

**Xu-FigureS1. All CNS shared aging feature: the decline of energy metabolism**

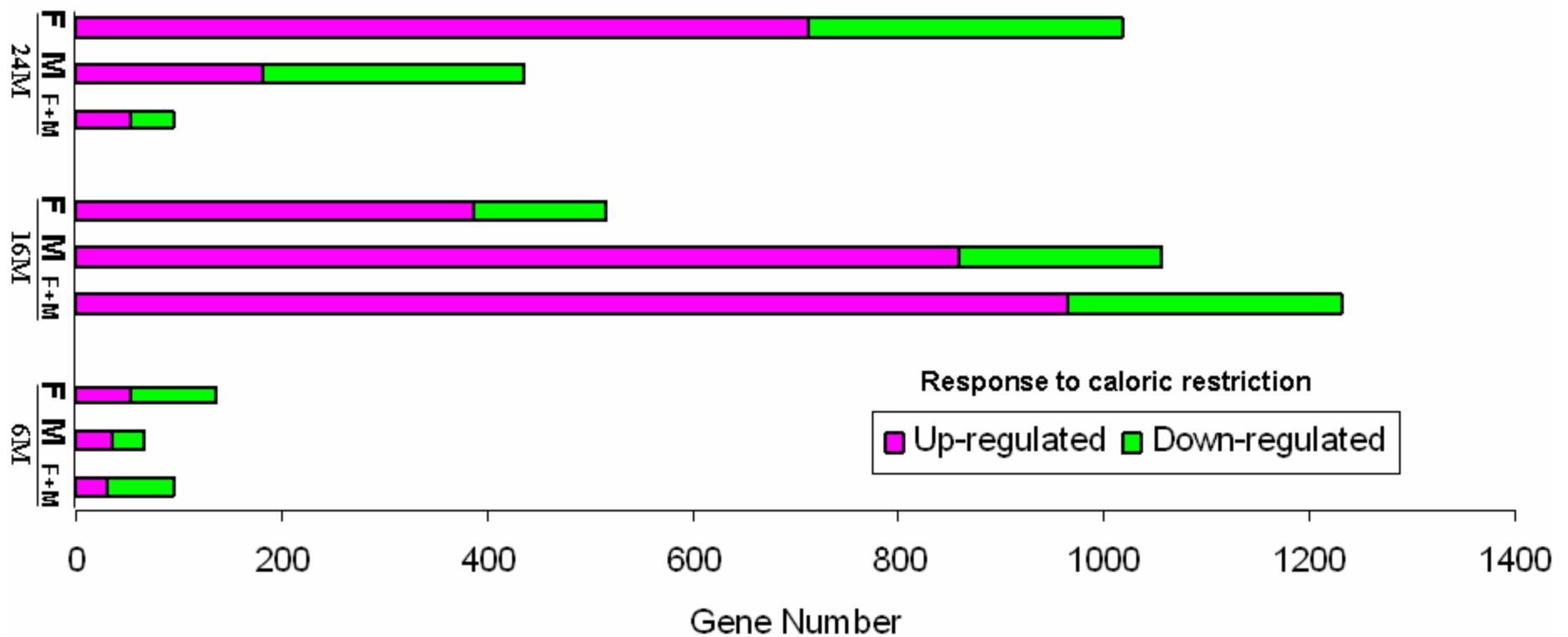
