

Supplementary Table 1. Differentially expresses genes (DEGs) in metastatic breast cancer stem cells (mBCSCs) from the GSE 151191 dataset.

ID	adj.P.Val	P.Value	logFC	GENE_SYMB	GENE_NAME	Remarks
A_33_P324	0.000483	1.16E-06	8.5	TAF5L	TAF5-like RNA polymerase II, p300/CBP-associated factor (PCAF)-asso	Upregulated
A_33_P324	0.000483	1.12E-06	8.08	BEX2	brain expressed X-linked 2	Upregulated
A_33_P347	0.000483	4.55E-07	7.9	ZBTB8A	zinc finger and BTB domain containing 8A	Upregulated
A_33_P367	0.000483	9.26E-07	7.62	LOC283887	uncharacterized LOC283887	Upregulated
A_21_P000	0.000483	4.25E-07	7.35	SNORD12	small nucleolar RNA, C/D box 12	Upregulated
A_33_P320	0.000483	3.31E-07	7.24	ZNF623	zinc finger protein 623	Upregulated
A_23_P413	0.000888	0.00006	7.23	ZNF330	zinc finger protein 330	Upregulated
A_23_P422	0.000483	1.83E-06	7.07	IER3	immediate early response 3	Upregulated
A_33_P323	0.000707	0.0000344	6.92	MT1G	metallothionein 1G	Upregulated
A_24_P254	0.000483	1.42E-06	6.87	ARHGEF9	Cdc42 guanine nucleotide exchange factor (GEF) 9	Upregulated
A_23_P303	0.000483	1.73E-06	6.85	P4HA2	prolyl 4-hydroxylase, alpha polypeptide II	Upregulated
A_21_P001	0.000483	1.51E-06	6.8	STK32C	serine/threonine kinase 32C	Upregulated
A_23_P126	0.000483	4.73E-07	6.79	CTH	cystathionine gamma-lyase	Upregulated
A_22_P000	0.000483	2.12E-06	6.76	lnc-RP11-116	lnc-RP11-116D17.1.1-10:1	Upregulated
A_24_P360	0.000483	6.44E-07	6.74	PDE7A	phosphodiesterase 7A	Upregulated
A_23_P273	0.000483	2.23E-06	6.67	KDSR	3-ketodihydrosphingosine reductase	Upregulated
A_23_P117	0.000483	1.11E-06	6.65	LYSMD4	LysM, putative peptidoglycan-binding, domain containing 4	Upregulated
A_22_P000	0.001049	0.0000884	6.61	lnc-MTMR9-1	lnc-MTMR9-1:1	Upregulated
A_23_P424	0.000483	4.87E-07	6.57	ERCC6L2	excision repair cross-complementation group 6-like 2	Upregulated
A_23_P894	0.000483	1.24E-06	6.54	CCL2	chemokine (C-C motif) ligand 2	Upregulated
A_24_P701	0.000483	4.43E-07	6.52	DTWD1	DTW domain containing 1	Upregulated
A_22_P000	0.000483	5.57E-07	6.52	LOC1005075	uncharacterized LOC100507564	Upregulated
A_23_P991	0.000483	2.47E-06	6.48	DRAM1	DNA-damage regulated autophagy modulator 1	Upregulated
A_33_P340	0.000483	2.54E-06	6.47	PNKP	polynucleotide kinase 3'-phosphatase	Upregulated
A_33_P335	0.000614	0.0000235	6.47	TRIM31	tripartite motif containing 31	Upregulated
A_22_P000	0.000483	3.03E-06	6.45	PIGL	phosphatidylinositol glycan anchor biosynthesis, class L	Upregulated
A_24_P778	0.000483	4.76E-07	6.4	RSL1D1	ribosomal L1 domain containing 1	Upregulated
A_24_P252	0.000483	1.28E-06	6.39	CXCR5	chemokine (C-X-C motif) receptor 5	Upregulated
A_23_P212	0.000534	0.0000136	6.38	HTT	huntingtin	Upregulated
A_33_P323	0.000837	0.0000526	6.38	ZNF100	zinc finger protein 100	Upregulated
A_21_P001	0.001353	0.000149	6.32	lnc-MAPK8IP2-1:5	lnc-MAPK8IP2-1:5	Upregulated
A_23_P128	0.000483	3.82E-06	6.27	KDEL1	KDEL (Lys-Asp-Glu-Leu) containing 1	Upregulated
A_24_P944	0.000483	2.91E-06	6.25	MAPKBP1	mitogen-activated protein kinase binding protein 1	Upregulated

A_23_P368	0.000483	2.66E-06	6.22	LRRC75A	leucine rich repeat containing 75A	Upregulated
A_33_P341	0.000483	2.88E-06	6.22	RHEB	Ras homolog enriched in brain	Upregulated
A_23_P368	0.000483	3.01E-06	6.18	GPRC5A	G protein-coupled receptor, class C, group 5, member A	Upregulated
A_24_P770	0.000483	3.29E-06	6.18	KMO	kynurenine 3-monooxygenase (kynurenine 3-hydroxylase)	Upregulated
A_23_P577	0.000483	1.54E-06	6.14	PXYLP1	2-phosphoxylose phosphatase 1	Upregulated
A_22_P000	0.000483	3.07E-06	6.1	LOC1005074	uncharacterized LOC100507487	Upregulated
A_22_P000	0.000483	3.25E-06	6.08	KMT2E-AS1	KMT2E antisense RNA 1 (head to head)	Upregulated
A_24_P334	0.000578	0.0000192	6.07	GPR141	G protein-coupled receptor 141	Upregulated
A_23_P948	0.000483	1.04E-06	6.04	F2	coagulation factor II (thrombin)	Upregulated
A_23_P297	0.000483	7.24E-07	6.03	SGOL1	shugoshin-like 1 (S. pombe)	Upregulated
A_22_P000	0.000483	2.45E-06	5.98	lnc-HNRNPA3	lnc-HNRNPA3-1:1	Upregulated
A_33_P335	0.000483	6.5E-07	5.94	LCTL	lactase-like	Upregulated
A_22_P000	0.001006	0.0000809	5.9	LOC1019293	uncharacterized LOC101929340	Upregulated
A_23_P124	0.000483	8.23E-07	5.86	COQ2	coenzyme Q2 4-hydroxybenzoate polyprenyltransferase	Upregulated
A_22_P000	0.000483	8.88E-07	5.86	lnc-ARNTL-1	lnc-ARNTL-1:1	Upregulated
A_24_P682	0.000483	3.29E-06	5.86	TRIM4	tripartite motif containing 4	Upregulated
A_32_P360	0.000483	0.0000036	5.82	DNHD1	dynein heavy chain domain 1	Upregulated
A_23_P130	0.000483	9.53E-07	5.79	KCTD1	potassium channel tetramerization domain containing 1	Upregulated
A_24_P213	0.000483	4.42E-06	5.76	SEMA6A	sema domain, transmembrane domain (TM), and cytoplasmic domain, (s	Upregulated
A_33_P337	0.000483	6.96E-07	5.75	GREB1	growth regulation by estrogen in breast cancer 1	Upregulated
A_33_P341	0.000526	0.0000123	5.75	BNIP3	BCL2/adenovirus E1B 19kDa interacting protein 3	Upregulated
A_23_P126	0.000978	0.0000754	5.74	NOL9	nucleolar protein 9	Upregulated
A_23_P127	0.000483	9.36E-07	5.73	IL2RA	interleukin 2 receptor, alpha	Upregulated
A_22_P000	0.0017	0.000226	5.73	lnc-ZBTB10-3	lnc-ZBTB10-3:1	Upregulated
A_33_P326	0.000489	0.0000074	5.72	SH3GLB1	SH3-domain GRB2-like endophilin B1	Upregulated
A_23_P385	0.001299	0.000139	5.72	PLCD4	phospholipase C, delta 4	Upregulated
A_22_P000	0.000526	0.000012	5.71	CDK3	cyclin-dependent kinase 3	Upregulated
A_22_P000	0.000565	0.0000169	5.71	lnc-TCEANC2	lnc-TCEANC2-1:1	Upregulated
A_23_P716	0.000848	0.0000541	5.7	FANCG	Fanconi anemia, complementation group G	Upregulated
A_23_P204	0.000483	4.95E-06	5.69	FARP1	FERM, RhoGEF (ARHGEF) and pleckstrin domain protein 1 (chondrocyt	Upregulated
A_33_P329	0.000486	6.64E-06	5.69	CEP55	centrosomal protein 55kDa	Upregulated
A_22_P000	0.000486	7.14E-06	5.66	lnc-PALLD-2	lnc-PALLD-2:1	Upregulated
A_24_P941	0.000483	7.51E-07	5.65	ZNF425	zinc finger protein 425	Upregulated
A_33_P334	0.000691	0.0000307	5.65	WDR60	WD repeat domain 60	Upregulated
A_24_P226	0.000483	4.22E-06	5.64	KIAA0368	KIAA0368	Upregulated
A_23_P335	0.000728	0.000038	5.64	ZNF721	zinc finger protein 721	Upregulated
A_22_P000	0.000483	4.72E-06	5.63	LRIG2	leucine-rich repeats and immunoglobulin-like domains 2	Upregulated

A_23_P533	0.000483	5.56E-06	5.63	TMEM177	transmembrane protein 177	Upregulated
A_23_P357	0.000483	7.86E-07	5.59	PNKD	paroxysmal nonkinesigenic dyskinesia	Upregulated
A_21_P000	0.000483	4.42E-06	5.59	EFTUD1	elongation factor Tu GTP binding domain containing 1	Upregulated
A_23_P341	0.000483	3.05E-06	5.58	WBP5	WW domain binding protein 5	Upregulated
A_23_P164	0.000483	1.81E-06	5.57	LIN7B	lin-7 homolog B (C. elegans)	Upregulated
A_21_P000	0.000611	0.0000232	5.57	PAXBP1-AS1	PAXBP1 antisense RNA 1	Upregulated
A_23_P449	0.000483	3.15E-06	5.53	DSC2	desmocollin 2	Upregulated
A_33_P323	0.000483	5.41E-06	5.53	HDGF	hepatoma-derived growth factor	Upregulated
A_21_P001	0.001372	0.000152	5.53	TMEM165	transmembrane protein 165	Upregulated
A_33_P681	0.000604	0.0000226	5.52	lnc-GTF2F2-2	lnc-GTF2F2-2:22	Upregulated
A_23_P109	0.000483	8.75E-07	5.49	SDC4	syndecan 4	Upregulated
A_24_P242	0.000483	6.07E-06	5.49	HS2ST1	heparan sulfate 2-O-sulfotransferase 1	Upregulated
A_22_P000	0.000484	6.45E-06	5.48	lnc-HIST2H2A	lnc-HIST2H2AA3-1:1	Upregulated
A_33_P322	0.000762	0.0000419	5.47	COQ3	coenzyme Q3 methyltransferase	Upregulated
A_23_P386	0.001051	0.0000887	5.47	DOLPP1	dolichyldiphosphatase 1	Upregulated
A_21_P000	0.000483	5.29E-06	5.44	ZNF587B	zinc finger protein 587B	Upregulated
A_23_P715	0.00124	0.000126	5.4	CSPP1	centrosome and spindle pole associated protein 1	Upregulated
A_24_P943	0.00056	0.0000161	5.38	SCUBE3	signal peptide, CUB domain, EGF-like 3	Upregulated
A_21_P000	0.000961	0.000072	5.37	lnc-MBOAT4-1	lnc-MBOAT4-2:1	Upregulated
A_33_P328	0.000483	1.95E-06	5.35	SLC16A1	solute carrier family 16 (monocarboxylate transporter), member 1	Upregulated
A_23_P363	0.000788	0.0000458	5.35	HSPA4L	heat shock 70kDa protein 4-like	Upregulated
A_23_P980	0.000483	9.13E-07	5.34	SIRT1	sirtuin 1	Upregulated
A_33_P331	0.000483	2.19E-06	5.34	STAG3	stromal antigen 3	Upregulated
A_24_P370	0.000483	5.77E-06	5.34	ATG10	autophagy related 10	Upregulated
A_24_P812	0.000483	2.45E-06	5.33	PPP6C	protein phosphatase 6, catalytic subunit	Upregulated
A_33_P371	0.00056	0.0000164	5.31	MEGF8	multiple EGF-like-domains 8	Upregulated
A_21_P001	0.000705	0.0000333	5.31	LOC1019299	uncharacterized LOC101929947	Upregulated
A_24_P984	0.000483	1.02E-06	5.3	HSPA5	heat shock 70kDa protein 5 (glucose-regulated protein, 78kDa)	Upregulated
A_23_P470	0.000483	3.89E-06	5.3	DHX32	DEAH (Asp-Glu-Ala-His) box polypeptide 32	Upregulated
A_21_P001	0.000483	9.93E-07	5.29	USP32P2	ubiquitin specific peptidase 32 pseudogene 2	Upregulated
A_24_P116	0.000483	1.33E-06	5.27	STAT3	signal transducer and activator of transcription 3 (acute-phase response)	Upregulated
A_23_P420	0.000483	1.03E-06	5.26	PGBD4	piggyBac transposable element derived 4	Upregulated
A_22_P000	0.000483	5.51E-06	5.26	ADAT1	adenosine deaminase, tRNA-specific 1	Upregulated
A_23_P940	0.000483	1.17E-06	5.25	ANKRD46	ankyrin repeat domain 46	Upregulated
A_23_P134	0.000483	5.57E-06	5.23	CNKSR3	CNKSR family member 3	Upregulated
A_23_P357	0.000483	3.93E-06	5.22	GFOD2	glucose-fructose oxidoreductase domain containing 2	Upregulated
A_23_P365	0.001023	0.000084	5.21	FAM161B	family with sequence similarity 161, member B	Upregulated

A_24_P194	0.000483	0.000001	5.2	ZNF275	zinc finger protein 275	Upregulated
A_33_P337	0.000603	0.000022	5.2	TMEM106A	transmembrane protein 106A	Upregulated
A_33_P334	0.000483	3.94E-06	5.19	ZNF276	zinc finger protein 276	Upregulated
A_22_P000	0.000483	5.98E-06	5.19	lnc-KATNA1-2	lnc-KATNA1-2:1	Upregulated
A_23_P167	0.000483	2.21E-06	5.17	CYFIP2	cytoplasmic FMR1 interacting protein 2	Upregulated
A_32_P176	0.000521	0.0000106	5.17	LINC00239	long intergenic non-protein coding RNA 239	Upregulated
A_21_P000	0.001263	0.000132	5.17	lnc-SDPR-1	lnc-SDPR-1:1	Upregulated
A_33_P328	0.000483	5.66E-06	5.15	FUT4	fucosyltransferase 4 (alpha (1,3) fucosyltransferase, myeloid-specific)	Upregulated
A_33_P342	0.000506	8.67E-06	5.14	LOC1001320	uncharacterized LOC100132071	Upregulated
A_33_P681	0.000575	0.0000175	5.12	lnc-GTF2F2-2	lnc-GTF2F2-2:19	Upregulated
A_33_P328	0.001043	0.0000873	5.1	GZF1	GDNF-inducible zinc finger protein 1	Upregulated
A_23_P256	0.000483	6.38E-06	5.09	HPSE	heparanase	Upregulated
A_23_P134	0.000483	1.09E-06	5.08	PHF14	PHD finger protein 14	Upregulated
A_19_P003	0.001525	0.000186	5.08	SMIM13	small integral membrane protein 13	Upregulated
A_23_P762	0.000483	4.36E-06	5.07	PRR4	proline rich 4 (lacrimal)	Upregulated
A_22_P000	0.000483	4.55E-06	5.06	SLC37A4	solute carrier family 37 (glucose-6-phosphate transporter), member 4	Upregulated
A_33_P370	0.001226	0.000124	5.05	LINC00662	long intergenic non-protein coding RNA 662	Upregulated
A_21_P001	0.000515	9.41E-06	5.04	LINC01353	long intergenic non-protein coding RNA 1353	Upregulated
A_33_P326	0.000483	1.68E-06	5.02	RUFY2	RUN and FYVE domain containing 2	Upregulated
A_23_P429	0.000589	0.0000206	5.02	KCNQ1	potassium channel, voltage gated KQT-like subfamily Q, member 1	Upregulated
A_32_P593	0.001067	0.0000927	5.02	HIVEP3	human immunodeficiency virus type I enhancer binding protein 3	Upregulated
A_33_P336	0.000487	7.24E-06	5.01	BCAR1	breast cancer anti-estrogen resistance 1	Upregulated
A_23_P114	0.001022	0.0000837	5.01	SEMA4C	sema domain, immunoglobulin domain (Ig), transmembrane domain (TM)	Upregulated
A_24_P849	0.000483	0.0000013	5	RPL22	ribosomal protein L22	Upregulated
A_33_P348	0.000483	0.0000014	5	ANKRD26P3	ankyrin repeat domain 26 pseudogene 3	Upregulated
A_33_P341	0.000483	1.18E-06	4.99	HSPA1B	heat shock 70kDa protein 1B	Upregulated
A_23_P111	0.000483	3.89E-06	4.99	GNG11	guanine nucleotide binding protein (G protein), gamma 11	Upregulated
A_33_P382	0.000483	4.97E-06	4.99	RABL6	RAB, member RAS oncogene family-like 6	Upregulated
A_24_P129	0.000513	8.98E-06	4.99	KCNIP2	Kv channel interacting protein 2	Upregulated
A_33_P342	0.00096	0.0000717	4.97	CNST	consortin, connexin sorting protein	Upregulated
A_22_P000	0.001032	0.0000854	4.96	KCNIP2-AS1	KCNIP2 antisense RNA 1	Upregulated
A_32_P177	0.000483	2.72E-06	4.95	STX17-AS1	STX17 antisense RNA 1	Upregulated
A_33_P322	0.000521	0.0000106	4.95	JAM2	junctional adhesion molecule 2	Upregulated
A_24_P701	0.000537	0.0000141	4.95	MYH11	myosin, heavy chain 11, smooth muscle	Upregulated
A_22_P000	0.000486	6.96E-06	4.94	lnc-TCF19-1	lnc-TCF19-1:4	Upregulated
A_22_P000	0.000483	1.79E-06	4.93	lnc-NUDT13-1	lnc-NUDT13-1:1	Upregulated
A_33_P330	0.000483	4.69E-06	4.93	DCUN1D2	DCN1, defective in cullin neddylation 1, domain containing 2	Upregulated

A_21_P001	0.000526	0.0000128	4.93	DDX11L16	DEAD/H (Asp-Glu-Ala-Asp/His) box helicase 11 like 16	Upregulated
A_23_P170	0.000532	0.0000134	4.93	IL36G	interleukin 36, gamma	Upregulated
A_24_P927	0.000483	0.0000061	4.92	C2CD3	C2 calcium-dependent domain containing 3	Upregulated
A_32_P137	0.000483	0.0000052	4.91	EFCAB7	EF-hand calcium binding domain 7	Upregulated
A_21_P000	0.000483	4.55E-06	4.9	LOC440896	uncharacterized LOC440896	Upregulated
A_23_P217	0.001341	0.000146	4.9	CTPS1	CTP synthase 1	Upregulated
A_21_P001	0.000483	1.51E-06	4.87	XLOC_I2_002311		Upregulated
A_22_P000	0.000483	5.06E-06	4.87	LOC1019270	uncharacterized LOC101927018	Upregulated
A_33_P321	0.000488	7.28E-06	4.87	LOC1001293	chromosome X open reading frame 69-like	Upregulated
A_23_P344	0.000502	8.31E-06	4.87	SLC35A3	solute carrier family 35 (UDP-N-acetylglucosamine (UDP-GlcNAc) transp	Upregulated
A_23_P996	0.000486	7.14E-06	4.86	SLC7A7	solute carrier family 7 (amino acid transporter light chain, y+L system), m	Upregulated
A_24_P267	0.000483	1.49E-06	4.85	ZNF585A	zinc finger protein 585A	Upregulated
A_24_P483	0.000828	0.0000517	4.85	CWC25	CWC25 spliceosome-associated protein homolog (S. cerevisiae)	Upregulated
A_23_P388	0.000502	0.0000084	4.83	ZNF552	zinc finger protein 552	Upregulated
A_24_P339	0.000483	1.42E-06	4.82	ARSG	arylsulfatase G	Upregulated
A_22_P000	0.000701	0.0000329	4.81	lnc-CEP41-1	lnc-CEP41-1:1	Upregulated
A_23_P273	0.002688	0.00048	4.81	EMILIN2	elastin microfibril interfacier 2	Upregulated
A_33_P329	0.000483	5.41E-06	4.78	GRASP	GRP1 (general receptor for phosphoinositides 1)-associated scaffold pr	Upregulated
A_33_P325	0.000739	0.000039	4.77	LOC1001306	uncharacterized LOC100130642	Upregulated
A_33_P323	0.000546	0.0000148	4.75	MAP3K14-AS	MAP3K14 antisense RNA 1	Upregulated
A_24_P822	0.000706	0.0000334	4.75	HS6ST1	heparan sulfate 6-O-sulfotransferase 1	Upregulated
A_23_P823	0.000743	0.0000397	4.75	BBS9	Bardet-Biedl syndrome 9	Upregulated
A_33_P337	0.000483	4.56E-06	4.74	WAC	WW domain containing adaptor with coiled-coil	Upregulated
A_33_P327	0.000483	1.81E-06	4.73	TRMT10A	tRNA methyltransferase 10 homolog A (S. cerevisiae)	Upregulated
A_23_P512	0.000483	5.71E-06	4.73	ZNF436	zinc finger protein 436	Upregulated
A_23_P138	0.000954	0.0000705	4.73	STYK1	serine/threonine/tyrosine kinase 1	Upregulated
A_22_P000	0.001178	0.000114	4.72	LOC643339	uncharacterized LOC643339	Upregulated
A_23_P662	0.000483	1.78E-06	4.7	MT1M	metallothionein 1M	Upregulated
A_22_P000	0.000525	0.000011	4.7	lnc-SGSM2-1	lnc-SGSM2-1:1	Upregulated
A_23_P904	0.000588	0.0000204	4.7	PBX4	pre-B-cell leukemia homeobox 4	Upregulated
A_24_P341	0.000765	0.0000425	4.7	GBA2	glucosidase, beta (bile acid) 2	Upregulated
A_33_P339	0.000483	3.25E-06	4.69	C17orf96	chromosome 17 open reading frame 96	Upregulated
A_21_P000	0.000526	0.0000127	4.69	lnc-C1orf21-3	lnc-C1orf21-3:1	Upregulated
A_33_P326	0.000483	2.26E-06	4.68	SNX1	sorting nexin 1	Upregulated
A_23_P459	0.000483	4.42E-06	4.68	TFB2M	transcription factor B2, mitochondrial	Upregulated
A_22_P000	0.000497	0.0000076	4.68	lnc-C10orf103	lnc-C10orf103-1:1	Upregulated
A_24_P113	0.000483	1.95E-06	4.67	ATAD5	ATPase family, AAA domain containing 5	Upregulated

A_33_P337	0.000483	1.95E-06	4.67	ENSA	endosulfine alpha	Upregulated
A_23_P991	0.00076	0.0000416	4.67	CCDC77	coiled-coil domain containing 77	Upregulated
A_23_P161	0.001092	0.0000975	4.67	FOSL1	FOS-like antigen 1	Upregulated
A_23_P111	0.000483	1.81E-06	4.64	HSPA1A	heat shock 70kDa protein 1A	Upregulated
A_33_P323	0.000525	0.0000115	4.64	STK3	serine/threonine kinase 3	Upregulated
A_32_P904	0.000483	4.86E-06	4.63	STXBP4	syntaxin binding protein 4	Upregulated
A_23_P200	0.000537	0.0000138	4.63	HILPDA	hypoxia inducible lipid droplet-associated	Upregulated
A_23_P120	0.000483	2.96E-06	4.62	ACSS1	acyl-CoA synthetase short-chain family member 1	Upregulated
A_23_P353	0.000483	3.23E-06	4.61	C2CD2L	C2CD2-like	Upregulated
A_23_P145	0.000526	0.0000124	4.61	STAG3	stromal antigen 3	Upregulated
A_23_P163	0.001088	0.0000968	4.61	POLE2	polymerase (DNA directed), epsilon 2, accessory subunit	Upregulated
A_23_P152	0.000483	2.56E-06	4.6	PLEKHM1	pleckstrin homology domain containing, family M (with RUN domain) member 1	Upregulated
A_23_P151	0.000695	0.0000313	4.6	C12orf43	chromosome 12 open reading frame 43	Upregulated
A_23_P665	0.002044	0.000313	4.6	SMG8	SMG8 nonsense mediated mRNA decay factor	Upregulated
A_22_P000	0.001108	0.000101	4.59	lnc-ERH-1	lnc-ERH-1:1	Upregulated
A_23_P421	0.000483	2.49E-06	4.58	FAM83H	family with sequence similarity 83, member H	Upregulated
A_33_P335	0.000662	0.0000279	4.58	TXNRD1	thioredoxin reductase 1	Upregulated
A_33_P330	0.000483	1.75E-06	4.57	DOPEY1	dopey family member 1	Upregulated
A_33_P331	0.000483	0.0000064	4.56	IMMT	inner membrane protein, mitochondrial	Upregulated
A_23_P145	0.000486	7.16E-06	4.56	PPP1R17	protein phosphatase 1, regulatory subunit 17	Upregulated
A_24_P873	0.000515	9.22E-06	4.56	BCR	breakpoint cluster region	Upregulated
A_21_P001	0.000625	0.0000246	4.56	lnc-MAPK8IP2	lnc-MAPK8IP2-1:12	Upregulated
A_33_P335	0.001957	0.000289	4.56	SARS	seryl-tRNA synthetase	Upregulated
A_21_P000	0.000483	2.31E-06	4.55	MT1E	metallothionein 1E	Upregulated
A_23_P202	0.000515	0.0000094	4.54	KBTBD4	kelch repeat and BTB (POZ) domain containing 4	Upregulated
A_23_P349	0.000527	0.0000129	4.53	FCHO2	FCH domain only 2	Upregulated
A_23_P340	0.000538	0.0000143	4.53	THAP3	THAP domain containing, apoptosis associated protein 3	Upregulated
A_23_P144	0.000741	0.0000394	4.53	PDLIM7	PDZ and LIM domain 7 (enigma)	Upregulated
A_33_P324	0.00219	0.000352	4.53	CCNE2	cyclin E2	Upregulated
A_24_P816	0.003373	0.00068	4.53	UBE2Q2P1	ubiquitin-conjugating enzyme E2Q family member 2 pseudogene 1	Upregulated
A_22_P000	0.000483	2.55E-06	4.52	lnc-SPAG1-3	lnc-SPAG1-3:4	Upregulated
A_32_P602	0.000483	1.96E-06	4.51	ING5	inhibitor of growth family, member 5	Upregulated
A_23_P131	0.000483	3.79E-06	4.51	CD302	CD302 molecule	Upregulated
A_33_P342	0.000483	0.0000046	4.51	XLOC_l2_000407		Upregulated
A_22_P000	0.000526	0.0000126	4.51	lnc-RSPRY1-1	lnc-RSPRY1-1:1	Upregulated
A_21_P000	0.000765	0.0000423	4.51	lnc-AL035696	lnc-AL035696.1-5:1	Upregulated
A_33_P333	0.000483	2.02E-06	4.5	NRARP	NOTCH-regulated ankyrin repeat protein	Upregulated

A_23_P698	0.000483	2.22E-06	4.5	ZNF717	zinc finger protein 717	Upregulated
A_21_P000	0.000486	7.17E-06	4.5	lnc-HERPUD2	lnc-HERPUD2-4:1	Upregulated
A_33_P332	0.000485	0.0000065	4.49	TOMM34	translocase of outer mitochondrial membrane 34	Upregulated
A_33_P333	0.000515	9.49E-06	4.48	MOSPD1	motile sperm domain containing 1	Upregulated
A_33_P332	0.000687	0.0000302	4.48	PLAGL2	pleiomorphic adenoma gene-like 2	Upregulated
A_32_P197	0.002351	0.000391	4.47	EIF2A	eukaryotic translation initiation factor 2A, 65kDa	Upregulated
A_23_P151	0.00321	0.000633	4.47	TMEM132C	transmembrane protein 132C	Upregulated
A_24_P898	0.000485	6.51E-06	4.46	TRAF1	TNF receptor-associated factor 1	Upregulated
A_33_P329	0.000483	3.67E-06	4.45	LOC1005055	uncharacterized LOC100505530	Upregulated
A_33_P325	0.000525	0.0000115	4.45	DOCK9	dedicator of cytokinesis 9	Upregulated
A_32_P538	0.000625	0.0000246	4.45	PAQR7	progesterone and adiponectin receptor family member VII	Upregulated
A_23_P162	0.000925	0.0000652	4.44	KLK1	kallikrein 1	Upregulated
A_21_P001	0.000526	0.0000117	4.43	lnc-KIF3A-1	lnc-KIF3A-1:4	Upregulated
A_33_P337	0.000498	7.73E-06	4.42	SESTD1	SEC14 and spectrin domains 1	Upregulated
A_24_P231	0.000515	9.86E-06	4.42	GIGYF1	GRB10 interacting GYF protein 1	Upregulated
A_33_P321	0.000483	2.16E-06	4.41	CAB39L	calcium binding protein 39-like	Upregulated
A_24_P253	0.000483	3.13E-06	4.41	PIGL	phosphatidylinositol glycan anchor biosynthesis, class L	Upregulated
A_33_P333	0.000646	0.0000265	4.41	LCORL	ligand dependent nuclear receptor corepressor-like	Upregulated
A_22_P000	0.000483	5.63E-06	4.39	STX18-AS1	STX18 antisense RNA 1 (head to head)	Upregulated
A_22_P000	0.000522	0.0000108	4.39	LOC1027237	uncharacterized LOC102723766	Upregulated
A_22_P000	0.000486	6.67E-06	4.38	SLCO5A1	solute carrier organic anion transporter family, member 5A1	Upregulated
A_23_P973	0.000483	3.36E-06	4.37	CASP9	caspase 9, apoptosis-related cysteine peptidase	Upregulated
A_23_P630	0.000806	0.0000485	4.37	MSTO1	misato 1, mitochondrial distribution and morphology regulator	Upregulated
A_24_P261	0.001596	0.0002	4.37	MTMR9	myotubularin related protein 9	Upregulated
A_22_P000	0.000483	0.0000019	4.36	lnc-MBOAT1-1	lnc-MBOAT1-5:1	Upregulated
A_23_P503	0.000521	0.0000104	4.36	LGALS13	lectin, galactoside-binding, soluble, 13	Upregulated
A_24_P944	0.000487	7.23E-06	4.33	KLHL6	kelch-like family member 6	Upregulated
A_33_P340	0.000577	0.000018	4.33	ST8SIA6	ST8 alpha-N-acetyl-neuraminidase alpha-2,8-sialyltransferase 6	Upregulated
A_24_P941	0.000483	1.96E-06	4.32	HAUS6	HAUS augmin-like complex, subunit 6	Upregulated
A_33_P340	0.000515	9.49E-06	4.32	PPM1F	protein phosphatase, Mg ²⁺ /Mn ²⁺ dependent, 1F	Upregulated
A_22_P000	0.000979	0.0000755	4.32	lnc-TP53I11-1	lnc-TP53I11-5:1	Upregulated
A_23_P268	0.000513	0.0000089	4.31	SOX9	SRY (sex determining region Y)-box 9	Upregulated
A_23_P135	0.000525	0.0000111	4.31	ZNF627	zinc finger protein 627	Upregulated
A_21_P000	0.000483	2.45E-06	4.3	LOC1019295	uncharacterized LOC101929506	Upregulated
A_24_P415	0.000483	3.52E-06	4.3	SEC61A2	Sec61 alpha 2 subunit (<i>S. cerevisiae</i>)	Upregulated
A_33_P326	0.0011	0.0000993	4.3	MTMR7	myotubularin related protein 7	Upregulated
A_23_P151	0.000525	0.0000115	4.29	CSRNP2	cysteine-serine-rich nuclear protein 2	Upregulated

A_23_P102	0.000559	0.0000155	4.29	NUP35	nucleoporin 35kDa	Upregulated
A_24_P148	0.001105	0.0001	4.29	SH3BP5	SH3-domain binding protein 5 (BTK-associated)	Upregulated
A_22_P000	0.00308	0.000591	4.29	lnc-STAT3-1	lnc-STAT3-1:1	Upregulated
A_32_P250	0.000483	3.44E-06	4.28	RDH10	retinol dehydrogenase 10 (all-trans)	Upregulated
A_23_P453	0.000498	7.84E-06	4.28	XK	X-linked Kx blood group	Upregulated
A_33_P331	0.001121	0.000104	4.28	MIR17HG	miR-17-92 cluster host gene (non-protein coding)	Upregulated
A_24_P358	0.001035	0.0000858	4.27	GPATCH11	G patch domain containing 11	Upregulated
A_23_P635	0.003109	0.000602	4.27	PMF1	polyamine-modulated factor 1	Upregulated
A_23_P132	0.000483	5.72E-06	4.26	FAM114A1	family with sequence similarity 114, member A1	Upregulated
A_32_P151	0.000526	0.0000118	4.26	ZNF398	zinc finger protein 398	Upregulated
A_19_P003	0.000483	2.14E-06	4.25	PTPN14	protein tyrosine phosphatase, non-receptor type 14	Upregulated
A_21_P000	0.001004	0.0000805	4.25	lnc-UBLCP1-8	lnc-UBLCP1-8:1	Upregulated
A_33_P327	0.002535	0.000439	4.25	DIS3L2	DIS3 like 3'-5' exoribonuclease 2	Upregulated
A_33_P323	0.000521	0.0000106	4.24	MINOS1-NBL	MINOS1-NBL1 readthrough	Upregulated
A_24_P630	0.000565	0.0000169	4.24	IL1R2	interleukin 1 receptor, type II	Upregulated
A_24_P294	0.00071	0.0000353	4.24	SYNJ2	synaptojanin 2	Upregulated
A_22_P000	0.000483	5.12E-06	4.23	lnc-NGDN-1	lnc-NGDN-1:1	Upregulated
A_33_P320	0.000855	0.0000554	4.23	ZNF345	zinc finger protein 345	Upregulated
A_33_P373	0.001103	0.0000998	4.23	LOC1005062	uncharacterized LOC100506282	Upregulated
A_22_P000	0.001346	0.000147	4.23	lnc-RIC8A-1	lnc-RIC8A-1:1	Upregulated
A_23_P277	0.001394	0.000157	4.23	SPINT2	serine peptidase inhibitor, Kunitz type, 2	Upregulated
A_24_P194	0.000483	2.23E-06	4.22	CCDC134	coiled-coil domain containing 134	Upregulated
A_24_P944	0.000752	0.0000408	4.22	TMTC3	transmembrane and tetratricopeptide repeat containing 3	Upregulated
A_33_P328	0.001687	0.000221	4.22	RNPC3	RNA-binding region (RNP1, RRM) containing 3	Upregulated
A_23_P709	0.000483	2.75E-06	4.21	AGA	aspartylglucosaminidase	Upregulated
A_24_P376	0.000483	2.97E-06	4.21	CCNL2	cyclin L2	Upregulated
A_23_P157	0.000515	9.87E-06	4.21	AP4M1	adaptor-related protein complex 4, mu 1 subunit	Upregulated
A_33_P326	0.00064	0.0000259	4.21	FZR1	fizzy/cell division cycle 20 related 1 (Drosophila)	Upregulated
A_23_P447	0.000483	2.71E-06	4.2	CSRP2	cysteine and glycine-rich protein 2	Upregulated
A_24_P528	0.000483	2.92E-06	4.2	ENDOU	endonuclease, polyU-specific	Upregulated
A_33_P331	0.000483	3.22E-06	4.2	MTERF4	mitochondrial transcription termination factor 4	Upregulated
A_22_P000	0.000945	0.0000691	4.2	LOC1019272	uncharacterized LOC101927257	Upregulated
A_24_P106	0.000995	0.000079	4.2	WDR36	WD repeat domain 36	Upregulated
A_23_P377	0.000883	0.0000591	4.19	CIRBP	cold inducible RNA binding protein	Upregulated
A_33_P339	0.001459	0.000172	4.19	IL4	interleukin 4	Upregulated
A_22_P000	0.000483	3.79E-06	4.17	lnc-VPRBP-1	lnc-VPRBP-1:1	Upregulated
A_19_P008	0.000526	0.0000126	4.17	OTUD6B-AS1	OTUD6B antisense RNA 1 (head to head)	Upregulated

A_23_P301	0.00056	0.0000165	4.17	MED27	mediator complex subunit 27	Upregulated
A_23_P193	0.000575	0.0000177	4.17	LRRC16A	leucine rich repeat containing 16A	Upregulated
A_21_P000	0.000752	0.0000408	4.17	SNORA29	small nucleolar RNA, H/ACA box 29	Upregulated
A_22_P000	0.001955	0.000288	4.17	LLPH-AS1	LLPH antisense RNA 1 (head to head)	Upregulated
A_21_P000	0.000695	0.0000315	4.16	lnc-ASMT-5	lnc-ASMT-5:1	Upregulated
A_33_P325	0.000908	0.0000628	4.16	NSG1	neuron specific gene family member 1	Upregulated
A_21_P000	0.000908	0.0000628	4.16	SNORA21	small nucleolar RNA, H/ACA box 21	Upregulated
A_33_P329	0.000598	0.0000214	4.15	MYO1E	myosin IE	Upregulated
A_24_P374	0.000925	0.0000653	4.15	PDK1	pyruvate dehydrogenase kinase, isozyme 1	Upregulated
A_33_P329	0.000483	2.61E-06	4.14	MRPL37	mitochondrial ribosomal protein L37	Upregulated
A_23_P255	0.000483	6.29E-06	4.14	PAFAH1B2	platelet-activating factor acetylhydrolase 1b, catalytic subunit 2 (30kDa)	Upregulated
A_24_P314	0.000483	2.41E-06	4.12	TUBB2B	tubulin, beta 2B class IIb	Upregulated
A_33_P336	0.000516	0.00001	4.12	SCARNA10	small Cajal body-specific RNA 10	Upregulated
A_23_P895	0.000516	0.0000101	4.12	KIAA0753	KIAA0753	Upregulated
A_24_P393	0.001142	0.000108	4.12	DNAJB4	DnaJ (Hsp40) homolog, subfamily B, member 4	Upregulated
A_21_P000	0.000498	7.88E-06	4.11	lnc-TMEM116	lnc-TMEM116-1:1	Upregulated
A_33_P322	0.000532	0.0000133	4.11	ID4	inhibitor of DNA binding 4, dominant negative helix-loop-helix protein	Upregulated
A_24_P933	0.001346	0.000147	4.11	ABI2	abl-interactor 2	Upregulated
A_23_P650	0.000709	0.0000349	4.1	EID3	EP300 interacting inhibitor of differentiation 3	Upregulated
A_24_P940	0.000909	0.000063	4.1	CNOT6	CCR4-NOT transcription complex, subunit 6	Upregulated
A_23_P139	0.003147	0.000612	4.1	SLC11A2	solute carrier family 11 (proton-coupled divalent metal ion transporter), member 2	Upregulated
A_33_P322	0.00058	0.0000196	4.09	ARHGAP26	Rho GTPase activating protein 26	Upregulated
A_24_P212	0.00069	0.0000304	4.09	C9orf156	chromosome 9 open reading frame 156	Upregulated
A_23_P131	0.001385	0.000154	4.09	UBXN2A	UBX domain protein 2A	Upregulated
A_22_P000	0.003481	0.000712	4.09	lnc-SDF2-1	lnc-SDF2-1:1	Upregulated
A_23_P217	0.000486	6.81E-06	4.08	DCAF10	DDB1 and CUL4 associated factor 10	Upregulated
A_33_P328	0.000504	8.58E-06	4.08	SLTM	SAFB-like, transcription modulator	Upregulated
A_23_P698	0.000525	0.0000114	4.07	AGPAT9	1-acylglycerol-3-phosphate O-acyltransferase 9	Upregulated
A_22_P000	0.000534	0.0000135	4.07	TAPT1-AS1	TAPT1 antisense RNA 1 (head to head)	Upregulated
A_21_P000	0.000592	0.0000208	4.07	LINC00278	long intergenic non-protein coding RNA 278	Upregulated
A_23_P795	0.0027	0.000483	4.07	IL1B	interleukin 1, beta	Upregulated
A_21_P001	0.000483	2.66E-06	4.06	CLCN3	chloride channel, voltage-sensitive 3	Upregulated
A_22_P000	0.000526	0.0000118	4.06	lnc-CCDC7-2	lnc-CCDC7-2:1	Upregulated
A_23_P375	0.00056	0.0000163	4.06	NPTN	neuroplastin	Upregulated
A_33_P323	0.000674	0.0000291	4.06	MBTD1	mbt domain containing 1	Upregulated
A_24_P402	0.000483	6.08E-06	4.05	CRNKL1	crooked neck pre-mRNA splicing factor 1	Upregulated
A_23_P124	0.001092	0.0000974	4.05	ISY1	ISY1 splicing factor homolog (S. cerevisiae)	Upregulated

A_19_P003	0.000483	3.08E-06	4.04	LOC1019297	uncharacterized LOC101929709	Upregulated
A_23_P123	0.000515	9.96E-06	4.04	GSTM3	glutathione S-transferase mu 3 (brain)	Upregulated
A_33_P321	0.000525	0.0000113	4.04	AEN	apoptosis enhancing nuclease	Upregulated
A_24_P318	0.000537	0.0000139	4.04	ZNF337	zinc finger protein 337	Upregulated
A_23_P423	0.000702	0.000033	4.04	FAM171B	family with sequence similarity 171, member B	Upregulated
A_23_P842	0.001959	0.00029	4.04	OTP	orthopedia homeobox	Upregulated
A_33_P325	0.000498	7.76E-06	4.03	CNTRL	centriolin	Upregulated
A_23_P118	0.000741	0.0000396	4.03	PLK1	polo-like kinase 1	Upregulated
A_33_P323	0.001314	0.000141	4.03	CCNG1	cyclin G1	Upregulated
A_33_P341	0.003584	0.000745	4.03	SLC35F1	solute carrier family 35, member F1	Upregulated
A_33_P323	0.000483	0.0000026	4.02	MT1X	metallothionein 1X	Upregulated
A_23_P111	0.000521	0.0000102	4.01	SRRT	serrate, RNA effector molecule	Upregulated
A_22_P000	0.000746	0.0000402	4.01	lnc-CUBN-1	lnc-CUBN-1:1	Upregulated
A_23_P104	0.000701	0.0000328	4	SPA17	sperm autoantigenic protein 17	Upregulated
A_22_P000	0.000483	5.82E-06	3.99	lnc-SPATA17	lnc-SPATA17-2:1	Upregulated
A_24_P365	0.000705	0.0000332	3.99	TCF3	transcription factor 3	Upregulated
A_33_P326	0.001081	0.0000952	3.99	BAD	BCL2-associated agonist of cell death	Upregulated
A_33_P326	0.002309	0.00038	3.99	C5orf49	chromosome 5 open reading frame 49	Upregulated
A_33_P337	0.000513	9.02E-06	3.98	FOXO3	forkhead box O3	Upregulated
A_22_P000	0.000526	0.0000122	3.98	SLC38A6	solute carrier family 38, member 6	Upregulated
A_23_P347	0.000575	0.0000177	3.98	COA7	cytochrome c oxidase assembly factor 7 (putative)	Upregulated
A_19_P003	0.000584	0.00002	3.98	lnc-LRIG2-4	lnc-LRIG2-4:3	Upregulated
A_22_P000	0.000604	0.0000225	3.98	lnc-RTN2-1	lnc-RTN2-1:1	Upregulated
A_23_P355	0.001341	0.000146	3.98	USP54	ubiquitin specific peptidase 54	Upregulated
A_23_P109	0.00053	0.0000131	3.97	HPS4	Hermansky-Pudlak syndrome 4	Upregulated
A_33_P331	0.000542	0.0000145	3.97	CA5B	carbonic anhydrase VB, mitochondrial	Upregulated
A_33_P327	0.000866	0.0000572	3.97	THAP9	THAP domain containing 9	Upregulated
A_23_P149	0.000629	0.0000249	3.96	THEM4	thioesterase superfamily member 4	Upregulated
A_22_P000	0.001752	0.000237	3.96	CLUAP1	clusterin associated protein 1	Upregulated
A_21_P001	0.001162	0.000111	3.95	lnc-WDR34-1	lnc-WDR34-1:1	Upregulated
A_23_P488	0.00062	0.0000241	3.94	TMOD2	tropomodulin 2 (neuronal)	Upregulated
A_21_P001	0.001029	0.0000848	3.94	LRRC37BP1	leucine rich repeat containing 37B pseudogene 1	Upregulated
A_23_P120	0.000515	9.44E-06	3.93	HMOX1	heme oxygenase (decycling) 1	Upregulated
A_23_P212	0.00056	0.0000157	3.93	LARS2	leucyl-tRNA synthetase 2, mitochondrial	Upregulated
A_21_P000	0.000639	0.0000257	3.93	lnc-NLGN4Y-	lnc-NLGN4Y-1:1	Upregulated
A_23_P989	0.000483	3.84E-06	3.92	CCNT1	cyclin T1	Upregulated
A_23_P393	0.000483	4.04E-06	3.92	PDXDC2P	pyridoxal-dependent decarboxylase domain containing 2, pseudogene	Upregulated

A_33_P334	0.000701	0.0000328	3.92	PLCE1	phospholipase C, epsilon 1	Upregulated
A_24_P338	0.001101	0.0000995	3.92	ARL1	ADP-ribosylation factor-like 1	Upregulated
A_23_P106	0.001116	0.000102	3.92	SEMA7A	semaphorin 7A, GPI membrane anchor (John Milton Hagen blood group)	Upregulated
A_22_P000	0.001477	0.000175	3.92	lnc-ACOT1-3	lnc-ACOT1-3:2	Upregulated
A_24_P349	0.000483	3.31E-06	3.91	PCDHGA12	protocadherin gamma subfamily A, 12	Upregulated
A_24_P270	0.001925	0.00028	3.91	CRK	v-crk avian sarcoma virus CT10 oncogene homolog	Upregulated
A_24_P291	0.000603	0.0000221	3.9	SYTL3	synaptotagmin-like 3	Upregulated
A_32_P482	0.000707	0.0000346	3.9	ZNF100	zinc finger protein 100	Upregulated
A_24_P185	0.000711	0.0000356	3.9	UPRT	uracil phosphoribosyltransferase (FUR1) homolog (S. cerevisiae)	Upregulated
A_32_P181	0.000515	9.93E-06	3.89	ST7-AS1	ST7 antisense RNA 1	Upregulated
A_23_P128	0.000522	0.0000108	3.89	BATF	basic leucine zipper transcription factor, ATF-like	Upregulated
A_21_P001	0.000526	0.0000122	3.89	LOC1019286	uncharacterized LOC101928658	Upregulated
A_23_P821	0.000786	0.0000454	3.89	SMPD2	sphingomyelin phosphodiesterase 2, neutral membrane (neutral sphingomyelinase 2)	Upregulated
A_24_P363	0.000577	0.0000179	3.88	MAK	male germ cell-associated kinase	Upregulated
A_33_P342	0.000642	0.0000262	3.88	ZC3H3	zinc finger CCCH-type containing 3	Upregulated
A_24_P186	0.001328	0.000144	3.88	MTERF4	mitochondrial transcription termination factor 4	Upregulated
A_33_P329	0.000489	7.35E-06	3.87	C17orf53	chromosome 17 open reading frame 53	Upregulated
A_21_P000	0.000527	0.000013	3.87	TFAP2A-AS1	TFAP2A antisense RNA 1	Upregulated
A_33_P322	0.000515	9.94E-06	3.86	CAAP1	caspase activity and apoptosis inhibitor 1	Upregulated
A_23_P205	0.000662	0.0000278	3.86	EXD2	exonuclease 3'-5' domain containing 2	Upregulated
A_23_P346	0.002226	0.000361	3.86	PIK3CB	phosphatidylinositol-4,5-bisphosphate 3-kinase, catalytic subunit beta	Upregulated
A_24_P232	0.000537	0.000014	3.85	APBB1IP	amyloid beta (A4) precursor protein-binding, family B, member 1 interacting protein	Upregulated
A_23_P312	0.000855	0.0000553	3.85	PILRA	paired immunoglobulin-like type 2 receptor alpha	Upregulated
A_23_P504	0.000995	0.0000786	3.85	KANK2	KN motif and ankyrin repeat domains 2	Upregulated
A_23_P202	0.001243	0.000128	3.85	CCND1	cyclin D1	Upregulated
A_22_P000	0.000483	3.56E-06	3.84	lnc-ALDH7A1	lnc-ALDH7A1-1:1	Upregulated
A_33_P331	0.000741	0.0000396	3.84	C16orf62	chromosome 16 open reading frame 62	Upregulated
A_33_P330	0.001153	0.000109	3.84	LRP6	low density lipoprotein receptor-related protein 6	Upregulated
A_23_P367	0.001067	0.0000927	3.83	FBXL14	F-box and leucine-rich repeat protein 14	Upregulated
A_23_P397	0.000483	4.46E-06	3.82	GSTM2	glutathione S-transferase mu 2 (muscle)	Upregulated
A_33_P336	0.000771	0.0000432	3.82	DNAJB5	DnaJ (Hsp40) homolog, subfamily B, member 5	Upregulated
A_33_P331	0.000855	0.0000552	3.82	ZNF789	zinc finger protein 789	Upregulated
A_24_P364	0.001163	0.000112	3.82	SERGEF	secretion regulating guanine nucleotide exchange factor	Upregulated
A_23_P333	0.002006	0.000302	3.82	TLL1	tubulin tyrosine ligase-like family member 11	Upregulated
A_24_P341	0.000483	5.09E-06	3.81	SMIM20	small integral membrane protein 20	Upregulated
A_33_P338	0.000486	0.0000071	3.81	KIF26B	kinesin family member 26B	Upregulated
A_23_P140	0.000709	0.0000349	3.81	ZNF263	zinc finger protein 263	Upregulated

A_22_P000	0.001181	0.000115	3.81	lnc-C6orf228- lnc-C6orf228-3:1	Upregulated
A_33_P338	0.000846	0.0000539	3.8	ELK1 ELK1, member of ETS oncogene family	Upregulated
A_24_P405	0.00056	0.0000157	3.79	TRIP6 thyroid hormone receptor interactor 6	Upregulated
A_23_P433	0.000697	0.0000319	3.79	OR7E91P olfactory receptor, family 7, subfamily E, member 91 pseudogene	Upregulated
A_24_P101	0.000537	0.000014	3.78	EXOC5 exocyst complex component 5	Upregulated
A_33_P336	0.000577	0.0000182	3.78	lnc-COPZ2-1 lnc-COPZ2-1:1	Upregulated
A_33_P339	0.000483	3.53E-06	3.77	PLSCR3 phospholipid scramblase 3	Upregulated
A_33_P321	0.000513	0.0000089	3.77	LNP1 leukemia NUP98 fusion partner 1	Upregulated
A_33_P337	0.001085	0.0000958	3.77	LOC1001332 GAL11870	Upregulated
A_23_P339	0.002128	0.000337	3.77	LIN52 lin-52 DREAM MuvB core complex component	Upregulated
A_23_P122	0.000483	3.27E-06	3.76	MCOLN3 mucolipin 3	Upregulated
A_23_P364	0.000575	0.0000178	3.76	VPS33A vacuolar protein sorting 33 homolog A (S. cerevisiae)	Upregulated
A_33_P344	0.000577	0.0000182	3.76	lnc-WDR1-1 lnc-WDR1-1:2	Upregulated
A_23_P218	0.000483	0.0000038	3.75	CPT1B carnitine palmitoyltransferase 1B (muscle)	Upregulated
A_23_P159	0.000515	9.79E-06	3.75	BEX1 brain expressed, X-linked 1	Upregulated
A_33_P340	0.001094	0.0000977	3.75	CTNNA1 catenin (cadherin-associated protein), alpha 1, 102kDa	Upregulated
A_23_P642	0.001542	0.000189	3.75	ZW10 zw10 kinetochore protein	Upregulated
A_22_P000	0.000483	0.0000064	3.74	lnc-RBMS1-2 lnc-RBMS1-2:1	Upregulated
A_33_P333	0.000512	8.82E-06	3.74	TTL5 tubulin tyrosine ligase-like family member 5	Upregulated
A_33_P325	0.000675	0.0000293	3.74	ZNF286B zinc finger protein 286B	Upregulated
A_23_P218	0.003175	0.000622	3.74	ZNF343 zinc finger protein 343	Upregulated
A_33_P340	0.00096	0.0000715	3.73	NAV1 neuron navigator 1	Upregulated
A_24_P164	0.001798	0.000248	3.73	DSCR3 Down syndrome critical region 3	Upregulated
A_23_P116	0.00058	0.0000196	3.71	USP1 ubiquitin specific peptidase 1	Upregulated
A_23_P837	0.003258	0.000646	3.71	ING2 inhibitor of growth family, member 2	Upregulated
A_24_P479	0.003295	0.000658	3.71	UBE2QL1 ubiquitin-conjugating enzyme E2Q family-like 1	Upregulated
A_21_P001	0.000483	4.06E-06	3.7	XLOC_I2_013457	Upregulated
A_23_P129	0.000483	4.24E-06	3.7	CALML4 calmodulin-like 4	Upregulated
A_33_P322	0.000525	0.0000115	3.7	LINC01347 long intergenic non-protein coding RNA 1347	Upregulated
A_21_P001	0.002907	0.00054	3.7	SMAD1-AS2 SMAD1 antisense RNA 2	Upregulated
A_33_P325	0.000809	0.000049	3.69	ATG2A autophagy related 2A	Upregulated
A_22_P000	0.001084	0.0000955	3.69	lnc-DPY19L2- lnc-DPY19L2-1:1	Upregulated
A_24_P101	0.001496	0.00018	3.69	THADA thyroid adenoma associated	Upregulated
A_33_P329	0.000483	4.32E-06	3.68	PPIH peptidylprolyl isomerase H (cyclophilin H)	Upregulated
A_22_P000	0.000502	8.46E-06	3.68	PDK3 pyruvate dehydrogenase kinase, isozyme 3	Upregulated
A_22_P000	0.00093	0.000066	3.68	GNG12-AS1 GNG12 antisense RNA 1	Upregulated
A_33_P327	0.002221	0.000359	3.68	AKAP14 A kinase (PRKA) anchor protein 14	Upregulated

A_22_P000	0.007055	0.00199	3.68	FSIP1	fibrous sheath interacting protein 1	Upregulated
A_23_P338	0.000483	4.91E-06	3.67	MAGED2	melanoma antigen family D, 2	Upregulated
A_23_P142	0.000483	5.93E-06	3.67	ZFYVE21	zinc finger, FYVE domain containing 21	Upregulated
A_23_P102	0.000973	0.0000746	3.67	WNT10A	wingless-type MMTV integration site family, member 10A	Upregulated
A_24_P177	0.001605	0.000203	3.67	PCDHGB8P	protocadherin gamma subfamily B, 8 pseudogene	Upregulated
A_33_P326	0.002945	0.000551	3.67	DDRGK1	DDRGK domain containing 1	Upregulated
A_23_P169	0.000537	0.0000142	3.66	TRUB2	TruB pseudouridine (psi) synthase family member 2	Upregulated
A_24_P241	0.002508	0.000432	3.66	ZNF160	zinc finger protein 160	Upregulated
A_21_P001	0.002788	0.000507	3.66	FBXO25	F-box protein 25	Upregulated
A_22_P000	0.000483	0.0000056	3.65	lnc-HIST4H4-	lnc-HIST4H4-1:1	Upregulated
A_32_P192	0.000483	0.0000058	3.65	GLT1D1	glycosyltransferase 1 domain containing 1	Upregulated
A_23_P591	0.000887	0.0000598	3.65	RXRβ	retinoid X receptor, beta	Upregulated
A_23_P680	0.001002	0.0000803	3.65	PCGF1	polycomb group ring finger 1	Upregulated
A_21_P000	0.00213	0.000337	3.64	LOC1019272	uncharacterized LOC101927252	Upregulated
A_23_P705	0.000483	4.55E-06	3.63	VPS52	vacuolar protein sorting 52 homolog (S. cerevisiae)	Upregulated
A_23_P167	0.000589	0.0000204	3.63	PAQR3	progesterone and adiponectin receptor family member III	Upregulated
A_23_P184	0.000701	0.0000326	3.63	CXCL9	chemokine (C-X-C motif) ligand 9	Upregulated
A_23_P144	0.000848	0.0000542	3.63	GNPDA1	glucosamine-6-phosphate deaminase 1	Upregulated
A_33_P340	0.001637	0.000211	3.63	SERINC4	serine incorporator 4	Upregulated
A_23_P668	0.005125	0.00126	3.63	SIRT7	sirtuin 7	Upregulated
A_23_P894	0.000483	3.86E-06	3.62	SLC35B1	solute carrier family 35, member B1	Upregulated
A_23_P112	0.001517	0.000184	3.62	TRIM32	tripartite motif containing 32	Upregulated
A_32_P717	0.000483	5.44E-06	3.61	FKBP4	FK506 binding protein 4, 59kDa	Upregulated
A_33_P329	0.000521	0.0000106	3.61	ST8SIA4	ST8 alpha-N-acetylneuraminidase alpha-2,8-sialyltransferase 4	Upregulated
A_21_P001	0.000578	0.0000191	3.61	XLOC_I2_015213		Upregulated
A_21_P001	0.000096	0.0000717	3.61	MTHFD1L	methylenetetrahydrofolate dehydrogenase (NADP+ dependent) 1-like	Upregulated
A_23_P771	0.001297	0.000138	3.61	SORD	sorbitol dehydrogenase	Upregulated
A_22_P000	0.001453	0.000171	3.61	lnc-HMHB1-3	lnc-HMHB1-3:1	Upregulated
A_33_P334	0.000945	0.0000689	3.6	TBL1X	transducin (beta)-like 1X-linked	Upregulated
A_32_P118	0.001323	0.000143	3.6	C12orf65	chromosome 12 open reading frame 65	Upregulated
A_33_P335	0.001943	0.000284	3.6	SMARCAD1	SWI/SNF-related, matrix-associated actin-dependent regulator of chromatin	Upregulated
A_23_P206	0.000483	4.05E-06	3.59	MT1E	metallothionein 1E	Upregulated
A_19_P008	0.000848	0.0000544	3.59	XLOC_I2_014579		Upregulated
A_22_P000	0.000483	4.11E-06	3.58	PPP3CB-AS1	PPP3CB antisense RNA 1 (head to head)	Upregulated
A_22_P000	0.000515	9.54E-06	3.58	lnc-PPP4R1-5	lnc-PPP4R1-5:1	Upregulated
A_22_P000	0.001262	0.000132	3.58	lnc-OIT3-1	lnc-OIT3-1:1	Upregulated
A_24_P468	0.001475	0.000175	3.58	RBBP4	retinoblastoma binding protein 4	Upregulated

A_23_P109	0.00062	0.0000241	3.57	THOC5	THO complex 5	Upregulated
A_33_P331	0.000945	0.0000691	3.57	MYB	v-myb avian myeloblastosis viral oncogene homolog	Upregulated
A_23_P358	0.001046	0.0000878	3.57	POU5F2	POU domain class 5, transcription factor 2	Upregulated
A_33_P332	0.002989	0.000564	3.57	RNF216	ring finger protein 216	Upregulated
A_33_P329	0.000483	4.23E-06	3.56	KCTD9	potassium channel tetramerization domain containing 9	Upregulated
A_23_P778	0.000601	0.0000218	3.56	TMEM88	transmembrane protein 88	Upregulated
A_23_P112	0.001386	0.000155	3.56	GNG10	guanine nucleotide binding protein (G protein), gamma 10	Upregulated
A_23_P746	0.002464	0.000419	3.56	G0S2	G0/G1 switch 2	Upregulated
A_23_P152	0.000483	4.95E-06	3.55	SNRNP25	small nuclear ribonucleoprotein 25kDa (U11/U12)	Upregulated
A_33_P333	0.000483	5.49E-06	3.55	MTMR10	myotubularin related protein 10	Upregulated
A_23_P203	0.00056	0.0000161	3.55	ACER3	alkaline ceramidase 3	Upregulated
A_23_P654	0.000707	0.0000343	3.55	HAUS4	HAUS augmin-like complex, subunit 4	Upregulated
A_23_P210	0.00226	0.00037	3.55	EPAS1	endothelial PAS domain protein 1	Upregulated
A_23_P161	0.000483	4.01E-06	3.54	ASAH2	N-acylsphingosine amidohydrolase (non-lysosomal ceramidase) 2	Upregulated
A_23_P204	0.000483	4.08E-06	3.54	NOP2	NOP2 nucleolar protein	Upregulated
A_23_P337	0.000526	0.0000116	3.54	PPFIBP1	PTPRF interacting protein, binding protein 1 (liprin beta 1)	Upregulated
A_33_P321	0.000957	0.0000709	3.54	PDCD4	programmed cell death 4 (neoplastic transformation inhibitor)	Upregulated
A_22_P000	0.00104	0.0000867	3.54	lnc-WIBG-1	lnc-WIBG-1:1	Upregulated
A_33_P321	0.001133	0.000105	3.54	MID1IP1	MID1 interacting protein 1	Upregulated
A_22_P000	0.0005	8.04E-06	3.53	lnc-LRMP-3	lnc-LRMP-3:1	Upregulated
A_24_P162	0.001244	0.000128	3.53	LINC00665	long intergenic non-protein coding RNA 665	Upregulated
A_23_P213	0.00126	0.000131	3.53	FGF1	fibroblast growth factor 1 (acidic)	Upregulated
A_22_P000	0.004269	0.000963	3.53	lnc-NDST1-1	lnc-NDST1-1:1	Upregulated
A_33_P328	0.000498	7.84E-06	3.51	LENG8	leukocyte receptor cluster (LRC) member 8	Upregulated
A_23_P108	0.000584	0.0000199	3.51	ANKLE2	ankyrin repeat and LEM domain containing 2	Upregulated
A_24_P135	0.000605	0.0000227	3.51	KCTD9	potassium channel tetramerization domain containing 9	Upregulated
A_24_P295	0.000788	0.0000457	3.51	HBS1L	HBS1-like translational GTPase	Upregulated
A_33_P331	0.000846	0.0000538	3.51	CCDC34	coiled-coil domain containing 34	Upregulated
A_23_P257	0.000994	0.0000775	3.51	PEX13	peroxisomal biogenesis factor 13	Upregulated
A_21_P000	0.001068	0.0000932	3.51	lnc-RNF144A	lnc-RNF144A-3:1	Upregulated
A_23_P167	0.000486	7.07E-06	3.5	TMA16	translation machinery associated 16 homolog (S. cerevisiae)	Upregulated
A_23_P156	0.000515	9.26E-06	3.5	ZNF622	zinc finger protein 622	Upregulated
A_21_P000	0.000515	9.81E-06	3.5	lnc-ARRDC3-	lnc-ARRDC3-1:1	Upregulated
A_24_P415	0.000707	0.0000345	3.5	HPS1	Hermansky-Pudlak syndrome 1	Upregulated
A_33_P338	0.003543	0.000732	3.5	CYB5D1	cytochrome b5 domain containing 1	Upregulated
A_23_P930	0.000525	0.0000112	3.49	APH1A	APH1A gamma secretase subunit	Upregulated
A_33_P341	0.000575	0.0000178	3.49	GK	glycerol kinase	Upregulated

A_24_P354	0.000577	0.0000184	3.49	TAGAP	T-cell activation RhoGTPase activating protein	Upregulated
A_33_P335	0.000695	0.0000315	3.49	SMC2	structural maintenance of chromosomes 2	Upregulated
A_21_P001	0.001295	0.000138	3.49	TBC1D3P1-D	TBC1D3P1-DHX40P1 readthrough transcribed pseudogene	Upregulated
A_23_P941	0.000726	0.0000378	3.48	NEIL2	nei endonuclease VIII-like 2 (E. coli)	Upregulated
A_24_P135	0.001021	0.0000832	3.48	UEVLD	UEV and lactate/malate dehydrogenase domains	Upregulated
A_21_P001	0.003094	0.000595	3.48	LINC01237	long intergenic non-protein coding RNA 1237	Upregulated
A_33_P332	0.000483	6.22E-06	3.47	MOK	MOK protein kinase	Upregulated
A_23_P324	0.000502	0.0000084	3.47	SYNJ1	synaptojanin 1	Upregulated
A_24_P213	0.00056	0.0000164	3.47	MAN1A2	mannosidase, alpha, class 1A, member 2	Upregulated
A_23_P259	0.000641	0.0000259	3.47	TTK	TTK protein kinase	Upregulated
A_24_P393	0.000709	0.0000349	3.47	PACS2	phosphofurin acidic cluster sorting protein 2	Upregulated
A_23_P420	0.001265	0.000132	3.47	ORC3	origin recognition complex, subunit 3	Upregulated
A_23_P134	0.00239	0.000401	3.47	SLC18B1	solute carrier family 18, subfamily B, member 1	Upregulated
A_23_P132	0.000483	4.82E-06	3.46	ACAD9	acyl-CoA dehydrogenase family, member 9	Upregulated
A_23_P256	0.000526	0.0000123	3.46	AKIRIN1	akirin 1	Upregulated
A_23_P210	0.000483	6.32E-06	3.45	BCL2L1	BCL2-like 1	Upregulated
A_22_P000	0.00063	0.000025	3.45	LOC1027249	uncharacterized LOC102724901	Upregulated
A_23_P194	0.000661	0.0000277	3.45	STK19	serine/threonine kinase 19	Upregulated
A_22_P000	0.001031	0.0000852	3.45	lnc-DDX51-2	lnc-DDX51-2:1	Upregulated
A_23_P268	0.001203	0.00012	3.45	ARHGAP44	Rho GTPase activating protein 44	Upregulated
A_23_P800	0.001901	0.000274	3.45	PROCR	protein C receptor, endothelial	Upregulated
A_23_P115	0.000506	8.65E-06	3.44	TMEM125	transmembrane protein 125	Upregulated
A_22_P000	0.000589	0.0000205	3.44	lnc-WDR77-1	lnc-WDR77-1:1	Upregulated
A_23_P422	0.000887	0.0000597	3.44	SUV39H1	suppressor of variegation 3-9 homolog 1 (Drosophila)	Upregulated
A_23_P363	0.000571	0.0000173	3.43	C1RL	complement component 1, r subcomponent-like	Upregulated
A_23_P589	0.001256	0.00013	3.43	TBC1D22B	TBC1 domain family, member 22B	Upregulated
A_22_P000	0.001398	0.000158	3.43	MIR612	microRNA 612	Upregulated
A_33_P353	0.00399	0.000871	3.43	C5orf42	chromosome 5 open reading frame 42	Upregulated
A_21_P001	0.000634	0.0000252	3.42	NF1	neurofibromin 1	Upregulated
A_23_P202	0.001267	0.000133	3.42	CXCL12	chemokine (C-X-C motif) ligand 12	Upregulated
A_23_P153	0.000711	0.0000356	3.41	ZNF624	zinc finger protein 624	Upregulated
A_23_P110	0.001358	0.00015	3.41	CSF1R	colony stimulating factor 1 receptor	Upregulated
A_23_P321	0.002858	0.000527	3.41	DTWD1	DTW domain containing 1	Upregulated
A_33_P334	0.003909	0.000845	3.41	ANKRD20A12	ankyrin repeat domain 20 family, member A12, pseudogene	Upregulated
A_23_P559	0.005305	0.00133	3.41	PRR12	proline rich 12	Upregulated
A_22_P000	0.00077	0.0000432	3.4	lnc-ATP2A1-1	lnc-ATP2A1-1:1	Upregulated
A_33_P366	0.000814	0.0000501	3.4	AHCTF1	AT hook containing transcription factor 1	Upregulated

A_23_P170	0.00056	0.0000165	3.39	TMEM57	transmembrane protein 57	Upregulated
A_23_P354	0.000906	0.0000624	3.39	CISD1	CDGSH iron sulfur domain 1	Upregulated
A_33_P334	0.001261	0.000131	3.39	SIRPG	signal-regulatory protein gamma	Upregulated
A_21_P001	0.000513	9.01E-06	3.38	XLOC_I2_013189		Upregulated
A_32_P755	0.00056	0.0000159	3.38	TAMM41	TAM41, mitochondrial translocator assembly and maintenance protein, 1	Upregulated
A_24_P280	0.001171	0.000113	3.38	LOC1001291	THAP domain containing, apoptosis associated protein 3 pseudogene	Upregulated
A_22_P000	0.000483	5.48E-06	3.37	lnc-TCIRG1-1	lnc-TCIRG1-1:1	Upregulated
A_24_P206	0.000486	7.04E-06	3.37	ZNF746	zinc finger protein 746	Upregulated
A_23_P256	0.000675	0.0000292	3.37	RNF219	ring finger protein 219	Upregulated
A_23_P356	0.000697	0.000032	3.37	RBM17	RNA binding motif protein 17	Upregulated
A_23_P566	0.000965	0.0000732	3.37	INO80B	INO80 complex subunit B	Upregulated
A_24_P181	0.0015	0.000181	3.37	B3GNTL1	UDP-GlcNAc:betaGal beta-1,3-N-acetylglucosaminyltransferase-like 1	Upregulated
A_22_P000	0.000502	8.38E-06	3.36	lnc-MDH1B-2	lnc-MDH1B-2:1	Upregulated
A_23_P121	0.000526	0.0000123	3.36	TWF2	twinfilin actin-binding protein 2	Upregulated
A_22_P000	0.0017	0.000226	3.36	lnc-SPSB4-1	lnc-SPSB4-1:1	Upregulated
A_21_P000	0.00433	0.000985	3.36	LOC1019275	uncharacterized LOC101927598	Upregulated
A_23_P428	0.006498	0.00178	3.36	EZH1	enhancer of zeste 1 polycomb repressive complex 2 subunit	Upregulated
A_23_P204	0.000486	7.04E-06	3.35	RAB35	RAB35, member RAS oncogene family	Upregulated
A_21_P000	0.000525	0.0000112	3.35	lnc-KIAA1919	lnc-KIAA1919-1:1	Upregulated
A_23_P202	0.000603	0.0000222	3.35	MADD	MAP-kinase activating death domain	Upregulated
A_24_P269	0.000693	0.000031	3.35	PLEKHA1	pleckstrin homology domain containing, family A (phosphoinositide binding)	Upregulated
A_33_P324	0.000718	0.0000366	3.35	C10orf128	chromosome 10 open reading frame 128	Upregulated
A_33_P326	0.001055	0.0000896	3.35	DYNLT1	dynein, light chain, Tctex-type 1	Upregulated
A_19_P008	0.001398	0.000158	3.35	LINC01355	long intergenic non-protein coding RNA 1355	Upregulated
A_21_P000	0.001812	0.000252	3.35	lnc-GATA3-3	lnc-GATA3-3:1	Upregulated
A_33_P681	0.003817	0.000816	3.35	PITRM1-AS1	PITRM1 antisense RNA 1	Upregulated
A_23_P365	0.000707	0.000034	3.34	ZNF783	zinc finger family member 783	Upregulated
A_22_P000	0.000483	0.0000061	3.33	lnc-C1QTNF5	lnc-C1QTNF5-1:1	Upregulated
A_23_P253	0.000526	0.0000121	3.33	GPR171	G protein-coupled receptor 171	Upregulated
A_33_P339	0.000664	0.0000281	3.33	C14orf28	chromosome 14 open reading frame 28	Upregulated
A_22_P000	0.002167	0.000346	3.33	lnc-CEP170-5	lnc-CEP170-5:1	Upregulated
A_22_P000	0.003766	0.0008	3.33	lnc-C18orf32-	lnc-C18orf32-1:1	Upregulated
A_23_P422	0.000521	0.0000103	3.32	PPIC	peptidylprolyl isomerase C (cyclophilin C)	Upregulated
A_33_P322	0.000597	0.0000214	3.32	ZNF197	zinc finger protein 197	Upregulated
A_24_P252	0.000814	0.0000499	3.32	CLP1	cleavage and polyadenylation factor I subunit 1	Upregulated
A_21_P000	0.000831	0.000052	3.32	lnc-C2orf27B-	lnc-C2orf27B-3:2	Upregulated
A_24_P137	0.001304	0.00014	3.32	GFM2	G elongation factor, mitochondrial 2	Upregulated

A_23_P334	0.00134	0.000146	3.32	TBC1D31	TBC1 domain family, member 31	Upregulated
A_24_P465	0.003715	0.000784	3.32	ZNRD1	zinc ribbon domain containing 1	Upregulated
A_32_P221	0.004205	0.00094	3.32	RABL3	RAB, member of RAS oncogene family-like 3	Upregulated
A_33_P339	0.004411	0.00101	3.32	PIP4K2A	phosphatidylinositol-5-phosphate 4-kinase, type II, alpha	Upregulated
A_22_P000	0.000483	6.31E-06	3.31	lnc-DCLRE1B	lnc-DCLRE1B-2:1	Upregulated
A_23_P963	0.000715	0.0000362	3.31	ERCC6L	excision repair cross-complementation group 6-like	Upregulated
A_22_P000	0.001291	0.000137	3.31	lnc-CHRNA3-2	lnc-CHRNA3-2:1	Upregulated
A_33_P331	0.005707	0.00147	3.31	TRAPPC10	trafficking protein particle complex 10	Upregulated
A_19_P003	0.000521	0.0000106	3.3	LINC01197	long intergenic non-protein coding RNA 1197	Upregulated
A_33_P332	0.000532	0.0000132	3.3	BACH1	BTB and CNC homology 1, basic leucine zipper transcription factor 1	Upregulated
A_23_P391	0.001139	0.000107	3.3	MANEAL	mannosidase, endo-alpha-like	Upregulated
A_23_P828	0.002572	0.000449	3.3	OSGIN2	oxidative stress induced growth inhibitor family member 2	Upregulated
A_21_P001	0.005795	0.00151	3.3	LOC1019299	uncharacterized LOC101929917	Upregulated
A_33_P331	0.000526	0.0000123	3.29	MOB1B	MOB kinase activator 1B	Upregulated
A_23_P154	0.000885	0.0000594	3.29	PTRH2	peptidyl-tRNA hydrolase 2	Upregulated
A_33_P331	0.000483	5.53E-06	3.28	MT1HL1	metallothionein 1H-like 1	Upregulated
A_23_P427	0.000498	7.94E-06	3.28	MT1L	metallothionein 1L (gene/pseudogene)	Upregulated
A_23_P173	0.000521	0.0000107	3.28	MRGBP	MRG/MORF4L binding protein	Upregulated
A_23_P900	0.000578	0.0000189	3.28	GPR108	G protein-coupled receptor 108	Upregulated
A_23_P555	0.000902	0.0000615	3.28	RNMT	RNA (guanine-7-) methyltransferase	Upregulated
A_33_P328	0.001047	0.0000882	3.28	SORBS1	sorbin and SH3 domain containing 1	Upregulated
A_23_P120	0.000483	5.91E-06	3.27	MCM3AP	minichromosome maintenance complex component 3 associated protein	Upregulated
A_33_P323	0.000526	0.0000121	3.27	LARP1B	La ribonucleoprotein domain family, member 1B	Upregulated
A_23_P141	0.000728	0.000038	3.27	NCOR1	nuclear receptor corepressor 1	Upregulated
A_23_P203	0.00089	0.0000602	3.27	NEU3	sialidase 3 (membrane sialidase)	Upregulated
A_33_P327	0.000944	0.0000687	3.27	NIPSNAP3B	nipsnap homolog 3B (C. elegans)	Upregulated
A_23_P241	0.000976	0.0000751	3.27	CCNJ	cyclin J	Upregulated
A_23_P259	0.000483	6.42E-06	3.26	LGMM	legumain	Upregulated
A_23_P134	0.000506	8.66E-06	3.26	GPNMB	glycoprotein (transmembrane) nmb	Upregulated
A_32_P791	0.000525	0.0000115	3.26	ANKRD20A12	ankyrin repeat domain 20 family, member A12, pseudogene	Upregulated
A_33_P340	0.000534	0.0000136	3.26	C9orf85	chromosome 9 open reading frame 85	Upregulated
A_23_P371	0.001043	0.0000873	3.26	DNM3	dynammin 3	Upregulated
A_23_P130	0.00122	0.000123	3.26	CEP89	centrosomal protein 89kDa	Upregulated
A_33_P323	0.001603	0.000202	3.26	PIN4	protein (peptidylprolyl cis/trans isomerase) NIMA-interacting, 4 (parvulin)	Upregulated
A_33_P341	0.000515	9.93E-06	3.25	CLCN5	chloride channel, voltage-sensitive 5	Upregulated
A_22_P000	0.000521	0.0000105	3.25	LOC1009964	uncharacterized LOC100996437	Upregulated
A_24_P348	0.000725	0.0000376	3.25	PLEKHA7	pleckstrin homology domain containing, family A member 7	Upregulated

A_23_P111	0.000779	0.0000442	3.25	MRPL32	mitochondrial ribosomal protein L32	Upregulated
A_23_P349	0.001398	0.000158	3.25	DIEXF	digestive organ expansion factor homolog (zebrafish)	Upregulated
A_33_P388	0.000498	0.0000078	3.24	ZCCHC10	zinc finger, CCHC domain containing 10	Upregulated
A_33_P341	0.000599	0.0000215	3.24	ZNF235	zinc finger protein 235	Upregulated
A_33_P327	0.000662	0.0000279	3.24	SYT6	synaptotagmin VI	Upregulated
A_33_P324	0.001356	0.000149	3.24	FOXO3	forkhead box O3	Upregulated
A_21_P000	0.008047	0.00238	3.24	BTN2A2	butyrophilin, subfamily 2, member A2	Upregulated
A_24_P401	0.000486	6.96E-06	3.23	TPH2	tryptophan hydroxylase 2	Upregulated
A_23_P160	0.000486	6.99E-06	3.23	LAMC2	laminin, gamma 2	Upregulated
A_24_P126	0.000939	0.0000679	3.23	CAV1	caveolin 1, caveolae protein, 22kDa	Upregulated
A_23_P416	0.000975	0.0000749	3.23	MS4A6E	membrane-spanning 4-domains, subfamily A, member 6E	Upregulated
A_23_P807	0.00125	0.000129	3.23	DIRC2	disrupted in renal carcinoma 2	Upregulated
A_33_P333	0.006885	0.00192	3.23	SNAPC5	small nuclear RNA activating complex, polypeptide 5, 19kDa	Upregulated
A_33_P333	0.000483	5.67E-06	3.22	OR7E37P	olfactory receptor, family 7, subfamily E, member 37 pseudogene	Upregulated
A_24_P350	0.000483	6.29E-06	3.22	PDPR	pyruvate dehydrogenase phosphatase regulatory subunit	Upregulated
A_23_P334	0.000609	0.000023	3.22	NRG4	neuregulin 4	Upregulated
A_23_P944	0.002726	0.00049	3.22	MELK	maternal embryonic leucine zipper kinase	Upregulated
A_23_P349	0.00071	0.0000354	3.21	FBXO41	F-box protein 41	Upregulated
A_33_P332	0.003684	0.000774	3.21	TNFRSF10D	tumor necrosis factor receptor superfamily, member 10d, decoy with truncated extracellular domain	Upregulated
A_24_P143	0.004634	0.00109	3.21	SIRPB1	signal-regulatory protein beta 1	Upregulated
A_33_P747	0.000513	8.99E-06	3.2	THUMPD3-AS1	THUMPD3 antisense RNA 1	Upregulated
A_19_P003	0.000575	0.0000176	3.2	LOC1019297	uncharacterized LOC101929709	Upregulated
A_33_P322	0.000675	0.0000293	3.2	OXER1	oxoeicosanoid (OXE) receptor 1	Upregulated
A_21_P001	0.000879	0.0000585	3.2	SNHG21	small nucleolar RNA host gene 21 (non-protein coding)	Upregulated
A_22_P000	0.00096	0.0000717	3.2	lnc-ZNF814-1	lnc-ZNF814-1:1	Upregulated
A_22_P000	0.001324	0.000143	3.2	lnc-PLEKHA3	lnc-PLEKHA3-2:2	Upregulated
A_21_P001	0.002008	0.000303	3.2	ANKRD20A1	ankyrin repeat domain 20 family, member A11, pseudogene	Upregulated
A_33_P338	0.004831	0.00115	3.2	LRRK2	leucine-rich repeat kinase 2	Upregulated
A_33_P327	0.000486	7.17E-06	3.19	RABEP1	rabaptin, RAB GTPase binding effector protein 1	Upregulated
A_32_P723	0.000494	7.52E-06	3.19	PRKAR1B	protein kinase, cAMP-dependent, regulatory, type I, beta	Upregulated
A_23_P317	0.001198	0.000118	3.19	AKAP10	A kinase (PRKA) anchor protein 10	Upregulated
A_33_P339	0.003012	0.000572	3.19	XLOC_l2_001559		Upregulated
A_33_P335	0.003511	0.00072	3.19	CSF1	colony stimulating factor 1 (macrophage)	Upregulated
A_23_P386	0.000515	9.27E-06	3.18	PPID	peptidylprolyl isomerase D	Upregulated
A_24_P244	0.000526	0.0000126	3.18	RNF41	ring finger protein 41, E3 ubiquitin protein ligase	Upregulated
A_21_P000	0.002944	0.00055	3.18	lnc-FRG1-5	lnc-FRG1-5:3	Upregulated
A_33_P330	0.003191	0.000627	3.18	USP47	ubiquitin specific peptidase 47	Upregulated

A_22_P000	0.003359	0.000677	3.18	lnc-C3orf23-2	lnc-C3orf23-2:1	Upregulated
A_23_P116	0.000527	0.0000129	3.17	C12orf10	chromosome 12 open reading frame 10	Upregulated
A_23_P112	0.001245	0.000128	3.17	NKRF	NFKB repressing factor	Upregulated
A_23_P354	0.000515	9.57E-06	3.16	PCDHGA8	protocadherin gamma subfamily A, 8	Upregulated
A_32_P445	0.000515	9.82E-06	3.16	LDHA	lactate dehydrogenase A	Upregulated
A_32_P403	0.00056	0.0000163	3.16	LOC389906	zinc finger protein 839 pseudogene	Upregulated
A_24_P334	0.00056	0.0000165	3.16	FN1	fibronectin 1	Upregulated
A_33_P327	0.000697	0.0000319	3.16	THAP3	THAP domain containing, apoptosis associated protein 3	Upregulated
A_23_P501	0.00283	0.000518	3.16	NDC80	NDC80 kinetochore complex component	Upregulated
A_33_P334	0.000486	7.17E-06	3.15	NUBPL	nucleotide binding protein-like	Upregulated
A_23_P236	0.00056	0.0000157	3.15	AMY1C	amylase, alpha 1C (salivary)	Upregulated
A_23_P689	0.001266	0.000133	3.15	MICALL1	MICAL-like 1	Upregulated
A_23_P141	0.001453	0.000171	3.15	UBE2M	ubiquitin-conjugating enzyme E2M	Upregulated
A_23_P880	0.001885	0.00027	3.15	LHFP	lipoma HMGIC fusion partner	Upregulated
A_33_P324	0.004995	0.00121	3.15	SLC4A5	solute carrier family 4 (sodium bicarbonate cotransporter), member 5	Upregulated
A_23_P403	0.005346	0.00134	3.15	JMJD7-PLA2G4B	JMJD7-PLA2G4B readthrough	Upregulated
A_32_P806	0.000639	0.0000256	3.14	ARL4A	ADP-ribosylation factor-like 4A	Upregulated
A_23_P316	0.000695	0.0000315	3.14	BUD31	BUD31 homolog (S. cerevisiae)	Upregulated
A_32_P927	0.000814	0.00005	3.14	STIP1	stress-induced phosphoprotein 1	Upregulated
A_24_P140	0.00104	0.0000866	3.14	LRRTM2	leucine rich repeat transmembrane neuronal 2	Upregulated
A_22_P000	0.001321	0.000142	3.14	TMEM161B-AS1	TMEM161B antisense RNA 1	Upregulated
A_22_P000	0.001753	0.000237	3.14	lnc-C2orf69-4	lnc-C2orf69-4:1	Upregulated
A_33_P350	0.001936	0.000283	3.14	LOC1027235	uncharacterized LOC102723564	Upregulated
A_23_P275	0.007746	0.00227	3.14	MCOLN1	mucolipin 1	Upregulated
A_24_P379	0.000526	0.0000124	3.13	MXD1	MAX dimerization protein 1	Upregulated
A_19_P003	0.000526	0.0000127	3.13	UBA6-AS1	UBA6 antisense RNA 1 (head to head)	Upregulated
A_23_P162	0.000535	0.0000137	3.13	ARNTL	aryl hydrocarbon receptor nuclear translocator-like	Upregulated
A_23_P151	0.000578	0.0000186	3.13	IL32	interleukin 32	Upregulated
A_23_P347	0.000635	0.0000254	3.13	SGPP1	sphingosine-1-phosphate phosphatase 1	Upregulated
A_22_P000	0.000786	0.0000454	3.13	LOC1027249	uncharacterized LOC102724915	Upregulated
A_33_P332	0.000825	0.0000513	3.13	ATXN1	ataxin 1	Upregulated
A_22_P000	0.00093	0.0000662	3.13	lnc-C1QBP-1	lnc-C1QBP-1:1	Upregulated
A_23_P107	0.003791	0.000807	3.13	FUT1	fucosyltransferase 1 (galactoside 2-alpha-L-fucosyltransferase, H blood)	Upregulated
A_23_P166	0.000498	7.93E-06	3.12	PFDN4	prefoldin subunit 4	Upregulated
A_23_P116	0.000502	8.31E-06	3.12	USP35	ubiquitin specific peptidase 35	Upregulated
A_23_P113	0.000515	9.51E-06	3.12	EXOC1	exocyst complex component 1	Upregulated
A_23_P605	0.000525	0.0000115	3.12	DNAJC7	DnaJ (Hsp40) homolog, subfamily C, member 7	Upregulated

A_33_P335	0.000707	0.0000345	3.12	LOC1019291	uncharacterized LOC101929115	Upregulated
A_32_P961	0.00076	0.0000417	3.12	DPY19L1	dpy-19-like 1 (C. elegans)	Upregulated
A_23_P747	0.000869	0.0000575	3.12	C1orf54	chromosome 1 open reading frame 54	Upregulated
A_23_P309	0.001397	0.000157	3.12	N4BP2	NEDD4 binding protein 2	Upregulated
A_23_P136	0.001525	0.000186	3.12	PIGG	phosphatidylinositol glycan anchor biosynthesis, class G	Upregulated
A_23_P136	0.001668	0.000218	3.12	RPGR	retinitis pigmentosa GTPase regulator	Upregulated
A_21_P000	0.002002	0.000301	3.12	lnc-GRB7-1	lnc-GRB7-1:1	Upregulated
A_24_P290	0.00579	0.0015	3.12	DTX1	deltex 1, E3 ubiquitin ligase	Upregulated
A_24_P353	0.010673	0.00347	3.12	GALNT2	polypeptide N-acetylgalactosaminyltransferase 2	Upregulated
A_19_P003	0.000541	0.0000144	3.11	TUG1	taurine up-regulated 1 (non-protein coding)	Upregulated
A_33_P338	0.00056	0.0000164	3.11	WHSC1L1	Wolf-Hirschhorn syndrome candidate 1-like 1	Upregulated
A_23_P135	0.000578	0.0000191	3.11	PRSS3	protease, serine, 3	Upregulated
A_22_P000	0.000743	0.0000399	3.11	lnc-ANKUB1-1	lnc-ANKUB1-1:1	Upregulated
A_33_P323	0.000807	0.0000487	3.11	ZNF776	zinc finger protein 776	Upregulated
A_21_P000	0.000929	0.0000658	3.11	lnc-UBE2B-1	lnc-UBE2B-1:1	Upregulated
A_23_P144	0.001108	0.000101	3.11	EEFSEC	eukaryotic elongation factor, selenocysteine-tRNA-specific	Upregulated
A_24_P241	0.00152	0.000184	3.11	CABP2	calcium binding protein 2	Upregulated
A_24_P330	0.001889	0.000271	3.11	FRMD6	FERM domain containing 6	Upregulated
A_24_P217	0.003817	0.000816	3.11	TBRG1	transforming growth factor beta regulator 1	Upregulated
A_33_P329	0.000486	7.07E-06	3.1	AKIRIN1	akirin 1	Upregulated
A_23_P721	0.000709	0.0000348	3.1	SMPDL3A	sphingomyelin phosphodiesterase, acid-like 3A	Upregulated
A_23_P811	0.000711	0.0000355	3.1	ZBTB9	zinc finger and BTB domain containing 9	Upregulated
A_23_P350	0.000781	0.0000445	3.1	ZDHHC23	zinc finger, DHHC-type containing 23	Upregulated
A_33_P681	0.000991	0.000077	3.1	PCBP1-AS1	PCBP1 antisense RNA 1	Upregulated
A_33_P341	0.000498	7.77E-06	3.09	SLC17A5	solute carrier family 17 (acidic sugar transporter), member 5	Upregulated
A_23_P211	0.000515	9.74E-06	3.09	POFUT2	protein O-fucosyltransferase 2	Upregulated
A_23_P151	0.000532	0.0000134	3.09	MT1F	metallothionein 1F	Upregulated
A_24_P378	0.000785	0.0000452	3.09	DHRXS	dehydrogenase/reductase (SDR family) X-linked	Upregulated
A_22_P000	0.001949	0.000286	3.09	lnc-AC021066	lnc-AC021066.1-1:1	Upregulated
A_33_P324	0.000498	0.0000079	3.08	PDE8A	phosphodiesterase 8A	Upregulated
A_22_P000	0.000526	0.0000123	3.08	lnc-GYG2-1	lnc-GYG2-1:1	Upregulated
A_23_P801	0.00056	0.0000164	3.08	WRB	tryptophan rich basic protein	Upregulated
A_22_P000	0.000695	0.0000313	3.08	LOC1019271	uncharacterized LOC101927124	Upregulated
A_23_P584	0.000942	0.0000684	3.08	FASTKD3	FAST kinase domains 3	Upregulated
A_23_P105	0.00126	0.000131	3.08	ME3	malic enzyme 3, NADP(+)-dependent, mitochondrial	Upregulated
A_33_P340	0.001626	0.000208	3.08	ZNF776	zinc finger protein 776	Upregulated
A_24_P887	0.001843	0.00026	3.08	LOXL3	lysyl oxidase-like 3	Upregulated

A_23_P645	0.005787	0.0015	3.08	PPME1	protein phosphatase methylesterase 1	Upregulated
A_24_P944	0.008145	0.00242	3.08	LRP2BP	LRP2 binding protein	Upregulated
A_22_P000	0.000486	6.92E-06	3.07	LOC1019270	uncharacterized LOC101927060	Upregulated
A_23_P345	0.000526	0.0000117	3.07	FASTKD2	FAST kinase domains 2	Upregulated
A_22_P000	0.00071	0.0000353	3.07	LOC1019270	uncharacterized LOC101927069	Upregulated
A_22_P000	0.001469	0.000173	3.07	lnc-UTS2D-1	lnc-UTS2D-1:1	Upregulated
A_23_P157	0.003147	0.000612	3.07	TNC	tenascin C	Upregulated
A_33_P332	0.005444	0.00138	3.07	PRO0628	uncharacterized LOC29053	Upregulated
A_33_P325	0.005592	0.00143	3.07	TIRAP	toll-interleukin 1 receptor (TIR) domain containing adaptor protein	Upregulated
A_22_P000	0.002171	0.000347	3.06	lnc-LDHD-1	lnc-LDHD-1:1	Upregulated
A_21_P001	0.002413	0.000407	3.06	XLOC_I2_013646		Upregulated
A_23_P147	0.005554	0.00142	3.06	TOR4A	torsin family 4, member A	Upregulated
A_33_P329	0.000488	7.28E-06	3.05	SBNO1	strawberry notch homolog 1 (Drosophila)	Upregulated
A_33_P335	0.000515	9.79E-06	3.05	PAGR1	PAXIP1 associated glutamate-rich protein 1	Upregulated
A_23_P321	0.001007	0.0000812	3.05	C9orf9	chromosome 9 open reading frame 9	Upregulated
A_19_P003	0.002957	0.000555	3.05	LOC1005071	uncharacterized LOC100507165	Upregulated
A_21_P000	0.000537	0.000014	3.04	SLC9A7	solute carrier family 9, subfamily A (NHE7, cation proton antiporter 7), m	Upregulated
A_23_P629	0.000904	0.0000617	3.04	UBASH3A	ubiquitin associated and SH3 domain containing A	Upregulated
A_33_P331	0.001408	0.000161	3.04	MC1R	melanocortin 1 receptor (alpha melanocyte stimulating hormone recepto	Upregulated
A_33_P324	0.001965	0.000292	3.04	SCAMP1	secretory carrier membrane protein 1	Upregulated
A_23_P398	0.000563	0.0000167	3.03	PWWP2A	PWWP domain containing 2A	Upregulated
A_24_P529	0.00063	0.000025	3.03	BCAT1	branched chain amino-acid transaminase 1, cytosolic	Upregulated
A_23_P384	0.000728	0.0000381	3.03	TRAP1	TNF receptor-associated protein 1	Upregulated
A_24_P630	0.001046	0.0000878	3.03	DFNB59	deafness, autosomal recessive 59	Upregulated
A_21_P001	0.001154	0.00011	3.03	INAFM2	InaF-motif containing 2	Upregulated
A_23_P106	0.000513	0.000009	3.02	MT2A	metallothionein 2A	Upregulated
A_22_P000	0.000657	0.0000274	3.02	lnc-AP000892	lnc-AP000892.4.1-1:1	Upregulated
A_22_P000	0.000664	0.0000281	3.02	lnc-TAT-1	lnc-TAT-1:1	Upregulated
A_23_P620	0.000693	0.0000309	3.02	SCG5	secretogranin V (7B2 protein)	Upregulated
A_23_P669	0.001088	0.0000968	3.02	GAREM	GRB2 associated, regulator of MAPK1	Upregulated
A_22_P000	0.001767	0.000241	3.02	LINC01032	long intergenic non-protein coding RNA 1032	Upregulated
A_23_P145	0.009439	0.00295	3.02	BYSL	bystin-like	Upregulated
A_23_P414	0.000515	9.58E-06	3.01	TTC17	tetratricopeptide repeat domain 17	Upregulated
A_33_P321	0.000605	0.0000227	3.01	AFMID	arylformamidase	Upregulated
A_24_P435	0.000928	0.0000656	3.01	MAD2L1BP	MAD2L1 binding protein	Upregulated
A_21_P001	0.001399	0.000159	3.01	XLOC_I2_010511		Upregulated
A_23_P169	0.00421	0.000943	3.01	HTR2B	5-hydroxytryptamine (serotonin) receptor 2B, G protein-coupled	Upregulated

A_33_P323	0.000502	8.46E-06	3	MCOLN3	mucolipin 3	Upregulated
A_22_P000	0.000525	0.0000113	3	VPS11	vacuolar protein sorting 11 homolog (S. cerevisiae)	Upregulated
A_22_P000	0.000526	0.0000122	3	lnc-FAM78A-1	lnc-FAM78A-1:1	Upregulated
A_22_P000	0.000792	0.0000464	3	HCG25	HLA complex group 25 (non-protein coding)	Upregulated
A_23_P354	0.000824	0.0000513	3	ZNF567	zinc finger protein 567	Upregulated
A_33_P681	0.000938	0.0000676	3	PCBP1-AS1	PCBP1 antisense RNA 1	Upregulated
A_32_P168	0.001414	0.000162	3	CASK	calcium/calmodulin-dependent serine protein kinase (MAGUK family)	Upregulated
A_23_P216	0.001519	0.000184	3	ZBTB5	zinc finger and BTB domain containing 5	Upregulated
A_23_P328	0.002631	0.000465	3	NEURL3	neuralized E3 ubiquitin protein ligase 3	Upregulated
A_24_P230	0.000498	7.81E-06	2.99	IL2RA	interleukin 2 receptor, alpha	Upregulated
A_23_P211	0.000566	0.0000171	2.99	PRMT2	protein arginine methyltransferase 2	Upregulated
A_24_P143	0.000621	0.0000243	2.99	SPIDR	scaffolding protein involved in DNA repair	Upregulated
A_23_P342	0.000736	0.0000387	2.99	STK35	serine/threonine kinase 35	Upregulated
A_22_P000	0.001439	0.000166	2.99	lnc-KLF6-2	lnc-KLF6-2:1	Upregulated
A_33_P321	0.001569	0.000195	2.99	LOC1009966	uncharacterized LOC100996662	Upregulated
A_24_P485	0.006425	0.00175	2.99	SIGLEC5	sialic acid binding Ig-like lectin 5	Upregulated
A_21_P001	0.000578	0.0000186	2.98	ZNF518A	zinc finger protein 518A	Upregulated
A_23_P139	0.000645	0.0000264	2.98	CDK8	cyclin-dependent kinase 8	Upregulated
A_33_P348	0.000783	0.000045	2.98	NLN	neurolysin (metallopeptidase M3 family)	Upregulated
A_33_P324	0.000792	0.0000461	2.98	APOA1BP	apolipoprotein A-I binding protein	Upregulated
A_23_P140	0.001256	0.00013	2.98	NGRN	neugrin, neurite outgrowth associated	Upregulated
A_24_P234	0.001715	0.00023	2.98	MXD4	MAX dimerization protein 4	Upregulated
A_33_P324	0.00227	0.000372	2.98	DLGAP1-AS5	DLGAP1 antisense RNA 5	Upregulated
A_33_P334	0.003733	0.00079	2.98	SYNPO2L	synaptopodin 2-like	Upregulated
A_21_P000	0.000701	0.0000327	2.97	lnc-SNTG2-4	lnc-SNTG2-4:4	Upregulated
A_23_P993	0.000798	0.0000472	2.97	TNFSF11	tumor necrosis factor (ligand) superfamily, member 11	Upregulated
A_23_P140	0.006528	0.00179	2.97	GOLGA8O	golgin A8 family, member O	Upregulated
A_24_P303	0.000712	0.0000358	2.96	HNRNPA0	heterogeneous nuclear ribonucleoprotein A0	Upregulated
A_22_P000	0.001821	0.000255	2.96	TRAF3IP2-AS	TRAF3IP2 antisense RNA 1	Upregulated
A_33_P326	0.002666	0.000474	2.96	ABAT	4-aminobutyrate aminotransferase	Upregulated
A_33_P327	0.005993	0.00158	2.96	ACOXL	acyl-CoA oxidase-like	Upregulated
A_23_P167	0.000515	9.55E-06	2.95	C4orf29	chromosome 4 open reading frame 29	Upregulated
A_23_P152	0.000521	0.0000107	2.95	ALOX12	arachidonate 12-lipoxygenase	Upregulated
A_24_P129	0.000795	0.0000469	2.95	TMEM245	transmembrane protein 245	Upregulated
A_23_P253	0.000814	0.00005	2.95	LRRC17	leucine rich repeat containing 17	Upregulated
A_21_P000	0.014383	0.00512	2.95	lnc-SHISA3-1	lnc-SHISA3-1:1	Upregulated
A_33_P321	0.000521	0.0000104	2.94	SPECC1L	sperm antigen with calponin homology and coiled-coil domains 1-like	Upregulated

A_24_P382	0.000522	0.0000108	2.94	POLR3K	polymerase (RNA) III (DNA directed) polypeptide K, 12.3 kDa	Upregulated
A_23_P128	0.000526	0.000012	2.94	GTPBP4	GTP binding protein 4	Upregulated
A_21_P001	0.000578	0.0000192	2.94	LOC1019293	uncharacterized LOC101929309	Upregulated
A_23_P208	0.000746	0.0000402	2.94	ZNF137P	zinc finger protein 137, pseudogene	Upregulated
A_33_P325	0.001037	0.0000862	2.94	CRB3	crumbs family member 3	Upregulated
A_33_P325	0.001596	0.0002	2.94	HAPLN3	hyaluronan and proteoglycan link protein 3	Upregulated
A_22_P000	0.004889	0.00118	2.94	ZNF518A	zinc finger protein 518A	Upregulated
A_23_P127	0.000515	9.98E-06	2.93	PRRG4	proline rich Gla (G-carboxyglutamic acid) 4 (transmembrane)	Upregulated
A_24_P371	0.000534	0.0000136	2.93	MRPL53	mitochondrial ribosomal protein L53	Upregulated
A_23_P772	0.000587	0.0000202	2.93	CRTC3	CREB regulated transcription coactivator 3	Upregulated
A_33_P352	0.000786	0.0000454	2.93	KDM2B	lysine (K)-specific demethylase 2B	Upregulated
A_22_P000	0.001023	0.000084	2.93	TOPORS-AS	TOPORS antisense RNA 1	Upregulated
A_21_P000	0.001132	0.000105	2.93	SNORD33	small nucleolar RNA, C/D box 33	Upregulated
A_33_P333	0.002664	0.000473	2.93	LAMB3	laminin, beta 3	Upregulated
A_23_P386	0.003775	0.000802	2.93	FAM110A	family with sequence similarity 110, member A	Upregulated
A_23_P926	0.004499	0.00104	2.93	HELQ	helicase, POLQ-like	Upregulated
A_22_P000	0.000577	0.0000182	2.92	KIZ	kizuna centrosomal protein	Upregulated
A_33_P329	0.000619	0.0000238	2.92	CYP1B1	cytochrome P450, family 1, subfamily B, polypeptide 1	Upregulated
A_33_P323	0.000783	0.0000448	2.92	ANKRD50	ankyrin repeat domain 50	Upregulated
A_23_P309	0.000783	0.0000448	2.92	ZNF777	zinc finger protein 777	Upregulated
A_23_P322	0.000938	0.0000675	2.92	TOPORS	topoisomerase I binding, arginine/serine-rich, E3 ubiquitin protein ligase	Upregulated
A_23_P115	0.000938	0.0000675	2.92	TRIM11	tripartite motif containing 11	Upregulated
A_24_P339	0.002799	0.00051	2.92	PRSS21	protease, serine, 21 (testisin)	Upregulated
A_33_P322	0.005204	0.00129	2.92	ST7L	suppression of tumorigenicity 7 like	Upregulated
A_33_P340	0.006202	0.00166	2.92	ZNF555	zinc finger protein 555	Upregulated
A_33_P336	0.006567	0.0018	2.92	CORO1B	coronin, actin binding protein, 1B	Upregulated
A_33_P327	0.000515	9.66E-06	2.91	PPP1R26	protein phosphatase 1, regulatory subunit 26	Upregulated
A_33_P332	0.00056	0.0000161	2.91	ANO10	anoctamin 10	Upregulated
A_24_P327	0.000578	0.0000187	2.91	STIP1	stress-induced phosphoprotein 1	Upregulated
A_24_P191	0.000614	0.0000235	2.91	NAB1	NGFI-A binding protein 1 (EGR1 binding protein 1)	Upregulated
A_22_P000	0.001022	0.0000835	2.91	lnc-MRPS7-2	lnc-MRPS7-2:1	Upregulated
A_23_P120	0.001208	0.00012	2.91	MCFD2	multiple coagulation factor deficiency 2	Upregulated
A_23_P257	0.001437	0.000166	2.91	GEM	GTP binding protein overexpressed in skeletal muscle	Upregulated
A_24_P418	0.00176	0.000239	2.91	GPX7	glutathione peroxidase 7	Upregulated
A_33_P320	0.003433	0.000697	2.91	ZNF623	zinc finger protein 623	Upregulated
A_33_P328	0.000642	0.0000262	2.9	ZNF765	zinc finger protein 765	Upregulated
A_23_P485	0.000857	0.0000559	2.9	ARHGAP5	Rho GTPase activating protein 5	Upregulated

A_21_P000	0.001197	0.000118	2.9	lnc-ASMT-2	lnc-ASMT-2:1	Upregulated
A_22_P000	0.002043	0.000313	2.9	VPS11	vacuolar protein sorting 11 homolog (S. cerevisiae)	Upregulated
A_33_P332	0.008614	0.00262	2.9	LOC1001314	uncharacterized LOC100131432	Upregulated
A_23_P322	0.000526	0.0000127	2.89	PPAPDC1B	phosphatidic acid phosphatase type 2 domain containing 1B	Upregulated
A_23_P628	0.000537	0.0000141	2.89	YRDC	yrnC N(6)-threonylcarbamoyltransferase domain containing	Upregulated
A_33_P321	0.000559	0.0000155	2.89	TNIK	TRAF2 and NCK interacting kinase	Upregulated
A_33_P341	0.000585	0.0000202	2.89	ZNF592	zinc finger protein 592	Upregulated
A_23_P388	0.000596	0.000021	2.89	ZC3H12C	zinc finger CCCH-type containing 12C	Upregulated
A_23_P207	0.000658	0.0000276	2.89	WDR45B	WD repeat domain 45B	Upregulated
A_22_P000	0.001266	0.000132	2.89	LINC00847	long intergenic non-protein coding RNA 847	Upregulated
A_32_P139	0.003101	0.000599	2.89	ABL2	ABL proto-oncogene 2, non-receptor tyrosine kinase	Upregulated
A_23_P134	0.000515	9.55E-06	2.88	PLIN2	perilipin 2	Upregulated
A_22_P000	0.000541	0.0000144	2.88	RORA-AS1	RORA antisense RNA 1	Upregulated
A_22_P000	0.000695	0.0000316	2.88	lnc-LRP11-1	lnc-LRP11-1:1	Upregulated
A_22_P000	0.000731	0.0000383	2.88	ARHGAP31-AS	ARHGAP31 antisense RNA 1	Upregulated
A_24_P119	0.000731	0.0000383	2.88	BLZF1	basic leucine zipper nuclear factor 1	Upregulated
A_24_P480	0.001227	0.000124	2.88	DOK4	docking protein 4	Upregulated
A_23_P324	0.002369	0.000396	2.88	KLHL7	kelch-like family member 7	Upregulated
A_22_P000	0.003834	0.000822	2.88	lnc-NKX6-3-2	lnc-NKX6-3-2:1	Upregulated
A_33_P681	0.000521	0.0000107	2.87	THUMPD3-AS	THUMPD3 antisense RNA 1	Upregulated
A_21_P001	0.000526	0.0000122	2.87	LINC01347	long intergenic non-protein coding RNA 1347	Upregulated
A_33_P336	0.00055	0.000015	2.87	RPS6KB1	ribosomal protein S6 kinase, 70kDa, polypeptide 1	Upregulated
A_32_P116	0.000578	0.0000191	2.87	LINC00094	long intergenic non-protein coding RNA 94	Upregulated
A_22_P000	0.000647	0.0000267	2.87	lnc-GNAT2-1	lnc-GNAT2-1:1	Upregulated
A_33_P322	0.000647	0.0000267	2.87	XPO5	exportin 5	Upregulated
A_19_P008	0.001462	0.000172	2.87	KPNA4	karyopherin alpha 4 (importin alpha 3)	Upregulated
A_24_P316	0.001674	0.000218	2.87	AQR	aquarius intron-binding spliceosomal factor	Upregulated
A_24_P860	0.002308	0.00038	2.87	PAIP2B	poly(A) binding protein interacting protein 2B	Upregulated
A_24_P836	0.002804	0.000511	2.87	MMS22L	MMS22-like, DNA repair protein	Upregulated
A_21_P001	0.005749	0.00149	2.87	N6AMT1	N-6 adenine-specific DNA methyltransferase 1 (putative)	Upregulated
A_22_P000	0.006874	0.00192	2.87	DHRS4-AS1	DHRS4 antisense RNA 1	Upregulated
A_33_P324	0.002868	0.000529	2.86	CIZ1	CDKN1A interacting zinc finger protein 1	Upregulated
A_24_P144	0.003032	0.000578	2.86	RNF145	ring finger protein 145	Upregulated
A_22_P000	0.010028	0.00321	2.86	lnc-C6orf228-	lnc-C6orf228-3:1	Upregulated
A_19_P008	0.000521	0.0000103	2.85	CASC15	cancer susceptibility candidate 15 (non-protein coding)	Upregulated
A_33_P325	0.000603	0.0000224	2.85	PDSS1	prenyl (decaprenyl) diphosphate synthase, subunit 1	Upregulated
A_23_P367	0.000848	0.0000542	2.85	TAPBPL	TAP binding protein-like	Upregulated

A_33_P322	0.001421	0.000163	2.85	AKNA	AT-hook transcription factor	Upregulated
A_23_P728	0.00356	0.000737	2.85	ELMOD2	ELMO/CED-12 domain containing 2	Upregulated
A_23_P137	0.000515	9.75E-06	2.84	PIR	pirin (iron-binding nuclear protein)	Upregulated
A_23_P133	0.000884	0.0000593	2.84	CDK7	cyclin-dependent kinase 7	Upregulated
A_23_P800	0.001589	0.000199	2.84	E2F1	E2F transcription factor 1	Upregulated
A_23_P257	0.002608	0.000459	2.84	CENPB	centromere protein B, 80kDa	Upregulated
A_33_P340	0.003079	0.00059	2.84	MUC22	mucin 22	Upregulated
A_24_P276	0.005388	0.00136	2.84	SNIP1	Smad nuclear interacting protein 1	Upregulated
A_21_P000	0.005683	0.00146	2.84	LRRC75A-AS	LRRC75A antisense RNA 1	Upregulated
A_24_P694	0.009539	0.003	2.84	lnc-ZNF236-1	lnc-ZNF236-1:5	Upregulated
A_23_P351	0.000521	0.0000103	2.83	SKIL	SKI-like proto-oncogene	Upregulated
A_33_P325	0.000675	0.0000293	2.83	COG4	component of oligomeric golgi complex 4	Upregulated
A_33_P333	0.001087	0.0000965	2.83	ZNF669	zinc finger protein 669	Upregulated
A_24_P124	0.001157	0.00011	2.83	VEGFA	vascular endothelial growth factor A	Upregulated
A_23_P970	0.001532	0.000187	2.83	FBXO6	F-box protein 6	Upregulated
A_33_P329	0.00275	0.000497	2.83	HDAC8	histone deacetylase 8	Upregulated
A_33_P342	0.003843	0.000825	2.83	ZNF790	zinc finger protein 790	Upregulated
A_33_P331	0.0141	0.00498	2.83	FXN	frataxin	Upregulated
A_23_P252	0.000527	0.000013	2.82	SCAP	SREBF chaperone	Upregulated
A_23_P122	0.000555	0.0000153	2.82	ZSCAN9	zinc finger and SCAN domain containing 9	Upregulated
A_21_P001	0.00056	0.0000156	2.82	lnc-MRPL39-4	lnc-MRPL39-4:1	Upregulated
A_23_P159	0.00075	0.0000405	2.82	SLC35E3	solute carrier family 35, member E3	Upregulated
A_33_P324	0.001162	0.000112	2.82	MNT	MAX network transcriptional repressor	Upregulated
A_22_P000	0.002568	0.000448	2.82	HPYR1	Helicobacter pylori responsive 1 (non-protein coding)	Upregulated
A_33_P325	0.002832	0.000519	2.82	VSIG10	V-set and immunoglobulin domain containing 10	Upregulated
A_24_P392	0.004383	0.001	2.82	ING1	inhibitor of growth family, member 1	Upregulated
A_24_P998	0.000515	9.33E-06	2.81	ZNF223	zinc finger protein 223	Upregulated
A_23_P528	0.000555	0.0000153	2.81	BUD13	BUD13 homolog (S. cerevisiae)	Upregulated
A_24_P145	0.00121	0.000121	2.81	SERINC2	serine incorporator 2	Upregulated
A_32_P779	0.00189	0.000271	2.81	UTP11L	UTP11-like, U3 small nucleolar ribonucleoprotein (yeast)	Upregulated
A_24_P184	0.003094	0.000596	2.81	CHD2	chromodomain helicase DNA binding protein 2	Upregulated
A_32_P151	0.000521	0.0000106	2.8	KRT18	keratin 18, type I	Upregulated
A_23_P210	0.000686	0.0000301	2.8	LGALSL	lectin, galactoside-binding-like	Upregulated
A_23_P138	0.000961	0.000072	2.8	CAPN1	calpain 1, (mu/l) large subunit	Upregulated
A_23_P416	0.000526	0.0000126	2.79	JADE2	jade family PHD finger 2	Upregulated
A_23_P164	0.000537	0.0000142	2.79	RNASEH2A	ribonuclease H2, subunit A	Upregulated
A_22_P000	0.001525	0.000186	2.79	lnc-DERA-1	lnc-DERA-1:3	Upregulated

A_23_P133	0.001983	0.000296	2.79	GPANK1	G patch domain and ankyrin repeats 1	Upregulated
A_23_P418	0.002101	0.000327	2.79	BCL2L2	BCL2-like 2	Upregulated
A_23_P256	0.002166	0.000345	2.79	FAM167A-AS	FAM167A antisense RNA 1	Upregulated
A_23_P145	0.003343	0.000672	2.79	DNAH8	dynein, axonemal, heavy chain 8	Upregulated
A_33_P340	0.005545	0.00141	2.79	VAMP4	vesicle-associated membrane protein 4	Upregulated
A_23_P153	0.000575	0.0000176	2.78	ZNF492	zinc finger protein 492	Upregulated
A_23_P136	0.000602	0.0000219	2.78	FBXO8	F-box protein 8	Upregulated
A_21_P000	0.000755	0.0000412	2.78	SNORD104	small nucleolar RNA, C/D box 104	Upregulated
A_23_P124	0.000781	0.0000445	2.78	FER	fer (fps/fes related) tyrosine kinase	Upregulated
A_22_P000	0.000781	0.0000445	2.78	lnc-DUOX2-2	lnc-DUOX2-2:1	Upregulated
A_23_P336	0.000912	0.0000636	2.78	TOR1AIP2	torsin A interacting protein 2	Upregulated
A_33_P336	0.001032	0.0000853	2.78	STAMPB	STAM binding protein	Upregulated
A_21_P001	0.001303	0.000139	2.78	TNPO1	transportin 1	Upregulated
A_24_P355	0.001626	0.000208	2.78	SLC25A25	solute carrier family 25 (mitochondrial carrier; phosphate carrier), member 25	Upregulated
A_22_P000	0.004073	0.000895	2.78	HMBOX1	homeobox containing 1	Upregulated
A_23_P120	0.005219	0.00129	2.78	TASP1	taspase, threonine aspartase, 1	Upregulated
A_23_P825	0.008351	0.00251	2.78	PEG10	paternally expressed 10	Upregulated
A_33_P352	0.009659	0.00305	2.78	KDM2B	lysine (K)-specific demethylase 2B	Upregulated
A_32_P103	0.000521	0.0000107	2.77	FAM92A1	family with sequence similarity 92, member A1	Upregulated
A_24_P729	0.000525	0.0000115	2.77	AGAP9	ArfGAP with GTPase domain, ankyrin repeat and PH domain 9	Upregulated
A_23_P133	0.000527	0.0000128	2.77	SLC29A1	solute carrier family 29 (equilibrative nucleoside transporter), member 1	Upregulated
A_24_P229	0.000577	0.0000182	2.77	ARRDC2	arrestin domain containing 2	Upregulated
A_33_P335	0.000597	0.0000212	2.77	SIAH2	siah E3 ubiquitin protein ligase 2	Upregulated
A_19_P008	0.000883	0.0000591	2.77	NUDT3	nudix (nucleoside diphosphate linked moiety X)-type motif 3	Upregulated
A_22_P000	0.001013	0.000082	2.77	lnc-C13orf15-	lnc-C13orf15-1:1	Upregulated
A_33_P321	0.001139	0.000107	2.77	PRKRIR	protein-kinase, interferon-inducible double stranded RNA dependent inhibitor 1	Upregulated
A_22_P000	0.003094	0.000595	2.77	MIR17HG	miR-17-92 cluster host gene (non-protein coding)	Upregulated
A_23_P126	0.005267	0.00131	2.77	CENPL	centromere protein L	Upregulated
A_23_P433	0.000526	0.0000121	2.76	SPRTN	SprT-like N-terminal domain	Upregulated
A_33_P338	0.000526	0.0000122	2.76	SFMBT2	Scm-like with four mbt domains 2	Upregulated
A_33_P331	0.000526	0.0000123	2.76	AHR	aryl hydrocarbon receptor	Upregulated
A_21_P000	0.000709	0.0000351	2.76	lnc-KIAA1383	lnc-KIAA1383-1:1	Upregulated
A_23_P792	0.001122	0.000104	2.76	ACVR1	activin A receptor, type I	Upregulated
A_24_P548	0.001763	0.00024	2.76	KLHL8	kelch-like family member 8	Upregulated
A_24_P161	0.009311	0.0029	2.76	SPDYE2	speedy/RINGO cell cycle regulator family member E2	Upregulated
A_33_P326	0.00056	0.0000165	2.75	CDK8	cyclin-dependent kinase 8	Upregulated
A_23_P409	0.000645	0.0000264	2.75	POLR1D	polymerase (RNA) I polypeptide D, 16kDa	Upregulated

A_23_P119	0.000646	0.0000265	2.75	KEAP1	kelch-like ECH-associated protein 1	Upregulated
A_21_P001	0.000809	0.0000491	2.75	lnc-MAPK8IP1;lnc-MAPK8IP2-1:14		Upregulated
A_21_P000	0.002944	0.00055	2.75	LOC1027246	uncharacterized LOC102724687	Upregulated
A_23_P257	0.000603	0.0000225	2.74	LOH12CR1	loss of heterozygosity, 12, chromosomal region 1	Upregulated
A_23_P306	0.000995	0.000079	2.74	CXorf40B	chromosome X open reading frame 40B	Upregulated
A_23_P165	0.001062	0.0000906	2.74	FARSB	phenylalanyl-tRNA synthetase, beta subunit	Upregulated
A_24_P336	0.001198	0.000118	2.74	HTRA2	HtrA serine peptidase 2	Upregulated
A_33_P326	0.00187	0.000267	2.74	ZFAT	zinc finger and AT hook domain containing	Upregulated
A_23_P696	0.00195	0.000286	2.74	OTUD4	OTU deubiquitinase 4	Upregulated
A_32_P719	0.003355	0.000675	2.74	DSTYK	dual serine/threonine and tyrosine protein kinase	Upregulated
A_22_P000	0.000526	0.0000123	2.73	MT1B	metallothionein 1B	Upregulated
A_24_P361	0.000526	0.0000126	2.73	PROSER3	proline and serine rich 3	Upregulated
A_23_P207	0.000705	0.0000333	2.73	RBM18	RNA binding motif protein 18	Upregulated
A_21_P000	0.000939	0.0000679	2.73	ADORA2A-AS1	ADORA2A antisense RNA 1	Upregulated
A_33_P339	0.001321	0.000142	2.73	FAM178A	family with sequence similarity 178, member A	Upregulated
A_21_P001	0.001462	0.000172	2.73	BMS1P5	BMS1 pseudogene 5	Upregulated
A_23_P657	0.001689	0.000222	2.73	MCTP2	multiple C2 domains, transmembrane 2	Upregulated
A_24_P693	0.001747	0.000236	2.73	CASD1	CAS1 domain containing 1	Upregulated
A_23_P171	0.002118	0.000333	2.73	MAL	mal, T-cell differentiation protein	Upregulated
A_33_P325	0.0033	0.000659	2.73	CMA1	chymase 1, mast cell	Upregulated
A_22_P000	0.005359	0.00135	2.73	LOC439933	uncharacterized LOC439933	Upregulated
A_22_P000	0.007735	0.00226	2.73	lnc-RP11-366	lnc-RP11-366L20.2.1-1:1	Upregulated
A_23_P668	0.010804	0.00352	2.73	GEMIN4	gem (nuclear organelle) associated protein 4	Upregulated
A_22_P000	0.000525	0.0000111	2.72	lnc-LENG9-1	lnc-LENG9-1:3	Upregulated
A_23_P203	0.00056	0.0000159	2.72	API5	apoptosis inhibitor 5	Upregulated
A_22_P000	0.000646	0.0000265	2.72	lnc-TRAPPC4	lnc-TRAPPC4-1:1	Upregulated
A_21_P000	0.000866	0.0000572	2.72	lnc-HIST1H2A1	lnc-HIST1H2AI-2:1	Upregulated
A_24_P743	0.003909	0.000845	2.72	BBIP1	BBSome interacting protein 1	Upregulated
A_24_P198	0.006469	0.00177	2.72	CDK12	cyclin-dependent kinase 12	Upregulated
A_23_P131	0.000526	0.0000118	2.71	C2orf47	chromosome 2 open reading frame 47	Upregulated
A_23_P126	0.000597	0.0000213	2.71	KIF21B	kinesin family member 21B	Upregulated
A_23_P215	0.00063	0.000025	2.71	WDR91	WD repeat domain 91	Upregulated
A_24_P320	0.000695	0.0000317	2.71	TRMT44	tRNA methyltransferase 44 homolog (S. cerevisiae)	Upregulated
A_33_P332	0.000707	0.0000342	2.71	BMP2K	BMP2 inducible kinase	Upregulated
A_23_P279	0.000709	0.0000349	2.71	PDCD2L	programmed cell death 2-like	Upregulated
A_21_P000	0.004962	0.0012	2.71	SNORD52	small nucleolar RNA, C/D box 52	Upregulated
A_22_P000	0.000532	0.0000132	2.7	LINC00851	long intergenic non-protein coding RNA 851	Upregulated

