 2	Acinar Cells
<i>PDGFRB</i>	ENSG00000113721	Platelet Derived Growth Factor Receptor Beta	Stellate Cells
<i>COL6A1</i>	ENSG00000142156	Collagen Type VI Alpha 1 Chain	Stellate Cells
<i>RGSS5</i>	ENSG00000143248	Regulator Of G Protein Signaling 5	Quiescent Stellate Cells
<i>PLVAP</i>	ENSG00000130300	Plasmalemma Vesicle Associated Protein	Endothelial Cells
<i>ESAM</i>	ENSG00000149564	Endothelial Cell Adhesion Molecule	Endothelial Cells
<i>VWF</i>	ENSG00000110799	Von Willebrand Factor	Endothelial Cells
<i>KIT</i>	ENSG00000157404	KIT Proto-Oncogene, Receptor Tyrosine Kinase	Mast Cells
<i>CD69</i>	ENSG00000110848	Cluster of Differentiation 69	Mast Cells
<i>C1QA</i>	ENSG00000173372	Complement C1q A Chain	Macrophages
<i>C1QB</i>	ENSG00000173369	Complement C1q B Chain	Macrophages
<i>C1QC</i>	ENSG00000159189	Complement C1q C Chain	Macrophages

Supplemental Table 4: Cell type specific marker genes

Cell Type	Gene	baseMean	log2FoldChange	lfcSE	stat	pvalue	padj
Acinar	<i>PNLIP</i>	83448.6275	9.260781718	0.58753037	15.762218	5.66E-56	3.81E-52
Acinar	<i>CPA1</i>	214092.303	9.254370332	0.69557887	13.3045592	2.18E-40	4.88E-37
Acinar	<i>CPB1</i>	105135.884	9.146352589	0.68339642	13.3836706	7.53E-41	3.05E-37
Acinar	<i>PRSS2</i>	728617.004	9.104837908	0.69123586	13.1718251	1.27E-39	1.72E-36
Acinar	<i>KLK1</i>	12530.2185	9.001868088	0.68025149	13.2331472	5.65E-40	8.69E-37
Acinar	<i>CUZD1</i>	15980.622	8.955248997	0.67489106	13.2691772	3.49E-40	6.72E-37
Acinar	<i>AMY2A</i>	21496.4411	9.506832452	0.74426104	12.7735189	2.30E-37	1.35E-34
Acinar	<i>CTRB2</i>	253574.07	8.908526187	0.6733092	13.2309586	5.81E-40	8.69E-37
Acinar	<i>CTRL</i>	6552.94275	8.754278355	0.65477972	13.3698067	9.08E-41	3.05E-37
Acinar	<i>CLPS</i>	328795.692	9.093606825	0.69976667	12.9951985	1.30E-38	1.46E-35
Alpha	<i>GCG</i>	386658.983	5.470787166	0.47807775	11.4433	2.54E-30	6.81E-27
Alpha	<i>CRH</i>	404.653545	4.86794705	0.50690894	9.60319817	7.75E-22	3.78E-19
Alpha	<i>SPOCK3</i>	121.047617	5.230035815	0.58100118	9.00176459	2.22E-19	6.16E-17
Alpha	<i>F10</i>	1342.17657	4.345088186	0.4461367	9.73936504	2.05E-22	1.14E-19
Alpha	<i>IRX2</i>	712.212188	4.224972801	0.42976608	9.83086621	8.29E-23	4.94E-20
Alpha	<i>POPDC3</i>	260.379467	4.502968137	0.47854074	9.40979059	4.97E-21	2.00E-18
Alpha	<i>C5orf38</i>	542.210177	4.34360024	0.45368735	9.57399462	1.03E-21	4.87E-19
Alpha	<i>GC</i>	3264.52404	4.144842651	0.42293614	9.80016195	1.12E-22	6.46E-20
Alpha	<i>SPINK4</i>	128.891941	4.593136996	0.50962126	9.01284422	2.01E-19	5.67E-17
Alpha	<i>TMEM236</i>	130.788035	3.91798197	0.42285556	9.26553268	1.94E-20	7.10E-18
Beta	<i>MAFA</i>	560.69505	6.924292111	0.57275854	12.0893738	1.20E-33	1.21E-30
Beta	<i>IAPP</i>	19026.8416	7.291942973	0.68982824	10.5706646	4.08E-26	2.53E-23
Beta	<i>ADCYAP1</i>	903.618905	6.241298497	0.55674966	11.2102422	3.63E-29	2.93E-26
Beta	<i>INS</i>	4058199.59	6.522721404	0.61919029	10.5342759	6.00E-26	3.59E-23
Beta	<i>AC132217.2</i>	222.972216	7.038850873	0.69615069	10.1111023	4.93E-24	1.99E-21
Beta	<i>LRRTM3</i>	71.8334176	6.740659795	0.6547739	10.2946373	7.45E-25	3.75E-22
Beta	<i>HHATL</i>	67.1907745	7.102209311	0.73092392	9.71675588	2.56E-22	8.59E-20
Beta	<i>SAMD11</i>	366.59322	5.598819344	0.51565942	10.8575915	1.84E-27	1.23E-24
Beta	<i>C1orf127</i>	186.091014	5.801118478	0.55747105	10.4061341	2.32E-25	1.21E-22
Beta	<i>WSCD2</i>	79.7730513	6.876120377	0.74019288	9.28963321	1.55E-20	3.42E-18
Delta	<i>SST</i>	369394.643	5.935216175	0.5023096	11.8158526	3.23E-32	5.06E-29
Delta	<i>GPC5-AS11</i>	57.9052436	5.508842875	0.5853384	9.41138134	4.90E-21	5.75E-18
Delta	<i>LRFN5</i>	38.9955398	4.702775598	0.51064485	9.20948398	3.28E-20	3.08E-17
Delta	<i>LY6H1</i>	310.267655	4.483761841	0.48260921	9.29066778	1.53E-20	1.60E-17
Delta	<i>BCHE</i>	63.324118	4.636359837	0.51030809	9.08541316	1.03E-19	8.82E-17
Delta	<i>CALB11</i>	30.5385557	4.757997852	0.53928025	8.82286682	1.12E-18	8.06E-16
Delta	<i>LINC01571</i>	79.1785517	5.392851799	0.65300069	8.25856983	1.47E-16	6.92E-14
Delta	<i>CBLN4</i>	49.9660007	4.498454459	0.51158491	8.79317268	1.45E-18	9.76E-16
Delta	<i>CRYGD</i>	7.63928039	4.406145446	0.513453	8.58139976	9.37E-18	5.18E-15
Delta	<i>F5</i>	57.6997129	4.449120772	0.52864185	8.41613425	3.89E-17	1.99E-14
Ductal	<i>FGFBP1</i>	486.14324	10.0487938	0.83873219	11.9809326	4.47E-33	8.30E-30
Ductal	<i>CFTR</i>	580.529802	8.824184463	0.71391663	12.360245	4.29E-35	1.39E-31
Ductal	<i>MMP7</i>	5360.30536	8.603083396	0.6988719	12.3099576	8.01E-35	2.08E-31
Ductal	<i>KRT23</i>	248.433366	9.055082404	0.79192414	11.4342801	2.82E-30	2.29E-27
Ductal	<i>S100A14</i>	551.937493	7.793304309	0.66957457	11.6391881	2.60E-31	2.82E-28
Ductal	<i>KRT19</i>	3436.94264	6.469389921	0.50716982	12.7558652	2.89E-37	1.25E-33
Ductal	<i>LGALS4</i>	1162.43095	7.071974776	0.59562612	11.8731776	1.63E-32	2.35E-29
Ductal	<i>CEACAM7</i>	41.885775	10.026333	1.02009006	9.82887045	8.46E-23	1.64E-20
Ductal	<i>VTCN1</i>	173.149158	7.812773113	0.70318437	11.1105614	1.11E-28	6.89E-26

Ductal	<i>TRPV6</i>	170.811242	7.803004022	0.70272527	11.1039184	1.20E-28	7.09E-26
Endothelial	<i>PLVAP</i>	1412.10646	10.27851975	0.69029363	14.8900689	3.82E-50	1.02E-46
Endothelial	<i>KDR</i>	316.469988	10.44960212	0.71267694	14.6624669	1.12E-48	1.28E-45
Endothelial	<i>ESM1</i>	225.344453	9.924277757	0.66985806	14.8154935	1.16E-49	2.14E-46
Endothelial	<i>VWF</i>	294.190606	10.00333162	0.69007085	14.4960936	1.28E-47	1.14E-44
Endothelial	<i>PCAT19</i>	595.040826	9.345526123	0.62598948	14.9292062	2.13E-50	8.49E-47
Endothelial	<i>PECAM1</i>	1221.20766	9.31345404	0.62111726	14.9946792	7.95E-51	6.35E-47
Endothelial	<i>CLDN5</i>	919.740252	9.585381212	0.65420692	14.6519103	1.31E-48	1.31E-45
Endothelial	<i>CLEC14A</i>	386.780443	9.257831731	0.62528248	14.805839	1.34E-49	2.14E-46
Endothelial	<i>ADGRL4</i>	262.506573	10.1063134	0.72944781	13.854745	1.19E-43	6.79E-41
Endothelial	<i>FCN3</i>	325.539303	10.3853239	0.76378285	13.5972205	4.16E-42	1.66E-39
Gamma+Epsilon	<i>PPY</i>	94369.0121	7.078650103	0.60111369	11.7758923	5.20E-32	4.10E-28
Gamma+Epsilon	<i>CARTPT</i>	173.691977	5.398082081	0.87538255	6.16654067	6.98E-10	6.12E-07
Gamma+Epsilon	<i>NPW</i>	116.366666	3.002341903	0.40878939	7.34447119	2.07E-13	4.08E-10
Gamma+Epsilon	<i>GPC5-AS1</i>	27.7223802	3.822901526	0.58087802	6.58124661	4.67E-11	5.26E-08
Gamma+Epsilon	<i>CALB1</i>	15.822587	3.457935068	0.57030112	6.06334956	1.33E-09	1.05E-06
Gamma+Epsilon	<i>SERTM1</i>	25.9690993	3.321249453	0.55796721	5.9524097	2.64E-09	1.60E-06
Gamma+Epsilon	<i>LY6H</i>	162.099124	2.906751246	0.46587085	6.23939285	4.39E-10	4.33E-07
Gamma+Epsilon	<i>GHRL</i>	27647.2093	4.201641447	0.80443595	5.22309012	1.76E-07	5.14E-05
Gamma+Epsilon	<i>ERICH3</i>	11.7212686	2.977688958	0.49276426	6.04282658	1.51E-09	1.09E-06
Gamma+Epsilon	<i>PRG4</i>	36.8547703	2.401999592	0.39995703	6.00564416	1.91E-09	1.25E-06
Macrophage	<i>C1QA</i>	891.963179	13.42107535	0.83690029	16.0366479	7.09E-58	1.84E-54
Macrophage	<i>C1QB</i>	794.340725	13.70121086	0.87126808	15.7255973	1.01E-55	9.64E-53
Macrophage	<i>C1QC</i>	533.772833	13.49328201	0.87844253	15.3604607	3.01E-53	2.40E-50
Macrophage	<i>TYROBP</i>	979.032209	12.21521238	0.76315925	16.006112	1.16E-57	1.84E-54
Macrophage	<i>SDS</i>	339.136572	11.40694202	0.72102342	15.8204875	2.25E-56	2.68E-53
Macrophage	<i>LAPTM5</i>	1009.25276	10.93715547	0.68234306	16.0288221	8.04E-58	1.84E-54
Macrophage	<i>MS4A7</i>	281.02144	12.0069871	0.82842279	14.4937913	1.33E-47	7.03E-45
Macrophage	<i>RGS1</i>	469.302013	10.108359	0.67013087	15.0841566	2.06E-51	1.40E-48
Macrophage	<i>ITGB2</i>	113.357283	11.13585483	0.78707161	14.1484647	1.91E-45	7.59E-43
Macrophage	<i>GPR183</i>	366.114854	9.694248375	0.65925502	14.7048533	6.00E-49	3.58E-46
Mast	<i>TPSB2</i>	1166.62273	11.91876425	0.89762721	13.2780781	3.10E-40	2.52E-37
Mast	<i>TPSAB1</i>	842.842628	12.1443508	0.97604224	12.4424438	1.54E-35	6.24E-33
Mast	<i>CD69</i>	44.4709563	10.63545744	1.01463518	10.4820508	1.04E-25	9.42E-24
Mast	<i>SAMSN1</i>	69.3486339	7.785070866	0.6816396	11.4210954	3.28E-30	6.66E-28
Mast	<i>CD37</i>	70.7527425	7.135633786	0.65755769	10.8517228	1.96E-27	2.27E-25
Mast	<i>CD48</i>	28.9260837	8.222423089	0.81464112	10.0933072	5.91E-24	4.37E-22
Mast	<i>KIT</i>	65.3883664	6.263939055	0.6275144	9.98214392	1.82E-23	1.23E-21
Mast	<i>GCSAML</i>	28.4336744	12.03947422	1.68701913	7.13653688	9.57E-13	2.99E-11
Mast	<i>SRGN</i>	162.375124	4.761672672	0.46771938	10.1806188	2.42E-24	1.97E-22
Mast	<i>ITGAX</i>	35.8426022	5.889919886	0.65251565	9.02648065	1.77E-19	1.03E-17
Stellate	<i>COL3A1</i>	1987.99305	10.28071325	0.65526673	15.6893564	1.79E-55	2.06E-51
Stellate	<i>DCN</i>	2201.83843	11.05083139	0.73592161	15.016316	5.74E-51	1.30E-47
Stellate	<i>LUM</i>	2063.37258	10.69941056	0.70527391	15.1705748	5.54E-52	2.12E-48
Stellate	<i>SFRP2</i>	2352.30153	10.37137585	0.67316678	15.4068445	1.47E-53	8.47E-50
Stellate	<i>PTGDS</i>	1561.05924	10.14394675	0.67491958	15.0298599	4.68E-51	1.30E-47
Stellate	<i>PRRX1</i>	464.056448	10.18543803	0.68715754	14.8225662	1.05E-49	1.34E-46
Stellate	<i>COL1A2</i>	2147.98482	10.72449353	0.74593136	14.3773196	7.18E-47	5.90E-44
Stellate	<i>BGN</i>	1410.98941	9.880364089	0.65845228	15.0054368	6.76E-51	1.30E-47
Stellate	<i>C7</i>	2329.61936	9.726195841	0.65232837	14.9099691	2.84E-50	4.66E-47
Stellate	<i>COL6A3</i>	1345.39533	9.414870783	0.64225592	14.6590643	1.18E-48	1.36E-45

Supplemental Table 5: Cell sub-type specific marker genes

Cell Type	Gene	baseMean	log2FoldChange	lfcSE	stat	pvalue	padj
Cycling Alpha	<i>UBE2C</i>	80.5214034	9.206274987	0.98168109	9.378071	6.72E-21	4.03E-17
Cycling Alpha	<i>CENPF</i>	140.187069	10.52466346	1.24115751	8.47971622	2.26E-17	3.39E-14
Cycling Alpha	<i>BIRC5</i>	108.234109	8.647895595	0.96687801	8.94414342	3.75E-19	1.12E-15
Cycling Alpha	<i>TOP2A</i>	89.175053	10.69682507	1.44547391	7.40022008	1.36E-13	3.55E-11
Cycling Alpha	<i>FOXM1</i>	40.5227356	7.142247943	0.86293037	8.27673725	1.27E-16	9.49E-14
Cycling Alpha	<i>NUSAP1</i>	89.0001022	6.675206853	0.77617484	8.60013303	7.96E-18	1.59E-14
Cycling Alpha	<i>TPX2</i>	60.6013388	7.229807053	0.8887387	8.13490741	4.12E-16	2.47E-13
Cycling Alpha	<i>CKAP2L</i>	27.2601722	9.501153746	1.36078738	6.98210012	2.91E-12	4.85E-10
Cycling Alpha	<i>MKI67</i>	72.0495904	14.87498556	2.70251763	5.50412157	3.71E-08	1.67E-06
Cycling Alpha	<i>CKS2</i>	90.9793531	6.539084858	0.78722394	8.30651165	9.86E-17	8.45E-14
Active Stellate	<i>APOD</i>	135.025509	10.24312855	1.01243874	10.1172823	4.63E-24	2.30E-20
Active Stellate	<i>SFRP2</i>	215.955245	8.451774524	0.81439001	10.378043	3.12E-25	3.10E-21
Active Stellate	<i>PTGDS</i>	127.942569	7.92791041	0.88817645	8.92605335	4.41E-19	8.78E-16
Active Stellate	<i>CFD</i>	72.2514895	7.869506605	0.88058414	8.936689	4.01E-19	8.78E-16
Active Stellate	<i>CCL11</i>	22.2330186	8.031638725	0.95945692	8.37102587	5.71E-17	5.16E-14
Active Stellate	<i>DPT</i>	31.5630752	7.190299523	0.88835195	8.09397617	5.77E-16	4.10E-13
Active Stellate	<i>C7</i>	206.14786	5.72446354	0.64090276	8.93187528	4.19E-19	8.78E-16
Active Stellate	<i>PODN</i>	13.9253728	6.514290123	0.80594532	8.08279412	6.33E-16	4.20E-13
Active Stellate	<i>CHI3L1</i>	11.9342832	7.386020684	0.9885742	7.47138723	7.94E-14	3.16E-11
Active Stellate	<i>CYP1B1</i>	120.726368	5.346662865	0.63111193	8.47181392	2.42E-17	2.67E-14
Quiescent Stellate	<i>FABP4</i>	87.8559814	5.528424384	0.64370836	8.5883992	8.82E-18	1.44E-14
Quiescent Stellate	<i>RGS5</i>	313.879384	4.272919976	0.49837361	8.57372841	1.00E-17	1.44E-14
Quiescent Stellate	<i>PDK4</i>	93.2227491	3.428096836	0.39697263	8.63560008	5.84E-18	1.44E-14
Quiescent Stellate	<i>ADIRF</i>	270.932066	3.179618354	0.37773129	8.41767273	3.84E-17	4.41E-14
Quiescent Stellate	<i>MCAM</i>	19.3425921	3.96964726	0.55417901	7.16311375	7.89E-13	3.02E-10
Quiescent Stellate	<i>MUSTN1</i>	25.1960965	4.190289854	0.6201111	6.75732117	1.41E-11	4.25E-09
Quiescent Stellate	<i>ESAM</i>	12.4639193	4.092628755	0.61368322	6.66895982	2.58E-11	6.72E-09
Quiescent Stellate	<i>EFHD1</i>	20.0073839	2.707126933	0.34195993	7.91650325	2.44E-15	1.75E-12
Quiescent Stellate	<i>ADAMTS9</i>	13.4207352	2.925769664	0.39976747	7.31867869	2.50E-13	1.31E-10
Quiescent Stellate	<i>ADAMTS4</i>	58.2963609	2.977883765	0.41570765	7.16340869	7.87E-13	3.02E-10
MUC5B+ Ductal	<i>TFF2</i>	185.53619	12.57294599	1.38327929	9.08923173	9.97E-20	6.52E-16
MUC5B+ Ductal	<i>TFF1</i>	749.801481	8.224686918	0.92265343	8.91416717	4.91E-19	1.07E-15
MUC5B+ Ductal	<i>MGST1</i>	51.6775475	6.654339231	0.74631126	8.91630561	4.82E-19	1.07E-15
MUC5B+ Ductal	<i>TFF3</i>	80.4384588	6.621126593	0.8169785	8.1044074	5.30E-16	6.93E-13
MUC5B+ Ductal	<i>TCN1</i>	31.6066526	6.526062948	0.81174889	8.03950953	9.02E-16	9.82E-13
MUC5B+ Ductal	<i>FXYP3</i>	42.7691115	5.089289493	0.59847792	8.50372134	1.84E-17	3.00E-14
MUC5B+ Ductal	<i>SPINK1</i>	1140.09788	5.023434405	0.63735292	7.88171547	3.23E-15	3.01E-12
MUC5B+ Ductal	<i>MMP1</i>	125.91246	7.870986341	1.30142971	6.04795346	1.47E-09	5.64E-07
MUC5B+ Ductal	<i>C19orf33</i>	167.668638	4.224360845	0.55206086	7.65198396	1.98E-14	1.62E-11
MUC5B+ Ductal	<i>LDHB</i>	23.8563933	4.829677165	0.67514283	7.15356358	8.46E-13	5.52E-10

Supplemental Table 6: Significant differentially expressed genes in T1D compared to ND controls

Cell Type	Gene	baseMean	log2FoldChange	lfcSE	stat	pvalue	padj
Acinar	CNPY2	347.8512976	-0.56800117	0.133869446	-4.242948554	2.21E-05	0.098297916
Acinar	RRP15	78.45479199	0.843427946	0.208163014	4.051766598	5.08E-05	0.098297916
Acinar	RELCH	27.80400081	0.977807427	0.241775756	4.044274102	5.25E-05	0.098297916
Acinar	CHORDC1	34.23935916	1.00947568	0.253500137	3.98215043	6.83E-05	0.098297916
Acinar	BLZF1	25.76782523	0.910919629	0.229985382	3.960771856	7.47E-05	0.098297916
Acinar	GPHA2	144.6360587	-2.238017882	0.571959268	-3.912897311	9.12E-05	0.098297916
Acinar	KRT17	48.62088897	3.228794404	0.825758118	3.910097076	9.23E-05	0.098297916
Acinar	SOC53	50.0894229	1.52534322	0.391213757	3.899001994	9.66E-05	0.098297916
Acinar	CD320	65.02922298	-0.966767462	0.248072712	-3.897113291	9.73E-05	0.098297916
Acinar	NAMPT	242.5727244	1.06467958	0.277867202	3.831612985	0.000127306	0.098458614
Acinar	DNAJA1	217.5242773	0.849407766	0.22171002	3.831165439	0.000127538	0.098458614
Acinar	H19	53.79929964	-3.294441383	0.865057403	-3.808350025	0.000139897	0.098458614
Acinar	CREB1	47.78331638	0.789321402	0.208314536	3.789084608	0.000151203	0.098458614
Acinar	SPG11	57.35896833	0.779897923	0.205869551	3.788311181	0.000151675	0.098458614
Active Stellate	RCAN1	41.21839119	1.620233759	0.314685419	5.148741132	2.62E-07	0.00241576
Active Stellate	CCDC74A	13.22446766	-1.682537235	0.378504454	-4.445224402	8.78E-06	0.030499969
Active Stellate	DPH2	10.45318818	1.236258154	0.279782906	4.418633616	9.93E-06	0.030499969
Active Stellate	NOC3L	8.384928044	1.476201949	0.348004234	4.241908016	2.22E-05	0.05104082
Active Stellate	PTGDS	832.2032279	-1.641318141	0.401114227	-4.091897099	4.28E-05	0.066381487
Active Stellate	TNFAIP3	13.70986552	2.177364602	0.53659164	4.057768405	4.95E-05	0.066381487
Active Stellate	HLA-B	601.5947226	1.036695044	0.255748636	4.053570175	5.04E-05	0.066381487
Active Stellate	ATF3	67.56553625	1.470264995	0.368859289	3.985977955	6.72E-05	0.077383968
Alpha	TYMP	40.52488275	2.133848239	0.386172897	5.52562921	3.28E-08	0.000359496
Alpha	GHR1	1653.892432	-5.831509665	1.117806999	-5.216919979	1.82E-07	0.000678959
Alpha	ODF3B	31.8402632	2.462195174	0.472336832	5.212795206	1.86E-07	0.000678959
Alpha	PCDH4	80.80780414	1.422781552	0.284681701	4.997797713	5.80E-07	0.001587443
Alpha	MAB21L4	23.02192962	-2.871179951	0.631679721	-4.545309678	5.49E-06	0.00861368
Alpha	GBP2	26.60098823	3.373251368	0.745515906	4.524720854	6.05E-06	0.00861368
Alpha	ANXA3	15.83838415	-2.681856892	0.594482874	-4.511243319	6.44E-06	0.00861368
Alpha	HLA-B	2788.219821	1.556316993	0.345618707	4.502988293	6.70E-06	0.00861368
Alpha	HES1	109.9061343	2.078043921	0.462684416	4.491277102	7.08E-06	0.00861368
Alpha	PSMB9	29.61930067	2.641061444	0.604019899	4.372474233	1.23E-05	0.013451672
Alpha	UTRN	36.08847742	1.866450586	0.437408278	4.267067364	1.98E-05	0.01971591
Alpha	ZFP36	321.6353843	1.92442653	0.45526456	4.227051038	2.37E-05	0.021605625
Alpha	HSPA6	563.1938489	-5.403469774	1.289176367	-4.191412372	2.77E-05	0.023350728
Alpha	BET1	62.98500588	1.240846428	0.301648872	4.113545727	3.90E-05	0.030474462
Alpha	TAP1	46.24037899	1.678014324	0.416755336	4.02637754	5.66E-05	0.040734868
Alpha	BAG1	551.3514352	-0.90452856	0.225304106	-4.014700736	5.95E-05	0.040734868
Alpha	STBD1	102.1197412	1.262082009	0.318485641	3.96275953	7.41E-05	0.047721644
Alpha	AC099509.1	109.037963	2.811404745	0.723655527	3.885004178	0.000102328	0.062249612
Alpha	HIST2H2AAA4	43.98294475	2.460807117	0.637271996	3.861470662	0.000112707	0.064954563
Alpha	PRSS2	436.0125758	-5.92659017	1.548406853	-3.827540648	0.00012943	0.070862933
Alpha	TFF3	373.7326924	-1.103792876	0.289855068	-3.808085485	0.000140047	0.073024436
Alpha	MT1G	278.3850015	-3.169620957	0.847431167	-3.740269509	0.000183823	0.091493743
Alpha	ASGR1	43.60764089	-1.196839772	0.323600469	-3.698510628	0.000216868	0.095434964
Alpha	HSPA1A	679.0611106	-2.727656322	0.739317003	-3.689427286	0.000224759	0.095434964
Alpha	DDX59	35.8076381	0.707693959	0.19200847	3.685743447	0.000228036	0.095434964
Alpha	LACTB2	67.67144087	1.070207327	0.291584192	3.670320119	0.000242247	0.095434964
Alpha	CPA1	134.4707474	-5.253817537	1.432894268	-3.666577257	0.000245819	0.095434964
Alpha	PLEKHA1	432.4333104	0.982146832	0.268029329	3.664325976	0.000247991	0.095434964
Alpha	CRYAB	203.8961433	-3.17848334	0.872214126	-3.644154853	0.000268272	0.095434964
Alpha	C18orf21	50.41465486	0.602441505	0.165412537	3.642054676	0.000270471	0.095434964
Alpha	SLC44A4	50.96358249	-0.838502767	0.230604842	-3.636102174	0.000276795	0.095434964
Alpha	B2M	19046.14244	0.833765004	0.229424929	3.634151736	0.000278897	0.095434964
Alpha	SEC16A	136.4051071	-0.656721972	0.182321356	-3.602002464	0.000315775	0.099907871
Alpha	RGS4	398.1310093	1.322550348	0.367299765	3.600738347	0.000317315	0.099907871
Alpha	EIF3B	220.2506491	-0.590013578	0.16393438	-3.599083844	0.00031934	0.099907871
Alpha+Beta	MEG3	23.88972115	-3.789945598	0.798695606	-4.74516896	2.08E-06	0.003281235
Alpha+Beta	HLA-A	122.7696048	1.760194586	0.388503567	4.530703793	5.88E-06	0.004116531
Alpha+Beta	TSPAN13	11.59110046	-2.696724692	0.607919803	-4.43598757	9.17E-06	0.004116531
Alpha+Beta	CCDC12	14.42146132	-2.03798525	0.464004476	-4.392167221	1.12E-05	0.004116531
Alpha+Beta	HLA-C	49.43686363	1.717155217	0.395144002	4.345644134	1.39E-05	0.004116531
Alpha+Beta	HLA-B	40.20282316	1.976750779	0.457699448	4.318883904	1.57E-05	0.004116531
Alpha+Beta	HERPUD1	127.5123264	-2.989866102	0.709961198	-4.211309168	2.54E-05	0.005712637
Alpha+Beta	WIPI2	9.051765776	-1.96842225	0.506178933	-3.888787386	0.000100746	0.016224759
Alpha+Beta	NEMF	8.23030797	-2.211031656	0.570006436	-3.87895911	0.000104904	0.016224759
Alpha+Beta	SEC61B	57.54710165	-0.847566257	0.219213759	-3.866391698	0.000110457	0.016224759
Alpha+Beta	SEC31A	15.45126318	-2.230055709	0.577711652	-3.860153593	0.000113316	0.016224759
Alpha+Beta	RAB18	14.41932563	-1.36174741	0.365344807	-3.727293734	0.000193547	0.025403023
Alpha+Beta	NEAT1	576.4413844	-3.151959366	0.85551622	-3.684277742	0.000229352	0.027786883
Alpha+Beta	DUSP1	10.15824729	-2.161745489	0.594748459	-3.6347223	0.00027828	0.031306525

Alpha+Beta	<i>SERP1</i>	19.18556135	-1.261547003	0.349588186	-3.608666003	0.000307776	0.032316433
Alpha+Beta	<i>INS</i>	42198.71679	-4.496718068	1.267372553	-3.54806332	0.000388075	0.038201124
Alpha+Beta	<i>RBM25</i>	28.11426403	-1.975495517	0.559391554	-3.531507586	0.000413198	0.038276281
Alpha+Beta	<i>P4HB</i>	28.61762976	-1.255428284	0.357021009	-3.516398905	0.000437443	0.038276281
Alpha+Beta	<i>DDX46</i>	12.7868414	-1.69314903	0.491344392	-3.445951675	0.000569052	0.040773526
Alpha+Beta	<i>HDLBP</i>	13.7822211	-1.529603285	0.445405447	-3.434181812	0.000594345	0.040773526
Alpha+Beta	<i>MT1X</i>	16.85376664	-2.491356818	0.729427365	-3.41549678	0.000636658	0.040773526
Alpha+Beta	<i>RPL39</i>	240.9235179	0.66683457	0.195813072	3.405465028	0.000660515	0.040773526
Alpha+Beta	<i>RPS27</i>	470.0961902	0.765848726	0.225591906	3.394841327	0.000686684	0.040773526
Alpha+Beta	<i>SELENOW</i>	22.02647033	-1.354048423	0.399122023	-3.392567544	0.000692409	0.040773526
Alpha+Beta	<i>B2M</i>	322.7669582	1.211193449	0.357066613	3.392065807	0.000693678	0.040773526
Alpha+Beta	<i>GCG</i>	5056.006888	2.866088932	0.848280695	3.378703474	0.000728285	0.040773526
Alpha+Beta	<i>SRP19</i>	23.64040194	-1.167026922	0.345855218	-3.374322151	0.000739977	0.040773526
Alpha+Beta	<i>SPAG9</i>	16.65179099	-2.103905037	0.625191663	-3.365216081	0.000764837	0.040773526
Alpha+Beta	<i>SCFD1</i>	8.471091257	-1.861596074	0.5535905	-3.362767374	0.000771654	0.040773526
Alpha+Beta	<i>TTC19</i>	9.577774073	-1.818754269	0.541136599	-3.36098921	0.000776639	0.040773526
Alpha+Beta	<i>ARL8B</i>	8.753223125	-1.70318934	0.512812844	-3.321268882	0.000896092	0.045527236
Alpha+Beta	<i>IBTK</i>	14.27028918	-1.954153377	0.593217278	-3.294161263	0.000987158	0.048586706
Alpha+Beta	<i>RPS29</i>	278.591762	0.877219489	0.267667854	3.277268738	0.001048166	0.050026083
Alpha+Beta	<i>SSR3</i>	13.62472418	-1.191533566	0.366012105	-3.255448527	0.001132134	0.051179306
Alpha+Beta	<i>SEC62</i>	34.83768459	-1.179642587	0.362503944	-3.254151045	0.001137318	0.051179306
Alpha+Beta	<i>SF3B5</i>	23.49714423	-0.812165516	0.25236659	-3.21819745	0.00128999	0.056437055
Alpha+Beta	<i>TMEM165</i>	9.479605398	-1.862357802	0.58030478	-3.209275307	0.0013307	0.056644666
Alpha+Beta	<i>NNMT</i>	14.64172217	-1.426360589	0.447198227	-3.189548845	0.001424951	0.059060451
Alpha+Beta	<i>TRAPPC5</i>	18.40199938	-1.112676822	0.349721227	-3.181610769	0.001464585	0.059146704
Alpha+Beta	<i>VAPA</i>	31.74931929	-0.996518321	0.316038345	-3.153156374	0.001615153	0.063081068
Alpha+Beta	<i>TXNL4A</i>	18.99544013	-0.776141306	0.246525436	-3.1483214	0.00164211	0.063081068
Alpha+Beta	<i>RAP1B</i>	14.07673148	-1.033767467	0.330202265	-3.130709798	0.001743844	0.064447827
Alpha+Beta	<i>ARID4A</i>	8.531810449	-1.890662937	0.606135878	-3.119206443	0.001813389	0.064447827
Alpha+Beta	<i>TCF25</i>	18.75312333	-1.289184907	0.413359843	-3.118795718	0.001815918	0.064447827
Alpha+Beta	<i>ANAPC5</i>	9.510488839	-1.390347231	0.447868407	-3.104365498	0.001906876	0.064447827
Alpha+Beta	<i>TOX4</i>	8.534702063	-1.906759126	0.614276465	-3.10407322	0.001908761	0.064447827
Alpha+Beta	<i>DNAJC7</i>	9.767847238	-1.278736045	0.412746956	-3.098111387	0.001947582	0.064447827
Alpha+Beta	<i>CRELD2</i>	7.789821654	-1.602911305	0.518045326	-3.094152625	0.001973759	0.064447827
Alpha+Beta	<i>RIOK3</i>	20.85960196	-1.710263064	0.554388826	-3.084952262	0.002035848	0.064447827
Alpha+Beta	<i>RBM4</i>	13.67650282	-1.211833137	0.393008531	-3.083477942	0.002045963	0.064447827
Alpha+Beta	<i>KRT10</i>	53.50215786	-0.774462298	0.252255295	-3.07015279	0.002139493	0.066002044
Alpha+Beta	<i>PRPF8</i>	9.498413011	-1.555802009	0.507887955	-3.063278021	0.002189266	0.066002044
Alpha+Beta	<i>PEBP1</i>	53.33279634	-0.799334007	0.262152233	-3.049121486	0.002295116	0.066002044
Alpha+Beta	<i>EEF1A1</i>	661.5802555	0.577245709	0.190337787	3.032743619	0.002423414	0.066002044
Alpha+Beta	<i>HM13</i>	10.12029518	-1.709395981	0.564156136	-3.030005123	0.002445496	0.066002044
Alpha+Beta	<i>TUBB4B</i>	13.20880832	-1.66929134	0.550985966	-3.029644027	0.002448421	0.066002044
Alpha+Beta	<i>PKIB</i>	9.099339791	-1.771349766	0.584968191	-3.028112968	0.002460861	0.066002044
Alpha+Beta	<i>ATP2A2</i>	9.310919635	-1.99765637	0.66059574	-3.024022484	0.002494379	0.066002044
Alpha+Beta	<i>PIGP</i>	8.533776012	-1.105155276	0.365500075	-3.023680028	0.002497204	0.066002044
Alpha+Beta	<i>AKAP9</i>	16.84905444	-1.680801284	0.556564906	-3.019955564	0.002528118	0.066002044
Alpha+Beta	<i>VMP1</i>	13.96423957	-1.9558581	0.6483651	-3.016599907	0.00255627	0.066002044
Alpha+Beta	<i>MARCH6</i>	10.91232545	-1.790319779	0.594782046	-3.010043411	0.002612104	0.066355856
Alpha+Beta	<i>DDX24</i>	30.62675043	-1.088476916	0.366554516	-2.969481672	0.002983026	0.07421909
Alpha+Beta	<i>PPP1R1A</i>	25.04564817	-1.349749718	0.455312629	-2.964446034	0.003032284	0.07421909
Alpha+Beta	<i>YIPF4</i>	10.96209425	-1.669935721	0.563911693	-2.961342605	0.00306301	0.07421909
Alpha+Beta	<i>ACADVL</i>	9.08815365	-1.588673057	0.538293751	-2.951312463	0.003164266	0.074351171
Alpha+Beta	<i>RPL5</i>	315.1658191	0.441185968	0.149548502	2.950119595	0.003176509	0.074351171
Alpha+Beta	<i>RPL22</i>	169.8158291	0.427422253	0.145042797	2.946869899	0.003210082	0.074351171
Alpha+Beta	<i>RPL37A</i>	423.9621835	0.52207427	0.178847783	2.919098364	0.003510454	0.079143627
Alpha+Beta	<i>ATP6V0E1</i>	33.02786395	-0.679656789	0.23308906	-2.915867396	0.003547012	0.079143627
Alpha+Beta	<i>RNF7</i>	23.07501563	-0.764621414	0.262391449	-2.914048524	0.003567744	0.079143627
Alpha+Beta	<i>SUN1</i>	10.94973194	-1.144593352	0.393542234	-2.90843842	0.003632387	0.079458467
Alpha+Beta	<i>RPL36AL</i>	86.36474982	-0.475992101	0.165084259	-2.883328208	0.003934972	0.084898372
Alpha+Beta	<i>PAFAH1B2</i>	8.991243469	-1.407962361	0.489125856	-2.878527773	0.003995361	0.085036399
Alpha+Beta	<i>RTN4</i>	34.42514551	-0.87178266	0.304646508	-2.861620394	0.004214814	0.088511092
Alpha+Beta	<i>MAP1LC3A</i>	14.25417007	-1.069855523	0.374508449	-2.856692619	0.004280802	0.088713984
Alpha+Beta	<i>RPS27A</i>	511.5275116	0.447923505	0.157387448	2.845992557	0.004427323	0.090558879
Alpha+Beta	<i>RAB7A</i>	12.19986779	-0.965431579	0.341064505	-2.830642195	0.004645466	0.093802673
Alpha+Beta	<i>RAB11FIP1</i>	15.16163196	-1.587362664	0.562572566	-2.821614064	0.004778264	0.095262862
Alpha+Beta	<i>TMF1</i>	13.08281794	-1.421696576	0.504639639	-2.817251097	0.004843664	0.095359638
Alpha+Beta	<i>SRPRA</i>	11.7766813	-1.337782199	0.475714176	-2.812155422	0.004921072	0.095687508
Alpha+Beta	<i>MGST3</i>	16.21253099	-1.052674666	0.376983991	-2.792359067	0.005232526	0.099046708
Alpha+Beta	<i>RPL21</i>	436.5950979	0.473926478	0.16980172	2.791058176	0.005253603	0.099046708
Alpha+Beta	<i>RPL37</i>	251.1979459	0.62989535	0.225996106	2.787195598	0.005316638	0.099046708
Alpha+Beta	<i>RPL11</i>	433.7390092	0.426660235	0.153174715	2.785448206	0.005345378	0.099046708
Beta	<i>CD74</i>	62.52347792	4.57582431	0.559485125	8.178634439	2.87E-16	3.39E-12
Beta	<i>HLA-C</i>	1851.612297	1.860963141	0.252779692	7.361996222	1.81E-13	1.07E-09