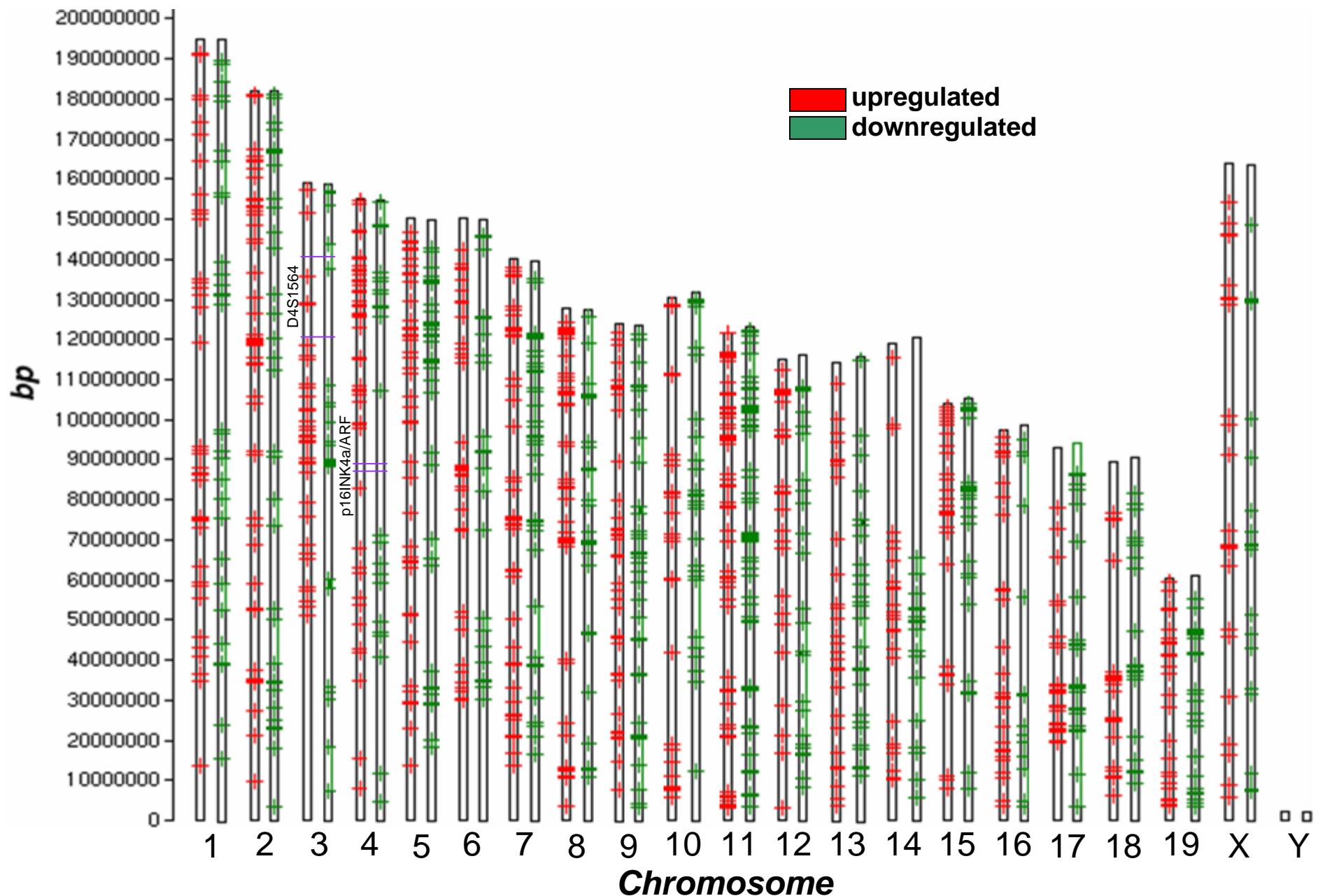
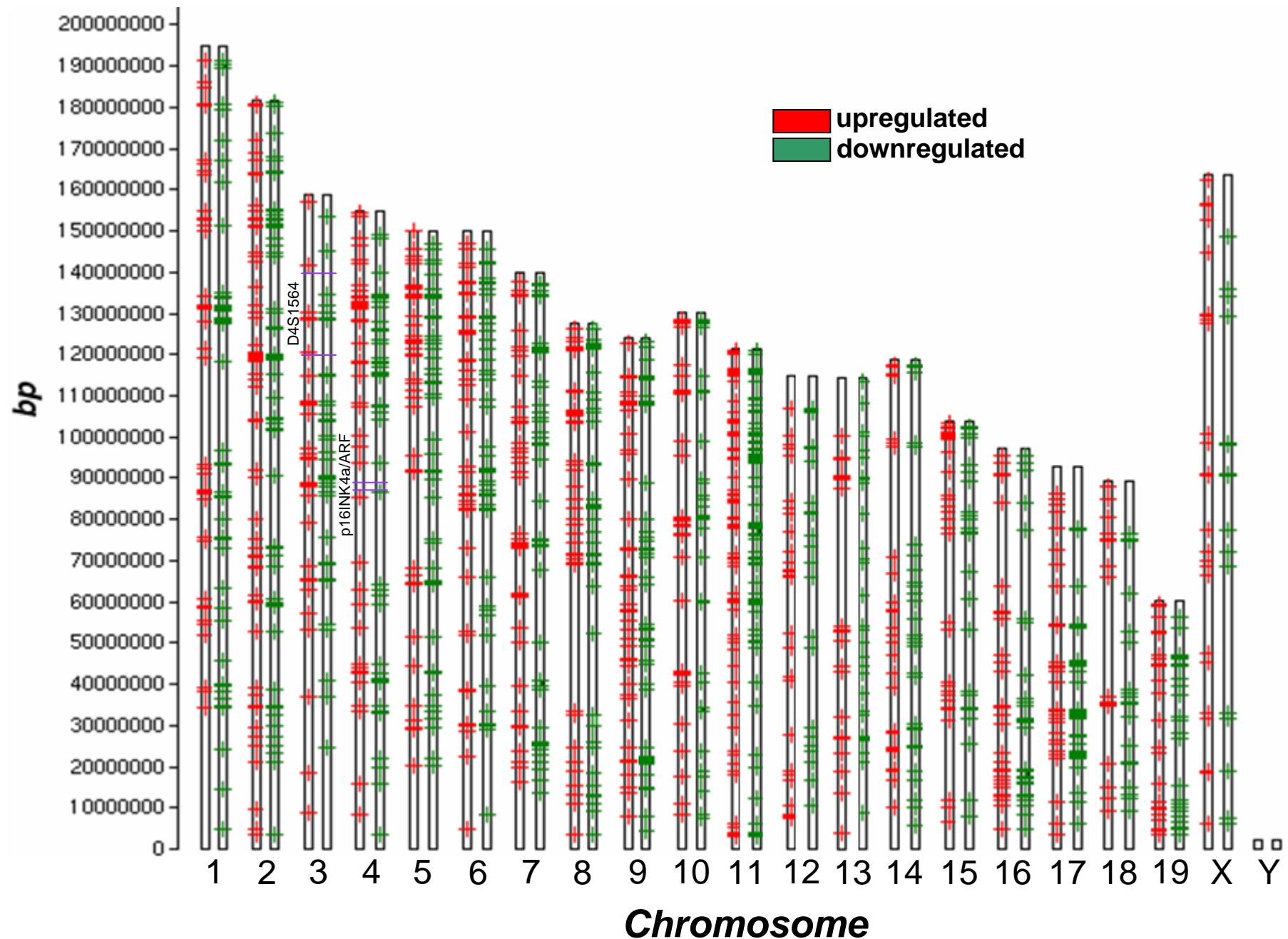


