

Table S1. Transcripts Up- and Down-Regulated in MDA-MB-231 Cells Grown in DC-DEP-EMF-Treated Media

Gene #	Gene Accession	Gene Symbol	Gene Description	Fold Change
1	NM_000963	PTGS2	prostaglandin-endoperoxide synthase 2 (prostaglandin G/H synthase and cyclooxygenase)	25.94
2	NM_001902	CTH	cystathionase (cystathionine gamma-lyase)	19.98
3	ENST00000446533	CHAC1	glutathione-specific gamma-glutamylcyclotransferase 1	15.99
4	NM_004864	GDF15	growth differentiation factor 15	14.95
5	NM_031459	SESN2	sestrin 2	14.89
6	NM_001561	TNFRSF9	tumor necrosis factor receptor superfamily	14.21
7	NM_000575	IL1A	interleukin 1	13.41
8	NR_033896	FLJ46906	uncharacterized LOC441172	13.30
9	NM_152772	TCP11L2	t-complex 11	12.02
10	NM_030647	JHDM1D	jumonji C domain containing histone demethylase 1 homolog D (S. cerevisiae)	11.10
11	NM_001034173	ALDH1L2	aldehyde dehydrogenase 1 family	10.85
12	NM_201649	SLC6A9	solute carrier family 6 (neurotransmitter transporter	10.36
13	NM_001433	ERN1	endoplasmic reticulum to nucleus signaling 1	10.23
14	NM_019058	DDIT4	DNA-damage-inducible transcript 4	10.01
15	ENST00000216117	HMOX1	heme oxygenase (decycling) 1	9.89
16	ENST00000367662	PAPPA2	pappalysin 2	9.29
17	ENST00000328299	ST6GALNAC3	ST6 (alpha-N-acetyl-neuraminyl-2	8.95
18	NM_002421	MMP1	matrix metalloproteinase 1 (interstitial collagenase)	8.19
19	ENST00000397936	STK32A	serine/threonine kinase 32A	7.88
20	NM_017697	ESRP1	epithelial splicing regulatory protein 1	7.79
21	NM_003038	SLC1A4	solute carrier family 1 (glutamate/neutral amino acid transporter)	7.07
22	NM_182575	IZUMO1	izumo sperm-egg fusion 1	7.04
23	NM_000433	NCF2	neutrophil cytosolic factor 2	6.63
24	NM_001195056	DDIT3	DNA-damage-inducible transcript 3	6.56
25	NM_133436	ASNS	asparagine synthetase (glutamine-hydrolyzing)	6.52
26	NR_002775	RPLP0P2	ribosomal protein	6.43
27	ENST00000256969	C12orf39	chromosome 12 open reading frame 39	6.37
28	NM_018643	TREM1	triggering receptor expressed on myeloid cells 1	6.33
29	NM_170744	UNC5B	unc-5 homolog B (C. elegans)	6.21
30	NM_207627	ABCG1	ATP-binding cassette	6.11
31	NM_144975	SLFN5	schlafen family member 5	6.06
32	NM_000148	FUT1	fucosyltransferase 1 (galactoside 2-alpha-L-fucosyltransferase	6.02

33	NM_203403	LURAP1L	leucine rich adaptor protein 1-like	5.85
34	NM_001172	ARG2	arginase 2	5.56
35	ENST00000311177	HOXB9	homeobox B9	5.49
36	NM_170662	CBLB	Cbl proto-oncogene	5.47
37	NM_173576	MKX	mohawk homeobox	5.45
38	NM_182569	GDPD1	glycerophosphodiester phosphodiesterase domain containing 1	5.45
39	ENST00000216780	PCK2	phosphoenolpyruvate carboxykinase 2 (mitochondrial)	5.34
40	NR_047500	LINC00571	long intergenic non-protein coding RNA 571	5.24
41	NM_021158	TRIB3	tribbles homolog 3 (Drosophila)	5.06
42	NM_017805	RASIP1	Ras interacting protein 1	5.03
43	NR_039862	MIR4712	microRNA 4712	4.93
44	NM_152405	JMY	junction mediating and regulatory protein	4.90
45	NM_015187	SEL1L3	sel-1 suppressor of lin-12-like 3 (C. elegans)	4.85
46	NM_023070	ZFP69B	ZFP69 zinc finger protein B	4.83
47	BC094703	DLGAP1-AS2	DLGAP1 antisense RNA 2	4.82
48	NM_001085386	NFE4	transcription factor NF-E4	4.71
49	NM_001042483	NUPR1	nuclear protein	4.69
50	NR_051988	FBXW10	F-box and WD repeat domain containing 10	4.67
51	NM_153607	CREBRF	CREB3 regulatory factor	4.62
52	NM_000104	CYP1B1	cytochrome P450	4.61
53	NM_017644	KLHL24	kelch-like family member 24	4.61
54	ENST00000400286	SLITRK6	SLIT and NTRK-like family	4.48
55	NM_032898	CEP19	centrosomal protein 19kDa	4.45
56	ENST00000598177	FAM223B	family with sequence similarity 223	4.41
57	NM_016262	TUBE1	tubulin	4.41
58	NR_028492	CFL1P1	cofilin 1 (non-muscle) pseudogene 1	4.30
59	NM_018420	SLC22A15	solute carrier family 22	4.30
60	NM_014330	PPP1R15A	protein phosphatase 1	4.25
61	NM_001270691	SMOX	spermine oxidase	4.20
62	NM_018295	TMEM140	transmembrane protein 140	4.18
63	AK023809	LOC284561	uncharacterized LOC284561	4.15
64	ENST00000284818	LY96	lymphocyte antigen 96	4.14
65	ENST00000370986	GADD45A	growth arrest and DNA-damage-inducible	4.14
66	ENST00000440783	GPT2	glutamic pyruvate transaminase (alanine aminotransferase) 2	4.12
67	NM_001025366	VEGFA	vascular endothelial growth factor A	4.06
68	BC119675	FAM27E3	family with sequence similarity 27	4.06
69	ENST00000249356	DNAJB9	DnaJ (Hsp40) homolog	4.03

70	NM_003383	VLDLR	very low density lipoprotein receptor	4.01
71	NM_000584	IL8	interleukin 8	4.00
72	NM_006472	TXNIP	thioredoxin interacting protein	3.97
73	AK091866	LUCAT1	lung cancer associated transcript 1 (non-protein coding)	3.94
74	NM_144717	IL20RB	interleukin 20 receptor beta	3.94
75	NM_001080424	KDM6B	lysine (K)-specific demethylase 6B	3.94
76	AK131337	LOC100124692	maltase-glucoamylase (alpha-glucosidase) pseudogene	3.86
77	ENST00000295958	SMIM14	small integral membrane protein 14	3.76
78	ENST00000409871	ZC3H6	zinc finger CCCH-type containing 6	3.74
79	NR_046793	RPS6KA2-IT1	RPS6KA2 intronic transcript 1 (non-protein coding)	3.73
80	DQ656060	CDK14	cyclin-dependent kinase 14	3.70
81	NM_173536	GABRG1	gamma-aminobutyric acid (GABA) A receptor	3.69
82	NM_021013	KRT34	keratin 34	3.68
83	NM_019113	FGF21	fibroblast growth factor 21	3.65
84	NM_018935	PCDHB15	protocadherin beta 15	3.64
85	NM_003064	SLPI	secretory leukocyte peptidase inhibitor	3.58
86	NM_000798	DRD5	dopamine receptor D5	3.57
87	NM_022060	ABHD4	abhydrolase domain containing 4	3.56
88	NM_002357	MXD1	MAX dimerization protein 1	3.55
89	NM_000499	CYP1A1	cytochrome P450	3.54
90	NM_018557	LRP1B	low density lipoprotein receptor-related protein 1B	3.53
91	AL832284	CHRM3-AS2	CHRM3 antisense RNA 2	3.51
92	NM_001252296	CEBPG	CCAAT/enhancer binding protein (C/EBP)	3.50
93	NM_000602	SERPINE1	serpin peptidase inhibitor	3.47
94	NM_173672	PPIL6	peptidylprolyl isomerase (cyclophilin)-like 6	3.47
95	NM_000050	ASS1	argininosuccinate synthase 1	3.46
96	NM_203411	TMEM88	transmembrane protein 88	3.42
97	NM_001657	AREG	amphiregulin	3.40
98	ENST00000268042	ARRDC4	arrestin domain containing 4	3.40
99	NM_002032	FTH1	ferritin	3.37
100	NM_173505	ANKRD29	ankyrin repeat domain 29	3.34
101	NM_005194	CEBPB	CCAAT/enhancer binding protein (C/EBP)	3.34
102	ENST00000518568	SLC10A5	solute carrier family 10 (sodium/bile acid cotransporter family)	3.33
103	NM_025074	FRAS1	Fraser syndrome 1	3.33
104	NR_027779	TTL1	tubulin tyrosine ligase-like family	3.33
105	NM_031924	RSPH3	radial spoke 3 homolog (Chlamydomonas)	3.33
106	NM_138290	RUNDC3B	RUN domain containing 3B	3.31

107	NR_002953	SNORA11	small nucleolar RNA	3.29
108	NM_058229	FBXO32	F-box protein 32	3.26
109	NM_021800	DNAJC12	DnaJ (Hsp40) homolog	3.25
110	ENST00000395748 // ENST00000395748	AREGB // AREG	amphiregulin B // amphiregulin	3.25
111	NM_001375	DNASE2	deoxyribonuclease II	3.24
112	ENST00000414676	LOC100507459	uncharacterized LOC100507459	3.24
113	NM_002317	LOX	lysyl oxidase	3.24
114	NM_031229	RBCK1	RanBP-type and C3HC4-type zinc finger containing 1	3.22
115	NM_152380	TBX15	T-box 15	3.22
116	NM_006769	LMO4	LIM domain only 4	3.20
117	ENST00000295522	CLDN1	claudin 1	3.20
118	ENST00000395601	SNTB1	syntrophin	3.20
119	NM_002440	MSH4	mutS homolog 4 (E. coli)	3.19
120	NM_004577	PSPH	phosphoserine phosphatase	3.19
121	NM_003709	KLF7	Kruppel-like factor 7 (ubiquitous)	3.19
122	NR_028502	MIR22HG	MIR22 host gene (non-protein coding)	3.17
123	NM_004184	WARS	tryptophanyl-tRNA synthetase	3.14
124	OTTHUMT0000041186 4	HIF1A-AS2	HIF1A Antisense RNA 2	3.12
125	NM_139314	ANGPTL4	angiopoietin-like 4	3.10
126	NR_029515	MIR100	microRNA 100	3.10
127	ENST00000374049	C9orf91	chromosome 9 open reading frame 91	3.10
128	NM_017933	PID1	phosphotyrosine interaction domain containing 1	3.10
129	ENST00000264690	KLKB1	kallikrein B	3.09
130	ENST00000439977	HERPUD1	homocysteine-inducible	3.08
131	NM_031479	INHBE	inhibin	3.08
132	NM_001017978	CXorf61	chromosome X open reading frame 61	3.05
133	NR_036156	MIR3189	microRNA 3189	3.05
134	NM_002395	ME1	malic enzyme 1	3.05
135	NM_001201480	OSBPL6	oxysterol binding protein-like 6	3.03
136	NM_006907	PYCR1	pyrroline-5-carboxylate reductase 1	3.02
137	NM_001029869	PLAC8L1	PLAC8-like 1	3.02
138	NM_001111038	FBXL13	F-box and leucine-rich repeat protein 13	3.01
139	ENST00000373824	TAF12	TAF12 RNA polymerase II	3.01
140	NM_002928	RGS16	regulator of G-protein signaling 16	2.99
141	NM_001148	ANK2	ankyrin 2	2.99

142	ENST00000275525	IGFBP1	insulin-like growth factor binding protein 1	2.98
143	NM_024866	ADM2	adrenomedullin 2	2.98
144	ENST00000217740	RNF125	ring finger protein 125	2.98
145	NM_001158	AOC2	amine oxidase	2.97
146	ENST00000321276	SGPP2	sphingosine-1-phosphate phosphatase 2	2.97
147	NM_001014796	DDR2	discoidin domain receptor tyrosine kinase 2	2.95
148	AK302708	LOC399491	GPS	2.94
149	NM_001206	KLF9	Kruppel-like factor 9	2.94
150	NR_024492	FLJ42627	uncharacterized LOC645644	2.93
151	NR_026954	LOC90246	uncharacterized LOC90246	2.93
152	ENST00000548136	OR9A4	olfactory receptor	2.90
153	NM_058179	PSAT1	phosphoserine aminotransferase 1	2.90
154	ENST00000342697	TP53INP1	tumor protein p53 inducible nuclear protein 1	2.89
155	NR_024101	DLGAP1-AS1	DLGAP1 antisense RNA 1	2.88
156	ENST00000368043	SLAMF7	SLAM family member 7	2.88
157	AK301184	LOC644794	uncharacterized LOC644794	2.88
158	NM_001005404	YPEL2	yippee-like 2 (Drosophila)	2.87
159	NM_024692	CLIP4	CAP-GLY domain containing linker protein family	2.87
160	NM_003381	VIP	vasoactive intestinal peptide	2.86
161	NM_001605	AARS	alanyl-tRNA synthetase	2.85
162	AK055490	PSPN	persephin	2.85
163	NM_001143668	AMIGO2	adhesion molecule with Ig-like domain 2	2.84
164	NR_037507	MIR3942	microRNA 3942	2.83
165	NR_046247	LOC100505695	uncharacterized LOC100505695	2.82
166	ENST00000264434	C2orf42	chromosome 2 open reading frame 42	2.82
167	ENST00000390291	IGLV1-50	immunoglobulin lambda variable 1-50 (non-functional)	2.82
168	NM_000197	HSD17B3	hydroxysteroid (17-beta) dehydrogenase 3	2.82
169	NM_004714	DYRK1B	dual-specificity tyrosine-(Y)-phosphorylation regulated kinase 1B	2.82
170	NM_001277115	DNAH11	dynein	2.79
171	NM_014157	CCDC113	coiled-coil domain containing 113	2.79
172	NM_014331	SLC7A11	solute carrier family 7 (anionic amino acid transporter light chain	2.77
173	NM_001025389	AMPD3	adenosine monophosphate deaminase 3	2.76
174	NM_052966	FAM129A	family with sequence similarity 129	2.75
175	NM_080683	PTPN13	protein tyrosine phosphatase	2.75
176	NM_000201	ICAM1	intercellular adhesion molecule 1	2.75
177	NM_017771	PXK	PX domain containing serine/threonine kinase	2.74
178	NM_020917	ZFP14	ZFP14 zinc finger protein	2.74

179	NM_001029884	PLEKHG1	pleckstrin homology domain containing	2.74
180	NR_030293	MIR568	microRNA 568	2.73
181	NM_003326	TNFSF4	tumor necrosis factor (ligand) superfamily	2.73
182	NM_001001555	GRB10	growth factor receptor-bound protein 10	2.73
183	NM_005502	ABCA1	ATP-binding cassette	2.72
184	NM_003222	TFAP2C	transcription factor AP-2 gamma (activating enhancer binding protein 2 gamma)	2.72
185	NM_001039585	PTGFR	prostaglandin F receptor (FP)	2.72
186	NM_001261452	GPR1	G protein-coupled receptor 1	2.72
187	NM_001199233	LOC100505478	uncharacterized LOC100505478	2.71
188	NM_019096	GTPBP2	GTP binding protein 2	2.71
189	NM_001127893	CEACAM19	carcinoembryonic antigen-related cell adhesion molecule 19	2.70
190	NR_002779	NUDT9P1	nudix (nucleoside diphosphate linked moiety X)-type motif 9 pseudogene 1	2.70
191	ENST00000388747	PIP5KL1	phosphatidylinositol-4-phosphate 5-kinase-like 1	2.70
192	NM_001013398	IGFBP3	insulin-like growth factor binding protein 3	2.70
193	NR_036447	PKD1P1	polycystic kidney disease 1 (autosomal dominant) pseudogene 1	2.69
194	NM_004947	DOCK3	dedicator of cytokinesis 3	2.66
195	NM_000640	IL13RA2	interleukin 13 receptor	2.66
196	NM_001145373	OTUD1	OTU domain containing 1	2.66
197	NR_003014	SNORA47	small nucleolar RNA	2.66
198	NM_003364	UPP1	uridine phosphorylase 1	2.66
199	NM_003831	RIOK3	RIO kinase 3	2.65
200	NM_022817	PER2	period circadian clock 2	2.65
201	ENST00000394053	MTHFD2	methylenetetrahydrofolate dehydrogenase (NADP+ dependent) 2	2.65
202	NM_001135242	NDRG1	N-myc downstream regulated 1	2.65
203	NM_001261445	TXNRD1	thioredoxin reductase 1	2.64
204	ENST00000266458	GABARAPL1	GABA(A) receptor-associated protein like 1	2.64
205	NR_037923	DYX1C1-CCPG1	DYX1C1-CCPG1 readthrough (NMD candidate)	2.64
206	NM_002047	GARS	glycyl-tRNA synthetase	2.64
207	NM_152367	MAB21L3	mab-21-like 3 (C. elegans)	2.63
208	NR_030583	VTRNA2-1	vault RNA 2-1	2.63
209	NM_001127401	YPEL5	yippee-like 5 (Drosophila)	2.63
210	NR_073431	TMEM9B-AS1	TMEM9B antisense RNA 1	2.62
211	NM_014647	KIAA0430	KIAA0430	2.61
212	NM_152279	ZNF585B	zinc finger protein 585B	2.61
213	NM_000189	HK2	hexokinase 2	2.60