Beta	HLA-F	16.3246428	3.864079798	0.538294208	7.178378922	7.05E-13	2.78E-09
Beta	HLA-A	3309.265196	1.692741955	0.238328027	7.102571928	1.22E-12	3.62E-09
Beta	HLA-B	1576.110385	2.966443916	0.436889805	6.789913349	1.12E-11	2.65E-08
Beta	B2M	8586.865487	1.695496672	0.254255288	6.668481455	2.58E-11	4.33E-08
Beta	HLA-E	384.6740914	2.13376461	0.320533727	6.656911362	2.80E-11	4.33E-08
Beta	STOM	41.14313238	1.869852012	0.281178518	6.650052876	2.93E-11	4.33E-08
Beta	PSMB8	119.8332807	1.660240069	0.254473522	6.524215401	6.84E-11	8.98E-08
Beta	GABRG2	29.36109955	3.987203858	0.648684177	6.146602618	7.92E-10	9.36E-07
Beta	TAP1	30.21288371	2.174710896	0.36880452	5.896649241	3.71E-09	3.99E-06
Beta	PSMB8-AS1	14.59760115	3.141443226	0.53923494	5.825741236	5.69E-09	5.60E-06
Beta	PRG4	88.09157081	4.116304592	0.71513492	5.755983209	8.61E-09	7.83E-06
Beta	PSMB9	19.22232702	3.149058691	0.548908491	5.736946582	9.64E-09	8.14E-06
Beta	GAD1	34.91370486	2.901180719	0.510056475	5.687959784	1.29E-08	1.01E-05
Beta	TUBB2B	254.7757782	-1.503547744	0.266881968	-5.633755452	1.76E-08	1.30E-05
Beta	MDK	391.2658709	1.548662973	0.275454307	5.622213676	1.89E-08	1.31E-05
Beta	GAST	19.40115381	4.366427802	0.786790994	5.549666729	2.86E-08	1.88E-05
Beta	ZFP36	88.76452187	2.233226947	0.413814181	5.396690233	6.79E-08	4.22E-05
Beta	BIRC3	22.11993539	2.940934493	0.557677949	5.273535554	1.34E-07	7.91E-05
Beta	IFIT3	20.30650176	2.32795868	0.443542315	5.248560511	1.53E-07	8.63E-05
Beta	PCDH10	16.89057168	2.930989357	0.560458075	5.22963177	1.70E-07	9.13E-05
Beta	ANK3	17.42703148	2.669107381	0.518795731	5.144813696	2.68E-07	0.00013519
Beta	CASP4	27.84277886	2.276194372	0.442819665	5.140228745	2.74E-07	0.00013519
Beta	TMEM45B	16.35582002	2.865897359	0.560953177	5.108977852	3.24E-07	0.000153195
Beta	IL18BP	13.35396611	2.95628846	0.582529661	5.074914902	3.88E-07	0.000170593
Beta	CTSL	501.3210786	0.901049448	0.177581846	5.07399527	3.90E-07	0.000170593
Beta	MT1X	1904.694105	-2.791186185	0.558903345	-4.994040936	5.91E-07	0.000249693
Beta	FBXO22	116.8102952	0.989992809	0.199185807	4.970197542	6.69E-07	0.000272705
Beta	LRCH2	11.24018017	1.922116079	0.38934609	4.936780228	7.94E-07	0.000313032
Beta	CRIM1	43.96427119	1.853658425	0.376827809	4.919112611	8.69E-07	0.000330817
Beta	SLC38A1	34.61907023	2.227280889	0.453311595	4.913355213	8.95E-07	0.000330817
Beta	TSHR	11.35793837	2.632437837	0.541969504	4.857169666	1.19E-06	0.000426651
Beta	AQP3	242.201051	3.285656859	0.678918566	4.839544865	1.30E-06	0.00045257
Beta	GNS	187.7713608	0.917446817	0.190462637	4.81693855	1.46E-06	0.000492478
Beta	SLC4A4	20.25323168	2.5886575	0.539311156	4.799933158	1.59E-06	0.000521302
Beta	FABP5	243.1698153	3.192896003	0.670627639	4.761056386	1.93E-06	0.00061543
Beta	NCOA7	113.5002168	2.077917904	0.438374719	4.740049588	2.14E-06	0.000664838
Beta	AKAP12	92.59737648	2.544210501	0.541377677	4.699511284	2.61E-06	0.000790646
Beta	CHGB	6574.538957	1.14529483	0.244079823	4.692296214	2.70E-06	0.00079858
Beta	SAMD5	103.5987893	1.77301752	0.378462661	4.684788495	2.80E-06	0.000808211
Beta	SYT1	30.62818397	3.206607586	0.68544894	4.678112983	2.90E-06	0.000815087
Beta	SCYL3	19.57806742	1.428110766	0.306004985	4.666952623	3.06E-06	0.000840603
Beta	KCNJ8	29.75495601	2.014320597	0.432900502	4.653079837	3.27E-06	0.000878775
Beta	RPL3	25207.11018	-0.767887319	0.16593476	-4.627645948	3.70E-06	0.00097179
Beta	SCN3A	15.47221723	1.977521212	0.427941283	4.621010617	3.82E-06	0.000981585
Beta	PTP4A3	62.04176915	2.832320413	0.614813721	4.606794408	4.09E-06	0.001016671
Beta	ICAM1	19.55677287	3.828115016	0.831318615	4.604871042	4.13E-06	0.001016671
Beta	PPP1R1A	1641.904587	-1.797705401	0.392974841	-4.574606854	4.77E-06	0.001151308
Beta	DKK3	69.73406749	2.982053028	0.654135938	4.558766543	5.15E-06	0.001215517
Beta	PPP2R2B	20.31808071	2.452092194	0.538350108	4.554828088	5.24E-06	0.001215517
Beta	PCDHB4	34.43286054	1.892694613	0.416048507	4.549216214	5.38E-06	0.001224377
Beta	PPY	35647.59877	5.751205089	1.265418836	4.544902389	5.50E-06	0.001226143
Beta	SELENOW	1716.321955	-1.001972766	0.221233167	-4.52903504	5.93E-06	0.001297436
Beta	CD40	26.0136545	1.647939728	0.368016342	4.477898231	7.54E-06	0.001607219
Beta	GIN1	24.50858191	1.42466609	0.31830309	4.475816085	7.61E-06	0.001607219
Beta	ETV1	115.37279	1.708911252	0.382819564	4.464012328	8.04E-06	0.001640695
Beta	IRF1	72.55010577	1.883493893	0.421938966	4.463901285	8.05E-06	0.001640695
Beta	MSN	73.41806425	2.05553548	0.460865993	4.460158727	8.19E-06	0.001641311
Beta	BOC	10.36928665	2.37520933	0.535486705	4.435608407	9.18E-06	0.001809321
Beta	EPAS1	116.0560994	1.54772056	0.349925259	4.423003261	9.73E-06	0.001886767
Beta	PRKAG2-AS1	60.7058864	-1.315583683	0.298119158	-4.412945783	1.02E-05	0.001944734
Beta	SPOCK1	24.61584233	2.675708416	0.606813608	4.40944036	1.04E-05	0.001945106
Beta	ARID4A	208.7001022	0.745104565	0.169143937	4.405150892	1.06E-05	0.001952997
Beta	TAPBP	173.7930201	1.015039711	0.23113636	4.391518986	1.13E-05	0.00204758
Beta	CTSS	11.8414508	2.386349067	0.549140271	4.345609298	1.39E-05	0.002488228
Beta	SEL1L3	16.66071753	1.820683177	0.422171202	4.312665498	1.61E-05	0.002844454
Beta	LCORL	100.8503708	1.088432374	0.252562719	4.309552799	1.64E-05	0.002844454
Beta	PARVB	578.7528596	-1.42588324	0.331895938	-4.296175635	1.74E-05	0.002977762
Beta	AL109613.1	36.62375683	-1.581687603	0.368619008	-4.290846565	1.78E-05	0.003006561
Beta	LDHA	80.69796847	2.360668054	0.551338275	4.281705373	1.85E-05	0.003088669
Beta	RG54	84.35657416	1.616728047	0.383223375	4.218761575	2.46E-05	0.004034084
Beta	CLTRN	67.0088357	-1.673570842	0.398350987	-4.201246882	2.65E-05	0.004299545
Beta	HIVEP1	41.00071314	1.252487049	0.298525024	4.195584794	2.72E-05	0.004320743
Beta	TMEM161B-AS1	104.4740965	0.961587357	0.229276372	4.194009834	2.74E-05	0.004320743

Beta	<i>ISL1</i>	341.123744	1.32350987	0.317039968	4.174583658	2.99E-05	0.004587176
Beta	<i>MT2A</i>	2999.225032	-2.399573554	0.5748258	-4.174436074	2.99E-05	0.004587176
Beta	<i>MTUS1</i>	110.1702945	2.012884564	0.482660539	4.170393892	3.04E-05	0.004609444
Beta	<i>SOD1</i>	1793.180078	-0.551985976	0.132865385	-4.154475405	3.26E-05	0.004864378
Beta	<i>PHACTR1</i>	8.451708953	2.160942212	0.520594587	4.150911795	3.31E-05	0.004864378
Beta	<i>BTN3A2</i>	10.50243971	2.292920778	0.55258041	4.149478945	3.33E-05	0.004864378
Beta	<i>HIST2H2AA4</i>	30.48471149	2.711353665	0.655070925	4.139023058	3.49E-05	0.005029351
Beta	<i>BAALC</i>	33.06801125	1.740874415	0.421290767	4.132239655	3.59E-05	0.005117734
Beta	<i>CETN3</i>	83.1772677	1.338248071	0.325624032	4.109795163	3.96E-05	0.005537152
Beta	<i>AC010478.1</i>	39.02029904	1.448050213	0.352609453	4.10666872	4.01E-05	0.005537152
Beta	<i>BRD8</i>	58.59479881	0.975764441	0.237649089	4.105904397	4.03E-05	0.005537152
Beta	<i>SPRED3</i>	15.96892752	1.380099131	0.336818128	4.097460959	4.18E-05	0.005676969
Beta	<i>AK4</i>	35.20402606	1.549417609	0.380531854	4.071715927	4.67E-05	0.006270492
Beta	<i>CRNKL1</i>	54.72211203	1.072496249	0.263634085	4.068124378	4.74E-05	0.006296358
Beta	<i>GM2A</i>	44.80275165	1.016768554	0.251223219	4.047271426	5.18E-05	0.006800968
Beta	<i>MLLT6</i>	105.838061	1.062169916	0.262593754	4.044916916	5.23E-05	0.006800968
Beta	<i>C5orf56</i>	33.8362595	1.199003317	0.296806559	4.039679309	5.35E-05	0.006879041
Beta	<i>SMOC1</i>	52.72244984	1.803688754	0.447082306	4.034355038	5.48E-05	0.006945121
Beta	<i>MCMBP</i>	72.2981697	0.974437284	0.241810578	4.02975458	5.58E-05	0.006945121
Beta	<i>PON2</i>	132.9343128	0.872500803	0.216836862	4.023766047	5.73E-05	0.006945121
Beta	<i>DBI</i>	1223.756819	-0.979237149	0.243436	-4.022565065	5.76E-05	0.006945121
Beta	<i>PLAAT4</i>	28.3416049	2.51915155	0.626703241	4.019688084	5.83E-05	0.006945121
Beta	<i>STAT1</i>	106.4278263	0.996797302	0.248016887	4.019070284	5.84E-05	0.006945121
Beta	<i>PDIA5</i>	20.89923013	1.161163071	0.288965112	4.018350392	5.86E-05	0.006945121
Beta	<i>TENM3</i>	67.10035904	1.520182058	0.378456799	4.01679151	5.90E-05	0.006945121
Beta	<i>CYB5D2</i>	190.3994405	0.816641533	0.203373315	4.01548026	5.93E-05	0.006945121
Beta	<i>LRR8C-<i>DT</i></i>	19.40425348	1.242990734	0.310394374	4.004553044	6.21E-05	0.007202769
Beta	<i>RAB27A</i>	126.3256389	1.100902045	0.275177202	4.000702234	6.32E-05	0.007248404
Beta	<i>GTF2A1</i>	67.18707808	1.154753336	0.288799151	3.998465139	6.38E-05	0.007248404
Beta	<i>TXNDC12</i>	191.8063755	0.526386645	0.131826575	3.993023739	6.52E-05	0.007346199
Beta	<i>PLBD2</i>	73.66054874	0.959447451	0.240605758	3.98763295	6.67E-05	0.007382633
Beta	<i>TAP2</i>	15.3601906	1.507048349	0.37795499	3.987375183	6.68E-05	0.007382633
Beta	<i>ASB9</i>	209.0930529	-2.255978118	0.566721491	-3.980752723	6.87E-05	0.007471015
Beta	<i>FGF14</i>	97.15419825	0.973001105	0.244520384	3.979222879	6.91E-05	0.007471015
Beta	<i>TGFBR3L</i>	88.94189787	-1.336858366	0.336064765	-3.977978363	6.95E-05	0.007471015
Beta	<i>DPYSL3</i>	81.17756506	1.545687726	0.389390573	3.969504745	7.20E-05	0.007671984
Beta	<i>KCNQ10T1</i>	123.1592475	1.318931028	0.333081813	3.959780977	7.50E-05	0.007919814
Beta	<i>GAMT</i>	331.388601	-0.992817068	0.250867028	-3.957543072	7.57E-05	0.007923611
Beta	<i>CDKN2B-<i>AS1</i></i>	10.79636969	1.614259749	0.408254116	3.954056278	7.68E-05	0.007949155
Beta	<i>STEAP2</i>	32.28943418	1.152568162	0.291747922	3.950561686	7.80E-05	0.007949155
Beta	<i>CITED1</i>	5.747019376	2.448234728	0.61972662	3.950507608	7.80E-05	0.007949155
Beta	<i>SNAPIN</i>	81.20065577	0.80623865	0.20442734	3.943888583	8.02E-05	0.008102059
Beta	<i>SUMF2</i>	155.284334	0.715676118	0.181796102	3.93669671	8.26E-05	0.008277893
Beta	<i>DGCR6L</i>	317.974252	-0.643351186	0.163512654	-3.934565124	8.33E-05	0.008281516
Beta	<i>ZNF33A</i>	120.7246686	0.955262525	0.243027712	3.930673237	8.47E-05	0.008342065
Beta	<i>LMO4</i>	34.80856768	1.785720445	0.454519627	3.928808219	8.54E-05	0.008342065
Beta	<i>ATG12</i>	245.7023881	0.758067503	0.193205957	3.923623859	8.72E-05	0.008453858
Beta	<i>CELSR3</i>	40.68085475	1.020788919	0.260338063	3.92101296	8.82E-05	0.008476512
Beta	<i>NUP85</i>	25.04238503	1.364353562	0.348151409	3.918851187	8.90E-05	0.008483913
Beta	<i>LINC00685</i>	32.27779111	1.529484299	0.390851253	3.913213245	9.11E-05	0.008615065
Beta	<i>SIAE</i>	22.72710916	1.004384654	0.257364727	3.90257307	9.52E-05	0.008892196
Beta	<i>TMEM54</i>	255.9906123	-0.925366534	0.237220702	-3.900867527	9.58E-05	0.008892196
Beta	<i>ASCL2</i>	159.7775043	-2.050534411	0.525801544	-3.899825769	9.63E-05	0.008892196
Beta	<i>SCAF11</i>	394.2111171	0.68057601	0.175295498	3.882450013	0.000103409	0.009439148
Beta	<i>TAPBP1</i>	35.99866808	1.267002758	0.326414089	3.881581094	0.00010378	0.009439148
Beta	<i>MEIS1</i>	69.87629763	1.189323297	0.306668849	3.878200543	0.000105232	0.009498188
Beta	<i>SERP1</i>	822.3633722	-0.691349613	0.178531652	-3.872420402	0.00010776	0.009637511
Beta	<i>PRICKLE2</i>	16.4300838	1.691181452	0.436888938	3.870964229	0.000108406	0.009637511
Beta	<i>TMEM37</i>	104.7086068	-1.314251761	0.340300044	-3.862038173	0.000112445	0.009881638
Beta	<i>EYA3</i>	40.77960271	1.123966543	0.291091188	3.861218023	0.000112823	0.009881638
Beta	<i>DNAJC22</i>	24.27224023	2.074416421	0.537982156	3.855920494	0.000115295	0.010023879
Beta	<i>TNFRSF11B</i>	9.730507182	1.926294356	0.500134394	3.851553465	0.000117371	0.01012988
Beta	<i>HAP1</i>	27.18617422	1.642464197	0.426823358	3.848112264	0.000119032	0.010198758
Beta	<i>HMGN2</i>	1864.560847	0.572416093	0.148886428	3.844649249	0.000120725	0.010269441
Beta	<i>KIF16B</i>	31.92191987	1.107774943	0.289532141	3.826086256	0.000130197	0.010990253
Beta	<i>MT1F</i>	478.8948934	-1.731843004	0.452833037	-3.82446258	0.000131058	0.010990253
Beta	<i>SPG11</i>	45.04362204	0.823449521	0.21559044	3.819508503	0.000133718	0.011082722
Beta	<i>ID2</i>	186.6630653	1.233490851	0.32313063	3.817313298	0.000134913	0.011082722
Beta	<i>ZRANB2</i>	234.4374993	0.871808751	0.228389319	3.817204574	0.000134972	0.011082722
Beta	<i>TLE4</i>	70.58702472	1.15427488	0.302755716	3.812561811	0.000137534	0.011215172
Beta	<i>SMC6</i>	59.09529141	0.923268313	0.242440194	3.808231213	0.000139964	0.01131468
Beta	<i>GLB1L2</i>	13.3636173	1.512537084	0.397308887	3.806955079	0.000140688	0.01131468
Beta	<i>ZSWIM6</i>	25.30853989	1.498535823	0.393800092	3.805313158	0.000141625	0.01131468

Beta	PDE4B	17.17586746	1.864691728	0.490510698	3.801531211	0.000143805	0.011411717
Beta	SCG2	2320.20795	1.014195395	0.267043162	3.797870677	0.000145944	0.011504313
Beta	S100A6	2749.339723	1.034068979	0.27259359	3.793445693	0.000148571	0.011633809
Beta	GLI1DR	61.41451079	-0.974671573	0.257530887	-3.78467836	0.000153907	0.011948335
Beta	PCDHB12	5.771874339	1.879051861	0.496754842	3.782654347	0.000155165	0.011948335
Beta	IL13RA1	102.8551794	1.058000883	0.279823317	3.780960412	0.000156225	0.011948335
Beta	TSPAN1	141.4524467	-1.612645331	0.42659017	-3.780315262	0.00015663	0.011948335
Beta	CTTNBP2NL	15.68854589	1.541558938	0.408290198	3.775645231	0.000159594	0.012096407
Beta	MAN2B2	45.45422767	0.901019448	0.238877702	3.771885953	0.000162018	0.01220194
Beta	TYMP	21.56942454	1.182914721	0.314987921	3.75542883	0.000173045	0.012949894
Beta	GRAMD4	25.91503643	1.279898869	0.341292803	3.750149014	0.00017673	0.013142452
Beta	RIF1	79.05186571	0.967603351	0.258161551	3.748053685	0.000178212	0.013169875
Beta	RSRP1	155.0751243	0.872582884	0.232915742	3.746345677	0.000179429	0.013177466
Beta	UBE2S	302.1766026	-0.69242629	0.184968721	-3.743477741	0.000181491	0.013223839
Beta	BMF	30.6052784	1.659517981	0.443455796	3.742239916	0.000182387	0.013223839
Beta	ADAMTSL2	32.20130591	1.256729134	0.335973849	3.740556405	0.000183613	0.013223839
Beta	ZNF480	59.2433636	0.861260709	0.230403069	3.738060924	0.000185445	0.013223839
Beta	SOX4	182.2190647	1.382817103	0.369956846	3.737779467	0.000185653	0.013223839
Beta	WDR75	27.20717794	1.067887267	0.285855565	3.735758188	0.00018715	0.0132507
Beta	LINC00324	21.03403233	1.689547916	0.453231849	3.727778442	0.000193175	0.013595846
Beta	MDF1C	51.01027008	1.374186252	0.369466767	3.71937715	0.000199715	0.013959677
Beta	ZC3H12A	18.3018321	1.620953192	0.435959668	3.718126495	0.000200706	0.013959677
Beta	EHF	40.72212451	1.485494574	0.399813929	3.715464788	0.000202831	0.014024959
Beta	RARS	135.1033528	0.7438843	0.200614104	3.708035912	0.000208873	0.014358807
Beta	PLXNB2	166.1049972	0.764472897	0.206690761	3.698631201	0.000216765	0.014784744
Beta	BCAT2	97.85114264	-0.997648143	0.269905855	-3.696281964	0.00021878	0.014784744
Beta	IAPP	15320.12476	-3.005906778	0.813548049	-3.694811614	0.00022005	0.014784744
Beta	GNG12	143.2903362	0.764275307	0.206852294	3.69478767	0.000220071	0.014784744
Beta	ZNF503	198.572694	1.137874947	0.308108124	3.693102704	0.000221534	0.014799005
Beta	UNC5B	94.50400817	1.442025497	0.391210701	3.686058415	0.000227754	0.015060826
Beta	ABCB4	7.66707969	1.761437566	0.47790062	3.685782131	0.000228001	0.015060826
Beta	DLG2	50.36024157	0.994726399	0.27011221	3.682641375	0.00023083	0.015162952
Beta	TRIP10	21.35505996	1.0043596	0.273016201	3.678754584	0.000234376	0.015227211
Beta	DYNC2LI1	119.674139	0.701582643	0.190730793	3.678392102	0.000234709	0.015227211
Beta	LGALS3BP	390.5076713	0.811421448	0.220701236	3.67656051	0.0002364	0.015227211
Beta	LGMN	169.7072876	0.746547046	0.203089159	3.675957145	0.000236959	0.015227211
Beta	DLK1	1829.836954	-2.157629175	0.587507558	-3.67251305	0.000240177	0.01523956
Beta	MAP2	254.1672786	1.038315072	0.282743203	3.672290117	0.000240387	0.01523956
Beta	FHL1	160.7321805	0.841581959	0.229271045	3.670685754	0.000241901	0.01523956
Beta	ODF3B	30.21335781	1.687347585	0.459945797	3.668579206	0.000243902	0.01523956
Beta	RG517	148.50541	0.849215177	0.231570614	3.667197503	0.000245223	0.01523956
Beta	AC132217.2	164.2200034	-1.657241614	0.451959495	-3.666792342	0.000245612	0.01523956
Beta	CNN3	25.79985668	1.574764855	0.429535033	3.666208185	0.000246174	0.01523956
Beta	LUC7L3	296.549619	0.737228057	0.201321697	3.661940403	0.000250312	0.015415053
Beta	ZC3H13	219.7692195	0.648939559	0.177334052	3.659418768	0.000252788	0.015486864
Beta	ARHGEF40	36.5873366	0.913196667	0.249820195	3.655415711	0.000256766	0.015649464
Beta	RBM38	33.29642268	1.043331472	0.285576677	3.653419745	0.000258771	0.015673662
Beta	GCSH	331.6580632	-0.615672488	0.168614049	-3.651371231	0.000260844	0.015673662
Beta	PRCP	134.4659173	0.652234818	0.178641586	3.65108054	0.000261139	0.015673662
Beta	USP10	59.99633671	0.772616472	0.211852618	3.646952675	0.000265369	0.015847073
Beta	SETX	139.7373247	0.840124098	0.230520615	3.64446407	0.00026795	0.015920782
Beta	MSMB	12.62868283	2.519591915	0.692778679	3.636936284	0.0002759	0.016311217
Beta	ERF	76.38308791	1.397306656	0.385353171	3.626041675	0.000287799	0.016930022
Beta	FIGN	5.350125124	2.301268886	0.634930363	3.624442961	0.000289585	0.016944773
Beta	PLD3	907.3602452	0.667025486	0.184095518	3.623257599	0.000290916	0.016944773
Beta	LSG1	37.76599456	0.907119134	0.250681614	3.618610548	0.000296189	0.017167345
Beta	TXNIP	253.1551331	1.31997767	0.365076908	3.615615341	0.000299635	0.017282364
Beta	PCNX4	110.8031186	0.743120446	0.205740925	3.61192333	0.000303934	0.017445246
Beta	PRPF38A	95.31457696	0.781622494	0.216958969	3.602628167	0.000315016	0.017993957
Beta	ZNF827	79.54553714	1.139482593	0.316580904	3.599340885	0.000319025	0.018135331
Beta	GGT7	33.35333136	0.880081912	0.244664507	3.597096786	0.000321789	0.018167157
Beta	ZNF317	38.95824704	0.85565406	0.237919925	3.596395138	0.000322658	0.018167157
Beta	SYNJ1	33.02720911	1.000874389	0.278788527	3.590084564	0.000330571	0.018524493
Beta	SMPD3	11.82944616	1.612669457	0.449356804	3.58883952	0.000332153	0.018525376
Beta	TRMU	100.8672273	0.755032397	0.21103883	3.577694189	0.000346639	0.019242515
Beta	SPTY2D1	120.7934702	0.843908412	0.235999059	3.575897355	0.000349029	0.019284645
Beta	QSOX1	116.6798582	0.955500991	0.267363363	3.573791781	0.000351849	0.019350045
Beta	NUP93	30.47166449	0.826725119	0.23209173	3.562061945	0.000367954	0.020142049
Beta	USF1	14.26511843	1.418213331	0.398487109	3.558994254	0.000372278	0.020229063
Beta	FLT3LG	7.010540275	1.575032313	0.442738798	3.557475245	0.000374436	0.020229063
Beta	ENTPD3	168.5357805	-0.954106209	0.268210224	-3.5573707381	0.000374676	0.020229063
Beta	FOXO3	166.2163392	0.893901579	0.251505807	3.554198562	0.000379133	0.020376667
Beta	PIAS3	33.69051864	0.884552078	0.249127504	3.550599842	0.000384354	0.020563826

Beta	SLC8A3	8.000856264	1.787296092	0.503649977	3.548686934	0.000387157	0.020620475
Beta	FUT11	52.03168314	0.947726645	0.267332762	3.545119709	0.000392435	0.020807844
Beta	SST	69589.31943	2.304482345	0.650910318	3.54039916	0.000399522	0.021089069
Beta	CL2orf75	1568.978323	-0.789814435	0.223263121	-3.537594709	0.000403789	0.021219579
Beta	SPATS2L	84.33161853	1.363756212	0.385816014	3.534732003	0.000408189	0.021355867
Beta	ZNF462	86.57145086	0.928181213	0.262770935	3.532282644	0.000411989	0.021366397
Beta	LLPH	190.985054	0.463652969	0.131261941	3.532272679	0.000412004	0.021366397
Beta	PPRC1	22.43190346	0.948636649	0.268735983	3.529994902	0.000415568	0.021457084
Beta	AL592295.5	13.81447359	1.486547047	0.421647977	3.52556428	0.000422582	0.021724369
Beta	ZCCHC3	80.4402671	0.690907693	0.196278673	3.520034456	0.000431491	0.021900593
Beta	TMEM176A	224.3446539	1.585254066	0.450363967	3.519939832	0.000431645	0.021900593
Beta	SLC44A3	7.890746298	1.801253577	0.511764043	3.519695454	0.000432043	0.021900593
Beta	POLD3	56.4299655	0.973721478	0.276718706	3.518813359	0.000433482	0.021900593
Beta	HSPA2	35.33184858	0.971379715	0.276173488	3.517280825	0.000435992	0.021900593
Beta	SCO1	96.85055306	0.659194791	0.18745266	3.51659342	0.000437123	0.021900593
Beta	NSG1	126.0805933	-1.313398864	0.374278265	-3.509150781	0.00044954	0.022427682
Beta	PPT1	281.9276319	0.563454912	0.160779027	3.50452992	0.000457414	0.022724643
Beta	SSX2IP	133.8543118	1.013111505	0.289286849	3.502100104	0.000461606	0.022820302
Beta	SCN2A	23.37892218	1.406427779	0.401700864	3.501181861	0.0004632	0.022820302
Beta	IRF2	61.60866184	1.272019877	0.363610155	3.498306797	0.000468222	0.022945442
Beta	ANKRD37	68.74547001	-0.93599236	0.267616681	-3.497511278	0.000469621	0.022945442
Beta	LINC01116	28.94256725	2.113396618	0.605134177	3.492442994	0.000478624	0.023289083
Beta	TRMT13	29.85696649	1.097614055	0.314418441	3.490934092	0.000481335	0.02332502
Beta	PRKAB2	57.40337163	0.87278249	0.251071563	3.476229963	0.000508516	0.024475873
Beta	CA8	33.64680158	1.259667547	0.362546447	3.474499773	0.000511807	0.024475873
Beta	RPF1	159.5943815	0.612665217	0.176366129	3.473825852	0.000513094	0.024475873
Beta	LINC01315	60.93849107	-0.964616762	0.277692671	-3.473684624	0.000513364	0.024475873
Beta	RTN4	2270.098111	-0.431962584	0.124401282	-3.472332259	0.000515957	0.024500721
Beta	ZCCHC2	97.93971113	0.853820711	0.246309908	3.46644891	0.000527382	0.024923745
Beta	RUNX1T1	96.07363111	0.909389333	0.26240581	3.46558384	0.000529082	0.024923745
Beta	NAGA	28.3570723	0.976018287	0.281815294	3.463326182	0.000533541	0.025000337
Beta	CTC1	16.7240245	1.324483268	0.38257991	3.461978097	0.000536221	0.025000337
Beta	SCSGRF1	98.38405658	-1.056120124	0.305218065	-3.460214994	0.000539744	0.025000337
Beta	TRIM27	103.2895432	0.690608624	0.199614262	3.459715845	0.000540746	0.025000337
Beta	DDX60	6.80722557	1.819810053	0.526142325	3.458779055	0.00054263	0.025000337
Beta	MPHOSPH10	176.1393208	0.563049671	0.16283093	3.457879101	0.000544446	0.025000337
Beta	CREBBP	81.55804659	0.79343685	0.22949252	3.457353861	0.000545508	0.025000337
Beta	BNIP3	545.8689178	-0.497883843	0.144109287	-3.454904633	0.000550487	0.025078654
Beta	USP47	190.7125184	0.589624916	0.170686639	3.454429244	0.000551459	0.025078654
Beta	DCAF1	30.61520201	0.998579632	0.289308399	3.451609545	0.000557253	0.025232905
Beta	TMEM176B	262.0454877	1.615823985	0.468276287	3.450578284	0.000559387	0.025232905
Beta	STAU2	103.4761848	0.960889098	0.278629838	3.448622388	0.000563454	0.025232905
Beta	MPPE1	92.66276922	0.615034246	0.178415607	3.447199809	0.000566429	0.025232905
Beta	FCHO2	40.22678873	0.92587585	0.26865816	3.446297142	0.000568325	0.025232905
Beta	ABCC9	29.65758768	1.723022251	0.500217738	3.444544482	0.000572023	0.025232905
Beta	LINC00342	43.46625533	1.023728567	0.297321973	3.44316485	0.000574949	0.025232905
Beta	AC142472.1	35.2619372	1.149205548	0.33393353	3.441420053	0.000578669	0.025232905
Beta	ARRDC3	98.45203913	1.231695463	0.357923633	3.441224187	0.000579089	0.025232905
Beta	GCNT1	60.97323884	0.891825386	0.259230415	3.440280672	0.000581111	0.025232905
Beta	SP4	44.15766756	0.968547527	0.281623059	3.439162725	0.000583516	0.025232905
Beta	ZNF384	33.59835125	1.043276003	0.303374263	3.438907413	0.000584067	0.025232905
Beta	MLF1	310.9313927	-1.151805732	0.334938981	-3.438852442	0.000584186	0.025232905
Beta	PCDHB11	10.72271097	1.403304766	0.408139261	3.438298889	0.000585381	0.025232905
Beta	PRRG4	32.79062281	1.394317305	0.405606005	3.437615041	0.000586861	0.025232905
Beta	SCPEP1	133.1272896	0.711698413	0.207183228	3.435115962	0.0005923	0.02530404
Beta	TMEM14A	242.4842914	-0.791495662	0.230428288	-3.434889306	0.000592796	0.02530404
Beta	MUC13	42.64994338	2.155085195	0.627978577	3.431781392	0.000599631	0.025503717
Beta	PCDHB16	39.5446118	1.098056465	0.320279386	3.428433147	0.000607076	0.025727839
Beta	MITD1	89.16755978	0.741111499	0.216374591	3.425131831	0.000614501	0.025943191
Beta	MESP1	64.20329195	-1.066179788	0.311363432	-3.424229307	0.000616546	0.025943191
Beta	SYNC	64.81095734	1.275849859	0.372868224	3.421717855	0.000622269	0.026007906
Beta	NFKB1	65.80909602	0.764213528	0.223348177	3.421624202	0.000622483	0.026007906
Beta	RMST	9.287334813	1.571587428	0.459598403	3.419479739	0.00062741	0.026121466
Beta	GORAB	20.50240212	1.063487197	0.311252441	3.416799539	0.000633619	0.026200624
Beta	FBXO28	47.60916691	0.718213149	0.210203828	3.416746294	0.000633743	0.026200624
Beta	PTRHD1	158.3916539	-0.708309555	0.20752804	-3.413078803	0.000642334	0.026463251
Beta	LRRIC10B	305.2011287	-0.997318572	0.292583655	-3.408661263	0.000652825	0.026802088
Beta	TMEM154	8.788831933	1.810474171	0.531374407	3.407153498	0.000656442	0.026857336
Beta	LINC00839	34.01137668	-1.210879123	0.355691659	-3.404294399	0.000663352	0.026956055
Beta	RIIAD1	169.8372167	-1.074401035	0.315604057	-3.404268773	0.000663414	0.026956055
Beta	FBXL16	97.6315608	0.836824542	0.246231398	3.398528976	0.000677493	0.02735951
Beta	C1orf53	46.90319652	-1.261810398	0.371302454	-3.398335737	0.000677972	0.02735951
Beta	DUSP6	16.47356944	1.392981249	0.410055993	3.397051311	0.000681162	0.027394757

Beta	CNTNAP5	11.29025574	1.732156749	0.510369438	3.393927259	0.00068898	0.027615249
Beta	TMED6	357.4249678	-1.606013939	0.473527881	-3.391593199	0.000694875	0.02775745
Beta	ATP1A3	7.910458404	1.488705281	0.439583111	3.386629841	0.000707568	0.028014076
Beta	NGLY1	78.48649776	0.566462421	0.16727906	3.386331934	0.000708336	0.028014076
Beta	BSG	1088.866737	0.498192516	0.14715487	3.385497988	0.000710492	0.028014076
Beta	FILIP1L	62.45250988	1.657897536	0.489721547	3.385388178	0.000710777	0.028014076
Beta	NRP1	18.7169234	1.470515866	0.434772339	3.382266384	0.000718904	0.028197976
Beta	ZFHX3	234.9387263	0.933514491	0.276071693	3.381420536	0.000721121	0.028197976
Beta	CTNBNB1	91.38130986	0.716611743	0.211961461	3.380858671	0.000722597	0.028197976
Beta	KANK1	13.51437888	2.036167177	0.602789901	3.377905261	0.000730402	0.028377506
Beta	TRMT5	31.26691443	0.809404084	0.239659733	3.377305293	0.000731998	0.028377506
Beta	LRRCC1	17.26975351	1.211870636	0.358967873	3.375986342	0.000735516	0.028393925
Beta	CD24	413.2507674	-0.9540169	0.282642525	-3.37534806	0.000737224	0.028393925
Beta	AUXG01000058.1	128.4852911	1.401916273	0.415504393	3.374010709	0.000740815	0.028430153
Beta	CAPS	142.134959	-1.213792529	0.359843911	-3.37310843	0.000743247	0.028430153
Beta	VPS13D	60.44323838	0.842699835	0.249887267	3.372320024	0.000745378	0.028430153
Beta	VWDE	57.36954651	0.984766703	0.292238407	3.369737443	0.000752398	0.028605654
Beta	IST1	240.8588073	0.818086719	0.242860703	3.368542992	0.000755666	0.028620869
Beta	SPAN33	45.12654467	-1.394374633	0.414133781	-3.366966661	0.000759999	0.028620869
Beta	SERP2	132.614235	-0.827711511	0.24592628	-3.365689544	0.000763526	0.028620869
Beta	POC1B	14.33460693	1.082782226	0.321734418	3.365453509	0.000764179	0.028620869
Beta	AKR7A2	351.6005451	-1.30808057	0.388708934	-3.365192966	0.000764901	0.028620869
Beta	ENTPD6	60.14103279	0.701253649	0.208532289	3.362806078	0.000771545	0.028768241
Beta	CLDN3	316.9225096	-0.861906694	0.256435057	-3.361111017	0.000776296	0.028768241
Beta	NOL8	59.01047125	0.772432778	0.22985427	3.360532645	0.000777923	0.028768241
Beta	ZNF587	39.90767858	0.775350259	0.230772997	3.359796293	0.00078	0.028768241
Beta	ACO12291.3	9.198565459	1.520515364	0.452609727	3.359440314	0.000781005	0.028768241
Beta	PHIP	279.3036824	0.712424985	0.212220736	3.356999874	0.000787931	0.028923508
Beta	PTPMT1	183.9959057	-0.634420476	0.189027405	-3.35623544	0.000790113	0.028923508
Beta	ERAP1	17.32824563	1.295745252	0.386376374	3.353583031	0.000797725	0.029112029
Beta	GPATCH11	91.4297745	0.996425611	0.297317706	3.351383354	0.000804089	0.029253997
Beta	PCF11	142.8141469	0.652119623	0.194788109	3.347841028	0.000814437	0.029536477
Beta	GPI	308.7693265	0.604164259	0.180508043	3.347021263	0.000816849	0.029536477
Beta	CHAC1	15.93758154	1.804028391	0.53934761	3.344834313	0.000823317	0.029546683
Beta	COX14	931.0156369	-0.439383779	0.131364641	-3.344764434	0.000823525	0.029546683
Beta	CHD5	19.94557045	1.39091523	0.415894673	3.344392994	0.000824628	0.029546683
Beta	GNL3L	39.6479056	1.03059898	0.308261363	3.343263558	0.000827992	0.02955318
Beta	BBX	376.0978362	0.671483178	0.200883154	3.342655491	0.000829809	0.02955318
Beta	TACC2	48.16005803	0.929406329	0.278514255	3.337015301	0.000846833	0.030068924
Beta	RBBP7	227.9279255	0.505848842	0.151640964	3.335832405	0.000850444	0.030106742
Beta	CREB1	65.66005799	0.859431678	0.257718941	3.334763342	0.00085372	0.030125741
Beta	TNR	18.84377508	1.214417577	0.364252777	3.33399676	0.000856077	0.030125741
Beta	SLC30A1	91.78252268	-1.109664968	0.333178338	-3.330543558	0.000866766	0.030403543
Beta	PREB	77.13277527	-0.815764712	0.2449898	-3.329790513	0.000869113	0.030403543
Beta	UTP25	19.17871499	1.03089446	0.30984998	3.327076096	0.000877624	0.030610698
Beta	CDK17	30.94681132	0.883529637	0.265822752	3.323754756	0.000888143	0.030808312
Beta	AP2B1	465.0084682	0.992857287	0.298725677	3.323642273	0.000888501	0.030808312
Beta	NT5C2	73.34811096	0.681540588	0.20511481	3.322727345	0.00089142	0.030819152
Beta	UGT8	29.63064064	1.028902606	0.309786638	3.321326615	0.000895906	0.030825819
Beta	WDR3	24.6729122	0.993950091	0.299288808	3.321039966	0.000896827	0.030825819
Beta	EGFL7	138.0927941	-1.219906579	0.367652454	-3.318097204	0.000906329	0.031010188
Beta	SIM1	61.11148751	0.96442537	0.290783544	3.31664357	0.000911058	0.031010188
Beta	PBX3	112.7225254	0.677973389	0.204426752	3.316461198	0.000911652	0.031010188
Beta	DIRAS3	107.6772978	1.16845204	0.352506112	3.314700087	0.000917415	0.031010188
Beta	NAA15	80.75972772	0.652669464	0.196931259	3.314199411	0.000919059	0.031010188
Beta	SEC22A	31.36357212	0.863058612	0.260438915	3.31386195	0.000920169	0.031010188
Beta	PCSK2	781.4860935	0.63710087	0.192259993	3.313746455	0.000920549	0.031010188
Beta	ARID1A	127.512553	0.78773047	0.237859215	3.311750906	0.000927141	0.031111565
Beta	PATJ	100.7947788	0.625421569	0.188878119	3.311244173	0.000928821	0.031111565
Beta	PUM3	81.31022922	0.808099006	0.244218282	3.308921019	0.000936563	0.031191555
Beta	KCNB1	24.61207765	1.305297989	0.394598395	3.307915102	0.000939933	0.031191555
Beta	HOPX	818.3058724	-1.006572373	0.304520036	-3.305438901	0.000948278	0.031191555
Beta	PARD6A	184.9792135	-0.669479781	0.202562026	-3.305060644	0.000949559	0.031191555
Beta	JOSD2	131.5791669	-1.152000093	0.348568835	-3.304942891	0.000949958	0.031191555
Beta	PARP14	25.58467752	0.896173882	0.271255782	3.303796422	0.000953851	0.031191555
Beta	FAM200A	33.13563357	1.21858688	0.368844859	3.303792504	0.000953864	0.031191555
Beta	ESF1	185.6983784	0.564385544	0.170835675	3.303674974	0.000954264	0.031191555
Beta	BCDIN3D	44.05033043	0.721756509	0.218484147	3.303473131	0.000954951	0.031191555
Beta	ADM	238.6142296	1.083623281	0.328169889	3.302019224	0.000959915	0.031267311
Beta	ZNF608	109.256821	1.164957494	0.352978956	3.300359621	0.00096561	0.031366411
Beta	MTR	61.37427851	0.920160694	0.279275733	3.294810778	0.00098488	0.031904707
Beta	TAF2	53.42066576	0.770123279	0.233912287	3.292359239	0.000993506	0.032096221
Beta	RNF7	1072.775119	-0.43808342	0.133176758	-3.289488556	0.001003696	0.032337074