Figure S2. Age-related changes in responsiveness of the hippocampal transcriptome to CR in males and females.

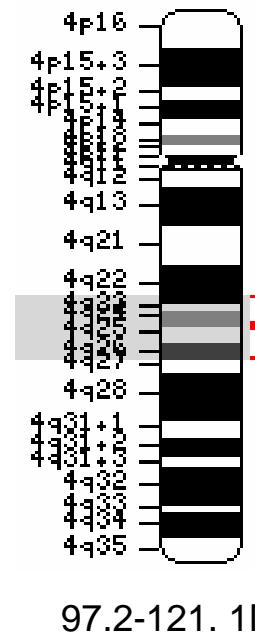


Xu-FigureS3a. Chromosome localization of CNS age-responsive genes.

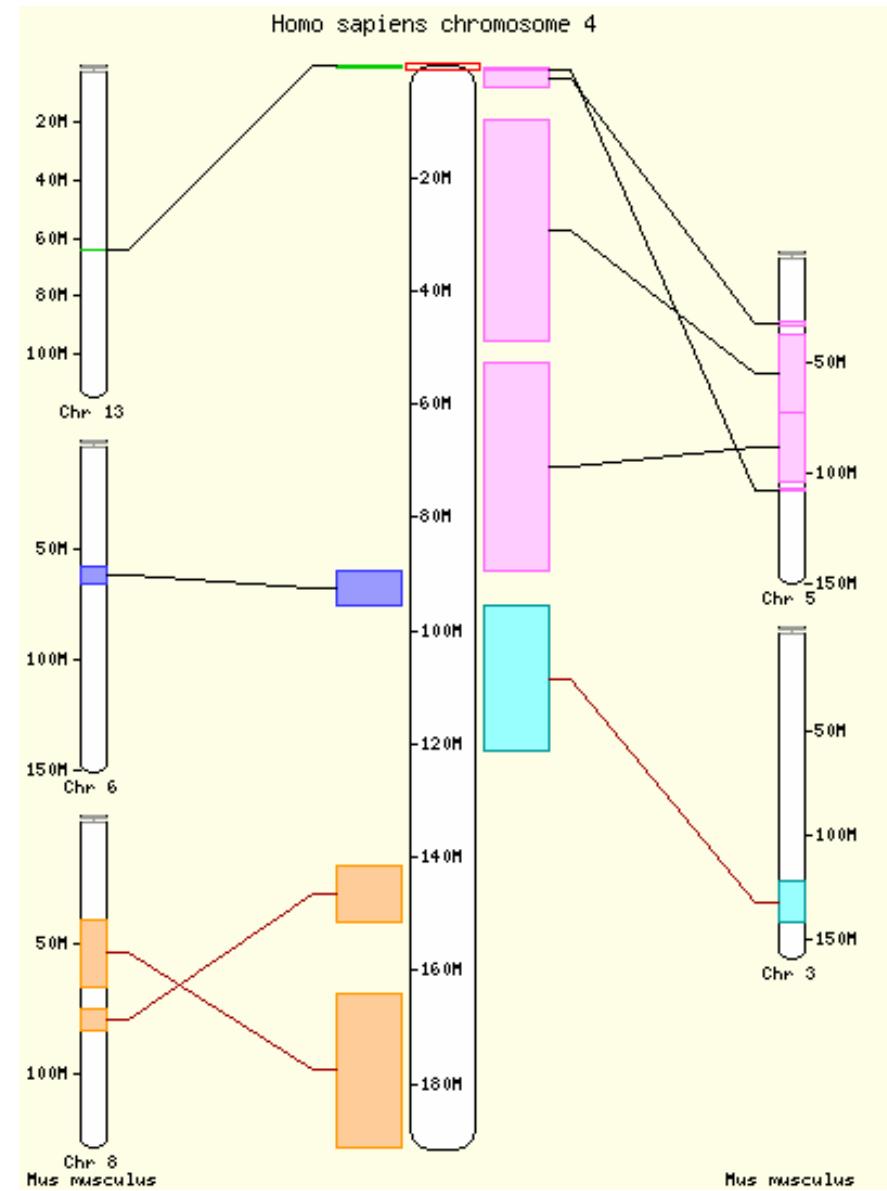
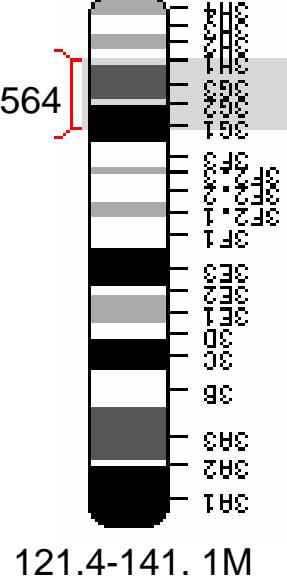


Xu-FigureS3b. Chromosome localization of CNS CR-responsive genes.