214	NM_003155	STC1	stanniocalcin 1	2.60
215	NM_024560	ACSS3	acyl-CoA synthetase short-chain family member 3	2.60
216	NM_003256	TIMP4	TIMP metalloproteinase inhibitor 4	2.59
217	BC038719	LOC644135	uncharacterized LOC644135	2.58
218	NM_001124756	PABPC1L	poly(A) binding protein	2.58
219	ENST00000359332	KLHDC1	kelch domain containing 1	2.58
220	NM_033004	NLRP1	NLR family	2.57
221	NM_013943	CLIC4	chloride intracellular channel 4	2.57
222	NR_036490	LOC284648	uncharacterized LOC284648	2.57
223	NM_018980	TAS2R5	taste receptor	2.56
224	NM_001162371	LOC728392	uncharacterized LOC728392	2.56
225	NM_001014437	CARS	cysteinyl-tRNA synthetase	2.56
226	NM_003486	SLC7A5	solute carrier family 7 (amino acid transporter light chain	2.55
227	NM_001244710	GFPT1	glutamine--fructose-6-phosphate transaminase 1	2.54
228	NM_173216	ST6GAL1	ST6 beta-galactosamide alpha-2	2.53
229	NM_019556	MOSPD1	motile sperm domain containing 1	2.53
230	NR_026796	LINC00520	long intergenic non-protein coding RNA 520	2.53
231	NM_003655	CBX4	chromobox homolog 4	2.53
232	NM_020962	IGDCC4	immunoglobulin superfamily	2.52
233	NM_018370	DRAM1	DNA-damage regulated autophagy modulator 1	2.52
234	NM_020665	TMEM27	transmembrane protein 27	2.50
235	AK092322	LOC283575	uncharacterized LOC283575	2.49
236	NM_144617	HSPB6	heat shock protein	2.48
237	NR_024451	LOC100134229	uncharacterized LOC100134229	2.48
238	NM_003714	STC2	stanniocalcin 2	2.48
239	NM_198057	TSC22D3	TSC22 domain family	2.48
240	NM_000332	ATXN1	ataxin 1	2.48
241	NM_001430	EPAS1	endothelial PAS domain protein 1	2.48
242	NM_006348	COG5	component of oligomeric golgi complex 5	2.47
243	AK096045	SHANK2	SH3 and multiple ankyrin repeat domains 2	2.46
244	NM_004234	ZNF235	zinc finger protein 235	2.46
245	NM_001009944	PKD1	polycystic kidney disease 1 (autosomal dominant)	2.46
246	NM_006186	NR4A2	nuclear receptor subfamily 4	2.45
247	NM_021255	PELI2	pellino E3 ubiquitin protein ligase family member 2	2.45
248	NM_003999	OSMR	oncostatin M receptor	2.45
249	NR_034133	LOC400655	uncharacterized LOC400655	2.45
250	NM_019065	NECAB2	N-terminal EF-hand calcium binding protein 2	2.45

251	ENST00000274242	RPL37	ribosomal protein L37	2.45
252	NM_003786	ABCC3	ATP-binding cassette	2.44
253	NM_153006	NAGS	N-acetylglutamate synthase	2.44
254	NR_002593	SLC7A5P1	solute carrier family 7 (amino acid transporter light chain)	2.44
255	NR_024348	FBXL19-AS1	FBXL19 antisense RNA 1 (head to head)	2.43
256	NM_005504	BCAT1	branched chain amino-acid transaminase 1	2.43
257	NM_031866	FZD8	frizzled family receptor 8	2.43
258	NM_006623	PHGDH	phosphoglycerate dehydrogenase	2.43
259	NR_003694	SNORD11B	small nucleolar RNA	2.42
260	NR_026703	VTRNA1-1	vault RNA 1-1	2.42
261	NM_004615	TSPAN7	tetraspanin 7	2.42
262	NM_017754	UHRF1BP1	UHRF1 binding protein 1	2.42
263	NM_001001928	PPARA	peroxisome proliferator-activated receptor alpha	2.42
264	NM_182965	SPHK1	sphingosine kinase 1	2.42
265	NM_001145710	FAM228B	family with sequence similarity 228	2.41
266	NM_005080	XBP1	X-box binding protein 1	2.41
267	ENST00000367001	SLC30A1	solute carrier family 30 (zinc transporter)	2.41
268	NM_001135241	AKR1C2	aldo-keto reductase family 1	2.41
269	NM_005474	HDAC5	histone deacetylase 5	2.40
270	NM_001277325	NPIPA5	nuclear pore complex interacting protein family	2.40
271	ENST00000293379	ITGA5	integrin	2.40
272	NR_002936	TOB2P1	transducer of ERBB2	2.39
273	NM_003734	AOC3	amine oxidase	2.39
274	NR_040053	RNF41	ring finger protein 41	2.39
275	NM_152574	TTC39B	tetratricopeptide repeat domain 39B	2.39
276	NM_001168272	ITPR1	inositol 1	2.38
277	NR_002954	SNORA12	small nucleolar RNA	2.38
278	NM_007098	CLTCL1	clathrin	2.38
279	NM_001185080	CLDN15	claudin 15	2.38
280	NM_197958	LARP6	La ribonucleoprotein domain family	2.38
281	NR_073405	PRKXP1	protein kinase	2.38
282	NR_038340	LOC100505817	uncharacterized LOC100505817	2.38
283	NM_003122	SPINK1	serine peptidase inhibitor	2.38
284	NM_020233	ADPRM	ADP-ribose/CDP-alcohol diphosphatase	2.37
285	NR_030785	MIR374A	microRNA 374a	2.37
286	NR_037445	MIR3674	microRNA 3674	2.37
287	NM_001168399	BEX2	brain expressed X-linked 2	2.36

288	NM_002506	NGF	nerve growth factor (beta polypeptide)	2.36
289	AK296391	TBC1D7	TBC1 domain family	2.36
290	BC118988	LINC00266-1	long intergenic non-protein coding RNA 266-1	2.36
291	XR_111050	LOC100509635	uncharacterized LOC100509635	2.35
292	NM_138371	PCED1B	PC-esterase domain containing 1B	2.35
293	NM_001244262	HBP1	HMG-box transcription factor 1	2.35
294	NM_173537	GTF2IRD2	GTF2I repeat domain containing 2	2.35
295	NM_001037330	TRIM16L	tripartite motif containing 16-like	2.35
296	NM_153218	LACC1	laccase (multicopper oxidoreductase) domain containing 1	2.35
297	NR_024494	BCRP3	breakpoint cluster region pseudogene 3	2.35
298	ENST00000409402	SPIRE1	spire homolog 1 (Drosophila)	2.34
299	NM_001012662	SLC3A2	solute carrier family 3 (activators of dibasic and neutral amino acid transport)	2.34
300	NM_030630	HID1	HID1 domain containing	2.34
301	NM_032875	FBXL20	F-box and leucine-rich repeat protein 20	2.34
302	NM_001001417	TBC1D3B	TBC1 domain family	2.34
303	NM_001040282	TBC1D3G	TBC1 domain family	2.34
304	NM_152731	BEND6	BEN domain containing 6	2.33
305	AK296465	XRCC3	X-ray repair complementing defective repair in Chinese hamster cells 3	2.33
306	NM_001135674	SMIM19	small integral membrane protein 19	2.33
307	NR_026956	LINC00663	long intergenic non-protein coding RNA 663	2.33
308	ENST00000261226	TMCC3	transmembrane and coiled-coil domain family 3	2.33
309	NM_182757	RNF144B	ring finger protein 144B	2.33
310	NM_144666	DNHD1	dynein heavy chain domain 1	2.33
311	NM_000271	NPC1	Niemann-Pick disease	2.33
312	NM_006513	SARS	seryl-tRNA synthetase	2.33
313	NM_006670	TPBG	trophoblast glycoprotein	2.32
314	NR_027139	SPIN3	spindlin family	2.32
315	ENST00000516845	RNU7-6P	RNA	2.31
316	NM_001123392	TBC1D3H	TBC1 domain family	2.31
317	NM_017712	PGPEP1	pyroglutamyl-peptidase I	2.31
318	NM_005065	SEL1L	sel-1 suppressor of lin-12-like (C. elegans)	2.31
319	NM_005875	EIF1B	eukaryotic translation initiation factor 1B	2.31
320	NR_102280	KCTD21-AS1	KCTD21 antisense RNA 1	2.31
321	NM_005949	MT1F	metallothionein 1F	2.30
322	ENST00000557168	TRAV30	T cell receptor alpha variable 30	2.30

323	NM_015444	TMEM158	transmembrane protein 158 (gene/pseudogene)	2.30
324	ENST00000382004	RFX3	regulatory factor X	2.30
325	NR_039871	MIR4720	microRNA 4720	2.30
326	NM_003051	SLC16A1	solute carrier family 16	2.30
327	NR_024480	LINC00887	long intergenic non-protein coding RNA 887	2.30
328	NM_001669	ARSD	arylsulfatase D	2.29
329	ENST00000262059	CALCOCO1	calcium binding and coiled-coil domain 1	2.29
330	NM_006985	NPIPA1	nuclear pore complex interacting protein family	2.29
331	NM_021260	ZFYVE1	zinc finger	2.29
332	NM_015678	NBEA	neurobeachin	2.28
333	ENST00000304385	TMEM154	transmembrane protein 154	2.28
334	NM_024786	ZDHHC11	zinc finger	2.28
335	NM_153223	CEP120	centrosomal protein 120kDa	2.28
336	NM_173569	UBN2	ubiquitin 2	2.28
337	NM_001040619	ATF3	activating transcription factor 3	2.27
338	NM_002229	JUNB	jun B proto-oncogene	2.27
339	NM_005384	NFIL3	nuclear factor	2.27
340	ENST00000248248	MON1B	MON1 homolog B (yeast)	2.27
341	NM_001105244	PTPRM	protein tyrosine phosphatase	2.27
342	NM_015091	FAM179B	family with sequence similarity 179	2.26
343	NM_001256182	ANKRD11	ankyrin repeat domain 11	2.25
344	NM_005562	LAMC2	laminin	2.25
345	NM_021229	NTN4	netrin 4	2.25
346	NR_038980	LOC100506207	uncharacterized LOC100506207	2.25
347	NR_036192	MIR4309	microRNA 4309	2.25
348	NM_022483	C5orf28	chromosome 5 open reading frame 28	2.25
349	NM_007157	ZXDB	zinc finger	2.24
350	ENST00000264228	SRD5A3	steroid 5 alpha-reductase 3	2.24
351	AK295599	LOC100288162	uncharacterized LOC100288162	2.24
352	AL832122	LOC100996511	uncharacterized LOC100996511	2.24
353	NM_001039763	TMEM232	transmembrane protein 232	2.24
354	NR_003704	SNORA84	small nucleolar RNA	2.24
355	NR_038998	LINC00629	long intergenic non-protein coding RNA 629	2.23
356	ENST00000229243	ACRBP	acrosin binding protein	2.23
357	ENST00000264381	BCHE	butyrylcholinesterase	2.23
358	NM_004163	RAB27B	RAB27B	2.23
359	ENST00000285393	ATP6V0D2	ATPase	2.22

360	BC033059	FLJ16124	FLJ16124 protein	2.22
361	NM_134261	RORA	RAR-related orphan receptor A	2.22
362	NM_005414	SKIL	SKI-like oncogene	2.22
363	NM_000690	ALDH2	aldehyde dehydrogenase 2 family (mitochondrial)	2.22
364	NM_003840	TNFRSF10D	tumor necrosis factor receptor superfamily	2.22
365	NM_007168	ABCA8	ATP-binding cassette	2.22
366	NM_005354	JUND	jun D proto-oncogene	2.22
367	NM_001001661	ZNF425	zinc finger protein 425	2.22
368	NM_020768	KCTD16	potassium channel tetramerisation domain containing 16	2.22
369	NM_014663	KDM4A	lysine (K)-specific demethylase 4A	2.21
370	NM_000713	BLVRB	biliverdin reductase B (flavin reductase (NADPH))	2.20
371	NM_004065	CDR1	cerebellar degeneration-related protein 1	2.20
372	NM_001171203	UBAP1	ubiquitin associated protein 1	2.20
373	NM_001143839	PDE2A	phosphodiesterase 2A	2.20
374	NM_001307	CLDN7	claudin 7	2.19
375	NM_145804	ABTB2	ankyrin repeat and BTB (POZ) domain containing 2	2.19
376	NM_032258	TBC1D3F	TBC1 domain family	2.19
377	NM_001123391	TBC1D3	TBC1 domain family	2.19
378	ENST00000253079	CCDC62	coiled-coil domain containing 62	2.19
379	AK296878	EDEM2	ER degradation enhancer	2.19
380	NM_138571	HINT3	histidine triad nucleotide binding protein 3	2.19
381	NM_001531	MR1	major histocompatibility complex	2.19
382	NM_004235	KLF4	Kruppel-like factor 4 (gut)	2.19
383	NM_133478	SLC4A5	solute carrier family 4	2.18
384	ENST00000324306	ZKSCAN1	zinc finger with KRAB and SCAN domains 1	2.18
385	NM_006351	TIMM44	translocase of inner mitochondrial membrane 44 homolog (yeast)	2.18
386	NM_001162383	ARHGEF2	Rho/Rac guanine nucleotide exchange factor (GEF) 2	2.18
387	NM_002037	FYN	FYN oncogene related to SRC	2.18
388	NM_003533	HIST1H3I	histone cluster 1	2.18
389	NM_139246	TSTD2	thiosulfate sulfurtransferase (rhodanese)-like domain containing 2	2.17
390	ENST00000481661	GPR135	G protein-coupled receptor 135	2.17
391	NM_003045	SLC7A1	solute carrier family 7 (cationic amino acid transporter)	2.17
392	NM_012342	BAMBI	BMP and activin membrane-bound inhibitor homolog (Xenopus laevis)	2.17
393	NM_018590	CSGALNACT2	chondroitin sulfate N-acetylgalactosaminyltransferase 2	2.17
394	NM_016546	C1RL	complement component 1	2.16
395	ENST00000268607	MAP1LC3B	microtubule-associated protein 1 light chain 3 beta	2.16