Beta	SHARPIN	117.3483236	-0.643782488	0.195774713	-3.28838427	0.001007642	0.032375976
Beta	CCDC125	21.24504743	1.246147253	0.379142727	3.286749726	0.001013509	0.032476223
Beta	TTYH3	9.607293053	1.233714521	0.375616851	3.284502594	0.001021626	0.03264784
Beta	ARHGEF12	197.3642268	0.754832342	0.229990583	3.282014117	0.001030684	0.032771185
Beta	CSTF3	83.37372519	0.715667903	0.218063786	3.281920011	0.001031028	0.032771185
Beta	ERCC6L2	73.41969493	0.74428782	0.226920164	3.279954531	0.001038238	0.032911872
Beta	MMP24	25.41615627	1.074238468	0.32779353	3.277180202	0.001048494	0.033081624
Beta	AC078909.2	16.55374998	1.511830409	0.461397846	3.27663083	0.001050536	0.033081624
Beta	SYT11	303.8026505	0.914959383	0.279271067	3.276241221	0.001051987	0.033081624
Beta	CCDC18-AS1	101.5719127	0.828377676	0.252986246	3.274398069	0.001058873	0.033091497
Beta	POLR1C	32.59579479	0.750402798	0.229192847	3.274110896	0.00105995	0.033091497
Beta	SERTAD3	51.51609702	0.792842003	0.242169619	3.273911926	0.001060697	0.033091497
Beta	FNDG9	16.06531908	1.920451648	0.587314253	3.269887692	0.001075902	0.033477537
Beta	AC104083.1	14.52771722	1.312386475	0.401465095	3.268992722	0.001079311	0.033495461
Beta	EOGT	26.50139842	0.946195543	0.289535082	3.267982371	0.001083171	0.033527265
Beta	STXBP5	97.35032335	0.685957434	0.209986653	3.266671595	0.001088198	0.033581282
Beta	APLP2	697.8568139	0.559772717	0.171391438	3.266048308	0.001090596	0.033581282
Beta	ZNF540	26.57976198	1.301471111	0.398576069	3.265301692	0.001093475	0.033582477
Beta	AMMECR1	26.83863565	0.716956234	0.219823663	3.261506174	0.00110822	0.03394107
Beta	C3orf62	16.00103628	1.097796773	0.336662457	3.260823264	0.001110893	0.03394107
Beta	HPCA	60.3854686	-1.011014074	0.310331202	-3.257855048	0.001122577	0.03400821
Beta	ZNF512	34.30958443	0.929369648	0.285277015	3.257779626	0.001122876	0.03400821
Beta	BCCIP	101.7757337	0.857858892	0.263334041	3.257683237	0.001123257	0.03400821
Beta	LNPEP	111.7894835	0.823777063	0.252898282	3.257345422	0.001124595	0.03400821
Beta	HSPB6	47.2089474	-1.104430325	0.339183775	-3.256141378	0.001129375	0.034065638
Beta	SEC61B	2773.211084	-0.68838283	0.211537349	-3.254190497	0.00113716	0.034154168
Beta	PUS7L	93.80473464	0.789678208	0.242682287	3.253958976	0.001138087	0.034154168
Beta	INO80D	72.80731341	0.891187787	0.274110344	3.251200863	0.001149186	0.034399948
Beta	CENPX	226.819734	-0.699788799	0.215367719	-3.249274321	0.001156998	0.03445768
Beta	MYO9B	25.04526299	0.854519596	0.263028808	3.248768079	0.001159059	0.03445768
Beta	IRF2BPL	183.3078648	0.788748085	0.242833733	3.248099333	0.001161787	0.03445768
Beta	PDLIM1	389.9385619	-0.6871712	0.211576722	-3.247858246	0.001162772	0.03445768
Beta	GRN	557.8623908	0.628785155	0.193691148	3.24632882	0.001169037	0.034509613
Beta	CASP7	16.68669877	1.314522123	0.405004447	3.245698002	0.001171631	0.034509613
Beta	SILC1	14.89712384	1.53834966	0.474115272	3.244674349	0.00117585	0.034509613
Beta	RIC1	26.45439464	0.906769407	0.27947119	3.244589922	0.001176199	0.034509613
Beta	SNHG29	4066.845861	-0.584977691	0.180373711	-3.243142745	0.00118219	0.034599531
Beta	PDLIM4	173.0149697	1.074970143	0.331590796	3.241857601	0.001187533	0.034670112
Beta	PES1	44.35174054	0.746802788	0.230490353	3.240060937	0.001195042	0.034803378
Beta	TNFSF10	27.53825507	1.143770729	0.353221481	3.238112037	0.001203235	0.034955912
Beta	MRPL30	64.72808471	0.799179838	0.246943235	3.236289666	0.001210944	0.035093641
Beta	CEP350	152.4368489	0.840528969	0.259852587	3.23463768	0.001217972	0.035211
Beta	TTC14	102.6193791	0.818796731	0.253321669	3.232241188	0.001228233	0.035421053
Beta	ATP6VOC	2266.009655	-0.346709333	0.107510609	-3.224884841	0.001260234	0.036255477
Beta	GNG7	83.6397278	-1.049408019	0.326046997	-3.218579003	0.001288275	0.036752298
Beta	LINC02035	24.19672934	1.245479295	0.386982831	3.218435538	0.001288919	0.036752298
Beta	SMC4	19.52714602	1.109883829	0.344857873	3.218380427	0.001289167	0.036752298
Beta	ETV6	26.63454074	1.115921444	0.346752278	3.218209411	0.001289936	0.036752298
Beta	VIM	83.81530924	2.286254441	0.710718101	3.216823149	0.001296185	0.036841558
Beta	CBR4	58.97577451	0.854088329	0.266123735	3.209365489	0.001330283	0.037720055
Beta	KCNC3	19.74212434	1.303059523	0.40616263	3.208221105	0.001335588	0.03777649
Beta	AP1S2	81.31941077	0.842004304	0.2625062	3.207559679	0.001338663	0.03777649
Beta	EIF4G3	221.5272033	0.661449791	0.206501599	3.203121885	0.001359464	0.038154129
Beta	MTFP1	39.83785778	-1.041391494	0.325295615	-3.201369601	0.00136776	0.038154129
Beta	RPP25	146.6664468	-0.790141291	0.246823514	-3.201239945	0.001368375	0.038154129
Beta	VMP1	286.4499141	0.995863571	0.311103556	3.20106778	0.001369193	0.038154129
Beta	RASA2	44.83360557	0.833274232	0.260322833	3.200926407	0.001369865	0.038154129
Beta	RBM41	37.13835103	0.832316926	0.26005008	3.200602458	0.001371406	0.038154129
Beta	KIAA2026	155.2682635	0.632905777	0.197944225	3.197394508	0.001386751	0.038490485
Beta	HHEX	30.0097094	1.931924884	0.604776433	3.194444723	0.001401001	0.038538112
Beta	ZNF346	58.50377378	0.782607489	0.244994282	3.194390839	0.001401263	0.038538112
Beta	DUSP1	835.4925926	-1.377330408	0.431194345	-3.194221873	0.001402083	0.038538112
Beta	VSTM2L	11.0527053	2.232248428	0.698944546	3.193741821	0.001404417	0.038538112
Beta	GXYLT1	57.73395693	0.870621344	0.272608384	3.193670468	0.001404764	0.038538112
Beta	CEP290	70.76885159	0.798292013	0.250129744	3.191511729	0.001415304	0.038737385
Beta	SRCAP	49.81615719	0.810682513	0.254234765	3.188716195	0.001429061	0.039023598
Beta	LRRCA8A	28.87208259	0.899282202	0.282186629	3.186834917	0.001438388	0.039151429
Beta	GABRB3	322.0668118	0.700911413	0.21996708	3.18643778	0.001440365	0.039151429
Beta	KCTD9	32.17349122	0.890972912	0.280151154	3.180329257	0.001471078	0.039812517
Beta	ZFP30	19.34168538	1.170817229	0.368151198	3.180261904	0.00147142	0.039812517
Beta	ZC3H14	213.8485686	0.640763945	0.201542641	3.179297158	0.001476327	0.039833267
Beta	PPP3CA	121.4330192	0.749967023	0.2359717	3.178207478	0.001481887	0.039833267
Beta	SACS	13.39815721	1.453789354	0.457611123	3.176910004	0.001488532	0.039833267

Beta	<i>SRSF7</i>	267.2213601	0.605887336	0.190719422	3.176851786	0.001488831	0.039833267
Beta	<i>TBL1XR1</i>	214.9653586	0.826921205	0.260299003	3.176812808	0.001489031	0.039833267
Beta	<i>CS</i>	86.73319986	0.652772634	0.205749129	3.172662929	0.001510478	0.040315778
Beta	<i>RNF214</i>	52.88653709	0.670409873	0.211438114	3.170714407	0.001520646	0.040456093
Beta	<i>RPL7L1</i>	401.7870338	0.36195578	0.114169192	3.170345476	0.001522578	0.040456093
Beta	<i>XIAP</i>	316.5016576	0.671841197	0.211964683	3.169590274	0.00152654	0.040470432
Beta	<i>GUCY1A1</i>	71.74546489	0.644476572	0.20350553	3.166874987	0.001540865	0.040744674
Beta	<i>NCOA6</i>	82.72095904	0.838765197	0.264901715	3.166326037	0.001543777	0.040744674
Beta	<i>HDAC7</i>	23.38768281	1.025123744	0.323956245	3.164389511	0.001554087	0.040925433
Beta	<i>ZNF84</i>	69.87692516	0.700372303	0.221615199	3.160308071	0.001576024	0.041410907
Beta	<i>MAGI3</i>	23.10440032	0.845938533	0.267748807	3.159448368	0.001580681	0.041441181
Beta	<i>FOXP2</i>	100.3652979	1.001553537	0.317103411	3.158444538	0.001586135	0.041492165
Beta	<i>CHD6</i>	131.4531485	0.527954014	0.167419979	3.153470792	0.001613414	0.042070199
Beta	<i>ZER1</i>	87.16689728	0.778558498	0.24700054	3.152051802	0.001621275	0.042070199
Beta	<i>SLC7A11</i>	21.03556793	1.735900039	0.550834522	3.151400226	0.001624897	0.042070199
Beta	<i>PIAS4</i>	63.69979944	0.760181501	0.24122453	3.151344106	0.001625209	0.042070199
Beta	<i>RAD50</i>	180.5956739	0.657765377	0.208735014	3.151198083	0.001626022	0.042070199
Beta	<i>ZNF830</i>	60.69263773	0.689249628	0.218814675	3.149924146	0.001633129	0.042161818
Beta	<i>EDIL3</i>	153.4190253	0.821372484	0.260921103	3.147972601	0.001644071	0.042351843
Beta	<i>RACK1</i>	5882.617694	-0.438719293	0.139455849	-3.145936835	0.001655558	0.042473058
Beta	<i>PISD</i>	50.48651774	0.680930433	0.216452486	3.145865614	0.001655961	0.042473058
Beta	<i>DCAF5</i>	115.6932816	0.569049348	0.180946263	3.144852728	0.001661705	0.042483829
Beta	<i>TEP1</i>	16.43118411	1.055617456	0.335700126	3.144525048	0.001663567	0.042483829
Beta	<i>E2F5</i>	27.96797864	0.862761041	0.274483373	3.143217863	0.001671014	0.042582051
Beta	<i>PGM2</i>	12.13209927	1.163817317	0.370401962	3.142038751	0.001677758	0.042594747
Beta	<i>ARHGAP5</i>	414.0679059	0.715634155	0.227773213	3.141871458	0.001678717	0.042594747
Beta	<i>MUC12</i>	117.1716332	-1.839693835	0.585828063	-3.140330673	0.001687572	0.04271095
Beta	<i>HDAC4-AS1</i>	43.22187651	1.253529377	0.39930936	3.139243662	0.001693845	0.04271095
Beta	<i>ELP3</i>	32.37471633	0.697814701	0.222291054	3.13919381	0.001694134	0.04271095
Beta	<i>RG52</i>	135.7037429	1.121399606	0.357391057	3.137738294	0.001702568	0.042832268
Beta	<i>GPM6B</i>	24.03166461	0.99661908	0.317965056	3.13436669	0.001722255	0.043222384
Beta	<i>SYNE2</i>	296.2823901	0.865048959	0.276035375	3.133833699	0.001725386	0.043222384
Beta	<i>ARID4B</i>	270.2872568	0.593075818	0.189293379	3.13310386	0.001729682	0.0432384
Beta	<i>LAMP2</i>	422.7586087	0.503269074	0.160764505	3.130473822	0.001745246	0.043535408
Beta	<i>NEGR1</i>	72.26680704	0.944314454	0.302013646	3.126727772	0.001767635	0.043914056
Beta	<i>STAG1</i>	91.98637429	0.76151677	0.243560654	3.126600116	0.001768403	0.043914056
Beta	<i>PBX1</i>	166.0969824	0.757488259	0.242312927	3.126074493	0.001771567	0.043914056
Beta	<i>TNRC6C</i>	70.61492999	1.099687899	0.351923708	3.124790613	0.001779317	0.04393861
Beta	<i>C9orf85</i>	55.54151944	0.645032513	0.206493329	3.123745037	0.001785651	0.04393861
Beta	<i>DPEP1</i>	7.561981199	1.881840189	0.6024387	3.12370402	0.0017859	0.04393861
Beta	<i>LRRTM3</i>	61.17815119	-0.974378265	0.311955432	-3.123453434	0.001787421	0.04393861
Beta	<i>AC051619.5</i>	42.22015282	1.215506237	0.389459326	3.121009454	0.001802322	0.0441615
Beta	<i>FHDC1</i>	16.89983647	1.211583718	0.388235751	3.120742266	0.001803958	0.0441615
Beta	<i>BAZ2A</i>	245.3769141	0.664305875	0.212922989	3.119934953	0.00180891	0.044191218
Beta	<i>SGMS2</i>	210.5728232	-0.763054447	0.244687438	-3.118486394	0.001817825	0.044239678
Beta	<i>PMVK</i>	455.8406326	-0.543209565	0.174195237	-3.11839506	0.001818389	0.044239678
Beta	<i>SMARCC2</i>	111.2019714	0.632240171	0.20279113	3.117691445	0.001822735	0.044239678
Beta	<i>ACIN1</i>	111.1188557	0.801603551	0.257156099	3.117186618	0.00182586	0.044239678
Beta	<i>PTK2B</i>	18.62823237	1.001019983	0.32125258	3.115990486	0.001833282	0.044328681
Beta	<i>VCPIP1</i>	59.45890692	0.696666942	0.223712489	3.114117344	0.001844961	0.044520038
Beta	<i>C17orf80</i>	30.57210881	0.98440435	0.316227313	3.112964343	0.001852184	0.04453636
Beta	<i>TXNL4A</i>	761.6069786	-0.484389275	0.155611719	-3.112807166	0.001853171	0.04453636
Beta	<i>AC048341.2</i>	8.687314368	1.479564778	0.475477219	3.111746931	0.001859839	0.044605946
Beta	<i>MSI2</i>	338.2277187	0.754945102	0.24271257	3.110449127	0.001868031	0.044703955
Beta	<i>CYB561D1</i>	42.18997887	0.903646245	0.290570537	3.109903206	0.001871487	0.044703955
Beta	<i>FBXW7</i>	155.8943381	0.622926302	0.200385455	3.108640305	0.001879504	0.044753746
Beta	<i>ZC3H8</i>	90.28467238	0.648350125	0.208581157	3.108383011	0.001881141	0.044753746
Beta	<i>HMGCB1</i>	1916.700067	0.475454709	0.153031679	3.106903819	0.001890579	0.04481672
Beta	<i>GLE1</i>	24.25702107	0.808993246	0.260396022	3.106780356	0.001891369	0.04481672
Beta	<i>LACC1</i>	24.79530447	1.115862307	0.359405406	3.104745474	0.001904428	0.04503592
Beta	<i>CTSO</i>	31.02332571	0.924143943	0.297787987	3.103362065	0.001913354	0.045119096
Beta	<i>CA11</i>	152.4308594	1.093366209	0.352355697	3.103018398	0.001915577	0.045119096
Beta	<i>UFL1</i>	270.4389146	0.607544361	0.195842947	3.102201896	0.001920869	0.045153788
Beta	<i>MBD6</i>	86.51055697	0.677897852	0.21862439	3.100742112	0.001930363	0.045286936
Beta	<i>SAMD9</i>	21.18201908	1.014740891	0.327342575	3.099935563	0.001935627	0.045320513
Beta	<i>DDC</i>	37.86585087	-1.169172807	0.377252735	-3.099176493	0.001940594	0.045346998
Beta	<i>RAB30-DT</i>	94.71648669	0.752313097	0.242831025	3.098092987	0.001947703	0.04536006
Beta	<i>TSC22D2</i>	76.7391221	0.75277547	0.242999658	3.097845804	0.001949328	0.04536006
Beta	<i>TRIM25</i>	25.6686991	0.916649864	0.295947502	3.097339419	0.001952662	0.04536006
Beta	<i>SEZ6</i>	36.29608996	1.073401364	0.346837316	3.094826635	0.00196928	0.045656398
Beta	<i>CYYR1</i>	83.65471347	-1.075276623	0.347728522	-3.092287673	0.001986203	0.045958631
Beta	<i>OFD1</i>	114.7800694	0.505446087	0.163566877	3.090149402	0.002000558	0.046049813
Beta	<i>PLK2</i>	113.3366763	1.09358421	0.35398743	3.089330629	0.002006081	0.046049813

Beta	INS	3186516.377	-1.635685242	0.529518995	-3.089002014	0.002008301	0.046049813
Beta	LUCAT1	45.02161994	1.843039487	0.59664748	3.088992327	0.002008366	0.046049813
Beta	TAF5L	29.76698382	0.758143653	0.245535485	3.087715217	0.002017017	0.046049813
Beta	KCNC4	12.00463633	1.577221681	0.510819974	3.087627267	0.002017614	0.046049813
Beta	HRK	158.4703468	-1.287729074	0.41714612	-3.086997603	0.002021892	0.046049813
Beta	NPNT	23.67385925	1.942624879	0.629310185	3.08691155	0.002022478	0.046049813
Beta	JAM3	77.4562269	0.64967609	0.210488732	3.086512438	0.002025195	0.046049813
Beta	MAGI1	72.06936743	0.84852593	0.275104027	3.084382078	0.002039755	0.046291857
Beta	SMG5	48.64694959	0.847310808	0.274841116	3.082911389	0.002049862	0.046432119
Beta	VWA5A	119.3375186	0.663050361	0.215391027	3.07835646	0.002081458	0.047057661
Beta	NSRP1	420.6491215	0.554341942	0.180116759	3.077681091	0.00208618	0.047074422
Beta	C1QBP	782.6269955	-0.560859	0.182327845	-3.076101726	0.002097263	0.047234353
Beta	NCOA5	40.39389207	0.850687146	0.276714441	3.074241965	0.002110382	0.047374298
Beta	NELFE	320.452524	0.500152968	0.162715683	3.073784654	0.002113619	0.047374298
Beta	CTCF	123.7714658	0.644544727	0.209708987	3.073519814	0.002115496	0.047374298
Beta	MAPK7	16.82472662	0.900742026	0.2933339	3.070705522	0.002135537	0.047481796
Beta	ESRRG	14.24529471	1.202927253	0.391754908	3.070611823	0.002136207	0.047481796
Beta	MT1E	1002.424635	-1.967238601	0.640908396	-3.069453626	0.002144507	0.047481796
Beta	BCOR	84.5836613	0.830663269	0.270649631	3.069146133	0.002146716	0.047481796
Beta	ZZEF1	114.3729378	0.73096668	0.238168439	3.069116475	0.002146929	0.047481796
Beta	GLRX	41.6526643	1.175480015	0.38301895	3.068986569	0.002147862	0.047481796
Beta	FAM174A	459.7357342	-0.594696294	0.193793325	-3.068714026	0.002149823	0.047481796
Beta	INHBA	204.8327382	1.71450434	0.558826871	3.068042055	0.002154663	0.047481796
Beta	GABPA	37.73150673	0.823586254	0.268461875	3.06779595	0.002156438	0.047481796
Beta	RNF111	56.60898976	0.860877712	0.280729324	3.066575657	0.00216526	0.047587425
Beta	C2orf49	97.4494348	0.901262327	0.293969782	3.065833238	0.002170643	0.047617232
Beta	OSTC	936.5300619	-0.586460012	0.191346854	-3.064905431	0.002177388	0.047658343
Beta	RIC8B	28.18440509	0.799177511	0.260807888	3.064238268	0.00218225	0.047658343
Beta	ZNF793	36.8188069	0.804833367	0.262711506	3.063563448	0.002187178	0.047658343
Beta	ESCO1	129.0573527	0.627562215	0.20486051	3.063363531	0.00218864	0.047658343
Beta	TUBD1	31.27983519	1.321078522	0.431423949	3.062135339	0.002197641	0.047766366
Beta	CDC37L1-DT	40.05146501	1.007053096	0.329168984	3.059380272	0.002217954	0.047987494
Beta	ACO05670.3	62.58766077	0.777005305	0.253981412	3.059299883	0.00221855	0.047987494
Beta	NUP62	69.37602868	0.620701738	0.202904388	3.059084849	0.002220143	0.047987494
Beta	CAMK2D	167.3093519	0.592273373	0.193645427	3.05854562	0.002224142	0.047987494
Beta	PPP3CB-AS1	12.04074453	0.925475741	0.302643236	3.057975959	0.002228375	0.047987494
Beta	RAI1	48.58371541	0.872545946	0.285382005	3.057466587	0.002232165	0.047987494
Beta	DENND4A	124.6695396	0.755780551	0.247425884	3.054573516	0.002253808	0.048329938
Beta	CEP162	27.42621884	0.83278413	0.272664383	3.054246102	0.002256269	0.048329938
Beta	NUFIP2	233.1846766	0.753651132	0.246853868	3.053025413	0.002265468	0.048344412
Beta	SRSF1	183.1676919	0.612685187	0.200699581	3.052747704	0.002267565	0.048344412
Beta	TMEM192	136.8856493	0.600297619	0.196673387	3.05225648	0.002271279	0.048344412
Beta	EDEM2	92.75278208	0.561836574	0.184102379	3.051761615	0.002275027	0.048344412
Beta	S100PBP	57.30647349	1.106572768	0.362638317	3.051450213	0.002277388	0.048344412
Beta	SETMAR	11.80264491	1.123370117	0.368256403	3.050510751	0.002284525	0.048370962
Beta	PSAP	1711.776524	0.469740324	0.154020104	3.049863702	0.002289452	0.048370962
Beta	KLHL35	33.13161448	-0.926585795	0.303831263	-3.049672331	0.002290912	0.048370962
Beta	ECEL1	30.42135874	2.016942729	0.661545806	3.048833066	0.002297321	0.048375956
Beta	GEMIN7	46.14972352	-0.724704167	0.237719352	-3.04857034	0.002299331	0.048375956
Beta	TRAF6	35.18584946	0.783125899	0.256997848	3.047208005	0.002309778	0.048509444
Beta	SEC31B	9.898719659	1.121698435	0.368210891	3.046347795	0.002316397	0.0485622
Beta	FAM229B	532.7656357	-0.730233851	0.239766238	-3.045607488	0.002322108	0.048595753
Beta	ZC3H4	27.49659948	1.070776117	0.351666243	3.044864662	0.00232785	0.048629863
Beta	GRAMD1B	15.23756584	1.258975645	0.413749713	3.042843553	0.002343541	0.048871311
Beta	RIPPLY2	66.73652985	0.94047206	0.309252428	3.041114558	0.002357041	0.049066297
Beta	IWS1	75.29824153	0.582551161	0.191617573	3.040176074	0.002364399	0.049132955
Beta	ZBTB38	216.2974931	0.64957766	0.213746671	3.039007144	0.002373592	0.049237465
Beta	PRPF40A	471.8525475	0.442088307	0.145601675	3.03628587	0.002395122	0.04954712
Beta	LINC00623	176.6384907	0.46719372	0.153894849	3.035798298	0.002398998	0.04954712
Beta	SECISBP2	132.6931264	0.600812983	0.197926534	3.03553532	0.002401091	0.04954712
Beta	ABCA1	73.1923053	1.519904576	0.501854688	3.028575032	0.002457101	0.050581061
Beta	ACO07566.1	32.52185135	1.103572953	0.364426079	3.028249119	0.002459752	0.050581061
Beta	METTL18	24.64405701	0.827658862	0.273444011	3.026794621	0.002471618	0.050664383
Beta	ULK1	114.0078646	1.010508194	0.333909005	3.026298121	0.002475681	0.050664383
Beta	FAM168A	31.36378942	0.91248489	0.301530405	3.026178708	0.002476659	0.050664383
Beta	TSPAN2	228.2190208	-0.683686734	0.226075427	-3.024153234	0.002493301	0.050916741
Beta	ALFTH	210.1325998	0.641855701	0.2123372	3.022813243	0.002504367	0.050966586
Beta	RALGAPA2	56.22442325	0.692506702	0.229107053	3.022633705	0.002505854	0.050966586
Beta	HSPH1	265.7453743	-1.515701822	0.501507187	-3.022293322	0.002508673	0.050966586
Beta	POLR2A	181.7548888	0.624113657	0.206546354	3.021663879	0.002513895	0.050985072
Beta	ZNF226	197.1310125	0.691890492	0.229070665	3.020423818	0.002524212	0.051106648
Beta	BRD2	335.9100821	0.571696915	0.189667505	3.014205917	0.002576529	0.052076709
Beta	ZNF773	28.72059552	0.836520638	0.277628469	3.013093867	0.002585989	0.05217873

Beta	FAU	7973.626071	-0.370862459	0.12312588	-3.012059358	0.002594819	0.05226769
Beta	VRK2	62.94336371	0.992055164	0.329423146	3.011491989	0.002599673	0.05227641
Beta	GRIN2A	30.13972048	1.199009062	0.398228715	3.010855363	0.002605129	0.052297193
Beta	ZNF507	72.08180713	0.699576986	0.232393742	3.010309058	0.00260982	0.052302559
Beta	SIPA1L1	101.5622843	0.782049947	0.259951668	3.008443661	0.002625895	0.052357851
Beta	EXTL3	42.74960379	0.989116379	0.328825929	3.008024284	0.002629521	0.052357851
Beta	C6orf47	85.21368371	-0.566716169	0.188419318	-3.007739197	0.002631989	0.052357851
Beta	DFFA	72.92671556	0.634775211	0.211060845	3.007546058	0.002633662	0.052357851
Beta	GNB5	91.62158793	0.468431814	0.155803179	3.006561347	0.002642207	0.052357851
Beta	TAF9	549.3273096	-0.655425067	0.218015151	-3.00632806	0.002644235	0.052357851
Beta	TDRD9	123.6577097	-1.679000451	0.558490311	-3.006319746	0.002644308	0.052357851
Beta	CLK2	20.3971831	0.841805152	0.280068698	3.00570952	0.00264962	0.052357851
Beta	POP7	364.2655916	-0.458317458	0.152499652	-3.005367236	0.002652604	0.052357851
Beta	THAP6	52.97842069	0.824389997	0.274350424	3.004879616	0.00265686	0.052357851
Beta	ADAM15	34.62444865	0.829596938	0.276251496	3.003049577	0.002672889	0.052570576
Beta	IGSF1	52.64856541	0.829791031	0.276354428	3.002633379	0.002676547	0.052570576
Beta	FBXO38	36.82630327	0.835663469	0.278611366	2.999387572	0.002705229	0.053027412
Beta	TUBA1A	3231.597356	-0.949246186	0.316522114	-2.998988521	0.002708775	0.053027412
Beta	KIAA1324L	21.36520197	1.001379374	0.333962503	2.998478466	0.002713313	0.053028457
Beta	ASB4	12.68411745	1.252223435	0.417748811	2.997551164	0.002721582	0.053079643
Beta	BAZ2B	273.5370386	0.687749493	0.229465639	2.997178554	0.002724911	0.053079643
Beta	TTBK2	91.78211639	0.874805725	0.29193152	2.996612784	0.002729972	0.053090778
Beta	DVL3	110.701811	0.614157625	0.205096457	2.994481889	0.002749114	0.05337524
Beta	ZNF621	39.95050215	0.763523406	0.255079209	2.993279656	0.002759967	0.053498119
Beta	ZBTB49	8.053014611	1.033605818	0.345397775	2.992508615	0.002766949	0.053545663
Beta	NBDY	625.6938157	-0.582478129	0.194838907	-2.989537037	0.002794006	0.053980921
Beta	KCNJ6	175.6681508	0.835902827	0.279807351	2.987422684	0.002813404	0.05413742
Beta	ITGAV	153.7960332	0.622228202	0.208286938	2.987360648	0.002813975	0.05413742
Beta	MTHFR	72.1082817	0.825055818	0.276200933	2.987157973	0.002815842	0.05413742
Beta	PLPBP	124.0211027	0.517386171	0.173252722	2.986309042	0.002823671	0.05419982
Beta	SASH1	16.37352742	1.35338523	0.453351887	2.985286414	0.002833129	0.054293223
Beta	PUDP	7.714809217	1.291919098	0.432973784	2.983827532	0.002846672	0.054464478
Beta	MCUB	250.027889	-0.538126527	0.180420731	-2.982620257	0.002857923	0.054591417
Beta	UBA6-AS1	27.11478896	0.826576799	0.277208956	2.98178245	0.002865756	0.054652733
Beta	CYB5A	392.7297656	-0.722548688	0.242386632	-2.980975812	0.002873315	0.054708655
Beta	KBTBD2	70.38814414	0.788441493	0.264665507	2.979011141	0.002891803	0.054824092
Beta	MARF1	74.08985359	0.891595677	0.299302245	2.978914095	0.002892719	0.054824092
Beta	POCS	33.20392368	0.683126883	0.229325413	2.978853828	0.002893288	0.054824092
Beta	ZNF431	102.1221595	0.63569052	0.213513046	2.97729123	0.002908076	0.054998738
Beta	QKI	57.53536438	0.590252279	0.19827762	2.976898141	0.002911807	0.054998738
Beta	BAZ1A	66.61287865	0.964968536	0.324216623	2.976308024	0.002917417	0.055016803
Beta	GAB2	55.0892919	0.875795416	0.294398223	2.974866517	0.002931161	0.055187967
Beta	PHC1	42.22873122	0.601842794	0.202411136	2.973368003	0.002945511	0.055337101
Beta	TCF4	192.9058977	0.800427114	0.269226444	2.973062758	0.002948442	0.055337101
Beta	PRKACB	181.2849443	0.759394675	0.255480551	2.97241677	0.002954653	0.055365797
Beta	KCNJ3	16.20119289	1.79164597	0.603064361	2.970903418	0.002969251	0.055510763
Beta	ARL14EP	170.2670902	0.505604581	0.170213579	2.970412731	0.002973999	0.055510763
Beta	RAB8B	43.12447091	1.009536111	0.339931232	2.969824533	0.002979699	0.055510763
Beta	MCRIP2	343.4967487	-0.524357641	0.176587964	-2.969384949	0.002983965	0.055510763
Beta	SMIM6	241.1652421	-1.037700934	0.349511058	-2.969007449	0.002987634	0.055510763
Beta	SLC48A1	41.24113091	0.767726051	0.258644039	2.96827274	0.002994785	0.055510763
Beta	AK9	43.19820965	0.688231791	0.231908205	2.967690555	0.003000462	0.055510763
Beta	TSHZ2	134.524303	0.873360186	0.29431466	2.967436917	0.003002939	0.055510763
Beta	STAMBP	91.56794323	0.669791023	0.225726911	2.967262603	0.003004642	0.055510763
Beta	NAV1	97.19417782	0.779241968	0.262747255	2.965747324	0.003019485	0.05563589
Beta	PIK3CA	60.59401269	0.735783616	0.248124496	2.965380801	0.003023085	0.05563589
Beta	PHLPP2	46.62482739	0.7933617	0.267563704	2.965131992	0.003025531	0.05563589
Beta	C19orf18	13.07069004	1.171175545	0.395182615	2.963631248	0.003040324	0.0558211
Beta	GALNT10	40.81639379	1.247200941	0.421043912	2.962163579	0.003054854	0.056000928
Beta	PET100	716.2588027	0.595772116	0.201201584	2.961070696	0.003065716	0.05603362
Beta	TIFA	37.51727601	-0.865646936	0.292370911	-2.960783385	0.003068577	0.05603362
Beta	HMBOX1	37.37307139	0.803716092	0.271516838	2.960096687	0.003075425	0.05603362
Beta	TRNP1	106.2761058	-0.814044397	0.275007585	-2.9600798	0.003075594	0.05603362
Beta	TIAP1	30.87159603	0.956802694	0.323297156	2.959514723	0.00308124	0.056050122
Beta	SPATA5L1	11.69405869	0.919347432	0.310842174	2.95760199	0.003100422	0.056288374
Beta	NPAS3	27.37170912	0.944645083	0.319451574	2.957083829	0.003105637	0.056288374
Beta	PLAG1	46.43352453	0.900734972	0.304632934	2.956787894	0.003108619	0.056288374
Beta	ZNF740	19.82554009	0.979488581	0.331366348	2.955908426	0.003117496	0.056362809
Beta	RNF43	30.85776963	0.889644904	0.301101655	2.954633055	0.003130411	0.056415019
Beta	ZCCHC10	136.1582144	0.594214743	0.201152185	2.954055619	0.003136275	0.056415019
Beta	ZNF618	33.61004072	0.968348131	0.327815142	2.953945703	0.003137392	0.056415019
Beta	TJP2	26.7401623	1.512379551	0.512021643	2.953741452	0.003139469	0.056415019
Beta	PAX6	618.8422731	0.714336243	0.241973601	2.952124698	0.003155955	0.056625199

Beta	CHD4	263.1989634	0.720125557	0.244262138	2.948166931	0.003196644	0.057198254
Beta	FAM214A	130.4229491	0.761362126	0.258257155	2.948077574	0.003197568	0.057198254
Beta	ABCB10	18.83960457	1.098871508	0.372876046	2.947015553	0.003208571	0.057308368
Beta	AAMP	152.5615878	0.559268472	0.189856039	2.945750233	0.003221724	0.057456514
Beta	ZC3H10	19.94971513	0.974594048	0.3309013	2.945271136	0.003226718	0.0574589
Beta	CDON	18.30325387	0.962913477	0.326989023	2.944788385	0.003231756	0.057462082
Beta	ACO15871.1	36.93954764	-1.14667659	0.389628805	-2.942997476	0.003250511	0.057708766
Beta	IGSF10	14.41636629	1.475647596	0.50152239	2.942336426	0.003257458	0.057745407
Beta	PROX1	108.814997	0.680222723	0.231269646	2.941253794	0.003268866	0.057860883
Beta	SCAI	45.35960418	0.741403453	0.252202122	2.939719326	0.003285097	0.057868119
Beta	ARSA	102.5024135	0.688376215	0.234180411	2.939512367	0.003287292	0.057868119
Beta	KLF3	115.0948978	0.708490804	0.241025702	2.939482378	0.00328761	0.057868119
Beta	WDR82	165.8992514	0.562910161	0.191514918	2.939249675	0.003290079	0.057868119
Beta	HTATSF1	219.4360468	0.617543944	0.21013091	2.938853417	0.003294288	0.057868119
Beta	TMEM130	22.77952299	1.156313804	0.393512244	2.938444284	0.003298639	0.057868119
Beta	PRIMPOL	30.38025161	0.762160913	0.259490705	2.937141475	0.003312529	0.058025702
Beta	PHF23	30.97097155	0.969161947	0.330091925	2.936036524	0.003324352	0.05808645
Beta	STX17	120.2108205	0.706450889	0.240676529	2.935271218	0.003332563	0.05808645
Beta	QTRT2	35.60431215	0.687476546	0.234217646	2.935203887	0.003333286	0.05808645
Beta	SMCR5	27.11579533	1.508479982	0.513965299	2.934984103	0.003335648	0.05808645
Beta	LMCD1	68.44480567	0.926544417	0.315788673	2.934064765	0.003345544	0.058173105
Beta	WDFY3	76.65287045	0.667266599	0.227605628	2.931678814	0.003371352	0.058466695
Beta	NUP107	43.93156855	0.808140052	0.275849276	2.929643551	0.00339351	0.058466695
Beta	STAT4	11.20612197	1.132769564	0.386711256	2.929238668	0.003397934	0.058466695
Beta	JADE2	47.06896076	0.819916961	0.27995551	2.928740213	0.003403387	0.058466695
Beta	MASTL	25.44909361	0.857323849	0.292751552	2.928503172	0.003405984	0.058466695
Beta	CCND3	199.6244519	-0.666462685	0.227612604	-2.928057032	0.003410875	0.058466695
Beta	PHACTR4	157.4344643	0.845320058	0.288716477	2.92785527	0.003413089	0.058466695
Beta	FND3B	140.5740771	0.721530305	0.246449055	2.927705712	0.003414731	0.058466695
Beta	KANSL3	26.75139287	0.787130035	0.268892848	2.927300001	0.003419189	0.058466695
Beta	BRD3	124.8601441	0.709192638	0.24231207	2.92677388	0.003424978	0.058466695
Beta	ACSL4	48.63772316	0.736499867	0.251642499	2.9267706	0.003425014	0.058466695
Beta	DHCR24	37.31567561	1.507823252	0.515229449	2.926508288	0.003427904	0.058466695
Beta	CCDC93	67.95800522	0.689990869	0.235776308	2.926463964	0.003428392	0.058466695
Beta	PFDN5	4778.918892	-0.39725509	0.135759491	-2.926168078	0.003431655	0.058466695
Beta	DPH6	75.43802312	0.711788671	0.243347643	2.924986914	0.003444707	0.058525148
Beta	CBLN4	12.5000201	1.837920558	0.628357114	2.924961804	0.003444985	0.058525148
Beta	CLU	2378.211256	1.085995925	0.371380816	2.924211154	0.003453304	0.058539771
Beta	WSB1	407.6086074	0.725000374	0.24796201	2.923836493	0.003457463	0.058539771
Beta	NDST2	44.71463344	0.685156792	0.234358872	2.923536822	0.003460793	0.058539771
Beta	UTRN	40.50589051	0.856413826	0.293003502	2.922879143	0.003468111	0.058539771
Beta	SLC41A1	42.41554453	0.761112669	0.260418176	2.922655709	0.0034706	0.058539771
Beta	SDC4	49.32641103	1.24638552	0.426751283	2.920636841	0.003493168	0.058640031
Beta	STARD13	15.46642169	1.121299288	0.383959562	2.920357768	0.003496298	0.058640031
Beta	GALNT7	24.59062577	0.794431589	0.272049936	2.920168259	0.003498424	0.058640031
Beta	GTF2H2	71.86867816	0.817964173	0.280149673	2.919739879	0.003503237	0.058640031
Beta	GBA	103.2359875	0.670859143	0.22978182	2.919548389	0.00350539	0.058640031
Beta	BCL6	46.13805428	1.165386884	0.399226724	2.919110406	0.003510319	0.058640031
Beta	MBD4	129.5211177	0.463428941	0.158761455	2.919026804	0.00351126	0.058640031
Beta	RPS3A	13252.99442	-0.418881942	0.143533386	-2.918358964	0.00351879	0.058682898
Beta	TEN1	103.2483364	-0.556131123	0.1905947	-2.917872973	0.003524279	0.058691653
Beta	TMEM125	60.59132464	-1.163037015	0.398951027	-2.915237553	0.003554179	0.059106346
Beta	KLHDC3	140.4852639	0.495428008	0.169988044	2.914487369	0.003562732	0.059146877
Beta	CCDC88A	85.84786833	0.737901015	0.253213393	2.914146865	0.003566621	0.059146877
Beta	CLIP3	75.01944892	0.668073943	0.229306884	2.91344913	0.003574601	0.059196189
Beta	ZNF573	17.04404514	1.108897302	0.38077796	2.912188776	0.003589057	0.059243334
Beta	SETBP1	86.20294933	0.752681089	0.258534422	2.911338013	0.003598845	0.059243334
Beta	RBMX	685.195464	0.819864501	0.281619804	2.911245902	0.003599906	0.059243334
Beta	ASF1A	41.56089867	0.794681889	0.272985824	2.911073834	0.003601889	0.059243334
Beta	CAVIN3	38.38859731	-1.313491259	0.451239434	-2.91085211	0.003604446	0.059243334
Beta	ASCL1	53.21331199	2.007036064	0.68956412	2.910586568	0.00360751	0.059243334
Beta	MFS11	102.1116127	0.438631612	0.150780639	2.909071178	0.003625043	0.059448697
Beta	DHX15	138.9384253	0.61498243	0.211480118	2.907991707	0.00363758	0.059452073
Beta	NOMO1	33.91957354	1.17726437	0.404851874	2.907889147	0.003638773	0.059452073
Beta	NCBP1	29.27679289	0.958185599	0.329527616	2.907755075	0.003640333	0.059452073
Beta	ZNF37A	171.5466899	0.653264891	0.224755793	2.906554191	0.003654336	0.059472323
Beta	PLXNA2	63.49452635	0.872535301	0.300204898	2.906465905	0.003655367	0.059472323
Beta	PARP8	74.93753499	0.653121944	0.224753976	2.905941672	0.003661497	0.059472323
Beta	GMEB1	45.01432589	0.653122755	0.224755547	2.905924971	0.003661692	0.059472323
Beta	PHF21A	71.93442693	0.809844691	0.278757424	2.905195056	0.003670243	0.059520064
Beta	EML6	37.99513898	0.817599004	0.281463342	2.90481524	0.003674699	0.059520064
Beta	ZNF383	32.33234348	0.792898289	0.273026101	2.904111676	0.003682968	0.05957238
Beta	ZNF264	91.2936962	0.637478831	0.219661457	2.902096891	0.003706739	0.059827537