A_21_P001	0.001851	0.000262	2.7	LOC1019292	uncharacterized LOC101929266	Upregulated
A_23_P638	0.001873	0.000267	2.7	SAMD8	sterile alpha motif domain containing 8	Upregulated
A_23_P325	0.003667	0.000769	2.7	ZNF134	zinc finger protein 134	Upregulated
A_24_P332	0.007718	0.00225	2.7	SSH1	slingshot protein phosphatase 1	Upregulated
A_23_P120	0.000578	0.0000187	2.69	SPEN	spen family transcriptional repressor	Upregulated
A_22_P000	0.001265	0.000132	2.69	lnc-AC092295	lnc-AC092295.7.1-2:1	Upregulated
A_33_P330	0.001328	0.000144	2.69	STRADB	STE20-related kinase adaptor beta	Upregulated
A_22_P000	0.001469	0.000173	2.69	lnc-EFCAB5-1	lnc-EFCAB5-1:1	Upregulated
A_33_P322	0.00429	0.00097	2.69	STK17A	serine/threonine kinase 17a	Upregulated
A_24_P372	0.006054	0.0016	2.69	RNF141	ring finger protein 141	Upregulated
A_23_P110	0.000639	0.0000257	2.68	MGST2	microsomal glutathione S-transferase 2	Upregulated
A_33_P324	0.003304	0.000661	2.68	RAPGEF6	Rap guanine nucleotide exchange factor (GEF) 6	Upregulated
A_19_P003	0.004274	0.000965	2.68	lnc-NR5A2-1	lnc-NR5A2-1:2	Upregulated
A_33_P324	0.008398	0.00253	2.68	LOC606724	coronin, actin binding protein, 1A pseudogene	Upregulated
A_33_P337	0.010065	0.00322	2.68	FAM196B	family with sequence similarity 196, member B	Upregulated
A_32_P306	0.012752	0.00437	2.68	ETV5	ets variant 5	Upregulated
A_24_P918	0.001595	0.0002	2.67	TMTC3	transmembrane and tetratricopeptide repeat containing 3	Upregulated
A_24_P380	0.001826	0.000256	2.67	LSMEM1	leucine-rich single-pass membrane protein 1	Upregulated
A_23_P135	0.003966	0.000863	2.67	AFG3L2	AFG3-like AAA ATPase 2	Upregulated
A_23_P250	0.005296	0.00132	2.67	PRKCE	protein kinase C, epsilon	Upregulated
A_23_P376	0.000526	0.0000116	2.66	TNF	tumor necrosis factor	Upregulated
A_23_P192	0.000526	0.0000127	2.66	TUBB2A	tubulin, beta 2A class IIa	Upregulated
A_22_P000	0.000529	0.000013	2.66	lnc-LOH12CR	lnc-LOH12CR1-1:1	Upregulated
A_23_P129	0.000581	0.0000197	2.66	IL4	interleukin 4	Upregulated
A_23_P255	0.000775	0.0000437	2.66	LHFPL2	lipoma HMGIC fusion partner-like 2	Upregulated
A_33_P325	0.002499	0.000429	2.66	ST6GALNAC1	ST6 (alpha-N-acetyl-neuraminyl-2,3-beta-galactosyl-1,3)-N-acetylgalacto	Upregulated
A_24_P158	0.002989	0.000564	2.66	DTX4	deltex 4, E3 ubiquitin ligase	Upregulated
A_33_P324	0.009077	0.00281	2.66	IGFL3	IGF-like family member 3	Upregulated
A_21_P000	0.010702	0.00348	2.66	SEC24B-AS1	SEC24B antisense RNA 1	Upregulated
A_21_P001	0.00056	0.0000161	2.65	NUTM2B-AS1	NUTM2B antisense RNA 1	Upregulated
A_23_P133	0.00072	0.0000371	2.65	RIOK2	RIO kinase 2	Upregulated
A_22_P000	0.000788	0.0000459	2.65	LMO7-AS1	LMO7 antisense RNA 1	Upregulated
A_23_P208	0.001043	0.0000873	2.65	ADCK4	aarF domain containing kinase 4	Upregulated
A_24_P759	0.00124	0.000126	2.65	APOL6	apolipoprotein L, 6	Upregulated
A_21_P000	0.003687	0.000776	2.65	LARGE-AS1	LARGE antisense RNA 1	Upregulated
A_24_P918	0.00509	0.00124	2.65	WHAMMP3	WAS protein homolog associated with actin, golgi membranes and micr	Upregulated
A_23_P343	0.000563	0.0000168	2.64	RSRP1	arginine/serine-rich protein 1	Upregulated

A_19_P003	0.000635	0.0000253	2.64	PPP4R1L	protein phosphatase 4, regulatory subunit 1-like (pseudogene)	Upregulated
A_23_P718	0.000695	0.0000312	2.64	PBX3	pre-B-cell leukemia homeobox 3	Upregulated
A_24_P317	0.000788	0.0000458	2.64	TMEM8B	transmembrane protein 8B	Upregulated
A_23_P414	0.001226	0.000124	2.64	FLCN	folliculin	Upregulated
A_33_P326	0.004254	0.000958	2.64	PAAF1	proteasomal ATPase-associated factor 1	Upregulated
A_23_P716	0.004786	0.00114	2.64	PAX5	paired box 5	Upregulated
A_24_P128	0.000575	0.0000176	2.63	ATF2	activating transcription factor 2	Upregulated
A_23_P153	0.001462	0.000172	2.63	TGIF1	TGFB-induced factor homeobox 1	Upregulated
A_23_P256	0.002757	0.000499	2.63	VBP1	von Hippel-Lindau binding protein 1	Upregulated
A_33_P333	0.000526	0.000012	2.62	SEC61A2	Sec61 alpha 2 subunit (<i>S. cerevisiae</i>)	Upregulated
A_33_P341	0.000575	0.0000177	2.62	AIG1	androgen-induced 1	Upregulated
A_23_P364	0.000814	0.0000499	2.62	SLX4IP	SLX4 interacting protein	Upregulated
A_23_P365	0.000963	0.0000727	2.62	PRKAG1	protein kinase, AMP-activated, gamma 1 non-catalytic subunit	Upregulated
A_24_P318	0.00097	0.0000739	2.62	RPUSD4	RNA pseudouridylylase synthase domain containing 4	Upregulated
A_23_P109	0.001023	0.000084	2.62	ZBTB11	zinc finger and BTB domain containing 11	Upregulated
A_24_P296	0.001714	0.000229	2.62	LINC00052	long intergenic non-protein coding RNA 52	Upregulated
A_33_P339	0.001873	0.000267	2.62	FAM188A	family with sequence similarity 188, member A	Upregulated
A_33_P327	0.00275	0.000497	2.62	GOSR1	golgi SNAP receptor complex member 1	Upregulated
A_23_P569	0.004115	0.000909	2.62	REL	v-rel avian reticuloendotheliosis viral oncogene homolog	Upregulated
A_33_P330	0.005749	0.00149	2.62	TLE4	transducin-like enhancer of split 4	Upregulated
A_23_P204	0.005796	0.00151	2.62	CAB39L	calcium binding protein 39-like	Upregulated
A_22_P000	0.000577	0.0000184	2.61	LOC1027238	uncharacterized LOC102723809	Upregulated
A_24_P454	0.000582	0.0000198	2.61	XCL1	chemokine (C motif) ligand 1	Upregulated
A_23_P136	0.00072	0.000037	2.61	WIPF2	WAS/WASL interacting protein family, member 2	Upregulated
A_23_P150	0.000899	0.0000611	2.61	RPP38	ribonuclease P/MRP 38kDa subunit	Upregulated
A_23_P896	0.001643	0.000212	2.61	IL7	interleukin 7	Upregulated
A_33_P326	0.002931	0.000547	2.61	ZNF280B	zinc finger protein 280B	Upregulated
A_22_P000	0.007492	0.00216	2.61	lnc-DDX31-1	lnc-DDX31-1:1	Upregulated
A_33_P323	0.008491	0.00257	2.61	FBXL18	F-box and leucine-rich repeat protein 18	Upregulated
A_23_P710	0.010451	0.00338	2.61	IL6	interleukin 6	Upregulated
A_33_P336	0.000577	0.0000186	2.6	P2RX4	purinergic receptor P2X, ligand gated ion channel, 4	Upregulated
A_23_P420	0.000578	0.0000187	2.6	NOD2	nucleotide-binding oligomerization domain containing 2	Upregulated
A_23_P980	0.000641	0.000026	2.6	CUTC	cutC copper transporter	Upregulated
A_23_P145	0.000684	0.00003	2.6	TSPAN12	tetraspanin 12	Upregulated
A_21_P001	0.002024	0.000307	2.6	XLOC_I2_005997		Upregulated
A_33_P336	0.012007	0.00405	2.6	PRPF31	pre-mRNA processing factor 31	Upregulated
A_22_P000	0.000707	0.0000337	2.59	lnc-KCNJ4-2	lnc-KCNJ4-2:1	Upregulated

A_33_P328	0.000783	0.0000449	2.59	CDPF1	cysteine-rich, DPF motif domain containing 1	Upregulated
A_33_P332	0.000938	0.0000678	2.59	SGPL1	sphingosine-1-phosphate lyase 1	Upregulated
A_22_P000	0.000954	0.0000705	2.59	lnc-COIL-3	lnc-COIL-3:1	Upregulated
A_33_P323	0.004433	0.00102	2.59	LOC257396	uncharacterized LOC257396	Upregulated
A_33_P323	0.005187	0.00128	2.59	LINC01144	long intergenic non-protein coding RNA 1144	Upregulated
A_23_P104	0.000578	0.0000192	2.58	VPS51	vacuolar protein sorting 51 homolog (S. cerevisiae)	Upregulated
A_23_P421	0.000648	0.0000269	2.58	TNFAIP2	tumor necrosis factor, alpha-induced protein 2	Upregulated
A_33_P333	0.001291	0.000137	2.58	SNORA62	small nucleolar RNA, H/ACA box 62	Upregulated
A_23_P107	0.003847	0.000826	2.58	CEP76	centrosomal protein 76kDa	Upregulated
A_24_P929	0.000601	0.0000217	2.57	AP4E1	adaptor-related protein complex 4, epsilon 1 subunit	Upregulated
A_23_P135	0.000658	0.0000275	2.57	PPP2R2D	protein phosphatase 2, regulatory subunit B, delta	Upregulated
A_33_P327	0.001015	0.0000824	2.57	ZNF75A	zinc finger protein 75a	Upregulated
A_21_P000	0.001612	0.000205	2.57	LHX4-AS1	LHX4 antisense RNA 1	Upregulated
A_33_P333	0.00204	0.000312	2.57	LOC1001298	uncharacterized LOC100129846	Upregulated
A_21_P000	0.00356	0.000737	2.57	lnc-APLN-1	lnc-APLN-1:1	Upregulated
A_33_P336	0.000532	0.0000134	2.56	TUBB2A	tubulin, beta 2A class IIa	Upregulated
A_32_P701	0.000538	0.0000143	2.56	TSPAN15	tetraspanin 15	Upregulated
A_22_P000	0.000559	0.0000154	2.56	lnc-ERMP1-1	lnc-ERMP1-1:1	Upregulated
A_23_P206	0.000575	0.0000178	2.56	USP31	ubiquitin specific peptidase 31	Upregulated
A_23_P349	0.000578	0.0000189	2.56	RIMKLA	ribosomal modification protein rimK-like family member A	Upregulated
A_33_P328	0.000848	0.0000544	2.56	CDPF1	cysteine-rich, DPF motif domain containing 1	Upregulated
A_33_P329	0.000904	0.0000617	2.56	CDKN2C	cyclin-dependent kinase inhibitor 2C (p18, inhibits CDK4)	Upregulated
A_23_P146	0.00097	0.0000739	2.56	BAG4	BCL2-associated athanogene 4	Upregulated
A_21_P000	0.001278	0.000135	2.56	lnc-XRCC2-2	lnc-XRCC2-2:1	Upregulated
A_22_P000	0.001606	0.000203	2.56	lnc-ZBTB10-3	lnc-ZBTB10-3:1	Upregulated
A_23_P122	0.002101	0.000327	2.56	GFOD1	glucose-fructose oxidoreductase domain containing 1	Upregulated
A_23_P784	0.002505	0.000431	2.56	ZNF350	zinc finger protein 350	Upregulated
A_32_P444	0.000578	0.000019	2.55	INPP1	inositol polyphosphate-1-phosphatase	Upregulated
A_24_P130	0.000603	0.0000222	2.55	LDLRAD4	low density lipoprotein receptor class A domain containing 4	Upregulated
A_23_P204	0.000654	0.0000272	2.55	NDRG1	N-myc downstream regulated 1	Upregulated
A_32_P112	0.000853	0.000055	2.55	FAM27E2	family with sequence similarity 27, member E2	Upregulated
A_24_P150	0.000938	0.0000672	2.55	GNA13	guanine nucleotide binding protein (G protein), alpha 13	Upregulated
A_23_P160	0.001291	0.000137	2.55	GLMN	glomulin, FKBP associated protein	Upregulated
A_32_P831	0.005846	0.00152	2.55	BRI3BP	BRI3 binding protein	Upregulated
A_23_P301	0.013704	0.0048	2.55	KLF3-AS1	KLF3 antisense RNA 1	Upregulated
A_32_P840	0.000561	0.0000166	2.54	TIMM23B	translocase of inner mitochondrial membrane 23 homolog B (yeast)	Upregulated
A_23_P365	0.000566	0.0000171	2.54	BCKDK	branched chain ketoacid dehydrogenase kinase	Upregulated

A_23_P503	0.001176	0.000114	2.54	SLC24A4	solute carrier family 24 (sodium/potassium/calcium exchanger), member	Upregulated
A_23_P139	0.001522	0.000185	2.54	SERPING1	serpin peptidase inhibitor, clade G (C1 inhibitor), member 1	Upregulated
A_19_P003	0.001709	0.000229	2.54	SNHG11	small nucleolar RNA host gene 11 (non-protein coding)	Upregulated
A_33_P323	0.001733	0.000233	2.54	PIP5KL1	phosphatidylinositol-4-phosphate 5-kinase-like 1	Upregulated
A_24_P416	0.001962	0.000291	2.54	KIAA0195	KIAA0195	Upregulated
A_33_P321	0.003393	0.000687	2.54	LINC01061	long intergenic non-protein coding RNA 1061	Upregulated
A_23_P737	0.004528	0.00105	2.54	LAGE3	L antigen family, member 3	Upregulated
A_23_P251	0.005487	0.00139	2.54	GPC2	glypican 2	Upregulated
A_21_P000	0.015102	0.00547	2.54	TTF2	transcription termination factor, RNA polymerase II	Upregulated
A_21_P001	0.00056	0.0000161	2.53	XLOC_I2_015596		Upregulated
A_23_P162	0.000577	0.0000183	2.53	CCDC91	coiled-coil domain containing 91	Upregulated
A_33_P333	0.000701	0.0000328	2.53	FCRL5	Fc receptor-like 5	Upregulated
A_23_P201	0.000758	0.0000414	2.53	SNX27	sorting nexin family member 27	Upregulated
A_22_P000	0.000837	0.0000526	2.53	lnc-SYN3-4	lnc-SYN3-4:1	Upregulated
A_22_P000	0.000945	0.0000689	2.53	lnc-COG3-2	lnc-COG3-2:1	Upregulated
A_23_P261	0.000963	0.0000725	2.53	DET1	de-etiolated homolog 1 (Arabidopsis)	Upregulated
A_23_P461	0.001349	0.000148	2.53	MED8	mediator complex subunit 8	Upregulated
A_33_P330	0.001784	0.000245	2.53	MRPL32	mitochondrial ribosomal protein L32	Upregulated
A_24_P290	0.008968	0.00276	2.53	FAM86B3P	family with sequence similarity 86, member A pseudogene	Upregulated
A_22_P000	0.01127	0.00373	2.53	lnc-PHF3-2	lnc-PHF3-2:1	Upregulated
A_33_P334	0.00056	0.0000158	2.52	SOCS4	suppressor of cytokine signaling 4	Upregulated
A_24_P337	0.000991	0.000077	2.52	DCTD	dCMP deaminase	Upregulated
A_23_P278	0.001098	0.0000985	2.52	GPATCH1	G patch domain containing 1	Upregulated
A_21_P000	0.001098	0.0000985	2.52	lnc-PLEKHA5	lnc-PLEKHA5-4:1	Upregulated
A_23_P467	0.001158	0.000111	2.52	ERF	Ets2 repressor factor	Upregulated
A_23_P371	0.001353	0.000149	2.52	KLF12	Kruppel-like factor 12	Upregulated
A_23_P972	0.00067	0.0000288	2.51	ZNF691	zinc finger protein 691	Upregulated
A_22_P000	0.001009	0.0000815	2.51	LOC1049683	ncRNA	Upregulated
A_23_P404	0.001054	0.0000895	2.51	GRPEL2	GrpE-like 2, mitochondrial (E. coli)	Upregulated
A_33_P335	0.001222	0.000123	2.51	ARG1	arginase 1	Upregulated
A_24_P208	0.001693	0.000223	2.51	IL18R1	interleukin 18 receptor 1	Upregulated
A_32_P760	0.002078	0.000321	2.51	CTDSPL2	CTD (carboxy-terminal domain, RNA polymerase II, polypeptide A) small	Upregulated
A_33_P339	0.003549	0.000733	2.51	lnc-PCSK1N-	lnc-PCSK1N-1:1	Upregulated
A_19_P003	0.005278	0.00132	2.51	LINC00882	long intergenic non-protein coding RNA 882	Upregulated
A_23_P360	0.012751	0.00437	2.51	PLD6	phospholipase D family, member 6	Upregulated
A_33_P341	0.012906	0.00444	2.51	TRIM16	tripartite motif containing 16	Upregulated
A_24_P140	0.000563	0.0000168	2.5	NMT1	N-myristoyltransferase 1	Upregulated

A_24_P128	0.000578	0.0000189	2.5	ZNF79	zinc finger protein 79	Upregulated
A_23_P344	0.000594	0.0000209	2.5	HDGFRP3	hepatoma-derived growth factor, related protein 3	Upregulated
A_22_P000	0.00062	0.000024	2.5	lnc-FOXN1-1	lnc-FOXN1-1:1	Upregulated
A_23_P250	0.000991	0.000077	2.5	LOC1019287	uncharacterized LOC101928710	Upregulated
A_23_P984	0.001188	0.000116	2.5	SIDT2	SID1 transmembrane family, member 2	Upregulated
A_22_P000	0.002058	0.000316	2.5	KIZ	kizuna centrosomal protein	Upregulated
A_23_P174	0.002319	0.000383	2.5	PCED1A	PC-esterase domain containing 1A	Upregulated
A_24_P561	0.003041	0.000581	2.5	CREBL2	cAMP responsive element binding protein-like 2	Upregulated
A_23_P391	0.006915	0.00194	2.5	PLXDC1	plexin domain containing 1	Upregulated
A_23_P102	0.00055	0.000015	2.49	RSPH1	radial spoke head 1 homolog (Chlamydomonas)	Upregulated
A_32_P182	0.000578	0.0000194	2.49	AIDA	axin interactor, dorsalization associated	Upregulated
A_23_P345	0.000585	0.00002	2.49	GFPT1	glutamine--fructose-6-phosphate transaminase 1	Upregulated
A_32_P158	0.000601	0.0000218	2.49	LINC00998	long intergenic non-protein coding RNA 998	Upregulated
A_23_P315	0.000695	0.0000311	2.49	R3HDM4	R3H domain containing 4	Upregulated
A_24_P336	0.000695	0.0000316	2.49	PNO1	partner of NOB1 homolog (S. cerevisiae)	Upregulated
A_33_P326	0.001445	0.000169	2.49	ZNF503	zinc finger protein 503	Upregulated
A_22_P000	0.002785	0.000506	2.49	lnc-ZNHIT2-1	lnc-ZNHIT2-1:1	Upregulated
A_23_P184	0.003258	0.000646	2.49	PTPN13	protein tyrosine phosphatase, non-receptor type 13 (APO-1/CD95 (Fas))	Upregulated
A_33_P340	0.004102	0.000904	2.49	TRAF4	TNF receptor-associated factor 4	Upregulated
A_23_P829	0.011739	0.00394	2.49	OGN	osteo glycin	Upregulated
A_23_P379	0.00056	0.0000164	2.48	MT1B	metallothionein 1B	Upregulated
A_24_P929	0.000578	0.0000193	2.48	MKNK2	MAP kinase interacting serine/threonine kinase 2	Upregulated
A_23_P341	0.000585	0.0000202	2.48	POP1	processing of precursor 1, ribonuclease P/MRP subunit (S. cerevisiae)	Upregulated
A_24_P416	0.000603	0.0000223	2.48	APOL3	apolipoprotein L, 3	Upregulated
A_32_P228	0.001555	0.000192	2.48	PPP4R2	protein phosphatase 4, regulatory subunit 2	Upregulated
A_23_P334	0.001559	0.000193	2.48	B3GALNT2	beta-1,3-N-acetylgalactosaminyltransferase 2	Upregulated
A_23_P329	0.001694	0.000224	2.48	DDX10	DEAD (Asp-Glu-Ala-Asp) box polypeptide 10	Upregulated
A_23_P155	0.003804	0.000812	2.48	APOL6	apolipoprotein L, 6	Upregulated
A_33_P333	0.004681	0.0011	2.48	PRKDC	protein kinase, DNA-activated, catalytic polypeptide	Upregulated
A_21_P001	0.004796	0.00114	2.48	XLOC_I2_015760		Upregulated
A_24_P299	0.00056	0.0000162	2.47	PASK	PAS domain containing serine/threonine kinase	Upregulated
A_24_P374	0.000857	0.0000558	2.47	STAG3L2	stromal antigen 3-like 2 (pseudogene)	Upregulated
A_23_P141	0.001047	0.0000881	2.47	ZNF544	zinc finger protein 544	Upregulated
A_22_P000	0.001067	0.0000929	2.47	UBXN7-AS1	UBXN7 antisense RNA 1	Upregulated
A_23_P673	0.001069	0.0000936	2.47	ZNF136	zinc finger protein 136	Upregulated
A_33_P323	0.001158	0.000111	2.47	TTF1	transcription termination factor, RNA polymerase I	Upregulated
A_23_P170	0.003002	0.000568	2.47	SBSPON	somatomedin B and thrombospondin, type 1 domain containing	Upregulated

A_33_P341	0.007806	0.00229	2.47	SNORA59B	small nucleolar RNA, H/ACA box 59B	Upregulated
A_23_P548	0.00056	0.0000162	2.46	MT1A	metallothionein 1A	Upregulated
A_33_P330	0.000561	0.0000166	2.46	SNAP23	synaptosomal-associated protein, 23kDa	Upregulated
A_23_P238	0.000603	0.0000224	2.46	SLC30A1	solute carrier family 30 (zinc transporter), member 1	Upregulated
A_33_P329	0.00062	0.0000241	2.46	LRRC37B	leucine rich repeat containing 37B	Upregulated
A_33_P331	0.000641	0.000026	2.46	CA5BP1	carbonic anhydrase VB pseudogene 1	Upregulated
A_33_P342	0.000695	0.0000316	2.46	KDM4A	lysine (K)-specific demethylase 4A	Upregulated
A_33_P332	0.000868	0.0000574	2.46	SDHC	succinate dehydrogenase complex, subunit C, integral membrane prote	Upregulated
A_23_P101	0.00124	0.000127	2.46	ZNF667	zinc finger protein 667	Upregulated
A_21_P001	0.001787	0.000246	2.46	LOC403323	uncharacterized LOC403323	Upregulated
A_23_P204	0.002459	0.000417	2.46	RNFT2	ring finger protein, transmembrane 2	Upregulated
A_33_P335	0.00338	0.000682	2.46	LCE1B	late comified envelope 1B	Upregulated
A_22_P000	0.00509	0.00124	2.46	lnc-UVRAG-2	lnc-UVRAG-2:1	Upregulated
A_23_P195	0.010345	0.00334	2.46	PGM3	phosphoglucomutase 3	Upregulated
A_33_P321	0.011349	0.00376	2.46	NOTCH2NL	notch 2 N-terminal like	Upregulated
A_22_P000	0.000577	0.0000181	2.45	LOC1019277	uncharacterized LOC101927761	Upregulated
A_23_P488	0.00062	0.0000239	2.45	GALK2	galactokinase 2	Upregulated
A_23_P169	0.00082	0.0000508	2.45	ZNF608	zinc finger protein 608	Upregulated
A_33_P340	0.000904	0.0000618	2.45	SEL1L	sel-1 suppressor of lin-12-like (C. elegans)	Upregulated
A_21_P001	0.001173	0.000113	2.45	ANKRD30A	ankyrin repeat domain 30A	Upregulated
A_24_P839	0.001996	0.000299	2.45	RPP14	ribonuclease P/MRP 14kDa subunit	Upregulated
A_24_P515	0.003321	0.000666	2.45	CCNL2	cyclin L2	Upregulated
A_23_P127	0.003321	0.000666	2.45	ZNF214	zinc finger protein 214	Upregulated
A_33_P339	0.012939	0.00446	2.45	CTU1	cytosolic thiouridylase subunit 1	Upregulated
A_21_P000	0.00062	0.000024	2.44	lnc-SCRG1-1	lnc-SCRG1-1:4	Upregulated
A_21_P001	0.000707	0.000034	2.44	LOC1019280	uncharacterized LOC101928054	Upregulated
A_24_P598	0.00096	0.0000717	2.44	RNF216P1	ring finger protein 216 pseudogene 1	Upregulated
A_33_P336	0.000995	0.0000785	2.44	APTX	aprataxin	Upregulated
A_33_P321	0.001006	0.0000808	2.44	SF3A1	splicing factor 3a, subunit 1, 120kDa	Upregulated
A_23_P368	0.001029	0.000085	2.44	LILRA6	leukocyte immunoglobulin-like receptor, subfamily A (with TM domain), nr	Upregulated
A_21_P001	0.001062	0.0000914	2.44	CRCP	CGRP receptor component	Upregulated
A_24_P481	0.004207	0.000941	2.44	DPY19L4	dpy-19-like 4 (C. elegans)	Upregulated
A_33_P323	0.004743	0.00112	2.44	ZNF266	zinc finger protein 266	Upregulated
A_32_P169	0.005408	0.00136	2.44	OTUD5	OTU deubiquitinase 5	Upregulated
A_23_P463	0.005592	0.00143	2.44	RCC1	regulator of chromosome condensation 1	Upregulated
A_23_P385	0.011144	0.00367	2.44	KCTD6	potassium channel tetramerization domain containing 6	Upregulated
A_33_P335	0.000588	0.0000204	2.43	C6orf48	chromosome 6 open reading frame 48	Upregulated

A_22_P000	0.000707	0.0000344	2.43	FAM110A	family with sequence similarity 110, member A	Upregulated
A_33_P337	0.000801	0.0000478	2.43	LINC00862	long intergenic non-protein coding RNA 862	Upregulated
A_21_P000	0.001051	0.0000888	2.43	lnc-FUT8-1	lnc-FUT8-1:1	Upregulated
A_24_P271	0.00112	0.000103	2.43	C18orf32	chromosome 18 open reading frame 32	Upregulated
A_24_P730	0.001203	0.00012	2.43	TTC12	tetratricopeptide repeat domain 12	Upregulated
A_23_P931	0.003041	0.00058	2.43	SPIN1	spindlin 1	Upregulated
A_23_P130	0.007036	0.00199	2.43	OR1A2	olfactory receptor, family 1, subfamily A, member 2	Upregulated
A_23_P230	0.009133	0.00283	2.43	TTC4	tetratricopeptide repeat domain 4	Upregulated
A_23_P207	0.009923	0.00316	2.43	ARL17B	ADP-ribosylation factor-like 17B	Upregulated
A_23_P313	0.010371	0.00335	2.43	CEP295	centrosomal protein 295kDa	Upregulated
A_24_P380	0.014369	0.00511	2.43	EIF5A2	eukaryotic translation initiation factor 5A2	Upregulated
A_33_P334	0.000577	0.0000185	2.42	BRI3	brain protein I3	Upregulated
A_32_P254	0.000978	0.0000754	2.42	SLC12A2	solute carrier family 12 (sodium/potassium/chloride transporter), member	Upregulated
A_23_P100	0.000995	0.0000786	2.42	AVEN	apoptosis, caspase activation inhibitor	Upregulated
A_24_P765	0.002039	0.000312	2.42	WASF2	WAS protein family, member 2	Upregulated
A_23_P505	0.004962	0.0012	2.42	KCNK6	potassium channel, two pore domain subfamily K, member 6	Upregulated
A_22_P000	0.007726	0.00226	2.42	LOC1019275	uncharacterized LOC101927556	Upregulated
A_23_P500	0.015953	0.00586	2.42	ABCA6	ATP-binding cassette, sub-family A (ABC1), member 6	Upregulated
A_33_P337	0.00056	0.0000161	2.41	N4BP2L2-IT2	N4BPL2 intronic transcript 2 (non-protein coding)	Upregulated
A_23_P322	0.000601	0.0000218	2.41	GPR55	G protein-coupled receptor 55	Upregulated
A_33_P380	0.00067	0.0000288	2.41	FNIP2	folliculin interacting protein 2	Upregulated
A_24_P291	0.000852	0.0000547	2.41	USP4	ubiquitin specific peptidase 4 (proto-oncogene)	Upregulated
A_33_P329	0.001443	0.000168	2.41	VMAC	vimentin-type intermediate filament associated coiled-coil protein	Upregulated
A_23_P707	0.011014	0.00361	2.41	AHI1	Abelson helper integration site 1	Upregulated
A_23_P799	0.011361	0.00377	2.41	ATRN	attractin	Upregulated
A_33_P323	0.01307	0.00452	2.41	AURKAPS1	aurora kinase A pseudogene 1	Upregulated
A_23_P152	0.022837	0.00916	2.41	POLR3E	polymerase (RNA) III (DNA directed) polypeptide E (80kD)	Upregulated
A_24_P462	0.000563	0.0000167	2.4	CENPW	centromere protein W	Upregulated
A_21_P000	0.000577	0.0000185	2.4	lnc-DERA-1	lnc-DERA-1:1	Upregulated
A_24_P109	0.000621	0.0000243	2.4	USP37	ubiquitin specific peptidase 37	Upregulated
A_33_P331	0.000637	0.0000255	2.4	ADRB1	adrenoceptor beta 1	Upregulated
A_24_P925	0.000707	0.0000338	2.4	GM2A	GM2 ganglioside activator	Upregulated
A_33_P326	0.000998	0.0000798	2.4	MRPS25	mitochondrial ribosomal protein S25	Upregulated
A_21_P000	0.001066	0.0000922	2.4	lnc-FAM70A-1	lnc-FAM70A-1:5	Upregulated
A_33_P326	0.002442	0.000413	2.4	WDR19	WD repeat domain 19	Upregulated
A_22_P000	0.005707	0.00147	2.4	PDP2	pyruvate dehydrogenase phosphatase catalytic subunit 2	Upregulated
A_23_P209	0.000596	0.0000211	2.39	SMC6	structural maintenance of chromosomes 6	Upregulated

A_22_P000	0.000707	0.0000339	2.39	Inc-TMEM242	Inc-TMEM242-2:1	Upregulated
A_33_P329	0.000711	0.0000356	2.39	PARP1	poly (ADP-ribose) polymerase 1	Upregulated
A_21_P000	0.000836	0.0000524	2.39	LOC1046135	uncharacterized LOC104613533	Upregulated
A_33_P337	0.000912	0.0000634	2.39	CDC37L1	cell division cycle 37-like 1	Upregulated
A_23_P258	0.000998	0.0000795	2.39	DNAAF5	dynein, axonemal, assembly factor 5	Upregulated
A_23_P152	0.00112	0.000103	2.39	TRIP4	thyroid hormone receptor interactor 4	Upregulated
A_24_P419	0.001442	0.000167	2.39	ZNF248	zinc finger protein 248	Upregulated
A_23_P217	0.001617	0.000206	2.39	SPHAR	S-phase response (cyclin related)	Upregulated
A_24_P943	0.004648	0.00109	2.39	PIKFYVE	phosphoinositide kinase, FYVE finger containing	Upregulated
A_22_P000	0.005462	0.00138	2.39	Inc-PLD6-1	Inc-PLD6-1:1	Upregulated
A_23_P328	0.008458	0.00255	2.39	ZNF519	zinc finger protein 519	Upregulated
A_33_P330	0.000575	0.0000177	2.38	PPM1D	protein phosphatase, Mg ²⁺ /Mn ²⁺ dependent, 1D	Upregulated
A_33_P322	0.000578	0.0000192	2.38	H2BFM	H2B histone family, member M	Upregulated
A_21_P001	0.00067	0.0000289	2.38	AK4	adenylate kinase 4	Upregulated
A_23_P213	0.000743	0.0000399	2.38	F2R	coagulation factor II (thrombin) receptor	Upregulated
A_33_P328	0.000933	0.0000666	2.38	GNN	Grp94 neighboring nucleotidase pseudogene	Upregulated
A_33_P327	0.001115	0.000102	2.38	LEO1	Leo1, Paf1/RNA polymerase II complex component, homolog (S. cerevisiae)	Upregulated
A_23_P688	0.001193	0.000117	2.38	DRG1	developmentally regulated GTP binding protein 1	Upregulated
A_23_P385	0.002592	0.000455	2.38	ZFP1	ZFP1 zinc finger protein	Upregulated
A_23_P301	0.002965	0.000557	2.38	LSAMP	limbic system-associated membrane protein	Upregulated
A_33_P332	0.003601	0.00075	2.38	AZI2	5-azacytidine induced 2	Upregulated
A_33_P333	0.000603	0.000022	2.37	LOC1001304	uncharacterized LOC100130463	Upregulated
A_23_P900	0.000684	0.00003	2.37	TMEM205	transmembrane protein 205	Upregulated
A_23_P121	0.000701	0.0000326	2.37	CXCL13	chemokine (C-X-C motif) ligand 13	Upregulated
A_22_P000	0.000712	0.000036	2.37	LOC1005056	uncharacterized LOC100505622	Upregulated
A_24_P915	0.000766	0.0000428	2.37	C9orf91	chromosome 9 open reading frame 91	Upregulated
A_23_P287	0.000819	0.0000506	2.37	KLC1	kinesin light chain 1	Upregulated
A_23_P338	0.001029	0.000085	2.37	BCDIN3D	BCDIN3 domain containing	Upregulated
A_33_P341	0.001187	0.000116	2.37	GNAI3	guanine nucleotide binding protein (G protein), alpha inhibiting activity p	Upregulated
A_23_P178	0.001523	0.000185	2.37	SEC14L2	SEC14-like 2 (S. cerevisiae)	Upregulated
A_33_P325	0.001626	0.000208	2.37	TMEM255B	transmembrane protein 255B	Upregulated
A_23_P307	0.001626	0.000208	2.37	WHSC1	Wolf-Hirschhorn syndrome candidate 1	Upregulated
A_23_P251	0.009612	0.00303	2.37	CDCA7	cell division cycle associated 7	Upregulated
A_22_P000	0.009874	0.00314	2.37	CLIP1-AS1	CLIP1 antisense RNA 1	Upregulated
A_21_P000	0.000578	0.0000187	2.36	SNORD53	small nucleolar RNA, C/D box 53	Upregulated
A_23_P393	0.000645	0.0000264	2.36	TFPI2	tissue factor pathway inhibitor 2	Upregulated
A_23_P167	0.000712	0.0000358	2.36	MAPK9	mitogen-activated protein kinase 9	Upregulated

A_33_P331	0.000776	0.0000439	2.36	CHD1L	chromodomain helicase DNA binding protein 1-like	Upregulated
A_22_P000	0.010809	0.00353	2.36	MIRLET7DHC	MIRLET7D host gene (non-protein coding)	Upregulated
A_21_P001	0.016444	0.00611	2.36	XLOC_I2_009332		Upregulated
A_21_P001	0.000579	0.0000195	2.35	ANKRD20A2	ankyrin repeat domain 20 family, member A2	Upregulated
A_23_P303	0.00063	0.0000251	2.35	CCNH	cyclin H	Upregulated
A_23_P162	0.000707	0.0000344	2.35	VDR	vitamin D (1,25- dihydroxyvitamin D3) receptor	Upregulated
A_33_P338	0.000709	0.000035	2.35	FMNL1	formin-like 1	Upregulated
A_33_P326	0.001022	0.0000838	2.35	SP140	SP140 nuclear body protein	Upregulated
A_24_P360	0.001178	0.000114	2.35	DIP2C	DIP2 disco-interacting protein 2 homolog C (Drosophila)	Upregulated
A_24_P791	0.001863	0.000265	2.35	SCAMP4	secretory carrier membrane protein 4	Upregulated
A_33_P333	0.00317	0.00062	2.35	ARHGAP11A	Rho GTPase activating protein 11A	Upregulated
A_22_P000	0.005802	0.00151	2.35	LINC01063	long intergenic non-protein coding RNA 1063	Upregulated
A_23_P154	0.010321	0.00333	2.35	HIRA	histone cell cycle regulator	Upregulated
A_24_P210	0.013566	0.00474	2.35	SCG3	secretogranin III	Upregulated
A_24_P194	0.018624	0.00711	2.35	SHANK3	SH3 and multiple ankyrin repeat domains 3	Upregulated
A_33_P378	0.000603	0.0000224	2.34	NAV2-AS4	NAV2 antisense RNA 4	Upregulated
A_33_P328	0.000654	0.0000273	2.34	LOC91450	uncharacterized LOC91450	Upregulated
A_22_P000	0.000707	0.000034	2.34	lnc-C11orf41-	lnc-C11orf41-1:1	Upregulated
A_23_P109	0.000755	0.0000411	2.34	PTTG1IP	pituitary tumor-transforming 1 interacting protein	Upregulated
A_23_P343	0.000786	0.0000453	2.34	CCR7	chemokine (C-C motif) receptor 7	Upregulated
A_23_P685	0.000995	0.0000785	2.34	MCM8	minichromosome maintenance complex component 8	Upregulated
A_24_P187	0.000995	0.0000785	2.34	MRPS27	mitochondrial ribosomal protein S27	Upregulated
A_21_P000	0.000995	0.0000785	2.34	RAB11B-AS1	RAB11B antisense RNA 1	Upregulated
A_33_P336	0.001698	0.000225	2.34	LOC1005071	uncharacterized LOC100507195	Upregulated
A_23_P103	0.003056	0.000584	2.34	MAN1C1	mannosidase, alpha, class 1C, member 1	Upregulated
A_22_P000	0.008535	0.00258	2.34	lnc-ALX4-7	lnc-ALX4-7:1	Upregulated
A_22_P000	0.010057	0.00322	2.34	lnc-PXDNL-1	lnc-PXDNL-1:1	Upregulated
A_23_P209	0.014668	0.00527	2.34	ZNF302	zinc finger protein 302	Upregulated
A_33_P321	0.00058	0.0000195	2.33	TMEM167B	transmembrane protein 167B	Upregulated
A_21_P000	0.000583	0.0000198	2.33	lnc-FRG1-2	lnc-FRG1-2:1	Upregulated
A_23_P331	0.000602	0.0000218	2.33	IPO7	importin 7	Upregulated
A_33_P332	0.000707	0.0000338	2.33	TOMM34	translocase of outer mitochondrial membrane 34	Upregulated
A_23_P583	0.000707	0.0000342	2.33	FIP1L1	factor interacting with PAPOLA and CPSF1	Upregulated
A_32_P215	0.000798	0.0000472	2.33	CCDC58	coiled-coil domain containing 58	Upregulated
A_22_P000	0.000848	0.0000541	2.33	lnc-TPX2-1	lnc-TPX2-1:1	Upregulated
A_21_P000	0.001123	0.000104	2.33	SNORA27	small nucleolar RNA, H/ACA box 27	Upregulated
A_33_P340	0.001123	0.000104	2.33	TMEM192	transmembrane protein 192	Upregulated

A_23_P107	0.001355	0.000149	2.33	ZNF324	zinc finger protein 324	Upregulated
A_33_P333	0.00176	0.000239	2.33	FANK1	fibronectin type III and ankyrin repeat domains 1	Upregulated
A_23_P997	0.002124	0.000335	2.33	CDKL1	cyclin-dependent kinase-like 1 (CDC2-related kinase)	Upregulated
A_23_P398	0.002523	0.000436	2.33	GOLGA2P7	golgin A2 pseudogene 7	Upregulated
A_21_P000	0.004983	0.00121	2.33	SNORD67	small nucleolar RNA, C/D box 67	Upregulated
A_32_P215	0.007704	0.00225	2.33	ACACA	acetyl-CoA carboxylase alpha	Upregulated
A_23_P373	0.00861	0.00262	2.33	CWC22	CWC22 spliceosome-associated protein	Upregulated
A_24_P177	0.009659	0.00305	2.33	LONP2	lon peptidase 2, peroxisomal	Upregulated
A_22_P000	0.010107	0.00324	2.33	lnc-EXTL3-5	lnc-EXTL3-5:1	Upregulated
A_23_P341	0.000625	0.0000246	2.32	FAM50A	family with sequence similarity 50, member A	Upregulated
A_22_P000	0.000884	0.0000593	2.32	lnc-RPS27A-1	lnc-RPS27A-1:1	Upregulated
A_33_P324	0.00109	0.000097	2.32	BAAT	bile acid CoA:amino acid N-acyltransferase	Upregulated
A_23_P158	0.001108	0.000101	2.32	ACADSB	acyl-CoA dehydrogenase, short/branched chain	Upregulated
A_21_P000	0.001118	0.000103	2.32	CAMTA1	calmodulin binding transcription activator 1	Upregulated
A_33_P341	0.001295	0.000137	2.32	FSCN1	fascin actin-bundling protein 1	Upregulated
A_22_P000	0.002361	0.000393	2.32	lnc-OBFC2A-1	lnc-OBFC2A-1:1	Upregulated
A_23_P379	0.002968	0.000558	2.32	GNRHR2	gonadotropin-releasing hormone (type 2) receptor 2, pseudogene	Upregulated
A_24_P141	0.003244	0.000643	2.32	CAMK2G	calcium/calmodulin-dependent protein kinase II gamma	Upregulated
A_33_P330	0.00386	0.000831	2.32	HDAC2	histone deacetylase 2	Upregulated
A_33_P325	0.005197	0.00128	2.32	SLC9A7	solute carrier family 9, subfamily A (NHE7, cation proton antiporter 7), member 7	Upregulated
A_33_P326	0.008018	0.00237	2.32	NALCN	sodium leak channel, non selective	Upregulated
A_23_P317	0.000596	0.000021	2.31	PKIA	protein kinase (cAMP-dependent, catalytic) inhibitor alpha	Upregulated
A_33_P330	0.000658	0.0000275	2.31	SEN1	SUMO1/sentrin specific peptidase 1	Upregulated
A_23_P497	0.000709	0.0000348	2.31	MRPL27	mitochondrial ribosomal protein L27	Upregulated
A_24_P484	0.000913	0.0000637	2.31	RNMT	RNA (guanine-7-) methyltransferase	Upregulated
A_23_P390	0.001858	0.000264	2.31	SPATA13	spermatogenesis associated 13	Upregulated
A_21_P001	0.004281	0.000967	2.31	LOC1019288	uncharacterized LOC101928865	Upregulated
A_23_P649	0.009898	0.00315	2.31	USP5	ubiquitin specific peptidase 5 (isopeptidase T)	Upregulated
A_32_P216	0.00062	0.0000239	2.3	PDXDC2P	pyridoxal-dependent decarboxylase domain containing 2, pseudogene	Upregulated
A_23_P360	0.000691	0.0000306	2.3	SSRP1	structure specific recognition protein 1	Upregulated
A_21_P001	0.000722	0.0000374	2.3	XLOC_I2_002729		Upregulated
A_23_P996	0.001062	0.0000912	2.3	G2E3	G2/M-phase specific E3 ubiquitin protein ligase	Upregulated
A_33_P328	0.001069	0.0000934	2.3	EFR3B	EFR3 homolog B (S. cerevisiae)	Upregulated
A_24_P311	0.002168	0.000346	2.3	PACRGL	PARK2 co-regulated-like	Upregulated
A_24_P169	0.003315	0.000664	2.3	ZNF160	zinc finger protein 160	Upregulated
A_21_P001	0.005821	0.00152	2.3	NUTM2B-AS1	NUTM2B antisense RNA 1	Upregulated
A_33_P323	0.006202	0.00166	2.3	LOC1001302	LP2209	Upregulated

A_23_P388	0.012585	0.0043	2.3	SLC22A15	solute carrier family 22, member 15	Upregulated
A_23_P880	0.000658	0.0000276	2.29	CARKD	carbohydrate kinase domain containing	Upregulated
A_32_P171	0.000693	0.0000309	2.29	UBE2S	ubiquitin-conjugating enzyme E2S	Upregulated
A_23_P207	0.000852	0.0000547	2.29	STAT5A	signal transducer and activator of transcription 5A	Upregulated
A_23_P306	0.001678	0.000219	2.29	MCM9	minichromosome maintenance complex component 9	Upregulated
A_22_P000	0.001815	0.000253	2.29	ORC3	origin recognition complex, subunit 3	Upregulated
A_21_P000	0.002043	0.000313	2.29	lnc-C5orf17-6	lnc-C5orf17-6:1	Upregulated
A_24_P364	0.002091	0.000324	2.29	STX2	syntaxin 2	Upregulated
A_22_P000	0.002337	0.000387	2.29	GPR107	G protein-coupled receptor 107	Upregulated
A_33_P325	0.003258	0.000646	2.29	C14orf80	chromosome 14 open reading frame 80	Upregulated
A_19_P008	0.003335	0.00067	2.29	PSMD14	proteasome (prosome, macropain) 26S subunit, non-ATPase, 14	Upregulated
A_33_P321	0.008968	0.00276	2.29	lnc-CHADL-3	lnc-CHADL-3:1	Upregulated
A_24_P940	0.010809	0.00353	2.29	C17orf104	chromosome 17 open reading frame 104	Upregulated
A_24_P720	0.016422	0.0061	2.29	KIDINS220	kinase D-interacting substrate, 220kDa	Upregulated
A_32_P714	0.017675	0.00667	2.29	NCAPD3	non-SMC condensin II complex, subunit D3	Upregulated
A_33_P340	0.000585	0.0000201	2.28	DCTN1	dynactin 1	Upregulated
A_23_P145	0.000608	0.000023	2.28	MALSU1	mitochondrial assembly of ribosomal large subunit 1	Upregulated
A_33_P321	0.000663	0.0000281	2.28	PCF11	PCF11 cleavage and polyadenylation factor subunit	Upregulated
A_23_P145	0.000794	0.0000467	2.28	CCNC	cyclin C	Upregulated
A_23_P434	0.000961	0.000072	2.28	HN1L	hematological and neurological expressed 1-like	Upregulated
A_33_P333	0.00104	0.0000865	2.28	WBP11	WW domain binding protein 11	Upregulated
A_22_P000	0.001134	0.000106	2.28	lnc-LRRC36-1	lnc-LRRC36-1:1	Upregulated
A_23_P216	0.001603	0.000202	2.28	SLC1A1	solute carrier family 1 (neuronal/epithelial high affinity glutamate transpo	Upregulated
A_21_P000	0.001954	0.000288	2.28	PET117	PET117 homolog (S. cerevisiae)	Upregulated
A_19_P008	0.002544	0.000441	2.28	LOC400958	uncharacterized LOC400958	Upregulated
A_32_P122	0.003012	0.000572	2.28	MSANTD3	Myb/SANT-like DNA-binding domain containing 3	Upregulated
A_23_P459	0.004328	0.000984	2.28	FBXO2	F-box protein 2	Upregulated
A_23_P267	0.008041	0.00238	2.28	CD300C	CD300c molecule	Upregulated
A_22_P000	0.008644	0.00263	2.28	lnc-ZDHHC9-1	lnc-ZDHHC9-1:1	Upregulated
A_24_P935	0.000697	0.0000321	2.27	BCAT1	branched chain amino-acid transaminase 1, cytosolic	Upregulated
A_33_P328	0.000814	0.0000501	2.27	MGC72080	MGC72080 pseudogene	Upregulated
A_24_P294	0.000926	0.0000654	2.27	PLA1A	phospholipase A1 member A	Upregulated
A_33_P341	0.000964	0.0000729	2.27	LOC339192	uncharacterized LOC339192	Upregulated
A_23_P118	0.000974	0.0000748	2.27	HSD17B7	hydroxysteroid (17-beta) dehydrogenase 7	Upregulated
A_23_P484	0.001029	0.0000848	2.27	RAD51B	RAD51 paralog B	Upregulated
A_22_P000	0.0014	0.000159	2.27	FXR1	fragile X mental retardation, autosomal homolog 1	Upregulated
A_24_P932	0.003208	0.000632	2.27	HMBOX1	homeobox containing 1	Upregulated

A_33_P322	0.003291	0.000656	2.27	DLG1	discs, large homolog 1 (Drosophila)	Upregulated
A_33_P340	0.000601	0.0000217	2.26	TMPPE	transmembrane protein with metallophosphoesterase domain	Upregulated
A_33_P330	0.000701	0.0000327	2.26	DCAF12L2	DDB1 and CUL4 associated factor 12-like 2	Upregulated
A_23_P153	0.00072	0.0000371	2.26	ICAM1	intercellular adhesion molecule 1	Upregulated
A_23_P132	0.000899	0.000061	2.26	SIDT1	SID1 transmembrane family, member 1	Upregulated
A_33_P322	0.000995	0.0000787	2.26	EIF2AK2	eukaryotic translation initiation factor 2-alpha kinase 2	Upregulated
A_33_P336	0.001062	0.0000911	2.26	NOL4L	nucleolar protein 4-like	Upregulated
A_24_P380	0.001478	0.000176	2.26	FKBP5	FK506 binding protein 5	Upregulated
A_33_P339	0.001622	0.000207	2.26	KLHL12	kelch-like family member 12	Upregulated
A_33_P323	0.002555	0.000444	2.26	NFYA	nuclear transcription factor Y, alpha	Upregulated
A_23_P967	0.003096	0.000597	2.26	LRRC47	leucine rich repeat containing 47	Upregulated
A_21_P001	0.00388	0.000837	2.26	lnc-ZNF280D-	lnc-ZNF280D-1:1	Upregulated
A_23_P219	0.005332	0.00134	2.26	RGS3	regulator of G-protein signaling 3	Upregulated
A_33_P370	0.005372	0.00135	2.26	SNX24	sorting nexin 24	Upregulated
A_33_P327	0.012267	0.00417	2.26	HEATR5A	HEAT repeat containing 5A	Upregulated
A_32_P813	0.000597	0.0000213	2.25	FAHD2A	fumarylacetoacetate hydrolase domain containing 2A	Upregulated
A_33_P320	0.000603	0.0000222	2.25	IARS	isoleucyl-tRNA synthetase	Upregulated
A_33_P346	0.000801	0.0000476	2.25	DNAJC3	DnaJ (Hsp40) homolog, subfamily C, member 3	Upregulated
A_33_P325	0.000805	0.0000484	2.25	ZYG11A	zyg-11 family member A, cell cycle regulator	Upregulated
A_22_P000	0.000824	0.0000513	2.25	lnc-TFB2M-1	lnc-TFB2M-1:1	Upregulated
A_23_P345	0.000908	0.0000628	2.25	SDCCAG8	serologically defined colon cancer antigen 8	Upregulated
A_21_P000	0.000908	0.0000628	2.25	SNORA61	small nucleolar RNA, H/ACA box 61	Upregulated
A_24_P839	0.001007	0.0000812	2.25	SNRPC	small nuclear ribonucleoprotein polypeptide C	Upregulated
A_24_P404	0.018699	0.00715	2.25	PCYT2	phosphate cytidyltransferase 2, ethanolamine	Upregulated
A_24_P287	0.000675	0.0000294	2.24	CHMP1A	charged multivesicular body protein 1A	Upregulated
A_33_P323	0.000994	0.0000776	2.24	INPP5F	inositol polyphosphate-5-phosphatase F	Upregulated
A_23_P210	0.001468	0.000173	2.24	ARFGAP1	ADP-ribosylation factor GTPase activating protein 1	Upregulated
A_32_P197	0.002634	0.000465	2.24	FAM76B	family with sequence similarity 76, member B	Upregulated
A_33_P326	0.002846	0.000523	2.24	RFT1	RFT1 homolog (S. cerevisiae)	Upregulated
A_33_P339	0.005746	0.00149	2.24	AP1S2	adaptor-related protein complex 1, sigma 2 subunit	Upregulated
A_33_P327	0.006452	0.00176	2.24	NOL4L	nucleolar protein 4-like	Upregulated
A_21_P000	0.006452	0.00176	2.24	SNORD127	small nucleolar RNA, C/D box 127	Upregulated
A_23_P500	0.009182	0.00285	2.24	TUB	tubby bipartite transcription factor	Upregulated
A_23_P168	0.000697	0.0000321	2.23	RBM28	RNA binding motif protein 28	Upregulated
A_24_P317	0.000755	0.0000411	2.23	SORBS1	sorbin and SH3 domain containing 1	Upregulated
A_33_P335	0.000805	0.0000484	2.23	RBAK	RB-associated KRAB zinc finger	Upregulated
A_33_P324	0.000813	0.0000495	2.23	OR4C6	olfactory receptor, family 4, subfamily C, member 6	Upregulated

A_23_P314	0.001007	0.0000812	2.23	ZNF280C	zinc finger protein 280C	Upregulated
A_24_P409	0.001552	0.000192	2.23	MIR3654	microRNA 3654	Upregulated
A_33_P329	0.001835	0.000258	2.23	HMBOX1	homeobox containing 1	Upregulated
A_23_P900	0.001856	0.000263	2.23	DNAJB1	DnaJ (Hsp40) homolog, subfamily B, member 1	Upregulated
A_24_P121	0.002681	0.000477	2.23	TMEM86B	transmembrane protein 86B	Upregulated
A_33_P328	0.003232	0.000639	2.23	SDF4	stromal cell derived factor 4	Upregulated
A_33_P327	0.003723	0.000787	2.23	UPF2	UPF2 regulator of nonsense transcripts homolog (yeast)	Upregulated
A_33_P337	0.005095	0.00125	2.23	FMO5	flavin containing monooxygenase 5	Upregulated
A_23_P749	0.005232	0.0013	2.23	URB2	URB2 ribosome biogenesis 2 homolog (S. cerevisiae)	Upregulated
A_24_P226	0.010168	0.00327	2.23	MGLL	monoglyceride lipase	Upregulated
A_33_P368	0.011343	0.00376	2.23	MAGED2	melanoma antigen family D, 2	Upregulated
A_22_P000	0.013889	0.00488	2.23	LOC1019271	uncharacterized LOC101927156	Upregulated
A_19_P003	0.021337	0.00841	2.23	LINC01021	long intergenic non-protein coding RNA 1021	Upregulated
A_22_P000	0.000605	0.0000228	2.22	lnc-ABCC3-1	lnc-ABCC3-1:1	Upregulated
A_33_P339	0.000642	0.0000262	2.22	PCMT1	protein-L-isoaspartate (D-aspartate) O-methyltransferase	Upregulated
A_23_P321	0.000697	0.000032	2.22	INADL	InaD-like (Drosophila)	Upregulated
A_24_P157	0.000801	0.0000478	2.22	TNFAIP3	tumor necrosis factor, alpha-induced protein 3	Upregulated
A_23_P309	0.00129	0.000137	2.22	ZSCAN25	zinc finger and SCAN domain containing 25	Upregulated
A_24_P281	0.001443	0.000168	2.22	GNPTAB	N-acetylglucosamine-1-phosphate transferase, alpha and beta subunits	Upregulated
A_24_P414	0.002889	0.000536	2.22	ALG3	ALG3, alpha-1,3- mannosyltransferase	Upregulated
A_24_P399	0.033718	0.0149	2.22	CENPM	centromere protein M	Upregulated
A_19_P008	0.000603	0.0000224	2.21	CDCA7L	cell division cycle associated 7-like	Upregulated
A_23_P109	0.00071	0.0000353	2.21	PRNP	prion protein	Upregulated
A_32_P163	0.001203	0.00012	2.21	SCD	stearoyl-CoA desaturase (delta-9-desaturase)	Upregulated
A_22_P000	0.001415	0.000162	2.21	LINC00641	long intergenic non-protein coding RNA 641	Upregulated
A_24_P104	0.003032	0.000578	2.21	RHOF	ras homolog family member F (in filopodia)	Upregulated
A_23_P115	0.012283	0.00418	2.21	PHYH	phytanoyl-CoA 2-hydroxylase	Upregulated
A_22_P000	0.000634	0.0000253	2.2	lnc-ANP32E-1	lnc-ANP32E-1:1	Upregulated
A_33_P346	0.000707	0.0000344	2.2	BFSP2-AS1	BFSP2 antisense RNA 1	Upregulated
A_23_P642	0.000741	0.0000395	2.2	ZPR1	ZPR1 zinc finger	Upregulated
A_23_P106	0.00083	0.0000519	2.2	MRPS23	mitochondrial ribosomal protein S23	Upregulated
A_33_P329	0.001055	0.0000899	2.2	MCTS2P	malignant T cell amplified sequence 2, pseudogene	Upregulated
A_23_P116	0.001097	0.0000982	2.2	MSANTD4	Myb/SANT-like DNA-binding domain containing 4 with coiled-coils	Upregulated
A_21_P001	0.001571	0.000196	2.2	ZNF605	zinc finger protein 605	Upregulated
A_22_P000	0.001887	0.00027	2.2	POFUT1	protein O-fucosyltransferase 1	Upregulated
A_33_P330	0.002853	0.000526	2.2	ZNFX1	zinc finger, NFX1-type containing 1	Upregulated
A_22_P000	0.003153	0.000613	2.2	SNHG15	small nucleolar RNA host gene 15 (non-protein coding)	Upregulated

A_33_P334	0.012122	0.00411	2.2 PBX3	pre-B-cell leukemia homeobox 3	Upregulated
A_33_P330	0.016795	0.00627	2.2 ANKFY1	ankyrin repeat and FYVE domain containing 1	Upregulated
A_33_P328	0.000612	0.0000234	2.19 C14orf2	chromosome 14 open reading frame 2	Upregulated
A_23_P738	0.000618	0.0000237	2.19 TCEAL1	transcription elongation factor A (SII)-like 1	Upregulated
A_23_P250	0.000802	0.000048	2.19 CDKN2AIPNL	CDKN2A interacting protein N-terminal like	Upregulated
A_33_P333	0.001797	0.000248	2.19 ARHGAP11B	Rho GTPase activating protein 11B	Upregulated
A_33_P321	0.002016	0.000305	2.19 ZBTB8OS	zinc finger and BTB domain containing 8 opposite strand	Upregulated
A_23_P135	0.013768	0.00483	2.19 SLCO5A1	solute carrier organic anion transporter family, member 5A1	Upregulated
A_24_P822	0.018003	0.00683	2.19 TMEM198	transmembrane protein 198	Upregulated
A_33_P353	0.00072	0.0000371	2.18 UBE2E4P	ubiquitin-conjugating enzyme E2E 4 pseudogene	Upregulated
A_24_P179	0.000883	0.000059	2.18 TPR	translocated promoter region, nuclear basket protein	Upregulated
A_22_P000	0.00094	0.0000681	2.18 lnc-C1QTNF8	lnc-C1QTNF8-4:1	Upregulated
A_23_P997	0.001216	0.000122	2.18 PNMA1	paraneoplastic Ma antigen 1	Upregulated
A_23_P340	0.001481	0.000177	2.18 RAB2A	RAB2A, member RAS oncogene family	Upregulated
A_21_P000	0.001953	0.000287	2.18 lnc-FAM182B	lnc-FAM182B-2:1	Upregulated
A_23_P379	0.003094	0.000596	2.18 FMNL3	formin-like 3	Upregulated
A_33_P324	0.003109	0.000601	2.18 N4BP2L1	NEDD4 binding protein 2-like 1	Upregulated
A_24_P269	0.005942	0.00156	2.18 SPRY4	sprouty homolog 4 (Drosophila)	Upregulated
A_23_P622	0.006094	0.00162	2.18 SCAF4	SR-related CTD-associated factor 4	Upregulated
A_33_P340	0.00811	0.00241	2.18 TCTEX1D4	Tctex1 domain containing 4	Upregulated
A_32_P206	0.000662	0.0000278	2.17 CKS1B	CDC28 protein kinase regulatory subunit 1B	Upregulated
A_24_P401	0.000678	0.0000296	2.17 ARHGAP17	Rho GTPase activating protein 17	Upregulated
A_33_P329	0.000695	0.0000314	2.17 CDCA7	cell division cycle associated 7	Upregulated
A_23_P391	0.000806	0.0000486	2.17 LIG1	ligase I, DNA, ATP-dependent	Upregulated
A_32_P526	0.000905	0.0000622	2.17 LPIN1	lipin 1	Upregulated
A_24_P958	0.00091	0.0000631	2.17 NPTN	neuroplastin	Upregulated
A_32_P869	0.000912	0.0000635	2.17 KGFLP2	keratinocyte growth factor-like protein 2	Upregulated
A_21_P001	0.000971	0.0000742	2.17 IGSF3	immunoglobulin superfamily, member 3	Upregulated
A_33_P325	0.001443	0.000168	2.17 DOK3	docking protein 3	Upregulated
A_22_P000	0.001476	0.000175	2.17 LOC1019277	uncharacterized LOC101927787	Upregulated
A_23_P345	0.002114	0.000331	2.17 SDCCAG8	serologically defined colon cancer antigen 8	Upregulated
A_33_P339	0.002342	0.000389	2.17 NREP	neuronal regeneration related protein	Upregulated
A_24_P336	0.00402	0.000879	2.17 RASSF5	Ras association (RalGDS/AF-6) domain family member 5	Upregulated
A_23_P714	0.004219	0.000946	2.17 WDYHV1	WDYHV motif containing 1	Upregulated
A_32_P203	0.005923	0.00155	2.17 ZNF30	zinc finger protein 30	Upregulated
A_21_P000	0.015222	0.00552	2.17 SCARNA8	small Cajal body-specific RNA 8	Upregulated
A_33_P323	0.000705	0.0000332	2.16 ASUN	asunder spermatogenesis regulator	Upregulated

A_23_P114	0.000949	0.0000697	2.16	MECR	mitochondrial trans-2-enoyl-CoA reductase	Upregulated
A_23_P145	0.000995	0.0000788	2.16	CEP162	centrosomal protein 162kDa	Upregulated
A_24_P636	0.001055	0.0000898	2.16	CCDC84	coiled-coil domain containing 84	Upregulated
A_23_P158	0.001066	0.0000923	2.16	SLC16A3	solute carrier family 16 (monocarboxylate transporter), member 3	Upregulated
A_21_P000	0.001603	0.000202	2.16	TMEM41B	transmembrane protein 41B	Upregulated
A_23_P207	0.001991	0.000298	2.16	KSR1	kinase suppressor of ras 1	Upregulated
A_32_P545	0.002454	0.000416	2.16	USP41	ubiquitin specific peptidase 41	Upregulated
A_33_P341	0.003304	0.00066	2.16	OR10A6	olfactory receptor, family 10, subfamily A, member 6 (gene/pseudogene)	Upregulated
A_21_P000	0.003535	0.000729	2.16	lnc-AKR1E2-5	lnc-AKR1E2-5:1	Upregulated
A_23_P653	0.000664	0.0000283	2.15	GLRX5	glutaredoxin 5	Upregulated
A_23_P256	0.00074	0.0000394	2.15	SMARCA5	SWI/SNF related, matrix associated, actin dependent regulator of chromatin	Upregulated
A_33_P332	0.000814	0.0000497	2.15	MCUR1	mitochondrial calcium uniporter regulator 1	Upregulated
A_33_P323	0.001397	0.000158	2.15	WDR44	WD repeat domain 44	Upregulated
A_23_P362	0.001534	0.000188	2.15	CSTF1	cleavage stimulation factor, 3' pre-RNA, subunit 1, 50kDa	Upregulated
A_23_P355	0.0017	0.000226	2.15	AFG3L1P	AFG3-like AAA ATPase 1, pseudogene	Upregulated
A_22_P000	0.002221	0.000359	2.15	LOC1005075	uncharacterized LOC100507577	Upregulated
A_22_P000	0.003572	0.000742	2.15	lnc-M6PR-3	lnc-M6PR-3:1	Upregulated
A_24_P226	0.007055	0.00199	2.15	CEP120	centrosomal protein 120kDa	Upregulated
A_23_P268	0.008594	0.00261	2.15	TUBD1	tubulin, delta 1	Upregulated
A_23_P212	0.000677	0.0000295	2.14	CEP135	centrosomal protein 135kDa	Upregulated
A_24_P360	0.000682	0.0000298	2.14	RNASET2	ribonuclease T2	Upregulated
A_23_P928	0.000832	0.0000522	2.14	LOC389765	kinesin family member 27 pseudogene	Upregulated
A_24_P169	0.000875	0.0000581	2.14	MAML2	mastermind-like 2 (Drosophila)	Upregulated
A_33_P338	0.001087	0.0000965	2.14	ORC2	origin recognition complex, subunit 2	Upregulated
A_23_P791	0.001595	0.0002	2.14	USE1	unconventional SNARE in the ER 1 homolog (S. cerevisiae)	Upregulated
A_23_P614	0.00304	0.00058	2.14	MSRA	methionine sulfoxide reductase A	Upregulated
A_23_P882	0.007422	0.00213	2.14	EMC9	ER membrane protein complex subunit 9	Upregulated
A_21_P000	0.00791	0.00233	2.14	TTC3P1	tetratricopeptide repeat domain 3 pseudogene 1	Upregulated
A_21_P000	0.00895	0.00275	2.14	lnc-GALC-3	lnc-GALC-3:4	Upregulated
A_23_P634	0.000695	0.0000315	2.13	GPSM2	G-protein signaling modulator 2	Upregulated
A_24_P329	0.000764	0.0000423	2.13	ORAI2	ORAI calcium release-activated calcium modulator 2	Upregulated
A_23_P101	0.000824	0.0000512	2.13	DOT1L	DOT1-like histone H3K79 methyltransferase	Upregulated
A_21_P000	0.001098	0.0000988	2.13	SNORA37	small nucleolar RNA, H/ACA box 37	Upregulated
A_33_P383	0.001661	0.000216	2.13	LOC401433	uncharacterized LOC401433	Upregulated
A_32_P158	0.002174	0.000348	2.13	ALG1L	ALG1, chitobiosyldiphosphodolichol beta-mannosyltransferase-like	Upregulated
A_32_P328	0.002685	0.000479	2.13	WDR33	WD repeat domain 33	Upregulated
A_22_P000	0.012507	0.00427	2.13	lnc-NPY2R-1	lnc-NPY2R-1:1	Upregulated

A_23_P171	0.000653	0.0000271	2.12	PHF6	PHD finger protein 6	Upregulated
A_23_P500	0.000679	0.0000296	2.12	TNFRSF8	tumor necrosis factor receptor superfamily, member 8	Upregulated
A_24_P732	0.000695	0.0000312	2.12	ATP2A2	ATPase, Ca ⁺⁺ transporting, cardiac muscle, slow twitch 2	Upregulated
A_23_P204	0.000707	0.0000335	2.12	DNM1L	dynamamin 1-like	Upregulated
A_33_P371	0.000783	0.0000449	2.12	MIR146A	microRNA 146a	Upregulated
A_23_P134	0.000971	0.0000743	2.12	SOD2	superoxide dismutase 2, mitochondrial	Upregulated
A_23_P618	0.001154	0.00011	2.12	BAIAP2	BAI1-associated protein 2	Upregulated
A_23_P254	0.001695	0.000224	2.12	TATDN1	TatD DNase domain containing 1	Upregulated
A_24_P945	0.002104	0.000328	2.12	CYP4V2	cytochrome P450, family 4, subfamily V, polypeptide 2	Upregulated
A_22_P000	0.0038	0.000811	2.12	SAMSN1-AS1	SAMSN1 antisense RNA 1	Upregulated
A_24_P166	0.01198	0.00404	2.12	ZNRF1	zinc and ring finger 1, E3 ubiquitin protein ligase	Upregulated
A_24_P944	0.000733	0.0000385	2.11	SETD5	SET domain containing 5	Upregulated
A_33_P326	0.000779	0.0000443	2.11	NCK2	NCK adaptor protein 2	Upregulated
A_24_P941	0.000908	0.0000628	2.11	SPAST	spastin	Upregulated
A_22_P000	0.001375	0.000153	2.11	lnc-MFN1-1	lnc-MFN1-1:1	Upregulated
A_33_P336	0.001808	0.000251	2.11	CLN5	ceroid-lipofuscinosis, neuronal 5	Upregulated
A_32_P150	0.001808	0.000251	2.11	PPM1D	protein phosphatase, Mg ²⁺ /Mn ²⁺ dependent, 1D	Upregulated
A_22_P000	0.002389	0.000401	2.11	SLC2A13	solute carrier family 2 (facilitated glucose transporter), member 13	Upregulated
A_21_P000	0.002532	0.000438	2.11	lnc-SLC12A8	lnc-SLC12A8-1:1	Upregulated
A_33_P336	0.002738	0.000493	2.11	PIK3R2	phosphoinositide-3-kinase, regulatory subunit 2 (beta)	Upregulated
A_33_P322	0.003614	0.000754	2.11	LOC440896	uncharacterized LOC440896	Upregulated
A_21_P000	0.004101	0.000903	2.11	lnc-CD180-7	lnc-CD180-7:1	Upregulated
A_23_P121	0.005497	0.00139	2.11	HS3ST1	heparan sulfate (glucosamine) 3-O-sulfotransferase 1	Upregulated
A_21_P001	0.005759	0.00149	2.11	IGSF11-AS1	IGSF11 antisense RNA 1	Upregulated
A_22_P000	0.006321	0.00171	2.11	LOC1027239	uncharacterized LOC102723924	Upregulated
A_23_P986	0.008818	0.0027	2.11	HPS5	Hermansky-Pudlak syndrome 5	Upregulated
A_22_P000	0.014897	0.00537	2.11	lnc-CDK17-1	lnc-CDK17-1:1	Upregulated
A_24_P177	0.000806	0.0000486	2.1	PPP1R3F	protein phosphatase 1, regulatory subunit 3F	Upregulated
A_21_P000	0.000812	0.0000494	2.1	TMEM217	transmembrane protein 217	Upregulated
A_24_P243	0.000814	0.0000497	2.1	ZNF277	zinc finger protein 277	Upregulated
A_33_P324	0.001013	0.000082	2.1	PSG9	pregnancy specific beta-1-glycoprotein 9	Upregulated
A_21_P000	0.001244	0.000128	2.1	THRIL	TNF and HNRNPL related immunoregulatory long non-coding RNA	Upregulated
A_33_P354	0.00134	0.000146	2.1	PHF20L1	PHD finger protein 20-like 1	Upregulated
A_23_P717	0.001533	0.000187	2.1	MAMDC4	MAM domain containing 4	Upregulated
A_33_P327	0.001543	0.000189	2.1	CNOT6L	CCR4-NOT transcription complex, subunit 6-like	Upregulated
A_33_P326	0.001724	0.000231	2.1	CEP68	centrosomal protein 68kDa	Upregulated
A_24_P670	0.001907	0.000275	2.1	CLK2	CDC-like kinase 2	Upregulated

A_33_P332	0.007348	0.0021	2.1	PQBP1	polyglutamine binding protein 1	Upregulated
A_22_P000	0.018135	0.00689	2.1	lnc-OSBPL9-2	lnc-OSBPL9-2:1	Upregulated
A_24_P283	0.000717	0.0000364	2.09	PCMT1	protein-L-isoaspartate (D-aspartate) O-methyltransferase	Upregulated
A_23_P387	0.000842	0.0000534	2.09	ZNF830	zinc finger protein 830	Upregulated
A_23_P415	0.000927	0.0000655	2.09	HARS2	histidyl-tRNA synthetase 2, mitochondrial	Upregulated
A_23_P758	0.000954	0.0000704	2.09	TCF7	transcription factor 7 (T-cell specific, HMG-box)	Upregulated
A_24_P338	0.000957	0.0000709	2.09	STOML2	stomatin (EPB72)-like 2	Upregulated
A_33_P359	0.002568	0.000448	2.09	OR7E12P	olfactory receptor, family 7, subfamily E, member 12 pseudogene	Upregulated
A_23_P430	0.007133	0.00202	2.09	MTERF3	mitochondrial transcription termination factor 3	Upregulated
A_24_P370	0.014157	0.00502	2.09	ZNF230	zinc finger protein 230	Upregulated
A_22_P000	0.000695	0.0000313	2.08	NBPF11	neuroblastoma breakpoint family, member 11	Upregulated
A_33_P332	0.000752	0.0000409	2.08	CEND1	cell cycle exit and neuronal differentiation 1	Upregulated
A_22_P000	0.001047	0.000088	2.08	DONSON	downstream neighbor of SON	Upregulated
A_24_P106	0.001624	0.000207	2.08	WHSC1L1	Wolf-Hirschhorn syndrome candidate 1-like 1	Upregulated
A_21_P000	0.001634	0.00021	2.08	lnc-TULP4-1	lnc-TULP4-1:1	Upregulated
A_21_P001	0.001958	0.000289	2.08	XLOC_I2_013460		Upregulated
A_33_P320	0.001979	0.000295	2.08	PTAR1	protein prenyltransferase alpha subunit repeat containing 1	Upregulated
A_33_P340	0.004662	0.0011	2.08	PLET1	placenta expressed transcript 1	Upregulated
A_22_P000	0.006282	0.00169	2.08	SOX2-OT	SOX2 overlapping transcript	Upregulated
A_32_P123	0.006586	0.00181	2.08	TTC39C	tetratricopeptide repeat domain 39C	Upregulated
A_22_P000	0.009032	0.00279	2.08	lnc-FKBP14-1	lnc-FKBP14-1:1	Upregulated
A_21_P000	0.011018	0.00361	2.08	SNORD111B	small nucleolar RNA, C/D box 111B	Upregulated
A_22_P000	0.014247	0.00506	2.08	TTY22	testis-specific transcript, Y-linked 22 (non-protein coding)	Upregulated
A_21_P001	0.000673	0.0000291	2.07	RPS6KB1	ribosomal protein S6 kinase, 70kDa, polypeptide 1	Upregulated
A_32_P109	0.000701	0.0000328	2.07	SFSWAP	splicing factor, suppressor of white-apricot family	Upregulated
A_23_P818	0.000706	0.0000334	2.07	DYNLT1	dynein, light chain, Tctex-type 1	Upregulated
A_24_P225	0.000707	0.0000338	2.07	MOB4	MOB family member 4, phocein	Upregulated
A_22_P000	0.000777	0.000044	2.07	LOC400541	uncharacterized LOC400541	Upregulated
A_24_P555	0.000966	0.0000734	2.07	PHF23	PHD finger protein 23	Upregulated
A_32_P132	0.000995	0.0000784	2.07	ZYG11A	zyg-11 family member A, cell cycle regulator	Upregulated
A_23_P121	0.0011	0.0000991	2.07	RAD18	RAD18 E3 ubiquitin protein ligase	Upregulated
A_23_P679	0.001555	0.000192	2.07	KLF7	Kruppel-like factor 7 (ubiquitous)	Upregulated
A_33_P329	0.001686	0.000221	2.07	TPRN	taperin	Upregulated
A_23_P212	0.002381	0.000399	2.07	ACAD11	acyl-CoA dehydrogenase family, member 11	Upregulated
A_32_P506	0.00249	0.000426	2.07	lnc-AP1S2-2	lnc-AP1S2-2:1	Upregulated
A_23_P521	0.005019	0.00122	2.07	ZNF124	zinc finger protein 124	Upregulated
A_23_P351	0.014529	0.00519	2.07	CLDN9	claudin 9	Upregulated

A_21_P000	0.021045	0.00827	2.07	lnc-PLP1-1	lnc-PLP1-1:1	Upregulated
A_22_P000	0.000709	0.0000349	2.06	lnc-SUMO1-1	lnc-SUMO1-1:1	Upregulated
A_23_P928	0.000913	0.0000639	2.06	RBM22	RNA binding motif protein 22	Upregulated
A_22_P000	0.000963	0.0000726	2.06	lnc-CD59-1	lnc-CD59-1:1	Upregulated
A_24_P230	0.001068	0.0000931	2.06	MIER1	mesoderm induction early response 1, transcriptional regulator	Upregulated
A_24_P169	0.001419	0.000163	2.06	ABCC4	ATP-binding cassette, sub-family C (CFTR/MRP), member 4	Upregulated
A_33_P322	0.004577	0.00107	2.06	SLC17A9	solute carrier family 17 (vesicular nucleotide transporter), member 9	Upregulated
A_33_P335	0.007112	0.00202	2.06	IFITM10	interferon induced transmembrane protein 10	Upregulated
A_32_P129	0.016044	0.0059	2.06	ERMARD	ER membrane-associated RNA degradation	Upregulated
A_33_P361	0.000698	0.0000322	2.05	ZBTB10	zinc finger and BTB domain containing 10	Upregulated
A_23_P134	0.000764	0.0000423	2.05	EPB41L2	erythrocyte membrane protein band 4.1-like 2	Upregulated
A_23_P411	0.000971	0.0000742	2.05	PPP4R2	protein phosphatase 4, regulatory subunit 2	Upregulated
A_33_P338	0.001214	0.000122	2.05	ZNF233	zinc finger protein 233	Upregulated
A_23_P105	0.001289	0.000136	2.05	WBP11	WW domain binding protein 11	Upregulated
A_33_P330	0.002015	0.000304	2.05	SETDB1	SET domain, bifurcated 1	Upregulated
A_23_P365	0.003018	0.000573	2.05	ITGA5	integrin, alpha 5 (fibronectin receptor, alpha polypeptide)	Upregulated
A_22_P000	0.004158	0.000924	2.05	lnc-C3orf71-1	lnc-C3orf71-1:2	Upregulated
A_24_P235	0.004677	0.0011	2.05	ABCA1	ATP-binding cassette, sub-family A (ABC1), member 1	Upregulated
A_33_P322	0.012488	0.00426	2.05	ARHGAP27	Rho GTPase activating protein 27	Upregulated
A_33_P325	0.000675	0.0000293	2.04	ITSN1	intersectin 1 (SH3 domain protein)	Upregulated
A_21_P001	0.0007	0.0000324	2.04	XLOC_l2_000727		Upregulated
A_23_P743	0.000739	0.000039	2.04	SCYL3	SCY1-like 3 (S. cerevisiae)	Upregulated
A_23_P128	0.000752	0.0000408	2.04	SOCS2	suppressor of cytokine signaling 2	Upregulated
A_33_P336	0.000776	0.0000439	2.04	MANEAL	mannosidase, endo-alpha-like	Upregulated
A_24_P665	0.000776	0.0000439	2.04	SRP9	signal recognition particle 9kDa	Upregulated
A_33_P331	0.000839	0.000053	2.04	FSTL3	follistatin-like 3 (secreted glycoprotein)	Upregulated
A_33_P336	0.001134	0.000106	2.04	C10orf88	chromosome 10 open reading frame 88	Upregulated
A_23_P478	0.001249	0.000129	2.04	STAT6	signal transducer and activator of transcription 6, interleukin-4 induced	Upregulated
A_23_P556	0.001398	0.000158	2.04	SFT2D3	SFT2 domain containing 3	Upregulated
A_33_P324	0.002681	0.000477	2.04	NFIC	nuclear factor I/C (CCAAT-binding transcription factor)	Upregulated
A_22_P000	0.004321	0.000981	2.04	lnc-RP11-33N	lnc-RP11-33N16.1.1-2:1	Upregulated
A_21_P000	0.016242	0.006	2.04	lnc-NHLRC3-1	lnc-NHLRC3-1:1	Upregulated
A_24_P319	0.000728	0.0000379	2.03	F11R	F11 receptor	Upregulated
A_24_P214	0.000883	0.0000591	2.03	TREML2	triggering receptor expressed on myeloid cells-like 2	Upregulated
A_32_P182	0.000991	0.0000768	2.03	ZNF511	zinc finger protein 511	Upregulated
A_23_P412	0.001197	0.000118	2.03	CLDN12	claudin 12	Upregulated
A_33_P328	0.001638	0.000211	2.03	SNX10	sorting nexin 10	Upregulated

A_23_P360	0.001657	0.000215	2.03	NEURL4	neuralized E3 ubiquitin protein ligase 4	Upregulated
A_33_P327	0.001677	0.000219	2.03	C20orf196	chromosome 20 open reading frame 196	Upregulated
A_22_P000	0.001784	0.000245	2.03	lnc-FAM13B-1	lnc-FAM13B-1:1	Upregulated
A_23_P406	0.001949	0.000286	2.03	MOSPD2	motile sperm domain containing 2	Upregulated
A_24_P186	0.00284	0.000522	2.03	ANAPC1	anaphase promoting complex subunit 1	Upregulated
A_22_P000	0.003265	0.000648	2.03	lnc-ZBTB32-1	lnc-ZBTB32-1:1	Upregulated
A_33_P341	0.004318	0.00098	2.03	ABL2	ABL proto-oncogene 2, non-receptor tyrosine kinase	Upregulated
A_33_P327	0.004411	0.00101	2.03	DOPEY1	dopey family member 1	Upregulated
A_23_P845	0.004467	0.00103	2.03	TOMM40L	translocase of outer mitochondrial membrane 40 homolog (yeast)-like	Upregulated
A_23_P369	0.004732	0.00112	2.03	RANBP10	RAN binding protein 10	Upregulated
A_23_P374	0.005741	0.00148	2.03	UBE2D4	ubiquitin-conjugating enzyme E2D 4 (putative)	Upregulated
A_22_P000	0.006654	0.00184	2.03	lnc-OR1Q1-1	lnc-OR1Q1-1:1	Upregulated
A_33_P327	0.021889	0.00869	2.03	NUP43	nucleoporin 43kDa	Upregulated
A_23_P111	0.000702	0.000033	2.02	BAG6	BCL2-associated athanogene 6	Upregulated
A_32_P634	0.000811	0.0000492	2.02	MAP2K4	mitogen-activated protein kinase kinase 4	Upregulated
A_23_P121	0.000938	0.0000672	2.02	FLVCR1	feline leukemia virus subgroup C cellular receptor 1	Upregulated
A_22_P000	0.002211	0.000356	2.02	PLLP	plasmolipin	Upregulated
A_23_P427	0.003564	0.000738	2.02	SPPL3	signal peptide peptidase like 3	Upregulated
A_33_P332	0.006155	0.00164	2.02	PLXNB2	plexin B2	Upregulated
A_23_P184	0.000707	0.0000339	2.01	MRPL3	mitochondrial ribosomal protein L3	Upregulated
A_32_P996	0.000867	0.0000573	2.01	HSF2	heat shock transcription factor 2	Upregulated
A_21_P001	0.000908	0.0000627	2.01	LOC389906	zinc finger protein 839 pseudogene	Upregulated
A_24_P888	0.001078	0.0000947	2.01	COX7A2L	cytochrome c oxidase subunit VIIa polypeptide 2 like	Upregulated
A_24_P101	0.012945	0.00446	2.01	CNOT1	CCR4-NOT transcription complex, subunit 1	Upregulated
A_23_P719	0.021038	0.00826	2.01	ERAL1	Era-like 12S mitochondrial rRNA chaperone 1	Upregulated
A_23_P207	0.000711	0.0000356	2	KIAA0100	KIAA0100	Upregulated
A_23_P300	0.000931	0.0000663	2	NFKB1	nuclear factor of kappa light polypeptide gene enhancer in B-cells 1	Upregulated
A_23_P212	0.000963	0.0000726	2	UBA7	ubiquitin-like modifier activating enzyme 7	Upregulated
A_32_P252	0.001193	0.000117	2	ISCA1	iron-sulfur cluster assembly 1	Upregulated
A_23_P160	0.001381	0.000154	2	GLRX2	glutaredoxin 2	Upregulated
A_32_P181	0.0016	0.000201	2	DXO	decapping exoribonuclease	Upregulated
A_23_P164	0.001663	0.000217	2	MED26	mediator complex subunit 26	Upregulated
A_23_P106	0.00185	0.000262	2	SULT1A2	sulfotransferase family, cytosolic, 1A, phenol-preferring, member 2	Upregulated
A_32_P199	0.002391	0.000402	2	SPTSSB	serine palmitoyltransferase, small subunit B	Upregulated
A_23_P781	0.003005	0.00057	2	ALDOC	aldolase C, fructose-bisphosphate	Upregulated
A_33_P337	0.006931	0.00194	2	DTNA	dystrobrevin, alpha	Upregulated
A_23_P198	0.008714	0.00266	2	IQCE	IQ motif containing E	Upregulated

A_23_P312	0.018595	0.0071	2	ARSK	arylsulfatase family, member K	Upregulated
A_23_P152	0.000709	0.0000349	1.99	DDX42	DEAD (Asp-Glu-Ala-Asp) box helicase 42	Upregulated
A_23_P803	0.000735	0.0000386	1.99	TOMM22	translocase of outer mitochondrial membrane 22 homolog (yeast)	Upregulated
A_23_P206	0.000885	0.0000595	1.99	KIAA0020	KIAA0020	Upregulated
A_23_P321	0.000938	0.0000673	1.99	LHX2	LIM homeobox 2	Upregulated
A_23_P510	0.001177	0.000114	1.99	ZNF142	zinc finger protein 142	Upregulated
A_23_P250	0.001222	0.000123	1.99	ISOC1	isochorismatase domain containing 1	Upregulated
A_24_P456	0.00335	0.000674	1.99	UTS2	urotensin 2	Upregulated
A_24_P117	0.003815	0.000815	1.99	INO80C	INO80 complex subunit C	Upregulated
A_33_P350	0.004238	0.000953	1.99	ZDHHC8P1	zinc finger, DHHC-type containing 8 pseudogene 1	Upregulated
A_23_P211	0.007089	0.00201	1.99	NRIP1	nuclear receptor interacting protein 1	Upregulated
A_24_P295	0.010142	0.00326	1.99	TSTD2	thiosulfate sulfurtransferase (rhodanese)-like domain containing 2	Upregulated
A_21_P000	0.000712	0.000036	1.98	SNORD93	small nucleolar RNA, C/D box 93	Upregulated
A_21_P000	0.000764	0.0000423	1.98	lnc-CLEC18B	lnc-CLEC18B-1:1	Upregulated
A_24_P192	0.000801	0.0000477	1.98	RALA	v-ral simian leukemia viral oncogene homolog A (ras related)	Upregulated
A_23_P384	0.001016	0.0000825	1.98	PHF23	PHD finger protein 23	Upregulated
A_23_P322	0.001149	0.000109	1.98	FAM177A1	family with sequence similarity 177, member A1	Upregulated
A_33_P336	0.001297	0.000138	1.98	NXT2	nuclear transport factor 2-like export factor 2	Upregulated
A_33_P338	0.001521	0.000184	1.98	DDB2	damage-specific DNA binding protein 2, 48kDa	Upregulated
A_22_P000	0.001831	0.000258	1.98	lnc-NT5DC2-1	lnc-NT5DC2-1:1	Upregulated
A_24_P115	0.012088	0.00409	1.98	EIF4EBP2	eukaryotic translation initiation factor 4E binding protein 2	Upregulated
A_23_P364	0.015515	0.00566	1.98	MIS18BP1	MIS18 binding protein 1	Upregulated
A_32_P170	0.000809	0.000049	1.97	TRAF3IP1	TNF receptor-associated factor 3 interacting protein 1	Upregulated
A_23_P801	0.001532	0.000187	1.97	RRP1	ribosomal RNA processing 1	Upregulated
A_24_P172	0.001543	0.000189	1.97	UBE2O	ubiquitin-conjugating enzyme E2O	Upregulated
A_21_P000	0.001562	0.000194	1.97	lnc-TRIP10-1	lnc-TRIP10-1:1	Upregulated
A_24_P398	0.002078	0.000322	1.97	COQ7	coenzyme Q7 homolog, ubiquinone (yeast)	Upregulated
A_21_P000	0.002101	0.000327	1.97	lnc-AKR1E2-5	lnc-AKR1E2-5:7	Upregulated
A_21_P001	0.015689	0.00573	1.97	LINC01127	long intergenic non-protein coding RNA 1127	Upregulated
A_24_P391	0.020261	0.00789	1.97	KCTD10	potassium channel tetramerization domain containing 10	Upregulated
A_33_P322	0.000741	0.0000396	1.96	HSD17B7	hydroxysteroid (17-beta) dehydrogenase 7	Upregulated
A_21_P000	0.001053	0.0000891	1.96	LINC01506	long intergenic non-protein coding RNA 1506	Upregulated
A_33_P329	0.001863	0.000265	1.96	ABCC5	ATP-binding cassette, sub-family C (CFTR/MRP), member 5	Upregulated
A_23_P150	0.001935	0.000282	1.96	C11orf68	chromosome 11 open reading frame 68	Upregulated
A_21_P000	0.002896	0.000538	1.96	SNORD96A	small nucleolar RNA, C/D box 96A	Upregulated
A_33_P330	0.004447	0.00102	1.96	SZT2	seizure threshold 2 homolog (mouse)	Upregulated
A_22_P000	0.012184	0.00413	1.96	lnc-NR2C2-1	lnc-NR2C2-1:1	Upregulated

A_23_P585	0.021337	0.00841	1.96	ERCC8	excision repair cross-complementation group 8	Upregulated
A_23_P126	0.000725	0.0000376	1.95	RAB29	RAB29, member RAS oncogene family	Upregulated
A_23_P130	0.000765	0.0000425	1.95	UTP18	UTP18 small subunit (SSU) processome component homolog (yeast)	Upregulated
A_23_P157	0.00082	0.0000508	1.95	DENND4C	DENN/MADD domain containing 4C	Upregulated
A_23_P149	0.0011	0.000099	1.95	COQ9	coenzyme Q9	Upregulated
A_24_P288	0.001432	0.000165	1.95	PIGA	phosphatidylinositol glycan anchor biosynthesis, class A	Upregulated
A_23_P255	0.00332	0.000666	1.95	TMEM185A	transmembrane protein 185A	Upregulated
A_32_P164	0.004602	0.00108	1.95	MRPL35	mitochondrial ribosomal protein L35	Upregulated
A_23_P217	0.005598	0.00143	1.95	COL4A6	collagen, type IV, alpha 6	Upregulated
A_23_P136	0.006443	0.00176	1.95	PDCD1	programmed cell death 1	Upregulated
A_23_P316	0.008344	0.00251	1.95	CCAR2	cell cycle and apoptosis regulator 2	Upregulated
A_22_P000	0.016221	0.00599	1.95	lnc-OIT3-1	lnc-OIT3-1:1	Upregulated
A_21_P001	0.017522	0.0066	1.95	XLOC_I2_015213		Upregulated
A_21_P001	0.021277	0.00838	1.95	CECR7	cat eye syndrome chromosome region, candidate 7 (non-protein coding)	Upregulated
A_23_P202	0.000737	0.0000388	1.94	ABLIM1	actin binding LIM protein 1	Upregulated
A_24_P343	0.000766	0.0000428	1.94	DHFR	dihydrofolate reductase	Upregulated
A_33_P327	0.000781	0.0000446	1.94	ARID3A	AT rich interactive domain 3A (BRIGHT-like)	Upregulated
A_33_P341	0.000826	0.0000515	1.94	CLCC1	chloride channel CLIC-like 1	Upregulated
A_33_P330	0.000846	0.0000538	1.94	RBM20	RNA binding motif protein 20	Upregulated
A_33_P327	0.000887	0.0000596	1.94	NINJ1	ninjurin 1	Upregulated
A_24_P100	0.001137	0.000107	1.94	ZNF486	zinc finger protein 486	Upregulated
A_21_P000	0.00144	0.000167	1.94	lnc-AC00498	lnc-AC004980.12.1-1:1	Upregulated
A_21_P000	0.001691	0.000222	1.94	RBM34	RNA binding motif protein 34	Upregulated
A_24_P225	0.001698	0.000225	1.94	RRM2	ribonucleotide reductase M2	Upregulated
A_23_P250	0.003998	0.000873	1.94	WRN	Werner syndrome, RecQ helicase-like	Upregulated
A_33_P323	0.005643	0.00145	1.94	OR52E2	olfactory receptor, family 52, subfamily E, member 2	Upregulated
A_33_P321	0.000765	0.0000426	1.93	C5orf42	chromosome 5 open reading frame 42	Upregulated
A_33_P339	0.000798	0.0000472	1.93	CLLU1OS	chronic lymphocytic leukemia up-regulated 1 opposite strand	Upregulated
A_23_P134	0.000839	0.0000531	1.93	BNIP3L	BCL2/adenovirus E1B 19kDa interacting protein 3-like	Upregulated
A_33_P331	0.000848	0.0000542	1.93	GCH1	GTP cyclohydrolase 1	Upregulated
A_23_P411	0.000888	0.00006	1.93	SPRYD4	SPRY domain containing 4	Upregulated
A_23_P133	0.001163	0.000112	1.93	ALPK1	alpha-kinase 1	Upregulated
A_33_P321	0.001349	0.000148	1.93	NET1	neuroepithelial cell transforming 1	Upregulated
A_22_P000	0.001479	0.000176	1.93	lnc-C20orf94-	lnc-C20orf94-1:1	Upregulated
A_33_P337	0.001861	0.000265	1.93	PRICKLE3	prickle homolog 3 (Drosophila)	Upregulated
A_23_P454	0.001959	0.00029	1.93	GLA	galactosidase, alpha	Upregulated
A_33_P337	0.002243	0.000366	1.93	MRS2	MRS2 magnesium transporter	Upregulated

A_21_P001	0.003187	0.000626	1.93	HERC2P4	hect domain and RLD 2 pseudogene 4	Upregulated
A_22_P000	0.003388	0.000684	1.93	lnc-SLC12A7	lnc-SLC12A7-1:9	Upregulated
A_23_P204	0.006166	0.00165	1.93	GIT2	G protein-coupled receptor kinase interacting ArfGAP 2	Upregulated
A_33_P333	0.012106	0.0041	1.93	SCYL2	SCY1-like 2 (<i>S. cerevisiae</i>)	Upregulated
A_33_P338	0.024076	0.0098	1.93	TRIM61	tripartite motif containing 61	Upregulated
A_23_P983	0.000827	0.0000516	1.92	BIRC3	baculoviral IAP repeat containing 3	Upregulated
A_23_P361	0.000986	0.0000763	1.92	CCND3	cyclin D3	Upregulated
A_23_P125	0.001022	0.0000837	1.92	ACOT9	acyl-CoA thioesterase 9	Upregulated
A_22_P000	0.001037	0.0000862	1.92	XIRP2-AS1	XIRP2 antisense RNA 1	Upregulated
A_23_P922	0.00104	0.0000866	1.92	TSC22D2	TSC22 domain family, member 2	Upregulated
A_23_P161	0.001046	0.0000879	1.92	OR7E24	olfactory receptor, family 7, subfamily E, member 24	Upregulated
A_23_P112	0.001085	0.0000957	1.92	ALG13	ALG13, UDP-N-acetylglucosaminyltransferase subunit	Upregulated
A_23_P103	0.001121	0.000104	1.92	LRRC8C	leucine rich repeat containing 8 family, member C	Upregulated
A_24_P187	0.001322	0.000142	1.92	RPAIN	RPA interacting protein	Upregulated
A_23_P383	0.001386	0.000155	1.92	HIC2	hypermethylated in cancer 2	Upregulated
A_23_P134	0.001763	0.00024	1.92	DUSP4	dual specificity phosphatase 4	Upregulated
A_23_P647	0.001959	0.00029	1.92	HCAR3	hydroxycarboxylic acid receptor 3	Upregulated
A_21_P001	0.001991	0.000298	1.92	XLOC_I2_007835		Upregulated
A_23_P379	0.00203	0.000309	1.92	PIGW	phosphatidylinositol glycan anchor biosynthesis, class W	Upregulated
A_23_P413	0.002693	0.000481	1.92	LYAR	Ly1 antibody reactive	Upregulated
A_32_P113	0.003684	0.000774	1.92	ZNF561	zinc finger protein 561	Upregulated
A_23_P373	0.004849	0.00116	1.92	PPFIBP1	PTPRF interacting protein, binding protein 1 (liprin beta 1)	Upregulated
A_33_P331	0.005444	0.00138	1.92	HSP90AB4P	heat shock protein 90kDa alpha (cytosolic), class B member 4, pseudog	Upregulated
A_23_P115	0.006071	0.00161	1.92	ZNF684	zinc finger protein 684	Upregulated
A_23_P430	0.00674	0.00187	1.92	ZBTB3	zinc finger and BTB domain containing 3	Upregulated
A_22_P000	0.011699	0.00392	1.92	CPB2-AS1	CPB2 antisense RNA 1	Upregulated
A_33_P339	0.019143	0.00737	1.92	CALML4	calmodulin-like 4	Upregulated
A_21_P000	0.028604	0.0122	1.92	lnc-GBP5-2	lnc-GBP5-2:2	Upregulated
A_22_P000	0.00093	0.000066	1.91	lnc-WDR45L-1	lnc-WDR45L-1:1	Upregulated
A_22_P000	0.00108	0.000095	1.91	lnc-PEAK1.1-2	lnc-PEAK1.1-2:1	Upregulated
A_33_P336	0.00134	0.000146	1.91	ATR	ATR serine/threonine kinase	Upregulated
A_23_P806	0.001403	0.000159	1.91	MFN1	mitofusin 1	Upregulated
A_24_P368	0.001719	0.00023	1.91	SLC25A26	solute carrier family 25 (S-adenosylmethionine carrier), member 26	Upregulated
A_33_P321	0.001808	0.000251	1.91	UPF2	UPF2 regulator of nonsense transcripts homolog (yeast)	Upregulated
A_22_P000	0.002	0.0003	1.91	SNHG15	small nucleolar RNA host gene 15 (non-protein coding)	Upregulated
A_23_P168	0.002167	0.000346	1.91	POMZP3	POM121 and ZP3 fusion	Upregulated
A_22_P000	0.002188	0.000351	1.91	GRAMD1A	GRAM domain containing 1A	Upregulated

A_22_P000	0.002631	0.000465	1.91	LOC1019276	uncharacterized LOC101927640	Upregulated
A_33_P327	0.002966	0.000557	1.91	CHM	choroideremia (Rab escort protein 1)	Upregulated
A_33_P330	0.004482	0.00104	1.91	CEP57L1	centrosomal protein 57kDa-like 1	Upregulated
A_33_P336	0.004946	0.00119	1.91	TNKS1BP1	tankyrase 1 binding protein 1, 182kDa	Upregulated
A_33_P337	0.007062	0.002	1.91	SESTD1	SEC14 and spectrin domains 1	Upregulated
A_24_P276	0.007622	0.00222	1.91	LRRC42	leucine rich repeat containing 42	Upregulated
A_33_P327	0.00825	0.00247	1.91	PHF20L1	PHD finger protein 20-like 1	Upregulated
A_23_P110	0.011822	0.00398	1.91	TRAF3IP2	TRAF3 interacting protein 2	Upregulated
A_23_P202	0.012661	0.00433	1.91	NOLC1	nucleolar and coiled-body phosphoprotein 1	Upregulated
A_23_P379	0.021637	0.00856	1.91	DHCR24	24-dehydrocholesterol reductase	Upregulated
A_33_P334	0.022799	0.00914	1.91	GIN54	GIN5 complex subunit 4 (Sld5 homolog)	Upregulated
A_24_P143	0.000839	0.0000532	1.9	PTBP1	polypyrimidine tract binding protein 1	Upregulated
A_22_P000	0.000847	0.000054	1.9	lnc-RP11-582	lnc-RP11-582J16.5.1-1:1	Upregulated
A_23_P152	0.000848	0.0000544	1.9	BCL2A1	BCL2-related protein A1	Upregulated
A_23_P102	0.001132	0.000105	1.9	MRPL53	mitochondrial ribosomal protein L53	Upregulated
A_19_P003	0.001134	0.000106	1.9	LINC-PINT	long intergenic non-protein coding RNA, p53 induced transcript	Upregulated
A_22_P000	0.001139	0.000107	1.9	LOC1019291	uncharacterized LOC101929124	Upregulated
A_24_P238	0.001141	0.000108	1.9	NSA2	NSA2 ribosome biogenesis homolog (S. cerevisiae)	Upregulated
A_23_P565	0.001453	0.00017	1.9	GEMIN6	gem (nuclear organelle) associated protein 6	Upregulated
A_24_P305	0.001637	0.000211	1.9	TMEM50B	transmembrane protein 50B	Upregulated
A_32_P451	0.0017	0.000226	1.9	IL6ST	interleukin 6 signal transducer	Upregulated
A_23_P550	0.00193	0.000281	1.9	FTSJ3	FtsJ homolog 3 (E. coli)	Upregulated
A_24_P408	0.002275	0.000373	1.9	ZNF587B	zinc finger protein 587B	Upregulated
A_33_P324	0.003028	0.000576	1.9	C2CD2	C2 calcium-dependent domain containing 2	Upregulated
A_23_P904	0.003228	0.000638	1.9	SARS2	seryl-tRNA synthetase 2, mitochondrial	Upregulated
A_33_P337	0.004217	0.000945	1.9	ZNF81	zinc finger protein 81	Upregulated
A_33_P329	0.004813	0.00115	1.9	TCEAL8	transcription elongation factor A (SII)-like 8	Upregulated
A_23_P320	0.005114	0.00125	1.9	SRXN1	sulfiredoxin 1	Upregulated
A_23_P553	0.006095	0.00162	1.9	KLHL11	kelch-like family member 11	Upregulated
A_23_P336	0.011364	0.00377	1.9	NOC2L	nucleolar complex associated 2 homolog (S. cerevisiae)	Upregulated
A_23_P912	0.028617	0.0122	1.9	CASS4	Cas scaffolding protein family member 4	Upregulated
A_33_P330	0.000763	0.000042	1.89	DGKZ	diacylglycerol kinase, zeta	Upregulated
A_21_P001	0.000858	0.0000561	1.89	LOC1019284	serine/threonine-protein kinase tousled-like 2-like	Upregulated
A_32_P366	0.000933	0.0000666	1.89	JAZF1	JAZF zinc finger 1	Upregulated
A_24_P982	0.001235	0.000126	1.89	EBAG9	estrogen receptor binding site associated, antigen, 9	Upregulated
A_23_P247	0.001437	0.000166	1.89	TTC9C	tetratricopeptide repeat domain 9C	Upregulated
A_24_P359	0.001544	0.00019	1.89	SLC6A6	solute carrier family 6 (neurotransmitter transporter), member 6	Upregulated

A_23_P129	0.001563	0.000194	1.89	DUSP3	dual specificity phosphatase 3	Upregulated
A_23_P301	0.00167	0.000218	1.89	ZNF572	zinc finger protein 572	Upregulated
A_24_P140	0.003709	0.000782	1.89	PXK	PX domain containing serine/threonine kinase	Upregulated
A_22_P000	0.005249	0.0013	1.89	lnc-COL6A2-1	lnc-COL6A2-1:1	Upregulated
A_33_P329	0.007299	0.00209	1.89	SPATA13	spermatogenesis associated 13	Upregulated
A_24_P416	0.012225	0.00415	1.89	PEX12	peroxisomal biogenesis factor 12	Upregulated
A_32_P263	0.000777	0.000044	1.88	POGLUT1	protein O-glucosyltransferase 1	Upregulated
A_33_P334	0.000863	0.0000566	1.88	ZNF43	zinc finger protein 43	Upregulated
A_23_P256	0.000876	0.0000583	1.88	FBXO30	F-box protein 30	Upregulated
A_23_P151	0.000938	0.0000678	1.88	LIMA1	LIM domain and actin binding 1	Upregulated
A_23_P252	0.001076	0.0000943	1.88	APTX	aprataxin	Upregulated
A_33_P329	0.001548	0.000191	1.88	CCDC174	coiled-coil domain containing 174	Upregulated
A_21_P001	0.002158	0.000343	1.88	LINC00869	long intergenic non-protein coding RNA 869	Upregulated
A_23_P756	0.002804	0.000511	1.88	HYOU1	hypoxia up-regulated 1	Upregulated
A_21_P000	0.003421	0.000694	1.88	LINC00673	long intergenic non-protein coding RNA 673	Upregulated
A_33_P341	0.003914	0.000847	1.88	ADAMTSL1	ADAMTS-like 1	Upregulated
A_33_P323	0.014445	0.00515	1.88	HMGB3	high mobility group box 3	Upregulated
A_23_P814	0.024907	0.0102	1.88	MAT2B	methionine adenosyltransferase II, beta	Upregulated
A_22_P000	0.025043	0.0103	1.88	lnc-IL6-2	lnc-IL6-2:2	Upregulated
A_32_P252	0.000786	0.0000454	1.87	HSPD1	heat shock 60kDa protein 1 (chaperonin)	Upregulated
A_23_P141	0.001314	0.000141	1.87	TNFSF13B	tumor necrosis factor (ligand) superfamily, member 13b	Upregulated
A_24_P317	0.001356	0.000149	1.87	LY6E	lymphocyte antigen 6 complex, locus E	Upregulated
A_33_P335	0.001529	0.000186	1.87	CSF1	colony stimulating factor 1 (macrophage)	Upregulated
A_23_P206	0.001692	0.000223	1.87	PRC1	protein regulator of cytokinesis 1	Upregulated
A_22_P000	0.002638	0.000466	1.87	lnc-NCL-2	lnc-NCL-2:1	Upregulated
A_33_P325	0.003875	0.000834	1.87	WDR5B	WD repeat domain 5B	Upregulated
A_21_P000	0.004955	0.00119	1.87	LOC1027244	uncharacterized LOC102724458	Upregulated
A_32_P118	0.013292	0.00461	1.87	DHRS4-AS1	DHRS4 antisense RNA 1	Upregulated
A_23_P255	0.014932	0.00539	1.87	RP9	retinitis pigmentosa 9 (autosomal dominant)	Upregulated
A_23_P130	0.021912	0.0087	1.87	ERCC2	excision repair cross-complementation group 2	Upregulated
A_24_P276	0.028727	0.0122	1.87	SPACA5	sperm acrosome associated 5	Upregulated
A_23_P140	0.000762	0.0000419	1.86	WBP4	WW domain binding protein 4	Upregulated
A_33_P357	0.000938	0.0000677	1.86	LOC158863	uncharacterized LOC158863	Upregulated
A_33_P334	0.00098	0.0000757	1.86	PIKFYVE	phosphoinositide kinase, FYVE finger containing	Upregulated
A_33_P330	0.001299	0.000139	1.86	BLCAP	bladder cancer associated protein	Upregulated
A_33_P337	0.001499	0.00018	1.86	LOC392364	nuclear pore associated protein 1 pseudogene	Upregulated
A_21_P001	0.001633	0.00021	1.86	LOC1019269	uncharacterized LOC101926936	Upregulated

A_23_P431	0.003032	0.000578	1.86	C14orf80	chromosome 14 open reading frame 80	Upregulated
A_19_P008	0.003155	0.000615	1.86	SNHG20	small nucleolar RNA host gene 20 (non-protein coding)	Upregulated
A_33_P321	0.011144	0.00367	1.86	GALNT6	polypeptide N-acetylgalactosaminyltransferase 6	Upregulated
A_23_P103	0.019852	0.0077	1.86	OSCP1	organic solute carrier partner 1	Upregulated
A_33_P328	0.034167	0.0151	1.86	ATP9B	ATPase, class II, type 9B	Upregulated
A_23_P438	0.000766	0.0000428	1.85	LAX1	lymphocyte transmembrane adaptor 1	Upregulated
A_24_P253	0.000793	0.0000466	1.85	SLC7A1	solute carrier family 7 (cationic amino acid transporter, y+ system), memt	Upregulated
A_23_P161	0.000863	0.0000566	1.85	CWF19L2	CWF19-like 2, cell cycle control (S. pombe)	Upregulated
A_24_P124	0.001036	0.000086	1.85	TRAM2	translocation associated membrane protein 2	Upregulated
A_23_P226	0.001107	0.000101	1.85	VAMP7	vesicle-associated membrane protein 7	Upregulated
A_33_P334	0.001216	0.000122	1.85	TMEM45A	transmembrane protein 45A	Upregulated
A_23_P757	0.001754	0.000238	1.85	MYRF	myelin regulatory factor	Upregulated
A_23_P218	0.002224	0.00036	1.85	NARF	nuclear prelamin A recognition factor	Upregulated
A_22_P000	0.002528	0.000438	1.85	lnc-FAM40A-1	lnc-FAM40A-1:1	Upregulated
A_23_P512	0.004335	0.000986	1.85	PARS2	prolyl-tRNA synthetase 2, mitochondrial (putative)	Upregulated
A_33_P341	0.005502	0.0014	1.85	NCCRP1	non-specific cytotoxic cell receptor protein 1 homolog (zebrafish)	Upregulated
A_23_P999	0.005797	0.00151	1.85	TIPIN	TIMELESS interacting protein	Upregulated
A_33_P332	0.006632	0.00183	1.85	ESCO2	establishment of sister chromatid cohesion N-acetyltransferase 2	Upregulated
A_33_P326	0.007887	0.00232	1.85	ZNF616	zinc finger protein 616	Upregulated
A_32_P480	0.008458	0.00255	1.85	EYS	eyes shut homolog (Drosophila)	Upregulated
A_23_P589	0.010635	0.00346	1.85	NQO2	NAD(P)H dehydrogenase, quinone 2	Upregulated
A_21_P001	0.012852	0.00442	1.85	LINC01128	long intergenic non-protein coding RNA 1128	Upregulated
A_23_P298	0.000781	0.0000446	1.84	USO1	USO1 vesicle transport factor	Upregulated
A_32_P109	0.000814	0.0000499	1.84	ANKRD20A12	ankyrin repeat domain 20 family, member A12, pseudogene	Upregulated
A_24_P150	0.000824	0.0000513	1.84	KLHL18	kelch-like family member 18	Upregulated
A_33_P323	0.000853	0.000055	1.84	MLLT4	myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, Drosop	Upregulated
A_33_P323	0.000912	0.0000636	1.84	NSDHL	NAD(P) dependent steroid dehydrogenase-like	Upregulated
A_21_P000	0.000974	0.0000748	1.84	RAB6C-AS1	RAB6C antisense RNA 1	Upregulated
A_23_P395	0.001004	0.0000806	1.84	KDM3A	lysine (K)-specific demethylase 3A	Upregulated
A_23_P845	0.001067	0.0000928	1.84	LFNG	LFNG O-fucosylpeptide 3-beta-N-acetylglucosaminyltransferase	Upregulated
A_23_P397	0.002459	0.000417	1.84	KLC4	kinesin light chain 4	Upregulated
A_24_P206	0.0032	0.00063	1.84	PDE1C	phosphodiesterase 1C, calmodulin-dependent 70kDa	Upregulated
A_33_P333	0.004149	0.00092	1.84	PDLIM5	PDZ and LIM domain 5	Upregulated
A_23_P373	0.004819	0.00115	1.84	PATL1	protein associated with topoisomerase II homolog 1 (yeast)	Upregulated
A_23_P130	0.006012	0.00159	1.84	ELOF1	elongation factor 1 homolog (S. cerevisiae)	Upregulated
A_32_P440	0.006067	0.00161	1.84	C16orf72	chromosome 16 open reading frame 72	Upregulated
A_33_P329	0.006315	0.0017	1.84	WDR5	WD repeat domain 5	Upregulated

A_19_P008	0.007301	0.00209	1.84	LOC1019295	uncharacterized LOC101929580	Upregulated
A_24_P219	0.009235	0.00287	1.84	GPALPP1	GPALPP motifs containing 1	Upregulated
A_33_P326	0.015684	0.00573	1.84	ZNF280D	zinc finger protein 280D	Upregulated
A_33_P331	0.000837	0.0000526	1.83	CAB39	calcium binding protein 39	Upregulated
A_33_P338	0.000884	0.0000593	1.83	CDT1	chromatin licensing and DNA replication factor 1	Upregulated
A_33_P322	0.000901	0.0000613	1.83	ZNF331	zinc finger protein 331	Upregulated
A_23_P626	0.001171	0.000113	1.83	PPT1	palmitoyl-protein thioesterase 1	Upregulated
A_24_P217	0.001203	0.000119	1.83	MFAP3	microfibrillar-associated protein 3	Upregulated
A_22_P000	0.001266	0.000133	1.83	TSPAN33	tetraspanin 33	Upregulated
A_23_P144	0.001289	0.000136	1.83	EXOC5	exocyst complex component 5	Upregulated
A_23_P164	0.001476	0.000175	1.83	ZNF225	zinc finger protein 225	Upregulated
A_23_P130	0.001772	0.000242	1.83	TBC1D17	TBC1 domain family, member 17	Upregulated
A_21_P001	0.002128	0.000336	1.83	XLOC_I2_005179		Upregulated
A_33_P341	0.002579	0.000452	1.83	KLF1	Kruppel-like factor 1 (erythroid)	Upregulated
A_23_P520	0.011238	0.00371	1.83	TARBP1	TAR (HIV-1) RNA binding protein 1	Upregulated
A_23_P256	0.021599	0.00854	1.83	KBTBD7	kelch repeat and BTB (POZ) domain containing 7	Upregulated
A_23_P165	0.000828	0.0000517	1.82	SLC20A1	solute carrier family 20 (phosphate transporter), member 1	Upregulated
A_22_P000	0.000857	0.0000558	1.82	LOC1019277	uncharacterized LOC101927735	Upregulated
A_23_P873	0.000859	0.0000562	1.82	NAT10	N-acetyltransferase 10 (GCN5-related)	Upregulated
A_33_P342	0.000959	0.0000713	1.82	PPP1R3D	protein phosphatase 1, regulatory subunit 3D	Upregulated
A_33_P340	0.001267	0.000133	1.82	TRAK1	trafficking protein, kinesin binding 1	Upregulated
A_33_P331	0.001668	0.000217	1.82	PGAP1	post-GPI attachment to proteins 1	Upregulated
A_32_P107	0.004084	0.000898	1.82	SPATA33	spermatogenesis associated 33	Upregulated
A_22_P000	0.010272	0.00331	1.82	LOC1019278	uncharacterized LOC101927835	Upregulated
A_21_P001	0.000853	0.0000549	1.81	DBNDD2	dysbindin (dystrobrevin binding protein 1) domain containing 2	Upregulated
A_24_P407	0.000942	0.0000685	1.81	PPM1A	protein phosphatase, Mg ²⁺ /Mn ²⁺ dependent, 1A	Upregulated
A_23_P110	0.000995	0.0000792	1.81	PPWD1	peptidylprolyl isomerase domain and WD repeat containing 1	Upregulated
A_23_P259	0.001062	0.0000909	1.81	SEC22A	SEC22 vesicle trafficking protein homolog A (S. cerevisiae)	Upregulated
A_22_P000	0.001087	0.0000965	1.81	lnc-KCNC2-1	lnc-KCNC2-1:1	Upregulated
A_33_P336	0.001107	0.000101	1.81	ERLIN2	ER lipid raft associated 2	Upregulated
A_22_P000	0.00165	0.000213	1.81	lnc-PHYHIP-2	lnc-PHYHIP-2:1	Upregulated
A_23_P106	0.004433	0.00102	1.81	L2HGDH	L-2-hydroxyglutarate dehydrogenase	Upregulated
A_23_P101	0.019256	0.00742	1.81	SLC5A5	solute carrier family 5 (sodium/iodide cotransporter), member 5	Upregulated
A_23_P147	0.000819	0.0000506	1.8	LYN	LYN proto-oncogene, Src family tyrosine kinase	Upregulated
A_21_P000	0.000837	0.0000527	1.8	RPL32	ribosomal protein L32	Upregulated
A_33_P325	0.000998	0.0000795	1.8	C12orf5	chromosome 12 open reading frame 5	Upregulated
A_23_P656	0.001235	0.000125	1.8	WARS	tryptophanyl-tRNA synthetase	Upregulated

A_33_P326	0.001254	0.00013	1.8	SLC17A5	solute carrier family 17 (acidic sugar transporter), member 5	Upregulated
A_22_P000	0.001563	0.000194	1.8	LOC1019272	uncharacterized LOC101927287	Upregulated
A_32_P194	0.002078	0.000322	1.8	CLEC16A	C-type lectin domain family 16, member A	Upregulated
A_23_P358	0.003716	0.000785	1.8	DNAJC16	DnaJ (Hsp40) homolog, subfamily C, member 16	Upregulated
A_23_P122	0.000817	0.0000503	1.79	AUTS2	autism susceptibility candidate 2	Upregulated
A_33_P335	0.000858	0.000056	1.79	IDH3B	isocitrate dehydrogenase 3 (NAD+) beta	Upregulated
A_32_P108	0.000904	0.0000618	1.79	AK4	adenylate kinase 4	Upregulated
A_23_P401	0.001021	0.0000833	1.79	CENPF	centromere protein F, 350/400kDa	Upregulated
A_32_P838	0.001262	0.000132	1.79	HEY1	hes-related family bHLH transcription factor with YRPW motif 1	Upregulated
A_33_P337	0.001813	0.000253	1.79	PAAF1	proteasomal ATPase-associated factor 1	Upregulated
A_33_P325	0.002293	0.000377	1.79	ACAT1	acetyl-CoA acetyltransferase 1	Upregulated
A_23_P201	0.00246	0.000418	1.79	PPOX	protoporphyrinogen oxidase	Upregulated
A_33_P336	0.004087	0.000899	1.79	HIST1H2AI	histone cluster 1, H2ai	Upregulated
A_23_P425	0.006045	0.0016	1.79	PPIL4	peptidylprolyl isomerase (cyclophilin)-like 4	Upregulated
A_22_P000	0.008304	0.00249	1.79	lnc-SGSH-1	lnc-SGSH-1:1	Upregulated
A_22_P000	0.009711	0.00307	1.79	lnc-DGAT2-1	lnc-DGAT2-1:1	Upregulated
A_21_P001	0.010554	0.00342	1.79	XLOC_I2_004563		Upregulated
A_21_P001	0.012623	0.00432	1.79	LOC1027246	uncharacterized LOC102724630	Upregulated
A_23_P361	0.016054	0.00591	1.79	RIMKLB	ribosomal modification protein rimK-like family member B	Upregulated
A_33_P332	0.025028	0.0103	1.79	ETV3	ets variant 3	Upregulated
A_21_P000	0.000858	0.000056	1.78	SNORD72	small nucleolar RNA, C/D box 72	Upregulated
A_33_P322	0.001067	0.0000927	1.78	IL17RA	interleukin 17 receptor A	Upregulated
A_32_P170	0.001198	0.000118	1.78	STAG3	stromal antigen 3	Upregulated
A_24_P302	0.001523	0.000185	1.78	CLCN6	chloride channel, voltage-sensitive 6	Upregulated
A_24_P376	0.001753	0.000237	1.78	UBA2	ubiquitin-like modifier activating enzyme 2	Upregulated
A_21_P001	0.001903	0.000274	1.78	XLOC_I2_005438		Upregulated
A_23_P651	0.002125	0.000336	1.78	SPRYD3	SPRY domain containing 3	Upregulated
A_21_P000	0.002889	0.000536	1.78	PCNA-AS1	PCNA antisense RNA 1	Upregulated
A_23_P233	0.005917	0.00155	1.78	EXO1	exonuclease 1	Upregulated
A_21_P000	0.006908	0.00193	1.78	lnc-IL6-1	lnc-IL6-1:1	Upregulated
A_21_P000	0.006908	0.00193	1.78	lnc-SLITRK6-	lnc-SLITRK6-12:2	Upregulated
A_22_P000	0.007111	0.00202	1.78	lnc-RP11-791	lnc-RP11-791J7.2.1-1:1	Upregulated
A_23_P148	0.019866	0.00771	1.78	NELFB	negative elongation factor complex member B	Upregulated
A_24_P491	0.026617	0.0111	1.78	EXD3	exonuclease 3'-5' domain containing 3	Upregulated
A_21_P000	0.045304	0.0213	1.78	lnc-ZNF727-2	lnc-ZNF727-2:1	Upregulated
A_33_P329	0.000866	0.0000571	1.77	RAB2B	RAB2B, member RAS oncogene family	Upregulated
A_33_P338	0.000995	0.0000786	1.77	ZNF331	zinc finger protein 331	Upregulated