396	NR_002996	SNORA80	small nucleolar RNA	2.16
397	ENST00000323523	TMEM45A	transmembrane protein 45A	2.16
398	ENST00000318663	ORAI3	ORAI calcium release-activated calcium modulator 3	2.16
399	NM_020412	CHMP1B	charged multivesicular body protein 1B	2.16
400	NM_015284	SZT2	seizure threshold 2 homolog (mouse)	2.16
401	NR_015370	EPB41L4A-AS1	EPB41L4A antisense RNA 1	2.16
402	ENST00000552747	PSORS1C1	psoriasis susceptibility 1 candidate 1	2.15
403	NM_003901	SGPL1	sphingosine-1-phosphate lyase 1	2.15
404	NM_003445	ZNF155	zinc finger protein 155	2.15
405	ENST00000254691	CARD6	caspase recruitment domain family	2.14
406	ENST00000444739	CASP4	caspase 4	2.14
407	NM_032530	ZNF594	zinc finger protein 594	2.14
408	AF306347	SPATA1	spermatogenesis associated 1	2.14
409	NM_004277	SLC25A27	solute carrier family 25	2.14
410	NM_052886	MAL2	T-cell differentiation protein 2	2.14
411	ENST00000437593	LOC100130887	uncharacterized LOC100130887	2.14
412	NM_001276378	LZTFL1	leucine zipper transcription factor-like 1	2.13
413	NM_033386	MICAL1	MICAL-like 1	2.13
414	NM_203394	E2F7	E2F transcription factor 7	2.13
415	NM_014903	NAV3	neuron navigator 3	2.12
416	NM_003747	TNKS	tankyrase	2.12
417	NR_029483	MIRLET7F1	microRNA let-7f-1	2.12
418	NM_006068	TLR6	toll-like receptor 6	2.12
419	ENST00000325617	CLGN	calmegin	2.12
420	NM_145020	CCDC11	coiled-coil domain containing 11	2.11
421	NR_028389	ACVR2B-AS1	ACVR2B antisense RNA 1	2.11
422	NR_027655	BACH1	BTB and CNC homology 1	2.11
423	NR_003059	SNORD71	small nucleolar RNA	2.11
424	NM_181079	IL21R	interleukin 21 receptor	2.11
425	NM_001570	IRAK2	interleukin-1 receptor-associated kinase 2	2.11
426	BC048978	LOC729291	uncharacterized LOC729291	2.10
427	NR_047573	TMEM44-AS1	TMEM44 antisense RNA 1	2.10
428	NM_014398	LAMP3	lysosomal-associated membrane protein 3	2.10
429	ENST00000278426	SLC43A1	solute carrier family 43	2.10
430	ENST00000516561	RNA5SP438	5S ribosomal pseudogene 438	2.09
431	NM_025137	SPG11	spastic paraplegia 11 (autosomal recessive)	2.09
432	NM_173676	PNPLA1	patatin-like phospholipase domain containing 1	2.09

433	ENST00000305943	RNF187	ring finger protein 187	2.09
434	NM_001080470	ZNF697	zinc finger protein 697	2.09
435	ENST00000360351	MAP2	microtubule-associated protein 2	2.09
436	NM_033017	TRIM4	tripartite motif containing 4	2.08
437	ENST00000391411	C17orf51	chromosome 17 open reading frame 51	2.08
438	NM_015723	PNPLA8	patatin-like phospholipase domain containing 8	2.08
439	ENST00000366769	CDC42BPA	CDC42 binding protein kinase alpha (DMPK-like)	2.08
440	NM_144611	CYB5D2	cytochrome b5 domain containing 2	2.08
441	NR_024489	LOC100129534	small nuclear ribonucleoprotein polypeptide N pseudogene	2.08
442	NM_031469	SH3BGL2	SH3 domain binding glutamic acid-rich protein like 2	2.08
443	ENST00000374273	SPAG4	sperm associated antigen 4	2.08
444	NM_001261390	CALCOCO2	calcium binding and coiled-coil domain 2	2.08
445	NR_002913	SNORD63	small nucleolar RNA	2.08
446	NM_003680	YARS	tyrosyl-tRNA synthetase	2.08
447	NM_001035254	FAM102A	family with sequence similarity 102	2.08
448	AB073660	XKR6	XK, Kell Blood Group Complex Subunit-Related Family, Member 6	2.08
449	NM_001256054	C9orf72	chromosome 9 open reading frame 72	2.07
450	NM_004446	EPRS	glutamyl-prolyl-tRNA synthetase	2.07
451	NR_038280	LOC100506963	uncharacterized LOC100506963	2.07
452	NR_034089	LOC100131564	uncharacterized LOC100131564	2.07
453	ENST00000338825	EIF4EBP1	eukaryotic translation initiation factor 4E binding protein 1	2.07
454	NR_015392	WEE2-AS1	WEE2 antisense RNA 1	2.07
455	NM_005649	ZNF354A	zinc finger protein 354A	2.07
456	NM_001271043	NFIX	nuclear factor I/X (CCAAT-binding transcription factor)	2.07
457	NM_025194	ITPKC	inositol-trisphosphate 3-kinase C	2.07
458	NM_001550	IFRD1	interferon-related developmental regulator 1	2.07
459	NM_004733	SLC33A1	solute carrier family 33 (acetyl-CoA transporter)	2.06
460	NM_001145855	SH3BP2	SH3-domain binding protein 2	2.06
461	NM_002281	KRT81	keratin 81	2.06
462	NM_153257	ZNF461	zinc finger protein 461	2.06
463	NR_038886	LOC100506385	uncharacterized LOC100506385	2.06
464	NM_002160	TNC	tenascin C	2.06
465	NM_001098402	ZBTB21	zinc finger and BTB domain containing 21	2.06
466	ENST00000573950	TAPT1-AS1	TAPT1 antisense RNA 1 (head to head)	2.06
467	ENST00000261326	MOCOS	molybdenum cofactor sulfurase	2.06
468	NM_030767	AKNA	AT-hook transcription factor	2.05
469	NM_001252092	MRAS	muscle RAS oncogene homolog	2.05

470	NM_020964	EPG5	ectopic P-granules autophagy protein 5 homolog (C. elegans)	2.05
471	ENST00000377724	DCAF10	DDB1 and CUL4 associated factor 10	2.05
472	NR_003209	SNORD114-16	small nucleolar RNA	2.05
473	NM_182491	ZFAND2A	zinc finger	2.05
474	NM_024733	ZNF665	zinc finger protein 665	2.05
475	AY129027	HCCAT4	hepatocellular carcinoma associated transcript 4 (non-protein coding)	2.05
476	NM_171982	TRIM35	tripartite motif containing 35	2.05
477	NM_199136	FAM221A	family with sequence similarity 221	2.04
478	ENST00000349945	NFAT5	nuclear factor of activated T-cells 5	2.04
479	NM_001400	S1PR1	sphingosine-1-phosphate receptor 1	2.04
480	NM_002557	OVGP1	oviductal glycoprotein 1	2.04
481	NM_004148	NINJ1	ninjurin 1	2.04
482	NR_015431	FLJ43663	uncharacterized LOC378805	2.04
483	NR_003108	NBR2	neighbor of BRCA1 gene 2 (non-protein coding)	2.04
484	NM_004753	DHRS3	dehydrogenase/reductase (SDR family) member 3	2.04
485	NM_006813	PNRC1	proline-rich nuclear receptor coactivator 1	2.04
486	NM_152604	ZNF383	zinc finger protein 383	2.04
487	AK130385	LOC100130157	uncharacterized LOC100130157	2.04
488	NM_022661	SPANXC	SPANX family	2.04
489	NM_004562	PARK2	parkinson protein 2	2.03
490	ENST00000221671	C19orf44	chromosome 19 open reading frame 44	2.03
491	NM_001289	CLIC2	chloride intracellular channel 2	2.03
492	NM_001080495	TNRC18	trinucleotide repeat containing 18	2.03
493	NM_005399	PRKAB2	protein kinase	2.03
494	NR_037806	NPPA-AS1	NPPA antisense RNA 1	2.02
495	NM_017983	WIPI1	WD repeat domain	2.02
496	NM_021943	ZFAND3	zinc finger	2.02
497	NM_001008394	EID3	EP300 interacting inhibitor of differentiation 3	2.02
498	NM_152243	CDC42EP1	CDC42 effector protein (Rho GTPase binding) 1	2.02
499	NM_018933	PCDHB13	protocadherin beta 13	2.02
500	ENST00000516314	RNU7-72P	RNA	2.02
501	NM_152337	C16orf46	chromosome 16 open reading frame 46	2.02
502	NM_001099857	IKBKG	inhibitor of kappa light polypeptide gene enhancer in B-cells	2.02
503	NR_029501	MIR27A	microRNA 27a	2.01
504	NM_013391	DMGDH	dimethylglycine dehydrogenase	2.01
505	ENST00000269980	BCKDHA	branched chain keto acid dehydrogenase E1	2.01
506	NM_182603	ANKRD42	ankyrin repeat domain 42	2.01

507	NM_001042697	ZSWIM7	zinc finger	2.01
508	NM_178832	MORN4	MORN repeat containing 4	2.00
509	NR_024437	LOC728323	uncharacterized LOC728323	2.00
510	NM_001271	CHD2	chromodomain helicase DNA binding protein 2	2.00

Transcripts Down-Regulated

511	NR_003057	SNORD69	small nucleolar RNA	-2.00
512	ENST00000367048	ACAT2	acetyl-CoA acetyltransferase 2	-2.00
513	NR_026978	HAUS1	HAUS augmin-like complex	-2.00
514	NR_002434	SNORD101	small nucleolar RNA	-2.00
515	NM_001905	CTPS1	CTP synthase 1	-2.00
516	ENST00000295124	CCDC138	coiled-coil domain containing 138	-2.00
517	ENST00000242576	UNG	uracil-DNA glycosylase	-2.00
518	ENST00000384073	RNY3P7	RNA, Ro-associated Y3 pseudogene 7	-2.00
519	NM_024571	SNRNP25	small nuclear ribonucleoprotein 25kDa (U11/U12)	-2.00
520	ENST00000409379	TONSL	tonsoku-like	-2.00
521	NM_002982	CCL2	chemokine (C-C motif) ligand 2	-2.00
522	NM_016466	ANKRD39	ankyrin repeat domain 39	-2.01
523	NM_006208	ENPP1	ectonucleotide pyrophosphatase/phosphodiesterase 1	-2.01
524	NM_178558	ZNF680	zinc finger protein 680	-2.01
525	NM_006807	CBX1	chromobox homolog 1	-2.01
526	ENST00000301031	C16orf55	chromosome 16 open reading frame 55	-2.01
527	ENST00000301458	CD320	CD320 molecule	-2.01
528	NM_001004690	OR2M5	olfactory receptor	-2.01
529	ENST00000428443	SESTD1	SEC14 and spectrin domains 1	-2.01
530	NR_038277	PRKG1-AS1	PRKG1 antisense RNA 1	-2.01
531	NM_001143935	CROT	carnitine O-octanoyltransferase	-2.01
532	NM_001199053	LOC81691	exonuclease NEF-sp	-2.02
533	NM_031215	CABLES2	Cdk5 and Abl enzyme substrate 2	-2.02
534	ENST00000330899	DNAJA1	DnaJ (Hsp40) homolog	-2.02
535	NM_001037582	SCD5	stearoyl-CoA desaturase 5	-2.02
536	NM_181578	RFC5	replication factor C (activator 1) 5	-2.02
537	ENST00000364226	RNA5SP387	RNA, 5S Ribosomal Pseudogene 387	-2.03
538	NM_001251962	ARHGEF26	Rho guanine nucleotide exchange factor (GEF) 26	-2.03
539	NM_001127257	SLC39A10	solute carrier family 39 (zinc transporter)	-2.03
540	NM_003016	SRSF2	serine/arginine-rich splicing factor 2	-2.03
541	NM_015529	MOXD1	monooxygenase	-2.03

542	NM_007086	WDHD1	WD repeat and HMG-box DNA binding protein 1	-2.03
543	ENST00000341119	SLC25A40	solute carrier family 25	-2.03
544	ENST00000533486	RAB30	RAB30, Member RAS Oncogene Family	-2.03
545	NM_001194998	CEP152	centrosomal protein 152kDa	-2.03
546	NM_001039091	PRPS2	phosphoribosyl pyrophosphate synthetase 2	-2.03
547	ENST00000370176	FRRS1	ferric-chelate reductase 1	-2.03
548	NM_007349	PAXIP1	PAX interacting (with transcription-activation domain) protein 1	-2.04
549	NM_021873	CDC25B	cell division cycle 25B	-2.04
550	ENST00000311083	CSRP2	cysteine and glycine-rich protein 2	-2.04
551	NM_030625	TET1	tet methylcytosine dioxygenase 1	-2.04
552	NR_024403	LOC730101	uncharacterized LOC730101	-2.04
553	NR_024178	LOC284100	tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein	-2.04
554	NM_053275	RPLP0	ribosomal protein	-2.05
555	NM_004260	RECQL4	RecQ protein-like 4	-2.05
556	NM_000212	ITGB3	integrin	-2.05
557	NM_152729	NT5DC1	5'-nucleotidase domain containing 1	-2.05
558	NM_152520	ZNF385B	zinc finger protein 385B	-2.05
559	NM_022164	TINAGL1	tubulointerstitial nephritis antigen-like 1	-2.05
560	NM_032354	TMEM107	transmembrane protein 107	-2.06
561	ENST00000378372	HSPA14	heat shock 70kDa protein 14	-2.06
562	NM_001490	GCNT1	glucosaminyl (N-acetyl) transferase 1	-2.06
563	ENST00000306121	SNX7	sorting nexin 7	-2.06
564	NM_001226	CASP6	caspase 6	-2.06
565	BC006849	THOC3	THO complex 3	-2.06
566	BC032648	SOLH	small optic lobes homolog (Drosophila)	-2.06
567	NM_001131007	KIAA0922	KIAA0922	-2.07
568	ENST00000367854	RCSD1	RCSD domain containing 1	-2.07
569	ENST00000334463	ERCC6L	excision repair cross-complementing rodent repair deficiency	-2.07
570	ENST00000358160	GRAMD1C	GRAM domain containing 1C	-2.07
571	NM_022843	PCDH20	protocadherin 20	-2.07
572	NM_001165252	KRTAP2-3	keratin associated protein 2-3	-2.07
573	NM_014268	MAPRE2	microtubule-associated protein	-2.07
574	NM_145663	DBF4B	DBF4 homolog B (S. cerevisiae)	-2.07
575	ENST00000441405	TCF19	transcription factor 19	-2.07
576	NM_001004696	OR2T4	olfactory receptor	-2.08
577	NM_152515	CKAP2L	cytoskeleton associated protein 2-like	-2.08

578	NM_021199	SQRDL	sulfide quinone reductase-like (yeast)	-2.08
579	NM_001025248	DUT	deoxyuridine triphosphatase	-2.09
580	NR_027130	ZNF738	zinc finger protein 738	-2.09
581	NM_007243	NRM	nurim (nuclear envelope membrane protein)	-2.09
582	ENST00000396593	CARHSP1	calcium regulated heat stable protein 1	-2.09
583	NM_012294	RAPGEF5	Rap guanine nucleotide exchange factor (GEF) 5	-2.09
584	NM_003510	HIST1H2AK	histone cluster 1	-2.09
585	NM_080668	CDCA5	cell division cycle associated 5	-2.09
586	NM_001098802	CEP78	centrosomal protein 78kDa	-2.09
587	ENST00000370351	SLC17A9	solute carrier family 17	-2.10
588	ENST00000274289	PLK2	polo-like kinase 2	-2.10
589	NM_018284	GBP3	guanylate binding protein 3	-2.10
590	ENST00000216122	MCM5	minichromosome maintenance complex component 5	-2.10
591	NM_001127370	CDCA7L	cell division cycle associated 7-like	-2.10
592	NM_014629	ARHGEF10	Rho guanine nucleotide exchange factor (GEF) 10	-2.10
593	ENST00000411154	RNA5SP155	RNA	-2.10
594	NM_174942	GAS2L3	growth arrest-specific 2 like 3	-2.10
595	NM_024590	ARSJ	arylsulfatase family	-2.11
596	ENST00000315579	NCAPD2	non-SMC condensin I complex	-2.11
597	NM_002167	ID3	inhibitor of DNA binding 3	-2.11
598	NM_004111	FEN1	flap structure-specific endonuclease 1	-2.11
599	NM_012339	TSPAN15	tetraspanin 15	-2.11
600	NM_001100625	CENPN	centromere protein N	-2.11
601	AY510106	IGKC	immunoglobulin kappa constant	-2.11
602	NM_000179	MSH6	mutS homolog 6 (E. coli)	-2.11
603	NM_020848	KIAA1462	KIAA1462	-2.11
604	NM_144649	TMEM71	transmembrane protein 71	-2.12
605	NM_015653	RIBC2	RIB43A domain with coiled-coils 2	-2.12
606	ENST00000360566	RRM2	ribonucleotide reductase M2	-2.12
607	ENST00000533655	C11orf82	chromosome 11 open reading frame 82	-2.12
608	NM_133459	CCBE1	collagen and calcium binding EGF domains 1	-2.12
609	NR_002967	SNORA31	small nucleolar RNA	-2.13
610	NM_173515	CNKSR3	CNKSR family member 3	-2.13
611	NM_007139	ZNF92	zinc finger protein 92	-2.13
612	NM_001238	CCNE1	cyclin E1	-2.13
613	NM_031908	C1QTNF2	C1q and tumor necrosis factor related protein 2	-2.13
614	NM_152341	PAQR4	progesterin and adipoQ receptor family member IV	-2.13