Beta	<i>AIMP1</i>	437.0074896	0.382441132	0.131808373	2.901493465	0.003713885	0.059827537
Beta	<i>CARM1</i>	47.29058187	0.774525199	0.266940468	2.901490374	0.003713922	0.059827537
Beta	<i>SURF2</i>	690.5268904	-0.537446438	0.18528114	-2.900707748	0.003723209	0.059863886
Beta	<i>ACO07029.1</i>	9.229409497	1.51733481	0.52314075	2.900433222	0.003726472	0.059863886
Beta	<i>HEBP1</i>	154.4747181	-0.535809504	0.184760509	-2.900021804	0.003731367	0.059863886
Beta	<i>TMEM140</i>	9.863078884	1.542359558	0.532183478	2.898172572	0.00375344	0.060136415
Beta	<i>KIAA0319</i>	31.03530532	0.831749512	0.287098233	2.897090323	0.003766413	0.060262608
Beta	<i>AHDC1</i>	114.3891769	0.850719992	0.293699147	2.896569505	0.003772671	0.060281158
Beta	<i>ITPR3</i>	101.2707744	0.759423978	0.262227202	2.896053392	0.003778881	0.060298906
Beta	<i>QSER1</i>	42.08342783	0.843596543	0.291388281	2.895094268	0.003790447	0.060401945
Beta	<i>ZNF721</i>	200.135131	0.554906548	0.191971865	2.890561846	0.003845539	0.061182635
Beta	<i>EMC10</i>	953.3137965	0.427123986	0.147782783	2.890214788	0.003849787	0.061182635
Beta	<i>MAST4-AS1</i>	12.74346013	1.142742274	0.395461837	2.889639825	0.003856834	0.061212363
Beta	<i>ZNF638</i>	205.2725669	0.753343913	0.260813666	2.888437263	0.003871613	0.061236648
Beta	<i>GRWD1</i>	33.68003137	0.782608101	0.270952619	2.888357766	0.003872591	0.061236648
Beta	<i>CASP8AP2</i>	58.40988387	0.907045983	0.31404676	2.88825136	0.003873902	0.061236648
Beta	<i>FOXP4</i>	182.9973988	0.673875077	0.233445924	2.886643149	0.003893756	0.061423484
Beta	<i>NPY</i>	1865.216892	2.163880494	0.749667698	2.886452889	0.003896111	0.061423484
Beta	<i>LV6E</i>	107.7217863	1.01063113	0.350249502	2.885460578	0.003908414	0.061535404
Beta	<i>DLGAP1-AS1</i>	24.28193236	1.459286936	0.506031785	2.883785127	0.003929268	0.061781463
Beta	<i>SSTR5-AS1</i>	62.0093467	1.232634308	0.427662397	2.882260204	0.003948335	0.061890229
Beta	<i>FUCA1</i>	151.8243447	0.715142226	0.248235646	2.880900611	0.003965407	0.061890229
Beta	<i>STMN3</i>	119.3865841	0.591503346	0.205357104	2.880364667	0.003972154	0.061890229
Beta	<i>ZF23</i>	30.01461004	0.76269377	0.264815523	2.880094648	0.003975558	0.061890229
Beta	<i>SELENON</i>	98.53425588	0.746351958	0.259225608	2.879159835	0.003987362	0.061890229
Beta	<i>ZB2217.1</i>	12.77811327	1.679926008	0.583483501	2.879131982	0.003987714	0.061890229
Beta	<i>SEPSECS</i>	17.59871411	0.892149668	0.309904127	2.878792475	0.003992009	0.061890229
Beta	<i>LMNA</i>	670.7780167	-0.666072871	0.231375845	-2.878748516	0.003992566	0.061890229
Beta	<i>UBTF</i>	91.31763945	0.802134393	0.2786471	2.878674833	0.003993499	0.061890229
Beta	<i>ATP1B3</i>	177.2324067	-0.590251231	0.205058011	-2.878459754	0.003996223	0.061890229
Beta	<i>CNIH2</i>	1124.969107	-0.997065058	0.346459316	-2.877870536	0.004003694	0.061890229
Beta	<i>NPAS2</i>	32.54989269	0.811121778	0.28184793	2.87787027	0.004003697	0.061890229
Beta	<i>KLF10</i>	232.0191805	0.780313101	0.271146515	2.877828247	0.004004231	0.061890229
Beta	<i>PATL1</i>	52.17355318	0.790285963	0.274656761	2.877358485	0.004010197	0.061901532
Beta	<i>NCBP2</i>	183.1484351	0.564590151	0.196332215	2.875687776	0.004031483	0.062086804
Beta	<i>BLZF1</i>	39.357901	0.677824993	0.23571665	2.875592334	0.004032702	0.062086804
Beta	<i>DGCR2</i>	90.01784096	0.724677046	0.252259945	2.872739254	0.004069298	0.062500855
Beta	<i>PIGK</i>	111.4838923	0.541149551	0.188396693	2.8723941	0.004073746	0.062500855
Beta	<i>TOB2</i>	54.62118106	0.632558317	0.220230043	2.872261692	0.004075453	0.062500855
Beta	<i>PRELID1</i>	965.495049	-0.50899488	0.177393925	-2.869291488	0.004113925	0.062910981
Beta	<i>CDK7</i>	45.19728053	0.63476808	0.221255055	2.868942722	0.004118464	0.062910981
Beta	<i>FZD3</i>	93.86353873	0.732472631	0.25531994	2.868842249	0.004119772	0.062910981
Beta	<i>ERAP2</i>	9.741519941	1.325719958	0.462155569	2.868557794	0.004123479	0.062910981
Beta	<i>RXR8</i>	56.81447149	0.563026258	0.196433296	2.866246547	0.004153706	0.063233783
Beta	<i>STK39</i>	34.3018949	0.910931274	0.317827039	2.866122641	0.004155332	0.063233783
Beta	<i>SNK766</i>	98.05840349	0.561485988	0.195971504	2.865140983	0.004168236	0.063348618
Beta	<i>SORT1</i>	183.9140493	0.647897213	0.226182294	2.864491302	0.004176796	0.063397226
Beta	<i>FTX</i>	149.46187	0.913915129	0.319166563	2.863442591	0.004190647	0.063525918
Beta	<i>VPS45</i>	35.30973329	0.585315283	0.204454464	2.862814879	0.004198958	0.063570398
Beta	<i>NUDC</i>	1031.770788	-0.555922671	0.194279038	-2.861465014	0.00421688	0.063760095
Beta	<i>ZCCHC4</i>	11.44833207	1.041410024	0.364261494	2.858962696	0.004250288	0.064038952
Beta	<i>EIF2AK2</i>	302.8989182	0.501029533	0.175250783	2.858928922	0.00425074	0.064038952
Beta	<i>TMEM8A</i>	77.06800925	0.719116893	0.251539129	2.858866911	0.004251571	0.064038952
Beta	<i>KIAA0586</i>	51.01967263	0.854478398	0.298944702	2.858315905	0.004258962	0.064068653
Beta	<i>STAG2</i>	264.6616567	0.732349285	0.256462413	2.855581359	0.004295811	0.064540883
Beta	<i>ELL2</i>	349.2579566	0.670468695	0.234876668	2.854556393	0.004309698	0.064642254
Beta	<i>FGD6</i>	22.38154117	1.108412957	0.388334078	2.85427682	0.004313493	0.064642254
Beta	<i>HERPUD1</i>	1491.942375	-0.769716639	0.269719853	-2.853763382	0.00432047	0.064657533
Beta	<i>PEBP1</i>	4286.332344	-0.444436896	0.155757096	-2.853397421	0.004325449	0.064657533
Beta	<i>DPY19L3</i>	22.36776626	0.80452127	0.28222082	2.850680086	0.004362584	0.065130292
Beta	<i>UTP14A</i>	19.77157479	0.767649767	0.269342945	2.850083069	0.004370781	0.065147959
Beta	<i>SEPTIN8</i>	43.84124537	0.651346526	0.228559345	2.84979171	0.004374787	0.065147959
Beta	<i>GINM1</i>	409.6176995	0.496849819	0.174415103	2.848662826	0.004390338	0.065297306
Beta	<i>EP300</i>	180.9041541	0.666889334	0.234149843	2.848130604	0.004397687	0.065324441
Beta	<i>KNOP1</i>	70.12391969	0.834943529	0.293205649	2.847637935	0.0044045	0.065343552
Beta	<i>PKF8B4</i>	13.77858198	0.943900906	0.331588596	2.846602437	0.004418851	0.065371646
Beta	<i>KCTD8</i>	24.924337	1.029353254	0.361634187	2.846393652	0.00442175	0.065371646
Beta	<i>ACO73508.3</i>	15.53679607	0.802461307	0.281930886	2.846305059	0.00442298	0.065371646
Beta	<i>NUBP1</i>	52.00221808	0.771500334	0.271295171	2.843767292	0.00445836	0.065730342
Beta	<i>TMEM150A</i>	26.38350088	0.873981728	0.307368562	2.843432405	0.004463048	0.065730342
Beta	<i>ITFG2</i>	41.89459863	0.590473134	0.207671817	2.84329931	0.004464912	0.065730342
Beta	<i>AL353719.1</i>	5.028301717	1.338865709	0.470938591	2.842973019	0.004469485	0.065730342
Beta	<i>DOP1A</i>	50.28762316	0.881979167	0.310331587	2.842054127	0.004482388	0.065822971

Beta	IFIH1	16.43008647	0.842281889	0.296397358	2.841732111	0.004486918	0.065822971
Beta	USP40	52.2753063	0.716654474	0.252295702	2.840533815	0.00450381	0.065922568
Beta	TUBG2	47.93180119	0.638229699	0.224692403	2.840459624	0.004504858	0.065922568
Beta	SRF	50.17322815	0.814270719	0.286776589	2.839390489	0.004519981	0.066005301
Beta	STAT5A	13.79183452	0.964810723	0.339809328	2.83927086	0.004521676	0.066005301
Beta	ERIC5	79.90937981	-0.682994772	0.240707493	-2.83744707	0.004547589	0.066301711
Beta	CMTM4	144.0960216	0.633952055	0.223489959	2.83660196	0.004559642	0.06636703
Beta	CDKN2C	77.75190196	0.763252304	0.269120929	2.836094191	0.004566898	0.06636703
Beta	ZNF776	43.90749654	0.737404562	0.260019962	2.835953656	0.004568908	0.06636703
Beta	SCMH1	49.80352066	0.562458275	0.198472786	2.833931471	0.004597919	0.066641978
Beta	AL161457.2	10.26506043	1.135056067	0.400535148	2.833848843	0.004599108	0.066641978
Beta	TCF20	44.41604835	0.904907683	0.319388846	2.833247604	0.004607768	0.066685738
Beta	TPR	294.3440226	0.539357519	0.190400918	2.832746412	0.004614998	0.066708726
Beta	KIAA0040	23.4609942	1.160375804	0.409777886	2.831718947	0.004629852	0.066841728
Beta	ZNF709	22.32226114	0.936273632	0.330732684	2.830907489	0.004641614	0.066929816
Beta	USP53	64.25514448	0.902728915	0.318960022	2.830225898	0.004651515	0.06699088
Beta	SERPINA1	452.1542688	1.948824293	0.688984133	2.828547424	0.004675977	0.067183416
Beta	TRIM38	36.98491913	0.913751091	0.323061983	2.828407983	0.004678015	0.067183416
Beta	RPS6	13061.43619	-0.362897975	0.128316826	-2.828140212	0.00468193	0.067183416
Beta	NDUFB10	969.6693107	-0.404214695	0.142977567	-2.827119686	0.004696877	0.067298003
Beta	ACO10168.2	43.95112215	0.831417346	0.294128073	2.826718771	0.004702761	0.067298003
Beta	NFRKB	28.28149414	0.727781298	0.257491276	2.826430895	0.00470699	0.067298003
Beta	MEGF9	98.17996163	0.701256962	0.24817876	2.825612323	0.004719034	0.067323949
Beta	RRAGA	278.9922292	-0.53650332	0.18990182	-2.825161555	0.004725678	0.067323949
Beta	TESC	98.84822554	-1.052881716	0.372682039	-2.82514746	0.004725886	0.067323949
Beta	ACVR2A	20.62575725	0.905802741	0.320962735	2.82214302	0.00477039	0.06787616
Beta	ZFYVE16	69.77154165	0.736025827	0.260970976	2.820335952	0.00479734	0.067971608
Beta	AKT2	73.80624298	0.698913455	0.247814143	2.820313023	0.004797682	0.067971608
Beta	UBLCP1	140.234989	0.563652363	0.199855692	2.820296773	0.004797925	0.067971608
Beta	MMAA	14.23714107	1.013908634	0.359548205	2.81995187	0.004803085	0.067971608
Beta	NUP50	72.70444365	0.605373665	0.21468919	2.819767806	0.004805841	0.067971608
Beta	CD47	234.5526599	0.560315041	0.198865407	2.817559126	0.00483902	0.068289177
Beta	EMSY	48.01830866	0.767725701	0.272484296	2.817504393	0.004839845	0.068289177
Beta	CCDC137	62.02894114	0.664571862	0.235928083	2.816840853	0.004849855	0.068348852
Beta	JAGN1	191.4713165	-0.420882978	0.149443073	-2.816343164	0.004857375	0.068373339
Beta	WDFY1	87.99995279	0.712252392	0.25311008	2.814002471	0.004892885	0.068729179
Beta	NME2	2723.932963	-0.453125907	0.161054792	-2.813489123	0.004900704	0.068729179
Beta	GADD45GIP1	730.1741576	-0.586788117	0.208588399	-2.813138794	0.004906047	0.068729179
Beta	PLSCR1	116.3270524	0.772713159	0.274707791	2.812854907	0.00491038	0.068729179
Beta	SFT2D2	207.4639234	0.694269125	0.246827786	2.812767297	0.004911718	0.068729179
Beta	TNK2	52.89371334	0.650199748	0.231313795	2.810899143	0.004940327	0.069047785
Beta	SNX25	26.65768587	0.722493656	0.257141094	2.809716821	0.004958511	0.069183831
Beta	CISD2	549.9101564	-0.419531643	0.149395747	-2.808189994	0.004982082	0.069183831
Beta	KDM3A	66.31479917	0.68666788	0.244535088	2.808054603	0.004984178	0.069183831
Beta	ASH1L	364.9335464	0.602331107	0.214524509	2.80774961	0.0049889	0.069183831
Beta	MARCH4	23.21203123	1.108586261	0.394849164	2.807619621	0.004990914	0.069183831
Beta	KLHL8	55.7430301	0.741261131	0.26403071	2.807480729	0.004993067	0.069183831
Beta	GLI4	48.13832661	-0.825741377	0.294166763	-2.807051925	0.004999718	0.069183831
Beta	PPME1	130.5821868	0.571597928	0.203631382	2.807022775	0.005000171	0.069183831
Beta	BMP5	124.9932882	0.9963576	0.355014685	2.806525033	0.005007902	0.069183831
Beta	TNS2	27.90251258	0.984087264	0.350647997	2.80648192	0.005008572	0.069183831
Beta	ZNF347	23.04571162	0.868730165	0.309636348	2.805646596	0.005021573	0.069282478
Beta	SDF2L1	1523.012681	-0.706485156	0.251883626	-2.804807787	0.005034659	0.069307394
Beta	AREL1	32.38875812	0.766094074	0.273158272	2.804579439	0.005038227	0.069307394
Beta	ENTPD1-AS1	43.49623435	0.818363392	0.291813621	2.804404361	0.005040964	0.069307394
Beta	ZNF75A	80.19069306	0.629924738	0.22477803	2.80243019	0.005071919	0.069652001
Beta	PAK1	71.45379695	0.702357228	0.250779024	2.800701661	0.005099164	0.069944908
Beta	DDX55	65.10557291	0.660431695	0.235890853	2.799734225	0.00511447	0.070073568
Beta	NLRCS	12.23357461	1.170206634	0.418174777	2.798367328	0.005136166	0.07028939
Beta	PI4KB	148.4152505	0.546805797	0.19543902	2.7978333	0.005144666	0.070324309
Beta	TMEM259	286.4805804	0.610147829	0.218108049	2.797456723	0.005150667	0.070325038
Beta	ST6GALNAC5	16.75386102	1.117865495	0.39970215	2.796746265	0.005162005	0.070385118
Beta	SF3B5	1080.551505	-0.416719723	0.149038652	-2.796051338	0.005173118	0.070385118
Beta	PIOD2	223.3064105	0.869710538	0.311100305	2.795595261	0.005180423	0.070385118
Beta	SAMD8	118.1155746	0.704674165	0.252096478	2.795255891	0.005185865	0.070385118
Beta	KIAA0355	113.9555685	0.83208128	0.297688721	2.795138749	0.005187744	0.070385118
Beta	PGM2L1	39.41036711	1.453204982	0.519939633	2.794949432	0.005190783	0.070385118
Beta	TRAPP1	41.4441842	0.671603546	0.240331872	2.794483896	0.005198263	0.070405798
Beta	SLC38A2	269.6157762	1.006906559	0.360491255	2.793151137	0.00521973	0.070615658
Beta	LCMT2	22.4168383	0.927974749	0.33228421	2.792713953	0.005226789	0.070630346
Beta	GOLGA2	469.5135989	0.713923932	0.255859369	2.790298181	0.005265952	0.071068076
Beta	ADPRHL2	45.5818153	0.653256416	0.23414414	2.789975509	0.005271203	0.071068076
Beta	ZNF286A	49.02267392	0.642047454	0.230162797	2.789536203	0.005278359	0.071083511

Beta	PKDCC	15.16322356	1.175246249	0.421598998	2.787592603	0.005310128	0.071280417
Beta	LY6H	60.36473753	1.46013414	0.523806602	2.787544361	0.005310918	0.071280417
Beta	NUP35	28.5064837	0.792397603	0.284264596	2.787535329	0.005311066	0.071280417
Beta	TMPO	49.60453808	0.889683728	0.319215145	2.787097483	0.005318248	0.071295875
Beta	MAPK8IP2	149.8454222	0.537529683	0.192985898	2.78533141	0.005347304	0.071604214
Beta	AC093673.1	50.48912702	-0.855849715	0.30736305	-2.784491226	0.005361177	0.071644626
Beta	ARX	19.85144011	2.488017951	0.893599601	2.784264842	0.005364921	0.071644626
Beta	MYO19	85.38763634	0.732800052	0.263213818	2.784048561	0.0053685	0.071644626
Beta	CCDC144A	29.91292573	1.186434554	0.4262326	2.783537799	0.00537696	0.071656848
Beta	KPNA5	105.7770026	0.638374032	0.229361833	2.783261817	0.005381536	0.071656848
Beta	NCOR1	220.0715314	0.458129077	0.164658065	2.782305734	0.005397417	0.071787464
Beta	ACAD10	36.04990651	0.680484599	0.244641981	2.781552847	0.005409952	0.071873342
Beta	UCHL1	2228.611461	-0.541920064	0.194899635	-2.78050836	0.005427386	0.072024034
Beta	MAP3K4	74.48311898	0.776225142	0.279333948	2.778842842	0.005455291	0.072279646
Beta	DHRS1	38.9012835	0.754136324	0.271405852	2.778629567	0.005458874	0.072279646
Beta	WASHC5	61.03476774	0.506542428	0.182473985	2.775970661	0.005503717	0.072791896
Beta	SLC7A2	407.4048979	0.920595164	0.331783043	2.774690217	0.005525431	0.072907043
Beta	HYI	151.6782974	-0.592164632	0.213461745	-2.774101893	0.005535434	0.072907043
Beta	ZXDC	57.52062064	0.685460813	0.247107499	2.773937718	0.005538228	0.072907043
Beta	MLLT3	25.26028756	0.85751439	0.309142914	2.773844562	0.005539814	0.072907043
Beta	ZNF154	9.723231451	1.156642737	0.417117705	2.772940883	0.005555221	0.072907043
Beta	AC108134.2	60.33411774	1.172252046	0.422770676	2.772784664	0.005557889	0.072907043
Beta	GART	36.18563364	0.714446851	0.257734953	2.772021578	0.005570934	0.072907043
Beta	UNC80	133.6734727	0.671144109	0.242116037	2.77199362	0.005571413	0.072907043
Beta	INO80B	36.09259204	0.93617702	0.337774205	2.771606018	0.00557805	0.072907043
Beta	TMEM187	54.46409214	-0.681133919	0.245756683	-2.771578419	0.005578523	0.072907043
Beta	TRIM23	105.3098627	0.643594334	0.232225116	2.771424321	0.005581164	0.072907043
Beta	APBP2	72.25139994	0.562150234	0.202903049	2.770536157	0.005596409	0.072907043
Beta	VAR52	15.69856753	0.834264253	0.301149542	2.770265723	0.005601058	0.072907043
Beta	PRR12	63.13073377	1.02147849	0.36875139	2.770100718	0.005603896	0.072907043
Beta	AC008969.1	37.27636555	0.816402515	0.294725727	2.770041569	0.005604914	0.072907043
Beta	NCOA2	82.42916457	0.73228423	0.264401306	2.769593849	0.005612623	0.072927096
Beta	PYGB	41.97915911	1.044847078	0.377325214	2.769088945	0.005621329	0.072943188
Beta	RPAP2	86.29911452	0.659549899	0.238207272	2.76880673	0.0056262	0.072943188
Beta	AKR1A1	371.0649223	-0.628900186	0.227171747	-2.768390853	0.005633385	0.072956348
Beta	PTCD2	16.60002831	1.125070275	0.406577965	2.767169822	0.005654529	0.073150057
Beta	MAFK	36.35149913	0.883075666	0.319577627	2.763258724	0.005722738	0.073804378
Beta	ZNF718	13.02487089	1.22101627	0.441882659	2.763213822	0.005723526	0.073804378
Beta	RBPJ	208.6607031	0.671468549	0.243015928	2.763063951	0.005726155	0.073804378
Beta	AL157392.3	18.67688848	0.913221604	0.330549574	2.762737196	0.00573189	0.073804378
Beta	ALID1B	308.4847016	0.497337753	0.180049837	2.762222733	0.00574093	0.073804378
Beta	SIX4	9.374983651	1.237646318	0.448076771	2.762130057	0.00574256	0.073804378
Beta	ZNHIT2	103.0885245	-0.568823455	0.206085733	-2.760130198	0.005777833	0.074177087
Beta	PRKAA2	61.65202422	0.853982216	0.309489773	2.759322895	0.005792127	0.074279949
Beta	MED8	213.1439662	-0.473232644	0.171673087	-2.756591921	0.005840719	0.074802097
Beta	CTTNBP2	16.05680409	1.525851489	0.553635719	2.7560568	0.005850284	0.074802097
Beta	CD274	11.16046395	1.033310824	0.374935328	2.75597082	0.005851822	0.074802097
Beta	ATP5MC3	1560.331011	-0.45191532	0.16407346	-2.754347471	0.005880929	0.075048528
Beta	ELL	29.59637592	0.790582945	0.287047551	2.754188085	0.005883794	0.075048528
Beta	MED29	154.5100024	0.470860691	0.171072785	2.752399748	0.005916026	0.075378327
Beta	PKD3	137.9897681	0.640366657	0.232724564	2.751607503	0.005930355	0.075479569
Beta	MPST	36.57338637	-0.81981435	0.298045904	-2.750631163	0.005948057	0.075623474
Beta	IKKB	31.93309349	0.758302892	0.275793298	2.749533423	0.005968018	0.075795747
Beta	ATAD2B	31.75145844	0.804452449	0.292625917	2.749081345	0.005976255	0.07581893
Beta	HCG18	107.0509696	0.652139204	0.237284784	2.748339755	0.005989791	0.075836911
Beta	CDK19	11.63381201	1.166378537	0.424399865	2.748300916	0.0059905	0.075836911
Beta	AL390955.2	16.79047776	-1.074069829	0.391006251	-2.746937742	0.006015455	0.076010035
Beta	TMEM132D	59.67040686	1.115978569	0.4062755	2.746851754	0.006017033	0.076010035
Beta	TOM1	103.8566374	0.554419748	0.201938689	2.745485524	0.006042143	0.076245787
Beta	SLC46A3	72.89784091	0.833474921	0.303715446	2.744262537	0.006064701	0.076448858
Beta	KIZ	59.22386222	0.63206879	0.230473762	2.742476127	0.006097788	0.076663553
Beta	ATP6V1F	1599.225687	-0.382510658	0.139482036	-2.742365028	0.006099851	0.076663553
Beta	ATP9A	144.9600059	0.714755833	0.260641647	2.74229326	0.006101184	0.076663553
Beta	NOC3L	32.35258997	0.900448379	0.328429843	2.741676486	0.006112651	0.076692609
Beta	UBXN2B	50.54136615	0.590182811	0.215279582	2.74147137	0.006116469	0.076692609
Beta	SQCS1	20.23044284	2.00538957	0.731734061	2.740598911	0.006132732	0.076815067
Beta	GRINA	278.3616544	0.575917738	0.21018595	2.740039184	0.006143186	0.076864583
Beta	LYST	106.9676144	0.594651928	0.217131577	2.738670881	0.006168809	0.077103596
Beta	FAM193A	43.96368421	0.731873851	0.267354951	2.737461367	0.006191539	0.077209772
Beta	ZCCHC9	89.46858231	0.623331619	0.227717565	2.737301442	0.00619455	0.077209772
Beta	ANKRA2	116.0424712	0.602630516	0.220164978	2.737177008	0.006196894	0.077209772
Beta	CNP	125.9526822	0.932478905	0.340720876	2.736782423	0.006204331	0.077221067
Beta	SPTY2D10S	19.09805253	0.932646882	0.340964503	2.73531958	0.006231974	0.077483554

Beta	<i>CLSTN1</i>	208.7566299	0.646322679	0.236331345	2.734815731	0.006241521	0.077520734
Beta	<i>SCML1</i>	81.53557581	0.850766628	0.311176716	2.734030487	0.006256425	0.077561653
Beta	<i>RPRD2</i>	152.8553602	0.627040542	0.229365551	2.733804354	0.006260723	0.077561653
Beta	<i>TRIM66</i>	20.49137751	1.107841406	0.405267392	2.733606077	0.006264494	0.077561653
Beta	<i>UHRF1BP1</i>	33.76897689	0.765036966	0.279988789	2.732384287	0.006287775	0.077701895
Beta	<i>MAP3K8</i>	63.73648557	-1.056597338	0.386703081	-2.732322006	0.006288964	0.077701895
Beta	<i>HSD17B11</i>	102.8475841	0.517553428	0.189442809	2.731977717	0.006295555	0.077702074
Beta	<i>TMA16</i>	43.13429439	0.898198668	0.328824404	2.731545037	0.006303812	0.077722918
Beta	<i>DTD2</i>	30.68329897	0.661598334	0.242250737	2.731047763	0.006313332	0.077759207
Beta	<i>THUMPD2</i>	97.26948415	0.662817472	0.242789135	2.730012905	0.006333185	0.07777172
Beta	<i>EXOC6</i>	59.20260833	0.76453598	0.280050594	2.729992349	0.00633358	0.07777172
Beta	<i>ARV1</i>	92.02760165	0.411997071	0.150916542	2.729966282	0.00633408	0.07777172
Beta	<i>CRB3</i>	117.2183797	-0.722336403	0.264649158	-2.729411306	0.006344751	0.07782193
Beta	<i>ID1</i>	161.1804095	1.869886227	0.685234998	2.728824756	0.006356047	0.07787969
Beta	<i>PAPOLG</i>	16.70926309	1.025201705	0.375780627	2.728192014	0.006368253	0.077948468
Beta	<i>PIGM</i>	62.8151675	0.727708658	0.266791593	2.727629642	0.006379119	0.078000721
Beta	<i>SERPINI1</i>	110.4522586	0.794289374	0.291364607	2.726101099	0.006408737	0.078222964
Beta	<i>KCTD7</i>	17.20438038	0.895519411	0.32850934	2.726008983	0.006410525	0.078222964
Beta	<i>ZNF124</i>	17.03948823	0.847390594	0.310972953	2.724965578	0.006430819	0.078266404
Beta	<i>LRATD1</i>	18.63524725	0.906378105	0.332626048	2.724916198	0.006431781	0.078266404
Beta	<i>BAG1</i>	579.742256	-0.54996906	0.201837936	-2.724805216	0.006433943	0.078266404
Beta	<i>DCLRE1C</i>	41.41293344	0.700913766	0.257299556	2.72411572	0.006447391	0.078280644
Beta	<i>LEMD3</i>	59.19691468	0.641611907	0.235538216	2.724024659	0.006449169	0.078280644
Beta	<i>RBM6</i>	131.517088	0.48196584	0.176950833	2.723727441	0.006454975	0.078280644
Beta	<i>GBE1</i>	51.54547758	0.599875217	0.220280044	2.723239049	0.006464526	0.078316147
Beta	<i>UBE2W</i>	109.9106535	0.527470092	0.193761247	2.722268253	0.006483549	0.078466206
Beta	<i>COMMD7</i>	209.3864468	-0.484651055	0.178188046	-2.719885349	0.006530455	0.078953073
Beta	<i>PREPL</i>	188.7660827	0.665829331	0.24483189	2.719536783	0.006537342	0.078955604
Beta	<i>ZNF445</i>	21.89399999	0.997790471	0.36700473	2.718740083	0.006553108	0.079065254
Beta	<i>ZFYVE27</i>	60.62805533	0.615673523	0.226590804	2.717116107	0.00658535	0.079373272
Beta	<i>PAPPA2</i>	30.68814642	1.748838301	0.644150989	2.71495089	0.00662856	0.079812722
Beta	<i>NPC2</i>	932.4855882	0.539021641	0.198573988	2.71446248	0.006638342	0.079849192
Beta	<i>RGCC</i>	181.0517045	-1.472264489	0.542452997	-2.714086747	0.006645876	0.079858576
Beta	<i>PARP4</i>	26.56933642	0.841427647	0.310062345	2.713736966	0.006652897	0.079861778
Beta	<i>ONECUT2</i>	43.29775747	1.418159136	0.522680309	2.713243853	0.006662806	0.079899608
Beta	<i>KRI1</i>	20.34542664	0.910809651	0.335996949	2.710767625	0.006712765	0.080417159
Beta	<i>GINS2</i>	21.32648038	-0.914603304	0.337652595	-2.708711018	0.006754514	0.08074745
Beta	<i>BTN2A1</i>	44.66413624	0.701172854	0.258861428	2.708680316	0.006755139	0.08074745
Beta	<i>DCUN1D1</i>	107.70446	0.590422632	0.217996738	2.708401225	0.006760823	0.08074745
Beta	<i>LARP7</i>	286.5839927	0.472609614	0.174542239	2.707709123	0.006774937	0.080834368
Beta	<i>SLC25A4</i>	573.2220417	-0.538556608	0.199032923	-2.70586694	0.006812634	0.081088106
Beta	<i>METTL4</i>	27.35301825	0.70906749	0.262064906	2.705694179	0.006816179	0.081088106
Beta	<i>NADK</i>	50.23966808	0.574759969	0.212428357	2.705664994	0.006816778	0.081088106
Beta	<i>RPF2</i>	84.58585723	0.602098261	0.222598283	2.704864809	0.006833219	0.081201995
Beta	<i>LBR</i>	55.30654391	0.627554224	0.232058306	2.704295463	0.00684494	0.081259604
Beta	<i>DTNB</i>	33.41115415	0.846792641	0.313414262	2.701831869	0.006895862	0.081658358
Beta	<i>TAF1A</i>	9.583002998	1.04139469	0.385453629	2.701737934	0.006897811	0.081658358
Beta	<i>INSR</i>	69.993215	0.830808842	0.307516923	2.701668688	0.006899247	0.081658358
Beta	<i>LDLRAD3</i>	57.8836546	0.713059395	0.263993648	2.701047545	0.006912146	0.08172921
Beta	<i>SLC25A33</i>	156.3687519	-0.65663843	0.243177184	-2.700246871	0.006928804	0.081844335
Beta	<i>RAD21</i>	268.1797016	0.530550986	0.196601305	2.698613759	0.006962894	0.081994512
Beta	<i>CPNE4</i>	12.36650191	1.399030224	0.518494024	2.698257183	0.006970357	0.081994512
Beta	<i>POU2F1</i>	88.0780022	0.815363402	0.302188154	2.698197767	0.006971601	0.081994512
Beta	<i>SMURF2</i>	41.2273001	0.687723998	0.254893561	2.698083057	0.006974004	0.081994512
Beta	<i>INTS6</i>	152.373001	0.73793617	0.273536048	2.697765712	0.006980655	0.081994512
Beta	<i>RPL36AL</i>	3661.5529	-0.440772327	0.163391347	-2.69764792	0.006983125	0.081994512
Beta	<i>C12orf60</i>	13.80874551	0.98787723	0.366272621	2.697109129	0.006994434	0.082045826
Beta	<i>ASAH1</i>	830.3933071	0.453952534	0.168364695	2.6962454	0.007012598	0.082162769
Beta	<i>ENPP5</i>	112.489561	0.572658833	0.212412546	2.695974615	0.007018301	0.082162769
Beta	<i>CD59</i>	1238.339336	0.471920497	0.175069614	2.695616252	0.007025856	0.082169849
Beta	<i>ZNF281</i>	117.7625047	0.5881409	0.218223196	2.695134669	0.007036019	0.082207397
Beta	<i>GPC6</i>	20.00995841	1.738743788	0.645233985	2.694749238	0.007044162	0.082221297
Beta	<i>ITGB8</i>	19.70550381	0.967878086	0.359404124	2.693007735	0.007081063	0.082570498
Beta	<i>CBX4</i>	109.6193839	0.581627779	0.21602952	2.692353291	0.007094974	0.082651208
Beta	<i>ARFGEF1</i>	92.72236166	0.616929141	0.22918379	2.691853292	0.007105619	0.082693745
Beta	<i>TCERG1</i>	99.83448686	0.660735731	0.24554769	2.690865184	0.007126699	0.082806587
Beta	<i>FKBP11</i>	542.3588243	-0.93242136	0.346555839	-2.690537155	0.007133709	0.082806587
Beta	<i>MYH10</i>	67.73034444	0.816237978	0.30338741	2.690414803	0.007136325	0.082806587
Beta	<i>SMIM10L1</i>	467.3310667	-0.385497883	0.143315352	-2.689857563	0.007148252	0.082831472
Beta	<i>ZNF609</i>	55.28274167	0.84132587	0.312822605	2.68946635	0.007156636	0.082831472
Beta	<i>SEC61A2</i>	30.69905533	0.74076557	0.275491172	2.68889041	0.007168995	0.082831472
Beta	<i>VGF</i>	1726.388874	0.824969584	0.306826216	2.688719354	0.007172669	0.082831472
Beta	<i>ZNF200</i>	17.55399611	0.722999201	0.268904807	2.68868084	0.007173497	0.082831472

Beta	<i>ODC1</i>	457.110396	-0.655741769	0.243970425	-2.687792049	0.007192617	0.082948894
Beta	<i>DDX59</i>	30.46760796	0.76234431	0.283657057	2.687556304	0.007197697	0.082948894
Beta	<i>RAB30</i>	74.29637955	0.70151952	0.261062591	2.687169835	0.00720603	0.082964072
Beta	<i>BAF1</i>	47.21300286	0.633955475	0.236009017	2.686149387	0.007228076	0.083033347
Beta	<i>TBL2</i>	60.63927712	0.608084137	0.226430648	2.68552045	0.007241694	0.083033347
Beta	<i>ACSL6</i>	12.94779677	1.056538393	0.393449126	2.685324029	0.007245952	0.083033347
Beta	<i>CD82</i>	66.52624899	-0.89417218	0.333040733	-2.684873328	0.00725573	0.083033347
Beta	<i>AC007613.1</i>	11.63250146	1.142758864	0.425728963	2.684240356	0.007269482	0.083033347
Beta	<i>TMEM260</i>	21.47445646	0.923580833	0.34410779	2.683986998	0.007274994	0.083033347
Beta	<i>THUMPD3-AS1</i>	227.6491186	0.516953767	0.192633906	2.683607362	0.007283259	0.083033347
Beta	<i>AC127502.2</i>	28.73011875	1.012461243	0.377290581	2.683505221	0.007285484	0.083033347
Beta	<i>ZNF780B</i>	26.22187508	0.845643911	0.315128425	2.683489792	0.00728582	0.083033347
Beta	<i>DET1</i>	12.19630923	1.131871317	0.421799737	2.683432959	0.007287058	0.083033347
Beta	<i>CHCHD10</i>	655.2061441	-0.647188127	0.241188388	-2.683330376	0.007289294	0.083033347
Beta	<i>CSTF2T</i>	36.54828597	0.65544103	0.244421166	2.68160504	0.007326991	0.083115919
Beta	<i>DDIT4</i>	107.7013995	1.330189216	0.496048101	2.681573047	0.007327691	0.083115919
Beta	<i>C12orf4</i>	27.11338278	0.718807358	0.268076278	2.681353843	0.007332494	0.083115919
Beta	<i>SIN3A</i>	82.6181429	0.699334056	0.260841376	2.681070263	0.007338711	0.083115919
Beta	<i>ARL6IP5</i>	608.5478307	-0.404050397	0.150709107	-2.680995233	0.007340356	0.083115919
Beta	<i>ASXL3</i>	13.34380285	1.076008621	0.401371665	2.680828557	0.007344013	0.083115919
Beta	<i>UFC1</i>	648.6794854	-0.453065887	0.169047463	-2.680110531	0.007359785	0.083115919
Beta	<i>FBXO44</i>	65.83079098	0.576688776	0.215195246	2.679839763	0.007365741	0.083115919
Beta	<i>KDM3B</i>	64.48086913	0.600951689	0.224258732	2.679724816	0.007368271	0.083115919
Beta	<i>ARFGEF3</i>	499.9962615	0.672376708	0.250924586	2.679596763	0.00737109	0.083115919
Beta	<i>RNF146</i>	97.571208	0.7653669	0.285641083	2.679470654	0.007373867	0.083115919
Beta	<i>AC139795.2</i>	7.123100928	1.203767899	0.449354691	2.678881343	0.007386857	0.08315183
Beta	<i>MID1</i>	37.67102828	1.086685835	0.40569647	2.678568622	0.007393758	0.08315183
Beta	<i>PARN</i>	91.46638806	0.70188052	0.262055125	2.678369751	0.00739815	0.08315183
Beta	<i>SPIN1</i>	179.2194333	0.659733328	0.246384179	2.677661081	0.007413819	0.083248814
Beta	<i>ZNF786</i>	10.29395845	1.050226941	0.392350741	2.676755338	0.00743389	0.083394983
Beta	<i>CDKN2A</i>	85.9244975	1.317723721	0.49245131	2.675845704	0.007454095	0.083542392
Beta	<i>WRD89</i>	26.29973515	0.889032594	0.332458788	2.674113683	0.007492705	0.083846019
Beta	<i>CCDC186</i>	314.0704972	0.478064954	0.178783552	2.673987335	0.007495528	0.083846019
Beta	<i>IRAK4</i>	58.10776161	0.623322812	0.233147086	2.673517493	0.007506036	0.083846019
Beta	<i>TMCO3</i>	453.9993878	-0.55998833	0.209469819	-2.673360454	0.007509551	0.083846019
Beta	<i>NPIP85</i>	28.13700153	0.883427322	0.330781486	2.670727833	0.007568699	0.084380285
Beta	<i>GUF1</i>	42.90122146	0.813011723	0.304459234	2.67034674	0.007577295	0.084380285
Beta	<i>NCBP3</i>	126.3445595	0.526886188	0.197314989	2.67027959	0.007578811	0.084380285
Beta	<i>AL136169.1</i>	16.40142968	1.051932	0.394019884	2.669743441	0.007590922	0.084408729
Beta	<i>TRIM35</i>	15.07554407	0.705277351	0.264250179	2.668975873	0.007608292	0.084408729
Beta	<i>LINC02193</i>	16.54358723	1.249955179	0.468338825	2.668912144	0.007609735	0.084408729
Beta	<i>NHLRC3</i>	138.8761918	0.631087167	0.236459303	2.668903947	0.007609921	0.084408729
Beta	<i>RNF213</i>	66.50841563	0.775205946	0.29052596	2.668284604	0.007623965	0.084485246
Beta	<i>ATE1</i>	103.123155	0.670051891	0.251262929	2.666735973	0.007659182	0.084796034
Beta	<i>NDUFC1</i>	1121.62362	0.36182369	0.135743369	2.665498084	0.007687437	0.085029237
Beta	<i>RPP14</i>	71.62986809	0.669947515	0.2513788	2.665091547	0.007696737	0.085052537
Beta	<i>HIVEP2</i>	87.48351815	0.912758238	0.342585515	2.664322328	0.007714361	0.085136596
Beta	<i>FXYD2</i>	6328.117537	-0.767268945	0.288006238	-2.66407058	0.007720136	0.085136596
Beta	<i>KLF5</i>	8.798951067	1.413932863	0.530791924	2.663817586	0.007725945	0.085136596
Beta	<i>CLSTN3</i>	52.36771883	0.735070373	0.276025617	2.663051276	0.007743561	0.085178312
Beta	<i>MPP1</i>	97.62732339	-0.594160622	0.223172485	-2.662338152	0.007759988	0.085178312
Beta	<i>EIF2B1</i>	88.38127653	0.457609799	0.171924423	2.661691644	0.007774907	0.085178312
Beta	<i>ZNF524</i>	74.20794887	-0.653567733	0.245561628	-2.66152224	0.00777882	0.085178312
Beta	<i>AC132872.1</i>	21.22386486	1.138645319	0.427840077	2.661380687	0.007782092	0.085178312
Beta	<i>MPC2</i>	1236.687668	-0.383212718	0.14399418	-2.661306988	0.007783795	0.085178312
Beta	<i>ALS2</i>	34.60511693	0.647530692	0.243339618	2.661016304	0.007790518	0.085178312
Beta	<i>PDS5B</i>	109.2123882	0.626961264	0.235614941	2.660957159	0.007791887	0.085178312
Beta	<i>KDM4B</i>	53.99641172	0.637002785	0.239423275	2.660571684	0.007800812	0.085178312
Beta	<i>SGSH</i>	21.24680699	0.830384222	0.312112286	2.660530391	0.007801769	0.085178312
Beta	<i>TMEM63B</i>	33.52446705	0.67702678	0.254523563	2.659976828	0.007814603	0.085239726
Beta	<i>PHLDA2</i>	26.41546006	-1.166075814	0.438469774	-2.659421207	0.007827504	0.085278497
Beta	<i>SPPL2B</i>	62.14840602	0.528058632	0.198577802	2.65920272	0.007832582	0.085278497
Beta	<i>LIG4</i>	54.79771216	0.721367095	0.271380735	2.658136717	0.007857401	0.085470019
Beta	<i>USP15</i>	140.4022058	0.541791849	0.203861245	2.65765006	0.007868755	0.085514853
Beta	<i>GLRA3</i>	13.85837341	1.217767944	0.458347108	2.65686839	0.007887023	0.085634671
Beta	<i>WASHC2A</i>	66.53637653	0.556679222	0.209669923	2.655026599	0.007930216	0.086001163
Beta	<i>KDM6B</i>	170.2708041	0.793693971	0.298964581	2.654809368	0.007935324	0.086001163
Beta	<i>RMDN1</i>	57.96081146	0.726373185	0.273721782	2.653691568	0.007961656	0.086207532
Beta	<i>NAA40</i>	36.60770172	0.711241443	0.268113948	2.652758086	0.007983707	0.086367199
Beta	<i>DGKH</i>	16.36014581	1.170772814	0.441638892	2.650973082	0.008026024	0.086619608
Beta	<i>BCL3</i>	30.53293809	1.251870324	0.472288931	2.650645064	0.008033822	0.086619608
Beta	<i>SEC24B</i>	59.07362941	0.603579783	0.227717388	2.650565192	0.008035722	0.086619608
Beta	<i>ARIH2</i>	224.6680495	0.489490412	0.184675793	2.650539112	0.008036342	0.086619608