A_21_P001	0.00106	0.0000904	1.77	CTHF8	CTF8, chromosome transmission fidelity factor 8 homolog (<i>S. cerevisiae</i>)	Upregulated
A_23_P209	0.001133	0.000106	1.77	NAB1	NGFI-A binding protein 1 (EGR1 binding protein 1)	Upregulated
A_23_P380	0.001347	0.000147	1.77	KIAA1279	KIAA1279	Upregulated
A_23_P790	0.001745	0.000235	1.77	LILRA3	leukocyte immunoglobulin-like receptor, subfamily A (without TM domain)	Upregulated
A_21_P001	0.003191	0.000627	1.77	HIST1H4H	histone cluster 1, H4h	Upregulated
A_24_P341	0.004269	0.000963	1.77	EPG5	ectopic P-granules autophagy protein 5 homolog (<i>C. elegans</i>)	Upregulated
A_23_P397	0.005117	0.00126	1.77	FEZ2	fasciculation and elongation protein zeta 2 (zygin II)	Upregulated
A_22_P000	0.00628	0.00169	1.77	lnc-CNOT1-1	lnc-CNOT1-1:1	Upregulated
A_23_P312	0.013653	0.00477	1.77	ITGAX	integrin, alpha X (complement component 3 receptor 4 subunit)	Upregulated
A_32_P191	0.013665	0.00478	1.77	SETD8	SET domain containing (lysine methyltransferase) 8	Upregulated
A_23_P299	0.014597	0.00523	1.77	IL15	interleukin 15	Upregulated
A_24_P414	0.015734	0.00575	1.77	PLN	phospholamban	Upregulated
A_32_P121	0.02125	0.00837	1.77	IQCF1	IQ motif containing F1	Upregulated
A_21_P000	0.028707	0.0122	1.77	TMEM161B-A	TMEM161B antisense RNA 1	Upregulated
A_21_P001	0.037982	0.0173	1.77	POLR2J4	polymerase (RNA) II (DNA directed) polypeptide J4, pseudogene	Upregulated
A_19_P008	0.000858	0.000056	1.76	ANKRD33B	ankyrin repeat domain 33B	Upregulated
A_23_P252	0.000998	0.0000797	1.76	SLC2A8	solute carrier family 2 (facilitated glucose transporter), member 8	Upregulated
A_33_P328	0.001108	0.000101	1.76	LENG8	leukocyte receptor cluster (LRC) member 8	Upregulated
A_33_P788	0.00126	0.000131	1.76	TSIX	TSIX transcript, XIST antisense RNA	Upregulated
A_23_P381	0.001625	0.000207	1.76	SP2	Sp2 transcription factor	Upregulated
A_32_P224	0.001692	0.000223	1.76	FKBP15	FK506 binding protein 15, 133kDa	Upregulated
A_22_P000	0.002482	0.000424	1.76	LOC1019294	uncharacterized LOC101929441	Upregulated
A_23_P101	0.002851	0.000525	1.76	MRPL54	mitochondrial ribosomal protein L54	Upregulated
A_33_P322	0.002945	0.000551	1.76	LOC1001289	uncharacterized LOC100128908	Upregulated
A_23_P550	0.003472	0.000709	1.76	NOL11	nucleolar protein 11	Upregulated
A_33_P321	0.004478	0.00103	1.76	ABHD15	abhydrolase domain containing 15	Upregulated
A_23_P138	0.004962	0.0012	1.76	ARHGAP19	Rho GTPase activating protein 19	Upregulated
A_33_P323	0.016195	0.00598	1.76	TMEM234	transmembrane protein 234	Upregulated
A_33_P323	0.023572	0.00954	1.76	TET3	tet methylcytosine dioxygenase 3	Upregulated
A_23_P926	0.028278	0.012	1.76	ANKHD1	ankyrin repeat and KH domain containing 1	Upregulated
A_21_P000	0.030051	0.0129	1.76	lnc-TERF2IP-1	lnc-TERF2IP-1:1	Upregulated
A_33_P337	0.032182	0.0141	1.76	NOM1	nucleolar protein with MIF4G domain 1	Upregulated
A_21_P000	0.060178	0.03	1.76	lnc-SORCS1-1	lnc-SORCS1-1:1	Upregulated
A_24_P377	0.000951	0.00007	1.75	HSPA4	heat shock 70kDa protein 4	Upregulated
A_23_P387	0.001021	0.0000834	1.75	CASP2	caspase 2, apoptosis-related cysteine peptidase	Upregulated
A_23_P242	0.001096	0.000098	1.75	IDI2-AS1	IDI2 antisense RNA 1	Upregulated
A_21_P000	0.001161	0.000111	1.75	SNORA54	small nucleolar RNA, H/ACA box 54	Upregulated

A_23_P127	0.001187	0.000116	1.75	DNAJC1	DnaJ (Hsp40) homolog, subfamily C, member 1	Upregulated
A_33_P323	0.001363	0.00015	1.75	ZSWIM4	zinc finger, SWIM-type containing 4	Upregulated
A_23_P112	0.001387	0.000155	1.75	RMI1	RecQ mediated genome instability 1	Upregulated
A_33_P336	0.001394	0.000157	1.75	RTN3	reticulon 3	Upregulated
A_23_P160	0.001697	0.000225	1.75	SLC2A5	solute carrier family 2 (facilitated glucose/fructose transporter), member 5	Upregulated
A_21_P000	0.002311	0.000381	1.75	RNU6ATAC	RNA, U6atac small nuclear (U12-dependent splicing)	Upregulated
A_23_P431	0.003239	0.000641	1.75	KBTBD8	kelch repeat and BTB (POZ) domain containing 8	Upregulated
A_23_P182	0.004452	0.00103	1.75	NPRL2	nitrogen permease regulator-like 2 (S. cerevisiae)	Upregulated
A_22_P000	0.004745	0.00113	1.75	LOC1019275	uncharacterized LOC101927543	Upregulated
A_23_P365	0.005136	0.00126	1.75	CAMTA2	calmodulin binding transcription activator 2	Upregulated
A_23_P159	0.005204	0.00129	1.75	GPR50	G protein-coupled receptor 50	Upregulated
A_33_P324	0.008227	0.00246	1.75	C3orf84	chromosome 3 open reading frame 84	Upregulated
A_22_P000	0.019642	0.0076	1.75	ALMS1-IT1	ALMS1 intronic transcript 1 (non-protein coding)	Upregulated
A_33_P323	0.022366	0.00892	1.75	BMP1	bone morphogenetic protein 1	Upregulated
A_23_P259	0.033269	0.0146	1.75	DNAL1	dynein, axonemal, light chain 1	Upregulated
A_33_P325	0.000836	0.0000525	1.74	MAPK8	mitogen-activated protein kinase 8	Upregulated
A_33_P329	0.00091	0.0000632	1.74	LPCAT3	lysophosphatidylcholine acyltransferase 3	Upregulated
A_33_P337	0.001043	0.0000874	1.74	CCL19	chemokine (C-C motif) ligand 19	Upregulated
A_23_P432	0.001067	0.0000926	1.74	SLC25A40	solute carrier family 25, member 40	Upregulated
A_32_P514	0.001101	0.0000996	1.74	UNK	unkempt family zinc finger	Upregulated
A_33_P331	0.00144	0.000167	1.74	TREM1	triggering receptor expressed on myeloid cells 1	Upregulated
A_22_P000	0.001663	0.000216	1.74	lnc-SGTB-2	lnc-SGTB-2:1	Upregulated
A_33_P361	0.002709	0.000486	1.74	PRKXP1	protein kinase, X-linked, pseudogene 1	Upregulated
A_23_P126	0.00275	0.000497	1.74	IL10	interleukin 10	Upregulated
A_23_P101	0.003476	0.00071	1.74	LPAR2	lysophosphatidic acid receptor 2	Upregulated
A_23_P657	0.00382	0.000817	1.74	DIS3L	DIS3 like exosome 3'-5' exoribonuclease	Upregulated
A_33_P324	0.00393	0.000851	1.74	HAAO	3-hydroxyanthranilate 3,4-dioxygenase	Upregulated
A_23_P206	0.005191	0.00128	1.74	MYH11	myosin, heavy chain 11, smooth muscle	Upregulated
A_23_P105	0.005382	0.00136	1.74	ROM1	retinal outer segment membrane protein 1	Upregulated
A_32_P103	0.000954	0.0000705	1.73	FAM60A	family with sequence similarity 60, member A	Upregulated
A_23_P203	0.00097	0.0000739	1.73	SMPD1	sphingomyelin phosphodiesterase 1, acid lysosomal	Upregulated
A_33_P323	0.000971	0.0000743	1.73	PREP	prolyl endopeptidase	Upregulated
A_23_P118	0.001014	0.0000821	1.73	TOP2A	topoisomerase (DNA) II alpha 170kDa	Upregulated
A_23_P338	0.001068	0.0000931	1.73	CD274	CD274 molecule	Upregulated
A_24_P115	0.001124	0.000104	1.73	BIRC2	baculoviral IAP repeat containing 2	Upregulated
A_22_P000	0.001476	0.000175	1.73	lnc-TNFRSF1	lnc-TNFRSF17-1:1	Upregulated
A_33_P333	0.001635	0.00021	1.73	TRPC2	transient receptor potential cation channel, subfamily C, member 2, pseudogene	Upregulated

A_23_P258	0.001727	0.000232	1.73	MYL5	myosin, light chain 5, regulatory	Upregulated
A_23_P355	0.002219	0.000358	1.73	SYNPO2L	synaptopodin 2-like	Upregulated
A_33_P322	0.002957	0.000555	1.73	LRRC37A8P	leucine rich repeat containing 37, member A8, pseudogene	Upregulated
A_22_P000	0.00419	0.000934	1.73	PPIEL	peptidylprolyl isomerase E-like pseudogene	Upregulated
A_33_P326	0.00451	0.00105	1.73	OR2T34	olfactory receptor, family 2, subfamily T, member 34	Upregulated
A_33_P339	0.004595	0.00107	1.73	C15orf54	chromosome 15 open reading frame 54	Upregulated
A_23_P108	0.006203	0.00166	1.73	WDSUB1	WD repeat, sterile alpha motif and U-box domain containing 1	Upregulated
A_24_P192	0.007499	0.00217	1.73	WRNIP1	Werner helicase interacting protein 1	Upregulated
A_33_P334	0.022388	0.00893	1.73	RPS6KA2	ribosomal protein S6 kinase, 90kDa, polypeptide 2	Upregulated
A_22_P000	0.059603	0.0296	1.73	lnc-MYCT1-1	lnc-MYCT1-1:1	Upregulated
A_32_P215	0.000963	0.0000726	1.72	GPSM1	G-protein signaling modulator 1	Upregulated
A_33_P335	0.000963	0.0000726	1.72	LINC00992	long intergenic non-protein coding RNA 992	Upregulated
A_33_P334	0.001022	0.0000836	1.72	EEF2K	eukaryotic elongation factor 2 kinase	Upregulated
A_33_P338	0.001116	0.000102	1.72	CD274	CD274 molecule	Upregulated
A_33_P323	0.00124	0.000127	1.72	SRSF6	serine/arginine-rich splicing factor 6	Upregulated
A_23_P224	0.001453	0.00017	1.72	RP2	retinitis pigmentosa 2 (X-linked recessive)	Upregulated
A_23_P161	0.00161	0.000204	1.72	NAALAD2	N-acetylated alpha-linked acidic dipeptidase 2	Upregulated
A_23_P321	0.001687	0.000221	1.72	DENND5A	DENN/MADD domain containing 5A	Upregulated
A_21_P001	0.001688	0.000222	1.72	XLOC_I2_007135		Upregulated
A_33_P331	0.00174	0.000234	1.72	CMPK1	cytidine monophosphate (UMP-CMP) kinase 1, cytosolic	Upregulated
A_23_P149	0.001986	0.000297	1.72	LINC00115	long intergenic non-protein coding RNA 115	Upregulated
A_33_P328	0.002006	0.000302	1.72	ANKRD20A8f	ankyrin repeat domain 20 family, member A8, pseudogene	Upregulated
A_21_P000	0.003109	0.000601	1.72	SNORA18	small nucleolar RNA, H/ACA box 18	Upregulated
A_23_P115	0.003134	0.000609	1.72	VASH2	vasohibin 2	Upregulated
A_24_P210	0.00321	0.000633	1.72	PSMG3	proteasome (prosome, macropain) assembly chaperone 3	Upregulated
A_24_P156	0.003497	0.000716	1.72	EBF1	early B-cell factor 1	Upregulated
A_23_P131	0.004031	0.000882	1.72	ZBTB32	zinc finger and BTB domain containing 32	Upregulated
A_22_P000	0.00761	0.00221	1.72	lnc-IL21R-1	lnc-IL21R-1:1	Upregulated
A_24_P417	0.009799	0.00311	1.72	FLYWCH2	FLYWCH family member 2	Upregulated
A_21_P001	0.011157	0.00368	1.72	XLOC_I2_002281		Upregulated
A_24_P118	0.01385	0.00487	1.72	ATP5S	ATP synthase, H+ transporting, mitochondrial Fo complex, subunit s (fac	Upregulated
A_33_P339	0.014654	0.00526	1.72	LOC1001298	uncharacterized LOC100129884	Upregulated
A_33_P324	0.04057	0.0187	1.72	ZNF365	zinc finger protein 365	Upregulated
A_33_P323	0.000867	0.0000573	1.71	IL6ST	interleukin 6 signal transducer	Upregulated
A_33_P322	0.000905	0.000062	1.71	ATP13A3	ATPase type 13A3	Upregulated
A_21_P000	0.000905	0.0000621	1.71	lnc-IRF2-2	lnc-IRF2-2:3	Upregulated
A_23_P255	0.000925	0.0000651	1.71	GSN	gelsolin	Upregulated

A_23_P119	0.000959	0.0000714	1.71	URI1	URI1, prefoldin-like chaperone	Upregulated
A_23_P850	0.000961	0.000072	1.71	ZRSR2	zinc finger (CCCH type), RNA-binding motif and serine/arginine rich 2	Upregulated
A_23_P373	0.000995	0.0000791	1.71	PUS10	pseudouridylate synthase 10	Upregulated
A_23_P516	0.001054	0.0000894	1.71	MEF2D	myocyte enhancer factor 2D	Upregulated
A_23_P122	0.001203	0.000119	1.71	BRI3	brain protein I3	Upregulated
A_33_P339	0.001224	0.000124	1.71	ELP5	elongator acetyltransferase complex subunit 5	Upregulated
A_23_P233	0.001409	0.000161	1.71	RRP15	ribosomal RNA processing 15 homolog (S. cerevisiae)	Upregulated
A_21_P000	0.001481	0.000177	1.71	lnc-RP1-239B	lnc-RP1-239B22.1.1-1:2	Upregulated
A_23_P167	0.001561	0.000193	1.71	RNF145	ring finger protein 145	Upregulated
A_23_P345	0.001626	0.000208	1.71	GNL2	guanine nucleotide binding protein-like 2 (nucleolar)	Upregulated
A_33_P321	0.001785	0.000245	1.71	CDC6	cell division cycle 6	Upregulated
A_21_P001	0.002498	0.000429	1.71	KCTD21-AS1	KCTD21 antisense RNA 1	Upregulated
A_21_P001	0.002498	0.000429	1.71	XLOC_I2_011048		Upregulated
A_23_P361	0.002855	0.000526	1.71	GTF2H1	general transcription factor IIH, polypeptide 1, 62kDa	Upregulated
A_33_P331	0.003126	0.000606	1.71	TP73-AS1	TP73 antisense RNA 1	Upregulated
A_22_P000	0.006688	0.00185	1.71	lnc-DGKH-1	lnc-DGKH-1:1	Upregulated
A_23_P422	0.007029	0.00198	1.71	C9orf116	chromosome 9 open reading frame 116	Upregulated
A_33_P341	0.012219	0.00415	1.71	CBLN3	cerebellin 3 precursor	Upregulated
A_33_P331	0.016569	0.00616	1.71	HNRNPA0	heterogeneous nuclear ribonucleoprotein A0	Upregulated
A_22_P000	0.020197	0.00786	1.71	lnc-CAMK1G-	lnc-CAMK1G-1:6	Upregulated
A_19_P008	0.033028	0.0145	1.71	KTN1-AS1	KTN1 antisense RNA 1	Upregulated
A_23_P119	0.000912	0.0000635	1.7	EBI3	Epstein-Barr virus induced 3	Upregulated
A_33_P341	0.001062	0.0000912	1.7	NRBF2	nuclear receptor binding factor 2	Upregulated
A_23_P746	0.001161	0.000111	1.7	NUDC	nudC nuclear distribution protein	Upregulated
A_23_P368	0.001196	0.000118	1.7	NETO2	neuropilin (NRP) and tolloid (TLL)-like 2	Upregulated
A_33_P334	0.001297	0.000138	1.7	MAP4	microtubule-associated protein 4	Upregulated
A_23_P111	0.001321	0.000142	1.7	MAK16	MAK16 homolog (S. cerevisiae)	Upregulated
A_23_P132	0.001477	0.000175	1.7	MANF	mesencephalic astrocyte-derived neurotrophic factor	Upregulated
A_23_P768	0.001877	0.000268	1.7	PRMT5	protein arginine methyltransferase 5	Upregulated
A_22_P000	0.002491	0.000427	1.7	lnc-KLHL25-5	lnc-KLHL25-5:1	Upregulated
A_32_P133	0.00437	0.000999	1.7	DCAF10	DDB1 and CUL4 associated factor 10	Upregulated
A_33_P335	0.00437	0.000999	1.7	ZNF273	zinc finger protein 273	Upregulated
A_23_P423	0.004594	0.00107	1.7	RXRA	retinoid X receptor, alpha	Upregulated
A_23_P379	0.005162	0.00127	1.7	FAM63B	family with sequence similarity 63, member B	Upregulated
A_33_P323	0.005196	0.00128	1.7	INPP5F	inositol polyphosphate-5-phosphatase F	Upregulated
A_23_P926	0.005502	0.0014	1.7	DAP	death-associated protein	Upregulated
A_22_P000	0.008307	0.00249	1.7	lnc-WDR67-2	lnc-WDR67-2:1	Upregulated

A_23_P123	0.008661	0.00264	1.7	PDAP1	PDGFA associated protein 1	Upregulated
A_23_P216	0.008954	0.00276	1.7	SLC44A1	solute carrier family 44 (choline transporter), member 1	Upregulated
A_32_P711	0.009133	0.00283	1.7	SCAI	suppressor of cancer cell invasion	Upregulated
A_23_P503	0.01333	0.00464	1.7	FAM32A	family with sequence similarity 32, member A	Upregulated
A_24_P914	0.018847	0.00722	1.7	MKLN1	muskelin 1, intracellular mediator containing kelch motifs	Upregulated
A_32_P102	0.022757	0.00911	1.7	LOC541473	FK506 binding protein 6, 36kDa pseudogene	Upregulated
A_24_P340	0.027809	0.0117	1.7	ZNF621	zinc finger protein 621	Upregulated
A_23_P438	0.042467	0.0197	1.7	KRT24	keratin 24, type I	Upregulated
A_23_P863	0.001199	0.000119	1.69	IER5	immediate early response 5	Upregulated
A_23_P812	0.001216	0.000122	1.69	MRPS18C	mitochondrial ribosomal protein S18C	Upregulated
A_32_P163	0.001279	0.000135	1.69	SGMS1	sphingomyelin synthase 1	Upregulated
A_23_P118	0.001566	0.000195	1.69	GINS2	GINS complex subunit 2 (Psf2 homolog)	Upregulated
A_23_P546	0.00176	0.000239	1.69	KIF22	kinesin family member 22	Upregulated
A_33_P333	0.003543	0.000732	1.69	MSL3	male-specific lethal 3 homolog (Drosophila)	Upregulated
A_23_P213	0.00384	0.000824	1.69	PPARGC1B	peroxisome proliferator-activated receptor gamma, coactivator 1 beta	Upregulated
A_23_P103	0.005933	0.00156	1.69	YY1AP1	YY1 associated protein 1	Upregulated
A_21_P001	0.030178	0.013	1.69	CLUHP3	clustered mitochondria (cluA/CLU1) homolog pseudogene 3	Upregulated
A_32_P507	0.038787	0.0177	1.69	PI4KAP2	phosphatidylinositol 4-kinase, catalytic, alpha pseudogene 2	Upregulated
A_22_P000	0.000905	0.0000621	1.68	lnc-CCDC73-1	lnc-CCDC73-1:1	Upregulated
A_24_P530	0.000947	0.0000694	1.68	SPG7	spastic paraplegia 7 (pure and complicated autosomal recessive)	Upregulated
A_23_P218	0.001126	0.000105	1.68	CRYZL1	crystallin, zeta (quinone reductase)-like 1	Upregulated
A_24_P328	0.001151	0.000109	1.68	TRAPPC11	trafficking protein particle complex 11	Upregulated
A_23_P410	0.00121	0.000121	1.68	GNL3	guanine nucleotide binding protein-like 3 (nucleolar)	Upregulated
A_33_P324	0.001249	0.000129	1.68	DDX19A	DEAD (Asp-Glu-Ala-Asp) box polypeptide 19A	Upregulated
A_23_P252	0.002163	0.000344	1.68	MRPS26	mitochondrial ribosomal protein S26	Upregulated
A_21_P001	0.002221	0.000359	1.68	ZNF663P	zinc finger protein 663, pseudogene	Upregulated
A_23_P312	0.003448	0.000702	1.68	CCDC82	coiled-coil domain containing 82	Upregulated
A_23_P370	0.003701	0.000779	1.68	MCM4	minichromosome maintenance complex component 4	Upregulated
A_23_P211	0.004275	0.000965	1.68	OPA1	optic atrophy 1 (autosomal dominant)	Upregulated
A_23_P167	0.006568	0.0018	1.68	MGAT5	mannosyl (alpha-1,6-)-glycoprotein beta-1,6-N-acetyl-glucosaminyltransferase 5	Upregulated
A_21_P000	0.009091	0.00281	1.68	SNORD107	small nucleolar RNA, C/D box 107	Upregulated
A_23_P503	0.009108	0.00282	1.68	TRIP10	thyroid hormone receptor interactor 10	Upregulated
A_23_P313	0.009711	0.00307	1.68	LRRN3	leucine rich repeat neuronal 3	Upregulated
A_23_P204	0.012732	0.00436	1.68	VEZT	vezatin, adherens junctions transmembrane protein	Upregulated
A_24_P819	0.013059	0.00451	1.68	SLC2A3	solute carrier family 2 (facilitated glucose transporter), member 3	Upregulated
A_33_P378	0.019638	0.0076	1.68	SBNO1	strawberry notch homolog 1 (Drosophila)	Upregulated
A_22_P000	0.023517	0.00951	1.68	lnc-SIAH1-1	lnc-SIAH1-1:1	Upregulated

A_33_P328	0.000908	0.0000626	1.67	CTSA	cathepsin A	Upregulated
A_23_P759	0.000954	0.0000703	1.67	TRAF6	TNF receptor-associated factor 6, E3 ubiquitin protein ligase	Upregulated
A_24_P151	0.000963	0.0000723	1.67	POF1B	premature ovarian failure, 1B	Upregulated
A_23_P914	0.000971	0.0000741	1.67	PSMA7	proteasome (prosome, macropain) subunit, alpha type, 7	Upregulated
A_23_P217	0.000991	0.0000773	1.67	GSTM4	glutathione S-transferase mu 4	Upregulated
A_33_P336	0.001133	0.000106	1.67	MED31	mediator complex subunit 31	Upregulated
A_21_P001	0.001139	0.000107	1.67	GOLGA8K	golgin A8 family, member K	Upregulated
A_33_P326	0.001226	0.000124	1.67	EPG5	ectopic P-granules autophagy protein 5 homolog (C. elegans)	Upregulated
A_23_P334	0.00131	0.00014	1.67	LY75	lymphocyte antigen 75	Upregulated
A_23_P170	0.001528	0.000186	1.67	E2F6	E2F transcription factor 6	Upregulated
A_33_P342	0.00192	0.000279	1.67	YTHDC2	YTH domain containing 2	Upregulated
A_33_P329	0.002442	0.000413	1.67	VPS52	vacuolar protein sorting 52 homolog (S. cerevisiae)	Upregulated
A_24_P889	0.002756	0.000499	1.67	XPC	xeroderma pigmentosum, complementation group C	Upregulated
A_21_P000	0.003094	0.000595	1.67	lnc-DNAJC19	lnc-DNAJC19-2:2	Upregulated
A_33_P332	0.003456	0.000704	1.67	NTRK2	neurotrophic tyrosine kinase, receptor, type 2	Upregulated
A_21_P000	0.004864	0.00117	1.67	SNORD121A	small nucleolar RNA, C/D box 121A	Upregulated
A_23_P226	0.005292	0.00132	1.67	ARMCX1	armadillo repeat containing, X-linked 1	Upregulated
A_33_P325	0.010051	0.00322	1.67	GSTA4	glutathione S-transferase alpha 4	Upregulated
A_21_P000	0.025056	0.0103	1.67	lnc-SCEL-1	lnc-SCEL-1:1	Upregulated
A_23_P900	0.052165	0.0252	1.67	GCDH	glutaryl-CoA dehydrogenase	Upregulated
A_33_P326	0.001046	0.0000877	1.66	CLNK	cytokine-dependent hematopoietic cell linker	Upregulated
A_23_P930	0.001076	0.0000944	1.66	EXOC3	exocyst complex component 3	Upregulated
A_23_P115	0.001158	0.000111	1.66	EIF2B3	eukaryotic translation initiation factor 2B, subunit 3 gamma, 58kDa	Upregulated
A_23_P141	0.001179	0.000115	1.66	FAM222B	family with sequence similarity 222, member B	Upregulated
A_23_P103	0.001226	0.000124	1.66	EBNA1BP2	EBNA1 binding protein 2	Upregulated
A_24_P381	0.001243	0.000128	1.66	GLRX3	glutaredoxin 3	Upregulated
A_23_P390	0.001266	0.000133	1.66	NUPL1	nucleoporin like 1	Upregulated
A_22_P000	0.001702	0.000227	1.66	lnc-CRIPT-1	lnc-CRIPT-1:1	Upregulated
A_23_P130	0.002187	0.000351	1.66	ENO3	enolase 3 (beta, muscle)	Upregulated
A_24_P138	0.002246	0.000367	1.66	SNX20	sorting nexin 20	Upregulated
A_23_P737	0.00241	0.000406	1.66	MED12	mediator complex subunit 12	Upregulated
A_32_P802	0.003195	0.000629	1.66	DDX6	DEAD (Asp-Glu-Ala-Asp) box helicase 6	Upregulated
A_23_P385	0.004321	0.000981	1.66	STX12	syntaxin 12	Upregulated
A_19_P003	0.005243	0.0013	1.66	LOC1005068	uncharacterized LOC100506860	Upregulated
A_23_P138	0.0077	0.00225	1.66	ACTN3	actinin, alpha 3 (gene/pseudogene)	Upregulated
A_24_P333	0.03335	0.0147	1.66	KLK13	kallikrein-related peptidase 13	Upregulated
A_23_P380	0.033613	0.0148	1.66	ARPC4-TTLL	ARPC4-TTLL3 readthrough	Upregulated

A_22_P000	0.000939	0.000068	1.65	CFLAR-AS1	CFLAR antisense RNA 1	Upregulated
A_23_P376	0.00114	0.000108	1.65	FAM21C	family with sequence similarity 21, member C	Upregulated
A_32_P175	0.001158	0.000111	1.65	HK2	hexokinase 2	Upregulated
A_23_P192	0.001551	0.000191	1.65	RPF2	ribosome production factor 2 homolog (S. cerevisiae)	Upregulated
A_33_P332	0.001776	0.000243	1.65	INSIG2	insulin induced gene 2	Upregulated
A_33_P342	0.002483	0.000425	1.65	CLEC16A	C-type lectin domain family 16, member A	Upregulated
A_23_P948	0.00293	0.000546	1.65	NUDT9	nudix (nucleoside diphosphate linked moiety X)-type motif 9	Upregulated
A_22_P000	0.003102	0.000599	1.65	RCL1	RNA terminal phosphate cyclase-like 1	Upregulated
A_23_P502	0.003386	0.000683	1.65	SEC22C	SEC22 vesicle trafficking protein homolog C (S. cerevisiae)	Upregulated
A_33_P325	0.004521	0.00105	1.65	EDN1	endothelin 1	Upregulated
A_23_P128	0.014348	0.0051	1.65	ENOX1	ecto-NOX disulfide-thiol exchanger 1	Upregulated
A_24_P405	0.015919	0.00584	1.65	TTC33	tetratricopeptide repeat domain 33	Upregulated
A_24_P413	0.000949	0.0000698	1.64	TP73	tumor protein p73	Upregulated
A_22_P000	0.001066	0.0000923	1.64	lnc-C17orf63-	lnc-C17orf63-1:1	Upregulated
A_21_P001	0.001158	0.000111	1.64	LOC1027246	uncharacterized LOC102724679	Upregulated
A_24_P151	0.001171	0.000113	1.64	KCNAB2	potassium channel, voltage gated subfamily A regulatory beta subunit 2	Upregulated
A_23_P629	0.001203	0.00012	1.64	ATP1B1	ATPase, Na ⁺ /K ⁺ transporting, beta 1 polypeptide	Upregulated
A_24_P450	0.001437	0.000166	1.64	NPEPL1	aminopeptidase-like 1	Upregulated
A_33_P329	0.001454	0.000171	1.64	SRRT	serrate, RNA effector molecule	Upregulated
A_23_P481	0.001641	0.000212	1.64	TMEM106C	transmembrane protein 106C	Upregulated
A_33_P341	0.002001	0.0003	1.64	SRSF2	serine/arginine-rich splicing factor 2	Upregulated
A_24_P228	0.002117	0.000332	1.64	MRPL40	mitochondrial ribosomal protein L40	Upregulated
A_24_P294	0.003369	0.000679	1.64	SERTAD2	SERTA domain containing 2	Upregulated
A_21_P000	0.006457	0.00176	1.64	lnc-RNPC3-3	lnc-RNPC3-3:1	Upregulated
A_33_P341	0.011556	0.00386	1.64	GAS2L1	growth arrest-specific 2 like 1	Upregulated
A_23_P323	0.013308	0.00462	1.64	SLC5A12	solute carrier family 5 (sodium/monocarboxylate cotransporter), member	Upregulated
A_33_P337	0.031596	0.0137	1.64	TC2N	tandem C2 domains, nuclear	Upregulated
A_33_P333	0.000995	0.0000786	1.63	RNPC3	RNA-binding region (RNP1, RRM) containing 3	Upregulated
A_23_P818	0.001029	0.0000847	1.63	UBD	ubiquitin D	Upregulated
A_23_P127	0.001193	0.000117	1.63	TNNT3	troponin T type 3 (skeletal, fast)	Upregulated
A_33_P339	0.001553	0.000192	1.63	USE1	unconventional SNARE in the ER 1 homolog (S. cerevisiae)	Upregulated
A_24_P140	0.002199	0.000354	1.63	SORBS2	sorbin and SH3 domain containing 2	Upregulated
A_23_P120	0.002357	0.000392	1.63	TTC3	tetratricopeptide repeat domain 3	Upregulated
A_23_P947	0.002549	0.000442	1.63	TOR1B	torsin family 1, member B (torsin B)	Upregulated
A_23_P904	0.003737	0.000792	1.63	LILRA4	leukocyte immunoglobulin-like receptor, subfamily A (with TM domain), nr	Upregulated
A_22_P000	0.003957	0.00086	1.63	lnc-HSPB8-2	lnc-HSPB8-2:1	Upregulated
A_24_P272	0.004251	0.000957	1.63	DENND1A	DENN/MADD domain containing 1A	Upregulated

A_21_P000	0.007789	0.00228	1.63	lnc-EFNB2-2	lnc-EFNB2-2:1	Upregulated
A_22_P000	0.013918	0.0049	1.63	lnc-NLRP12-1	lnc-NLRP12-1:1	Upregulated
A_21_P000	0.016327	0.00605	1.63	lnc-TSN-8	lnc-TSN-8:1	Upregulated
A_22_P000	0.027475	0.0116	1.63	lnc-TBC1D12	lnc-TBC1D12-1:1	Upregulated
A_23_P953	0.033245	0.0146	1.63	RFC5	replication factor C (activator 1) 5, 36.5kDa	Upregulated
A_33_P342	0.059256	0.0294	1.63	PALLD	palladin, cytoskeletal associated protein	Upregulated
A_23_P100	0.000966	0.0000734	1.62	SUZ12	SUZ12 polycomb repressive complex 2 subunit	Upregulated
A_32_P545	0.000995	0.0000781	1.62	CCT6A	chaperonin containing TCP1, subunit 6A (zeta 1)	Upregulated
A_23_P924	0.001062	0.0000909	1.62	UTP3	UTP3, small subunit (SSU) processome component, homolog (S. cerevisiae)	Upregulated
A_24_P438	0.00112	0.000103	1.62	C9orf40	chromosome 9 open reading frame 40	Upregulated
A_33_P340	0.001163	0.000112	1.62	TMF1	TATA element modulatory factor 1	Upregulated
A_23_P178	0.001697	0.000225	1.62	CD82	CD82 molecule	Upregulated
A_21_P000	0.001954	0.000288	1.62	LINC01005	long intergenic non-protein coding RNA 1005	Upregulated
A_32_P215	0.002124	0.000334	1.62	NPIPA1	nuclear pore complex interacting protein family, member A1	Upregulated
A_32_P144	0.002357	0.000392	1.62	NECAP1	NECAP endocytosis associated 1	Upregulated
A_23_P132	0.00308	0.000591	1.62	USP18	ubiquitin specific peptidase 18	Upregulated
A_32_P225	0.005121	0.00126	1.62	EIF3J-AS1	EIF3J antisense RNA 1 (head to head)	Upregulated
A_33_P341	0.006428	0.00175	1.62	SERPING1	serpin peptidase inhibitor, clade G (C1 inhibitor), member 1	Upregulated
A_24_P177	0.008783	0.00269	1.62	GEN1	GEN1 Holliday junction 5' flap endonuclease	Upregulated
A_23_P200	0.010812	0.00353	1.62	CEP85	centrosomal protein 85kDa	Upregulated
A_23_P843	0.000959	0.0000711	1.61	COPS6	COP9 signalosome subunit 6	Upregulated
A_24_P343	0.000995	0.000079	1.61	ATP5J2	ATP synthase, H+ transporting, mitochondrial Fo complex, subunit F2	Upregulated
A_23_P110	0.001062	0.0000911	1.61	CHIC2	cysteine-rich hydrophobic domain 2	Upregulated
A_24_P137	0.001068	0.000093	1.61	ZNF34	zinc finger protein 34	Upregulated
A_23_P880	0.001068	0.0000932	1.61	TBC1D4	TBC1 domain family, member 4	Upregulated
A_32_P171	0.001075	0.0000942	1.61	NBPF10	neuroblastoma breakpoint family, member 10	Upregulated
A_23_P315	0.001087	0.0000963	1.61	KIAA0930	KIAA0930	Upregulated
A_23_P350	0.001098	0.0000985	1.61	REEP5	receptor accessory protein 5	Upregulated
A_23_P133	0.001121	0.000104	1.61	HARS	histidyl-tRNA synthetase	Upregulated
A_23_P930	0.001124	0.000104	1.61	NUS1	nuclear undecaprenyl pyrophosphate synthase 1 homolog (S. cerevisiae)	Upregulated
A_21_P001	0.001222	0.000123	1.61	lnc-TAF9-2	lnc-TAF9-2:1	Upregulated
A_33_P322	0.00124	0.000126	1.61	DOK3	docking protein 3	Upregulated
A_23_P103	0.001235	0.000126	1.61	KTI12	KTI12 homolog, chromatin associated (S. cerevisiae)	Upregulated
A_23_P395	0.001356	0.000149	1.61	UBE2F	ubiquitin-conjugating enzyme E2F (putative)	Upregulated
A_33_P334	0.001824	0.000255	1.61	LOC1001313	uncharacterized LOC100131373	Upregulated
A_23_P140	0.002078	0.000322	1.61	CYFIP1	cytoplasmic FMR1 interacting protein 1	Upregulated
A_33_P332	0.002618	0.000461	1.61	FUBP3	far upstream element (FUSE) binding protein 3	Upregulated

A_23_P383	0.003651	0.000764	1.61	NFKBID	nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibi	Upregulated
A_23_P152	0.004508	0.00104	1.61	SLC6A4	solute carrier family 6 (neurotransmitter transporter), member 4	Upregulated
A_24_P201	0.008442	0.00255	1.61	PPP1R3B	protein phosphatase 1, regulatory subunit 3B	Upregulated
A_33_P332	0.01123	0.00371	1.61	lnc-PAX9-2	lnc-PAX9-2:1	Upregulated
A_23_P429	0.021351	0.00842	1.61	ZNF232	zinc finger protein 232	Upregulated
A_21_P001	0.066164	0.0335	1.61	BMS1P20	BMS1 pseudogene 20	Upregulated
A_23_P145	0.000995	0.0000778	1.6	MED23	mediator complex subunit 23	Upregulated
A_23_P458	0.000995	0.0000791	1.6	CHD1L	chromodomain helicase DNA binding protein 1-like	Upregulated
A_21_P001	0.001029	0.000085	1.6	XLOC_I2_010013		Upregulated
A_22_P000	0.001065	0.0000919	1.6	lnc-SRGAP3-	lnc-SRGAP3-1:21	Upregulated
A_22_P000	0.001133	0.000106	1.6	lnc-CTBP2-1	lnc-CTBP2-1:1	Upregulated
A_23_P129	0.001173	0.000113	1.6	GOLGA2P7	golgin A2 pseudogene 7	Upregulated
A_33_P331	0.001215	0.000122	1.6	ZNRF2	zinc and ring finger 2, E3 ubiquitin protein ligase	Upregulated
A_24_P345	0.001949	0.000286	1.6	XRCC5	X-ray repair complementing defective repair in Chinese hamster cells 5 (Upregulated
A_23_P277	0.001967	0.000292	1.6	FBXO46	F-box protein 46	Upregulated
A_24_P521	0.003176	0.000622	1.6	KLHL24	kelch-like family member 24	Upregulated
A_23_P725	0.004084	0.000898	1.6	KLHL2	kelch-like family member 2	Upregulated
A_33_P330	0.0044	0.00101	1.6	GPX4	glutathione peroxidase 4	Upregulated
A_23_P371	0.004588	0.00107	1.6	DTD2	D-tyrosyl-tRNA deacylase 2 (putative)	Upregulated
A_23_P160	0.006067	0.00161	1.6	PPAN	peter pan homolog (Drosophila)	Upregulated
A_21_P000	0.006553	0.0018	1.6	LINC00882	long intergenic non-protein coding RNA 882	Upregulated
A_23_P693	0.009096	0.00282	1.6	HYAL1	hyaluronoglucosaminidase 1	Upregulated
A_24_P235	0.012945	0.00446	1.6	MTHFD1L	methylenetetrahydrofolate dehydrogenase (NADP+ dependent) 1-like	Upregulated
A_22_P000	0.014197	0.00503	1.6	lnc-TREX1-2	lnc-TREX1-2:1	Upregulated
A_33_P335	0.017622	0.00665	1.6	DUSP8	dual specificity phosphatase 8	Upregulated
A_21_P001	0.000979	0.0000756	1.59	XLOC_I2_015478		Upregulated
A_24_P351	0.000995	0.0000782	1.59	IMMT	inner membrane protein, mitochondrial	Upregulated
A_23_P369	0.001062	0.0000908	1.59	FAM98C	family with sequence similarity 98, member C	Upregulated
A_24_P137	0.001066	0.0000924	1.59	IFRD1	interferon-related developmental regulator 1	Upregulated
A_23_P211	0.001087	0.0000964	1.59	NUP50	nucleoporin 50kDa	Upregulated
A_23_P885	0.001219	0.000123	1.59	ARID3B	AT rich interactive domain 3B (BRIGHT-like)	Upregulated
A_32_P273	0.001341	0.000146	1.59	TCTN3	tectonic family member 3	Upregulated
A_23_P124	0.001393	0.000156	1.59	CHKA	choline kinase alpha	Upregulated
A_33_P323	0.001985	0.000296	1.59	F11R	F11 receptor	Upregulated
A_23_P588	0.002046	0.000314	1.59	GSTM2P1	glutathione S-transferase mu 2 (muscle) pseudogene 1	Upregulated
A_24_P144	0.002232	0.000362	1.59	DHRS4-AS1	DHRS4 antisense RNA 1	Upregulated
A_21_P000	0.002528	0.000437	1.59	lnc-PRKCQ-2	lnc-PRKCQ-2:1	Upregulated

A_33_P335	0.003543	0.000732	1.59	POGZ	pogo transposable element with ZNF domain	Upregulated
A_33_P326	0.005964	0.00157	1.59	MPDU1	mannose-P-dolichol utilization defect 1	Upregulated
A_23_P105	0.009292	0.0029	1.59	TMEM116	transmembrane protein 116	Upregulated
A_21_P000	0.014899	0.00537	1.59	LOC1019293	uncharacterized LOC101929382	Upregulated
A_22_P000	0.017875	0.00676	1.59	lnc-PPM1D-1	lnc-PPM1D-1:1	Upregulated
A_24_P210	0.019849	0.0077	1.59	NME4	NME/NM23 nucleoside diphosphate kinase 4	Upregulated
A_33_P329	0.023681	0.00959	1.59	TCOF1	Treacher Collins-Franceschetti syndrome 1	Upregulated
A_23_P116	0.02952	0.0127	1.59	ATG101	autophagy related 101	Upregulated
A_33_P331	0.040833	0.0188	1.59	AP2A2	adaptor-related protein complex 2, alpha 2 subunit	Upregulated
A_23_P469	0.000995	0.0000779	1.58	HIF1AN	hypoxia inducible factor 1, alpha subunit inhibitor	Upregulated
A_21_P000	0.001004	0.0000805	1.58	LINC01128	long intergenic non-protein coding RNA 1128	Upregulated
A_33_P337	0.001007	0.0000812	1.58	MFAP3	microfibrillar-associated protein 3	Upregulated
A_24_P349	0.001046	0.0000879	1.58	POM121	POM121 transmembrane nucleoporin	Upregulated
A_23_P560	0.001361	0.00015	1.58	DOK1	docking protein 1, 62kDa (downstream of tyrosine kinase 1)	Upregulated
A_33_P322	0.00161	0.000204	1.58	HIST1H2BF	histone cluster 1, H2bf	Upregulated
A_33_P340	0.001854	0.000263	1.58	YWHAE	tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation prc	Upregulated
A_19_P008	0.001859	0.000264	1.58	APTR	Alu-mediated CDKN1A/p21 transcriptional regulator (non-protein coding	Upregulated
A_22_P000	0.002132	0.000338	1.58	lnc-RNF125-3	lnc-RNF125-3:1	Upregulated
A_33_P324	0.003094	0.000596	1.58	KCNE4	potassium channel, voltage gated subfamily E regulatory beta subunit 4	Upregulated
A_23_P271	0.003535	0.000729	1.58	NSRP1	nuclear speckle splicing regulatory protein 1	Upregulated
A_24_P471	0.004579	0.00107	1.58	VCL	vinculin	Upregulated
A_33_P338	0.005554	0.00142	1.58	ANKRD20A1	ankyrin repeat domain 20 family, member A11, pseudogene	Upregulated
A_23_P129	0.005554	0.00142	1.58	EFCAB11	EF-hand calcium binding domain 11	Upregulated
A_22_P000	0.005554	0.00142	1.58	STARD13	StAR-related lipid transfer (START) domain containing 13	Upregulated
A_33_P324	0.02016	0.00785	1.58	DGKK	diacylglycerol kinase, kappa	Upregulated
A_32_P165	0.025419	0.0105	1.58	IQCF2	IQ motif containing F2	Upregulated
A_33_P322	0.031069	0.0135	1.58	RREB1	ras responsive element binding protein 1	Upregulated
A_33_P330	0.000991	0.0000772	1.57	TAPT1	transmembrane anterior posterior transformation 1	Upregulated
A_23_P143	0.001022	0.0000837	1.57	ARHGEF3	Rho guanine nucleotide exchange factor (GEF) 3	Upregulated
A_23_P104	0.001069	0.0000935	1.57	DNAJC9	DnaJ (Hsp40) homolog, subfamily C, member 9	Upregulated
A_21_P001	0.001254	0.00013	1.57	XLOC_I2_001448		Upregulated
A_23_P141	0.00129	0.000136	1.57	SUPT6H	suppressor of Ty 6 homolog (S. cerevisiae)	Upregulated
A_24_P940	0.001453	0.00017	1.57	STK4	serine/threonine kinase 4	Upregulated
A_22_P000	0.001454	0.000171	1.57	lnc-FAM196B	lnc-FAM196B-1:1	Upregulated
A_23_P839	0.001563	0.000194	1.57	KDM2A	lysine (K)-specific demethylase 2A	Upregulated
A_23_P605	0.001581	0.000198	1.57	PRPF4	pre-mRNA processing factor 4	Upregulated
A_23_P214	0.001803	0.000249	1.57	MTRF1L	mitochondrial translational release factor 1-like	Upregulated

A_33_P324	0.005095	0.00125	1.57	VARS	valyl-tRNA synthetase	Upregulated
A_22_P000	0.00608	0.00161	1.57	lnc-PLOD2-2	lnc-PLOD2-2:1	Upregulated
A_23_P326	0.010867	0.00355	1.57	U2AF1L4	U2 small nuclear RNA auxiliary factor 1-like 4	Upregulated
A_23_P108	0.001199	0.000119	1.56	MREG	melanoregulin	Upregulated
A_24_P105	0.001328	0.000144	1.56	AP1S3	adaptor-related protein complex 1, sigma 3 subunit	Upregulated
A_23_P142	0.001528	0.000186	1.56	LILRA2	leukocyte immunoglobulin-like receptor, subfamily A (with TM domain), m	Upregulated
A_24_P223	0.001857	0.000263	1.56	FNDC3B	fibronectin type III domain containing 3B	Upregulated
A_22_P000	0.001912	0.000276	1.56	lnc-SLC12A7	lnc-SLC12A7-1:16	Upregulated
A_23_P114	0.002012	0.000304	1.56	MORF4L2	mortality factor 4 like 2	Upregulated
A_24_P811	0.002258	0.00037	1.56	PPFIBP1	PTPRF interacting protein, binding protein 1 (liprin beta 1)	Upregulated
A_33_P332	0.002659	0.000471	1.56	PHACTR4	phosphatase and actin regulator 4	Upregulated
A_23_P407	0.002951	0.000553	1.56	COMMD2	COMM domain containing 2	Upregulated
A_21_P001	0.003094	0.000595	1.56	XLOC_I2_007967		Upregulated
A_23_P372	0.003877	0.000835	1.56	S100A13	S100 calcium binding protein A13	Upregulated
A_23_P876	0.005765	0.00149	1.56	SART3	squamous cell carcinoma antigen recognized by T cells 3	Upregulated
A_22_P000	0.006367	0.00172	1.56	LINC00460	long intergenic non-protein coding RNA 460	Upregulated
A_33_P327	0.015162	0.00549	1.56	CLTC	clathrin, heavy chain (Hc)	Upregulated
A_33_P339	0.016157	0.00596	1.56	P4HA2	prolyl 4-hydroxylase, alpha polypeptide II	Upregulated
A_33_P322	0.021531	0.0085	1.56	VWA8	von Willebrand factor A domain containing 8	Upregulated
A_24_P187	0.028225	0.012	1.56	BID	BH3 interacting domain death agonist	Upregulated
A_23_P332	0.032256	0.0141	1.56	ARHGEF19	Rho guanine nucleotide exchange factor (GEF) 19	Upregulated
A_24_P256	0.032256	0.0141	1.56	LOC1001282	uncharacterized LOC100128288	Upregulated
A_22_P000	0.001108	0.000101	1.55	CECR7	cat eye syndrome chromosome region, candidate 7 (non-protein coding	Upregulated
A_23_P164	0.001171	0.000113	1.55	ZBTB45	zinc finger and BTB domain containing 45	Upregulated
A_24_P190	0.001297	0.000138	1.55	TMEM97	transmembrane protein 97	Upregulated
A_23_P102	0.001331	0.000144	1.55	BCL2L13	BCL2-like 13 (apoptosis facilitator)	Upregulated
A_33_P352	0.001412	0.000161	1.55	GRPEL1	GrpE-like 1, mitochondrial (E. coli)	Upregulated
A_23_P583	0.001438	0.000166	1.55	C4orf32	chromosome 4 open reading frame 32	Upregulated
A_33_P333	0.002078	0.000322	1.55	DEFB109P1	defensin, beta 109, pseudogene 1	Upregulated
A_23_P954	0.002572	0.00045	1.55	NRXN1	neurexin 1	Upregulated
A_23_P539	0.002625	0.000463	1.55	TP53I3	tumor protein p53 inducible protein 3	Upregulated
A_22_P000	0.003684	0.000774	1.55	C21orf91-OT	C21orf91 overlapping transcript 1	Upregulated
A_33_P341	0.007348	0.0021	1.55	HP1BP3	heterochromatin protein 1, binding protein 3	Upregulated
A_33_P321	0.010348	0.00334	1.55	SMARCAL1	SWI/SNF related, matrix associated, actin dependent regulator of chrom	Upregulated
A_33_P335	0.011193	0.00369	1.55	RNASEH2C	ribonuclease H2, subunit C	Upregulated
A_33_P377	0.011221	0.00371	1.55	GK5	glycerol kinase 5 (putative)	Upregulated
A_33_P326	0.011221	0.00371	1.55	lnc-ELF2-2	lnc-ELF2-2:3	Upregulated

A_33_P339	0.014228	0.00505	1.55	VSIG10L	V-set and immunoglobulin domain containing 10 like	Upregulated
A_22_P000	0.019522	0.00755	1.55	LINC00635	long intergenic non-protein coding RNA 635	Upregulated
A_33_P330	0.030749	0.0133	1.55	PLEKHB1	pleckstrin homology domain containing, family B (evectins) member 1	Upregulated
A_32_P230	0.001049	0.0000883	1.54	GAS5	growth arrest-specific 5 (non-protein coding)	Upregulated
A_32_P149	0.001198	0.000118	1.54	DNAJC18	DnaJ (Hsp40) homolog, subfamily C, member 18	Upregulated
A_23_P244	0.001245	0.000128	1.54	TMEM5	transmembrane protein 5	Upregulated
A_24_P325	0.001429	0.000164	1.54	FAM160B1	family with sequence similarity 160, member B1	Upregulated
A_23_P214	0.001443	0.000167	1.54	MTHFD1L	methylenetetrahydrofolate dehydrogenase (NADP+ dependent) 1-like	Upregulated
A_33_P332	0.001451	0.000169	1.54	RAB3IP	RAB3A interacting protein	Upregulated
A_33_P328	0.001469	0.000174	1.54	MLLT1	myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, Drosophila)	Upregulated
A_33_P364	0.001753	0.000237	1.54	PDCD4-AS1	PDCD4 antisense RNA 1	Upregulated
A_21_P001	0.001809	0.000251	1.54	LOC729815	uncharacterized LOC729815	Upregulated
A_22_P000	0.001812	0.000252	1.54	lnc-WNT11-2	lnc-WNT11-2:1	Upregulated
A_24_P908	0.001881	0.000269	1.54	THUMPD1	THUMP domain containing 1	Upregulated
A_23_P884	0.002163	0.000344	1.54	INTS9	integrator complex subunit 9	Upregulated
A_23_P906	0.002172	0.000347	1.54	MCM6	minichromosome maintenance complex component 6	Upregulated
A_23_P139	0.004971	0.0012	1.54	RSF1	remodeling and spacing factor 1	Upregulated
A_23_P334	0.007108	0.00201	1.54	FAM126B	family with sequence similarity 126, member B	Upregulated
A_23_P200	0.011035	0.00362	1.54	MAGOH	mago-nashi homolog, proliferation-associated (Drosophila)	Upregulated
A_33_P321	0.013879	0.00488	1.54	ANKRD36	ankyrin repeat domain 36	Upregulated
A_32_P154	0.015315	0.00556	1.54	RNF185	ring finger protein 185	Upregulated
A_33_P338	0.024963	0.0103	1.54	TBC1D3B	TBC1 domain family, member 3B	Upregulated
A_32_P103	0.033635	0.0148	1.54	MCM2	minichromosome maintenance complex component 2	Upregulated
A_21_P001	0.040788	0.0188	1.54	GS1-259H13	transmembrane protein 225-like	Upregulated
A_23_P337	0.059984	0.0298	1.54	TOM1L2	target of myb1-like 2 (chicken)	Upregulated
A_33_P339	0.001092	0.0000974	1.53	ATL2	atlastin GTPase 2	Upregulated
A_24_P113	0.001105	0.0001	1.53	SLC35E2	solute carrier family 35, member E2	Upregulated
A_21_P000	0.001201	0.000119	1.53	SNHG4	small nucleolar RNA host gene 4 (non-protein coding)	Upregulated
A_33_P326	0.001243	0.000128	1.53	CSNK1G1	casein kinase 1, gamma 1	Upregulated
A_23_P208	0.00129	0.000136	1.53	MAP2K2	mitogen-activated protein kinase kinase 2	Upregulated
A_23_P581	0.001415	0.000162	1.53	EXOSC7	exosome component 7	Upregulated
A_23_P123	0.001476	0.000175	1.53	EXOSC3	exosome component 3	Upregulated
A_22_P000	0.00261	0.000459	1.53	lnc-SH3RF2-1	lnc-SH3RF2-1:1	Upregulated
A_33_P324	0.002696	0.000482	1.53	SLC7A11	solute carrier family 7 (anionic amino acid transporter light chain, xc- system)	Upregulated
A_33_P353	0.002967	0.000558	1.53	C1QTNF9B-A	C1QTNF9B antisense RNA 1	Upregulated
A_24_P350	0.00343	0.000697	1.53	TNIK	TRAF2 and NCK interacting kinase	Upregulated
A_32_P163	0.003648	0.000763	1.53	VDAC1	voltage-dependent anion channel 1	Upregulated

A_33_P333	0.004156	0.000923	1.53	METTL10	methyltransferase like 10	Upregulated
A_24_P982	0.005207	0.00129	1.53	VPS13B	vacuolar protein sorting 13 homolog B (yeast)	Upregulated
A_33_P322	0.005457	0.00138	1.53	MIER2	mesoderm induction early response 1, family member 2	Upregulated
A_21_P000	0.005502	0.0014	1.53	lnc-ZNF486-1	lnc-ZNF486-1:1	Upregulated
A_33_P336	0.007778	0.00228	1.53	TMEM194B	transmembrane protein 194B	Upregulated
A_22_P000	0.007958	0.00235	1.53	lnc-IRX2-5	lnc-IRX2-5:1	Upregulated
A_33_P334	0.015738	0.00576	1.53	RC3H2	ring finger and CCCH-type domains 2	Upregulated
A_23_P410	0.023814	0.00967	1.53	TEX264	testis expressed 264	Upregulated
A_23_P168	0.02435	0.00995	1.53	FBXO16	F-box protein 16	Upregulated
A_32_P790	0.029856	0.0128	1.53	KATNAL2	katanin p60 subunit A-like 2	Upregulated
A_23_P211	0.047957	0.0228	1.53	TGFBR2	transforming growth factor, beta receptor II (70/80kDa)	Upregulated
A_23_P162	0.059037	0.0293	1.53	SERPINE3	serpin peptidase inhibitor, clade E (nexin, plasminogen activator inhibitor 3) member 3	Upregulated
A_23_P133	0.001062	0.000909	1.52	TCERG1	transcription elongation regulator 1	Upregulated
A_33_P323	0.00114	0.000107	1.52	HIF1A	hypoxia inducible factor 1, alpha subunit (basic helix-loop-helix transcription factor)	Upregulated
A_24_P305	0.00115	0.000109	1.52	LEMD2	LEM domain containing 2	Upregulated
A_22_P000	0.001154	0.00011	1.52	lnc-RP11-392	lnc-RP11-392O18.1.1-2:1	Upregulated
A_33_P341	0.001197	0.000118	1.52	RLIM	ring finger protein, LIM domain interacting	Upregulated
A_23_P256	0.001253	0.00013	1.52	TRAPPC12	trafficking protein particle complex 12	Upregulated
A_23_P222	0.001394	0.000157	1.52	EIF4EBP1	eukaryotic translation initiation factor 4E binding protein 1	Upregulated
A_23_P329	0.001409	0.000161	1.52	ILF3	interleukin enhancer binding factor 3, 90kDa	Upregulated
A_22_P000	0.001498	0.00018	1.52	lnc-GRID2IP-1	lnc-GRID2IP-1:1	Upregulated
A_23_P314	0.001668	0.000217	1.52	LEO1	Leo1, Paf1/RNA polymerase II complex component, homolog (S. cerevisiae)	Upregulated
A_33_P329	0.001751	0.000236	1.52	SMC1A	structural maintenance of chromosomes 1A	Upregulated
A_22_P000	0.001954	0.000288	1.52	TUG1	taurine up-regulated 1 (non-protein coding)	Upregulated
A_33_P331	0.003287	0.000655	1.52	NUS1	nuclear undecaprenyl pyrophosphate synthase 1 homolog (S. cerevisiae)	Upregulated
A_23_P416	0.004301	0.000973	1.52	TAS2R31	taste receptor, type 2, member 31	Upregulated
A_23_P145	0.00479	0.00114	1.52	ZNF318	zinc finger protein 318	Upregulated
A_23_P253	0.006568	0.0018	1.52	FAM175A	family with sequence similarity 175, member A	Upregulated
A_33_P339	0.00733	0.0021	1.52	ZNF441	zinc finger protein 441	Upregulated
A_24_P303	0.007614	0.00221	1.52	CXCL10	chemokine (C-X-C motif) ligand 10	Upregulated
A_22_P000	0.013997	0.00493	1.52	LOC1019277	uncharacterized LOC101927793	Upregulated
A_19_P003	0.015108	0.00547	1.52	LOC1005059	uncharacterized LOC100505920	Upregulated
A_33_P338	0.015108	0.00547	1.52	PLB1	phospholipase B1	Upregulated
A_22_P000	0.029471	0.0126	1.52	lnc-TYMS-2	lnc-TYMS-2:1	Upregulated
A_33_P335	0.031902	0.0139	1.52	SUV420H2	suppressor of variegation 4-20 homolog 2 (Drosophila)	Upregulated
A_22_P000	0.039388	0.018	1.52	lnc-ZNF790-1	lnc-ZNF790-1:1	Upregulated
A_22_P000	0.040403	0.0186	1.52	LOC1019291	uncharacterized LOC101929172	Upregulated

A_21_P000	0.00104	0.0000865	1.51	lnc-ZFP36L1-	lnc-ZFP36L1-1:1	Upregulated
A_23_P215	0.001047	0.0000881	1.51	ATP5J2	ATP synthase, H ⁺ transporting, mitochondrial Fo complex, subunit F2	Upregulated
A_23_P339	0.001052	0.0000889	1.51	HAT1	histone acetyltransferase 1	Upregulated
A_32_P950	0.001055	0.0000897	1.51	AK4	adenylate kinase 4	Upregulated
A_24_P161	0.001105	0.0001	1.51	ZFAS1	ZNFX1 antisense RNA 1	Upregulated
A_33_P334	0.001107	0.000101	1.51	OPA1	optic atrophy 1 (autosomal dominant)	Upregulated
A_23_P341	0.001134	0.000106	1.51	KLHL21	kelch-like family member 21	Upregulated
A_24_P928	0.001203	0.00012	1.51	LMAN2	lectin, mannose-binding 2	Upregulated
A_23_P976	0.00124	0.000127	1.51	RRAGC	Ras-related GTP binding C	Upregulated
A_23_P735	0.001458	0.000172	1.51	ARAF	A-Raf proto-oncogene, serine/threonine kinase	Upregulated
A_23_P468	0.002167	0.000346	1.51	BTRC	beta-transducin repeat containing E3 ubiquitin protein ligase	Upregulated
A_23_P742	0.003316	0.000665	1.51	SRM	spermidine synthase	Upregulated
A_33_P334	0.003631	0.000758	1.51	ZBTB38	zinc finger and BTB domain containing 38	Upregulated
A_23_P782	0.003706	0.000781	1.51	FAM26F	family with sequence similarity 26, member F	Upregulated
A_33_P330	0.00419	0.000935	1.51	KIAA1841	KIAA1841	Upregulated
A_22_P000	0.004196	0.000937	1.51	lnc-TMED5-1	lnc-TMED5-1:27	Upregulated
A_32_P730	0.004748	0.00113	1.51	CMAS	cytidine monophosphate N-acetylneuraminic acid synthetase	Upregulated
A_32_P589	0.00479	0.00114	1.51	MBTD1	mbt domain containing 1	Upregulated
A_33_P341	0.004841	0.00116	1.51	C7orf60	chromosome 7 open reading frame 60	Upregulated
A_21_P000	0.010047	0.00321	1.51	lnc-SOX6-1	lnc-SOX6-1:1	Upregulated
A_33_P342	0.011268	0.00373	1.51	RSU1	Ras suppressor protein 1	Upregulated
A_23_P941	0.036858	0.0166	1.51	RAD54B	RAD54 homolog B (<i>S. cerevisiae</i>)	Upregulated
A_21_P001	0.041579	0.0192	1.51	XLOC_I2_010348		Upregulated
A_22_P000	0.051415	0.0248	1.51	lnc-CNOT7-1	lnc-CNOT7-1:1	Upregulated
A_22_P000	0.001115	0.000102	1.5	LOC1019271	uncharacterized LOC101927104	Upregulated
A_33_P321	0.001171	0.000113	1.5	RCC2	regulator of chromosome condensation 2	Upregulated
A_23_P201	0.001336	0.000145	1.5	CREM	cAMP responsive element modulator	Upregulated
A_21_P000	0.00142	0.000163	1.5	USP12-AS2	USP12 antisense RNA 2 (head to head)	Upregulated
A_22_P000	0.001476	0.000175	1.5	FAM155A-IT1	FAM155A intronic transcript 1 (non-protein coding)	Upregulated
A_19_P008	0.00168	0.00022	1.5	lnc-OSTC-2	lnc-OSTC-2:1	Upregulated
A_33_P366	0.00168	0.00022	1.5	LOC284669	uncharacterized LOC284669	Upregulated
A_24_P277	0.002096	0.000325	1.5	CNPY3	canopy FGF signaling regulator 3	Upregulated
A_23_P251	0.0021	0.000326	1.5	NSUN5	NOP2/Sun domain family, member 5	Upregulated
A_22_P000	0.00293	0.000546	1.5	lnc-MTHFR-2	lnc-MTHFR-2:1	Upregulated
A_22_P000	0.002941	0.000549	1.5	lnc-INPPL1-1	lnc-INPPL1-1:1	Upregulated
A_24_P231	0.003889	0.000839	1.5	BOD1L1	biorientation of chromosomes in cell division 1-like 1	Upregulated
A_24_P261	0.006914	0.00193	1.5	VPRBP	Vpr (HIV-1) binding protein	Upregulated

A_23_P324	0.01058	0.00343	1.5	DISP2	dispatched homolog 2 (Drosophila)	Upregulated
A_24_P385	0.019404	0.0075	1.5	NOL6	nucleolar protein 6 (RNA-associated)	Upregulated
A_23_P430	0.023487	0.00949	1.5	INTS8	integrator complex subunit 8	Upregulated
A_21_P000	0.023986	0.00976	1.5	lnc-RASA1-3	lnc-RASA1-3:1	Upregulated
A_23_P140	0.031297	0.0136	1.5	MYO5C	myosin VC	Upregulated
A_32_P212	0.031758	0.0138	1.5	CEP19	centrosomal protein 19kDa	Upregulated
A_21_P000	0.0352	0.0157	1.5	NKAPP1	NFKB activating protein pseudogene 1	Upregulated
A_33_P326	0.044346	0.0208	1.5	TDRD10	tudor domain containing 10	Upregulated
A_23_P215	0.00126	0.000131	1.49	AHR	aryl hydrocarbon receptor	Upregulated
A_23_P102	0.001333	0.000145	1.49	SSFA2	sperm specific antigen 2	Upregulated
A_23_P168	0.001443	0.000168	1.49	HERPUD2	HERPUD family member 2	Upregulated
A_33_P329	0.001478	0.000176	1.49	DCAF16	DDB1 and CUL4 associated factor 16	Upregulated
A_32_P749	0.001548	0.00019	1.49	EIF1AD	eukaryotic translation initiation factor 1A domain containing	Upregulated
A_21_P001	0.0017	0.000226	1.49	XLOC_I2_001967		Upregulated
A_33_P331	0.002258	0.00037	1.49	RBMS1	RNA binding motif, single stranded interacting protein 1	Upregulated
A_32_P687	0.00376	0.000798	1.49	SMU1	smu-1 suppressor of mec-8 and unc-52 homolog (C. elegans)	Upregulated
A_19_P008	0.004094	0.000902	1.49	lnc-HIST1H1A	lnc-HIST1H1A-1:2	Upregulated
A_22_P000	0.0056	0.00143	1.49	LOC1019289	uncharacterized LOC101928989	Upregulated
A_22_P000	0.007045	0.00199	1.49	lnc-C9orf163	lnc-C9orf163-1:1	Upregulated
A_23_P207	0.009601	0.00302	1.49	RNFT1	ring finger protein, transmembrane 1	Upregulated
A_21_P000	0.012808	0.0044	1.49	lnc-CHL1-1	lnc-CHL1-1:3	Upregulated
A_22_P000	0.048098	0.0229	1.49	LOC1001313	uncharacterized LOC100131315	Upregulated
A_23_P551	0.001076	0.0000945	1.48	EFTUD2	elongation factor Tu GTP binding domain containing 2	Upregulated
A_23_P562	0.001243	0.000128	1.48	GMIP	GEM interacting protein	Upregulated
A_23_P113	0.00142	0.000163	1.48	ATP6AP2	ATPase, H+ transporting, lysosomal accessory protein 2	Upregulated
A_23_P311	0.001821	0.000255	1.48	MITD1	MIT, microtubule interacting and transport, domain containing 1	Upregulated
A_23_P828	0.001827	0.000257	1.48	PINX1	PIN2/TERF1 interacting, telomerase inhibitor 1	Upregulated
A_32_P233	0.002078	0.000322	1.48	FAM133B	family with sequence similarity 133, member B	Upregulated
A_33_P336	0.003155	0.000615	1.48	PAM	peptidylglycine alpha-amidating monooxygenase	Upregulated
A_23_P215	0.003751	0.000796	1.48	TYW1	tRNA-yW synthesizing protein 1 homolog (S. cerevisiae)	Upregulated
A_23_P376	0.003909	0.000845	1.48	CLYBL	citrate lyase beta like	Upregulated
A_33_P322	0.006617	0.00182	1.48	HERC2P10	hect domain and RLD 2 pseudogene 10	Upregulated
A_23_P110	0.006606	0.00182	1.48	HERC5	HECT and RLD domain containing E3 ubiquitin protein ligase 5	Upregulated
A_33_P337	0.011063	0.00364	1.48	TNPO3	transportin 3	Upregulated
A_23_P677	0.016609	0.00618	1.48	SPAG16	sperm associated antigen 16	Upregulated
A_23_P303	0.025744	0.0107	1.48	CRYBG3	beta-gamma crystallin domain containing 3	Upregulated
A_33_P340	0.001376	0.000153	1.47	PPM1B	protein phosphatase, Mg2+/Mn2+ dependent, 1B	Upregulated

A_23_P205	0.001795	0.000247	1.47	MAP4K5	mitogen-activated protein kinase kinase kinase kinase 5	Upregulated
A_23_P146	0.002696	0.000482	1.47	BAG1	BCL2-associated athanogene	Upregulated
A_19_P008	0.002984	0.000563	1.47	lnc-GXYLT1-2	lnc-GXYLT1-2:1	Upregulated
A_32_P234	0.004162	0.000926	1.47	ARMC1	armadillo repeat containing 1	Upregulated
A_22_P000	0.00605	0.0016	1.47	LOC1019275	uncharacterized LOC101927518	Upregulated
A_23_P205	0.007407	0.00213	1.47	NR2E3	nuclear receptor subfamily 2, group E, member 3	Upregulated
A_32_P201	0.008875	0.00272	1.47	HECTD2	HECT domain containing E3 ubiquitin protein ligase 2	Upregulated
A_33_P321	0.009576	0.00301	1.47	TYW1	tRNA-yW synthesizing protein 1 homolog (S. cerevisiae)	Upregulated
A_24_P127	0.011428	0.0038	1.47	CLASP2	cytoplasmic linker associated protein 2	Upregulated
A_22_P000	0.012965	0.00447	1.47	lnc-PHKB-5	lnc-PHKB-5:1	Upregulated
A_22_P000	0.016831	0.00629	1.47	LINC00443	long intergenic non-protein coding RNA 443	Upregulated
A_33_P369	0.01825	0.00695	1.47	LHFPL3-AS2	LHFPL3 antisense RNA 2	Upregulated
A_23_P977	0.036455	0.0164	1.47	TXNIP	thioredoxin interacting protein	Upregulated
A_22_P000	0.039243	0.0179	1.47	lnc-YWHAZ-1	lnc-YWHAZ-1:1	Upregulated
A_33_P325	0.001108	0.000101	1.46	C16orf91	chromosome 16 open reading frame 91	Upregulated
A_23_P405	0.001215	0.000122	1.46	CDC14A	cell division cycle 14A	Upregulated
A_23_P686	0.001354	0.000149	1.46	ADRM1	adhesion regulating molecule 1	Upregulated
A_33_P338	0.001394	0.000156	1.46	AKT2	v-akt murine thymoma viral oncogene homolog 2	Upregulated
A_23_P147	0.001721	0.000231	1.46	ADPGK	ADP-dependent glucokinase	Upregulated
A_32_P788	0.001763	0.00024	1.46	PSPH	phosphoserine phosphatase	Upregulated
A_23_P164	0.00188	0.000269	1.46	MFAP4	microfibrillar-associated protein 4	Upregulated
A_33_P339	0.002067	0.000318	1.46	ZNF420	zinc finger protein 420	Upregulated
A_22_P000	0.002351	0.000391	1.46	lnc-NMNAT1-3	lnc-NMNAT1-3:1	Upregulated
A_21_P001	0.002361	0.000394	1.46	XLOC_I2_012870		Upregulated
A_33_P337	0.002667	0.000474	1.46	MITD1	MIT, microtubule interacting and transport, domain containing 1	Upregulated
A_24_P294	0.003323	0.000667	1.46	TMEM14B	transmembrane protein 14B	Upregulated
A_21_P000	0.003878	0.000836	1.46	SNORD49A	small nucleolar RNA, C/D box 49A	Upregulated
A_21_P001	0.005496	0.00139	1.46	THEGL	theg spermatid protein-like	Upregulated
A_33_P332	0.006945	0.00195	1.46	ZNF615	zinc finger protein 615	Upregulated
A_23_P203	0.007867	0.00231	1.46	SCARB1	scavenger receptor class B, member 1	Upregulated
A_22_P000	0.009276	0.00289	1.46	lnc-TNN-1	lnc-TNN-1:1	Upregulated
A_23_P412	0.016749	0.00625	1.46	MFSD10	major facilitator superfamily domain containing 10	Upregulated
A_23_P582	0.001117	0.000103	1.45	GAR1	GAR1 ribonucleoprotein	Upregulated
A_22_P000	0.001135	0.000107	1.45	lnc-KLLN-1	lnc-KLLN-1:1	Upregulated
A_33_P337	0.001135	0.000107	1.45	MLLT6	myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, Drosophila)	Upregulated
A_33_P321	0.001187	0.000116	1.45	INSIG1	insulin induced gene 1	Upregulated
A_33_P335	0.00125	0.000129	1.45	NUSAP1	nucleolar and spindle associated protein 1	Upregulated

A_23_P391	0.001365	0.000151	1.45	IVNS1ABP	influenza virus NS1A binding protein	Upregulated
A_23_P255	0.001386	0.000155	1.45	DAPP1	dual adaptor of phosphotyrosine and 3-phosphoinositides	Upregulated
A_33_P338	0.001396	0.000157	1.45	SNX30	sorting nexin family member 30	Upregulated
A_33_P335	0.001415	0.000162	1.45	SLAMF1	signaling lymphocytic activation molecule family member 1	Upregulated
A_22_P000	0.001522	0.000185	1.45	BTG1	B-cell translocation gene 1, anti-proliferative	Upregulated
A_33_P325	0.001594	0.000199	1.45	SLC36A1	solute carrier family 36 (proton/amino acid symporter), member 1	Upregulated
A_32_P191	0.00165	0.000213	1.45	SETD8	SET domain containing (lysine methyltransferase) 8	Upregulated
A_23_P132	0.001848	0.000261	1.45	TPST2	tyrosylprotein sulfotransferase 2	Upregulated
A_22_P000	0.003109	0.000602	1.45	lnc-FAM129B	lnc-FAM129B-1:1	Upregulated
A_33_P339	0.007045	0.00199	1.45	BRWD1	bromodomain and WD repeat domain containing 1	Upregulated
A_24_P383	0.007257	0.00207	1.45	KRTAP13-1	keratin associated protein 13-1	Upregulated
A_33_P328	0.017536	0.00661	1.45	ZNF778	zinc finger protein 778	Upregulated
A_23_P866	0.001173	0.000113	1.44	SRGN	serglycin	Upregulated
A_33_P331	0.001187	0.000116	1.44	BTNL9	butyrophilin-like 9	Upregulated
A_23_P142	0.001187	0.000116	1.44	GRWD1	glutamate-rich WD repeat containing 1	Upregulated
A_33_P327	0.001263	0.000132	1.44	ZNF701	zinc finger protein 701	Upregulated
A_22_P000	0.001341	0.000146	1.44	lnc-OIT3-2	lnc-OIT3-2:1	Upregulated
A_33_P325	0.001616	0.000205	1.44	SEC22C	SEC22 vesicle trafficking protein homolog C (S. cerevisiae)	Upregulated
A_23_P167	0.001697	0.000225	1.44	RNF4	ring finger protein 4	Upregulated
A_33_P321	0.001784	0.000245	1.44	FAM3A	family with sequence similarity 3, member A	Upregulated
A_23_P408	0.001785	0.000245	1.44	MXD1	MAX dimerization protein 1	Upregulated
A_22_P000	0.001861	0.000264	1.44	TAF10	TAF10 RNA polymerase II, TATA box binding protein (TBP)-associated i	Upregulated
A_23_P132	0.001959	0.00029	1.44	PES1	pescadillo ribosomal biogenesis factor 1	Upregulated
A_23_P857	0.002021	0.000306	1.44	GNPAT	glyceronephosphate O-acyltransferase	Upregulated
A_23_P134	0.002579	0.000452	1.44	CDYL	chromodomain protein, Y-like	Upregulated
A_23_P138	0.002687	0.000479	1.44	NOC2L	nucleolar complex associated 2 homolog (S. cerevisiae)	Upregulated
A_24_P101	0.002794	0.000508	1.44	NOP56	NOP56 ribonucleoprotein	Upregulated
A_23_P266	0.002832	0.000519	1.44	NMRAL1	NmrA-like family domain containing 1	Upregulated
A_23_P302	0.003036	0.000579	1.44	IPO11	importin 11	Upregulated
A_23_P521	0.003595	0.000748	1.44	ACBD6	acyl-CoA binding domain containing 6	Upregulated
A_23_P208	0.004582	0.00107	1.44	SEMA6B	sema domain, transmembrane domain (TM), and cytoplasmic domain, (s	Upregulated
A_23_P316	0.00479	0.00114	1.44	ZBED6CL	ZBED6 C-terminal like	Upregulated
A_23_P543	0.00812	0.00241	1.44	MEGF11	multiple EGF-like-domains 11	Upregulated
A_33_P331	0.014594	0.00522	1.44	ZDHHC8	zinc finger, DHHC-type containing 8	Upregulated
A_33_P324	0.019729	0.00764	1.44	EMR4P	egf-like module containing, mucin-like, hormone receptor-like 4 pseudog	Upregulated
A_21_P001	0.029345	0.0125	1.44	LOC1019283	uncharacterized LOC10192831	Upregulated
A_33_P330	0.037574	0.017	1.44	PDPR	pyruvate dehydrogenase phosphatase regulatory subunit	Upregulated

A_19_P008	0.037658	0.0171	1.44	NASP	nuclear autoantigenic sperm protein (histone-binding)	Upregulated
A_21_P000	0.049868	0.0239	1.44	lnc-FAM53A-2	lnc-FAM53A-2:1	Upregulated
A_23_P387	0.061638	0.0308	1.44	CDH2	cadherin 2, type 1, N-cadherin (neuronal)	Upregulated
A_32_P108	0.001173	0.000114	1.43	MIR155HG	MIR155 host gene (non-protein coding)	Upregulated
A_23_P215	0.001226	0.000124	1.43	POLR2J3	polymerase (RNA) II (DNA directed) polypeptide J3	Upregulated
A_23_P494	0.001322	0.000142	1.43	ST6GALNAC	ST6 (alpha-N-acetyl-neuraminyl-2,3-beta-galactosyl-1,3)-N-acetylgalacto	Upregulated
A_23_P205	0.001344	0.000147	1.43	GABPB1	GA binding protein transcription factor, beta subunit 1	Upregulated
A_23_P851	0.001359	0.00015	1.43	ARMCX5	armadillo repeat containing, X-linked 5	Upregulated
A_23_P206	0.001398	0.000158	1.43	DNAJA4	DnaJ (Hsp40) homolog, subfamily A, member 4	Upregulated
A_24_P723	0.001404	0.00016	1.43	RBAK	RB-associated KRAB zinc finger	Upregulated
A_33_P324	0.001458	0.000171	1.43	PANK3	pantothenate kinase 3	Upregulated
A_21_P000	0.001499	0.00018	1.43	SNORA5B	small nucleolar RNA, H/ACA box 5B	Upregulated
A_23_P140	0.001522	0.000185	1.43	FBXL3	F-box and leucine-rich repeat protein 3	Upregulated
A_32_P685	0.002113	0.000331	1.43	ZDBF2	zinc finger, DBF-type containing 2	Upregulated
A_33_P333	0.002184	0.00035	1.43	LOC1019278	uncharacterized LOC101927838	Upregulated
A_23_P709	0.003175	0.000622	1.43	UMAD1	UBAP1-MVB12-associated (UMA) domain containing 1	Upregulated
A_33_P339	0.003461	0.000706	1.43	C2orf50	chromosome 2 open reading frame 50	Upregulated
A_21_P001	0.005389	0.00136	1.43	lnc-ABHD12B	lnc-ABHD12B-5:1	Upregulated
A_33_P333	0.008161	0.00243	1.43	PDE1C	phosphodiesterase 1C, calmodulin-dependent 70kDa	Upregulated
A_33_P326	0.008344	0.00251	1.43	RHEBL1	Ras homolog enriched in brain like 1	Upregulated
A_33_P331	0.012521	0.00427	1.43	FBXL17	F-box and leucine-rich repeat protein 17	Upregulated
A_23_P214	0.015734	0.00575	1.43	CNR1	cannabinoid receptor 1 (brain)	Upregulated
A_23_P494	0.015734	0.00575	1.43	LOC81691	exonuclease NEF-sp	Upregulated
A_22_P000	0.066456	0.0337	1.43	lnc-COX17-1	lnc-COX17-1:1	Upregulated
A_21_P000	0.001157	0.00011	1.42	lnc-CADM2-5	lnc-CADM2-5:1	Upregulated
A_23_P412	0.001157	0.00011	1.42	TGM4	transglutaminase 4	Upregulated
A_24_P332	0.001211	0.000121	1.42	RPL7L1	ribosomal protein L7-like 1	Upregulated
A_33_P335	0.001227	0.000124	1.42	PPAPDC1B	phosphatidic acid phosphatase type 2 domain containing 1B	Upregulated
A_23_P256	0.001263	0.000132	1.42	GOLGA4	golgin A4	Upregulated
A_33_P321	0.001479	0.000176	1.42	ZNF777	zinc finger protein 777	Upregulated
A_24_P282	0.001541	0.000189	1.42	SSR2	signal sequence receptor, beta (translocon-associated protein beta)	Upregulated
A_23_P202	0.001604	0.000202	1.42	MAP2K1	mitogen-activated protein kinase kinase 1	Upregulated
A_23_P320	0.001626	0.000208	1.42	BUB3	BUB3 mitotic checkpoint protein	Upregulated
A_33_P328	0.00188	0.000269	1.42	SMCO1	single-pass membrane protein with coiled-coil domains 1	Upregulated
A_24_P185	0.002179	0.000349	1.42	DMD	dystrophin	Upregulated
A_33_P335	0.002535	0.000439	1.42	HSPB1	heat shock 27kDa protein 1	Upregulated
A_23_P141	0.00264	0.000467	1.42	C17orf49	chromosome 17 open reading frame 49	Upregulated

A_23_P423	0.003001	0.000568	1.42	CREB3	cAMP responsive element binding protein 3	Upregulated
A_33_P336	0.003474	0.000709	1.42	AGPAT2	1-acylglycerol-3-phosphate O-acyltransferase 2	Upregulated
A_22_P000	0.004746	0.00113	1.42	OXCT1-AS1	OXCT1 antisense RNA 1	Upregulated
A_23_P218	0.005135	0.00126	1.42	POLQ	polymerase (DNA directed), theta	Upregulated
A_33_P329	0.006015	0.00159	1.42	ZNF550	zinc finger protein 550	Upregulated
A_23_P126	0.006861	0.00191	1.42	TNFSF4	tumor necrosis factor (ligand) superfamily, member 4	Upregulated
A_23_P891	0.008774	0.00268	1.42	EXOC7	exocyst complex component 7	Upregulated
A_23_P357	0.008875	0.00272	1.42	RPS6KA4	ribosomal protein S6 kinase, 90kDa, polypeptide 4	Upregulated
A_24_P701	0.009801	0.00311	1.42	BVES-AS1	BVES antisense RNA 1	Upregulated
A_33_P322	0.015865	0.00581	1.42	PRH2	proline-rich protein HaeIII subfamily 2	Upregulated
A_21_P001	0.016021	0.00589	1.42	LINC00539	long intergenic non-protein coding RNA 539	Upregulated
A_24_P332	0.022982	0.00923	1.42	JAKMIP3	Janus kinase and microtubule interacting protein 3	Upregulated
A_21_P000	0.025809	0.0107	1.42	LOC1019287	uncharacterized LOC101928739	Upregulated
A_33_P324	0.027568	0.0116	1.42	PIBF1	progesterone immunomodulatory binding factor 1	Upregulated
A_21_P001	0.034251	0.0152	1.42	XLOC_I2_004843		Upregulated
A_19_P003	0.034839	0.0155	1.42	LINC00963	long intergenic non-protein coding RNA 963	Upregulated
A_33_P324	0.042922	0.02	1.42	NRK	Nik related kinase	Upregulated
A_33_P337	0.050416	0.0242	1.42	TDRD1	tudor domain containing 1	Upregulated
A_33_P344	0.00118	0.000115	1.41	PPP6R3	protein phosphatase 6, regulatory subunit 3	Upregulated
A_23_P117	0.001203	0.00012	1.41	PRDM4	PR domain containing 4	Upregulated
A_23_P209	0.00121	0.000121	1.41	CD22	CD22 molecule	Upregulated
A_21_P000	0.001242	0.000127	1.41	SNORA5A	small nucleolar RNA, H/ACA box 5A	Upregulated
A_22_P000	0.00129	0.000136	1.41	lnc-SLC25A3	lnc-SLC25A37-1:1	Upregulated
A_33_P326	0.001342	0.000147	1.41	PGAM1	phosphoglycerate mutase 1 (brain)	Upregulated
A_23_P121	0.001398	0.000158	1.41	GBE1	glucan (1,4-alpha-), branching enzyme 1	Upregulated
A_19_P008	0.001448	0.000169	1.41	PPA1	pyrophosphatase (inorganic) 1	Upregulated
A_33_P334	0.0015	0.000181	1.41	EDRF1	erythroid differentiation regulatory factor 1	Upregulated
A_23_P105	0.001693	0.000223	1.41	CHPT1	choline phosphotransferase 1	Upregulated
A_32_P179	0.001779	0.000244	1.41	TOB2	transducer of ERBB2, 2	Upregulated
A_33_P329	0.002005	0.000301	1.41	DEGS1	delta(4)-desaturase, sphingolipid 1	Upregulated
A_33_P356	0.002112	0.00033	1.41	MAD1L1	MAD1 mitotic arrest deficient-like 1 (yeast)	Upregulated
A_23_P485	0.002113	0.000331	1.41	C14orf93	chromosome 14 open reading frame 93	Upregulated
A_33_P328	0.002243	0.000366	1.41	POLL	polymerase (DNA directed), lambda	Upregulated
A_33_P321	0.002559	0.000445	1.41	KLK3	kallikrein-related peptidase 3	Upregulated
A_33_P329	0.005753	0.00149	1.41	DDRGK1	DDRGK domain containing 1	Upregulated
A_22_P000	0.014369	0.00511	1.41	lnc-AVEN-1	lnc-AVEN-1:1	Upregulated
A_33_P333	0.01486	0.00535	1.41	BTN2A1	butyrophilin, subfamily 2, member A1	Upregulated

A_23_P205	0.021173	0.00833	1.41	DDHD1	DDHD domain containing 1	Upregulated
A_23_P122	0.023982	0.00975	1.41	C5orf30	chromosome 5 open reading frame 30	Upregulated
A_32_P159	0.033974	0.015	1.41	ASIC2	acid sensing (proton gated) ion channel 2	Upregulated
A_24_P400	0.001208	0.00012	1.4	GET4	golgi to ER traffic protein 4 homolog (S. cerevisiae)	Upregulated
A_24_P365	0.001211	0.000121	1.4	TSPAN33	tetraspanin 33	Upregulated
A_23_P768	0.00124	0.000126	1.4	NGDN	neuroguidin, EIF4E binding protein	Upregulated
A_33_P340	0.001591	0.000199	1.4	GM2A	GM2 ganglioside activator	Upregulated
A_33_P335	0.001635	0.00021	1.4	USP37	ubiquitin specific peptidase 37	Upregulated
A_24_P285	0.001772	0.000242	1.4	DGUOK	deoxyguanosine kinase	Upregulated
A_22_P000	0.001776	0.000243	1.4	TMPO-AS1	TMPO antisense RNA 1	Upregulated
A_23_P584	0.00183	0.000257	1.4	MGAT1	mannosyl (alpha-1,3-)-glycoprotein beta-1,2-N-acetylglucosaminyltransferase	Upregulated
A_33_P337	0.002203	0.000355	1.4	SGTB	small glutamine-rich tetratricopeptide repeat (TPR)-containing, beta	Upregulated
A_23_P664	0.00239	0.000401	1.4	MED9	mediator complex subunit 9	Upregulated
A_23_P214	0.002597	0.000456	1.4	COL10A1	collagen, type X, alpha 1	Upregulated
A_33_P335	0.002707	0.000485	1.4	IGBP1	immunoglobulin (CD79A) binding protein 1	Upregulated
A_23_P352	0.004554	0.00106	1.4	RCAN3	RCAN family member 3	Upregulated
A_21_P000	0.005261	0.00131	1.4	lnc-NUDT7-1	lnc-NUDT7-1:1	Upregulated
A_33_P369	0.006321	0.00171	1.4	LOC283485	uncharacterized LOC283485	Upregulated
A_24_P532	0.006348	0.00172	1.4	CPD	carboxypeptidase D	Upregulated
A_22_P000	0.006888	0.00192	1.4	PTOV1-AS1	PTOV1 antisense RNA 1	Upregulated
A_22_P000	0.010139	0.00326	1.4	lnc-API5-1	lnc-API5-1:1	Upregulated
A_33_P333	0.014014	0.00494	1.4	ARMCX6	armadillo repeat containing, X-linked 6	Upregulated
A_23_P302	0.017396	0.00655	1.4	SRD5A1	steroid-5-alpha-reductase, alpha polypeptide 1 (3-oxo-5 alpha-steroid di	Upregulated
A_32_P150	0.021642	0.00856	1.4	C17orf100	chromosome 17 open reading frame 100	Upregulated
A_22_P000	0.024408	0.00999	1.4	lnc-CNR1-1	lnc-CNR1-1:2	Upregulated
A_33_P327	0.029372	0.0126	1.4	PHLPP2	PH domain and leucine rich repeat protein phosphatase 2	Upregulated
A_23_P127	0.054093	0.0264	1.4	HYLS1	hydroletharus syndrome 1	Upregulated
A_21_P000	0.090554	0.0492	1.4	lnc-CD83-2	lnc-CD83-2:1	Upregulated
A_23_P136	0.001232	0.000125	1.39	IMPAD1	inositol monophosphatase domain containing 1	Upregulated
A_32_P204	0.001347	0.000147	1.39	FABP5	fatty acid binding protein 5 (psoriasis-associated)	Upregulated
A_23_P117	0.001405	0.00016	1.39	KIAA0101	KIAA0101	Upregulated
A_33_P330	0.001569	0.000195	1.39	C1orf52	chromosome 1 open reading frame 52	Upregulated
A_24_P590	0.001753	0.000237	1.39	RRN3	RRN3 RNA polymerase I transcription factor homolog (S. cerevisiae)	Upregulated
A_23_P944	0.001934	0.000282	1.39	PDCD1LG2	programmed cell death 1 ligand 2	Upregulated
A_23_P314	0.002097	0.000326	1.39	BMI1	BMI1 proto-oncogene, polycomb ring finger	Upregulated
A_23_P208	0.002211	0.000356	1.39	CLEC4M	C-type lectin domain family 4, member M	Upregulated
A_23_P302	0.00299	0.000565	1.39	HMHB1	histocompatibility (minor) HB-1	Upregulated

A_33_P333	0.003458	0.000705	1.39	SP1	Sp1 transcription factor	Upregulated
A_22_P000	0.006239	0.00168	1.39	lnc-ENAH-1	lnc-ENAH-1:1	Upregulated
A_22_P000	0.010952	0.00358	1.39	LOC1019277	uncharacterized LOC101927740	Upregulated
A_22_P000	0.013454	0.00469	1.39	SLC50A1	solute carrier family 50 (sugar efflux transporter), member 1	Upregulated
A_33_P322	0.015611	0.0057	1.39	CCR10	chemokine (C-C motif) receptor 10	Upregulated
A_21_P000	0.072667	0.0375	1.39	LINC00485	long intergenic non-protein coding RNA 485	Upregulated
A_33_P340	0.001242	0.000127	1.38	TMEM120B	transmembrane protein 120B	Upregulated
A_23_P773	0.001435	0.000165	1.38	CETN3	centrin, EF-hand protein, 3	Upregulated
A_23_P257	0.001435	0.000166	1.38	TMEM117	transmembrane protein 117	Upregulated
A_23_P101	0.001583	0.000198	1.38	EML2	echinoderm microtubule associated protein like 2	Upregulated
A_23_P330	0.001594	0.0002	1.38	MAF1	MAF1 homolog (S. cerevisiae)	Upregulated
A_33_P333	0.001749	0.000236	1.38	HUS1	HUS1 checkpoint homolog (S. pombe)	Upregulated
A_24_P102	0.00176	0.000239	1.38	DNAJB2	DnaJ (Hsp40) homolog, subfamily B, member 2	Upregulated
A_24_P880	0.001839	0.000259	1.38	C8orf33	chromosome 8 open reading frame 33	Upregulated
A_23_P100	0.002072	0.00032	1.38	VKORC1	vitamin K epoxide reductase complex, subunit 1	Upregulated
A_22_P000	0.002117	0.000332	1.38	lnc-CTDSPL2	lnc-CTDSPL2-2:1	Upregulated
A_23_P118	0.002603	0.000458	1.38	C17orf62	chromosome 17 open reading frame 62	Upregulated
A_19_P003	0.002992	0.000566	1.38	LOC145474	uncharacterized LOC145474	Upregulated
A_33_P320	0.003548	0.000733	1.38	IARS	isoleucyl-tRNA synthetase	Upregulated
A_21_P000	0.005415	0.00137	1.38	lnc-HPDL-1	lnc-HPDL-1:1	Upregulated
A_22_P000	0.006474	0.00177	1.38	lnc-STAT1-2	lnc-STAT1-2:1	Upregulated
A_23_P156	0.008574	0.0026	1.38	STX11	syntaxin 11	Upregulated
A_22_P000	0.009631	0.00304	1.38	lnc-ZNF667-1	lnc-ZNF667-1:1	Upregulated
A_23_P128	0.010107	0.00324	1.38	RNF34	ring finger protein 34, E3 ubiquitin protein ligase	Upregulated
A_22_P000	0.010598	0.00344	1.38	lnc-SPAG1-4	lnc-SPAG1-4:2	Upregulated
A_33_P321	0.012467	0.00425	1.38	METTL6	methyltransferase like 6	Upregulated
A_21_P001	0.01384	0.00486	1.38	LINC01503	long intergenic non-protein coding RNA 1503	Upregulated
A_33_P337	0.021475	0.00848	1.38	LOC1001312	uncharacterized LOC100131242	Upregulated
A_21_P001	0.025049	0.0103	1.38	MUC19	mucin 19, oligomeric	Upregulated
A_23_P379	0.028169	0.0119	1.38	MAPK3	mitogen-activated protein kinase 3	Upregulated
A_22_P000	0.037267	0.0168	1.38	lnc-TSPYL6-1	lnc-TSPYL6-1:1	Upregulated
A_33_P331	0.045877	0.0217	1.38	OR5C1	olfactory receptor, family 5, subfamily C, member 1	Upregulated
A_23_P700	0.001222	0.000123	1.37	PFDN1	prefoldin subunit 1	Upregulated
A_23_P385	0.001241	0.000127	1.37	ARL8B	ADP-ribosylation factor-like 8B	Upregulated
A_24_P353	0.001398	0.000158	1.37	SLAMF7	SLAM family member 7	Upregulated
A_33_P340	0.001453	0.000171	1.37	GTF3C4	general transcription factor IIIC, polypeptide 4, 90kDa	Upregulated
A_24_P661	0.001474	0.000174	1.37	STAG2	stromal antigen 2	Upregulated

A_23_P247	0.001537	0.000188	1.37	OSBP	oxysterol binding protein	Upregulated
A_23_P108	0.001611	0.000204	1.37	YPEL5	yippee-like 5 (Drosophila)	Upregulated
A_33_P321	0.0017	0.000226	1.37	PANK3	pantothenate kinase 3	Upregulated
A_32_P193	0.001754	0.000237	1.37	FMNL2	formin-like 2	Upregulated
A_23_P672	0.001831	0.000257	1.37	PKN1	protein kinase N1	Upregulated
A_33_P332	0.001925	0.00028	1.37	ATXN7	ataxin 7	Upregulated
A_33_P324	0.002337	0.000387	1.37	MUC19	mucin 19, oligomeric	Upregulated
A_23_P258	0.00248	0.000424	1.37	MANBA	mannosidase, beta A, lysosomal	Upregulated
A_33_P321	0.00264	0.000467	1.37	IMPDH2	IMP (inosine 5'-monophosphate) dehydrogenase 2	Upregulated
A_24_P509	0.006118	0.00163	1.37	TRIM11	tripartite motif containing 11	Upregulated
A_32_P198	0.018743	0.00717	1.37	lnc-EPHA1-1	lnc-EPHA1-1:1	Upregulated
A_22_P000	0.018801	0.0072	1.37	lnc-CLGN-2	lnc-CLGN-2:1	Upregulated
A_23_P121	0.026279	0.011	1.37	PRSS12	protease, serine, 12 (neurotrypsin, motopsin)	Upregulated
A_21_P001	0.026279	0.011	1.37	ZDHC11	zinc finger, DHHC-type containing 11	Upregulated
A_24_P348	0.044464	0.0208	1.37	LRRC8E	leucine rich repeat containing 8 family, member E	Upregulated
A_24_P935	0.04772	0.0227	1.37	ADCY9	adenylate cyclase 9	Upregulated
A_23_P433	0.051162	0.0247	1.37	SPG7	spastic paraplegia 7 (pure and complicated autosomal recessive)	Upregulated
A_21_P000	0.064134	0.0323	1.37	lnc-NPAT-1	lnc-NPAT-1:1	Upregulated
A_33_P328	0.001243	0.000128	1.36	RMND5A	required for meiotic nuclear division 5 homolog A (S. cerevisiae)	Upregulated
A_24_P196	0.001298	0.000138	1.36	KMT2E	lysine (K)-specific methyltransferase 2E	Upregulated
A_23_P157	0.001373	0.000152	1.36	MRPS33	mitochondrial ribosomal protein S33	Upregulated
A_33_P332	0.001398	0.000158	1.36	GAS5	growth arrest-specific 5 (non-protein coding)	Upregulated
A_24_P823	0.001478	0.000176	1.36	HSP90AB1	heat shock protein 90kDa alpha (cytosolic), class B member 1	Upregulated
A_23_P205	0.001484	0.000178	1.36	PSEN1	presenilin 1	Upregulated
A_23_P163	0.001563	0.000194	1.36	MTHFS	5,10-methenyltetrahydrofolate synthetase (5-formyltetrahydrofolate cycl	Upregulated
A_33_P325	0.001884	0.000269	1.36	ZNF451	zinc finger protein 451	Upregulated
A_24_P276	0.002464	0.000419	1.36	PPT1	palmitoyl-protein thioesterase 1	Upregulated
A_32_P169	0.00275	0.000497	1.36	ALG1	ALG1, chitobiosyldiphosphodolichol beta-mannosyltransferase	Upregulated
A_23_P632	0.003291	0.000656	1.36	POGZ	pogo transposable element with ZNF domain	Upregulated
A_23_P327	0.007634	0.00222	1.36	KIAA0232	KIAA0232	Upregulated
A_24_P305	0.00852	0.00258	1.36	SMS	spermine synthase	Upregulated
A_23_P401	0.009741	0.00308	1.36	COL9A3	collagen, type IX, alpha 3	Upregulated
A_33_P324	0.010112	0.00325	1.36	DIAPH1	diaphanous-related formin 1	Upregulated
A_24_P283	0.011042	0.00363	1.36	NABP2	nucleic acid binding protein 2	Upregulated
A_32_P137	0.011404	0.00379	1.36	TRIM27	tripartite motif containing 27	Upregulated
A_24_P989	0.012763	0.00438	1.36	PFKM	phosphofructokinase, muscle	Upregulated
A_33_P338	0.001298	0.000138	1.35	EEF2KMT	eukaryotic elongation factor 2 lysine methyltransferase	Upregulated

A_23_P145	0.001347	0.000148	1.35	HSP90AB1	heat shock protein 90kDa alpha (cytosolic), class B member 1	Upregulated
A_33_P330	0.001397	0.000157	1.35	CPSF7	cleavage and polyadenylation specific factor 7, 59kDa	Upregulated
A_33_P341	0.00141	0.000161	1.35	SLC24A1	solute carrier family 24 (sodium/potassium/calcium exchanger), member	Upregulated
A_33_P321	0.001479	0.000176	1.35	POLR2A	polymerase (RNA) II (DNA directed) polypeptide A, 220kDa	Upregulated
A_32_P698	0.001517	0.000184	1.35	BEX5	brain expressed, X-linked 5	Upregulated
A_22_P000	0.00163	0.000209	1.35	lnc-PHYHD1-	lnc-PHYHD1-1:1	Upregulated
A_22_P000	0.001808	0.00025	1.35	lnc-SLC12A7-	lnc-SLC12A7-1:2	Upregulated
A_32_P126	0.001944	0.000284	1.35	E2F6	E2F transcription factor 6	Upregulated
A_24_P309	0.00196	0.00029	1.35	SNN	stannin	Upregulated
A_19_P003	0.002571	0.000449	1.35	LOC1027251	uncharacterized LOC102725166	Upregulated
A_33_P332	0.002662	0.000472	1.35	RRM2B	ribonucleotide reductase M2 B (TP53 inducible)	Upregulated
A_33_P330	0.004565	0.00106	1.35	ZFAND4	zinc finger, AN1-type domain 4	Upregulated
A_33_P321	0.011063	0.00364	1.35	ATAD2	ATPase family, AAA domain containing 2	Upregulated
A_33_P321	0.011582	0.00388	1.35	ZC3H12A	zinc finger CCCH-type containing 12A	Upregulated
A_22_P000	0.012101	0.00409	1.35	CYB5B	cytochrome b5 type B (outer mitochondrial membrane)	Upregulated
A_33_P325	0.019729	0.00764	1.35	PAN3	PAN3 poly(A) specific ribonuclease subunit	Upregulated
A_23_P250	0.034507	0.0153	1.35	BRPF1	bromodomain and PHD finger containing, 1	Upregulated
A_33_P337	0.042114	0.0195	1.35	FAM98B	family with sequence similarity 98, member B	Upregulated
A_23_P184	0.001295	0.000137	1.34	TIMMDC1	translocase of inner mitochondrial membrane domain containing 1	Upregulated
A_32_P683	0.001337	0.000145	1.34	C5orf51	chromosome 5 open reading frame 51	Upregulated
A_23_P395	0.001375	0.000153	1.34	PWP1	PWP1 homolog (S. cerevisiae)	Upregulated
A_23_P191	0.001376	0.000153	1.34	TTC1	tetratricopeptide repeat domain 1	Upregulated
A_33_P324	0.001386	0.000155	1.34	PIGX	phosphatidylinositol glycan anchor biosynthesis, class X	Upregulated
A_32_P148	0.001469	0.000174	1.34	SNRPD1	small nuclear ribonucleoprotein D1 polypeptide 16kDa	Upregulated
A_23_P302	0.001479	0.000176	1.34	FAM174A	family with sequence similarity 174, member A	Upregulated
A_21_P001	0.001481	0.000177	1.34	XLOC_I2_015213		Upregulated
A_33_P325	0.001531	0.000187	1.34	FAM21C	family with sequence similarity 21, member C	Upregulated
A_33_P321	0.001605	0.000203	1.34	IL18R1	interleukin 18 receptor 1	Upregulated
A_24_P990	0.001854	0.000263	1.34	IPO5	importin 5	Upregulated
A_22_P000	0.002544	0.000442	1.34	lnc-S100A13-	lnc-S100A13-1:1	Upregulated
A_23_P362	0.002882	0.000534	1.34	SLC25A33	solute carrier family 25 (pyrimidine nucleotide carrier), member 33	Upregulated
A_22_P000	0.003054	0.000583	1.34	lnc-USP8-1	lnc-USP8-1:1	Upregulated
A_23_P170	0.003974	0.000865	1.34	CHCHD7	coiled-coil-helix-coiled-coil-helix domain containing 7	Upregulated
A_23_P977	0.004221	0.000948	1.34	ACBD5	acyl-CoA binding domain containing 5	Upregulated
A_19_P008	0.004467	0.00103	1.34	BMPR1A	bone morphogenetic protein receptor, type IA	Upregulated
A_23_P521	0.006304	0.0017	1.34	TBCE	tubulin folding cofactor E	Upregulated
A_21_P000	0.009878	0.00314	1.34	lnc-CTAGE5-	lnc-CTAGE5-1:1	Upregulated

A_33_P326	0.011099	0.00365	1.34	ZNF546	zinc finger protein 546	Upregulated
A_22_P000	0.011787	0.00396	1.34	LOC1001290	uncharacterized LOC100129083	Upregulated
A_33_P328	0.014447	0.00515	1.34	ANKRD20A9f	ankyrin repeat domain 20 family, member A9, pseudogene	Upregulated
A_32_P352	0.02519	0.0104	1.34	LOC650293	seven transmembrane helix receptor	Upregulated
A_22_P000	0.027701	0.0117	1.34	USP12-AS1	USP12 antisense RNA 1	Upregulated
A_33_P324	0.031087	0.0135	1.34	LOC1005057	uncharacterized LOC100505739	Upregulated
A_23_P696	0.033521	0.0148	1.34	SEC24B	SEC24 family member B	Upregulated
A_22_P000	0.040455	0.0186	1.34	lnc-ACOT9-1	lnc-ACOT9-1:1	Upregulated
A_21_P001	0.048807	0.0233	1.34	LOC1005060	uncharacterized LOC100506023	Upregulated
A_21_P000	0.050765	0.0244	1.34	BEND7	BEN domain containing 7	Upregulated
A_33_P335	0.063294	0.0318	1.34	KIF22	kinesin family member 22	Upregulated
A_33_P377	0.001316	0.000142	1.33	SERAC1	serine active site containing 1	Upregulated
A_33_P334	0.001386	0.000155	1.33	HSPH1	heat shock 105kDa/110kDa protein 1	Upregulated
A_23_P110	0.001469	0.000174	1.33	SKIV2L2	superkiller viralicidic activity 2-like 2 (S. cerevisiae)	Upregulated
A_33_P322	0.002113	0.00033	1.33	UBE2E3	ubiquitin-conjugating enzyme E2E 3	Upregulated
A_33_P321	0.002241	0.000365	1.33	PAG1	phosphoprotein membrane anchor with glycosphingolipid microdomains	Upregulated
A_23_P492	0.002951	0.000553	1.33	C16orf87	chromosome 16 open reading frame 87	Upregulated
A_33_P359	0.003355	0.000675	1.33	PAPPA	pregnancy-associated plasma protein A, pappalysin 1	Upregulated
A_24_P202	0.004389	0.001	1.33	ITPKC	inositol-trisphosphate 3-kinase C	Upregulated
A_33_P335	0.004443	0.00102	1.33	ZNF416	zinc finger protein 416	Upregulated
A_23_P808	0.004454	0.00103	1.33	FYTTD1	forty-two-three domain containing 1	Upregulated
A_22_P000	0.005038	0.00123	1.33	lnc-ADAMTS1	lnc-ADAMTS18-6:1	Upregulated
A_23_P131	0.006324	0.00171	1.33	ACSBG2	acyl-CoA synthetase bubblegum family member 2	Upregulated
A_23_P214	0.008186	0.00244	1.33	PPARD	peroxisome proliferator-activated receptor delta	Upregulated
A_33_P325	0.016121	0.00594	1.33	ZNF134	zinc finger protein 134	Upregulated
A_21_P001	0.016713	0.00623	1.33	LOC441124	uncharacterized LOC441124	Upregulated
A_23_P501	0.019666	0.00761	1.33	ASB4	ankyrin repeat and SOCS box containing 4	Upregulated
A_23_P132	0.031217	0.0136	1.33	GLT8D1	glycosyltransferase 8 domain containing 1	Upregulated
A_21_P000	0.031596	0.0137	1.33	LOC1027235	uncharacterized LOC102723525	Upregulated
A_32_P853	0.039434	0.0181	1.33	ST20-AS1	ST20 antisense RNA 1	Upregulated
A_22_P000	0.04551	0.0215	1.33	lnc-KIAA1598	lnc-KIAA1598-1:1	Upregulated
A_23_P149	0.053536	0.026	1.33	PANK4	pantothenate kinase 4	Upregulated
A_21_P001	0.076749	0.04	1.33	lnc-CD93-1	lnc-CD93-1:1	Upregulated
A_23_P604	0.001314	0.000141	1.32	ZNF462	zinc finger protein 462	Upregulated
A_33_P338	0.001369	0.000152	1.32	FAM27B	family with sequence similarity 27, member B	Upregulated
A_23_P824	0.001621	0.000206	1.32	PUS7	pseudouridylate synthase 7 (putative)	Upregulated
A_33_P334	0.001657	0.000215	1.32	TTC5	tetratricopeptide repeat domain 5	Upregulated

A_23_P130	0.001694	0.000224	1.32	AURKB	aurora kinase B	Upregulated
A_23_P109	0.001753	0.000237	1.32	PSMD6	proteasome (prosome, macropain) 26S subunit, non-ATPase, 6	Upregulated
A_23_P604	0.001784	0.000245	1.32	UBAP2	ubiquitin associated protein 2	Upregulated
A_33_P330	0.001833	0.000258	1.32	LOC1001293	uncharacterized LOC100129363	Upregulated
A_33_P334	0.001908	0.000276	1.32	AKT1S1	AKT1 substrate 1 (proline-rich)	Upregulated
A_23_P502	0.001908	0.000276	1.32	PHF2	PHD finger protein 2	Upregulated
A_23_P359	0.00195	0.000286	1.32	EPC2	enhancer of polycomb homolog 2 (Drosophila)	Upregulated
A_21_P001	0.002062	0.000317	1.32	lnc-NFATC2-1	lnc-NFATC2-1:1	Upregulated
A_23_P249	0.002232	0.000362	1.32	CDK4	cyclin-dependent kinase 4	Upregulated
A_24_P417	0.002347	0.00039	1.32	FRG1B	FSD region gene 1 family, member B	Upregulated
A_24_P241	0.002454	0.000416	1.32	DCAF4	DDB1 and CUL4 associated factor 4	Upregulated
A_24_P597	0.00247	0.000421	1.32	CTD-2151A2	uncharacterized LOC102724855	Upregulated
A_33_P331	0.003343	0.000672	1.32	FANCC	Fanconi anemia, complementation group C	Upregulated
A_33_P327	0.003667	0.000769	1.32	ZIK1	zinc finger protein interacting with K protein 1	Upregulated
A_21_P001	0.005054	0.00123	1.32	XLOC_I2_004594		Upregulated
A_33_P336	0.005296	0.00132	1.32	BRMS1	breast cancer metastasis suppressor 1	Upregulated
A_23_P936	0.006372	0.00173	1.32	ASIC3	acid sensing (proton gated) ion channel 3	Upregulated
A_23_P148	0.008614	0.00262	1.32	PTGER4	prostaglandin E receptor 4 (subtype EP4)	Upregulated
A_21_P001	0.009666	0.00305	1.32	PHF21B	PHD finger protein 21B	Upregulated
A_33_P342	0.023957	0.00974	1.32	OR4D6	olfactory receptor, family 4, subfamily D, member 6	Upregulated
A_22_P000	0.025963	0.0108	1.32	lnc-C16orf88-	lnc-C16orf88-1:3	Upregulated
A_21_P000	0.043671	0.0204	1.32	lnc-SGPP1-1	lnc-SGPP1-1:1	Upregulated
A_23_P598	0.054346	0.0265	1.32	METTL2B	methyltransferase like 2B	Upregulated
A_23_P426	0.001385	0.000155	1.31	POLR2J	polymerase (RNA) II (DNA directed) polypeptide J, 13.3kDa	Upregulated
A_32_P430	0.001394	0.000157	1.31	FRG1	FSD region gene 1	Upregulated
A_23_P384	0.001398	0.000158	1.31	TAOK1	TAO kinase 1	Upregulated
A_23_P310	0.001444	0.000168	1.31	RANBP3	RAN binding protein 3	Upregulated
A_33_P340	0.001522	0.000185	1.31	C6orf226	chromosome 6 open reading frame 226	Upregulated
A_33_P326	0.001537	0.000188	1.31	LOC1001311	uncharacterized LOC100131132	Upregulated
A_22_P000	0.00163	0.000209	1.31	lnc-TLCD2-2	lnc-TLCD2-2:1	Upregulated
A_24_P400	0.001894	0.000272	1.31	TMC8	transmembrane channel-like 8	Upregulated
A_33_P337	0.00191	0.000276	1.31	PLEKHO1	pleckstrin homology domain containing, family O member 1	Upregulated
A_23_P616	0.001991	0.000298	1.31	CLK4	CDC-like kinase 4	Upregulated
A_24_P166	0.002027	0.000308	1.31	CDK6	cyclin-dependent kinase 6	Upregulated
A_19_P003	0.002721	0.000489	1.31	ZNF83	zinc finger protein 83	Upregulated
A_23_P167	0.00302	0.000574	1.31	PRPF40A	PRP40 pre-mRNA processing factor 40 homolog A (S. cerevisiae)	Upregulated
A_32_P353	0.003438	0.000699	1.31	PTDSS2	phosphatidylserine synthase 2	Upregulated

A_21_P001	0.004356	0.000994	1.31	DUX4	double homeobox 4	Upregulated
A_24_P353	0.004466	0.00103	1.31	GUCD1	guanylyl cyclase domain containing 1	Upregulated
A_24_P943	0.005753	0.00149	1.31	ARL5B	ADP-ribosylation factor-like 5B	Upregulated
A_33_P341	0.007033	0.00198	1.31	lnc-HJURP-1	lnc-HJURP-1:1	Upregulated
A_33_P335	0.00708	0.002	1.31	SMG7	SMG7 nonsense mediated mRNA decay factor	Upregulated
A_33_P340	0.008114	0.00241	1.31	EPHA6	EPH receptor A6	Upregulated
A_24_P218	0.013137	0.00455	1.31	MED17	mediator complex subunit 17	Upregulated
A_33_P333	0.031837	0.0139	1.31	ABCB4	ATP-binding cassette, sub-family B (MDR/TAP), member 4	Upregulated
A_23_P112	0.048955	0.0234	1.31	GSDMD	gasdermin D	Upregulated
A_24_P159	0.001559	0.000193	1.3	PDCD7	programmed cell death 7	Upregulated
A_23_P365	0.001626	0.000208	1.3	PPP1R14B	protein phosphatase 1, regulatory (inhibitor) subunit 14B	Upregulated
A_23_P159	0.001691	0.000223	1.3	TAF15	TAF15 RNA polymerase II, TATA box binding protein (TBP)-associated i	Upregulated
A_33_P339	0.001793	0.000247	1.3	LOC727721	uncharacterized LOC727721	Upregulated
A_23_P419	0.001879	0.000268	1.3	CCDC127	coiled-coil domain containing 127	Upregulated
A_23_P413	0.002002	0.000301	1.3	ABCE1	ATP-binding cassette, sub-family E (OABP), member 1	Upregulated
A_21_P000	0.002229	0.000362	1.3	LARP4	La ribonucleoprotein domain family, member 4	Upregulated
A_23_P148	0.002428	0.00041	1.3	CSTF2	cleavage stimulation factor, 3' pre-RNA, subunit 2, 64kDa	Upregulated
A_23_P111	0.002495	0.000428	1.3	TBC1D7	TBC1 domain family, member 7	Upregulated
A_23_P132	0.002528	0.000437	1.3	EIF4ENIF1	eukaryotic translation initiation factor 4E nuclear import factor 1	Upregulated
A_23_P453	0.002952	0.000554	1.3	HTATSF1	HIV-1 Tat specific factor 1	Upregulated
A_22_P000	0.002984	0.000562	1.3	lnc-CES1-3	lnc-CES1-3:1	Upregulated
A_24_P632	0.003293	0.000657	1.3	RPN1	ribophorin I	Upregulated
A_21_P000	0.004207	0.000941	1.3	LOC1009963	uncharacterized LOC100996324	Upregulated
A_23_P212	0.004498	0.00104	1.3	TTC14	tetratricopeptide repeat domain 14	Upregulated
A_23_P165	0.008932	0.00275	1.3	EIF4E2	eukaryotic translation initiation factor 4E family member 2	Upregulated
A_22_P000	0.009837	0.00312	1.3	lnc-PKLR-2	lnc-PKLR-2:1	Upregulated
A_33_P333	0.02036	0.00794	1.3	ABCB8	ATP-binding cassette, sub-family B (MDR/TAP), member 8	Upregulated
A_21_P000	0.022763	0.00912	1.3	PGM3	phosphoglucomutase 3	Upregulated
A_21_P001	0.023746	0.00963	1.3	XLOC_l2_007829		Upregulated
A_24_P110	0.028148	0.0119	1.3	CSAG1	chondrosarcoma associated gene 1	Upregulated
A_23_P695	0.07597	0.0396	1.3	GUCY1A3	guanylate cyclase 1, soluble, alpha 3	Upregulated
A_33_P340	0.001443	0.000168	1.29	IL4I1	interleukin 4 induced 1	Upregulated
A_33_P321	0.001483	0.000177	1.29	SLC35F2	solute carrier family 35, member F2	Upregulated
A_23_P218	0.001597	0.000201	1.29	XPNPEP3	X-prolyl aminopeptidase (aminopeptidase P) 3, putative	Upregulated
A_23_P347	0.001603	0.000202	1.29	SP3	Sp3 transcription factor	Upregulated
A_23_P706	0.001612	0.000204	1.29	CD83	CD83 molecule	Upregulated
A_33_P336	0.001626	0.000208	1.29	HIBCH	3-hydroxyisobutyryl-CoA hydrolase	Upregulated