615	ENST00000474498	BRD2	bromodomain containing 2	-2.14
616	NM_001100910	FAM72B	family with sequence similarity 72	-2.14
617	NR_029842	MIR301A	microRNA 301a	-2.14
618	NM_019117	KLHL4	kelch-like family member 4	-2.14
619	NM_012416	RANBP6	RAN binding protein 6	-2.14
620	NM_012291	ESPL1	extra spindle pole bodies homolog 1 (<i>S. cerevisiae</i>)	-2.15
621	ENST00000357388	SMC4	structural maintenance of chromosomes 4	-2.15
622	NM_002670	PLS1	plastin 1	-2.15
623	ENST00000518529	SFTA3	surfactant associated 3	-2.15
624	NM_014109	ATAD2	ATPase family	-2.15
625	NM_001100595	SKA2	spindle and kinetochore associated complex subunit 2	-2.16
626	NM_013296	GPSM2	G-protein signaling modulator 2	-2.16
627	NM_032818	ARHGEF39	Rho guanine nucleotide exchange factor (GEF) 39	-2.16
628	NM_031217	KIF18A	kinesin family member 18A	-2.16
629	ENST00000541076	MPHOSPH9	M-phase phosphoprotein 9	-2.16
630	NM_001271006	STRA13	stimulated by retinoic acid 13	-2.16
631	NM_032015	RNF26	ring finger protein 26	-2.17
632	ENST00000370035	FAM102B	family with sequence similarity 102	-2.17
633	NM_003810	TNFSF10	tumor necrosis factor (ligand) superfamily	-2.17
634	NM_018192	LEPREL1	leprecan-like 1	-2.17
635	NM_033260	FOXQ1	forkhead box Q1	-2.17
636	NM_001126121	SLC25A19	solute carrier family 25 (mitochondrial thiamine pyrophosphate carrier)	-2.17
637	NM_001033	RRM1	ribonucleotide reductase M1	-2.17
638	AJ001402	MUC5AC	mucin 5AC	-2.17
639	NM_001798	CDK2	cyclin-dependent kinase 2	-2.17
640	ENST00000489418	SLBP	stem-loop binding protein	-2.17
641	NM_001042357	PTPN20B	protein tyrosine phosphatase	-2.18
642	ENST00000260947	BARD1	BRCA1 associated RING domain 1	-2.18
643	NM_001182	ALDH7A1	aldehyde dehydrogenase 7 family	-2.18
644	NM_144665	SESN3	sestrin 3	-2.18
645	ENST00000261881	TIPIN	TIMELESS interacting protein	-2.18
646	NM_016937	POLA1	polymerase (DNA directed)	-2.18
647	NM_001126129	GINS3	GINS complex subunit 3 (Psf3 homolog)	-2.19
648	NM_019028	ZDHHC13	zinc finger	-2.19
649	ENST00000265056	MCM2	minichromosome maintenance complex component 2	-2.19
650	NM_198468	MMS22L	MMS22-like	-2.20
651	NM_005993	TBCD	tubulin folding cofactor D	-2.20

652	NM_014344	FJX1	four jointed box 1 (Drosophila)	-2.20
653	NM_003839	TNFRSF11A	tumor necrosis factor receptor superfamily	-2.20
654	ENST00000340828	CCNG1	cyclin G1	-2.20
655	NM_001012267	CENPP	centromere protein P	-2.20
656	ENST00000453103	DGUOK-AS1	DGUOK antisense RNA 1	-2.20
657	ENST00000379205	C4orf46	chromosome 4 open reading frame 46	-2.20
658	NM_199420	POLQ	polymerase (DNA directed)	-2.21
659	NR_036491	FBXO43	F-box protein 43	-2.21
660	NM_022746	MARC1	mitochondrial amidoxime reducing component 1	-2.21
661	NM_021258	IL22RA1	interleukin 22 receptor	-2.21
662	NM_015345	DAAM2	dishevelled associated activator of morphogenesis 2	-2.21
663	NR_001558	LINC00261	long intergenic non-protein coding RNA 261	-2.21
664	NM_000156	GAMT	guanidinoacetate N-methyltransferase	-2.22
665	NR_002921	SNORA75	small nucleolar RNA	-2.22
666	AK299863	LOC220729	succinate dehydrogenase complex	-2.22
667	NM_004629	FANCG	Fanconi anemia	-2.22
668	NM_005281	GPR3	G protein-coupled receptor 3	-2.22
669	ENST00000260356	THBS1	thrombospondin 1	-2.22
670	NM_052844	WDR34	WD repeat domain 34	-2.22
671	NM_181802	UBE2C	ubiquitin-conjugating enzyme E2C	-2.22
672	ENST00000449712	LINC00704	long intergenic non-protein coding RNA 704	-2.22
673	NM_004877	GMFG	glia maturation factor	-2.23
674	NM_001256015	PSMC3IP	PSMC3 interacting protein	-2.23
675	NM_004091	E2F2	E2F transcription factor 2	-2.24
676	NM_001039569	AP1S3	adaptor-related protein complex 1	-2.24
677	NM_001276325	SETMAR	SET domain and mariner transposase fusion gene	-2.24
678	NM_206827	RASL11A	RAS-like	-2.25
679	NM_001145316	DSN1	DSN1	-2.25
680	NM_005946	MT1A	metallothionein 1A	-2.25
681	ENST00000355790	LRRC20	leucine rich repeat containing 20	-2.25
682	ENST00000394650	CCDC109B	coiled-coil domain containing 109B	-2.25
683	NM_016513	ICK	intestinal cell (MAK-like) kinase	-2.25
684	ENST00000300145	XRCC6BP1	XRCC6 binding protein 1	-2.25
685	NM_001193333	CORO1A	coronin	-2.25
686	NM_181471	RFC2	replication factor C (activator 1) 2	-2.25
687	ENST00000562396 // ENST00000562396	LOC100287628 // ATF7IP2	uncharacterized LOC100287628 // activating transcription factor 7 interacting protein 2	-2.26

688	NM_203401	STMN1	stathmin 1	-2.26
689	NM_005342	HMGB3	high mobility group box 3	-2.27
690	NM_006231	POLE	polymerase (DNA directed)	-2.27
691	NM_004170	SLC1A1	solute carrier family 1 (neuronal/epithelial high affinity glutamate transporter)	-2.27
692	NM_182687	PKMYT1	protein kinase	-2.28
693	NM_015261	NCAPD3	non-SMC condensin II complex	-2.28
694	ENST00000369158 // ENST00000369158 // ENST00000369158	HIST2H3D // HIST2H3A // HIST2H3C	histone cluster 2	-2.28
695	NM_005345	HSPA1A	heat shock 70kDa protein 1A	-2.28
696	NM_000386	BLMH	bleomycin hydrolase	-2.28
697	NM_181861	APAF1	apoptotic peptidase activating factor 1	-2.28
698	NM_015849	CELA2B	chymotrypsin-like elastase family	-2.29
699	NM_000251	MSH2	mutS homolog 2	-2.29
700	NM_205849	FAM9B	family with sequence similarity 9	-2.29
701	NM_001270888	SLC25A10	solute carrier family 25 (mitochondrial carrier; dicarboxylate transporter)	-2.29
702	NM_014788	TRIM14	tripartite motif containing 14	-2.30
703	NM_030920	ANP32E	acidic (leucine-rich) nuclear phosphoprotein 32 family	-2.30
704	ENST00000263966	USP13	ubiquitin specific peptidase 13 (isopeptidase T-3)	-2.30
705	NM_001195685	LYPD6	LY6/PLAUR domain containing 6	-2.30
706	ENST00000506175	YTHDC1	YTH domain containing 1	-2.30
707	ENST00000341446	BRI3BP	BRI3 binding protein	-2.31
708	ENST00000265465	POLA2	polymerase (DNA directed)	-2.31
709	NM_207361	FREM2	FRAS1 related extracellular matrix protein 2	-2.31
710	NM_001099293	KIF4B	kinesin family member 4B	-2.31
711	NM_005427	TP73	tumor protein p73	-2.32
712	NM_002053	GBP1	guanylate binding protein 1	-2.32
713	ENST00000375650 // ENST00000375650	HSPA1B // HSPA1A	heat shock 70kDa protein 1B // heat shock 70kDa protein 1A	-2.33
714	NM_005604	POU3F2	POU class 3 homeobox 2	-2.33
715	NM_152900	MAGI3	membrane associated guanylate kinase	-2.33
716	NM_024629	MLF1IP	MLF1 interacting protein	-2.33
717	NM_138409	MRAP2	melanocortin 2 receptor accessory protein 2	-2.33
718	NM_024945	RMI1	RecQ mediated genome instability 1	-2.34
719	NM_016657	KDEL3	KDEL (Lys-Asp-Glu-Leu) endoplasmic reticulum protein retention receptor 3	-2.34

720	NM_152550	SH3RF2	SH3 domain containing ring finger 2	-2.34
721	NR_045205	CHEK1	checkpoint kinase 1	-2.34
722	NM_018304	PRR11	proline rich 11	-2.34
723	ENST00000266397	ERP27	endoplasmic reticulum protein 27	-2.34
724	NR_024380	LOC441666	zinc finger protein 91 pseudogene	-2.36
725	NM_002296	LBR	lamin B receptor	-2.36
726	NM_003594	TTF2	transcription termination factor	-2.36
727	ENST00000368325	CENPW	centromere protein W	-2.36
728	NM_018015	CXorf57	chromosome X open reading frame 57	-2.36
729	NM_018131	CEP55	centrosomal protein 55kDa	-2.37
730	NM_004701	CCNB2	cyclin B2	-2.37
731	NM_002388	MCM3	minichromosome maintenance complex component 3	-2.37
732	ENST00000302472	PTGER4	prostaglandin E receptor 4 (subtype EP4)	-2.37
733	NR_003046	SNORD59B	small nucleolar RNA	-2.38
734	NM_001099286	MTRF2	mitochondrial fission regulator 2	-2.38
735	NM_002875	RAD51	RAD51 homolog (<i>S. cerevisiae</i>)	-2.38
736	NM_002482	NASP	nuclear autoantigenic sperm protein (histone-binding)	-2.38
737	NM_032799	ZDHHC12	zinc finger	-2.38
738	NM_005483	CHAF1A	chromatin assembly factor 1	-2.39
739	NM_145061	SKA3	spindle and kinetochore associated complex subunit 3	-2.39
740	ENST00000368149	ARHGAP18	Rho GTPase activating protein 18	-2.39
741	ENST00000328697	CCDC34	coiled-coil domain containing 34	-2.39
742	ENST00000333479	KNTC1	kinetochore associated 1	-2.39
743	NM_175748	UBR7	ubiquitin protein ligase E3 component n-recognin 7 (putative)	-2.39
744	ENST00000377803 // ENST00000377803 // ENST00000377803 // ENST00000377803 // ENST00000377803 // ENST00000377803 // ENST00000377803 // ENST00000377803 // ENST00000377803 // ENST00000377803 // ENST00000377803 // ENST00000377803 // ENST00000377803 // ENST00000377803 // ENST00000377803	HIST2H4B // HIST4H4 // HIST2H4A // HIST1H4L // HIST1H4E // HIST1H4B // HIST1H4H // HIST1H4C // HIST1H4J // HIST1H4K // HIST1H4F // HIST1H4D // HIST1H4A // HIST1H4I	histone cluster 2	-2.40

745	NM_016343	CENPF	centromere protein F	-2.40
746	ENST00000495186	EBP	emopamil binding protein (sterol isomerase)	-2.40
747	NM_152259	TICRR	TOPBP1-interacting checkpoint and replication regulator	-2.41
748	ENST00000228438	CLEC2B	C-type lectin domain family 2	-2.41
749	OTTHUMT00000089738	FAM108A4P	abhydrolase domain containing 17A pseudogene 3	-2.41
750	NR_039754	MIR4529	microRNA 4529	-2.42
751	NM_001164277	SLC37A4	solute carrier family 37 (glucose-6-phosphate transporter)	-2.43
752	NR_024391	LINC00669	long intergenic non-protein coding RNA 669	-2.44
753	NM_031965	GSG2	germ cell associated 2 (haspin)	-2.45
754	ENST00000364866	RNA5SP160	RNA	-2.45
755	NR_024045	RAET1K	retinoic acid early transcript 1K pseudogene	-2.46
756	NM_001018115	FANCD2	Fanconi anemia	-2.46
757	NM_001166269	HAUS4	HAUS augmin-like complex	-2.46
758	NR_027700	NOP56	NOP56 ribonucleoprotein	-2.47
759	NM_005768	LPCAT3	lysophosphatidylcholine acyltransferase 3	-2.47
760	NR_046240	LOC100506100	uncharacterized LOC100506100	-2.47
761	NM_020890	KIAA1524	KIAA1524	-2.47
762	NM_001201362	HMGN3	high mobility group nucleosomal binding domain 3	-2.47
763	NR_026912	ABHD11	abhydrolase domain containing 11	-2.47
764	NM_017709	FAM46C	family with sequence similarity 46	-2.47
765	NM_005797	MPZL2	myelin protein zero-like 2	-2.48
766	NM_024830	LPCAT1	lysophosphatidylcholine acyltransferase 1	-2.48
767	NM_001618	PARP1	poly (ADP-ribose) polymerase 1	-2.48
768	NM_052985	IFT122	intraflagellar transport 122 homolog (Chlamydomonas)	-2.48
769	NM_006087	TUBB4A	tubulin	-2.49
770	NM_000864	HTR1D	5-hydroxytryptamine (serotonin) receptor 1D	-2.49
771	NR_003710	SNORA11C	small nucleolar RNA	-2.49
772	NM_005346	HSPA1B	heat shock 70kDa protein 1B	-2.49
773	NM_001040694	INCENP	inner centromere protein antigens 135/155kDa	-2.49
774	NM_024808	BORA	aurora kinase A activator (BORA), transcript variant 1	-2.50
775	ENST00000260453	MNS1	meiosis-specific nuclear structural 1	-2.50
776	NR_038282	PTPRG-AS1	PTPRG antisense RNA 1	-2.51
777	NM_018410	HJURP	Holliday junction recognition protein	-2.51
778	NM_024057	NUP37	nucleoporin 37kDa	-2.51
779	NM_001130862	RAD51AP1	RAD51 associated protein 1	-2.51
780	NR_002444	SNORA66	small nucleolar RNA	-2.52

781	NM_016359	NUSAP1	nucleolar and spindle associated protein 1	-2.52
782	NM_000909	NPY1R	neuropeptide Y receptor Y1	-2.52
783	NM_001843	CNTN1	contactin 1	-2.52
784	NM_015651	PHF19	PHD finger protein 19	-2.52
785	ENST00000492131	FAM72C	family with sequence similarity 72	-2.53
786	NM_006845	KIF2C	kinesin family member 2C	-2.53
787	ENST00000320578	RAB39A	RAB39A	-2.53
788	NM_012242	DKK1	dickkopf WNT signaling pathway inhibitor 1	-2.53
789	NM_012310	KIF4A	kinesin family member 4A	-2.54
790	NM_148923	CYB5A	cytochrome b5 type A (microsomal)	-2.54
791	NM_001258038	SPRY1	sprouty homolog 1	-2.54
792	NM_014278	HSPA4L	heat shock 70kDa protein 4-like	-2.55
793	ENST00000302506	CDC25A	cell division cycle 25A	-2.55
794	NR_004395	SNORD1A	small nucleolar RNA	-2.55
795	NM_018689	KIAA1199	KIAA1199	-2.55
796	NM_003645	SLC27A2	solute carrier family 27 (fatty acid transporter)	-2.55
797	NM_001083961	WDR62	WD repeat domain 62	-2.56
798	ENST00000358296	ZNF100	zinc finger protein 100	-2.56
799	NM_002105	H2AFX	H2A histone family	-2.56
800	NM_001175	ARHGDIB	Rho GDP dissociation inhibitor (GDI) beta	-2.56
801	NM_001067	TOP2A	topoisomerase (DNA) II alpha 170kDa	-2.56
802	NM_152237	GAS2L1	growth arrest-specific 2 like 1	-2.57
803	NM_012145	DTYMK	deoxythymidylate kinase (thymidylate kinase)	-2.57
804	NM_001809	CENPA	centromere protein A	-2.58
805	NM_202002	FOXM1	forkhead box M1	-2.58
806	NM_005914	MCM4	minichromosome maintenance complex component 4	-2.58
807	NR_002950	SNORA2A	small nucleolar RNA	-2.58
808	NM_000057	BLM	Bloom syndrome	-2.58
809	NM_017488	ADD2	adducin 2 (beta)	-2.58
810	NM_014573	TMEM97	transmembrane protein 97	-2.58
811	NR_030364	MIR634	microRNA 634	-2.59
812	AB096683	FAM72D	family with sequence similarity 72	-2.59
813	NM_138786	TM4SF18	transmembrane 4 L six family member 18	-2.60
814	NM_003914	CCNA1	cyclin A1	-2.60
815	NM_001899	CST4	cystatin S	-2.60
816	NM_014508	APOBEC3C	apolipoprotein B mRNA editing enzyme	-2.60
817	ENST00000286648	DCK	deoxycytidine kinase	-2.60

