

Supplemental Table S2		Genes Elevated in VLPO at ZT6		
Affymetrix ID	Gene Symbol	Description	Unigene	Fold Change
92803_at	Prl	prolactin	Mm.1270	17.98
94700_at	Cga	glycoprotein hormones, alpha subunit	Mm.1361	16.4
162502_f_at	Cga	glycoprotein hormones, alpha subunit	Mm.53978	13.03
97741_at	Tshb	thyroid stimulating hormone, beta subunit	Mm.4001	9.6
92783_at	GH	growth hormone	Mm.1240	8.59
94026_at	Pomc1	pro-opiomelanocortin-alpha	Mm.21878	7.34
160841_at	Dbp	D site albumin promoter binding protein	Mm.3459	2.85
98967_at	Fabp7	fatty acid binding protein 7, brain	Mm.3644	2.69
101737_at	FSH-b	follicle stimulating hormone beta	Mm.57060	2.47
101738_at	LH	luteinizing hormone beta	Mm.57061	2.4
97692_at	Htr2c	5-hydroxytryptamine (serotonin) receptor 2C	Mm.378	2.33
161003_at	Kif3b	kinesin family member 3b	Mm.27973	2.32
97474_r_at	Ptn	pleiotrophin	Mm.3063	2.26
101946_at	Lypla1	lysophospholipase 1	Mm.95696	2.19
160862_at	Ptp4a3	protein tyrosine phosphatase 4a3	Mm.4124	2.18
97760_at	Mtap2	microtubule-associated protein 2	Mm.413	2.13
95418_at	1190017B18Rik	RIKEN 1190017B18 gene	Mm.24348	1.98
93212_at	Hspc121-pending	butyrate-induced transcript 1	Mm.57023	1.91
104249_g_at	0610038P07Rik	RIKEN 0610038P07 gene	Mm.28345	1.9
101524_at	2610209F03Rik	RIKEN 2610209F03 gene	Mm.86187	1.87
96679_at	Dnajb9	DnaJ (Hsp40) homolog, subfamily B, member 9	Mm.27432	1.87
101629_s_at	Stx1b2	syntaxin 1B2	Mm.6224	1.81
98872_at	Ugt8	UDP-glucuronosyltransferase 8	Mm.5160	1.79
98490_at	2610313E07Rik	RIKEN 2610313E07 gene	Mm.35596	1.78
98864_s_at	Grik2	glutamate receptor, ionotropic, kainate 2 (beta 2)	Mm.5135	1.78
95031_at	1110059H15Rik	RIKEN 1110059H15 gene	Mm.27520	1.77
92502_at	Zac1	zinc finger protein regulator of apoptosis and cell cycle arrest	Mm.42200	1.75
100925_at	2700089E24Rik	RIKEN 2700089E24 gene	Mm.608	1.74
98287_at	Dpp6	dipeptidylpeptidase 6	Mm.42078	1.74
96433_at	Usp29	ubiquitin specific protease 29	Mm.25177	1.74
93005_at	Syt1	synaptotagmin 1	Mm.5101	1.73
92673_at	Sh3d2a	SH3 domain protein 2A	Mm.4493	1.73
94470_i_at	1810010K08Rik	RIKEN 1810010K08 gene	Mm.28851	1.72
95606_at	Nsap1l-pending	NS1-associated protein 1-like	Mm.27972	1.72
95800_s_at	Zfa	zinc finger protein, autosomal	Mm.87837	1.72
92816_r_at	Eif4a1	eukaryotic translation initiation factor 4A1	Mm.12858	1.69
101975_at	Dlk1	delta-like 1 homolog (Drosophila)	Mm.95633	1.69
92183_at	Dtna	dystrobrevin alpha	Mm.3386	1.68
161784_f_at	Star	steroidogenic acute regulatory protein	Mm.90785	1.68
98458_at	Birc5	baculoviral IAP repeat-containing 5	Mm.34757	1.64
103202_at	Gbp3	guanylate nucleotide binding protein 3	Mm.1909	1.62
99889_at	Smstr5	somatostatin receptor type 5	Mm.7985	1.61
99048_g_at	Mobp	myelin-associated oligodendrocytic basic protein	Mm.3915	1.59
98112_r_at	Lap3	leucine aminopeptidase 3	Mm.34832	1.59
161557_at	Mnat1	menage a trois 1	Mm.66921	1.58
94076_i_at	Rpn2	ribophorin II	Mm.22130	1.56

92484_at	Hivep2	human immunodeficiency virus type I enhancer binding protein 2	Mm.42157	1.54
104115_at	EST AA409398	EST AA409398	Mm.21963	1.54
160588_at	2610109I01Rik	RIKEN 2610109I01 gene	Mm.11787	1.54
93632_g_at	Lbcl1	lymphoid blast crisis-like 1	Mm.7634	1.54
93214_at	Camk2d	calcium/calmodulin-dependent protein kinase II, delta	Mm.57082	1.53
104627_at	5730450N06Rik	RIKEN 5730450N06 gene	Mm.24288	1.52
97989_at	Cam-Prp	protein phosphatase 3, catalytic subunit, beta isoform	Mm.3150	1.52
94463_at	Clcn3	chloride channel 3	Mm.28842	1.52
92272_at	EST AA408306	EST AA408306	Mm.3609	1.52
92607_at	Mest	mesoderm specific transcript	Mm.1089	1.52
99367_at	5530600P05Rik	RIKEN 5530600P05 gene	Mm.56829	1.52
93857_at	Kpna3	karyopherin (importin) alpha 3	Mm.87674	1.52
92736_at	Slc7a2	solute carrier family 7 (cationic amino acid transporter, y+ system), member 2	Mm.4676	1.51
160901_at	Fos	FBJ osteosarcoma oncogene	Mm.5043	1.5
94913_at	G3bp2	Ras-GTPase-activating protein (GAP<120>) SH3-domain binding protein 2	Mm.2411	1.5
94055_at	Ctnn	cortactin	Mm.22024	1.5
95563_at	Arih1	ariadne ubiquitin-conjugating enzyme E2 binding protein homolog 1 (Drosophila)	Mm.27783	1.5
97824_at	2410130M07Rik	RIKEN 2410130M07 gene	Mm.28203	1.49
100372_at	Gabrg1	gamma-aminobutyric acid (GABA-A) receptor, subunit gamma 1	Mm.88838	1.49
104005_at	B4galt2	UDP-Gal:betaGlcNAc beta 1,4- galactosyltransferase, polypeptide 2	Mm.26693	1.49
92938_at	Gabra1	gamma-aminobutyric acid (GABA-A) receptor, subunit alpha 1	Mm.4914	1.49
104508_at	EST AI463083	EST AI463083	Mm.30805	1.49
94068_at	Rps19	ribosomal protein S19	Mm.22103	1.48
101362_at	Mapk9	mitogen activated protein kinase 9	Mm.68933	1.48
100366_at	Casp9	caspase 9	Mm.88829	1.48
97340_at	Sart3	squamous cell carcinoma antigen recognized by T-cells 3	Mm.29594	1.48
160936_at	1810049E02Rik	RIKEN 1810049E02 gene	Mm.89875	1.47
160955_at	2010309E21Rik	RIKEN 2010309E21 gene	Mm.209	1.47
102342_at	Nsf	N-ethylmaleimide sensitive fusion protein	Mm.1117	1.47
101889_s_at	Rora	RAR-related orphan receptor alpha	Mm.8858	1.47
101837_g_at	Ppm1b	protein phosphatase 1B, magnesium dependent, beta isoform	Mm.849	1.47
96044_at	Bcl2l10	Bcl2-like 10	Mm.25988	1.47
102696_s_at	Pitpnb	phosphatidylinositol transfer protein, beta	Mm.14147	1.46
93818_g_at	Sid394p	coated vesicle membrane protein	Mm.21507	1.46
98762_f_at	Zfp97	zinc finger protein 97	Mm.4596	1.46
101295_s_at	Icln	chloride channel regulator Icln (Icln) pseudogene	Mm.56919	1.46
92890_at	Kif1a	kinesin heavy chain member 1A	Mm.4762	1.45
101508_at	Khdrbs1	KH domain containing, RNA binding, signal transduction associated 1	Mm.8256	1.45
100508_at	Mfng	manic fringe homolog (Drosophila)	Mm.517	1.45
93895_s_at	Itpr1	inositol 1,4,5-triphosphate receptor 1	Mm.89190	1.45
162080_f_at	2900008M13Rik	RIKEN 2900008M13 gene	Mm.96009	1.45
100569_at	Anxa2	annexin A2	Mm.584	1.45
102773_at	Cals1	carbonic anhydrase-like sequence 1	Mm.1336	1.44
102959_at	Tle4	transducin-like enhancer of split 4, E(spl) homolog (Drosophila)	Mm.17915	1.44