A_21_P001	0.001919	0.000279	1.29	LINC00158	long intergenic non-protein coding RNA 158	Upregulated
A_23_P128	0.001949	0.000286	1.29	RAB21	RAB21, member RAS oncogene family	Upregulated
A_23_P358	0.001958	0.000289	1.29	POPDC3	popeye domain containing 3	Upregulated
A_22_P000	0.002511	0.000433	1.29	LOC1019287	uncharacterized LOC101928737	Upregulated
A_24_P302	0.002728	0.000491	1.29	FCHSD2	FCH and double SH3 domains 2	Upregulated
A_23_P102	0.002834	0.00052	1.29	COQ10B	coenzyme Q10 homolog B (S. cerevisiae)	Upregulated
A_24_P642	0.002872	0.00053	1.29	ALDH1B1	aldehyde dehydrogenase 1 family, member B1	Upregulated
A_23_P658	0.003163	0.000618	1.29	FBXO22	F-box protein 22	Upregulated
A_24_P187	0.003199	0.00063	1.29	CNOT4	CCR4-NOT transcription complex, subunit 4	Upregulated
A_24_P391	0.003224	0.000636	1.29	PTTG1IP	pituitary tumor-transforming 1 interacting protein	Upregulated
A_21_P001	0.00452	0.00105	1.29	XLOC_I2_015438		Upregulated
A_33_P341	0.006535	0.00179	1.29	ZNF891	zinc finger protein 891	Upregulated
A_24_P377	0.008344	0.00251	1.29	OSBPL3	oxysterol binding protein-like 3	Upregulated
A_33_P335	0.008765	0.00268	1.29	LOC403323	uncharacterized LOC403323	Upregulated
A_23_P378	0.011229	0.00371	1.29	TMEM64	transmembrane protein 64	Upregulated
A_33_P342	0.015816	0.00579	1.29	ZNF710	zinc finger protein 710	Upregulated
A_22_P000	0.01767	0.00667	1.29	lnc-CTSL2-2	lnc-CTSL2-2:1	Upregulated
A_21_P001	0.01767	0.00667	1.29	LOC646588	uncharacterized LOC646588	Upregulated
A_33_P384	0.018047	0.00685	1.29	LINC01281	long intergenic non-protein coding RNA 1281	Upregulated
A_22_P000	0.025564	0.0106	1.29	lnc-GJA4-1	lnc-GJA4-1:1	Upregulated
A_23_P124	0.026603	0.0111	1.29	CLCN3	chloride channel, voltage-sensitive 3	Upregulated
A_33_P339	0.030769	0.0133	1.29	LRP1	low density lipoprotein receptor-related protein 1	Upregulated
A_19_P003	0.03725	0.0168	1.29	LINC01013	long intergenic non-protein coding RNA 1013	Upregulated
A_33_P327	0.03725	0.0168	1.29	NMT2	N-myristoyltransferase 2	Upregulated
A_21_P001	0.059747	0.0297	1.29	XLOC_I2_004385		Upregulated
A_23_P106	0.001475	0.000175	1.28	NFKBIA	nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor 1A	Upregulated
A_23_P415	0.001543	0.000189	1.28	HIST1H4E	histone cluster 1, H4e	Upregulated
A_24_P700	0.001699	0.000226	1.28	LATS2	large tumor suppressor kinase 2	Upregulated
A_33_P337	0.001812	0.000252	1.28	NAMPT	nicotinamide phosphoribosyltransferase	Upregulated
A_23_P656	0.001819	0.000254	1.28	GTF2A1	general transcription factor IIA, 1, 19/37kDa	Upregulated
A_23_P409	0.001854	0.000263	1.28	USP13	ubiquitin specific peptidase 13 (isopeptidase T-3)	Upregulated
A_23_P602	0.002179	0.000349	1.28	EIF4B	eukaryotic translation initiation factor 4B	Upregulated
A_24_P299	0.002768	0.000502	1.28	FAM101B	family with sequence similarity 101, member B	Upregulated
A_23_P134	0.002944	0.00055	1.28	BTBD10	BTB (POZ) domain containing 10	Upregulated
A_23_P156	0.003795	0.000808	1.28	C17orf75	chromosome 17 open reading frame 75	Upregulated
A_22_P000	0.003997	0.000872	1.28	LINC01252	long intergenic non-protein coding RNA 1252	Upregulated
A_23_P113	0.004324	0.000982	1.28	KATNA1	katanin p60 (ATPase containing) subunit A 1	Upregulated

A_23_P251	0.004678	0.0011	1.28	NF2	neurofibromin 2 (merlin)	Upregulated
A_32_P703	0.005244	0.0013	1.28	LOC646626	uncharacterized LOC646626	Upregulated
A_22_P000	0.007062	0.002	1.28	lnc-PRKACG-	lnc-PRKACG-3:1	Upregulated
A_24_P172	0.008584	0.0026	1.28	GMFB	glia maturation factor, beta	Upregulated
A_22_P000	0.018659	0.00713	1.28	lnc-MRAP-1	lnc-MRAP-1:1	Upregulated
A_24_P223	0.026736	0.0112	1.28	NAF1	nuclear assembly factor 1 ribonucleoprotein	Upregulated
A_22_P000	0.038392	0.0175	1.28	lnc-KCNMB1-	lnc-KCNMB1-3:2	Upregulated
A_22_P000	0.042136	0.0196	1.28	lnc-THBS4-3	lnc-THBS4-3:1	Upregulated
A_33_P331	0.042471	0.0197	1.28	UHRF1BP1	UHRF1 binding protein 1	Upregulated
A_21_P000	0.067234	0.0342	1.28	lnc-SH3GL3-1	lnc-SH3GL3-1:1	Upregulated
A_24_P433	0.001443	0.000167	1.27	RNF38	ring finger protein 38	Upregulated
A_23_P130	0.001481	0.000177	1.27	ROCK1	Rho-associated, coiled-coil containing protein kinase 1	Upregulated
A_23_P140	0.001731	0.000232	1.27	NDUFB1	NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 1, 7kDa	Upregulated
A_23_P411	0.001825	0.000256	1.27	OSTC	oligosaccharyltransferase complex subunit (non-catalytic)	Upregulated
A_24_P298	0.002075	0.00032	1.27	CBX1	chromobox homolog 1	Upregulated
A_33_P370	0.002124	0.000335	1.27	lnc-ZNF717-1	lnc-ZNF717-1:1	Upregulated
A_23_P363	0.002748	0.000496	1.27	SLC38A1	solute carrier family 38, member 1	Upregulated
A_33_P336	0.002951	0.000553	1.27	YIF1A	Yip1 interacting factor homolog A (<i>S. cerevisiae</i>)	Upregulated
A_23_P152	0.003041	0.00058	1.27	ENGASE	endo-beta-N-acetylglucosaminidase	Upregulated
A_22_P000	0.003311	0.000662	1.27	STX6	syntaxin 6	Upregulated
A_23_P432	0.004321	0.000981	1.27	PMM2	phosphomannomutase 2	Upregulated
A_21_P001	0.004882	0.00117	1.27	LOC1027233	uncharacterized LOC102723382	Upregulated
A_23_P122	0.006012	0.00159	1.27	MSH3	mutS homolog 3	Upregulated
A_33_P333	0.006219	0.00167	1.27	TMEM53	transmembrane protein 53	Upregulated
A_23_P108	0.011539	0.00385	1.27	STK16	serine/threonine kinase 16	Upregulated
A_23_P158	0.020623	0.00807	1.27	BRIP1	BRCA1 interacting protein C-terminal helicase 1	Upregulated
A_21_P000	0.035323	0.0158	1.27	LOC1005065	uncharacterized LOC100506548	Upregulated
A_33_P326	0.037112	0.0168	1.27	RAP1GAP	RAP1 GTPase activating protein	Upregulated
A_33_P334	0.051781	0.025	1.27	LOC284788	uncharacterized LOC284788	Upregulated
A_22_P000	0.075898	0.0395	1.27	lnc-CDKAL1-1	lnc-CDKAL1-1:1	Upregulated
A_22_P000	0.075898	0.0395	1.27	RORB-AS1	RORB antisense RNA 1	Upregulated
A_33_P322	0.001453	0.00017	1.26	NCF1	neutrophil cytosolic factor 1	Upregulated
A_22_P000	0.001481	0.000177	1.26	lnc-FAM184B	lnc-FAM184B-1:1	Upregulated
A_32_P519	0.001552	0.000191	1.26	KIAA1191	KIAA1191	Upregulated
A_33_P340	0.001595	0.0002	1.26	BOD1L1	biorientation of chromosomes in cell division 1-like 1	Upregulated
A_21_P001	0.001634	0.00021	1.26	LOC374443	C-type lectin domain family 2, member D pseudogene	Upregulated
A_23_P150	0.001661	0.000216	1.26	C11orf1	chromosome 11 open reading frame 1	Upregulated

A_23_P211	0.001663	0.000217	1.26	TCTEX1D2	Tctex1 domain containing 2	Upregulated
A_33_P325	0.001682	0.00022	1.26	TRIM33	tripartite motif containing 33	Upregulated
A_23_P859	0.001693	0.000223	1.26	ZNF326	zinc finger protein 326	Upregulated
A_33_P335	0.001695	0.000224	1.26	MYH9	myosin, heavy chain 9, non-muscle	Upregulated
A_24_P335	0.001859	0.000264	1.26	ZNF266	zinc finger protein 266	Upregulated
A_24_P127	0.00191	0.000276	1.26	ST13	suppression of tumorigenicity 13 (colon carcinoma) (Hsp70 interacting p	Upregulated
A_22_P000	0.001986	0.000297	1.26	lnc-ARL6IP5-	lnc-ARL6IP5-1:1	Upregulated
A_24_P193	0.001996	0.000299	1.26	PIGN	phosphatidylinositol glycan anchor biosynthesis, class N	Upregulated
A_24_P743	0.002028	0.000308	1.26	CTSA	cathepsin A	Upregulated
A_23_P825	0.002034	0.00031	1.26	ABCB1	ATP-binding cassette, sub-family B (MDR/TAP), member 1	Upregulated
A_24_P134	0.002179	0.000349	1.26	SPATA13	spermatogenesis associated 13	Upregulated
A_19_P003	0.002283	0.000375	1.26	UBA6-AS1	UBA6 antisense RNA 1 (head to head)	Upregulated
A_23_P641	0.00241	0.000406	1.26	CARD16	caspase recruitment domain family, member 16	Upregulated
A_33_P338	0.002482	0.000424	1.26	GTSF1	gametocyte specific factor 1	Upregulated
A_32_P896	0.002765	0.000501	1.26	ALG10B	ALG10B, alpha-1,2-glucosyltransferase	Upregulated
A_23_P775	0.003584	0.000746	1.26	SSTR5	somatostatin receptor 5	Upregulated
A_23_P516	0.005013	0.00122	1.26	ATP13A1	ATPase type 13A1	Upregulated
A_19_P003	0.007111	0.00202	1.26	lnc-UBLCP1-4	lnc-UBLCP1-4:1	Upregulated
A_22_P000	0.007339	0.0021	1.26	lnc-SPATA9-1	lnc-SPATA9-1:1	Upregulated
A_33_P330	0.007505	0.00217	1.26	GPT	glutamic-pyruvate transaminase (alanine aminotransferase)	Upregulated
A_24_P845	0.017312	0.00651	1.26	SPAG9	sperm associated antigen 9	Upregulated
A_33_P324	0.021031	0.00826	1.26	FAIM2	Fas apoptotic inhibitory molecule 2	Upregulated
A_33_P333	0.030025	0.0129	1.26	SLC26A11	solute carrier family 26 (anion exchanger), member 11	Upregulated
A_23_P800	0.036295	0.0163	1.26	FER1L4	fer-1-like family member 4, pseudogene (functional)	Upregulated
A_33_P326	0.036295	0.0163	1.26	NR6A1	nuclear receptor subfamily 6, group A, member 1	Upregulated
A_21_P000	0.052813	0.0256	1.26	lnc-LRP8-1	lnc-LRP8-1:1	Upregulated
A_24_P344	0.00151	0.000182	1.25	AGPAT3	1-acylglycerol-3-phosphate O-acyltransferase 3	Upregulated
A_32_P846	0.001644	0.000212	1.25	RPS23	ribosomal protein S23	Upregulated
A_32_P199	0.001771	0.000242	1.25	HSP90AA1	heat shock protein 90kDa alpha (cytosolic), class A member 1	Upregulated
A_32_P179	0.002037	0.000311	1.25	LOC1019296	uncharacterized LOC101929687	Upregulated
A_33_P322	0.002087	0.000324	1.25	EIF1AX	eukaryotic translation initiation factor 1A, X-linked	Upregulated
A_24_P790	0.002097	0.000326	1.25	TGFB1	transforming growth factor, beta 1	Upregulated
A_33_P322	0.002251	0.000368	1.25	DKFZp434J0:	uncharacterized LOC93429	Upregulated
A_23_P159	0.002452	0.000415	1.25	VEGFB	vascular endothelial growth factor B	Upregulated
A_33_P329	0.002734	0.000492	1.25	BAG1	BCL2-associated athanogene	Upregulated
A_33_P321	0.002775	0.000504	1.25	AP5Z1	adaptor-related protein complex 5, zeta 1 subunit	Upregulated
A_33_P332	0.002901	0.000539	1.25	NRSN2	neurensin 2	Upregulated

A_33_P380	0.002952	0.000554	1.25	SPATS2	spermatogenesis associated, serine-rich 2	Upregulated
A_23_P699	0.003231	0.000638	1.25	RARS	arginyl-tRNA synthetase	Upregulated
A_24_P690	0.003515	0.000721	1.25	SEC23B	Sec23 homolog B (<i>S. cerevisiae</i>)	Upregulated
A_22_P000	0.003914	0.000847	1.25	lnc-FBN2-6	lnc-FBN2-6:1	Upregulated
A_23_P204	0.004106	0.000906	1.25	MPHOSPH8	M-phase phosphoprotein 8	Upregulated
A_21_P000	0.004154	0.000922	1.25	lnc-PFKP-9	lnc-PFKP-9:1	Upregulated
A_32_P662	0.006163	0.00164	1.25	ANKRD20A2	ankyrin repeat domain 20 family, member A2	Upregulated
A_33_P338	0.006791	0.00189	1.25	STXBP2	syntaxin binding protein 2	Upregulated
A_23_P872	0.007225	0.00206	1.25	MRPL17	mitochondrial ribosomal protein L17	Upregulated
A_33_P323	0.009552	0.003	1.25	TET2	tet methylcytosine dioxygenase 2	Upregulated
A_33_P339	0.0141	0.00498	1.25	SPATA25	spermatogenesis associated 25	Upregulated
A_33_P329	0.014691	0.00527	1.25	ALG2	ALG2, alpha-1,3/1,6-mannosyltransferase	Upregulated
A_21_P000	0.019729	0.00764	1.25	lnc-ZRANB1-2	lnc-ZRANB1-2:1	Upregulated
A_24_P522	0.01975	0.00765	1.25	ERICH3	glutamate-rich 3	Upregulated
A_23_P200	0.020694	0.0081	1.25	LRP8	low density lipoprotein receptor-related protein 8, apolipoprotein e receptor 2	Upregulated
A_33_P336	0.023746	0.00963	1.25	SCARNA5	small Cajal body-specific RNA 5	Upregulated
A_23_P629	0.030032	0.0129	1.25	PBX1	pre-B-cell leukemia homeobox 1	Upregulated
A_23_P435	0.0414	0.0191	1.25	GPC4	glypican 4	Upregulated
A_32_P225	0.001497	0.00018	1.24	UTS2B	urotensin 2B	Upregulated
A_23_P137	0.001503	0.000181	1.24	ENO1	enolase 1, (alpha)	Upregulated
A_23_P105	0.001522	0.000185	1.24	ATL3	atlastin GTPase 3	Upregulated
A_23_P752	0.001523	0.000185	1.24	SLC25A28	solute carrier family 25 (mitochondrial iron transporter), member 28	Upregulated
A_24_P927	0.001552	0.000191	1.24	OXNAD1	oxidoreductase NAD-binding domain containing 1	Upregulated
A_32_P114	0.001606	0.000203	1.24	CACYBP	calcyclin binding protein	Upregulated
A_23_P293	0.001661	0.000216	1.24	RYBP	RING1 and YY1 binding protein	Upregulated
A_24_P340	0.001804	0.00025	1.24	NDUFAF4P1	NADH dehydrogenase (ubiquinone) complex I, assembly factor 4 pseudogene	Upregulated
A_19_P008	0.001908	0.000275	1.24	FTL	ferritin, light polypeptide	Upregulated
A_23_P125	0.002025	0.000307	1.24	PGK1	phosphoglycerate kinase 1	Upregulated
A_23_P160	0.002034	0.00031	1.24	SLC19A2	solute carrier family 19 (thiamine transporter), member 2	Upregulated
A_32_P100	0.0021	0.000326	1.24	FLJ37453	uncharacterized LOC729614	Upregulated
A_24_P209	0.002455	0.000416	1.24	MRPS10	mitochondrial ribosomal protein S10	Upregulated
A_24_P286	0.002682	0.000478	1.24	PURB	purine-rich element binding protein B	Upregulated
A_23_P131	0.006395	0.00174	1.24	VPS54	vacuolar protein sorting 54 homolog (<i>S. cerevisiae</i>)	Upregulated
A_23_P116	0.006443	0.00176	1.24	IFT46	intraflagellar transport 46	Upregulated
A_22_P000	0.006628	0.00183	1.24	LOC1019270	uncharacterized LOC101927043	Upregulated
A_23_P358	0.006753	0.00187	1.24	PML	promyelocytic leukemia	Upregulated
A_23_P144	0.011081	0.00364	1.24	CCRN4L	CCR4 carbon catabolite repression 4-like (<i>S. cerevisiae</i>)	Upregulated

A_23_P125	0.014474	0.00517	1.24	SLC26A11	solute carrier family 26 (anion exchanger), member 11	Upregulated
A_23_P969	0.021235	0.00836	1.24	SYNC	syncoilin, intermediate filament protein	Upregulated
A_21_P000	0.022183	0.00883	1.24	ZBED6	zinc finger, BED-type containing 6	Upregulated
A_23_P259	0.025418	0.0105	1.24	KCND2	potassium channel, voltage gated Shal related subfamily D, member 2	Upregulated
A_23_P139	0.025552	0.0106	1.24	GALNT18	polypeptide N-acetylgalactosaminyltransferase 18	Upregulated
A_23_P484	0.030335	0.0131	1.24	CCNA1	cyclin A1	Upregulated
A_21_P000	0.032013	0.014	1.24	LOC1019277	uncharacterized LOC101927780	Upregulated
A_21_P001	0.037423	0.0169	1.24	FOXP4-AS1	FOXP4 antisense RNA 1	Upregulated
A_33_P321	0.040083	0.0184	1.24	HIRIP3	HIRA interacting protein 3	Upregulated
A_22_P000	0.05525	0.0271	1.24	lnc-AKIRIN1-1	lnc-AKIRIN1-1:1	Upregulated
A_22_P000	0.057401	0.0283	1.24	lnc-TAF15-1	lnc-TAF15-1:1	Upregulated
A_22_P000	0.058736	0.0291	1.24	CREB1	cAMP responsive element binding protein 1	Upregulated
A_23_P420	0.070072	0.0359	1.24	SLC22A16	solute carrier family 22 (organic cation/carnitine transporter), member 16	Upregulated
A_32_P800	0.001889	0.000271	1.23	CLEC2D	C-type lectin domain family 2, member D	Upregulated
A_32_P743	0.001908	0.000276	1.23	VCPIP1	valosin containing protein (p97)/p47 complex interacting protein 1	Upregulated
A_33_P340	0.002006	0.000302	1.23	ANP32E	acidic (leucine-rich) nuclear phosphoprotein 32 family, member E	Upregulated
A_33_P333	0.002024	0.000307	1.23	HSD17B12	hydroxysteroid (17-beta) dehydrogenase 12	Upregulated
A_33_P334	0.002132	0.000338	1.23	CHEK1	checkpoint kinase 1	Upregulated
A_23_P205	0.002163	0.000344	1.23	GMFB	glia maturation factor, beta	Upregulated
A_23_P217	0.002968	0.000559	1.23	RGS16	regulator of G-protein signaling 16	Upregulated
A_33_P335	0.003003	0.000569	1.23	POU3F1	POU class 3 homeobox 1	Upregulated
A_23_P344	0.004051	0.000889	1.23	TMEM39B	transmembrane protein 39B	Upregulated
A_33_P339	0.004084	0.000898	1.23	LINC01160	long intergenic non-protein coding RNA 1160	Upregulated
A_23_P201	0.004491	0.00104	1.23	DESI2	desumoylating isopeptidase 2	Upregulated
A_23_P128	0.004763	0.00113	1.23	FKBP4	FK506 binding protein 4, 59kDa	Upregulated
A_23_P407	0.005058	0.00123	1.23	PARVB	parvin, beta	Upregulated
A_23_P661	0.006203	0.00166	1.23	KNOP1	lysine-rich nucleolar protein 1	Upregulated
A_23_P204	0.011684	0.00392	1.23	SLC41A2	solute carrier family 41 (magnesium transporter), member 2	Upregulated
A_33_P342	0.013296	0.00462	1.23	lnc-TMED5-1	lnc-TMED5-1:28	Upregulated
A_21_P001	0.015312	0.00556	1.23	TPTE2	transmembrane phosphoinositide 3-phosphatase and tensin homolog 2	Upregulated
A_32_P326	0.021987	0.00874	1.23	SENP5	SUMO1/sentrin specific peptidase 5	Upregulated
A_33_P326	0.03179	0.0138	1.23	B3GALT5-AS	B3GALT5 antisense RNA 1	Upregulated
A_21_P001	0.033281	0.0146	1.23	XLOC_I2_012366		Upregulated
A_23_P253	0.042047	0.0195	1.23	UNC13B	unc-13 homolog B (C. elegans)	Upregulated
A_23_P629	0.001532	0.000187	1.22	ATF6	activating transcription factor 6	Upregulated
A_23_P654	0.001603	0.000202	1.22	RAB2B	RAB2B, member RAS oncogene family	Upregulated
A_22_P000	0.001606	0.000203	1.22	LRRC75A-AS	LRRC75A antisense RNA 1	Upregulated

A_24_P831	0.00183	0.000257	1.22	AFF4	AF4/FMR2 family, member 4	Upregulated
A_23_P255	0.001848	0.000261	1.22	RNF14	ring finger protein 14	Upregulated
A_33_P326	0.001965	0.000292	1.22	FAM120AOS	family with sequence similarity 120A opposite strand	Upregulated
A_23_P119	0.0021	0.000326	1.22	CNNM4	cyclin and CBS domain divalent metal cation transport mediator 4	Upregulated
A_24_P370	0.002124	0.000334	1.22	ZMYM6NB	ZMYM6 neighbor	Upregulated
A_23_P258	0.002241	0.000365	1.22	PSMD10	proteasome (prosome, macropain) 26S subunit, non-ATPase, 10	Upregulated
A_33_P322	0.002361	0.000394	1.22	LOC1027248	uncharacterized LOC102724804	Upregulated
A_33_P341	0.002579	0.000452	1.22	RNF220	ring finger protein 220	Upregulated
A_23_P155	0.003178	0.000623	1.22	GFM1	G elongation factor, mitochondrial 1	Upregulated
A_19_P008	0.003184	0.000625	1.22	lnc-FBXW4-1	lnc-FBXW4-1:1	Upregulated
A_33_P332	0.003668	0.00077	1.22	LOC389906	zinc finger protein 839 pseudogene	Upregulated
A_24_P543	0.003779	0.000803	1.22	RASGRP3	RAS guanyl releasing protein 3 (calcium and DAG-regulated)	Upregulated
A_21_P001	0.004983	0.00121	1.22	DGCR5	DiGeorge syndrome critical region gene 5 (non-protein coding)	Upregulated
A_21_P001	0.005238	0.0013	1.22	LINC00454	long intergenic non-protein coding RNA 454	Upregulated
A_23_P678	0.005382	0.00135	1.22	ADCY3	adenylate cyclase 3	Upregulated
A_21_P001	0.005847	0.00152	1.22	ZNF807	zinc finger protein 807	Upregulated
A_22_P000	0.006753	0.00187	1.22	lnc-PEA15-1	lnc-PEA15-1:1	Upregulated
A_33_P328	0.010886	0.00356	1.22	SP6	Sp6 transcription factor	Upregulated
A_21_P001	0.032067	0.014	1.22	C1orf61	chromosome 1 open reading frame 61	Upregulated
A_33_P334	0.03211	0.014	1.22	LSM14B	LSM14B, SCD6 homolog B (S. cerevisiae)	Upregulated
A_33_P332	0.056476	0.0278	1.22	PRR26	proline rich 26	Upregulated
A_23_P215	0.078611	0.0412	1.22	HBP1	HMG-box transcription factor 1	Upregulated
A_24_P586	0.001617	0.000206	1.21	LOC1001333	uncharacterized LOC100133331	Upregulated
A_24_P154	0.001687	0.000221	1.21	ECE1	endothelin converting enzyme 1	Upregulated
A_24_P319	0.001687	0.000221	1.21	SUMO1	small ubiquitin-like modifier 1	Upregulated
A_24_P924	0.001972	0.000293	1.21	VEZF1	vascular endothelial zinc finger 1	Upregulated
A_24_P402	0.002034	0.00031	1.21	MBP	myelin basic protein	Upregulated
A_33_P331	0.002083	0.000323	1.21	PRKAA1	protein kinase, AMP-activated, alpha 1 catalytic subunit	Upregulated
A_33_P331	0.002166	0.000345	1.21	USF2	upstream transcription factor 2, c-fos interacting	Upregulated
A_23_P259	0.002309	0.000381	1.21	TKTL1	transketolase-like 1	Upregulated
A_23_P192	0.003949	0.000858	1.21	SDHAF2	succinate dehydrogenase complex assembly factor 2	Upregulated
A_21_P001	0.005296	0.00132	1.21	lnc-MMRN1-2	lnc-MMRN1-2:3	Upregulated
A_23_P593	0.005417	0.00137	1.21	CEP57L1	centrosomal protein 57kDa-like 1	Upregulated
A_23_P141	0.00612	0.00163	1.21	ZNF688	zinc finger protein 688	Upregulated
A_23_P994	0.009925	0.00316	1.21	BRCA2	breast cancer 2, early onset	Upregulated
A_21_P000	0.009925	0.00316	1.21	lnc-TNFSF11-	lnc-TNFSF11-1:1	Upregulated
A_24_P321	0.011487	0.00383	1.21	PRKRIR	protein-kinase, interferon-inducible double stranded RNA dependent int	Upregulated

A_33_P321	0.01209	0.00409	1.21	BMPR1A	bone morphogenetic protein receptor, type IA	Upregulated
A_22_P000	0.012113	0.0041	1.21	LOC1019276	uncharacterized LOC101927637	Upregulated
A_22_P000	0.013468	0.00469	1.21	lnc-ZWINT-5	lnc-ZWINT-5:1	Upregulated
A_22_P000	0.035165	0.0157	1.21	lnc-AC006035	lnc-AC006035.2-3:1	Upregulated
A_23_P121	0.044655	0.0209	1.21	TRAPPC13	trafficking protein particle complex 13	Upregulated
A_22_P000	0.060624	0.0302	1.21	lnc-GATAD1-2	lnc-GATAD1-2:1	Upregulated
A_22_P000	0.073261	0.0379	1.21	KCNJ10	potassium channel, inwardly rectifying subfamily J, member 10	Upregulated
A_33_P329	0.001808	0.000251	1.2	DPP9	dipeptidyl-peptidase 9	Upregulated
A_23_P103	0.001913	0.000277	1.2	MFNG	MFNG O-fucosylpeptide 3-beta-N-acetylglucosaminyltransferase	Upregulated
A_24_P337	0.002043	0.000313	1.2	RABGEF1	RAB guanine nucleotide exchange factor (GEF) 1	Upregulated
A_23_P120	0.002117	0.000333	1.2	MTHFD2	methylenetetrahydrofolate dehydrogenase (NADP+ dependent) 2, meth	Upregulated
A_23_P200	0.002128	0.000336	1.2	NEXN	nexilin (F actin binding protein)	Upregulated
A_24_P105	0.002124	0.000336	1.2	PRKAB2	protein kinase, AMP-activated, beta 2 non-catalytic subunit	Upregulated
A_23_P503	0.002227	0.000361	1.2	EDARADD	EDAR-associated death domain	Upregulated
A_19_P003	0.002353	0.000391	1.2	FAM200B	family with sequence similarity 200, member B	Upregulated
A_24_P136	0.002423	0.000409	1.2	TOPORS-AS	TOPORS antisense RNA 1	Upregulated
A_24_P356	0.002452	0.000415	1.2	GABARAPL2	GABA(A) receptor-associated protein-like 2	Upregulated
A_23_P470	0.002499	0.000429	1.2	WDR37	WD repeat domain 37	Upregulated
A_23_P372	0.002596	0.000455	1.2	GAPVD1	GTPase activating protein and VPS9 domains 1	Upregulated
A_23_P204	0.00263	0.000464	1.2	H2AFJ	H2A histone family, member J	Upregulated
A_33_P336	0.002907	0.000541	1.2	NAP1L4	nucleosome assembly protein 1-like 4	Upregulated
A_33_P324	0.00604	0.0016	1.2	SPDL1	spindle apparatus coiled-coil protein 1	Upregulated
A_23_P468	0.006588	0.00181	1.2	OBFC1	oligonucleotide/oligosaccharide-binding fold containing 1	Upregulated
A_32_P206	0.007166	0.00204	1.2	ZNF322	zinc finger protein 322	Upregulated
A_22_P000	0.011991	0.00405	1.2	lnc-C10orf11	lnc-C10orf11-3:1	Upregulated
A_32_P191	0.011991	0.00405	1.2	LOC644662	uncharacterized LOC644662	Upregulated
A_23_P328	0.013274	0.00461	1.2	LCOR	ligand dependent nuclear receptor corepressor	Upregulated
A_23_P140	0.014406	0.00513	1.2	TMEM8A	transmembrane protein 8A	Upregulated
A_23_P565	0.017727	0.0067	1.2	C1D	C1D nuclear receptor corepressor	Upregulated
A_23_P112	0.018945	0.00727	1.2	NUDT2	nudix (nucleoside diphosphate linked moiety X)-type motif 2	Upregulated
A_24_P965	0.033475	0.0147	1.2	EVI5	ecotropic viral integration site 5	Upregulated
A_22_P000	0.035267	0.0158	1.2	LOC1005070	uncharacterized LOC100507071	Upregulated
A_22_P000	0.03885	0.0177	1.2	LOC1001290	uncharacterized LOC100129046	Upregulated
A_33_P335	0.063131	0.0317	1.2	GAS6-AS1	GAS6 antisense RNA 1	Upregulated
A_33_P330	0.08413	0.0448	1.2	MTRR	5-methyltetrahydrofolate-homocysteine methyltransferase reductase	Upregulated
A_33_P322	0.001635	0.00021	1.19	CDK11A	cyclin-dependent kinase 11A	Upregulated
A_23_P557	0.001667	0.000217	1.19	RELB	v-rel avian reticuloendotheliosis viral oncogene homolog B	Upregulated

A_23_P368	0.001684	0.000221	1.19	EME1	essential meiotic structure-specific endonuclease 1	Upregulated
A_24_P565	0.001709	0.000228	1.19	ALG1	ALG1, chitobiosyldiphosphodolichol beta-mannosyltransferase	Upregulated
A_23_P646	0.001709	0.000229	1.19	ZCCHC8	zinc finger, CCHC domain containing 8	Upregulated
A_23_P519	0.00174	0.000234	1.19	PFDN2	prefoldin subunit 2	Upregulated
A_23_P257	0.001805	0.00025	1.19	USP16	ubiquitin specific peptidase 16	Upregulated
A_23_P431	0.001981	0.000295	1.19	YIPF6	Yip1 domain family, member 6	Upregulated
A_23_P171	0.002012	0.000304	1.19	GPN1	GPN-loop GTPase 1	Upregulated
A_22_P000	0.002037	0.000311	1.19	lnc-RUNDC3A	lnc-RUNDC3A-1:1	Upregulated
A_22_P000	0.002722	0.000489	1.19	lnc-UBE2Z-1	lnc-UBE2Z-1:1	Upregulated
A_23_P111	0.00274	0.000494	1.19	YIPF3	Yip1 domain family, member 3	Upregulated
A_23_P425	0.00284	0.000522	1.19	TRIO	trio Rho guanine nucleotide exchange factor	Upregulated
A_21_P001	0.003394	0.000687	1.19	FRG1	FSDH region gene 1	Upregulated
A_22_P000	0.004088	0.0009	1.19	lnc-AQP8-1	lnc-AQP8-1:1	Upregulated
A_32_P558	0.004502	0.00104	1.19	SKA2	spindle and kinetochore associated complex subunit 2	Upregulated
A_33_P335	0.005252	0.00131	1.19	MFSD12	major facilitator superfamily domain containing 12	Upregulated
A_21_P001	0.005296	0.00132	1.19	XLOC_I2_009613		Upregulated
A_33_P338	0.0066	0.00182	1.19	WHSC1	Wolf-Hirschhorn syndrome candidate 1	Upregulated
A_23_P510	0.0111	0.00365	1.19	SPC25	SPC25, NDC80 kinetochore complex component	Upregulated
A_21_P001	0.014099	0.00498	1.19	lnc-RGL4-4	lnc-RGL4-4:4	Upregulated
A_22_P000	0.025957	0.0108	1.19	LINC-R0002	uncharacterized LincR-0002	Upregulated
A_22_P000	0.025957	0.0108	1.19	lnc-TSPAN32	lnc-TSPAN32-1:1	Upregulated
A_21_P000	0.052165	0.0252	1.19	LINC01304	long intergenic non-protein coding RNA 1304	Upregulated
A_33_P337	0.001643	0.000212	1.18	SAT1	spermidine/spermine N1-acetyltransferase 1	Upregulated
A_23_P171	0.001651	0.000214	1.18	IGBP1	immunoglobulin (CD79A) binding protein 1	Upregulated
A_23_P717	0.001695	0.000224	1.18	CKS2	CDC28 protein kinase regulatory subunit 2	Upregulated
A_33_P331	0.00176	0.000239	1.18	FAM46C	family with sequence similarity 46, member C	Upregulated
A_19_P008	0.001837	0.000259	1.18	lnc-SAA2-2	lnc-SAA2-2:1	Upregulated
A_33_P321	0.001936	0.000282	1.18	ETV6	ets variant 6	Upregulated
A_23_P695	0.001991	0.000298	1.18	CCNI	cyclin I	Upregulated
A_24_P743	0.002248	0.000368	1.18	ZNF493	zinc finger protein 493	Upregulated
A_22_P000	0.002314	0.000382	1.18	lnc-GATAD2B	lnc-GATAD2B-1:2	Upregulated
A_24_P277	0.002361	0.000394	1.18	HIST1H4G	histone cluster 1, H4g	Upregulated
A_32_P584	0.002468	0.00042	1.18	PHF13	PHD finger protein 13	Upregulated
A_33_P327	0.002572	0.00045	1.18	ZNF525	zinc finger protein 525	Upregulated
A_33_P336	0.002825	0.000517	1.18	TAF8	TAF8 RNA polymerase II, TATA box binding protein (TBP)-associated factor 8	Upregulated
A_23_P897	0.003387	0.000683	1.18	PHLPP1	PH domain and leucine rich repeat protein phosphatase 1	Upregulated
A_23_P353	0.003468	0.000707	1.18	LARP1B	La ribonucleoprotein domain family, member 1B	Upregulated

A_19_P003	0.003611	0.000753	1.18	LOC220729	succinate dehydrogenase complex, subunit A, flavoprotein (Fp) pseudo	Upregulated
A_33_P328	0.003728	0.000789	1.18	ZNF775	zinc finger protein 775	Upregulated
A_23_P171	0.003985	0.000868	1.18	WDR44	WD repeat domain 44	Upregulated
A_22_P000	0.00422	0.000947	1.18	lnc-SLC24A5	lnc-SLC24A5-3:1	Upregulated
A_33_P341	0.005195	0.00128	1.18	ACER2	alkaline ceramidase 2	Upregulated
A_24_P148	0.005869	0.00153	1.18	UBE2E3	ubiquitin-conjugating enzyme E2E 3	Upregulated
A_33_P321	0.008048	0.00238	1.18	LZTS1	leucine zipper, putative tumor suppressor 1	Upregulated
A_22_P000	0.009619	0.00303	1.18	CKMT2-AS1	CKMT2 antisense RNA 1	Upregulated
A_33_P339	0.010598	0.00344	1.18	FAM73A	family with sequence similarity 73, member A	Upregulated
A_21_P000	0.011718	0.00393	1.18	LOC1019292	uncharacterized LOC101929295	Upregulated
A_24_P287	0.012163	0.00412	1.18	TOLLIP	toll interacting protein	Upregulated
A_23_P145	0.02598	0.0108	1.18	SUGCT	succinyl-CoA:glutarate-CoA transferase	Upregulated
A_33_P335	0.031056	0.0135	1.18	DDC	dopa decarboxylase (aromatic L-amino acid decarboxylase)	Upregulated
A_33_P330	0.036625	0.0165	1.18	LOC1001300	uncharacterized LOC100130078	Upregulated
A_33_P335	0.049558	0.0238	1.18	ETV1	ets variant 1	Upregulated
A_21_P000	0.050136	0.0241	1.18	lnc-USP12-2	lnc-USP12-2:1	Upregulated
A_19_P003	0.053537	0.0261	1.18	LINC00870	long intergenic non-protein coding RNA 870	Upregulated
A_22_P000	0.0017	0.000226	1.17	lnc-CEP152-1	lnc-CEP152-1:1	Upregulated
A_33_P333	0.001815	0.000253	1.17	GINM1	glycoprotein integral membrane 1	Upregulated
A_22_P000	0.001863	0.000265	1.17	LOC1009964	uncharacterized LOC100996425	Upregulated
A_24_P407	0.001922	0.000279	1.17	GRB2	growth factor receptor-bound protein 2	Upregulated
A_23_P202	0.001958	0.000289	1.17	PCGF5	polycomb group ring finger 5	Upregulated
A_22_P000	0.002022	0.000306	1.17	LOC1019277	uncharacterized LOC101927730	Upregulated
A_22_P000	0.002034	0.00031	1.17	lnc-AC114947	lnc-AC114947.1.1-1:2	Upregulated
A_22_P000	0.002112	0.00033	1.17	lnc-ACTR6-1	lnc-ACTR6-1:1	Upregulated
A_24_P912	0.002112	0.00033	1.17	MGC50722	uncharacterized MGC50722	Upregulated
A_32_P457	0.00218	0.000349	1.17	PGAM1	phosphoglycerate mutase 1 (brain)	Upregulated
A_23_P698	0.002459	0.000417	1.17	DHX15	DEAH (Asp-Glu-Ala-His) box helicase 15	Upregulated
A_23_P211	0.00247	0.00042	1.17	DGCR8	DGCR8 microprocessor complex subunit	Upregulated
A_33_P334	0.002524	0.000436	1.17	AP2S1	adaptor-related protein complex 2, sigma 1 subunit	Upregulated
A_24_P286	0.002572	0.000449	1.17	AHCTF1	AT hook containing transcription factor 1	Upregulated
A_23_P158	0.002661	0.000472	1.17	ESRRA	estrogen-related receptor alpha	Upregulated
A_33_P335	0.002874	0.000531	1.17	AKIRIN1	akirin 1	Upregulated
A_33_P327	0.003113	0.000603	1.17	FKBP8	FK506 binding protein 8, 38kDa	Upregulated
A_22_P000	0.003389	0.000685	1.17	lnc-FAM168A	lnc-FAM168A-1:1	Upregulated
A_24_P158	0.004647	0.00109	1.17	IRAK4	interleukin-1 receptor-associated kinase 4	Upregulated
A_23_P212	0.006202	0.00166	1.17	PTPN23	protein tyrosine phosphatase, non-receptor type 23	Upregulated

A_22_P000	0.006764	0.00188	1.17	lnc-B4GALNT	lnc-B4GALNT3-1:1	Upregulated
A_23_P353	0.010026	0.0032	1.17	IGFBP7	insulin-like growth factor binding protein 7	Upregulated
A_22_P000	0.010209	0.00329	1.17	lnc-TMC7-1	lnc-TMC7-1:1	Upregulated
A_33_P325	0.011464	0.00382	1.17	PPP1R12B	protein phosphatase 1, regulatory subunit 12B	Upregulated
A_21_P001	0.013974	0.00492	1.17	LOC1019302	uncharacterized LOC101930282	Upregulated
A_24_P139	0.020379	0.00795	1.17	USP21	ubiquitin specific peptidase 21	Upregulated
A_23_P367	0.023201	0.00934	1.17	EPOR	erythropoietin receptor	Upregulated
A_23_P516	0.030538	0.0132	1.17	PLK3	polo-like kinase 3	Upregulated
A_23_P366	0.036454	0.0164	1.17	TDGF1	teratocarcinoma-derived growth factor 1	Upregulated
A_21_P001	0.044618	0.0209	1.17	XLOC_I2_011309		Upregulated
A_33_P330	0.06701	0.0341	1.17	GGA1	golgi-associated, gamma adaptin ear containing, ARF binding protein 1	Upregulated
A_33_P353	0.001732	0.000233	1.16	DARS	aspartyl-tRNA synthetase	Upregulated
A_24_P100	0.001837	0.000259	1.16	SH3RF1	SH3 domain containing ring finger 1	Upregulated
A_23_P404	0.001953	0.000287	1.16	KIAA1147	KIAA1147	Upregulated
A_33_P341	0.002034	0.00031	1.16	FAM96A	family with sequence similarity 96, member A	Upregulated
A_33_P334	0.002219	0.000358	1.16	TRAF3IP2	TRAF3 interacting protein 2	Upregulated
A_23_P600	0.002369	0.000396	1.16	ANGPT2	angiopoietin 2	Upregulated
A_33_P342	0.002492	0.000427	1.16	IKZF5	IKAROS family zinc finger 5 (Pegasus)	Upregulated
A_32_P221	0.003483	0.000712	1.16	MGC70870	C-terminal binding protein 2 pseudogene	Upregulated
A_32_P168	0.003532	0.000727	1.16	ANAPC13	anaphase promoting complex subunit 13	Upregulated
A_33_P338	0.006489	0.00177	1.16	FBXO5	F-box protein 5	Upregulated
A_33_P334	0.010643	0.00346	1.16	RHOBTB1	Rho-related BTB domain containing 1	Upregulated
A_23_P333	0.011562	0.00387	1.16	ZNF547	zinc finger protein 547	Upregulated
A_22_P000	0.012254	0.00416	1.16	lnc-OTUD3-1	lnc-OTUD3-1:1	Upregulated
A_22_P000	0.013997	0.00493	1.16	RASAL2	RAS protein activator like 2	Upregulated
A_23_P119	0.027185	0.0114	1.16	FXYD7	FXYD domain containing ion transport regulator 7	Upregulated
A_33_P337	0.02899	0.0124	1.16	OPA3	optic atrophy 3 (autosomal recessive, with chorea and spastic paraplegia)	Upregulated
A_33_P330	0.02899	0.0124	1.16	SLC16A10	solute carrier family 16 (aromatic amino acid transporter), member 10	Upregulated
A_22_P000	0.032792	0.0144	1.16	lnc-AC090186	lnc-AC090186.1-3:1	Upregulated
A_21_P000	0.039618	0.0182	1.16	lnc-UBLCP1-8	lnc-UBLCP1-8:2	Upregulated
A_21_P000	0.052196	0.0253	1.16	lnc-PRR16-1	lnc-PRR16-1:2	Upregulated
A_23_P352	0.001751	0.000236	1.15	POLR2C	polymerase (RNA) II (DNA directed) polypeptide C, 33kDa	Upregulated
A_24_P216	0.001808	0.000251	1.15	LSM10	LSM10, U7 small nuclear RNA associated	Upregulated
A_24_P920	0.001863	0.000265	1.15	ASB7	ankyrin repeat and SOCS box containing 7	Upregulated
A_33_P328	0.001962	0.000291	1.15	KAT6A	K(lysine) acetyltransferase 6A	Upregulated
A_24_P418	0.002027	0.000308	1.15	RPS17	ribosomal protein S17	Upregulated
A_24_P260	0.002124	0.000335	1.15	LRPPRC	leucine-rich pentatricopeptide repeat containing	Upregulated

A_23_P102	0.002154	0.000342	1.15	CCT4	chaperonin containing TCP1, subunit 4 (delta)	Upregulated
A_24_P854	0.002271	0.000372	1.15	ARIH1	ariadne RBR E3 ubiquitin protein ligase 1	Upregulated
A_24_P388	0.00228	0.000374	1.15	SRP19	signal recognition particle 19kDa	Upregulated
A_23_P133	0.002286	0.000376	1.15	PJA2	praja ring finger 2, E3 ubiquitin protein ligase	Upregulated
A_23_P784	0.0025	0.00043	1.15	ELP2	elongator acetyltransferase complex subunit 2	Upregulated
A_33_P327	0.002532	0.000438	1.15	SLC25A16	solute carrier family 25 (mitochondrial carrier), member 16	Upregulated
A_32_P226	0.00301	0.000571	1.15	FOXP4-AS1	FOXP4 antisense RNA 1	Upregulated
A_23_P255	0.003658	0.000766	1.15	DUS1L	dihydrouridine synthase 1-like (S. cerevisiae)	Upregulated
A_23_P128	0.004595	0.00107	1.15	HELLS	helicase, lymphoid-specific	Upregulated
A_33_P328	0.004613	0.00108	1.15	IVNS1ABP	influenza virus NS1A binding protein	Upregulated
A_33_P336	0.005041	0.00123	1.15	RBBP9	retinoblastoma binding protein 9	Upregulated
A_23_P310	0.005219	0.00129	1.15	PRSS3P2	protease, serine, 3 pseudogene 2	Upregulated
A_21_P000	0.005539	0.00141	1.15	lnc-AC069257	lnc-AC069257.9.1-5:1	Upregulated
A_23_P266	0.005854	0.00153	1.15	TMEM186	transmembrane protein 186	Upregulated
A_24_P942	0.006994	0.00197	1.15	PGP	phosphoglycolate phosphatase	Upregulated
A_23_P208	0.007101	0.00201	1.15	WDR34	WD repeat domain 34	Upregulated
A_33_P333	0.009013	0.00278	1.15	PPCS	phosphopantothoenoylcysteine synthetase	Upregulated
A_32_P434	0.010871	0.00355	1.15	ZNF182	zinc finger protein 182	Upregulated
A_23_P214	0.016636	0.00619	1.15	AIF1	allograft inflammatory factor 1	Upregulated
A_19_P003	0.017213	0.00647	1.15	LOC1019271	uncharacterized LOC101927151	Upregulated
A_22_P000	0.025457	0.0105	1.15	lnc-PAX8-1	lnc-PAX8-1:2	Upregulated
A_23_P210	0.025963	0.0108	1.15	SIRPA	signal-regulatory protein alpha	Upregulated
A_22_P000	0.035067	0.0156	1.15	lnc-STOM-1	lnc-STOM-1:1	Upregulated
A_33_P332	0.041447	0.0192	1.15	ZDHHC3	zinc finger, DHHC-type containing 3	Upregulated
A_22_P000	0.059444	0.0295	1.15	lnc-RHD-1	lnc-RHD-1:1	Upregulated
A_22_P000	0.001782	0.000244	1.14	lnc-EFR3B-4	lnc-EFR3B-4:1	Upregulated
A_32_P384	0.001823	0.000255	1.14	SNHG8	small nucleolar RNA host gene 8 (non-protein coding)	Upregulated
A_24_P899	0.001884	0.000269	1.14	SURF4	surfeit 4	Upregulated
A_22_P000	0.001893	0.000272	1.14	LOC1027233	uncharacterized LOC102723366	Upregulated
A_24_P874	0.001892	0.000272	1.14	TVP23C	trans-golgi network vesicle protein 23 homolog C (S. cerevisiae)	Upregulated
A_23_P618	0.001948	0.000285	1.14	RAB24	RAB24, member RAS oncogene family	Upregulated
A_33_P323	0.001958	0.000289	1.14	DENND4B	DENN/MADD domain containing 4B	Upregulated
A_23_P509	0.002053	0.000315	1.14	ITGAV	integrin, alpha V	Upregulated
A_23_P204	0.002124	0.000335	1.14	TDG	thymine-DNA glycosylase	Upregulated
A_23_P212	0.002241	0.000365	1.14	ELP6	elongator acetyltransferase complex subunit 6	Upregulated
A_32_P150	0.002374	0.000397	1.14	LOC407835	mitogen-activated protein kinase kinase 2 pseudogene	Upregulated
A_23_P487	0.002527	0.000437	1.14	UCK2	uridine-cytidine kinase 2	Upregulated

A_33_P322	0.002597	0.000456	1.14	PSIP1	PC4 and SFRS1 interacting protein 1	Upregulated
A_23_P364	0.002655	0.000471	1.14	SELK	selenoprotein K	Upregulated
A_33_P329	0.002714	0.000487	1.14	PPM1B	protein phosphatase, Mg ²⁺ /Mn ²⁺ dependent, 1B	Upregulated
A_24_P155	0.002932	0.000547	1.14	ASB7	ankyrin repeat and SOCS box containing 7	Upregulated
A_21_P001	0.004221	0.000948	1.14	LOC388692	uncharacterized LOC388692	Upregulated
A_23_P144	0.004303	0.000974	1.14	ANKRD32	ankyrin repeat domain 32	Upregulated
A_23_P375	0.005628	0.00145	1.14	AAGAB	alpha- and gamma-adaptin binding protein	Upregulated
A_23_P502	0.00702	0.00198	1.14	CBFA2T2	core-binding factor, runt domain, alpha subunit 2; translocated to, 2	Upregulated
A_23_P218	0.009165	0.00284	1.14	TPCN1	two pore segment channel 1	Upregulated
A_23_P160	0.010976	0.00359	1.14	MYOG	myogenin (myogenic factor 4)	Upregulated
A_23_P457	0.021337	0.00842	1.14	ORC1	origin recognition complex, subunit 1	Upregulated
A_33_P337	0.026634	0.0111	1.14	AGAP11	ankyrin repeat and GTPase domain Arf GTPase activating protein 11	Upregulated
A_21_P000	0.031962	0.0139	1.14	lnc-NFE2L3-2	lnc-NFE2L3-2:1	Upregulated
A_22_P000	0.072699	0.0375	1.14	lnc-HAS2-1	lnc-HAS2-1:1	Upregulated
A_23_P833	0.00179	0.000246	1.13	MRPL18	mitochondrial ribosomal protein L18	Upregulated
A_23_P157	0.001861	0.000264	1.13	INTS10	integrator complex subunit 10	Upregulated
A_21_P000	0.001938	0.000283	1.13	SNORD46	small nucleolar RNA, C/D box 46	Upregulated
A_33_P341	0.002114	0.000331	1.13	NUDT21	nudix (nucleoside diphosphate linked moiety X)-type motif 21	Upregulated
A_33_P324	0.00234	0.000388	1.13	XIAP	X-linked inhibitor of apoptosis, E3 ubiquitin protein ligase	Upregulated
A_24_P406	0.002416	0.000407	1.13	SLC43A3	solute carrier family 43, member 3	Upregulated
A_33_P332	0.002469	0.00042	1.13	RSPRY1	ring finger and SPRY domain containing 1	Upregulated
A_23_P435	0.002483	0.000425	1.13	WSB1	WD repeat and SOCS box containing 1	Upregulated
A_23_P356	0.002644	0.000468	1.13	MAPK8	mitogen-activated protein kinase 8	Upregulated
A_33_P330	0.002785	0.000506	1.13	EXOSC4	exosome component 4	Upregulated
A_21_P000	0.003149	0.000612	1.13	lnc-COPS4-1	lnc-COPS4-1:2	Upregulated
A_21_P001	0.003465	0.000707	1.13	ANKRD20A9f	ankyrin repeat domain 20 family, member A9, pseudogene	Upregulated
A_23_P614	0.003721	0.000787	1.13	ETFDH	electron-transferring-flavoprotein dehydrogenase	Upregulated
A_23_P743	0.004269	0.000964	1.13	TADA1	transcriptional adaptor 1	Upregulated
A_23_P166	0.004313	0.000978	1.13	TRMT10C	tRNA methyltransferase 10 homolog C (<i>S. cerevisiae</i>)	Upregulated
A_33_P331	0.004725	0.00112	1.13	ZNF215	zinc finger protein 215	Upregulated
A_21_P000	0.005231	0.0013	1.13	lnc-C5orf43-2	lnc-C5orf43-2:1	Upregulated
A_33_P326	0.005399	0.00136	1.13	MAZ	MYC-associated zinc finger protein (purine-binding transcription factor)	Upregulated
A_23_P346	0.006116	0.00163	1.13	MCU	mitochondrial calcium uniporter	Upregulated
A_33_P324	0.008137	0.00242	1.13	GOLGA6L4	golgin A6 family-like 4	Upregulated
A_23_P163	0.008331	0.0025	1.13	ECI1	enoyl-CoA delta isomerase 1	Upregulated
A_23_P376	0.008796	0.00269	1.13	BEND7	BEN domain containing 7	Upregulated
A_24_P372	0.008796	0.00269	1.13	PEX5	peroxisomal biogenesis factor 5	Upregulated

A_33_P338	0.009543	0.003	1.13	KIF3A	kinesin family member 3A	Upregulated
A_22_P000	0.020606	0.00806	1.13	LOC1019273	uncharacterized LOC101927326	Upregulated
A_33_P336	0.022884	0.00918	1.13	GYPA	glycophorin A (MNS blood group)	Upregulated
A_33_P361	0.026664	0.0112	1.13	POLR1A	polymerase (RNA) I polypeptide A, 194kDa	Upregulated
A_33_P324	0.052806	0.0256	1.13	ZNF814	zinc finger protein 814	Upregulated
A_22_P000	0.077329	0.0404	1.13	UBXN10-AS1	UBXN10 antisense RNA 1	Upregulated
A_21_P000	0.001838	0.000259	1.12	LINC01490	long intergenic non-protein coding RNA 1490	Upregulated
A_21_P000	0.001838	0.000259	1.12	lnc-ATP6AP2	lnc-ATP6AP2-5:1	Upregulated
A_33_P341	0.001949	0.000286	1.12	ATMIN	ATM interactor	Upregulated
A_32_P644	0.002027	0.000308	1.12	SDE2	SDE2 telomere maintenance homolog (S. pombe)	Upregulated
A_23_P942	0.00249	0.000426	1.12	LY96	lymphocyte antigen 96	Upregulated
A_23_P400	0.002572	0.00045	1.12	ETV3	ets variant 3	Upregulated
A_33_P335	0.002631	0.000465	1.12	TRIM78P	tripartite motif containing 78, pseudogene	Upregulated
A_33_P321	0.002889	0.000536	1.12	IBA57	IBA57, iron-sulfur cluster assembly homolog (S. cerevisiae)	Upregulated
A_21_P000	0.003491	0.000714	1.12	LINC01012	long intergenic non-protein coding RNA 1012	Upregulated
A_32_P946	0.004113	0.000908	1.12	LRRC37B	leucine rich repeat containing 37B	Upregulated
A_23_P278	0.004813	0.00115	1.12	ZNF607	zinc finger protein 607	Upregulated
A_33_P384	0.005278	0.00132	1.12	IKZF2	IKAROS family zinc finger 2 (Helios)	Upregulated
A_33_P332	0.005389	0.00136	1.12	THRB-AS1	THRB antisense RNA 1	Upregulated
A_23_P424	0.006917	0.00194	1.12	RHOV	ras homolog family member V	Upregulated
A_21_P000	0.007685	0.00224	1.12	LOC1019278	uncharacterized LOC101927815	Upregulated
A_21_P000	0.009226	0.00287	1.12	VTRNA1-3	vault RNA 1-3	Upregulated
A_24_P400	0.010993	0.0036	1.12	SLC25A44	solute carrier family 25, member 44	Upregulated
A_33_P340	0.01156	0.00386	1.12	TMEM38B	transmembrane protein 38B	Upregulated
A_22_P000	0.024466	0.01	1.12	MCM3AP	minichromosome maintenance complex component 3 associated proteir	Upregulated
A_32_P150	0.024864	0.0102	1.12	LOC1019283	uncharacterized LOC101928370	Upregulated
A_23_P171	0.025552	0.0106	1.12	CCNB3	cyclin B3	Upregulated
A_22_P000	0.031752	0.0138	1.12	LOC1019274	uncharacterized LOC101927472	Upregulated
A_23_P320	0.045156	0.0213	1.12	DEFB125	defensin, beta 125	Upregulated
A_21_P000	0.045156	0.0213	1.12	lnc-SBF2-2	lnc-SBF2-2:1	Upregulated
A_21_P000	0.048094	0.0229	1.12	LOC1027252	uncharacterized LOC102725283	Upregulated
A_24_P343	0.048094	0.0229	1.12	NTRK2	neurotrophic tyrosine kinase, receptor, type 2	Upregulated
A_23_P873	0.054634	0.0267	1.12	COMMD9	COMM domain containing 9	Upregulated
A_21_P000	0.054634	0.0267	1.12	LOC1005057	uncharacterized LOC100505715	Upregulated
A_22_P000	0.054634	0.0267	1.12	LOC1005060	uncharacterized LOC100506085	Upregulated
A_21_P001	0.066933	0.034	1.12	LOC1002895	uncharacterized LOC100289580	Upregulated
A_21_P000	0.076004	0.0396	1.12	PABPC1L2B-	PABPC1L2B antisense RNA 1 (head to head)	Upregulated

A_23_P408	0.001865	0.000266	1.11	CCT6B	chaperonin containing TCP1, subunit 6B (zeta 2)	Upregulated
A_21_P001	0.001991	0.000298	1.11	LOC1027254	uncharacterized LOC102725415	Upregulated
A_24_P766	0.002117	0.000333	1.11	CSNK2A1	casein kinase 2, alpha 1 polypeptide	Upregulated
A_23_P306	0.002132	0.000338	1.11	PPTC7	PTC7 protein phosphatase homolog (S. cerevisiae)	Upregulated
A_23_P708	0.002154	0.000342	1.11	BPGM	2,3-bisphosphoglycerate mutase	Upregulated
A_24_P417	0.002361	0.000394	1.11	TBL1X	transducin (beta)-like 1X-linked	Upregulated
A_24_P722	0.002483	0.000425	1.11	DHTKD1	dehydrogenase E1 and transketolase domain containing 1	Upregulated
A_23_P120	0.002677	0.000476	1.11	TRIT1	tRNA isopentenyltransferase 1	Upregulated
A_21_P001	0.003393	0.000687	1.11	SYNGR2	synaptogyrin 2	Upregulated
A_33_P339	0.003567	0.00074	1.11	ZC3HAV1	zinc finger CCCH-type, antiviral 1	Upregulated
A_32_P213	0.004341	0.000989	1.11	C20orf202	chromosome 20 open reading frame 202	Upregulated
A_24_P207	0.004341	0.000989	1.11	LCE2B	late comified envelope 2B	Upregulated
A_19_P003	0.004341	0.000989	1.11	TBXAS1	thromboxane A synthase 1 (platelet)	Upregulated
A_24_P154	0.004843	0.00116	1.11	ZBTB49	zinc finger and BTB domain containing 49	Upregulated
A_23_P152	0.006493	0.00177	1.11	EARS2	glutamyl-tRNA synthetase 2, mitochondrial	Upregulated
A_23_P334	0.006885	0.00192	1.11	SENPA8	SUMO/sentrin specific peptidase family member 8	Upregulated
A_33_P321	0.007518	0.00217	1.11	CCZ1	CCZ1 vacuolar protein trafficking and biogenesis associated homolog (S	Upregulated
A_33_P332	0.008143	0.00242	1.11	GOLGA2P6	golgin A2 pseudogene 6	Upregulated
A_33_P334	0.008884	0.00273	1.11	UBAP2	ubiquitin associated protein 2	Upregulated
A_23_P131	0.011812	0.00397	1.11	THUMPD2	THUMP domain containing 2	Upregulated
A_21_P001	0.015092	0.00546	1.11	SEPT7P2	septin 7 pseudogene 2	Upregulated
A_23_P561	0.023072	0.00927	1.11	SMG9	SMG9 nonsense mediated mRNA decay factor	Upregulated
A_23_P316	0.033316	0.0146	1.11	HOXB3	homeobox B3	Upregulated
A_21_P000	0.03335	0.0147	1.11	lnc-RMI1-3	lnc-RMI1-3:1	Upregulated
A_33_P337	0.073354	0.0379	1.11	FAM229B	family with sequence similarity 229, member B	Upregulated
A_24_P258	0.001949	0.000286	1.1	MASTL	microtubule associated serine/threonine kinase-like	Upregulated
A_24_P235	0.00198	0.000295	1.1	VDAC3	voltage-dependent anion channel 3	Upregulated
A_23_P166	0.001986	0.000297	1.1	ABCG1	ATP-binding cassette, sub-family G (WHITE), member 1	Upregulated
A_23_P631	0.002124	0.000335	1.1	DDX20	DEAD (Asp-Glu-Ala-Asp) box polypeptide 20	Upregulated
A_33_P334	0.002254	0.000369	1.1	RRNAD1	ribosomal RNA adenine dimethylase domain containing 1	Upregulated
A_33_P338	0.002284	0.000375	1.1	ANKRD40	ankyrin repeat domain 40	Upregulated
A_33_P339	0.00233	0.000385	1.1	CCDC6	coiled-coil domain containing 6	Upregulated
A_24_P233	0.002726	0.00049	1.1	SDHC	succinate dehydrogenase complex, subunit C, integral membrane prote	Upregulated
A_23_P317	0.002881	0.000533	1.1	C8orf76	chromosome 8 open reading frame 76	Upregulated
A_24_P368	0.003019	0.000574	1.1	WDR26	WD repeat domain 26	Upregulated
A_23_P735	0.003184	0.000625	1.1	GRIPAP1	GRIP1 associated protein 1	Upregulated
A_24_P294	0.003572	0.000742	1.1	PIK3R1	phosphoinositide-3-kinase, regulatory subunit 1 (alpha)	Upregulated

A_19_P003	0.003689	0.000776	1.1	LOC1019276 uncharacterized LOC101927686	Upregulated
A_23_P169	0.004227	0.00095	1.1	SDC1 syndecan 1	Upregulated
A_23_P151	0.004447	0.00102	1.1	IFNG interferon, gamma	Upregulated
A_21_P001	0.005796	0.00151	1.1	LOC1019282 uncharacterized LOC101928228	Upregulated
A_23_P361	0.005854	0.00153	1.1	MS4A6A membrane-spanning 4-domains, subfamily A, member 6A	Upregulated
A_21_P000	0.006058	0.0016	1.1	lnc-RABGAP1 lnc-RABGAP1-1:1	Upregulated
A_33_P325	0.006203	0.00166	1.1	TCF7 transcription factor 7 (T-cell specific, HMG-box)	Upregulated
A_23_P209	0.009437	0.00295	1.1	ATG12 autophagy related 12	Upregulated
A_33_P342	0.014864	0.00536	1.1	OR4D9 olfactory receptor, family 4, subfamily D, member 9	Upregulated
A_23_P362	0.014864	0.00536	1.1	OR52B2 olfactory receptor, family 52, subfamily B, member 2	Upregulated
A_23_P205	0.01536	0.00558	1.1	CDC37L1 cell division cycle 37-like 1	Upregulated
A_23_P216	0.016641	0.0062	1.1	CDC14B cell division cycle 14B	Upregulated
A_23_P502	0.022057	0.00877	1.1	DGKH diacylglycerol kinase, eta	Upregulated
A_23_P139	0.022275	0.00887	1.1	OASL 2'-5'-oligoadenylate synthetase-like	Upregulated
A_33_P338	0.022415	0.00894	1.1	TCP11X2 t-complex 11 family, X-linked 2	Upregulated
A_23_P507	0.029562	0.0127	1.1	ZNF181 zinc finger protein 181	Upregulated
A_33_P327	0.030088	0.013	1.1	UCN2 urocortin 2	Upregulated
A_21_P000	0.036707	0.0165	1.1	lnc-ZNF296-1 lnc-ZNF296-1:1	Upregulated
A_33_P335	0.042467	0.0197	1.1	PTGFR prostaglandin F receptor (FP)	Upregulated
A_22_P000	0.055792	0.0274	1.1	LINC00642 long intergenic non-protein coding RNA 642	Upregulated
A_21_P000	0.056334	0.0277	1.1	lnc-LY86-1 lnc-LY86-1:1	Upregulated
A_33_P331	0.087386	0.0471	1.1	XLOC_I2_005197	Upregulated
A_23_P165	0.001925	0.00028	1.09	PSMD14 proteasome (prosome, macropain) 26S subunit, non-ATPase, 14	Upregulated
A_23_P478	0.001962	0.000291	1.09	DDX55 DEAD (Asp-Glu-Ala-Asp) box polypeptide 55	Upregulated
A_24_P377	0.002112	0.00033	1.09	HSPA4 heat shock 70kDa protein 4	Upregulated
A_23_P252	0.002124	0.000335	1.09	YBX3 Y box binding protein 3	Upregulated
A_23_P569	0.002174	0.000348	1.09	HSPE1 heat shock 10kDa protein 1	Upregulated
A_23_P154	0.002464	0.000419	1.09	NOP58 NOP58 ribonucleoprotein	Upregulated
A_23_P218	0.002471	0.000421	1.09	EIF5B eukaryotic translation initiation factor 5B	Upregulated
A_33_P336	0.002476	0.000422	1.09	LY9 lymphocyte antigen 9	Upregulated
A_24_P250	0.00301	0.000571	1.09	CBWD5 COBW domain containing 5	Upregulated
A_33_P321	0.003056	0.000584	1.09	ZNF808 zinc finger protein 808	Upregulated
A_22_P000	0.003139	0.00061	1.09	FAM204A family with sequence similarity 204, member A	Upregulated
A_23_P256	0.003239	0.000641	1.09	TLR6 toll-like receptor 6	Upregulated
A_23_P106	0.003456	0.000704	1.09	DDX28 DEAD (Asp-Glu-Ala-Asp) box polypeptide 28	Upregulated
A_21_P001	0.004102	0.000905	1.09	LOC1002880 uncharacterized LOC100288069	Upregulated
A_33_P342	0.004626	0.00108	1.09	C8orf59 chromosome 8 open reading frame 59	Upregulated

A_22_P000	0.004856	0.00116	1.09	LOC1019277	uncharacterized LOC101927734	Upregulated
A_32_P414	0.005095	0.00124	1.09	THOC3	THO complex 3	Upregulated
A_22_P000	0.005732	0.00148	1.09	lnc-PPP2R2D	lnc-PPP2R2D-3:1	Upregulated
A_21_P000	0.007258	0.00207	1.09	lnc-C1orf195-	lnc-C1orf195-3:2	Upregulated
A_23_P129	0.008618	0.00262	1.09	SREBF1	sterol regulatory element binding transcription factor 1	Upregulated
A_23_P789	0.009825	0.00312	1.09	DUSP22	dual specificity phosphatase 22	Upregulated
A_22_P000	0.024792	0.0102	1.09	LINC01405	long intergenic non-protein coding RNA 1405	Upregulated
A_23_P203	0.025133	0.0104	1.09	PSMD9	proteasome (prosome, macropain) 26S subunit, non-ATPase, 9	Upregulated
A_33_P332	0.032347	0.0142	1.09	ZNF320	zinc finger protein 320	Upregulated
A_33_P336	0.034497	0.0153	1.09	ARAF	A-Raf proto-oncogene, serine/threonine kinase	Upregulated
A_21_P000	0.044049	0.0206	1.09	SNORA25	small nucleolar RNA, H/ACA box 25	Upregulated
A_23_P928	0.001986	0.000296	1.08	SAR1B	secretion associated, Ras related GTPase 1B	Upregulated
A_33_P329	0.002026	0.000307	1.08	TCOF1	Treacher Collins-Franceschetti syndrome 1	Upregulated
A_23_P163	0.002113	0.000331	1.08	EHD4	EH-domain containing 4	Upregulated
A_22_P000	0.002166	0.000345	1.08	lnc-MRPL39-2	lnc-MRPL39-2:1	Upregulated
A_33_P332	0.002186	0.000351	1.08	RGP1	RGP1 retrograde golgi transport homolog (S. cerevisiae)	Upregulated
A_24_P351	0.002191	0.000352	1.08	MREG	melanoregulin	Upregulated
A_33_P324	0.002243	0.000366	1.08	ADIPOR1	adiponectin receptor 1	Upregulated
A_32_P620	0.002243	0.000366	1.08	RPL10A	ribosomal protein L10a	Upregulated
A_23_P202	0.002439	0.000412	1.08	ZBTB44	zinc finger and BTB domain containing 44	Upregulated
A_33_P331	0.002479	0.000423	1.08	PACSN2	protein kinase C and casein kinase substrate in neurons 2	Upregulated
A_33_P339	0.002589	0.000454	1.08	USP32	ubiquitin specific peptidase 32	Upregulated
A_23_P164	0.002667	0.000474	1.08	MMD	monocyte to macrophage differentiation-associated	Upregulated
A_32_P311	0.002835	0.00052	1.08	RPL7	ribosomal protein L7	Upregulated
A_23_P572	0.002888	0.000535	1.08	URB1	URB1 ribosome biogenesis 1 homolog (S. cerevisiae)	Upregulated
A_23_P134	0.003929	0.000851	1.08	C7orf50	chromosome 7 open reading frame 50	Upregulated
A_23_P418	0.004176	0.00093	1.08	TNKS1BP1	tankyrase 1 binding protein 1, 182kDa	Upregulated
A_23_P400	0.004913	0.00118	1.08	TRMT10B	tRNA methyltransferase 10 homolog B (S. cerevisiae)	Upregulated
A_24_P156	0.005496	0.00139	1.08	LYSMD3	LysM, putative peptidoglycan-binding, domain containing 3	Upregulated
A_33_P326	0.00581	0.00151	1.08	CBFA2T2	core-binding factor, runt domain, alpha subunit 2; translocated to, 2	Upregulated
A_22_P000	0.010756	0.0035	1.08	LOC1019270	uncharacterized LOC101927027	Upregulated
A_33_P324	0.011371	0.00378	1.08	PC	pyruvate carboxylase	Upregulated
A_21_P001	0.012852	0.00442	1.08	LINC01057	long intergenic non-protein coding RNA 1057	Upregulated
A_33_P336	0.012907	0.00444	1.08	KLHL36	kelch-like family member 36	Upregulated
A_33_P335	0.01307	0.00452	1.08	TDG	thymine-DNA glycosylase	Upregulated
A_32_P104	0.014406	0.00514	1.08	DCUN1D3	DCN1, defective in cullin neddylation 1, domain containing 3	Upregulated
A_23_P428	0.014743	0.0053	1.08	TTC21A	tetratricopeptide repeat domain 21A	Upregulated

A_21_P001	0.019849	0.0077	1.08	LOC1010605	uncharacterized LOC101060542	Upregulated
A_24_P265	0.020111	0.00783	1.08	NTRK1	neurotrophic tyrosine kinase, receptor, type 1	Upregulated
A_22_P000	0.026781	0.0112	1.08	PSMD5-AS1	PSMD5 antisense RNA 1 (head to head)	Upregulated
A_22_P000	0.029356	0.0126	1.08	lnc-SPP2-1	lnc-SPP2-1:1	Upregulated
A_33_P329	0.033413	0.0147	1.08	TBX5-AS1	TBX5 antisense RNA 1	Upregulated
A_24_P111	0.033779	0.0149	1.08	POMT2	protein-O-mannosyltransferase 2	Upregulated
A_23_P106	0.037257	0.0168	1.08	LCMT2	leucine carboxyl methyltransferase 2	Upregulated
A_22_P000	0.038334	0.0174	1.08	lnc-TSPAN12	lnc-TSPAN12-1:1	Upregulated
A_21_P000	0.047102	0.0223	1.08	lnc-PHF3-4	lnc-PHF3-4:1	Upregulated
A_23_P219	0.048025	0.0229	1.08	ZNF3	zinc finger protein 3	Upregulated
A_21_P000	0.054726	0.0268	1.08	SNORA41	small nucleolar RNA, H/ACA box 41	Upregulated
A_22_P000	0.059292	0.0294	1.08	lnc-HIATL1-5	lnc-HIATL1-5:1	Upregulated
A_33_P338	0.061982	0.0311	1.08	FANCF	Fanconi anemia, complementation group F	Upregulated
A_22_P000	0.071841	0.037	1.08	lnc-PRPF19-1	lnc-PRPF19-1:1	Upregulated
A_22_P000	0.084486	0.0451	1.08	lnc-COQ9-1	lnc-COQ9-1:1	Upregulated
A_23_P329	0.085404	0.0458	1.08	GREB1	growth regulation by estrogen in breast cancer 1	Upregulated
A_24_P673	0.002046	0.000313	1.07	FABP5	fatty acid binding protein 5 (psoriasis-associated)	Upregulated
A_33_P332	0.002043	0.000313	1.07	FCGR2B	Fc fragment of IgG, low affinity IIb, receptor (CD32)	Upregulated
A_23_P212	0.002253	0.000369	1.07	RAB5A	RAB5A, member RAS oncogene family	Upregulated
A_23_P998	0.00247	0.000421	1.07	FAM214A	family with sequence similarity 214, member A	Upregulated
A_33_P342	0.002494	0.000428	1.07	ZNF770	zinc finger protein 770	Upregulated
A_23_P214	0.002693	0.000481	1.07	PERP	PERP, TP53 apoptosis effector	Upregulated
A_23_P117	0.002724	0.00049	1.07	AHSA1	AHA1, activator of heat shock 90kDa protein ATPase homolog 1 (yeast)	Upregulated
A_33_P327	0.002761	0.0005	1.07	PPP1R14B	protein phosphatase 1, regulatory (inhibitor) subunit 14B	Upregulated
A_23_P115	0.003248	0.000643	1.07	SZRD1	SUZ RNA binding domain containing 1	Upregulated
A_23_P147	0.003401	0.000689	1.07	TSEN54	TSEN54 tRNA splicing endonuclease subunit	Upregulated
A_33_P327	0.003527	0.000725	1.07	RNF126	ring finger protein 126	Upregulated
A_23_P117	0.003703	0.00078	1.07	BAHD1	bromo adjacent homology domain containing 1	Upregulated
A_24_P113	0.004238	0.000953	1.07	ZNHIT6	zinc finger, HIT-type containing 6	Upregulated
A_23_P341	0.004262	0.00096	1.07	IDH3G	isocitrate dehydrogenase 3 (NAD+) gamma	Upregulated
A_21_P001	0.005008	0.00122	1.07	XLOC_l2_012802		Upregulated
A_23_P214	0.005327	0.00133	1.07	EXOC2	exocyst complex component 2	Upregulated
A_33_P325	0.006386	0.00173	1.07	RNF38	ring finger protein 38	Upregulated
A_24_P325	0.006513	0.00178	1.07	RNF214	ring finger protein 214	Upregulated
A_33_P327	0.006811	0.00189	1.07	PHF20L1	PHD finger protein 20-like 1	Upregulated
A_33_P333	0.007028	0.00198	1.07	GLIS2	GLIS family zinc finger 2	Upregulated
A_33_P338	0.008115	0.00241	1.07	SIKE1	suppressor of IKBKE 1	Upregulated

A_22_P000	0.008157	0.00243	1.07	lnc-EMX2-3	lnc-EMX2-3:1	Upregulated
A_23_P559	0.009803	0.00311	1.07	NAPA	N-ethylmaleimide-sensitive factor attachment protein, alpha	Upregulated
A_24_P162	0.009878	0.00314	1.07	ERC1	ELKS/RAB6-interacting/CAST family member 1	Upregulated
A_33_P338	0.010424	0.00337	1.07	TAT-AS1	TAT antisense RNA 1	Upregulated
A_24_P322	0.012389	0.00422	1.07	DIDO1	death inducer-obliterator 1	Upregulated
A_23_P933	0.012465	0.00425	1.07	NUDT3	nudix (nucleoside diphosphate linked moiety X)-type motif 3	Upregulated
A_23_P169	0.018847	0.00722	1.07	ORM1	orosomuroid 1	Upregulated
A_32_P578	0.020454	0.00799	1.07	RNF157	ring finger protein 157	Upregulated
A_33_P324	0.027772	0.0117	1.07	CSMD2	CUB and Sushi multiple domains 2	Upregulated
A_33_P324	0.041151	0.019	1.07	RBM12B	RNA binding motif protein 12B	Upregulated
A_22_P000	0.048413	0.0231	1.07	lnc-TLCD1-1	lnc-TLCD1-1:1	Upregulated
A_24_P205	0.065493	0.0331	1.07	SHMT1	serine hydroxymethyltransferase 1 (soluble)	Upregulated
A_21_P000	0.069437	0.0355	1.07	LOC1027247	uncharacterized LOC102724732	Upregulated
A_21_P001	0.089753	0.0486	1.07	XLOC_I2_014830		Upregulated
A_22_P000	0.002062	0.000317	1.06	VASH1	vasohibin 1	Upregulated
A_33_P329	0.002238	0.000364	1.06	NAA35	N(alpha)-acetyltransferase 35, NatC auxiliary subunit	Upregulated
A_23_P118	0.002347	0.00039	1.06	SUMO2	small ubiquitin-like modifier 2	Upregulated
A_33_P335	0.002395	0.000403	1.06	ARCN1	archain 1	Upregulated
A_33_P380	0.002471	0.000421	1.06	DNAJA1P5	DnaJ (Hsp40) homolog, subfamily A, member 1 pseudogene 5	Upregulated
A_23_P354	0.002624	0.000463	1.06	LYST	lysosomal trafficking regulator	Upregulated
A_23_P881	0.002657	0.000471	1.06	HSPH1	heat shock 105kDa/110kDa protein 1	Upregulated
A_33_P335	0.002872	0.00053	1.06	MTA1	metastasis associated 1	Upregulated
A_23_P121	0.002963	0.000557	1.06	THG1L	tRNA-histidine guanylyltransferase 1-like (<i>S. cerevisiae</i>)	Upregulated
A_33_P323	0.003008	0.00057	1.06	MAP2K3	mitogen-activated protein kinase kinase 3	Upregulated
A_23_P648	0.003428	0.000696	1.06	SELPLG	selectin P ligand	Upregulated
A_23_P387	0.00411	0.000907	1.06	MICB	MHC class I polypeptide-related sequence B	Upregulated
A_24_P398	0.004951	0.00119	1.06	TRIM34	tripartite motif containing 34	Upregulated
A_24_P115	0.005608	0.00144	1.06	DAGLA	diacylglycerol lipase, alpha	Upregulated
A_33_P339	0.005608	0.00144	1.06	PCDHGA5	protocadherin gamma subfamily A, 5	Upregulated
A_23_P771	0.007727	0.00226	1.06	RNF111	ring finger protein 111	Upregulated
A_23_P102	0.01557	0.00568	1.06	CHD6	chromodomain helicase DNA binding protein 6	Upregulated
A_22_P000	0.017477	0.00658	1.06	LINC00648	long intergenic non-protein coding RNA 648	Upregulated
A_33_P331	0.017999	0.00682	1.06	ANO7	anoctamin 7	Upregulated
A_23_P906	0.022678	0.00907	1.06	STRADB	STE20-related kinase adaptor beta	Upregulated
A_22_P000	0.030594	0.0132	1.06	lnc-INPP5F-1	lnc-INPP5F-1:1	Upregulated
A_33_P331	0.035881	0.0161	1.06	METTL4	methyltransferase like 4	Upregulated
A_23_P933	0.052653	0.0255	1.06	DDR1	discoidin domain receptor tyrosine kinase 1	Upregulated

A_23_P107	0.002078	0.000322	1.05	RPA1	replication protein A1, 70kDa	Upregulated
A_23_P252	0.002144	0.00034	1.05	MRPS30	mitochondrial ribosomal protein S30	Upregulated
A_23_P725	0.00215	0.000341	1.05	AIFM1	apoptosis-inducing factor, mitochondrion-associated, 1	Upregulated
A_32_P830	0.002196	0.000353	1.05	EFR3B	EFR3 homolog B (<i>S. cerevisiae</i>)	Upregulated
A_22_P000	0.002224	0.00036	1.05	LOC1027240	uncharacterized LOC102724096	Upregulated
A_22_P000	0.002337	0.000387	1.05	LINC00944	long intergenic non-protein coding RNA 944	Upregulated
A_23_P370	0.002491	0.000427	1.05	SMIM4	small integral membrane protein 4	Upregulated
A_22_P000	0.002757	0.000499	1.05	lnc-LEO1-4	lnc-LEO1-4:1	Upregulated
A_21_P001	0.002813	0.000514	1.05	LOC729218	uncharacterized LOC729218	Upregulated
A_24_P641	0.002921	0.000544	1.05	CPNE3	copine III	Upregulated
A_33_P338	0.003054	0.000584	1.05	NOP14	NOP14 nucleolar protein	Upregulated
A_32_P180	0.003057	0.000585	1.05	LOC728323	uncharacterized LOC728323	Upregulated
A_33_P341	0.003084	0.000593	1.05	OXTR	oxytocin receptor	Upregulated
A_21_P000	0.004247	0.000956	1.05	lnc-VKORC1L	lnc-VKORC1L1-1:1	Upregulated
A_33_P329	0.00429	0.00097	1.05	PARP1	poly (ADP-ribose) polymerase 1	Upregulated
A_23_P201	0.004843	0.00116	1.05	ARPC1B	actin related protein 2/3 complex, subunit 1B, 41kDa	Upregulated
A_23_P257	0.004939	0.00119	1.05	HCCS	holocytochrome c synthase	Upregulated
A_22_P000	0.005194	0.00128	1.05	lnc-ZRANB1-2	lnc-ZRANB1-2:1	Upregulated
A_33_P326	0.005191	0.00128	1.05	SAMD9L	sterile alpha motif domain containing 9-like	Upregulated
A_33_P338	0.005253	0.00131	1.05	FAM222B	family with sequence similarity 222, member B	Upregulated
A_33_P346	0.005653	0.00145	1.05	LOC286154	uncharacterized LOC286154	Upregulated
A_24_P341	0.006994	0.00197	1.05	TMEM75	transmembrane protein 75	Upregulated
A_23_P315	0.007563	0.00219	1.05	EMX1	empty spiracles homeobox 1	Upregulated
A_33_P334	0.0083	0.00249	1.05	SYNGR2	synaptogyrin 2	Upregulated
A_21_P000	0.009143	0.00284	1.05	lnc-CRISP2-1	lnc-CRISP2-1:1	Upregulated
A_21_P000	0.010096	0.00323	1.05	lnc-SYNDIG1	lnc-SYNDIG1-4:1	Upregulated
A_33_P332	0.012926	0.00445	1.05	PLXNA4	plexin A4	Upregulated
A_21_P000	0.014243	0.00506	1.05	lnc-ADCY2-1	lnc-ADCY2-1:1	Upregulated
A_33_P333	0.015437	0.00562	1.05	RTCA	RNA 3'-terminal phosphate cyclase	Upregulated
A_22_P000	0.016738	0.00624	1.05	RFESD	Rieske (Fe-S) domain containing	Upregulated
A_23_P432	0.021482	0.00848	1.05	CCDC117	coiled-coil domain containing 117	Upregulated
A_33_P325	0.027925	0.0118	1.05	GRIP1	glutamate receptor interacting protein 1	Upregulated
A_33_P327	0.036788	0.0166	1.05	SPATA21	spermatogenesis associated 21	Upregulated
A_33_P338	0.045923	0.0217	1.05	ZNF511	zinc finger protein 511	Upregulated
A_33_P325	0.080564	0.0425	1.05	PLAC9	placenta-specific 9	Upregulated
A_32_P191	0.080627	0.0426	1.05	SCGB2B2	secretoglobin, family 2B, member 2	Upregulated
A_22_P000	0.089781	0.0487	1.05	lnc-GPN2-1	lnc-GPN2-1:1	Upregulated

A_33_P324	0.002439	0.000412	1.04	CD69	CD69 molecule	Upregulated
A_19_P003	0.00248	0.000424	1.04	SNHG5	small nucleolar RNA host gene 5 (non-protein coding)	Upregulated
A_21_P000	0.002503	0.000431	1.04	lnc-AL669831	lnc-AL669831.1-4:1	Upregulated
A_23_P351	0.002649	0.000469	1.04	TAF13	TAF13 RNA polymerase II, TATA box binding protein (TBP)-associated factor 13	Upregulated
A_23_P887	0.00284	0.000522	1.04	RAD51	RAD51 recombinase	Upregulated
A_23_P156	0.002967	0.000558	1.04	LNPEP	leucyl/cystinyl aminopeptidase	Upregulated
A_24_P230	0.003022	0.000575	1.04	CCDC137	coiled-coil domain containing 137	Upregulated
A_23_P312	0.003057	0.000585	1.04	TUBB4B	tubulin, beta 4B class IVb	Upregulated
A_24_P144	0.003398	0.000688	1.04	RNF6	ring finger protein (C3H2C3 type) 6	Upregulated
A_23_P149	0.003516	0.000722	1.04	SDHB	succinate dehydrogenase complex, subunit B, iron sulfur (lp)	Upregulated
A_21_P000	0.003564	0.000738	1.04	lnc-KIF20B-5	lnc-KIF20B-5:1	Upregulated
A_23_P169	0.003574	0.000743	1.04	CDK9	cyclin-dependent kinase 9	Upregulated
A_24_P488	0.003904	0.000843	1.04	SNAP29	synaptosomal-associated protein, 29kDa	Upregulated
A_33_P322	0.004183	0.000932	1.04	ZNF284	zinc finger protein 284	Upregulated
A_32_P149	0.00422	0.000947	1.04	LINC00515	long intergenic non-protein coding RNA 515	Upregulated
A_24_P241	0.004294	0.000971	1.04	EXOSC8	exosome component 8	Upregulated
A_24_P767	0.004641	0.00109	1.04	CC2D1B	coiled-coil and C2 domain containing 1B	Upregulated
A_32_P199	0.004648	0.00109	1.04	TFDP1	transcription factor Dp-1	Upregulated
A_19_P003	0.005773	0.0015	1.04	ZSWIM6	zinc finger, SWIM-type containing 6	Upregulated
A_32_P144	0.006725	0.00186	1.04	ZNF518B	zinc finger protein 518B	Upregulated
A_21_P000	0.009922	0.00316	1.04	lnc-CTAGE5-1	lnc-CTAGE5-1:5	Upregulated
A_23_P347	0.016148	0.00595	1.04	MOB1B	MOB kinase activator 1B	Upregulated
A_21_P000	0.017109	0.00641	1.04	lnc-RP11-597	lnc-RP11-597K23.2.1-2:1	Upregulated
A_24_P199	0.020609	0.00806	1.04	VPS54	vacuolar protein sorting 54 homolog (S. cerevisiae)	Upregulated
A_21_P000	0.024291	0.00993	1.04	lnc-SREK1-1	lnc-SREK1-1:4	Upregulated
A_23_P467	0.032859	0.0144	1.04	EPC1	enhancer of polycomb homolog 1 (Drosophila)	Upregulated
A_21_P000	0.041057	0.0189	1.04	HCG14	HLA complex group 14 (non-protein coding)	Upregulated
A_23_P250	0.044142	0.0207	1.04	IGF2BP2	insulin-like growth factor 2 mRNA binding protein 2	Upregulated
A_22_P000	0.045941	0.0217	1.04	lnc-TRPM2-1	lnc-TRPM2-1:1	Upregulated
A_23_P383	0.048442	0.0231	1.04	SNAPC5	small nuclear RNA activating complex, polypeptide 5, 19kDa	Upregulated
A_21_P000	0.051415	0.0248	1.04	lnc-CCND1-1	lnc-CCND1-1:1	Upregulated
A_19_P003	0.085527	0.0459	1.04	APCDD1L-AS	APCDD1L antisense RNA 1 (head to head)	Upregulated
A_23_P475	0.002197	0.000353	1.03	LDHA	lactate dehydrogenase A	Upregulated
A_21_P000	0.00226	0.00037	1.03	ATP1A1-AS1	ATP1A1 antisense RNA 1	Upregulated
A_33_P320	0.00232	0.000383	1.03	CD58	CD58 molecule	Upregulated
A_23_P115	0.00238	0.000398	1.03	HPS6	Hermansky-Pudlak syndrome 6	Upregulated
A_23_P134	0.002478	0.000423	1.03	MAP3K5	mitogen-activated protein kinase kinase kinase 5	Upregulated

A_33_P336	0.002508	0.000432	1.03	NAMPT	nicotinamide phosphoribosyltransferase	Upregulated
A_33_P330	0.00255	0.000443	1.03	SRSF10	serine/arginine-rich splicing factor 10	Upregulated
A_19_P003	0.002592	0.000454	1.03	SNHG5	small nucleolar RNA host gene 5 (non-protein coding)	Upregulated
A_23_P245	0.002644	0.000468	1.03	C11orf57	chromosome 11 open reading frame 57	Upregulated
A_21_P000	0.002734	0.000492	1.03	lnc-PMFBP1-2	lnc-PMFBP1-2:1	Upregulated
A_33_P324	0.002888	0.000535	1.03	SLC4A5	solute carrier family 4 (sodium bicarbonate cotransporter), member 5	Upregulated
A_23_P828	0.003738	0.000792	1.03	IFNGR1	interferon gamma receptor 1	Upregulated
A_33_P325	0.004106	0.000906	1.03	MFHAS1	malignant fibrous histiocytoma amplified sequence 1	Upregulated
A_23_P395	0.004313	0.000978	1.03	FBXO31	F-box protein 31	Upregulated
A_33_P341	0.004786	0.00114	1.03	SNX8	sorting nexin 8	Upregulated
A_23_P500	0.005029	0.00122	1.03	B3GNT2	UDP-GlcNAc:betaGal beta-1,3-N-acetylglucosaminyltransferase 2	Upregulated
A_23_P309	0.005241	0.0013	1.03	HIST2H2AA4	histone cluster 2, H2aa4	Upregulated
A_23_P251	0.005278	0.00132	1.03	CHRNA2	cholinergic receptor, nicotinic, alpha 2 (neuronal)	Upregulated
A_24_P247	0.005925	0.00155	1.03	ZNF589	zinc finger protein 589	Upregulated
A_22_P000	0.006513	0.00178	1.03	lnc-DHRS7B-3	lnc-DHRS7B-3:1	Upregulated
A_24_P861	0.007422	0.00213	1.03	BRWD1	bromodomain and WD repeat domain containing 1	Upregulated
A_33_P377	0.008914	0.00274	1.03	KRT8P12	keratin 8 pseudogene 12	Upregulated
A_22_P000	0.009695	0.00306	1.03	ANKRD44-IT1	ANKRD44 intronic transcript 1 (non-protein coding)	Upregulated
A_23_P713	0.00982	0.00312	1.03	CCDC25	coiled-coil domain containing 25	Upregulated
A_21_P000	0.010993	0.0036	1.03	SNORA68	small nucleolar RNA, H/ACA box 68	Upregulated
A_23_P148	0.014554	0.0052	1.03	FTHL17	ferritin, heavy polypeptide-like 17	Upregulated
A_23_P413	0.015515	0.00566	1.03	HAUS1	HAUS augmin-like complex, subunit 1	Upregulated
A_33_P325	0.016087	0.00592	1.03	MEG3	maternally expressed 3 (non-protein coding)	Upregulated
A_32_P103	0.016795	0.00627	1.03	B4GALT4	UDP-Gal:betaGlcNAc beta 1,4- galactosyltransferase, polypeptide 4	Upregulated
A_22_P000	0.027449	0.0116	1.03	lnc-PABPC4-1	lnc-PABPC4-1:1	Upregulated
A_22_P000	0.031596	0.0137	1.03	ABO	ABO blood group (transferase A, alpha 1-3-N-acetylgalactosaminyltrans	Upregulated
A_21_P000	0.031596	0.0137	1.03	lnc-C17orf58-5	lnc-C17orf58-5:1	Upregulated
A_24_P226	0.031962	0.0139	1.03	FGFBP2	fibroblast growth factor binding protein 2	Upregulated
A_22_P000	0.031962	0.0139	1.03	lnc-HEPH-2	lnc-HEPH-2:1	Upregulated
A_21_P000	0.031962	0.0139	1.03	lnc-OR5H15-1	lnc-OR5H15-1:1	Upregulated
A_23_P336	0.037331	0.0169	1.03	GEMIN5	gem (nuclear organelle) associated protein 5	Upregulated
A_24_P626	0.086889	0.0468	1.03	MUC3	intestinal mucin-like	Upregulated
A_33_P332	0.002311	0.000381	1.02	HSPE1	heat shock 10kDa protein 1	Upregulated
A_23_P116	0.002369	0.000396	1.02	LGALS9	lectin, galactoside-binding, soluble, 9	Upregulated
A_23_P359	0.002515	0.000434	1.02	NFAT5	nuclear factor of activated T-cells 5, tonicity-responsive	Upregulated
A_33_P335	0.002561	0.000446	1.02	COQ10B	coenzyme Q10 homolog B (S. cerevisiae)	Upregulated
A_33_P326	0.002618	0.000461	1.02	WIBG	within bgcn homolog (Drosophila)	Upregulated

A_33_P336	0.002676	0.000476	1.02	EIF1AX	eukaryotic translation initiation factor 1A, X-linked	Upregulated
A_21_P000	0.002876	0.000532	1.02	lnc-LHX2-1	lnc-LHX2-1:1	Upregulated
A_23_P321	0.00293	0.000546	1.02	BCL2A1	BCL2-related protein A1	Upregulated
A_23_P304	0.003096	0.000596	1.02	CHRNE	cholinergic receptor, nicotinic, epsilon (muscle)	Upregulated
A_23_P354	0.003125	0.000606	1.02	KCTD11	potassium channel tetramerization domain containing 11	Upregulated
A_24_P101	0.003335	0.000669	1.02	PDIA3	protein disulfide isomerase family A, member 3	Upregulated
A_33_P323	0.003392	0.000686	1.02	SBDS	Shwachman-Bodian-Diamond syndrome	Upregulated
A_22_P000	0.003638	0.00076	1.02	lnc-CCDC7-4	lnc-CCDC7-4:1	Upregulated
A_23_P611	0.003798	0.00081	1.02	SEC23B	Sec23 homolog B (<i>S. cerevisiae</i>)	Upregulated
A_23_P251	0.004094	0.000902	1.02	FKBP11	FK506 binding protein 11, 19 kDa	Upregulated
A_23_P194	0.004524	0.00105	1.02	DDAH2	dimethylarginine dimethylaminohydrolase 2	Upregulated
A_33_P331	0.004589	0.00107	1.02	RHOG	ras homolog family member G	Upregulated
A_23_P945	0.004744	0.00112	1.02	POLR1E	polymerase (RNA) I polypeptide E, 53kDa	Upregulated
A_33_P323	0.005113	0.00125	1.02	ALG11	ALG11, alpha-1,2-mannosyltransferase	Upregulated
A_33_P333	0.005207	0.00129	1.02	SEC24A	SEC24 family member A	Upregulated
A_22_P000	0.00576	0.00149	1.02	lnc-ARHGAP1	lnc-ARHGAP17-1:1	Upregulated
A_33_P333	0.005832	0.00152	1.02	MSTO1	misato 1, mitochondrial distribution and morphology regulator	Upregulated
A_19_P003	0.00608	0.00161	1.02	TDRG1	testis development related 1 (non-protein coding)	Upregulated
A_23_P436	0.008013	0.00237	1.02	RBM34	RNA binding motif protein 34	Upregulated
A_21_P000	0.009032	0.00279	1.02	LOC646938	TBC1 domain family, member 2B pseudogene	Upregulated
A_21_P000	0.009869	0.00314	1.02	lnc-BATF3-2	lnc-BATF3-2:7	Upregulated
A_33_P325	0.010129	0.00325	1.02	PPIL4	peptidylprolyl isomerase (cyclophilin)-like 4	Upregulated
A_33_P326	0.012589	0.0043	1.02	CYP26C1	cytochrome P450, family 26, subfamily C, polypeptide 1	Upregulated
A_24_P296	0.014395	0.00513	1.02	ZMIZ2	zinc finger, MIZ-type containing 2	Upregulated
A_23_P206	0.018666	0.00714	1.02	AEN	apoptosis enhancing nuclease	Upregulated
A_23_P748	0.022067	0.00877	1.02	GJA9	gap junction protein, alpha 9, 59kDa	Upregulated
A_33_P322	0.031643	0.0138	1.02	PCNXL4	pecanex-like 4 (<i>Drosophila</i>)	Upregulated
A_23_P170	0.033989	0.015	1.02	MRPL12	mitochondrial ribosomal protein L12	Upregulated
A_22_P000	0.069042	0.0353	1.02	lnc-ADRB1-2	lnc-ADRB1-2:1	Upregulated
A_21_P000	0.071036	0.0365	1.02	lnc-FBXO32-1	lnc-FBXO32-1:1	Upregulated
A_22_P000	0.0822	0.0435	1.02	LINC00316	long intergenic non-protein coding RNA 316	Upregulated
A_21_P000	0.089984	0.0488	1.02	lnc-C7orf41-1	lnc-C7orf41-1:1	Upregulated
A_33_P330	0.002353	0.000391	1.01	RPS5	ribosomal protein S5	Upregulated
A_22_P000	0.002357	0.000392	1.01	lnc-HLA-DMA	lnc-HLA-DMA-1:1	Upregulated
A_23_P350	0.002504	0.000431	1.01	TET2	tet methylcytosine dioxygenase 2	Upregulated
A_23_P920	0.002517	0.000434	1.01	SETD5	SET domain containing 5	Upregulated
A_23_P102	0.002528	0.000437	1.01	CTSE	cathepsin E	Upregulated

A_33_P321	0.002746	0.000496	1.01	NCF1	neutrophil cytosolic factor 1	Upregulated
A_33_P342	0.00275	0.000497	1.01	TP53INP1	tumor protein p53 inducible nuclear protein 1	Upregulated
A_32_P326	0.00281	0.000513	1.01	KRR1	KRR1, small subunit (SSU) processome component, homolog (yeast)	Upregulated
A_33_P323	0.003106	0.0006	1.01	ZNF497	zinc finger protein 497	Upregulated
A_23_P209	0.003415	0.000693	1.01	ATL2	atlastin GTPase 2	Upregulated
A_24_P272	0.003497	0.000716	1.01	SCIMP	SLP adaptor and CSK interacting membrane protein	Upregulated
A_33_P322	0.00532	0.00133	1.01	AMZ2	archaelysin family metallopeptidase 2	Upregulated
A_23_P318	0.006955	0.00195	1.01	PLEKHA8	pleckstrin homology domain containing, family A (phosphoinositide binding)	Upregulated
A_23_P166	0.00901	0.00278	1.01	OSM	oncostatin M	Upregulated
A_33_P335	0.011555	0.00386	1.01	LOC1009962	uncharacterized LOC100996273	Upregulated
A_22_P000	0.011641	0.0039	1.01	LOC1027245	uncharacterized LOC102724596	Upregulated
A_23_P388	0.015066	0.00545	1.01	DMAP1	DNA methyltransferase 1 associated protein 1	Upregulated
A_21_P000	0.015066	0.00545	1.01	lnc-SBDS-8	lnc-SBDS-8:1	Upregulated
A_33_P326	0.01536	0.00558	1.01	RFX3	regulatory factor X, 3 (influences HLA class II expression)	Upregulated
A_21_P000	0.017465	0.00658	1.01	lnc-FAM153C	lnc-FAM153C-3:1	Upregulated
A_33_P332	0.017976	0.00681	1.01	DENND3	DENN/MADD domain containing 3	Upregulated
A_33_P339	0.025963	0.0108	1.01	LOC1001297	uncharacterized LOC100129785	Upregulated
A_22_P000	0.034547	0.0153	1.01	lnc-ACOX3-3	lnc-ACOX3-3:1	Upregulated
A_21_P001	0.04387	0.0205	1.01	ANKRD20A5f	ankyrin repeat domain 20 family, member A5, pseudogene	Upregulated
A_21_P001	0.063582	0.032	1.01	ANKRD20A2	ankyrin repeat domain 20 family, member A2	Upregulated
A_21_P000	0.064668	0.0326	1.01	lnc-ZNF487P-	lnc-ZNF487P-1:1	Upregulated
A_22_P000	0.072556	0.0374	1.01	lnc-QPCT-3	lnc-QPCT-3:4	Upregulated
A_22_P000	0.002356	0.000392	1	DNAJC27-AS	DNAJC27 antisense RNA 1	Upregulated
A_21_P001	0.002445	0.000414	1	EIF4A1	eukaryotic translation initiation factor 4A1	Upregulated
A_32_P447	0.002495	0.000428	1	C9orf85	chromosome 9 open reading frame 85	Upregulated
A_24_P295	0.002853	0.000525	1	BLOC1S2	biogenesis of lysosomal organelles complex-1, subunit 2	Upregulated
A_33_P330	0.002853	0.000525	1	RWDD1	RWD domain containing 1	Upregulated
A_23_P206	0.002872	0.000531	1	WWP2	WW domain containing E3 ubiquitin protein ligase 2	Upregulated
A_24_P942	0.002881	0.000533	1	KDM6B	lysine (K)-specific demethylase 6B	Upregulated
A_33_P333	0.002882	0.000534	1	POLR1C	polymerase (RNA) I polypeptide C, 30kDa	Upregulated
A_23_P387	0.002989	0.000565	1	TUBB	tubulin, beta class I	Upregulated
A_21_P000	0.003081	0.000592	1	RPS3A	ribosomal protein S3A	Upregulated
A_33_P321	0.003175	0.000622	1	ZWINT	ZW10 interacting kinetochore protein	Upregulated
A_23_P123	0.004455	0.00103	1	LRSAM1	leucine rich repeat and sterile alpha motif containing 1	Upregulated
A_22_P000	0.005537	0.00141	1	lnc-HDDC2-5	lnc-HDDC2-5:3	Upregulated
A_23_P426	0.006757	0.00187	1	SH3BP5L	SH3-binding domain protein 5-like	Upregulated
A_24_P125	0.009895	0.00315	1	BCCIP	BRCA2 and CDKN1A interacting protein	Upregulated

A_33_P660	0.010112	0.00324	1	YTHDF3	YTH N(6)-methyladenosine RNA binding protein 3	Upregulated
A_22_P000	0.011014	0.00361	1	INTS6-AS1	INTS6 antisense RNA 1	Upregulated
A_23_P343	0.013026	0.0045	1	PARP11	poly (ADP-ribose) polymerase family, member 11	Upregulated
A_32_P132	0.01568	0.00573	1	FAM86JP	family with sequence similarity 86, member A pseudogene	Upregulated
A_22_P000	0.016357	0.00606	1	LOC115110	uncharacterized LOC115110	Upregulated
A_33_P328	0.020165	0.00785	1	LRFN4	leucine rich repeat and fibronectin type III domain containing 4	Upregulated
A_33_P331	0.023452	0.00947	1	LONP1	lon peptidase 1, mitochondrial	Upregulated
A_23_P321	0.051156	0.0247	1	DEF6	differentially expressed in FDCP 6 homolog (mouse)	Upregulated
A_23_P211	0.002309	0.000381	-1	UBP1	upstream binding protein 1 (LBP-1a)	Downregulated
A_19_P003	0.00249	0.000427	-1	LOC1004227	uncharacterized LOC100422737	Downregulated
A_33_P332	0.002511	0.000433	-1	CIITA	class II, major histocompatibility complex, transactivator	Downregulated
A_22_P000	0.002572	0.00045	-1	lnc-TMEM105	lnc-TMEM105-1:1	Downregulated
A_23_P949	0.002798	0.000509	-1	MMADHC	methylmalonic aciduria (cobalamin deficiency) cblD type, with homocystir	Downregulated
A_23_P310	0.003012	0.000572	-1	NUDT16	nudix (nucleoside diphosphate linked moiety X)-type motif 16	Downregulated
A_33_P341	0.003033	0.000578	-1	MLH1	mutL homolog 1	Downregulated
A_33_P331	0.003277	0.000652	-1	FLJ44674	FLJ44674 protein	Downregulated
A_23_P674	0.003794	0.000808	-1	PSMD8	proteasome (prosome, macropain) 26S subunit, non-ATPase, 8	Downregulated
A_33_P339	0.003806	0.000813	-1	GUK1	guanylate kinase 1	Downregulated
A_33_P327	0.004147	0.000919	-1	TXNDC8	thioredoxin domain containing 8 (spermatozoa)	Downregulated
A_33_P333	0.004928	0.00119	-1	MECP2	methyl CpG binding protein 2	Downregulated
A_22_P000	0.005491	0.00139	-1	LMO7	LIM domain 7	Downregulated
A_21_P000	0.005537	0.00141	-1	lnc-PARN-6	lnc-PARN-6:3	Downregulated
A_24_P287	0.005537	0.00141	-1	PSMC3IP	PSMC3 interacting protein	Downregulated
A_23_P239	0.005697	0.00147	-1	FAM188A	family with sequence similarity 188, member A	Downregulated
A_32_P925	0.006983	0.00196	-1	LCLAT1	lysocardiolipin acyltransferase 1	Downregulated
A_23_P736	0.007458	0.00215	-1	NR0B1	nuclear receptor subfamily 0, group B, member 1	Downregulated
A_33_P370	0.007458	0.00215	-1	SNORA28	small nucleolar RNA, H/ACA box 28	Downregulated
A_22_P000	0.007512	0.00217	-1	lnc-RIMS3-2	lnc-RIMS3-2:1	Downregulated
A_24_P801	0.008107	0.00241	-1	PDCL3	phosducin-like 3	Downregulated
A_23_P133	0.008875	0.00272	-1	PPIL1	peptidylprolyl isomerase (cyclophilin)-like 1	Downregulated
A_24_P403	0.008915	0.00274	-1	ZNF385A	zinc finger protein 385A	Downregulated
A_22_P000	0.009491	0.00297	-1	lnc-DOCK8-1	lnc-DOCK8-1:1	Downregulated
A_21_P000	0.009491	0.00297	-1	lnc-PIK3CG-2	lnc-PIK3CG-2:3	Downregulated
A_24_P924	0.013026	0.0045	-1	CFI	complement factor I	Downregulated
A_23_P115	0.014197	0.00503	-1	IPO13	importin 13	Downregulated
A_22_P000	0.014724	0.00529	-1	C7orf13	chromosome 7 open reading frame 13	Downregulated
A_23_P367	0.016265	0.00601	-1	C2CD5	C2 calcium-dependent domain containing 5	Downregulated

A_23_P286	0.017092	0.00641	-1	CPSF3	cleavage and polyadenylation specific factor 3, 73kDa	Downregulated
A_33_P322	0.017554	0.00662	-1	ZNF117	zinc finger protein 117	Downregulated
A_33_P328	0.022678	0.00908	-1	CCDC136	coiled-coil domain containing 136	Downregulated
A_24_P124	0.0342	0.0151	-1	NCOA7	nuclear receptor coactivator 7	Downregulated
A_22_P000	0.03469	0.0154	-1	lnc-ATP6AP2	lnc-ATP6AP2-3:1	Downregulated
A_33_P337	0.03469	0.0154	-1	RGS7BP	regulator of G-protein signaling 7 binding protein	Downregulated
A_21_P000	0.04017	0.0184	-1	lnc-DLGAP2	lnc-DLGAP2-4:1	Downregulated
A_21_P001	0.043763	0.0204	-1	XLOC_I2_000423		Downregulated
A_23_P360	0.046842	0.0222	-1	LRWD1	leucine-rich repeats and WD repeat domain containing 1	Downregulated
A_33_P647	0.059444	0.0295	-1	SHANK2-AS1	SHANK2 antisense RNA 1	Downregulated
A_32_P194	0.075725	0.0394	-1	SDK2	sidekick cell adhesion molecule 2	Downregulated
A_21_P000	0.078838	0.0414	-1	lnc-KIDINS22	lnc-KIDINS220-6:7	Downregulated
A_23_P112	0.082675	0.0438	-1	CST1	cystatin SN	Downregulated
A_23_P325	0.002339	0.000388	-1.01	XPO6	exportin 6	Downregulated
A_33_P337	0.00237	0.000396	-1.01	TRAFD1	TRAF-type zinc finger domain containing 1	Downregulated
A_22_P000	0.002521	0.000435	-1.01	lnc-C1orf124	lnc-C1orf124-2:1	Downregulated
A_23_P456	0.00255	0.000443	-1.01	FUBP1	far upstream element (FUSE) binding protein 1	Downregulated
A_23_P629	0.002707	0.000485	-1.01	BTG2	BTG family, member 2	Downregulated
A_23_P377	0.002859	0.000527	-1.01	SRSF5	serine/arginine-rich splicing factor 5	Downregulated
A_23_P167	0.003012	0.000572	-1.01	IGJ	immunoglobulin J polypeptide, linker protein for immunoglobulin alpha a	Downregulated
A_23_P622	0.003068	0.000588	-1.01	KDM5C	lysine (K)-specific demethylase 5C	Downregulated
A_24_P139	0.003096	0.000597	-1.01	ITCH	itchy E3 ubiquitin protein ligase	Downregulated
A_32_P994	0.003208	0.000632	-1.01	TRAPPC5	trafficking protein particle complex 5	Downregulated
A_22_P000	0.003262	0.000647	-1.01	lnc-ASH2L-1	lnc-ASH2L-1:1	Downregulated
A_22_P000	0.003338	0.000671	-1.01	lnc-TIMM9-2	lnc-TIMM9-2:12	Downregulated
A_23_P105	0.003878	0.000836	-1.01	EIF2B1	eukaryotic translation initiation factor 2B, subunit 1 alpha, 26kDa	Downregulated
A_33_P336	0.004079	0.000896	-1.01	FLNA	filamin A, alpha	Downregulated
A_23_P404	0.004987	0.00121	-1.01	PCTP	phosphatidylcholine transfer protein	Downregulated
A_33_P327	0.006955	0.00195	-1.01	FILIP1	filamin A interacting protein 1	Downregulated
A_33_P333	0.006955	0.00195	-1.01	LINC00113	long intergenic non-protein coding RNA 113	Downregulated
A_33_P331	0.007183	0.00204	-1.01	OR51B6	olfactory receptor, family 51, subfamily B, member 6	Downregulated
A_33_P335	0.00914	0.00283	-1.01	KCMF1	potassium channel modulatory factor 1	Downregulated
A_33_P325	0.012505	0.00427	-1.01	FCHO1	FCH domain only 1	Downregulated
A_19_P003	0.048739	0.0233	-1.01	lnc-ERP44-3	lnc-ERP44-3:3	Downregulated
A_32_P155	0.048739	0.0233	-1.01	PRIMA1	proline rich membrane anchor 1	Downregulated
A_33_P381	0.057747	0.0285	-1.01	LOC344967	acyl-CoA thioesterase 7 pseudogene	Downregulated
A_23_P125	0.068341	0.0348	-1.01	GABRQ	gamma-aminobutyric acid (GABA) A receptor, theta	Downregulated

A_21_P000	0.069528	0.0356	-1.01	ZSCAN12	zinc finger and SCAN domain containing 12	Downregulated
A_24_P142	0.002248	0.000368	-1.02	CHMP4A	charged multivesicular body protein 4A	Downregulated
A_23_P978	0.002277	0.000374	-1.02	LIPA	lipase A, lysosomal acid, cholesterol esterase	Downregulated
A_23_P980	0.00228	0.000375	-1.02	PTEN	phosphatase and tensin homolog	Downregulated
A_24_P239	0.002505	0.000431	-1.02	RNF187	ring finger protein 187	Downregulated
A_23_P211	0.002562	0.000446	-1.02	DYRK1A	dual-specificity tyrosine-(Y)-phosphorylation regulated kinase 1A	Downregulated
A_23_P165	0.002775	0.000504	-1.02	BIN1	bridging integrator 1	Downregulated
A_23_P429	0.003132	0.000608	-1.02	GNPNAT1	glucosamine-phosphate N-acetyltransferase 1	Downregulated
A_23_P119	0.003173	0.000621	-1.02	RETN	resistin	Downregulated
A_22_P000	0.003663	0.000768	-1.02	lnc-DGKE-2	lnc-DGKE-2:1	Downregulated
A_21_P000	0.003826	0.000819	-1.02	AHSA2	AHA1, activator of heat shock 90kDa protein ATPase homolog 2 (yeast)	Downregulated
A_33_P333	0.003847	0.000826	-1.02	ZNF428	zinc finger protein 428	Downregulated
A_23_P972	0.004739	0.00112	-1.02	GON4L	gon-4-like (C. elegans)	Downregulated
A_24_P335	0.005623	0.00144	-1.02	SLC7A5	solute carrier family 7 (amino acid transporter light chain, L system), men	Downregulated
A_32_P191	0.006724	0.00186	-1.02	ATAD2B	ATPase family, AAA domain containing 2B	Downregulated
A_23_P139	0.010841	0.00354	-1.02	C11orf73	chromosome 11 open reading frame 73	Downregulated
A_23_P122	0.013064	0.00451	-1.02	DDX41	DEAD (Asp-Glu-Ala-Asp) box polypeptide 41	Downregulated
A_23_P350	0.013248	0.00459	-1.02	ZC3H18	zinc finger CCCH-type containing 18	Downregulated
A_33_P336	0.013308	0.00462	-1.02	NPPB	natriuretic peptide B	Downregulated
A_24_P898	0.016311	0.00604	-1.02	ZNF189	zinc finger protein 189	Downregulated
A_19_P008	0.021061	0.00828	-1.02	lnc-RLIM-3	lnc-RLIM-3:1	Downregulated
A_33_P331	0.021835	0.00866	-1.02	TOR1AIP1	torsin A interacting protein 1	Downregulated
A_33_P348	0.031087	0.0135	-1.02	SPI1	Spi-1 proto-oncogene	Downregulated
A_23_P153	0.034667	0.0154	-1.02	YIF1B	Yip1 interacting factor homolog B (S. cerevisiae)	Downregulated
A_21_P001	0.035247	0.0157	-1.02	XLOC_I2_006745		Downregulated
A_23_P118	0.053877	0.0263	-1.02	TVP23B	trans-golgi network vesicle protein 23 homolog B (S. cerevisiae)	Downregulated
A_23_P346	0.06886	0.0352	-1.02	AVPR2	arginine vasopressin receptor 2	Downregulated
A_22_P000	0.070111	0.0359	-1.02	CASC18	cancer susceptibility candidate 18 (non-protein coding)	Downregulated
A_19_P003	0.07829	0.041	-1.02	LOC1019270	uncharacterized LOC101927043	Downregulated
A_24_P305	0.002219	0.000358	-1.03	PITPNB	phosphatidylinositol transfer protein, beta	Downregulated
A_33_P331	0.002221	0.000359	-1.03	PEL1	pellino E3 ubiquitin protein ligase 1	Downregulated
A_33_P331	0.002249	0.000368	-1.03	PDPR	pyruvate dehydrogenase phosphatase regulatory subunit	Downregulated
A_21_P000	0.002365	0.000395	-1.03	SCARNA18	small Cajal body-specific RNA 18	Downregulated
A_24_P398	0.002381	0.000399	-1.03	USP6NL	USP6 N-terminal like	Downregulated
A_22_P000	0.002423	0.000409	-1.03	CERS6-AS1	CERS6 antisense RNA 1	Downregulated
A_33_P330	0.002533	0.000439	-1.03	KLHL36	kelch-like family member 36	Downregulated
A_33_P333	0.002558	0.000445	-1.03	FBXL20	F-box and leucine-rich repeat protein 20	Downregulated

A_24_P271	0.002559	0.000445	-1.03	SLC2A10	solute carrier family 2 (facilitated glucose transporter), member 10	Downregulated
A_33_P331	0.002874	0.000532	-1.03	TMEM154	transmembrane protein 154	Downregulated
A_23_P255	0.0029	0.000539	-1.03	PLGRKT	plasminogen receptor, C-terminal lysine transmembrane protein	Downregulated
A_22_P000	0.002967	0.000558	-1.03	LOC1005061	uncharacterized LOC100506100	Downregulated
A_24_P172	0.002968	0.000559	-1.03	AARS	alanyl-tRNA synthetase	Downregulated
A_22_P000	0.002995	0.000567	-1.03	lnc-MLH3-1	lnc-MLH3-1:1	Downregulated
A_23_P549	0.003096	0.000597	-1.03	MRPL38	mitochondrial ribosomal protein L38	Downregulated
A_21_P000	0.003109	0.000601	-1.03	SNORD25	small nucleolar RNA, C/D box 25	Downregulated
A_23_P161	0.003795	0.000809	-1.03	PDSS1	prenyl (decaprenyl) diphosphate synthase, subunit 1	Downregulated
A_24_P352	0.003822	0.000818	-1.03	MRPL42	mitochondrial ribosomal protein L42	Downregulated
A_23_P171	0.004113	0.000908	-1.03	EBP	emopamil binding protein (sterol isomerase)	Downregulated
A_23_P786	0.004499	0.00104	-1.03	FARSA	phenylalanyl-tRNA synthetase, alpha subunit	Downregulated
A_23_P215	0.004859	0.00117	-1.03	CDK13	cyclin-dependent kinase 13	Downregulated
A_23_P534	0.004979	0.0012	-1.03	IKBIP	IKBKB interacting protein	Downregulated
A_33_P321	0.00511	0.00125	-1.03	SIKE1	suppressor of IKBKE 1	Downregulated
A_33_P322	0.005864	0.00153	-1.03	ADAMTS10	ADAM metalloproteinase with thrombospondin type 1 motif, 10	Downregulated
A_23_P604	0.007149	0.00203	-1.03	PPP2R4	protein phosphatase 2A activator, regulatory subunit 4	Downregulated
A_32_P101	0.007716	0.00225	-1.03	TMEM106A	transmembrane protein 106A	Downregulated
A_33_P332	0.012991	0.00448	-1.03	MED25	mediator complex subunit 25	Downregulated
A_33_P322	0.019344	0.00746	-1.03	GOLGA6L6	golgin A6 family-like 6	Downregulated
A_21_P000	0.02316	0.00932	-1.03	lnc-GLRX5-1	lnc-GLRX5-1:5	Downregulated
A_23_P111	0.02316	0.00932	-1.03	PPIL6	peptidylprolyl isomerase (cyclophilin)-like 6	Downregulated
A_23_P123	0.031596	0.0137	-1.03	PSMG3-AS1	PSMG3 antisense RNA 1 (head to head)	Downregulated
A_21_P001	0.031596	0.0137	-1.03	ZNF726	zinc finger protein 726	Downregulated
A_23_P184	0.047422	0.0225	-1.03	MAEA	macrophage erythroblast attacher	Downregulated
A_33_P335	0.05406	0.0264	-1.03	HMG2	high mobility group AT-hook 2	Downregulated
A_21_P000	0.075293	0.0391	-1.03	FLJ20021	uncharacterized LOC90024	Downregulated
A_33_P332	0.091663	0.0499	-1.03	TTN	titin	Downregulated
A_23_P134	0.002369	0.000396	-1.04	CSGALNACT	chondroitin sulfate N-acetylgalactosaminyltransferase 1	Downregulated
A_23_P350	0.002394	0.000402	-1.04	GLTSCR1L	GLTSCR1-like	Downregulated
A_33_P337	0.002472	0.000421	-1.04	RBM14-RBM4	RBM14-RBM4 readthrough	Downregulated
A_24_P119	0.00268	0.000477	-1.04	PHACTR4	phosphatase and actin regulator 4	Downregulated
A_33_P344	0.002912	0.000542	-1.04	OXR1	oxidation resistance 1	Downregulated
A_24_P247	0.003279	0.000653	-1.04	AK3	adenylate kinase 3	Downregulated
A_22_P000	0.003408	0.000691	-1.04	lnc-NT5E-1	lnc-NT5E-1:1	Downregulated
A_24_P885	0.003504	0.000718	-1.04	PEX11B	peroxisomal biogenesis factor 11 beta	Downregulated
A_33_P329	0.003719	0.000786	-1.04	WEE1	WEE1 G2 checkpoint kinase	Downregulated