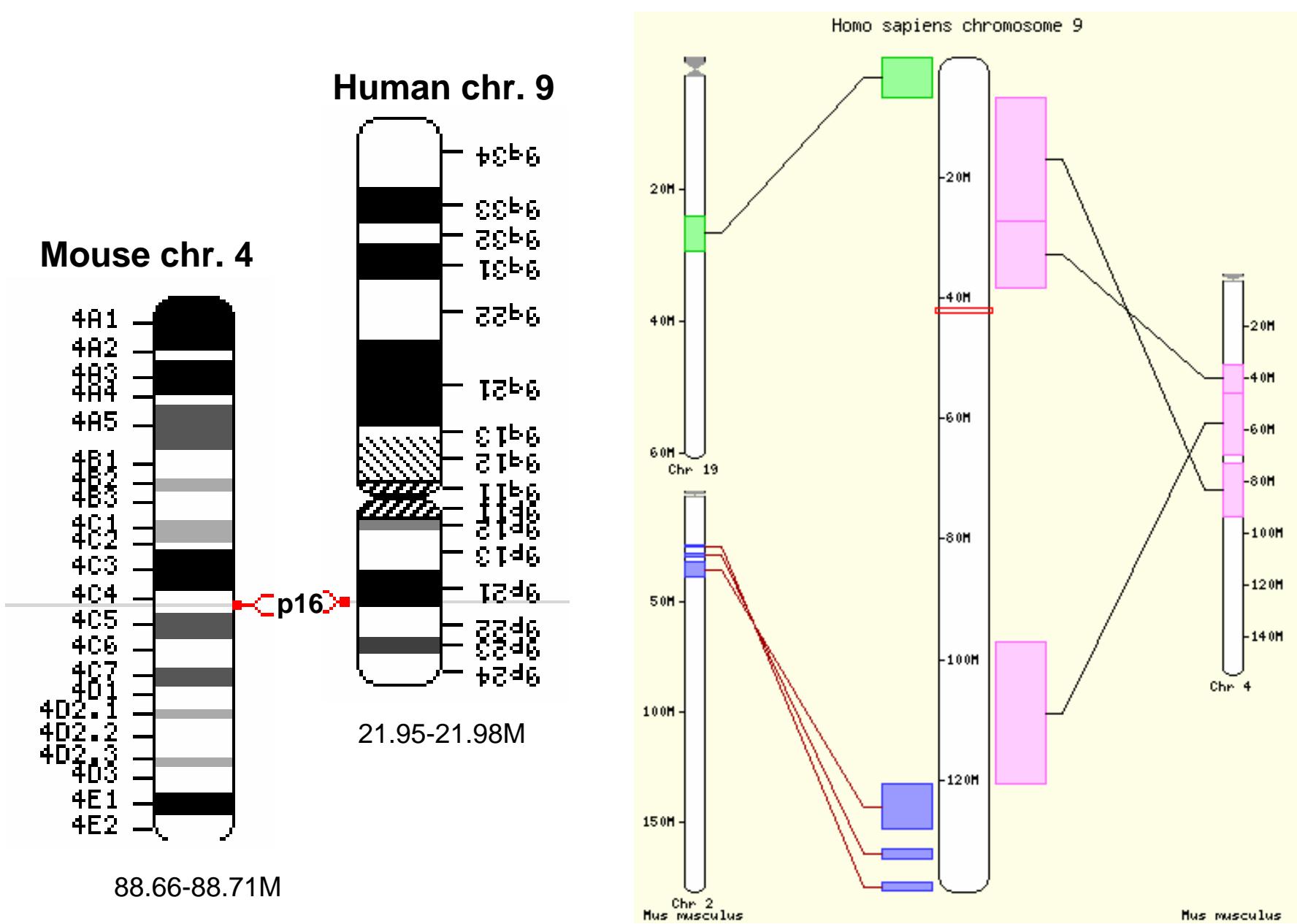
## Human chr. 4