818	NR_033289	GK5	glycerol kinase 5 (putative)	-2.60
819	NM_004217	AURKB	aurora kinase B	-2.61
820	ENST00000361627	ARHGAP11A	Rho GTPase activating protein 11A	-2.61
821	NM_001127181	CENPL	centromere protein L	-2.61
822	ENST00000348225	PTN	pleiotrophin	-2.62
823	NM_152524	SGOL2	shugoshin-like 2 (S. pombe)	-2.62
824	NM_014391	ANKRD1	ankyrin repeat domain 1 (cardiac muscle)	-2.62
825	NR_038254	LOC100288637	OTU domain containing 7A pseudogene	-2.62
826	NM_024053	CENPM	centromere protein M	-2.63
827	NM_003243	TGFBR3	transforming growth factor	-2.63
828	ENST00000263382	ASF1B	anti-silencing function 1B histone chaperone	-2.63
829	NM_000221	KHK	ketoheokinase (fructokinase)	-2.64
830	NM_006101	NDC80	NDC80 kinetochore complex component	-2.64
831	NM_001256849	POLD1	polymerase (DNA directed)	-2.64
832	NM_001170553	VSIG1	V-set and immunoglobulin domain containing 1	-2.65
833	NM_021979	HSPA2	heat shock 70kDa protein 2	-2.67
834	NM_006342	TACC3	transforming	-2.67
835	NM_001135599	TGFB2	transforming growth factor	-2.68
836	NM_000857	GUCY1B3	guanylate cyclase 1	-2.68
837	NM_017760	NCAPG2	non-SMC condensin II complex	-2.68
838	ENST00000459349	RNU7-9P	RNA	-2.69
839	NM_018279	TMEM19	transmembrane protein 19	-2.70
840	NM_001211	BUB1B	BUB1 mitotic checkpoint serine/threonine kinase B	-2.70
841	NM_001130960	PLCH1	phospholipase C	-2.71
842	NM_006681	NMU	neuromedin U	-2.72
843	NR_029663	MIR15B	microRNA 15b	-2.72
844	NM_175065	HIST2H2AB	histone cluster 2	-2.72
845	NM_020169	LXN	latexin	-2.74
846	NM_015068	PEG10	paternally expressed 10	-2.74
847	NM_018323	PI4K2B	phosphatidylinositol 4-kinase type 2 beta	-2.75
848	ENST00000410276	RNA5SP129	RNA	-2.75
849	NM_033402	LRRCC1	leucine rich repeat and coiled-coil centrosomal protein 1	-2.75
850	NM_178858	SFXN2	sideroflexin 2	-2.76
851	NM_005517	HMGN2	high mobility group nucleosomal binding domain 2	-2.76
852	NM_020647	JPH1	junctionophilin 1	-2.76
853	NM_005725	TSPAN2	tetraspanin 2	-2.76
854	NM_001048201	UHRF1	ubiquitin-like with PHD and ring finger domains 1	-2.77

855	NM_001039841	ARHGAP11B	Rho GTPase activating protein 11B	-2.77
856	NR_046408	FN3KRP	fructosamine 3 kinase related protein	-2.80
857	NM_001256875	CDCA8	cell division cycle associated 8	-2.80
858	NM_006467	POLR3G	polymerase (RNA) III (DNA directed) polypeptide G (32kD)	-2.80
859	NM_001761	CCNF	cyclin F	-2.81
860	ENST00000305188	ESCO2	establishment of sister chromatid cohesion N-acetyltransferase 2	-2.81
861	NM_001206999	CIT	citron (rho-interacting)	-2.82
862	NR_027157	TMPO-AS1	TMPO antisense RNA 1	-2.83
863	NM_019018	FAM105A	family with sequence similarity 105	-2.83
864	NM_001322	CST2	cystatin SA	-2.85
865	NR_003196	SNORD114-4	small nucleolar RNA	-2.85
866	NM_001786	CDK1	cyclin-dependent kinase 1	-2.85
867	NM_003529	HIST1H3A	histone cluster 1	-2.85
868	NM_001172303	MASTL	microtubule associated serine/threonine kinase-like	-2.86
869	NR_002908	SNORD20	small nucleolar RNA	-2.87
870	NM_003009	SEPW1	selenoprotein W	-2.87
871	NM_001790	CDC25C	cell division cycle 25C	-2.88
872	NM_002263	KIFC1	kinesin family member C1	-2.89
873	ENST00000371542	LRRC26	leucine rich repeat containing 26	-2.89
874	NM_017613	DONSON	downstream neighbor of SON	-2.89
875	NM_001007563	IGFBPL1	insulin-like growth factor binding protein-like 1	-2.89
876	ENST00000364357	RNA5-8SP3	RNA	-2.89
877	NM_001204183	NEK2	NIMA-related kinase 2	-2.90
878	NM_024322	CENPO	centromere protein O	-2.92
879	AK295906	LOC100507516	uncharacterized LOC100507516	-2.92
880	NM_145697	NUF2	NUF2	-2.95
881	NM_002758	MAP2K6	mitogen-activated protein kinase kinase 6	-2.95
882	NM_003531	HIST1H3C	histone cluster 1	-2.97
883	NM_004336	BUB1	BUB1 mitotic checkpoint serine/threonine kinase	-2.97
884	AK095849	SNHG1	small nucleolar RNA host gene 1 (non-protein coding)	-2.98
885	NM_001032283	TMPO	thymopoietin	-2.98
886	NM_021629	GNB4	guanine nucleotide binding protein (G protein)	-2.98
887	NM_020242	KIF15	kinesin family member 15	-2.98
888	JQ988807	RNVU1-13	RNA	-2.98
889	NM_138555	KIF23	kinesin family member 23	-2.99
890	NM_003532	HIST1H3E	histone cluster 1	-3.00
891	NM_016240	SCARA3	scavenger receptor class A	-3.01

892	NR_023343	RNU4ATAC	RNA	-3.02
893	NM_000946	PRIM1	primase	-3.02
894	NM_170589	CASC5	cancer susceptibility candidate 5	-3.03
895	NM_005225	E2F1	E2F transcription factor 1	-3.05
896	NM_014264	PLK4	polo-like kinase 4	-3.06
897	NM_016195	KIF20B	kinesin family member 20B	-3.07
898	NM_001080449	DNA2	DNA replication helicase/nuclease 2	-3.09
899	NM_001123375	HIST2H3D	histone cluster 2	-3.09
900	NM_000135	FANCA	Fanconi anemia	-3.10
901	NM_014736	KIAA0101	KIAA0101	-3.10
902	NM_001264573	KIF18B	kinesin family member 18B	-3.11
903	NM_198433	AURKA	aurora kinase A	-3.11
904	NM_003981	PRC1	protein regulator of cytokinesis 1	-3.12
905	NM_007280	OIP5	Opa interacting protein 5	-3.12
906	ENST00000265748	ANLN	anillin	-3.16
907	NM_145307	RTKN2	rhotekin 2	-3.18
908	NM_145176	SLC2A12	solute carrier family 2 (facilitated glucose transporter)	-3.18
909	NM_018369	DEPDC1B	DEP domain containing 1B	-3.18
910	ENST00000260967	CDK15	cyclin-dependent kinase 15	-3.19
911	NM_152637	METTL7B	methyltransferase like 7B	-3.19
912	NM_001142520	FAM111A	family with sequence similarity 111	-3.19
913	NM_014875	KIF14	kinesin family member 14	-3.21
914	NR_030581	MIR891A	microRNA 891a	-3.23
915	NM_022145	CENPK	centromere protein K	-3.24
916	NM_001199252	SGOL1	shugoshin-like 1 (S. pombe)	-3.24
917	ENST00000264596	NEIL3	nei endonuclease VIII-like 3 (E. coli)	-3.26
918	NM_153695	ZNF367	zinc finger protein 367	-3.27
919	ENST00000367274	UBE2T	ubiquitin-conjugating enzyme E2T (putative)	-3.27
920	NM_006379	SEMA3C	sema domain	-3.28
921	NM_032043	BRIP1	BRCA1 interacting protein C-terminal helicase 1	-3.29
922	NM_001080416	MYBL1	v-myb myeloblastosis viral oncogene homolog (avian)-like 1	-3.29
923	NM_003318	TTK	TTK protein kinase	-3.31
924	NM_017504	OR2M4	olfactory receptor	-3.32
925	NM_003519	HIST1H2BL	histone cluster 1	-3.32
926	NM_001255	CDC20	cell division cycle 20	-3.32
927	ENST00000300093	PLK1	polo-like kinase 1	-3.33
928	NM_031966	CCNB1	cyclin B1	-3.34

929	ENST00000240488	MND1	meiotic nuclear divisions 1 homolog (<i>S. cerevisiae</i>)	-3.34
930	NM_015341	NCAPH	non-SMC condensin I complex	-3.36
931	NM_006461	SPAG5	sperm associated antigen 5	-3.38
932	NM_001099285	PTMA	prothymosin	-3.40
933	NR_036052	MIR1244-1	microRNA 1244-1	-3.40
934	ENST00000263274	LIG1	ligase I	-3.40
935	NM_015895	GMNN	geminin	-3.40
936	NM_033417	HAUS8	HAUS augmin-like complex	-3.41
937	ENST00000282356	CAMK4	calcium/calmodulin-dependent protein kinase IV	-3.42
938	NM_004523	KIF11	kinesin family member 11	-3.45
939	NM_005480	TROAP	trophinin associated protein	-3.45
940	NM_004153	ORC1	origin recognition complex	-3.45
941	NM_005192	CDKN3	cyclin-dependent kinase inhibitor 3	-3.46
942	NM_001080505	SHISA3	shisa homolog 3 (<i>Xenopus laevis</i>)	-3.47
943	NM_021067	GINS1	GINS complex subunit 1 (Psf1 homolog)	-3.47
944	NM_001080480	MBOAT1	membrane bound O-acyltransferase domain containing 1	-3.48
945	NM_005314	GRPR	gastrin-releasing peptide receptor	-3.50
946	NM_003538	HIST1H4A	histone cluster 1	-3.50
947	NM_022346	NCAPG	non-SMC condensin I complex	-3.50
948	ENST00000274255	SKP2	S-phase kinase-associated protein 2	-3.51
949	ENST00000303383	SHCBP1	SHC SH2-domain binding protein 1	-3.51
950	NM_003537	HIST1H3B	histone cluster 1	-3.52
951	NM_032997	ZWINT	ZW10 interacting kinetochore protein	-3.53
952	NM_016426	GTSE1	G-2 and S-phase expressed 1	-3.57
953	ENST00000321990	ATAD5	ATPase family	-3.57
954	ENST00000438534	PSRC1	proline/serine-rich coiled-coil 1	-3.61
955	NM_014750	DLGAP5	discs large homolog associated protein 5	-3.62
956	NM_006332	IFI30	gamma-interferon-inducible lysosomal thiol reductase	-3.64
957	NM_030919	FAM83D	family with sequence similarity 83	-3.64
958	NM_003258	TK1	thymidine kinase 1	-3.65
959	ENST00000409474	MPP4	membrane protein	-3.66
960	ENST00000352433	PTTG1	pituitary tumor-transforming 1	-3.66
961	NM_144777	SCEL	sciellin	-3.68
962	NM_000745	CHRNA5	cholinergic receptor	-3.69
963	NM_018063	HELLS	helicase	-3.71
964	NM_001178010	CDC45	cell division cycle 45	-3.72
965	ENST00000353866	HMMR	hyaluronan-mediated motility receptor (RHAMM)	-3.72

966	NM_152562	CDCA2	cell division cycle associated 2	-3.75
967	ENST00000296509	MAD2L1	MAD2 mitotic arrest deficient-like 1 (yeast)	-3.77
968	ENST00000264870	F13A1	coagulation factor XIII	-3.78
969	ENST00000368654	MKI67	antigen identified by monoclonal antibody Ki-67	-3.79
970	ENST00000367012	SERTAD4	SERTA domain containing 4	-3.83
971	NM_014051	TMEM14A	transmembrane protein 14A	-3.83
972	NM_002466	MYBL2	v-myb myeloblastosis viral oncogene homolog (avian)-like 2	-3.83
973	NM_130398	EXO1	exonuclease 1	-3.86
974	NR_002141	OR2M1P	olfactory receptor	-3.86
975	NM_018945	PDE7B	phosphodiesterase 7B	-3.87
976	NM_003514	HIST1H2AM	histone cluster 1	-3.93
977	NM_001168	BIRC5	baculoviral IAP repeat containing 5	-3.95
978	NM_012177	FBXO5	F-box protein 5	-3.96
979	NM_000067	CA2	carbonic anhydrase II	-3.96
980	NM_003544	HIST1H4B	histone cluster 1	-3.98
981	NM_023915	GPR87	G protein-coupled receptor 87	-4.01
982	NM_022111	CLSPN	claspin	-4.03
983	NM_006187	OAS3	2'-5'-oligoadenylate synthetase 3	-4.04
984	NM_001955	EDN1	endothelin 1	-4.05
985	NM_003579	RAD54L	RAD54-like (<i>S. cerevisiae</i>)	-4.09
986	NM_020675	SPC25	SPC25	-4.10
987	NM_001813	CENPE	centromere protein E	-4.10
988	ENST00000166345	TRIP13	thyroid hormone receptor interactor 13	-4.10
989	NM_021066	HIST1H2AJ	histone cluster 1	-4.13
990	NM_002592	PCNA	proliferating cell nuclear antigen	-4.15
991	ENST00000301905	PBK	PDZ binding kinase	-4.19
992	NM_024908	WDR76	WD repeat domain 76	-4.22
993	NM_005441	CHAF1B	chromatin assembly factor 1	-4.25
994	NM_018136	ASPM	asp (abnormal spindle) homolog	-4.30
995	NM_005573	LMNB1	lamin B1	-4.43
996	NM_001262	CDKN2C	cyclin-dependent kinase inhibitor 2C (p18	-4.45
997	NM_001237	CCNA2	cyclin A2	-4.46
998	NM_002692	POLE2	polymerase (DNA directed)	-4.57
999	ENST00000313655	DSCC1	DNA replication and sister chromatid cohesion 1	-4.64
1000	ENST00000372927	CENPI	centromere protein I	-4.87
1001	NM_001256371	E2F8	E2F transcription factor 8	-4.93
1002	NM_182751	MCM10	minichromosome maintenance complex component 10	-4.95

1003	NM_014033	METTL7A	methyltransferase like 7A	-5.23
1004	NM_031299	CDCA3	cell division cycle associated 3	-5.38
1005	NM_003536	HIST1H3H	histone cluster 1	-5.44
1006	ENST00000592540	SPC24	SPC24	-5.61
1007	ENST00000253462	GIN52	GIN5 complex subunit 2 (Psf2 homolog)	-5.67
1008	NM_004657	SDPR	serum deprivation response	-5.93
1009	ENST00000256104	FABP4	fatty acid binding protein 4	-6.24
1010	NM_005733	KIF20A	kinesin family member 20A	-6.30
1011	NM_019013	FAM64A	family with sequence similarity 64	-6.44
1012	NM_003513	HIST1H2AB	histone cluster 1	-6.61
1013	ENST00000323274	TYMS	thymidylate synthetase	-6.76
1014	NM_031942	CDCA7	cell division cycle associated 7	-7.20
1015	NM_003535	HIST1H3J	histone cluster 1	-7.63
1016	NM_003509	HIST1H2AI	histone cluster 1	-8.02
1017	ENST00000456743	OR2M3	olfactory receptor	-8.09
1018	NM_021062	HIST1H2BB	histone cluster 1	-8.25
1019	ENST00000364507	RNY4P23	RNA	-8.40
1020	NM_057749	CCNE2	cyclin E2	-9.89
1021	NM_003521	HIST1H2BM	histone cluster 1	-10.37
1022	NM_198947	FAM111B	family with sequence similarity 111	-14.98

Table S2. Transcripts Up- and Down-Regulated in MCF-10A Grown in DC-DEP-EMF-Treated Media