A_23_P343	0.003983	0.000868	-1.04	ANGEL2	angel homolog 2 (Drosophila)	Downregulated
A_21_P001	0.004088	0.000899	-1.04	GK3P	glycerol kinase 3 pseudogene	Downregulated
A_23_P282	0.004106	0.000906	-1.04	CTDSP1	CTD (carboxy-terminal domain, RNA polymerase II, polypeptide A) small	Downregulated
A_22_P000	0.004114	0.000909	-1.04	lnc-PITPNC1-	lnc-PITPNC1-1:1	Downregulated
A_24_P250	0.004669	0.0011	-1.04	SNRPA	small nuclear ribonucleoprotein polypeptide A	Downregulated
A_33_P330	0.005091	0.00124	-1.04	LRRC39	leucine rich repeat containing 39	Downregulated
A_23_P490	0.005154	0.00127	-1.04	TMEM62	transmembrane protein 62	Downregulated
A_23_P881	0.005735	0.00148	-1.04	CINP	cyclin-dependent kinase 2 interacting protein	Downregulated
A_22_P000	0.005796	0.00151	-1.04	LOC1019279	uncharacterized LOC101927963	Downregulated
A_23_P117	0.005917	0.00155	-1.04	MTFMT	mitochondrial methionyl-tRNA formyltransferase	Downregulated
A_23_P487	0.006603	0.00182	-1.04	C14orf159	chromosome 14 open reading frame 159	Downregulated
A_33_P327	0.006715	0.00186	-1.04	TXNDC5	thioredoxin domain containing 5 (endoplasmic reticulum)	Downregulated
A_24_P390	0.006906	0.00193	-1.04	TRAPPC6A	trafficking protein particle complex 6A	Downregulated
A_21_P000	0.011269	0.00373	-1.04	LOC1027247	uncharacterized LOC102724758	Downregulated
A_22_P000	0.011812	0.00397	-1.04	lnc-C6orf221-	lnc-C6orf221-2:3	Downregulated
A_24_P194	0.014614	0.00523	-1.04	EHBP1	EH domain binding protein 1	Downregulated
A_21_P000	0.01848	0.00705	-1.04	lnc-BANP-1	lnc-BANP-1:4	Downregulated
A_22_P000	0.022463	0.00897	-1.04	LOC284009	uncharacterized LOC284009	Downregulated
A_33_P383	0.023436	0.00946	-1.04	HAUS2	HAUS augmin-like complex, subunit 2	Downregulated
A_32_P321	0.030488	0.0132	-1.04	WDFY4	WDFY family member 4	Downregulated
A_33_P335	0.031609	0.0138	-1.04	NHSL2	NHS-like 2	Downregulated
A_22_P000	0.036406	0.0164	-1.04	LOC1005068	uncharacterized LOC100506801	Downregulated
A_21_P001	0.046867	0.0222	-1.04	XLOC_I2_002033		Downregulated
A_21_P000	0.057717	0.0285	-1.04	LINC00908	long intergenic non-protein coding RNA 908	Downregulated
A_23_P541	0.060451	0.0301	-1.04	NIF3L1	NIF3 NGG1 interacting factor 3-like 1 (S. cerevisiae)	Downregulated
A_22_P000	0.060593	0.0302	-1.04	lnc-SETD1B-1	lnc-SETD1B-1:1	Downregulated
A_22_P000	0.066548	0.0338	-1.04	lnc-OCIAD2-1	lnc-OCIAD2-1:1	Downregulated
A_21_P000	0.072528	0.0374	-1.04	LOC645434	uncharacterized LOC645434	Downregulated
A_33_P341	0.002131	0.000337	-1.05	NUDT8	nudix (nucleoside diphosphate linked moiety X)-type motif 8	Downregulated
A_33_P339	0.002227	0.000361	-1.05	TNFSF9	tumor necrosis factor (ligand) superfamily, member 9	Downregulated
A_24_P673	0.002321	0.000383	-1.05	PIP4K2A	phosphatidylinositol-5-phosphate 4-kinase, type II, alpha	Downregulated
A_23_P201	0.002433	0.000411	-1.05	GUK1	guanylate kinase 1	Downregulated
A_24_P453	0.00255	0.000443	-1.05	NIPAL3	NIPA-like domain containing 3	Downregulated
A_23_P368	0.002563	0.000446	-1.05	AGPS	alkylglycerone phosphate synthase	Downregulated
A_23_P259	0.002712	0.000487	-1.05	EIF2B2	eukaryotic translation initiation factor 2B, subunit 2 beta, 39kDa	Downregulated
A_23_P117	0.003094	0.000596	-1.05	UBL7	ubiquitin-like 7	Downregulated
A_23_P133	0.003855	0.000829	-1.05	LSP1	lymphocyte-specific protein 1	Downregulated

A_33_P325	0.004778	0.00114	-1.05	SPTBN1	spectrin, beta, non-erythrocytic 1	Downregulated
A_21_P000	0.006003	0.00158	-1.05	SNORA71D	small nucleolar RNA, H/ACA box 71D	Downregulated
A_23_P136	0.006349	0.00172	-1.05	MAGEA6	melanoma antigen family A, 6	Downregulated
A_33_P322	0.006477	0.00177	-1.05	C16orf54	chromosome 16 open reading frame 54	Downregulated
A_24_P131	0.007614	0.00221	-1.05	ATP13A2	ATPase type 13A2	Downregulated
A_23_P422	0.008365	0.00252	-1.05	WDR63	WD repeat domain 63	Downregulated
A_22_P000	0.010093	0.00323	-1.05	IFNG-AS1	IFNG antisense RNA 1	Downregulated
A_23_P152	0.012697	0.00435	-1.05	B9D1	B9 protein domain 1	Downregulated
A_24_P410	0.012697	0.00435	-1.05	ROR1	receptor tyrosine kinase-like orphan receptor 1	Downregulated
A_21_P000	0.016548	0.00615	-1.05	lnc-ZNF680-1	lnc-ZNF680-1:1	Downregulated
A_23_P503	0.049204	0.0235	-1.05	NAT14	N-acetyltransferase 14 (GCN5-related, putative)	Downregulated
A_21_P001	0.055566	0.0272	-1.05	XLOC_I2_000138		Downregulated
A_22_P000	0.071529	0.0368	-1.05	LINC00670	long intergenic non-protein coding RNA 670	Downregulated
A_24_P386	0.002087	0.000324	-1.06	PPP1CC	protein phosphatase 1, catalytic subunit, gamma isozyme	Downregulated
A_23_P145	0.002124	0.000334	-1.06	S100A11	S100 calcium binding protein A11	Downregulated
A_21_P001	0.002124	0.000335	-1.06	LINC01347	long intergenic non-protein coding RNA 1347	Downregulated
A_23_P256	0.002241	0.000365	-1.06	RPA3	replication protein A3, 14kDa	Downregulated
A_32_P209	0.002423	0.000409	-1.06	MRPL46	mitochondrial ribosomal protein L46	Downregulated
A_21_P000	0.002427	0.00041	-1.06	lnc-DENND1A	lnc-DENND1A-1:1	Downregulated
A_33_P324	0.002454	0.000416	-1.06	VWA9	von Willebrand factor A domain containing 9	Downregulated
A_22_P000	0.002516	0.000434	-1.06	lnc-PDHX-1	lnc-PDHX-1:1	Downregulated
A_23_P806	0.002611	0.00046	-1.06	SETMAR	SET domain and mariner transposase fusion gene	Downregulated
A_21_P000	0.002669	0.000474	-1.06	lnc-CHL1-1	lnc-CHL1-1:1	Downregulated
A_23_P602	0.002719	0.000488	-1.06	GRHPR	glyoxylate reductase/hydroxypyruvate reductase	Downregulated
A_33_P323	0.002873	0.000531	-1.06	MIA3	melanoma inhibitory activity family, member 3	Downregulated
A_32_P155	0.003033	0.000578	-1.06	CD2AP	CD2-associated protein	Downregulated
A_23_P113	0.003094	0.000596	-1.06	C10orf11	chromosome 10 open reading frame 11	Downregulated
A_33_P323	0.003159	0.000617	-1.06	PYHIN1	pyrin and HIN domain family, member 1	Downregulated
A_21_P000	0.003283	0.000654	-1.06	lnc-SETD6-8	lnc-SETD6-8:1	Downregulated
A_33_P341	0.003529	0.000726	-1.06	MAP3K2	mitogen-activated protein kinase kinase kinase 2	Downregulated
A_23_P376	0.003535	0.000728	-1.06	PAPOLA	poly(A) polymerase alpha	Downregulated
A_33_P328	0.003893	0.000841	-1.06	DNM1L	dynamitin 1-like	Downregulated
A_33_P332	0.004674	0.0011	-1.06	POLL	polymerase (DNA directed), lambda	Downregulated
A_22_P000	0.004658	0.0011	-1.06	TMEM231	transmembrane protein 231	Downregulated
A_33_P337	0.00501	0.00122	-1.06	SCIMP	SLP adaptor and CSK interacting membrane protein	Downregulated
A_33_P322	0.005296	0.00132	-1.06	LINC00656	long intergenic non-protein coding RNA 656	Downregulated
A_24_P225	0.007006	0.00197	-1.06	IRS1	insulin receptor substrate 1	Downregulated

A_33_P333	0.007949	0.00234	-1.06	ZXDB	zinc finger, X-linked, duplicated B	Downregulated
A_23_P140	0.009322	0.00291	-1.06	LMAN1L	lectin, mannose-binding, 1 like	Downregulated
A_33_P324	0.009413	0.00294	-1.06	RAD52	RAD52 homolog (<i>S. cerevisiae</i>)	Downregulated
A_23_P382	0.010757	0.00351	-1.06	BCKDK	branched chain ketoacid dehydrogenase kinase	Downregulated
A_33_P337	0.014378	0.00512	-1.06	SNAPC2	small nuclear RNA activating complex, polypeptide 2, 45kDa	Downregulated
A_22_P000	0.014597	0.00523	-1.06	CASC11	cancer susceptibility candidate 11 (non-protein coding)	Downregulated
A_33_P329	0.014597	0.00523	-1.06	FAM127C	family with sequence similarity 127, member C	Downregulated
A_22_P000	0.014597	0.00523	-1.06	lnc-AKAP10-1	lnc-AKAP10-1:1	Downregulated
A_21_P000	0.016221	0.00599	-1.06	lnc-ZNF608-5	lnc-ZNF608-5:1	Downregulated
A_23_P144	0.017139	0.00643	-1.06	RAD1	RAD1 checkpoint DNA exonuclease	Downregulated
A_23_P832	0.021971	0.00873	-1.06	AK8	adenylate kinase 8	Downregulated
A_22_P000	0.021998	0.00874	-1.06	lnc-GCM1-1	lnc-GCM1-1:1	Downregulated
A_21_P000	0.022121	0.0088	-1.06	LINC01586	long intergenic non-protein coding RNA 1586	Downregulated
A_33_P336	0.024852	0.0102	-1.06	SYT8	synaptotagmin VIII	Downregulated
A_21_P001	0.038507	0.0175	-1.06	lnc-FGF10-3	lnc-FGF10-3:3	Downregulated
A_23_P372	0.039011	0.0178	-1.06	CGRRF1	cell growth regulator with ring finger domain 1	Downregulated
A_23_P365	0.041105	0.019	-1.06	KCNG4	potassium channel, voltage gated modifier subfamily G, member 4	Downregulated
A_23_P903	0.002119	0.000333	-1.07	TMEM259	transmembrane protein 259	Downregulated
A_24_P583	0.002128	0.000337	-1.07	DCAKD	dephospho-CoA kinase domain containing	Downregulated
A_23_P243	0.002197	0.000353	-1.07	CCDC88B	coiled-coil domain containing 88B	Downregulated
A_24_P134	0.002219	0.000358	-1.07	MYADM	myeloid-associated differentiation marker	Downregulated
A_23_P309	0.002339	0.000388	-1.07	CYB5R4	cytochrome b5 reductase 4	Downregulated
A_21_P001	0.002995	0.000567	-1.07	XLOC_I2_015565		Downregulated
A_21_P001	0.003155	0.000615	-1.07	LOC1019286	uncharacterized LOC101928670	Downregulated
A_24_P153	0.003259	0.000647	-1.07	FGD3	FYVE, RhoGEF and PH domain containing 3	Downregulated
A_33_P329	0.003381	0.000682	-1.07	TET1	tet methylcytosine dioxygenase 1	Downregulated
A_23_P422	0.003648	0.000763	-1.07	CUL4B	cullin 4B	Downregulated
A_21_P001	0.003957	0.00086	-1.07	XLOC_I2_005874		Downregulated
A_23_P914	0.004131	0.000914	-1.07	RWDD2B	RWD domain containing 2B	Downregulated
A_24_P678	0.00431	0.000976	-1.07	MGEA5	meningioma expressed antigen 5 (hyaluronidase)	Downregulated
A_32_P148	0.004708	0.00111	-1.07	ANXA2	annexin A2	Downregulated
A_23_P314	0.004901	0.00118	-1.07	CHKB	choline kinase beta	Downregulated
A_23_P703	0.005095	0.00125	-1.07	ENPP4	ectonucleotide pyrophosphatase/phosphodiesterase 4 (putative)	Downregulated
A_33_P325	0.005114	0.00125	-1.07	TAB3	TGF-beta activated kinase 1/MAP3K7 binding protein 3	Downregulated
A_23_P170	0.005516	0.0014	-1.07	PACRG	PARK2 co-regulated	Downregulated
A_32_P226	0.005508	0.0014	-1.07	YWHAZ	tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation prc	Downregulated
A_21_P000	0.006094	0.00162	-1.07	DNAJC3-AS1	DNAJC3 antisense RNA 1 (head to head)	Downregulated

A_33_P338	0.006203	0.00166	-1.07	NUDT8	nudix (nucleoside diphosphate linked moiety X)-type motif 8	Downregulated
A_24_P345	0.006262	0.00168	-1.07	ANTXR2	anthrax toxin receptor 2	Downregulated
A_22_P000	0.007028	0.00198	-1.07	lnc-ADCK3-1	lnc-ADCK3-1:1	Downregulated
A_24_P608	0.007136	0.00203	-1.07	CHCHD10	coiled-coil-helix-coiled-coil-helix domain containing 10	Downregulated
A_21_P000	0.008574	0.0026	-1.07	lnc-C1QTNF1	lnc-C1QTNF1-1:1	Downregulated
A_23_P221	0.009285	0.00289	-1.07	PLEC	plectin	Downregulated
A_22_P000	0.012583	0.0043	-1.07	lnc-TEAD4-2	lnc-TEAD4-2:1	Downregulated
A_33_P328	0.016168	0.00596	-1.07	AAK1	AP2 associated kinase 1	Downregulated
A_23_P103	0.017467	0.00658	-1.07	OCLM	oculomedin	Downregulated
A_23_P371	0.053461	0.026	-1.07	PRKACB	protein kinase, cAMP-dependent, catalytic, beta	Downregulated
A_33_P329	0.057647	0.0285	-1.07	RAC3	ras-related C3 botulinum toxin substrate 3 (rho family, small GTP binding)	Downregulated
A_22_P000	0.075234	0.0391	-1.07	lnc-PRL-2	lnc-PRL-2:1	Downregulated
A_24_P413	0.001974	0.000294	-1.08	TGOLN2	trans-golgi network protein 2	Downregulated
A_23_P143	0.002016	0.000305	-1.08	TIPARP	TCDD-inducible poly(ADP-ribose) polymerase	Downregulated
A_23_P156	0.002053	0.000315	-1.08	GOLPH3	golgi phosphoprotein 3 (coat-protein)	Downregulated
A_24_P934	0.002072	0.00032	-1.08	SYNGAP1	synaptic Ras GTPase activating protein 1	Downregulated
A_33_P335	0.002077	0.000321	-1.08	RIC1	RAB6A GEF complex partner 1	Downregulated
A_23_P164	0.0021	0.000326	-1.08	RFFL	ring finger and FYVE-like domain containing E3 ubiquitin protein ligase	Downregulated
A_22_P000	0.002114	0.000331	-1.08	lnc-GTPBP1-1	lnc-GTPBP1-1:1	Downregulated
A_23_P535	0.002128	0.000337	-1.08	CCDC53	coiled-coil domain containing 53	Downregulated
A_33_P335	0.002167	0.000346	-1.08	LRRFIP1	leucine rich repeat (in FLII) interacting protein 1	Downregulated
A_24_P801	0.002229	0.000361	-1.08	PTPN18	protein tyrosine phosphatase, non-receptor type 18 (brain-derived)	Downregulated
A_33_P341	0.002471	0.000421	-1.08	VEZT	vezatin, adherens junctions transmembrane protein	Downregulated
A_22_P000	0.002673	0.000475	-1.08	LOC1019274	uncharacterized LOC101927450	Downregulated
A_33_P339	0.003195	0.000628	-1.08	SYS1	Sys1 golgi trafficking protein	Downregulated
A_23_P688	0.003312	0.000663	-1.08	TXN2	thioredoxin 2	Downregulated
A_23_P137	0.0045	0.00104	-1.08	NENF	neudesin neurotrophic factor	Downregulated
A_23_P100	0.005121	0.00126	-1.08	STAT3	signal transducer and activator of transcription 3 (acute-phase response)	Downregulated
A_33_P327	0.005568	0.00142	-1.08	ZC3H11A	zinc finger CCCH-type containing 11A	Downregulated
A_24_P345	0.006688	0.00185	-1.08	ING5	inhibitor of growth family, member 5	Downregulated
A_33_P325	0.007492	0.00216	-1.08	TP53TG1	TP53 target 1 (non-protein coding)	Downregulated
A_22_P000	0.00906	0.0028	-1.08	lnc-PLCL2-1	lnc-PLCL2-1:1	Downregulated
A_33_P327	0.00906	0.0028	-1.08	TMEM236	transmembrane protein 236	Downregulated
A_24_P148	0.009631	0.00304	-1.08	RUVBL1	RuvB-like AAA ATPase 1	Downregulated
A_22_P000	0.010291	0.00332	-1.08	lnc-KIN-1	lnc-KIN-1:1	Downregulated
A_33_P360	0.013178	0.00456	-1.08	ILF3-AS1	ILF3 antisense RNA 1 (head to head)	Downregulated
A_33_P335	0.015069	0.00545	-1.08	FAM198A	family with sequence similarity 198, member A	Downregulated

A_33_P339	0.023121	0.0093	-1.08	LINC01296	long intergenic non-protein coding RNA 1296	Downregulated
A_32_P855	0.029515	0.0126	-1.08	HCFC2	host cell factor C2	Downregulated
A_33_P336	0.038334	0.0174	-1.08	FAM205BP	transmembrane protein C9orf144B pseudogene	Downregulated
A_33_P323	0.038334	0.0174	-1.08	KCNA2	potassium channel, voltage gated shaker related subfamily A, member 2	Downregulated
A_22_P000	0.038334	0.0174	-1.08	LOC285889	uncharacterized LOC285889	Downregulated
A_24_P321	0.044736	0.021	-1.08	SLC38A4	solute carrier family 38, member 4	Downregulated
A_23_P726	0.045917	0.0217	-1.08	GPIHBP1	glycosylphosphatidylinositol anchored high density lipoprotein binding protein 1	Downregulated
A_33_P329	0.062694	0.0315	-1.08	LMOD1	leiomodulin 1 (smooth muscle)	Downregulated
A_22_P000	0.062694	0.0315	-1.08	lnc-UBFD1-1	lnc-UBFD1-1:1	Downregulated
A_21_P000	0.06874	0.0351	-1.08	LOC1019276	uncharacterized LOC101927664	Downregulated
A_21_P000	0.069545	0.0356	-1.08	lnc-STIL-3	lnc-STIL-3:1	Downregulated
A_24_P185	0.001942	0.000284	-1.09	GSK3A	glycogen synthase kinase 3 alpha	Downregulated
A_23_P254	0.002021	0.000306	-1.09	RANGRF	RAN guanine nucleotide release factor	Downregulated
A_24_P671	0.002046	0.000314	-1.09	SON	SON DNA binding protein	Downregulated
A_33_P330	0.002166	0.000345	-1.09	ATF6B	activating transcription factor 6 beta	Downregulated
A_23_P754	0.002638	0.000466	-1.09	NUDT22	nudix (nucleoside diphosphate linked moiety X)-type motif 22	Downregulated
A_24_P934	0.002949	0.000552	-1.09	MTCH2	mitochondrial carrier 2	Downregulated
A_24_P497	0.00301	0.000571	-1.09	IRF2BP2	interferon regulatory factor 2 binding protein 2	Downregulated
A_33_P333	0.003041	0.000581	-1.09	XLOC_I2_015508		Downregulated
A_23_P172	0.003177	0.000623	-1.09	IAH1	isoamyl acetate-hydrolyzing esterase 1 homolog (S. cerevisiae)	Downregulated
A_22_P000	0.003287	0.000655	-1.09	SLC25A29	solute carrier family 25 (mitochondrial carnitine/acylcarnitine carrier), member 29	Downregulated
A_21_P001	0.004632	0.00109	-1.09	LOC1005055	uncharacterized LOC100505501	Downregulated
A_24_P211	0.005114	0.00125	-1.09	ICA1L	islet cell autoantigen 1,69kDa-like	Downregulated
A_21_P000	0.005184	0.00128	-1.09	SNORD71	small nucleolar RNA, C/D box 71	Downregulated
A_32_P286	0.005221	0.00129	-1.09	SNRPA1	small nuclear ribonucleoprotein polypeptide A'	Downregulated
A_22_P000	0.005706	0.00147	-1.09	LINC01402	long intergenic non-protein coding RNA 1402	Downregulated
A_33_P384	0.006428	0.00175	-1.09	IKZF1	IKAROS family zinc finger 1 (Ikaros)	Downregulated
A_23_P149	0.013177	0.00456	-1.09	EFCAB2	EF-hand calcium binding domain 2	Downregulated
A_21_P001	0.013653	0.00477	-1.09	LINC00665	long intergenic non-protein coding RNA 665	Downregulated
A_33_P348	0.013647	0.00477	-1.09	PTPN20B	protein tyrosine phosphatase, non-receptor type 20B	Downregulated
A_21_P000	0.014643	0.00525	-1.09	lnc-GINS2-3	lnc-GINS2-3:1	Downregulated
A_23_P218	0.024384	0.00997	-1.09	RBM26	RNA binding motif protein 26	Downregulated
A_33_P321	0.031749	0.0138	-1.09	GPATCH4	G patch domain containing 4	Downregulated
A_33_P341	0.041211	0.019	-1.09	ZRSR2	zinc finger (CCCH type), RNA-binding motif and serine/arginine rich 2	Downregulated
A_23_P139	0.045974	0.0217	-1.09	UBAC2	UBA domain containing 2	Downregulated
A_22_P000	0.04728	0.0224	-1.09	lnc-PRR15L-4	lnc-PRR15L-4:1	Downregulated
A_23_P474	0.084486	0.0451	-1.09	ACAD8	acyl-CoA dehydrogenase family, member 8	Downregulated

A_33_P326	0.084486	0.0451	-1.09	GOLGA6L2	golgin A6 family-like 2	Downregulated
A_23_P196	0.084486	0.0451	-1.09	LRP11	low density lipoprotein receptor-related protein 11	Downregulated
A_21_P001	0.001986	0.000297	-1.1	XLOC_I2_009539		Downregulated
A_24_P361	0.002022	0.000306	-1.1	NDUFA9	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 9, 39kDa	Downregulated
A_24_P183	0.002124	0.000335	-1.1	PLAC8	placenta-specific 8	Downregulated
A_22_P000	0.00216	0.000344	-1.1	lnc-SETDB1-1	lnc-SETDB1-1:1	Downregulated
A_23_P208	0.002572	0.00045	-1.1	SEC11C	SEC11 homolog C (<i>S. cerevisiae</i>)	Downregulated
A_21_P001	0.002689	0.00048	-1.1	LINC00339	long intergenic non-protein coding RNA 339	Downregulated
A_23_P166	0.002712	0.000486	-1.1	DCP1A	decapping mRNA 1A	Downregulated
A_33_P328	0.003796	0.000809	-1.1	LINC01534	long intergenic non-protein coding RNA 1534	Downregulated
A_24_P316	0.004182	0.000932	-1.1	NDUFA10	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 10, 42kDa	Downregulated
A_21_P000	0.004318	0.00098	-1.1	C2orf48	chromosome 2 open reading frame 48	Downregulated
A_22_P000	0.004324	0.000982	-1.1	lnc-NPAT-2	lnc-NPAT-2:1	Downregulated
A_23_P414	0.004432	0.00102	-1.1	DDX60	DEAD (Asp-Glu-Ala-Asp) box polypeptide 60	Downregulated
A_33_P329	0.004864	0.00117	-1.1	ARID1B	AT rich interactive domain 1B (SWI1-like)	Downregulated
A_33_P321	0.005004	0.00121	-1.1	TM9SF1	transmembrane 9 superfamily member 1	Downregulated
A_21_P001	0.005562	0.00142	-1.1	MIR4435-1H	MIR4435-1 host gene (non-protein coding)	Downregulated
A_23_P160	0.006528	0.00179	-1.1	UAP1	UDP-N-acetylglucosamine pyrophosphorylase 1	Downregulated
A_21_P001	0.007287	0.00208	-1.1	XLOC_I2_005438		Downregulated
A_33_P342	0.009679	0.00306	-1.1	FXYD5	FXYD domain containing ion transport regulator 5	Downregulated
A_23_P649	0.011268	0.00373	-1.1	TNRC6B	trinucleotide repeat containing 6B	Downregulated
A_24_P194	0.011813	0.00397	-1.1	SMEK2	SMEK homolog 2, suppressor of mek1 (<i>Dictyostelium</i>)	Downregulated
A_24_P139	0.017407	0.00655	-1.1	USP25	ubiquitin specific peptidase 25	Downregulated
A_21_P000	0.019522	0.00755	-1.1	lnc-KATNAL2	lnc-KATNAL2-4:1	Downregulated
A_23_P256	0.027577	0.0116	-1.1	RDH11	retinol dehydrogenase 11 (all-trans/9-cis/11-cis)	Downregulated
A_23_P161	0.040057	0.0184	-1.1	HPX	hemopexin	Downregulated
A_32_P922	0.071673	0.0369	-1.1	PMS2P9	postmeiotic segregation increased 2 pseudogene 9	Downregulated
A_23_P526	0.001866	0.000266	-1.11	COX8A	cytochrome c oxidase subunit VIIIA (ubiquitous)	Downregulated
A_23_P420	0.001933	0.000282	-1.11	BRK1	BRICK1, SCAR/WAVE actin-nucleating complex subunit	Downregulated
A_22_P000	0.002145	0.00034	-1.11	lnc-VN1R2-1	lnc-VN1R2-1:4	Downregulated
A_23_P371	0.002326	0.000385	-1.11	ICOS	inducible T-cell co-stimulator	Downregulated
A_24_P174	0.002375	0.000397	-1.11	FBXW7	F-box and WD repeat domain containing 7, E3 ubiquitin protein ligase	Downregulated
A_33_P339	0.002429	0.00041	-1.11	DIXDC1	DIX domain containing 1	Downregulated
A_24_P241	0.002457	0.000417	-1.11	JUNB	jun B proto-oncogene	Downregulated
A_33_P329	0.002517	0.000434	-1.11	PRKCB	protein kinase C, beta	Downregulated
A_23_P213	0.003001	0.000568	-1.11	SMARCAD1	SWI/SNF-related, matrix-associated actin-dependent regulator of chrom	Downregulated
A_33_P322	0.003033	0.000578	-1.11	SCIMP	SLP adaptor and CSK interacting membrane protein	Downregulated

A_33_P333	0.003423	0.000695	-1.11	PLEKHA2	pleckstrin homology domain containing, family A (phosphoinositide bindi	Downregulated
A_33_P341	0.003929	0.000851	-1.11	GLIPR1	GLI pathogenesis-related 1	Downregulated
A_21_P001	0.004341	0.000989	-1.11	XLOC_I2_007167		Downregulated
A_22_P000	0.005709	0.00147	-1.11	lnc-SLC39A11	lnc-SLC39A10-3:1	Downregulated
A_32_P167	0.006586	0.00181	-1.11	MED14OS	MED14 opposite strand	Downregulated
A_24_P107	0.006885	0.00192	-1.11	USP2	ubiquitin specific peptidase 2	Downregulated
A_33_P338	0.006988	0.00197	-1.11	C5orf56	chromosome 5 open reading frame 56	Downregulated
A_33_P337	0.008925	0.00274	-1.11	lnc-FCGR3B-2	lnc-FCGR3B-2:1	Downregulated
A_21_P000	0.015117	0.00547	-1.11	lnc-KCND3-1	lnc-KCND3-1:1	Downregulated
A_23_P138	0.01924	0.00741	-1.11	KAT5	K(lysine) acetyltransferase 5	Downregulated
A_33_P326	0.023072	0.00927	-1.11	PCK2	phosphoenolpyruvate carboxykinase 2 (mitochondrial)	Downregulated
A_22_P000	0.031142	0.0135	-1.11	LOC1027245	uncharacterized LOC102724598	Downregulated
A_21_P000	0.033859	0.015	-1.11	lnc-RAMP3-2	lnc-RAMP3-2:1	Downregulated
A_23_P302	0.038195	0.0174	-1.11	PCDHB16	protocadherin beta 16	Downregulated
A_24_P883	0.048785	0.0233	-1.11	C2orf49	chromosome 2 open reading frame 49	Downregulated
A_23_P380	0.065461	0.0331	-1.11	NAGPA	N-acetylglucosamine-1-phosphodiester alpha-N-acetylglucosaminidase	Downregulated
A_21_P000	0.070008	0.0359	-1.11	LOC1027249	uncharacterized LOC102724943	Downregulated
A_23_P106	0.072703	0.0375	-1.11	PSEN1	presenilin 1	Downregulated
A_24_P418	0.089223	0.0483	-1.11	ARHGAP6	Rho GTPase activating protein 6	Downregulated
A_33_P343	0.002006	0.000302	-1.12	ZC3H14	zinc finger CCCH-type containing 14	Downregulated
A_23_P124	0.002154	0.000342	-1.12	MED24	mediator complex subunit 24	Downregulated
A_24_P166	0.002397	0.000403	-1.12	TMEM60	transmembrane protein 60	Downregulated
A_23_P159	0.002515	0.000434	-1.12	PHKA2	phosphorylase kinase, alpha 2 (liver)	Downregulated
A_23_P168	0.002823	0.000516	-1.12	TXNDC5	thioredoxin domain containing 5 (endoplasmic reticulum)	Downregulated
A_19_P003	0.005578	0.00143	-1.12	H19	H19, imprinted maternally expressed transcript (non-protein coding)	Downregulated
A_23_P361	0.00588	0.00154	-1.12	ATF7	activating transcription factor 7	Downregulated
A_33_P324	0.005942	0.00156	-1.12	LTB	lymphotoxin beta (TNF superfamily, member 3)	Downregulated
A_24_P289	0.006203	0.00166	-1.12	TFF3	trefoil factor 3 (intestinal)	Downregulated
A_22_P000	0.006435	0.00175	-1.12	lnc-AIPL1-2	lnc-AIPL1-2:3	Downregulated
A_33_P363	0.007013	0.00198	-1.12	UBE2D4	ubiquitin-conjugating enzyme E2D 4 (putative)	Downregulated
A_22_P000	0.008876	0.00272	-1.12	lnc-DLX2-2	lnc-DLX2-2:1	Downregulated
A_22_P000	0.009998	0.00319	-1.12	lnc-ALPK3-1	lnc-ALPK3-1:1	Downregulated
A_21_P000	0.014945	0.00539	-1.12	SNORA19	small nucleolar RNA, H/ACA box 19	Downregulated
A_33_P324	0.016327	0.00605	-1.12	NEFM	neurofilament, medium polypeptide	Downregulated
A_24_P362	0.016327	0.00605	-1.12	PAX3	paired box 3	Downregulated
A_23_P257	0.021938	0.00872	-1.12	NUP214	nucleoporin 214kDa	Downregulated
A_33_P337	0.023875	0.0097	-1.12	TMEM106B	transmembrane protein 106B	Downregulated

A_24_P202	0.025367	0.0105	-1.12	METTL9	methyltransferase like 9	Downregulated
A_21_P001	0.02671	0.0112	-1.12	XLOC_I2_011627		Downregulated
A_22_P000	0.027602	0.0116	-1.12	lnc-EIF2AK3-	lnc-EIF2AK3-4:2	Downregulated
A_21_P001	0.029687	0.0127	-1.12	LINC-PINT	long intergenic non-protein coding RNA, p53 induced transcript	Downregulated
A_33_P321	0.030226	0.013	-1.12	ELF2	E74-like factor 2 (ets domain transcription factor)	Downregulated
A_21_P000	0.034154	0.0151	-1.12	lnc-RGMA-9	lnc-RGMA-9:2	Downregulated
A_22_P000	0.035468	0.0159	-1.12	DISC1-IT1	DISC1 intronic transcript 1 (non-protein coding)	Downregulated
A_22_P000	0.036418	0.0164	-1.12	LOC1027247	uncharacterized LOC102724776	Downregulated
A_32_P967	0.045156	0.0213	-1.12	SHCBP1	SHC SH2-domain binding protein 1	Downregulated
A_22_P000	0.050103	0.0241	-1.12	LINC01021	long intergenic non-protein coding RNA 1021	Downregulated
A_24_P217	0.050382	0.0242	-1.12	RAD9A	RAD9 homolog A (S. pombe)	Downregulated
A_22_P000	0.069343	0.0354	-1.12	lnc-ATP6V1E	lnc-ATP6V1E2-3:1	Downregulated
A_23_P134	0.074516	0.0386	-1.12	COL26A1	collagen, type XXVI, alpha 1	Downregulated
A_22_P000	0.079443	0.0418	-1.12	lnc-RTN3-1	lnc-RTN3-1:1	Downregulated
A_32_P952	0.001821	0.000255	-1.13	FDPSP2	farnesyl diphosphate synthase pseudogene 2	Downregulated
A_23_P325	0.001845	0.000261	-1.13	SKI	SKI proto-oncogene	Downregulated
A_22_P000	0.001901	0.000274	-1.13	TMEM258	transmembrane protein 258	Downregulated
A_33_P340	0.001958	0.000289	-1.13	VAMP2	vesicle-associated membrane protein 2 (synaptobrevin 2)	Downregulated
A_33_P341	0.002203	0.000355	-1.13	DNAJC5	DnaJ (Hsp40) homolog, subfamily C, member 5	Downregulated
A_23_P346	0.002241	0.000365	-1.13	MTOR	mechanistic target of rapamycin (serine/threonine kinase)	Downregulated
A_33_P341	0.002336	0.000387	-1.13	LOC645645	uncharacterized LOC645645	Downregulated
A_23_P156	0.002764	0.000501	-1.13	UQCC2	ubiquinol-cytochrome c reductase complex assembly factor 2	Downregulated
A_33_P324	0.002803	0.000511	-1.13	MAP3K8	mitogen-activated protein kinase kinase kinase 8	Downregulated
A_33_P385	0.002832	0.000519	-1.13	KIAA0319L	KIAA0319-like	Downregulated
A_23_P102	0.003511	0.00072	-1.13	PDE6D	phosphodiesterase 6D, cGMP-specific, rod, delta	Downregulated
A_21_P000	0.003533	0.000728	-1.13	lnc-SGCG-5	lnc-SGCG-5:3	Downregulated
A_24_P142	0.003721	0.000786	-1.13	AKAP13	A kinase (PRKA) anchor protein 13	Downregulated
A_21_P000	0.003789	0.000806	-1.13	lnc-AC099552	lnc-AC099552.4.1-1:2	Downregulated
A_22_P000	0.004411	0.00101	-1.13	lnc-TMEM85-	lnc-TMEM85-1:1	Downregulated
A_23_P118	0.005231	0.0013	-1.13	SLFN12	schlafen family member 12	Downregulated
A_23_P490	0.005268	0.00131	-1.13	WDR61	WD repeat domain 61	Downregulated
A_23_P397	0.006108	0.00162	-1.13	INIP	INTS3 and NABP interacting protein	Downregulated
A_23_P942	0.006365	0.00172	-1.13	LONRF1	LON peptidase N-terminal domain and ring finger 1	Downregulated
A_23_P551	0.007225	0.00206	-1.13	RANGRF	RAN guanine nucleotide release factor	Downregulated
A_22_P000	0.007332	0.0021	-1.13	LOC1001310	uncharacterized LOC100131047	Downregulated
A_23_P383	0.007698	0.00224	-1.13	CD300LG	CD300 molecule-like family member g	Downregulated
A_22_P000	0.008796	0.00269	-1.13	lnc-TMX3-1	lnc-TMX3-1:1	Downregulated

A_23_P409	0.008796	0.00269	-1.13	PPFIBP2	PTPRF interacting protein, binding protein 2 (liprin beta 2)	Downregulated
A_32_P957	0.009012	0.00278	-1.13	FANCI	Fanconi anemia, complementation group I	Downregulated
A_23_P206	0.014984	0.00541	-1.13	NDE1	nudE neurodevelopment protein 1	Downregulated
A_33_P339	0.0158	0.00578	-1.13	C10orf99	chromosome 10 open reading frame 99	Downregulated
A_23_P377	0.016556	0.00615	-1.13	FHOD1	formin homology 2 domain containing 1	Downregulated
A_21_P000	0.024386	0.00997	-1.13	lnc-C16orf72-	lnc-C16orf72-5:1	Downregulated
A_23_P129	0.026911	0.0113	-1.13	ATF7IP2	activating transcription factor 7 interacting protein 2	Downregulated
A_22_P000	0.030866	0.0134	-1.13	lnc-ALDH9A1	lnc-ALDH9A1-1:1	Downregulated
A_24_P131	0.030866	0.0134	-1.13	MYL3	myosin, light chain 3, alkali; ventricular, skeletal, slow	Downregulated
A_23_P423	0.037331	0.0169	-1.13	PHC2	polyhomeotic homolog 2 (Drosophila)	Downregulated
A_23_P113	0.045493	0.0214	-1.13	P4HTM	prolyl 4-hydroxylase, transmembrane (endoplasmic reticulum)	Downregulated
A_22_P000	0.060062	0.0299	-1.13	lnc-TMCO3-2	lnc-TMCO3-2:1	Downregulated
A_21_P000	0.063206	0.0318	-1.13	lnc-MAT2B-3	lnc-MAT2B-3:15	Downregulated
A_24_P237	0.088541	0.0478	-1.13	NCOR1	nuclear receptor corepressor 1	Downregulated
A_21_P000	0.091508	0.0498	-1.13	lnc-CACNG3-	lnc-CACNG3-1:4	Downregulated
A_23_P255	0.001962	0.000291	-1.14	GPR183	G protein-coupled receptor 183	Downregulated
A_32_P402	0.001972	0.000293	-1.14	TMEM200A	transmembrane protein 200A	Downregulated
A_24_P350	0.00206	0.000317	-1.14	PRRC2B	proline-rich coiled-coil 2B	Downregulated
A_23_P133	0.002167	0.000346	-1.14	CCDC167	coiled-coil domain containing 167	Downregulated
A_19_P003	0.002241	0.000365	-1.14	ATP2C1	ATPase, Ca ⁺⁺ transporting, type 2C, member 1	Downregulated
A_23_P475	0.002243	0.000366	-1.14	TMEM258	transmembrane protein 258	Downregulated
A_33_P329	0.002476	0.000422	-1.14	FAM204A	family with sequence similarity 204, member A	Downregulated
A_33_P329	0.002503	0.000431	-1.14	MVP	major vault protein	Downregulated
A_22_P000	0.002503	0.000431	-1.14	PDE10A	phosphodiesterase 10A	Downregulated
A_23_P303	0.002952	0.000553	-1.14	TAS2R45	taste receptor, type 2, member 45	Downregulated
A_21_P001	0.003132	0.000608	-1.14	XLOC_I2_006789		Downregulated
A_23_P253	0.003189	0.000626	-1.14	CD99L2	CD99 molecule-like 2	Downregulated
A_23_P591	0.003363	0.000678	-1.14	POU5F1	POU class 5 homeobox 1	Downregulated
A_21_P000	0.005126	0.00126	-1.14	lnc-ZBTB17-2	lnc-ZBTB17-2:1	Downregulated
A_23_P118	0.005191	0.00128	-1.14	EXTL2	exostosin-like glycosyltransferase 2	Downregulated
A_21_P001	0.005196	0.00128	-1.14	LOC1001301	uncharacterized LOC100130156	Downregulated
A_23_P879	0.006336	0.00171	-1.14	DYRK4	dual-specificity tyrosine-(Y)-phosphorylation regulated kinase 4	Downregulated
A_22_P000	0.009281	0.00289	-1.14	LOC1019288	uncharacterized LOC101928812	Downregulated
A_33_P388	0.009391	0.00293	-1.14	POT1	protection of telomeres 1	Downregulated
A_22_P000	0.009912	0.00316	-1.14	lnc-CLEC3A-4	lnc-CLEC3A-4:1	Downregulated
A_23_P107	0.010132	0.00326	-1.14	RAB5C	RAB5C, member RAS oncogene family	Downregulated
A_23_P413	0.015334	0.00557	-1.14	P2RX5	purinergic receptor P2X, ligand gated ion channel, 5	Downregulated

A_23_P146	0.020326	0.00792	-1.14	CORO2A	coronin, actin binding protein, 2A	Downregulated
A_33_P331	0.021337	0.00842	-1.14	TBCB	tubulin folding cofactor B	Downregulated
A_33_P336	0.022942	0.00921	-1.14	NFYC	nuclear transcription factor Y, gamma	Downregulated
A_21_P000	0.028614	0.0122	-1.14	LINC01229	long intergenic non-protein coding RNA 1229	Downregulated
A_23_P129	0.045011	0.0212	-1.14	VPS9D1	VPS9 domain containing 1	Downregulated
A_24_P608	0.045613	0.0215	-1.14	ACHE	acetylcholinesterase (Yt blood group)	Downregulated
A_23_P212	0.060616	0.0302	-1.14	VPRBP	Vpr (HIV-1) binding protein	Downregulated
A_23_P211	0.083962	0.0447	-1.14	LINC01547	long intergenic non-protein coding RNA 1547	Downregulated
A_33_P342	0.001815	0.000253	-1.15	SON	SON DNA binding protein	Downregulated
A_22_P000	0.001858	0.000264	-1.15	lnc-YIF1A-1	lnc-YIF1A-1:2	Downregulated
A_33_P341	0.001903	0.000274	-1.15	ACLY	ATP citrate lyase	Downregulated
A_23_P204	0.001923	0.000279	-1.15	CDKN1B	cyclin-dependent kinase inhibitor 1B (p27, Kip1)	Downregulated
A_24_P394	0.001956	0.000289	-1.15	SHISA5	shisa family member 5	Downregulated
A_21_P000	0.001962	0.000291	-1.15	lnc-TRAK1-1	lnc-TRAK1-1:1	Downregulated
A_32_P129	0.002142	0.000339	-1.15	RAB1B	RAB1B, member RAS oncogene family	Downregulated
A_24_P926	0.00216	0.000344	-1.15	UBE2D3	ubiquitin-conjugating enzyme E2D 3	Downregulated
A_33_P325	0.002309	0.000381	-1.15	SNX17	sorting nexin 17	Downregulated
A_23_P331	0.002476	0.000423	-1.15	HIATL1	hippocampus abundant transcript-like 1	Downregulated
A_21_P001	0.002645	0.000468	-1.15	ZNF767P	zinc finger family member 767, pseudogene	Downregulated
A_24_P328	0.002989	0.000564	-1.15	YIPF5	Yip1 domain family, member 5	Downregulated
A_23_P264	0.00308	0.000591	-1.15	RHBDL1	rhomboid, veinlet-like 1 (Drosophila)	Downregulated
A_22_P000	0.003286	0.000655	-1.15	RPARP-AS1	RPARP antisense RNA 1	Downregulated
A_23_P382	0.00348	0.000712	-1.15	OR1F2P	olfactory receptor, family 1, subfamily F, member 2	Downregulated
A_23_P403	0.00379	0.000806	-1.15	DZANK1	double zinc ribbon and ankyrin repeat domains 1	Downregulated
A_23_P229	0.004003	0.000874	-1.15	SLC30A7	solute carrier family 30 (zinc transporter), member 7	Downregulated
A_24_P287	0.004119	0.00091	-1.15	RSAD2	radical S-adenosyl methionine domain containing 2	Downregulated
A_32_P959	0.005191	0.00128	-1.15	CLEC2D	C-type lectin domain family 2, member D	Downregulated
A_33_P328	0.005238	0.0013	-1.15	PYGO2	pygopus family PHD finger 2	Downregulated
A_19_P003	0.00537	0.00135	-1.15	lnc-GGCT-1	lnc-GGCT-1:14	Downregulated
A_22_P000	0.009013	0.00278	-1.15	LOC1005062	uncharacterized LOC100506274	Downregulated
A_24_P372	0.010267	0.00331	-1.15	EDRF1	erythroid differentiation regulatory factor 1	Downregulated
A_23_P105	0.017082	0.0064	-1.15	MDM1	Mdm1 nuclear protein homolog (mouse)	Downregulated
A_33_P324	0.018994	0.00729	-1.15	ZNF680	zinc finger protein 680	Downregulated
A_21_P001	0.026876	0.0113	-1.15	TRAK1	trafficking protein, kinesin binding 1	Downregulated
A_33_P334	0.027505	0.0116	-1.15	ZNF568	zinc finger protein 568	Downregulated
A_23_P807	0.028781	0.0123	-1.15	PLCD1	phospholipase C, delta 1	Downregulated
A_21_P001	0.029432	0.0126	-1.15	LOC1019282	uncharacterized LOC101928203	Downregulated

A_21_P000	0.029561	0.0127	-1.15	lnc-TSSC4-2	lnc-TSSC4-2:1	Downregulated
A_33_P341	0.031218	0.0136	-1.15	CHAF1A	chromatin assembly factor 1, subunit A (p150)	Downregulated
A_22_P000	0.036218	0.0163	-1.15	lnc-CETP-1	lnc-CETP-1:1	Downregulated
A_23_P862	0.042305	0.0196	-1.15	PIGC	phosphatidylinositol glycan anchor biosynthesis, class C	Downregulated
A_33_P326	0.049406	0.0237	-1.15	CPTP	ceramide-1-phosphate transfer protein	Downregulated
A_21_P001	0.050068	0.024	-1.15	ZNF37BP	zinc finger protein 37B, pseudogene	Downregulated
A_33_P340	0.073132	0.0378	-1.15	DEFB108B	defensin, beta 108B	Downregulated
A_24_P120	0.075523	0.0393	-1.15	GADD45G	growth arrest and DNA-damage-inducible, gamma	Downregulated
A_23_P118	0.082713	0.0439	-1.15	ATP2B4	ATPase, Ca ⁺⁺ transporting, plasma membrane 4	Downregulated
A_33_P340	0.001959	0.00029	-1.16	SELL	selectin L	Downregulated
A_33_P337	0.002053	0.000315	-1.16	LYPLA2	lysophospholipase II	Downregulated
A_23_P869	0.00219	0.000352	-1.16	FADD	Fas (TNFRSF6)-associated via death domain	Downregulated
A_21_P000	0.00241	0.000406	-1.16	SNORD22	small nucleolar RNA, C/D box 22	Downregulated
A_22_P000	0.002572	0.00045	-1.16	LOC1005070	uncharacterized LOC100507006	Downregulated
A_22_P000	0.002921	0.000544	-1.16	lnc-CCDC68-2	lnc-CCDC68-2:1	Downregulated
A_23_P115	0.003103	0.0006	-1.16	FUCA1	fucosidase, alpha-L- 1, tissue	Downregulated
A_33_P326	0.004804	0.00114	-1.16	PCBP4	poly(rC) binding protein 4	Downregulated
A_23_P406	0.008025	0.00237	-1.16	CAMSAP2	calmodulin regulated spectrin-associated protein family, member 2	Downregulated
A_23_P347	0.011448	0.00381	-1.16	TFCP2	transcription factor CP2	Downregulated
A_32_P175	0.01785	0.00675	-1.16	RCN2	reticulocalbin 2, EF-hand calcium binding domain	Downregulated
A_21_P001	0.021111	0.0083	-1.16	XLOC_I2_009139		Downregulated
A_33_P327	0.02899	0.0124	-1.16	NUP35	nucleoporin 35kDa	Downregulated
A_21_P000	0.045082	0.0212	-1.16	IL10RB-AS1	IL10RB antisense RNA 1 (head to head)	Downregulated
A_23_P154	0.051891	0.0251	-1.16	AOX1	aldehyde oxidase 1	Downregulated
A_21_P001	0.055447	0.0272	-1.16	XLOC_I2_012806		Downregulated
A_21_P000	0.057473	0.0284	-1.16	RNASEH1-AS	RNASEH1 antisense RNA 1	Downregulated
A_23_P102	0.061663	0.0309	-1.16	TXNRD2	thioredoxin reductase 2	Downregulated
A_32_P389	0.089753	0.0486	-1.16	HEATR5B	HEAT repeat containing 5B	Downregulated
A_33_P339	0.001684	0.000221	-1.17	MBNL2	muscleblind-like splicing regulator 2	Downregulated
A_33_P333	0.001753	0.000237	-1.17	ARID1B	AT rich interactive domain 1B (SWI1-like)	Downregulated
A_23_P208	0.001753	0.000237	-1.17	NDUFA3	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 3, 9kDa	Downregulated
A_33_P322	0.00178	0.000244	-1.17	NCF1B	neutrophil cytosolic factor 1B pseudogene	Downregulated
A_19_P008	0.001791	0.000247	-1.17	BRK1	BRICK1, SCAR/WAVE actin-nucleating complex subunit	Downregulated
A_23_P170	0.001805	0.00025	-1.17	ANTXR2	anthrax toxin receptor 2	Downregulated
A_33_P330	0.001824	0.000255	-1.17	LOC1001291	uncharacterized LOC100129129	Downregulated
A_33_P328	0.001849	0.000262	-1.17	POMGNT1	protein O-linked mannose N-acetylglucosaminyltransferase 1 (beta 1,2,-)	Downregulated
A_22_P000	0.001876	0.000268	-1.17	NAPSB	napsin B aspartic peptidase, pseudogene	Downregulated

A_23_P930	0.001916	0.000277	-1.17	SRP19	signal recognition particle 19kDa	Downregulated
A_33_P332	0.001992	0.000298	-1.17	ATP7A	ATPase, Cu ⁺⁺ transporting, alpha polypeptide	Downregulated
A_23_P214	0.001995	0.000299	-1.17	FLOT1	flotillin 1	Downregulated
A_24_P997	0.00204	0.000312	-1.17	ISOC2	isochorismatase domain containing 2	Downregulated
A_22_P000	0.00206	0.000317	-1.17	lnc-CNPY3-1	lnc-CNPY3-1:1	Downregulated
A_23_P372	0.002303	0.000379	-1.17	AHSA2	AHA1, activator of heat shock 90kDa protein ATPase homolog 2 (yeast)	Downregulated
A_23_P162	0.002625	0.000463	-1.17	CNOT2	CCR4-NOT transcription complex, subunit 2	Downregulated
A_22_P000	0.002659	0.000472	-1.17	lnc-VN1R2-1	lnc-VN1R2-1:1	Downregulated
A_23_P409	0.002775	0.000504	-1.17	HNRNPUL2	heterogeneous nuclear ribonucleoprotein U-like 2	Downregulated
A_23_P349	0.003046	0.000582	-1.17	ATF3	activating transcription factor 3	Downregulated
A_33_P329	0.003964	0.000862	-1.17	LMO4	LIM domain only 4	Downregulated
A_23_P823	0.004301	0.000973	-1.17	SLC25A13	solute carrier family 25 (aspartate/glutamate carrier), member 13	Downregulated
A_24_P801	0.004333	0.000985	-1.17	TMEM127	transmembrane protein 127	Downregulated
A_33_P330	0.004801	0.00114	-1.17	TRIM10	tripartite motif containing 10	Downregulated
A_19_P003	0.005098	0.00125	-1.17	HCG18	HLA complex group 18 (non-protein coding)	Downregulated
A_21_P001	0.006202	0.00166	-1.17	XLOC_I2_005276		Downregulated
A_23_P830	0.006645	0.00183	-1.17	HIATL1	hippocampus abundant transcript-like 1	Downregulated
A_33_P325	0.009508	0.00298	-1.17	P3H4	prolyl 3-hydroxylase family member 4 (non-enzymatic)	Downregulated
A_22_P000	0.011562	0.00387	-1.17	lnc-DALRD3-1	lnc-DALRD3-1:1	Downregulated
A_22_P000	0.011812	0.00397	-1.17	lnc-DLX2-5	lnc-DLX2-5:2	Downregulated
A_21_P000	0.01988	0.00772	-1.17	OSTM1-AS1	OSTM1 antisense RNA 1	Downregulated
A_24_P201	0.026043	0.0108	-1.17	FGFBP3	fibroblast growth factor binding protein 3	Downregulated
A_21_P000	0.034076	0.0151	-1.17	ZRANB2-AS1	ZRANB2 antisense RNA 1	Downregulated
A_22_P000	0.037888	0.0172	-1.17	LINC00877	long intergenic non-protein coding RNA 877	Downregulated
A_33_P324	0.042428	0.0197	-1.17	LUC7L3	LUC7-like 3 (S. cerevisiae)	Downregulated
A_33_P340	0.044274	0.0207	-1.17	KIF2A	kinesin heavy chain member 2A	Downregulated
A_22_P000	0.063964	0.0322	-1.17	lnc-CCNE2-1	lnc-CCNE2-1:1	Downregulated
A_22_P000	0.065575	0.0332	-1.17	lnc-APOBEC4	lnc-APOBEC4-1:1	Downregulated
A_33_P339	0.073875	0.0382	-1.17	GLTSCR1	glioma tumor suppressor candidate region gene 1	Downregulated
A_23_P255	0.001698	0.000225	-1.18	SMPD4	sphingomyelin phosphodiesterase 4, neutral membrane (neutral sphingomyelinase 4)	Downregulated
A_33_P333	0.001715	0.00023	-1.18	PTMS	parathymosin	Downregulated
A_23_P247	0.001827	0.000257	-1.18	COPS7A	COP9 signalosome subunit 7A	Downregulated
A_19_P003	0.001978	0.000294	-1.18	NEAT1	nuclear paraspeckle assembly transcript 1 (non-protein coding)	Downregulated
A_32_P182	0.001977	0.000294	-1.18	TALDO1	transaldolase 1	Downregulated
A_33_P323	0.002027	0.000308	-1.18	IL24	interleukin 24	Downregulated
A_23_P103	0.0021	0.000326	-1.18	YWHAH	tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein 1	Downregulated
A_23_P147	0.002112	0.00033	-1.18	ATXN2L	ataxin 2-like	Downregulated

A_24_P355	0.002132	0.000338	-1.18	FLI1	Fli-1 proto-oncogene, ETS transcription factor	Downregulated
A_33_P340	0.00218	0.000349	-1.18	TMEM19	transmembrane protein 19	Downregulated
A_23_P368	0.00226	0.00037	-1.18	FCHSD2	FCH and double SH3 domains 2	Downregulated
A_23_P647	0.003041	0.000581	-1.18	AAAS	achalasia, adrenocortical insufficiency, alacrimia	Downregulated
A_32_P117	0.003232	0.000639	-1.18	LYSMD4	LysM, putative peptidoglycan-binding, domain containing 4	Downregulated
A_23_P515	0.003365	0.000678	-1.18	DUSP12	dual specificity phosphatase 12	Downregulated
A_33_P323	0.003983	0.000867	-1.18	BOLA2B	bolA family member 2B	Downregulated
A_23_P117	0.004406	0.00101	-1.18	GZMB	granzyme B (granzyme 2, cytotoxic T-lymphocyte-associated serine esterase 2)	Downregulated
A_23_P202	0.004628	0.00109	-1.18	ZNF22	zinc finger protein 22	Downregulated
A_23_P252	0.004859	0.00116	-1.18	RECQL	RecQ helicase-like	Downregulated
A_23_P348	0.005553	0.00141	-1.18	MKL1	megakaryoblastic leukemia (translocation) 1	Downregulated
A_21_P000	0.007949	0.00234	-1.18	lnc-CLN8-1	lnc-CLN8-1:1	Downregulated
A_22_P000	0.008048	0.00238	-1.18	lnc-TRAPPC8	lnc-TRAPPC8-2:1	Downregulated
A_21_P001	0.009184	0.00285	-1.18	lnc-FOXA2-1	lnc-FOXA2-1:3	Downregulated
A_33_P336	0.019522	0.00755	-1.18	BLNK	B-cell linker	Downregulated
A_22_P000	0.022447	0.00896	-1.18	LOC1027233	uncharacterized LOC102723373	Downregulated
A_19_P003	0.025432	0.0105	-1.18	LOC389602	uncharacterized LOC389602	Downregulated
A_24_P193	0.026142	0.0109	-1.18	CCNF	cyclin F	Downregulated
A_21_P000	0.029405	0.0126	-1.18	lnc-CYB5D2-1	lnc-CYB5D2-1:2	Downregulated
A_23_P111	0.044789	0.021	-1.18	ZBTB12	zinc finger and BTB domain containing 12	Downregulated
A_33_P333	0.063022	0.0317	-1.18	TAF4B	TAF4b RNA polymerase II, TATA box binding protein (TBP)-associated factor 4B	Downregulated
A_23_P111	0.072689	0.0375	-1.18	ZSCAN21	zinc finger and SCAN domain containing 21	Downregulated
A_23_P165	0.001787	0.000246	-1.19	STRN	striatin, calmodulin binding protein	Downregulated
A_23_P257	0.001805	0.00025	-1.19	HERC1	HECT and RLD domain containing E3 ubiquitin protein ligase family member 1	Downregulated
A_23_P104	0.001956	0.000288	-1.19	BPNT1	3'(2'), 5'-bisphosphate nucleotidase 1	Downregulated
A_23_P350	0.001965	0.000292	-1.19	PRDM1	PR domain containing 1, with ZNF domain	Downregulated
A_33_P337	0.00198	0.000295	-1.19	HMGXB3	HMG box domain containing 3	Downregulated
A_23_P399	0.002006	0.000302	-1.19	TMEM256	transmembrane protein 256	Downregulated
A_32_P101	0.002023	0.000307	-1.19	FAM3C	family with sequence similarity 3, member C	Downregulated
A_33_P321	0.002033	0.00031	-1.19	SMNDC1	survival motor neuron domain containing 1	Downregulated
A_33_P336	0.002099	0.000326	-1.19	lnc-TBC1D29	lnc-TBC1D29-1:1	Downregulated
A_23_P377	0.002124	0.000335	-1.19	ACTR2	ARP2 actin-related protein 2 homolog (yeast)	Downregulated
A_33_P340	0.002389	0.0004	-1.19	LOC1001293	uncharacterized LOC100129399	Downregulated
A_21_P001	0.002575	0.000451	-1.19	XLOC_I2_008140		Downregulated
A_23_P104	0.003223	0.000636	-1.19	DDIT4	DNA-damage-inducible transcript 4	Downregulated
A_33_P337	0.003527	0.000725	-1.19	ALDH1A1	aldehyde dehydrogenase 1 family, member A1	Downregulated
A_33_P323	0.004182	0.000932	-1.19	DDX18	DEAD (Asp-Glu-Ala-Asp) box polypeptide 18	Downregulated

A_24_P210	0.004205	0.00094	-1.19	BTBD7	BTB (POZ) domain containing 7	Downregulated
A_19_P008	0.004269	0.000963	-1.19	HIGD1A	HIG1 hypoxia inducible domain family, member 1A	Downregulated
A_22_P000	0.00431	0.000977	-1.19	lnc-AC105020	lnc-AC105020.1-1:1	Downregulated
A_23_P309	0.004347	0.000991	-1.19	HECTD4	HECT domain containing E3 ubiquitin protein ligase 4	Downregulated
A_23_P141	0.005457	0.00138	-1.19	DRG2	developmentally regulated GTP binding protein 2	Downregulated
A_33_P337	0.005554	0.00142	-1.19	PYROXD1	pyridine nucleotide-disulphide oxidoreductase domain 1	Downregulated
A_23_P307	0.006841	0.0019	-1.19	CEP95	centrosomal protein 95kDa	Downregulated
A_23_P142	0.007455	0.00215	-1.19	LMAN2L	lectin, mannose-binding 2-like	Downregulated
A_22_P000	0.007941	0.00234	-1.19	lnc-HRH4-9	lnc-HRH4-9:1	Downregulated
A_33_P331	0.012389	0.00422	-1.19	ZNF419	zinc finger protein 419	Downregulated
A_33_P336	0.013004	0.00449	-1.19	PDHB	pyruvate dehydrogenase (lipoamide) beta	Downregulated
A_21_P000	0.013768	0.00483	-1.19	lnc-SUMF2-1	lnc-SUMF2-1:1	Downregulated
A_23_P851	0.016281	0.00602	-1.19	EMD	emerin	Downregulated
A_23_P319	0.016575	0.00616	-1.19	UHRF1BP1L	UHRF1 binding protein 1-like	Downregulated
A_33_P729	0.017296	0.0065	-1.19	LOC1019269	uncharacterized LOC101926943	Downregulated
A_23_P118	0.025191	0.0104	-1.19	LRRC36	leucine rich repeat containing 36	Downregulated
A_21_P001	0.029816	0.0128	-1.19	XLOC_I2_009790		Downregulated
A_23_P378	0.034214	0.0152	-1.19	IKZF4	IKAROS family zinc finger 4 (Eos)	Downregulated
A_32_P148	0.035227	0.0157	-1.19	UBXN2B	UBX domain protein 2B	Downregulated
A_33_P333	0.036536	0.0164	-1.19	USP17L7	ubiquitin specific peptidase 17-like family member 7	Downregulated
A_21_P000	0.044157	0.0207	-1.19	PSMD6-AS2	PSMD6 antisense RNA 2	Downregulated
A_24_P810	0.048872	0.0234	-1.19	ANO9	anoctamin 9	Downregulated
A_33_P321	0.076165	0.0397	-1.19	ATP7A	ATPase, Cu ⁺⁺ transporting, alpha polypeptide	Downregulated
A_33_P366	0.084486	0.045	-1.19	LINC00954	long intergenic non-protein coding RNA 954	Downregulated
A_33_P323	0.001594	0.0002	-1.2	CAPZB	capping protein (actin filament) muscle Z-line, beta	Downregulated
A_23_P380	0.001626	0.000208	-1.2	LMO4	LIM domain only 4	Downregulated
A_32_P534	0.001657	0.000215	-1.2	BOLA2B	bolA family member 2B	Downregulated
A_23_P156	0.001683	0.00022	-1.2	ANKS1A	ankyrin repeat and sterile alpha motif domain containing 1A	Downregulated
A_24_P194	0.001744	0.000235	-1.2	SAE1	SUMO1 activating enzyme subunit 1	Downregulated
A_23_P143	0.001808	0.000251	-1.2	ACIN1	apoptotic chromatin condensation inducer 1	Downregulated
A_24_P123	0.001958	0.000289	-1.2	PPAT	phosphoribosyl pyrophosphate amidotransferase	Downregulated
A_33_P325	0.001986	0.000297	-1.2	WDR55	WD repeat domain 55	Downregulated
A_24_P252	0.002027	0.000308	-1.2	BTN3A2	butyrophilin, subfamily 3, member A2	Downregulated
A_33_P323	0.002171	0.000347	-1.2	CBR4	carbonyl reductase 4	Downregulated
A_23_P454	0.002382	0.000399	-1.2	GDI1	GDP dissociation inhibitor 1	Downregulated
A_23_P371	0.002493	0.000427	-1.2	TAS2R43	taste receptor, type 2, member 43	Downregulated
A_23_P424	0.002746	0.000496	-1.2	POU2F1	POU class 2 homeobox 1	Downregulated

A_23_P211	0.002811	0.000514	-1.2	LAMTOR1	late endosomal/lysosomal adaptor, MAPK and MTOR activator 1	Downregulated
A_23_P121	0.002825	0.000517	-1.2	HACL1	2-hydroxyacyl-CoA lyase 1	Downregulated
A_22_P000	0.002951	0.000553	-1.2	lnc-CHRNA5-	lnc-CHRNA5-1:1	Downregulated
A_21_P000	0.003335	0.00067	-1.2	GCFC2	GC-rich sequence DNA-binding factor 2	Downregulated
A_23_P895	0.004102	0.000905	-1.2	NLRP1	NLR family, pyrin domain containing 1	Downregulated
A_21_P000	0.005358	0.00135	-1.2	LOC1005066	hepatocellular carcinoma-associated antigen HCA25a	Downregulated
A_23_P329	0.008735	0.00267	-1.2	COG7	component of oligomeric golgi complex 7	Downregulated
A_23_P819	0.010546	0.00342	-1.2	HSD17B8	hydroxysteroid (17-beta) dehydrogenase 8	Downregulated
A_33_P323	0.011808	0.00397	-1.2	MPRIP	myosin phosphatase Rho interacting protein	Downregulated
A_24_P267	0.01239	0.00422	-1.2	SAMHD1	SAM domain and HD domain 1	Downregulated
A_23_P149	0.013312	0.00463	-1.2	MBTPS1	membrane-bound transcription factor peptidase, site 1	Downregulated
A_23_P135	0.017199	0.00646	-1.2	TLE1	transducin-like enhancer of split 1 (E(sp1) homolog, Drosophila)	Downregulated
A_33_P326	0.018895	0.00725	-1.2	NAA16	N(alpha)-acetyltransferase 16, NatA auxiliary subunit	Downregulated
A_33_P321	0.018895	0.00725	-1.2	NMNAT1	nicotinamide nucleotide adenyltransferase 1	Downregulated
A_19_P003	0.023836	0.00968	-1.2	L3MBTL1	l(3)mbt-like 1 (Drosophila)	Downregulated
A_21_P000	0.024412	0.00999	-1.2	lnc-RP11-100	lnc-RP11-1007G5.2.1-2:1	Downregulated
A_23_P205	0.024412	0.00999	-1.2	PPIP5K1	diphosphoinositol pentakisphosphate kinase 1	Downregulated
A_21_P001	0.029966	0.0129	-1.2	XLOC_I2_001592		Downregulated
A_33_P324	0.05004	0.024	-1.2	OBP2B	odorant binding protein 2B	Downregulated
A_23_P700	0.001597	0.000201	-1.21	CD74	CD74 molecule, major histocompatibility complex, class II invariant chain	Downregulated
A_24_P124	0.001606	0.000203	-1.21	PSMA4	proteasome (prosome, macropain) subunit, alpha type, 4	Downregulated
A_23_P978	0.001663	0.000216	-1.21	LDB1	LIM domain binding 1	Downregulated
A_33_P322	0.001808	0.000251	-1.21	XPO5	exportin 5	Downregulated
A_23_P209	0.00193	0.000281	-1.21	PER2	period circadian clock 2	Downregulated
A_23_P251	0.001941	0.000283	-1.21	CPEB4	cytoplasmic polyadenylation element binding protein 4	Downregulated
A_33_P321	0.001978	0.000295	-1.21	DICER1	dicer 1, ribonuclease type III	Downregulated
A_22_P000	0.002114	0.000331	-1.21	PLAC4	placenta-specific 4	Downregulated
A_23_P605	0.002124	0.000335	-1.21	TOR2A	torsin family 2, member A	Downregulated
A_19_P003	0.002158	0.000343	-1.21	ZNF254	zinc finger protein 254	Downregulated
A_23_P138	0.002235	0.000363	-1.21	MLF2	myeloid leukemia factor 2	Downregulated
A_33_P333	0.002303	0.000379	-1.21	ARSD	arylsulfatase D	Downregulated
A_23_P115	0.002343	0.000389	-1.21	HNRNPH3	heterogeneous nuclear ribonucleoprotein H3 (2H9)	Downregulated
A_22_P000	0.0025	0.00043	-1.21	lnc-FAM78A-3	lnc-FAM78A-3:1	Downregulated
A_24_P176	0.002681	0.000477	-1.21	ATMIN	ATM interactor	Downregulated
A_23_P251	0.002707	0.000485	-1.21	ABCF1	ATP-binding cassette, sub-family F (GCN20), member 1	Downregulated
A_24_P331	0.003421	0.000694	-1.21	COMMD4	COMM domain containing 4	Downregulated
A_33_P371	0.003542	0.000731	-1.21	LOC283737	uncharacterized LOC283737	Downregulated

A_22_P000	0.005296	0.00132	-1.21	lnc-RGMA-1	lnc-RGMA-1:1	Downregulated
A_33_P380	0.005296	0.00132	-1.21	RYR3	ryanodine receptor 3	Downregulated
A_23_P877	0.005589	0.00143	-1.21	PLBD1	phospholipase B domain containing 1	Downregulated
A_24_P103	0.006176	0.00165	-1.21	IDI1	isopentenyl-diphosphate delta isomerase 1	Downregulated
A_32_P439	0.006315	0.0017	-1.21	DNAH17	dynein, axonemal, heavy chain 17	Downregulated
A_22_P000	0.009618	0.00303	-1.21	USP12-AS1	USP12 antisense RNA 1	Downregulated
A_22_P000	0.012113	0.0041	-1.21	ZNRD1-AS1	ZNRD1 antisense RNA 1	Downregulated
A_32_P129	0.012964	0.00447	-1.21	NHLRC3	NHL repeat containing 3	Downregulated
A_21_P000	0.014122	0.005	-1.21	LOC1027253	uncharacterized LOC102725333	Downregulated
A_22_P000	0.017124	0.00642	-1.21	LINC00927	long intergenic non-protein coding RNA 927	Downregulated
A_23_P312	0.020523	0.00802	-1.21	DNAJC4	DnaJ (Hsp40) homolog, subfamily C, member 4	Downregulated
A_23_P205	0.021012	0.00825	-1.21	WDR20	WD repeat domain 20	Downregulated
A_21_P001	0.035165	0.0157	-1.21	XLOC_I2_006794		Downregulated
A_24_P185	0.035408	0.0158	-1.21	TP53I13	tumor protein p53 inducible protein 13	Downregulated
A_23_P373	0.038	0.0173	-1.21	CCDC85C	coiled-coil domain containing 85C	Downregulated
A_23_P104	0.05204	0.0252	-1.21	MYPN	myopalladin	Downregulated
A_21_P000	0.06947	0.0355	-1.21	SNORD18C	small nucleolar RNA, C/D box 18C	Downregulated
A_23_P209	0.00163	0.000209	-1.22	ROCK2	Rho-associated, coiled-coil containing protein kinase 2	Downregulated
A_22_P000	0.001754	0.000238	-1.22	lnc-PMM2-6	lnc-PMM2-6:1	Downregulated
A_33_P366	0.001826	0.000256	-1.22	LOC644656	uncharacterized LOC644656	Downregulated
A_33_P326	0.001934	0.000282	-1.22	TCEANC2	transcription elongation factor A (SII) N-terminal and central domain con	Downregulated
A_33_P331	0.001979	0.000295	-1.22	KDM4B	lysine (K)-specific demethylase 4B	Downregulated
A_22_P000	0.002018	0.000305	-1.22	lnc-C11orf1-1	lnc-C11orf1-1:1	Downregulated
A_33_P339	0.002033	0.00031	-1.22	KMT2A	lysine (K)-specific methyltransferase 2A	Downregulated
A_23_P480	0.002062	0.000317	-1.22	NUP37	nucleoporin 37kDa	Downregulated
A_24_P371	0.002062	0.000318	-1.22	MRPL36	mitochondrial ribosomal protein L36	Downregulated
A_23_P210	0.002117	0.000332	-1.22	PTPN18	protein tyrosine phosphatase, non-receptor type 18 (brain-derived)	Downregulated
A_32_P577	0.002479	0.000423	-1.22	PMS2P1	postmeiotic segregation increased 2 pseudogene 1	Downregulated
A_33_P333	0.002719	0.000488	-1.22	DUSP11	dual specificity phosphatase 11 (RNA/RNP complex 1-interacting)	Downregulated
A_21_P000	0.002718	0.000488	-1.22	lnc-LYZL1-2	lnc-LYZL1-2:1	Downregulated
A_24_P122	0.003003	0.000569	-1.22	PSMF1	proteasome (prosome, macropain) inhibitor subunit 1 (PI31)	Downregulated
A_33_P321	0.003733	0.00079	-1.22	NBPF9	neuroblastoma breakpoint family, member 9	Downregulated
A_24_P919	0.004147	0.000919	-1.22	ATPAF1	ATP synthase mitochondrial F1 complex assembly factor 1	Downregulated
A_22_P000	0.004744	0.00112	-1.22	SLC25A25-A:	SLC25A25 antisense RNA 1	Downregulated
A_32_P130	0.00603	0.00159	-1.22	SLC16A7	solute carrier family 16 (monocarboxylate transporter), member 7	Downregulated
A_24_P596	0.007158	0.00203	-1.22	JAK3	Janus kinase 3	Downregulated
A_23_P469	0.007949	0.00234	-1.22	MMS19	MMS19 nucleotide excision repair homolog (S. cerevisiae)	Downregulated

A_24_P909	0.008594	0.00261	-1.22	HNRNPDL	heterogeneous nuclear ribonucleoprotein D-like	Downregulated
A_21_P000	0.009992	0.00319	-1.22	LOC1019276	uncharacterized LOC101927694	Downregulated
A_32_P910	0.013354	0.00465	-1.22	LOC1001290	uncharacterized LOC100129034	Downregulated
A_24_P940	0.015403	0.0056	-1.22	CCDC57	coiled-coil domain containing 57	Downregulated
A_32_P416	0.02096	0.00822	-1.22	NLRC5	NLR family, CARD domain containing 5	Downregulated
A_21_P000	0.026644	0.0111	-1.22	LRRC34	leucine rich repeat containing 34	Downregulated
A_33_P333	0.031215	0.0135	-1.22	SH3YL1	SH3 and SYLF domain containing 1	Downregulated
A_21_P000	0.075743	0.0394	-1.22	lnc-IRF2BPL-1	lnc-IRF2BPL-2:1	Downregulated
A_32_P357	0.078204	0.0409	-1.22	PPHLN1	periphilin 1	Downregulated
A_22_P000	0.087386	0.0471	-1.22	lnc-FAM63B-1	lnc-FAM63B-1:1	Downregulated
A_24_P798	0.001576	0.000197	-1.23	PBXIP1	pre-B-cell leukemia homeobox interacting protein 1	Downregulated
A_23_P345	0.002046	0.000313	-1.23	ZNF655	zinc finger protein 655	Downregulated
A_23_P968	0.002086	0.000323	-1.23	FAF1	Fas (TNFRSF6) associated factor 1	Downregulated
A_23_P349	0.002173	0.000348	-1.23	JTB	jumping translocation breakpoint	Downregulated
A_23_P139	0.002184	0.00035	-1.23	ERGIC2	ERGIC and golgi 2	Downregulated
A_33_P324	0.002365	0.000395	-1.23	SLC41A3	solute carrier family 41, member 3	Downregulated
A_23_P390	0.002503	0.000431	-1.23	RRAS	related RAS viral (r-ras) oncogene homolog	Downregulated
A_23_P320	0.003199	0.00063	-1.23	ZNF827	zinc finger protein 827	Downregulated
A_23_P217	0.003265	0.000648	-1.23	AK6	adenylate kinase 6	Downregulated
A_23_P245	0.006147	0.00164	-1.23	ACAT1	acetyl-CoA acetyltransferase 1	Downregulated
A_33_P325	0.00706	0.00199	-1.23	MFSD1	major facilitator superfamily domain containing 1	Downregulated
A_23_P127	0.00751	0.00217	-1.23	PPRC1	peroxisome proliferator-activated receptor gamma, coactivator-related 1	Downregulated
A_33_P341	0.011128	0.00366	-1.23	BTBD7	BTB (POZ) domain containing 7	Downregulated
A_22_P000	0.011362	0.00377	-1.23	LOC284648	uncharacterized LOC284648	Downregulated
A_33_P326	0.01517	0.0055	-1.23	LOC1027247	tricarboxylate transport protein, mitochondrial-like	Downregulated
A_22_P000	0.016063	0.00591	-1.23	lnc-ADAMTS7	lnc-ADAMTS7-1:3	Downregulated
A_23_P244	0.023072	0.00927	-1.23	CTSF	cathepsin F	Downregulated
A_23_P258	0.024838	0.0102	-1.23	ENOX2	ecto-NOX disulfide-thiol exchanger 2	Downregulated
A_21_P000	0.024825	0.0102	-1.23	lnc-PDE4D-1	lnc-PDE4D-1:1	Downregulated
A_33_P321	0.02969	0.0127	-1.23	AGPAT5	1-acylglycerol-3-phosphate O-acyltransferase 5	Downregulated
A_21_P000	0.03179	0.0138	-1.23	lnc-WRNIP1-2	lnc-WRNIP1-2:20	Downregulated
A_23_P106	0.044848	0.0211	-1.23	CHST6	carbohydrate (N-acetylglucosamine 6-O) sulfotransferase 6	Downregulated
A_24_P931	0.057031	0.0281	-1.23	LOC1001288	ACA3104	Downregulated
A_21_P001	0.064522	0.0325	-1.23	LOC388692	uncharacterized LOC388692	Downregulated
A_23_P333	0.07196	0.0371	-1.23	SH3D19	SH3 domain containing 19	Downregulated
A_23_P425	0.072642	0.0375	-1.23	SPDYE1	speedy/RINGO cell cycle regulator family member E1	Downregulated
A_21_P000	0.001606	0.000203	-1.24	SNORA70E	small nucleolar RNA, H/ACA box 70E	Downregulated

A_23_P901	0.001611	0.000204	-1.24	PPP1R15A	protein phosphatase 1, regulatory subunit 15A	Downregulated
A_23_P546	0.001629	0.000209	-1.24	ATP6V0D1	ATPase, H+ transporting, lysosomal 38kDa, V0 subunit d1	Downregulated
A_33_P338	0.001633	0.00021	-1.24	CTDNBP1	CTD nuclear envelope phosphatase 1	Downregulated
A_23_P795	0.001635	0.00021	-1.24	SUCLG1	succinate-CoA ligase, alpha subunit	Downregulated
A_23_P206	0.001754	0.000238	-1.24	ITGAL	integrin, alpha L (antigen CD11A (p180), lymphocyte function-associate	Downregulated
A_24_P361	0.001772	0.000242	-1.24	CHD8	chromodomain helicase DNA binding protein 8	Downregulated
A_23_P100	0.00186	0.000264	-1.24	ZNF598	zinc finger protein 598	Downregulated
A_33_P333	0.001903	0.000274	-1.24	FCRL5	Fc receptor-like 5	Downregulated
A_33_P326	0.00193	0.000281	-1.24	NCBP1	nuclear cap binding protein subunit 1, 80kDa	Downregulated
A_23_P122	0.001973	0.000293	-1.24	HDAC2	histone deacetylase 2	Downregulated
A_23_P140	0.002006	0.000302	-1.24	SUPT20H	suppressor of Ty 20 homolog (S. cerevisiae)	Downregulated
A_23_P866	0.002125	0.000336	-1.24	HNRNPA3	heterogeneous nuclear ribonucleoprotein A3	Downregulated
A_24_P924	0.002558	0.000445	-1.24	PCNXL3	pecanex-like 3 (Drosophila)	Downregulated
A_23_P132	0.002572	0.00045	-1.24	SPCS3	signal peptidase complex subunit 3 homolog (S. cerevisiae)	Downregulated
A_23_P101	0.002818	0.000515	-1.24	TMEM38A	transmembrane protein 38A	Downregulated
A_23_P211	0.002853	0.000525	-1.24	NDUFV3	NADH dehydrogenase (ubiquinone) flavoprotein 3, 10kDa	Downregulated
A_23_P942	0.003338	0.000671	-1.24	OXR1	oxidation resistance 1	Downregulated
A_33_P342	0.005267	0.00131	-1.24	LOC1027251	uncharacterized LOC102725171	Downregulated
A_24_P942	0.005372	0.00135	-1.24	TRAPPC6B	trafficking protein particle complex 6B	Downregulated
A_23_P140	0.00638	0.00173	-1.24	DDX19B	DEAD (Asp-Glu-Ala-Asp) box polypeptide 19B	Downregulated
A_33_P360	0.006443	0.00176	-1.24	C12orf80	chromosome 12 open reading frame 80	Downregulated
A_33_P322	0.006923	0.00194	-1.24	LOC1720	dihydrofolate reductase pseudogene	Downregulated
A_22_P000	0.007511	0.00217	-1.24	lnc-POU5F1B	lnc-POU5F1B-3:3	Downregulated
A_33_P332	0.008765	0.00268	-1.24	FAM69A	family with sequence similarity 69, member A	Downregulated
A_21_P000	0.00896	0.00276	-1.24	PDCL3	phosducin-like 3	Downregulated
A_22_P000	0.015038	0.00544	-1.24	lnc-SNURF-1	lnc-SNURF-1:9	Downregulated
A_21_P000	0.015038	0.00544	-1.24	SNORD42B	small nucleolar RNA, C/D box 42B	Downregulated
A_24_P337	0.025764	0.0107	-1.24	ANKRA2	ankyrin repeat, family A (RFXANK-like), 2	Downregulated
A_21_P001	0.033792	0.0149	-1.24	DNAH17	dynein, axonemal, heavy chain 17	Downregulated
A_22_P000	0.038334	0.0174	-1.24	lnc-TPPP2-1	lnc-TPPP2-1:2	Downregulated
A_21_P000	0.075523	0.0393	-1.24	lnc-BLID-1	lnc-BLID-1:18	Downregulated
A_24_P276	0.001481	0.000177	-1.25	FCRLA	Fc receptor-like A	Downregulated
A_23_P215	0.001643	0.000212	-1.25	ECHDC1	ethylmalonyl-CoA decarboxylase 1	Downregulated
A_24_P126	0.001656	0.000215	-1.25	NR2C2AP	nuclear receptor 2C2-associated protein	Downregulated
A_23_P603	0.001663	0.000217	-1.25	C9orf64	chromosome 9 open reading frame 64	Downregulated
A_22_P000	0.001763	0.00024	-1.25	NUP50-AS1	NUP50 antisense RNA 1 (head to head)	Downregulated
A_33_P330	0.001772	0.000242	-1.25	MAP3K11	mitogen-activated protein kinase kinase kinase 11	Downregulated

A_24_P728	0.00193	0.000281	-1.25	XLOC_I2_011874		Downregulated
A_22_P000	0.001949	0.000286	-1.25	lnc-LRRC14-1	lnc-LRRC14-1:1	Downregulated
A_23_P212	0.002041	0.000312	-1.25	THUMPD3	THUMP domain containing 3	Downregulated
A_33_P322	0.002072	0.00032	-1.25	C9orf64	chromosome 9 open reading frame 64	Downregulated
A_23_P703	0.002168	0.000346	-1.25	PHF3	PHD finger protein 3	Downregulated
A_23_P152	0.002391	0.000402	-1.25	C17orf59	chromosome 17 open reading frame 59	Downregulated
A_23_P946	0.002538	0.00044	-1.25	TBC1D13	TBC1 domain family, member 13	Downregulated
A_23_P155	0.003358	0.000676	-1.25	XYLT2	xylosyltransferase II	Downregulated
A_22_P000	0.003469	0.000708	-1.25	CRTC3-AS1	CRTC3 antisense RNA 1	Downregulated
A_24_P381	0.004156	0.000923	-1.25	SYVN1	synovial apoptosis inhibitor 1, synoviolin	Downregulated
A_21_P000	0.004321	0.000981	-1.25	SNORD36A	small nucleolar RNA, C/D box 36A	Downregulated
A_33_P322	0.006058	0.0016	-1.25	C17orf50	chromosome 17 open reading frame 50	Downregulated
A_33_P324	0.006593	0.00181	-1.25	CEP350	centrosomal protein 350kDa	Downregulated
A_33_P364	0.006791	0.00189	-1.25	LOC1002893	uncharacterized LOC100289333	Downregulated
A_23_P133	0.006797	0.00189	-1.25	TBCK	TBC1 domain containing kinase	Downregulated
A_33_P329	0.007192	0.00205	-1.25	LRRC37A3	leucine rich repeat containing 37, member A3	Downregulated
A_22_P000	0.009487	0.00297	-1.25	lnc-SEBOX-1	lnc-SEBOX-1:1	Downregulated
A_24_P132	0.009487	0.00297	-1.25	RNF14	ring finger protein 14	Downregulated
A_21_P000	0.015464	0.00563	-1.25	lnc-KATNAL2	lnc-KATNAL2-1:1	Downregulated
A_21_P001	0.048785	0.0233	-1.25	LINC00993	long intergenic non-protein coding RNA 993	Downregulated
A_21_P000	0.060547	0.0302	-1.25	lnc-FUT8-2	lnc-FUT8-2:2	Downregulated
A_24_P144	0.077079	0.0402	-1.25	WFDC2	WAP four-disulfide core domain 2	Downregulated
A_23_P330	0.001453	0.00017	-1.26	DERL1	derlin 1	Downregulated
A_24_P914	0.001626	0.000208	-1.26	MARK2	MAP/microtubule affinity-regulating kinase 2	Downregulated
A_23_P127	0.001754	0.000238	-1.26	CTR9	CTR9, Paf1/RNA polymerase II complex component	Downregulated
A_32_P170	0.001797	0.000248	-1.26	SUB1	SUB1 homolog (S. cerevisiae)	Downregulated
A_33_P325	0.001808	0.000251	-1.26	LINC01561	long intergenic non-protein coding RNA 1561	Downregulated
A_33_P333	0.00196	0.00029	-1.26	TMEM208	transmembrane protein 208	Downregulated
A_23_P312	0.002016	0.000305	-1.26	PNPLA8	patatin-like phospholipase domain containing 8	Downregulated
A_23_P253	0.002227	0.000361	-1.26	PNOC	prepronociceptin	Downregulated
A_22_P000	0.002235	0.000363	-1.26	lnc-ATP11B-2	lnc-ATP11B-2:1	Downregulated
A_21_P001	0.002499	0.000429	-1.26	FOXN3	forkhead box N3	Downregulated
A_23_P310	0.002682	0.000478	-1.26	NUP43	nucleoporin 43kDa	Downregulated
A_24_P138	0.003331	0.000668	-1.26	FAM120A	family with sequence similarity 120A	Downregulated
A_24_P848	0.003747	0.000794	-1.26	LINC00032	long intergenic non-protein coding RNA 32	Downregulated
A_24_P945	0.003747	0.000794	-1.26	RBM15B	RNA binding motif protein 15B	Downregulated
A_23_P376	0.004843	0.00116	-1.26	TICAM1	toll-like receptor adaptor molecule 1	Downregulated

A_33_P342	0.005354	0.00134	-1.26	WHSC1	Wolf-Hirschhorn syndrome candidate 1	Downregulated
A_22_P000	0.00847	0.00256	-1.26	lnc-LPGAT1-2	lnc-LPGAT1-2:1	Downregulated
A_22_P000	0.008877	0.00272	-1.26	lnc-IGFALS-1	lnc-IGFALS-1:1	Downregulated
A_32_P146	0.009981	0.00318	-1.26	PDLIM5	PDZ and LIM domain 5	Downregulated
A_22_P000	0.010188	0.00328	-1.26	lnc-C11orf44-	lnc-C11orf44-2:1	Downregulated
A_33_P338	0.012906	0.00444	-1.26	AKAP9	A kinase (PRKA) anchor protein 9	Downregulated
A_23_P109	0.015033	0.00543	-1.26	SLC26A6	solute carrier family 26 (anion exchanger), member 6	Downregulated
A_23_P321	0.018829	0.00721	-1.26	SAAL1	serum amyloid A-like 1	Downregulated
A_21_P000	0.019078	0.00734	-1.26	IQCH-AS1	IQCH antisense RNA 1	Downregulated
A_24_P102	0.023517	0.00951	-1.26	DAPK2	death-associated protein kinase 2	Downregulated
A_33_P357	0.02857	0.0121	-1.26	NCR1	natural cytotoxicity triggering receptor 1	Downregulated
A_21_P001	0.028955	0.0123	-1.26	lnc-SIK1-4	lnc-SIK1-4:9	Downregulated
A_33_P341	0.032982	0.0145	-1.26	ARHGAP44	Rho GTPase activating protein 44	Downregulated
A_33_P322	0.03335	0.0147	-1.26	LIMS3-LOC4	LIMS3-LOC440895 readthrough	Downregulated
A_23_P160	0.053925	0.0263	-1.26	GALE	UDP-galactose-4-epimerase	Downregulated
A_21_P000	0.070917	0.0364	-1.26	lnc-DHX37-5	lnc-DHX37-5:2	Downregulated
A_33_P378	0.001563	0.000194	-1.27	PAK1	p21 protein (Cdc42/Rac)-activated kinase 1	Downregulated
A_33_P326	0.001604	0.000202	-1.27	DCTN1	dynactin 1	Downregulated
A_23_P434	0.001683	0.00022	-1.27	CAST	calpastatin	Downregulated
A_23_P877	0.001854	0.000263	-1.27	PARPBP	PARP1 binding protein	Downregulated
A_23_P126	0.001949	0.000286	-1.27	S100A11	S100 calcium binding protein A11	Downregulated
A_24_P115	0.002043	0.000313	-1.27	COX15	cytochrome c oxidase assembly homolog 15 (yeast)	Downregulated
A_21_P000	0.002078	0.000322	-1.27	lnc-HES1-2	lnc-HES1-2:6	Downregulated
A_33_P330	0.002356	0.000392	-1.27	UQCC1	ubiquinol-cytochrome c reductase complex assembly factor 1	Downregulated
A_23_P214	0.003232	0.000639	-1.27	PHF19	PHD finger protein 19	Downregulated
A_33_P330	0.004882	0.00117	-1.27	TTC23L	tetratricopeptide repeat domain 23-like	Downregulated
A_33_P340	0.004977	0.0012	-1.27	PHC3	polyhomeotic homolog 3 (Drosophila)	Downregulated
A_33_P334	0.005095	0.00124	-1.27	LOC1019276	ERV-FRD provirus ancestral Env polyprotein-like	Downregulated
A_33_P328	0.008919	0.00274	-1.27	UHRF1BP1L	UHRF1 binding protein 1-like	Downregulated
A_23_P426	0.00959	0.00302	-1.27	ZYG11B	zyg-11 family member B, cell cycle regulator	Downregulated
A_23_P217	0.011865	0.004	-1.27	EHMT1	euchromatic histone-lysine N-methyltransferase 1	Downregulated
A_23_P386	0.028176	0.0119	-1.27	GTF2H3	general transcription factor IIH, polypeptide 3, 34kDa	Downregulated
A_24_P363	0.037512	0.017	-1.27	FTSJ2	FtsJ RNA methyltransferase homolog 2 (E. coli)	Downregulated
A_33_P324	0.037512	0.017	-1.27	MZF1	myeloid zinc finger 1	Downregulated
A_19_P003	0.037512	0.017	-1.27	XLOC_I2_015561		Downregulated
A_24_P392	0.053369	0.0259	-1.27	MYPOP	Myb-related transcription factor, partner of profilin	Downregulated
A_24_P299	0.001403	0.00016	-1.28	ARPC5L	actin related protein 2/3 complex, subunit 5-like	Downregulated

A_23_P203	0.001422	0.000163	-1.28	DDX11	DEAD/H (Asp-Glu-Ala-Asp/His) box helicase 11	Downregulated
A_23_P170	0.001433	0.000165	-1.28	PSMB2	proteasome (prosome, macropain) subunit, beta type, 2	Downregulated
A_23_P945	0.001575	0.000196	-1.28	ANXA1	annexin A1	Downregulated
A_33_P333	0.001618	0.000206	-1.28	WIPF1	WAS/WASL interacting protein family, member 1	Downregulated
A_23_P451	0.001766	0.000241	-1.28	PROSC	proline synthetase co-transcribed homolog (bacterial)	Downregulated
A_23_P945	0.001908	0.000275	-1.28	TMEM141	transmembrane protein 141	Downregulated
A_23_P106	0.00206	0.000317	-1.28	NOB1	NIN1/RPN12 binding protein 1 homolog (S. cerevisiae)	Downregulated
A_22_P000	0.002189	0.000351	-1.28	lnc-SH2D7-3	lnc-SH2D7-3:1	Downregulated
A_23_P144	0.002361	0.000394	-1.28	GALNT7	polypeptide N-acetylgalactosaminyltransferase 7	Downregulated
A_33_P333	0.002989	0.000564	-1.28	WASH5P	WAS protein family homolog 5 pseudogene	Downregulated
A_33_P681	0.005462	0.00138	-1.28	LOC1005068	uncharacterized LOC100506844	Downregulated
A_23_P796	0.007222	0.00206	-1.28	CCDC93	coiled-coil domain containing 93	Downregulated
A_22_P000	0.008431	0.00254	-1.28	lnc-LINC0034	lnc-LINC00346-2:1	Downregulated
A_22_P000	0.018659	0.00713	-1.28	ZFPM2-AS1	ZFPM2 antisense RNA 1	Downregulated
A_24_P399	0.020052	0.0078	-1.28	TXNL4B	thioredoxin-like 4B	Downregulated
A_21_P001	0.04072	0.0187	-1.28	NUTM2A-AS1	NUTM2A antisense RNA 1	Downregulated
A_22_P000	0.044301	0.0207	-1.28	lnc-ARMC6-1	lnc-ARMC6-1:1	Downregulated
A_21_P001	0.049305	0.0236	-1.28	lnc-C22orf26-	lnc-C22orf26-2:10	Downregulated
A_22_P000	0.056721	0.0279	-1.28	lnc-ZMYM2-4	lnc-ZMYM2-4:1	Downregulated
A_23_P334	0.001433	0.000165	-1.29	ITFG1	integrin alpha FG-GAP repeat containing 1	Downregulated
A_23_P165	0.00162	0.000206	-1.29	RFXANK	regulatory factor X-associated ankyrin-containing protein	Downregulated
A_24_P189	0.001635	0.00021	-1.29	LMF1	lipase maturation factor 1	Downregulated
A_23_P691	0.001719	0.00023	-1.29	DYNC1L1	dynein, cytoplasmic 1, light intermediate chain 1	Downregulated
A_33_P323	0.001785	0.000245	-1.29	UTRN	utrophin	Downregulated
A_33_P321	0.001798	0.000248	-1.29	CS	citrate synthase	Downregulated
A_21_P000	0.001842	0.00026	-1.29	SNORA70B	small nucleolar RNA, H/ACA box 70B	Downregulated
A_23_P209	0.001871	0.000267	-1.29	CYP1B1	cytochrome P450, family 1, subfamily B, polypeptide 1	Downregulated
A_24_P940	0.001889	0.000271	-1.29	CTBS	chitobiase, di-N-acetyl-	Downregulated
A_23_P425	0.001951	0.000287	-1.29	TRIM14	tripartite motif containing 14	Downregulated
A_23_P129	0.002568	0.000447	-1.29	C11orf24	chromosome 11 open reading frame 24	Downregulated
A_23_P607	0.002805	0.000512	-1.29	ASMTL-AS1	ASMTL antisense RNA 1	Downregulated
A_23_P545	0.003392	0.000686	-1.29	MKL2	MKL/myocardin-like 2	Downregulated
A_33_P322	0.003446	0.000701	-1.29	ALKBH3	alkB, alkylation repair homolog 3 (E. coli)	Downregulated
A_22_P000	0.004079	0.000896	-1.29	RPARP-AS1	RPARP antisense RNA 1	Downregulated
A_33_P340	0.00487	0.00117	-1.29	GGTLC2	gamma-glutamyltransferase light chain 2	Downregulated
A_23_P141	0.006915	0.00194	-1.29	TYK2	tyrosine kinase 2	Downregulated
A_23_P137	0.007306	0.00209	-1.29	TBX19	T-box 19	Downregulated

A_21_P000	0.007491	0.00216	-1.29	lnc-OIP5-1	lnc-OIP5-1:1	Downregulated
A_21_P001	0.008324	0.0025	-1.29	lnc-TEX261-2	lnc-TEX261-2:1	Downregulated
A_24_P397	0.008765	0.00268	-1.29	GCNT2	glucosaminyl (N-acetyl) transferase 2, I-branching enzyme (I blood group)	Downregulated
A_23_P565	0.009793	0.0031	-1.29	IL37	interleukin 37	Downregulated
A_21_P001	0.012945	0.00446	-1.29	XLOC_l2_009159		Downregulated
A_23_P918	0.01767	0.00667	-1.29	DCBLD2	discoidin, CUB and LCCL domain containing 2	Downregulated
A_21_P000	0.030769	0.0133	-1.29	SCARNA14	small Cajal body-specific RNA 14	Downregulated
A_23_P420	0.042335	0.0197	-1.29	CIT	citron rho-interacting serine/threonine kinase	Downregulated
A_21_P000	0.045135	0.0212	-1.29	lnc-FTH1-1	lnc-FTH1-1:1	Downregulated
A_22_P000	0.045135	0.0212	-1.29	lnc-SLC6A12	lnc-SLC6A12-4:1	Downregulated
A_23_P687	0.047581	0.0226	-1.29	DNAJC28	DnaJ (Hsp40) homolog, subfamily C, member 28	Downregulated
A_33_P332	0.075672	0.0394	-1.29	CAGE1	cancer antigen 1	Downregulated
A_24_P328	0.085795	0.0461	-1.29	SOCS5	suppressor of cytokine signaling 5	Downregulated
A_23_P145	0.001421	0.000163	-1.3	FUCA2	fucosidase, alpha-L- 2, plasma	Downregulated
A_24_P316	0.001429	0.000164	-1.3	MLLT10	myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, Drosophila)	Downregulated
A_23_P256	0.001802	0.000249	-1.3	LAS1L	LAS1-like (S. cerevisiae)	Downregulated
A_22_P000	0.001889	0.000271	-1.3	lnc-PAX9-4	lnc-PAX9-4:1	Downregulated
A_24_P100	0.001906	0.000275	-1.3	EMC4	ER membrane protein complex subunit 4	Downregulated
A_23_P255	0.002101	0.000327	-1.3	DCAF12	DDB1 and CUL4 associated factor 12	Downregulated
A_23_P317	0.002156	0.000343	-1.3	UIMC1	ubiquitin interaction motif containing 1	Downregulated
A_22_P000	0.002472	0.000421	-1.3	lnc-RPL36AL	lnc-RPL36AL-1:1	Downregulated
A_33_P384	0.002984	0.000562	-1.3	FHL1	four and a half LIM domains 1	Downregulated
A_22_P000	0.002984	0.000562	-1.3	lnc-GPD2-1	lnc-GPD2-1:1	Downregulated
A_24_P290	0.003219	0.000635	-1.3	OGDH	oxoglutarate (alpha-ketoglutarate) dehydrogenase (lipoamide)	Downregulated
A_23_P952	0.003228	0.000638	-1.3	RBKS	ribokinase	Downregulated
A_33_P333	0.003401	0.000689	-1.3	UBE2Q2	ubiquitin-conjugating enzyme E2Q family member 2	Downregulated
A_33_P383	0.00366	0.000767	-1.3	C19orf24	chromosome 19 open reading frame 24	Downregulated
A_33_P348	0.003663	0.000768	-1.3	SNORA19	small nucleolar RNA, H/ACA box 19	Downregulated
A_33_P323	0.003791	0.000807	-1.3	ITPR2	inositol 1,4,5-trisphosphate receptor, type 2	Downregulated
A_21_P000	0.004257	0.000959	-1.3	SNORD1B	small nucleolar RNA, C/D box 1B	Downregulated
A_24_P124	0.005096	0.00125	-1.3	NDNL2	necdin-like 2	Downregulated
A_23_P499	0.005683	0.00146	-1.3	KRT10	keratin 10, type I	Downregulated
A_33_P345	0.006372	0.00173	-1.3	LINC01573	long intergenic non-protein coding RNA 1573	Downregulated
A_33_P333	0.006506	0.00178	-1.3	ACACB	acetyl-CoA carboxylase beta	Downregulated
A_33_P646	0.007927	0.00233	-1.3	SNHG7	small nucleolar RNA host gene 7 (non-protein coding)	Downregulated
A_22_P000	0.013405	0.00467	-1.3	lnc-C1orf31-4	lnc-C1orf31-4:1	Downregulated
A_22_P000	0.01422	0.00505	-1.3	lnc-CCNB1IP	lnc-CCNB1IP1-2:1	Downregulated

A_33_P334	0.015271	0.00555	-1.3	ZC3H18	zinc finger CCCH-type containing 18	Downregulated
A_21_P001	0.016739	0.00624	-1.3	lnc-PRC1-1	lnc-PRC1-1:1	Downregulated
A_21_P000	0.052859	0.0256	-1.3	lnc-DMRTA1-1	lnc-DMRTA1-5:2	Downregulated
A_33_P333	0.065215	0.033	-1.3	ANKK1	ankyrin repeat and kinase domain containing 1	Downregulated
A_24_P204	0.001333	0.000145	-1.31	ANXA2P1	annexin A2 pseudogene 1	Downregulated
A_32_P220	0.001421	0.000163	-1.31	ZFAND6	zinc finger, AN1-type domain 6	Downregulated
A_23_P104	0.001443	0.000167	-1.31	ITGB1	integrin, beta 1 (fibronectin receptor, beta polypeptide, antigen CD29 in	Downregulated
A_33_P342	0.001808	0.000251	-1.31	CADM1	cell adhesion molecule 1	Downregulated
A_23_P329	0.001936	0.000282	-1.31	RHBDF2	rhomoid 5 homolog 2 (Drosophila)	Downregulated
A_33_P338	0.001948	0.000285	-1.31	ATP6V1D	ATPase, H ⁺ transporting, lysosomal 34kDa, V1 subunit D	Downregulated
A_33_P333	0.002114	0.000331	-1.31	INSR	insulin receptor	Downregulated
A_21_P000	0.002568	0.000448	-1.31	lnc-AC00310	lnc-AC003101.1.1-1:1	Downregulated
A_23_P591	0.003119	0.000604	-1.31	LSM2	LSM2 homolog, U6 small nuclear RNA associated (S. cerevisiae)	Downregulated
A_33_P325	0.00321	0.000633	-1.31	RBM48	RNA binding motif protein 48	Downregulated
A_23_P124	0.003315	0.000664	-1.31	QSOX1	quiescin Q6 sulfhydryl oxidase 1	Downregulated
A_22_P000	0.003535	0.000729	-1.31	lnc-WNT1-2	lnc-WNT1-2:1	Downregulated
A_23_P141	0.004184	0.000933	-1.31	FBXL20	F-box and leucine-rich repeat protein 20	Downregulated
A_23_P131	0.004203	0.000939	-1.31	PRADC1	protease-associated domain containing 1	Downregulated
A_33_P337	0.004529	0.00105	-1.31	TLE1	transducin-like enhancer of split 1 (E(sp1) homolog, Drosophila)	Downregulated
A_23_P505	0.004627	0.00108	-1.31	DMPK	dystrophia myotonica-protein kinase	Downregulated
A_22_P000	0.004969	0.0012	-1.31	LOC1001316	uncharacterized LOC100131655	Downregulated
A_33_P362	0.005253	0.00131	-1.31	CDRT8	CMT1A duplicated region transcript 8	Downregulated
A_24_P879	0.006235	0.00167	-1.31	WAC-AS1	WAC antisense RNA 1 (head to head)	Downregulated
A_24_P367	0.006645	0.00183	-1.31	SOCS7	suppressor of cytokine signaling 7	Downregulated
A_33_P340	0.006846	0.00191	-1.31	SEH1L	SEH1-like (S. cerevisiae)	Downregulated
A_23_P477	0.00743	0.00214	-1.31	FOLR2	folate receptor 2 (fetal)	Downregulated
A_33_P328	0.01771	0.00669	-1.31	CLDN3	claudin 3	Downregulated
A_32_P180	0.022311	0.00889	-1.31	PCYOX1	prenylcysteine oxidase 1	Downregulated
A_33_P336	0.022662	0.00907	-1.31	ERCC1	excision repair cross-complementation group 1	Downregulated
A_21_P001	0.025587	0.0106	-1.31	lnc-CSTB-1	lnc-CSTB-1:5	Downregulated
A_32_P528	0.034462	0.0153	-1.31	TM7SF3	transmembrane 7 superfamily member 3	Downregulated
A_33_P328	0.042642	0.0198	-1.31	SNHG7	small nucleolar RNA host gene 7 (non-protein coding)	Downregulated
A_21_P000	0.048955	0.0234	-1.31	lnc-PELI2-6	lnc-PELI2-6:1	Downregulated
A_23_P348	0.058355	0.0289	-1.31	CDHR3	cadherin-related family member 3	Downregulated
A_22_P000	0.06469	0.0327	-1.31	lnc-ADAM21-2	lnc-ADAM21-2:1	Downregulated
A_33_P326	0.090474	0.0491	-1.31	FAAH	fatty acid amide hydrolase	Downregulated
A_19_P003	0.001359	0.00015	-1.32	UBE2E3	ubiquitin-conjugating enzyme E2E 3	Downregulated

A_24_P899	0.001376	0.000153	-1.32	NAIF1	nuclear apoptosis inducing factor 1	Downregulated
A_23_P680	0.001398	0.000158	-1.32	STAT4	signal transducer and activator of transcription 4	Downregulated
A_33_P376	0.00151	0.000182	-1.32	DCAF4L2	DDB1 and CUL4 associated factor 4-like 2	Downregulated
A_23_P102	0.00151	0.000182	-1.32	NFS1	NFS1 cysteine desulfurase	Downregulated
A_33_P322	0.00178	0.000244	-1.32	UTY	ubiquitously transcribed tetratricopeptide repeat containing, Y-linked	Downregulated
A_21_P000	0.001812	0.000252	-1.32	lnc-C15orf2-2	lnc-C15orf2-2:27	Downregulated
A_23_P146	0.001904	0.000275	-1.32	ZFAND1	zinc finger, AN1-type domain 1	Downregulated
A_23_P110	0.002012	0.000303	-1.32	DUSP1	dual specificity phosphatase 1	Downregulated
A_24_P263	0.002229	0.000362	-1.32	DOCK2	dedicator of cytokinesis 2	Downregulated
A_32_P563	0.002389	0.0004	-1.32	RBMX	RNA binding motif protein, X-linked	Downregulated
A_21_P001	0.00247	0.000421	-1.32	XLOC_I2_013328		Downregulated
A_23_P117	0.002738	0.000493	-1.32	CHRM5	cholinergic receptor, muscarinic 5	Downregulated
A_22_P000	0.002909	0.000541	-1.32	lnc-CBR1-1	lnc-CBR1-1:1	Downregulated
A_33_P323	0.003447	0.000702	-1.32	FAM122B	family with sequence similarity 122B	Downregulated
A_24_P693	0.003531	0.000727	-1.32	LOC1001909	uncharacterized LOC100190986	Downregulated
A_21_P001	0.003572	0.000742	-1.32	GBP3	guanylate binding protein 3	Downregulated
A_22_P000	0.004402	0.00101	-1.32	lnc-ZMYM3-1	lnc-ZMYM3-1:1	Downregulated
A_33_P321	0.006254	0.00168	-1.32	HDDC2	HD domain containing 2	Downregulated
A_21_P000	0.007778	0.00228	-1.32	SNORA70D	small nucleolar RNA, H/ACA box 70D	Downregulated
A_32_P228	0.01158	0.00388	-1.32	PRDM10	PR domain containing 10	Downregulated
A_33_P333	0.01221	0.00414	-1.32	LOC1001282	uncharacterized LOC100128219	Downregulated
A_23_P411	0.012756	0.00438	-1.32	B3GALNT1	beta-1,3-N-acetylgalactosaminyltransferase 1 (globoside blood group)	Downregulated
A_33_P333	0.01675	0.00625	-1.32	ATXN7L1	ataxin 7-like 1	Downregulated
A_33_P339	0.030972	0.0134	-1.32	SDHA	succinate dehydrogenase complex, subunit A, flavoprotein (Fp)	Downregulated
A_23_P202	0.039243	0.0179	-1.32	CYP2R1	cytochrome P450, family 2, subfamily R, polypeptide 1	Downregulated
A_21_P000	0.049381	0.0237	-1.32	lnc-SLC2A13	lnc-SLC2A13-3:2	Downregulated
A_22_P000	0.069855	0.0358	-1.32	lnc-SLC7A6-1	lnc-SLC7A6-1:1	Downregulated
A_24_P171	0.001403	0.000159	-1.33	RASSF5	Ras association (RalGDS/AF-6) domain family member 5	Downregulated
A_23_P129	0.001548	0.00019	-1.33	PLEKHO2	pleckstrin homology domain containing, family O member 2	Downregulated
A_21_P000	0.001551	0.000191	-1.33	SNORA70C	small nucleolar RNA, H/ACA box 70C	Downregulated
A_19_P003	0.001595	0.0002	-1.33	FLJ32255	uncharacterized LOC643977	Downregulated
A_23_P391	0.001698	0.000225	-1.33	LPHN1	latrophilin 1	Downregulated
A_23_P212	0.001802	0.000249	-1.33	NKTR	natural killer cell triggering receptor	Downregulated
A_22_P000	0.002124	0.000335	-1.33	LOC1001297	uncharacterized LOC100129781	Downregulated
A_23_P432	0.002183	0.00035	-1.33	RTN4RL1	reticulon 4 receptor-like 1	Downregulated
A_23_P847	0.002221	0.00036	-1.33	PLRG1	pleiotropic regulator 1	Downregulated
A_33_P327	0.002849	0.000524	-1.33	RHOQ	ras homolog family member Q	Downregulated

A_33_P369	0.002892	0.000537	-1.33	SEMA4D	sema domain, immunoglobulin domain (Ig), transmembrane domain (TM)	Downregulated
A_21_P000	0.002931	0.000547	-1.33	SNORA70	small nucleolar RNA, H/ACA box 70	Downregulated
A_33_P330	0.003158	0.000617	-1.33	KIAA1549L	KIAA1549-like	Downregulated
A_23_P329	0.004315	0.000979	-1.33	ARMC10	armadillo repeat containing 10	Downregulated
A_23_P103	0.0059	0.00154	-1.33	AKR7A3	aldo-keto reductase family 7, member A3 (afatoxin aldehyde reductase)	Downregulated
A_21_P001	0.006544	0.00179	-1.33	LOC1002880	uncharacterized LOC100288069	Downregulated
A_23_P855	0.00863	0.00262	-1.33	RNF2	ring finger protein 2	Downregulated
A_33_P384	0.010475	0.00339	-1.33	MAGI1-IT1	MAGI1 intronic transcript 1 (non-protein coding)	Downregulated
A_22_P000	0.011167	0.00368	-1.33	RNF219-AS1	RNF219 antisense RNA 1	Downregulated
A_32_P133	0.011499	0.00383	-1.33	SPON1	spondin 1, extracellular matrix protein	Downregulated
A_22_P000	0.016121	0.00594	-1.33	lnc-TM9SF2-2	lnc-TM9SF2-2:1	Downregulated
A_33_P330	0.02602	0.0108	-1.33	TPP2	tripeptidyl peptidase II	Downregulated
A_21_P000	0.029173	0.0125	-1.33	lnc-NTRK2-3	lnc-NTRK2-3:1	Downregulated
A_21_P000	0.035596	0.0159	-1.33	SNORA11	small nucleolar RNA, H/ACA box 11	Downregulated
A_22_P000	0.046324	0.0219	-1.33	lnc-PIK3R1-3	lnc-PIK3R1-3:1	Downregulated
A_21_P000	0.051724	0.025	-1.33	lnc-RPL24-2	lnc-RPL24-2:4	Downregulated
A_24_P151	0.076749	0.04	-1.33	MYL4	myosin, light chain 4, alkali; atrial, embryonic	Downregulated
A_33_P323	0.001286	0.000136	-1.34	TSC22D3	TSC22 domain family, member 3	Downregulated
A_24_P944	0.001299	0.000139	-1.34	HP1BP3	heterochromatin protein 1, binding protein 3	Downregulated
A_24_P837	0.001324	0.000143	-1.34	SPNS2	spinster homolog 2 (Drosophila)	Downregulated
A_33_P327	0.001383	0.000154	-1.34	DNMT3A	DNA (cytosine-5-)-methyltransferase 3 alpha	Downregulated
A_33_P332	0.001404	0.00016	-1.34	RAB8A	RAB8A, member RAS oncogene family	Downregulated
A_23_P362	0.001504	0.000181	-1.34	UBR2	ubiquitin protein ligase E3 component n-recognin 2	Downregulated
A_23_P207	0.00152	0.000184	-1.34	BRCA1	breast cancer 1, early onset	Downregulated
A_24_P194	0.001556	0.000192	-1.34	FXVD5	FXVD domain containing ion transport regulator 5	Downregulated
A_24_P285	0.001696	0.000224	-1.34	IDS	iduronate 2-sulfatase	Downregulated
A_21_P000	0.001958	0.000289	-1.34	SNORD5	small nucleolar RNA, C/D box 5	Downregulated
A_21_P000	0.002	0.0003	-1.34	lnc-AC069257	lnc-AC069257.9.1-5:2	Downregulated
A_24_P406	0.002719	0.000488	-1.34	MTMR2	myotubularin related protein 2	Downregulated
A_24_P520	0.002886	0.000534	-1.34	PDS5A	PDS5 cohesin associated factor A	Downregulated
A_24_P272	0.002889	0.000536	-1.34	AVL9	AVL9 homolog (S. cerevisiae)	Downregulated
A_24_P631	0.003155	0.000615	-1.34	P2RY13	purinergic receptor P2Y, G-protein coupled, 13	Downregulated
A_23_P111	0.003155	0.000615	-1.34	RSPO3	R-spondin 3	Downregulated
A_24_P370	0.003203	0.000631	-1.34	MAN2B1	mannosidase, alpha, class 2B, member 1	Downregulated
A_23_P462	0.005346	0.00134	-1.34	CELA2A	chymotrypsin-like elastase family, member 2A	Downregulated
A_32_P723	0.005869	0.00153	-1.34	TRIM59	tripartite motif containing 59	Downregulated
A_32_P226	0.00616	0.00164	-1.34	ZFH2	zinc finger homeobox 2	Downregulated

A_33_P325	0.007979	0.00236	-1.34	SLC35B4	solute carrier family 35 (UDP-xylose/UDP-N-acetylglucosamine transport	Downregulated
A_33_P384	0.009157	0.00284	-1.34	FRYL	FRY-like	Downregulated
A_33_P333	0.010538	0.00342	-1.34	SCARNA13	small Cajal body-specific RNA 13	Downregulated
A_23_P229	0.012416	0.00423	-1.34	NFYC	nuclear transcription factor Y, gamma	Downregulated
A_24_P373	0.051456	0.0248	-1.34	C19orf25	chromosome 19 open reading frame 25	Downregulated
A_23_P319	0.001265	0.000132	-1.35	VPS28	vacuolar protein sorting 28 homolog (S. cerevisiae)	Downregulated
A_22_P000	0.001301	0.000139	-1.35	LINC01258	long intergenic non-protein coding RNA 1258	Downregulated
A_23_P405	0.001322	0.000143	-1.35	WIZ	widely interspaced zinc finger motifs	Downregulated
A_21_P001	0.001376	0.000153	-1.35	CS	citrate synthase	Downregulated
A_32_P181	0.001398	0.000158	-1.35	DOCK8	dedicator of cytokinesis 8	Downregulated
A_22_P000	0.001474	0.000174	-1.35	lnc-SETDB1-1	lnc-SETDB1-1:2	Downregulated
A_32_P900	0.001478	0.000176	-1.35	C4orf48	chromosome 4 open reading frame 48	Downregulated
A_23_P676	0.001492	0.000179	-1.35	CAPNS1	calpain, small subunit 1	Downregulated
A_23_P270	0.001636	0.000211	-1.35	UBE2G1	ubiquitin-conjugating enzyme E2G 1	Downregulated
A_23_P108	0.001706	0.000228	-1.35	TLR1	toll-like receptor 1	Downregulated
A_33_P325	0.001916	0.000278	-1.35	SNORD3B-1	small nucleolar RNA, C/D box 3B-1	Downregulated
A_33_P325	0.002013	0.000304	-1.35	MYLIP	myosin regulatory light chain interacting protein	Downregulated
A_32_P207	0.002034	0.00031	-1.35	ARL16	ADP-ribosylation factor-like 16	Downregulated
A_23_P375	0.002078	0.000322	-1.35	COL19A1	collagen, type XIX, alpha 1	Downregulated
A_23_P254	0.002117	0.000332	-1.35	CENPU	centromere protein U	Downregulated
A_33_P322	0.002391	0.000402	-1.35	CYFIP2	cytoplasmic FMR1 interacting protein 2	Downregulated
A_22_P000	0.002411	0.000406	-1.35	lnc-NFYB-2	lnc-NFYB-2:1	Downregulated
A_21_P000	0.002836	0.00052	-1.35	lnc-AMELY-4	lnc-AMELY-4:1	Downregulated
A_21_P000	0.003022	0.000575	-1.35	SYS1	Sys1 golgi trafficking protein	Downregulated
A_24_P199	0.004441	0.00102	-1.35	RNF2	ring finger protein 2	Downregulated
A_33_P321	0.004694	0.00111	-1.35	FCHSD2	FCH and double SH3 domains 2	Downregulated
A_24_P734	0.005017	0.00122	-1.35	CCNYL1	cyclin Y-like 1	Downregulated
A_23_P317	0.006006	0.00158	-1.35	ANAPC4	anaphase promoting complex subunit 4	Downregulated
A_24_P244	0.00628	0.00169	-1.35	ANAPC15	anaphase promoting complex subunit 15	Downregulated
A_23_P999	0.006837	0.0019	-1.35	MAGEL2	MAGE-like 2	Downregulated
A_23_P170	0.00999	0.00319	-1.35	TRAIIP	TRAF interacting protein	Downregulated
A_23_P159	0.021596	0.00854	-1.35	TOPBP1	topoisomerase (DNA) II binding protein 1	Downregulated
A_22_P000	0.021708	0.00859	-1.35	EIF4ENIF1	eukaryotic translation initiation factor 4E nuclear import factor 1	Downregulated
A_24_P797	0.028393	0.0121	-1.35	COX20	COX20 cytochrome c oxidase assembly factor	Downregulated
A_23_P316	0.029195	0.0125	-1.35	GLIS1	GLIS family zinc finger 1	Downregulated
A_22_P000	0.033609	0.0148	-1.35	lnc-NUB1-1	lnc-NUB1-1:4	Downregulated
A_23_P143	0.04558	0.0215	-1.35	ATP6V1E2	ATPase, H+ transporting, lysosomal 31kDa, V1 subunit E2	Downregulated

A_23_P215	0.00124	0.000126	-1.36	IGFBP3	insulin-like growth factor binding protein 3	Downregulated
A_21_P000	0.001375	0.000153	-1.36	SNORD43	small nucleolar RNA, C/D box 43	Downregulated
A_21_P001	0.001391	0.000156	-1.36	LOC1019273	uncharacterized LOC101927372	Downregulated
A_24_P242	0.00151	0.000183	-1.36	ZRANB2	zinc finger, RAN-binding domain containing 2	Downregulated
A_33_P324	0.001626	0.000208	-1.36	MPP5	membrane protein, palmitoylated 5 (MAGUK p55 subfamily member 5)	Downregulated
A_22_P000	0.001772	0.000242	-1.36	COQ9	coenzyme Q9	Downregulated
A_33_P336	0.002016	0.000305	-1.36	IFNAR2	interferon (alpha, beta and omega) receptor 2	Downregulated
A_23_P925	0.002243	0.000366	-1.36	SCFD2	sec1 family domain containing 2	Downregulated
A_24_P385	0.002327	0.000385	-1.36	SP100	SP100 nuclear antigen	Downregulated
A_33_P367	0.002752	0.000498	-1.36	VPS36	vacuolar protein sorting 36 homolog (S. cerevisiae)	Downregulated
A_33_P339	0.003826	0.000819	-1.36	TP53I3	tumor protein p53 inducible protein 3	Downregulated
A_33_P321	0.005855	0.00153	-1.36	ERN2	endoplasmic reticulum to nucleus signaling 2	Downregulated
A_24_P210	0.006362	0.00172	-1.36	C11orf71	chromosome 11 open reading frame 71	Downregulated
A_22_P000	0.00714	0.00203	-1.36	lnc-MRPL40-2	lnc-MRPL40-2:1	Downregulated
A_22_P000	0.010862	0.00355	-1.36	lnc-POLR1E-2	lnc-POLR1E-2:1	Downregulated
A_23_P391	0.012359	0.00421	-1.36	RUVBL2	RuvB-like AAA ATPase 2	Downregulated
A_24_P123	0.026335	0.011	-1.36	HNRNPD	heterogeneous nuclear ribonucleoprotein D (AU-rich element RNA binding)	Downregulated
A_33_P323	0.063842	0.0322	-1.36	RMND5A	required for meiotic nuclear division 5 homolog A (S. cerevisiae)	Downregulated
A_23_P314	0.00124	0.000127	-1.37	PRKAG2	protein kinase, AMP-activated, gamma 2 non-catalytic subunit	Downregulated
A_33_P333	0.001245	0.000128	-1.37	RPA2	replication protein A2, 32kDa	Downregulated
A_24_P217	0.001304	0.00014	-1.37	SLC3A1	solute carrier family 3 (amino acid transporter heavy chain), member 1	Downregulated
A_23_P385	0.001314	0.000141	-1.37	STAMBPL1	STAM binding protein-like 1	Downregulated
A_33_P339	0.001342	0.000147	-1.37	TLK2	tousled-like kinase 2	Downregulated
A_23_P269	0.001376	0.000153	-1.37	POLG2	polymerase (DNA directed), gamma 2, accessory subunit	Downregulated
A_32_P989	0.001544	0.00019	-1.37	C15orf57	chromosome 15 open reading frame 57	Downregulated
A_33_P338	0.001767	0.000241	-1.37	CXCR3	chemokine (C-X-C motif) receptor 3	Downregulated
A_33_P682	0.002006	0.000302	-1.37	NFATC3	nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 3	Downregulated
A_32_P117	0.002006	0.000302	-1.37	PMS2P4	postmeiotic segregation increased 2 pseudogene 4	Downregulated
A_22_P000	0.002607	0.000459	-1.37	ERN1	endoplasmic reticulum to nucleus signaling 1	Downregulated
A_24_P188	0.003064	0.000587	-1.37	VPS18	vacuolar protein sorting 18 homolog (S. cerevisiae)	Downregulated
A_33_P349	0.003158	0.000616	-1.37	TMEM65	transmembrane protein 65	Downregulated
A_24_P268	0.004312	0.000977	-1.37	DRAM2	DNA-damage regulated autophagy modulator 2	Downregulated
A_21_P000	0.005097	0.00125	-1.37	lnc-VN1R2-1	lnc-VN1R2-1:2	Downregulated
A_23_P545	0.005204	0.00129	-1.37	TYRO3	TYRO3 protein tyrosine kinase	Downregulated
A_33_P323	0.006202	0.00166	-1.37	TGFB111	transforming growth factor beta 1 induced transcript 1	Downregulated
A_24_P576	0.006513	0.00178	-1.37	SPRN	shadow of prion protein homolog (zebrafish)	Downregulated
A_21_P001	0.006967	0.00196	-1.37	XLOC_I2_004854		Downregulated