94135_at	Tcfcp2	transcription factor CP2	Mm.1139	1.44
99076_at	Thra	thyroid hormone receptor alpha	Mm.4015	1.44
104179_at	EST AI788669	EST AI788669	Mm.27308	1.43
95419_at	H1f0	H1 histone family, member 0	Mm.24350	1.43
93789_s_at	Sin3b	transcriptional regulator, SIN3B (yeast)	Mm.2137	1.43
93831_at	Nono	non-POU-domain-containing, octamer binding protein	Mm.21559	1.43
98004_at	Pkia	protein kinase inhibitor, alpha	Mm.3193	1.43
99628_at	Sfrs5	splicing factor, arginine/serine-rich 5 (SRp40, HRS)	Mm.43331	1.43
95712_at	Orc6l	origin recognition complex, subunit 6-like (S. cerevisiae)	Mm.29709	1.43
94471_r_at	1810010K08Rik	RIKEN 1810010K08 gene	Mm.28851	1.43
100441_s_at	Ank1	ankyrin 1, erythroid	Mm.4789	1.42
160098_s_at	Cryab	crystallin, alpha B	Mm.178	1.42
160605_s_at	4833420O05Rik	RIKEN 4833420O05 gene	Mm.13437	1.42
97227_at	Gna12	guanine nucleotide binding protein, alpha 12	Mm.27773	1.42
96587_at	Arf3	ADP-ribosylation factor 3	Mm.30412	1.42
95848_at	1810005K14Rik	RIKEN 1810005K14 gene	Mm.24888	1.42
97130_at	Ate1	arginine-tRNA-protein transferase 1	Mm.34599	1.42
99378_f_at	0610037M15Rik	RIKEN 0610037M15	Mm.56926	1.42
97500_g_at	Fhl1	four and a half LIM domains 1	Mm.3126	1.41
104583_at	2400007G07Rik	RIKEN 2400007G07 gene	Mm.23975	1.41
95289_r_at	EST AI848406	EST AI848406	Mm.1882	1.41
93921_at	Bat 3	HLA-B-associated transcript 3	Mm.89855	1.41
97312_at	Cd164	CD164 antigen	Mm.28083	1.41
95785_s_at	Rab7	RAB7, member RAS oncogene family	Mm.87807	1.41
94361_at	Ddx21	DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 21 (RNA helicase II/Gu)	Mm.25264	1.41
100065_r_at	Gja1	gap junction membrane channel protein alpha 1	Mm.4504	1.41
92384_at	Xpa	xeroderma pigmentosum, complementation group A	Mm.4049	1.4
101198_at	Cplx1	complexin 1	Mm.5195	1.4
93664_at	Atp1b2	ATPase, Na ⁺ /K ⁺ transporting, beta 2 polypeptide	Mm.8041	1.4
93909_f_at	none	Intracisternal A particles, Thbd	Mm.89480	1.4
101465_at	Stat1	signal transducer and activator of transcription 1	Mm.8249	1.4

Genes Elevated in VLPO at ZT18

Affymetrix ID	Gene Symbol	Description	Unigene	Fold Change
161435_i_at	1810013D10Rik	RIKEN 1810013D10 gene	Mm.62231	2.94
104333_at	G7e-pending	viral envelope like protein	Mm.22506	2.68
93694_at	Per2	period homolog 2 (Drosophila)	Mm.8471	2.2
99435_at	Fgf7	fibroblast growth factor 7	Mm.57177	2.18
160068_at	Sap30	sin3 associated polypeptide, 30kD	Mm.118	2.12
100946_at	Hsp70-1	heat shock protein, 70 kDa 1	Mm.6388	2.03
97253_at	2810411G23Rik	RIKEN 2810411G23 gene	Mm.27872	1.87
102758_at	Rbm6	RNA binding motif protein 6	Mm.12931	1.83
93046_at	1700030K07Rik	RIKEN 1700030K07 gene	Mm.1521	1.74
99816_at	Hsp70-2	heat shock protein, 70 kDa 2	Mm.57245	1.68
92877_at	Tgfb1	transforming growth factor, beta induced, 68 kDa	Mm.14455	1.68
96254_at	Dnajb1	DnaJ (Hsp40) homolog, subfamily B, member 1	Mm.2982	1.67
93017_at	Sdcbp	syntenin (syndecan binding protein)	Mm.14744	1.64
99513_at	Pla2g4a	phospholipase A2, group IVA (cytosolic, calcium-dependent)	Mm.4186	1.64
100326_f_at	Klra8	killer cell lectin-like receptor, subfamily A, member 8	Mm.87782	1.63
92977_s_at	Hmx3	H6 homeo box 3	Mm.5016	1.62
95466_at	Clp-pending	coactosin-like protein	Mm.24758	1.62
100905_at	1700056O17Rik	RIKEN 1700056O17 gene	Mm.5772	1.61
160254_at	1110036C17Rik	RIKEN 1110036C17 gene	Mm.27846	1.6
101631_at	Sox11	SRY-box containing gene 11	Mm.6238	1.6
103344_at	Dnajc1	DnaJ (Hsp40) homolog, subfamily C, member 1	Mm.18237	1.6
99903_at	Dmp1	dentin matrix protein 1	Mm.8011	1.59
102101_f_at	Plp	proteolipid protein (myelin)	Mm.42440	1.55
95617_at	Rbl2	retinoblastoma-like 2	Mm.28027	1.55
95564_at	EST AU018638	EST AU018638	Mm.27785	1.55
102812_i_at	5730525G14Rik	RIKEN 5730525G14 gene	Mm.14253	1.54
92531_at	EST AI844545	EST AI844545	Mm.43345	1.53
99587_at	Rab7	RAB7, member RAS oncogene family	Mm.4268	1.53
95069_at	EST AA940430	EST AA940430	Mm.29187	1.53
98767_at	Yy1	YY1 transcription factor	Mm.463	1.52
98394_at	Dlx1	distal-less homeobox 1	Mm.4543	1.51
161480_i_at	Rplp1	ribosomal protein, large, P1	Mm.64084	1.5
98961_at	B3galt3	UDP-Gal:betaGlcNAc beta 1,3-galactosyltransferase, polypeptide 3	Mm.36174	1.5
97919_at	1110021E09Rik	RIKEN 1110021E09 gene	Mm.30132	1.5
99577_at	Kitl	kit ligand	Mm.4235	1.5
92918_at	F7	coagulation factor VII	Mm.4827	1.5
99030_at	Il7r	interleukin 7 receptor	Mm.389	1.5
94985_at	Nsap1-pending	NS1-associated protein 1	Mm.27303	1.49
94203_at	ESTs (Mm.13144)		Mm.13144	1.49
92672_at	5530400H20Rik	RIKEN 5530400H20 gene	Mm.44906	1.49
95437_at	Cop1-pending	constitutive photomorphogenic protein 1 (Arabidopsis)	Mm.24538	1.48
95462_at	1110001I24Rik	RIKEN 1110001I24 gene	Mm.24745	1.48