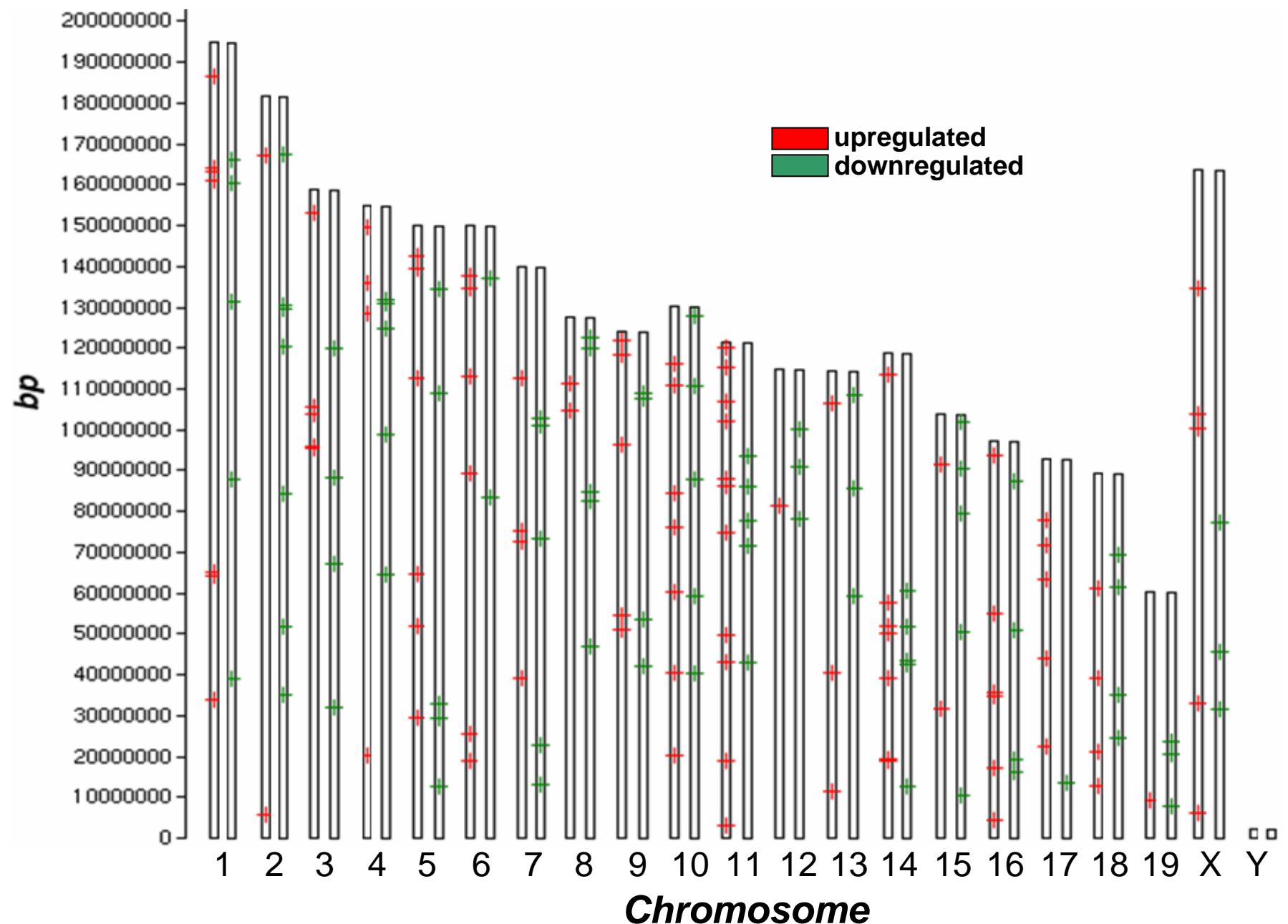
Mouse chr. 3



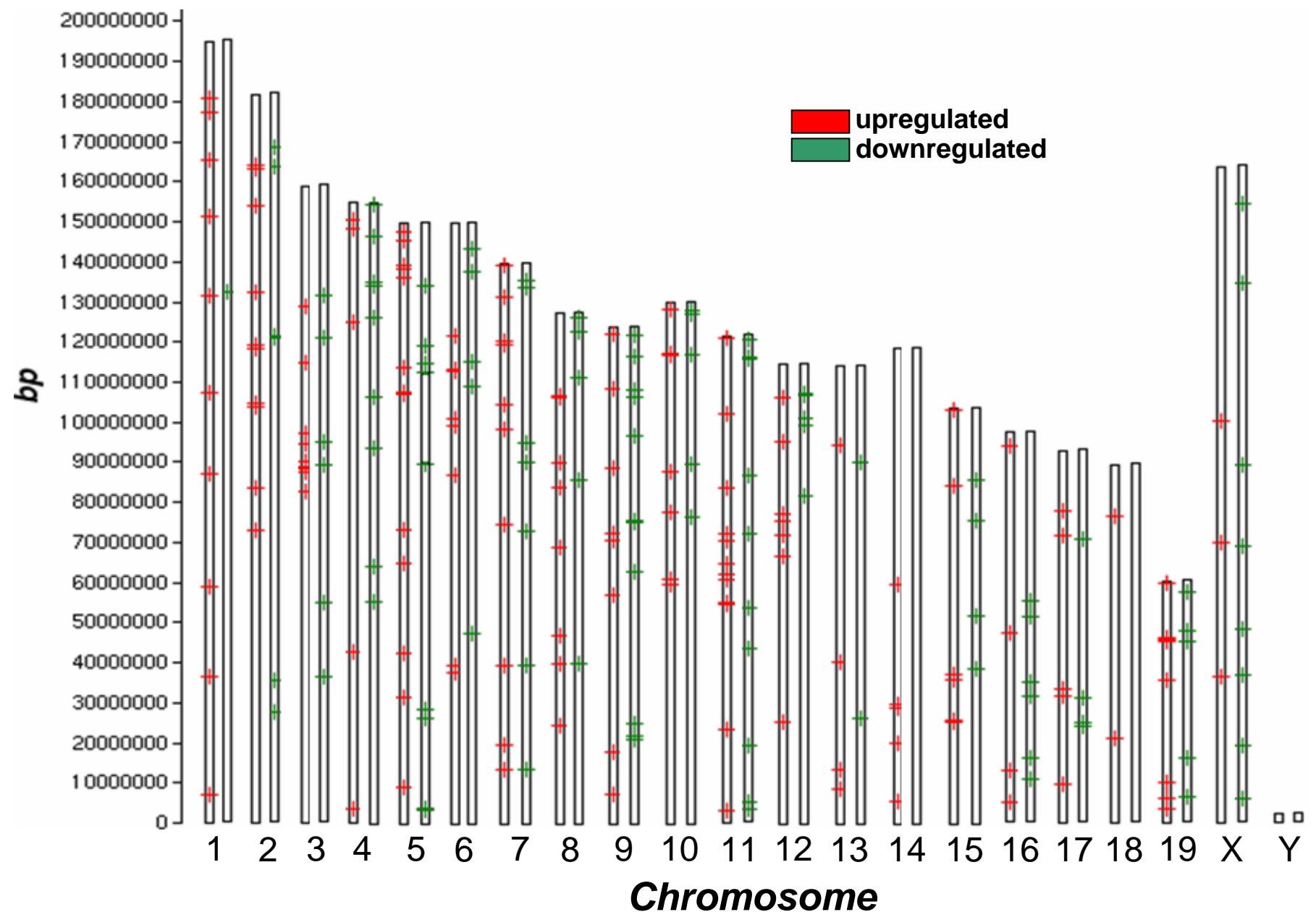
### Xu-FigureS3c. Synteny map of human exceptional longevity D4S1564 locus