A_21_P000	0.008371	0.00252	-1.37	LOC1019287	uncharacterized LOC101928767	Downregulated
A_33_P321	0.008877	0.00272	-1.37	RAP1GDS1	RAP1, GTP-GDP dissociation stimulator 1	Downregulated
A_23_P250	0.011589	0.00388	-1.37	RAB1A	RAB1A, member RAS oncogene family	Downregulated
A_22_P000	0.020456	0.00799	-1.37	CASP8AP2	caspase 8 associated protein 2	Downregulated
A_23_P344	0.026279	0.011	-1.37	OGG1	8-oxoguanine DNA glycosylase	Downregulated
A_33_P330	0.042003	0.0195	-1.37	PDIK1L	PDLIM1 interacting kinase 1 like	Downregulated
A_23_P219	0.001214	0.000122	-1.38	ABCC10	ATP-binding cassette, sub-family C (CFTR/MRP), member 10	Downregulated
A_21_P000	0.001222	0.000123	-1.38	LINC00629	long intergenic non-protein coding RNA 629	Downregulated
A_23_P128	0.001244	0.000128	-1.38	ZFYVE1	zinc finger, FYVE domain containing 1	Downregulated
A_23_P888	0.001258	0.000131	-1.38	CMTM3	CKLF-like MARVEL transmembrane domain containing 3	Downregulated
A_23_P170	0.001268	0.000133	-1.38	PMCHL1	pro-melanin-concentrating hormone-like 1, pseudogene	Downregulated
A_24_P350	0.001324	0.000143	-1.38	KIAA0907	KIAA0907	Downregulated
A_19_P008	0.001394	0.000157	-1.38	LINC01215	long intergenic non-protein coding RNA 1215	Downregulated
A_33_P322	0.001433	0.000165	-1.38	SCPEP1	serine carboxypeptidase 1	Downregulated
A_33_P334	0.001576	0.000197	-1.38	C16orf13	chromosome 16 open reading frame 13	Downregulated
A_24_P852	0.001603	0.000202	-1.38	ELMSAN1	ELM2 and Myb/SANT-like domain containing 1	Downregulated
A_23_P363	0.001611	0.000204	-1.38	CGGBP1	CGG triplet repeat binding protein 1	Downregulated
A_23_P148	0.001802	0.000249	-1.38	CUL4B	cullin 4B	Downregulated
A_22_P000	0.0018	0.000249	-1.38	lnc-FBXO25-2	lnc-FBXO25-2:1	Downregulated
A_21_P000	0.002243	0.000366	-1.38	PDCD6IP	programmed cell death 6 interacting protein	Downregulated
A_23_P251	0.002243	0.000366	-1.38	TEX261	testis expressed 261	Downregulated
A_32_P144	0.002872	0.00053	-1.38	PARP4	poly (ADP-ribose) polymerase family, member 4	Downregulated
A_22_P000	0.003109	0.000602	-1.38	C21orf2	chromosome 21 open reading frame 2	Downregulated
A_21_P000	0.008213	0.00245	-1.38	lnc-ZSWIM2-4	lnc-ZSWIM2-4:1	Downregulated
A_33_P336	0.01315	0.00455	-1.38	BAGE	B melanoma antigen	Downregulated
A_22_P000	0.013209	0.00458	-1.38	lnc-OLR1-2	lnc-OLR1-2:1	Downregulated
A_21_P001	0.014311	0.00509	-1.38	XLOC_I2_004180		Downregulated
A_33_P666	0.018713	0.00716	-1.38	PRIM2	primase, DNA, polypeptide 2 (58kDa)	Downregulated
A_23_P771	0.025006	0.0103	-1.38	TM6SF1	transmembrane 6 superfamily member 1	Downregulated
A_24_P405	0.028067	0.0119	-1.38	PDIK1L	PDLIM1 interacting kinase 1 like	Downregulated
A_23_P687	0.029266	0.0125	-1.38	PDXK	pyridoxal (pyridoxine, vitamin B6) kinase	Downregulated
A_22_P000	0.053737	0.0262	-1.38	lnc-ACCSL-1	lnc-ACCSL-1:1	Downregulated
A_22_P000	0.063259	0.0318	-1.38	lnc-MIER3-2	lnc-MIER3-2:1	Downregulated
A_21_P001	0.00121	0.000121	-1.39	PRDX6	peroxiredoxin 6	Downregulated
A_24_P418	0.001215	0.000122	-1.39	MACF1	microtubule-actin crosslinking factor 1	Downregulated
A_33_P337	0.001324	0.000143	-1.39	CHAC1	ChaC glutathione-specific gamma-glutamylcyclotransferase 1	Downregulated
A_23_P129	0.001534	0.000187	-1.39	USP8	ubiquitin specific peptidase 8	Downregulated

A_33_P339	0.001688	0.000222	-1.39	ACOXL	acyl-CoA oxidase-like	Downregulated
A_23_P103	0.001726	0.000231	-1.39	PSEN2	presenilin 2	Downregulated
A_22_P000	0.002211	0.000356	-1.39	lnc-CTU2-2	lnc-CTU2-2:1	Downregulated
A_23_P144	0.002564	0.000447	-1.39	NAP1L5	nucleosome assembly protein 1-like 5	Downregulated
A_24_P294	0.003518	0.000723	-1.39	ATXN1	ataxin 1	Downregulated
A_33_P323	0.006124	0.00163	-1.39	CDC14B	cell division cycle 14B	Downregulated
A_24_P108	0.0097	0.00307	-1.39	IMPACT	impact RWD domain protein	Downregulated
A_23_P171	0.021169	0.00833	-1.39	MORC4	MORC family CW-type zinc finger 4	Downregulated
A_21_P001	0.034462	0.0153	-1.39	FAM220A	family with sequence similarity 220, member A	Downregulated
A_23_P162	0.048135	0.0229	-1.39	IRAK3	interleukin-1 receptor-associated kinase 3	Downregulated
A_23_P962	0.052171	0.0252	-1.39	REEP4	receptor accessory protein 4	Downregulated
A_23_P252	0.052391	0.0254	-1.39	MTRR	5-methyltetrahydrofolate-homocysteine methyltransferase reductase	Downregulated
A_33_P339	0.055883	0.0274	-1.39	UBXN11	UBX domain protein 11	Downregulated
A_33_P333	0.001492	0.000179	-1.4	OPTN	optineurin	Downregulated
A_23_P216	0.001544	0.00019	-1.4	SUSD1	sushi domain containing 1	Downregulated
A_32_P193	0.001566	0.000195	-1.4	RICTOR	RPTOR independent companion of MTOR, complex 2	Downregulated
A_23_P356	0.001601	0.000201	-1.4	DESI1	desumoylating isopeptidase 1	Downregulated
A_33_P326	0.001711	0.000229	-1.4	CCDC167	coiled-coil domain containing 167	Downregulated
A_33_P353	0.001815	0.000253	-1.4	LARS	leucyl-tRNA synthetase	Downregulated
A_23_P654	0.001813	0.000253	-1.4	ZBTB17	zinc finger and BTB domain containing 17	Downregulated
A_24_P244	0.001888	0.000271	-1.4	MCTP2	multiple C2 domains, transmembrane 2	Downregulated
A_33_P329	0.00189	0.000271	-1.4	TRA2B	transformer 2 beta homolog (Drosophila)	Downregulated
A_33_P321	0.002006	0.000302	-1.4	ADAMTS7	ADAM metallopeptidase with thrombospondin type 1 motif, 7	Downregulated
A_32_P185	0.002107	0.000329	-1.4	YBEY	ybeY metallopeptidase (putative)	Downregulated
A_32_P237	0.002124	0.000336	-1.4	XLOC_I2_010916		Downregulated
A_23_P913	0.002785	0.000506	-1.4	GPCPD1	glycerophosphocholine phosphodiesterase GDE1 homolog (S. cerevisia	Downregulated
A_23_P165	0.002889	0.000535	-1.4	ILVBL	ilvB (bacterial acetolactate synthase)-like	Downregulated
A_23_P117	0.005348	0.00134	-1.4	LETMD1	LETM1 domain containing 1	Downregulated
A_23_P151	0.006398	0.00174	-1.4	FOXM1	forkhead box M1	Downregulated
A_33_P324	0.006768	0.00188	-1.4	EBF1	early B-cell factor 1	Downregulated
A_23_P208	0.011043	0.00363	-1.4	AKT2	v-akt murine thymoma viral oncogene homolog 2	Downregulated
A_23_P314	0.012756	0.00438	-1.4	ZDHHC19	zinc finger, DHHC-type containing 19	Downregulated
A_19_P008	0.013059	0.00451	-1.4	lnc-ITSN1-2	lnc-ITSN1-2:5	Downregulated
A_24_P937	0.013516	0.00472	-1.4	LOC645984	uncharacterized LOC645984	Downregulated
A_23_P422	0.013516	0.00472	-1.4	SLC35F3	solute carrier family 35, member F3	Downregulated
A_22_P000	0.016638	0.00619	-1.4	TTN-AS1	TTN antisense RNA 1	Downregulated
A_33_P382	0.020419	0.00797	-1.4	CCDC112	coiled-coil domain containing 112	Downregulated

A_23_P308	0.028784	0.0123	-1.4	TTC39C	tetratricopeptide repeat domain 39C	Downregulated
A_24_P340	0.031758	0.0138	-1.4	SERHL2	serine hydrolase-like 2	Downregulated
A_33_P331	0.03786	0.0172	-1.4	lnc-LIN28B-1	lnc-LIN28B-1:4	Downregulated
A_24_P336	0.053672	0.0261	-1.4	C22orf23	chromosome 22 open reading frame 23	Downregulated
A_22_P000	0.053672	0.0261	-1.4	LOC1001322	uncharacterized LOC100132215	Downregulated
A_23_P270	0.064702	0.0327	-1.4	LPAR6	lysophosphatidic acid receptor 6	Downregulated
A_23_P367	0.079233	0.0416	-1.4	ALDH2	aldehyde dehydrogenase 2 family (mitochondrial)	Downregulated
A_22_P000	0.001178	0.000114	-1.41	lnc-COLQ-1	lnc-COLQ-1:1	Downregulated
A_23_P399	0.001198	0.000118	-1.41	IL12RB1	interleukin 12 receptor, beta 1	Downregulated
A_23_P134	0.00146	0.000172	-1.41	COG5	component of oligomeric golgi complex 5	Downregulated
A_23_P408	0.001581	0.000198	-1.41	CHST2	carbohydrate (N-acetylglucosamine-6-O) sulfotransferase 2	Downregulated
A_33_P321	0.001711	0.000229	-1.41	RUNX1	runt-related transcription factor 1	Downregulated
A_24_P409	0.001859	0.000264	-1.41	NPEPPS	aminopeptidase puromycin sensitive	Downregulated
A_24_P252	0.002034	0.00031	-1.41	NHLRC2	NHL repeat containing 2	Downregulated
A_23_P253	0.002459	0.000417	-1.41	CENPE	centromere protein E, 312kDa	Downregulated
A_32_P228	0.002597	0.000456	-1.41	GAPVD1	GTPase activating protein and VPS9 domains 1	Downregulated
A_33_P337	0.003439	0.0007	-1.41	FBXO32	F-box protein 32	Downregulated
A_33_P324	0.00391	0.000846	-1.41	AGO3	argonaute RISC catalytic component 3	Downregulated
A_24_P212	0.003973	0.000864	-1.41	ZNF33A	zinc finger protein 33A	Downregulated
A_23_P374	0.004031	0.000882	-1.41	SH3KBP1	SH3-domain kinase binding protein 1	Downregulated
A_33_P335	0.005304	0.00133	-1.41	ZNF639	zinc finger protein 639	Downregulated
A_21_P001	0.006445	0.00176	-1.41	LOC1019297	uncharacterized LOC101929787	Downregulated
A_21_P001	0.007457	0.00215	-1.41	lnc-C21orf63-	lnc-C21orf63-2:2	Downregulated
A_33_P325	0.007707	0.00225	-1.41	ANKS1B	ankyrin repeat and sterile alpha motif domain containing 1B	Downregulated
A_19_P003	0.008533	0.00258	-1.41	LINC01278	long intergenic non-protein coding RNA 1278	Downregulated
A_24_P193	0.014153	0.00501	-1.41	RAB15	RAB15, member RAS oncogene family	Downregulated
A_33_P337	0.014169	0.00502	-1.41	CLIC4	chloride intracellular channel 4	Downregulated
A_22_P000	0.015189	0.00551	-1.41	lnc-SHISA9-1	lnc-SHISA9-1:1	Downregulated
A_24_P225	0.017171	0.00644	-1.41	DPH3	diphthamide biosynthesis 3	Downregulated
A_22_P000	0.038453	0.0175	-1.41	TM4SF19-AS	TM4SF19 antisense RNA 1	Downregulated
A_22_P000	0.065863	0.0334	-1.41	lnc-BLID-3	lnc-BLID-3:2	Downregulated
A_23_P321	0.001349	0.000148	-1.42	CLECL1	C-type lectin-like 1	Downregulated
A_22_P000	0.001445	0.000168	-1.42	lnc-LPIN2-1	lnc-LPIN2-1:2	Downregulated
A_33_P320	0.001503	0.000181	-1.42	WDFY4	WDFY family member 4	Downregulated
A_23_P204	0.001548	0.000191	-1.42	AKAP11	A kinase (PRKA) anchor protein 11	Downregulated
A_33_P332	0.001611	0.000204	-1.42	CAPZA2	capping protein (actin filament) muscle Z-line, alpha 2	Downregulated
A_23_P112	0.001815	0.000253	-1.42	ATF7IP	activating transcription factor 7 interacting protein	Downregulated

A_23_P129	0.002243	0.000366	-1.42	PRDX5	peroxiredoxin 5	Downregulated
A_33_P328	0.004602	0.00108	-1.42	AAK1	AP2 associated kinase 1	Downregulated
A_24_P398	0.006867	0.00191	-1.42	EIF5	eukaryotic translation initiation factor 5	Downregulated
A_33_P339	0.008555	0.00259	-1.42	SPIN4	spindlin family, member 4	Downregulated
A_23_P152	0.008584	0.0026	-1.42	SLC16A6	solute carrier family 16, member 6	Downregulated
A_23_P126	0.011921	0.00402	-1.42	CLSPN	claspin	Downregulated
A_21_P000	0.01794	0.0068	-1.42	LOC440028	uncharacterized LOC440028	Downregulated
A_24_P392	0.020558	0.00804	-1.42	GLTPD2	glycolipid transfer protein domain containing 2	Downregulated
A_33_P322	0.034839	0.0155	-1.42	ZNF705B	zinc finger protein 705B	Downregulated
A_21_P000	0.037459	0.017	-1.42	LOC1025462	uncharacterized LOC102546298	Downregulated
A_33_P323	0.050072	0.024	-1.42	UROS	uroporphyrinogen III synthase	Downregulated
A_33_P332	0.056347	0.0277	-1.42	MAST2	microtubule associated serine/threonine kinase 2	Downregulated
A_23_P121	0.066933	0.034	-1.42	CAMK1	calcium/calmodulin-dependent protein kinase I	Downregulated
A_24_P985	0.001226	0.000124	-1.43	PPP3CB	protein phosphatase 3, catalytic subunit, beta isozyme	Downregulated
A_23_P308	0.001254	0.00013	-1.43	RRP36	ribosomal RNA processing 36 homolog (S. cerevisiae)	Downregulated
A_23_P164	0.001307	0.00014	-1.43	PSMC5	proteasome (prosome, macropain) 26S subunit, ATPase, 5	Downregulated
A_23_P191	0.001316	0.000142	-1.43	GSPT2	G1 to S phase transition 2	Downregulated
A_23_P162	0.001333	0.000144	-1.43	CCDC90B	coiled-coil domain containing 90B	Downregulated
A_21_P001	0.001328	0.000144	-1.43	INTS4	integrator complex subunit 4	Downregulated
A_33_P326	0.001533	0.000187	-1.43	MSL1	male-specific lethal 1 homolog (Drosophila)	Downregulated
A_23_P455	0.001785	0.000245	-1.43	SETBP1	SET binding protein 1	Downregulated
A_22_P000	0.00207	0.000319	-1.43	LOC1001309	uncharacterized LOC100130950	Downregulated
A_22_P000	0.002597	0.000456	-1.43	KCNMA1-AS2	KCNMA1 antisense RNA 2	Downregulated
A_23_P109	0.002597	0.000456	-1.43	TADA3	transcriptional adaptor 3	Downregulated
A_22_P000	0.00435	0.000992	-1.43	lnc-DYNLRB1	lnc-DYNLRB1-1:1	Downregulated
A_22_P000	0.00435	0.000992	-1.43	lnc-LPPR5.1-	lnc-LPPR5.1-1:1	Downregulated
A_23_P124	0.00435	0.000992	-1.43	NSD1	nuclear receptor binding SET domain protein 1	Downregulated
A_21_P001	0.004701	0.00111	-1.43	XLOC_I2_009469		Downregulated
A_22_P000	0.005023	0.00122	-1.43	lnc-ARF6-2	lnc-ARF6-2:1	Downregulated
A_21_P000	0.006446	0.00176	-1.43	LINC00662	long intergenic non-protein coding RNA 662	Downregulated
A_23_P229	0.007088	0.002	-1.43	HELB	helicase (DNA) B	Downregulated
A_33_P337	0.008871	0.00272	-1.43	MIER3	mesoderm induction early response 1, family member 3	Downregulated
A_23_P380	0.012265	0.00417	-1.43	R3HDM1	R3H domain containing 1	Downregulated
A_32_P900	0.017341	0.00652	-1.43	ARMC10	armadillo repeat containing 10	Downregulated
A_22_P000	0.02943	0.0126	-1.43	LINC00523	long intergenic non-protein coding RNA 523	Downregulated
A_33_P328	0.001134	0.000106	-1.44	MBIP	MAP3K12 binding inhibitory protein 1	Downregulated
A_32_P162	0.001187	0.000116	-1.44	ARHGAP18	Rho GTPase activating protein 18	Downregulated

A_23_P201	0.001186	0.000116	-1.44	FCRL5	Fc receptor-like 5	Downregulated
A_23_P111	0.00121	0.000121	-1.44	ATG5	autophagy related 5	Downregulated
A_33_P377	0.00122	0.000123	-1.44	PRKACB	protein kinase, cAMP-dependent, catalytic, beta	Downregulated
A_23_P384	0.001227	0.000124	-1.44	GYG1	glycogenin 1	Downregulated
A_33_P324	0.001245	0.000128	-1.44	LAMTOR2	late endosomal/lysosomal adaptor, MAPK and MTOR activator 2	Downregulated
A_33_P322	0.001445	0.000168	-1.44	HIPK2	homeodomain interacting protein kinase 2	Downregulated
A_23_P904	0.001548	0.00019	-1.44	RBM42	RNA binding motif protein 42	Downregulated
A_23_P112	0.001683	0.00022	-1.44	KIAA0196	KIAA0196	Downregulated
A_22_P000	0.001687	0.000221	-1.44	lnc-PPP1R1A	lnc-PPP1R1A-2:1	Downregulated
A_22_P000	0.001702	0.000227	-1.44	lnc-TUBB-7	lnc-TUBB-7:1	Downregulated
A_32_P140	0.001935	0.000282	-1.44	PMS2	PMS2 postmeiotic segregation increased 2 (S. cerevisiae)	Downregulated
A_24_P160	0.002374	0.000397	-1.44	MRPL55	mitochondrial ribosomal protein L55	Downregulated
A_23_P101	0.002538	0.00044	-1.44	BCAT2	branched chain amino-acid transaminase 2, mitochondrial	Downregulated
A_23_P551	0.003747	0.000794	-1.44	G6PC3	glucose 6 phosphatase, catalytic, 3	Downregulated
A_22_P000	0.004159	0.000924	-1.44	VIPR1-AS1	VIPR1 antisense RNA 1	Downregulated
A_23_P207	0.004658	0.0011	-1.44	CARD14	caspase recruitment domain family, member 14	Downregulated
A_21_P000	0.007914	0.00233	-1.44	RBM4	RNA binding motif protein 4	Downregulated
A_33_P336	0.00812	0.00241	-1.44	CRNDE	colorectal neoplasia differentially expressed (non-protein coding)	Downregulated
A_21_P001	0.015267	0.00554	-1.44	XLOC_I2_015536		Downregulated
A_33_P329	0.023179	0.00933	-1.44	TMEM175	transmembrane protein 175	Downregulated
A_23_P850	0.037403	0.0169	-1.44	RHOXF1	Rhox homeobox family, member 1	Downregulated
A_24_P659	0.046528	0.022	-1.44	UQCC1	ubiquinol-cytochrome c reductase complex assembly factor 1	Downregulated
A_24_P484	0.04934	0.0236	-1.44	CIDCEP	cell death-inducing DFFA-like effector c pseudogene	Downregulated
A_33_P336	0.001108	0.000101	-1.45	PPP1R13B	protein phosphatase 1, regulatory subunit 13B	Downregulated
A_23_P494	0.001117	0.000103	-1.45	NUDT16L1	nudix (nucleoside diphosphate linked moiety X)-type motif 16-like 1	Downregulated
A_23_P522	0.001149	0.000109	-1.45	IFIT1	interferon-induced protein with tetratricopeptide repeats 1	Downregulated
A_33_P681	0.00124	0.000127	-1.45	LOC1005068	uncharacterized LOC100506844	Downregulated
A_33_P335	0.001243	0.000128	-1.45	ING3	inhibitor of growth family, member 3	Downregulated
A_24_P329	0.00125	0.000129	-1.45	BTN3A1	butyrophilin, subfamily 3, member A1	Downregulated
A_23_P165	0.001302	0.000139	-1.45	LOC1001299	lectin, galactoside-binding, soluble, 14 pseudogene	Downregulated
A_33_P321	0.001369	0.000151	-1.45	ZNF684	zinc finger protein 684	Downregulated
A_24_P541	0.001375	0.000152	-1.45	TNFRSF1B	tumor necrosis factor receptor superfamily, member 1B	Downregulated
A_24_P242	0.001453	0.00017	-1.45	TSN	translin	Downregulated
A_22_P000	0.001492	0.000179	-1.45	MED6	mediator complex subunit 6	Downregulated
A_33_P335	0.001565	0.000195	-1.45	CCDC69	coiled-coil domain containing 69	Downregulated
A_23_P395	0.001672	0.000218	-1.45	RSC1A1	regulatory solute carrier protein, family 1, member 1	Downregulated
A_33_P328	0.001922	0.000279	-1.45	COPS8	COP9 signalosome subunit 8	Downregulated

A_33_P329	0.001992	0.000298	-1.45	SLC12A8	solute carrier family 12, member 8	Downregulated
A_21_P000	0.00289	0.000536	-1.45	lnc-RAB11F1F	lnc-RAB11FIP2-2:3	Downregulated
A_24_P329	0.003154	0.000614	-1.45	UBQLN1	ubiquilin 1	Downregulated
A_33_P338	0.003189	0.000626	-1.45	POMGNT1	protein O-linked mannose N-acetylglucosaminyltransferase 1 (beta 1,2-)	Downregulated
A_23_P540	0.003316	0.000664	-1.45	THTPA	thiamine triphosphatase	Downregulated
A_23_P893	0.003559	0.000736	-1.45	EPN2	epsin 2	Downregulated
A_23_P319	0.003579	0.000744	-1.45	NR1I3	nuclear receptor subfamily 1, group I, member 3	Downregulated
A_33_P328	0.003791	0.000807	-1.45	LOC1006531	golgin subfamily A member 6-like protein 1-like	Downregulated
A_22_P000	0.00399	0.000871	-1.45	MED4-AS1	MED4 antisense RNA 1	Downregulated
A_22_P000	0.004058	0.000891	-1.45	lnc-C9orf66-3	lnc-C9orf66-3:1	Downregulated
A_23_P142	0.005696	0.00147	-1.45	PRPF31	pre-mRNA processing factor 31	Downregulated
A_23_P115	0.009857	0.00313	-1.45	FAM204A	family with sequence similarity 204, member A	Downregulated
A_33_P332	0.010989	0.0036	-1.45	TTN	titin	Downregulated
A_33_P339	0.016381	0.00607	-1.45	BCL2L11	BCL2-like 11 (apoptosis facilitator)	Downregulated
A_21_P000	0.023517	0.00951	-1.45	lnc-MFSD8-2	lnc-MFSD8-2:1	Downregulated
A_21_P000	0.026793	0.0112	-1.45	LOC1027237	uncharacterized LOC102723765	Downregulated
A_33_P324	0.039717	0.0182	-1.45	MAVS	mitochondrial antiviral signaling protein	Downregulated
A_22_P000	0.039717	0.0182	-1.45	NRSN2-AS1	NRSN2 antisense RNA 1	Downregulated
A_33_P327	0.041752	0.0193	-1.45	RAD1	RAD1 checkpoint DNA exonuclease	Downregulated
A_23_P281	0.001181	0.000115	-1.46	ARL6IP6	ADP-ribosylation factor-like 6 interacting protein 6	Downregulated
A_24_P943	0.001543	0.000189	-1.46	NR1D2	nuclear receptor subfamily 1, group D, member 2	Downregulated
A_22_P000	0.001691	0.000223	-1.46	LOC1019272	uncharacterized LOC101927272	Downregulated
A_23_P259	0.001706	0.000228	-1.46	THNSL2	threonine synthase-like 2 (S. cerevisiae)	Downregulated
A_24_P917	0.001749	0.000236	-1.46	LOC284912	uncharacterized LOC284912	Downregulated
A_32_P216	0.002072	0.00032	-1.46	SPDYE3	speedy/RINGO cell cycle regulator family member E3	Downregulated
A_23_P151	0.002302	0.000379	-1.46	UBFD1	ubiquitin family domain containing 1	Downregulated
A_33_P322	0.0025	0.00043	-1.46	MED15P9	mediator complex subunit 15 pseudogene 9	Downregulated
A_23_P208	0.003074	0.000589	-1.46	MBOAT7	membrane bound O-acyltransferase domain containing 7	Downregulated
A_22_P000	0.003267	0.000649	-1.46	lnc-NID1-3	lnc-NID1-3:1	Downregulated
A_23_P376	0.006339	0.00171	-1.46	GOLGA8A	golgin A8 family, member A	Downregulated
A_23_P131	0.008293	0.00249	-1.46	C2orf81	chromosome 2 open reading frame 81	Downregulated
A_23_P753	0.00968	0.00306	-1.46	ARHGAP22	Rho GTPase activating protein 22	Downregulated
A_23_P129	0.033467	0.0147	-1.46	SDR42E1	short chain dehydrogenase/reductase family 42E, member 1	Downregulated
A_24_P410	0.043926	0.0205	-1.46	BCL2L13	BCL2-like 13 (apoptosis facilitator)	Downregulated
A_23_P120	0.001117	0.000103	-1.47	SP110	SP110 nuclear body protein	Downregulated
A_23_P870	0.001187	0.000116	-1.47	TAGLN	transgelin	Downregulated
A_23_P428	0.001193	0.000117	-1.47	SND1	staphylococcal nuclease and tudor domain containing 1	Downregulated

A_24_P410	0.001341	0.000146	-1.47	RITA1	RBPJ interacting and tubulin associated 1	Downregulated
A_32_P438	0.001394	0.000157	-1.47	DCUN1D4	DCN1, defective in cullin neddylation 1, domain containing 4	Downregulated
A_33_P336	0.001571	0.000196	-1.47	PTPRC	protein tyrosine phosphatase, receptor type, C	Downregulated
A_23_P108	0.001626	0.000208	-1.47	CREB3L3	cAMP responsive element binding protein 3-like 3	Downregulated
A_23_P502	0.001697	0.000225	-1.47	MRPL47	mitochondrial ribosomal protein L47	Downregulated
A_23_P705	0.001778	0.000243	-1.47	HSPA1L	heat shock 70kDa protein 1-like	Downregulated
A_23_P382	0.001955	0.000288	-1.47	PRPF8	pre-mRNA processing factor 8	Downregulated
A_23_P114	0.002238	0.000364	-1.47	MTPAP	mitochondrial poly(A) polymerase	Downregulated
A_33_P338	0.002748	0.000496	-1.47	SHARPIN	SHANK-associated RH domain interactor	Downregulated
A_23_P137	0.002984	0.000563	-1.47	CHI3L1	chitinase 3-like 1 (cartilage glycoprotein-39)	Downregulated
A_23_P418	0.00314	0.00061	-1.47	CARD6	caspase recruitment domain family, member 6	Downregulated
A_33_P326	0.003157	0.000616	-1.47	ANKRD36B	ankyrin repeat domain 36B	Downregulated
A_33_P332	0.003529	0.000726	-1.47	IRF3	interferon regulatory factor 3	Downregulated
A_23_P134	0.005519	0.0014	-1.47	PTCD1	pentatricopeptide repeat domain 1	Downregulated
A_21_P001	0.007314	0.00209	-1.47	lnc-NBPF3-4	lnc-NBPF3-4:1	Downregulated
A_33_P324	0.009198	0.00286	-1.47	DNAJC11	DnaJ (Hsp40) homolog, subfamily C, member 11	Downregulated
A_33_P321	0.022876	0.00918	-1.47	ANAPC16	anaphase promoting complex subunit 16	Downregulated
A_22_P000	0.022876	0.00918	-1.47	lnc-CCNJL-1	lnc-CCNJL-1:2	Downregulated
A_33_P335	0.02543	0.0105	-1.47	ZBP1	Z-DNA binding protein 1	Downregulated
A_33_P334	0.053098	0.0258	-1.47	ZNF578	zinc finger protein 578	Downregulated
A_33_P340	0.084425	0.045	-1.47	SORBS2	sorbin and SH3 domain containing 2	Downregulated
A_23_P157	0.001095	0.0000979	-1.48	PSMB6	proteasome (prosome, macropain) subunit, beta type, 6	Downregulated
A_21_P000	0.001379	0.000154	-1.48	lnc-MFAP4-4	lnc-MFAP4-4:1	Downregulated
A_23_P111	0.001474	0.000175	-1.48	PARP12	poly (ADP-ribose) polymerase family, member 12	Downregulated
A_24_P332	0.001816	0.000253	-1.48	GUSBP1	glucuronidase, beta pseudogene 1	Downregulated
A_33_P323	0.001841	0.00026	-1.48	MIEF1	mitochondrial elongation factor 1	Downregulated
A_21_P000	0.002943	0.00055	-1.48	lnc-SGCG-5	lnc-SGCG-5:1	Downregulated
A_32_P219	0.00376	0.000798	-1.48	CENPJ	centromere protein J	Downregulated
A_33_P329	0.004843	0.00116	-1.48	NTM	neurotrimin	Downregulated
A_33_P326	0.006501	0.00178	-1.48	DUS1L	dihydrouridine synthase 1-like (S. cerevisiae)	Downregulated
A_24_P914	0.008489	0.00256	-1.48	MEF2BNB	MEF2B neighbor	Downregulated
A_23_P206	0.008651	0.00263	-1.48	SEC14L1	SEC14-like 1 (S. cerevisiae)	Downregulated
A_33_P322	0.009425	0.00295	-1.48	RRBP1	ribosome binding protein 1	Downregulated
A_22_P000	0.015522	0.00566	-1.48	LOC1001287	uncharacterized LOC100128714	Downregulated
A_22_P000	0.015957	0.00586	-1.48	lnc-LEPRE1-1	lnc-LEPRE1-1:1	Downregulated
A_23_P855	0.046873	0.0222	-1.48	GPR52	G protein-coupled receptor 52	Downregulated
A_23_P775	0.048094	0.0229	-1.48	VAC14	Vac14 homolog (S. cerevisiae)	Downregulated

A_33_P331	0.001098	0.0000987	-1.49	UBAP2L	ubiquitin associated protein 2-like	Downregulated
A_23_P126	0.001146	0.000108	-1.49	SH3BGR13	SH3 domain binding glutamate-rich protein like 3	Downregulated
A_33_P655	0.001222	0.000123	-1.49	ZNF518A	zinc finger protein 518A	Downregulated
A_23_P769	0.001316	0.000142	-1.49	SIPA1L1	signal-induced proliferation-associated 1 like 1	Downregulated
A_23_P623	0.001369	0.000151	-1.49	TAZ	tafazzin	Downregulated
A_23_P161	0.001479	0.000176	-1.49	ELK4	ELK4, ETS-domain protein (SRF accessory protein 1)	Downregulated
A_22_P000	0.001763	0.00024	-1.49	ANKRD36BP	ankyrin repeat domain 36B pseudogene 2	Downregulated
A_33_P382	0.002117	0.000332	-1.49	LINC00857	long intergenic non-protein coding RNA 857	Downregulated
A_23_P108	0.002338	0.000387	-1.49	CNOT11	CCR4-NOT transcription complex, subunit 11	Downregulated
A_22_P000	0.003346	0.000673	-1.49	lnc-COL9A1-1	lnc-COL9A1-1:1	Downregulated
A_24_P219	0.00339	0.000685	-1.49	PTOV1	prostate tumor overexpressed 1	Downregulated
A_33_P329	0.004588	0.00107	-1.49	NFS1	NFS1 cysteine desulfurase	Downregulated
A_23_P257	0.005067	0.00124	-1.49	MAPK1	mitogen-activated protein kinase 1	Downregulated
A_33_P330	0.006173	0.00165	-1.49	PIDD1	p53-induced death domain protein 1	Downregulated
A_23_P139	0.006941	0.00195	-1.49	CHST11	carbohydrate (chondroitin 4) sulfotransferase 11	Downregulated
A_23_P671	0.007077	0.002	-1.49	PIN1	peptidylprolyl cis/trans isomerase, NIMA-interacting 1	Downregulated
A_23_P909	0.010039	0.00321	-1.49	IL36B	interleukin 36, beta	Downregulated
A_24_P207	0.012808	0.0044	-1.49	UBE3A	ubiquitin protein ligase E3A	Downregulated
A_22_P000	0.015153	0.00549	-1.49	LINC00461	long intergenic non-protein coding RNA 461	Downregulated
A_21_P000	0.02252	0.009	-1.49	lnc-ARID2-3	lnc-ARID2-3:1	Downregulated
A_23_P165	0.02549	0.0105	-1.49	MPV17L2	MPV17 mitochondrial membrane protein-like 2	Downregulated
A_33_P321	0.041895	0.0194	-1.49	JPH4	junctophilin 4	Downregulated
A_24_P114	0.046941	0.0223	-1.49	MBOAT2	membrane bound O-acyltransferase domain containing 2	Downregulated
A_33_P334	0.05145	0.0248	-1.49	EXOSC2	exosome component 2	Downregulated
A_33_P337	0.001065	0.0000919	-1.5	SH3YL1	SH3 and SYLF domain containing 1	Downregulated
A_22_P000	0.00109	0.0000971	-1.5	lnc-NBPF3-4	lnc-NBPF3-4:1	Downregulated
A_33_P338	0.001145	0.000108	-1.5	C19orf54	chromosome 19 open reading frame 54	Downregulated
A_24_P245	0.001165	0.000112	-1.5	ATP5A1	ATP synthase, H ⁺ transporting, mitochondrial F1 complex, alpha subunit	Downregulated
A_24_P245	0.001266	0.000133	-1.5	USP7	ubiquitin specific peptidase 7 (herpes virus-associated)	Downregulated
A_23_P128	0.001393	0.000156	-1.5	PSTK	phosphoserine-tRNA kinase	Downregulated
A_23_P130	0.001626	0.000208	-1.5	MOB3A	MOB kinase activator 3A	Downregulated
A_21_P000	0.001817	0.000254	-1.5	lnc-GABRB3-	lnc-GABRB3-1:1	Downregulated
A_22_P000	0.002137	0.000339	-1.5	lnc-GLS-2	lnc-GLS-2:2	Downregulated
A_33_P338	0.004759	0.00113	-1.5	PXN	paxillin	Downregulated
A_22_P000	0.006123	0.00163	-1.5	lnc-MAPK6-9	lnc-MAPK6-9:1	Downregulated
A_23_P123	0.006795	0.00189	-1.5	APH1A	APH1A gamma secretase subunit	Downregulated
A_23_P150	0.006955	0.00195	-1.5	SEPHS1	selenophosphate synthetase 1	Downregulated

A_21_P001	0.027632	0.0117	-1.5	XLOC_I2_009811		Downregulated
A_33_P339	0.037331	0.0169	-1.5	RIT1	Ras-like without CAAX 1	Downregulated
A_33_P341	0.058429	0.0289	-1.5	ABI3BP	ABI family, member 3 (NESH) binding protein	Downregulated
A_23_P209	0.0011	0.0000992	-1.51	PSMD1	proteasome (prosome, macropain) 26S subunit, non-ATPase, 1	Downregulated
A_22_P000	0.001122	0.000104	-1.51	lnc-GPR126-1	lnc-GPR126-1:1	Downregulated
A_33_P327	0.001382	0.000154	-1.51	IFNAR1	interferon (alpha, beta and omega) receptor 1	Downregulated
A_23_P214	0.001475	0.000175	-1.51	PBX2	pre-B-cell leukemia homeobox 2	Downregulated
A_33_P335	0.001477	0.000175	-1.51	PVRIG	poliovirus receptor related immunoglobulin domain containing	Downregulated
A_24_P398	0.001653	0.000214	-1.51	RGP1	RGP1 retrograde golgi transport homolog (S. cerevisiae)	Downregulated
A_22_P000	0.001678	0.000219	-1.51	lnc-FAM211A	lnc-FAM211A-2:1	Downregulated
A_21_P000	0.001815	0.000253	-1.51	ZNF726	zinc finger protein 726	Downregulated
A_24_P345	0.002426	0.000409	-1.51	CYBRD1	cytochrome b reductase 1	Downregulated
A_23_P346	0.003631	0.000758	-1.51	CACNA2D2	calcium channel, voltage-dependent, alpha 2/delta subunit 2	Downregulated
A_23_P376	0.004602	0.00108	-1.51	NIT1	nitrilase 1	Downregulated
A_23_P389	0.007273	0.00207	-1.51	VAV1	vav 1 guanine nucleotide exchange factor	Downregulated
A_23_P943	0.007332	0.0021	-1.51	TSTA3	tissue specific transplantation antigen P35B	Downregulated
A_23_P705	0.008165	0.00243	-1.51	SDAD1	SDA1 domain containing 1	Downregulated
A_23_P155	0.015831	0.0058	-1.51	NAAA	N-acylethanolamine acid amidase	Downregulated
A_22_P000	0.016042	0.0059	-1.51	lnc-BARHL2-3	lnc-BARHL2-3:1	Downregulated
A_23_P501	0.0168	0.00627	-1.51	CSRP2BP	CSRP2 binding protein	Downregulated
A_21_P000	0.03265	0.0143	-1.51	lnc-PFKP-8	lnc-PFKP-8:1	Downregulated
A_23_P144	0.001054	0.0000892	-1.52	CAMK2D	calcium/calmodulin-dependent protein kinase II delta	Downregulated
A_23_P486	0.001086	0.0000961	-1.52	TMEM55B	transmembrane protein 55B	Downregulated
A_23_P693	0.001117	0.000103	-1.52	PARP9	poly (ADP-ribose) polymerase family, member 9	Downregulated
A_23_P206	0.001258	0.000131	-1.52	NIPSNAP3A	nipsnap homolog 3A (C. elegans)	Downregulated
A_24_P384	0.001291	0.000137	-1.52	EWSR1	EWS RNA-binding protein 1	Downregulated
A_23_P834	0.001405	0.00016	-1.52	SMARCC1	SWI/SNF related, matrix associated, actin dependent regulator of chrom	Downregulated
A_23_P533	0.001916	0.000278	-1.52	XRCC6BP1	XRCC6 binding protein 1	Downregulated
A_23_P428	0.002237	0.000363	-1.52	PDIA4	protein disulfide isomerase family A, member 4	Downregulated
A_21_P000	0.00284	0.000522	-1.52	lnc-MKI67IP-1	lnc-MKI67IP-1:3	Downregulated
A_23_P124	0.002907	0.000541	-1.52	DEAF1	DEAF1 transcription factor	Downregulated
A_23_P743	0.003187	0.000626	-1.52	OPN3	opsin 3	Downregulated
A_22_P000	0.00353	0.000726	-1.52	MANEA-AS1	MANEA antisense RNA 1 (head to head)	Downregulated
A_33_P331	0.003646	0.000762	-1.52	IMMT	inner membrane protein, mitochondrial	Downregulated
A_24_P174	0.003936	0.000853	-1.52	NNT	nicotinamide nucleotide transhydrogenase	Downregulated
A_24_P184	0.004114	0.000909	-1.52	PXN	paxillin	Downregulated
A_23_P122	0.004206	0.000941	-1.52	ELMO1	engulfment and cell motility 1	Downregulated

A_21_P001	0.006614	0.00182	-1.52	AMZ2P1	archaelysin family metallopeptidase 2 pseudogene 1	Downregulated
A_23_P345	0.00833	0.0025	-1.52	TICRR	TOPBP1-interacting checkpoint and replication regulator	Downregulated
A_33_P323	0.00833	0.0025	-1.52	TRIM45	tripartite motif containing 45	Downregulated
A_23_P132	0.008661	0.00264	-1.52	C22orf46	chromosome 22 open reading frame 46	Downregulated
A_21_P001	0.015108	0.00547	-1.52	XLOC_I2_005020		Downregulated
A_22_P000	0.018211	0.00693	-1.52	lnc-ATF7IP2-2	lnc-ATF7IP2-2:1	Downregulated
A_21_P000	0.021294	0.00839	-1.52	HDHD1	haloacid dehalogenase-like hydrolase domain containing 1	Downregulated
A_21_P000	0.024515	0.01	-1.52	SNORA60	small nucleolar RNA, H/ACA box 60	Downregulated
A_19_P003	0.044371	0.0208	-1.52	LOC1019280	uncharacterized LOC101928004	Downregulated
A_33_P323	0.058458	0.0289	-1.52	ATXN3L	ataxin 3-like	Downregulated
A_24_P253	0.001067	0.0000928	-1.53	EMG1	EMG1 N1-specific pseudouridine methyltransferase	Downregulated
A_23_P256	0.001097	0.0000983	-1.53	TSSC1	tumor suppressing subtransferable candidate 1	Downregulated
A_23_P159	0.0011	0.000099	-1.53	COX7B	cytochrome c oxidase subunit VIIb	Downregulated
A_33_P332	0.001295	0.000138	-1.53	CDK13	cyclin-dependent kinase 13	Downregulated
A_33_P326	0.001443	0.000167	-1.53	RASA3	RAS p21 protein activator 3	Downregulated
A_23_P488	0.001492	0.000179	-1.53	KIF23	kinesin family member 23	Downregulated
A_24_P149	0.001791	0.000246	-1.53	ZBTB43	zinc finger and BTB domain containing 43	Downregulated
A_21_P001	0.001863	0.000265	-1.53	LINC00665	long intergenic non-protein coding RNA 665	Downregulated
A_22_P000	0.002029	0.000309	-1.53	lnc-ABCC3-1	lnc-ABCC3-1:1	Downregulated
A_23_P205	0.002364	0.000394	-1.53	ANKRD10	ankyrin repeat domain 10	Downregulated
A_23_P215	0.002794	0.000508	-1.53	NUB1	negative regulator of ubiquitin-like proteins 1	Downregulated
A_23_P283	0.003171	0.000621	-1.53	GMCL1	germ cell-less, spermatogenesis associated 1	Downregulated
A_22_P000	0.003193	0.000628	-1.53	lnc-RP11-728	lnc-RP11-728F11.4.1-1:3	Downregulated
A_23_P333	0.004094	0.000902	-1.53	NEK3	NIMA-related kinase 3	Downregulated
A_19_P008	0.005715	0.00148	-1.53	XLOC_I2_010511		Downregulated
A_24_P184	0.006166	0.00165	-1.53	LRTOMT	leucine rich transmembrane and O-methyltransferase domain containing	Downregulated
A_23_P103	0.006203	0.00166	-1.53	AGMAT	agmatine ureohydrolase (agmatinase)	Downregulated
A_23_P957	0.006202	0.00166	-1.53	ITLN1	intelectin 1 (galactofuranose binding)	Downregulated
A_22_P000	0.00833	0.0025	-1.53	lnc-WDR45L-2	lnc-WDR45L-2:1	Downregulated
A_33_P329	0.008991	0.00277	-1.53	lnc-MLL3-1	lnc-MLL3-1:1	Downregulated
A_24_P178	0.011221	0.00371	-1.53	PHLDB2	pleckstrin homology-like domain, family B, member 2	Downregulated
A_33_P336	0.019258	0.00743	-1.53	LBH	limb bud and heart development	Downregulated
A_22_P000	0.021061	0.00828	-1.53	NEURL4	neuralized E3 ubiquitin protein ligase 4	Downregulated
A_21_P000	0.021697	0.00859	-1.53	LINC01482	long intergenic non-protein coding RNA 1482	Downregulated
A_23_P115	0.03678	0.0166	-1.53	FCRL4	Fc receptor-like 4	Downregulated
A_33_P334	0.001014	0.0000822	-1.54	ATG2B	autophagy related 2B	Downregulated
A_22_P000	0.001092	0.0000973	-1.54	lnc-RAB30-1	lnc-RAB30-1:1	Downregulated

A_33_P335	0.001098	0.0000985	-1.54	BTLA	B and T lymphocyte associated	Downregulated
A_33_P329	0.001443	0.000168	-1.54	LUC7L3	LUC7-like 3 (S. cerevisiae)	Downregulated
A_23_P336	0.001458	0.000172	-1.54	GLCCI1	glucocorticoid induced transcript 1	Downregulated
A_21_P000	0.001817	0.000254	-1.54	lnc-LRP1B-4	lnc-LRP1B-4:1	Downregulated
A_22_P000	0.001899	0.000273	-1.54	lnc-SUPT6H-1	lnc-SUPT6H-1:1	Downregulated
A_19_P003	0.001953	0.000287	-1.54	PVT1	Pvt1 oncogene (non-protein coding)	Downregulated
A_23_P363	0.002112	0.00033	-1.54	ATG16L2	autophagy related 16-like 2 (S. cerevisiae)	Downregulated
A_23_P385	0.003497	0.000716	-1.54	KRT16	keratin 16, type I	Downregulated
A_33_P341	0.009988	0.00319	-1.54	ZNF407	zinc finger protein 407	Downregulated
A_33_P326	0.02063	0.00807	-1.54	GAPVD1	GTPase activating protein and VPS9 domains 1	Downregulated
A_21_P001	0.0282	0.012	-1.54	XLOC_I2_001086		Downregulated
A_22_P000	0.047843	0.0228	-1.54	RGS5	regulator of G-protein signaling 5	Downregulated
A_21_P001	0.051179	0.0247	-1.54	LOC1019306	uncharacterized LOC101930634	Downregulated
A_23_P334	0.001021	0.0000834	-1.55	CRELD2	cysteine-rich with EGF-like domains 2	Downregulated
A_23_P413	0.001306	0.00014	-1.55	PREX1	phosphatidylinositol-3,4,5-trisphosphate-dependent Rac exchange factor 1	Downregulated
A_23_P128	0.001465	0.000173	-1.55	ARG2	arginase 2	Downregulated
A_33_P340	0.001478	0.000176	-1.55	TIMM23	translocase of inner mitochondrial membrane 23 homolog (yeast)	Downregulated
A_24_P419	0.001486	0.000178	-1.55	BICD2	bicaudal D homolog 2 (Drosophila)	Downregulated
A_32_P221	0.001486	0.000178	-1.55	HIST1H2AM	histone cluster 1, H2am	Downregulated
A_23_P121	0.001808	0.000251	-1.55	TMEM43	transmembrane protein 43	Downregulated
A_33_P327	0.001848	0.000261	-1.55	RIPK1	receptor (TNFRSF)-interacting serine-threonine kinase 1	Downregulated
A_22_P000	0.002008	0.000303	-1.55	lnc-STRA8-1	lnc-STRA8-1:1	Downregulated
A_23_P951	0.002163	0.000344	-1.55	SLC37A3	solute carrier family 37, member 3	Downregulated
A_33_P321	0.002476	0.000422	-1.55	EMR1	egf-like module containing, mucin-like, hormone receptor-like 1	Downregulated
A_22_P000	0.002572	0.00045	-1.55	LGALS17A	Charcot-Leyden crystal protein pseudogene	Downregulated
A_23_P149	0.003536	0.000729	-1.55	ABHD12	abhydrolase domain containing 12	Downregulated
A_23_P141	0.004135	0.000916	-1.55	CXXC1	CXXC finger protein 1	Downregulated
A_23_P129	0.009311	0.0029	-1.55	PALB2	partner and localizer of BRCA2	Downregulated
A_22_P000	0.009571	0.00301	-1.55	lnc-GGCT-1	lnc-GGCT-1:3	Downregulated
A_24_P425	0.014665	0.00526	-1.55	ACOT9	acyl-CoA thioesterase 9	Downregulated
A_22_P000	0.016175	0.00597	-1.55	lnc-RP11-43D	lnc-RP11-43D2.2.1-4:1	Downregulated
A_33_P330	0.02566	0.0106	-1.55	ZGLP1	zinc finger, GATA-like protein 1	Downregulated
A_23_P603	0.000995	0.0000781	-1.56	UBAC1	UBA domain containing 1	Downregulated
A_22_P000	0.001157	0.00011	-1.56	PLCG2	phospholipase C, gamma 2 (phosphatidylinositol-specific)	Downregulated
A_24_P148	0.001295	0.000137	-1.56	MST1	macrophage stimulating 1 (hepatocyte growth factor-like)	Downregulated
A_33_P322	0.001445	0.000168	-1.56	PTRH1	peptidyl-tRNA hydrolase 1 homolog (S. cerevisiae)	Downregulated
A_21_P000	0.001771	0.000242	-1.56	lnc-ADAMTS7	lnc-ADAMTS7-1:1	Downregulated

A_21_P001	0.002077	0.000321	-1.56	LOC1005074	uncharacterized LOC100507487	Downregulated
A_23_P714	0.002207	0.000355	-1.56	UBE2W	ubiquitin-conjugating enzyme E2W (putative)	Downregulated
A_33_P330	0.00247	0.00042	-1.56	VWA5A	von Willebrand factor A domain containing 5A	Downregulated
A_33_P330	0.002651	0.00047	-1.56	KMT2A	lysine (K)-specific methyltransferase 2A	Downregulated
A_23_P146	0.003126	0.000606	-1.56	STX8	syntaxin 8	Downregulated
A_23_P381	0.003164	0.000618	-1.56	CCDC74B	coiled-coil domain containing 74B	Downregulated
A_23_P125	0.003686	0.000775	-1.56	CASP7	caspase 7, apoptosis-related cysteine peptidase	Downregulated
A_21_P000	0.004039	0.000885	-1.56	GOLGA2P5	golgin A2 pseudogene 5	Downregulated
A_33_P333	0.004356	0.000995	-1.56	LOC1027252	chondroitin sulfate proteoglycan 4-like	Downregulated
A_23_P319	0.005643	0.00145	-1.56	EYA2	EYA transcriptional coactivator and phosphatase 2	Downregulated
A_23_P115	0.005735	0.00148	-1.56	PCGF6	polycomb group ring finger 6	Downregulated
A_23_P150	0.007125	0.00202	-1.56	SUOX	sulfite oxidase	Downregulated
A_33_P321	0.007348	0.0021	-1.56	LOC149373	uncharacterized LOC149373	Downregulated
A_24_P143	0.01223	0.00415	-1.56	FAM109A	family with sequence similarity 109, member A	Downregulated
A_22_P000	0.023558	0.00953	-1.56	lnc-MPHOSP1	lnc-MPHOSP8-3:1	Downregulated
A_23_P200	0.029816	0.0128	-1.56	NTPCR	nucleoside-triphosphatase, cancer-related	Downregulated
A_23_P442	0.03225	0.0141	-1.56	FLII	flightless I homolog (Drosophila)	Downregulated
A_24_P749	0.000987	0.0000765	-1.57	PLP2	proteolipid protein 2 (colonic epithelium-enriched)	Downregulated
A_23_P553	0.001078	0.0000947	-1.57	KANSL1	KAT8 regulatory NSL complex subunit 1	Downregulated
A_23_P388	0.001088	0.0000968	-1.57	RABAC1	Rab acceptor 1 (prenylated)	Downregulated
A_24_P392	0.001092	0.0000975	-1.57	TRPM3	transient receptor potential cation channel, subfamily M, member 3	Downregulated
A_21_P001	0.001097	0.0000983	-1.57	STAU2	staufen double-stranded RNA binding protein 2	Downregulated
A_33_P330	0.001107	0.000101	-1.57	GOLGA2	golgin A2	Downregulated
A_23_P151	0.001154	0.00011	-1.57	MYCBP2	MYC binding protein 2, E3 ubiquitin protein ligase	Downregulated
A_22_P000	0.00126	0.000131	-1.57	lnc-WDR67-1	lnc-WDR67-1:1	Downregulated
A_33_P323	0.001275	0.000134	-1.57	UBL4A	ubiquitin-like 4A	Downregulated
A_33_P340	0.001404	0.00016	-1.57	STPG1	sperm-tail PG-rich repeat containing 1	Downregulated
A_24_P769	0.001597	0.000201	-1.57	C12orf73	chromosome 12 open reading frame 73	Downregulated
A_24_P324	0.001694	0.000224	-1.57	KCTD2	potassium channel tetramerization domain containing 2	Downregulated
A_24_P454	0.001821	0.000255	-1.57	SLAMF6	SLAM family member 6	Downregulated
A_23_P143	0.00189	0.000271	-1.57	PISD	phosphatidylserine decarboxylase	Downregulated
A_23_P802	0.00239	0.000401	-1.57	SFI1	Sfi1 homolog, spindle assembly associated (yeast)	Downregulated
A_23_P522	0.003012	0.000572	-1.57	ERLIN1	ER lipid raft associated 1	Downregulated
A_24_P753	0.004163	0.000927	-1.57	GAS2L1P2	growth arrest-specific 2 like 1 pseudogene 2	Downregulated
A_24_P978	0.004862	0.00117	-1.57	CCDC69	coiled-coil domain containing 69	Downregulated
A_23_P312	0.00758	0.0022	-1.57	GAL3ST4	galactose-3-O-sulfotransferase 4	Downregulated
A_33_P332	0.009447	0.00296	-1.57	ADCY2	adenylate cyclase 2 (brain)	Downregulated

A_23_P206	0.014296	0.00508	-1.57	NQO1	NAD(P)H dehydrogenase, quinone 1	Downregulated
A_22_P000	0.019849	0.0077	-1.57	lnc-LBR-1	lnc-LBR-1:3	Downregulated
A_22_P000	0.029816	0.0128	-1.57	EIF1AX-AS1	EIF1AX antisense RNA 1	Downregulated
A_22_P000	0.029816	0.0128	-1.57	LINC01265	long intergenic non-protein coding RNA 1265	Downregulated
A_24_P484	0.000991	0.0000773	-1.58	YES1	YES proto-oncogene 1, Src family tyrosine kinase	Downregulated
A_33_P340	0.001049	0.0000885	-1.58	MROH1	maestro heat-like repeat family member 1	Downregulated
A_23_P151	0.001066	0.0000922	-1.58	ARHGDI3	Rho GDP dissociation inhibitor (GDI) beta	Downregulated
A_22_P000	0.001181	0.000115	-1.58	LOC1027247	uncharacterized LOC102724715	Downregulated
A_21_P000	0.00121	0.000121	-1.58	LOC1019295	uncharacterized LOC101929531	Downregulated
A_23_P103	0.001448	0.000169	-1.58	FGR	FGR proto-oncogene, Src family tyrosine kinase	Downregulated
A_33_P326	0.001464	0.000173	-1.58	ANKRD52	ankyrin repeat domain 52	Downregulated
A_23_P123	0.001481	0.000177	-1.58	IDNK	idnK, gluconokinase homolog (E. coli)	Downregulated
A_24_P981	0.001977	0.000294	-1.58	SNX10	sorting nexin 10	Downregulated
A_33_P330	0.002341	0.000388	-1.58	TMEM110	transmembrane protein 110	Downregulated
A_24_P605	0.002517	0.000434	-1.58	PGGT1B	protein geranylgeranyltransferase type I, beta subunit	Downregulated
A_22_P000	0.002989	0.000564	-1.58	lnc-CCT4-1	lnc-CCT4-1:1	Downregulated
A_32_P216	0.003094	0.000596	-1.58	LDLRAP1	low density lipoprotein receptor adaptor protein 1	Downregulated
A_23_P103	0.003875	0.000835	-1.58	FCRL3	Fc receptor-like 3	Downregulated
A_23_P115	0.005162	0.00127	-1.58	ZZZ3	zinc finger, ZZ-type containing 3	Downregulated
A_33_P322	0.005837	0.00152	-1.58	TRAPPC13	trafficking protein particle complex 13	Downregulated
A_22_P000	0.035323	0.0158	-1.58	LOC1019294	uncharacterized LOC101929425	Downregulated
A_32_P189	0.036007	0.0161	-1.58	USHBP1	Usher syndrome 1C binding protein 1	Downregulated
A_33_P324	0.042851	0.0199	-1.58	SLMAP	sarcolemma associated protein	Downregulated
A_33_P332	0.001134	0.000106	-1.59	TBC1D10C	TBC1 domain family, member 10C	Downregulated
A_24_P363	0.001237	0.000126	-1.59	C5orf45	chromosome 5 open reading frame 45	Downregulated
A_21_P000	0.001596	0.0002	-1.59	lnc-DHRS2-3	lnc-DHRS2-3:1	Downregulated
A_33_P339	0.001606	0.000203	-1.59	USP39	ubiquitin specific peptidase 39	Downregulated
A_24_P356	0.002027	0.000308	-1.59	HEXIM1	hexamethylene bis-acetamide inducible 1	Downregulated
A_22_P000	0.002041	0.000312	-1.59	lnc-C17orf66-	lnc-C17orf66-1:1	Downregulated
A_33_P321	0.002544	0.000441	-1.59	ENTPD1	ectonucleoside triphosphate diphosphohydrolase 1	Downregulated
A_24_P557	0.003009	0.000571	-1.59	XAF1	XIAP associated factor 1	Downregulated
A_24_P954	0.005795	0.00151	-1.59	CARS	cysteinyl-tRNA synthetase	Downregulated
A_22_P000	0.008069	0.00239	-1.59	LOC1019276	uncharacterized LOC101927620	Downregulated
A_21_P000	0.013155	0.00455	-1.59	lnc-BOD1-2	lnc-BOD1-2:9	Downregulated
A_22_P000	0.016097	0.00593	-1.59	lnc-LRRC40-1	lnc-LRRC40-1:1	Downregulated
A_23_P395	0.028344	0.012	-1.59	ZFP42	ZFP42 zinc finger protein	Downregulated
A_23_P939	0.035934	0.0161	-1.59	ARHGEF5	Rho guanine nucleotide exchange factor (GEF) 5	Downregulated

A_24_P203	0.038648	0.0176	-1.59	SLC1A7	solute carrier family 1 (glutamate transporter), member 7	Downregulated
A_22_P000	0.000979	0.0000755	-1.6	TUG1	taurine up-regulated 1 (non-protein coding)	Downregulated
A_23_P478	0.001054	0.0000894	-1.6	TM7SF3	transmembrane 7 superfamily member 3	Downregulated
A_22_P000	0.001067	0.0000927	-1.6	SASH3	SAM and SH3 domain containing 3	Downregulated
A_33_P328	0.001179	0.000115	-1.6	S1PR4	sphingosine-1-phosphate receptor 4	Downregulated
A_21_P001	0.001193	0.000117	-1.6	FCRL5	Fc receptor-like 5	Downregulated
A_33_P340	0.001196	0.000118	-1.6	FCGR2C	Fc fragment of IgG, low affinity IIc, receptor for (CD32) (gene/pseudogene)	Downregulated
A_33_P347	0.001479	0.000176	-1.6	PPP1R11	protein phosphatase 1, regulatory (inhibitor) subunit 11	Downregulated
A_23_P138	0.001821	0.000254	-1.6	FAIM3	Fas apoptotic inhibitory molecule 3	Downregulated
A_32_P162	0.002102	0.000328	-1.6	TAB3	TGF-beta activated kinase 1/MAP3K7 binding protein 3	Downregulated
A_23_P212	0.002291	0.000377	-1.6	SHISA5	shisa family member 5	Downregulated
A_23_P144	0.002469	0.00042	-1.6	GNPDA2	glucosamine-6-phosphate deaminase 2	Downregulated
A_22_P000	0.002944	0.00055	-1.6	lnc-TSPYL4-1	lnc-TSPYL4-1:1	Downregulated
A_33_P329	0.004951	0.00119	-1.6	FCRLB	Fc receptor-like B	Downregulated
A_24_P414	0.005502	0.0014	-1.6	PPP3CA	protein phosphatase 3, catalytic subunit, alpha isozyme	Downregulated
A_23_P105	0.006921	0.00194	-1.6	METRNL	meteorin, glial cell differentiation regulator-like	Downregulated
A_24_P179	0.008581	0.0026	-1.6	WDR66	WD repeat domain 66	Downregulated
A_33_P327	0.010612	0.00345	-1.6	ELOVL5	ELOVL fatty acid elongase 5	Downregulated
A_21_P001	0.020467	0.008	-1.6	LOC1005074	uncharacterized LOC100507487	Downregulated
A_23_P252	0.038752	0.0177	-1.6	COMMD10	COMM domain containing 10	Downregulated
A_23_P357	0.00096	0.0000717	-1.61	MBNL1	muscleblind-like splicing regulator 1	Downregulated
A_23_P423	0.001005	0.0000807	-1.61	HLA-DMA	major histocompatibility complex, class II, DM alpha	Downregulated
A_33_P329	0.001065	0.0000918	-1.61	IL2RG	interleukin 2 receptor, gamma	Downregulated
A_23_P210	0.001134	0.000106	-1.61	PCIF1	PDX1 C-terminal inhibiting factor 1	Downregulated
A_33_P680	0.001135	0.000107	-1.61	LOC1005068	uncharacterized LOC100506844	Downregulated
A_23_P377	0.001175	0.000114	-1.61	TNRC18	trinucleotide repeat containing 18	Downregulated
A_23_P373	0.001267	0.000133	-1.61	FUZ	fuzzy planar cell polarity protein	Downregulated
A_22_P000	0.001298	0.000138	-1.61	lnc-CT47A1-1	lnc-CT47A1-1:1	Downregulated
A_22_P000	0.001542	0.000189	-1.61	LINC00506	long intergenic non-protein coding RNA 506	Downregulated
A_24_P371	0.001633	0.00021	-1.61	C3orf58	chromosome 3 open reading frame 58	Downregulated
A_23_P105	0.001647	0.000213	-1.61	CAT	catalase	Downregulated
A_23_P861	0.001947	0.000285	-1.61	RPA2	replication protein A2, 32kDa	Downregulated
A_22_P000	0.002683	0.000478	-1.61	LOC255654	uncharacterized LOC255654	Downregulated
A_32_P236	0.003439	0.0007	-1.61	ABCB10	ATP-binding cassette, sub-family B (MDR/TAP), member 10	Downregulated
A_33_P332	0.006203	0.00166	-1.61	BLOC1S3	biogenesis of lysosomal organelles complex-1, subunit 3	Downregulated
A_24_P945	0.006753	0.00187	-1.61	RABEP1	rabaptin, RAB GTPase binding effector protein 1	Downregulated
A_23_P500	0.007149	0.00203	-1.61	SYNE1	spectrin repeat containing, nuclear envelope 1	Downregulated

A_23_P375	0.015845	0.00581	-1.61	FUNDC1	FUN14 domain containing 1	Downregulated
A_23_P288	0.020806	0.00816	-1.61	PIGH	phosphatidylinositol glycan anchor biosynthesis, class H	Downregulated
A_23_P365	0.030776	0.0133	-1.61	UBE3D	ubiquitin protein ligase E3D	Downregulated
A_23_P204	0.00097	0.0000738	-1.62	RB1	retinoblastoma 1	Downregulated
A_23_P411	0.000975	0.0000749	-1.62	PYGO2	pygopus family PHD finger 2	Downregulated
A_23_P111	0.001055	0.0000896	-1.62	AGAP3	ArfGAP with GTPase domain, ankyrin repeat and PH domain 3	Downregulated
A_33_P322	0.001078	0.0000947	-1.62	OFD1	oral-facial-digital syndrome 1	Downregulated
A_24_P160	0.001086	0.0000962	-1.62	PTRHD1	peptidyl-tRNA hydrolase domain containing 1	Downregulated
A_23_P148	0.0011	0.0000993	-1.62	RLIM	ring finger protein, LIM domain interacting	Downregulated
A_33_P335	0.001199	0.000119	-1.62	AGAP2	ArfGAP with GTPase domain, ankyrin repeat and PH domain 2	Downregulated
A_23_P127	0.001372	0.000152	-1.62	FAM35A	family with sequence similarity 35, member A	Downregulated
A_33_P339	0.001552	0.000191	-1.62	RHOB	ras homolog family member B	Downregulated
A_23_P392	0.001595	0.0002	-1.62	ZFP36	ZFP36 ring finger protein	Downregulated
A_23_P423	0.001709	0.000228	-1.62	FANCE	Fanconi anemia, complementation group E	Downregulated
A_23_P478	0.001753	0.000237	-1.62	DIABLO	diablo, IAP-binding mitochondrial protein	Downregulated
A_32_P768	0.001754	0.000238	-1.62	GOLGA8R	golgin A8 family, member R	Downregulated
A_32_P407	0.001916	0.000278	-1.62	LOC1019270	uncharacterized LOC101927085	Downregulated
A_33_P326	0.002253	0.000369	-1.62	ACTR3C	ARP3 actin-related protein 3 homolog C (yeast)	Downregulated
A_22_P000	0.003535	0.000729	-1.62	lnc-WDFY4-1	lnc-WDFY4-1:1	Downregulated
A_22_P000	0.003795	0.000808	-1.62	lnc-FSCB-4	lnc-FSCB-4:1	Downregulated
A_23_P200	0.007984	0.00236	-1.62	TGFBR3	transforming growth factor, beta receptor III	Downregulated
A_32_P479	0.014341	0.0051	-1.62	CAMK2D	calcium/calmodulin-dependent protein kinase II delta	Downregulated
A_23_P215	0.018633	0.00712	-1.62	KLHL7	kelch-like family member 7	Downregulated
A_21_P000	0.042431	0.0197	-1.62	lnc-NFRKB-1	lnc-NFRKB-1:1	Downregulated
A_33_P335	0.000946	0.0000693	-1.63	GPD2	glycerol-3-phosphate dehydrogenase 2 (mitochondrial)	Downregulated
A_23_P100	0.000964	0.0000731	-1.63	SKAP1	src kinase associated phosphoprotein 1	Downregulated
A_33_P326	0.001066	0.0000924	-1.63	RNVU1-18	RNA, variant U1 small nuclear 18	Downregulated
A_23_P122	0.001134	0.000106	-1.63	NELFE	negative elongation factor complex member E	Downregulated
A_23_P857	0.001142	0.000108	-1.63	FCGR2A	Fc fragment of IgG, low affinity IIa, receptor (CD32)	Downregulated
A_23_P326	0.001224	0.000124	-1.63	RBBP4	retinoblastoma binding protein 4	Downregulated
A_23_P226	0.001295	0.000138	-1.63	CYSLTR1	cysteinyl leukotriene receptor 1	Downregulated
A_23_P699	0.001826	0.000256	-1.63	SOX30	SRY (sex determining region Y)-box 30	Downregulated
A_19_P003	0.001826	0.000256	-1.63	TUG1	taurine up-regulated 1 (non-protein coding)	Downregulated
A_23_P366	0.002124	0.000335	-1.63	AQP5	aquaporin 5	Downregulated
A_24_P174	0.002414	0.000407	-1.63	PPP1R2	protein phosphatase 1, regulatory (inhibitor) subunit 2	Downregulated
A_21_P000	0.002709	0.000486	-1.63	RBM19	RNA binding motif protein 19	Downregulated
A_33_P331	0.003027	0.000576	-1.63	PARD6G-AS1	PARD6G antisense RNA 1	Downregulated

A_23_P371	0.006716	0.00186	-1.63	ALKBH8	alkB, alkylation repair homolog 8 (E. coli)	Downregulated
A_22_P000	0.01975	0.00765	-1.63	Inc-ACP1-1	Inc-ACP1-1:2	Downregulated
A_23_P225	0.02385	0.00969	-1.63	CHM	choroideremia (Rab escort protein 1)	Downregulated
A_24_P216	0.024364	0.00996	-1.63	SOAT1	sterol O-acyltransferase 1	Downregulated
A_24_P145	0.000938	0.0000671	-1.64	TRA2B	transformer 2 beta homolog (Drosophila)	Downregulated
A_24_P273	0.000954	0.0000702	-1.64	LINC00152	long intergenic non-protein coding RNA 152	Downregulated
A_23_P398	0.000954	0.0000704	-1.64	MIEN1	migration and invasion enhancer 1	Downregulated
A_24_P253	0.000973	0.0000746	-1.64	AP2B1	adaptor-related protein complex 2, beta 1 subunit	Downregulated
A_23_P132	0.000991	0.0000771	-1.64	UQCRC1	ubiquinol-cytochrome c reductase core protein I	Downregulated
A_33_P338	0.001069	0.0000934	-1.64	CAPG	capping protein (actin filament), gelsolin-like	Downregulated
A_23_P435	0.001142	0.000108	-1.64	ST8SIA4	ST8 alpha-N-acetyl-neuraminide alpha-2,8-sialyltransferase 4	Downregulated
A_23_P770	0.001203	0.00012	-1.64	SPPL2A	signal peptide peptidase like 2A	Downregulated
A_24_P196	0.001245	0.000128	-1.64	GTF2H5	general transcription factor IIH, polypeptide 5	Downregulated
A_23_P810	0.001443	0.000168	-1.64	STIM2	stromal interaction molecule 2	Downregulated
A_22_P000	0.001607	0.000203	-1.64	Inc-RP11-257	Inc-RP11-257K9.7.1-2:1	Downregulated
A_33_P327	0.001925	0.00028	-1.64	UBE2J1	ubiquitin-conjugating enzyme E2, J1	Downregulated
A_33_P333	0.00212	0.000333	-1.64	ZBED5-AS1	ZBED5 antisense RNA 1	Downregulated
A_21_P000	0.003716	0.000784	-1.64	TM4SF19	transmembrane 4 L six family member 19	Downregulated
A_23_P752	0.005695	0.00147	-1.64	NSMCE4A	non-SMC element 4 homolog A (S. cerevisiae)	Downregulated
A_22_P000	0.009842	0.00313	-1.64	ZEB2-AS1	ZEB2 antisense RNA 1	Downregulated
A_23_P357	0.014594	0.00522	-1.64	NAA40	N(alpha)-acetyltransferase 40, NatD catalytic subunit	Downregulated
A_33_P328	0.015428	0.00562	-1.64	LOC1001322	uncharacterized LOC100132249	Downregulated
A_23_P157	0.019778	0.00766	-1.64	POLR2K	polymerase (RNA) II (DNA directed) polypeptide K, 7.0kDa	Downregulated
A_33_P337	0.042497	0.0198	-1.64	IMPA1	inositol(myo)-1(or 4)-monophosphatase 1	Downregulated
A_22_P000	0.000919	0.0000645	-1.65	Inc-PAPSS2-2	Inc-PAPSS2-2:1	Downregulated
A_23_P420	0.000949	0.0000698	-1.65	PRKCB	protein kinase C, beta	Downregulated
A_23_P502	0.001187	0.000116	-1.65	ANGPTL6	angiopoietin-like 6	Downregulated
A_21_P001	0.00119	0.000117	-1.65	XLOC_I2_004771		Downregulated
A_23_P152	0.001314	0.000141	-1.65	ICAM2	intercellular adhesion molecule 2	Downregulated
A_23_P397	0.001612	0.000205	-1.65	SAMD3	sterile alpha motif domain containing 3	Downregulated
A_23_P215	0.001884	0.00027	-1.65	ST7	suppression of tumorigenicity 7	Downregulated
A_33_P339	0.001996	0.000299	-1.65	PI4KA	phosphatidylinositol 4-kinase, catalytic, alpha	Downregulated
A_33_P335	0.003126	0.000607	-1.65	NFXL1	nuclear transcription factor, X-box binding-like 1	Downregulated
A_33_P331	0.003445	0.000701	-1.65	ZZZ3	zinc finger, ZZ-type containing 3	Downregulated
A_33_P339	0.01153	0.00385	-1.65	CCDC134	coiled-coil domain containing 134	Downregulated
A_23_P256	0.015485	0.00564	-1.65	SLC10A1	solute carrier family 10 (sodium/bile acid cotransporter), member 1	Downregulated
A_24_P577	0.015919	0.00584	-1.65	MRPL52	mitochondrial ribosomal protein L52	Downregulated

A_22_P000	0.000995	0.0000787	-1.66	lnc-VAMP1-1	lnc-VAMP1-1:7	Downregulated
A_22_P000	0.00102	0.000083	-1.66	lnc-CTU2-2	lnc-CTU2-2:1	Downregulated
A_23_P154	0.001029	0.0000849	-1.66	SAP130	Sin3A-associated protein, 130kDa	Downregulated
A_23_P163	0.001121	0.000104	-1.66	PARP6	poly (ADP-ribose) polymerase family, member 6	Downregulated
A_23_P435	0.001156	0.00011	-1.66	NDUFA8	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 8, 19kDa	Downregulated
A_21_P001	0.001353	0.000149	-1.66	XLOC_I2_013462		Downregulated
A_33_P328	0.00162	0.000206	-1.66	FUBP1	far upstream element (FUSE) binding protein 1	Downregulated
A_23_P169	0.00179	0.000246	-1.66	MRPS28	mitochondrial ribosomal protein S28	Downregulated
A_23_P407	0.001844	0.00026	-1.66	KIRREL3	kin of IRRE like 3 (Drosophila)	Downregulated
A_33_P334	0.00232	0.000383	-1.66	SUPT3H	suppressor of Ty 3 homolog (S. cerevisiae)	Downregulated
A_23_P621	0.002674	0.000475	-1.66	TIMP1	TIMP metalloproteinase inhibitor 1	Downregulated
A_23_P660	0.002685	0.000479	-1.66	B3GNT9	UDP-GlcNAc:betaGal beta-1,3-N-acetylglucosaminyltransferase 9	Downregulated
A_23_P353	0.002685	0.000479	-1.66	RMI2	RecQ mediated genome instability 2	Downregulated
A_33_P324	0.002701	0.000484	-1.66	SLC35E2B	solute carrier family 35, member E2B	Downregulated
A_32_P348	0.005993	0.00158	-1.66	WDR93	WD repeat domain 93	Downregulated
A_22_P000	0.007155	0.00203	-1.66	LOC1026064	uncharacterized LOC102606465	Downregulated
A_33_P337	0.010925	0.00357	-1.66	ABCB9	ATP-binding cassette, sub-family B (MDR/TAP), member 9	Downregulated
A_22_P000	0.012258	0.00416	-1.66	MEG3	maternally expressed 3 (non-protein coding)	Downregulated
A_22_P000	0.014395	0.00513	-1.66	MRPL46	mitochondrial ribosomal protein L46	Downregulated
A_21_P000	0.01597	0.00587	-1.66	LOC1019275	uncharacterized LOC101927584	Downregulated
A_33_P339	0.029475	0.0126	-1.66	GYLTL1B	glycosyltransferase-like 1B	Downregulated
A_23_P311	0.000918	0.0000643	-1.67	GINM1	glycoprotein integral membrane 1	Downregulated
A_33_P325	0.000928	0.0000657	-1.67	ARHGAP40	Rho GTPase activating protein 40	Downregulated
A_33_P323	0.000945	0.0000688	-1.67	RLTPR	RGD motif, leucine rich repeats, tropomodulin domain and proline-rich alpha	Downregulated
A_23_P726	0.000963	0.0000727	-1.67	HGS	hepatocyte growth factor-regulated tyrosine kinase substrate	Downregulated
A_23_P394	0.001052	0.0000889	-1.67	BST2	bone marrow stromal cell antigen 2	Downregulated
A_23_P155	0.001142	0.000108	-1.67	CRELD1	cysteine-rich with EGF-like domains 1	Downregulated
A_24_P416	0.001181	0.000115	-1.67	RBL2	retinoblastoma-like 2	Downregulated
A_22_P000	0.001369	0.000152	-1.67	lnc-CTDSPL2	lnc-CTDSPL2-2:1	Downregulated
A_23_P162	0.001397	0.000158	-1.67	PTPN6	protein tyrosine phosphatase, non-receptor type 6	Downregulated
A_23_P161	0.001498	0.00018	-1.67	SNAPIN	SNAP-associated protein	Downregulated
A_19_P008	0.001653	0.000214	-1.67	LOC1005068	uncharacterized LOC100506804	Downregulated
A_23_P374	0.002912	0.000542	-1.67	SECISBP2L	SECIS binding protein 2-like	Downregulated
A_22_P000	0.003096	0.000597	-1.67	LOC1027253	uncharacterized LOC102725300	Downregulated
A_23_P135	0.004362	0.000996	-1.67	CKAP5	cytoskeleton associated protein 5	Downregulated
A_21_P000	0.005292	0.00132	-1.67	lnc-MDGA2-2	lnc-MDGA2-2:1	Downregulated
A_23_P145	0.006123	0.00163	-1.67	MTO1	mitochondrial tRNA translation optimization 1	Downregulated

A_24_P937	0.006315	0.0017	-1.67	EHMT1-IT1	EHMT1 intronic transcript 1	Downregulated
A_33_P339	0.007941	0.00234	-1.67	ATG4C	autophagy related 4C, cysteine peptidase	Downregulated
A_19_P003	0.009601	0.00302	-1.67	MCF2L	MCF.2 cell line derived transforming sequence-like	Downregulated
A_22_P000	0.014634	0.00525	-1.67	lnc-MPHOSP1	lnc-MPHOSPH8-3:1	Downregulated
A_24_P236	0.021828	0.00866	-1.67	CD2BP2	CD2 (cytoplasmic tail) binding protein 2	Downregulated
A_23_P729	0.02308	0.00928	-1.67	PRPS1	phosphoribosyl pyrophosphate synthetase 1	Downregulated
A_24_P270	0.023092	0.00928	-1.67	SCN4A	sodium channel, voltage gated, type IV alpha subunit	Downregulated
A_24_P416	0.000904	0.0000619	-1.68	GGA2	golgi-associated, gamma adaptin ear containing, ARF binding protein 2	Downregulated
A_33_P326	0.000938	0.0000677	-1.68	NEDD1	neural precursor cell expressed, developmentally down-regulated 1	Downregulated
A_24_P282	0.000959	0.0000711	-1.68	TLK1	tousled-like kinase 1	Downregulated
A_33_P327	0.001043	0.0000871	-1.68	FKBP2	FK506 binding protein 2, 13kDa	Downregulated
A_23_P798	0.001118	0.000103	-1.68	OSER1	oxidative stress responsive serine-rich 1	Downregulated
A_32_P386	0.001135	0.000106	-1.68	KRBA1	KRAB-A domain containing 1	Downregulated
A_23_P531	0.001296	0.000138	-1.68	LMO2	LIM domain only 2 (rhombotin-like 1)	Downregulated
A_33_P321	0.001694	0.000224	-1.68	KDM5C	lysine (K)-specific demethylase 5C	Downregulated
A_23_P107	0.001753	0.000237	-1.68	RAB27B	RAB27B, member RAS oncogene family	Downregulated
A_21_P000	0.002118	0.000333	-1.68	lnc-GPR65-1	lnc-GPR65-1:1	Downregulated
A_22_P000	0.002221	0.000359	-1.68	lnc-RIIAD1-1	lnc-RIIAD1-1:1	Downregulated
A_23_P307	0.002408	0.000405	-1.68	LSM12	LSM12 homolog (S. cerevisiae)	Downregulated
A_24_P212	0.003714	0.000784	-1.68	ZNF33A	zinc finger protein 33A	Downregulated
A_21_P000	0.005951	0.00156	-1.68	SNORD42A	small nucleolar RNA, C/D box 42A	Downregulated
A_23_P327	0.007949	0.00234	-1.68	GATS	GATS, stromal antigen 3 opposite strand	Downregulated
A_33_P324	0.008307	0.00249	-1.68	XLOC_I2_000001		Downregulated
A_23_P943	0.013786	0.00484	-1.68	ADCK5	aarF domain containing kinase 5	Downregulated
A_24_P182	0.016408	0.00609	-1.68	GCSAM	germinal center-associated, signaling and motility	Downregulated
A_19_P008	0.018008	0.00683	-1.68	XLOC_I2_008221		Downregulated
A_33_P340	0.019244	0.00742	-1.68	EXOG	endo/exonuclease (5'-3'), endonuclease G-like	Downregulated
A_33_P331	0.019709	0.00763	-1.68	LOC1005061	uncharacterized LOC100506191	Downregulated
A_24_P937	0.029816	0.0128	-1.68	TMEM198B	transmembrane protein 198B, pseudogene	Downregulated
A_22_P000	0.000908	0.0000626	-1.69	lnc-EMILIN2-1	lnc-EMILIN2-1:2	Downregulated
A_23_P419	0.000966	0.0000734	-1.69	BLCAP	bladder cancer associated protein	Downregulated
A_32_P309	0.001054	0.0000894	-1.69	WDFY4	WDFY family member 4	Downregulated
A_21_P000	0.001057	0.0000901	-1.69	lnc-CHST12-1	lnc-CHST12-1:6	Downregulated
A_23_P303	0.001443	0.000167	-1.69	STX7	syntaxin 7	Downregulated
A_24_P581	0.001557	0.000192	-1.69	C14orf159	chromosome 14 open reading frame 159	Downregulated
A_22_P000	0.002889	0.000536	-1.69	lnc-SIVA1-1	lnc-SIVA1-1:1	Downregulated
A_23_P559	0.00324	0.000641	-1.69	SLC1A5	solute carrier family 1 (neutral amino acid transporter), member 5	Downregulated

A_22_P000	0.003633	0.000759	-1.69	lnc-COL1A1-2	lnc-COL1A1-2:1	Downregulated
A_33_P322	0.00701	0.00197	-1.69	FBXO43	F-box protein 43	Downregulated
A_24_P116	0.008498	0.00257	-1.69	WVOX	WW domain containing oxidoreductase	Downregulated
A_33_P334	0.009072	0.00281	-1.69	ARGFXP2	arginine-fifty homeobox pseudogene 2	Downregulated
A_23_P307	0.009186	0.00285	-1.69	ABT1	activator of basal transcription 1	Downregulated
A_32_P940	0.023473	0.00948	-1.69	FAM92A1P2	family with sequence similarity 92, member A3	Downregulated
A_24_P237	0.025844	0.0107	-1.69	EIF1AX	eukaryotic translation initiation factor 1A, X-linked	Downregulated
A_21_P001	0.03725	0.0168	-1.69	HHIP	hedgehog interacting protein	Downregulated
A_33_P346	0.000913	0.000639	-1.7	GTPBP10	GTP-binding protein 10 (putative)	Downregulated
A_33_P339	0.000925	0.000652	-1.7	PTGR1	prostaglandin reductase 1	Downregulated
A_22_P000	0.000938	0.000675	-1.7	DUS2	dihydrouridine synthase 2	Downregulated
A_24_P320	0.000998	0.000798	-1.7	C6orf106	chromosome 6 open reading frame 106	Downregulated
A_24_P323	0.001023	0.000839	-1.7	GNRH2	gonadotropin-releasing hormone 2	Downregulated
A_22_P000	0.001095	0.000978	-1.7	lnc-ITM2C-2	lnc-ITM2C-2:1	Downregulated
A_33_P325	0.001453	0.000171	-1.7	RMND5B	required for meiotic nuclear division 5 homolog B (S. cerevisiae)	Downregulated
A_23_P341	0.001536	0.000188	-1.7	MNT	MAX network transcriptional repressor	Downregulated
A_33_P335	0.001691	0.000223	-1.7	LOC388692	uncharacterized LOC388692	Downregulated
A_23_P119	0.002488	0.000426	-1.7	TIMM44	translocase of inner mitochondrial membrane 44 homolog (yeast)	Downregulated
A_23_P208	0.003521	0.000724	-1.7	EMC10	ER membrane protein complex subunit 10	Downregulated
A_23_P315	0.005093	0.00124	-1.7	ABHD11	abhydrolase domain containing 11	Downregulated
A_23_P125	0.007111	0.00202	-1.7	TMEM255A	transmembrane protein 255A	Downregulated
A_23_P996	0.007969	0.00235	-1.7	RNF31	ring finger protein 31	Downregulated
A_24_P322	0.010101	0.00324	-1.7	ELMO2	engulfment and cell motility 2	Downregulated
A_33_P324	0.011206	0.0037	-1.7	MAVS	mitochondrial antiviral signaling protein	Downregulated
A_33_P325	0.012979	0.00448	-1.7	OGFR	opioid growth factor receptor	Downregulated
A_33_P329	0.027436	0.0116	-1.7	DENND4C	DENN/MADD domain containing 4C	Downregulated
A_32_P206	0.028104	0.0119	-1.7	DNAH2	dynein, axonemal, heavy chain 2	Downregulated
A_22_P000	0.000899	0.0000611	-1.71	lnc-PLEKHA3	lnc-PLEKHA3-3:1	Downregulated
A_23_P537	0.000924	0.0000649	-1.71	FBXO21	F-box protein 21	Downregulated
A_33_P330	0.000949	0.0000698	-1.71	C21orf58	chromosome 21 open reading frame 58	Downregulated
A_23_P361	0.000954	0.0000705	-1.71	SLC35F5	solute carrier family 35, member F5	Downregulated
A_33_P324	0.000971	0.0000743	-1.71	HBS1L	HBS1-like translational GTPase	Downregulated
A_22_P000	0.001022	0.0000836	-1.71	LINC01429	long intergenic non-protein coding RNA 1429	Downregulated
A_33_P330	0.001062	0.0000907	-1.71	RANBP2	RAN binding protein 2	Downregulated
A_33_P365	0.001086	0.000096	-1.71	CXorf49B	chromosome X open reading frame 49B	Downregulated
A_33_P324	0.001991	0.000298	-1.71	ATAD3C	ATPase family, AAA domain containing 3C	Downregulated
A_21_P000	0.002488	0.000426	-1.71	LOC1002893	uncharacterized LOC100289361	Downregulated

A_22_P000	0.006688	0.00185	-1.71	lnc-UPK3B-1	lnc-UPK3B-1:3	Downregulated
A_33_P324	0.026919	0.0113	-1.71	RGS5	regulator of G-protein signaling 5	Downregulated
A_23_P483	0.041342	0.0191	-1.71	PCCA	propionyl CoA carboxylase, alpha polypeptide	Downregulated
A_23_P212	0.001015	0.0000824	-1.72	NAT6	N-acetyltransferase 6 (GCN5-related)	Downregulated
A_23_P209	0.001029	0.0000848	-1.72	TRAK2	trafficking protein, kinesin binding 2	Downregulated
A_22_P000	0.0011	0.0000992	-1.72	lnc-ADAMTS1	lnc-ADAMTS18-1:1	Downregulated
A_23_P578	0.001187	0.000116	-1.72	ACY1	aminoacylase 1	Downregulated
A_23_P798	0.001386	0.000155	-1.72	SERINC3	serine incorporator 3	Downregulated
A_22_P000	0.001444	0.000168	-1.72	lnc-SLC22A1	lnc-SLC22A18-1:1	Downregulated
A_22_P000	0.00151	0.000182	-1.72	lnc-LIFR-1	lnc-LIFR-1:1	Downregulated
A_33_P331	0.001604	0.000202	-1.72	CCDC14	coiled-coil domain containing 14	Downregulated
A_33_P331	0.001738	0.000234	-1.72	PHIP	pleckstrin homology domain interacting protein	Downregulated
A_23_P196	0.001742	0.000235	-1.72	RARRES3	retinoic acid receptor responder (tazarotene induced) 3	Downregulated
A_21_P000	0.001744	0.000235	-1.72	SNORA80E	small nucleolar RNA, H/ACA box 80E	Downregulated
A_21_P000	0.001808	0.000251	-1.72	METTL23	methyltransferase like 23	Downregulated
A_24_P134	0.001893	0.000272	-1.72	BTBD3	BTB (POZ) domain containing 3	Downregulated
A_23_P209	0.001962	0.000291	-1.72	CLIP4	CAP-GLY domain containing linker protein family, member 4	Downregulated
A_23_P520	0.002022	0.000306	-1.72	GRHL3	grainyhead-like 3 (Drosophila)	Downregulated
A_23_P498	0.002621	0.000462	-1.72	ADAP2	ArfGAP with dual PH domains 2	Downregulated
A_23_P396	0.003847	0.000827	-1.72	ORC2	origin recognition complex, subunit 2	Downregulated
A_23_P252	0.003875	0.000835	-1.72	RIPK2	receptor-interacting serine-threonine kinase 2	Downregulated
A_33_P321	0.004961	0.0012	-1.72	ENTPD1	ectonucleoside triphosphate diphosphohydrolase 1	Downregulated
A_21_P000	0.006305	0.0017	-1.72	lnc-ZNF37A-3	lnc-ZNF37A-3:2	Downregulated
A_21_P001	0.00635	0.00172	-1.72	XLOC_I2_007586		Downregulated
A_23_P741	0.006955	0.00195	-1.72	RAD54L	RAD54-like (S. cerevisiae)	Downregulated
A_23_P432	0.030987	0.0134	-1.72	CHMP4C	charged multivesicular body protein 4C	Downregulated
A_33_P330	0.000877	0.0000583	-1.73	PARP4	poly (ADP-ribose) polymerase family, member 4	Downregulated
A_23_P131	0.000909	0.000063	-1.73	HDLBP	high density lipoprotein binding protein	Downregulated
A_24_P412	0.000915	0.0000641	-1.73	TMEM143	transmembrane protein 143	Downregulated
A_24_P216	0.001022	0.0000836	-1.73	ERGIC3	ERGIC and golgi 3	Downregulated
A_23_P118	0.001036	0.000086	-1.73	SRP68	signal recognition particle 68kDa	Downregulated
A_33_P338	0.00124	0.000126	-1.73	MDM4	MDM4, p53 regulator	Downregulated
A_23_P622	0.001279	0.000135	-1.73	NKAP	NFKB activating protein	Downregulated
A_23_P142	0.001492	0.000179	-1.73	GIGYF2	GRB10 interacting GYF protein 2	Downregulated
A_33_P334	0.002027	0.000308	-1.73	SLC25A37	solute carrier family 25 (mitochondrial iron transporter), member 37	Downregulated
A_33_P322	0.002054	0.000315	-1.73	KNSTRN	kinetochore-localized astrin/SPAG5 binding protein	Downregulated
A_33_P334	0.002219	0.000358	-1.73	ZNF280D	zinc finger protein 280D	Downregulated

A_33_P336	0.002358	0.000393	-1.73	TRAPPC2	trafficking protein particle complex 2	Downregulated
A_23_P203	0.002596	0.000455	-1.73	GAB2	GRB2-associated binding protein 2	Downregulated
A_23_P140	0.003567	0.000739	-1.73	NDRG4	NDRG family member 4	Downregulated
A_33_P335	0.004971	0.0012	-1.73	TAF4B	TAF4b RNA polymerase II, TATA box binding protein (TBP)-associated	Downregulated
A_21_P000	0.007266	0.00207	-1.73	LOC1027239	uncharacterized LOC102723932	Downregulated
A_21_P000	0.01353	0.00472	-1.73	NIFK-AS1	NIFK antisense RNA 1	Downregulated
A_21_P000	0.022388	0.00893	-1.73	SNORD35A	small nucleolar RNA, C/D box 35A	Downregulated
A_33_P324	0.025262	0.0104	-1.73	IL1RN	interleukin 1 receptor antagonist	Downregulated
A_33_P326	0.030274	0.0131	-1.73	LOC1002891	uncharacterized LOC100289120	Downregulated
A_23_P147	0.000866	0.0000569	-1.74	RPS27L	ribosomal protein S27-like	Downregulated
A_23_P137	0.000931	0.0000663	-1.74	KDM5D	lysine (K)-specific demethylase 5D	Downregulated
A_22_P000	0.000938	0.0000676	-1.74	lnc-C14orf57-	lnc-C14orf57-1:1	Downregulated
A_24_P277	0.000991	0.0000772	-1.74	FIS1	fission 1 (mitochondrial outer membrane) homolog (S. cerevisiae)	Downregulated
A_22_P000	0.00114	0.000108	-1.74	LINC00116	long intergenic non-protein coding RNA 116	Downregulated
A_22_P000	0.001393	0.000156	-1.74	lnc-MAPK6-8	lnc-MAPK6-8:1	Downregulated
A_33_P329	0.001763	0.00024	-1.74	FAM159A	family with sequence similarity 159, member A	Downregulated
A_23_P148	0.002243	0.000366	-1.74	TSPAN3	tetraspanin 3	Downregulated
A_24_P303	0.002301	0.000378	-1.74	ARL15	ADP-ribosylation factor-like 15	Downregulated
A_24_P234	0.002794	0.000508	-1.74	CSNK1G3	casein kinase 1, gamma 3	Downregulated
A_23_P837	0.005191	0.00128	-1.74	C11orf63	chromosome 11 open reading frame 63	Downregulated
A_33_P342	0.008303	0.00249	-1.74	SP2	Sp2 transcription factor	Downregulated
A_23_P163	0.000853	0.000055	-1.75	ACYP1	acylphosphatase 1, erythrocyte (common) type	Downregulated
A_23_P359	0.000903	0.0000616	-1.75	ALKBH3	alkB, alkylation repair homolog 3 (E. coli)	Downregulated
A_33_P331	0.000923	0.0000648	-1.75	IMMT	inner membrane protein, mitochondrial	Downregulated
A_33_P339	0.000991	0.0000772	-1.75	PROSER1	proline and serine rich 1	Downregulated
A_23_P152	0.001065	0.0000919	-1.75	CSK	c-src tyrosine kinase	Downregulated
A_24_P219	0.001546	0.00019	-1.75	RBM23	RNA binding motif protein 23	Downregulated
A_23_P231	0.002421	0.000408	-1.75	PINK1	PTEN induced putative kinase 1	Downregulated
A_33_P333	0.002503	0.000431	-1.75	XLOC_l2_015203		Downregulated
A_21_P000	0.002568	0.000448	-1.75	lnc-CSMD1-9	lnc-CSMD1-9:1	Downregulated
A_21_P000	0.002803	0.000511	-1.75	SNORD62A	small nucleolar RNA, C/D box 62A	Downregulated
A_33_P330	0.003637	0.00076	-1.75	DDX31	DEAD (Asp-Glu-Ala-Asp) box polypeptide 31	Downregulated
A_33_P326	0.003878	0.000836	-1.75	PITRM1	pitrilysin metalloproteinase 1	Downregulated
A_33_P335	0.004745	0.00113	-1.75	ATHL1	ATH1, acid trehalase-like 1 (yeast)	Downregulated
A_21_P000	0.004979	0.0012	-1.75	RAB30-AS1	RAB30 antisense RNA 1 (head to head)	Downregulated
A_23_P201	0.005327	0.00133	-1.75	PTPN7	protein tyrosine phosphatase, non-receptor type 7	Downregulated
A_23_P125	0.005417	0.00137	-1.75	SLC25A43	solute carrier family 25, member 43	Downregulated

A_19_P003	0.016688	0.00622	-1.75	AATBC	uncharacterized LOC284837	Downregulated
A_23_P122	0.00086	0.0000563	-1.76	LTV1	LTV1 ribosome biogenesis factor	Downregulated
A_24_P189	0.000952	0.0000701	-1.76	ENDOD1	endonuclease domain containing 1	Downregulated
A_24_P416	0.000959	0.0000711	-1.76	ADCY7	adenylate cyclase 7	Downregulated
A_24_P917	0.000995	0.0000788	-1.76	TMED10	transmembrane emp24-like trafficking protein 10 (yeast)	Downregulated
A_33_P332	0.000998	0.0000796	-1.76	NLK	nemo-like kinase	Downregulated
A_21_P001	0.001013	0.000082	-1.76	lnc-HSP90AA	lnc-HSP90AA1-5:1	Downregulated
A_33_P328	0.00123	0.000125	-1.76	FAM204A	family with sequence similarity 204, member A	Downregulated
A_23_P398	0.001763	0.00024	-1.76	C15orf57	chromosome 15 open reading frame 57	Downregulated
A_23_P205	0.001826	0.000256	-1.76	GNB5	guanine nucleotide binding protein (G protein), beta 5	Downregulated
A_23_P604	0.00183	0.000257	-1.76	ODF2	outer dense fiber of sperm tails 2	Downregulated
A_33_P336	0.002101	0.000327	-1.76	RRN3	RRN3 RNA polymerase I transcription factor homolog (S. cerevisiae)	Downregulated
A_21_P000	0.002832	0.000519	-1.76	ITGB2-AS1	ITGB2 antisense RNA 1	Downregulated
A_24_P399	0.004012	0.000877	-1.76	ZCCHC3	zinc finger, CCHC domain containing 3	Downregulated
A_33_P375	0.005623	0.00144	-1.76	M1AP	meiosis 1 associated protein	Downregulated
A_22_P000	0.009143	0.00284	-1.76	ZBED1	zinc finger, BED-type containing 1	Downregulated
A_23_P370	0.009526	0.00299	-1.76	SEPN1	selenoprotein N, 1	Downregulated
A_33_P361	0.009939	0.00317	-1.76	LOC283516	uncharacterized LOC283516	Downregulated
A_33_P330	0.010871	0.00355	-1.76	ZBPB	zona pellucida binding protein	Downregulated
A_33_P332	0.011625	0.00389	-1.76	DAZAP2	DAZ associated protein 2	Downregulated
A_22_P000	0.016015	0.00588	-1.76	LOC1019281	uncharacterized LOC101928156	Downregulated
A_21_P000	0.024466	0.01	-1.76	CMAHP	cytidine monophospho-N-acetylneuraminic acid hydroxylase, pseudoger	Downregulated
A_24_P844	0.000898	0.0000609	-1.77	VAV2	vav 2 guanine nucleotide exchange factor	Downregulated
A_22_P000	0.000938	0.0000674	-1.77	CCDC175	coiled-coil domain containing 175	Downregulated
A_24_P655	0.000945	0.0000688	-1.77	STRA13	stimulated by retinoic acid 13	Downregulated
A_23_P243	0.000995	0.0000789	-1.77	OTUB1	OTU deubiquitinase, ubiquitin aldehyde binding 1	Downregulated
A_23_P120	0.000999	0.0000799	-1.77	APOBEC3C	apolipoprotein B mRNA editing enzyme, catalytic polypeptide-like 3C	Downregulated
A_23_P341	0.001333	0.000145	-1.77	WWC3	WWC family member 3	Downregulated
A_23_P750	0.001638	0.000211	-1.77	ZMYND11	zinc finger, MYND-type containing 11	Downregulated
A_23_P771	0.001702	0.000227	-1.77	RAB11A	RAB11A, member RAS oncogene family	Downregulated
A_22_P000	0.001808	0.00025	-1.77	lnc-ARL16-1	lnc-ARL16-1:1	Downregulated
A_23_P334	0.002241	0.000365	-1.77	FAM167A	family with sequence similarity 167, member A	Downregulated
A_22_P000	0.002995	0.000567	-1.77	lnc-FANCI-1	lnc-FANCI-1:1	Downregulated
A_23_P115	0.003568	0.00074	-1.77	CELF2	CUGBP, Elav-like family member 2	Downregulated
A_33_P322	0.013974	0.00492	-1.77	TRMT13	tRNA methyltransferase 13 homolog (S. cerevisiae)	Downregulated
A_23_P141	0.023836	0.00968	-1.77	DHRS7B	dehydrogenase/reductase (SDR family) member 7B	Downregulated
A_23_P204	0.026881	0.0113	-1.77	ZNF384	zinc finger protein 384	Downregulated

A_33_P337	0.000987	0.0000764	-1.78	ABR	active BCR-related	Downregulated
A_23_P400	0.000998	0.0000798	-1.78	GTF3C6	general transcription factor IIIC, polypeptide 6, alpha 35kDa	Downregulated
A_23_P858	0.001007	0.0000812	-1.78	CD52	CD52 molecule	Downregulated
A_21_P001	0.001133	0.000106	-1.78	lnc-PPDPF-1	lnc-PPDPF-1:2	Downregulated
A_23_P697	0.001149	0.000109	-1.78	AP1AR	adaptor-related protein complex 1 associated regulatory protein	Downregulated
A_24_P829	0.001203	0.00012	-1.78	RNF114	ring finger protein 114	Downregulated
A_22_P000	0.00151	0.000182	-1.78	lnc-SPTBN5-2	lnc-SPTBN5-2:1	Downregulated
A_33_P320	0.001836	0.000258	-1.78	CTNND1	catenin (cadherin-associated protein), delta 1	Downregulated
A_32_P933	0.002067	0.000319	-1.78	NUDT19	nudix (nucleoside diphosphate linked moiety X)-type motif 19	Downregulated
A_23_P831	0.0024	0.000404	-1.78	PTPLAD2	protein tyrosine phosphatase-like A domain containing 2	Downregulated
A_24_P274	0.003316	0.000665	-1.78	GTF2H2C_2	GTF2H2 family member C, copy 2	Downregulated
A_33_P324	0.003599	0.00075	-1.78	DMKN	dermokine	Downregulated
A_24_P630	0.005643	0.00145	-1.78	SFXN5	sideroflexin 5	Downregulated
A_23_P409	0.010468	0.00339	-1.78	PPM1A	protein phosphatase, Mg ²⁺ /Mn ²⁺ dependent, 1A	Downregulated
A_23_P402	0.011468	0.00382	-1.78	LNK2	ligand of numb-protein X 2	Downregulated
A_23_P200	0.01384	0.00486	-1.78	NOTCH2	notch 2	Downregulated
A_33_P338	0.015382	0.00559	-1.78	LOC1019271	uncharacterized LOC101927100	Downregulated
A_33_P323	0.023408	0.00945	-1.78	CLIP4	CAP-GLY domain containing linker protein family, member 4	Downregulated
A_23_P536	0.028042	0.0119	-1.78	PAWR	PRKC, apoptosis, WT1, regulator	Downregulated
A_23_P326	0.035407	0.0158	-1.78	CSMD3	CUB and Sushi multiple domains 3	Downregulated
A_22_P000	0.000807	0.0000487	-1.79	lnc-PLCD3-1	lnc-PLCD3-1:1	Downregulated
A_23_P688	0.000906	0.0000623	-1.79	TUG1	taurine up-regulated 1 (non-protein coding)	Downregulated
A_24_P253	0.000961	0.000072	-1.79	CIRH1A	cirrhosis, autosomal recessive 1A (cirhin)	Downregulated
A_23_P126	0.000995	0.0000779	-1.79	PGD	phosphogluconate dehydrogenase	Downregulated
A_21_P000	0.001022	0.0000836	-1.79	SNORD58C	small nucleolar RNA, C/D box 58C	Downregulated
A_32_P177	0.001731	0.000232	-1.79	SPDYE5	speedy/RINGO cell cycle regulator family member E5	Downregulated
A_33_P336	0.002022	0.000306	-1.79	SYT2	synaptotagmin II	Downregulated
A_22_P000	0.002309	0.00038	-1.79	lnc-CD53-1	lnc-CD53-1:1	Downregulated
A_33_P339	0.003003	0.000569	-1.79	C19orf84	chromosome 19 open reading frame 84	Downregulated
A_22_P000	0.003308	0.000661	-1.79	STRIP1	striatin interacting protein 1	Downregulated
A_23_P535	0.004344	0.00099	-1.79	MTERF2	mitochondrial transcription termination factor 2	Downregulated
A_32_P355	0.004528	0.00105	-1.79	VPS35	vacuolar protein sorting 35 homolog (S. cerevisiae)	Downregulated
A_22_P000	0.004677	0.0011	-1.79	lnc-EID1-3	lnc-EID1-3:1	Downregulated
A_23_P158	0.009825	0.00312	-1.79	C9orf16	chromosome 9 open reading frame 16	Downregulated
A_23_P141	0.019109	0.00735	-1.79	RASL11A	RAS-like, family 11, member A	Downregulated
A_23_P361	0.033723	0.0149	-1.79	ATXN3L	ataxin 3-like	Downregulated
A_21_P000	0.000904	0.0000619	-1.8	LOC1019277	uncharacterized LOC101927712	Downregulated

A_24_P389	0.001107	0.000101	-1.8	RELT	RELT tumor necrosis factor receptor	Downregulated
A_23_P123	0.001325	0.000143	-1.8	PRMT6	protein arginine methyltransferase 6	Downregulated
A_24_P336	0.001409	0.000161	-1.8	CABIN1	calcineurin binding protein 1	Downregulated
A_23_P215	0.001443	0.000167	-1.8	POM121	POM121 transmembrane nucleoporin	Downregulated
A_23_P385	0.001512	0.000183	-1.8	DNAJB6	DnaJ (Hsp40) homolog, subfamily B, member 6	Downregulated
A_22_P000	0.006544	0.00179	-1.8	lnc-SMG6-3	lnc-SMG6-3:1	Downregulated
A_33_P340	0.01812	0.00689	-1.8	CEP85L	centrosomal protein 85kDa-like	Downregulated
A_33_P354	0.02876	0.0122	-1.8	OR5AK4P	olfactory receptor, family 5, subfamily AK, member 4 pseudogene	Downregulated
A_23_P300	0.000805	0.0000483	-1.81	C6orf136	chromosome 6 open reading frame 136	Downregulated
A_23_P239	0.000814	0.0000497	-1.81	CAPN2	calpain 2, (m/II) large subunit	Downregulated
A_24_P186	0.000901	0.0000614	-1.81	PDS5A	PDS5 cohesin associated factor A	Downregulated
A_33_P339	0.00093	0.000066	-1.81	MBD1	methyl-CpG binding domain protein 1	Downregulated
A_21_P000	0.000939	0.0000679	-1.81	PARGP1	poly (ADP-ribose) glycohydrolase pseudogene 1	Downregulated
A_21_P000	0.001471	0.000174	-1.81	lnc-CDC7-1	lnc-CDC7-1:1	Downregulated
A_21_P001	0.001611	0.000204	-1.81	LINC00342	long intergenic non-protein coding RNA 342	Downregulated
A_22_P000	0.001919	0.000278	-1.81	lnc-PAK2-1	lnc-PAK2-1:1	Downregulated
A_33_P333	0.003816	0.000815	-1.81	ZNF746	zinc finger protein 746	Downregulated
A_24_P235	0.003932	0.000852	-1.81	THAP5	THAP domain containing 5	Downregulated
A_21_P000	0.006961	0.00195	-1.81	RNASEH1-AS1	RNASEH1 antisense RNA 1	Downregulated
A_22_P000	0.007438	0.00214	-1.81	lnc-AL020996	lnc-AL020996.1-1:2	Downregulated
A_23_P381	0.013653	0.00478	-1.81	GGA3	golgi-associated, gamma adaptin ear containing, ARF binding protein 3	Downregulated
A_33_P330	0.000793	0.0000467	-1.82	RHOB	ras homolog family member B	Downregulated
A_33_P325	0.000814	0.0000498	-1.82	DPM3	dolichyl-phosphate mannosyltransferase polypeptide 3	Downregulated
A_32_P101	0.00082	0.0000507	-1.82	lnc-THNSL1-2	lnc-THNSL1-2:1	Downregulated
A_23_P734	0.000883	0.000059	-1.82	RUFY1	RUN and FYVE domain containing 1	Downregulated
A_22_P000	0.000922	0.0000647	-1.82	SLC25A30-AS1	SLC25A30 antisense RNA 1	Downregulated
A_23_P393	0.001065	0.000092	-1.82	HCST	hematopoietic cell signal transducer	Downregulated
A_24_P358	0.001312	0.000141	-1.82	GTPBP6	GTP binding protein 6 (putative)	Downregulated
A_33_P326	0.001657	0.000215	-1.82	KRTAP5-6	keratin associated protein 5-6	Downregulated
A_24_P409	0.001763	0.00024	-1.82	BCL2L13	BCL2-like 13 (apoptosis facilitator)	Downregulated
A_24_P315	0.002575	0.000451	-1.82	POM121L8P	POM121 transmembrane nucleoporin-like 8 pseudogene	Downregulated
A_22_P000	0.004157	0.000924	-1.82	lnc-RP4-604K	lnc-RP4-604K5.1.1-1:1	Downregulated
A_24_P203	0.005562	0.00142	-1.82	ACAT1	acetyl-CoA acetyltransferase 1	Downregulated
A_24_P416	0.005764	0.00149	-1.82	HOXB4	homeobox B4	Downregulated
A_24_P321	0.007357	0.00211	-1.82	TTL5	tubulin tyrosine ligase-like family member 5	Downregulated
A_24_P156	0.011666	0.00391	-1.82	MPL	MPL proto-oncogene, thrombopoietin receptor	Downregulated
A_22_P000	0.016458	0.00611	-1.82	lnc-NARF-1	lnc-NARF-1:1	Downregulated

A_21_P000	0.024008	0.00977	-1.82	lnc-CEP68-1	lnc-CEP68-1:2	Downregulated
A_21_P000	0.000795	0.0000469	-1.83	SLITRK5	SLIT and NTRK-like family, member 5	Downregulated
A_23_P240	0.000875	0.0000581	-1.83	IFIT2	interferon-induced protein with tetratricopeptide repeats 2	Downregulated
A_23_P116	0.001065	0.0000919	-1.83	HMGB4	high mobility group box 4	Downregulated
A_23_P141	0.001171	0.000113	-1.83	ZNF18	zinc finger protein 18	Downregulated
A_22_P000	0.001564	0.000194	-1.83	lnc-CDK12-2	lnc-CDK12-2:1	Downregulated
A_21_P000	0.001693	0.000223	-1.83	lnc-DCTD-1	lnc-DCTD-1:1	Downregulated
A_23_P250	0.001826	0.000256	-1.83	CLIP1	CAP-GLY domain containing linker protein 1	Downregulated
A_23_P167	0.002112	0.00033	-1.83	HIST1H2AC	histone cluster 1, H2ac	Downregulated
A_32_P197	0.00293	0.000546	-1.83	ZNF697	zinc finger protein 697	Downregulated
A_32_P230	0.003359	0.000677	-1.83	DOCK7	dedicator of cytokinesis 7	Downregulated
A_33_P329	0.007446	0.00214	-1.83	DISP1	dispatched homolog 1 (Drosophila)	Downregulated
A_24_P126	0.021799	0.00864	-1.83	TMEM194A	transmembrane protein 194A	Downregulated
A_33_P332	0.000792	0.0000463	-1.84	ANKLE2	ankyrin repeat and LEM domain containing 2	Downregulated
A_24_P117	0.000792	0.0000464	-1.84	LDLR	low density lipoprotein receptor	Downregulated
A_23_P161	0.000982	0.0000759	-1.84	ZDHC6	zinc finger, DHHC-type containing 6	Downregulated
A_24_P135	0.001134	0.000106	-1.84	PTPLB	protein tyrosine phosphatase-like (proline instead of catalytic arginine), r	Downregulated
A_23_P350	0.001171	0.000113	-1.84	TRIM56	tripartite motif containing 56	Downregulated
A_24_P232	0.002012	0.000304	-1.84	SMARCD1	SWI/SNF related, matrix associated, actin dependent regulator of chrom	Downregulated
A_23_P160	0.003056	0.000584	-1.84	NR0B2	nuclear receptor subfamily 0, group B, member 2	Downregulated
A_23_P298	0.003119	0.000604	-1.84	CBLB	Cbl proto-oncogene B, E3 ubiquitin protein ligase	Downregulated
A_23_P302	0.003542	0.000731	-1.84	ERAP2	endoplasmic reticulum aminopeptidase 2	Downregulated
A_23_P153	0.006575	0.00181	-1.84	GTDC1	glycosyltransferase-like domain containing 1	Downregulated
A_23_P253	0.013477	0.0047	-1.84	GRAMD1C	GRAM domain containing 1C	Downregulated
A_23_P342	0.035237	0.0157	-1.84	FBXW4	F-box and WD repeat domain containing 4	Downregulated
A_24_P472	0.000808	0.0000489	-1.85	ARF6	ADP-ribosylation factor 6	Downregulated
A_33_P334	0.001085	0.0000959	-1.85	MKLN1	muskelin 1, intracellular mediator containing kelch motifs	Downregulated
A_23_P365	0.001153	0.00011	-1.85	EID2	EP300 interacting inhibitor of differentiation 2	Downregulated
A_22_P000	0.001157	0.00011	-1.85	LOC1019282	uncharacterized LOC101928273	Downregulated
A_23_P615	0.001399	0.000159	-1.85	CD2BP2	CD2 (cytoplasmic tail) binding protein 2	Downregulated
A_23_P646	0.001424	0.000163	-1.85	ARHGAP9	Rho GTPase activating protein 9	Downregulated
A_23_P314	0.001427	0.000164	-1.85	ERVW-1	endogenous retrovirus group W, member 1	Downregulated
A_23_P386	0.001537	0.000188	-1.85	TWISTNB	TWIST neighbor	Downregulated
A_23_P390	0.001558	0.000193	-1.85	WDR83	WD repeat domain 83	Downregulated
A_21_P000	0.002016	0.000305	-1.85	lnc-SLC2A9-1	lnc-SLC2A9-1:1	Downregulated
A_24_P248	0.003749	0.000795	-1.85	ACSL3	acyl-CoA synthetase long-chain family member 3	Downregulated
A_33_P336	0.006501	0.00178	-1.85	CDC27	cell division cycle 27	Downregulated

A_33_P324	0.007142	0.00203	-1.85	PKN2	protein kinase N2	Downregulated
A_22_P000	0.014655	0.00526	-1.85	lnc-PAPLN-1	lnc-PAPLN-1:1	Downregulated
A_23_P200	0.01581	0.00579	-1.85	HYI	hydroxypyruvate isomerase (putative)	Downregulated
A_23_P116	0.019336	0.00746	-1.85	SPRR2D	small proline-rich protein 2D	Downregulated
A_23_P833	0.000776	0.0000439	-1.86	ENG	endoglin	Downregulated
A_23_P258	0.000853	0.0000548	-1.86	MRPS17	mitochondrial ribosomal protein S17	Downregulated
A_23_P169	0.0009	0.0000612	-1.86	ANXA4	annexin A4	Downregulated
A_24_P329	0.000913	0.0000638	-1.86	TSC1	tuberous sclerosis 1	Downregulated
A_23_P102	0.000947	0.0000693	-1.86	CXCR4	chemokine (C-X-C motif) receptor 4	Downregulated
A_23_P378	0.001215	0.000122	-1.86	STUB1	STIP1 homology and U-box containing protein 1, E3 ubiquitin protein ligase	Downregulated
A_33_P324	0.001453	0.000171	-1.86	SNORA23	small nucleolar RNA, H/ACA box 23	Downregulated
A_33_P334	0.001839	0.000259	-1.86	lnc-WWP2-1	lnc-WWP2-1:1	Downregulated
A_23_P455	0.001916	0.000278	-1.86	PPP2R3B	protein phosphatase 2, regulatory subunit B", beta	Downregulated
A_33_P320	0.002033	0.00031	-1.86	RASGRP2	RAS guanyl releasing protein 2 (calcium and DAG-regulated)	Downregulated
A_23_P153	0.002242	0.000365	-1.86	PPP5C	protein phosphatase 5, catalytic subunit	Downregulated
A_23_P232	0.00261	0.000459	-1.86	BLZF1	basic leucine zipper nuclear factor 1	Downregulated
A_21_P001	0.006435	0.00175	-1.86	LINC01474	long intergenic non-protein coding RNA 1474	Downregulated
A_23_P174	0.02294	0.00921	-1.86	TMEM230	transmembrane protein 230	Downregulated
A_33_P324	0.000786	0.0000453	-1.87	ZNF346	zinc finger protein 346	Downregulated
A_23_P372	0.001007	0.0000813	-1.87	CIPC	CLOCK-interacting pacemaker	Downregulated
A_33_P323	0.00174	0.000234	-1.87	ANKRD54	ankyrin repeat domain 54	Downregulated
A_23_P418	0.0018	0.000248	-1.87	C11orf65	chromosome 11 open reading frame 65	Downregulated
A_23_P359	0.001947	0.000285	-1.87	DNAH2	dynein, axonemal, heavy chain 2	Downregulated
A_21_P000	0.002166	0.000345	-1.87	SAP30L-AS1	SAP30L antisense RNA 1 (head to head)	Downregulated
A_23_P310	0.002855	0.000526	-1.87	C19orf52	chromosome 19 open reading frame 52	Downregulated
A_24_P568	0.003011	0.000571	-1.87	CRLF3	cytokine receptor-like factor 3	Downregulated
A_23_P211	0.003846	0.000826	-1.87	ABHD6	abhydrolase domain containing 6	Downregulated
A_33_P328	0.005623	0.00144	-1.87	PLCL1	phospholipase C-like 1	Downregulated
A_21_P000	0.00872	0.00266	-1.87	CNPY2	canopy FGF signaling regulator 2	Downregulated
A_22_P000	0.010142	0.00326	-1.87	lnc-TMEM14E	lnc-TMEM14E-2:1	Downregulated
A_22_P000	0.015057	0.00545	-1.87	lnc-PHC3-1	lnc-PHC3-1:1	Downregulated
A_21_P001	0.000801	0.0000478	-1.88	PLA2G10	phospholipase A2, group X	Downregulated
A_23_P323	0.000819	0.0000505	-1.88	PPP1CA	protein phosphatase 1, catalytic subunit, alpha isozyme	Downregulated
A_23_P351	0.000839	0.000053	-1.88	ALG6	ALG6, alpha-1,3-glucosyltransferase	Downregulated
A_33_P337	0.000977	0.0000753	-1.88	KLHDC4	kelch domain containing 4	Downregulated
A_33_P333	0.001112	0.000102	-1.88	GOLGA2P5	golgin A2 pseudogene 5	Downregulated
A_23_P830	0.001171	0.000113	-1.88	TLE4	transducin-like enhancer of split 4	Downregulated