102866_at	Tead4	TEA domain family member 4	Mm.14774	1.48
96651_at	Smарce1(Baf57)	SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily e, member 1	Mm.27330	1.47
160330_at	Chordc1	cysteine and histidine-rich domain (CHORD)-containing, zinc-binding protein 1	Mm.29138	1.47
160877_at	Ogn	osteoglycin	Mm.4258	1.47
96598_at	none	EST Mus musculus cDNA, 5' end clone IMAGE-596253	Mm.309	1.47
96758_s_at	none	EST clone MGC:6302 IMAGE:2655022, mRNA, complete cds	Mm.28994	1.46
104114_at	2310050N11Rik	RIKEN 2310050N11 gene	Mm.21954	1.46
104678_at	Gas7	growth arrest specific 7	Mm.3257	1.46
93669_f_at	Sox11	SRY-box containing gene 11	Mm.80595	1.45
160262_at	Mtch2-pending	mitochondrial carrier homolog 2	Mm.28023	1.45
160343_at	2310020D23Rik	RIKEN 2310020D23 gene	Mm.29452	1.45
104605_at	EST AI115388	EST AI115388	Mm.24126	1.45
160783_at	none	Similar to KIAA0831 protein, clone IMAGE:4950756, mRNA, partial cds	Mm.28446	1.44
93178_at	Ngef	neuronal guanine nucleotide exchange factor	Mm.539	1.44
103791_at	Narg1	NMDA receptor-regulated gene 1	Mm.24956	1.44
102046_at	Nssr	neural-salient serine/arginine-rich	Mm.10229	1.44
98515_at	Gtf2e2	general transcription factor IIE, polypeptide 2 (beta subunit, 34kD)	Mm.36088	1.44
96191_at	EST AI852124	EST AI852124	Mm.28512	1.43
97220_at	Dscr2	Down syndrome critical region homolog 2 (human)	Mm.27746	1.43
93210_g_at	Nek4	NIMA (never in mitosis gene a)-related expressed kinase 4	Mm.57013	1.43
103397_at	Hrb	HIV-1 Rev binding protein	Mm.18713	1.43
104352_at	Brd4	bromodomain-containing 4	Mm.22572	1.43
98169_s_at	EST AU020229	EST AU020229	Mm.26206	1.42
161616_f_at	2410012A13Rik	RIKEN 2410012A13 gene	Mm.68896	1.42
101406_at	Sult2b1	sulfotransferase family, cytosolic, 2B, member 1	Mm.7316	1.42
94103_at	Tspy-ps	Testis specific protein-Y encoded, pseudogene	Mm.10106	1.42
100749_at	none	Est Mus musculus cDNA, 3' end clone IMAGE-777914	Mm.3802	1.42
96657_at	Sat	spermidine/spermine N1-acetyl transferase	Mm.2734	1.41
160807_at	Agpat3	1-acylglycerol-3-phosphate O-acyltransferase 3	Mm.29485	1.41
98061_at	1110001K21Rik	RIKEN 1110001K21 gene	Mm.34388	1.41
100457_at	Selel	selectin, endothelial cell, ligand	Mm.488	1.41
161462_r_at	2610005L07Rik	RIKEN 2610005L07 gene	Mm.63173	1.41
100886_f_at	Mrpl45	mitochondrial ribosomal protein L45	Mm.5381	1.4
93497_at	C3	complement component 3	Mm.19131	1.4
160900_at	Gkap42	42 kD cGMP-dependent protein kinase anchoring protein	Mm.5030	1.4
94940_at	Mccc1	methylcrotonoyl-Coenzyme A carboxylase 1 (alpha)	Mm.26925	1.4
95028_r_at	none	Est, Mus musculus cDNA, 3' end clone J0024D07	Mm.27511	1.4
95050_at	Chordc1	cysteine and histidine-rich domain (CHORD)-containing, zinc-binding protein 1	Mm.29138	1.4
160731_at	Rab25	RAB25, member RAS oncogene family	Mm.26994	1.4
94838_r_at	Plf	proliferin	Mm.22777	1.4
102024_at	Ncoa3	nuclear receptor coactivator 3	Mm.1011	1.4

Genes Elevated in SCN at ZT6				
Affymetrix ID	Gene Symbol	Description	Unigene	Fold Change
97760_at	Mtap2	microtubule-associated protein 2	Mm.413	4.85
102572_at	Rasgrf2	RAS protein-specific guanine nucleotide-releasing factor 2	Mm.57233	4.18
160841_at	Dbp	D site albumin promoter binding protein	Mm.3459	3.12
104685_g_at	Grin1	glutamate receptor, ionotropic, NMDA1 (zeta 1)	Mm.3292	3.05
96587_at	Arf3	ADP-ribosylation factor 3	Mm.30412	2.86
93212_at	Hspc121-pending	butyrate-induced transcript 1	Mm.57023	2.73
103968_at	Mid2	midline 2	Mm.25678	2.61
98967_at	Fabp7	fatty acid-binding protein 7, brain	Mm.3644	2.58
97560_at	Psap	prosaposin	Mm.89451	2.53
104249_g_at	0610038P07Rik	RIKEN 0610038P07 gene	Mm.28345	2.42
95418_at	1190017B18Rik	RIKEN 1190017B18 gene	Mm.24348	2.24
92294_at	EST AA408731	EST AA408731	Mm.3727	2.13
102081_at	Rbig1	retinoblastoma inhibiting gene 1	Mm.42093	2.08
94378_at	Rgs16	regulator of G-protein signaling 16	Mm.2555	2.07
95031_at	1110059H15Rik	RIKEN 1110059H15 gene	Mm.27520	2.02
102259_at	Ywhag	3-monooxygenase/tryptophan 5-monooxygenase activation protein, gamma	Mm.10802	2.02
97948_at	Rb1	retinoblastoma 1	Mm.304	1.99
92890_at	Kif1a	kinesin heavy chain member 1A	Mm.4762	1.97
103569_at	Sh3glb1	SH3-domain GRB2-like B1; endophilin	Mm.19281	1.92
94922_i_at	D8Ertd69e	DNA segment, Chr 8, ERATO Doi 69, expressed	Mm.26609	1.87
101837_g_at	Ppm1b	protein phosphatase 1B, magnesium dependent, beta	Mm.849	1.86
97533_at	Fcgrt	Fc receptor, IgG, alpha chain transporter	Mm.3303	1.85
97797_at	2210409M21Rik	RIKEN 2210409M21 gene	Mm.28111	1.82
93694_at	Per2	period homolog 2 (Drosophila)	Mm.8471	1.82
92802_s_at	Plp	myelin; proteolipid protein	Mm.1268	1.81
99036_s_at	Map2k7	mitogen activated protein kinase kinase 7	Mm.3906	1.79
99528_at	Spin	spindlin	Mm.42151	1.77
93789_s_at	Sin3b	transcriptional regulator, SIN3B; yeast	Mm.2137	1.77
96333_g_at	Snx2	sorting nexin 2	Mm.29971	1.74
101684_r_at	Srst	simple repeat sequence-containing transcript	Mm.35868	1.73
104343_f_at	2310004B05Rik	RIKEN 2310004B05 gene	Mm.22526	1.72
97247_at	2610034N03Rik	RIKEN 2610034N03 gene	Mm.27847	1.7
98410_at	Gtpi-pending	interferon-g induced GTPase	Mm.33902	1.7
99558_at	Ccnc	cyclin C	Mm.4300	1.69
96606_at	Chp-pending	calcium binding protein P22	Mm.27065	1.68
99893_at	Fgf13	fibroblast growth factor 13	Mm.7995	1.67
98539_at	Cops2	COP9 'constitutive photomorphogenic' homolog, 2 (Arabidopsis thaliana)	Mm.3596	1.67
101362_at	Mapk9	Mitogen activated protein kinase 9	Mm.68933	1.66
97124_at	Fin15	fibroblast growth factor inducible 15	Mm.3421	1.66
93922_g_at	Bat3	HLA-B-associated transcript 3	Mm.89855	1.62
103356_at	3110056M06Rik	RIKEN 3110056M06 gene	Mm.18425	1.61
97511_at	Mgl1	monoglyceride lipase	Mm.31616	1.61
92870_at	Sellh	Sell 'suppressor of lin-12' 1 homolog (C. elegans)	Mm.14352	1.61
100371_at	Hnrpa1	heterogeneous nuclear ribonucleoprotein A1	Mm.88834	1.61
93214_at	Camk2d	calcium/calmodulin-dependent protein kinase II, delta	Mm.57082	1.6
97195_at	Gnai1	guanine nucleotide binding protein, alpha inhibiting 1	Mm.36875	1.6