Beta	PELI1	54.977041	0.743779964	0.280661206	2.65009894	0.00804682	0.086653554
Beta	PUS3	110.9426302	0.490798373	0.185241323	2.649508031	0.008060906	0.08672625
Beta	SEPSECS-AS1	11.89000958	1.006696135	0.380140673	2.648220008	0.008091685	0.086854294
Beta	ANKS1B	25.17528104	1.207166402	0.455866263	2.648071377	0.008095243	0.086854294
Beta	GOT2	147.5573815	0.501961694	0.189567137	2.647936249	0.00809848	0.086854294
Beta	LPXN	15.98591858	1.015337119	0.383497602	2.647570975	0.008107234	0.086854294
Beta	ADD3	41.00865146	0.821233078	0.310194835	2.647475026	0.008109535	0.086854294
Beta	VPS54	55.55859674	0.619189418	0.234078747	2.645218434	0.00816382	0.087295545
Beta	MBTD1	22.0163724	0.759797269	0.287272216	2.644868614	0.008172264	0.087295545
Beta	SPECC1L	131.5775266	0.658820971	0.249096439	2.644842992	0.008172883	0.087295545
Beta	TNRC6B	441.7863648	0.74697366	0.282673525	2.642531379	0.008228884	0.087814372
Beta	RNF24	18.49606606	0.902700328	0.341644293	2.642222762	0.008236386	0.087815179
Beta	FUT10	10.26908382	1.05708024	0.400197693	2.641395137	0.008256536	0.087950706
Beta	CCDC14	36.91710134	0.833629954	0.315712354	2.640473022	0.008279038	0.087973328
Beta	SLCOSA1	82.80316868	0.71368681	0.270302351	2.640327791	0.008282587	0.087973328
Beta	HIST3H2A	266.3142464	-0.694804291	0.263154618	-2.640289181	0.008283531	0.087973328
Beta	ZNF671	22.11535119	0.737875784	0.279488959	2.640089204	0.008288421	0.087973328
Beta	ZNF782	13.53681301	0.934233146	0.353961315	2.639365108	0.008306147	0.088021055
Beta	L3MBTL1	38.29868507	0.717092666	0.271698317	2.639297419	0.008307806	0.088021055
Beta	RANBP3	64.59426698	0.523234844	0.19827601	2.638921588	0.008317022	0.088039806
Beta	HMG20A	74.82670237	0.730458653	0.276918273	2.637813118	0.008344255	0.088249082
Beta	ZNF813	13.66102594	0.911920994	0.345780686	2.637281467	0.008357345	0.088308537
Beta	AC025580.3	6.805944105	1.388699645	0.526675421	2.636727649	0.008371001	0.088373854
Beta	AC135050.6	17.16435144	0.952850466	0.361433838	2.636306746	0.008381393	0.088404627
Beta	MIR100HG	25.9068295	0.926905846	0.351725279	2.635311996	0.008405998	0.088519861
Beta	TKFC	32.50921105	0.686028196	0.260326589	2.635259803	0.008407291	0.088519861
Beta	AC239868.1	13.58279552	1.001919115	0.380295655	2.63457944	0.008424159	0.088564078
Beta	PACRGL	42.69893825	0.622072017	0.236126496	2.634486294	0.008426471	0.088564078
Beta	TRIM56	111.6128315	0.747463196	0.283799064	2.633776112	0.008444115	0.088670704
Beta	GATC	71.66573929	0.665705371	0.252805309	2.633272903	0.008456637	0.088723401
Beta	APIP	102.9672315	0.610896965	0.232033831	2.632792655	0.008468603	0.088770178
Beta	LIMCH1	235.6222045	0.695764268	0.264320835	2.632271758	0.008481599	0.088827659
Beta	COP1	52.85563562	0.604397657	0.229649029	2.631831971	0.008492585	0.088860306
Beta	BTRC	41.82399378	0.819679293	0.311482082	2.63154557	0.008499747	0.088860306
Beta	MYBBP1A	21.19250303	0.764499213	0.290547007	2.631241059	0.008507367	0.088861402
Beta	DNAJB9	896.8357041	-0.677304525	0.257439257	-2.630929457	0.008515171	0.088864414
Beta	MEIS2	897.414402	0.651547127	0.247818009	2.629135503	0.008560224	0.089183068
Beta	CEP170	71.4725156	0.676210162	0.257201219	2.629109477	0.00856088	0.089183068
Beta	DDX60L	7.887305254	1.262051493	0.480084065	2.628813544	0.008568333	0.089183068
Beta	RANBP2	218.738123	0.503496061	0.19161013	2.627711108	0.008596149	0.089393903
Beta	MROH8	83.82830435	1.564068482	0.59541648	2.626847818	0.008617987	0.089470633
Beta	SEMA4B	26.17502028	0.83541057	0.318031001	2.62682118	0.008618661	0.089470633
Beta	CREBRF	400.5307335	0.667277605	0.254119031	2.625846642	0.008643375	0.089500239
Beta	PALB2	22.87500025	0.832157887	0.316910823	2.625842431	0.008643482	0.089500239
Beta	STRN	54.93560226	0.657888066	0.250546397	2.625813313	0.008644221	0.089500239
Beta	LARP6	219.7655238	0.727028202	0.277013965	2.624518235	0.008677165	0.089762725
Beta	ERN1	84.52764041	0.611168165	0.232913973	2.624008161	0.00869017	0.089818683
Beta	MZT2A	591.9253893	-0.545456614	0.208018576	-2.622153395	0.008737609	0.090090421
Beta	AC090515.2	8.520354664	1.143585378	0.436226073	2.621542933	0.008753274	0.090090421
Beta	ZNF318	66.8256531	0.781816443	0.298227824	2.621540922	0.008753325	0.090090421
Beta	FICD	188.3580664	-0.595688073	0.227230088	-2.621519348	0.008753879	0.090090421
Beta	MAP3K5	11.81091376	1.0006719	0.381781865	2.621056657	0.008765769	0.090090421
Beta	PIGP	459.6487142	-0.569876239	0.217426838	-2.621002282	0.008767168	0.090090421
Beta	TMEM161B	53.53906589	0.638312706	0.243570961	2.620643708	0.008776393	0.090090421
Beta	USP24	40.21933413	0.744685932	0.284167349	2.620589364	0.008777792	0.090090421
Beta	CRTC2	63.89598307	0.853323439	0.325730544	2.619721895	0.00880015	0.090090421
Beta	ERBIN	54.56710814	0.667912444	0.254963535	2.619639096	0.008802287	0.090090421
Beta	TMEM189	65.48185031	-0.565308178	0.215861916	-2.61884166	0.008822889	0.090090421
Beta	SNHG10	124.6832454	0.69043674	0.263648197	2.618780437	0.008824473	0.090090421
Beta	MRPL41	742.6266999	-0.428099004	0.163477817	-2.618697822	0.00882661	0.090090421
Beta	MICALL1	11.83638152	0.9335161	0.356507452	2.618503751	0.008831632	0.090090421
Beta	YY1	402.3203151	0.456058148	0.174170426	2.618459156	0.008832787	0.090090421
Beta	GIGYF2	150.9454629	0.64675703	0.247019432	2.618243536	0.00883837	0.090090421
Beta	AC092747.4	30.3290263	0.944561737	0.360900995	2.617232289	0.008864599	0.090265708
Beta	LEPR	28.45693288	1.460174464	0.557959028	2.616992271	0.008870835	0.090265708
Beta	FBXL2	22.37150134	0.778086109	0.297454681	2.61581397	0.008901504	0.090473555
Beta	BMPR2	100.158212	0.632039462	0.241655487	2.6154567	0.008910822	0.090473555
Beta	KBTD6	47.43452425	0.642372138	0.245636565	2.615132397	0.008919287	0.090473555
Beta	SLC22A23	6.369078086	1.139112192	0.43560136	2.615033598	0.008921868	0.090473555
Beta	AAR2	35.48983806	0.555406127	0.212417403	2.614692205	0.00893079	0.090486423
Beta	SLC8A1	81.82626947	0.969406134	0.370826088	2.61417998	0.008944191	0.090528763
Beta	SUPT16H	251.1867636	0.544727217	0.208392569	2.613947414	0.008950281	0.090528763
Beta	MAD2L1BP	47.48091313	0.626730896	0.23986661	2.612830926	0.008979571	0.090702173

Beta	ISY1	94.43027165	0.406683269	0.155673344	2.612414291	0.008990523	0.090702173
Beta	GEMIN2	32.09623391	0.718716453	0.275135067	2.612231367	0.008995335	0.090702173
Beta	IRS1	10.42859954	1.140947289	0.436822814	2.61192239	0.009003469	0.090702173
Beta	EBPL	145.9501688	-0.7070403	0.270724643	-2.611658445	0.009010422	0.090702173
Beta	TICAM2	41.75734321	-0.694708239	0.266014422	-2.611543511	0.009013452	0.090702173
Beta	DANCR	731.8510018	-0.523969721	0.200677212	-2.61100758	0.009027589	0.090702961
Beta	BRPF1	29.71110592	0.62284752	0.238573974	2.610710252	0.009035441	0.090702961
Beta	GTF2H2C	27.48421266	0.671574822	0.25724247	2.610668536	0.009036543	0.090702961
Beta	ZNF532	11.51046145	1.102080623	0.422307036	2.609666732	0.009063047	0.090783709
Beta	CCDC152	18.1097283	1.093620443	0.419085555	2.609539816	0.009066409	0.090783709
Beta	STUB1	833.5188485	-0.419387745	0.160716114	-2.60949407	0.009067622	0.090783709
Beta	TCEANC2	8.751711077	1.200547474	0.460130012	2.609148377	0.009076788	0.090798593
Beta	IL13RA2	18.44004704	1.962111232	0.752204733	2.608480306	0.009094524	0.090869275
Beta	UBXN2A	99.17646293	0.709515813	0.272021953	2.6083035	0.009099224	0.090869275
Beta	GATM	11.34284892	1.640055094	0.628970204	2.607524304	0.00911996	0.090999496
Beta	ATXN7L3	36.7062034	0.783701674	0.300666196	2.60655067	0.009145929	0.091131018
Beta	RWDD4	222.1491685	-0.421994912	0.161903943	-2.606452343	0.009148555	0.091131018
Beta	RBM12	98.78610439	0.564398568	0.216646536	2.605158512	0.009183176	0.091398887
Beta	CFL2	221.9802276	0.55768903	0.214156025	2.604124866	0.009210919	0.091597905
Beta	DESI1	55.48999584	0.631221763	0.24249704	2.603008112	0.009240977	0.091727765
Beta	LIAS	69.20966299	0.630664759	0.242300293	2.602822938	0.009245969	0.091727765
Beta	SNURF	17.50571461	1.169836215	0.449457226	2.602775407	0.009247251	0.091727765
Beta	FBLN7	22.9094407	0.813656451	0.312873661	2.600591073	0.009306331	0.092173555
Beta	ZNF696	9.105519999	0.927757056	0.356755876	2.600537561	0.009307783	0.092173555
Beta	SMCR8	50.54296329	0.691750486	0.266042261	2.600152631	0.009318231	0.092185311
Beta	RPL12	12071.83078	-0.428344851	0.16475312	-2.599919509	0.009324563	0.092185311
Beta	CLHC1	24.90611692	0.585639366	0.225347983	2.598822316	0.009354418	0.092250293
Beta	NTAN1	58.41966509	-0.665541755	0.256098635	-2.598771196	0.009355811	0.092250293
Beta	TNRC6A	394.0279999	0.776331076	0.298754207	2.598561149	0.009361537	0.092250293
Beta	FAM155A-IT1	8.548170245	1.132369675	0.435772915	2.598531567	0.009362344	0.092250293
Beta	PLEKHA7	5.602389101	1.243252853	0.478817582	2.596506269	0.009417719	0.092589498
Beta	CHCHD2	3081.240637	-0.33581039	0.1293335	-2.596468736	0.009418748	0.092589498
Beta	PANX2	30.4409594	0.864562813	0.332997818	2.596301735	0.009423327	0.092589498
Beta	GC	184.0645387	1.971598502	0.759499486	2.595918154	0.009433853	0.092589498
Beta	GSE1	142.254955	0.555827381	0.214122126	2.595842808	0.009435922	0.092589498
Beta	AC092171.4	11.26104161	1.164503131	0.448874729	2.59427198	0.009479147	0.09293651
Beta	HADH	1017.59601	-0.776876055	0.299560333	-2.593387608	0.00950356	0.09297703
Beta	XPA	182.9928418	0.444383799	0.171354564	2.593358403	0.009504367	0.09297703
Beta	PSMB7	661.4587282	-0.432685236	0.16684942	-2.593267846	0.00950687	0.09297703
Beta	PDP1	17.96498374	0.950477259	0.366798986	2.59127559	0.009562088	0.093419189
Beta	ATP5PO	833.1664713	-0.363110729	0.14015167	-2.590841255	0.009574164	0.093419189
Beta	EPS15	130.9046997	0.515790106	0.199086565	2.590783083	0.009575783	0.093419189
Beta	DDX31	40.92711086	0.727289627	0.280960199	2.588585959	0.009637089	0.09393977
Beta	MTMR3	95.67123874	0.548213466	0.211851063	2.587730543	0.009661052	0.094092344
Beta	COL6A1	40.59849495	0.777790691	0.300602101	2.587442633	0.009669129	0.094092344
Beta	AC103691.1	7.485323446	1.176285519	0.454660026	2.587176025	0.009676614	0.094092344
Beta	APOH	64.12564071	1.850363854	0.715648132	2.585577704	0.009721596	0.094452053
Beta	ALG10B	38.80299144	0.804746977	0.311287489	2.585221077	0.009731658	0.094472184
Beta	TASOR	86.60358391	0.667615504	0.258410567	2.583545683	0.009779052	0.094854393
Beta	ETV7	15.86622321	1.303791537	0.504762993	2.582977668	0.009795166	0.09492132
Beta	EFNB3	37.47832198	1.042322388	0.403572826	2.582736797	0.009802007	0.09492132
Beta	CCDC167	93.67695693	-0.855750974	0.33154785	-2.581078344	0.009849223	0.095300499
Beta	SMAD5	247.2656713	0.521848327	0.202294699	2.579644108	0.009890218	0.09550155
Beta	AC015849.4	4.889183402	1.350311647	0.523467822	2.579550435	0.009892901	0.09550155
Beta	KLHL21	36.13641238	0.706240897	0.27378942	2.579503975	0.009894232	0.09550155
Beta	HECA	61.43448357	0.768703122	0.298086692	2.578790472	0.00991469	0.095620962
Beta	GCA7	34.92655346	-0.985761338	0.382314387	-2.578405027	0.009925758	0.095643854
Beta	ATN1	178.4176773	0.554426354	0.215063033	2.57797143	0.009938221	0.095643854
Beta	FASTKD3	27.66742412	0.818273321	0.317488841	2.577329388	0.009956702	0.095643854
Beta	SNX3	979.0259396	-0.406412266	0.157695532	-2.57719582	0.009960551	0.095643854
Beta	JUN	2302.391034	-1.079821064	0.419020208	-2.577014287	0.009965783	0.095643854
Beta	HPSE	7.043255973	1.138904301	0.441956272	2.576961505	0.009967305	0.095643854
Beta	THBD	28.39097614	1.159417504	0.449955133	2.576740252	0.009973687	0.095643854
Beta	LDB1	41.61307989	0.879586194	0.341467882	2.575897301	0.009998034	0.095646057
Beta	SLC38A4	17.97988775	1.287040995	0.499648267	2.575894045	0.009998128	0.095646057
Beta	PLCL2	76.59031628	0.877468345	0.340646389	2.575892109	0.009998184	0.095646057
Beta	COX5A	731.6043247	-0.431415254	0.167527	-2.575198348	0.010018262	0.095760652
Beta	CACYBP	388.8889053	-0.576672655	0.224146786	-2.572745592	0.010089534	0.096222458
Beta	RNF182	11.81211174	1.151679582	0.447649705	2.572724985	0.010090135	0.096222458
Beta	THRB	20.94171257	1.053749808	0.409624794	2.572475651	0.010097406	0.096222458
Beta	CYTOR	96.12350468	-0.852298061	0.331424564	-2.57162007	0.010122391	0.096222458
Beta	BRX1	118.9405338	0.483081198	0.18787707	2.571262146	0.010132859	0.096222458
Beta	C6orf62	175.6964611	0.543488219	0.211375067	2.571203053	0.010134589	0.096222458

Beta	<i>MTX1</i>	199.9180578	-0.456535182	0.17758306	-2.570826193	0.010145623	0.096222458
Beta	<i>CZCD5</i>	34.17268335	0.717530066	0.279122473	2.570663903	0.010150378	0.096222458
Beta	<i>PIGZ</i>	42.90824636	-0.649085503	0.252502657	-2.570608603	0.010151999	0.096222458
Beta	<i>RAPGEF6</i>	58.41110009	0.650832445	0.253187181	2.570558439	0.010153469	0.096222458
Beta	<i>PDZD2</i>	93.23612981	-0.793082622	0.308555859	-2.570304853	0.010160906	0.096222458
Beta	<i>ZNF511</i>	184.1767535	-0.615718476	0.239561318	-2.570191554	0.01016423	0.096222458
Beta	<i>MYCBP2-AS1</i>	6.932930611	1.484752985	0.577853793	2.569426735	0.010186693	0.096357966
Beta	<i>RIPK1</i>	60.93071831	0.793565838	0.309001736	2.568159802	0.010224001	0.096588945
Beta	<i>LINC02106</i>	34.27786602	0.88517703	0.344716919	2.567837493	0.010233512	0.096588945
Beta	<i>RBBP4</i>	245.4586735	0.599482477	0.233464592	2.567766151	0.010235618	0.096588945
Beta	<i>TIA1</i>	79.24276808	0.49539011	0.19298131	2.567036732	0.010257175	0.09664836
Beta	<i>MIER3</i>	42.73881838	0.682707389	0.265955356	2.566999967	0.010258262	0.09664836
Beta	<i>PHF12</i>	66.83514328	0.614887375	0.239590054	2.566414447	0.010275597	0.096655666
Beta	<i>SAMD4A</i>	31.50989262	1.044250012	0.406911608	2.566282191	0.010279516	0.096655666
Beta	<i>AC007325.4</i>	57.76225217	-0.895116276	0.348872533	-2.565740181	0.010295592	0.096655666
Beta	<i>C10orf88</i>	30.89305793	0.731333103	0.285038241	2.565736795	0.010295692	0.096655666
Beta	<i>AP3B1</i>	209.9314615	0.551339915	0.2149131	2.565408597	0.010305437	0.096655666
Beta	<i>GTPBP4</i>	130.1696233	0.488202993	0.190308848	2.565319466	0.010308085	0.096655666
Beta	<i>NSIP</i>	142.2093247	-0.453812621	0.176950888	-2.564624719	0.010328745	0.096712012
Beta	<i>AC009061.2</i>	15.22697594	0.842071076	0.328404818	2.564125216	0.010343622	0.096712012
Beta	<i>SH2B3</i>	18.67444755	0.856029184	0.333860874	2.564029665	0.01034647	0.096712012
Beta	<i>N4BP2</i>	110.8031392	0.686742373	0.267838335	2.564018225	0.010346811	0.096712012
Beta	<i>AL355999.1</i>	12.56568957	0.802523639	0.313215387	2.562210133	0.010400837	0.097140201
Beta	<i>NEUROD1</i>	521.6969267	0.735199932	0.287153687	2.560301208	0.010458148	0.097527454
Beta	<i>LRP6</i>	57.45740611	0.59854791	0.23378224	2.560279646	0.010458797	0.097527454
Beta	<i>SENP5</i>	134.624475	0.860517948	0.336152266	2.559905242	0.010470071	0.097546277
Beta	<i>CPSF2</i>	86.43324081	0.677440159	0.26465971	2.559664855	0.010477315	0.097546277
Beta	<i>EFTUD2</i>	39.02423581	0.598452284	0.23383423	2.559301457	0.010488275	0.097565208
Beta	<i>FKBP14</i>	64.74044615	0.65116604	0.254456118	2.559050438	0.010495851	0.097565208
Beta	<i>NDRG1</i>	45.66709848	-0.902803357	0.352957607	-2.557823773	0.010532945	0.097825112
Beta	<i>PRRT2</i>	9.932755521	0.951547241	0.372108809	2.557174724	0.01055262	0.097825112
Beta	<i>ERCC5</i>	94.14579499	0.607680541	0.237647119	2.557070933	0.010555769	0.097825112
Beta	<i>HPS3</i>	57.37491057	0.610630275	0.238804174	2.557033505	0.010556905	0.097825112
Beta	<i>AC018926.2</i>	8.957512157	1.293613124	0.506030991	2.556391107	0.010576417	0.097929172
Beta	<i>POLDIP3</i>	53.06522623	0.532474487	0.208343315	2.555755092	0.010595767	0.09801452
Beta	<i>SKIL</i>	153.8325481	0.675421314	0.264304059	2.555470835	0.010604425	0.09801452
Beta	<i>SENP1</i>	46.34416583	0.612933684	0.239870286	2.555271407	0.010610503	0.09801452
Beta	<i>NAA16</i>	69.23626385	0.644596482	0.252323079	2.554647335	0.010629543	0.098017926
Beta	<i>TOP2B</i>	125.3211402	0.596779974	0.233669934	2.553944204	0.010651032	0.098017926
Beta	<i>ALKBH8</i>	7.718531535	0.989198311	0.387324594	2.553925896	0.010651592	0.098017926
Beta	<i>USP30</i>	57.11495858	0.596974321	0.233768516	2.553698555	0.010658549	0.098017926
Beta	<i>NTRK2</i>	12.15133003	1.474692784	0.577481447	2.55366262	0.010659649	0.098017926
Beta	<i>ELF2</i>	184.4207777	0.491550469	0.192490781	2.553631223	0.01066061	0.098017926
Beta	<i>NAPEPLD</i>	17.70207205	0.873530053	0.34212879	2.553219951	0.010673207	0.098057499
Beta	<i>TAOK2</i>	38.68730626	0.677116093	0.265295458	2.55230941	0.010701144	0.098237831
Beta	<i>RPS3</i>	14532.42193	-0.389192916	0.152516219	-2.551813305	0.010716393	0.098301493
Beta	<i>AC006141.1</i>	21.79587338	0.80134416	0.314082622	2.551380122	0.010729723	0.098347476
Beta	<i>MPP5</i>	81.49313311	0.653389705	0.256205316	2.550258184	0.010764317	0.098588136
Beta	<i>BORCS7</i>	432.7457067	-0.462541031	0.181467883	-2.548886467	0.010806748	0.098841895
Beta	<i>DENND11</i>	47.82728599	0.691832952	0.271454552	2.548614292	0.010815184	0.098841895
Beta	<i>TRIOBP</i>	20.53348525	0.767726026	0.301240033	2.548552454	0.010817102	0.098841895
Beta	<i>TSTA3</i>	145.6192089	-0.831263799	0.32621368	-2.548218695	0.010827457	0.098860118
Beta	<i>FRY</i>	55.89995842	0.652315715	0.256042971	2.547680624	0.01084417	0.098936315
Beta	<i>AC004540.2</i>	118.1521972	0.973094528	0.382058592	2.546977214	0.010866053	0.09905487
Beta	<i>FKBP4</i>	118.5635333	-0.837218018	0.328743044	-2.546724662	0.010873919	0.09905487
Beta	<i>TTC23</i>	15.81166241	1.120309275	0.440129092	2.545410644	0.01091493	0.099339164
Beta	<i>MAZ</i>	245.4381931	0.458538387	0.180159035	2.545186745	0.010921931	0.099339164
Beta	<i>ZNF207</i>	341.6773405	0.416264187	0.163628568	2.543957888	0.01096043	0.099583537
Beta	<i>POLR2J</i>	536.9676356	-0.44972078	0.176791507	-2.543791772	0.010965643	0.099583537
Beta	<i>SRSF3</i>	435.7291719	0.490777429	0.192955627	2.543473003	0.010975654	0.099597951
Beta	<i>NCAM1</i>	86.69791832	0.667876829	0.262675701	2.542590835	0.0110034	0.099757484
Beta	<i>ARHGAP12</i>	114.4155983	0.490534199	0.192943075	2.542377843	0.011010108	0.099757484
Cycling Alpha	<i>HLA-A</i>	117.5976581	2.123523922	0.318611399	6.664933924	2.65E-11	5.28E-08
Cycling Alpha	<i>B2M</i>	321.0907442	2.037082086	0.323655126	6.293989873	3.09E-10	3.08E-07
Cycling Alpha	<i>SGO2</i>	7.599617505	2.793312426	0.512243152	5.453098625	4.95E-08	3.29E-05
Cycling Alpha	<i>KPNA2</i>	14.46443264	2.357596458	0.442458041	5.328406858	9.91E-08	3.97E-05
Cycling Alpha	<i>KIF5B</i>	22.3901915	1.437800728	0.269876421	5.327626333	9.95E-08	3.97E-05
Cycling Alpha	<i>HNRNP1A1</i>	53.6190616	1.083635466	0.215496291	5.028557391	4.94E-07	0.000164151
Cycling Alpha	<i>KIF20B</i>	9.285618251	2.145580661	0.429901893	4.990861167	6.01E-07	0.000171144
Cycling Alpha	<i>CKAP2</i>	18.98434693	2.556602304	0.518193184	4.933685702	8.07E-07	0.000201025
Cycling Alpha	<i>GAS2L3</i>	5.676807476	2.601873968	0.533277284	4.879026437	1.07E-06	0.000236084
Cycling Alpha	<i>HLA-B</i>	74.71114514	2.260541514	0.481253574	4.697194232	2.64E-06	0.000525673
Cycling Alpha	<i>CENPF</i>	40.53743468	2.550585817	0.555033307	4.59537434	4.32E-06	0.000774962

Cycling Alpha	CENPE	3.765478503	2.233180719	0.487672179	4.579266186	4.67E-06	0.000774962
Cycling Alpha	MDM4	5.999672659	1.653900436	0.371512894	4.451798203	8.52E-06	0.001305479
Cycling Alpha	CKAP2L	6.938058076	1.901090208	0.430865663	4.412257397	1.02E-05	0.001396281
Cycling Alpha	THOC2	4.701389446	1.737772111	0.394395633	4.40616469	1.05E-05	0.001396281
Cycling Alpha	FOS	22.0747433	2.467069427	0.561664919	4.392422143	1.12E-05	0.001396281
Cycling Alpha	DDX5	37.88293866	1.379314324	0.316936148	4.352025896	1.35E-05	0.001581332
Cycling Alpha	ECT2	10.46892588	2.096057083	0.484890176	4.322746029	1.54E-05	0.001640198
Cycling Alpha	LARP7	5.967785166	1.531459227	0.354543516	4.319523997	1.56E-05	0.001640198
Cycling Alpha	ASPM	11.2099007	2.850539664	0.663523376	4.296065171	1.74E-05	0.001693104
Cycling Alpha	UBE2C	23.85691755	1.783749357	0.415759501	4.290339375	1.78E-05	0.001693104
Cycling Alpha	GGH	9.472280661	1.820208657	0.429407942	4.238879813	2.25E-05	0.002035015
Cycling Alpha	RAD21	20.99468633	1.60795999	0.380401222	4.22701058	2.37E-05	0.002052067
Cycling Alpha	SUGP2	8.592938302	2.177274702	0.519904153	4.187838642	2.82E-05	0.002338649
Cycling Alpha	ARHGAP11A	9.378002843	1.84284212	0.444674484	4.14424975	3.41E-05	0.002717878
Cycling Alpha	PPP1CC	17.14829429	1.235980545	0.301217978	4.103276144	4.07E-05	0.003051294
Cycling Alpha	CALM2	119.0175275	1.318784658	0.321664519	4.099876044	4.13E-05	0.003051294
Cycling Alpha	CDKN2D	15.54648978	1.740032263	0.425967426	4.084895126	4.41E-05	0.003138742
Cycling Alpha	HNRNPM	25.9636773	1.190668587	0.292624711	4.068926995	4.72E-05	0.00319269
Cycling Alpha	TNRC6A	6.825911009	1.528228682	0.37595973	4.064873338	4.81E-05	0.00319269
Cycling Alpha	TACC3	12.30754758	1.736236698	0.430094234	4.03687509	5.42E-05	0.003482471
Cycling Alpha	ANKHD1	6.903338201	1.428455058	0.357247086	3.99850723	6.37E-05	0.003970008
Cycling Alpha	ANLN	8.214184753	1.877983116	0.471058168	3.986732945	6.70E-05	0.004045751
Cycling Alpha	PDCD4	8.547056942	1.338536079	0.336442902	3.978494039	6.94E-05	0.004065318
Cycling Alpha	DEPDC1	8.227461163	2.100677029	0.530787208	3.957663252	7.57E-05	0.004267645
Cycling Alpha	SFPQ	34.75584068	1.387614124	0.351003323	3.953279165	7.71E-05	0.004267645
Cycling Alpha	RPS18	261.1964426	-0.530969222	0.13468622	-3.942268342	8.07E-05	0.004347681
Cycling Alpha	SENP6	6.115518926	1.406822591	0.35869977	3.922005833	8.78E-05	0.004537942
Cycling Alpha	PRC1	19.88568443	1.886320968	0.481288323	3.919315882	8.88E-05	0.004537942
Cycling Alpha	RACGAP1	8.600299482	1.751150502	0.451061151	3.88229068	0.000103477	0.005155745
Cycling Alpha	PHF3	7.456807712	1.227693999	0.319477098	3.842823188	0.000121627	0.005825063
Cycling Alpha	HMMR	9.115297764	2.400410784	0.62530577	3.838779201	0.000123648	0.005825063
Cycling Alpha	TOP2A	35.35037329	2.246596217	0.585848082	3.83477609	0.000125679	0.005825063
Cycling Alpha	XRCC6	20.78912279	0.870300714	0.23072261	3.772065146	0.000161902	0.007333423
Cycling Alpha	CSNK1D	5.943461919	1.198757818	0.319497161	3.752013988	0.00017542	0.007769142
Cycling Alpha	PAX6	9.167865517	2.996748223	0.802254617	3.735407886	0.000187411	0.007940404
Cycling Alpha	PTTG1	36.63749133	1.598487603	0.42929908	3.723482479	0.000196494	0.007940404
Cycling Alpha	NDC80	8.97945644	1.52871587	0.410623132	3.722917073	0.000196934	0.007940404
Cycling Alpha	PRPF4B	5.88740828	1.387074895	0.372752333	3.721170259	0.000198302	0.007940404
Cycling Alpha	UBE2S	54.92632096	1.904349541	0.512055013	3.719033097	0.000199987	0.007940404
Cycling Alpha	CHD9	7.996512907	1.438883476	0.388034488	3.708132959	0.000208793	0.007940404
Cycling Alpha	ALCAM	6.436635168	1.667684597	0.450062285	3.705452894	0.000211013	0.007940404
Cycling Alpha	MYEF2	7.824899149	1.981614432	0.534808704	3.705277081	0.00021116	0.007940404
Cycling Alpha	NUF2	7.345082195	1.900807594	0.516467216	3.680403199	0.000232865	0.00859446
Cycling Alpha	HMGN3	19.34696053	1.1163944	0.304083112	3.671346276	0.000241276	0.008742971
Cycling Alpha	STMN1	73.66910498	1.937329526	0.533896011	3.628664548	0.000284891	0.010139072
Cycling Alpha	HLA-C	59.45962564	1.420628245	0.392132862	3.622823746	0.000291404	0.010188929
Cycling Alpha	ANKRD12	15.20119242	1.205067191	0.335609104	3.590686835	0.000329808	0.011332875
Cycling Alpha	RPS14	193.7450392	-0.606849196	0.17020921	-3.565313513	0.000363421	0.012276255
Cycling Alpha	GFPT1	7.022019166	1.342878898	0.377417579	3.558071943	0.000373587	0.012299356
Cycling Alpha	REEP5	12.04367554	-1.021655851	0.287299372	-3.556067127	0.000376448	0.012299356
Cycling Alpha	RPL13	266.0181852	-0.625088872	0.176094637	-3.549732589	0.000385623	0.012395902
Cycling Alpha	NME2	47.39546545	-1.046753604	0.295571932	-3.5414513	0.000397932	0.012588557
Cycling Alpha	H2AFV	24.56121548	1.061608734	0.300948246	3.527545837	0.000419431	0.012864252
Cycling Alpha	PPP2R5C	6.243019	1.270144115	0.360186092	3.526355249	0.000421321	0.012864252
Cycling Alpha	ITCH	3.426044106	1.68480953	0.478174116	3.523422693	0.000426011	0.012864252
Cycling Alpha	GPBP1	7.906936598	1.096870333	0.31189772	3.516762904	0.000436844	0.012994473
Cycling Alpha	SORT1	5.981911283	1.426956646	0.407445475	3.50220271	0.000461428	0.013523924
Cycling Alpha	HMGCB2	45.0619029	1.496874699	0.428977748	3.489399406	0.000484107	0.013931746
Cycling Alpha	MAD2L1	14.36421364	1.247037413	0.357672555	3.486533689	0.000489324	0.013931746
Cycling Alpha	CDC20	6.124884681	1.738364426	0.499883118	3.477541774	0.000506034	0.014204594
Cycling Alpha	SUMF2	6.877784845	1.687008618	0.486167203	3.47001733	0.000520425	0.014405647
Cycling Alpha	HNRNPL	5.636994184	1.247459206	0.360617343	3.45923243	0.000541717	0.014494594
Cycling Alpha	QPCT	11.14545701	2.229912087	0.644911644	3.4577017	0.000544804	0.014494594
Cycling Alpha	SMC2	6.780870149	1.774577424	0.513272403	3.457379384	0.000545456	0.014494594
Cycling Alpha	MUC13	7.121291145	1.724627625	0.500170995	3.448076044	0.000564595	0.014805762
Cycling Alpha	HP1BP3	19.60225649	1.217594505	0.354808918	3.431690816	0.000599831	0.015525495
Cycling Alpha	STAG2	7.376561426	1.373034454	0.400823789	3.425531344	0.000613598	0.015678219
Cycling Alpha	TNFRSF12A	16.72094261	-2.669957036	0.783439887	-3.407992217	0.000654428	0.0165098
Cycling Alpha	LUC7L3	7.71316673	1.474693653	0.433726047	3.400057858	0.000673716	0.016674425
Cycling Alpha	TMEM176A	11.1934614	2.242194487	0.660230935	3.39607608	0.000683594	0.016674425
Cycling Alpha	WNK1	7.531767848	1.373342878	0.404508162	3.395093122	0.000686053	0.016674425
Cycling Alpha	BRCA2	8.238155204	1.792327205	0.529422592	3.385437702	0.000710648	0.017064123
Cycling Alpha	ASH1L	9.04895635	1.583823459	0.47013181	3.368892351	0.000754709	0.017713766

Cycling Alpha	<i>HMG2N</i>	116.6680198	1.321972214	0.392438352	3.368611165	0.000755479	0.017713766
Cycling Alpha	<i>ZNF91</i>	7.148614891	2.055060003	0.612796825	3.353574821	0.000797748	0.018487356
Cycling Alpha	<i>CDC48</i>	9.278898822	1.758793435	0.525307272	3.348123146	0.000813608	0.018638181
Cycling Alpha	<i>MGST3</i>	15.3183602	-0.982496196	0.294313821	-3.33826047	0.000843047	0.019093094
Cycling Alpha	<i>RPS23</i>	193.2817974	-0.503137754	0.151551174	-3.319919865	0.000900433	0.020163627
Cycling Alpha	<i>MKI67</i>	20.40469162	1.624887964	0.490796674	3.310715112	0.000930579	0.020607154
Cycling Alpha	<i>BDP1</i>	5.815591432	1.300014005	0.393606367	3.302827677	0.000957152	0.020888206
Cycling Alpha	<i>CDK1</i>	12.93962763	1.413139991	0.428132463	3.300707407	0.000964414	0.020888206
Cycling Alpha	<i>RB1CC1</i>	8.887327971	1.387141097	0.420966278	3.295135902	0.000983741	0.020888206
Cycling Alpha	<i>SRSF10</i>	15.58876781	0.997062278	0.302624177	3.294721156	0.000985194	0.020888206
Cycling Alpha	<i>FIS1</i>	11.00063039	-1.12093889	0.341141177	-3.28585045	0.00101675	0.02133034
Cycling Alpha	<i>DNTTIP2</i>	7.924356919	1.051482875	0.321910866	3.266378942	0.001089324	0.022614814
Cycling Alpha	<i>BCAM</i>	7.436001801	1.483703675	0.459175012	3.231237841	0.001232553	0.025324523
Cycling Alpha	<i>CCNB2</i>	7.266946293	1.755758448	0.546391943	3.213368113	0.00131188	0.026679362
Cycling Alpha	<i>SRP9</i>	18.52108909	0.829206336	0.258463473	3.208214785	0.001335617	0.026887726
Cycling Alpha	<i>EMC10</i>	24.45682236	1.162982232	0.363174539	3.202268075	0.0013635	0.027174564
Cycling Alpha	<i>SLC36A4</i>	6.870704868	1.281742297	0.40164378	3.191241493	0.001416628	0.02771951
Cycling Alpha	<i>SMARCA2</i>	6.52948607	1.13167755	0.354665869	3.190827337	0.00141866	0.02771951
Cycling Alpha	<i>BIRC5</i>	28.16466245	1.23320029	0.387767643	3.180255786	0.001471451	0.028471864
Cycling Alpha	<i>TROAP</i>	6.847084726	1.660884867	0.522928085	3.176124812	0.001492567	0.028602754
Cycling Alpha	<i>SGO1</i>	5.843863293	1.254055564	0.398550028	3.146544914	0.001652119	0.031358789
Cycling Alpha	<i>RPS24</i>	168.4145357	-0.446142408	0.142195819	-3.137521284	0.001703829	0.031890559
Cycling Alpha	<i>ZFR</i>	7.110353088	1.412627327	0.450441499	3.136094988	0.001712137	0.031890559
Cycling Alpha	<i>CDC88A</i>	5.352525226	1.776592181	0.567842265	3.128671972	0.001755982	0.032103346
Cycling Alpha	<i>SYNE1</i>	7.107248449	1.798502689	0.575145178	3.127041239	0.001765752	0.032103346
Cycling Alpha	<i>SON</i>	21.1621818	0.921832276	0.295000073	3.1248544	0.001778931	0.032103346
Cycling Alpha	<i>PPM1A</i>	4.304516543	1.044311508	0.334355234	3.123359234	0.001787994	0.032103346
Cycling Alpha	<i>ACAP2</i>	4.686190089	1.324589428	0.424769814	3.118369961	0.001818544	0.032350546
Cycling Alpha	<i>JUNB</i>	17.14313142	1.516907514	0.487131651	3.113958024	0.001845957	0.032350546
Cycling Alpha	<i>DBF4</i>	5.917901431	1.585057923	0.509625158	3.110242694	0.001869337	0.032350546
Cycling Alpha	<i>FBXL5</i>	7.908615036	1.405192963	0.452014128	3.108736819	0.00187889	0.032350546
Cycling Alpha	<i>HNRNPF</i>	15.8082273	0.995495763	0.320290428	3.108103384	0.001882922	0.032350546
Cycling Alpha	<i>CYTH2</i>	4.948373447	1.061693131	0.342538007	3.099490013	0.001938541	0.033021474
Cycling Alpha	<i>RPL12</i>	174.0359987	-0.607603575	0.196552333	-3.091306855	0.001992776	0.033657646
Cycling Alpha	<i>CDKN3</i>	11.52672287	1.136032631	0.37000297	3.070333818	0.002138196	0.035810298
Cycling Alpha	<i>PBK</i>	12.81949254	1.925930323	0.629189748	3.060969015	0.002206219	0.036475095
Cycling Alpha	<i>DDX3X</i>	9.24494771	1.268013428	0.414404067	3.059847934	0.002214494	0.036475095
Cycling Alpha	<i>HMGXB4</i>	7.138507481	1.109866625	0.36301262	3.057377524	0.002232829	0.036475635
Cycling Alpha	<i>RBBP7</i>	8.42069385	0.97491748	0.320230755	3.044421762	0.002331281	0.037774327
Cycling Alpha	<i>EEF1AKMT2</i>	3.158566337	1.238382694	0.407648875	3.037866089	0.002382598	0.038294499
Cycling Alpha	<i>RPL19</i>	180.7794423	-0.407303859	0.135391482	-3.008341835	0.002626775	0.041881299
Cycling Alpha	<i>RPS12</i>	271.4153105	-0.832902418	0.277252968	-3.004124444	0.002663464	0.04212923
Cycling Alpha	<i>ZC3H6</i>	6.573650612	1.492062252	0.499024211	2.989959643	0.002790143	0.043565085
Cycling Alpha	<i>NTSC3A</i>	5.375185553	1.199537626	0.401431099	2.988153207	0.002806688	0.043565085
Cycling Alpha	<i>EEF1B2</i>	62.25724705	-0.801840333	0.268467935	-2.986726642	0.002819817	0.043565085
Cycling Alpha	<i>IL6ST</i>	7.566616365	1.261142801	0.423464508	2.978154671	0.002899896	0.044457637
Cycling Alpha	<i>HLA-E</i>	15.86630452	1.256174647	0.425072695	2.955199574	0.003124669	0.046977645
Cycling Alpha	<i>FTH1</i>	264.6011506	-1.037275036	0.351024647	-2.954992031	0.003126771	0.046977645
Cycling Alpha	<i>PBRM1</i>	6.022246792	1.103355678	0.373489346	2.954182467	0.003134986	0.046977645
Cycling Alpha	<i>CDK27</i>	4.137197367	1.134079129	0.385165259	2.94439621	0.003235855	0.047809215
Cycling Alpha	<i>DDX17</i>	6.753587474	1.167419114	0.396536147	2.944042106	0.003239559	0.047809215
Cycling Alpha	<i>SMC3</i>	19.71178541	0.960611957	0.326531877	2.94186272	0.003262445	0.047809215
Cycling Alpha	<i>RANGAP1</i>	7.938338711	1.303701536	0.443505249	2.93954026	0.003286996	0.047817389
Cycling Alpha	<i>ECHDC2</i>	4.668681624	1.373454179	0.467913971	2.935270723	0.003332568	0.048129042
Cycling Alpha	<i>OAZ2</i>	7.892803795	0.957685859	0.327289165	2.926115376	0.003432236	0.049004033
Cycling Alpha	<i>DNMT1</i>	6.401538744	1.668554598	0.570406686	2.925201684	0.00344233	0.049004033
Cycling Alpha	<i>UBE2K</i>	8.710833889	1.128926636	0.386559781	2.920445147	0.003495317	0.049405441
Cycling Alpha	<i>HNRNPD</i>	15.68121759	0.939198352	0.32323589	2.905612838	0.003665347	0.051331845
Cycling Alpha	<i>P4HB</i>	26.84204924	-1.300791382	0.447915661	-2.90409891	0.003683118	0.051331845
Cycling Alpha	<i>LCOR</i>	6.680817003	1.218539699	0.419959534	2.901564554	0.003713043	0.051389542
Cycling Alpha	<i>PAIP2</i>	9.68342815	0.819615641	0.283267386	2.893434545	0.003810537	0.052375175
Cycling Alpha	<i>CEP350</i>	5.143715302	1.2105153	0.418824905	2.890265801	0.003849162	0.052521496
Cycling Alpha	<i>RPS19</i>	187.2221029	-0.562774931	0.195021578	-2.885705969	0.003905368	0.052521496
Cycling Alpha	<i>RASSF1</i>	6.566319749	1.065817917	0.369400818	2.885261392	0.003910888	0.052521496
Cycling Alpha	<i>CCNB1</i>	9.104426744	1.573055821	0.545442485	2.883999438	0.003926595	0.052521496
Cycling Alpha	<i>DYRK1A</i>	4.63655732	1.277478569	0.44568861	2.866302929	0.004152966	0.055051964
Cycling Alpha	<i>MZT1</i>	7.434485575	1.092993045	0.381707965	2.8634274	0.004190848	0.055051964
Cycling Alpha	<i>USP8</i>	4.994783312	0.945115081	0.330290099	2.861469612	0.004216819	0.055051964
Cycling Alpha	<i>PSMD14</i>	11.04504104	1.106537054	0.386798269	2.860760102	0.004226267	0.055051964
Cycling Alpha	<i>HMG1</i>	33.60031385	0.727629053	0.254639484	2.857487154	0.004270099	0.055091077
Cycling Alpha	<i>KANSL1</i>	3.758575207	1.081600777	0.378656806	2.856414458	0.004284554	0.055091077
Cycling Alpha	<i>ATP5MC1</i>	15.90865821	-0.839912872	0.294660539	-2.850442329	0.004365847	0.05577649
Cycling Alpha	<i>CLTC</i>	11.44801175	0.943894387	0.331942031	2.843551884	0.004461375	0.055849919