A_23_P323	0.001211	0.000121	-1.88	LYRM4	LYR motif containing 4	Downregulated
A_33_P339	0.001227	0.000124	-1.88	INO80E	INO80 complex subunit E	Downregulated
A_24_P192	0.001688	0.000222	-1.88	FADS1	fatty acid desaturase 1	Downregulated
A_21_P000	0.001816	0.000254	-1.88	PITPNA-AS1	PITPNA antisense RNA 1	Downregulated
A_24_P651	0.002219	0.000358	-1.88	CDK10	cyclin-dependent kinase 10	Downregulated
A_32_P141	0.00302	0.000574	-1.88	COMMD7	COMM domain containing 7	Downregulated
A_33_P339	0.003103	0.000599	-1.88	FAM168B	family with sequence similarity 168, member B	Downregulated
A_22_P000	0.003421	0.000694	-1.88	lnc-PKN2-1	lnc-PKN2-1:1	Downregulated
A_24_P712	0.00383	0.000821	-1.88	PIK3CD	phosphatidylinositol-4,5-bisphosphate 3-kinase, catalytic subunit delta	Downregulated
A_33_P329	0.005674	0.00146	-1.88	C11orf49	chromosome 11 open reading frame 49	Downregulated
A_21_P000	0.009704	0.00307	-1.88	MAPKAPK5- l	MAPKAPK5 antisense RNA 1	Downregulated
A_23_P159	0.012122	0.0041	-1.88	CD8B	CD8b molecule	Downregulated
A_23_P831	0.016087	0.00592	-1.88	CDK5RAP2	CDK5 regulatory subunit associated protein 2	Downregulated
A_33_P324	0.000752	0.0000408	-1.89	SLC39A4	solute carrier family 39 (zinc transporter), member 4	Downregulated
A_33_P322	0.000763	0.000042	-1.89	SNORD3B-1	small nucleolar RNA, C/D box 3B-1	Downregulated
A_22_P000	0.000799	0.0000474	-1.89	lnc-CENPBD1	lnc-CENPBD1-1:1	Downregulated
A_23_P570	0.000905	0.0000621	-1.89	STAU1	staufen double-stranded RNA binding protein 1	Downregulated
A_23_P383	0.000995	0.0000783	-1.89	DHX58	DEXH (Asp-Glu-X-His) box polypeptide 58	Downregulated
A_23_P322	0.001026	0.0000843	-1.89	EFNA4	ephrin-A4	Downregulated
A_23_P415	0.001067	0.0000927	-1.89	PRMT9	protein arginine methyltransferase 9	Downregulated
A_33_P323	0.001359	0.00015	-1.89	EDEM3	ER degradation enhancer, mannosidase alpha-like 3	Downregulated
A_21_P001	0.001563	0.000194	-1.89	LOC285638	uncharacterized LOC285638	Downregulated
A_23_P425	0.002871	0.00053	-1.89	MED11	mediator complex subunit 11	Downregulated
A_22_P000	0.004984	0.00121	-1.89	CDK3	cyclin-dependent kinase 3	Downregulated
A_32_P221	0.005249	0.0013	-1.89	RRP15	ribosomal RNA processing 15 homolog (S. cerevisiae)	Downregulated
A_33_P321	0.006496	0.00177	-1.89	RFC3	replication factor C (activator 1) 3, 38kDa	Downregulated
A_23_P103	0.025445	0.0105	-1.89	TTC13	tetratricopeptide repeat domain 13	Downregulated
A_33_P329	0.026117	0.0109	-1.89	PRRC2B	proline-rich coiled-coil 2B	Downregulated
A_23_P118	0.000919	0.0000645	-1.9	FAHD1	fumarylacetoacetate hydrolase domain containing 1	Downregulated
A_24_P380	0.000949	0.0000696	-1.9	SMAP1	small ArfGAP 1	Downregulated
A_24_P262	0.001062	0.0000912	-1.9	DDA1	DET1 and DDB1 associated 1	Downregulated
A_24_P445	0.00121	0.000121	-1.9	MON1B	MON1 secretory trafficking family member B	Downregulated
A_23_P131	0.002149	0.000341	-1.9	MANBAL	mannosidase, beta A, lysosomal-like	Downregulated
A_24_P394	0.002786	0.000506	-1.9	SFXN1	sideroflexin 1	Downregulated
A_23_P300	0.002804	0.000511	-1.9	CCNY	cyclin Y	Downregulated
A_33_P337	0.004435	0.00102	-1.9	NR2C2	nuclear receptor subfamily 2, group C, member 2	Downregulated
A_23_P621	0.027476	0.0116	-1.9	ZC4H2	zinc finger, C4H2 domain containing	Downregulated

A_23_P119	0.000758	0.0000414	-1.91	EMP3	epithelial membrane protein 3	Downregulated
A_33_P339	0.00076	0.0000416	-1.91	POLR2G	polymerase (RNA) II (DNA directed) polypeptide G	Downregulated
A_22_P000	0.000764	0.0000422	-1.91	lnc-SYNC-2	lnc-SYNC-2:1	Downregulated
A_23_P259	0.000788	0.0000457	-1.91	ZBP1	Z-DNA binding protein 1	Downregulated
A_23_P745	0.000788	0.0000458	-1.91	CD53	CD53 molecule	Downregulated
A_23_P318	0.000838	0.0000528	-1.91	ZAK	sterile alpha motif and leucine zipper containing kinase AZK	Downregulated
A_23_P253	0.000853	0.0000549	-1.91	AUP1	ancient ubiquitous protein 1	Downregulated
A_23_P205	0.000875	0.0000582	-1.91	ABHD4	abhydrolase domain containing 4	Downregulated
A_22_P000	0.000909	0.0000631	-1.91	DPYS	dihydropyrimidinase	Downregulated
A_32_P184	0.000961	0.000072	-1.91	ARID5B	AT rich interactive domain 5B (MRF1-like)	Downregulated
A_23_P127	0.000964	0.0000728	-1.91	TUBGCP2	tubulin, gamma complex associated protein 2	Downregulated
A_24_P205	0.001079	0.0000949	-1.91	ACOT7	acyl-CoA thioesterase 7	Downregulated
A_33_P386	0.001187	0.000116	-1.91	TRABD	TraB domain containing	Downregulated
A_32_P358	0.001243	0.000128	-1.91	ICE1	interactor of little elongation complex ELL subunit 1	Downregulated
A_32_P163	0.001851	0.000262	-1.91	SPDYE3	speedy/RINGO cell cycle regulator family member E3	Downregulated
A_33_P339	0.001987	0.000297	-1.91	SMG1	SMG1 phosphatidylinositol 3-kinase-related kinase	Downregulated
A_22_P000	0.002956	0.000555	-1.91	ZRANB1	zinc finger, RAN-binding domain containing 1	Downregulated
A_24_P387	0.003163	0.000618	-1.91	PKN2	protein kinase N2	Downregulated
A_24_P282	0.049228	0.0236	-1.91	ABL1	ABL proto-oncogene 1, non-receptor tyrosine kinase	Downregulated
A_33_P328	0.000739	0.0000392	-1.92	IGFL1	IGF-like family member 1	Downregulated
A_33_P325	0.001087	0.0000963	-1.92	MAPKAP1	mitogen-activated protein kinase associated protein 1	Downregulated
A_33_P323	0.001376	0.000153	-1.92	TET2	tet methylcytosine dioxygenase 2	Downregulated
A_24_P368	0.001756	0.000238	-1.92	ARL10	ADP-ribosylation factor-like 10	Downregulated
A_32_P112	0.003657	0.000766	-1.92	CTF8	CTF8, chromosome transmission fidelity factor 8 homolog (S. cerevisiae)	Downregulated
A_32_P100	0.004771	0.00113	-1.92	LOC1019279	uncharacterized LOC101927974	Downregulated
A_33_P334	0.006202	0.00166	-1.92	MGME1	mitochondrial genome maintenance exonuclease 1	Downregulated
A_23_P567	0.006349	0.00172	-1.92	HNMT	histamine N-methyltransferase	Downregulated
A_33_P322	0.012104	0.0041	-1.92	NAT8B	N-acetyltransferase 8B (GCN5-related, putative, gene/pseudogene)	Downregulated
A_22_P000	0.01765	0.00666	-1.92	ZBTB20-AS1	ZBTB20 antisense RNA 1	Downregulated
A_22_P000	0.000807	0.0000487	-1.93	lnc-SLC15A1	lnc-SLC15A1-1:1	Downregulated
A_33_P328	0.000821	0.0000509	-1.93	RASA2	RAS p21 protein activator 2	Downregulated
A_23_P153	0.001069	0.0000936	-1.93	RALBP1	ralA binding protein 1	Downregulated
A_23_P989	0.001108	0.000101	-1.93	LRMP	lymphoid-restricted membrane protein	Downregulated
A_33_P383	0.001333	0.000145	-1.93	POU2F2	POU class 2 homeobox 2	Downregulated
A_23_P888	0.001543	0.000189	-1.93	DEF8	differentially expressed in FDCP 8 homolog (mouse)	Downregulated
A_22_P000	0.001688	0.000222	-1.93	lnc-C17orf48	lnc-C17orf48-1:1	Downregulated
A_33_P323	0.002908	0.000541	-1.93	FAM216A	family with sequence similarity 216, member A	Downregulated

A_23_P105	0.003609	0.000752	-1.93	APPL2	adaptor protein, phosphotyrosine interaction, PH domain and leucine zipper domain	Downregulated
A_22_P000	0.003609	0.000752	-1.93	lnc-DBN1-1	lnc-DBN1-1:1	Downregulated
A_33_P335	0.004373	0.001	-1.93	CCSAP	centriole, cilia and spindle-associated protein	Downregulated
A_21_P001	0.004493	0.00104	-1.93	LOC285626	uncharacterized LOC285626	Downregulated
A_23_P530	0.0046	0.00107	-1.93	ZNF215	zinc finger protein 215	Downregulated
A_23_P145	0.005651	0.00145	-1.93	TPK1	thiamin pyrophosphokinase 1	Downregulated
A_22_P000	0.006986	0.00196	-1.93	lnc-DDI1-1	lnc-DDI1-1:1	Downregulated
A_22_P000	0.01198	0.00404	-1.93	LOC1019285	uncharacterized LOC101928573	Downregulated
A_33_P322	0.025791	0.0107	-1.93	ERCC1	excision repair cross-complementation group 1	Downregulated
A_21_P001	0.026743	0.0112	-1.93	XLOC_I2_014814		Downregulated
A_23_P666	0.000837	0.0000528	-1.94	EVI2B	ecotropic viral integration site 2B	Downregulated
A_33_P334	0.000864	0.0000568	-1.94	APTX	aprataxin	Downregulated
A_24_P237	0.000887	0.0000596	-1.94	SASH3	SAM and SH3 domain containing 3	Downregulated
A_21_P000	0.000915	0.0000641	-1.94	lnc-TMCC1-4	lnc-TMCC1-4:1	Downregulated
A_33_P328	0.000971	0.000074	-1.94	TRAF3IP3	TRAF3 interacting protein 3	Downregulated
A_23_P700	0.000998	0.0000797	-1.94	PPAP2A	phosphatidic acid phosphatase type 2A	Downregulated
A_33_P329	0.001297	0.000138	-1.94	PLK1	polo-like kinase 1	Downregulated
A_23_P417	0.00165	0.000213	-1.94	IRF1	interferon regulatory factor 1	Downregulated
A_32_P201	0.001706	0.000228	-1.94	AMMECR1	Alport syndrome, mental retardation, midface hypoplasia and elliptocytosis 1	Downregulated
A_33_P333	0.003798	0.00081	-1.94	LOC1001320	uncharacterized LOC100132077	Downregulated
A_33_P337	0.004648	0.00109	-1.94	DYNC1LI2	dynein, cytoplasmic 1, light intermediate chain 2	Downregulated
A_23_P195	0.004644	0.00109	-1.94	TMEM223	transmembrane protein 223	Downregulated
A_22_P000	0.005219	0.00129	-1.94	lnc-PCYOX1L	lnc-PCYOX1L-1:1	Downregulated
A_23_P138	0.006706	0.00185	-1.94	GPN2	GPN-loop GTPase 2	Downregulated
A_23_P765	0.000712	0.0000358	-1.95	ITGB7	integrin, beta 7	Downregulated
A_24_P100	0.000801	0.0000476	-1.95	BCAS3	breast carcinoma amplified sequence 3	Downregulated
A_23_P373	0.000805	0.0000484	-1.95	CIDEB	cell death-inducing DFFA-like effector b	Downregulated
A_23_P409	0.000808	0.0000489	-1.95	FAM83C	family with sequence similarity 83, member C	Downregulated
A_21_P001	0.000814	0.0000501	-1.95	EBLN3	endogenous Bornavirus-like nucleoprotein 3	Downregulated
A_23_P167	0.001055	0.0000898	-1.95	CENPC	centromere protein C	Downregulated
A_22_P000	0.001086	0.0000962	-1.95	lnc-NPDC1-1	lnc-NPDC1-1:1	Downregulated
A_23_P630	0.001398	0.000158	-1.95	CERS2	ceramide synthase 2	Downregulated
A_24_P119	0.001453	0.000171	-1.95	MYH15	myosin, heavy chain 15	Downregulated
A_23_P147	0.001563	0.000194	-1.95	RAB33A	RAB33A, member RAS oncogene family	Downregulated
A_23_P242	0.001626	0.000208	-1.95	MAGOHB	mago-nashi homolog B (Drosophila)	Downregulated
A_21_P000	0.001812	0.000252	-1.95	C5orf56	chromosome 5 open reading frame 56	Downregulated
A_33_P330	0.002361	0.000394	-1.95	ANKRD30BL	ankyrin repeat domain 30B-like	Downregulated

A_32_P269	0.003101	0.000599	-1.95	ERICH1	glutamate-rich 1	Downregulated
A_33_P334	0.006483	0.00177	-1.95	CEP83	centrosomal protein 83kDa	Downregulated
A_33_P359	0.007304	0.00209	-1.95	HABP4	hyaluronan binding protein 4	Downregulated
A_23_P170	0.00796	0.00235	-1.95	ZNF692	zinc finger protein 692	Downregulated
A_32_P178	0.013227	0.00458	-1.95	C16orf86	chromosome 16 open reading frame 86	Downregulated
A_22_P000	0.01384	0.00486	-1.95	lnc-RP11-43C	lnc-RP11-43D2.2.1-3:1	Downregulated
A_21_P000	0.01384	0.00486	-1.95	SNORD119	small nucleolar RNA, C/D box 119	Downregulated
A_33_P329	0.021484	0.00848	-1.95	ASB14	ankyrin repeat and SOCS box containing 14	Downregulated
A_23_P324	0.000963	0.0000726	-1.96	KIAA0355	KIAA0355	Downregulated
A_21_P000	0.001107	0.000101	-1.96	FLJ42351	uncharacterized LOC400999	Downregulated
A_23_P333	0.001274	0.000134	-1.96	ERGIC1	endoplasmic reticulum-golgi intermediate compartment (ERGIC) 1	Downregulated
A_21_P001	0.001395	0.000157	-1.96	LOC1001281	uncharacterized LOC100128108	Downregulated
A_24_P108	0.001693	0.000223	-1.96	KCTD17	potassium channel tetramerization domain containing 17	Downregulated
A_22_P000	0.001918	0.000278	-1.96	lnc-DLL1-3	lnc-DLL1-3:1	Downregulated
A_21_P000	0.003228	0.000637	-1.96	lnc-C12orf74-	lnc-C12orf74-1:1	Downregulated
A_33_P341	0.004718	0.00112	-1.96	PLXNA3	plexin A3	Downregulated
A_33_P322	0.009494	0.00298	-1.96	AMER1	APC membrane recruitment protein 1	Downregulated
A_33_P329	0.009651	0.00305	-1.96	PTPRCAP	protein tyrosine phosphatase, receptor type, C-associated protein	Downregulated
A_22_P000	0.013095	0.00453	-1.96	lnc-NPIPL2-2	lnc-NPIPL2-2:1	Downregulated
A_22_P000	0.000707	0.0000342	-1.97	lnc-TSPYL2-2	lnc-TSPYL2-2:1	Downregulated
A_23_P975	0.000718	0.0000368	-1.97	VAMP3	vesicle-associated membrane protein 3	Downregulated
A_22_P000	0.000758	0.0000414	-1.97	LOC1027245	uncharacterized LOC102724508	Downregulated
A_33_P324	0.001015	0.0000824	-1.97	CAMK2N2	calcium/calmodulin-dependent protein kinase II inhibitor 2	Downregulated
A_22_P000	0.00115	0.000109	-1.97	lnc-LUZP1-1	lnc-LUZP1-1:1	Downregulated
A_23_P211	0.001262	0.000132	-1.97	PAXBP1	PAX3 and PAX7 binding protein 1	Downregulated
A_33_P334	0.001562	0.000194	-1.97	TBL1X	transducin (beta)-like 1X-linked	Downregulated
A_24_P402	0.001647	0.000213	-1.97	ITM2C	integral membrane protein 2C	Downregulated
A_32_P231	0.003469	0.000708	-1.97	GOLGA6L9	golgin A6 family-like 9	Downregulated
A_33_P337	0.004031	0.000882	-1.97	LOC1002708	uncharacterized LOC100270804	Downregulated
A_32_P170	0.005106	0.00125	-1.97	POLA1	polymerase (DNA directed), alpha 1, catalytic subunit	Downregulated
A_32_P721	0.014802	0.00533	-1.97	LINC00669	long intergenic non-protein coding RNA 669	Downregulated
A_23_P209	0.016063	0.00591	-1.97	COLGALT1	collagen beta(1-O)galactosyltransferase 1	Downregulated
A_22_P000	0.01721	0.00646	-1.97	lnc-CCDC69-1	lnc-CCDC69-1:1	Downregulated
A_23_P108	0.022843	0.00916	-1.97	TJP3	tight junction protein 3	Downregulated
A_21_P000	0.038546	0.0176	-1.97	lnc-RPS7-1	lnc-RPS7-1:6	Downregulated
A_24_P342	0.000709	0.000035	-1.98	RERE	arginine-glutamic acid dipeptide (RE) repeats	Downregulated
A_33_P326	0.000752	0.0000407	-1.98	CECR1	cat eye syndrome chromosome region, candidate 1	Downregulated

A_24_P322	0.000766	0.0000427	-1.98	IL10RB	interleukin 10 receptor, beta	Downregulated
A_33_P321	0.001006	0.0000808	-1.98	SEC13	SEC13 homolog (S. cerevisiae)	Downregulated
A_24_P108	0.001068	0.0000932	-1.98	RTTN	rotatin	Downregulated
A_21_P000	0.001235	0.000126	-1.98	lnc-RP11-736	lnc-RP11-736N17.6.1-1:1	Downregulated
A_23_P430	0.001313	0.000141	-1.98	ELP3	elongator acetyltransferase complex subunit 3	Downregulated
A_24_P233	0.001342	0.000147	-1.98	CEPT1	choline/ethanolamine phosphotransferase 1	Downregulated
A_23_P639	0.001913	0.000277	-1.98	WDR11	WD repeat domain 11	Downregulated
A_24_P244	0.002199	0.000354	-1.98	BSCL2	Berardinelli-Seip congenital lipodystrophy 2 (seipin)	Downregulated
A_33_P341	0.00608	0.00161	-1.98	ADAL	adenosine deaminase-like	Downregulated
A_22_P000	0.010112	0.00325	-1.98	lnc-SZT2-2	lnc-SZT2-2:1	Downregulated
A_33_P335	0.000707	0.000034	-1.99	ITGA4	integrin, alpha 4 (antigen CD49D, alpha 4 subunit of VLA-4 receptor)	Downregulated
A_23_P357	0.000737	0.0000388	-1.99	APOBEC3F	apolipoprotein B mRNA editing enzyme, catalytic polypeptide-like 3F	Downregulated
A_23_P273	0.000931	0.0000664	-1.99	SMAD4	SMAD family member 4	Downregulated
A_19_P003	0.000945	0.000069	-1.99	WDFY4	WDFY family member 4	Downregulated
A_22_P000	0.000995	0.0000788	-1.99	lnc-MED10-5	lnc-MED10-5:1	Downregulated
A_24_P636	0.001085	0.0000959	-1.99	STK17B	serine/threonine kinase 17b	Downregulated
A_21_P000	0.001395	0.000157	-1.99	lnc-SELV.1-1	lnc-SELV.1-1:1	Downregulated
A_21_P000	0.002068	0.000319	-1.99	lnc-SHH-1	lnc-SHH-1:1	Downregulated
A_33_P384	0.002566	0.000447	-1.99	SLC25A15	solute carrier family 25 (mitochondrial carrier; ornithine transporter) memt	Downregulated
A_33_P329	0.002995	0.000567	-1.99	LINC00894	long intergenic non-protein coding RNA 894	Downregulated
A_21_P001	0.00452	0.00105	-1.99	C19orf68	chromosome 19 open reading frame 68	Downregulated
A_33_P335	0.005261	0.00131	-1.99	GPATCH2	G patch domain containing 2	Downregulated
A_33_P322	0.011775	0.00396	-1.99	CD8A	CD8a molecule	Downregulated
A_23_P255	0.00082	0.0000508	-2	CCDC109B	coiled-coil domain containing 109B	Downregulated
A_23_P133	0.000848	0.0000544	-2	MRPS27	mitochondrial ribosomal protein S27	Downregulated
A_23_P356	0.000912	0.0000636	-2	FBXO11	F-box protein 11	Downregulated
A_19_P003	0.000995	0.000078	-2	SCARNA16	small Cajal body-specific RNA 16	Downregulated
A_22_P000	0.001041	0.0000868	-2	lnc-PINK1-2	lnc-PINK1-2:1	Downregulated
A_33_P326	0.001098	0.0000988	-2	ABHD17B	abhydrolase domain containing 17B	Downregulated
A_33_P339	0.00112	0.000103	-2	RPS27	ribosomal protein S27	Downregulated
A_22_P000	0.001172	0.000113	-2	lnc-NOS2-2	lnc-NOS2-2:1	Downregulated
A_23_P213	0.001178	0.000114	-2	PALLD	palladin, cytoskeletal associated protein	Downregulated
A_24_P475	0.001469	0.000174	-2	OPA3	optic atrophy 3 (autosomal recessive, with chorea and spastic paraplegi	Downregulated
A_23_P244	0.001695	0.000224	-2	DHCR7	7-dehydrocholesterol reductase	Downregulated
A_33_P336	0.001946	0.000285	-2	QKI	QKI, KH domain containing, RNA binding	Downregulated
A_22_P000	0.004668	0.0011	-2	lnc-AGMAT-1	lnc-AGMAT-1:1	Downregulated
A_22_P000	0.010871	0.00355	-2	LOC1019296	uncharacterized LOC101929641	Downregulated

A_22_P000	0.015182	0.0055	-2	Inc-TRIM63-1	Inc-TRIM63-1:1	Downregulated
A_33_P326	0.016602	0.00618	-2	OR2D3	olfactory receptor, family 2, subfamily D, member 3	Downregulated
A_23_P351	0.017088	0.0064	-2	NPHP4	nephronophthisis 4	Downregulated
A_23_P799	0.021538	0.00851	-2	PSMF1	proteasome (prosome, macropain) inhibitor subunit 1 (PI31)	Downregulated
A_23_P122	0.022882	0.00918	-2	TAF6	TAF6 RNA polymerase II, TATA box binding protein (TBP)-associated fa	Downregulated
A_24_P182	0.024104	0.00982	-2	KCNAB1	potassium channel, voltage gated subfamily A regulatory beta subunit 1	Downregulated
A_23_P320	0.000707	0.0000341	-2.01	MEF2C	myocyte enhancer factor 2C	Downregulated
A_23_P125	0.00072	0.000037	-2.01	TRAPPC1	trafficking protein particle complex 1	Downregulated
A_33_P334	0.000814	0.00005	-2.01	POMC	proopiomelanocortin	Downregulated
A_23_P131	0.000883	0.0000592	-2.01	PIGF	phosphatidylinositol glycan anchor biosynthesis, class F	Downregulated
A_33_P331	0.000909	0.000063	-2.01	PXYLP1	2-phosphoxylose phosphatase 1	Downregulated
A_23_P403	0.001035	0.0000858	-2.01	MAPRE1	microtubule-associated protein, RP/EB family, member 1	Downregulated
A_23_P217	0.001265	0.000132	-2.01	IDS	iduronate 2-sulfatase	Downregulated
A_24_P717	0.001453	0.00017	-2.01	DIP2A	DIP2 disco-interacting protein 2 homolog A (Drosophila)	Downregulated
A_23_P119	0.001453	0.00017	-2.01	TTC32	tetratricopeptide repeat domain 32	Downregulated
A_23_P133	0.00174	0.000234	-2.01	PREP	prolyl endopeptidase	Downregulated
A_24_P298	0.002112	0.00033	-2.01	PRMT5	protein arginine methyltransferase 5	Downregulated
A_33_P334	0.017831	0.00674	-2.01	TLCD2	TLC domain containing 2	Downregulated
A_23_P396	0.000792	0.0000465	-2.02	TBC1D2B	TBC1 domain family, member 2B	Downregulated
A_33_P321	0.000799	0.0000473	-2.02	DGKQ	diacylglycerol kinase, theta 110kDa	Downregulated
A_23_P414	0.000883	0.000059	-2.02	TRPC3	transient receptor potential cation channel, subfamily C, member 3	Downregulated
A_24_P376	0.000888	0.0000599	-2.02	MBD1	methyl-CpG binding domain protein 1	Downregulated
A_23_P207	0.000959	0.0000711	-2.02	PPY	pancreatic polypeptide	Downregulated
A_23_P603	0.001115	0.000102	-2.02	SMARCA2	SWI/SNF related, matrix associated, actin dependent regulator of chrom	Downregulated
A_23_P204	0.001299	0.000139	-2.02	PPP1CC	protein phosphatase 1, catalytic subunit, gamma isozyme	Downregulated
A_23_P164	0.001403	0.000159	-2.02	FKRP	fukutin related protein	Downregulated
A_23_P254	0.005232	0.0013	-2.02	TUBB6	tubulin, beta 6 class V	Downregulated
A_32_P761	0.000697	0.0000321	-2.03	RWDD4	RWD domain containing 4	Downregulated
A_23_P652	0.000707	0.0000345	-2.03	TMTC4	transmembrane and tetratricopeptide repeat containing 4	Downregulated
A_33_P331	0.000712	0.0000359	-2.03	INTS6	integrator complex subunit 6	Downregulated
A_21_P001	0.000718	0.0000368	-2.03	XLOC_I2_011987		Downregulated
A_23_P145	0.000744	0.00004	-2.03	BAK1	BCL2-antagonist/killer 1	Downregulated
A_21_P000	0.000959	0.0000712	-2.03	Inc-HMBOX1-	Inc-HMBOX1-1:1	Downregulated
A_24_P940	0.000964	0.0000729	-2.03	IPCEF1	interaction protein for cytohesin exchange factors 1	Downregulated
A_32_P466	0.000995	0.000079	-2.03	VWA3B	von Willebrand factor A domain containing 3B	Downregulated
A_23_P139	0.001321	0.000142	-2.03	ARFIP2	ADP-ribosylation factor interacting protein 2	Downregulated
A_24_P397	0.001382	0.000154	-2.03	ZC2HC1A	zinc finger, C2HC-type containing 1A	Downregulated

A_21_P001	0.001968	0.000292	-2.03	LINC01347	long intergenic non-protein coding RNA 1347	Downregulated
A_23_P147	0.002117	0.000332	-2.03	ZNF280D	zinc finger protein 280D	Downregulated
A_22_P000	0.002311	0.000381	-2.03	lnc-OSBPL9-2	lnc-OSBPL9-2:1	Downregulated
A_21_P001	0.00348	0.000712	-2.03	LINC00869	long intergenic non-protein coding RNA 869	Downregulated
A_33_P326	0.005233	0.0013	-2.03	ZDHHC2	zinc finger, DHHC-type containing 2	Downregulated
A_22_P000	0.006753	0.00187	-2.03	LOC153684	uncharacterized LOC153684	Downregulated
A_33_P323	0.00819	0.00244	-2.03	MAP3K7CL	MAP3K7 C-terminal like	Downregulated
A_23_P925	0.014847	0.00535	-2.03	SYK	spleen tyrosine kinase	Downregulated
A_23_P463	0.029806	0.0128	-2.03	TNFAIP8L2	tumor necrosis factor, alpha-induced protein 8-like 2	Downregulated
A_33_P338	0.000691	0.0000306	-2.04	SKAP2	src kinase associated phosphoprotein 2	Downregulated
A_33_P358	0.000699	0.0000323	-2.04	GNAI2	guanine nucleotide binding protein (G protein), alpha inhibiting activity p	Downregulated
A_32_P101	0.000764	0.0000422	-2.04	USP39	ubiquitin specific peptidase 39	Downregulated
A_23_P638	0.000967	0.0000735	-2.04	GOT1	glutamic-oxaloacetic transaminase 1, soluble	Downregulated
A_32_P881	0.001021	0.0000832	-2.04	YPEL1	yippee-like 1 (Drosophila)	Downregulated
A_23_P436	0.00124	0.000127	-2.04	MLLT4	myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, Drosophila)	Downregulated
A_21_P001	0.001443	0.000168	-2.04	XLOC_12_009134		Downregulated
A_22_P000	0.001847	0.000261	-2.04	lnc-ME3-1	lnc-ME3-1:1	Downregulated
A_33_P342	0.00235	0.00039	-2.04	GOLGA7	golgin A7	Downregulated
A_22_P000	0.003458	0.000705	-2.04	lnc-TFDP2-1	lnc-TFDP2-1:1	Downregulated
A_24_P142	0.010357	0.00335	-2.04	PI4KA	phosphatidylinositol 4-kinase, catalytic, alpha	Downregulated
A_22_P000	0.014118	0.00499	-2.04	ZBTB20	zinc finger and BTB domain containing 20	Downregulated
A_24_P153	0.017086	0.0064	-2.04	OSBPL8	oxysterol binding protein-like 8	Downregulated
A_33_P335	0.000696	0.0000317	-2.05	GPD2	glycerol-3-phosphate dehydrogenase 2 (mitochondrial)	Downregulated
A_33_P325	0.000697	0.0000321	-2.05	RPS23	ribosomal protein S23	Downregulated
A_33_P341	0.000781	0.0000446	-2.05	ADTRP	androgen-dependent TFPI-regulating protein	Downregulated
A_21_P000	0.000928	0.0000657	-2.05	SNORA11C	small nucleolar RNA, H/ACA box 11C	Downregulated
A_23_P205	0.000938	0.0000676	-2.05	BCL11B	B-cell CLL/lymphoma 11B (zinc finger protein)	Downregulated
A_21_P000	0.001043	0.0000873	-2.05	USP3-AS1	USP3 antisense RNA 1	Downregulated
A_32_P498	0.00139	0.000156	-2.05	RHOQ	ras homolog family member Q	Downregulated
A_24_P898	0.001699	0.000226	-2.05	CYHR1	cysteine/histidine-rich 1	Downregulated
A_23_P325	0.001699	0.000226	-2.05	SCAI	suppressor of cancer cell invasion	Downregulated
A_22_P000	0.00203	0.000309	-2.05	GAS5-AS1	GAS5 antisense RNA 1	Downregulated
A_33_P388	0.002705	0.000484	-2.05	PPA2	pyrophosphatase (inorganic) 2	Downregulated
A_33_P321	0.006067	0.00161	-2.05	CHIC1	cysteine-rich hydrophobic domain 1	Downregulated
A_33_P321	0.006352	0.00172	-2.05	RCOR1	REST corepressor 1	Downregulated
A_24_P276	0.000718	0.0000368	-2.06	RCOR3	REST corepressor 3	Downregulated
A_23_P809	0.000752	0.0000408	-2.06	RNF5	ring finger protein 5, E3 ubiquitin protein ligase	Downregulated

A_22_P000	0.000764	0.0000422	-2.06	SMARCC2	SWI/SNF related, matrix associated, actin dependent regulator of chrom	Downregulated
A_23_P593	0.000814	0.0000498	-2.06	HECA	headcase homolog (Drosophila)	Downregulated
A_22_P000	0.002246	0.000367	-2.06	RNF139-AS1	RNF139 antisense RNA 1 (head to head)	Downregulated
A_22_P000	0.002853	0.000525	-2.06	lnc-C6orf225-	lnc-C6orf225-1:1	Downregulated
A_24_P288	0.003525	0.000724	-2.06	SRRD	SRR1 domain containing	Downregulated
A_33_P681	0.00689	0.00193	-2.06	lnc-GGCT-1	lnc-GGCT-1:6	Downregulated
A_23_P601	0.008676	0.00264	-2.06	ABL1	ABL proto-oncogene 1, non-receptor tyrosine kinase	Downregulated
A_33_P332	0.011297	0.00374	-2.06	BDNF-AS	BDNF antisense RNA	Downregulated
A_33_P336	0.000743	0.0000397	-2.07	PTPRC	protein tyrosine phosphatase, receptor type, C	Downregulated
A_23_P426	0.000765	0.0000425	-2.07	GGCT	gamma-glutamylcyclotransferase	Downregulated
A_33_P332	0.000869	0.0000576	-2.07	CDK19	cyclin-dependent kinase 19	Downregulated
A_23_P345	0.000977	0.0000752	-2.07	RPAP1	RNA polymerase II associated protein 1	Downregulated
A_33_P349	0.000987	0.0000765	-2.07	lnc-AC016745-	lnc-AC016745.1-2:1	Downregulated
A_23_P562	0.00104	0.0000867	-2.07	POLR2I	polymerase (RNA) II (DNA directed) polypeptide I, 14.5kDa	Downregulated
A_24_P493	0.001042	0.000087	-2.07	AAMDC	adipogenesis associated, Mth938 domain containing	Downregulated
A_33_P336	0.001611	0.000204	-2.07	KLF6	Kruppel-like factor 6	Downregulated
A_32_P173	0.001881	0.000269	-2.07	TMEM41B	transmembrane protein 41B	Downregulated
A_33_P321	0.002319	0.000383	-2.07	FAM230B	family with sequence similarity 230, member B (non-protein coding)	Downregulated
A_23_P369	0.003304	0.000661	-2.07	MSI2	musashi RNA-binding protein 2	Downregulated
A_22_P000	0.003649	0.000764	-2.07	lnc-COL9A2-1	lnc-COL9A2-1:1	Downregulated
A_33_P339	0.004219	0.000946	-2.07	IPCEF1	interaction protein for cytohesin exchange factors 1	Downregulated
A_23_P407	0.004288	0.000969	-2.07	DNM2	dynamamin 2	Downregulated
A_24_P351	0.004894	0.00118	-2.07	GATAD1	GATA zinc finger domain containing 1	Downregulated
A_33_P326	0.000709	0.0000348	-2.08	NCK2	NCK adaptor protein 2	Downregulated
A_23_P154	0.000775	0.0000437	-2.08	NAGK	N-acetylglucosamine kinase	Downregulated
A_23_P122	0.000995	0.0000787	-2.08	DAXX	death-domain associated protein	Downregulated
A_21_P000	0.001095	0.0000979	-2.08	lnc-ZNF169-1	lnc-ZNF169-1:1	Downregulated
A_33_P336	0.001097	0.0000983	-2.08	KCTD5	potassium channel tetramerization domain containing 5	Downregulated
A_33_P325	0.002816	0.000515	-2.08	SH2D3A	SH2 domain containing 3A	Downregulated
A_33_P339	0.003175	0.000622	-2.08	FAM178A	family with sequence similarity 178, member A	Downregulated
A_24_P314	0.008684	0.00265	-2.08	GOLGA2P2Y	golgin A2 pseudogene 2, Y-linked	Downregulated
A_23_P743	0.014083	0.00497	-2.08	NUF2	NUF2, NDC80 kinetochore complex component	Downregulated
A_33_P337	0.019239	0.00741	-2.08	FGD5P1	FYVE, RhoGEF and PH domain containing 5 pseudogene 1	Downregulated
A_21_P000	0.000669	0.0000285	-2.09	RNU11	RNA, U11 small nuclear	Downregulated
A_33_P336	0.000706	0.0000335	-2.09	BSDC1	BSD domain containing 1	Downregulated
A_33_P337	0.000726	0.0000377	-2.09	TXLNA	taxilin alpha	Downregulated
A_23_P480	0.00074	0.0000394	-2.09	CD27	CD27 molecule	Downregulated

A_21_P001	0.000844	0.0000536	-2.09	LOC1019284	uncharacterized LOC101928464	Downregulated
A_22_P000	0.000998	0.0000798	-2.09	lnc-PRR15L-2	lnc-PRR15L-2:2	Downregulated
A_24_P274	0.00112	0.000103	-2.09	STAT1	signal transducer and activator of transcription 1, 91kDa	Downregulated
A_21_P000	0.001678	0.000219	-2.09	lnc-CCDC111	lnc-CCDC111-1:1	Downregulated
A_21_P000	0.002947	0.000551	-2.09	lnc-AMZ2-1	lnc-AMZ2-1:1	Downregulated
A_24_P912	0.003176	0.000623	-2.09	KIAA0754	KIAA0754	Downregulated
A_33_P335	0.004396	0.00101	-2.09	VAC14-AS1	VAC14 antisense RNA 1	Downregulated
A_23_P897	0.005822	0.00152	-2.09	CTDP1	CTD (carboxy-terminal domain, RNA polymerase II, polypeptide A) phosphatase 1	Downregulated
A_23_P544	0.013794	0.00484	-2.09	ACSBG1	acyl-CoA synthetase bubblegum family member 1	Downregulated
A_21_P000	0.016316	0.00604	-2.09	lnc-MIB2-1	lnc-MIB2-1:5	Downregulated
A_24_P112	0.021843	0.00867	-2.09	ENTPD7	ectonucleoside triphosphate diphosphohydrolase 7	Downregulated
A_33_P728	0.000707	0.0000343	-2.1	LOC401320	uncharacterized LOC401320	Downregulated
A_23_P106	0.000715	0.0000363	-2.1	HSPBP1	HSPA (heat shock 70kDa) binding protein, cytoplasmic cochaperone 1	Downregulated
A_33_P340	0.000721	0.0000373	-2.1	HAS3	hyaluronan synthase 3	Downregulated
A_23_P104	0.000739	0.0000392	-2.1	CPT1A	carnitine palmitoyltransferase 1A (liver)	Downregulated
A_32_P121	0.000864	0.0000568	-2.1	DOK3	docking protein 3	Downregulated
A_21_P000	0.000866	0.0000572	-2.1	SNORA4	small nucleolar RNA, H/ACA box 4	Downregulated
A_23_P357	0.001043	0.0000873	-2.1	ANXA6	annexin A6	Downregulated
A_33_P322	0.00105	0.0000886	-2.1	CD151	CD151 molecule (Raph blood group)	Downregulated
A_23_P776	0.00112	0.000103	-2.1	MAP1LC3B	microtubule-associated protein 1 light chain 3 beta	Downregulated
A_23_P322	0.001138	0.000107	-2.1	KLF4	Kruppel-like factor 4 (gut)	Downregulated
A_23_P384	0.001424	0.000163	-2.1	CCDC14	coiled-coil domain containing 14	Downregulated
A_33_P334	0.002055	0.000316	-2.1	JMJD7	jumonji domain containing 7	Downregulated
A_23_P200	0.002237	0.000363	-2.1	NADK	NAD kinase	Downregulated
A_23_P394	0.002243	0.000366	-2.1	ALKBH6	alkB, alkylation repair homolog 6 (E. coli)	Downregulated
A_21_P001	0.003023	0.000575	-2.1	XLOC_I2_013857		Downregulated
A_23_P518	0.003278	0.000652	-2.1	PUSL1	pseudouridylate synthase-like 1	Downregulated
A_33_P328	0.006575	0.00181	-2.1	CTNS	cystinosin, lysosomal cystine transporter	Downregulated
A_24_P353	0.008507	0.00257	-2.1	LIMK2	LIM domain kinase 2	Downregulated
A_24_P694	0.000709	0.0000351	-2.11	SLC25A32	solute carrier family 25 (mitochondrial folate carrier), member 32	Downregulated
A_21_P000	0.00075	0.0000404	-2.11	LOC1019273	uncharacterized LOC101927334	Downregulated
A_24_P410	0.000813	0.0000496	-2.11	VGLL4	vestigial-like family member 4	Downregulated
A_22_P000	0.00094	0.0000682	-2.11	lnc-HIST1H3F	lnc-HIST1H3F-1:1	Downregulated
A_33_P336	0.001131	0.000105	-2.11	BLVRB	biliverdin reductase B	Downregulated
A_23_P159	0.001196	0.000118	-2.11	SNRNP35	small nuclear ribonucleoprotein 35kDa (U11/U12)	Downregulated
A_23_P138	0.001215	0.000122	-2.11	C10orf95	chromosome 10 open reading frame 95	Downregulated
A_23_P120	0.001264	0.000132	-2.11	MTX2	metaxin 2	Downregulated

A_21_P000	0.002744	0.000495	-2.11	SNORD34	small nucleolar RNA, C/D box 34	Downregulated
A_33_P350	0.00433	0.000985	-2.11	CASP10	caspase 10, apoptosis-related cysteine peptidase	Downregulated
A_21_P000	0.004816	0.00115	-2.11	lnc-AC07409	lnc-AC074091.13.1-1:1	Downregulated
A_23_P189	0.005872	0.00153	-2.11	MIER3	mesoderm induction early response 1, family member 3	Downregulated
A_21_P001	0.008161	0.00243	-2.11	LOC1005074	uncharacterized LOC100507460	Downregulated
A_33_P330	0.011279	0.00374	-2.11	RBM20	RNA binding motif protein 20	Downregulated
A_24_P153	0.011931	0.00402	-2.11	TRIM37	tripartite motif containing 37	Downregulated
A_24_P920	0.023878	0.0097	-2.11	COMMD6	COMM domain containing 6	Downregulated
A_23_P250	0.000848	0.0000543	-2.12	ST3GAL6	ST3 beta-galactoside alpha-2,3-sialyltransferase 6	Downregulated
A_24_P295	0.000855	0.0000555	-2.12	RASSF4	Ras association (RalGDS/AF-6) domain family member 4	Downregulated
A_21_P000	0.000857	0.0000558	-2.12	HMGA1P7	high mobility group AT-hook 1 pseudogene 7	Downregulated
A_24_P381	0.000959	0.0000714	-2.12	ITM2B	integral membrane protein 2B	Downregulated
A_21_P000	0.001163	0.000112	-2.12	LINC01138	long intergenic non-protein coding RNA 1138	Downregulated
A_32_P165	0.00203	0.000309	-2.12	WDR92	WD repeat domain 92	Downregulated
A_21_P000	0.004687	0.00111	-2.12	lnc-H3F3C-1	lnc-H3F3C-1:1	Downregulated
A_21_P001	0.01356	0.00474	-2.12	XLOC_I2_003647		Downregulated
A_21_P000	0.015921	0.00584	-2.12	lnc-AC01231	lnc-AC012313.1-1:4	Downregulated
A_21_P000	0.000647	0.0000267	-2.13	BTN2A1	butyrophilin, subfamily 2, member A1	Downregulated
A_23_P612	0.000693	0.0000309	-2.13	FAM207A	family with sequence similarity 207, member A	Downregulated
A_23_P201	0.000792	0.0000465	-2.13	LAMC1	laminin, gamma 1 (formerly LAMB2)	Downregulated
A_23_P282	0.000808	0.0000489	-2.13	ACTR1B	ARP1 actin-related protein 1 homolog B, centractin beta (yeast)	Downregulated
A_22_P000	0.00112	0.000103	-2.13	lnc-IL15RA-1	lnc-IL15RA-1:1	Downregulated
A_21_P000	0.002101	0.000327	-2.13	lnc-GOLGA8J	lnc-GOLGA8J-1:1	Downregulated
A_32_P416	0.003175	0.000622	-2.13	F5	coagulation factor V (proaccelerin, labile factor)	Downregulated
A_33_P337	0.005033	0.00122	-2.13	PDE5A	phosphodiesterase 5A, cGMP-specific	Downregulated
A_23_P112	0.005093	0.00124	-2.13	DNAJB5	DnaJ (Hsp40) homolog, subfamily B, member 5	Downregulated
A_33_P323	0.017742	0.0067	-2.13	AGFG1	ArfGAP with FG repeats 1	Downregulated
A_33_P322	0.000693	0.0000309	-2.14	DAPK3	death-associated protein kinase 3	Downregulated
A_32_P209	0.000699	0.0000323	-2.14	CIITA	class II, major histocompatibility complex, transactivator	Downregulated
A_23_P428	0.000739	0.0000392	-2.14	CHCHD4	coiled-coil-helix-coiled-coil-helix domain containing 4	Downregulated
A_24_P273	0.000754	0.000041	-2.14	EML4	echinoderm microtubule associated protein like 4	Downregulated
A_23_P156	0.000888	0.0000599	-2.14	CNOT4	CCR4-NOT transcription complex, subunit 4	Downregulated
A_24_P274	0.000963	0.0000726	-2.14	ARRDC3	arrestin domain containing 3	Downregulated
A_23_P237	0.001085	0.0000959	-2.14	VPS45	vacuolar protein sorting 45 homolog (S. cerevisiae)	Downregulated
A_33_P338	0.001092	0.0000975	-2.14	HSPA6	heat shock 70kDa protein 6 (HSP70B')	Downregulated
A_21_P001	0.001265	0.000132	-2.14	XLOC_I2_005490		Downregulated
A_21_P001	0.001386	0.000155	-2.14	C9orf3	chromosome 9 open reading frame 3	Downregulated

A_24_P971	0.002219	0.000358	-2.14	CTDSP1	CTD (carboxy-terminal domain, RNA polymerase II, polypeptide A) small	Downregulated
A_23_P218	0.00239	0.000401	-2.14	CAPN3	calpain 3, (p94)	Downregulated
A_23_P153	0.002773	0.000503	-2.14	CERS4	ceramide synthase 4	Downregulated
A_24_P137	0.00299	0.000565	-2.14	USP53	ubiquitin specific peptidase 53	Downregulated
A_23_P142	0.004315	0.000979	-2.14	C2orf69	chromosome 2 open reading frame 69	Downregulated
A_24_P296	0.00615	0.00164	-2.14	COG3	component of oligomeric golgi complex 3	Downregulated
A_33_P336	0.008528	0.00258	-2.14	MAP3K1	mitogen-activated protein kinase kinase 1, E3 ubiquitin protein ligase	Downregulated
A_33_P336	0.019992	0.00777	-2.14	NEDD9	neural precursor cell expressed, developmentally down-regulated 9	Downregulated
A_24_P346	0.000848	0.0000544	-2.15	TMEM248	transmembrane protein 248	Downregulated
A_23_P213	0.001056	0.00009	-2.15	GFM2	G elongation factor, mitochondrial 2	Downregulated
A_23_P217	0.001141	0.000108	-2.15	KLF8	Kruppel-like factor 8	Downregulated
A_23_P215	0.003406	0.00069	-2.15	KIAA1429	KIAA1429	Downregulated
A_22_P000	0.006185	0.00165	-2.15	lnc-GTDC1-5	lnc-GTDC1-5:2	Downregulated
A_32_P191	0.006847	0.00191	-2.15	LINC00265	long intergenic non-protein coding RNA 265	Downregulated
A_23_P301	0.014292	0.00508	-2.15	PAIP2B	poly(A) binding protein interacting protein 2B	Downregulated
A_21_P001	0.000642	0.0000262	-2.16	PPP2R5C	protein phosphatase 2, regulatory subunit B', gamma	Downregulated
A_23_P367	0.00065	0.000027	-2.16	SNX29	sorting nexin 29	Downregulated
A_23_P127	0.000738	0.0000389	-2.16	POLD4	polymerase (DNA-directed), delta 4, accessory subunit	Downregulated
A_23_P232	0.000971	0.0000741	-2.16	RCSD1	RCSD domain containing 1	Downregulated
A_22_P000	0.001129	0.000105	-2.16	KDM4A-AS1	KDM4A antisense RNA 1	Downregulated
A_33_P334	0.001337	0.000145	-2.16	LOC1001322	uncharacterized LOC100132249	Downregulated
A_24_P562	0.001494	0.000179	-2.16	DYRK2	dual-specificity tyrosine-(Y)-phosphorylation regulated kinase 2	Downregulated
A_33_P321	0.00163	0.000209	-2.16	RBM33	RNA binding motif protein 33	Downregulated
A_23_P654	0.001702	0.000227	-2.16	TEP1	telomerase-associated protein 1	Downregulated
A_22_P000	0.001889	0.000271	-2.16	LOC1005072	uncharacterized LOC100507250	Downregulated
A_23_P207	0.00308	0.000591	-2.16	ATP2A3	ATPase, Ca ⁺⁺ transporting, ubiquitous	Downregulated
A_33_P323	0.003875	0.000835	-2.16	MAP2K7	mitogen-activated protein kinase kinase 7	Downregulated
A_33_P332	0.003985	0.000868	-2.16	TNFRSF1B	tumor necrosis factor receptor superfamily, member 1B	Downregulated
A_24_P193	0.005861	0.00153	-2.16	KLRK1	killer cell lectin-like receptor subfamily K, member 1	Downregulated
A_22_P000	0.006363	0.00172	-2.16	JARID2-AS1	JARID2 antisense RNA 1	Downregulated
A_32_P194	0.008234	0.00246	-2.16	TECPR1	tectonin beta-propeller repeat containing 1	Downregulated
A_33_P331	0.000805	0.0000483	-2.17	WDR91	WD repeat domain 91	Downregulated
A_23_P200	0.00198	0.000295	-2.17	SHC1	SHC (Src homology 2 domain containing) transforming protein 1	Downregulated
A_33_P342	0.002243	0.000366	-2.17	GRHL1	grainyhead-like 1 (Drosophila)	Downregulated
A_33_P324	0.002279	0.000374	-2.17	CALHM3	calcium homeostasis modulator 3	Downregulated
A_22_P000	0.002528	0.000437	-2.17	lnc-PRMT8-2	lnc-PRMT8-2:1	Downregulated
A_32_P117	0.003389	0.000685	-2.17	TRIQQ	triple QxxK/R motif containing	Downregulated

A_33_P330	0.004269	0.000963	-2.17	STRA6	stimulated by retinoic acid 6	Downregulated
A_33_P335	0.006863	0.00191	-2.17	C1orf194	chromosome 1 open reading frame 194	Downregulated
A_23_P395	0.007703	0.00225	-2.17	C2orf76	chromosome 2 open reading frame 76	Downregulated
A_33_P323	0.009012	0.00278	-2.17	RPP30	ribonuclease P/MRP 30kDa subunit	Downregulated
A_23_P212	0.011519	0.00384	-2.17	TRIM37	tripartite motif containing 37	Downregulated
A_23_P102	0.028637	0.0122	-2.17	CEP250	centrosomal protein 250kDa	Downregulated
A_23_P770	0.000626	0.0000247	-2.18	SNRPN	small nuclear ribonucleoprotein polypeptide N	Downregulated
A_33_P322	0.00063	0.000025	-2.18	NDOR1	NADPH dependent diflavin oxidoreductase 1	Downregulated
A_23_P385	0.000701	0.0000327	-2.18	PAOX	polyamine oxidase (exo-N4-amino)	Downregulated
A_23_P134	0.000712	0.0000358	-2.18	RBM12B-AS1	RBM12B antisense RNA 1	Downregulated
A_33_P370	0.000746	0.0000402	-2.18	DPY19L3	dpy-19-like 3 (C. elegans)	Downregulated
A_23_P627	0.000824	0.0000511	-2.18	CCDC28B	coiled-coil domain containing 28B	Downregulated
A_22_P000	0.000858	0.0000561	-2.18	lnc-RP11-148	lnc-RP11-148O21.2.1-2:1	Downregulated
A_23_P217	0.000938	0.0000677	-2.18	BRCC3	BRCA1/BRCA2-containing complex, subunit 3	Downregulated
A_33_P335	0.000971	0.0000743	-2.18	SLFN14	schlafen family member 14	Downregulated
A_22_P000	0.001341	0.000146	-2.18	lnc-SHANK2-4	lnc-SHANK2-5:2	Downregulated
A_24_P832	0.001381	0.000154	-2.18	FAM120AOS	family with sequence similarity 120A opposite strand	Downregulated
A_24_P184	0.001808	0.000251	-2.18	COCH	cochlin	Downregulated
A_23_P615	0.014995	0.00542	-2.18	NSUN6	NOP2/Sun domain family, member 6	Downregulated
A_33_P333	0.000722	0.0000374	-2.19	IFNAR2	interferon (alpha, beta and omega) receptor 2	Downregulated
A_33_P323	0.000755	0.0000411	-2.19	UTRN	utrophin	Downregulated
A_23_P214	0.000937	0.0000669	-2.19	REV3L	REV3-like, polymerase (DNA directed), zeta, catalytic subunit	Downregulated
A_24_P299	0.000942	0.0000685	-2.19	ZBTB18	zinc finger and BTB domain containing 18	Downregulated
A_33_P380	0.001126	0.000105	-2.19	TRAF2	TNF receptor-associated factor 2	Downregulated
A_21_P000	0.001369	0.000152	-2.19	SNORA6	small nucleolar RNA, H/ACA box 6	Downregulated
A_24_P400	0.003125	0.000606	-2.19	SMCHD1	structural maintenance of chromosomes flexible hinge domain containin	Downregulated
A_24_P622	0.003543	0.000731	-2.19	CERK	ceramide kinase	Downregulated
A_23_P251	0.005608	0.00144	-2.19	SNTG2	syntrophin, gamma 2	Downregulated
A_22_P000	0.009491	0.00297	-2.19	lnc-RMND5A-1	lnc-RMND5A-1:2	Downregulated
A_23_P413	0.020076	0.00781	-2.19	POC5	POC5 centriolar protein	Downregulated
A_23_P117	0.000626	0.0000247	-2.2	CLN6	ceroid-lipofuscinosis, neuronal 6, late infantile, variant	Downregulated
A_21_P001	0.000705	0.0000332	-2.2	C6orf62	chromosome 6 open reading frame 62	Downregulated
A_23_P786	0.000739	0.0000391	-2.2	DENND1C	DENN/MADD domain containing 1C	Downregulated
A_33_P324	0.000858	0.000056	-2.2	RALGAPB	Ral GTPase activating protein, beta subunit (non-catalytic)	Downregulated
A_24_P678	0.001654	0.000214	-2.2	STMN3	stathmin-like 3	Downregulated
A_33_P336	0.002352	0.000391	-2.2	SLC35B2	solute carrier family 35 (adenosine 3'-phospho 5'-phosphosulfate transp	Downregulated
A_24_P655	0.002544	0.000442	-2.2	OIP5-AS1	OIP5 antisense RNA 1	Downregulated

A_23_P119	0.00284	0.000522	-2.2	TMEM185B	transmembrane protein 185B	Downregulated
A_21_P000	0.006029	0.00159	-2.2	LINC01364	long intergenic non-protein coding RNA 1364	Downregulated
A_21_P000	0.006384	0.00173	-2.2	LOC1005076	uncharacterized LOC100507651	Downregulated
A_33_P322	0.007361	0.00211	-2.2	ITGA4	integrin, alpha 4 (antigen CD49D, alpha 4 subunit of VLA-4 receptor)	Downregulated
A_22_P000	0.014764	0.00531	-2.2	lnc-C5orf35-1	lnc-C5orf35-1:1	Downregulated
A_23_P502	0.018525	0.00707	-2.2	RASAL2	RAS protein activator like 2	Downregulated
A_24_P206	0.00077	0.0000431	-2.21	SNX15	sorting nexin 15	Downregulated
A_21_P000	0.003085	0.000593	-2.21	lnc-AC024563	lnc-AC024563.1-2:1	Downregulated
A_22_P000	0.003687	0.000776	-2.21	lnc-CCDC83-1	lnc-CCDC83-1:1	Downregulated
A_24_P251	0.004003	0.000874	-2.21	ABCF3	ATP-binding cassette, sub-family F (GCN20), member 3	Downregulated
A_21_P001	0.01064	0.00346	-2.21	XLOC_I2_013873		Downregulated
A_33_P338	0.000614	0.0000235	-2.22	COL5A1	collagen, type V, alpha 1	Downregulated
A_33_P325	0.000663	0.000028	-2.22	RNF7	ring finger protein 7	Downregulated
A_23_P218	0.000682	0.0000298	-2.22	ZGPAT	zinc finger, CCCH-type with G patch domain	Downregulated
A_23_P661	0.000701	0.0000328	-2.22	ITFG3	integrin alpha FG-GAP repeat containing 3	Downregulated
A_23_P759	0.000829	0.0000518	-2.22	CLPB	ClpB caseinolytic peptidase B homolog (E. coli)	Downregulated
A_33_P336	0.000856	0.0000556	-2.22	BOLA3	boIA family member 3	Downregulated
A_21_P001	0.001034	0.0000856	-2.22	XLOC_I2_004595		Downregulated
A_23_P297	0.00112	0.000103	-2.22	WWTR1	WW domain containing transcription regulator 1	Downregulated
A_33_P341	0.002006	0.000302	-2.22	AREG	amphiregulin	Downregulated
A_33_P335	0.002076	0.000321	-2.22	UBLCP1	ubiquitin-like domain containing CTD phosphatase 1	Downregulated
A_22_P000	0.003516	0.000722	-2.22	UBXN8	UBX domain protein 8	Downregulated
A_32_P676	0.000709	0.0000351	-2.23	FAM120C	family with sequence similarity 120C	Downregulated
A_33_P385	0.00277	0.000502	-2.23	CIRBP-AS1	CIRBP antisense RNA 1	Downregulated
A_33_P386	0.0044	0.00101	-2.23	lnc-FOXD4L6	lnc-FOXD4L6-3:1	Downregulated
A_33_P333	0.007276	0.00208	-2.23	MUC1	mucin 1, cell surface associated	Downregulated
A_22_P000	0.00895	0.00275	-2.23	lnc-CAPN13-1	lnc-CAPN13-1:1	Downregulated
A_23_P781	0.010163	0.00327	-2.23	MYO18A	myosin XVIIIa	Downregulated
A_23_P316	0.000596	0.0000211	-2.24	ACOX3	acyl-CoA oxidase 3, pristanoyl	Downregulated
A_24_P115	0.000603	0.0000221	-2.24	RIC8A	RIC8 guanine nucleotide exchange factor A	Downregulated
A_24_P230	0.000646	0.0000266	-2.24	ZNFX1	zinc finger, NFX1-type containing 1	Downregulated
A_24_P208	0.000783	0.0000449	-2.24	EDEM3	ER degradation enhancer, mannosidase alpha-like 3	Downregulated
A_23_P717	0.001147	0.000109	-2.24	TMEM206	transmembrane protein 206	Downregulated
A_33_P336	0.001171	0.000113	-2.24	FCRL3	Fc receptor-like 3	Downregulated
A_23_P115	0.001226	0.000124	-2.24	ECD	ecdysoneless homolog (Drosophila)	Downregulated
A_23_P686	0.001763	0.00024	-2.24	TMEM115	transmembrane protein 115	Downregulated
A_23_P130	0.001948	0.000285	-2.24	ZDHHC13	zinc finger, DHHC-type containing 13	Downregulated

A_23_P557	0.003453	0.000703	-2.24	CIC	capicua transcriptional repressor	Downregulated
A_21_P000	0.008039	0.00238	-2.24	lnc-ANO10-1	lnc-ANO10-1:1	Downregulated
A_23_P783	0.000702	0.000033	-2.25	C18orf8	chromosome 18 open reading frame 8	Downregulated
A_23_P309	0.000773	0.0000434	-2.25	HENMT1	HEN1 methyltransferase homolog 1 (Arabidopsis)	Downregulated
A_23_P368	0.000783	0.0000448	-2.25	GIMAP2	GTPase, IMAP family member 2	Downregulated
A_33_P333	0.000964	0.0000728	-2.25	FAM86FP	family with sequence similarity 86, member A pseudogene	Downregulated
A_33_P330	0.001032	0.0000854	-2.25	PLEKHG2	pleckstrin homology domain containing, family G (with RhoGef domain) r	Downregulated
A_23_P138	0.001137	0.000107	-2.25	ARL8A	ADP-ribosylation factor-like 8A	Downregulated
A_32_P220	0.004151	0.000921	-2.25	ZNF658	zinc finger protein 658	Downregulated
A_23_P952	0.005354	0.00134	-2.25	CASC1	cancer susceptibility candidate 1	Downregulated
A_23_P648	0.005582	0.00143	-2.25	OAS1	2'-5'-oligoadenylate synthetase 1, 40/46kDa	Downregulated
A_21_P000	0.007547	0.00219	-2.25	LOC1019271	uncharacterized LOC101927156	Downregulated
A_23_P366	0.008108	0.00241	-2.25	LATS1	large tumor suppressor kinase 1	Downregulated
A_23_P168	0.011241	0.00372	-2.25	WASF1	WAS protein family, member 1	Downregulated
A_33_P334	0.000611	0.0000232	-2.26	UQCRBP1	ubiquinol-cytochrome c reductase binding protein pseudogene 1	Downregulated
A_23_P137	0.000619	0.0000238	-2.26	MRPL24	mitochondrial ribosomal protein L24	Downregulated
A_23_P120	0.000746	0.0000402	-2.26	ORMDL1	ORMDL sphingolipid biosynthesis regulator 1	Downregulated
A_22_P000	0.000854	0.0000551	-2.26	lnc-GRHL2-1	lnc-GRHL2-1:1	Downregulated
A_23_P366	0.000911	0.0000633	-2.26	SCRN1	secernin 1	Downregulated
A_24_P388	0.001448	0.000169	-2.26	TPP1	tripeptidyl peptidase I	Downregulated
A_33_P366	0.00265	0.000469	-2.26	RHOT1	ras homolog family member T1	Downregulated
A_23_P250	0.005353	0.00134	-2.26	HACE1	HECT domain and ankyrin repeat containing E3 ubiquitin protein ligase	Downregulated
A_23_P355	0.000647	0.0000267	-2.27	EXOSC1	exosome component 1	Downregulated
A_23_P611	0.000669	0.0000286	-2.27	INPP5D	inositol polyphosphate-5-phosphatase, 145kDa	Downregulated
A_23_P856	0.000781	0.0000446	-2.27	GBP2	guanylate binding protein 2, interferon-inducible	Downregulated
A_33_P321	0.000866	0.0000571	-2.27	CREB3L2	cAMP responsive element binding protein 3-like 2	Downregulated
A_23_P137	0.001885	0.00027	-2.27	WRAP73	WD repeat containing, antisense to TP73	Downregulated
A_21_P001	0.002196	0.000353	-2.27	TXLNGY	taxilin gamma pseudogene, Y-linked	Downregulated
A_33_P371	0.002768	0.000502	-2.27	ARHGAP42	Rho GTPase activating protein 42	Downregulated
A_23_P148	0.003473	0.000709	-2.27	EHBP1L1	EH domain binding protein 1-like 1	Downregulated
A_21_P001	0.005906	0.00155	-2.27	FAM185A	family with sequence similarity 185, member A	Downregulated
A_21_P001	0.008618	0.00262	-2.27	XLOC_I2_006166		Downregulated
A_24_P202	0.014929	0.00538	-2.27	SIPA1L3	signal-induced proliferation-associated 1 like 3	Downregulated
A_23_P202	0.000596	0.0000211	-2.28	C11orf54	chromosome 11 open reading frame 54	Downregulated
A_21_P000	0.000654	0.0000273	-2.28	lnc-RPGRIP1	lnc-RPGRIP1-2:1	Downregulated
A_23_P108	0.000788	0.0000456	-2.28	PPAP2C	phosphatidic acid phosphatase type 2C	Downregulated
A_33_P321	0.000795	0.0000469	-2.28	MED1	mediator complex subunit 1	Downregulated

A_24_P289	0.000901	0.0000614	-2.28	RNASET2	ribonuclease T2	Downregulated
A_33_P329	0.001134	0.000106	-2.28	CNTLN	centlein, centrosomal protein	Downregulated
A_23_P923	0.001134	0.000106	-2.28	TMEM156	transmembrane protein 156	Downregulated
A_33_P386	0.001405	0.00016	-2.28	MTMR10	myotubularin related protein 10	Downregulated
A_21_P000	0.001453	0.00017	-2.28	lnc-ABCA13-2	lnc-ABCA13-2:1	Downregulated
A_21_P001	0.003527	0.000725	-2.28	LOC1019301	uncharacterized LOC101930100	Downregulated
A_21_P000	0.0077	0.00225	-2.28	SNORD21	small nucleolar RNA, C/D box 21	Downregulated
A_24_P226	0.012265	0.00417	-2.28	TOX	thymocyte selection-associated high mobility group box	Downregulated
A_22_P000	0.000585	0.0000201	-2.29	lnc-GK-3	lnc-GK-3:1	Downregulated
A_33_P324	0.000594	0.0000208	-2.29	ZEB2	zinc finger E-box binding homeobox 2	Downregulated
A_21_P000	0.000612	0.0000233	-2.29	MKRN1	makorin ring finger protein 1	Downregulated
A_33_P322	0.000636	0.0000254	-2.29	MRPL11	mitochondrial ribosomal protein L11	Downregulated
A_22_P000	0.000691	0.0000305	-2.29	lnc-UBLCP1-7	lnc-UBLCP1-7:1	Downregulated
A_23_P387	0.000853	0.0000551	-2.29	SMCHD1	structural maintenance of chromosomes flexible hinge domain containin	Downregulated
A_23_P159	0.000938	0.0000672	-2.29	ADAM15	ADAM metallopeptidase domain 15	Downregulated
A_33_P333	0.000963	0.0000723	-2.29	TMEM59	transmembrane protein 59	Downregulated
A_21_P000	0.001322	0.000143	-2.29	LOC1001315	uncharacterized LOC100131564	Downregulated
A_24_P753	0.001641	0.000212	-2.29	BMPR2	bone morphogenetic protein receptor, type II (serine/threonine kinase)	Downregulated
A_22_P000	0.001769	0.000242	-2.29	LOC1019273	uncharacterized LOC101927365	Downregulated
A_22_P000	0.002965	0.000557	-2.29	lnc-AC112512	lnc-AC112512.1-1:1	Downregulated
A_23_P477	0.005063	0.00123	-2.29	METTL1	methyltransferase like 1	Downregulated
A_21_P000	0.005417	0.00137	-2.29	VTRNA2-1	vault RNA 2-1	Downregulated
A_24_P263	0.001066	0.0000924	-2.3	ATXN7L3B	ataxin 7-like 3B	Downregulated
A_24_P132	0.001237	0.000126	-2.3	IKBKB	inhibitor of kappa light polypeptide gene enhancer in B-cells, kinase bet	Downregulated
A_33_P328	0.001492	0.000179	-2.3	LMO7	LIM domain 7	Downregulated
A_23_P991	0.001775	0.000243	-2.3	UBE3B	ubiquitin protein ligase E3B	Downregulated
A_21_P001	0.006541	0.00179	-2.3	ANKRD26P3	ankyrin repeat domain 26 pseudogene 3	Downregulated
A_21_P000	0.007979	0.00236	-2.3	ZDHC11	zinc finger, DHHC-type containing 11	Downregulated
A_23_P103	0.000707	0.0000343	-2.31	DTL	denticleless E3 ubiquitin protein ligase homolog (Drosophila)	Downregulated
A_33_P332	0.000797	0.0000471	-2.31	NDEL1	nudE neurodevelopment protein 1-like 1	Downregulated
A_23_P799	0.000855	0.0000555	-2.31	NOP56	NOP56 ribonucleoprotein	Downregulated
A_33_P321	0.000866	0.0000572	-2.31	RFX7	regulatory factor X, 7	Downregulated
A_23_P209	0.001394	0.000157	-2.31	PPM1G	protein phosphatase, Mg ²⁺ /Mn ²⁺ dependent, 1G	Downregulated
A_33_P335	0.001949	0.000286	-2.31	FAM122C	family with sequence similarity 122C	Downregulated
A_33_P339	0.00308	0.000591	-2.31	GNG12	guanine nucleotide binding protein (G protein), gamma 12	Downregulated
A_23_P208	0.003529	0.000726	-2.31	LENG1	leukocyte receptor cluster (LRC) member 1	Downregulated
A_22_P000	0.005296	0.00132	-2.31	lnc-FITM2-1	lnc-FITM2-1:1	Downregulated

A_23_P280	0.00685	0.00191	-2.31	ZNF558	zinc finger protein 558	Downregulated
A_22_P000	0.007273	0.00207	-2.31	lnc-RTKN2-1	lnc-RTKN2-1:1	Downregulated
A_33_P323	0.014406	0.00514	-2.31	LOC1001285	uncharacterized LOC100128517	Downregulated
A_33_P342	0.000578	0.0000189	-2.32	TRAF3IP3	TRAF3 interacting protein 3	Downregulated
A_33_P337	0.00062	0.000024	-2.32	ABCC10	ATP-binding cassette, sub-family C (CFTR/MRP), member 10	Downregulated
A_23_P159	0.000693	0.0000309	-2.32	SSNA1	Sjogren syndrome nuclear autoantigen 1	Downregulated
A_23_P252	0.000848	0.0000542	-2.32	STK25	serine/threonine kinase 25	Downregulated
A_33_P341	0.000945	0.000069	-2.32	RABGAP1	RAB GTPase activating protein 1	Downregulated
A_23_P371	0.000963	0.0000725	-2.32	CDYL2	chromodomain protein, Y-like 2	Downregulated
A_24_P241	0.002145	0.00034	-2.32	ZC3H14	zinc finger CCCH-type containing 14	Downregulated
A_23_P214	0.002991	0.000565	-2.32	GPX5	glutathione peroxidase 5	Downregulated
A_24_P942	0.003041	0.00058	-2.32	ECT2L	epithelial cell transforming 2 like	Downregulated
A_21_P000	0.015034	0.00543	-2.32	LOC1009967	uncharacterized LOC100996741	Downregulated
A_33_P328	0.024503	0.01	-2.32	TRIM51HP	tripartite motif-containing 51H, pseudogene	Downregulated
A_23_P177	0.000578	0.0000192	-2.33	DPAGT1	dolichyl-phosphate (UDP-N-acetylglucosamine) N-acetylglucosaminepho	Downregulated
A_23_P120	0.000709	0.0000351	-2.33	LBH	limb bud and heart development	Downregulated
A_23_P201	0.000711	0.0000357	-2.33	MAPKAPK2	mitogen-activated protein kinase-activated protein kinase 2	Downregulated
A_33_P326	0.000855	0.0000555	-2.33	CD160	CD160 molecule	Downregulated
A_23_P114	0.001029	0.0000846	-2.33	HDAC1	histone deacetylase 1	Downregulated
A_23_P150	0.001214	0.000122	-2.33	MRE11A	MRE11 meiotic recombination 11 homolog A (S. cerevisiae)	Downregulated
A_23_P649	0.001267	0.000133	-2.33	RIC8B	RIC8 guanine nucleotide exchange factor B	Downregulated
A_32_P225	0.001403	0.000159	-2.33	FAM187B	family with sequence similarity 187, member B	Downregulated
A_24_P100	0.001557	0.000192	-2.33	CYB5R3	cytochrome b5 reductase 3	Downregulated
A_23_P129	0.005096	0.00125	-2.33	TARSL2	threonyl-tRNA synthetase-like 2	Downregulated
A_23_P102	0.025103	0.0103	-2.33	CHST10	carbohydrate sulfotransferase 10	Downregulated
A_33_P334	0.000578	0.0000194	-2.34	RAB28	RAB28, member RAS oncogene family	Downregulated
A_23_P124	0.00061	0.0000231	-2.34	ZCCHC7	zinc finger, CCHC domain containing 7	Downregulated
A_23_P143	0.00075	0.0000405	-2.34	ARID5A	AT rich interactive domain 5A (MRF1-like)	Downregulated
A_33_P337	0.000971	0.0000741	-2.34	MED25	mediator complex subunit 25	Downregulated
A_33_P340	0.001121	0.000104	-2.34	PLEKHM1	pleckstrin homology domain containing, family M (with RUN domain) mer	Downregulated
A_23_P226	0.001691	0.000223	-2.34	SLC9A6	solute carrier family 9, subfamily A (NHE6, cation proton antiporter 6), m	Downregulated
A_33_P325	0.000597	0.0000213	-2.35	CRIP1	cysteine-rich protein 1 (intestinal)	Downregulated
A_23_P396	0.000801	0.0000478	-2.35	NIN	ninein (GSK3B interacting protein)	Downregulated
A_24_P167	0.001386	0.000155	-2.35	VPS39	vacuolar protein sorting 39 homolog (S. cerevisiae)	Downregulated
A_33_P328	0.004021	0.000879	-2.35	TMEM254	transmembrane protein 254	Downregulated
A_23_P595	0.004433	0.00102	-2.35	ACN9	ACN9 homolog (S. cerevisiae)	Downregulated
A_21_P001	0.005135	0.00126	-2.35	XLOC_I2_003992		Downregulated

A_22_P000	0.007457	0.00215	-2.35	lnc-SNURF-3	lnc-SNURF-3:21	Downregulated
A_22_P000	0.007547	0.00219	-2.35	DIAPH2-AS1	DIAPH2 antisense RNA 1	Downregulated
A_33_P338	0.009895	0.00315	-2.35	FPGT	fucose-1-phosphate guanylyltransferase	Downregulated
A_21_P001	0.000603	0.0000224	-2.36	LOC1027248	uncharacterized LOC102724889	Downregulated
A_24_P787	0.001197	0.000118	-2.36	YPEL2	yippee-like 2 (Drosophila)	Downregulated
A_23_P142	0.001705	0.000228	-2.36	ZNF513	zinc finger protein 513	Downregulated
A_23_P433	0.002887	0.000535	-2.36	MLANA	melan-A	Downregulated
A_23_P831	0.00856	0.00259	-2.36	ABHD17B	abhydrolase domain containing 17B	Downregulated
A_33_P338	0.008606	0.00261	-2.36	RPPH1	ribonuclease P RNA component H1	Downregulated
A_21_P001	0.008661	0.00264	-2.36	TRANK1	tetratricopeptide repeat and ankyrin repeat containing 1	Downregulated
A_33_P337	0.000577	0.0000184	-2.37	TPPP	tubulin polymerization promoting protein	Downregulated
A_33_P339	0.000605	0.0000228	-2.37	SLC2A6	solute carrier family 2 (facilitated glucose transporter), member 6	Downregulated
A_32_P486	0.000788	0.0000456	-2.37	IGSF22	immunoglobulin superfamily, member 22	Downregulated
A_23_P883	0.000812	0.0000494	-2.37	EPHX2	epoxide hydrolase 2, cytoplasmic	Downregulated
A_23_P399	0.004499	0.00104	-2.37	ACTG2	actin, gamma 2, smooth muscle, enteric	Downregulated
A_24_P305	0.005211	0.00129	-2.37	GATAD2A	GATA zinc finger domain containing 2A	Downregulated
A_23_P418	0.008825	0.0027	-2.37	ATPAF2	ATP synthase mitochondrial F1 complex assembly factor 2	Downregulated
A_23_P212	0.011673	0.00391	-2.37	TBL1XR1	transducin (beta)-like 1 X-linked receptor 1	Downregulated
A_23_P140	0.00057	0.0000172	-2.38	IFI27L2	interferon, alpha-inducible protein 27-like 2	Downregulated
A_23_P202	0.000612	0.0000233	-2.38	APLP2	amyloid beta (A4) precursor-like protein 2	Downregulated
A_33_P328	0.000622	0.0000244	-2.38	METTL15	methyltransferase like 15	Downregulated
A_23_P166	0.000626	0.0000247	-2.38	RASSF2	Ras association (RalGDS/AF-6) domain family member 2	Downregulated
A_23_P118	0.001405	0.00016	-2.38	BIRC5	baculoviral IAP repeat containing 5	Downregulated
A_23_P393	0.002033	0.00031	-2.38	IGHMBP2	immunoglobulin mu binding protein 2	Downregulated
A_23_P388	0.002738	0.000493	-2.38	C4orf3	chromosome 4 open reading frame 3	Downregulated
A_33_P342	0.002897	0.000538	-2.38	PALLD	palladin, cytoskeletal associated protein	Downregulated
A_23_P974	0.003293	0.000657	-2.38	UBE2Q1	ubiquitin-conjugating enzyme E2Q family member 1	Downregulated
A_33_P333	0.003825	0.000818	-2.38	ALDH3A2	aldehyde dehydrogenase 3 family, member A2	Downregulated
A_23_P404	0.006699	0.00185	-2.38	CREBRF	CREB3 regulatory factor	Downregulated
A_23_P747	0.007611	0.00221	-2.38	EYA3	EYA transcriptional coactivator and phosphatase 3	Downregulated
A_33_P321	0.008008	0.00237	-2.38	C6orf89	chromosome 6 open reading frame 89	Downregulated
A_22_P000	0.015796	0.00578	-2.38	lnc-NUCB2-1	lnc-NUCB2-1:1	Downregulated
A_23_P123	0.000605	0.0000228	-2.39	GLDC	glycine dehydrogenase (decarboxylating)	Downregulated
A_24_P182	0.001125	0.000104	-2.39	CELSR2	cadherin, EGF LAG seven-pass G-type receptor 2	Downregulated
A_21_P000	0.001202	0.000119	-2.39	FAM174B	family with sequence similarity 174, member B	Downregulated
A_24_P253	0.002901	0.000539	-2.39	DBF4B	DBF4 zinc finger B	Downregulated
A_22_P000	0.009588	0.00302	-2.39	lnc-CLCN6-1	lnc-CLCN6-1:2	Downregulated

A_32_P151	0.000577	0.0000179	-2.4	FAM72D	family with sequence similarity 72, member D	Downregulated
A_21_P000	0.000673	0.0000291	-2.4	SNORD82	small nucleolar RNA, C/D box 82	Downregulated
A_22_P000	0.000706	0.0000334	-2.4	lnc-MAP3K12	lnc-MAP3K12-1:1	Downregulated
A_22_P000	0.000742	0.0000396	-2.4	lnc-GLIPR1-3	lnc-GLIPR1-3:1	Downregulated
A_23_P121	0.000991	0.0000773	-2.4	TSHB	thyroid stimulating hormone, beta	Downregulated
A_23_P371	0.001029	0.0000846	-2.4	ZNF227	zinc finger protein 227	Downregulated
A_22_P000	0.001295	0.000137	-2.4	LOC1005068	uncharacterized LOC100506844	Downregulated
A_23_P157	0.005544	0.00141	-2.4	INVS	inversin	Downregulated
A_33_P328	0.005673	0.00146	-2.4	CTNNBIP1	catenin, beta interacting protein 1	Downregulated
A_19_P003	0.008172	0.00244	-2.4	LOC1010599	uncharacterized LOC101059954	Downregulated
A_23_P110	0.009995	0.00319	-2.4	APBB3	amyloid beta (A4) precursor protein-binding, family B, member 3	Downregulated
A_21_P000	0.00056	0.0000165	-2.41	BZRAP1-AS1	BZRAP1 antisense RNA 1	Downregulated
A_23_P106	0.000618	0.0000237	-2.41	FOS	FBJ murine osteosarcoma viral oncogene homolog	Downregulated
A_23_P659	0.00062	0.0000241	-2.41	ZFYVE19	zinc finger, FYVE domain containing 19	Downregulated
A_19_P003	0.00064	0.0000259	-2.41	TSTD3	thiosulfate sulfurtransferase (rhodanese)-like domain containing 3	Downregulated
A_23_P148	0.000669	0.0000285	-2.41	GNPTG	N-acetylglucosamine-1-phosphate transferase, gamma subunit	Downregulated
A_23_P818	0.000695	0.0000316	-2.41	TJAP1	tight junction associated protein 1 (peripheral)	Downregulated
A_24_P134	0.000696	0.0000318	-2.41	RHBDD1	rhomboid domain containing 1	Downregulated
A_23_P500	0.001015	0.0000824	-2.41	KANK1	KN motif and ankyrin repeat domains 1	Downregulated
A_23_P742	0.001268	0.000133	-2.41	GBP5	guanylate binding protein 5	Downregulated
A_24_P227	0.00189	0.000271	-2.41	KLC2	kinesin light chain 2	Downregulated
A_22_P000	0.004328	0.000984	-2.41	lnc-CDNF-1	lnc-CDNF-1:1	Downregulated
A_21_P000	0.000596	0.0000211	-2.42	lnc-APBA2-2	lnc-APBA2-2:1	Downregulated
A_33_P322	0.000603	0.0000224	-2.42	SLC12A9	solute carrier family 12, member 9	Downregulated
A_23_P117	0.000639	0.0000256	-2.42	WASH1	WAS protein family homolog 1	Downregulated
A_23_P388	0.000695	0.0000312	-2.42	ELAVL1	ELAV like RNA binding protein 1	Downregulated
A_33_P336	0.000792	0.0000463	-2.42	MPP2	membrane protein, palmitoylated 2 (MAGUK p55 subfamily member 2)	Downregulated
A_23_P106	0.000801	0.0000478	-2.42	RAB11FIP3	RAB11 family interacting protein 3 (class II)	Downregulated
A_23_P283	0.001065	0.0000918	-2.42	NDUFAF7	NADH dehydrogenase (ubiquinone) complex I, assembly factor 7	Downregulated
A_33_P326	0.002006	0.000302	-2.42	UVRAG	UV radiation resistance associated	Downregulated
A_23_P370	0.00238	0.000398	-2.42	C12orf66	chromosome 12 open reading frame 66	Downregulated
A_23_P893	0.016218	0.00599	-2.42	ZNF286A	zinc finger protein 286A	Downregulated
A_33_P323	0.000568	0.0000172	-2.43	DGKZ	diacylglycerol kinase, zeta	Downregulated
A_22_P000	0.000578	0.0000193	-2.43	FGF12-AS1	FGF12 antisense RNA 1	Downregulated
A_33_P381	0.000647	0.0000268	-2.43	GABARAPL1	GABA(A) receptor-associated protein like 1	Downregulated
A_33_P339	0.001062	0.0000913	-2.43	TP53RK	TP53 regulating kinase	Downregulated
A_23_P139	0.001258	0.000131	-2.43	GNG3	guanine nucleotide binding protein (G protein), gamma 3	Downregulated

A_33_P334	0.002219	0.000358	-2.43	CPTP	ceramide-1-phosphate transfer protein	Downregulated
A_24_P132	0.003557	0.000735	-2.43	NAP1L4	nucleosome assembly protein 1-like 4	Downregulated
A_22_P000	0.004306	0.000975	-2.43	THAP9-AS1	THAP9 antisense RNA 1	Downregulated
A_24_P509	0.006045	0.0016	-2.43	GOLGA6L6	golgin A6 family-like 6	Downregulated
A_23_P360	0.00899	0.00277	-2.43	CPNE5	copine V	Downregulated
A_24_P185	0.009601	0.00302	-2.43	FAM134C	family with sequence similarity 134, member C	Downregulated
A_23_P217	0.012702	0.00435	-2.43	TIMM8A	translocase of inner mitochondrial membrane 8 homolog A (yeast)	Downregulated
A_22_P000	0.000602	0.0000219	-2.44	lnc-CCNE2-1	lnc-CCNE2-1:3	Downregulated
A_23_P126	0.000605	0.0000227	-2.44	EIF4G3	eukaryotic translation initiation factor 4 gamma, 3	Downregulated
A_24_P502	0.00067	0.0000288	-2.44	HLA-DMA	major histocompatibility complex, class II, DM alpha	Downregulated
A_21_P000	0.000793	0.0000466	-2.44	lnc-CCDC140	lnc-CCDC140-2:1	Downregulated
A_23_P502	0.000871	0.0000578	-2.44	FYN	FYN proto-oncogene, Src family tyrosine kinase	Downregulated
A_22_P000	0.000883	0.0000591	-2.44	LOC1009965	uncharacterized LOC100996579	Downregulated
A_23_P705	0.001062	0.0000907	-2.44	SLC39A7	solute carrier family 39 (zinc transporter), member 7	Downregulated
A_22_P000	0.001714	0.000229	-2.44	lnc-APOC3-6	lnc-APOC3-6:1	Downregulated
A_24_P544	0.007028	0.00198	-2.44	SSR1	signal sequence receptor, alpha	Downregulated
A_33_P324	0.007298	0.00208	-2.44	FAM72A	family with sequence similarity 72, member A	Downregulated
A_33_P325	0.000565	0.000017	-2.45	N6AMT1	N-6 adenine-specific DNA methyltransferase 1 (putative)	Downregulated
A_33_P346	0.000819	0.0000505	-2.45	lnc-NMNAT2-2	lnc-NMNAT2-2:1	Downregulated
A_21_P000	0.000995	0.0000786	-2.45	SNORD32A	small nucleolar RNA, C/D box 32A	Downregulated
A_21_P000	0.001057	0.0000901	-2.45	lnc-KLHL25-9	lnc-KLHL25-9:1	Downregulated
A_24_P706	0.001455	0.000171	-2.45	HNRNPA3	heterogeneous nuclear ribonucleoprotein A3	Downregulated
A_23_P132	0.001504	0.000181	-2.45	MPST	mercaptopyruvate sulfurtransferase	Downregulated
A_23_P411	0.002951	0.000553	-2.45	WDR90	WD repeat domain 90	Downregulated
A_23_P132	0.000568	0.0000172	-2.46	MSL2	male-specific lethal 2 homolog (Drosophila)	Downregulated
A_33_P323	0.000577	0.0000181	-2.46	BOLA2B	bolA family member 2B	Downregulated
A_23_P329	0.000821	0.0000509	-2.46	JAK3	Janus kinase 3	Downregulated
A_33_P333	0.000905	0.0000622	-2.46	DTNBP1	dystrobrevin binding protein 1	Downregulated
A_33_P328	0.000995	0.0000789	-2.46	TMEM254	transmembrane protein 254	Downregulated
A_23_P121	0.001528	0.000186	-2.46	CSRNP1	cysteine-serine-rich nuclear protein 1	Downregulated
A_22_P000	0.001676	0.000219	-2.46	lnc-SCAPER-1	lnc-SCAPER-1:1	Downregulated
A_24_P628	0.001937	0.000283	-2.46	STAM2	signal transducing adaptor molecule (SH3 domain and ITAM motif) 2	Downregulated
A_23_P200	0.001943	0.000284	-2.46	TXNDC12	thioredoxin domain containing 12 (endoplasmic reticulum)	Downregulated
A_33_P354	0.001956	0.000289	-2.46	IL17RA	interleukin 17 receptor A	Downregulated
A_23_P312	0.002009	0.000303	-2.46	ALMS1	Alstrom syndrome 1	Downregulated
A_22_P000	0.003779	0.000803	-2.46	lnc-GGH-1	lnc-GGH-1:1	Downregulated
A_23_P148	0.005795	0.0015	-2.46	ZDHHC9	zinc finger, DHHC-type containing 9	Downregulated

A_23_P869	0.010923	0.00357	-2.46	B4GAT1	beta-1,4-glucuronyltransferase 1	Downregulated
A_33_P327	0.000805	0.0000484	-2.47	ARFGAP2	ADP-ribosylation factor GTPase activating protein 2	Downregulated
A_23_P415	0.001899	0.000273	-2.47	KLF9	Kruppel-like factor 9	Downregulated
A_22_P000	0.003936	0.000854	-2.47	lnc-SMG1-2	lnc-SMG1-2:1	Downregulated
A_33_P322	0.004843	0.00116	-2.47	NPHP3	nephronophthisis 3 (adolescent)	Downregulated
A_23_P121	0.007132	0.00202	-2.47	TBCCD1	TBCC domain containing 1	Downregulated
A_21_P001	0.000648	0.0000268	-2.48	NNT-AS1	NNT antisense RNA 1	Downregulated
A_23_P105	0.000689	0.0000303	-2.48	FRY	furry homolog (Drosophila)	Downregulated
A_22_P000	0.000766	0.0000428	-2.48	DCP1A	decapping mRNA 1A	Downregulated
A_23_P121	0.002427	0.00041	-2.48	CYB561D2	cytochrome b561 family, member D2	Downregulated
A_23_P210	0.003191	0.000627	-2.48	RTFDC1	replication termination factor 2 domain containing 1	Downregulated
A_23_P749	0.003966	0.000863	-2.48	MR1	major histocompatibility complex, class I-related	Downregulated
A_23_P202	0.008622	0.00262	-2.48	MCMBP	minichromosome maintenance complex binding protein	Downregulated
A_23_P107	0.010485	0.0034	-2.48	TMEM11	transmembrane protein 11	Downregulated
A_23_P257	0.000603	0.000022	-2.49	SRA1	steroid receptor RNA activator 1	Downregulated
A_23_P442	0.001054	0.0000893	-2.49	CLASP2	cytoplasmic linker associated protein 2	Downregulated
A_33_P330	0.001194	0.000117	-2.49	METTL15	methyltransferase like 15	Downregulated
A_22_P000	0.001263	0.000132	-2.49	PHKA2-AS1	PHKA2 antisense RNA 1	Downregulated
A_23_P236	0.001492	0.000179	-2.49	USF1	upstream transcription factor 1	Downregulated
A_22_P000	0.001839	0.000259	-2.49	LOC1019270	uncharacterized LOC101927027	Downregulated
A_19_P003	0.000537	0.0000141	-2.5	ZNF678	zinc finger protein 678	Downregulated
A_33_P335	0.000571	0.0000173	-2.5	SOS1	son of sevenless homolog 1 (Drosophila)	Downregulated
A_24_P945	0.00062	0.0000241	-2.5	SKA2	spindle and kinetochore associated complex subunit 2	Downregulated
A_23_P201	0.000695	0.0000317	-2.5	S100A6	S100 calcium binding protein A6	Downregulated
A_19_P003	0.000803	0.0000481	-2.5	lnc-SPAG1-3	lnc-SPAG1-3:3	Downregulated
A_21_P000	0.000964	0.0000729	-2.5	SNORD32B	small nucleolar RNA, C/D box 32B	Downregulated
A_23_P847	0.002688	0.00048	-2.5	TNFRSF13B	tumor necrosis factor receptor superfamily, member 13B	Downregulated
A_33_P333	0.006915	0.00194	-2.5	SDCCAG3	serologically defined colon cancer antigen 3	Downregulated
A_33_P330	0.007099	0.00201	-2.5	EID1	EP300 interacting inhibitor of differentiation 1	Downregulated
A_21_P001	0.009497	0.00298	-2.5	LOC1019285	uncharacterized LOC101928595	Downregulated
A_33_P387	0.000577	0.0000186	-2.51	TRIM39-RPP21	TRIM39-RPP21 readthrough	Downregulated
A_32_P466	0.000601	0.0000217	-2.51	IRF2BPL	interferon regulatory factor 2 binding protein-like	Downregulated
A_33_P327	0.000724	0.0000375	-2.51	TARDBP	TAR DNA binding protein	Downregulated
A_22_P000	0.002018	0.000305	-2.51	RNASEH2B-AS1	RNASEH2B antisense RNA 1	Downregulated
A_23_P216	0.004355	0.000994	-2.51	SLA	Src-like-adaptor	Downregulated
A_23_P163	0.005444	0.00138	-2.51	RBM4B	RNA binding motif protein 4B	Downregulated
A_24_P392	0.009995	0.00319	-2.51	PSG8	pregnancy specific beta-1-glycoprotein 8	Downregulated

A_23_P368	0.000537	0.0000139	-2.52	SNX12	sorting nexin 12	Downregulated
A_23_P411	0.000763	0.0000419	-2.52	CEBPB	CCAAT/enhancer binding protein (C/EBP), beta	Downregulated
A_24_P116	0.000925	0.0000653	-2.52	GCOM1	GRINL1A complex locus 1	Downregulated
A_22_P000	0.001014	0.0000822	-2.52	PAQR9-AS1	PAQR9 antisense RNA 1	Downregulated
A_23_P301	0.001254	0.00013	-2.52	IP6K2	inositol hexakisphosphate kinase 2	Downregulated
A_23_P106	0.001349	0.000148	-2.52	GALNS	galactosamine (N-acetyl)-6-sulfatase	Downregulated
A_23_P118	0.002323	0.000384	-2.52	BCL7C	B-cell CLL/lymphoma 7C	Downregulated
A_23_P769	0.003074	0.000589	-2.52	SIX1	SIX homeobox 1	Downregulated
A_23_P125	0.000577	0.0000183	-2.53	IRF2	interferon regulatory factor 2	Downregulated
A_33_P325	0.000707	0.0000341	-2.53	VIMP	VCP-interacting membrane protein	Downregulated
A_32_P822	0.001349	0.000148	-2.53	GRM8	glutamate receptor, metabotropic 8	Downregulated
A_24_P136	0.001918	0.000278	-2.53	CA5BP1	carbonic anhydrase VB pseudogene 1	Downregulated
A_33_P335	0.003068	0.000588	-2.53	TSC1	tuberous sclerosis 1	Downregulated
A_24_P680	0.008254	0.00247	-2.53	CCDC73	coiled-coil domain containing 73	Downregulated
A_23_P293	0.000808	0.0000489	-2.54	SAMM50	SAMM50 sorting and assembly machinery component	Downregulated
A_33_P324	0.000887	0.0000597	-2.54	LOC1001298	uncharacterized LOC100129888	Downregulated
A_33_P327	0.002237	0.000363	-2.54	YIPF2	Yip1 domain family, member 2	Downregulated
A_21_P000	0.003986	0.000869	-2.54	Inc-SRSF2-1	Inc-SRSF2-1:1	Downregulated
A_22_P000	0.008623	0.00262	-2.54	LOC1019291	uncharacterized LOC101929162	Downregulated
A_23_P141	0.000534	0.0000136	-2.55	GPR18	G protein-coupled receptor 18	Downregulated
A_23_P338	0.000719	0.0000369	-2.55	KDM1B	lysine (K)-specific demethylase 1B	Downregulated
A_23_P218	0.000863	0.0000566	-2.55	B9D2	B9 protein domain 2	Downregulated
A_23_P390	0.000938	0.000067	-2.55	SMARCA4	SWI/SNF related, matrix associated, actin dependent regulator of chrom	Downregulated
A_33_P338	0.00152	0.000184	-2.55	ERCC5	excision repair cross-complementation group 5	Downregulated
A_33_P337	0.001727	0.000232	-2.55	FAM117B	family with sequence similarity 117, member B	Downregulated
A_23_P466	0.001919	0.000278	-2.55	LPGAT1	lysophosphatidylglycerol acyltransferase 1	Downregulated
A_23_P164	0.002113	0.00033	-2.55	WDR7	WD repeat domain 7	Downregulated
A_23_P360	0.003287	0.000655	-2.55	NUDT7	nudix (nucleoside diphosphate linked moiety X)-type motif 7	Downregulated
A_23_P220	0.000713	0.0000361	-2.56	TAOK3	TAO kinase 3	Downregulated
A_23_P128	0.000715	0.0000363	-2.56	FBXO18	F-box protein, helicase, 18	Downregulated
A_21_P000	0.000727	0.0000378	-2.56	RAB30-AS1	RAB30 antisense RNA 1 (head to head)	Downregulated
A_33_P329	0.000728	0.0000381	-2.56	COPS7B	COP9 signalosome subunit 7B	Downregulated
A_23_P852	0.000791	0.0000461	-2.56	TTN	titin	Downregulated
A_23_P164	0.001635	0.00021	-2.56	RCE1	Ras converting CAAX endopeptidase 1	Downregulated
A_23_P845	0.001799	0.000248	-2.56	MZB1	marginal zone B and B1 cell-specific protein	Downregulated
A_33_P324	0.002101	0.000327	-2.56	IKBKB	inhibitor of kappa light polypeptide gene enhancer in B-cells, kinase bet	Downregulated
A_33_P337	0.003804	0.000812	-2.56	DDX51	DEAD (Asp-Glu-Ala-Asp) box polypeptide 51	Downregulated

A_23_P759	0.006531	0.00179	-2.56	RNF121	ring finger protein 121	Downregulated
A_24_P601	0.008888	0.00273	-2.56	C2orf74	chromosome 2 open reading frame 74	Downregulated
A_21_P000	0.000578	0.0000188	-2.57	lnc-DDX51-4	lnc-DDX51-4:1	Downregulated
A_23_P141	0.000578	0.0000194	-2.57	SERTAD3	SERTA domain containing 3	Downregulated
A_23_P146	0.000739	0.0000392	-2.57	ASAP1-IT1	ASAP1 intronic transcript 1 (non-protein coding)	Downregulated
A_23_P134	0.000784	0.0000451	-2.57	NUDT1	nudix (nucleoside diphosphate linked moiety X)-type motif 1	Downregulated
A_21_P000	0.000794	0.0000467	-2.57	SNORA14B	small nucleolar RNA, H/ACA box 14B	Downregulated
A_21_P001	0.000905	0.0000622	-2.57	LOC1019284	uncharacterized LOC101928461	Downregulated
A_22_P000	0.001047	0.0000881	-2.57	SVIL-AS1	SVIL antisense RNA 1	Downregulated
A_23_P682	0.001062	0.0000909	-2.57	TTN	titin	Downregulated
A_22_P000	0.001697	0.000225	-2.57	lnc-USP50-1	lnc-USP50-1:1	Downregulated
A_33_P325	0.001914	0.000277	-2.57	AIDA	axin interactor, dorsalization associated	Downregulated
A_22_P000	0.002351	0.000391	-2.57	NEURL4	neuralized E3 ubiquitin protein ligase 4	Downregulated
A_23_P152	0.003586	0.000746	-2.57	E2F4	E2F transcription factor 4, p107/p130-binding	Downregulated
A_23_P287	0.000577	0.0000181	-2.58	DBNDD2	dysbindin (dystrobrevin binding protein 1) domain containing 2	Downregulated
A_23_P141	0.000707	0.0000344	-2.58	RDM1	RAD52 motif containing 1	Downregulated
A_23_P398	0.00098	0.0000758	-2.58	TTC31	tetratricopeptide repeat domain 31	Downregulated
A_23_P101	0.001018	0.0000827	-2.58	ZFP36L2	ZFP36 ring finger protein-like 2	Downregulated
A_22_P000	0.004602	0.00108	-2.58	lnc-SP140-2	lnc-SP140-2:1	Downregulated
A_23_P162	0.00536	0.00135	-2.58	WNT10B	wingless-type MMTV integration site family, member 10B	Downregulated
A_24_P192	0.001952	0.000287	-2.59	MLLT3	myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, Drosophila)	Downregulated
A_33_P322	0.001964	0.000291	-2.59	lnc-DLX2-4	lnc-DLX2-4:3	Downregulated
A_33_P339	0.00206	0.000317	-2.59	MRPL4	mitochondrial ribosomal protein L4	Downregulated
A_21_P000	0.002163	0.000344	-2.59	lnc-BOD1-1	lnc-BOD1-1:7	Downregulated
A_33_P330	0.002901	0.000539	-2.59	ALOX12-AS1	ALOX12 antisense RNA 1	Downregulated
A_23_P416	0.003667	0.000769	-2.59	PIF1	PIF1 5'-to-3' DNA helicase	Downregulated
A_33_P334	0.010001	0.00319	-2.59	HIP1	huntingtin interacting protein 1	Downregulated
A_23_P347	0.011519	0.00384	-2.59	MTSS1	metastasis suppressor 1	Downregulated
A_22_P000	0.001257	0.00013	-2.6	lnc-SLC25A19-1	lnc-SLC25A19-1:1	Downregulated
A_21_P000	0.00141	0.000161	-2.6	LOC1001315	uncharacterized LOC100131564	Downregulated
A_21_P000	0.00165	0.000213	-2.6	lnc-DLEU1-1	lnc-DLEU1-1:1	Downregulated
A_33_P336	0.002968	0.000559	-2.6	DNAJC15	DnaJ (Hsp40) homolog, subfamily C, member 15	Downregulated
A_24_P166	0.008188	0.00244	-2.6	IMPAD1	inositol monophosphatase domain containing 1	Downregulated
A_23_P446	0.000526	0.0000124	-2.61	CRIP1	cysteine-rich protein 1 (intestinal)	Downregulated
A_21_P001	0.00055	0.0000151	-2.61	XLOC_I2_001066		Downregulated
A_23_P149	0.000575	0.0000176	-2.61	PDLIM1	PDZ and LIM domain 1	Downregulated
A_23_P202	0.000805	0.0000482	-2.61	COMMD5	COMM domain containing 5	Downregulated

A_33_P327	0.000954	0.0000704	-2.61	NADK	NAD kinase	Downregulated
A_33_P328	0.001397	0.000157	-2.61	SSX2IP	synovial sarcoma, X breakpoint 2 interacting protein	Downregulated
A_21_P000	0.002062	0.000318	-2.61	TSFM	Ts translation elongation factor, mitochondrial	Downregulated
A_23_P145	0.002081	0.000322	-2.61	GPR65	G protein-coupled receptor 65	Downregulated
A_23_P302	0.002571	0.000449	-2.61	PCYOX1L	prenylcysteine oxidase 1 like	Downregulated
A_23_P565	0.003543	0.000731	-2.61	ITGA4	integrin, alpha 4 (antigen CD49D, alpha 4 subunit of VLA-4 receptor)	Downregulated
A_24_P379	0.0038	0.00081	-2.61	RPS14	ribosomal protein S14	Downregulated
A_33_P367	0.003815	0.000815	-2.61	USP28	ubiquitin specific peptidase 28	Downregulated
A_23_P115	0.000597	0.0000214	-2.62	VPS72	vacuolar protein sorting 72 homolog (S. cerevisiae)	Downregulated
A_19_P008	0.000792	0.0000463	-2.62	LOC1019293	uncharacterized LOC101929378	Downregulated
A_21_P000	0.00124	0.000127	-2.62	lnc-PCF11-1	lnc-PCF11-1:12	Downregulated
A_23_P155	0.002693	0.000481	-2.62	CYTH4	cytohesin 4	Downregulated
A_21_P001	0.006965	0.00196	-2.62	FTX	FTX transcript, XIST regulator (non-protein coding)	Downregulated
A_24_P203	0.00067	0.0000288	-2.63	IL2RB	interleukin 2 receptor, beta	Downregulated
A_21_P000	0.00071	0.0000354	-2.63	SNORD20	small nucleolar RNA, C/D box 20	Downregulated
A_33_P324	0.000719	0.0000369	-2.63	CTSD	cathepsin D	Downregulated
A_24_P371	0.000819	0.0000505	-2.63	SLC35G2	solute carrier family 35, member G2	Downregulated
A_21_P000	0.000959	0.0000714	-2.63	lnc-VEGFC-1	lnc-VEGFC-1:1	Downregulated
A_23_P902	0.000959	0.0000714	-2.63	ZNF585B	zinc finger protein 585B	Downregulated
A_33_P376	0.001129	0.000105	-2.63	PIGU	phosphatidylinositol glycan anchor biosynthesis, class U	Downregulated
A_22_P000	0.00773	0.00226	-2.63	lnc-S1PR1-1	lnc-S1PR1-1:1	Downregulated
A_21_P000	0.011169	0.00368	-2.63	SNORD26	small nucleolar RNA, C/D box 26	Downregulated
A_23_P135	0.000526	0.0000128	-2.64	PLAA	phospholipase A2-activating protein	Downregulated
A_24_P231	0.00056	0.000016	-2.64	DNPEP	aspartyl aminopeptidase	Downregulated
A_23_P102	0.000707	0.0000342	-2.64	BANK1	B-cell scaffold protein with ankyrin repeats 1	Downregulated
A_33_P324	0.000928	0.0000657	-2.64	CNOT6L	CCR4-NOT transcription complex, subunit 6-like	Downregulated
A_24_P159	0.000998	0.0000798	-2.64	PAK6	p21 protein (Cdc42/Rac)-activated kinase 6	Downregulated
A_23_P976	0.001008	0.0000813	-2.64	CNTROB	centrobin, centrosomal BRCA2 interacting protein	Downregulated
A_23_P154	0.001171	0.000113	-2.64	BACE2	beta-site APP-cleaving enzyme 2	Downregulated
A_22_P000	0.001266	0.000133	-2.64	lnc-NSUN6-1	lnc-NSUN6-1:1	Downregulated
A_23_P596	0.002101	0.000327	-2.64	NPVF	neuropeptide VF precursor	Downregulated
A_33_P321	0.002276	0.000373	-2.64	AAK1	AP2 associated kinase 1	Downregulated
A_23_P358	0.00412	0.000911	-2.64	PRIMPOL	primase and polymerase (DNA-directed)	Downregulated
A_21_P000	0.007766	0.00227	-2.64	lnc-HMG20A-1	lnc-HMG20A-5:1	Downregulated
A_33_P322	0.00067	0.0000289	-2.65	MTMR10	myotubularin related protein 10	Downregulated
A_22_P000	0.000765	0.0000424	-2.65	lnc-ZC3H12D-1	lnc-ZC3H12D-2:1	Downregulated
A_33_P322	0.000866	0.0000571	-2.65	KIF21B	kinesin family member 21B	Downregulated

A_33_P329	0.000942	0.0000684	-2.65	UBIAD1	UbiA prenyltransferase domain containing 1	Downregulated
A_24_P942	0.001163	0.000112	-2.65	TMX4	thioredoxin-related transmembrane protein 4	Downregulated
A_22_P000	0.002572	0.000449	-2.65	IFNG-AS1	IFNG antisense RNA 1	Downregulated
A_23_P577	0.006659	0.00184	-2.65	DRD3	dopamine receptor D3	Downregulated
A_33_P324	0.000563	0.0000168	-2.66	NSUN4	NOP2/Sun domain family, member 4	Downregulated
A_23_P122	0.00065	0.000027	-2.66	CCNB1	cyclin B1	Downregulated
A_23_P153	0.000673	0.000029	-2.66	XRCC1	X-ray repair complementing defective repair in Chinese hamster cells 1	Downregulated
A_33_P323	0.000707	0.0000336	-2.66	KIAA1217	KIAA1217	Downregulated
A_23_P147	0.000721	0.0000373	-2.66	KIF13B	kinesin family member 13B	Downregulated
A_33_P323	0.001066	0.0000923	-2.66	MTMR3	myotubularin related protein 3	Downregulated
A_22_P000	0.00129	0.000136	-2.66	lnc-DPCD-1	lnc-DPCD-1:1	Downregulated
A_33_P321	0.001692	0.000223	-2.66	RNASEH2B	ribonuclease H2, subunit B	Downregulated
A_23_P354	0.002909	0.000541	-2.66	MYOF	myoferlin	Downregulated
A_33_P331	0.006257	0.00168	-2.66	FOXK2	forkhead box K2	Downregulated
A_23_P119	0.013974	0.00492	-2.66	GUCA2A	guanylate cyclase activator 2A (guanylin)	Downregulated
A_33_P337	0.000526	0.0000119	-2.67	CYBA	cytochrome b-245, alpha polypeptide	Downregulated
A_24_P273	0.00056	0.0000163	-2.67	MED20	mediator complex subunit 20	Downregulated
A_33_P330	0.000578	0.000019	-2.67	COL19A1	collagen, type XIX, alpha 1	Downregulated
A_33_P340	0.000906	0.0000624	-2.67	PECAM1	platelet/endothelial cell adhesion molecule 1	Downregulated
A_23_P121	0.000925	0.0000653	-2.67	PARP8	poly (ADP-ribose) polymerase family, member 8	Downregulated
A_23_P141	0.001103	0.0000999	-2.67	TPGS2	tubulin polyglutamylase complex subunit 2	Downregulated
A_21_P001	0.001603	0.000202	-2.67	CD99P1	CD99 molecule pseudogene 1	Downregulated
A_33_P328	0.002153	0.000342	-2.67	CTSB	cathepsin B	Downregulated
A_21_P000	0.003674	0.000771	-2.67	SNORD54	small nucleolar RNA, C/D box 54	Downregulated
A_23_P554	0.00478	0.00114	-2.67	CBX8	chromobox homolog 8	Downregulated
A_24_P348	0.000711	0.0000357	-2.68	TTY15	testis-specific transcript, Y-linked 15 (non-protein coding)	Downregulated
A_32_P110	0.000831	0.000052	-2.68	GGACT	gamma-glutamylamine cyclotransferase	Downregulated
A_33_P326	0.001563	0.000194	-2.68	IVD	isovaleryl-CoA dehydrogenase	Downregulated
A_33_P331	0.003893	0.000841	-2.68	LINC01184	long intergenic non-protein coding RNA 1184	Downregulated
A_21_P000	0.009843	0.00313	-2.68	lnc-C1orf124-	lnc-C1orf124-1:1	Downregulated
A_33_P325	0.000525	0.0000111	-2.69	BCL2L11	BCL2-like 11 (apoptosis facilitator)	Downregulated
A_32_P298	0.000532	0.0000132	-2.69	CRADD	CASP2 and RIPK1 domain containing adaptor with death domain	Downregulated
A_23_P611	0.000597	0.0000213	-2.69	APOO	apolipoprotein O	Downregulated
A_23_P128	0.000773	0.0000434	-2.69	GZMH	granzyme H (cathepsin G-like 2, protein h-CCPX)	Downregulated
A_24_P383	0.00093	0.0000661	-2.69	DPYSL2	dihydropyrimidinase-like 2	Downregulated
A_23_P611	0.002627	0.000464	-2.69	PLCXD1	phosphatidylinositol-specific phospholipase C, X domain containing 1	Downregulated
A_33_P338	0.000709	0.0000351	-2.7	TBPL1	TBP-like 1	Downregulated

A_23_P610	0.001427	0.000164	-2.7	MLKL	mixed lineage kinase domain-like	Downregulated
A_33_P339	0.001445	0.000168	-2.7	PARP10	poly (ADP-ribose) polymerase family, member 10	Downregulated
A_24_P544	0.001537	0.000188	-2.7	CCDC115	coiled-coil domain containing 115	Downregulated
A_23_P949	0.001695	0.000224	-2.7	ZNF283	zinc finger protein 283	Downregulated
A_23_P193	0.00248	0.000424	-2.7	CUL7	cullin 7	Downregulated
A_24_P152	0.003568	0.00074	-2.7	C10orf76	chromosome 10 open reading frame 76	Downregulated
A_22_P000	0.00056	0.0000162	-2.71	lnc-RWDD2B-	lnc-RWDD2B-1:1	Downregulated
A_24_P354	0.000759	0.0000415	-2.71	MTMR12	myotubularin related protein 12	Downregulated
A_23_P329	0.000603	0.0000224	-2.72	VPS4A	vacuolar protein sorting 4 homolog A (<i>S. cerevisiae</i>)	Downregulated
A_22_P000	0.000766	0.0000427	-2.72	lnc-ZNF8-1	lnc-ZNF8-1:1	Downregulated
A_22_P000	0.000776	0.0000438	-2.72	lnc-CDIPT-1	lnc-CDIPT-1:7	Downregulated
A_23_P682	0.000995	0.000079	-2.72	GPR75	G protein-coupled receptor 75	Downregulated
A_21_P000	0.001804	0.000249	-2.72	lnc-NDFIP2-8	lnc-NDFIP2-8:1	Downregulated
A_23_P216	0.000525	0.0000115	-2.73	ENTPD4	ectonucleoside triphosphate diphosphohydrolase 4	Downregulated
A_24_P709	0.000526	0.0000128	-2.73	CD99	CD99 molecule	Downregulated
A_24_P912	0.000695	0.0000317	-2.73	AKNA	AT-hook transcription factor	Downregulated
A_23_P203	0.000925	0.0000653	-2.73	INTS4	integrator complex subunit 4	Downregulated
A_32_P584	0.000961	0.0000721	-2.73	KCND3	potassium channel, voltage gated Shal related subfamily D, member 3	Downregulated
A_33_P333	0.001203	0.000119	-2.73	FBRS	fibrosin	Downregulated
A_23_P152	0.002456	0.000416	-2.73	RSAD1	radical S-adenosyl methionine domain containing 1	Downregulated
A_33_P331	0.004645	0.00109	-2.73	ZNF749	zinc finger protein 749	Downregulated
A_24_P380	0.000589	0.0000204	-2.74	PANK3	pantothenate kinase 3	Downregulated
A_33_P327	0.000621	0.0000242	-2.74	UHRF2	ubiquitin-like with PHD and ring finger domains 2, E3 ubiquitin protein ligase	Downregulated
A_24_P398	0.001062	0.0000913	-2.74	IFT43	intraflagellar transport 43	Downregulated
A_24_P244	0.001569	0.000195	-2.74	NUDT15	nudix (nucleoside diphosphate linked moiety X)-type motif 15	Downregulated
A_23_P208	0.001569	0.000195	-2.74	SIRT6	sirtuin 6	Downregulated
A_23_P492	0.001919	0.000278	-2.74	C19orf68	chromosome 19 open reading frame 68	Downregulated
A_24_P942	0.00069	0.0000304	-2.75	FRMD4A	FERM domain containing 4A	Downregulated
A_23_P252	0.000769	0.000043	-2.75	STRBP	spermatid perinuclear RNA binding protein	Downregulated
A_24_P132	0.000783	0.0000449	-2.75	GIMAP8	GTPase, IMAP family member 8	Downregulated
A_33_P323	0.0017	0.000226	-2.75	MYO18A	myosin XVIIIa	Downregulated
A_21_P001	0.002117	0.000332	-2.75	XLOC_l2_009804		Downregulated
A_23_P255	0.000525	0.0000112	-2.76	MANEA	mannosidase, endo-alpha	Downregulated
A_21_P001	0.001581	0.000197	-2.76	PACRGL	PARK2 co-regulated-like	Downregulated
A_24_P272	0.003909	0.000845	-2.76	MUSTN1	musculoskeletal, embryonic nuclear protein 1	Downregulated
A_24_P371	0.006209	0.00166	-2.76	FAM208A	family with sequence similarity 208, member A	Downregulated
A_23_P413	0.006309	0.0017	-2.76	MDM1	Mdm1 nuclear protein homolog (mouse)	Downregulated

A_23_P114	0.011083	0.00365	-2.76	MBTPS2	membrane-bound transcription factor peptidase, site 2	Downregulated
A_24_P946	0.000792	0.0000462	-2.77	ARIH2	ariadne RBR E3 ubiquitin protein ligase 2	Downregulated
A_23_P157	0.000914	0.0000639	-2.77	DNAJC30	DnaJ (Hsp40) homolog, subfamily C, member 30	Downregulated
A_23_P205	0.00109	0.0000969	-2.77	UTP14A	UTP14, U3 small nucleolar ribonucleoprotein, homolog A (yeast)	Downregulated
A_23_P882	0.001211	0.000121	-2.77	RBM23	RNA binding motif protein 23	Downregulated
A_33_P323	0.004387	0.001	-2.77	RIMS3	regulating synaptic membrane exocytosis 3	Downregulated
A_21_P000	0.000647	0.0000267	-2.78	C5orf56	chromosome 5 open reading frame 56	Downregulated
A_22_P000	0.000728	0.0000381	-2.78	LOC1019278	uncharacterized LOC101927841	Downregulated
A_33_P344	0.000728	0.0000381	-2.78	LOC286071	uncharacterized LOC286071	Downregulated
A_33_P324	0.002117	0.000333	-2.78	DCAF8	DDB1 and CUL4 associated factor 8	Downregulated
A_23_P400	0.004131	0.000914	-2.78	AMMECR1L	AMMECR1-like	Downregulated
A_33_P328	0.004483	0.00104	-2.78	GCNT7	glucosaminyl (N-acetyl) transferase family member 7	Downregulated
A_23_P141	0.006046	0.0016	-2.78	BCAS3	breast carcinoma amplified sequence 3	Downregulated
A_21_P000	0.000855	0.0000554	-2.79	lnc-SLC1A4-1	lnc-SLC1A4-1:1	Downregulated
A_23_P157	0.00108	0.000095	-2.79	KRT9	keratin 9, type I	Downregulated
A_21_P000	0.0011	0.0000994	-2.79	lnc-C15orf2-9	lnc-C15orf2-9:10	Downregulated
A_23_P100	0.001277	0.000134	-2.79	MYO19	myosin XIX	Downregulated
A_33_P323	0.001433	0.000165	-2.79	ZNF3	zinc finger protein 3	Downregulated
A_24_P932	0.001435	0.000166	-2.79	TMEM14E	transmembrane protein 14E	Downregulated
A_21_P001	0.003544	0.000732	-2.79	XLOC_I2_004595		Downregulated
A_23_P386	0.016097	0.00593	-2.79	DIRAS1	DIRAS family, GTP-binding RAS-like 1	Downregulated
A_21_P001	0.000537	0.000014	-2.8	lnc-AF165138	lnc-AF165138.7.1-3:2	Downregulated
A_23_P153	0.000717	0.0000365	-2.8	ACVR2A	activin A receptor, type IIA	Downregulated
A_33_P332	0.000893	0.0000604	-2.8	ZNF19	zinc finger protein 19	Downregulated
A_33_P324	0.001341	0.000146	-2.8	AFF1	AF4/FMR2 family, member 1	Downregulated
A_21_P000	0.001353	0.000149	-2.8	LOC1005057	uncharacterized LOC100505771	Downregulated
A_22_P000	0.001699	0.000226	-2.8	PRKXP1	protein kinase, X-linked, pseudogene 1	Downregulated
A_22_P000	0.002221	0.000359	-2.8	IGFBP7	insulin-like growth factor binding protein 7	Downregulated
A_23_P155	0.002219	0.000359	-2.8	NEK11	NIMA-related kinase 11	Downregulated
A_22_P000	0.002409	0.000405	-2.8	lnc-ZBTB38-1	lnc-ZBTB38-1:1	Downregulated
A_23_P113	0.000526	0.0000127	-2.81	USP19	ubiquitin specific peptidase 19	Downregulated
A_23_P415	0.000537	0.0000142	-2.81	METTL7A	methyltransferase like 7A	Downregulated
A_21_P001	0.000545	0.0000147	-2.81	XLOC_I2_006026		Downregulated
A_33_P341	0.000717	0.0000365	-2.81	DDX58	DEAD (Asp-Glu-Ala-Asp) box polypeptide 58	Downregulated
A_23_P383	0.001324	0.000143	-2.81	ZSWIM5	zinc finger, SWIM-type containing 5	Downregulated
A_23_P134	0.002302	0.000379	-2.81	THAP1	THAP domain containing, apoptosis associated protein 1	Downregulated
A_24_P279	0.007565	0.00219	-2.81	MRI1	methylthioribose-1-phosphate isomerase 1	Downregulated

A_22_P000	0.016069	0.00591	-2.81	lnc-PGBD5-1	lnc-PGBD5-1:1	Downregulated
A_23_P131	0.001612	0.000205	-2.82	EXT2	exostosin glycosyltransferase 2	Downregulated
A_33_P342	0.002832	0.000519	-2.82	WDPCP	WD repeat containing planar cell polarity effector	Downregulated
A_23_P706	0.000525	0.0000113	-2.83	LY86	lymphocyte antigen 86	Downregulated
A_22_P000	0.000612	0.0000234	-2.83	FLJ32255	uncharacterized LOC643977	Downregulated
A_22_P000	0.00071	0.0000353	-2.83	lnc-C10orf31-	lnc-C10orf31-2:1	Downregulated
A_22_P000	0.000896	0.0000607	-2.83	lnc-CD63-1	lnc-CD63-1:1	Downregulated
A_23_P320	0.001266	0.000133	-2.83	CEP128	centrosomal protein 128kDa	Downregulated
A_21_P000	0.00281	0.000513	-2.83	lnc-SMARCAL	lnc-SMARCAL1-2:5	Downregulated
A_22_P000	0.004513	0.00105	-2.83	LOC1005068	uncharacterized LOC100506844	Downregulated
A_21_P000	0.006568	0.0018	-2.83	lnc-GCNT1-2	lnc-GCNT1-2:1	Downregulated
A_23_P380	0.000577	0.0000183	-2.84	ANKRD13B	ankyrin repeat domain 13B	Downregulated
A_21_P000	0.000642	0.0000262	-2.84	SNORD100	small nucleolar RNA, C/D box 100	Downregulated
A_33_P330	0.001797	0.000248	-2.84	DBT	dihydrolipoamide branched chain transacylase E2	Downregulated
A_33_P325	0.002585	0.000453	-2.84	PLCB1	phospholipase C, beta 1 (phosphoinositide-specific)	Downregulated
A_21_P001	0.003024	0.000575	-2.84	XLOC_I2_015441		Downregulated
A_23_P771	0.000709	0.0000349	-2.85	DPH6	diphthamine biosynthesis 6	Downregulated
A_24_P751	0.000894	0.0000605	-2.85	HBD	hemoglobin, delta	Downregulated
A_33_P338	0.001397	0.000157	-2.85	DUSP28	dual specificity phosphatase 28	Downregulated
A_23_P317	0.001443	0.000168	-2.85	E2F5	E2F transcription factor 5, p130-binding	Downregulated
A_22_P000	0.002356	0.000392	-2.85	lnc-CCDC7-3	lnc-CCDC7-3:1	Downregulated
A_22_P000	0.004251	0.000957	-2.85	lnc-CDC25C-1	lnc-CDC25C-1:1	Downregulated
A_24_P330	0.004632	0.00109	-2.85	CALCOCO2	calcium binding and coiled-coil domain 2	Downregulated
A_33_P328	0.000515	9.85E-06	-2.86	NUP133	nucleoporin 133kDa	Downregulated
A_22_P000	0.000526	0.0000126	-2.86	lnc-EIF2AK4-	lnc-EIF2AK4-3:1	Downregulated
A_23_P139	0.000577	0.000018	-2.86	GOLGA2P5	golgin A2 pseudogene 5	Downregulated
A_23_P400	0.000715	0.0000362	-2.86	PMS1	PMS1 postmeiotic segregation increased 1 (S. cerevisiae)	Downregulated
A_33_P333	0.001158	0.000111	-2.86	SHROOM3	shroom family member 3	Downregulated
A_24_P314	0.001365	0.000151	-2.86	SPC24	SPC24, NDC80 kinetochore complex component	Downregulated
A_22_P000	0.005238	0.0013	-2.86	lnc-ST7L-1	lnc-ST7L-1:1	Downregulated
A_21_P000	0.005271	0.00131	-2.86	MAPKAPK5-	MAPKAPK5 antisense RNA 1	Downregulated
A_24_P108	0.005534	0.00141	-2.86	GOSR2	golgi SNAP receptor complex member 2	Downregulated
A_23_P949	0.007026	0.00198	-2.86	LETM1	leucine zipper-EF-hand containing transmembrane protein 1	Downregulated
A_23_P251	0.000526	0.0000127	-2.87	DCTN4	dynactin 4 (p62)	Downregulated
A_33_P328	0.000545	0.0000147	-2.87	KAT6B	K(lysine) acetyltransferase 6B	Downregulated
A_23_P361	0.000707	0.0000341	-2.87	SESN3	sestrin 3	Downregulated
A_24_P370	0.00124	0.000127	-2.87	WBSCR16	Williams-Beuren syndrome chromosome region 16	Downregulated