99076_at	Thra	thyroid hormone receptor alpha	Mm.4015	1.59
100979_at	Trif	Trif gene	Mm.6703	1.58
160323_at	Sra1	steriod receptor RNA activator 1	Mm.29058	1.58
99144_s_at	Ttgn1	trans-golgi network protein 1	Mm.4142	1.58
97130_at	Ate1	arginine-tRNA-protein transferase 1	Mm.34599	1.58
100418_at	Gng2	guanine nucleotide binding protein (G protein), gamma 2 subunit	Mm.46767	1.58
92678_at	Ddx25	DEAD box polypeptide 25 'aspartate-glutamate-alanine-aspartate'	Mm.45108	1.57
102346_at	Erc3	Similar to excision repair cross-complementing rodent repair deficiency, complementation group 3 'xeroderma pigmentosum group B complementing), clone MGC:29007 IMAGE:3153847, mRNA, compl)	Mm.11218	1.57
160642_at	Tmem5	transmembrane protein 5	Mm.198	1.55
93114_at	Atp5j2	ATP synthase, H+ transporting, mitochondrial F0 complex, subunit f, isoform 2	Mm.1674	1.55
98101_at	Gtf2a2	general transcription factor lia, 2	Mm.34772	1.54
96878_at	1810044O22Rik	RIKEN 1810044O22 gene	Mm.30073	1.54
97263_s_at	Csnk1d	casein kinase I, delta	Mm.27899	1.54
100372_at	Gabrg1	GABA(A) receptor gamma-1	Mm.88838	1.53
99107_at	Ghr	growth hormone receptor	Mm.3986	1.53
101561_at	Mt2	metallothionein 2	Mm.89170	1.53
98603_s_at	Rangap1	RAN GTPase activating protein 1	Mm.3833	1.52
AFFX-TransRecMur/X57349_3_at	Trfr	transferrin receptor	Mm.26069	1.52
101857_at	Srpk2	serine/arginine-rich protein specific kinase 2	Mm.8709	1.52
160110_at	1300010O06Rik	RIKEN 1300010O06 gene	Mm.18795	1.52
98818_at	Nr3c1	Glucocorticoid receptor 1 (nuclear receptor subfamily 3, group C, member 1)	Mm.4918	1.52
96583_s_at	Kif5a	kinesin family member 5A	Mm.30355	1.51
93918_at	Taf9	TAF9 RNA polymerase II, TATA box binding protein (TBP)-associated factor, 32 kDa	Mm.89836	1.51
98608_at	D6Erd109e	DNA segment, Chr 6, ERATO Doi 109, expressed	Mm.3845	1.51
101459_at	Chd1	chromodomain helicase DNA binding protein 1	Mm.8137	1.51
104305_at	none	Mus musculus, similar to Unknown (protein for MGC:14993), clone MGC:28202	Mm.22363	1.5
92540_f_at	Srm	spermidine synthase gene	Mm.10	1.5
101069_g_at	Mkrn1	makorin ring finger	Mm.7198	1.5
93163_at	Gabrg2	GABA-A receptor, gamma 2	Mm.5309	1.5
96345_at	2310015B14Rik	RIKEN 2310015B14 gene	Mm.29995	1.5
100957_at	2810480P10Rik	RIKEN 2810480P10 gene	Mm.6509	1.49
98909_at	Lias	lipoic acid synthetase	Mm.28591	1.49
93182_at	Nkx6-2	NK6 transcription factor related, locus 2 (Drosophila)	Mm.5423	1.49
103799_at	EST AF073881	EST AF073881	Mm.20844	1.49
92480_f_at	Zfp118	Zinc finger protein 118	Mm.42140	1.49
96188_at	Adar	adenosine deaminase, RNA-specific	Mm.28502	1.49
93005_at	Syt1	synaptotagmin 1	Mm.5101	1.48
94689_at	EST C79248	EST C79248	Mm.13291	1.48
95478_at	1110020I04Rik	RIKEN 1110020I04 gene	Mm.24848	1.48
98024_at	Nfyb	nuclear transcription factor-Y beta	Mm.3259	1.48
93993_at	1300009F09Rik	RIKEN 1300009F09 gene	Mm.21752	1.48
93366_r_at	2410174K12Rik	RIKEN 2410174K12 gene	Mm.18972	1.47
94885_at	4632417G13Rik	RIKEN 4632417G13 gene	Mm.23889	1.47
102319_at	Snx12	sorting nexin 12	Mm.10704	1.47
104671_at	Ampd3	AMP deaminase 3	Mm.4848	1.46

102247_at	Ubr1	ubiquitin protein ligase E3 component n-recogin 1	Mm.10731	1.46
100931_at	As2	arylsulfatase A	Mm.620	1.46
162179_r_at	Blmh	bleomycin hydrolase	Mm.98081	1.46
94076_i_at	Rpn2	ribophorin II	Mm.22130	1.46
94471_r_at	1810010K08Rik	RIKEN 1810010K08 gene	Mm.28851	1.46
104340_at	Mbd1	methyl-CpG binding domain protein 1	Mm.22522	1.45
99176_at	Fibp	fibroblast growth factor 'acidic' intracellular binding protein	Mm.41785	1.45
94451_at	D13Wsu123e	DNA segment, Chr 13, Wayne State University 123, expressed	Mm.28786	1.45
95079_at	Pdgfra	platelet derived growth factor receptor, alpha polypeptide	Mm.2924	1.45
102703_s_at	Aqp4	aquaporin 4	Mm.1419	1.44
160804_at	Gapd	glyceraldehyde-3-phosphate dehydrogenase	Mm.29383	1.44
160611_at	EST AU043077	EST AU043077	Mm.1554	1.44
103712_at	none	EST Moderately similar to Y029_HUMAN HYPOTHETICAL PROTEIN KIAA0029 {H.sapiens}	Mm.24109	1.44
160098_s_at	Cryab	crystallin, alpha B	Mm.178	1.43
98956_at	1810049E02Rik	RIKEN 1810049E02 gene	Mm.28765	1.43
97462_at	3110006P09Rik	RIKEN 3110006P09 gene	Mm.3035	1.43
102324_at	Dnajc4	Hsp40-C,4	Mm.10721	1.43
98989_at	Dhcr7	7-dehydrocholesterol reductase	Mm.3747	1.43
101088_f_at	Cnbp	cellular nucleic acid binding protein	Mm.7335	1.43
93859_at	2410112O06Rik	RIKEN 2410112O06 gene	Mm.87729	1.43
104673_at	Epha4	Eph receptor A4	Mm.3249	1.43
93211_at	Dnajc5	Hsp40-C,5	Mm.57022	1.43
96529_at	EST C76297	EST C76297	Mm.27084	1.43
102754_at	Birc6	baculoviral IAP repeat-containing 6	Mm.12921	1.42
103842_at	Dby	DEAD box polypeptide 'aspartate-glutamate-alanine-aspartate;' Y chromosome	Mm.20950	1.42
96701_at	Uble1b	ubiquitin-like 1 'sentrin' activating enzyme E1B	Mm.27560	1.42
95700_r_at	Dnajc8	Hsp40-C, 8	Mm.29685	1.42
AFFX-b-ActinMur/M1248_1_5_at	Actb	actin, beta, cytoplasmic	Mm.297	1.42
100484_at	Mmp13	matrix metalloproteinase 13	Mm.5022	1.42
97404_at	1500034J01Rik	RIKEN 1500034J01 gene	Mm.29901	1.41
100887_at	3830418C19Rik	RIKEN 3830418C19 gene	Mm.5383	1.41
100133_at	Fyn	Fyn proto-oncogene	Mm.4848	1.41
92618_at	Serf2	small EDRK-rich factor 2	Mm.1106	1.41
160788_at	Pes1	pescadillo homolog 1, containing BRCT domain (zebrafish)	Mm.28659	1.41
94482_at	Csnk2a2	casein kinase II, alpha 2, polypeptide	Mm.28881	1.4
94877_at	Btbd1	BTB 'POZ' domain containing 1	Mm.23839	1.4
103708_at	Eif1a	eukaryotic translation initiation factor 1A	Mm.24090	1.4
160933_at	Igtp	interferon gamma induced GTPase	Mm.858	1.4
102221_at	Syngr1	synaptogyrin 1	Mm.10217	1.4