Cycling Alpha	<i>TCEAL8</i>	8.808378125	1.007022953	0.354144272	2.843538731	0.004461559	0.055849919
Cycling Alpha	<i>UBE2D3</i>	31.01999433	0.63326201	0.222735096	2.84311732	0.004467462	0.055849919
Cycling Alpha	<i>RWDD1</i>	15.09668621	0.780022287	0.274466141	2.841961798	0.004483686	0.055849919
Cycling Alpha	<i>FNIP1</i>	5.615348248	1.187252694	0.420208102	2.825392198	0.004722278	0.058456516
Cycling Alpha	<i>BUD23</i>	11.25024163	0.952844555	0.33854104	2.81456143	0.004884384	0.058677907
Cycling Alpha	<i>MORF4L2</i>	16.7111142	0.887319881	0.31536703	2.813610168	0.00489886	0.058677907
Cycling Alpha	<i>DCTN3</i>	18.83848752	0.823183797	0.292772475	2.81168439	0.004928283	0.058677907
Cycling Alpha	<i>NDUFA4</i>	20.88919659	-1.268719012	0.451449122	-2.810325571	0.004949141	0.058677907
Cycling Alpha	<i>HNRNPA0</i>	17.57298116	0.873642062	0.311139791	2.807876355	0.004986937	0.058677907
Cycling Alpha	<i>CDCA5</i>	5.583558107	1.430175107	0.509835625	2.805169036	0.00502902	0.058677907
Cycling Alpha	<i>TPX2</i>	16.61502078	1.37430452	0.490103948	2.804108239	0.005045596	0.058677907
Cycling Alpha	<i>TAF15</i>	6.800124461	1.193917395	0.425855896	2.803571363	0.005054005	0.058677907
Cycling Alpha	<i>FABP5</i>	12.08051447	1.584720937	0.565334743	2.803155044	0.005060534	0.058677907
Cycling Alpha	<i>GTSE1</i>	4.931702077	1.427608262	0.509435897	2.802331499	0.005073471	0.058677907
Cycling Alpha	<i>CHGB</i>	160.6956661	3.157785677	1.126922384	2.802132358	0.005076604	0.058677907
Cycling Alpha	<i>ARID1A</i>	8.269498422	1.164621124	0.41584673	2.80060186	0.005100741	0.058677907
Cycling Alpha	<i>SS18</i>	4.08409377	1.052125166	0.375866112	2.799201985	0.005122908	0.058677907
Cycling Alpha	<i>RHEB</i>	31.63890333	0.866654674	0.30994076	2.796194583	0.005170826	0.05888319
Cycling Alpha	<i>RBM39</i>	24.56812318	0.971188505	0.347929152	2.791339849	0.005249033	0.059273555
Cycling Alpha	<i>OSTC</i>	9.32638826	-1.174714164	0.420982645	-2.790409956	0.005264134	0.059273555
Cycling Alpha	<i>ARL6IP1</i>	78.85479825	1.36003719	0.487814798	2.788019542	0.005303134	0.05937723
Cycling Alpha	<i>HSPA5</i>	44.29126792	-1.582723505	0.56868782	-2.78311483	0.005383975	0.059945596
Cycling Alpha	<i>PRELID3B</i>	5.233157362	1.026529894	0.370456138	2.770989027	0.005588631	0.061878565
Cycling Alpha	<i>DDX39A</i>	11.23786289	1.043984935	0.377085087	2.768565955	0.005630359	0.061996161
Cycling Alpha	<i>PRDX6</i>	10.50246512	-0.949776829	0.343315435	-2.766484496	0.005666428	0.062050499
Cycling Alpha	<i>ELF1</i>	4.516016593	1.213102294	0.439454167	2.760475118	0.005771735	0.062858299
Cycling Alpha	<i>SAFB</i>	4.276128117	0.986239722	0.358352113	2.752152661	0.005920491	0.064127932
Cycling Alpha	<i>S100A6</i>	76.06177256	-1.809199928	0.658468873	-2.747586109	0.006003574	0.064676343
Cycling Alpha	<i>NUSAP1</i>	21.11746099	1.457867942	0.53141596	2.743364994	0.006081305	0.065161509
Cycling Alpha	<i>PRRC2C</i>	17.13635361	0.761671218	0.278277019	2.737097085	0.0061984	0.065830325
Cycling Alpha	<i>CSNK1A1</i>	12.56677263	0.697014529	0.254710842	2.736493363	0.006209785	0.065830325
Cycling Alpha	<i>RNF213</i>	4.085853411	1.653730442	0.606136347	2.728314266	0.006365893	0.066896329
Cycling Alpha	<i>NPTN</i>	5.856038513	1.045294957	0.383433756	2.726142234	0.006407938	0.066896329
Cycling Alpha	<i>SEPTIN7</i>	18.39443037	0.772756931	0.283623183	2.724590152	0.006438135	0.066896329
Cycling Alpha	<i>CCNL1</i>	10.36724868	1.643064806	0.603123671	2.724258532	0.006444604	0.066896329
Cycling Alpha	<i>FTL</i>	327.8505155	-1.386906301	0.509946374	-2.719710094	0.006533917	0.067156012
Cycling Alpha	<i>MRPL41</i>	15.83300861	-0.723537708	0.266147643	-2.718557638	0.006556723	0.067156012
Cycling Alpha	<i>SMC4</i>	13.12290632	1.448718131	0.53303777	2.717852681	0.006570709	0.067156012
Cycling Alpha	<i>PTMS</i>	27.73912387	1.003909965	0.370226941	2.711607001	0.006695793	0.067906484
Cycling Alpha	<i>FCGRT</i>	4.466363089	0.955416046	0.352449106	2.710791515	0.006712282	0.067906484
Cycling Alpha	<i>SEC22C</i>	6.530436866	0.94360755	0.348776108	2.705482195	0.00682053	0.068653117
Cycling Alpha	<i>TBC1D15</i>	9.771254323	1.179012483	0.436671907	2.699996184	0.006934027	0.069444805
Cycling Alpha	<i>RCAN2</i>	5.565856279	1.600399352	0.593166329	2.698061698	0.006974451	0.069500407
Cycling Alpha	<i>RPL14</i>	135.4868442	-0.284236363	0.105631537	-2.690828612	0.00712748	0.070671979
Cycling Alpha	<i>CNOT1</i>	8.705181492	1.230349412	0.457830278	2.687348281	0.007202181	0.071059145
Cycling Alpha	<i>HNRNPUL2</i>	6.49207594	1.205057856	0.449202697	2.682659442	0.007303933	0.071103244
Cycling Alpha	<i>GABARAPL2</i>	12.62859688	1.038467163	0.387107771	2.682630632	0.007304562	0.071103244
Cycling Alpha	<i>VMA21</i>	6.971855653	0.984667865	0.367110197	2.682213335	0.00731368	0.071103244
Cycling Alpha	<i>COX8A</i>	67.57259574	0.642335219	0.240061471	2.675711416	0.007457082	0.072145463
Cycling Alpha	<i>HNRNPC</i>	19.12789922	0.822413908	0.307833263	2.671621319	0.007548578	0.072468052
Cycling Alpha	<i>ATG12</i>	6.394979117	1.067140188	0.399532213	2.670974091	0.007563148	0.072468052
Cycling Alpha	<i>SBNO1</i>	5.942882041	0.896576586	0.336502121	2.664400992	0.007712557	0.07352726
Cycling Alpha	<i>CCNA2</i>	7.387669648	1.19348152	0.4482672	2.662433302	0.007757794	0.07352726
Cycling Alpha	<i>FOXM1</i>	10.89071697	1.011185762	0.379961888	2.661282078	0.007784371	0.07352726
Cycling Alpha	<i>SNHG29</i>	53.03630908	-0.557454473	0.209665016	-2.658786304	0.007842269	0.073724724
Cycling Alpha	<i>PRPF40A</i>	11.80651899	0.74530981	0.280850465	2.653760284	0.007960035	0.074480518
Cycling Alpha	<i>CNOT2</i>	4.807986961	1.074863856	0.405394985	2.651398993	0.008015909	0.07465283
Cycling Alpha	<i>RFC1</i>	6.502871845	1.022907818	0.387100456	2.642486732	0.008229969	0.076289898
Cycling Alpha	<i>ANP32E</i>	11.73834841	0.984981181	0.373348417	2.638235857	0.00833386	0.076689176
Cycling Alpha	<i>PPIG</i>	19.00455295	0.817662572	0.31000488	2.637579683	0.008350001	0.076689176
Cycling Alpha	<i>NIPBL</i>	7.182215106	1.066817981	0.407080955	2.620653137	0.00877615	0.080021574
Cycling Alpha	<i>FLOT1</i>	6.863460325	0.928519812	0.354397723	2.619999373	0.008793138	0.080021574
Cycling Alpha	<i>PABPC1</i>	30.82154622	0.762923718	0.291607855	2.616266004	0.008889727	0.080078223
Cycling Alpha	<i>TARS</i>	7.259605	1.251840662	0.478768222	2.614711264	0.008930291	0.080078223
Cycling Alpha	<i>PAFAH1B1</i>	9.895434785	0.841666041	0.321898881	2.614690797	0.008930826	0.080078223
Cycling Alpha	<i>ATF6</i>	4.021447161	1.11529199	0.427141398	2.611060399	0.009026195	0.080078223
Cycling Alpha	<i>ASXL1</i>	4.36481439	1.008023382	0.386182085	2.610228235	0.009048183	0.080078223
Cycling Alpha	<i>TMCO3</i>	8.490802833	1.151251272	0.441187259	2.609439072	0.009069079	0.080078223
Cycling Alpha	<i>GAPDH</i>	194.7837017	0.735682554	0.282040851	2.608425519	0.00909598	0.080078223
Cycling Alpha	<i>TAF1D</i>	7.308145381	0.880173844	0.337555629	2.607492714	0.009120801	0.080078223
Cycling Alpha	<i>RPL26</i>	181.3882691	-0.41570147	0.159588701	-2.604830219	0.00919198	0.080200505
Cycling Alpha	<i>FMC1</i>	4.818944	1.180218807	0.453239085	2.603965208	0.009215211	0.080200505
Cycling Alpha	<i>S100A11</i>	28.12720412	-2.395871887	0.922450166	-2.597291405	0.009396217	0.081394598

Cycling Alpha	<i>SNHG8</i>	22.90793647	0.98993558	0.38152361	2.594690224	0.009467621	0.081394598
Cycling Alpha	<i>SUZ12</i>	11.26978498	1.120339496	0.431893796	2.594016183	0.009486202	0.081394598
Cycling Alpha	<i>FXR1</i>	9.613455153	0.971736216	0.37476148	2.592945826	0.009515776	0.081394598
Cycling Alpha	<i>ATP5MPL</i>	34.13867439	0.5963356	0.230656375	2.585385293	0.009727023	0.082845972
Cycling Alpha	<i>C2orf69</i>	5.756545347	1.196299909	0.463172586	2.582838332	0.009799123	0.083104902
Cycling Alpha	<i>PNISR</i>	20.21646602	0.99546447	0.387678854	2.567755397	0.010235936	0.086084015
Cycling Alpha	<i>CNIH1</i>	6.046415865	0.941433927	0.367067793	2.5647413	0.010325276	0.086084015
Cycling Alpha	<i>LINC01578</i>	9.861484238	1.306190135	0.50931353	2.564609141	0.010329209	0.086084015
Cycling Alpha	<i>REEP3</i>	5.197355369	1.118395484	0.436164637	2.564159013	0.010342615	0.086084015
Cycling Alpha	<i>DLGAP5</i>	4.393515221	1.374937203	0.536380243	2.563362875	0.010366364	0.086084015
Cycling Alpha	<i>GLS</i>	9.575908392	1.585169354	0.618750083	2.561889521	0.010410443	0.086091339
Cycling Alpha	<i>USP47</i>	4.036532041	0.832948459	0.325752219	2.557000106	0.010557919	0.086950131
Cycling Alpha	<i>DAP</i>	9.996504142	0.743288295	0.291032308	2.553971754	0.01065019	0.087349086
Cycling Alpha	<i>C12orf65</i>	4.859745815	1.053028505	0.41266935	2.551748766	0.010718378	0.08754806
Cycling Alpha	<i>TMX2</i>	3.352640716	1.303553258	0.513197022	2.540063956	0.01108322	0.090112946
Cycling Alpha	<i>RBM23</i>	5.298501298	1.025698023	0.404006403	2.538816257	0.011122822	0.090112946
Cycling Alpha	<i>TSNAX</i>	8.289872344	0.906353601	0.358237873	2.530032891	0.011405183	0.09202644
Cycling Alpha	<i>SREK1</i>	7.259040033	0.940516833	0.372233142	2.526687519	0.01151439	0.092320452
Cycling Alpha	<i>TWF1</i>	6.345047888	0.881575892	0.349289812	2.523909546	0.011605779	0.092320452
Cycling Alpha	<i>LDLR</i>	10.20245932	1.078870468	0.42754923	2.523383023	0.011623172	0.092320452
Cycling Alpha	<i>NCOR1</i>	4.609243045	0.883014188	0.350132434	2.521943417	0.011670848	0.092320452
Cycling Alpha	<i>CKS2</i>	23.36837058	1.155037091	0.458007904	2.521871527	0.011673233	0.092320452
Cycling Alpha	<i>APLP1</i>	8.604070398	1.489057043	0.592312184	2.513973347	0.011937946	0.094040812
Cycling Alpha	<i>CHID1</i>	8.394998725	1.055262435	0.420290432	2.510793384	0.012046018	0.094518558
Cycling Alpha	<i>TBL1XR1</i>	4.632975815	1.238207731	0.493991162	2.506538226	0.012191987	0.094896519
Cycling Alpha	<i>REK1</i>	8.406359151	-1.04968786	0.418814842	-2.506329181	0.012199199	0.094896519
Cycling Alpha	<i>TMEM176B</i>	15.52610168	1.645967996	0.657011617	2.505234234	0.012237032	0.094896519
Cycling Alpha	<i>RP54X</i>	175.5454869	-0.490897826	0.196562511	-2.497413286	0.012510306	0.096639688
Cycling Alpha	<i>PIM3</i>	7.282499567	1.374370216	0.552375263	2.488109638	0.012842414	0.098822124
Cycling Alpha	<i>ARHGEF12</i>	7.52728313	1.071060675	0.431301394	2.483323008	0.0130163	0.099774946
Delta	<i>ZFP36</i>	11.62981942	2.326040715	0.46932345	4.956157025	7.19E-07	0.002418754
Delta	<i>HLA-B</i>	66.21374671	1.985373207	0.430248746	4.614477619	3.94E-06	0.006628514
Delta	<i>AQP3</i>	34.75104077	2.895737356	0.648230808	4.467139359	7.93E-06	0.008700035
Delta	<i>HLA-A</i>	214.6387313	1.074896868	0.243749823	4.409836509	1.03E-05	0.008700035
Delta	<i>DGCR6L</i>	11.80124839	-1.195724035	0.291386086	-4.103572864	4.07E-05	0.027370732
Delta	<i>HLA-C</i>	97.76446531	1.022340256	0.252542208	4.0481956	5.16E-05	0.027772796
Delta	<i>SCG2</i>	84.01326157	1.506765856	0.375209889	4.015794623	5.92E-05	0.027772796
Delta	<i>B2M</i>	530.0201194	0.879364889	0.220387003	3.99009413	6.60E-05	0.027772796
Delta	<i>PRG4</i>	20.8112476	2.769837415	0.713203418	3.883656953	0.000102897	0.037273756
Delta	<i>IARS</i>	12.11458498	1.09131015	0.282310924	3.865632025	0.000110802	0.037273756
Delta	<i>CTSL</i>	32.48426328	0.867000651	0.231856616	3.73938284	0.000184473	0.056415075
Delta	<i>MEITRN</i>	36.88277063	-1.433855417	0.395453795	-3.625848166	0.000288015	0.08074008
Delta	<i>HLA-E</i>	24.29771871	1.213042219	0.341291403	3.554271246	0.000379028	0.098080805
Ductal	<i>S100A2</i>	31.97295768	-2.010770735	0.414417605	-4.852039853	1.22E-06	0.013127737
Ductal	<i>PDLM2</i>	41.15183069	-1.467095514	0.323990412	-4.58206573	5.95E-06	0.025009226
Ductal	<i>TEN1</i>	50.54418227	-0.879957274	0.195799312	-4.494179607	6.98E-06	0.025009226
Ductal	<i>MSANTD4</i>	24.41804404	0.895146591	0.204846459	4.369841671	1.24E-05	0.033393717
Gamma+Epsilon	<i>B2M</i>	482.8800623	1.076163501	0.214354957	5.020474051	5.15E-07	0.001546839
Gamma+Epsilon	<i>FAM229B</i>	10.0101047	-1.370683494	0.319209758	-4.293989953	1.75E-05	0.026332337
Gamma+Epsilon	<i>TFH3</i>	17.07281199	-1.572695366	0.388936641	-4.043577287	5.26E-05	0.042138954
Gamma+Epsilon	<i>HLA-A</i>	219.6391642	0.93379551	0.236221777	3.953045821	7.72E-05	0.042138954
Gamma+Epsilon	<i>LDHA</i>	11.12147284	1.542643888	0.390303857	3.952417739	7.74E-05	0.042138954
Gamma+Epsilon	<i>TMBIM6</i>	77.91444853	0.578468599	0.148329916	3.899878156	9.62E-05	0.042138954
Gamma+Epsilon	<i>GOLGA4</i>	28.85376834	0.930472988	0.238903119	3.894771205	9.83E-05	0.042138954
Gamma+Epsilon	<i>RGS4</i>	15.01237241	1.747840589	0.467870231	3.735737972	0.000187165	0.058794587
Gamma+Epsilon	<i>SYPL1</i>	8.59051525	0.949731525	0.254783167	3.727607031	0.000193306	0.058794587
Gamma+Epsilon	<i>WSB1</i>	15.07647204	0.77102511	0.207029717	3.72422434	0.000195917	0.058794587
Gamma+Epsilon	<i>HLA-B</i>	81.51667186	1.564026927	0.423954313	3.689140267	0.000225013	0.059154275
Gamma+Epsilon	<i>HLA-C</i>	91.27557117	1.055027378	0.287086753	3.674942744	0.000237903	0.059154275
Gamma+Epsilon	<i>SCAND1</i>	51.23401796	-0.759624438	0.20777863	-3.655931505	0.00025625	0.059154275
Gamma+Epsilon	<i>SELENOW</i>	25.42637488	-0.778012927	0.218930357	-3.55370054	0.000379851	0.081423876
Gamma+Epsilon	<i>ISOC2</i>	8.958260745	-1.023615796	0.293883352	-3.483068337	0.000495702	0.09917341
Macrophage	<i>RO60</i>	7.822473626	0.973946751	0.235443455	4.136648234	3.52E-05	0.043546056
Macrophage	<i>CCT4</i>	6.873421616	1.096345678	0.268716825	4.079929413	4.50E-05	0.043546056
Macrophage	<i>BLOC1S6</i>	8.091749288	0.96320528	0.237367031	4.057873061	4.95E-05	0.043546056
Macrophage	<i>EIF2S3</i>	6.337598152	1.36564649	0.343986736	3.970055664	7.19E-05	0.047388928
Macrophage	<i>EIF2A</i>	4.649416122	1.151220019	0.300638936	3.829244591	0.000128537	0.067816231
Macrophage	<i>GAPVD1</i>	4.753258099	1.120082677	0.299402029	3.741065756	0.000183242	0.080565209
Macrophage	<i>TMCO1</i>	8.870477413	1.170250576	0.317157089	3.689813713	0.000224418	0.08457365
Macrophage	<i>MED13</i>	9.377927432	0.864602344	0.238589823	3.623802283	0.000290304	0.088970008
Macrophage	<i>ARRDC3</i>	11.55190703	1.295293227	0.35858223	3.612262732	0.000303537	0.088970008
Macrophage	<i>EIF2AK2</i>	9.491761101	0.952266187	0.268445252	3.547338534	0.000389144	0.09915745
Macrophage	<i>PIA2</i>	13.32358722	0.874483229	0.247635377	3.531334011	0.000413469	0.09915745

Mast	<i>MALAT1</i>	3931.46393	-2.419451919	0.483037497	-5.008828367	5.48E-07	0.000138312
Mast	<i>SAT1</i>	28.71209335	-2.635777369	0.537886991	-4.900243756	9.57E-07	0.000138312
Mast	<i>NEAT1</i>	447.8094171	-3.414777933	0.711147083	-4.80178857	1.57E-06	0.000151489
Mast	<i>FTH1</i>	216.1492322	-1.785534794	0.450877552	-3.960132385	7.49E-05	0.005170404
Mast	<i>SERP1</i>	6.302847396	-2.065324062	0.527197835	-3.917550352	8.95E-05	0.005170404
Mast	<i>RBM25</i>	14.40078836	-2.160271442	0.575103538	-3.756317427	0.000172432	0.008305473
Mast	<i>SF3B1</i>	8.36412762	-2.17043964	0.584142953	-3.715596722	0.000202725	0.008369634
Mast	<i>CD44</i>	18.03059698	-2.077421996	0.567889056	-3.658147617	0.000254045	0.0091372
Mast	<i>SRSF10</i>	8.833940081	-1.79525604	0.497356444	-3.609596423	0.000306674	0.0091372
Mast	<i>SQSTM1</i>	12.41083385	-1.883099316	0.522838998	-3.601681059	0.000316166	0.0091372
Mast	<i>FTL</i>	229.109473	-1.877201865	0.542303611	-3.461533037	0.000537108	0.014111297
Mast	<i>H3F3B</i>	49.87886351	-1.053760471	0.309128457	-3.408810958	0.000652467	0.015613016
Mast	<i>RPS29</i>	118.1641666	0.993594414	0.293210422	3.388673593	0.000702316	0.015613016
Mast	<i>RPS9</i>	53.2549804	-0.595047267	0.181369744	-3.280851884	0.001034941	0.021364135
Mast	<i>RPL36AL</i>	24.88342889	-0.759131374	0.251253643	-3.021374594	0.002516298	0.048480684
Mast	<i>SFPQ</i>	11.71311184	-1.414473932	0.473794071	-2.985419232	0.002831899	0.051151178
Mast	<i>SNHG8</i>	10.54923047	-1.061163962	0.358555286	-2.95955464	0.003080841	0.052374291
Mast	<i>FUS</i>	14.11035674	-1.445015847	0.497247037	-2.906032092	0.003660439	0.058770383
Mast	<i>SRSF5</i>	13.77868673	-1.006307841	0.362494881	-2.776060828	0.005502191	0.083691226
Mast	<i>BTG2</i>	9.508556241	-1.685903757	0.611485516	-2.757062455	0.005832321	0.084277039
Mast	<i>HLA-A</i>	24.49011377	0.792733001	0.29066882	2.727272233	0.006386033	0.087883976
Mast	<i>SKP1</i>	11.47602034	-0.90199174	0.337759668	-2.670513464	0.007573533	0.099488689
MUC5B+ Ductal	<i>TBL1XR1</i>	9.000430511	1.45047732	0.3134983	4.626747001	3.71E-06	0.01294888
MUC5B+ Ductal	<i>AHCYL1</i>	14.60345043	1.064456426	0.24598024	4.327406242	1.51E-05	0.020054835
MUC5B+ Ductal	<i>LPP</i>	15.78062945	1.375030303	0.319946524	4.297687894	1.73E-05	0.020054835
MUC5B+ Ductal	<i>NFE2L2</i>	26.07100112	1.046538378	0.250008095	4.186017971	2.84E-05	0.022490055
MUC5B+ Ductal	<i>CLDN12</i>	6.062885137	1.310003633	0.316045552	4.144983604	3.40E-05	0.022490055
MUC5B+ Ductal	<i>GBP2</i>	8.419415483	1.72910138	0.421476014	4.102490582	4.09E-05	0.022490055
MUC5B+ Ductal	<i>RBBP4</i>	9.015903413	1.5253767	0.373925916	4.079355384	4.52E-05	0.022490055
MUC5B+ Ductal	<i>PATJ</i>	6.141412427	1.122323163	0.279074126	4.021595197	5.78E-05	0.025188676
MUC5B+ Ductal	<i>UGP2</i>	7.414933989	1.330986304	0.350254824	3.800051315	0.000144666	0.052301454
MUC5B+ Ductal	<i>VPS35</i>	7.886488963	1.014533733	0.267615327	3.791015059	0.000150033	0.052301454
MUC5B+ Ductal	<i>ABCF1</i>	10.00458624	1.053197129	0.281850308	3.736725135	0.000186433	0.059082163
MUC5B+ Ductal	<i>COPB2</i>	8.023239398	1.208967923	0.327963652	3.686286313	0.00022755	0.061535013
MUC5B+ Ductal	<i>COPB1</i>	11.5014163	1.075408238	0.291902147	3.684139524	0.000229477	0.061535013
MUC5B+ Ductal	<i>WNK1</i>	8.980002477	1.291202425	0.353536215	3.652249391	0.000259953	0.064728357
MUC5B+ Ductal	<i>MED4</i>	8.213970959	0.863417824	0.238425266	3.621335273	0.000293086	0.068113279
MUC5B+ Ductal	<i>PRKDC</i>	5.650070064	1.477184705	0.412491962	3.581123616	0.00034212	0.069444713
MUC5B+ Ductal	<i>DYNC1I2</i>	10.07324986	1.478021538	0.413063204	3.578197046	0.000345973	0.069444713
MUC5B+ Ductal	<i>XRCC5</i>	30.15678246	0.928405639	0.261123712	3.555424479	0.000377369	0.069444713
MUC5B+ Ductal	<i>NMT1</i>	9.426685779	1.295015332	0.364317062	3.554638165	0.0003785	0.069444713
MUC5B+ Ductal	<i>TRIB1</i>	7.535998497	1.432254267	0.409490161	3.497652453	0.000469372	0.075297919
MUC5B+ Ductal	<i>NARS</i>	6.68476827	1.426493667	0.407888475	3.497263974	0.000470056	0.075297919
MUC5B+ Ductal	<i>PRMT2</i>	5.632393697	1.36650737	0.391684378	3.488797222	0.000485199	0.075297919
MUC5B+ Ductal	<i>WBP2</i>	11.84996334	0.968749091	0.278500983	3.478440467	0.00050434	0.075297919
MUC5B+ Ductal	<i>HIPK2</i>	9.872134476	1.380628132	0.397753685	3.471063084	0.000518402	0.075297919
MUC5B+ Ductal	<i>NAMPT</i>	21.68461983	1.267130306	0.367490058	3.448066903	0.000564614	0.075980368
MUC5B+ Ductal	<i>HDAC1</i>	8.200720382	1.020509985	0.296051041	3.447074468	0.000566692	0.075980368
MUC5B+ Ductal	<i>HIF1A</i>	28.07328848	1.373404195	0.402902945	3.408771797	0.00065256	0.084252802
MUC5B+ Ductal	<i>WSB1</i>	11.95945474	0.966947408	0.284834634	3.394767676	0.000686869	0.08551514
MUC5B+ Ductal	<i>UACA</i>	6.277413724	1.370494797	0.406901502	3.368124201	0.000756815	0.090974375
MUC5B+ Ductal	<i>PA2G4</i>	21.51870495	0.884495472	0.263920764	3.351367502	0.000804135	0.091265724
MUC5B+ Ductal	<i>SHTN1</i>	7.010118181	1.088661493	0.325575218	3.343809457	0.000826365	0.091265724
MUC5B+ Ductal	<i>GPI</i>	8.674607996	1.072273196	0.321931964	3.330744746	0.00086614	0.091265724
MUC5B+ Ductal	<i>SON</i>	38.54058959	0.741056715	0.222703878	3.327542932	0.000876155	0.091265724
MUC5B+ Ductal	<i>SYNE2</i>	10.07584769	1.126271769	0.338919207	3.323127595	0.000890142	0.091265724
Quiescent Stella	<i>HLA-B</i>	141.0683439	1.241179681	0.282310336	4.396508106	1.10E-05	0.036445072
Quiescent Stella	<i>PSMD14</i>	13.64086598	1.204579648	0.298765713	4.031853706	5.53E-05	0.091668444

Supplemental Table 7: Significantly enriched pathways in T1D beta cells (GSEA)

Pathway	Database	pval	padj	log2err	ES	NES	size
ANTIGEN_PROCESSING_CROSS_PRESENTATION	REACTOME	3.62E-11	3.96E-07	0.85133906	0.9069189	1.81239964	79
ADAPTIVE_IMMUNE_RESPONSE	GOBP	1.09E-09	5.98E-06	0.78818681	0.8207473	1.67118731	159
ADAPTIVE_IMMUNE_RESPONSE_BASED_ON_SOMATIC_RECOMBINATION	GOBP	3.28E-09	1.20E-05	0.77493903	0.83708	1.69347315	119
ANTIGEN_PROCESSING_AND_PRESENTATION	GOBP	1.27E-08	3.41E-05	0.74773966	0.92158847	1.81769518	55
LEUKOCYTE_MEDIATED_CYTOTOXICITY	GOBP	1.56E-08	3.41E-05	0.73376199	0.93176878	1.82203133	44
IMMUNOREGULATORY_INTERACTIONS_BETWEEN_A_LYMPHOID_AND_F	REACTOME	2.62E-08	4.78E-05	0.73376199	0.97388232	1.80375002	23
POSITIVE_REGULATION_OF_IMMUNE_SYSTEM_PROCESS	GOBP	3.52E-08	5.36E-05	0.71951283	0.69268456	1.43634434	446
LYMPHOCYTE_MEDIATED_IMMUNITY	GOBP	3.91E-08	5.36E-05	0.71951283	0.83690511	1.69666868	110
POSITIVE_REGULATION_OF_IMMUNE_EFFECTOR_PROCESS	GOBP	7.02E-08	8.54E-05	0.70497572	0.83190945	1.68654091	110
CELL_KILLING	GOBP	9.62E-08	0.00010539	0.70497572	0.90971125	1.78855407	53
INTERFERON_ALPHA_BETA_SIGNALING	REACTOME	1.53E-07	0.00014931	0.69013246	0.93431743	1.81451733	40
ANTIGEN_PRESENTATION_FOLDING_ASSEMBLY_AND_PEPTIDE_LOADING	REACTOME	1.64E-07	0.00014931	0.69013246	0.95128027	1.7995066	28
LEUKOCYTE_MEDIATED_IMMUNITY	GOBP	1.81E-07	0.00014931	0.69013246	0.79340815	1.61423069	153
IMMUNE_EFFECTOR_PROCESS	GOBP	1.91E-07	0.00014931	0.69013246	0.74258116	1.52249334	240
ANTIGEN_PROCESSING_AND_PRESENTATION_OF_PEPTIDE_ANTIGEN	GOBP	2.18E-07	0.00015279	0.69013246	0.93335438	1.80307874	35
REGULATION_OF_IMMUNE_EFFECTOR_PROCESS	GOBP	2.23E-07	0.00015279	0.69013246	0.7877323	1.60169261	149
INNATE_IMMUNE_RESPONSE	GOBP	2.69E-07	0.00017341	0.67496286	0.69402171	1.43775769	390
POSITIVE_REGULATION_OF_IMMUNE_RESPONSE	GOBP	3.41E-07	0.00020762	0.67496286	0.72163285	1.48610121	297
DEFENSE_RESPONSE_TO_OTHER_ORGANISM	GOBP	4.47E-07	0.00025783	0.67496286	0.6773241	1.40663499	479
OXIDATIVE_PHOSPHORYLATION	KEGG	5.44E-07	0.00029814	0.6594444	-0.6107234	-2.0520012	115
REGULATION_OF_LEUKOCYTE_MEDIATED_CYTOTOXICITY	GOBP	5.98E-07	0.00031224	0.6594444	0.95833161	1.79034281	25
REGULATION_OF_CELL_KILLING	GOBP	7.84E-07	0.00039068	0.6594444	0.95136753	1.80741202	29
POSITIVE_REGULATION_OF_LEUKOCYTE_MEDIATED_IMMUNITY	GOBP	8.68E-07	0.00041357	0.6594444	0.8618483	1.70655601	63
T_CELL_MEDIATED_CYTOTOXICITY	GOBP	1.09E-06	0.00048055	0.64355184	0.97369105	1.74905443	18
ANTIGEN_PROCESSING_AND_PRESENTATION	KEGG	1.10E-06	0.00048055	0.64355184	0.92451661	1.7923909	38
COOPERATION_OF_PREFOLDIN_AND_TRIC_CCT_IN_ACTIN_AND_TUBULI	REACTOME	1.16E-06	0.0004892	0.64355184	-0.8942896	-2.2509337	24
CYTOKINE_SIGNALING_IN_IMMUNE_SYSTEM	REACTOME	1.29E-06	0.00050118	0.64355184	0.68141776	1.41157136	418
REGULATION_OF_ADAPTIVE_IMMUNE_RESPONSE	GOBP	1.32E-06	0.00050118	0.64355184	0.82966582	1.66842895	88
POSITIVE_REGULATION_OF_RESPONSE_TO_EXTERNAL_STIMULUS	GOBP	1.33E-06	0.00050118	0.64355184	0.72554457	1.48963089	256
REGULATION_OF_IMMUNE_RESPONSE	GOBP	1.45E-06	0.00051703	0.64355184	0.68822972	1.42471487	382
POSITIVE_REGULATION_OF_CELL_KILLING	GOBP	1.46E-06	0.00051703	0.64355184	0.96765072	1.75146906	19
ANTIGEN_BINDING	GOMF	1.68E-06	0.00057368	0.64355184	0.96343543	1.75143633	20
VIRAL_MYOCARDITIS	KEGG	2.00E-06	0.00066361	0.62725674	0.93883675	1.78963974	30
REGULATION_OF_PRODUCTION_OF_MOLECULAR_MEDIATOR_OF_IMML	GOBP	3.45E-06	0.00111307	0.62725674	0.83419417	1.67316913	84
CYTOKINE_PRODUCTION	GOBP	3.56E-06	0.00111473	0.62725674	0.69133397	1.42689234	343
ADAPTIVE_IMMUNE_SYSTEM	REACTOME	4.39E-06	0.00125893	0.61052688	0.65191789	1.35433105	500
T_CELL_MEDIATED_IMMUNITY	GOBP	4.44E-06	0.00125893	0.61052688	0.9019567	1.75840928	43
PEPTIDE_BINDING	GOMF	4.47E-06	0.00125893	0.61052688	0.76751147	1.5609884	157
ANTIGEN_PROCESSING_AND_PRESENTATION_OF_PEPTIDE_ANTIGEN_VI	GOBP	4.48E-06	0.00125893	0.61052688	0.94758877	1.75505114	23
UNSATURATED_FATTY_ACID_METABOLIC_PROCESS	GOBP	4.87E-06	0.00133302	0.61052688	0.8955848	1.75150392	45
NATURAL_KILLER_CELL_MEDIATED_IMMUNITY	GOBP	5.52E-06	0.00147532	0.61052688	0.92759246	1.75469713	28
REGULATION_OF_LYMPHOCYTE_MEDIATED_IMMUNITY	GOBP	6.16E-06	0.00160719	0.61052688	0.84046437	1.67554318	72
NEGATIVE_REGULATION_OF_IMMUNE_SYSTEM_PROCESS	GOBP	6.88E-06	0.00172079	0.61052688	0.73154947	1.49712294	204
POSITIVE_REGULATION_OF_LYMPHOCYTE_MEDIATED_IMMUNITY	GOBP	7.03E-06	0.00172079	0.61052688	0.87753562	1.72793623	54
REGULATION_OF_LEUKOCYTE_MEDIATED_IMMUNITY	GOBP	7.07E-06	0.00172079	0.61052688	0.81391664	1.64467783	98
CELL_CELL_ADHESION	GOBP	7.29E-06	0.00173323	0.61052688	0.67530002	1.39881985	395
REGULATION_OF_DEFENSE_RESPONSE	GOBP	7.43E-06	0.00173323	0.61052688	0.67612522	1.39587502	344
POSITIVE_REGULATION_OF_PRODUCTION_OF_MOLECULAR_MEDIATOR	GOBP	8.74E-06	0.00199473	0.59332548	0.85694248	1.70486952	67
POSITIVE_REGULATION_OF_T_CELL_MEDIATED_IMMUNITY	GOBP	9.46E-06	0.00211477	0.59332548	0.92221214	1.74451935	28
ICOSANOID_METABOLIC_PROCESS	GOBP	9.92E-06	0.00212097	0.59332548	0.88909232	1.72740049	41
REGULATION_OF_T_CELL_MEDIATED_IMMUNITY	GOBP	1.01E-05	0.00212097	0.59332548	0.9061707	1.74580902	34
UNSATURATED_FATTY_ACID_BIOSYNTHETIC_PROCESS	GOBP	1.01E-05	0.00212097	0.59332548	0.94047352	1.74187281	23
REGULATION_OF_T_CELL_MEDIATED_CYTOTOXICITY	GOBP	1.05E-05	0.00214554	0.59332548	0.98090106	1.70387532	13
REGULATION_OF_RESPONSE_TO_EXTERNAL_STIMULUS	GOBP	1.06E-05	0.00214554	0.59332548	0.65855456	1.36743989	478
MOLECULAR_TRANSDUCER_ACTIVITY	GOMF	1.08E-05	0.00214554	0.59332548	0.70965001	1.46054647	270
CELL_ACTIVATION_INVOLVED_IN_IMMUNE_RESPONSE	GOBP	1.13E-05	0.00220643	0.59332548	0.77112047	1.56453289	129
ANTIGEN_PROCESSING_AND_PRESENTATION_OF_ENDOGENOUS_ANTIC	GOBP	1.16E-05	0.00222065	0.59332548	0.97535909	1.70731157	14
REGULATION_OF_EXOCYTOSIS	GOBP	1.26E-05	0.00237569	0.59332548	0.77589279	1.56938905	120
NEGATIVE_REGULATION_OF_CELL_ACTIVATION	GOBP	1.35E-05	0.00247763	0.59332548	0.82324968	1.6451939	79
METALLOTHIONEINS_BIND_METALS	REACTOME	1.36E-05	0.00247763	0.59332548	-0.9988848	-1.7448602	4
NEGATIVE_REGULATION_OF_T_CELL_CYTOKINE_PRODUCTION	GOBP	1.64E-05	0.002943	0.57561026	0.99979461	1.37417267	2
POSITIVE_REGULATION_OF_T_CELL_MEDIATED_CYTOTOXICITY	GOBP	1.71E-05	0.00299081	0.57561026	0.98090194	1.70206331	12
POSITIVE_REGULATION_OF_ANTIGEN_PROCESSING_AND_PRESENTATION	GOBP	1.75E-05	0.00299081	0.57561026	0.99978007	1.37415269	2
POSITIVE_REGULATION_OF_DENDRITIC_CELL_ANTIGEN_PROCESSING_A	GOBP	1.75E-05	0.00299081	0.57561026	0.99978007	1.37415269	2
NEGATIVE_REGULATION_OF_LYMPHOCYTE_ACTIVATION	GOBP	1.79E-05	0.00301057	0.57561026	0.85629505	1.69464333	61
POSITIVE_REGULATION_OF_ADAPTIVE_IMMUNE_RESPONSE	GOBP	1.81E-05	0.00301057	0.57561026	0.85754056	1.69762036	60
POSITIVE_REGULATION_OF_CYTOKINE_PRODUCTION_INVOLVED_IN_IMI	GOBP	1.91E-05	0.00308282	0.57561026	0.90277914	1.75246688	39
SARS_COV_2_INFECTION	REACTOME	1.91E-05	0.00308282	0.57561026	0.72414366	1.48222373	202
LYMPHOCYTE_ACTIVATION_INVOLVED_IN_IMMUNE_RESPONSE	GOBP	2.01E-05	0.00315144	0.57561026	0.8058805	1.62686037	91
REGULATION_OF_REGULATED_SECRETORY_PATHWAY	GOBP	2.01E-05	0.00315144	0.57561026	0.82875708	1.65087884	69
PROSTANOID_METABOLIC_PROCESS	GOBP	2.16E-05	0.00333898	0.57561026	0.94042482	1.721167	21
NEGATIVE_REGULATION_OF_CELL_KILLING	GOBP	2.40E-05	0.00362626	0.57561026	0.98957742	1.65166033	9
AMIDE_BINDING	GOMF	2.42E-05	0.00362626	0.57561026	0.72345229	1.48036058	207
ANTIGEN_PROCESSING_AND_PRESENTATION_OF_EXOGENOUS_ANTIGE	GOBP	2.48E-05	0.00366836	0.57561026	0.92196353	1.71699435	24
REGULATION_OF_CELL_ACTIVATION	GOBP	2.53E-05	0.00369277	0.57561026	0.69067081	1.42258226	279
POSITIVE_REGULATION_OF_VIRAL_PROCESS	GOBP	2.57E-05	0.00370812	0.57561026	0.85879022	1.68435681	46
POSITIVE_REGULATION_OF_CELL_ACTIVATION	GOBP	2.64E-05	0.00376335	0.57561026	0.73571395	1.49955071	168
CYTOKINE_PRODUCTION_INVOLVED_IN_IMMUNE_RESPONSE	GOBP	2.74E-05	0.00381961	0.57561026	0.87513313	1.71988826	50
PEPTIDE_ANTIGEN_BINDING	GOMF	2.75E-05	0.00381961	0.57561026	0.97614785	1.69561874	13