Gene #	Gene Accession	Gene Symbol	Gene Description	Fold Change
1	NM_000499	CYP1A1	cytochrome P450, family 1, subfamily A, polypeptide 1	9.23
2	NM_001143818	SERPINB2	serpin peptidase inhibitor, clade B (ovalbumin), member 2	9.18
3	NM_001185156	IL24	interleukin 24	7.44
4	NM_002153	HSD17B2	hydroxysteroid (17-beta) dehydrogenase 2	7.09
5	NM_017523	XAF1	XIAP associated factor 1	6.79
6	OTTHUMT0000034819 7	RP11-2L8.1	novel transcript	6.75
7	NM_003125	SPRR1B	small proline-rich protein 1B	5.94
8	NR_033807	CYP3A5	cytochrome P450, family 3, subfamily A, polypeptide 5	5.81
9	AK125166	LOC441268	uncharacterized LOC441268	5.77
10	OTTHUMT0000035635 5	RP11-88I21.1	proline rich 20 (PRR20) pseudogene	5.10
11	NM_001130046	CCL20	chemokine (C-C motif) ligand 20	5.09
12	NM_000602	SERPINE1	serpin peptidase inhibitor, clade E (nexin, plasminogen activator inhibitor type 1), member 1	4.87
13	NM_017878	HRASLS2	HRAS-like suppressor 2	4.86
14	BC054023	SPANXA1 // SPANXA2	sperm protein associated with the nucleus, X-linked, family member A1 // SPANX family, member A2	4.72
15	ENST00000531200	MMP7	matrix metalloproteinase 7 (matrilysin, uterine)	4.62
16	ENST00000419892	GPR110	G protein-coupled receptor 110	4.57
17	ENST00000516326	RNVU1-2	RNA, variant U1 small nuclear 2	4.51
18	NM_001243093	FYB	FYN binding protein	4.40
19	NM_002185	IL7R	interleukin 7 receptor	4.34
20	ENST00000503449	LOC728554	THO complex 3 pseudogene	4.32
21	NM_001017992	ACTBL2	actin, beta-like 2	4.27
22	ENST00000384132	RNU6-767P	RNA, U6 small nuclear 767, pseudogene	4.21
23	ENST00000410792	RNU2-63P	RNA, U2 small nuclear 63, pseudogene	4.20
24	OTTHUMT0000035998 3	RP11-484O2.1	novel transcript	4.13
25	OTTHUMT0000047092 1	RP11-91H12.4	novel transcript, sense overlapping to THOC3	3.94
26	ENST00000516525	RNU6-1337P	RNA, U6 small nuclear 1337, pseudogene	3.93
27	NR_036540	LINC00622	long intergenic non-protein coding RNA 622	3.84

28	ENST00000410983	RNU6-564P	RNA, U6 small nuclear 564, pseudogene	3.83
29	NM_003155	STC1	stanniocalcin 1	3.81
30	NM_002963	S100A7	S100 calcium binding protein A7	3.80
31	NM_000379	XDH	xanthine dehydrogenase	3.79
32	NM_005130	FGFBP1	fibroblast growth factor binding protein 1	3.79
33	ENST00000521815	CASC19	cancer susceptibility candidate 19 (non-protein coding)	3.79
34	NM_001243835	STAT4	signal transducer and activator of transcription 4	3.74
35	OTTHUMT00000445281	RP1-66C13.3	lectin, galactoside-binding, soluble, 9 (LGALS9) pseudogene	3.71
36	OTTHUMT00000025274	RP4-630A11.3	putative novel transcript	3.69
37	NM_002192	INHBA	inhibin, beta A	3.66
38	NM_173629	DYNAP	dynactin associated protein	3.65
39	NM_005409	CXCL11	chemokine (C-X-C motif) ligand 11	3.62
40	NM_000442	PECAM1	platelet/endothelial cell adhesion molecule 1	3.59
41	OTTHUMT00000473089	RP11-467H10.2	novel transcript	3.51
42	ENST00000410832	RN7SKP106	RNA, 7SK small nuclear pseudogene 106	3.49
43	NM_001288705	CSF1R	colony stimulating factor 1 receptor	3.47
44	NM_003843	SCEL	sciellin	3.47
45	NM_001647	APOD	apolipoprotein D	3.44
46	NR_037510	MIR3945	microRNA 3945	3.43
47	NM_005621	S100A12	S100 calcium binding protein A12	3.42
48	NR_027082	SFTA1P	surfactant associated 1, pseudogene	3.41
49	ENST00000263341	IL1B	interleukin 1, beta	3.40
50	NM_002638	PI3	peptidase inhibitor 3, skin-derived	3.37
51	ENST00000364102	RNU5A-8P	RNA, U5A small nuclear 8, pseudogene	3.33
52	ENST00000423676	LGALS9B	lectin, galactoside-binding, soluble, 9B	3.32
53	NM_002427	MMP13	matrix metalloproteinase 13 (collagenase 3)	3.30
54	ENST00000361475	TGM2	transglutaminase 2	3.27
55	NM_005630	SLCO2A1	solute carrier organic anion transporter family, member 2A1	3.23
56	ENST00000547937	DCN	decorin	3.20
57	NM_020299	AKR1B10	aldo-keto reductase family 1, member B10 (aldose reductase)	3.18
58	NR_039896	MIR4742	microRNA 4742	3.16
59	OTTHUMT00000046559	RP13-463N16.6	putative novel transcript	3.15
60	NM_000782	CYP24A1	cytochrome P450, family 24, subfamily A, polypeptide 1	3.15
61	BC064619	CD24	CD24 molecule	3.15

62	ENST00000598518	LOC645553	uncharacterized LOC645553	3.07
63	AB033899	ACSL5	acyl-CoA synthetase long-chain family member 5	3.06
64	NM_000392	ABCC2	ATP-binding cassette, sub-family C (CFTR/MRP), member 2	3.06
65	ENST00000411306	RNA5SP294	RNA, 5S ribosomal pseudogene 294	3.05
66	NM_000421	KRT10	keratin 10	3.04
67	ENST00000384211	RNU4-31P	RNA, U4 small nuclear 31, pseudogene	3.03
68	NM_001910	CTSE	cathepsin E	3.02
69	ENST00000448301	CTSS	cathepsin S	2.99
70	NM_000359	TGM1	transglutaminase 1	2.99
71	NM_001081675	KLHL38	kelch-like family member 38	2.98
72	NM_012242	DKK1	dickkopf WNT signaling pathway inhibitor 1	2.98
73	NM_001199978	PLSCR2	phospholipid scramblase 2	2.97
74	NM_001565	CXCL10	chemokine (C-X-C motif) ligand 10	2.96
75	ENST00000440578	LOC100130476	uncharacterized LOC100130476	2.96
76	ENST00000362700	RNU6-228P	RNA, U6 small nuclear 228, pseudogene	2.93
77	ENST00000219596	MEFV	Mediterranean fever	2.92
78	NR_121646	RNU1-13P	RNA, U1 small nuclear 13, pseudogene	2.91
79	NM_014059	RGCC	regulator of cell cycle	2.89
80	ENST00000206423	CCDC80	coiled-coil domain containing 80	2.87
81	NM_005318	H1F0	H1 histone family, member 0	2.87
82	ENST00000528016	ACADM	acyl-CoA dehydrogenase, C-4 to C-12 straight chain	2.87
83	NM_001256267	MYPN	myopalladin	2.85
84	ENST00000364226	MIR7641-2	microRNA 7641-2	2.85
85	NM_032563	LCE3D	late cornified envelope 3D	2.82
86	ENST00000364127	RNU1-85P	RNA, U1 small nuclear 85, pseudogene	2.81
87	NM_006919	SERPINB3	serpin peptidase inhibitor, clade B (ovalbumin), member 3	2.81
88	ENST00000458867	RNU7-24P	RNA, U7 small nuclear 24 pseudogene	2.80
89	NM_006877	GMPR	guanosine monophosphate reductase	2.80
90	NM_001291807	FAP	fibroblast activation protein, alpha	2.77
91	ENST00000403291	HNRNPH1P1	heterogeneous nuclear ribonucleoprotein H1 pseudogene 1	2.77
92	OTTHUMT00000418667	CTD-2033D15.1	novel transcript, antisense to THBS1	2.75
93	NR_026825	RPSAP52	ribosomal protein SA pseudogene 52	2.73
94	NM_020431	TMEM63C	transmembrane protein 63C	2.73
95	NM_001547	IFIT2	interferon-induced protein with tetratricopeptide repeats 2	2.72
96	ENST00000365538	RNU1-122P	RNA, U1 small nuclear 122, pseudogene	2.71
97	NM_001145290	SLC37A2	solute carrier family 37 (glucose-6-phosphate transporter), member 2	2.70

98	NM_004753	DHRS3	dehydrogenase/reductase (SDR family) member 3	2.67
99	AK128720	PKP4	plakophilin 4	2.65
100	NM_001136528	SERPINE2	serpin peptidase inhibitor, clade E (nexin, plasminogen activator inhibitor type 1), member 2	2.65
101	NM_001145031	PLAU	plasminogen activator, urokinase	2.64
102	NM_001218	CA12	carbonic anhydrase XII	2.64
103	NM_000930	PLAT	plasminogen activator, tissue	2.62
104	uc003nhl.1	HIST1H4H	histone cluster 1, H4h	2.62
105	NM_001005180	OR56B1	olfactory receptor, family 56, subfamily B, member 1	2.61
106	NM_001005340	GPNMB	glycoprotein (transmembrane) nmb	2.61
107	ENST00000363216	RNU6-433P	RNA, U6 small nuclear 433, pseudogene	2.60
108	OTTHUMT00000372514	CTC-308K20.2	novel transcript	2.60
109	OTTHUMT00000325655	AC009229.5	putative novel transcript	2.59
110	OTTHUMT00000347380	AC107072.2	novel transcript	2.58
111	NM_024577	SH3TC2	SH3 domain and tetratricopeptide repeats 2	2.58
112	ENST00000515957	RNA5SP518	RNA, 5S ribosomal pseudogene 518	2.58
113	NM_058229	FBXO32	F-box protein 32	2.58
114	ENST00000435990	MXD1	MAX dimerization protein 1	2.58
115	ENST00000516436	RNU6-736P	RNA, U6 small nuclear 736, pseudogene	2.57
116	NM_006033	LIPG	lipase, endothelial	2.57
117	ENST00000411327	RNA5SP508	RNA, 5S ribosomal pseudogene 508	2.57
118	ENST00000364028	RNU6-1243P	RNA, U6 small nuclear 1243, pseudogene	2.56
119	NM_001243237	LOC100130301	uncharacterized LOC100130301	2.56
120	NM_003264	TLR2	toll-like receptor 2	2.55
121	NR_104076	RNVU1-15	RNA, variant U1 small nuclear 15	2.54
122	NR_002735	SNORD61	small nucleolar RNA, C/D box 61	2.53
123	OTTHUMT00000413604	CTD-2207P18.2	novel transcript	2.52
124	NM_001166208	SYNPO	synaptopodin	2.52
125	NM_001161342	TMEM171	transmembrane protein 171	2.52
126	NM_007365	PADI2	peptidyl arginine deiminase, type II	2.52
127	NM_006080	SEMA3A	sema domain, immunoglobulin domain (Ig), short basic domain, secreted, (semaphorin) 3A	2.51
128	NM_002429	MMP19	matrix metalloproteinase 19	2.51
129	NR_031568	MIR1323	microRNA 1323	2.50

130	NM_001039702	OLAH	oleoyl-ACP hydrolase	2.49
131	NM_054031	MRGPRX3	MAS-related GPR, member X3	2.49
132	NM_001146337	AFAP1L1	actin filament associated protein 1-like 1	2.48
133	NM_003246	THBS1	thrombospondin 1	2.48
134	NM_001143962	CAPN8	calpain 8	2.46
135	NM_052962	IL22RA2	interleukin 22 receptor, alpha 2	2.46
136	ENST00000516544	RNU7-25P	RNA, U7 small nuclear 25 pseudogene	2.46
137	NM_004657	SDPR	serum deprivation response	2.46
138	ENST00000516534	RNU2-34P	RNA, U2 small nuclear 34, pseudogene	2.46
139	ENST00000481009	S100A4	S100 calcium binding protein A4	2.46
140	ENST00000515911	RNU7-123P	RNA, U7 small nuclear 123 pseudogene	2.45
141	ENST00000384625	RNU6-1257P	RNA, U6 small nuclear 1257, pseudogene	2.44
142	NM_000860	HPGD	hydroxyprostaglandin dehydrogenase 15-(NAD)	2.43
143	NM_017682	BEST2	bestrophin 2	2.43
144	NM_014722	FAM65B	family with sequence similarity 65, member B	2.42
145	OTTHUMT0000040653 2	RP11-13A1.3	novel transcript	2.42
146	NM_000584	CXCL8	chemokine (C-X-C motif) ligand 8	2.41
147	ENST00000384003	RNU6-468P	RNA, U6 small nuclear 468, pseudogene	2.41
148	NM_182507	KRT80	keratin 80	2.41
149	NR_110826	LOC102724550	uncharacterized LOC102724550	2.41
150	NM_000591	CD14	CD14 molecule	2.40
151	NR_039750	MIR4524A	microRNA 4524a	2.40
152	NR_027992	NBEAP1	neurobeachin pseudogene 1	2.40
153	NM_032572	RNASE7	ribonuclease, RNase A family, 7	2.40
154	NR_104085	RNVU1-6	RNA, variant U1 small nuclear 6	2.39
155	NM_001204406	ALOX5AP	arachidonate 5-lipoxygenase-activating protein	2.39
156	ENST00000391240	RNA5SP496	RNA, 5S ribosomal pseudogene 496	2.38
157	ENST00000364829	RNU1-59P	RNA, U1 small nuclear 59, pseudogene	2.38
158	NM_001024383	NAV3	neuron navigator 3	2.38
159	NR_047700	MYO16-AS1	MYO16 antisense RNA 1	2.37
160	NM_002727	SRGN	serglycin	2.37
161	NM_014467	SRPX2	sushi-repeat containing protein, X-linked 2	2.36
162	NR_039722	MIR4500	microRNA 4500	2.35
163	AK130228	LOC100133032	uncharacterized LOC100133032	2.35
164	NM_014568	GALNT5	polypeptide N-acetylgalactosaminyltransferase 5	2.34
165	NM_012397	SERPINB13	serpin peptidase inhibitor, clade B (ovalbumin), member 13	2.34

166	NM_001025197	CHI3L2	chitinase 3-like 2	2.34
167	OTTHUMT00000041894	RP1-124C6.1	putative novel transcript	2.34
168	NR_110820	C3orf67-AS1	C3orf67 antisense RNA 1	2.33
169	NR_002753	RNU5F-1	RNA, U5F small nuclear 1	2.33
170	ENST00000425208	HMGA2	high mobility group AT-hook 2	2.33
171	NM_000024	ADRB2	adrenoceptor beta 2, surface	2.33
172	NR_039707	MIR4487	microRNA 4487	2.33
173	NM_024690	MUC16	mucin 16, cell surface associated	2.32
174	ENST00000364174	RNU6-268P	RNA, U6 small nuclear 268, pseudogene	2.31
175	NR_003277	HNRNPA1P33	heterogeneous nuclear ribonucleoprotein A1 pseudogene 33	2.31
176	NM_012465	TLL2	tolloid-like 2	2.31
177	ENST00000493581	AQP3	aquaporin 3 (Gill blood group)	2.31
178	NM_001175	ARHGDIB	Rho GDP dissociation inhibitor (GDI) beta	2.31
179	ENST00000439872	LOC101928119	uncharacterized LOC101928119	2.30
180	NM_001293626	LOC93432	maltase-glucoamylase (alpha-glucosidase)	2.30
181	NM_022573	TSPY2	testis specific protein, Y-linked 2	2.30
182	ENST00000307851	HAVCR2	hepatitis A virus cellular receptor 2	2.30
183	NM_001039362	ATP6V1C2	ATPase, H ⁺ transporting, lysosomal 42kDa, V1 subunit C2	2.28
184	ENST00000516096	RNU7-2P	RNA, U7 small nuclear 2 pseudogene	2.28
185	NM_000903	NQO1	NAD(P)H dehydrogenase, quinone 1	2.28
186	NM_015982	YBX2	Y box binding protein 2	2.28
187	NR_110838	LOC101927087	uncharacterized LOC101927087	2.27
188	AY358688	LOC100133299	GALI1870	2.27
189	NM_004825	CDY2A	chromodomain protein, Y-linked, 2A	2.27
190	ENST00000360669	FAM153A	family with sequence similarity 153, member A	2.27
191	NM_001570	IRAK2	interleukin-1 receptor-associated kinase 2	2.27
192	ENST00000516086	RNU6-976P	RNA, U6 small nuclear 976, pseudogene	2.26
193	NM_000962	PTGS1	prostaglandin-endoperoxide synthase 1 (prostaglandin G/H synthase and cyclooxygenase)	2.26
194	NR_121625	LOC100507639	uncharacterized LOC100507639	2.26
195	NR_003236	SNORD113-8	small nucleolar RNA, C/D box 113-8	2.26
196	OTTHUMT00000060865	AF003626.1	chromosome X novel transcript	2.25
197	NM_001039667	ANGPTL4	angiopoietin-like 4	2.24
198	NR_039867	MIR3529	microRNA 3529	2.24
199	NM_003536	HIST1H3H	histone cluster 1, H3h	2.24