Genes Elevated in SCN at ZT18

Affymetrix ID	Gene Symbol	Description	Unigene	Fold Change
161562_f_at	none	ESTs, Weakly similar to zinc finger protein 105 [Mus musculus] [M.musulus]	Mm.67110	2.64
92783_at	Gh	growth hormone	Mm.1240	2.39
98110_at	Mdm2	transformed mouse 3t3 cell double minute 2	Mm.34810	1.99
161284_r_at	Txnrd1	thioredoxin reductase 1	Mm.85650	1.92
97346_at	2610001J05Rik	RIKEN 2610001J05 gene	Mm.29615	1.89
95479_at	C1d-pending	nuclear DNA binding protein	Mm.2485	1.87
160829_at	Tdag	T-cell death associated gene	Mm.3117	1.84
104352_at	Brd4	bromodomain-containing 4	Mm.22572	1.83
161698_f_at	BC019977	cDNA sequence BC019977	Mm.71615	1.81
160903_at	Apbb2	amyloid beta (A4) precursor protein-binding, family B, member 2	Mm.5159	1.8
100946_at	Hsp70-1	heat shock protein, 70 kDa 1	Mm.6388	1.79
101501_r_at	Impact	imprinted and ancient	Mm.8154	1.76
103763_at	Ash1-pending	absent, small, or homeotic discs 1 (Drosophila)	Mm.24637	1.75
98278_at	Spry4	sprouty homolog 4 {Drosophila}	Mm.42038	1.71
96666_at	Ntan1	N-terminal Asn amidase	Mm.27378	1.69
93348_at	Timm22	translocase of inner mitochondrial membrane 22 homolog 'yeast'	Mm.18803	1.67
161378_r_at	Runx2	runt related transcription factor 2	Mm.60100	1.67
93875_at	Hsp70-3	heat shock protein, 70 kDa 3	Mm.88432	1.66
98072_r_at	Dck	deoxycytidine kinase	Mm.3446	1.66
161080_f_at	1700012P16Rik	RIKEN 1700012P16 gene	Mm.7213	1.66
101965_at	Rnf13	ring finger protein 13	Mm.9326	1.65
103588_at	Adam15	a disintegrin and metalloproteinase domain 15 (metargidin)	Mm.19830	1.65
99032_at	Rasd1	RAS, dexamethasone-induced 1	Mm.3903	1.64
104188_at	EST AI853703	EST AI853703	Mm.27449	1.63
104304_r_at	1500004O14Rik	RIKEN 1500004O14 gene	Mm.22358	1.62
100533_s_at	Crem	cAMP responsive element modulator	Mm.5244	1.62
104090_at	Rab6kif1	Rab6, kinesin-like	Mm.21803	1.62
103303_at	none	ESTs	Mm.21099	1.62
101853_f_at	Cfh	complement component factor h	Mm.8655	1.62
100321_f_at	2210418O10Rik	RIKEN 2210418O10 gene	Mm.87656	1.61
161980_f_at	Bag3	Bcl2-associated athanogene 3	Mm.93932	1.6
92871_at	EST AW493766	EST AW493766	Mm.14352	1.59
97441_at	Acinus-pending	apoptotic chromatin condensation inducer in the nucleus	Mm.30236	1.59
93246_at	Narg1-pending	NMDA receptor-regulated gene 1	Mm.6043	1.58
96871_at	2310042G06Rik	RIKEN 2310042G06 gene	Mm.30065	1.58
100595_at	Ptp4a2	protein tyrosine phosphatase 4a2	Mm.6355	1.58
101094_at	Hig1-pending	hypoxia induced gene 1	Mm.7381	1.56
92816_r_at	Eif4a1	eukaryotic translation initiation factor 4A1	Mm.12858	1.55
92747_at	Nkx2-2	NK2 transcription factor related, locus 2 {Drosophila}	Mm.4701	1.55
98385_at	Ptpn14	protein tyrosine phosphatase, non-receptor type 14	Mm.4498	1.54
94483_at	1110035J23Rik	RIKEN 1110035J23 gene	Mm.28881	1.53
160300_at	Tff1	trefoil factor 1	Mm.2854	1.53
161183_at	Dag1	dystroglycan 1	Mm.55187	1.53
104128_at	EST AW556797	EST AW556797	Mm.22040	1.52
102768_i_at	Sc5d	sterol-C5-desaturase, 'fungal ERG3, delta-5-	Mm.13081	1.52

		desaturase homolog (<i>S.cerevisiae</i>)		
95913_at	EST AA407619	EST AA407619	Mm.24462	1.52
161695_f_at	Slc6a4	solute carrier family 6; 'neurotransmitter transporter, serotonin,' member 4	Mm.71570	1.51
100536_at	EST R74645	EST R74645	Mm.5259	1.51
103688_at	none	ESTs, Weakly similar to ankyrin repeat and SOCS box-containing protein 7 [<i>Mus musculus</i>] [<i>M.musculus</i>]	Mm.23940	1.51
104500_at	Idua	alpha-L-iduronidase	Mm.3054	1.51
97474_r_at	Ptn	pleiotrophin	Mm.3063	1.51
95050_at	Chordc1	cysteine and histidine-rich domain 'CHORD'-containing, zinc binding protein 1	Mm.29138	1.5
103780_at	1700021F05Rik	RIKEN 1700021F05 gene	Mm.24863	1.5
93277_at	Hsp60	heat shock protein, 60kDa	Mm.1777	1.49
103342_at	Eed	embryonic ectoderm development	Mm.18203	1.49
104002_at	Zfp275	Zinc finger protein 275	Mm.26595	1.48
101359_at	Lamb2	laminin, beta 2	Mm.68887	1.48
103711_at	EST AI115399	EST AI115399	Mm.24100	1.48
99627_r_at	0610025G13	RIKEN 0610025G13 gene	Mm.43330	1.48
95694_at	TOP1	topoisomerase I	Mm.29663	1.47
104244_at	EST AU024026	EST AU024026	Mm.28210	1.47
161610_at	Ndr2	N-myc downstream regulated 2	Mm.68755	1.46
97309_at	3110002K08Rik	RIKEN 3110002K08 gene	Mm.28066	1.46
93064_at	Bnip2	BCL2/adenovirus E1B 19 kDa-interacting protein 1, NIP2	Mm.1561	1.46
100702_at	Shbg	sex hormone binding globulin	Mm.1431	1.45
94250_at	Eif3	eukaryotic translation initiation factor 3	Mm.2238	1.45
99999_at	Np220	nuclear protein 220	Mm.4503	1.45
160330_at	Chordc1	cysteine and histidine-rich domain 'CHORD'-containing, zinc binding protein 1	Mm.29138	1.45
95564_at	EST AU018638	EST AU018638	Mm.27785	1.44
97458_at	EST AA409223	EST AA409223	Mm.30267	1.44
98505_i_at	Cpo	coproporphyrinogen oxidase	Mm.35820	1.44
160246_at	EST AA987150	EST AA987150	Mm.27740	1.44
97193_at	EST AA575098	EST AA575098	Mm.36566	1.43
161750_f_at	Ncam	neural cell adhesion molecule	Mm.73620	1.43
160117_at	2310028D20Rik	RIKEN 2310028D20 gene	Mm.19258	1.43
99370_at	Klrc1	killer cell lectin-like receptor subfamily C, member 1	Mm.56899	1.43
161435_i_at	1810013D10Rik	RIKEN 1810013D10 gene	Mm.62231	1.43
103260_at	1110060D06Rik	RIKEN 1110060D06 gene	Mm.208	1.43
160182_at	1210001E11Rik	RIKEN 1210001E11 gene	Mm.24042	1.42
99529_f_at	Trif-pending	Trif gene	Mm.42154	1.42
101216_at	none	EST	Mm.5306	1.41
104744_at	2610319K07Rik	RIKEN 2610319K07 gene	Mm.24707	1.41
94817_at	Serpinh1	serine (or cysteine) proteinase inhibitor, clade H, member	Mm.22708	1.41
100970_at	Akt1	thymoma viral proto-oncogene 1	Mm.6645	1.4
102955_at	Nfil3	nuclear factor, interleukin 3, regulated	Mm.1755	1.4
95752_at	4733401P19Rik	4733401P19 gene	Mm.29784	1.4
103861_s_at	D7Wsu128e	DNA segment, Chr 7, Wayne State University 128, expressed	Mm.21103	1.4
160621_at	Mrps22	mitochondrial ribosomal protein S22	Mm.17949	1.4