SARS_COV_INFECTIONS	REACTOME	2.83E-05	0.00388276	0.57561026	0.6909666	1.42359983	290
RESPONSE_TO_COPPER_ION	GOBP	3.11E-05	0.00420298	0.55733224	-0.8727418	-2.2123358	22
PRODUCTION_OF_MOLECULAR_MEDIATOR_OF_IMMUNE_RESPONSE	GOBP	3.25E-05	0.00433913	0.55733224	0.78697209	1.5937765	108
NEGATIVE_REGULATION_OF_NATURAL_KILLER_CELL_MEDIATED_IMMUNITY	GOBP	3.64E-05	0.00481055	0.55733224	0.9895779	1.62913715	8
NEGATIVE_REGULATION_OF_LYMPHOCYTE_DIFFERENTIATION	GOBP	3.70E-05	0.00481215	0.55733224	0.92748861	1.71782316	23
MONONUCLEAR_CELL_DIFFERENTIATION	GOBP	3.73E-05	0.00481215	0.55733224	0.70970608	1.45238137	218
LEUKOCYTE_CELL_CELL_ADHESION	GOBP	3.85E-05	0.00490905	0.55733224	0.73073631	1.48940516	168
MHC_PROTEIN_BINDING	GOMF	4.00E-05	0.00503776	0.55733224	0.96663207	1.70971201	15
REGULATION_OF_NATURAL_KILLER_CELL_MEDIATED_IMMUNITY	GOBP	4.58E-05	0.00565946	0.55733224	0.96511493	1.7070286	15
ANTIGEN_PROCESSING_AND_PRESENTATION_OF_ENDOGENOUS_PEPTIDES	GOBP	4.60E-05	0.00565946	0.55733224	0.97566579	1.69297752	12
ANTIGEN_PROCESSING_AND_PRESENTATION_OF_PEPTIDE_ANTIGEN_VIA_MHC_CLASS_II	GOBP	4.79E-05	0.00583385	0.55733224	0.9930496	1.61549438	7
ENDOSOMAL_VACUOLAR_PATHWAY	REACTOME	5.29E-05	0.00637484	0.55733224	0.97855554	1.66828841	10
ANTIGEN_PROCESSING_AND_PRESENTATION_VIA_MHC_CLASS_II	GOBP	5.36E-05	0.00639072	0.55733224	0.98642697	1.64640206	9
SARS_COV_2_ACTIVATES_MODULATES_INNATE_AND_ADAPTIVE_IMMUNITY	REACTOME	5.45E-05	0.00642727	0.55733224	0.79382171	1.60251684	91
NEGATIVE_REGULATION_OF_LYMPHOCYTE_MEDIATED_IMMUNITY	GOBP	5.55E-05	0.00646958	0.55733224	0.93912704	1.69984057	19
NEGATIVE_REGULATION_OF_DEFENSE_RESPONSE	GOBP	6.44E-05	0.00743415	0.5384341	0.75597559	1.52910277	120
HSF1_ACTIVATION	REACTOME	6.63E-05	0.00756623	0.5384341	-0.8296747	-2.1278069	23
CLASS_II_MHC_MEDIATED_ANTIGEN_PROCESSING_PRESENTATION	REACTOME	6.71E-05	0.0075832	0.5384341	0.67717798	1.39748741	317
POSITIVE_REGULATION_OF_ERK1_AND_ERK2_CASCADE	GOBP	7.20E-05	0.0080532	0.5384341	0.81641286	1.62571963	70
LYMPHOCYTE_ACTIVATION	GOBP	7.28E-05	0.00805435	0.5384341	0.66573621	1.3758128	362
NEGATIVE_REGULATION_OF_LEUKOCYTE_MEDIATED_IMMUNITY	GOBP	7.43E-05	0.00807957	0.5384341	0.91717025	1.69871228	23
FORMATION_OF_TUBULIN_FOLDING_INTERMEDIATES_BY_CCT_TRIC	REACTOME	7.45E-05	0.00807957	0.5384341	-0.9060644	-2.2134061	17
POSITIVE_REGULATION_OF_CELL_ADHESION	GOBP	7.73E-05	0.00830226	0.5384341	0.70861397	1.45082331	214
REGULATION_OF_FATTY_ACID_BIOSYNTHETIC_PROCESS	GOBP	7.82E-05	0.00832364	0.5384341	0.91151736	1.6975402	24
MACROPHAGE_CYTOKINE_PRODUCTION	GOBP	8.21E-05	0.00865499	0.5384341	0.96462397	1.68852035	14
POSITIVE_REGULATION_OF_CELL_CELL_ADHESION	GOBP	8.35E-05	0.00871467	0.5384341	0.75022193	1.5213477	132
CELL_ACTIVATION	GOBP	9.19E-05	0.00950509	0.5384341	0.6293992	1.30781533	493
RESPONSE_TO_BACTERIUM	GOBP	9.42E-05	0.00961656	0.5384341	0.6940084	1.42283217	233
RESPONSE_TO_ZINC_ION	GOBP	9.48E-05	0.00961656	0.5384341	-0.821967	-2.1046095	25
RESPONSE_TO_CADMIUM_ION	GOBP	9.62E-05	0.00967685	0.5384341	-0.7647885	-2.1008897	34
POSITIVE_REGULATION_OF_LYMPHOCYTE_ACTIVATION	GOBP	9.79E-05	0.0097506	0.5384341	0.73791461	1.50074779	152
POSITIVE_REGULATION_OF_REGULATED_SECRETORY_PATHWAY	GOBP	0.00010832	0.01069441	0.5384341	0.90087722	1.69125767	26
B_CELL_MEDIATED_IMMUNITY	GOBP	0.00012208	0.01194547	0.51884808	0.83432685	1.64950259	58
NATURAL_KILLER_CELL_MEDIATED_CYTOTOXICITY	KEGG	0.00012518	0.0121399	0.51884808	0.84479865	1.66347459	54
CELLULAR_RESPONSE_TO_CADMIUM_ION	GOBP	0.00013055	0.01235648	0.51884808	-0.8653342	-2.1750811	19
POSITIVE_REGULATION_OF_FATTY_ACID_BIOSYNTHETIC_PROCESS	GOBP	0.0001306	0.01235648	0.51884808	0.98279383	1.64033814	9
DEFENSE_RESPONSE_TO_GRAM_POSITIVE_BACTERIUM	GOBP	0.00013079	0.01235648	0.51884808	0.92063281	1.68494364	21
AUTOIMMUNE_THYROID_DISEASE	KEGG	0.00013345	0.01249979	0.51884808	0.98460018	1.62094235	8
POSITIVE_REGULATION_OF_CYTOKINE_PRODUCTION	GOBP	0.00014397	0.01313637	0.51884808	0.71492117	1.46392073	200
INTERFERON_GAMMA_SIGNALING	REACTOME	0.00014494	0.01313637	0.51884808	0.84620048	1.66274319	48
REGULATION_OF_DNA_DAMAGE_RESPONSE_SIGNAL_TRANSDUCTION	GOBP	0.00014505	0.01313637	0.51884808	0.90179451	1.6794331	24
REGULATION_OF_CELL_ADHESION	GOBP	0.00014624	0.01313637	0.51884808	0.65602436	1.35651123	366
POSITIVE_REGULATION_OF_CELL_POPULATION_PROLIFERATION	GOBP	0.00014624	0.01313637	0.51884808	0.63680365	1.31933444	421
INTERFERON_SIGNALING	REACTOME	0.0001497	0.01323061	0.51884808	0.75703471	1.53607718	128
SARS_COV_2_HOST_INTERACTIONS	REACTOME	0.0001497	0.01323061	0.51884808	0.75270771	1.52644471	130
PROTEASOME	KEGG	0.00015485	0.01357593	0.51884808	0.85793225	1.66686018	41
GRANULOCYTE_MIGRATION	GOBP	0.00015689	0.01364537	0.51884808	0.83438483	1.63649017	46
ERK1_AND_ERK2_CASCADE	GOBP	0.00015917	0.01373461	0.51884808	0.76047884	1.53821829	125
TNFR2_NON_CANONICAL_NF_KB_PATHWAY	REACTOME	0.00017022	0.01457337	0.51884808	0.80624733	1.60547705	70
ANTIOXIDANT_ACTIVITY	GOMF	0.00017716	0.01505044	0.51884808	-0.6989795	-1.9662439	44
TYPE_1_DIABETES_MELLITUS	KEGG	0.00018328	0.01545043	0.51884808	0.95827179	1.67740121	14
BETA_2_MICROGLOBULIN_BINDING	GOMF	0.00019153	0.01602262	0.51884808	0.99387991	1.53514395	5
TAP_BINDING	GOMF	0.00019632	0.01615213	0.51884808	0.98901665	1.60893357	7
PATHOGENIC_ESCHERICHIA_COLI_INFECTION	KEGG	0.00019844	0.01615213	0.51884808	-0.7304171	-1.9344141	39
ANTIGEN_PROCESSING_AND_PRESENTATION_OF_EXOGENOUS_PEPTIDES	GOBP	0.00019937	0.01615213	0.51884808	0.93029026	1.69118149	20
REGULATION_OF_LYMPHOCYTE_ACTIVATION	GOBP	0.00020065	0.01615213	0.51884808	0.69159648	1.41782507	225
RESPONSE_TO_TYPE_II_INTERFERON	GOBP	0.00020135	0.01615213	0.51884808	0.82899615	1.63776348	59
CYTOKINE_BINDING	GOMF	0.00020192	0.01615213	0.51884808	0.87204602	1.69280803	39
HEMOPOIESIS	GOBP	0.00020745	0.01647462	0.51884808	0.62893486	1.30644092	475
PROTON_MOTIVE_FORCE_DRIVEN_ATP_SYNTHESIS	GOBP	0.00021306	0.01679776	0.51884808	-0.6042136	-1.8188251	72
HSP90_CHAPERONE_CYCLE_FOR_STEROID_HORMONE_RECEPTORS_SHR	REACTOME	0.00022156	0.01734307	0.51884808	-0.709142	-1.9748371	43
POSITIVE_REGULATION_OF_LEUKOCYTE_CHEMOTAXIS	GOBP	0.00022671	0.01762093	0.51884808	0.86831924	1.66819829	33
GRANULOCYTE_CHEMOTAXIS	GOBP	0.00024096	0.01859631	0.51884808	0.8623337	1.67117921	36
ICOSANOID_BIOSYNTHETIC_PROCESS	GOBP	0.00024451	0.01873817	0.49849311	0.92827338	1.68751498	20
POSITIVE_REGULATION_OF_MACROPHAGE_CYTOKINE_PRODUCTION	GOBP	0.00024903	0.01893892	0.49849311	0.97828061	1.63280533	9
PROSTANOID_BIOSYNTHETIC_PROCESS	GOBP	0.00025058	0.01893892	0.49849311	0.96554492	1.67541578	12
REGULATION_OF_CELL_CELL_ADHESION	GOBP	0.00025291	0.01898395	0.49849311	0.68848253	1.4088584	210
RHO_GTPASES_ACTIVATE_IQGA	REACTOME	0.00025711	0.01916817	0.49849311	-0.851268	-2.1397247	19
NATURAL_KILLER_CELL_CYTOKINE_PRODUCTION	GOBP	0.00026378	0.01953193	0.49849311	0.99914229	1.37327609	2
FIBROBLAST_PROLIFERATION	GOBP	0.00026874	0.01976568	0.49849311	0.8226959	1.62650767	58
PROTEIN_COMPLEX_OIGOMERIZATION	GOBP	0.00027195	0.01986895	0.49849311	0.72964618	1.48343023	147
POSITIVE_REGULATION_OF_LEUKOCYTE_PROLIFERATION	GOBP	0.00027425	0.01990426	0.49849311	0.80988097	1.59922901	56
DAP12_INTERACTIONS	REACTOME	0.00028478	0.02053225	0.49849311	0.926882	1.68498558	20
POSITIVE_REGULATION_OF_LEUKOCYTE_CELL_CELL_ADHESION	GOBP	0.00028768	0.02059198	0.49849311	0.7527351	1.52190147	114
NEGATIVE_REGULATION_OF_MULTICELLULAR_ORGANISMAL_PROCESS	GOBP	0.00028937	0.02059198	0.49849311	0.62006421	1.28841835	493
POSITIVE_REGULATION_OF_EXOCYTOSIS	GOBP	0.00029131	0.02059665	0.49849311	0.84139001	1.65311066	51
GAMMA_AMINOBUTYRIC_ACID_BIOSYNTHETIC_PROCESS	GOBP	0.00029812	0.02094295	0.49849311	0.99195777	1.53217501	5
NEGATIVE_REGULATION_OF_RESPONSE_TO_EXTERNAL_STIMULUS	GOBP	0.00030821	0.02138036	0.49849311	0.70822397	1.44668075	186
DENDRITIC_CELL_ANTIGEN_PROCESSING_AND_PRESENTATION	GOBP	0.00031079	0.02138036	0.49849311	0.99902302	1.43290946	3
REGULATION_OF_DENDRITIC_CELL_ANTIGEN_PROCESSING_AND_PRESENTATION	GOBP	0.00031079	0.02138036	0.49849311	0.99902302	1.43290946	3
REGULATION_OF_HEMOPOIESIS	GOBP	0.00031215	0.02138036	0.49849311	0.69937771	1.43156475	197

CELL_CHEMOTAXIS	GOBP	0.00031435	0.02139719	0.49849311	0.75305321	1.52333958	101
ABC_TRANSPORTER_DISORDERS	REACTOME	0.00033815	0.02287506	0.49849311	0.79779828	1.58197636	64
PROTECTION_FROM_NATURAL_KILLER_CELL_MEDIATED_CYTOTOXICITY	GOBP	0.00034276	0.02304449	0.49849311	0.99897066	1.43283437	3
NEGATIVE_REGULATION_OF_INNATE_IMMUNE_RESPONSE	GOBP	0.00035399	0.02365479	0.49849311	0.842927	1.63770676	41
NEGATIVE_REGULATION_OF_LEUKOCYTE_CELL_CELL_ADHESION	GOBP	0.00036236	0.02406739	0.49849311	0.81930418	1.61161289	52
REGULATION_OF_RESPONSE_TO_BIOTIC_STIMULUS	GOBP	0.00037139	0.02451844	0.49849311	0.67745237	1.38952039	243
T_CELL_ACTIVATION_INVOLVED_IN_IMMUNE_RESPONSE	GOBP	0.00037775	0.02478888	0.49849311	0.84037969	1.64332412	44
POSITIVE_REGULATION_OF_NEUTROPHIL_MIGRATION	GOBP	0.00038404	0.02505196	0.49849311	0.94973905	1.66246512	14
ENDOCYTOSIS	KEGG	0.00042491	0.0274694	0.49849311	0.73811092	1.49684332	130
COPI_INDEPENDENT_GOLGI_TO_ER_RETROGRADE_TRAFFIC	REACTOME	0.00042612	0.0274694	0.49849311	-0.7123353	-1.8865268	39
HYPERSENSITIVITY	GOBP	0.00043765	0.02772365	0.49849311	0.99889467	1.37293574	2
POSITIVE_REGULATION_OF_HYPERSENSITIVITY	GOBP	0.00043765	0.02772365	0.49849311	0.99889467	1.37293574	2
REGULATION_OF_HYPERSENSITIVITY	GOBP	0.00043765	0.02772365	0.49849311	0.99889467	1.37293574	2
POSITIVE_REGULATION_OF_CELL_DEVELOPMENT	GOBP	0.00045797	0.0287375	0.49849311	0.68131786	1.3958098	223
REGULATION_OF_VIRAL_PROCESS	GOBP	0.0004612	0.0287375	0.49849311	0.75081083	1.51554403	95
14_3_3_PROTEIN_BINDING	GOMF	0.00046152	0.0287375	0.49849311	0.87502463	1.65525624	28
NEGATIVE_REGULATION_OF_SIGNAL_TRANSDUCTION_BY_P53_CLASS_1	GOBP	0.00047402	0.02934886	0.49849311	0.8878772	1.64445794	23
LEUKOCYTE_MIGRATION	GOBP	0.00049345	0.03038069	0.47727082	0.72474906	1.46951832	139
REGULATION_OF_CELL_DEVELOPMENT	GOBP	0.00049916	0.03056043	0.47727082	0.62647095	1.29801717	422
RESPIRATORY_ELECTRON_TRANSPORT_ATP_SYNTHESIS_BY_CHEMIOSM	REACTOME	0.0005161	0.03133181	0.47727082	-0.4580324	-1.5865457	123
REGULATION_OF_VESICLE_MEDIATED_TRANSPORT	GOBP	0.00051748	0.03133181	0.47727082	0.64726496	1.3356734	315
NEGATIVE_REGULATION_OF_RESPONSE_TO_BIOTIC_STIMULUS	GOBP	0.00052696	0.03168577	0.47727082	0.78066399	1.55632561	72
POSITIVE_REGULATION_OF_PEPTIDYL_TYROSINE_PHOSPHORYLATION	GOBP	0.00052911	0.03168577	0.47727082	0.77896399	1.55169133	69
POST_CHAPERONIN_TUBULIN_FOLDING_PATHWAY	REACTOME	0.00053834	0.03206331	0.47727082	-0.8990667	-2.0819403	14
POSITIVE_REGULATION_OF_RESPONSE_TO_BIOTIC_STIMULUS	GOBP	0.00055467	0.03285735	0.47727082	0.68943536	1.40460341	162
POSITIVE_REGULATION_OF_CHEMOKINE_PRODUCTION	GOBP	0.00056365	0.0330772	0.47727082	0.88534723	1.63977213	23
NEUTROPHIL_CHEMOTAXIS	GOBP	0.00056442	0.0330772	0.47727082	0.87162988	1.6488345	28
IMMUNE_RECEPTOR_ACTIVITY	GOMF	0.00057237	0.03336504	0.47727082	0.91757004	1.66805731	20
T_CELL_ACTIVATION	GOBP	0.00059075	0.03408006	0.47727082	0.66798079	1.3695423	240
CELLULAR_RESPONSE_TO_COPPER_ION	GOBP	0.00059086	0.03408006	0.47727082	-0.8982422	-2.080031	14
POSITIVE_REGULATION_OF_I_KAPPA_B_KINASE_NF_KAPPA_B_SIGNALING	GOBP	0.00059731	0.034272	0.47727082	0.713881	1.44385547	121
RESPONSE_TO_MOLECULE_OF_BACTERIAL_ORIGIN	GOBP	0.00060171	0.03434454	0.47727082	0.71363129	1.45153852	146
REGULATION_OF_INNATE_IMMUNE_RESPONSE	GOBP	0.00060907	0.03458425	0.47727082	0.69040305	1.41207746	195
ALLOGRAFT_REJECTION	KEGG	0.00061308	0.03459851	0.47727082	0.9834309	1.59984666	7
TRANSPORT_OF_CONNEXONS_TO_THE_PLASMA_MEMBRANE	REACTOME	0.00061563	0.03459851	0.47727082	-0.9513684	-1.9368272	8
NEGATIVE_REGULATION_OF_T_CELL_DIFFERENTIATION	GOBP	0.00062322	0.03484642	0.47727082	0.92683797	1.66489161	18
SIGNALING_RECEPTOR_REGULATOR_ACTIVITY	GOMF	0.00063435	0.03528881	0.47727082	0.72192926	1.45966121	123
REGULATION_OF_LEUKOCYTE_PROLIFERATION	GOBP	0.00065025	0.03599027	0.47727082	0.74288759	1.50277572	101
B_CELL_HOMEOSTASIS	GOBP	0.00066354	0.03654162	0.47727082	0.91502544	1.66343146	20
NORADRENERGIC_NEURON_DIFFERENTIATION	GOBP	0.00066899	0.03665735	0.47727082	0.98806048	1.52615527	5
NEGATIVE_REGULATION_OF_IMMUNE_EFFECTOR_PROCESS	GOBP	0.00067258	0.03667054	0.47727082	0.84524496	1.64153165	40
CELL_ADHESION_MOLECULES_CAMS	KEGG	0.00068141	0.03678599	0.47727082	0.83823369	1.64657089	49
REGULATION_OF_FIBROBLAST_PROLIFERATION	GOBP	0.00068141	0.03678599	0.47727082	0.83820132	1.64650731	49
DETOXIFICATION	GOBP	0.00069301	0.03711244	0.47727082	-0.6056543	-1.8146394	66
POSITIVE_REGULATION_OF_CALCIUM_ION_DEPENDENT_EXOCYTOSIS	GOBP	0.00069423	0.03711244	0.47727082	0.95832453	1.63379761	10
MYELOID_LEUKOCYTE_ACTIVATION	GOBP	0.00070701	0.03746834	0.47727082	0.75577208	1.51983123	88
NEGATIVE_REGULATION_OF_SECRETION	GOBP	0.00070772	0.03746834	0.47727082	0.77381894	1.55110642	82
MULTICELLULAR_ORGANISMAL_LEVEL_HOMEOSTASIS	GOBP	0.00071897	0.0378808	0.47727082	0.6373337	1.32021132	396
CIRCULATORY_SYSTEM_PROCESS	GOBP	0.00073729	0.03866004	0.47727082	0.65899815	1.35253927	252
LEUKOCYTE_DIFFERENTIATION	GOBP	0.00074645	0.0389539	0.47727082	0.66198218	1.36392315	280
POSITIVE_REGULATION_OF_FIBROBLAST_PROLIFERATION	GOBP	0.00075172	0.03904311	0.47727082	0.88595403	1.65512794	25
POSITIVE_REGULATION_OF_LIPID_BIOSYNTHETIC_PROCESS	GOBP	0.00076878	0.0396683	0.47727082	0.83450271	1.62599929	42
MHC_PROTEIN_COMPLEX_BINDING	GOMF	0.000771	0.0396683	0.47727082	0.95185242	1.65165652	12
NEGATIVE_REGULATION_OF_IMMUNE_RESPONSE	GOBP	0.00078095	0.03984481	0.47727082	0.76585827	1.53610569	84
REGULATION_OF_UNSATURATED_FATTY_ACID_BIOSYNTHETIC_PROCESS	GOBP	0.00078533	0.03984481	0.47727082	0.98691775	1.52439021	5
REGULATION_OF_ANTIGEN_PROCESSING_AND_PRESENTATION	GOBP	0.00078533	0.03984481	0.47727082	0.98691266	1.52438235	5
LYMPHOCYTE_HOMEOSTASIS	GOBP	0.00078985	0.03988902	0.47727082	0.85041391	1.63379891	33
NEUTROPHIL_MIGRATION	GOBP	0.00080614	0.04052503	0.47727082	0.84239506	1.63317914	38
LEUKOCYTE_PROLIFERATION	GOBP	0.00081627	0.04084689	0.47727082	0.71583605	1.45144608	139
CYTOKINE_RECEPTOR_ACTIVITY	GOMF	0.00082924	0.0413076	0.47727082	0.92368851	1.65923418	18
INTERLEUKIN_6_PRODUCTION	GOBP	0.0008356	0.04143602	0.47727082	0.81618105	1.60979485	55
POSITIVE_REGULATION_OF_DEFENSE_RESPONSE	GOBP	0.00084719	0.04182161	0.47727082	0.69189825	1.41671075	201
REGULATION_OF_LIPID_BIOSYNTHETIC_PROCESS	GOBP	0.00086238	0.04238053	0.47727082	0.73759674	1.48887083	95
CROSS_PRESENTATION_OF_SOLUBLE_EXOGENOUS_ANTIGENS_ENDOSOMIAL	REACTOME	0.00087474	0.04279574	0.47727082	0.83886733	1.63541344	43
MHC_CLASS_II_PROTEIN_COMPLEX_BINDING	GOMF	0.00090307	0.04398558	0.47727082	0.95919523	1.6478986	11
NEGATIVE_REGULATION_OF_DNA_DAMAGE_RESPONSE_SIGNAL_TRANSDUCTION	GOBP	0.0009242	0.04481529	0.47727082	0.95884994	1.6473036	11
T_CELL_DIFFERENTIATION	GOBP	0.00097129	0.04689148	0.47727082	0.70806086	1.43800746	142
POSITIVE_REGULATION_OF_LOCOMOTION	GOBP	0.00098485	0.04733741	0.45505987	0.65424598	1.34697933	276
CENTRAL_NERVOUS_SYSTEM_NEURON_DIFFERENTIATION	GOBP	0.00099178	0.0474626	0.45505987	0.76285162	1.53971525	92
REGULATION_OF_LEUKOCYTE_MIGRATION	GOBP	0.00101338	0.04807621	0.45505987	0.76321731	1.53156087	85
POSITIVE_REGULATION_OF_HEMOPOIESIS	GOBP	0.00101338	0.04807621	0.45505987	0.76304829	1.5312217	85
MITOCHONDRIAL_ELECTRON_TRANSPORT_CYTOCHROME_C_TO_OXYGEN	GOBP	0.00103864	0.04891898	0.45505987	-0.8116385	-2.0401132	19
RESPONSE_TO_LIPID	GOBP	0.00104007	0.04891898	0.45505987	0.62263527	1.29080347	439
ABC_TYPE_TRANSPORTER_ACTIVITY	GOMF	0.0010973	0.05139021	0.45505987	0.88494522	1.66509256	27
NEGATIVE_REGULATION_OF_HEMOPOIESIS	GOBP	0.00114207	0.0532594	0.45505987	0.82004699	1.60377389	45
GAP_JUNCTION_TRAFFICKING_AND_REGULATION	REACTOME	0.00116689	0.05418637	0.45505987	-0.8061238	-2.0262515	19
DETECTION_OF_EXTERNAL_BIOTIC_STIMULUS	GOBP	0.00122767	0.05647927	0.45505987	0.98300468	1.5183461	5
GRAFT_VERSUS_HOST_DISEASE	KEGG	0.00123229	0.05647927	0.45505987	0.98652429	1.57597052	6
REGULATION_OF_CALCIUM_ION_DEPENDENT_EXOCYTOSIS	GOBP	0.00123312	0.05647927	0.45505987	0.86862327	1.60879729	23
LEUKOCYTE_DEGRANULATION	GOBP	0.00123689	0.05647927	0.45505987	0.84081686	1.61536124	33
SALT_TRANSMEMBRANE_TRANSPORTER_ACTIVITY	GOMF	0.00126096	0.05733985	0.45505987	0.66920508	1.36988887	212

TUBE_MORPHOGENESIS	GOBP	0.00127937	0.05793652	0.45505987	0.6213199	1.28707175	385
LEUKOCYTE_CHEMOTAXIS	GOBP	0.00130147	0.05865346	0.45505987	0.77310071	1.54326558	77
POSITIVE_REGULATION_OF_FATTY_ACID_METABOLIC_PROCESS	GOBP	0.00130591	0.05865346	0.45505987	0.89733055	1.62418801	19
CARBOXYTERMINAL_POST_TRANSLATIONAL_MODIFICATIONS_OF_TUBU	REACTOME	0.0013439	0.05984737	0.45505987	-0.7623789	-1.9189135	24
NEGATIVE_REGULATION_OF_NEURON_DEATH	GOBP	0.00134806	0.05984737	0.45505987	0.7224059	1.46120826	125
GAP_JUNCTION_ASSEMBLY	REACTOME	0.00134887	0.05984737	0.45505987	-0.9384188	-1.9947165	9
MYELOID_LEUKOCYTE_MIGRATION	GOBP	0.00136666	0.0601172	0.45505987	0.76434681	1.53211971	82
ANTIBACTERIAL_HUMORAL_RESPONSE	GOBP	0.00136797	0.0601172	0.45505987	0.98156183	1.51611748	5
TAXIS	GOBP	0.00137141	0.0601172	0.45505987	0.65861913	1.35018635	229
NEUTROPHIL_DEGRANULATION	REACTOME	0.00138982	0.0603875	0.45505987	0.64176246	1.32258187	303
REGULATION_OF_NEUTROPHIL_MIGRATION	GOBP	0.00139753	0.0603875	0.45505987	0.91384944	1.64156013	18
REGULATION_OF_GRANULOCYTE_CHEMOTAXIS	GOBP	0.0013991	0.0603875	0.45505987	0.91992927	1.64615302	17
ABC_TRANSPORTERS	KEGG	0.00139962	0.0603875	0.45505987	0.88713185	1.63529494	22
POSITIVE_REGULATION_OF_B_CELL_ACTIVATION	GOBP	0.00141079	0.0606307	0.45505987	0.81595408	1.59576936	45
OXIDOREDUCTION_DRIVEN_ACTIVE_TRANSMEMBRANE_TRANSPORTER	GOMF	0.00142899	0.06117303	0.45505987	-0.5770997	-1.7211461	67
VIRAL_LIFE_CYCLE	GOBP	0.00146345	0.06240452	0.45505987	0.66729497	1.36450047	194
NEGATIVE_T_CELL_SELECTION	GOBP	0.00148047	0.06270153	0.45505987	0.99753249	1.37106348	2
VIRAL_PROCESS	GOBP	0.00148186	0.06270153	0.45505987	0.63954	1.31802518	283
REGULATION_OF_INTRINSIC_APOPTOTIC_SIGNALING_PATHWAY_BY_P5	GOBP	0.00152712	0.06396166	0.45505987	0.88823663	1.6256521	21
POSITIVE_REGULATION_OF_CHEMOTAXIS	GOBP	0.00154033	0.06396166	0.45505987	0.81239403	1.5965879	50
REGULATION_OF_T_CELL_ACTIVATION	GOBP	0.0015417	0.06396166	0.45505987	0.6929812	1.3403287	158
NEGATIVE_REGULATION_OF_CELL_DIFFERENTIATION	GOBP	0.00155549	0.06396166	0.45505987	0.6414604	1.32420401	325
T_CELL_RECEPTOR_BINDING	GOMF	0.00155598	0.06396166	0.45505987	0.98937793	1.46159057	4
ATPASE_COUPLED_TRANSMEMBRANE_TRANSPORTER_ACTIVITY	GOMF	0.00155758	0.06396166	0.45505987	0.79442329	1.57061141	58
ANTIBODY_DEPENDENT_CELLULAR_CYTOTOXICITY	GOBP	0.00156417	0.06396166	0.45505987	0.9990566	1.31162729	1
TYPE_II_HYPERSENSITIVITY	GOBP	0.00156417	0.06396166	0.45505987	0.9990566	1.31162729	1
NATURAL_KILLER_CELL_LECTIN_LIKE_RECEPTOR_BINDING	GOMF	0.00156417	0.06396166	0.45505987	0.9990566	1.31162729	1
POSITIVE_REGULATION_OF_LYMPHOCYTE_DIFFERENTIATION	GOBP	0.00157323	0.06409309	0.45505987	0.78798059	1.55944618	61
SCF_SKP2_MEDIATED_DEGRADATION_OF_P27_P21	REACTOME	0.00163601	0.06640363	0.45505987	0.78950175	1.55299	52
POSITIVE_REGULATION_OF_GRANULOCYTE_CHEMOTAXIS	GOBP	0.00165031	0.06673698	0.45505987	0.96264652	1.60671115	9
POSITIVE_REGULATION_OF_MYELOID_LEUKOCYTE_CYTOKINE_PRODUCT	GOBP	0.00166855	0.06700943	0.45505987	0.91666564	1.64031298	17
HOMEOSTASIS_OF_NUMBER_OF_CELLS	GOBP	0.00166927	0.06700943	0.45505987	0.67775237	1.38189987	176
B_CELL_PROLIFERATION	GOBP	0.00169362	0.06773859	0.45505987	0.82320602	1.59029122	35
POSITIVE_REGULATION_OF_CD8_POSITIVE_ALPHA_BETA_T_CELL_ACTIV	GOBP	0.00172103	0.06858456	0.45505987	0.9957813	1.42825983	3
POSITIVE_REGULATION_OF_B_CELL_PROLIFERATION	GOBP	0.00173778	0.06900101	0.45505987	0.89037188	1.61159266	19
REGULATION_OF_LYMPHOCYTE_DIFFERENTIATION	GOBP	0.00177036	0.06977571	0.45505987	0.73304704	1.4798023	96
POSITIVE_REGULATION_OF_LEUKOCYTE_MIGRATION	GOBP	0.00177617	0.06977571	0.45505987	0.80420239	1.58353736	54
REGULATION_OF_SECRETION	GOBP	0.00177639	0.06977571	0.45505987	0.63108194	1.30250516	331
NEGATIVE_REGULATION_OF_INTRINSIC_APOPTOTIC_SIGNALING_PATHW	GOBP	0.00184266	0.07212031	0.45505987	0.91850984	1.63341001	16
NEUROPEPTIDE_RECEPTOR_BINDING	GOMF	0.00186396	0.07268285	0.45505987	0.94394907	1.60928964	10
REGULATION_OF_BODY_FLUID_LEVELS	GOBP	0.0018703	0.07268285	0.45505987	0.68074762	1.38612309	159
POSITIVE_REGULATION_OF_VIRAL_LIFE_CYCLE	GOBP	0.0019102	0.07397132	0.45505987	0.92521821	1.61954276	14
POSITIVE_REGULATION_OF_INTERLEUKIN_8_PRODUCTION	GOBP	0.00196933	0.0759924	0.4317077	0.84969838	1.58241326	24
INORGANIC_ANION_TRANSPORT	GOBP	0.00198404	0.07629174	0.4317077	0.75047326	1.49607308	71
NEGATIVE_REGULATION_OF_TRANSPORT	GOBP	0.00201642	0.07726541	0.4317077	0.65159304	1.3364804	243
CELL_DIFFERENTIATION_IN_SPINAL_CORD	GOBP	0.00204625	0.07813548	0.4317077	0.88786852	1.60706154	19
REGULATION_OF_LEUKOCYTE_CHEMOTAXIS	GOBP	0.00206396	0.07846905	0.4317077	0.81212578	1.5880749	44
ATP_ACTIVATED_INWARD_RECTIFIER_POTASSIUM_CHANNEL_ACTIVITY	GOMF	0.00207054	0.07846905	0.4317077	0.98809126	1.4596898	4
ANTIMICROBIAL_HUMORAL_RESPONSE	GOBP	0.00207906	0.07846905	0.4317077	0.92269051	1.61511817	14
ATPASE_REGULATOR_ACTIVITY	GOMF	0.00208363	0.07846905	0.4317077	-0.6478118	-1.7752061	42
NORADRENERGIC_NEURON_DEVELOPMENT	GOBP	0.00211955	0.07954834	0.4317077	0.98787035	1.45936345	4
NEURON_DEATH	GOBP	0.00212741	0.07957089	0.4317077	0.66627401	1.36528949	224
GABA_SYNTHESIS_RELEASE_REUPTAKE_AND_DEGRADATION	REACTOME	0.00215472	0.08008458	0.4317077	0.9355791	1.62514876	13
WATER_TRANSPORT	GOBP	0.00216302	0.08008458	0.4317077	0.9769471	1.50898958	5
INTRAFLAGELLAR_TRANSPORT	REACTOME	0.00216647	0.08008458	0.4317077	-0.6475298	-1.8032577	43
INTERLEUKIN_18_SIGNALING	REACTOME	0.00217037	0.08008458	0.4317077	0.99703568	1.37038064	2
LEUKOCYTE_HOMEOSTASIS	GOBP	0.00217969	0.08015329	0.4317077	0.79598503	1.55966187	47
EXTRACELLULAR_MATRIX_STRUCTURAL_CONSTITUENT_CONFERRING_C	GOMF	0.00218686	0.08015329	0.4317077	0.99473274	1.42675588	3
B_CELL_ACTIVATION	GOBP	0.00221691	0.08098359	0.4317077	0.70017096	1.41967551	133
POSITIVE_REGULATION_OF_INTERLEUKIN_6_PRODUCTION	GOBP	0.00227581	0.08285912	0.4317077	0.81621592	1.57678757	35
T_CELL_DIFFERENTIATION_IN_THYMUS	GOBP	0.00229542	0.08292466	0.4317077	0.80446186	1.56297358	41
CHEMOKINE_C_X_C_MOTIF_LIGAND_2_PRODUCTION	GOBP	0.00230648	0.08292466	0.4317077	0.95824154	1.59935898	9
UREA_TRANSMEMBRANE_TRANSPORT	GOBP	0.00230788	0.08292466	0.4317077	0.99854202	1.31095171	1
UREA_TRANSMEMBRANE_TRANSPORTER_ACTIVITY	GOMF	0.00230788	0.08292466	0.4317077	0.99854202	1.31095171	1
RESPONSE_TO_GROWTH_FACTOR	GOBP	0.00234939	0.08414054	0.4317077	0.61835212	1.28077931	378
T_CELL_CYTOKINE_PRODUCTION	GOBP	0.00239543	0.08550978	0.4317077	0.91014343	1.6286419	17
THE_ROLE_OF_NEF_IN_HIV_1_REPLICATION_AND_DISEASE_PATHOGENE	REACTOME	0.00241889	0.08606679	0.4317077	0.88031372	1.61115157	21
ANTIGEN_PROCESSING_AND_PRESENTATION_OF_PEPTIDE_OR_POLYSAI	GOBP	0.00243933	0.08651336	0.4317077	0.92055865	1.61138647	14
CELLULAR_RESPONSE_TO_ELECTRICAL_STIMULUS	GOBP	0.00254907	0.09011365	0.4317077	-0.97323	-1.71718	5
MODIFIED_AMINO_ACID_BINDING	GOMF	0.00260133	0.09166564	0.4317077	0.81958931	1.58896488	38
I_KAPPAB_KINASE_NF_KAPPAB_SIGNALING	GOBP	0.00261099	0.09171086	0.4317077	0.67392426	1.37608067	183
PHOSPHATIDYLSERINE_BINDING	GOMF	0.00269885	0.09399925	0.4317077	0.85195293	1.61854376	29
POSITIVE_REGULATION_OF_NATURAL_KILLER_CELL_MEDIATED_CYTOTO	GOBP	0.00270187	0.09399925	0.4317077	0.95613764	1.59584746	9
POSITIVE_REGULATION_OF_NATURAL_KILLER_CELL_MEDIATED_IMMUN	GOBP	0.00270187	0.09399925	0.4317077	0.95613764	1.59584746	9
NITRIC_OXIDE_SYNTHASE_BINDING	GOMF	0.00274925	0.09534507	0.4317077	0.97006198	1.57809808	7
NEGATIVE_REGULATION_OF_CELLULAR_RESPONSE_TO_OXIDATIVE_STR	GOBP	0.00280279	0.09689525	0.4317077	0.99655676	1.36972239	2
NEGATIVE_REGULATION_OF_PEPTIDE_SECRETION	GOBP	0.00281704	0.09708166	0.4317077	0.85120351	1.61712001	29
CELLULAR_OXIDANT_DETOXIFICATION	GOBP	0.00285193	0.09797579	0.4317077	-0.5732717	-1.6805773	52
NEGATIVE_REGULATION_OF_MITOCHONDRION_ORGANIZATION	GOBP	0.00289098	0.09873613	0.4317077	-0.6236791	-1.7544223	44
B_CELL_APOPTOTIC_PROCESS	GOBP	0.00289208	0.09873613	0.4317077	0.90178026	1.6198801	18
INORGANIC_ANION_TRANSMEMBRANE_TRANSPORTER_ACTIVITY	GOMF	0.00290359	0.0988213	0.4317077	0.78730849	1.54702328	48