200	NM_198996	LIPI	lipase, member I	2.23
201	ENST00000363926	RNU6-753P	RNA, U6 small nuclear 753, pseudogene	2.23
202	NM_021068	IFNA4	interferon, alpha 4	2.23
203	NR_039751	MIR4525	microRNA 4525	2.23
204	NM_144658	DOCK11	dedicator of cytokinesis 11	2.23
205	ENST00000505196	LINC01194	long intergenic non-protein coding RNA 1194	2.21
206	NR_039765	MIR548AN	microRNA 548an	2.21
207	NM_145252	ZG16B	zymogen granule protein 16B	2.21
208	ENST00000505421	ZFYVE28	zinc finger, FYVE domain containing 28	2.21
209	NM_001261825	OASL	2-5-oligoadenylate synthetase-like	2.20
210	NM_003141	TRIM21	tripartite motif containing 21	2.20
211	NM_005101	ISG15	ISG15 ubiquitin-like modifier	2.20
212	ENST00000364256	RNU6-773P	RNA, U6 small nuclear 773, pseudogene	2.20
213	NR_002165	HMGB3P1	high mobility group box 3 pseudogene 1	2.20
214	NM_000104	CYP1B1	cytochrome P450, family 1, subfamily B, polypeptide 1	2.20
215	NM_002254	KIF3C	kinesin family member 3C	2.20
216	NM_006291	TNFAIP2	tumor necrosis factor, alpha-induced protein 2	2.19
217	NM_001193300	SEMA4A	sema domain, immunoglobulin domain (Ig), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 4A	2.19
218	ENST00000459153	RNA5SP233	RNA, 5S ribosomal pseudogene 233	2.19
219	ENST00000384505	RNU6-125P	RNA, U6 small nuclear 125, pseudogene	2.18
220	ENST00000384683	RNU6-768P	RNA, U6 small nuclear 768, pseudogene	2.18
221	NM_173662	RNF175	ring finger protein 175	2.18
222	ENST00000384746	RNU6-318P	RNA, U6 small nuclear 318, pseudogene	2.18
223	OTTHUMT0000043088 9	RP11-804H8.6	linc RNA	2.18
224	NR_036085	MIR3134	microRNA 3134	2.17
225	NM_005672	PSCA	prostate stem cell antigen	2.17
226	NR_119373	PCAT2	prostate cancer associated transcript 2 (non-protein coding)	2.17
227	NM_001190942	TNFSF10	tumor necrosis factor (ligand) superfamily, member 10	2.17
228	NM_001099287	NIPAL4	NIPA-like domain containing 4	2.16
229	NR_004395	SNORD1A	small nucleolar RNA, C/D box 1A	2.15
230	NR_036214	MIR4253	microRNA 4253	2.15
231	NM_012429	SEC14L2	SEC14-like 2 (S. cerevisiae)	2.15
232	NM_133459	CCBE1	collagen and calcium binding EGF domains 1	2.15
233	OTTHUMT0000036247 2	AC142293.3	novel transcript	2.15

234	ENST00000570562	LOC100506713	uncharacterized LOC100506713	2.14
235	NR_015395	MIR4435-1HG	MIR4435-1 host gene (non-protein coding)	2.14
236	ENST00000390844	RNU6-910P	RNA, U6 small nuclear 910, pseudogene	2.14
237	ENST00000317012	ZBED2	zinc finger, BED-type containing 2	2.14
238	ENST00000364675	RNU4-85P	RNA, U4 small nuclear 85, pseudogene	2.14
239	OTTHUMT00000053217	RP11-80I15.4	putative novel transcript	2.14
240	NM_001145153	TMEM71	transmembrane protein 71	2.14
241	NM_000888	ITGB6	integrin, beta 6	2.14
242	NM_002965	S100A9	S100 calcium binding protein A9	2.14
243	NR_002917	SNORA19	small nucleolar RNA, H/ACA box 19	2.13
244	NR_003359	SNORD115-44	small nucleolar RNA, C/D box 115-44	2.13
245	NM_020980	AQP9	aquaporin 9	2.13
246	NM_052941	GBP4	guanylate binding protein 4	2.13
247	OTTHUMT00000357034	RP11-469L4.1	novel transcript	2.13
248	NR_036494	LOC643201	centrosomal protein 192kDa pseudogene	2.13
249	OTTHUMT00000376629	RP11-962G15.1	novel transcript	2.13
250	NM_017654	SAMD9	sterile alpha motif domain containing 9	2.12
251	ENST00000516946	RNU6-703P	RNA, U6 small nuclear 703, pseudogene	2.12
252	ENST00000410230	RN7SKP151	RNA, 7SK small nuclear pseudogene 151	2.12
253	NM_003979	GPRC5A	G protein-coupled receptor, class C, group 5, member A	2.12
254	ENST00000516577	RNU6-1018P	RNA, U6 small nuclear 1018, pseudogene	2.12
255	ENST00000364454	RNU6-361P	RNA, U6 small nuclear 361, pseudogene	2.12
256	AK097629	GPR146	G protein-coupled receptor 146	2.12
257	NM_003966	SEMA5A	sema domain, seven thrombospondin repeats (type 1 and type 1-like), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 5A	2.12
258	NM_001199828	SPRR1A	small proline-rich protein 1A	2.12
259	NM_032461	SPANXB1	SPANX family, member B1	2.12
260	NM_014289	CAPN6	calpain 6	2.12
261	NM_001204504	DGKH	diacylglycerol kinase, eta	2.12
262	ENST00000390413	TRBJ2-2	T cell receptor beta joining 2-2	2.12
263	OTTHUMT00000157919	AF127936.5	novel transcript	2.11
264	NM_173842	IL1RN	interleukin 1 receptor antagonist	2.11
265	AK092813	IFIT1	interferon-induced protein with tetratricopeptide repeats 1	2.11

266	ENST00000302824	STARD5	StAR-related lipid transfer (START) domain containing 5	2.11
267	NM_031415	GSDMC	gasdermin C	2.11
268	ENST00000567517	LINC00515	long intergenic non-protein coding RNA 515	2.10
269	NR_015384	LOC100126784	uncharacterized LOC100126784	2.10
270	ENST00000384639	RNU6-665P	RNA, U6 small nuclear 665, pseudogene	2.10
271	NM_001029955	DCAF4L1	DDB1 and CUL4 associated factor 4-like 1	2.09
272	NR_003015	SNORA53	small nucleolar RNA, H/ACA box 53	2.09
273	NM_001256385	LRRC39	leucine rich repeat containing 39	2.09
274	NM_002463	MX2	myxovirus (influenza virus) resistance 2 (mouse)	2.09
275	OTTHUMT0000041677 8	RP11-809H16.4	novel transcript, antisense to NOX5	2.09
276	OTTHUMT0000004858 9	RP11-167P22.3	novel transcript	2.09
277	ENST00000305623	AKR1C7P	aldo-keto reductase family 1, member C7, pseudogene	2.09
278	XM_005275671	LOC100294341	ADP-ribosylation factor-like protein 17-like	2.08
279	ENST00000459054	RNU7-63P	RNA, U7 small nuclear 63 pseudogene	2.08
280	NM_004126	GNG11	guanine nucleotide binding protein (G protein), gamma 11	2.08
281	ENST00000490242	ITGBL1	integrin, beta-like 1 (with EGF-like repeat domains)	2.08
282	NM_001178096	F3	coagulation factor III (thromboplastin, tissue factor)	2.08
283	NM_153267	MAMDC2	MAM domain containing 2	2.08
284	XR_112646	LOC100506253	uncharacterized LOC100506253	2.08
285	NM_001199784	SDCBP2	syndecan binding protein (syntenin) 2	2.08
286	NM_002205	ITGA5	integrin, alpha 5 (fibronectin receptor, alpha polypeptide)	2.08
287	ENST00000390482	TRAJ57	T cell receptor alpha joining 57	2.07
288	ENST00000396451	KLRK1 // KLRC4-KLRK1	killer cell lectin-like receptor subfamily K, member 1 // KLRC4-KLRK1 readthrough	2.07
289	ENST00000384112	RNU6-746P	RNA, U6 small nuclear 746, pseudogene	2.07
290	NM_130783	TSPAN18	tetraspanin 18	2.06
291	ENST00000430078	FLJ27255	uncharacterized LOC401281	2.06
292	NR_029503	MIR29A	microRNA 29a	2.06
293	ENST00000459465	RNU7-23P	RNA, U7 small nuclear 23 pseudogene	2.06
294	ENST00000390392	TRBV4-2	T cell receptor beta variable 4-2	2.06
295	XR_429633	FLJ38723	uncharacterized FLJ38723	2.05
296	NM_001114173	CTSC	cathepsin C	2.05
297	NM_000710	BDKRB1	bradykinin receptor B1	2.05
298	ENST00000364923	RN7SKP9	RNA, 7SK small nuclear pseudogene 9	2.05
299	XR_424455	LOC102724065	uncharacterized LOC102724065	2.05

300	OTTHUMT00000366716	CTD-2066L21.2	putative novel transcript	2.05
301	NM_001078175	SLC29A1	solute carrier family 29 (equilibrative nucleoside transporter), member 1	2.04
302	NR_026713	FAM182A	family with sequence similarity 182, member A	2.04
303	ENST00000390952	RNU6-124P	RNA, U6 small nuclear 124, pseudogene	2.04
304	ENST00000410290	RNU2-17P	RNA, U2 small nuclear 17, pseudogene	2.04
305	NM_006942	SOX15	SRX (sex determining region Y)-box 15	2.04
306	NR_039932	MIR4773-2	microRNA 4773-2	2.04
307	NM_001286655	DLK2	delta-like 2 homolog (Drosophila)	2.04
308	ENST00000384002	RNU6-1126P	RNA, U6 small nuclear 1126, pseudogene	2.03
309	OTTHUMT00000412980	RP11-409I10.2	novel transcript, antisense to SLC35F4	2.03
310	OTTHUMT00000331148	AC073409.1	novel transcript	2.03
311	NM_198391	FLRT3	fibronectin leucine rich transmembrane protein 3	2.03
312	NR_029689	MIR153-2	microRNA 153-2	2.02
313	NM_001184717	TIPARP	TCDD-inducible poly(ADP-ribose) polymerase	2.02
314	ENST00000517148	RNA5SP402	RNA, 5S ribosomal pseudogene 402	2.02
315	NR_033892	TBC1D3P5	TBC1 domain family, member 3 pseudogene 5	2.02
316	NR_003296	SNORD115-4	small nucleolar RNA, C/D box 115-4	2.02
317	NM_001005519	OR6C68	olfactory receptor, family 6, subfamily C, member 68	2.02
318	NR_040036	LOC100505835	uncharacterized LOC100505835	2.01
319	NM_001165136	HERC6	HECT and RLD domain containing E3 ubiquitin protein ligase family member 6	2.01
320	ENST00000463112	TINAGL1	tubulointerstitial nephritis antigen-like 1	2.01
321	NM_001040874	HIST2H2AA4	histone cluster 2, H2aa4	2.01
322	NM_002261	KLRC3	killer cell lectin-like receptor subfamily C, member 3	2.01
323	NM_015206	KIAA1024	KIAA1024	2.01
324	NR_028089	NXF5	nuclear RNA export factor 5	2.01
325	OTTHUMT00000373091	RP11-115J23.1	novel transcript	2.01
326	NM_153838	GPR115	G protein-coupled receptor 115	2.00
327	OTTHUMT00000255311	LOC124685	myosin, light chain 6, alkali, smooth muscle and non-muscle pseudogene	2.00
328	NR_037494	MIR676	microRNA 676	2.00
329	ENST00000458001	GAS6-AS1	GAS6 antisense RNA 1	2.00
330	OTTHUMT00000366755	CTD-2333M24.1	novel transcript	2.00

331	NM_001007232	CARD17	caspase recruitment domain family, member 17	2.00
332	NM_001031683	IFIT3	interferon-induced protein with tetratricopeptide repeats 3	2.00

Transcripts Down-Regulated

333	ENST00000450890	LOC101929475	uncharacterized LOC101929475	-2.00
334	NM_005236	ERCC4	excision repair cross-complementation group 4	-2.00
335	ENST00000507209	CYP4V2	cytochrome P450, family 4, subfamily V, polypeptide 2	-2.00
336	XR_425486	LOC102724081	uncharacterized LOC102724081	-2.00
337	NR_038450	LOC100130849	phosphorylase kinase, gamma 1 (muscle) pseudogene	-2.00
338	NM_138811	C7orf31	chromosome 7 open reading frame 31	-2.00
339	NM_001160183	ZNF138	zinc finger protein 138	-2.00
340	NM_020653	ZNF287	zinc finger protein 287	-2.01
341	OTTHUMT0000043439 7	AC002310.12	novel transcript, antisense to ZNF747	-2.01
342	NM_000946	PRIM1	primase, DNA, polypeptide 1 (49kDa)	-2.01
343	NM_020531	APMAP	adipocyte plasma membrane associated protein	-2.01
344	NM_005622	ACSM3	acyl-CoA synthetase medium-chain family member 3	-2.01
345	NM_007235	XPOT	exportin, tRNA	-2.01
346	ENST00000408939	TTC30B	tetratricopeptide repeat domain 30B	-2.02
347	OTTHUMT0000032768 1	AC007255.8	novel transcript, antisense to CHN2	-2.02
348	ENST00000428960	PXMP2	peroxisomal membrane protein 2, 22kDa	-2.02
349	NR_038263	SOCS2-AS1	SOCS2 antisense RNA 1	-2.02
350	ENST00000516219	RN7SKP52	RNA, 7SK small nuclear pseudogene 52	-2.02
351	NM_001142560	RRNAD1	ribosomal RNA adenine dimethylase domain containing 1	-2.02
352	NM_024514	CYP2R1	cytochrome P450, family 2, subfamily R, polypeptide 1	-2.02
353	NM_001130991	HYOU1	hypoxia up-regulated 1	-2.02
354	ENST00000384318	RNU6-532P	RNA, U6 small nuclear 532, pseudogene	-2.02
355	NR_023382	ZNF815P	zinc finger protein 815, pseudogene	-2.02
356	OTTHUMT0000040982 4	RP11-317N8.5	novel transcript, antisense to BRMS1L	-2.02
357	OTTHUMT0000005168 8	RP11-390F4.6	novel transcript	-2.02
358	ENST00000363050	RNU4-44P	RNA, U4 small nuclear 44, pseudogene	-2.02
359	OTTHUMT0000036771 7	CTD-2203A3.1	novel transcript	-2.03
360	ENST00000365242	RNU6-690P	RNA, U6 small nuclear 690, pseudogene	-2.03
361	ENST00000363074	RNU6-653P	RNA, U6 small nuclear 653, pseudogene	-2.03