Genes Elevated in LH at ZT6				
Affymetrix ID	Gene Symbol	Description	Unigene	Fold Change
98967_at	Fabp7	fatty acid-binding protein 7, brain	Mm.3644	3.58
97165_r_at	D2Ert93e	DNA segment, Chr 2, ERATO Doi 93, expressed	Mm.35523	3.33
99513_at	Pla2g4a	phospholipase A2, group IVA (cytosolic, calcium-dependent)	Mm.4186	3.1
98867_at	Dlx6as	distal-less homeobox 6, antisense	Mm.5152	2.87
103957_at	Trfr	transferrin receptor	Mm.25560	2.72
161435_i_at	1810013D10Rik	RIKEN 1810013D10 gene	Mm.62231	2.66
96875_r_at	1200003J11	RIKEN 1200003J11 gene	Mm.30069	2.6
93033_at	Ube2e3	ubiquitin-conjugating enzyme E2E 3, UBC4/5 homolog (yeast)	Mm.1485	2.57
103086_at	Hoxa5	homeo box A5	Mm.173	2.55
162172_f_at	Nedd4a	neural precursor cell expressed, developmentally down-regulated gene 4a	Mm.98042	2.35
161390_r_at	2310038G18	RIKEN 2310038G18 gene	Mm.60387	2.15
104132_at	Noc4	neighbor of Cox4	Mm.22072	2.07
100696_at	Pde6a	phosphodiesterase 6A, cGMP-specific, rod, alpha	Mm.1370	2.04
101562_at	Hsp70-4	heat shock protein, 70 kDa 4	Mm.89341	1.88
96713_at	Papss2	3'-phosphoadenosine 5'-phosphosulfate synthase 2	Mm.27646	1.88
96533_at	Adir	ATP-dependant interferon responsive	Mm.27464	1.84
101561_at	Mt2	metallothionein 2	Mm.89170	1.8
93026_at	1500002K10Rik	RIKEN 1500002K10 gene	Mm.14796	1.79
160280_at	Cav	caveolin, caveolae protein, 22 kDa	Mm.28278	1.78
94814_at	Gnai3	guanine nucleotide binding protein, alpha inhibiting 3	Mm.22704	1.77
97948_at	Rb1	retinoblastoma 1	Mm.304	1.77
161088_r_at	EST AI450287	EST AI450287	Mm.100209	1.76
93121_at	Rps24	ribosomal protein S24	Mm.16775	1.75
160841_at	Dbp	D site albumin promoter binding protein	Mm.3459	1.75
162080_f_at	2900008M13Rik	RIKEN 2900008M13 gene	Mm.96009	1.75
99036_s_at	Map2k7	mitogen activated protein kinase kinase 7	Mm.3906	1.74
99463_at	Cyp3a13	cytochrome P450, steroid inducible 3a13	Mm.4094	1.73
95879_at	EST C79052	EST C79052	Mm.25008	1.73
98610_at	1500012D08Rik	RIKEN 1500012D08 gene	Mm.38460	1.71
92225_f_at	Rpol-2	RNA polymerase 1-2 '128 kDa subunit'	Mm.34589	1.7
100887_at	3830418C19Rik	RIKEN 3830418C19 gene	Mm.5383	1.68
AFFX-TransRecMur/X57349_3_at	Trfr	transferrin receptor	Mm.26069	1.68
93182_at	Nkx6-2	NK6 transcription factor related, locus 2 (Drosophila)	Mm.5423	1.68
92770_at	S100a6	S100 calcium binding protein A6 'calcyclin'	Mm.1221	1.68
160461_f_at	2310057H16Rik	RIKEN 2310057H16 gene	Mm.40068	1.67
97139_at	EST C77614	EST C77614	Mm.34934	1.66
95471_at	Cdkn1c	cyclin-dependent kinase inhibitor 1C 'P57'	Mm.2480	1.66
92560_g_at	Vcam1	vascular cell adhesion molecule 1	Mm.1021	1.66
161013_f_at	EST AI596360	EST AI596360	Mm.30	1.65
161424_f_at	1110049F12Rik	RIKEN 1110049F12 gene	Mm.61830	1.65
104201_at	Plac1	placental specific protein 1	Mm.27525	1.64
160136_r_at	4933429H19Rik	RIKEN 4933429H19 gene	Mm.21490	1.63
103696_r_at	C330007P06Rik	RIKEN C330007P06 gene	Mm.23994	1.61
160494_at	Endog	Endonuclease G	Mm.4449	1.61
94991_at	EST AW046661	EST AW046661	Mm.27313	1.6