Supplemental Table 8: Differentially expressed genes from DESeq which overlap known T1D or T2D risk loci

T1D DEG Overlapping T1D Risk	T2D DEG Overlapping T2D Risk
CNPY2	TMED6
H19	UNC5B
TNFAIP3	ASCL2
ATF3	WNT3
ASGR1	FSTL4
DDX59	TRA2A
MEG3	FOCAD-AS1
INS	
ACADVL	
PTP4A3	
ICAM1	
PPY	
SEL1L3	
MLLT6	
CYB5D2	
KCNQ1OT1	
ASCL2	
RSRP1	
BCAT2	
DLK1	
FIGN	
FLT3LG	
ANKRD37	
CA8	
RASGRF1	
PTRHD1	
NRP1	
TAF2	
PDLIM4	
PES1	
MTFP1	
CS	
MAGI3	
DCAF5	
RGS2	
BAZ2A	
SMARCC2	
ZC3H8	
DDC	
ZZEF1	
CDC37L1-DT	
ZC3H4	
LINC00623	
POLR2A	
PHC1	
ZNF740	
ZC3H10	
PHF23	

PFDN5
CARM1
NPAS2
NUBP1
EMSY
SNX25
ACAD10
PRR12
RBPJ
MPST
SOCS1
PAPOLG
KRI1
SLC25A4
DTNB
ZNF281
ITGB8
ACSL6
DDIT4
ARFGEF3
NCBP3
PHLDA2
KDM6B
NAA40
MYBBP1A
MICALL1
FBLN7
MTMR3
COL6A1
APOH
EFNB3
GCAT
RAPGEF6
NOSIP
SH2B3
TRIOBP
KIF20B
CDKN2D
PPP2R5C
RPL19
ZC3H6
DNMT1
KANSL1
FNIP1
FTL
FCGRT
GABARAPL2
COX8A
SRSF5
PA2G4

Supplemental Table 9: Significant differentially expressed genes in T2D compared to ND controls

Cell Type	Gene	baseMean	log2FoldChange	lfcSE	stat	pvalue	padj
Acinar	<i>RPS4Y1</i>	1444.692075	6.528401555	1.372238858	4.757481918	1.96E-06	0.022554384
Acinar	<i>S100A14</i>	19.49202037	3.022646163	0.674445127	4.481678408	7.41E-06	0.038151046
Acinar	<i>CXCL1</i>	72.29174477	-5.044901488	1.14181526	-4.41831675	9.95E-06	0.038151046
Alpha	<i>RPS4Y1</i>	757.2556915	6.186065813	1.325436724	4.667190597	3.05E-06	0.042430888
Beta	<i>OPLAH</i>	11.27265785	2.650033573	0.465481582	5.693100812	1.25E-08	0.000174105
Beta	<i>TSHR</i>	11.35793837	2.393823559	0.43971829	5.443993609	5.21E-08	0.000363547
Beta	<i>RPS4Y1</i>	1135.601155	6.994905501	1.365835864	5.12133682	3.03E-07	0.001242266
Beta	<i>AC027031.2</i>	36.0541084	1.8019829	0.353949878	5.091068008	3.56E-07	0.001242266
Beta	<i>PROC</i>	18.10078649	-1.921810878	0.400747981	-4.795559723	1.62E-06	0.004391475
Beta	<i>SLC4A4</i>	20.25323168	2.22317656	0.466558145	4.765057867	1.89E-06	0.004391475
Beta	<i>LINC01637</i>	34.22893608	-1.198378734	0.259377197	-4.620216228	3.83E-06	0.007581642
Beta	<i>LINC01116</i>	28.94256725	2.428775858	0.528671819	4.594108806	4.35E-06	0.007581642
Beta	<i>SYT1</i>	30.62818397	2.800940421	0.621876566	4.504013457	6.67E-06	0.009570122
Beta	<i>AL109613.1</i>	36.62375683	-1.388244356	0.308631202	-4.49806872	6.86E-06	0.009570122
Beta	<i>STOM</i>	41.14313238	1.024517299	0.229533342	4.463479209	8.06E-06	0.010230944
Beta	<i>TMED6</i>	357.4249678	-1.885888871	0.437828214	-4.307371726	1.65E-05	0.01921344
Beta	<i>TNFRSF11B</i>	9.730507182	1.91655796	0.447990802	4.278118999	1.88E-05	0.020233973
Beta	<i>GOLT1A</i>	163.662211	-0.986750491	0.232228681	-4.249046621	2.15E-05	0.021345029
Beta	<i>CASP7</i>	16.68669877	1.394937183	0.330019314	4.226834993	2.37E-05	0.021345029
Beta	<i>CHD5</i>	19.94557045	1.561287663	0.370006523	4.21962199	2.45E-05	0.021345029
Beta	<i>CTNNAL1</i>	146.1700429	0.809570819	0.192721103	4.200737787	2.66E-05	0.021434288
Beta	<i>UNC5B</i>	94.50400817	1.475711116	0.352026642	4.192043843	2.76E-05	0.021434288
Beta	<i>RINT1</i>	34.65321593	0.855112388	0.205290522	4.165376857	3.11E-05	0.022831918
Beta	<i>EML6</i>	37.99513898	0.953271033	0.234814263	4.059681138	4.91E-05	0.034289735
Beta	<i>CCDC173</i>	37.15630465	1.32046021	0.326708788	4.041703985	5.31E-05	0.034484297
Beta	<i>SNHG25</i>	322.7872299	1.959593394	0.485523522	4.036042138	5.44E-05	0.034484297
Beta	<i>PPP1R1A</i>	1641.904587	-1.480441025	0.368669524	-4.01563169	5.93E-05	0.035843632
Beta	<i>CLTRN</i>	67.0088357	-1.418664275	0.354363173	-4.003419045	6.24E-05	0.035843632
Beta	<i>FTSJ3</i>	33.04773568	0.886188899	0.221725378	3.996786051	6.42E-05	0.035843632
Beta	<i>LINC01091</i>	45.76727102	-2.068738401	0.520485563	-3.974631667	7.05E-05	0.036050251
Beta	<i>PCDH10</i>	16.89057168	1.817817188	0.45742851	3.973991883	7.07E-05	0.036050251
Beta	<i>GRASP</i>	57.03532455	-1.175493195	0.297147851	-3.95592023	7.62E-05	0.036050251
Beta	<i>ACHE</i>	12.91230095	1.741513469	0.440412274	3.954280052	7.68E-05	0.036050251
Beta	<i>MPZL3</i>	41.77797811	1.034426503	0.261746237	3.952020528	7.75E-05	0.036050251
Beta	<i>HCN4</i>	13.03978854	-1.693612892	0.42963124	-3.942015232	8.08E-05	0.036375568
Beta	<i>PFKFB3</i>	16.92456644	1.132633995	0.292871396	3.867342489	0.000110028	0.045386897
Beta	<i>CBLB</i>	26.42202259	0.944084615	0.244206487	3.865927667	0.000110668	0.045386897
Beta	<i>SLC05A1</i>	82.80316868	0.903360518	0.233702392	3.865431205	0.000110893	0.045386897
Beta	<i>AC009404.1</i>	21.81774607	0.962194828	0.249334127	3.859057881	0.000113825	0.045386897
Beta	<i>NSG1</i>	126.0805933	-1.307947498	0.341020229	-3.835395638	0.000125362	0.046247356
Beta	<i>NRP1</i>	18.7169234	1.441103188	0.375869507	3.834051874	0.00012605	0.046247356
Beta	<i>KIF19</i>	13.0143374	1.736887629	0.45320268	3.832474307	0.000126861	0.046247356
Beta	<i>AC010624.5</i>	31.35422601	2.385596494	0.62400972	3.823011752	0.000131831	0.046247356
Beta	<i>ITGA10</i>	14.36301881	-1.563365049	0.409142248	-3.821079481	0.000132869	0.046247356
Beta	<i>FKBP11</i>	542.3588243	-1.231374781	0.322723179	-3.815575889	0.000135866	0.046247356
Beta	<i>ARSE</i>	12.6320176	-1.957642426	0.514331987	-3.80618448	0.000141127	0.046785083
Beta	<i>ROR2</i>	14.85277542	1.905303056	0.501271968	3.800936774	0.00014415	0.046785083
Beta	<i>ASCL2</i>	159.7775043	-1.828375467	0.482233571	-3.791472797	0.000149757	0.047500056
Beta	<i>PTCH2</i>	9.338860927	1.254567749	0.332694049	3.77093535	0.000162637	0.048098692
Beta	<i>COASY</i>	123.937415	0.531768236	0.141104679	3.7686081	0.00016416	0.048098692
Beta	<i>ANKRD44</i>	20.26716461	1.014376158	0.269375535	3.765658079	0.000166111	0.048098692
Beta	<i>EIF1AY</i>	259.1886658	4.343822189	1.155861235	3.758082767	0.00017122	0.048098692
Beta	<i>LINC01612</i>	28.79611131	-1.724500595	0.45958948	-3.752262984	0.000175245	0.048098692

Beta	<i>SRSF3</i>	435.7291719	0.662697344	0.176623098	3.752042351	0.0001754	0.048098692
Beta	<i>MGAT4C</i>	22.70346385	-0.95755491	0.255244842	-3.751515219	0.000175769	0.048098692
Beta	<i>OSBPL1A</i>	11.85821258	1.406170616	0.375438722	3.745406467	0.000180102	0.04833659
Beta	<i>PPRC1</i>	22.43190346	0.758375742	0.203244278	3.731351001	0.000190456	0.049772555
Beta	<i>WNT3</i>	10.83928463	1.302404247	0.34930588	3.72854945	0.000192585	0.049772555
Beta	<i>FNDC9</i>	16.06531908	1.89801441	0.511530964	3.71045849	0.000206884	0.051558933
Beta	<i>MPST</i>	36.57338637	-0.913329429	0.246337929	-3.707628109	0.00020921	0.051558933
Beta	<i>SLC35A2</i>	60.40691366	0.591213503	0.15952988	3.705973478	0.00021058	0.051558933
Beta	<i>FKBP14</i>	64.74044615	0.79840831	0.216089289	3.694807422	0.000220054	0.052120219
Beta	<i>TNFRSF18</i>	7.026601564	1.771970579	0.479627231	3.694474508	0.000220342	0.052120219
Beta	<i>TNK2</i>	52.89371334	0.693902963	0.188824908	3.674848675	0.00023799	0.054845683
Beta	<i>MAP2K3</i>	122.8795081	0.906699841	0.247087444	3.669550452	0.000242977	0.054845683
Beta	<i>FSTL4</i>	20.29538314	1.518723138	0.413951894	3.66883969	0.000243654	0.054845683
Beta	<i>TRA2A</i>	186.926684	0.815075828	0.225767413	3.610245684	0.000305907	0.067113431
Beta	<i>THUMPD2</i>	97.26948415	0.765489775	0.212125217	3.608669385	0.000307772	0.067113431
Beta	<i>TBC1D9</i>	123.5220609	0.581213011	0.161658228	3.595319682	0.000323993	0.069563892
Beta	<i>SLC31A1</i>	104.181445	0.559442852	0.15592916	3.587801359	0.000333478	0.07051548
Beta	<i>AP001439.1</i>	10.5617112	1.613071867	0.450689258	3.57912206	0.00034475	0.071217026
Beta	<i>ADAMTS5</i>	18.53407296	1.12150029	0.313494129	3.577420397	0.000347002	0.071217026
Beta	<i>TMEM51-AS1</i>	6.552649965	1.305353888	0.36957757	3.532015993	0.000412404	0.08255954
Beta	<i>FOCAD-AS1</i>	4.341792294	1.461330608	0.413865479	3.530931385	0.000414099	0.08255954
Beta	<i>DKK3</i>	69.73406749	2.059697211	0.585211632	3.519576675	0.000432236	0.084961785
Beta	<i>AGAP4</i>	10.95742733	1.080716798	0.307739535	3.511790569	0.000445099	0.085381108
Beta	<i>AC124016.2</i>	12.54433935	1.164945169	0.331948246	3.509418062	0.000449088	0.085381108
Beta	<i>PCDHB3</i>	8.581755452	1.023152167	0.29172292	3.507273848	0.000452723	0.085381108
Beta	<i>PDLIM2</i>	222.5706734	-1.050519897	0.300461953	-3.496349162	0.000471671	0.086076158
Beta	<i>AC015912.3</i>	26.75075283	1.238212844	0.354184809	3.495951297	0.000472375	0.086076158
Beta	<i>AL390816.2</i>	13.49210845	1.258587662	0.360160176	3.49452201	0.000474911	0.086076158
Beta	<i>AC103591.3</i>	16.15249646	1.751169109	0.506371836	3.458267198	0.000543662	0.09727366
Beta	<i>LINC01146</i>	22.36545884	-1.282695	0.371459933	-3.453118051	0.000554146	0.097894527
Endothelial	<i>CRTC2</i>	7.345997275	1.240798432	0.287876896	4.310170239	1.63E-05	0.084500779

Supplemental Table 10: Significantly enriched pathways in T2D beta cells (GSEA)

Pathway	Database	pval	padj	log2err	ES	NES	size
ATP_SYNTHESIS_COUPLED_ELECTRON_TRANSPORT	GOBP	5.60E-08	0.00061868	0.71951283	-0.720199	-2.163344	92
VALINE_LEUCINE_AND_ISOLEUCINE_DEGRADATION	KEGG	1.45E-06	0.00802256	0.64355184	-0.810528	-2.0813943	40
OXIDOREDUCTION_DRIVEN_ACTIVE_TRANSMEMBRANE_TRANSPORTER_ACTIVITY	GOMF	2.65E-06	0.00976191	0.62725674	-0.7424831	-2.0917061	67
METABOLIC_DISORDERS_OF_BIOLOGICAL_OXIDATION_ENZYMES	REACTOME	4.80E-06	0.01325471	0.61052688	0.95386338	1.73874141	16
PARKINSONS_DISEASE	KEGG	6.36E-06	0.01405711	0.61052688	-0.6197638	-1.894842	114
CELLULAR_RESPONSE_TO_TOXIC_SUBSTANCE	GOBP	8.65E-06	0.01592261	0.59332548	-0.697791	-1.9841884	71
ELECTRON_TRANSFER_ACTIVITY	GOMF	1.37E-05	0.02166964	0.59332548	-0.6265914	-1.9025508	100
METABOLISM_OF_AMINO_ACIDS_AND_DERIVATIVES	REACTOME	3.69E-05	0.04609614	0.55733224	-0.4993765	-1.6071716	198
RESPIRATORY_ELECTRON_TRANSPORT	REACTOME	3.84E-05	0.04609614	0.55733224	-0.6158843	-1.8873371	103
PROTEIN_HORMONE_RECEPTOR_ACTIVITY	GOMF	4.17E-05	0.04609614	0.55733224	0.98006208	1.61126051	8
MRNA_PROCESSING	GOBP	4.71E-05	0.04726713	0.55733224	0.58627079	1.38964971	431
POSITIVE_REGULATION_OF_CELL_GROWTH	GOBP	5.85E-05	0.05328325	0.55733224	0.70092343	1.58957941	106
RESPIRATORY_ELECTRON_TRANSPORT_ATP_SYNTHESIS_BY_CHEMIOSMOTIC_COUPLING	REACTOME	6.27E-05	0.05328325	0.5384341	-0.5715231	-1.7609624	124
GLUTATHIONE_METABOLISM	KEGG	7.68E-05	0.06059718	0.5384341	0.83453396	1.66638318	33
ORGANIC_ACID_CATABOLIC_PROCESS	GOBP	8.66E-05	0.06380256	0.5384341	-0.4976487	-1.538802	175
OXIDATIVE_PHOSPHORYLATION	KEGG	0.0001038	0.06819241	0.5384341	-0.577241	-1.7807608	117
RNA_SPLICING	GOBP	0.000106	0.06819241	0.5384341	0.59295148	1.40507987	401
MITOCHONDRIAL_RESPIRATORY_CHAIN_COMPLEX_ASSEMBLY	GOBP	0.00011108	0.06819241	0.5384341	-0.5837966	-1.7917727	98
RESPONSE_TO_GROWTH_FACTOR	GOBP	0.00014455	0.08406711	0.51884808	0.57430763	1.36161055	435
TRANSLATION_FACTOR_ACTIVITY_RNA_BINDING	GOMF	0.00018683	0.09164137	0.51884808	0.71749303	1.58726046	81
NEGATIVE_REGULATION_OF_EXTRINSIC_APOPTOTIC_SIGNALING_PATHWAY	GOBP	0.00019148	0.09164137	0.51884808	0.74456608	1.60094552	60
ANTIOXIDANT_ACTIVITY	GOMF	0.00019755	0.09164137	0.51884808	-0.7273198	-1.9165012	47
OXIDATIVE_PHOSPHORYLATION	GOBP	0.00020427	0.09164137	0.51884808	-0.5359029	-1.6575983	134
POSITIVE_REGULATION_OF_GROWTH	GOBP	0.00021587	0.09164137	0.51884808	0.65817553	1.51669586	151
CELLULAR_OXIDANT_DETOXIFICATION	GOBP	0.00022689	0.09164137	0.51884808	-0.6754793	-1.8206045	57
DETOXIFICATION	GOBP	0.00023074	0.09164137	0.51884808	-0.6382984	-1.8220044	72
HORMONE_LIGAND_BINDING_RECEPTORS	REACTOME	0.00023154	0.09164137	0.51884808	0.99992749	1.31106734	1
LOW_DENSITY_LIPOPROTEIN_PARTICLE_RECEPTOR_BINDING	GOMF	0.00023913	0.09164137	0.51884808	0.89770741	1.64732015	17
PHASE_II_CONJUGATION_OF_COMPOUNDS	REACTOME	0.00024051	0.09164137	0.51884808	0.76753771	1.61016547	50
DEVELOPMENTAL_CELL_GROWTH	GOBP	0.00026316	0.0969323	0.49849311	0.65387664	1.50678952	151

Supplemental Table 11: Overlap in genes with differential expression across studies

T1D beta scRNA-seq	T1D alpha scRNA-seq	T2D beta scRNA-seq	T2D alpha scRNA-seq	T2D beta bulk
Elgamal & Fasolino (pseudobulk)	Elgamal & Bosi	No overlaps.	Bosi & Segerstolpe	Elgamal & Solimena OD
CD74	PSMB9		C12orf57	PPP1R1A
HLA-C	BAG1		CHORDC1	ASCL2
HLA-A			NAA38	NSG1
B2M	Elgamal & Fasolino (pseudobulk)		C4orf48	
PSMB8	TYMP		POLR2L	Elgamal & Solimena PPP
ZFP36			TUBA1B	ASCL2
	Elgamal & Fasolino (edgeR/TooManyCells)			
SLC4A4	TYMP		TTC3	DKK3
LDHA	GHRL		PRKAR1A	PPP1R1A
RGS4	ODF3B		HOOK3	TSHR
TYMP	GBP2		VIM	HCN4
DLK1	ANXA3			NSG1
CNN3	HES1			WNT3
PLK2	PSMB9			CHD5
LMCD1	UTRN			TMED6
CLU				
				Solimena OD & Solimena PPP
GTF2H2	ZFP36			HHATL
LY6E	HSPA6			SLC2A2
RNF213	BET1			PPP1R1A
GATM	TAP1			ARG2
	BAG1			
Elgamal & Fasolino (edgeR/TooManyCells)				
CD74	AC099509.1			FBXO32
	HIST2H2AA4			CHL1
HLA-C	PRSS2			OTTHUMG00000003650
HLA-F	TFF3			/// RP1-212P9.2
HLA-A	MT1G			ASCL2
HLA-B	ASGR1			CAPN13
B2M	HSPA1A			TMEM37
				SCTR
HLA-E	CPA1			CTB-12O2.1 ///
STOM	PLEKHA1			OTTHUMG000000163523
PSMB8	CRYAB			PDK4
GABRG2	B2M			FAM102B
PSMB8-AS1	SEC16A			KCNH8
PSMB9	RGS4			FFAR4
GAD1	EIF3B			ANKRD23 /// ANKRD39
TUBB2B				UNC5D
				GAP43
	Bosi & Fasolino (edgeR/TooManyCells)			
MDK	DOHH			RGS16
GAST	THAP11			CD44
ZFP36	PPP1R16A			NSG1
BIRC3	CTSL			PCDH20
CASP4	PEMT			G6PC2
TMEM45B	PIGH			DAB1
IL18BP	RPS23			
CTSL	CPT2			Elgamal & Wigger PPP
MT1X	NOP10			TSHR
FBXO22	LAPTM4A			LINC01116
LRCH2	DMWD			STOM
SLC38A1	FAM219B			GOLT1A
AQP3	RPL29			CHD5
GNS	CALR			PPP1R1A
SLC4A4	TUFM			CLTRN
FABP5	RPL30			HCN4
NCOA7	LOXL1			PFKFB3
AKAP12	MGAT4A			NSG1
CHGB	PLEKHF2			LINC01612
SAMD5	SCAMP4			WNT3
SYT1	TMEM147			DKK3
KCNJ8				
				Solimena OD & Wigger PPP
RPL3	KCTD18			HHATL
SCN3A	RPL38			SLC2A2
PTP4A3	DNAJC8			PPP1R1A
ICAM1	SNTA1			

PPP1R1A	HSP90AA1	ARG2
DDK3	DDX18	IAPP
PPP2R2B	MT-ND5	GLP1R
PPY	HES6	IFI16
SELENOW	STXBP2	FXD1
CD40	TMEM60	CHL1
IRF1	PALLD	SH3BP2
MSN	HINT1	CAPN13
EPAS1	RPL39	TSPAN1
PRKAG2-AS1	RHOA	VAT1L
SPOCK1	PA2G4	TMEM37
CTSS	CSTB	PPM1E
SEL1L3	GAPDH	ANKRD34C
PARVB	TPM3	SOX4
AL109613.1	NDUFA6	SLC5A1
LDHA	PRNP	ZFP36L1
RGS4	ZNF706	WSCD2
CLTRN	CYCS	FAM102B
TMEM161B-AS1	ZDHHC12	CTNNA2
ISL1	PDCD5	GPM6A
MT2A	ASPHD1	KCNH8
MTUS1	SERF2	SLC16A9
SOD1	GLRX	FFAR4
BTN3A2	LYPLA1	ADCYAP1
HIST2H2AA4	HSPA9	UNC5D
BAA1C	ING3	LPCAT2
CETN3	TAF9	NAALAD2
BRD8	LSM7	ESR1
AK4	RP9	CXCL12
MLLT6	MRPL4	NSG1
SMOC1	CHMP2B	ASB9
DBI	TARS	G6PC2
TENM3	TCEAL1	BIRC3
RAB27A	C9orf16	ZPLD1
GTF2A1	TIMP2	EFEMP1
TXNDC12	CAPZA2	
		Solimena PPP & Wigger
		PPP
ASB9	BLOC1S6	PCOLCE2
TGFBFR3L	HSP90AB1	ALDOB
DPYSL3	TMEM38B	ARG2
GAMT	BCAS2	TMEM37
CITED1	MAPRE1	SLC2A2
SUMF2	LSM1	PRIMA1
DGCR6L	RPN2	DDK3
ZNF33A	CYSTM1	FAIM2
LMO4	SNRPD1	FAM19A4
ATG12	MRPL47	SLC26A4
CELSR3	RPL36A	PPP1R1A
LINC00685	GNG4	CYS1
TMEM54	TMEM192	CHL1
ASCL2	SSBP1	MRO
SCAF11	RRAGD	RASGRP1
TAPBP1	SVIP	ACRBP
SERP1	MLF1	IRF8
TMEM37	RSL24D1	TSHR
EYA3	NDUFB7	HS6ST2
DNAJC22	GCSH	NTN1
TNFRSF11B	TXN	KCNAB2
HMG2	KIF1A	MIOX
MT1F	SF3B5	TMEM150C
SPG11	RHBDD2	RDH10
ID2	CHMP3	HHATL
ZRANB2	ATP6V1A	PLA1A
TLE4	WDR83OS	GAD1
SMC6	LINC00526	HCN4
ZSWIM6	FGFR10P2	NSG1
SCG2	HNRNP	NHLH2
S100A6	NDUFAB1	GALNT10
GLDR	SNRPC	PDE4B
IL13RA1	F10	C3orf70
TSPAN1	RPS3A	

MAN2B2
TYMP
GRAMD4
RIF1
RSRP1
UBE2S
ZNF480
LINC00324
MDFIC
EHF
RARS
PLXNB2
BCAT2
IAPP
GNG12
UNC5B
ABCB4
TRIP10
DYNC2L1
LGALS3BP
LGMN
DLK1
MAP2
FHL1
RGS17
LUC7L3
ZC3H13
RBM38
GCSH
SETX
MSMB
ERF
FIGN
PLD3
LSG1
PCNX4
PRPF38A
GGT7
ZNF317
SMPD3
TRMU
SPTY2D1
QSOX1
FLT3LG
ENTPD3
FOXO3

FUT11
SST
C12orf75
SPATS2L
ZNF462

CHGB
PET100
COMT
TCEAL4
ERP29
PSMB9
SERBP1
PSMA7
BRD2
HMGB1
ROMO1
SSR1
TMSB10
DDX1
C1orf43
GOT1
VDAC2
CELA3A
DDIT3
CD99
NDUFB4
LAMTOR1
TRMT112
SCGB2A1
KRTCAP2
POLR2K
RPS20
SLC3A2
UBXN4
KRT8
JOSD2
AGPAT5
TMED1
CAMK2N2
HLA-A
SERTAD1
C4orf48
PFN1
HMG1
GNB2
SRSF9
SCAND1
KRT10
MRPL23
PTMS
EIF5A

DUSP1
NPDC1
TUSC3
SRSF2
GADD45GIP1

LLPH
ZCCHC3
TMEM176A
POLD3
HSPA2
SCO1
NSG1
PPT1
SSX2IP
SCN2A
IRF2
ANKRD37
LINC01116
PRKAB2
RPF1

NBL1
C1QBP
INSIG1
TXNIP
JUNB
PCSK1N
RASD1
NENF
RANBP1
TMEM160
IDI1
SLC36A4
PCP4
UBALD2
UQCRCF51

LINC01315

MAP2K2

FFAR4
SLC4A7
CDKN1A
PCSK9
WNT3
CAPN13
ARL4C
HIP1
TMEM132C
SULF1
RNF6
RUNX2
UNC5D
TSPAN5
ZNF578
MLIP
TGFB3
AGT
KCNH8
SLC24A3
ONECUT2
RYSR
MLPH
LY96
FAM102B
TTC39C
ARHGAP22
ZMAT4
G6PC2
PFKFB2
ITGB2
DIO2
ADAM19
SAMS1
PAPPA
EPHA3
PTPRC
CHD5
CH25H
COL1A1
VCAN
STAB1
C3
TPH1
KCNE4

Elgamal & Solimena OD
& Solimena PPP
PPP1R1A
ASCL2
NSG1

Solimena OD & Solimena
PPP & Wigger PPP
HHATL
SLC2A2
PPP1R1A
ARG2
CHL1
CAPN13
TMEM37
FAM102B
KCNH8
FFAR4
UNC5D
NSG1
G6PC2

Elgamal & Solimena OD
& Wigger PPP

RTN4	BAG1
ZCCHC2	MRPS34
NAGA	PPP1R1A
CTC1	PTPRN2
RASGRF1	SLC2A4RG
TRIM27	FEV
MPHOSPH10	TERF2IP
CREBBP	KCNMA1
BNIP3	CST3
USP47	IGFBP2
TMEM176B	C1QTNF4
STAU2	TMX4
MPPE1	CYC1
FCHO2	CALY
ABCC9	PCBP2
AC142472.1	CBX6
GCNT1	SRSF5
SP4	C1orf122
ZNF384	GNAI2
MLF1	PRSS3
PRRG4	CPE
SCPEP1	PCSK2
TMEM14A	CHGA
MUC13	EGR1
MESP1	REG3A
SYNC	AKR7A2
NFKB1	ITM2B
FBXO28	KLHDC2
PTRHD1	FTH1
LRRC10B	JUND
TMEM154	REG1B
RIIAD1	H2AFV
C1orf53	SLC7A8
TMED6	RPS2
NGLY1	PEG10
BSG	STUB1
CTNNBL1	MTCH1
KANK1	SLC30A8
LRRCC1	CRYBA2
CD24	SRP14
CAPS	PAM
VPS13D	UCHL1
VWDE	PAK3
TSPAN33	CTRB2
SERP2	DUT
POC1B	MARCKS
AKR7A2	IER2
ENTPD6	SPINT2
CLDN3	PRELID1
NOL8	KCMF1
ZNF587	ABHD15
PHIP	NUCKS1
PTPMT1	SRM
ERAP1	MLXIPL
PCF11	RPS29
GPI	PTPRT
CHAC1	UBXN6
COX14	ZDHHC24
CHD5	GSTA4
BBX	HNRNPH1
RBBP7	VPS26B
CREB1	SCD
TNR	MAGED1
SLC30A1	SESN3
PREB	DVL3
UTP25	INO80E
CDK17	CTNND2
AP2B1	SUDS3

PPP1R1A
NSG1

**Elgamal & Solimena PPP
& Wigger PPP**

TSHR
CHD5
PPP1R1A
HCN4
NSG1
WNT3
DKK3

**Elgamal & Solimena OD
& Solimena PPP &
Wigger PPP**

PPP1R1A
NSG1

NT5C2
EGFL7
PBX3
DIRAS3
NAA15
PCSK2
PUM3
HOPX
PAR6A
JOSD2
PARP14
ESF1
BCDIN3D
ADM
ZNF608
TAF2
RNF7
SHARPIN
ARHGEF12
CSTF3
ERCC6L2
SYT11
POLR1C

SERTAD3
STXBP5
APLP2
ZNF540
AMMECR1
HPCA
ZNF512
BCCIP
LNPEP
HSPB6

SEC61B
PUS7L
CENPX
MYO9B

IRF2BPL
PDLIM1
GRN
CASP7
RIC1
PDLIM4
CEP350
TTC14
ATP6VOC
GNG7
SMC4
VIM
AP1S2
EIF4G3
MTFP1
RPP25
VMP1
RASA2
KIAA2026
HHEX
ZNF346
DUSP1
VSTM2L
GXYLT1
CEP290
SRCAP
GABRB3
KCTD9
ZC3H14
PPP3CA

CTRB1
C9orf24
TSPYL2
MISP
PSPC1
AGPAT2
STX16
UNC80
TXNL4A
GCH1
DMTN
SMARCA1
ARL3
KCNJ6
ATXN10
LMNA
CDIPT
UBE2Q2
TUBA1A
MOB1B
MORF4L1
CCAR1

**Fasolino (pseudobulk) & Fasolino
(edgeR/TooManyCells)**

OLFM4
CXCL2
TYMP
CCL2
CXCL1
IL32
LCN2
KRT7

**Elgamal & Bosi & Fasolino
(edgeR/TooManyCells)**

PSMB9
BAG1

**Elgamal & Fasolino (pseudobulk)
& Fasolino (edgeR/TooManyCells)**

TYMP

SACS
SRSF7
TBL1XR1
CS
RNF214
RPL7L1
NCOA6
HDAC7
ZNF84
MAGI3
FOXP2
CHD6
ZER1
PIAS4
RAD50
ZNF830
RACK1
DCAF5
ARHGAP5
MUC12
ELP3
GPM6B
SYNE2
ARID4B
LAMP2
STAG1
PBX1
TNRC6C
AC051619.5
FHDC1
BAZ2A
SGMS2
PMVK
SMARCC2
ACIN1
PTK2B
VCP1P1
C17orf80
TXNL4A
MSI2
CYB561D1
FBXW7
ZC3H8
HMGB1
GLE1
CA11
MBD6
SAMD9
TSC22D2
CYR1
OFD1
PLK2
INS
LUCAT1
KCNC4
HRK
NPNT
JAM3
VWA5A
NSRP1
C1QBP
NCOA5
NELFE
CTCF
ESRRG
MT1E
BCOR
ZZEF1
FAM174A
INHBA
RNF111

OSTC
ESCO1
CDC37L1-DT
NUP62
CAMK2D
NUFIP2
SRSF1
TMEM192
EDEM2
S100PBP
SETMAR
PSAP
KLHL35
ECEL1
GEMIN7
TRAF6
FAM229B
IWS1
PRPF40A
SECISBP2
ABCA1
FAM168A
TSPAN2
AFTPH
RALGAPA2
HSPH1
POLR2A
ZNF226
BRD2
ZNF773
FAU
GRIN2A
ZNF507
SIPA1L1
C6orf47
DFFA
TAF9
TDRD9
POP7
IGSF1
TUBA1A
KIAA1324L
BAZ2B
DVL3
ZNF621
ZBTB49
NBDY
KCNJ6
ITGAV
PLPBP
SASH1
MCUB
UBA6-AS1
CYB5A
MARF1
POC5
ZNF431
QKI
BAZ1A
GAB2
PHC1
TCF4
PRKACB
ARL14EP
MCRIP2
SLC48A1
TSHZ2
STAMBP
NAV1
PIK3CA
PHLPP2

C19orf18
PET100
TIFA
HMBOX1
TRNP1
ZNF740
ZNF618
TJP2
PAX6
CHD4
FAM214A
AAMP
ZC3H10
IGSF10
PROX1
ARSA
KLF3
WDR82
HTATSF1
TMEM130
QTRT2
SMCR5
LMCD1
WDFY3
STAT4
JADE2
CCND3
FNDC3B
ACSL4
DHCR24
CCDC93
PFDN5
DPH6
CBLN4
CLU
WSB1
SLC41A1
SDC4
GALNT7
GTF2H2
GBA
MBD4
RPS3A
TEN1
TMEM125
CCDC88A
ZNF573
SETBP1
RBMX
ASF1A
CAVIN3
ASCL1
MFSD11
DHX15
NCBP1
ZNF37A
PLXNA2
PARP8
GMEB1
PHF21A
ZNF383
ZNF264
AIMP1
CARM1
SURF2
AC007029.1
HEBP1
TMEM140
KIAA0319
AHDC1
ITPR3

QSER1
ZNF721
EMC10
ZNF638
GRWD1
CASP8AP2
FOXP4
NPY
LY6E
DLGAP1-AS1
STMN3
Z82217.1
LMNA
ATP1B3
CNIH2
KLF10
NCBP2
BLZF1
TOB2
PRELID1
CDK7
RXRB
ZNF766
VPS45
NUDC
EIF2AK2
TMEM8A
ELL2
FGD6
HERPUD1
PEBP1
DPY19L3
GINM1
EP300
KNOP1
KCTD8
AC073508.3
NUBP1
ITFG2
AL353719.1
IFIH1
TUBG2
SRF
ERICH5
CDKN2C
SCMH1
TCF20
TPR
KIAA0040
ZNF709
USP53
SERPINA1
TRIM38
RPS6
NDUFB10
NFRKB
MEGF9
RRAGA
TESC
ACVR2A
ZFYVE16
UBLCP1
MMAA
NUP50
CD47
EMSY
CCDC137
JAGN1
WDFY1
NME2
GADD45GIP1

PLSCR1
SFT2D2
TNK2
CISD2
KDM3A
ASH1L
KLHL8
GLI4
PPME1
BMP5
TNS2
ZNF347
SDF2L1
DDX55
PI4KB
TMEM259
SF3B5
PLOD2
KIAA0355
PGM2L1
SLC38A2
ADPRHL2
ZNF286A
LY6H
NUP35
TMPO
MAPK8IP2
AC093673.1
KPNA5
NCOR1
UCHL1
SLC7A2
HYI
ZXDC
AC108134.2
UNC80
INO80B
TMEM187
TRIM23
APBP2
PYGB
RPAP2
AKR1A1
RBPJ
ARID1B
ZNHIT2
PRKAA2
MED8
CTTNBP2
CD274
ATP5MC3
MED29
PDK3
MPST
IKBKB
ATAD2B
CDK19
AL390955.2
TMEM132D
TOM1
SLC46A3
KIZ
ATP6V1F
ATP9A
UBXN2B
SOCS1
GRINA
LYST
FAM193A
ZCCHC9
ANKRA2

CNP
CLSTN1
SCML1
RPRD2
UHRF1BP1
MAP3K8
HSD17B11
TMA16
DTD2
THUMPD2
EXOC6
ARV1
CRB3
ID1
PIGM
SERPINI1
ZNF124
BAG1
LEMD3
RBM6
GBE1
COMMD7
PREPL
ZNF445
ZFYVE27
PAPPA2
NPC2
PARP4
GINS2
BTN2A1
DCUN1D1
LARP7
SLC25A4
RPF2
LBR
DTNB
INSR
LDLRAD3
SLC25A33
RAD21
CPNE4
SMURF2
INTS6
RPL36AL
C12orf60
ASAH1
ENPP5
CD59
ZNF281
ITGB8
CBX4
ARFGEF1
TCERG1
FKBP11
MYH10
SMIM10L1
ZNF609
SEC61A2
VGF
ZNF200
ODC1
DDX59
RAB30
BAP1
TBL2
CD82
THUMPD3-AS1
ZNF780B
DET1
CHCHD10
CSTF2T

DDIT4
C12orf4
SIN3A
ARL6IP5
ASXL3
UFC1
FBXO44
KDM3B
ARFGEF3
AC139795.2
MID1
CDKN2A
CCDC186
IRAK4
TMCO3
GUF1
NCBP3
TRIM35
RNF213
ATE1
NDUFC1
RPP14
FXVD2
CLSTN3
MPP1
ZNF524
AC132872.1
MPC2
ALS2
PDS5B
KDM4B
TMEM63B
PHLDA2
SPPL2B
LIG4
USP15
WASHC2A
KDM6B
DGKH
BCL3
SEC24B
ARIH2
PELI1
PUS3
SEPSECS-AS1
ANKS1B
GOT2
VPS54
SPECC1L
TNRC6B
RNF24
FUT10
SLCO5A1
HIST3H2A
ZNF782
L3MBTL1
RANBP3
TKFC
PACRGL
TRIM56
GATC
APIP
LIMCH1
BTRC
DNAJB9
CEP170
RANBP2
CREBRF
STRN
LARP6
ERN1

MZT2A
ZNF318
FICD
PIGP
USP24
TMEM189
SNHG10
MRPL41
MICALL1
YY1
GIGYF2
FBXL2
BMPR2
KBTBD6
AAR2
SUPT16H
MAD2L1BP
ISY1
GEMIN2
IRS1
EBPL
TICAM2
BRPF1
GTF2H2C
STUB1
ATXN7L3
RWDD4
RBM12
CFL2
DESI1
LIAS
FBLN7
SMCR8
RPL12
CLHC1
NTAN1
TNRC6A
PLEKHA7
CHCHD2
GC
GSE1
AC092171.4
HADH
XPA
PSMB7
ATP5PO
EPS15
MTMR3
COL6A1
AC103691.1
APOH
EFNB3
CCDC167
SMAD5
KLHL21
HECA
GCAT
ATN1
SNX3
JUN
THBD
LDB1
COX5A
CACYBP
THR8
BRIX1
C6orf62
MTX1
C2CD5
PIGZ
PDZD2

ZNF511
RIPK1
RBBP4
TIA1
PHF12
SAMD4A
AC007325.4
AP3B1
GTPBP4
NOSIP
AC009061.2
SH2B3
N4BP2
NEUROD1
EFTUD2
FKBP14
NDRG1
PRRT2
HPS3
POLDIP3
SENP1
NAA16
TOP2B
ALKBH8
USP30
NTRK2
ELF2
TAOK2
RPS3
MPP5
BORCS7
TSTA3
FRY
AC004540.2
FKBP4
MAZ
ZNF207
POLR2J
SRSF3
NCAM1
ARHGAP12

**Fasolino (pseudobulk) & Fasolino
(edgeR/TooManyCells)**

CD74
HLA-DRA
RSAD2
CXCL2
B2M
OLFM4
TYMP
RGS4
PSMB8
CCL2
LMCD1
ZFP36
CLDN10
ANXA4
GSTA1
PLK2
IL32
IFI6
HIGD1A
TSPAN8
TM4SF1
RNASEK
MMD
SYT13
HLA-C
PKIB
CLU

TERF2
CD44
DEFB1
FBXO32
CXCL8
NECTIN3
ANXA2
DLK1
LDHA
GTF2H2
PDK4
HLA-A
MAFA
SHISAL2B
SNCB
SPIRE1
NBL1
KRT8
PCDH7
DCBLD1
RNF213
SORL1
REG3A
SOD2
REG1B
PRUNE2
GCG
HES1
KRT19
EIF5A
LY6E
S100A10
AC036176.1
GAD2
MZF1
FXYS5
LSAMP
SEPT1
SCD5
HSBP1L1
SERPING1
SLC4A4
ELF3

Elgamal & Fasolino (pseudobulk)
*** & Fasolino (edgeR/TooManyCells)**

CD74
HLA-C
HLA-A
B2M
PSMB8
ZFP36
SLC4A4
LDHA
RGS4
TYMP
DLK1
PLK2
LMCD1
CLU
GTF2H2
LY6E
RNF213