A_23_P911	0.003389	0.000685	-2.87	PECR	peroxisomal trans-2-enoyl-CoA reductase	Downregulated
A_33_P326	0.008796	0.00269	-2.87	TUBE1	tubulin, epsilon 1	Downregulated
A_23_P107	0.000543	0.0000146	-2.88	ETFB	electron-transfer-flavoprotein, beta polypeptide	Downregulated
A_22_P000	0.000776	0.0000438	-2.88	ZNF154	zinc finger protein 154	Downregulated
A_33_P325	0.001279	0.000135	-2.88	SETDB1	SET domain, bifurcated 1	Downregulated
A_33_P328	0.001522	0.000185	-2.88	CDK11A	cyclin-dependent kinase 11A	Downregulated
A_19_P008	0.001893	0.000272	-2.88	RNF213	ring finger protein 213	Downregulated
A_33_P321	0.002927	0.000545	-2.88	TTBK2	tau tubulin kinase 2	Downregulated
A_23_P166	0.003699	0.000779	-2.88	ITGB5	integrin, beta 5	Downregulated
A_19_P003	0.005192	0.00128	-2.88	HCG18	HLA complex group 18 (non-protein coding)	Downregulated
A_24_P392	0.006904	0.00193	-2.88	SIMC1	SUMO-interacting motifs containing 1	Downregulated
A_33_P682	0.000701	0.0000325	-2.89	LOC1005068	uncharacterized LOC100506844	Downregulated
A_33_P331	0.001443	0.000168	-2.89	CYB5R4	cytochrome b5 reductase 4	Downregulated
A_23_P416	0.001453	0.00017	-2.89	LRRC70	leucine rich repeat containing 70	Downregulated
A_23_P167	0.001511	0.000183	-2.89	FAM134B	family with sequence similarity 134, member B	Downregulated
A_22_P000	0.003171	0.000621	-2.89	lnc-FDXACB1	lnc-FDXACB1-1:1	Downregulated
A_23_P127	0.000603	0.0000224	-2.9	STK33	serine/threonine kinase 33	Downregulated
A_33_P336	0.000639	0.0000258	-2.9	MICA	MHC class I polypeptide-related sequence A	Downregulated
A_23_P117	0.0008	0.0000475	-2.9	ZFAND4	zinc finger, AN1-type domain 4	Downregulated
A_33_P324	0.001802	0.000249	-2.9	SMIM5	small integral membrane protein 5	Downregulated
A_33_P333	0.001959	0.00029	-2.9	SYNE1	spectrin repeat containing, nuclear envelope 1	Downregulated
A_33_P323	0.00542	0.00137	-2.9	FLJ16734	uncharacterized LOC641928	Downregulated
A_23_P553	0.000521	0.0000103	-2.91	FLOT2	flotillin 2	Downregulated
A_32_P191	0.001343	0.000147	-2.91	KCTD5	potassium channel tetramerization domain containing 5	Downregulated
A_23_P566	0.002279	0.000374	-2.91	MCEE	methylmalonyl CoA epimerase	Downregulated
A_22_P000	0.000515	9.18E-06	-2.92	lnc-SDCCAG8	lnc-SDCCAG8-1:1	Downregulated
A_23_P951	0.00056	0.0000164	-2.92	SEMA4B	sema domain, immunoglobulin domain (Ig), transmembrane domain (TM)	Downregulated
A_32_P196	0.000837	0.0000527	-2.92	DPY19L4	dpy-19-like 4 (C. elegans)	Downregulated
A_23_P211	0.000837	0.0000527	-2.92	ZNF35	zinc finger protein 35	Downregulated
A_33_P336	0.001043	0.0000875	-2.92	UGGT1	UDP-glucose glycoprotein glucosyltransferase 1	Downregulated
A_33_P336	0.001054	0.0000893	-2.92	TRPS1	trichorhinophalangeal syndrome I	Downregulated
A_33_P342	0.001524	0.000185	-2.92	ARPC5	actin related protein 2/3 complex, subunit 5, 16kDa	Downregulated
A_33_P340	0.002221	0.000359	-2.92	LOC283788	FSHD region gene 1 pseudogene	Downregulated
A_21_P001	0.006241	0.00168	-2.92	LOC1005070	uncharacterized LOC100507006	Downregulated
A_23_P202	0.007422	0.00213	-2.92	SLC35C1	solute carrier family 35 (GDP-fucose transporter), member C1	Downregulated
A_33_P327	0.000502	8.36E-06	-2.93	REC8	REC8 meiotic recombination protein	Downregulated
A_22_P000	0.00058	0.0000196	-2.93	lnc-SNX11-2	lnc-SNX11-2:1	Downregulated

A_23_P917	0.00065	0.000027	-2.93	TNFRSF13C	tumor necrosis factor receptor superfamily, member 13C	Downregulated
A_33_P375	0.002207	0.000355	-2.93	TOM1	target of myb1 (chicken)	Downregulated
A_32_P539	0.000527	0.000013	-2.94	LINC01410	long intergenic non-protein coding RNA 1410	Downregulated
A_22_P000	0.00062	0.0000239	-2.94	lnc-SRPR-1	lnc-SRPR-1:1	Downregulated
A_23_P331	0.00069	0.0000304	-2.94	TTYH3	tweety family member 3	Downregulated
A_21_P000	0.000995	0.0000785	-2.94	MCPH1	microcephalin 1	Downregulated
A_23_P252	0.001203	0.000119	-2.94	EAF2	ELL associated factor 2	Downregulated
A_23_P390	0.001815	0.000253	-2.94	PSKH1	protein serine kinase H1	Downregulated
A_33_P342	0.003232	0.000639	-2.94	TRIM14	tripartite motif containing 14	Downregulated
A_23_P164	0.006105	0.00162	-2.94	FCER2	Fc fragment of IgE, low affinity II, receptor for (CD23)	Downregulated
A_22_P000	0.006604	0.00182	-2.94	lnc-CHADL-2	lnc-CHADL-2:1	Downregulated
A_22_P000	0.00774	0.00226	-2.94	lnc-DHX38-5	lnc-DHX38-5:1	Downregulated
A_33_P325	0.000499	8.01E-06	-2.95	CNTRL	centriolin	Downregulated
A_33_P327	0.0005	8.07E-06	-2.95	METTL16	methyltransferase like 16	Downregulated
A_32_P198	0.000713	0.000036	-2.95	SREK1IP1	SREK1-interacting protein 1	Downregulated
A_33_P323	0.000814	0.00005	-2.95	RNFT2	ring finger protein, transmembrane 2	Downregulated
A_23_P422	0.001493	0.000179	-2.95	ARHGAP20	Rho GTPase activating protein 20	Downregulated
A_23_P302	0.001662	0.000216	-2.95	PLK2	polo-like kinase 2	Downregulated
A_23_P156	0.001997	0.0003	-2.95	ECI2	enoyl-CoA delta isomerase 2	Downregulated
A_21_P000	0.002376	0.000398	-2.95	LINC01419	long intergenic non-protein coding RNA 1419	Downregulated
A_23_P132	0.00596	0.00157	-2.95	ZMAT5	zinc finger, matrin-type 5	Downregulated
A_23_P142	0.007099	0.00201	-2.95	GNA11	guanine nucleotide binding protein (G protein), alpha 11 (Gq class)	Downregulated
A_21_P001	0.00995	0.00317	-2.95	XLOC_l2_009184		Downregulated
A_22_P000	0.017144	0.00643	-2.95	lnc-HLA-DQA1-5:1	lnc-HLA-DQA1-5:1	Downregulated
A_33_P340	0.000578	0.0000193	-2.96	UQCC3	ubiquinol-cytochrome c reductase complex assembly factor 3	Downregulated
A_33_P321	0.001478	0.000176	-2.96	ZCCHC6	zinc finger, CCHC domain containing 6	Downregulated
A_23_P254	0.001501	0.000181	-2.96	C12orf4	chromosome 12 open reading frame 4	Downregulated
A_33_P340	0.001626	0.000207	-2.96	SEC14L1P1	SEC14-like 1 pseudogene 1	Downregulated
A_23_P103	0.00255	0.000443	-2.96	B4GALT3	UDP-Gal:betaGlcNAc beta 1,4- galactosyltransferase, polypeptide 3	Downregulated
A_33_P336	0.000498	0.0000077	-2.97	RTN3	reticulon 3	Downregulated
A_23_P215	0.000513	8.94E-06	-2.97	BAZ1B	bromodomain adjacent to zinc finger domain, 1B	Downregulated
A_33_P322	0.000614	0.0000235	-2.97	COL4A4	collagen, type IV, alpha 4	Downregulated
A_23_P233	0.000857	0.0000558	-2.97	MLLT11	myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, Drosophila)	Downregulated
A_22_P000	0.001055	0.0000897	-2.97	GSN	gelsolin	Downregulated
A_24_P406	0.001369	0.000151	-2.97	MLLT10	myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, Drosophila)	Downregulated
A_22_P000	0.00166	0.000216	-2.97	LOC340512	uncharacterized LOC340512	Downregulated
A_23_P398	0.001763	0.00024	-2.97	HIP1R	huntingtin interacting protein 1 related	Downregulated

A_24_P586	0.006035	0.0016	-2.97	GRAMD1B	GRAM domain containing 1B	Downregulated
A_23_P692	0.000532	0.0000134	-2.98	SUMF1	sulfatase modifying factor 1	Downregulated
A_23_P838	0.000658	0.0000276	-2.98	CA8	carbonic anhydrase VIII	Downregulated
A_24_P571	0.001824	0.000256	-2.98	PROSER3	proline and serine rich 3	Downregulated
A_24_P365	0.0027	0.000483	-2.98	NKAPP1	NFKB activating protein pseudogene 1	Downregulated
A_23_P100	0.007415	0.00213	-2.98	ZCCHC14	zinc finger, CCHC domain containing 14	Downregulated
A_22_P000	0.008429	0.00254	-2.98	lnc-ATP4B-1	lnc-ATP4B-1:1	Downregulated
A_33_P331	0.000577	0.0000185	-2.99	MTERF4	mitochondrial transcription termination factor 4	Downregulated
A_24_P111	0.000693	0.0000308	-2.99	FAM172A	family with sequence similarity 172, member A	Downregulated
A_23_P754	0.000736	0.0000387	-2.99	MEN1	multiple endocrine neoplasia I	Downregulated
A_21_P000	0.00075	0.0000405	-2.99	SNORD75	small nucleolar RNA, C/D box 75	Downregulated
A_24_P320	0.000869	0.0000576	-2.99	PRKRIP1	PRKR interacting protein 1 (IL11 inducible)	Downregulated
A_33_P327	0.002757	0.000499	-2.99	HLA-DPB1	major histocompatibility complex, class II, DP beta 1	Downregulated
A_23_P446	0.00411	0.000907	-2.99	ADAMTS12	ADAM metalloproteinase with thrombospondin type 1 motif, 12	Downregulated
A_24_P364	0.004211	0.000943	-2.99	NDUFC2	NADH dehydrogenase (ubiquinone) 1, subcomplex unknown, 2, 14.5kD	Downregulated
A_24_P344	0.000584	0.0000199	-3	RNF167	ring finger protein 167	Downregulated
A_22_P000	0.000683	0.0000299	-3	lnc-KLHL25-3	lnc-KLHL25-3:1	Downregulated
A_23_P148	0.00383	0.00082	-3	ADI1	acireductone dioxygenase 1	Downregulated
A_23_P207	0.000711	0.0000356	-3.01	RAD51C	RAD51 paralog C	Downregulated
A_23_P100	0.00124	0.000127	-3.01	ORC6	origin recognition complex, subunit 6	Downregulated
A_22_P000	0.001291	0.000137	-3.01	LRRC8B	leucine rich repeat containing 8 family, member B	Downregulated
A_23_P390	0.001314	0.000141	-3.01	ZNF630	zinc finger protein 630	Downregulated
A_21_P000	0.001991	0.000298	-3.01	SARS	seryl-tRNA synthetase	Downregulated
A_33_P341	0.00362	0.000756	-3.01	LINC00886	long intergenic non-protein coding RNA 886	Downregulated
A_33_P334	0.004325	0.000983	-3.01	RABL2A	RAB, member of RAS oncogene family-like 2A	Downregulated
A_33_P332	0.005877	0.00154	-3.01	SBF1	SET binding factor 1	Downregulated
A_24_P252	0.000498	7.85E-06	-3.02	TRIB1	tribbles pseudokinase 1	Downregulated
A_33_P357	0.000504	8.58E-06	-3.02	AP3D1	adaptor-related protein complex 3, delta 1 subunit	Downregulated
A_33_P341	0.000964	0.000073	-3.02	PURA	purine-rich element binding protein A	Downregulated
A_23_P128	0.000516	0.00001	-3.03	CARS2	cysteinyl-tRNA synthetase 2, mitochondrial (putative)	Downregulated
A_23_P502	0.000603	0.0000222	-3.03	CYB5R3	cytochrome b5 reductase 3	Downregulated
A_33_P328	0.00125	0.000129	-3.03	NSF	N-ethylmaleimide-sensitive factor	Downregulated
A_23_P852	0.002591	0.000454	-3.03	TMEM106B	transmembrane protein 106B	Downregulated
A_23_P414	0.007089	0.00201	-3.03	TBC1D9	TBC1 domain family, member 9 (with GRAM domain)	Downregulated
A_33_P326	0.000489	7.32E-06	-3.04	SLC25A23	solute carrier family 25 (mitochondrial carrier; phosphate carrier), member	Downregulated
A_22_P000	0.000525	0.000011	-3.04	LOC1019289	uncharacterized LOC101928954	Downregulated
A_23_P446	0.000601	0.0000216	-3.04	ECT2	epithelial cell transforming 2	Downregulated

A_22_P000	0.001117	0.000103	-3.04	lnc-EFR3B-3	lnc-EFR3B-3:1	Downregulated
A_33_P337	0.001134	0.000106	-3.04	RBM14	RNA binding motif protein 14	Downregulated
A_33_P321	0.001836	0.000258	-3.04	TRIQK	triple QxxK/R motif containing	Downregulated
A_21_P000	0.00275	0.000497	-3.04	RNF103	ring finger protein 103	Downregulated
A_33_P327	0.004032	0.000883	-3.04	GALM	galactose mutarotase (aldose 1-epimerase)	Downregulated
A_33_P336	0.007627	0.00222	-3.04	EIF4ENIF1	eukaryotic translation initiation factor 4E nuclear import factor 1	Downregulated
A_33_P341	0.000526	0.0000125	-3.05	HNRNPU-AS1	HNRNPU antisense RNA 1	Downregulated
A_33_P333	0.000577	0.0000181	-3.05	HKDC1	hexokinase domain containing 1	Downregulated
A_23_P128	0.001115	0.000102	-3.05	FANCF	Fanconi anemia, complementation group F	Downregulated
A_21_P000	0.001952	0.000287	-3.05	SNORD44	small nucleolar RNA, C/D box 44	Downregulated
A_33_P327	0.005428	0.00137	-3.05	CELF2-AS1	CELF2 antisense RNA 1	Downregulated
A_24_P481	0.005933	0.00156	-3.05	LOC1001315	uncharacterized LOC100131564	Downregulated
A_22_P000	0.000504	8.56E-06	-3.06	lnc-CTU2-1	lnc-CTU2-1:1	Downregulated
A_23_P217	0.000592	0.0000207	-3.06	DPM2	dolichyl-phosphate mannosyltransferase polypeptide 2, regulatory subu	Downregulated
A_23_P144	0.000645	0.0000264	-3.06	SSUH2	ssu-2 homolog (C. elegans)	Downregulated
A_22_P000	0.000662	0.0000279	-3.06	lnc-FAM184B	lnc-FAM184B-1:1	Downregulated
A_33_P327	0.000739	0.0000391	-3.06	NR1D2	nuclear receptor subfamily 1, group D, member 2	Downregulated
A_23_P119	0.000802	0.000048	-3.06	CYTH2	cytohesin 2	Downregulated
A_23_P150	0.001132	0.000105	-3.06	C2CD3	C2 calcium-dependent domain containing 3	Downregulated
A_23_P215	0.001626	0.000208	-3.06	KIAA0408	KIAA0408	Downregulated
A_23_P446	0.003709	0.000782	-3.06	ANAPC7	anaphase promoting complex subunit 7	Downregulated
A_33_P327	0.00056	0.0000157	-3.07	lnc-KLHL36-1	lnc-KLHL36-1:1	Downregulated
A_24_P157	0.00067	0.0000288	-3.07	IL17RB	interleukin 17 receptor B	Downregulated
A_22_P000	0.000697	0.0000319	-3.07	SPAG5-AS1	SPAG5 antisense RNA 1	Downregulated
A_23_P216	0.002078	0.000322	-3.07	EXOSC2	exosome component 2	Downregulated
A_24_P185	0.002757	0.000499	-3.07	NDRG3	NDRG family member 3	Downregulated
A_24_P331	0.003057	0.000585	-3.07	GUCD1	guanylyl cyclase domain containing 1	Downregulated
A_23_P890	0.000756	0.0000413	-3.08	CLUHP3	clustered mitochondria (cluA/CLU1) homolog pseudogene 3	Downregulated
A_33_P342	0.001042	0.000087	-3.08	MRPS34	mitochondrial ribosomal protein S34	Downregulated
A_23_P372	0.001066	0.0000922	-3.08	ITPKB	inositol-trisphosphate 3-kinase B	Downregulated
A_33_P329	0.001863	0.000265	-3.08	NAAA	N-acylethanolamine acid amidase	Downregulated
A_33_P334	0.002553	0.000444	-3.08	LOC1001304	uncharacterized LOC100130458	Downregulated
A_22_P000	0.004207	0.000942	-3.08	lnc-DBT-2	lnc-DBT-2:1	Downregulated
A_21_P000	0.000718	0.0000367	-3.09	VTRNA1-1	vault RNA 1-1	Downregulated
A_33_P338	0.00084	0.0000532	-3.09	AGO1	argonaute RISC catalytic component 1	Downregulated
A_23_P273	0.004588	0.00107	-3.09	TSHZ1	teashirt zinc finger homeobox 1	Downregulated
A_22_P000	0.005951	0.00156	-3.09	HDAC9	histone deacetylase 9	Downregulated

A_33_P321	0.006385	0.00173	-3.09	FECH	ferrochelatase	Downregulated
A_23_P361	0.000502	8.47E-06	-3.1	METTL6	methyltransferase like 6	Downregulated
A_21_P001	0.000664	0.0000283	-3.1	lnc-PRR11-1	lnc-PRR11-1:1	Downregulated
A_24_P361	0.000664	0.0000283	-3.1	ZNF839	zinc finger protein 839	Downregulated
A_24_P919	0.000701	0.0000327	-3.1	WDR17	WD repeat domain 17	Downregulated
A_22_P000	0.000718	0.0000368	-3.1	LINC01585	long intergenic non-protein coding RNA 1585	Downregulated
A_33_P341	0.00074	0.0000393	-3.1	DNAJA2	DnaJ (Hsp40) homolog, subfamily A, member 2	Downregulated
A_24_P116	0.000839	0.0000532	-3.1	PSMD9	proteasome (prosome, macropain) 26S subunit, non-ATPase, 9	Downregulated
A_33_P341	0.001054	0.0000895	-3.1	SHROOM3	shroom family member 3	Downregulated
A_33_P329	0.001187	0.000116	-3.1	CCDC125	coiled-coil domain containing 125	Downregulated
A_23_P391	0.000486	0.0000071	-3.11	RCAN3	RCAN family member 3	Downregulated
A_24_P920	0.000559	0.0000155	-3.11	PPIA	peptidylprolyl isomerase A (cyclophilin A)	Downregulated
A_23_P337	0.000717	0.0000365	-3.11	SERBP1	SERPINE1 mRNA binding protein 1	Downregulated
A_32_P100	0.000855	0.0000555	-3.11	MTURN	maturin, neural progenitor differentiation regulator homolog (Xenopus)	Downregulated
A_21_P000	0.001175	0.000114	-3.11	LOC1005076	uncharacterized LOC100507616	Downregulated
A_21_P001	0.004458	0.00103	-3.11	LOC1002894	uncharacterized LOC100289455	Downregulated
A_24_P401	0.000701	0.0000327	-3.12	KIAA0556	KIAA0556	Downregulated
A_23_P168	0.001036	0.000086	-3.12	TP53INP1	tumor protein p53 inducible nuclear protein 1	Downregulated
A_21_P001	0.00166	0.000216	-3.12	FTO-IT1	FTO intronic transcript 1 (non-protein coding)	Downregulated
A_22_P000	0.002696	0.000482	-3.12	lnc-NUMB-2	lnc-NUMB-2:1	Downregulated
A_23_P112	0.004355	0.000994	-3.12	CNOT10	CCR4-NOT transcription complex, subunit 10	Downregulated
A_33_P336	0.005953	0.00157	-3.12	RPS6	ribosomal protein S6	Downregulated
A_21_P001	0.000501	8.17E-06	-3.13	XLOC_I2_003992		Downregulated
A_22_P000	0.000765	0.0000426	-3.13	SLC7A11-AS	SLC7A11 antisense RNA 1	Downregulated
A_23_P934	0.001031	0.0000851	-3.13	BCKDHB	branched chain keto acid dehydrogenase E1, beta polypeptide	Downregulated
A_23_P969	0.001481	0.000177	-3.13	NVL	nuclear VCP-like	Downregulated
A_33_P334	0.002498	0.000429	-3.13	NAIP	NLR family, apoptosis inhibitory protein	Downregulated
A_21_P001	0.004031	0.000883	-3.13	XLOC_I2_011911		Downregulated
A_33_P341	0.006535	0.00179	-3.13	HPS1	Hermansky-Pudlak syndrome 1	Downregulated
A_23_P593	0.002804	0.000511	-3.14	RSPH3	radial spoke 3 homolog (Chlamydomonas)	Downregulated
A_19_P003	0.005245	0.0013	-3.14	XLOC_I2_015760		Downregulated
A_23_P367	0.000502	8.39E-06	-3.15	PCBD1	pterin-4 alpha-carbinolamine dehydratase/dimerization cofactor of hepa	Downregulated
A_23_P963	0.000526	0.0000117	-3.15	PRAF2	PRA1 domain family, member 2	Downregulated
A_22_P000	0.000743	0.0000399	-3.15	PRR34-AS1	PRR34 antisense RNA 1	Downregulated
A_33_P335	0.000896	0.0000607	-3.15	HMG20B	high mobility group 20B	Downregulated
A_23_P981	0.001085	0.0000959	-3.15	HRAS	Harvey rat sarcoma viral oncogene homolog	Downregulated
A_23_P300	0.001213	0.000121	-3.15	LMBR1	limb development membrane protein 1	Downregulated

A_33_P322	0.001403	0.000159	-3.15	SNORA74B	small nucleolar RNA, H/ACA box 74B	Downregulated
A_33_P332	0.001524	0.000185	-3.15	ZNF605	zinc finger protein 605	Downregulated
A_23_P250	0.000642	0.0000262	-3.16	ZDHHC14	zinc finger, DHHC-type containing 14	Downregulated
A_24_P403	0.000752	0.0000408	-3.16	PHF20L1	PHD finger protein 20-like 1	Downregulated
A_22_P000	0.000883	0.000059	-3.16	lnc-TSPAN5-2	lnc-TSPAN5-2:2	Downregulated
A_33_P335	0.005377	0.00135	-3.16	MTSS1	metastasis suppressor 1	Downregulated
A_23_P200	0.005531	0.00141	-3.16	PCNXL2	pecanex-like 2 (Drosophila)	Downregulated
A_33_P336	0.000526	0.0000124	-3.17	CSGALNACT	chondroitin sulfate N-acetylgalactosaminyltransferase 1	Downregulated
A_33_P323	0.000665	0.0000283	-3.17	TRIM47	tripartite motif containing 47	Downregulated
A_24_P277	0.000839	0.000053	-3.17	RAB43	RAB43, member RAS oncogene family	Downregulated
A_33_P376	0.000846	0.0000538	-3.17	SIRT5	sirtuin 5	Downregulated
A_33_P321	0.000931	0.0000664	-3.17	RNF43	ring finger protein 43	Downregulated
A_23_P207	0.000977	0.0000753	-3.17	MAP3K14	mitogen-activated protein kinase kinase kinase 14	Downregulated
A_23_P156	0.002468	0.00042	-3.17	SOBP	sine oculis binding protein homolog (Drosophila)	Downregulated
A_23_P215	0.000525	0.0000115	-3.18	PODXL	podocalyxin-like	Downregulated
A_22_P000	0.000526	0.000012	-3.18	LOC1027246	uncharacterized LOC102724601	Downregulated
A_23_P966	0.00056	0.000016	-3.18	PRPS2	phosphoribosyl pyrophosphate synthetase 2	Downregulated
A_23_P841	0.000563	0.0000168	-3.18	PITPNC1	phosphatidylinositol transfer protein, cytoplasmic 1	Downregulated
A_33_P327	0.001157	0.00011	-3.18	PHF20L1	PHD finger protein 20-like 1	Downregulated
A_23_P129	0.001341	0.000146	-3.18	IDH2	isocitrate dehydrogenase 2 (NADP+), mitochondrial	Downregulated
A_23_P257	0.001576	0.000197	-3.18	CD180	CD180 molecule	Downregulated
A_23_P217	0.00766	0.00223	-3.18	SLC31A2	solute carrier family 31 (copper transporter), member 2	Downregulated
A_23_P132	0.000483	0.0000064	-3.19	SIK1	salt-inducible kinase 1	Downregulated
A_33_P336	0.000585	0.0000201	-3.19	ABCG8	ATP-binding cassette, sub-family G (WHITE), member 8	Downregulated
A_24_P253	0.000707	0.0000337	-3.19	FLOT2	flotillin 2	Downregulated
A_23_P479	0.001179	0.000115	-3.19	MED13L	mediator complex subunit 13-like	Downregulated
A_23_P139	0.002054	0.000315	-3.19	TRIM44	tripartite motif containing 44	Downregulated
A_23_P358	0.004639	0.00109	-3.19	GOLGA6L4	golgin A6 family-like 4	Downregulated
A_33_P339	0.000793	0.0000466	-3.2	LINC00494	long intergenic non-protein coding RNA 494	Downregulated
A_23_P168	0.000896	0.0000608	-3.2	CCDC126	coiled-coil domain containing 126	Downregulated
A_23_P365	0.002874	0.000532	-3.2	MDN1	MDN1, midasin homolog (yeast)	Downregulated
A_22_P000	0.005105	0.00125	-3.2	KIAA0040	KIAA0040	Downregulated
A_24_P229	0.001115	0.000102	-3.21	SMIM22	small integral membrane protein 22	Downregulated
A_23_P443	0.001604	0.000202	-3.21	CASKIN2	CASK interacting protein 2	Downregulated
A_22_P000	0.000701	0.0000326	-3.22	LUZP1	leucine zipper protein 1	Downregulated
A_23_P898	0.000967	0.0000735	-3.22	TMEM241	transmembrane protein 241	Downregulated
A_23_P335	0.001179	0.000115	-3.22	HIBADH	3-hydroxyisobutyrate dehydrogenase	Downregulated

A_33_P324	0.001885	0.00027	-3.22	C17orf59	chromosome 17 open reading frame 59	Downregulated
A_23_P550	0.000483	5.72E-06	-3.23	SLC38A10	solute carrier family 38, member 10	Downregulated
A_24_P303	0.000483	6.04E-06	-3.23	BMI1	BMI1 proto-oncogene, polycomb ring finger	Downregulated
A_22_P000	0.000501	8.13E-06	-3.23	lnc-TMEM30B	lnc-TMEM30B-1:3	Downregulated
A_21_P001	0.000515	9.85E-06	-3.23	XLOC_I2_005179		Downregulated
A_33_P323	0.000601	0.0000216	-3.23	ANG	angiogenin, ribonuclease, RNase A family, 5	Downregulated
A_24_P168	0.000601	0.0000218	-3.24	GNAS	GNAS complex locus	Downregulated
A_24_P109	0.000771	0.0000432	-3.24	NBEAL1	neurobeachin-like 1	Downregulated
A_23_P175	0.000863	0.0000566	-3.24	KIF16B	kinesin family member 16B	Downregulated
A_21_P000	0.004288	0.000969	-3.24	lnc-CBWD3-1	lnc-CBWD3-1:1	Downregulated
A_22_P000	0.000486	6.98E-06	-3.25	lnc-SERAC1-2	lnc-SERAC1-2:1	Downregulated
A_22_P000	0.000831	0.000052	-3.25	KCNQ5-AS1	KCNQ5 antisense RNA 1	Downregulated
A_22_P000	0.002459	0.000417	-3.25	PSMA3-AS1	PSMA3 antisense RNA 1	Downregulated
A_23_P636	0.000483	5.48E-06	-3.26	IDE	insulin-degrading enzyme	Downregulated
A_24_P398	0.000665	0.0000284	-3.26	UNC45A	unc-45 homolog A (C. elegans)	Downregulated
A_24_P443	0.004371	0.000999	-3.26	UGGT2	UDP-glucose glycoprotein glucosyltransferase 2	Downregulated
A_23_P151	0.000525	0.0000113	-3.27	TCHP	trichoplein, keratin filament binding	Downregulated
A_23_P156	0.000695	0.0000314	-3.27	ADTRP	androgen-dependent TFPI-regulating protein	Downregulated
A_23_P523	0.000801	0.0000479	-3.27	NDST2	N-deacetylase/N-sulfotransferase (heparan glucosaminy) 2	Downregulated
A_33_P339	0.000855	0.0000555	-3.27	EXOC7	exocyst complex component 7	Downregulated
A_24_P114	0.000521	0.0000104	-3.28	CHMP2B	charged multivesicular body protein 2B	Downregulated
A_33_P325	0.000669	0.0000286	-3.28	LOC1001292	beta-defensin 131-like	Downregulated
A_23_P339	0.003119	0.000604	-3.28	NUP62CL	nucleoporin 62kDa C-terminal like	Downregulated
A_23_P411	0.000515	9.49E-06	-3.29	PER2	period circadian clock 2	Downregulated
A_24_P319	0.000639	0.0000256	-3.29	NEK2	NIMA-related kinase 2	Downregulated
A_24_P298	0.002241	0.000364	-3.29	LOC1001307	uncharacterized LOC100130744	Downregulated
A_23_P153	0.002709	0.000486	-3.29	GNG7	guanine nucleotide binding protein (G protein), gamma 7	Downregulated
A_32_P438	0.001098	0.0000987	-3.3	NEUROG2	neurogenin 2	Downregulated
A_24_P940	0.00126	0.000131	-3.3	SETX	senataxin	Downregulated
A_24_P145	0.001555	0.000192	-3.3	DTNBP1	dystrobrevin binding protein 1	Downregulated
A_22_P000	0.003027	0.000576	-3.3	lnc-RPL7L1-1	lnc-RPL7L1-1:1	Downregulated
A_23_P411	0.003535	0.000728	-3.3	LRRC34	leucine rich repeat containing 34	Downregulated
A_23_P135	0.000483	5.83E-06	-3.31	MRPS2	mitochondrial ribosomal protein S2	Downregulated
A_33_P334	0.000526	0.0000121	-3.31	EHBP1	EH domain binding protein 1	Downregulated
A_21_P001	0.00056	0.0000156	-3.31	LOC1019284	serine/threonine-protein kinase tousled-like 2-like	Downregulated
A_24_P791	0.000786	0.0000453	-3.31	NUFIP2	nuclear fragile X mental retardation protein interacting protein 2	Downregulated
A_21_P000	0.001108	0.000101	-3.31	SNORA55	small nucleolar RNA, H/ACA box 55	Downregulated

A_33_P330	0.000483	5.49E-06	-3.32	CR2	complement component (3d/Epstein Barr virus) receptor 2	Downregulated
A_33_P336	0.000498	7.69E-06	-3.32	EIF4ENIF1	eukaryotic translation initiation factor 4E nuclear import factor 1	Downregulated
A_23_P640	0.00055	0.0000151	-3.32	FERMT3	fermitin family member 3	Downregulated
A_24_P329	0.004738	0.00112	-3.32	SIK3	SIK family kinase 3	Downregulated
A_23_P118	0.000778	0.0000441	-3.33	C1orf112	chromosome 1 open reading frame 112	Downregulated
A_23_P940	0.000948	0.0000695	-3.33	TRRAP	transformation/transcription domain-associated protein	Downregulated
A_23_P122	0.000995	0.0000789	-3.33	AVL9	AVL9 homolog (S. cerevisiae)	Downregulated
A_24_P181	0.001062	0.000091	-3.33	TMEM135	transmembrane protein 135	Downregulated
A_33_P334	0.001912	0.000276	-3.33	DHRS12	dehydrogenase/reductase (SDR family) member 12	Downregulated
A_33_P340	0.002053	0.000315	-3.33	PPM1M	protein phosphatase, Mg ²⁺ /Mn ²⁺ dependent, 1M	Downregulated
A_24_P244	0.003134	0.000609	-3.33	EXOG	endo/exonuclease (5'-3'), endonuclease G-like	Downregulated
A_22_P000	0.000556	0.0000153	-3.34	lnc-RP11-279	lnc-RP11-279O9.4.1-2:1	Downregulated
A_23_P194	0.000575	0.0000176	-3.34	MDC1	mediator of DNA-damage checkpoint 1	Downregulated
A_33_P342	0.000579	0.0000195	-3.34	EIF3D	eukaryotic translation initiation factor 3, subunit D	Downregulated
A_21_P001	0.00062	0.000024	-3.34	XLOC_I2_012210		Downregulated
A_32_P118	0.001124	0.000104	-3.34	DENND6A	DENN/MADD domain containing 6A	Downregulated
A_24_P218	0.001297	0.000138	-3.34	CDCA3	cell division cycle associated 3	Downregulated
A_24_P126	0.001754	0.000238	-3.34	SLC12A9	solute carrier family 12, member 9	Downregulated
A_24_P413	0.004648	0.00109	-3.34	CENPA	centromere protein A	Downregulated
A_23_P210	0.000483	5.11E-06	-3.35	CDC25B	cell division cycle 25B	Downregulated
A_23_P368	0.000521	0.0000105	-3.35	LRRRC56	leucine rich repeat containing 56	Downregulated
A_23_P201	0.000603	0.000022	-3.35	PPP1R12B	protein phosphatase 1, regulatory subunit 12B	Downregulated
A_21_P000	0.001081	0.0000952	-3.35	LOC1019276	uncharacterized LOC101927686	Downregulated
A_24_P535	0.001399	0.000159	-3.35	CHAF1A	chromatin assembly factor 1, subunit A (p150)	Downregulated
A_33_P325	0.001626	0.000208	-3.35	KDM7A	lysine (K)-specific demethylase 7A	Downregulated
A_33_P327	0.001949	0.000286	-3.35	LOC90784	uncharacterized LOC90784	Downregulated
A_33_P331	0.000486	7.19E-06	-3.36	MGAT1	mannosyl (alpha-1,3-)-glycoprotein beta-1,2-N-acetylglucosaminyltransferase	Downregulated
A_23_P414	0.000526	0.0000127	-3.36	PLXNC1	plexin C1	Downregulated
A_21_P000	0.000814	0.0000499	-3.36	lnc-PRKAB2-	lnc-PRKAB2-1:1	Downregulated
A_23_P345	0.001228	0.000125	-3.36	SCLY	selenocysteine lyase	Downregulated
A_33_P362	0.00056	0.0000165	-3.37	PKI55	DKFZp434H1419	Downregulated
A_33_P378	0.000795	0.0000469	-3.37	SCAMP1-AS1	SCAMP1 antisense RNA 1	Downregulated
A_22_P000	0.000828	0.0000517	-3.37	lnc-RP11-33N	lnc-RP11-33N16.1.1-1:1	Downregulated
A_23_P320	0.001197	0.000118	-3.37	SLC35D2	solute carrier family 35 (UDP-GlcNAc/UDP-glucose transporter), member	Downregulated
A_21_P000	0.005093	0.00124	-3.37	lnc-ZSCAN2-2	lnc-ZSCAN2-2:1	Downregulated
A_23_P971	0.002568	0.000448	-3.38	MTFR1L	mitochondrial fission regulator 1-like	Downregulated
A_24_P380	0.002756	0.000499	-3.38	ARHGAP24	Rho GTPase activating protein 24	Downregulated

A_23_P694	0.000483	5.13E-06	-3.39	GPR15	G protein-coupled receptor 15	Downregulated
A_23_P948	0.000486	6.83E-06	-3.39	S100A4	S100 calcium binding protein A4	Downregulated
A_22_P000	0.000515	9.66E-06	-3.39	lnc-HNRNPA1	lnc-HNRNPA1-1:1	Downregulated
A_24_P641	0.000577	0.0000182	-3.39	SLC25A37	solute carrier family 25 (mitochondrial iron transporter), member 37	Downregulated
A_33_P380	0.000578	0.0000188	-3.39	LOC286437	uncharacterized LOC286437	Downregulated
A_23_P140	0.000763	0.000042	-3.39	DNAJC17	DnaJ (Hsp40) homolog, subfamily C, member 17	Downregulated
A_23_P679	0.001198	0.000118	-3.39	C1D	C1D nuclear receptor corepressor	Downregulated
A_21_P000	0.001426	0.000164	-3.39	SNORD59A	small nucleolar RNA, C/D box 59A	Downregulated
A_23_P294	0.001548	0.000191	-3.39	GYG1	glycogenin 1	Downregulated
A_19_P003	0.001885	0.00027	-3.39	PVT1	Pvt1 oncogene (non-protein coding)	Downregulated
A_22_P000	0.005619	0.00144	-3.39	lnc-AC135050	lnc-AC135050.1-1:1	Downregulated
A_24_P237	0.001069	0.0000936	-3.4	FAM102B	family with sequence similarity 102, member B	Downregulated
A_23_P132	0.001134	0.000106	-3.4	VGLL4	vestigial-like family member 4	Downregulated
A_33_P334	0.000483	0.0000063	-3.41	PRDM1	PR domain containing 1, with ZNF domain	Downregulated
A_23_P270	0.000486	6.74E-06	-3.41	TMEM98	transmembrane protein 98	Downregulated
A_33_P344	0.000711	0.0000357	-3.41	FRMD4B	FERM domain containing 4B	Downregulated
A_23_P152	0.000961	0.0000719	-3.41	EFTUD1	elongation factor Tu GTP binding domain containing 1	Downregulated
A_24_P177	0.001211	0.000121	-3.41	TBC1D9B	TBC1 domain family, member 9B (with GRAM domain)	Downregulated
A_21_P001	0.000483	4.84E-06	-3.42	XLOC_I2_005781		Downregulated
A_33_P365	0.000483	5.05E-06	-3.42	ERCC8	excision repair cross-complementation group 8	Downregulated
A_33_P321	0.000537	0.0000141	-3.42	C15orf61	chromosome 15 open reading frame 61	Downregulated
A_33_P333	0.00055	0.000015	-3.42	B4GALT3	UDP-Gal:betaGlcNAc beta 1,4- galactosyltransferase, polypeptide 3	Downregulated
A_22_P000	0.000565	0.000017	-3.42	ZRANB2-AS1	ZRANB2 antisense RNA 1	Downregulated
A_23_P363	0.00179	0.000246	-3.42	FBXO3	F-box protein 3	Downregulated
A_32_P122	0.000501	8.09E-06	-3.43	LOC441455	makorin ring finger protein 1 pseudogene	Downregulated
A_22_P000	0.000521	0.0000102	-3.43	lnc-PDZD7-1	lnc-PDZD7-1:1	Downregulated
A_33_P332	0.000582	0.0000198	-3.43	PDE4DIP	phosphodiesterase 4D interacting protein	Downregulated
A_22_P000	0.001398	0.000158	-3.43	HOTAIRM1	HOXA transcript antisense RNA, myeloid-specific 1	Downregulated
A_21_P001	0.000483	4.85E-06	-3.44	LINC01420	long intergenic non-protein coding RNA 1420	Downregulated
A_21_P000	0.000483	5.16E-06	-3.44	lnc-FARP1-1	lnc-FARP1-1:2	Downregulated
A_23_P135	0.000558	0.0000154	-3.44	EIF2AK3	eukaryotic translation initiation factor 2-alpha kinase 3	Downregulated
A_33_P325	0.000577	0.0000182	-3.44	CNTRL	centriolin	Downregulated
A_33_P340	0.000883	0.0000591	-3.44	FLYWCH1	FLYWCH-type zinc finger 1	Downregulated
A_22_P000	0.000959	0.0000712	-3.44	lnc-APOM-3	lnc-APOM-3:1	Downregulated
A_23_P327	0.00307	0.000588	-3.44	C3orf38	chromosome 3 open reading frame 38	Downregulated
A_22_P000	0.003205	0.000632	-3.44	SCAMP1	secretory carrier membrane protein 1	Downregulated
A_33_P681	0.000578	0.0000191	-3.45	NDUFA6-AS1	NDUFA6 antisense RNA 1 (head to head)	Downregulated

A_24_P248	0.00076	0.0000417	-3.45	SYT11	synaptotagmin XI	Downregulated
A_24_P442	0.000971	0.0000744	-3.45	FBXW8	F-box and WD repeat domain containing 8	Downregulated
A_23_P349	0.00123	0.000125	-3.45	EVI5	ecotropic viral integration site 5	Downregulated
A_33_P335	0.001349	0.000148	-3.45	CTBP1	C-terminal binding protein 1	Downregulated
A_23_P210	0.002109	0.000329	-3.45	NSFL1C	NSFL1 (p97) cofactor (p47)	Downregulated
A_24_P193	0.000715	0.0000363	-3.46	DEF8	differentially expressed in FDCP 8 homolog (mouse)	Downregulated
A_33_P332	0.001688	0.000222	-3.46	NMS	neuromedin S	Downregulated
A_33_P353	0.002053	0.000315	-3.46	PRO2852	uncharacterized protein PRO2852	Downregulated
A_24_P405	0.002627	0.000464	-3.46	HOMEZ	homeobox and leucine zipper encoding	Downregulated
A_23_P877	0.002623	0.000462	-3.47	IFFO1	intermediate filament family orphan 1	Downregulated
A_33_P328	0.004142	0.000918	-3.47	MIER1	mesoderm induction early response 1, transcriptional regulator	Downregulated
A_24_P627	0.000534	0.0000136	-3.48	EPM2AIP1	EPM2A (laforin) interacting protein 1	Downregulated
A_23_P858	0.001563	0.000194	-3.48	GLMP	glycosylated lysosomal membrane protein	Downregulated
A_33_P341	0.004152	0.000921	-3.48	ZNF268	zinc finger protein 268	Downregulated
A_23_P377	0.000502	8.43E-06	-3.49	TNFRSF17	tumor necrosis factor receptor superfamily, member 17	Downregulated
A_24_P116	0.000563	0.0000168	-3.49	KLHDC2	kelch domain containing 2	Downregulated
A_33_P340	0.000938	0.0000675	-3.49	UBE3A	ubiquitin protein ligase E3A	Downregulated
A_19_P003	0.000942	0.0000683	-3.49	CA5BP1	carbonic anhydrase VB pseudogene 1	Downregulated
A_33_P324	0.000945	0.000069	-3.49	TMEM87A	transmembrane protein 87A	Downregulated
A_23_P145	0.002124	0.000335	-3.49	FIG4	FIG4 phosphoinositide 5-phosphatase	Downregulated
A_23_P106	0.000489	7.37E-06	-3.5	ORAI3	ORAI calcium release-activated calcium modulator 3	Downregulated
A_33_P322	0.000498	7.83E-06	-3.5	CSRNP1	cysteine-serine-rich nuclear protein 1	Downregulated
A_23_P116	0.000526	0.0000126	-3.5	PLA2G4A	phospholipase A2, group IVA (cytosolic, calcium-dependent)	Downregulated
A_33_P326	0.00056	0.0000156	-3.5	FAM167A	family with sequence similarity 167, member A	Downregulated
A_23_P445	0.002701	0.000483	-3.5	DFFB	DNA fragmentation factor, 40kDa, beta polypeptide (caspase-activated)	Downregulated
A_33_P340	0.000592	0.0000208	-3.51	AKT2	v-akt murine thymoma viral oncogene homolog 2	Downregulated
A_22_P000	0.000622	0.0000243	-3.51	ARHGEF38	Rho guanine nucleotide exchange factor (GEF) 38	Downregulated
A_23_P409	0.000701	0.0000327	-3.51	NR2C2	nuclear receptor subfamily 2, group C, member 2	Downregulated
A_33_P332	0.001363	0.00015	-3.51	FANCL	Fanconi anemia, complementation group L	Downregulated
A_24_P141	0.001943	0.000284	-3.51	METAP2	methionyl aminopeptidase 2	Downregulated
A_22_P000	0.002832	0.000519	-3.51	lnc-SPTBN5-1	lnc-SPTBN5-1:1	Downregulated
A_22_P000	0.000578	0.0000189	-3.52	LOC1019276	uncharacterized LOC101927609	Downregulated
A_21_P000	0.000912	0.0000635	-3.52	SNORD92	small nucleolar RNA, C/D box 92	Downregulated
A_21_P000	0.00234	0.000388	-3.52	lnc-ANKRD27	lnc-ANKRD27-2:3	Downregulated
A_21_P001	0.002968	0.000559	-3.52	MMP25-AS1	MMP25 antisense RNA 1	Downregulated
A_22_P000	0.000483	6.01E-06	-3.53	TRG-AS1	T cell receptor gamma locus antisense RNA 1	Downregulated
A_23_P399	0.000995	0.0000783	-3.53	COA5	cytochrome c oxidase assembly factor 5	Downregulated

A_23_P137	0.001043	0.0000874	-3.53	BTK	Bruton agammaglobulinemia tyrosine kinase	Downregulated
A_33_P334	0.004301	0.000973	-3.53	KMT2D	lysine (K)-specific methyltransferase 2D	Downregulated
A_33_P332	0.000483	4.28E-06	-3.54	RHOT1	ras homolog family member T1	Downregulated
A_24_P356	0.000577	0.0000184	-3.54	MAP2K5	mitogen-activated protein kinase kinase 5	Downregulated
A_21_P000	0.000603	0.0000223	-3.54	lnc-HERPUD2	lnc-HERPUD2-1:1	Downregulated
A_21_P001	0.002168	0.000346	-3.54	XLOC_I2_002790		Downregulated
A_23_P139	0.001499	0.00018	-3.55	DHX37	DEAH (Asp-Glu-Ala-His) box polypeptide 37	Downregulated
A_22_P000	0.003909	0.000845	-3.55	LOC1027245	uncharacterized LOC102724532	Downregulated
A_21_P000	0.000905	0.0000619	-3.56	lnc-RNFT2-1	lnc-RNFT2-1:1	Downregulated
A_23_P303	0.000494	7.51E-06	-3.57	CHMP7	charged multivesicular body protein 7	Downregulated
A_33_P383	0.00056	0.000016	-3.57	RNU4ATAC	RNA, U4atac small nuclear (U12-dependent splicing)	Downregulated
A_23_P359	0.0015	0.000181	-3.57	AKAP2	A kinase (PRKA) anchor protein 2	Downregulated
A_33_P341	0.003266	0.000649	-3.57	ANKRD36B	ankyrin repeat domain 36B	Downregulated
A_23_P410	0.003509	0.00072	-3.57	RASSF1	Ras association (RalGDS/AF-6) domain family member 1	Downregulated
A_32_P112	0.000707	0.0000339	-3.58	LINC00999	long intergenic non-protein coding RNA 999	Downregulated
A_33_P324	0.00072	0.000037	-3.58	TMCO3	transmembrane and coiled-coil domains 3	Downregulated
A_22_P000	0.000483	6.35E-06	-3.59	LYST	lysosomal trafficking regulator	Downregulated
A_21_P000	0.000483	6.42E-06	-3.59	LOC1019297	uncharacterized LOC101929719	Downregulated
A_23_P778	0.000945	0.0000689	-3.59	FN3KRP	fructosamine 3 kinase related protein	Downregulated
A_23_P427	0.001178	0.000114	-3.59	LOC646652	integral membrane glycoprotein-like	Downregulated
A_23_P203	0.001443	0.000168	-3.59	DPYS	dihydropyrimidinase	Downregulated
A_22_P000	0.001925	0.00028	-3.59	lnc-PRR25-2	lnc-PRR25-2:1	Downregulated
A_23_P300	0.000642	0.0000262	-3.6	DDX60L	DEAD (Asp-Glu-Ala-Asp) box polypeptide 60-like	Downregulated
A_23_P169	0.000776	0.0000438	-3.6	EXOC6	exocyst complex component 6	Downregulated
A_24_P300	0.000788	0.0000457	-3.6	SCN9A	sodium channel, voltage gated, type IX alpha subunit	Downregulated
A_24_P745	0.001612	0.000205	-3.6	CYTH4	cytohesin 4	Downregulated
A_23_P205	0.000605	0.0000227	-3.61	DHRS12	dehydrogenase/reductase (SDR family) member 12	Downregulated
A_33_P365	0.000642	0.0000262	-3.61	SNORA26	small nucleolar RNA, H/ACA box 26	Downregulated
A_23_P935	0.000707	0.0000337	-3.61	SAMD3	sterile alpha motif domain containing 3	Downregulated
A_21_P000	0.000866	0.000057	-3.61	lnc-PHACTR1	lnc-PHACTR1-1:1	Downregulated
A_33_P341	0.001287	0.000136	-3.61	lnc-VIM-1	lnc-VIM-1:2	Downregulated
A_23_P404	0.001559	0.000193	-3.61	ARHGAP33	Rho GTPase activating protein 33	Downregulated
A_23_P368	0.003646	0.000762	-3.61	TMEM131	transmembrane protein 131	Downregulated
A_23_P131	0.004198	0.000937	-3.61	SNAI1	snail family zinc finger 1	Downregulated
A_19_P003	0.000812	0.0000494	-3.62	LINC01094	long intergenic non-protein coding RNA 1094	Downregulated
A_21_P001	0.001597	0.000201	-3.62	XLOC_I2_006173		Downregulated
A_23_P105	0.005153	0.00127	-3.62	POC1B	POC1 centriolar protein B	Downregulated

A_24_P235	0.00055	0.000015	-3.63	ZNF706	zinc finger protein 706	Downregulated
A_24_P382	0.00056	0.0000158	-3.63	RPRD1A	regulation of nuclear pre-mRNA domain containing 1A	Downregulated
A_22_P000	0.000603	0.0000221	-3.63	LOC1027238	uncharacterized LOC102723885	Downregulated
A_23_P161	0.000849	0.0000545	-3.63	TMEM134	transmembrane protein 134	Downregulated
A_23_P258	0.000925	0.0000652	-3.63	PPM1M	protein phosphatase, Mg ²⁺ /Mn ²⁺ dependent, 1M	Downregulated
A_33_P335	0.0011	0.0000992	-3.63	LOC1001309	uncharacterized LOC100130913	Downregulated
A_33_P328	0.001117	0.000103	-3.63	CRAT	carnitine O-acetyltransferase	Downregulated
A_24_P379	0.000483	0.0000046	-3.64	CHCHD5	coiled-coil-helix-coiled-coil-helix domain containing 5	Downregulated
A_22_P000	0.001064	0.0000915	-3.64	ERICH2	glutamate-rich 2	Downregulated
A_23_P110	0.000483	4.09E-06	-3.65	WDR53	WD repeat domain 53	Downregulated
A_21_P000	0.000537	0.0000142	-3.65	SNORD63	small nucleolar RNA, C/D box 63	Downregulated
A_23_P615	0.000715	0.0000363	-3.65	CCDC71	coiled-coil domain containing 71	Downregulated
A_23_P884	0.002389	0.000401	-3.65	FOXN3	forkhead box N3	Downregulated
A_22_P000	0.000483	0.000004	-3.66	lnc-WRAP73-	lnc-WRAP73-2:1	Downregulated
A_23_P420	0.000544	0.0000147	-3.66	BPHL	biphenyl hydrolase-like (serine hydrolase)	Downregulated
A_23_P136	0.000663	0.000028	-3.66	ZBTB39	zinc finger and BTB domain containing 39	Downregulated
A_33_P329	0.000695	0.0000316	-3.66	RPL28	ribosomal protein L28	Downregulated
A_33_P339	0.000775	0.0000436	-3.66	AKAP5	A kinase (PRKA) anchor protein 5	Downregulated
A_33_P359	0.001758	0.000239	-3.66	FAM91A1	family with sequence similarity 91, member A1	Downregulated
A_24_P818	0.000483	4.23E-06	-3.67	CDKN1B	cyclin-dependent kinase inhibitor 1B (p27, Kip1)	Downregulated
A_32_P140	0.00088	0.0000586	-3.67	F13A1	coagulation factor XIII, A1 polypeptide	Downregulated
A_22_P000	0.001009	0.0000815	-3.67	lnc-MIER3-2	lnc-MIER3-2:1	Downregulated
A_23_P252	0.000483	4.79E-06	-3.68	WBP1	WW domain binding protein 1	Downregulated
A_33_P325	0.000521	0.0000105	-3.68	ZNF551	zinc finger protein 551	Downregulated
A_23_P204	0.001427	0.000164	-3.68	ITFG2	integrin alpha FG-GAP repeat containing 2	Downregulated
A_21_P000	0.001998	0.0003	-3.68	lnc-RBM10-1	lnc-RBM10-1:1	Downregulated
A_23_P597	0.000483	6.36E-06	-3.69	SRI	sorcin	Downregulated
A_21_P000	0.001006	0.0000809	-3.69	LINC01578	long intergenic non-protein coding RNA 1578	Downregulated
A_33_P339	0.001035	0.0000857	-3.69	LINC01420	long intergenic non-protein coding RNA 1420	Downregulated
A_33_P336	0.00111	0.000101	-3.69	FRS2	fibroblast growth factor receptor substrate 2	Downregulated
A_22_P000	0.001956	0.000288	-3.69	LOC1019274	uncharacterized LOC101927418	Downregulated
A_33_P338	0.003669	0.00077	-3.69	TEX9	testis expressed 9	Downregulated
A_21_P001	0.005534	0.00141	-3.7	XLOC_l2_009448		Downregulated
A_23_P364	0.000483	0.0000044	-3.71	TXLNGY	taxilin gamma pseudogene, Y-linked	Downregulated
A_21_P001	0.000697	0.000032	-3.71	UBE2Q2P1	ubiquitin-conjugating enzyme E2Q family member 2 pseudogene 1	Downregulated
A_24_P927	0.001086	0.0000961	-3.71	SLED1	proteoglycan 3 pseudogene	Downregulated
A_33_P342	0.00056	0.0000163	-3.73	UVSSA	UV-stimulated scaffold protein A	Downregulated

A_33_P323	0.000532	0.0000134	-3.74	GOLGA6L9	golgin A6 family-like 9	Downregulated
A_23_P205	0.00104	0.0000864	-3.74	PDS5B	PDS5 cohesin associated factor B	Downregulated
A_23_P250	0.002326	0.000385	-3.74	CAND2	cullin-associated and neddylation-dissociated 2 (putative)	Downregulated
A_33_P328	0.000515	0.0000093	-3.75	ARF3	ADP-ribosylation factor 3	Downregulated
A_23_P541	0.00072	0.0000372	-3.75	MED6	mediator complex subunit 6	Downregulated
A_21_P000	0.001108	0.000101	-3.75	lnc-USP8-2	lnc-USP8-2:8	Downregulated
A_23_P259	0.001432	0.000165	-3.75	NCOA6	nuclear receptor coactivator 6	Downregulated
A_22_P000	0.001755	0.000238	-3.75	lnc-CHAC1-4	lnc-CHAC1-4:1	Downregulated
A_21_P000	0.001021	0.0000832	-3.76	lnc-DIRAS2-1	lnc-DIRAS2-1:4	Downregulated
A_22_P000	0.004207	0.000941	-3.76	lnc-SUSD1-2	lnc-SUSD1-2:1	Downregulated
A_21_P001	0.004217	0.000945	-3.76	XLOC_I2_010511		Downregulated
A_33_P338	0.000483	4.45E-06	-3.77	USP9X	ubiquitin specific peptidase 9, X-linked	Downregulated
A_33_P328	0.000707	0.0000346	-3.77	AP1S3	adaptor-related protein complex 1, sigma 3 subunit	Downregulated
A_21_P000	0.000806	0.0000485	-3.77	LOC1005057	uncharacterized LOC100505716	Downregulated
A_23_P110	0.001064	0.0000916	-3.77	METTL14	methyltransferase like 14	Downregulated
A_23_P217	0.000483	3.89E-06	-3.78	VPS13A	vacuolar protein sorting 13 homolog A (S. cerevisiae)	Downregulated
A_33_P331	0.000938	0.0000672	-3.78	BBIP1	BBSome interacting protein 1	Downregulated
A_21_P000	0.001161	0.000111	-3.78	lnc-APITD1-1	lnc-APITD1-1:1	Downregulated
A_23_P432	0.001154	0.00011	-3.8	CCDC125	coiled-coil domain containing 125	Downregulated
A_23_P183	0.001385	0.000154	-3.8	ARMC8	armadillo repeat containing 8	Downregulated
A_24_P449	0.000527	0.0000129	-3.81	MPND	MPN domain containing	Downregulated
A_23_P411	0.000706	0.0000334	-3.81	APEH	acylaminoacyl-peptide hydrolase	Downregulated
A_22_P000	0.000575	0.0000175	-3.82	CNPY3	canopy FGF signaling regulator 3	Downregulated
A_23_P363	0.001845	0.000261	-3.82	INPPL1	inositol polyphosphate phosphatase-like 1	Downregulated
A_23_P157	0.001863	0.000265	-3.82	BZW2	basic leucine zipper and W2 domains 2	Downregulated
A_23_P250	0.00275	0.000497	-3.82	HDAC6	histone deacetylase 6	Downregulated
A_22_P000	0.000697	0.0000318	-3.83	lnc-ZNF131-2	lnc-ZNF131-2:2	Downregulated
A_21_P000	0.000534	0.0000136	-3.84	SNORA45B	small nucleolar RNA, H/ACA box 45B	Downregulated
A_21_P000	0.000589	0.0000205	-3.84	SNORD36C	small nucleolar RNA, C/D box 36C	Downregulated
A_21_P000	0.000839	0.0000531	-3.84	lnc-SEL1L3-1	lnc-SEL1L3-1:3	Downregulated
A_33_P335	0.00119	0.000117	-3.84	OSBPL7	oxysterol binding protein-like 7	Downregulated
A_23_P134	0.001375	0.000153	-3.84	USP45	ubiquitin specific peptidase 45	Downregulated
A_33_P341	0.002393	0.000402	-3.84	EGOT	eosinophil granule ontogeny transcript (non-protein coding)	Downregulated
A_21_P001	0.000689	0.0000303	-3.85	lnc-TPTE2-2	lnc-TPTE2-2:1	Downregulated
A_21_P000	0.000842	0.0000534	-3.85	lnc-MEF2D-1	lnc-MEF2D-1:1	Downregulated
A_33_P327	0.002055	0.000316	-3.85	DIS3L2	DIS3 like 3'-5' exoribonuclease 2	Downregulated
A_23_P958	0.000483	3.63E-06	-3.86	TUFM	Tu translation elongation factor, mitochondrial	Downregulated

A_22_P000	0.000483	5.13E-06	-3.86	lnc-PMEL-1	lnc-PMEL-1:1	Downregulated
A_33_P337	0.000799	0.0000474	-3.86	CACUL1	CDK2-associated, cullin domain 1	Downregulated
A_23_P202	0.000483	4.74E-06	-3.87	SFXN3	sideroflexin 3	Downregulated
A_22_P000	0.000515	0.0000096	-3.87	lnc-OPN4-1	lnc-OPN4-1:2	Downregulated
A_24_P359	0.00071	0.0000353	-3.87	GPATCH8	G patch domain containing 8	Downregulated
A_22_P000	0.001101	0.0000996	-3.87	BLCAP	bladder cancer associated protein	Downregulated
A_23_P251	0.00121	0.000121	-3.87	RFESD	Rieske (Fe-S) domain containing	Downregulated
A_33_P329	0.000486	6.58E-06	-3.89	SART1	squamous cell carcinoma antigen recognized by T cells	Downregulated
A_24_P106	0.000525	0.0000114	-3.89	SLC44A2	solute carrier family 44 (choline transporter), member 2	Downregulated
A_21_P000	0.000515	9.64E-06	-3.9	SNORD59B	small nucleolar RNA, C/D box 59B	Downregulated
A_33_P330	0.00056	0.0000163	-3.9	PTPRS	protein tyrosine phosphatase, receptor type, S	Downregulated
A_24_P191	0.000592	0.0000207	-3.9	SAP30L	SAP30-like	Downregulated
A_23_P145	0.003854	0.000829	-3.9	ACOT4	acyl-CoA thioesterase 4	Downregulated
A_24_P130	0.000521	0.0000107	-3.91	NSUN4	NOP2/Sun domain family, member 4	Downregulated
A_23_P140	0.000549	0.0000149	-3.91	AKAP3	A kinase (PRKA) anchor protein 3	Downregulated
A_23_P119	0.00056	0.000016	-3.91	SLC6A9	solute carrier family 6 (neurotransmitter transporter, glycine), member 9	Downregulated
A_23_P203	0.000597	0.0000213	-3.91	CREBZF	CREB/ATF bZIP transcription factor	Downregulated
A_24_P174	0.000812	0.0000493	-3.91	SLC22A5	solute carrier family 22 (organic cation/carnitine transporter), member 5	Downregulated
A_23_P215	0.000537	0.0000139	-3.92	FKBP14	FK506 binding protein 14, 22 kDa	Downregulated
A_33_P335	0.000543	0.0000146	-3.92	FBXO22-AS1	FBXO22 antisense RNA 1	Downregulated
A_23_P290	0.00072	0.0000372	-3.92	CBR1	carbonyl reductase 1	Downregulated
A_33_P379	0.002333	0.000386	-3.92	LOC1027236	uncharacterized LOC102723652	Downregulated
A_21_P001	0.000839	0.000053	-3.93	XLOC_I2_014331		Downregulated
A_32_P284	0.000483	0.0000041	-3.94	LRRC37BP1	leucine rich repeat containing 37B pseudogene 1	Downregulated
A_33_P330	0.000483	4.48E-06	-3.94	TLE4	transducin-like enhancer of split 4	Downregulated
A_22_P000	0.001653	0.000214	-3.94	lnc-GTDC1-3	lnc-GTDC1-3:1	Downregulated
A_23_P436	0.000525	0.0000115	-3.95	SLC25A42	solute carrier family 25, member 42	Downregulated
A_33_P338	0.002951	0.000553	-3.95	LCK	LCK proto-oncogene, Src family tyrosine kinase	Downregulated
A_33_P333	0.00058	0.0000196	-3.96	NUDT17	nudix (nucleoside diphosphate linked moiety X)-type motif 17	Downregulated
A_23_P146	0.00124	0.000127	-3.96	NIPAL2	NIPA-like domain containing 2	Downregulated
A_21_P000	0.000483	4.32E-06	-3.97	SNORD12C	small nucleolar RNA, C/D box 12C	Downregulated
A_21_P001	0.000731	0.0000383	-3.97	LOC1019277	uncharacterized LOC101927752	Downregulated
A_23_P417	0.001049	0.0000885	-3.97	TSPYL5	TSPY-like 5	Downregulated
A_23_P162	0.001076	0.0000943	-3.97	HECTD4	HECT domain containing E3 ubiquitin protein ligase 4	Downregulated
A_19_P003	0.002196	0.000353	-3.97	CDYL2	chromodomain protein, Y-like 2	Downregulated
A_33_P340	0.000526	0.0000117	-3.98	POTEM	POTE ankyrin domain family, member M	Downregulated
A_23_P215	0.000526	0.0000128	-3.98	DUS4L	dihydrouridine synthase 4-like (S. cerevisiae)	Downregulated

A_23_P149	0.000534	0.0000136	-3.98	HIST2H2BE	histone cluster 2, H2be	Downregulated
A_22_P000	0.000577	0.0000179	-3.98	lnc-ZNF382-1	lnc-ZNF382-1:1	Downregulated
A_23_P354	0.001404	0.00016	-3.98	CTHF18	CTF18, chromosome transmission fidelity factor 18 homolog (S. cerevisiae)	Downregulated
A_24_P273	0.003795	0.000809	-3.98	TP63	tumor protein p63	Downregulated
A_33_P335	0.000543	0.0000146	-3.99	PVT1	Pvt1 oncogene (non-protein coding)	Downregulated
A_21_P000	0.001195	0.000118	-3.99	NBPF15	neuroblastoma breakpoint family, member 15	Downregulated
A_33_P339	0.002727	0.000491	-3.99	SNX22	sorting nexin 22	Downregulated
A_32_P462	0.001847	0.000261	-4	SLC9A9	solute carrier family 9, subfamily A (NHE9, cation proton antiporter 9), member 9	Downregulated
A_22_P000	0.002957	0.000555	-4	lnc-C7orf13-1	lnc-C7orf13-1:1	Downregulated
A_23_P348	0.000483	3.19E-06	-4.01	TCEANC2	transcription elongation factor A (SII) N-terminal and central domain containing 2	Downregulated
A_33_P337	0.001107	0.0001	-4.01	BTN1A1	butyrophilin, subfamily 1, member A1	Downregulated
A_33_P333	0.000483	3.14E-06	-4.02	SLC44A2	solute carrier family 44 (choline transporter), member 2	Downregulated
A_23_P516	0.000995	0.0000791	-4.02	MUTYH	mutY homolog	Downregulated
A_33_P341	0.000483	2.91E-06	-4.03	CLCC1	chloride channel CLIC-like 1	Downregulated
A_33_P332	0.000589	0.0000204	-4.04	SMIM12	small integral membrane protein 12	Downregulated
A_33_P337	0.000707	0.0000337	-4.04	PAPD5	PAP associated domain containing 5	Downregulated
A_23_P129	0.000707	0.0000337	-4.04	VASN	vasorin	Downregulated
A_23_P137	0.001099	0.0000989	-4.04	IGSF8	immunoglobulin superfamily, member 8	Downregulated
A_22_P000	0.001406	0.00016	-4.04	lnc-ZNF687-1	lnc-ZNF687-1:1	Downregulated
A_22_P000	0.004121	0.000911	-4.04	lnc-MFSD4-1	lnc-MFSD4-1:1	Downregulated
A_22_P000	0.000537	0.000014	-4.05	FAM184B	family with sequence similarity 184, member B	Downregulated
A_24_P123	0.000778	0.0000442	-4.05	SEC63	SEC63 homolog (S. cerevisiae)	Downregulated
A_22_P000	0.000526	0.0000122	-4.06	LIMD1-AS1	LIMD1 antisense RNA 1	Downregulated
A_32_P206	0.00056	0.0000156	-4.06	QSOX2	quiescin Q6 sulfhydryl oxidase 2	Downregulated
A_22_P000	0.000695	0.0000312	-4.06	lnc-MYL4-2	lnc-MYL4-2:1	Downregulated
A_23_P397	0.000483	4.78E-06	-4.07	GLS	glutaminase	Downregulated
A_22_P000	0.000515	9.48E-06	-4.07	SLFNL1-AS1	SLFNL1 antisense RNA 1	Downregulated
A_22_P000	0.000677	0.0000295	-4.07	lnc-STUB1-1	lnc-STUB1-1:1	Downregulated
A_33_P333	0.000483	2.42E-06	-4.08	SNX29	sorting nexin 29	Downregulated
A_32_P224	0.000483	3.82E-06	-4.08	SLC25A23	solute carrier family 25 (mitochondrial carrier; phosphate carrier), member 23	Downregulated
A_21_P000	0.000483	5.49E-06	-4.08	ZBTB24	zinc finger and BTB domain containing 24	Downregulated
A_33_P329	0.000513	9.02E-06	-4.08	KCNQ1OT1	KCNQ1 opposite strand/antisense transcript 1 (non-protein coding)	Downregulated
A_33_P327	0.000779	0.0000443	-4.08	SIRT2	sirtuin 2	Downregulated
A_33_P350	0.000788	0.0000458	-4.08	LOC780529	uncharacterized LOC780529	Downregulated
A_22_P000	0.001009	0.0000815	-4.08	lnc-ERAP1-1	lnc-ERAP1-1:1	Downregulated
A_33_P341	0.001727	0.000232	-4.08	RAP2C-AS1	RAP2C antisense RNA 1	Downregulated
A_33_P323	0.000684	0.00003	-4.09	CHCHD6	coiled-coil-helix-coiled-coil-helix domain containing 6	Downregulated

A_33_P321	0.000987	0.0000765	-4.09	TLE1	transducin-like enhancer of split 1 (E(sp1) homolog, Drosophila)	Downregulated
A_22_P000	0.001213	0.000121	-4.09	lnc-CEP120-2	lnc-CEP120-2:1	Downregulated
A_23_P961	0.001658	0.000215	-4.09	C11orf80	chromosome 11 open reading frame 80	Downregulated
A_23_P843	0.000483	0.0000028	-4.1	SIGIRR	single immunoglobulin and toll-interleukin 1 receptor (TIR) domain	Downregulated
A_21_P000	0.000535	0.0000137	-4.1	lnc-PEAK1.1-	lnc-PEAK1.1-1:3	Downregulated
A_23_P406	0.000691	0.0000307	-4.1	SRPK2	SRSF protein kinase 2	Downregulated
A_21_P000	0.000499	0.0000008	-4.11	PEAK1	pseudopodium-enriched atypical kinase 1	Downregulated
A_21_P000	0.000515	9.19E-06	-4.11	lnc-TAF1A-1	lnc-TAF1A-1:1	Downregulated
A_23_P999	0.000483	6.11E-06	-4.12	LRRK1	leucine-rich repeat kinase 1	Downregulated
A_33_P681	0.000521	0.0000107	-4.12	LOC1005068	uncharacterized LOC100506844	Downregulated
A_21_P001	0.000542	0.0000145	-4.12	LOC1019278	uncharacterized LOC101927811	Downregulated
A_23_P155	0.00093	0.0000661	-4.12	ABHD14B	abhydrolase domain containing 14B	Downregulated
A_23_P308	0.001443	0.000167	-4.13	MAP3K15	mitogen-activated protein kinase kinase kinase 15	Downregulated
A_24_P228	0.001597	0.000201	-4.13	CYB5D2	cytochrome b5 domain containing 2	Downregulated
A_22_P000	0.000537	0.0000139	-4.14	KDM4C	lysine (K)-specific demethylase 4C	Downregulated
A_23_P638	0.000596	0.0000021	-4.14	CTBP2	C-terminal binding protein 2	Downregulated
A_23_P208	0.000602	0.0000219	-4.14	ZNF407	zinc finger protein 407	Downregulated
A_23_P514	0.000662	0.0000279	-4.14	GBP3	guanylate binding protein 3	Downregulated
A_23_P153	0.000788	0.0000457	-4.14	ARMC7	armadillo repeat containing 7	Downregulated
A_22_P000	0.002601	0.000457	-4.14	LINC00173	long intergenic non-protein coding RNA 173	Downregulated
A_21_P000	0.000483	2.27E-06	-4.15	lnc-PIGF-3	lnc-PIGF-3:1	Downregulated
A_23_P218	0.000521	0.0000107	-4.16	SERPINA1	serpin peptidase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin), I	Downregulated
A_33_P327	0.000577	0.0000185	-4.16	HSD17B7	hydroxysteroid (17-beta) dehydrogenase 7	Downregulated
A_22_P000	0.000486	6.73E-06	-4.17	lnc-ADAM19-	lnc-ADAM19-1:1	Downregulated
A_33_P330	0.000739	0.0000392	-4.17	BRCC3	BRCA1/BRCA2-containing complex, subunit 3	Downregulated
A_33_P330	0.000483	5.13E-06	-4.18	PSMD5	proteasome (prosome, macropain) 26S subunit, non-ATPase, 5	Downregulated
A_23_P119	0.000483	5.79E-06	-4.18	KLF2	Kruppel-like factor 2	Downregulated
A_24_P245	0.000485	6.54E-06	-4.18	TNFSF12	tumor necrosis factor (ligand) superfamily, member 12	Downregulated
A_23_P164	0.000526	0.0000118	-4.18	CDC34	cell division cycle 34	Downregulated
A_33_P333	0.000526	0.0000124	-4.18	ALDH3A2	aldehyde dehydrogenase 3 family, member A2	Downregulated
A_33_P341	0.000578	0.0000192	-4.18	DGCR11	DiGeorge syndrome critical region gene 11 (non-protein coding)	Downregulated
A_21_P000	0.000584	0.000002	-4.18	LOC1002870	uncharacterized LOC100287036	Downregulated
A_19_P008	0.000516	0.0000101	-4.19	TAPT1-AS1	TAPT1 antisense RNA 1 (head to head)	Downregulated
A_23_P937	0.000765	0.0000424	-4.19	PMS2	PMS2 postmeiotic segregation increased 2 (S. cerevisiae)	Downregulated
A_23_P250	0.00129	0.000136	-4.19	HSD17B6	hydroxysteroid (17-beta) dehydrogenase 6	Downregulated
A_23_P217	0.000486	6.89E-06	-4.2	CCNL2	cyclin L2	Downregulated
A_22_P000	0.000525	0.0000114	-4.2	LOC1020313	uncharacterized LOC102031319	Downregulated

A_23_P612	0.000483	4.11E-06	-4.21	HGH1	HGH1 homolog (S. cerevisiae)	Downregulated
A_33_P344	0.000498	7.77E-06	-4.21	LOC389641	uncharacterized LOC389641	Downregulated
A_24_P297	0.001702	0.000227	-4.21	CDK14	cyclin-dependent kinase 14	Downregulated
A_23_P112	0.003387	0.000683	-4.22	DGAT1	diacylglycerol O-acyltransferase 1	Downregulated
A_24_P696	0.000501	8.22E-06	-4.23	ZNF25	zinc finger protein 25	Downregulated
A_23_P584	0.000578	0.0000191	-4.23	ANKHD1-EIF4EBP3	ANKHD1-EIF4EBP3 readthrough	Downregulated
A_21_P000	0.000578	0.0000191	-4.23	lnc-CHD1L-1	lnc-CHD1L-1:3	Downregulated
A_32_P214	0.00072	0.0000372	-4.23	lnc-AKIRIN1-1	lnc-AKIRIN1-1:2	Downregulated
A_32_P119	0.00056	0.0000161	-4.24	TPM3	tropomyosin 3	Downregulated
A_23_P169	0.000909	0.000063	-4.24	DGKI	diacylglycerol kinase, iota	Downregulated
A_23_P441	0.001141	0.000108	-4.24	DCXR	dicarbonyl/L-xylulose reductase	Downregulated
A_23_P152	0.000483	2.64E-06	-4.25	NUP88	nucleoporin 88kDa	Downregulated
A_33_P320	0.000515	9.83E-06	-4.25	WDFY2	WD repeat and FYVE domain containing 2	Downregulated
A_23_P211	0.000498	7.96E-06	-4.26	SETD4	SET domain containing 4	Downregulated
A_21_P001	0.000511	8.77E-06	-4.27	LOC1027251	uncharacterized LOC102725134	Downregulated
A_23_P419	0.000718	0.0000368	-4.27	KIAA1407	KIAA1407	Downregulated
A_33_P324	0.000801	0.0000478	-4.27	KIF13B	kinesin family member 13B	Downregulated
A_23_P653	0.000483	3.05E-06	-4.28	SYNJ2BP	synaptojanin 2 binding protein	Downregulated
A_22_P000	0.000521	0.0000104	-4.28	lnc-CAST-2	lnc-CAST-2:1	Downregulated
A_32_P159	0.000541	0.0000144	-4.28	KAT2B	K(lysine) acetyltransferase 2B	Downregulated
A_23_P105	0.000585	0.0000201	-4.28	HRASLS2	HRAS-like suppressor 2	Downregulated
A_24_P749	0.003099	0.000598	-4.28	KDM1A	lysine (K)-specific demethylase 1A	Downregulated
A_22_P000	0.001734	0.000233	-4.29	lnc-CERK-1	lnc-CERK-1:1	Downregulated
A_33_P337	0.000483	2.36E-06	-4.3	ABCC10	ATP-binding cassette, sub-family C (CFTR/MRP), member 10	Downregulated
A_21_P001	0.001602	0.000201	-4.3	NUBP1	nucleotide binding protein 1	Downregulated
A_22_P000	0.000483	4.11E-06	-4.31	lnc-TFEC-2	lnc-TFEC-2:4	Downregulated
A_33_P334	0.000521	0.0000102	-4.31	UBE4B	ubiquitination factor E4B	Downregulated
A_23_P890	0.000525	0.0000114	-4.33	C16orf95	chromosome 16 open reading frame 95	Downregulated
A_24_P244	0.000532	0.0000134	-4.33	NLRX1	NLR family member X1	Downregulated
A_33_P335	0.00096	0.0000716	-4.33	CD99	CD99 molecule	Downregulated
A_23_P916	0.000501	8.18E-06	-4.34	EWSR1	EWS RNA-binding protein 1	Downregulated
A_33_P341	0.000494	7.53E-06	-4.35	ALS2	amyotrophic lateral sclerosis 2 (juvenile)	Downregulated
A_24_P168	0.000521	0.0000107	-4.35	ZMYM3	zinc finger, MYM-type 3	Downregulated
A_23_P119	0.000532	0.0000133	-4.35	NUDT5	nudix (nucleoside diphosphate linked moiety X)-type motif 5	Downregulated
A_33_P328	0.000621	0.0000243	-4.35	FAM207A	family with sequence similarity 207, member A	Downregulated
A_22_P000	0.000486	0.000007	-4.36	lnc-SPINK9-1	lnc-SPINK9-1:1	Downregulated
A_21_P000	0.000605	0.0000226	-4.36	BTN2A1	butyrophilin, subfamily 2, member A1	Downregulated

A_19_P003	0.001084	0.0000956	-4.36	PVT1	Pvt1 oncogene (non-protein coding)	Downregulated
A_21_P001	0.000486	6.82E-06	-4.37	LOC1005074	uncharacterized LOC100507412	Downregulated
A_21_P001	0.000483	3.33E-06	-4.38	XLOC_I2_006025		Downregulated
A_24_P627	0.001263	0.000132	-4.38	EDEM2	ER degradation enhancer, mannosidase alpha-like 2	Downregulated
A_33_P332	0.000525	0.000011	-4.39	ARID5B	AT rich interactive domain 5B (MRF1-like)	Downregulated
A_23_P110	0.000634	0.0000253	-4.39	NICN1	nicolin 1	Downregulated
A_23_P125	0.000939	0.000068	-4.39	RBM10	RNA binding motif protein 10	Downregulated
A_22_P000	0.002949	0.000552	-4.39	LOC1019269	uncharacterized LOC101926933	Downregulated
A_22_P000	0.000483	3.45E-06	-4.4	lnc-TM2D2-3	lnc-TM2D2-3:1	Downregulated
A_24_P681	0.000526	0.0000128	-4.4	HIPK2	homeodomain interacting protein kinase 2	Downregulated
A_23_P486	0.000928	0.0000656	-4.4	PYGL	phosphorylase, glycogen, liver	Downregulated
A_22_P000	0.000483	5.95E-06	-4.41	ALG14	ALG14, UDP-N-acetylglucosaminyltransferase subunit	Downregulated
A_24_P181	0.000486	7.07E-06	-4.41	CATSPER2	cation channel, sperm associated 2	Downregulated
A_24_P275	0.000743	0.0000398	-4.41	PGAP3	post-GPI attachment to proteins 3	Downregulated
A_32_P105	0.000483	2.26E-06	-4.42	FTCDNL1	formiminotransferase cyclodeaminase N-terminal like	Downregulated
A_23_P678	0.000502	8.33E-06	-4.42	SCN3A	sodium channel, voltage gated, type III alpha subunit	Downregulated
A_23_P840	0.000995	0.0000779	-4.42	CDK5	cyclin-dependent kinase 5	Downregulated
A_23_P897	0.001297	0.000138	-4.43	CEP192	centrosomal protein 192kDa	Downregulated
A_23_P157	0.000483	5.49E-06	-4.44	DDHD2	DDHD domain containing 2	Downregulated
A_23_P160	0.000701	0.0000325	-4.44	AKT3	v-akt murine thymoma viral oncogene homolog 3	Downregulated
A_23_P254	0.003126	0.000607	-4.44	SGSH	N-sulfoglucosamine sulfohydrolase	Downregulated
A_33_P331	0.00056	0.0000156	-4.45	CRACR2A	calcium release activated channel regulator 2A	Downregulated
A_33_P325	0.000483	6.04E-06	-4.46	JADE1	jade family PHD finger 1	Downregulated
A_23_P124	0.000515	9.59E-06	-4.47	RGS14	regulator of G-protein signaling 14	Downregulated
A_24_P145	0.000526	0.0000122	-4.47	ZNF609	zinc finger protein 609	Downregulated
A_32_P121	0.00067	0.0000287	-4.49	ANAPC1	anaphase promoting complex subunit 1	Downregulated
A_23_P470	0.000711	0.0000355	-4.49	HHEX	hematopoietically expressed homeobox	Downregulated
A_22_P000	0.000991	0.0000772	-4.5	lnc-HSP90AA	lnc-HSP90AA1-4:1	Downregulated
A_24_P945	0.00221	0.000356	-4.5	CHMP3	charged multivesicular body protein 3	Downregulated
A_22_P000	0.000483	2.04E-06	-4.51	lnc-NT5E-1	lnc-NT5E-1:1	Downregulated
A_21_P000	0.000584	0.00002	-4.51	SNORD35B	small nucleolar RNA, C/D box 35B	Downregulated
A_21_P000	0.000609	0.000023	-4.51	SNORD56B	small nucleolar RNA, C/D box 56B	Downregulated
A_21_P000	0.001021	0.0000831	-4.51	LOC115110	uncharacterized LOC115110	Downregulated
A_33_P339	0.000483	2.17E-06	-4.52	BET1	Bet1 golgi vesicular membrane trafficking protein	Downregulated
A_24_P106	0.000483	1.65E-06	-4.53	PKD2	polycystic kidney disease 2 (autosomal dominant)	Downregulated
A_23_P590	0.000498	7.86E-06	-4.53	TRERF1	transcriptional regulating factor 1	Downregulated
A_23_P246	0.000707	0.0000344	-4.53	ELP4	elongator acetyltransferase complex subunit 4	Downregulated

A_33_P329	0.000523	0.0000109	-4.54	ZBTB20	zinc finger and BTB domain containing 20	Downregulated
A_33_P337	0.000537	0.0000141	-4.54	OSTN	ostecrocin	Downregulated
A_23_P319	0.000483	1.63E-06	-4.55	FAM118B	family with sequence similarity 118, member B	Downregulated
A_33_P336	0.000532	0.0000133	-4.55	PHF8	PHD finger protein 8	Downregulated
A_24_P232	0.000577	0.0000184	-4.56	GRAMD4	GRAM domain containing 4	Downregulated
A_33_P328	0.002167	0.000346	-4.56	TSC2	tuberous sclerosis 2	Downregulated
A_23_P413	0.000483	6.35E-06	-4.57	SH3TC1	SH3 domain and tetratricopeptide repeats 1	Downregulated
A_23_P249	0.000664	0.0000282	-4.57	TSPAN31	tetraspanin 31	Downregulated
A_23_P156	0.000728	0.000038	-4.57	GZMK	granzyme K (granzyme 3; tryptase II)	Downregulated
A_33_P332	0.000999	0.00008	-4.57	MOSPD3	motile sperm domain containing 3	Downregulated
A_23_P386	0.00093	0.0000662	-4.6	INAFM1	InaF-motif containing 1	Downregulated
A_22_P000	0.002169	0.000347	-4.6	lnc-NKX6-3-1	lnc-NKX6-3-1:1	Downregulated
A_33_P333	0.000513	9.05E-06	-4.61	LOC728392	uncharacterized LOC728392	Downregulated
A_33_P330	0.000532	0.0000133	-4.61	LAMA4	laminin, alpha 4	Downregulated
A_22_P000	0.000999	0.00008	-4.61	lnc-GGCT-1	lnc-GGCT-1:4	Downregulated
A_23_P140	0.000483	1.54E-06	-4.62	EVL	Enah/Vasp-like	Downregulated
A_21_P001	0.000773	0.0000434	-4.62	ULK4P3	ULK4 pseudogene 3	Downregulated
A_33_P335	0.000513	8.85E-06	-4.63	TANGO6	transport and golgi organization 6 homolog (Drosophila)	Downregulated
A_33_P336	0.000483	5.48E-06	-4.64	ICAM4	intercellular adhesion molecule 4 (Landsteiner-Wiener blood group)	Downregulated
A_33_P335	0.00056	0.000016	-4.65	PATL2	protein associated with topoisomerase II homolog 2 (yeast)	Downregulated
A_33_P338	0.000483	6.08E-06	-4.66	BCAS3	breast carcinoma amplified sequence 3	Downregulated
A_21_P001	0.000578	0.0000192	-4.66	LOC1005071	uncharacterized LOC100507195	Downregulated
A_23_P243	0.000489	7.39E-06	-4.67	CCDC88B	coiled-coil domain containing 88B	Downregulated
A_33_P331	0.000483	6.35E-06	-4.68	RAB37	RAB37, member RAS oncogene family	Downregulated
A_23_P404	0.000939	0.0000679	-4.68	BIK	BCL2-interacting killer (apoptosis-inducing)	Downregulated
A_19_P003	0.000485	6.49E-06	-4.69	LINC00673	long intergenic non-protein coding RNA 673	Downregulated
A_21_P000	0.000639	0.0000257	-4.69	OVAAL	ovarian adenocarcinoma amplified long non-coding RNA	Downregulated
A_23_P126	0.000483	3.81E-06	-4.7	ANGPTL1	angiopoietin-like 1	Downregulated
A_33_P334	0.000501	8.13E-06	-4.7	CALHM2	calcium homeostasis modulator 2	Downregulated
A_21_P000	0.000515	9.58E-06	-4.7	SNORD12B	small nucleolar RNA, C/D box 12B	Downregulated
A_23_P121	0.000577	0.0000183	-4.7	TNFSF10	tumor necrosis factor (ligand) superfamily, member 10	Downregulated
A_33_P334	0.000695	0.0000311	-4.7	TTL1	tubulin tyrosine ligase-like family member 1	Downregulated
A_23_P352	0.000964	0.000073	-4.7	DCAF5	DDB1 and CUL4 associated factor 5	Downregulated
A_19_P008	0.000486	6.75E-06	-4.72	lnc-RPRML-3	lnc-RPRML-3:2	Downregulated
A_23_P822	0.000571	0.0000173	-4.72	GNB2	guanine nucleotide binding protein (G protein), beta polypeptide 2	Downregulated
A_33_P338	0.001071	0.0000938	-4.72	DHX30	DEAH (Asp-Glu-Ala-His) box helicase 30	Downregulated
A_23_P150	0.000483	2.46E-06	-4.73	ESYT1	extended synaptotagmin-like protein 1	Downregulated

A_23_P208	0.000483	5.49E-06	-4.73	AXL	AXL receptor tyrosine kinase	Downregulated
A_22_P000	0.000483	5.51E-06	-4.73	LOC1019289	uncharacterized LOC101928915	Downregulated
A_23_P386	0.000683	0.0000299	-4.74	C4orf26	chromosome 4 open reading frame 26	Downregulated
A_23_P348	0.000526	0.0000118	-4.75	AK9	adenylate kinase 9	Downregulated
A_23_P864	0.000483	4.24E-06	-4.77	CH25H	cholesterol 25-hydroxylase	Downregulated
A_23_P210	0.001158	0.000111	-4.77	ELMO2	engulfment and cell motility 2	Downregulated
A_33_P329	0.002479	0.000423	-4.77	ZXDC	ZXD family zinc finger C	Downregulated
A_22_P000	0.000525	0.0000114	-4.79	LINC00421	long intergenic non-protein coding RNA 421	Downregulated
A_33_P349	0.000625	0.0000246	-4.79	CCDC141	coiled-coil domain containing 141	Downregulated
A_23_P101	0.000792	0.0000463	-4.79	KRI1	KRI1 homolog (<i>S. cerevisiae</i>)	Downregulated
A_23_P264	0.000938	0.0000672	-4.79	HBA2	hemoglobin, alpha 2	Downregulated
A_23_P551	0.000483	4.09E-06	-4.8	COX10	COX10 heme A:farnesyltransferase cytochrome c oxidase assembly fac	Downregulated
A_33_P322	0.000483	0.0000054	-4.8	SLC16A4	solute carrier family 16, member 4	Downregulated
A_23_P257	0.000483	5.94E-06	-4.81	ALG14	ALG14, UDP-N-acetylglucosaminyltransferase subunit	Downregulated
A_24_P135	0.000483	5.99E-06	-4.81	TSPAN14	tetraspanin 14	Downregulated
A_33_P325	0.00056	0.0000158	-4.81	PLIN2	perilipin 2	Downregulated
A_23_P215	0.000582	0.0000198	-4.81	ABCF2	ATP-binding cassette, sub-family F (GCN20), member 2	Downregulated
A_22_P000	0.000483	5.24E-06	-4.82	lnc-HYI-1	lnc-HYI-1:1	Downregulated
A_23_P146	0.00064	0.0000259	-4.82	RNF170	ring finger protein 170	Downregulated
A_23_P209	0.000697	0.0000321	-4.82	TRIM68	tripartite motif containing 68	Downregulated
A_33_P336	0.000483	4.43E-06	-4.85	UBA5	ubiquitin-like modifier activating enzyme 5	Downregulated
A_24_P854	0.000486	7.03E-06	-4.86	MIAT	myocardial infarction associated transcript (non-protein coding)	Downregulated
A_32_P135	0.000515	9.62E-06	-4.86	RBM41	RNA binding motif protein 41	Downregulated
A_24_P683	0.000532	0.0000132	-4.86	SYNE2	spectrin repeat containing, nuclear envelope 2	Downregulated
A_33_P325	0.000483	1.83E-06	-4.87	HBA2	hemoglobin, alpha 2	Downregulated
A_23_P137	0.000483	3.02E-06	-4.87	S100A10	S100 calcium binding protein A10	Downregulated
A_19_P003	0.000504	8.51E-06	-4.87	KIF9-AS1	KIF9 antisense RNA 1	Downregulated
A_33_P340	0.000537	0.0000139	-4.87	LRRC8C	leucine rich repeat containing 8 family, member C	Downregulated
A_22_P000	0.000608	0.000023	-4.87	ZNRD1-AS1	ZNRD1 antisense RNA 1	Downregulated
A_33_P336	0.002733	0.000492	-4.87	C6orf57	chromosome 6 open reading frame 57	Downregulated
A_21_P000	0.000483	3.86E-06	-4.9	LOC1027239	uncharacterized LOC102723931	Downregulated
A_23_P300	0.000709	0.000035	-4.9	SMCR8	Smith-Magenis syndrome chromosome region, candidate 8	Downregulated
A_24_P380	0.000486	6.98E-06	-4.91	SAPCD1	suppressor APC domain containing 1	Downregulated
A_23_P109	0.00124	0.000127	-4.91	THAP7	THAP domain containing 7	Downregulated
A_23_P345	0.000483	3.95E-06	-4.92	EPHX1	epoxide hydrolase 1, microsomal (xenobiotic)	Downregulated
A_24_P288	0.000483	4.55E-06	-4.92	DPP9	dipeptidyl-peptidase 9	Downregulated
A_24_P383	0.002102	0.000327	-4.92	C19orf70	chromosome 19 open reading frame 70	Downregulated

A_33_P326	0.000622	0.0000244	-4.93	EFCAB3	EF-hand calcium binding domain 3	Downregulated
A_33_P341	0.002853	0.000525	-4.93	CCDC124	coiled-coil domain containing 124	Downregulated
A_32_P158	0.000525	0.0000111	-4.94	KLRF1	killer cell lectin-like receptor subfamily F, member 1	Downregulated
A_22_P000	0.001364	0.000151	-4.96	lnc-DKK4-1	lnc-DKK4-1:1	Downregulated
A_33_P335	0.00056	0.0000156	-4.97	CLOCK	clock circadian regulator	Downregulated
A_21_P001	0.000483	1.18E-06	-4.99	XLOC_I2_010405		Downregulated
A_21_P000	0.000483	1.98E-06	-5.01	SNORD74	small nucleolar RNA, C/D box 74	Downregulated
A_21_P001	0.000483	5.13E-06	-5.01	LOC1019273	uncharacterized LOC101927365	Downregulated
A_23_P216	0.000578	0.0000193	-5.01	MAPKAP1	mitogen-activated protein kinase associated protein 1	Downregulated
A_33_P339	0.000596	0.0000211	-5.01	POLR3G	polymerase (RNA) III (DNA directed) polypeptide G (32kD)	Downregulated
A_22_P000	0.000483	6.16E-06	-5.02	lnc-HNMT-2	lnc-HNMT-2:1	Downregulated
A_33_P322	0.001069	0.0000934	-5.02	SLC4A8	solute carrier family 4, sodium bicarbonate cotransporter, member 8	Downregulated
A_21_P000	0.000525	0.0000109	-5.03	lnc-GPR183-2	lnc-GPR183-2:3	Downregulated
A_23_P387	0.000766	0.0000426	-5.04	ZBTB40	zinc finger and BTB domain containing 40	Downregulated
A_22_P000	0.000589	0.0000206	-5.06	lnc-NSMCE1-1	lnc-NSMCE1-1:1	Downregulated
A_23_P666	0.002262	0.000371	-5.07	HOXB6	homeobox B6	Downregulated
A_24_P228	0.000589	0.0000205	-5.08	ARHGEF6	Rac/Cdc42 guanine nucleotide exchange factor (GEF) 6	Downregulated
A_33_P342	0.001141	0.000108	-5.08	TTL	tubulin tyrosine ligase	Downregulated
A_22_P000	0.002113	0.00033	-5.08	LOC1019284	uncharacterized LOC101928461	Downregulated
A_23_P105	0.000603	0.0000225	-5.09	GPRC5D	G protein-coupled receptor, class C, group 5, member D	Downregulated
A_33_P337	0.000515	9.33E-06	-5.1	SLC9A3R1	solute carrier family 9, subfamily A (NHE3, cation proton antiporter 3), member 1	Downregulated
A_23_P647	0.000611	0.0000232	-5.1	ZNF641	zinc finger protein 641	Downregulated
A_23_P482	0.000743	0.0000397	-5.13	APOLD1	apolipoprotein L domain containing 1	Downregulated
A_33_P335	0.002043	0.000312	-5.13	LOC728903	uncharacterized LOC728903	Downregulated
A_23_P874	0.00102	0.000083	-5.17	APOF	apolipoprotein F	Downregulated
A_23_P785	0.000515	9.91E-06	-5.18	CEACAM21	carcinoembryonic antigen-related cell adhesion molecule 21	Downregulated
A_23_P359	0.000483	4.25E-06	-5.19	PDDC1	Parkinson disease 7 domain containing 1	Downregulated
A_24_P941	0.000483	4.73E-06	-5.19	FAM65B	family with sequence similarity 65, member B	Downregulated
A_22_P000	0.002012	0.000304	-5.19	lnc-PLEKHA3	lnc-PLEKHA3-4:1	Downregulated
A_23_P667	0.000483	4.03E-06	-5.2	DHRS13	dehydrogenase/reductase (SDR family) member 13	Downregulated
A_22_P000	0.000575	0.0000177	-5.2	lnc-MKRN2-A	lnc-MKRN2-AS1-1:1	Downregulated
A_23_P388	0.000483	3.47E-06	-5.21	KAT6B	K(lysine) acetyltransferase 6B	Downregulated
A_22_P000	0.00155	0.000191	-5.22	LOC1019273	uncharacterized LOC101927391	Downregulated
A_22_P000	0.000483	4.16E-06	-5.23	LOC1019296	uncharacterized LOC101929648	Downregulated
A_33_P330	0.000526	0.0000119	-5.23	BLOC1S5	biogenesis of lysosomal organelles complex-1, subunit 5, muted	Downregulated
A_23_P122	0.000693	0.000031	-5.23	C6orf47	chromosome 6 open reading frame 47	Downregulated
A_21_P001	0.001404	0.00016	-5.23	MIR4435-1HC	MIR4435-1 host gene (non-protein coding)	Downregulated

A_22_P000	0.002369	0.000396	-5.23	SNRPD1	small nuclear ribonucleoprotein D1 polypeptide 16kDa	Downregulated
A_24_P174	0.000537	0.0000142	-5.24	TTC30A	tetratricopeptide repeat domain 30A	Downregulated
A_23_P720	0.001626	0.000208	-5.24	SLC25A20	solute carrier family 25 (carnitine/acylcarnitine translocase), member 20	Downregulated
A_23_P152	0.001751	0.000236	-5.25	RMDN3	regulator of microtubule dynamics 3	Downregulated
A_23_P330	0.000605	0.0000227	-5.26	PIP5K1C	phosphatidylinositol-4-phosphate 5-kinase, type I, gamma	Downregulated
A_24_P337	0.000483	5.26E-06	-5.27	TTC7A	tetratricopeptide repeat domain 7A	Downregulated
A_23_P329	0.001108	0.000101	-5.28	DPH7	diphthamide biosynthesis 7	Downregulated
A_23_P537	0.000483	5.54E-06	-5.3	CLSTN3	calsyntenin 3	Downregulated
A_33_P324	0.000526	0.0000116	-5.3	ACSM6	acyl-CoA synthetase medium-chain family member 6	Downregulated
A_21_P000	0.000883	0.0000591	-5.32	LINC00944	long intergenic non-protein coding RNA 944	Downregulated
A_23_P592	0.000483	3.52E-06	-5.34	TAF11	TAF11 RNA polymerase II, TATA box binding protein (TBP)-associated 1	Downregulated
A_24_P272	0.000486	6.85E-06	-5.34	ASH1L-AS1	ASH1L antisense RNA 1	Downregulated
A_22_P000	0.000483	4.05E-06	-5.35	lnc-RP11-467	lnc-RP11-467M13.1.1-3:1	Downregulated
A_33_P334	0.000483	3.51E-06	-5.37	LCLAT1	lysocardiolipin acyltransferase 1	Downregulated
A_33_P341	0.000483	3.58E-06	-5.37	MEN1	multiple endocrine neoplasia 1	Downregulated
A_23_P430	0.000621	0.0000242	-5.37	LYSMD1	LysM, putative peptidoglycan-binding, domain containing 1	Downregulated
A_21_P000	0.000483	4.37E-06	-5.38	LOC1005071	uncharacterized LOC100507195	Downregulated
A_33_P338	0.000949	0.0000698	-5.38	ABLIM1	actin binding LIM protein 1	Downregulated
A_23_P490	0.001301	0.000139	-5.39	LPCAT4	lysophosphatidylcholine acyltransferase 4	Downregulated
A_23_P308	0.000483	5.01E-06	-5.41	AMER1	APC membrane recruitment protein 1	Downregulated
A_33_P337	0.000599	0.0000215	-5.44	SOCS2-AS1	SOCS2 antisense RNA 1	Downregulated
A_33_P338	0.000483	0.0000034	-5.45	STK10	serine/threonine kinase 10	Downregulated
A_23_P656	0.000483	3.93E-06	-5.46	SPG11	spastic paraplegia 11 (autosomal recessive)	Downregulated
A_23_P356	0.000483	0.0000061	-5.46	ZNF451	zinc finger protein 451	Downregulated
A_23_P397	0.001453	0.00017	-5.46	TIRAP	toll-interleukin 1 receptor (TIR) domain containing adaptor protein	Downregulated
A_33_P342	0.000483	0.0000025	-5.47	CRELD1	cysteine-rich with EGF-like domains 1	Downregulated
A_22_P000	0.000893	0.0000604	-5.47	LOC1019273	uncharacterized LOC101927355	Downregulated
A_22_P000	0.000483	0.0000044	-5.49	lnc-ANKRD42	lnc-ANKRD42-1:1	Downregulated
A_24_P119	0.000483	8.34E-07	-5.5	ITPKB	inositol-trisphosphate 3-kinase B	Downregulated
A_33_P339	0.000483	0.0000032	-5.5	C20orf27	chromosome 20 open reading frame 27	Downregulated
A_23_P214	0.000483	5.53E-06	-5.51	GPR63	G protein-coupled receptor 63	Downregulated
A_21_P000	0.000483	0.0000033	-5.52	LOC389641	uncharacterized LOC389641	Downregulated
A_23_P136	0.000483	1.01E-06	-5.53	AP3B1	adaptor-related protein complex 3, beta 1 subunit	Downregulated
A_23_P393	0.000483	0.0000048	-5.54	INPP4A	inositol polyphosphate-4-phosphatase, type I, 107kDa	Downregulated
A_33_P337	0.000483	5.03E-06	-5.54	SZT2	seizure threshold 2 homolog (mouse)	Downregulated
A_24_P916	0.00055	0.000015	-5.54	PRKCA	protein kinase C, alpha	Downregulated
A_22_P000	0.000483	2.63E-06	-5.55	LOC728730	uncharacterized LOC728730	Downregulated

A_33_P330	0.000537	0.0000138	-5.56	RIPK3	receptor-interacting serine-threonine kinase 3	Downregulated
A_24_P150	0.000597	0.0000214	-5.56	ZNF490	zinc finger protein 490	Downregulated
A_24_P222	0.000483	4.91E-06	-5.58	S100PBP	S100P binding protein	Downregulated
A_33_P338	0.000483	7.75E-07	-5.59	ATP6V1C1	ATPase, H+ transporting, lysosomal 42kDa, V1 subunit C1	Downregulated
A_23_P203	0.000483	4.16E-06	-5.61	IMMP1L	IMP1 inner mitochondrial membrane peptidase-like (S. cerevisiae)	Downregulated
A_23_P347	0.001698	0.000225	-5.65	KIF2C	kinesin family member 2C	Downregulated
A_33_P339	0.000483	5.46E-06	-5.68	CMTR1	cap methyltransferase 1	Downregulated
A_23_P338	0.000483	1.92E-06	-5.73	S100PBP	S100P binding protein	Downregulated
A_23_P377	0.000483	0.0000028	-5.73	HEXIM2	hexamethylene bis-acetamide inducible 2	Downregulated
A_22_P000	0.000537	0.0000139	-5.74	lnc-RP11-712	lnc-RP11-712L6.5.1-1:1	Downregulated
A_21_P000	0.000483	3.11E-06	-5.8	lnc-BOD1-1	lnc-BOD1-1:3	Downregulated
A_33_P342	0.000563	0.0000167	-5.8	LOC1001292	uncharacterized LOC100129275	Downregulated
A_23_P200	0.000483	7.38E-07	-5.82	AGL	amylo-alpha-1, 6-glucosidase, 4-alpha-glucanotransferase	Downregulated
A_23_P348	0.000483	4.17E-06	-5.83	LETM2	leucine zipper-EF-hand containing transmembrane protein 2	Downregulated
A_32_P198	0.000526	0.0000124	-5.83	NEURL1B	neuralized E3 ubiquitin protein ligase 1B	Downregulated
A_24_P108	0.000792	0.0000464	-5.88	GRAP2	GRB2-related adaptor protein 2	Downregulated
A_23_P256	0.000483	3.66E-06	-5.89	KIF20A	kinesin family member 20A	Downregulated
A_23_P163	0.000483	2.56E-06	-5.91	SCAPER	S-phase cyclin A-associated protein in the ER	Downregulated
A_22_P000	0.000483	3.94E-06	-5.92	lnc-SFN-1	lnc-SFN-1:1	Downregulated
A_23_P393	0.000525	0.0000111	-5.93	KLHL26	kelch-like family member 26	Downregulated
A_23_P979	0.000578	0.0000193	-5.94	MSRB2	methionine sulfoxide reductase B2	Downregulated
A_23_P215	0.000483	3.81E-06	-5.96	VPS41	vacuolar protein sorting 41 homolog (S. cerevisiae)	Downregulated
A_23_P138	0.00055	0.0000151	-6	ATN1	atrophin 1	Downregulated
A_32_P363	0.001243	0.000128	-6	VTI1A	vesicle transport through interaction with t-SNAREs 1A	Downregulated
A_22_P000	0.000483	3.21E-06	-6.01	LOC1005076	uncharacterized LOC100507616	Downregulated
A_23_P317	0.000483	7.23E-07	-6.04	BLK	BLK proto-oncogene, Src family tyrosine kinase	Downregulated
A_23_P735	0.000483	5.85E-06	-6.06	CCDC120	coiled-coil domain containing 120	Downregulated
A_33_P339	0.000483	0.0000014	-6.1	ZNF562	zinc finger protein 562	Downregulated
A_23_P422	0.000483	2.27E-06	-6.1	APOM	apolipoprotein M	Downregulated
A_23_P206	0.000483	2.42E-06	-6.11	KIAA0513	KIAA0513	Downregulated
A_23_P142	0.000483	3.12E-06	-6.11	ARHGAP25	Rho GTPase activating protein 25	Downregulated
A_33_P330	0.000483	3.51E-06	-6.11	RNF207	ring finger protein 207	Downregulated
A_23_P359	0.000483	3.55E-06	-6.11	KDM7A	lysine (K)-specific demethylase 7A	Downregulated
A_23_P170	0.000518	0.0000101	-6.12	SMYD2	SET and MYND domain containing 2	Downregulated
A_33_P326	0.000483	2.61E-06	-6.21	HS2ST1	heparan sulfate 2-O-sulfotransferase 1	Downregulated
A_23_P105	0.000483	2.86E-06	-6.21	BIVM	basic, immunoglobulin-like variable motif containing	Downregulated
A_33_P322	0.000483	0.0000045	-6.27	OAS2	2'-5'-oligoadenylate synthetase 2, 69/71kDa	Downregulated

A_23_P133	0.000483	2.79E-06	-6.31	HUS1B	HUS1 checkpoint homolog b (S. pombe)	Downregulated
A_24_P406	0.000483	2.08E-06	-6.33	FAM53B	family with sequence similarity 53, member B	Downregulated
A_23_P468	0.000486	6.98E-06	-6.34	SLC29A3	solute carrier family 29 (equilibrative nucleoside transporter), member 3	Downregulated
A_33_P329	0.000549	0.0000149	-6.35	TSC22D1	TSC22 domain family, member 1	Downregulated
A_24_P382	0.000483	1.49E-06	-6.36	NHP2L1	NHP2 non-histone chromosome protein 2-like 1 (S. cerevisiae)	Downregulated
A_23_P489	0.000483	1.67E-06	-6.36	SMAD3	SMAD family member 3	Downregulated
A_33_P322	0.000483	2.93E-06	-6.36	GSDMB	gasdermin B	Downregulated
A_23_P109	0.000483	2.67E-06	-6.37	NR112	nuclear receptor subfamily 1, group I, member 2	Downregulated
A_33_P341	0.000483	0.0000021	-6.39	LOC1001286	uncharacterized LOC100128607	Downregulated
A_23_P352	0.000483	1.98E-06	-6.43	NEK2	NIMA-related kinase 2	Downregulated
A_33_P332	0.000483	1.36E-06	-6.49	ATP2B4	ATPase, Ca ⁺⁺ transporting, plasma membrane 4	Downregulated
A_24_P409	0.000501	0.0000082	-6.52	PPAPDC2	phosphatidic acid phosphatase type 2 domain containing 2	Downregulated
A_33_P332	0.000483	1.74E-06	-6.56	SAMD12	sterile alpha motif domain containing 12	Downregulated
A_23_P552	0.000483	2.31E-06	-6.61	CCL18	chemokine (C-C motif) ligand 18 (pulmonary and activation-regulated)	Downregulated
A_23_P250	0.000998	0.0000798	-6.62	PARVG	parvin, gamma	Downregulated
A_23_P328	0.000483	2.17E-06	-6.66	FHDC1	FH2 domain containing 1	Downregulated
A_21_P000	0.000483	2.35E-06	-6.66	LYRM4	LYR motif containing 4	Downregulated
A_23_P224	0.000483	1.53E-06	-6.9	GNL3L	guanine nucleotide binding protein-like 3 (nucleolar)-like	Downregulated
A_23_P322	0.000483	3.46E-07	-6.98	TET1	tet methylcytosine dioxygenase 1	Downregulated
A_23_P253	0.000483	1.93E-06	-7.05	ASCL1	achaete-scute family bHLH transcription factor 1	Downregulated
A_23_P164	0.000483	3.32E-07	-7.12	MINK1	misshapen-like kinase 1	Downregulated
A_21_P000	0.000483	0.0000029	-7.17	PDCD6	programmed cell death 6	Downregulated
A_32_P126	0.000483	1.19E-06	-7.21	SLC38A9	solute carrier family 38, member 9	Downregulated
A_33_P330	0.000483	0.0000021	-7.28	PSMD5	proteasome (prosome, macropain) 26S subunit, non-ATPase, 5	Downregulated
A_24_P900	0.000912	0.0000634	-7.3	ADD3	adducin 3 (gamma)	Downregulated
A_22_P000	0.000691	0.0000306	-7.35	lnc-FBXO31-1	lnc-FBXO31-1:1	Downregulated
A_23_P145	0.000483	0.0000015	-7.45	ADRB2	adrenoceptor beta 2, surface	Downregulated
A_32_P226	0.000483	7.78E-07	-7.69	LOC1001297	uncharacterized LOC100129781	Downregulated

Supplementary Table 2. Honokiol (HNK)-mediated proteins (HMPs)
, as retrieved from Swiss target prediction, STITCH, canSAR Black, and SEA.

SwissTargetPrediction	
Gene Name	Gene Symbol
Arachidonate 5-lipoxygenase	ALOX5
Cannabinoid receptor 1	CNR1
Cannabinoid receptor 2	CNR2
Carbonic anhydrase II	CA2
Calcium-activated potassium channel subunit alpha-1	KCNMA1
Monoamine oxidase B	MAOB
Vanilloid receptor	TRPV1
Pyruvate dehydrogenase kinase isoform 1	PDK1
Catechol O-methyltransferase	COMT
Histone deacetylase 8	HDAC8
Cholesteryl ester transfer protein	CETP
Heat shock protein HSP 90-alpha	HSP90AA1
Quinone reductase 2	NQO2
Glucocorticoid receptor	NR3C1
Phospholipase A2 group IIA	PLA2G2A
Receptor protein-tyrosine kinase erbB-2	ERBB2
Epidermal growth factor receptor erbB1	EGFR
Heat shock protein HSP 90-beta	HSP90AB1
Steryl-sulfatase	STS
GABA-A receptor; GABA-A site (alpha1/beta2 interface)	GABRA1
Poly [ADP-ribose] polymerase-1	PARP1
Cytochrome b-c1 complex subunit 7	UQCRB
Mu opioid receptor	OPRM1
Delta opioid receptor	OPRD1
Arachidonate 15-lipoxygenase	ALOX15
Epoxide hydratase	EPHX2
Histone deacetylase 6	HDAC6
Macrophage migration inhibitory factor	MIF
MAP kinase p38 alpha	MAPK14
Anandamide amidohydrolase	FAAH
Acyl coenzyme A:cholesterol acyltransferase	CES1
Dual-specificity tyrosine-phosphorylation regulated kinase 1A	DYRK1A
Kinesin-like protein 1	KIF11
Glycogen synthase kinase-3 beta	GSK3B
Glycogen synthase kinase-3 alpha	GSK3A
Transthyretin	TTR
Carbonic anhydrase I	CA1
Carbonic anhydrase IX	CA9
Serine/threonine-protein kinase PAK 1	PAK1
5-lipoxygenase activating protein	ALOX5AP
Nitric-oxide synthase, brain	NOS1

Dual specificity phosphatase Cdc25B	CDC25B
Adenosine A2a receptor	ADORA2A
Serine/threonine-protein kinase Aurora-B	AURKB
Tyrosine-protein kinase SRC	SRC
Focal adhesion kinase 1	PTK2
Vascular endothelial growth factor receptor 2	KDR
Hepatocyte growth factor receptor	MET
ALK tyrosine kinase receptor	ALK
Serine/threonine-protein kinase NEK6	NEK6
Heat shock protein 75 kDa, mitochondrial	TRAP1
NADPH oxidase 4	NOX4
NADPH oxidase 1	NOX1
Glutamate NMDA receptor; GRIN1/GRIN2B	GRIN1 GRIN2B
Bile acid receptor FXR	NR1H4
Matrix metalloproteinase 9	MMP9
Carbonic anhydrase XII	CA12
Matrix metalloproteinase 1	MMP1
Matrix metalloproteinase 2	MMP2
Protein kinase C gamma (by homology)	PRKCG
Estradiol 17-beta-dehydrogenase 1	HSD17B1
Serine/threonine-protein kinase B-raf	BRAF
Prostanoid EP4 receptor	PTGER4
Monoglyceride lipase	MGLL
11-beta-hydroxysteroid dehydrogenase 1	HSD11B1
Cyclin-dependent kinase 2/cyclin E1	CCNE1 CDK2
Tyrosine-protein kinase receptor FLT3	FLT3
Phosphodiesterase 4B	PDE4B
Nischarin	NISCH
NAD-dependent deacetylase sirtuin 2	SIRT2
G-protein coupled bile acid receptor 1	GPBAR1
Cytochrome P450 11B1	CYP11B1
Cytochrome P450 19A1	CYP19A1
Acetylcholinesterase	ACHE
Cytochrome P450 11B2	CYP11B2
Testis-specific androgen-binding protein	SHBG
Dual specificity tyrosine-phosphorylation-regulated kinase 1B	DYRK1B
Kinesin-1 heavy chain/ Tyrosine-protein kinase receptor RET	RET
Progesterone receptor	PGR
Histone deacetylase 1	HDAC1
Fibroblast growth factor receptor 1	FGFR1
Macrophage colony stimulating factor receptor	CSF1R
Serine/threonine-protein kinase PIM1	PIM1
3-phosphoinositide dependent protein kinase-1	PDPK1
Cyclin-dependent kinase 2	CDK2
Prostaglandin E synthase	PTGES
Potassium-transporting ATPase	ATP4B ATP4A
Alpha-2a adrenergic receptor	ADRA2A
Uridine phosphorylase 1 (by homology)	UPP1

Estradiol 17-beta-dehydrogenase 2	HSD17B2
Vascular endothelial growth factor receptor 1	FLT1
Platelet-derived growth factor receptor beta	PDGFRB
Stem cell growth factor receptor	KIT
Serine/threonine-protein kinase Sgk1	SGK1
Dual specificity protein kinase CLK1	CLK1
CDC7/DBF4 (Cell division cycle 7-related protein kinase/Activator)	CDC7
Serine/threonine-protein kinase RAF	RAF1
G-protein coupled receptor 84	GPR84
Tyrosinase	TYR
Protein kinase C (PKC)	PRKCZ

STITCH

Peptidylprolyl Isomerase F	PPIF
Calpain 11	CAPN11
ATP Binding Cassette Subfamily A	ABCA
Calpain 1	CAPN1
Calpain 3	CAPN3
Calpain 9	CAPN9
BEN Domain Containing 3	BEND3
Nitric Oxide Synthase 3	NOS3
Vascular Endothelial Growth Factor A	VEGFA
Interleukin 4	IL4
Caspase 3	CASP3
Nitric Oxide Synthase 2	NOS2
Cytochrome P450 2B6	CYP2B6
Calpain 2	CAPN2
Caspase 9	CASP9
Caspase 8	CASP8
CASP8 And FADD Like Apoptosis Regulator	CFLAR
Cyclin D1	CCND1

CANSAR BLACK

Retinoid X Receptor Alpha	RXRA
Gamma-Aminobutyric Acid Type A Receptor Subunit Beta2	GABRB2
Gamma-Aminobutyric Acid Type A Receptor Subunit Alpha5	GABRA5
Gamma-Aminobutyric Acid Type A Receptor Subunit Beta1	GABRB1
Gamma-Aminobutyric Acid Type A Receptor Subunit Alpha2	GABRA2
Gamma-Aminobutyric Acid Type A Receptor Subunit Alpha3	GABRA3
Gamma-Aminobutyric Acid Type A Receptor Subunit Beta3	GABRB3
Gamma-Aminobutyric Acid Type A Receptor Subunit Gamma	GABRG2

SEA.BKSLAB.ORG

Prostaglandin-Endoperoxide Synthase 2	PTGS2
Prostaglandin-Endoperoxide Synthase 1	PTGS1

Supplementary Table 3. KEGG pathway enrichment analysis of OGs from both HMP and DEGs.

Term	Count	%	PValue	Genes
hsa05200:Pathways in cancer	9	33.3333333	1.11E-05	PTGER4, CASP9, CSF1R, HSP90AA1, RXRA, HSP90AB1, CCND1, HDAC1, VEGFA
hsa04151:PI3K-Akt signaling pathway	8	29.6296296	4.74E-05	CASP9, IL4, CSF1R, HSP90AA1, RXRA, HSP90AB1, CCND1, VEGFA
hsa05215:Prostate cancer	4	14.8148148	0.00227757	CASP9, HSP90AA1, HSP90AB1, CCND1
hsa04919:Thyroid hormone signaling pathway	4	14.8148148	0.00486019	CASP9, RXRA, CCND1, HDAC1
hsa05223:Non-small cell lung cancer	3	11.1111111	0.01237913	CASP9, RXRA, CCND1
hsa04141:Protein processing in endoplasmic re	4	14.8148148	0.01399389	HSP90AA1, HSP90AB1, CAPN2, CAPN1
hsa04210:Apoptosis	3	11.1111111	0.01503458	CASP9, CAPN2, CAPN1
hsa05212:Pancreatic cancer	3	11.1111111	0.01644674	CASP9, CCND1, VEGFA
hsa04510:Focal adhesion	4	14.8148148	0.02365066	PAK1, CCND1, CAPN2, VEGFA
hsa05222:Small cell lung cancer	3	11.1111111	0.02721576	CASP9, RXRA, CCND1
hsa04723:Retrograde endocannabinoid signalir	3	11.1111111	0.03739244	FAAH, CNR1, MGLL

Supplementary Fig. 1