100324_g_at	none	S-adenosylmethionine decarboxylase 3	Mm.87749	1.6
161519_f_at	1700037H04Rik	RIKEN 1700037H04 gene	Mm.65546	1.6
102910_at	Abcb1a	ATP-binding cassette, subfamily B 'MDR/TAP,' member 1A	Mm.16086	1.6
94757_at	Cftr	cystic fibrosis transmembrane conductance regulator homolog	Mm.15621	1.6
96755_at	MGC18745	hypothetical protein MGC18745	Mm.28982	1.59
92216_at	Madh7	MAD homolog 7 {Drosophila}	Mm.34407	1.59
100593_at	Tnnt2	troponin T2, cardiac	Mm.632	1.59
98101_at	Gtf2a2	general transcription factor Iia, 2 '12 kD subunit'	Mm.34772	1.58
102414_i_at	Dnajc3	Hsp40-C, 3	Mm.12616	1.58
160306_at	Thrsp	thyroid hormone responsive SPOT14 homolog (Rattus)	Mm.28585	1.58
160068_at	Sap30	sin3 associated polypeptide, 30kD	Mm.118	1.57
94917_at	Fbxo8	f-box only protein 8	Mm.24156	1.56
161356_at	SMAF1	SMAF1	Mm.59260	1.56
101764_at	Htr1d	5-hydroxytryptamine (serotonin) receptor 1D	Mm.57096	1.55
104508_at	EST AI463083	EST AI463083	Mm.30805	1.55
94057_g_at	Scd1	stearoyl-coenzyme A desaturase 1	Mm.22026	1.54
93706_at	Ikbbk	inhibitor of kappaB kinase beta	Mm.86427	1.53
162460_f_at	Igpb1	immunoglobulin (CD79A) binding protein 1	Mm.52833	1.52
92419_at	Cct6b	chaperonin subunit 6b (zeta)	Mm.4126	1.52
92725_at	Gas11	growth arrest specific 11	Mm.46545	1.52
103574_at	EST AW060987	EST AW060987	Mm.1947	1.51
103527_at	MGC28785	hypothetical protein MGC28785	Mm.23011	1.51
101998_at	4833420G17Rik	RIKEN 4833420G17 gene	Mm.9860	1.51
96836_r_at	Zfp161	zinc finger protein 161	Mm.29434	1.51
92323_at	Mapk12	mitogen-activated protein kinase 12	Mm.38343	1.5
93590_at	1200015G06Rik	RIKEN 1200015G06 gene	Mm.20818	1.5
161066_at	1500026A19Rik	RIKEN 1500026A19 gene	Mm.5365	1.5
104549_at	EST AW495846	EST AW495846	Mm.23702	1.49
98511_at	Raly	HnRNP-associate with lethal yellow	Mm.3591	1.49
160428_at	Suclg2	succinate-Coenzyme A ligase, GDP-forming, beta subunit	Mm.34632	1.49
103658_r_at	Mtf2	metal response element binding transcription factor 2	Mm.20559	1.48
160468_at	Mtpn	myotrophin	Mm.4143	1.48
103723_at	Il13ra1	interleukin 13 receptor, alpha 1	Mm.24208	1.48
160563_at	Serf2	small EDRK-rich factor 2	Mm.91433	1.48
97944_f_at	Tcra-VII.1d	T cell receptor alpha chain, variable region gene	Mm.30295	1.47
161522_i_at	Cst3	cystatin C	Mm.65647	1.47
95479_at	C1d-pending	nuclear DNA binding protein	Mm.2485	1.47
94530_at	LOC217715	similar to eukaryotic translation initiation factor 2B, subunit 2 (beta, 39kD)	Mm.29041	1.47
97243_at	Slc9a3r1	solute carrier family 9 'sodium/hydrogen exchanger,' isoform 3 regulator 1	Mm.27842	1.47
94367_at	Uck2-pending	uridine-cytidine kinase 2	Mm.25309	1.46
100925_at	2700089E24Rik	RIKEN 2700089E24 gene	Mm.608	1.45
99486_at	Cenpb	centromere autoantigen B	Mm.41454	1.45
97593_f_at	3632430F08Rik	RIKEN 3632430F08 gene	Mm.89577	1.45
101050_at	0610038L10Rik	RIKEN 0610038L10 gene	Mm.7013	1.45
95379_at	Mab2112	mab-21-like 2 (C. elegans)	Mm.22988	1.45
160085_at	Tst	thiosulfate sulfurtransferase, mitochondrial	Mm.15312	1.44
102703_s_at	Aqp4	aquaporin 4	Mm.1419	1.44

104091_at	670474K14Rik	RIKEN 670474K14 gene	Mm.21814	1.44
97248_at	Dbi	diazepam binding inhibitor	Mm.2785	1.44
95118_r_at	EST AU021460	EST AU021460	Mm.29381	1.44
161160_f_at	Mybl2	myeloblastosis oncogene-like 2	Mm.82864	1.44
97982_at	Emu2-pending	Emu2 gene	Mm.3127	1.44
104428_s_at	Matk	megakaryocyte-associated tyrosine kinase	Mm.2918	1.43
104262_at	Pthlh	parathyroid hormone-like peptide	Mm.28440	1.43
98912_at	D13Wsu64e	DNA segment, Chr 13, Wayne State University 64, expressed	Mm.28600	1.42
96343_at	Actn4	alpha actinin 4	Mm.29991	1.42
161104_at	EST AA408298	EST AA408298	Mm.24485	1.42
93114_at	Atp5j2	ATP synthase, H+ transporting, mitochondrial F0 complex, subunit f, isoform 2	Mm.1674	1.41
100133_at	Fyn	Fyn proto-oncogene	Mm.4848	1.41
93722_at	Ensa	endosulfine alpha	Mm.86904	1.41
160374_r_at	Ptb2-pending	polypyrimidine tract binding protein 2	Mm.29966	1.41
162392_r_at	TgN737Rpw	transgene insert site 737, insertional mutation, polycystic kidney disease	Mm.50377	1.41
93272_at	Stk16	serine/threonine kinase 16	Mm.17461	1.41
100751_at	Adam10	a disintegrin and metalloprotease domain 10	Mm.3911	1.41
162248_f_at	2010012D11Rik	RIKEN 2010012D11 gene	Mm.99125	1.41
96795_at	Faah	fatty acid amide hydrolase	Mm.2915	1.4
93301_at	1300007B12Rik	RIKEN 1300007B12 gene	Mm.18230	1.4
95031_at	1110059H15Rik	RIKEN 1110059H15 gene	Mm.27520	1.4
104216_at	Shoc2	soc-2 (suppressor of clear) homolog (C. elegans)	Mm.27860	1.4

Genes Elevated in LH at ZT18				
Affymetrix ID	Gene Symbol	Description	Unigene	Fold Change
161741_r_at	LOC218820	similar to hypothetical protein MGC2555	Mm.73405	3.25
100946_at	Hsp70-1	heat shock protein, 70 kDa 1	Mm.6388	2.47
160901_at	Fos	FBJ osteosarcoma oncogene	Mm.5043	2.42
160970_at	EST AI848335	EST AI848335	Mm.24261	2.36
160917_r_at	2010107K23Rik	RIKEN 2010107K23 gene	Mm.6890	2.33
103968_at	Mid2	midline 2	Mm.25678	2.29
94483_at	1110035J23Rik	RIKEN 1110035J23 gene	Mm.28881	2.26
103582_r_at	6130401J04Rik	RIKEN 6130401J04 gene	Mm.19799	2.18
93694_at	Per2	period homolog 2 (Drosophila)	Mm.8471	2.03
92595_r_at	Fech	ferrochelataase	Mm.1070	2.03
99620_at	9030402K04Rik	RIKEN 9030402K04 gene	Mm.43213	2.02
96254_at	Dnajb1	Hsp40, B1	Mm.2982	2.01
104442_at	EST AA409087	EST AA409087	Mm.29302	1.99
160330_at	Chordc1	cystein and histidine-rich domain 'CHORD'-containing, zinc-binding protein 1	Mm.29138	1.96
100706_f_at	D2Wsu23e	DNA segment, Chr 2, Wayne State University 23, expressed	Mm.27840	1.92
94985_at	Nsap1-pending	NS1-associated protein 1	Mm.27303	1.92
104340_at	Mbd1	methyl-CpG binding domain protein 1	Mm.22522	1.9
95888_at	Laf4l	lymphoid nuclear protein related to AF4-like	Mm.24018	1.87
98042_at	Risc-pending	retinoid-inducible serine carboxypetidase	Mm.34126	1.83
98470_at	Slc25a14	solute carrier family 25 'mitochondrial carrier, brain'-member 14	Mm.34953	1.79
101906_at	EST C79747	EST C79747	Mm.89817	1.79
95749_at	Armet	arginine-rich, mutated in early stage tumors	Mm.29778	1.77
93285_at	Dusp6	dual specificity phosphatase 6	Mm.1791	1.77
94433_at	EST AI316867	EST AI316867	Mm.26492	1.72
99882_at	Ids	iduronate 2-sulfatase	Mm.7973	1.72
103975_at	Prdc-pending	protein related to DAN and cerberus	Mm.25760	1.71
94517_r_at	Penk1	preproenkephalin 1	Mm.2899	1.69
160605_s_at	4833420O05Rik	RIKEN 4833420O05 gene	Mm.13437	1.67
103711_at	EST AI115399	EST AI115399	Mm.24100	1.67
161086_at	Veli3-pending	vertebrate homolog of C. elegans Lin-7 type 3	Mm.9573	1.67
160335_at	Gclm	glutamate-cysteine ligase, modifier subunit	Mm.29340	1.66
94000_at	Cd8b	CD8 antigen, beta chain	Mm.21764	1.65
100512_at	Uch15	ubiquitin carboxyl-terminal esterase L5	Mm.52067	1.64
160791_at	3300001P08Rik	RIKEN 3300001P08 gene	Mm.28778	1.64
160182_at	1210001E11Rik	RIKEN 1210001E11 gene	Mm.24042	1.63
103808_at	Golga5	golgi autoantigen, golgin subfamily a, 5	Mm.20885	1.62
94209_g_at	1700015E05Rik	RIKEN 1700015E05 gene	Mm.2220	1.61
160472_r_at	Tmeff1	transmembrane protein with EGF-like and two follistatin-like domains 1	Mm.41772	1.6
94273_at	2610311119Rik	RIKEN 2610311119 gene	Mm.22485	1.6
96891_at	Anp32b	acidic nuclear phosphoprotein 32 family, member B	Mm.30093	1.55
95050_at	Chordc1	cystein and histidine-rich domain 'CHORD'-containing, zinc-binding protein 1	Mm.29138	1.55
104373_at	EST AW212954	EST AW212954	Mm.22645	1.55
92182_at	none	ESTs, Weakly similar to Rap2 interacting protein; Rap2 interacting protein 8 [Mus musculus] [M.musculus]	Mm.33851	1.55
103892_r_at	Ell2	ELL-related RNA polymerase II, elongation factor	Mm.21288	1.54