362	NR_120647	LOC101928913	uncharacterized LOC101928913	-2.03
363	OTTHUMT00000375803	RP11-855C21.1	putative novel transcript	-2.03
364	NM_001193453	TMEM116	transmembrane protein 116	-2.03
365	XR_431295	LOC102724329	uncharacterized LOC102724329	-2.03
366	ENST00000362969	RNA5SP150	RNA, 5S ribosomal pseudogene 150	-2.04
367	NM_001143850	TCTN2	tectonic family member 2	-2.04
368	NM_001127493	ANK2	ankyrin 2, neuronal	-2.04
369	NM_001010887	ACER2	alkaline ceramidase 2	-2.04
370	NR_003339	SNORD116-25	small nucleolar RNA, C/D box 116-25	-2.04
371	ENST00000433764	MMP24-AS1	MMP24 antisense RNA 1	-2.04
372	NM_144650	ADHFE1	alcohol dehydrogenase, iron containing, 1	-2.04
373	NM_183242	BTBD8	BTB (POZ) domain containing 8	-2.04
374	NM_001011878	DEFB121	defensin, beta 121	-2.05
375	OTTHUMT00000365278	RP11-364L4.3	novel transcript	-2.05
376	ENST00000515893	RNU6-857P	RNA, U6 small nuclear 857, pseudogene	-2.05
377	NR_039786	MIR4643	microRNA 4643	-2.05
378	ENST00000365516	RNA5SP211	RNA, 5S ribosomal pseudogene 211	-2.05
379	OTTHUMT00000407347	RP11-219B4.6	Orphan protein	-2.05
380	NR_030312	MIR548A1	microRNA 548a-1	-2.05
381	NR_036087	MIR3136	microRNA 3136	-2.05
382	ENST00000313940	OR5AN1	olfactory receptor, family 5, subfamily AN, member 1	-2.05
383	ENST00000529615	CCDC34	coiled-coil domain containing 34	-2.05
384	NM_145020	CCDC11	coiled-coil domain containing 11	-2.06
385	ENST00000474908	HINT2	histidine triad nucleotide binding protein 2	-2.06
386	NM_001018056	VLDLR	very low density lipoprotein receptor	-2.07
387	NR_027301	LINC00662	long intergenic non-protein coding RNA 662	-2.07
388	ENST00000419909	TEX35	testis expressed 35	-2.07
389	NM_015192	PLCB1	phospholipase C, beta 1 (phosphoinositide-specific)	-2.07
390	NM_001167911	VEPH1	ventricular zone expressed PH domain-containing 1	-2.07
391	NR_109990	LOC100507459	uncharacterized LOC100507459	-2.07
392	ENST00000390416	TRBJ2-4	T cell receptor beta joining 2-4	-2.07
393	ENST00000558368	LOC101928907	uncharacterized LOC101928907	-2.08
394	NM_001143957	GPR63	G protein-coupled receptor 63	-2.08
395	NM_001278666	RAB23	RAB23, member RAS oncogene family	-2.08

396	NM_001030287	ATF3	activating transcription factor 3	-2.08
397	NR_036241	MIR4279	microRNA 4279	-2.08
398	NM_003533	HIST1H3I	histone cluster 1, H3i	-2.09
399	ENST00000410695	RNU2-37P	RNA, U2 small nuclear 37, pseudogene	-2.09
400	NR_110613	TAF1A-AS1	TAF1A antisense RNA 1	-2.09
401	NM_001166243	FHIT	fragile histidine triad	-2.09
402	OTTHUMT0000037053 6	AC008592.7	novel transcript	-2.09
403	ENST00000516937	RNU6-273P	RNA, U6 small nuclear 273, pseudogene	-2.10
404	OTTHUMT0000002541 1	RP11-342H21.2	putative novel transcript	-2.10
405	ENST00000568584 // ENST00000568584	TUBB8 // TUBBP5	tubulin, beta 8 class VIII // tubulin, beta pseudogene 5	-2.10
406	NM_003546	HIST1H4L	histone cluster 1, H4l	-2.10
407	NM_013391	DMGDH	dimethylglycine dehydrogenase	-2.11
408	AY743714	CT45A6	cancer/testis antigen family 45, member A6	-2.11
409	NR_002318	CATSPER2P1	cation channel, sperm associated 2 pseudogene 1	-2.11
410	NM_001261399	PRB4	proline-rich protein BstNI subfamily 4	-2.12
411	NR_047527	KGFLP1	fibroblast growth factor 7 pseudogene	-2.13
412	ENST00000511103	ASN5P4	asparagine synthetase pseudogene 4	-2.13
413	OTTHUMT0000038103 5	RP11-431J17.1	novel transcript	-2.13
414	ENST00000591702 // ENST00000591702	LOC100287934 // LOC101930657	uncharacterized LOC100287934 // uncharacterized LOC101930657	-2.14
415	OTTHUMT0000033183 6	AC097721.2	novel transcript	-2.14
416	NM_001605	AARS	alanyl-tRNA synthetase	-2.14
417	ENST00000391258	RNU6-630P	RNA, U6 small nuclear 630, pseudogene	-2.14
418	NR_120623	TCERG1L-AS1	TCERG1L antisense RNA 1	-2.15
419	ENST00000363576	RNU6-1085P	RNA, U6 small nuclear 1085, pseudogene	-2.16
420	NM_022773	LMF1	lipase maturation factor 1	-2.16
421	ENST00000263382	ASF1B	anti-silencing function 1B histone chaperone	-2.16
422	NM_001024680	FBXO48	F-box protein 48	-2.17
423	OTTHUMT0000032360 8	AC016730.1	novel transcript	-2.17
424	NR_033297	CCDC163P	coiled-coil domain containing 163, pseudogene	-2.17
425	ENST00000427169	LOC101929325	uncharacterized LOC101929325	-2.17
426	NR_038953	LOC100507564	uncharacterized LOC100507564	-2.17

427	NM_153705	KDELC2	KDEL (Lys-Asp-Glu-Leu) containing 2	-2.18
428	ENST00000458982	RNU7-152P	RNA, U7 small nuclear 152 pseudogene	-2.18
429	XR_250218	DKFZP434F142	uncharacterized DKFZp434F142	-2.19
430	XR_251551	LOC101928803	uncharacterized LOC101928803	-2.19
431	NM_001199563	BVES	blood vessel epicardial substance	-2.20
432	ENST00000364189	RNA5SP336	RNA, 5S ribosomal pseudogene 336	-2.20
433	NM_017983	WIPI1	WD repeat domain, phosphoinositide interacting 1	-2.20
434	NM_001159280	ADAL	adenosine deaminase-like	-2.21
435	ENST00000391038	RNU6-739P	RNA, U6 small nuclear 739, pseudogene	-2.22
436	NM_002047	GARS	glycyl-tRNA synthetase	-2.22
437	ENST00000364314	RNU4-68P	RNA, U4 small nuclear 68, pseudogene	-2.22
438	NM_001113434	C17orf51	chromosome 17 open reading frame 51	-2.22
439	NM_001005464	HIST2H3A	histone cluster 2, H3a	-2.22
440	ENST00000410429	RNU6-1186P	RNA, U6 small nuclear 1186, pseudogene	-2.22
441	NM_001278590	LIAS	lipoic acid synthetase	-2.23
442	OTTHUMT0000041776 2	RP11-463I20.2	novel transcript	-2.23
443	NM_001029989	KIAA0101	KIAA0101	-2.23
444	NM_016262	TUBE1	tubulin, epsilon 1	-2.23
445	NM_001082619	PIH1D2	PIH1 domain containing 2	-2.24
446	ENST00000410910	RN7SKP168	RNA, 7SK small nuclear pseudogene 168	-2.24
447	NM_018930	PCDHB10	protocadherin beta 10	-2.24
448	NR_003328	SNORD116-13	small nucleolar RNA, C/D box 116-13	-2.24
449	ENST00000231136	PCDHB6	protocadherin beta 6	-2.24
450	NR_024259	PCAT18	prostate cancer associated transcript 18 (non-protein coding)	-2.24
451	NR_003268	CTAGE10P	CTAGE family, member 10, pseudogene	-2.24
452	ENST00000384485	RNU6-102P	RNA, U6 small nuclear 102, pseudogene	-2.25
453	OTTHUMT0000009615 8	RP11-261C10.1	novel transcript	-2.25
454	NM_014652	IPO13	importin 13	-2.26
455	OTTHUMT0000036526 1	RP11-21G20.3	novel transcript	-2.26
456	NM_032898	CEP19	centrosomal protein 19kDa	-2.26
457	NM_022840	METTL4	methyltransferase like 4	-2.26
458	NR_024494	BCRP3	breakpoint cluster region pseudogene 3	-2.26
459	NR_033405	CTSLP8	cathepsin L pseudogene 8	-2.27
460	NM_000203	IDUA	iduronidase, alpha-L-	-2.27

461	ENST00000363506	RNU5E-10P	RNA, U5E small nuclear 10, pseudogene	-2.28
462	ENST00000363850	RNU6-931P	RNA, U6 small nuclear 931, pseudogene	-2.28
463	ENST00000411108	RN7SKP144	RNA, 7SK small nuclear pseudogene 144	-2.28
464	NM_000107	DDB2	damage-specific DNA binding protein 2, 48kDa	-2.29
465	OTTHUMT0000043148 7	RP11-196G18.22	novel transcript sense overlapping HIST2H2AA3	-2.29
466	NR_122038	C19orf82	chromosome 19 open reading frame 82	-2.30
467	NR_073431	TMEM9B-AS1	TMEM9B antisense RNA 1	-2.30
468	ENST00000543276	CD163L1	CD163 molecule-like 1	-2.30
469	ENST00000362494	RNA5SP327	RNA, 5S ribosomal pseudogene 327	-2.31
470	NR_036461	HIST2H2BC	histone cluster 2, H2bc (pseudogene)	-2.31
471	OTTHUMT0000010047 5	RP11-458D21.1	novel transcript	-2.32
472	NM_001393	ECM2	extracellular matrix protein 2, female organ and adipocyte specific	-2.33
473	ENST00000313064	LINC00471	long intergenic non-protein coding RNA 471	-2.33
474	OTTHUMT0000036330 2	RP11-297P16.4	novel transcript	-2.34
475	NR_003098	SNHG1	small nucleolar RNA host gene 1 (non-protein coding)	-2.34
476	OTTHUMT0000000124 9	RP11-115A15.1	putative novel transcript	-2.34
477	ENST00000391152	RNA5SP286	RNA, 5S ribosomal pseudogene 286	-2.35
478	OTTHUMT0000017105 5	AP001255.2	novel transcript	-2.35
479	NM_030572	SPX	spexin hormone	-2.36
480	ENST00000454060	LINC00571	long intergenic non-protein coding RNA 571	-2.37
481	OTTHUMT0000035408 6	RP11-231E6.1	novel transcript	-2.38
482	NM_003510	HIST1H2AK	histone cluster 1, H2ak	-2.38
483	NM_001025104	CSN1S1	casein alpha s1	-2.38
484	XR_428198	LOC101929381	uncharacterized LOC101929381	-2.38
485	NM_012088	PGLS	6-phosphogluconolactonase	-2.38
486	ENST00000402318	ANKRD20A7P	ankyrin repeat domain 20 family, member A7, pseudogene	-2.38
487	NM_016361	ACP6	acid phosphatase 6, lysophosphatidic	-2.39
488	NM_001287499	IQCE	IQ motif containing E	-2.40
489	ENST00000362979	RNU5F-6P	RNA, U5F small nuclear 6, pseudogene	-2.40
490	ENST00000423112	LOC101929302	uncharacterized LOC101929302	-2.41
491	XR_244204	LOC101927932	uncharacterized LOC101927932	-2.42
492	NM_031459	SESN2	sestrin 2	-2.43

493	NM_003532	HIST1H3E	histone cluster 1, H3e	-2.44
494	NM_005332	HBZ	hemoglobin, zeta	-2.44
495	NR_104137	ARMC2-AS1	ARMC2 antisense RNA 1	-2.44
496	NR_001281	PCDHB18	protocadherin beta 18 pseudogene	-2.45
497	ENST00000398117	BCL2	B-cell CLL/lymphoma 2	-2.46
498	NM_001085451	LNP1	leukemia NUP98 fusion partner 1	-2.49
499	NM_018039	KDM4D	lysine (K)-specific demethylase 4D	-2.49
500	NR_037419	MIR3646	microRNA 3646	-2.49
501	ENST00000363093	RNU6-605P	RNA, U6 small nuclear 605, pseudogene	-2.49
502	NR_030308	MIR582	microRNA 582	-2.50
503	AK127225	LOC100130027	uncharacterized LOC100130027	-2.52
504	ENST00000364270	RN7SKP128	RNA, 7SK small nuclear pseudogene 128	-2.53
505	NM_001039567	RPS4Y2	ribosomal protein S4, Y-linked 2	-2.53
506	NM_024094	DSCC1	DNA replication and sister chromatid cohesion 1	-2.54
507	NM_001166356	SHMT2	serine hydroxymethyltransferase 2 (mitochondrial)	-2.55
508	NR_003539	LOC643486	bromodomain, testis-specific pseudogene	-2.56
509	ENST00000217964	TBL1X	transducin (beta)-like 1X-linked	-2.56
510	NR_037665	LOC100506548	uncharacterized LOC100506548	-2.56
511	ENST00000571963	ZNF213-AS1	ZNF213 antisense RNA 1 (head to head)	-2.57
512	NM_001165993	GDPD1	glycerophosphodiester phosphodiesterase domain containing 1	-2.57
513	OTTHUMT0000041895 7	CTD-2339L15.3	novel transcript sense intronic to CASC5	-2.58
514	NR_033896	FLJ46906	uncharacterized LOC441172	-2.58
515	ENST00000410191	RNA5SP390	RNA, 5S ribosomal pseudogene 390	-2.59
516	NM_001254	CDC6	cell division cycle 6	-2.64
517	ENST00000410712	RNU2-16P	RNA, U2 small nuclear 16, pseudogene	-2.66
518	OTTHUMT0000008308 2	XX-FW81066F1.2	putative novel transcript	-2.70
519	uc002wdn.3	TRIB3	tribbles pseudokinase 3	-2.71
520	NR_003198	SNORD114-6	small nucleolar RNA, C/D box 114-6	-2.71
521	ENST00000517133	RNA5SP290	RNA, 5S ribosomal pseudogene 290	-2.72
522	NM_175065	HIST2H2AB	histone cluster 2, H2ab	-2.72
523	NM_018932	PCDHB12	protocadherin beta 12	-2.74
524	NM_012360	OR1F1	olfactory receptor, family 1, subfamily F, member 1	-2.76
525	NM_001040437	C6orf48	chromosome 6 open reading frame 48	-2.81
526	NR_003710	SNORA11C	small nucleolar RNA, H/ACA box 11C	-2.83
527	ENST00000364507	RNY4P23	RNA, Ro-associated Y4 pseudogene 23	-2.86

528	ENST00000517107	RNU6-762P	RNA, U6 small nuclear 762, pseudogene	-2.87
529	NM_004184	WARS	tryptophanyl-tRNA synthetase	-2.89
530	NM_003038	SLC1A4	solute carrier family 1 (glutamate/neutral amino acid transporter), member 4	-2.89
531	NR_030351	MIR620	microRNA 620	-2.97
532	NM_021154	PSAT1	phosphoserine aminotransferase 1	-3.01
533	OTTHUMT00000051732	RP11-3L8.3	novel transcript	-3.04
534	ENST00000362585	RNA5SP191	RNA, 5S ribosomal pseudogene 191	-3.04
535	ENST00000572856	DLGAP1-AS2	DLGAP1 antisense RNA 2	-3.10
536	NR_039762	MIR548AM	microRNA 548am	-3.15
537	ENST00000518311	ASNSP1	asparagine synthetase pseudogene 1	-3.18
538	XR_428603	LOC100506119	uncharacterized LOC100506119	-3.20
539	ENST00000384709	RNU6-541P	RNA, U6 small nuclear 541, pseudogene	-3.26
540	NM_004990	MARS	methionyl-tRNA synthetase	-3.29
541	ENST00000446533	CHAC1	glutathione-specific gamma-glutamylcyclotransferase 1	-3.35
542	NM_001178075	ASNS	asparagine synthetase (glutamine-hydrolyzing)	-3.43
543	NR_036093	MIR548T	microRNA 548t	-3.46
544	NM_014331	SLC7A11	solute carrier family 7 (anionic amino acid transporter light chain, xc-system), member 11	-3.51
545	AK091688	LOC101927468	uncharacterized LOC101927468	-3.70
546	NM_052966	FAM129A	family with sequence similarity 129, member A	-3.79
547	ENST00000410582	RN7SKP223	RNA, 7SK small nuclear pseudogene 223	-3.81
548	NM_001112724	STK32A	serine/threonine kinase 32A	-3.87
549	NM_006623	PHGDH	phosphoglycerate dehydrogenase	-4.06
550	NM_001024845	SLC6A9	solute carrier family 6 (neurotransmitter transporter, glycine), member 9	-4.65
551	NM_001034173	ALDH1L2	aldehyde dehydrogenase 1 family, member L2	-5.26
552	AK023809	LOC284561	uncharacterized LOC284561	-5.39
553	NM_001130675	CLGN	calmegin (testis-specific ER chaperone possibly involved in spermatogenesis)	-10.48