102955_at	Nfil3	nuclear factor, interleukin 3, regulated	Mm.1755	1.54
99816_at	Hsp70-2	heat shock protein, 70 kDa 2	Mm.57245	1.53
101215_at	Gabra2	GABA-A receptor, alpha 2	Mm.5304	1.53
160373_i_at	Sdpr	serum deprivation response	Mm.29964	1.53
103664_r_at	2810452K22Rik	RIKEN 2810452K22 gene	Mm.20693	1.52
96698_at	Psm5	proteasome 'prosome macropain' 26S subunit, non-ATPase, 5	Mm.27558	1.52
160121_at	2810017M24Rik	RIKEN 2810017M24 gene	Mm.20216	1.52
102980_at	EST AW536594	EST AW536594	Mm.1896	1.51
98478_at	Ccng2	cyclin G2	Mm.3527	1.5
104449_at	Glr3	glycine receptor, beta subunit	Mm.29422	1.5
102217_at	Gprk5	G protein-coupled receptor kinase 5	Mm.10188	1.49
94501_at	Spph1-pending	sphingosine-1-phosphate phosphatase 1	Mm.28948	1.48
103752_r_at	EST AW227545	EST AW227545	Mm.24516	1.48
103726_at	2610311119Rik	RIKEN 2610311119 gene	Mm.24286	1.48
102875_at	EST C80612	EST C80612	Mm.14864	1.48
100004_at	5930412E23Rik	RIKEN 5930412E23 gene	Mm.45194	1.48
96375_at	D9Ert306e	DNA segment, Chr 9, ERATO Doi 306, expressed	Mm.25065	1.48
94228_at	Xpo1	exportin 1, CRM1 homolog (yeast)	Mm.22269	1.47
96266_at	2610023M21Rik	RIKEN 2610023M21 gene	Mm.29841	1.47
94208_at	1700015E05Rik	RIKEN 1700015E05 gene	Mm.2220	1.46
92789_r_at	Cetn3	centrin 3	Mm.12481	1.46
101226_at	EST J0037D08	EST J0037D08	Mm.5650	1.46
94821_at	Xbp1	X-box binding protein 1	Mm.22718	1.46
93054_at	1110054N06Rik	RIKEN 1110054N06 gene	Mm.15351	1.46
98397_at	1700030G05Rik	RIKEN 1700030G05 gene	Mm.33285	1.46
103537_at	Eif2ak3	eukaryotic translation initiation factor 2 alpha kinase 3	Mm.23375	1.46
92771_at	Zfp207	zinc finger protein 207	Mm.12236	1.45
101955_at	Hspa5	heat shock 70kD protein 5 'glucose-regulated protein 78kD	Mm.918	1.45
94418_at	Lce-pending	long chain fatty acyl elongase	Mm.26171	1.45
104114_at	2310050N11Rik	RIKEN 2310050N11 gene	Mm.21954	1.45
94239_at	Pnn	pinin	Mm.22347	1.45
93389_at	Prom	prominin	Mm.6250	1.45
97204_s_at	1110003P16Rik	RIKEN 1110003P16 gene	Mm.27692	1.45
160934_s_at	Ccr4	carbon catabolite repression 4 homolog (S. cerevisiae)	Mm.86541	1.45
95694_at	TOP	topoisomerase I	Mm.29663	1.44
160829_at	Tdag	T-cell death associated gene	Mm.3117	1.44
104717_at	1110068L01	RIKEN 1110068L01 gene	Mm.24505	1.44
103823_at	Top3b	topoisomerase (DNA) III beta	Mm.20915	1.44
97846_at	Cdc51	cell division cycle 5-like (S.pombe)	Mm.28270	1.43
92808_f_at	Fkbp4	FK506 binding protein 4 59kDa	Mm.12758	1.43
160204_at	3110013H01Rik	RIKEN 3110013H01 gene	Mm.25170	1.43
98087_at	Tbk1	TANK-binding kinase 1	Mm.34580	1.43
92369_at	Tgfa	transforming growth factor alpha	Mm.3992	1.43
92754_at	Fdxr	ferredoxin reductase	Mm.4719	1.43
98553_at	Slap	sarcolemmal-associated protein	Mm.36769	1.43
96665_at	Vps26	vacuolar protein sorting 26 (yeast)	Mm.27373	1.43
99621_s_at	9030402K04Rik	RIKEN 9030402K04 gene	Mm.43213	1.42
98904_at	1110066C01Rik	RIKEN 1110066C01 gene	Mm.28579	1.42
103088_at	Chl1	close homolog of L1	Mm.1736	1.42

103525_at	2810036L13Rik	RIKEN 2810036L13 gene	Mm.2290	1.42
160900_at	Gkap42-pending	42 kD cGMP-dependent protein kinase anchoring protein	Mm.5030	1.42
100072_at	Ciao1	WD40 protein Ciao1	Mm.45179	1.42
100954_at	Hrb	HIV-1 Rev binding protein	Mm.6461	1.41
96784_at	1110037A17Rik	RIKEN 1110037A17 gene	Mm.29082	1.41
104246_at	none	EST Moderately similar to T17285 hypothetical protein DKFZp434N0535.1 (H.sapiens)	Mm.2833	1.41
97285_f_at	Ubxdc2	UBX domain-containing 2	Mm.28000	1.41
96771_at	none	ESTs Mus musculus, clone IMAGE:4952369	Mm.29023	1.41
100962_at	Nab2	Ngfi-A binding protein 2	Mm.6549	1.41
96224_at	Btrc	beta-transducin repeat containing protein	Mm.28734	1.4
98960_s_at	b3GT3	UDP-Gal-betaG1cNAc beta 1,3-galactosyltransferase-III	Mm.36174	1.4
93875_at	Hsp70-3	heat shock protein, 70 kDa 3	Mm.88432	1.4
92408_at	none	ESTs, Weakly similar to down-regulated by Ctnnb1, a [Mus musculus] [M.musculus]	Mm.41046	1.4
94356_at	Trp53bp1	transformation related protein 53 binding protein 1	Mm.25231	1.4
104641_f_at	none	Mus musculus, Similar to RIKEN cDNA 9030624G23 gene, clone MGC:40732 IMAGE:5362444	Mm.31130	1.4