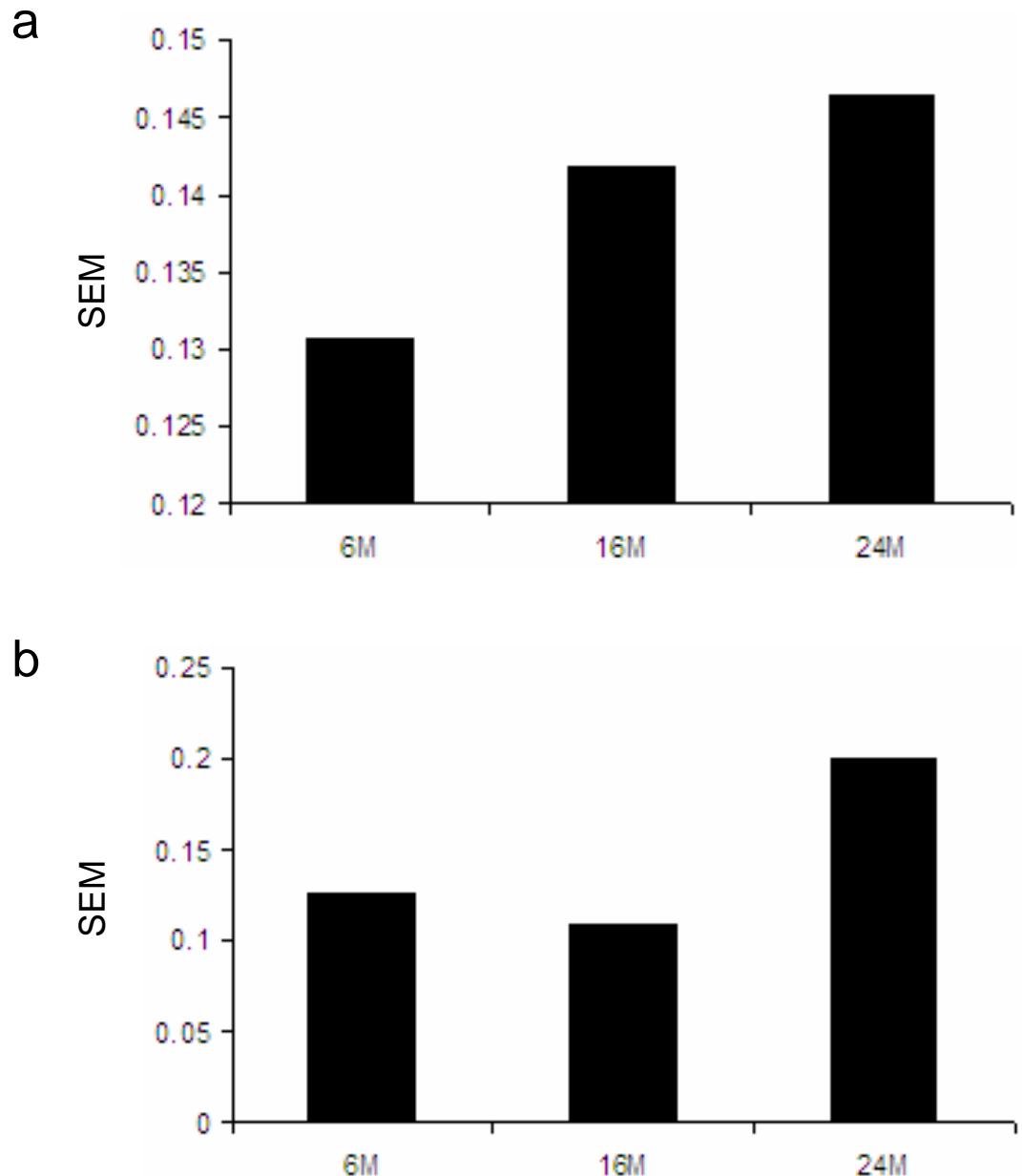
Xu-FigureS3d. Synteny map of human p16INK4a/ARF locus



Xu-FigureS3e. Chromosome localization of CNS sex influenced age-related genes.



**Xu-FigureS3f. Chromosome localization of CNS sex influenced CR responsive genes.**



**Xu-FigureS4. Age-dependent gene expression variation analysis.** a. cortex; b. striatum. SEM: standard error of the mean.

**TableS6 The perturbation probability of UPS, Wnt, and WRN pathways in different sex of CNS regions during aging and in response to CR.** The values with color represent the significant influence. A, ad libitum; C, Caloric restriction.

Pathways	CNS regions States transition	Male & Female				Male				Female			
		16M-24M	24M-16M	24MC-24MA	24MA-24MC	16M-24M	24M-16M	24MC-24MA	24MA-24MC	16M-24M	24M-16M	24MC-24MA	24MA-24MC
Ubiquitin-proteasome system (UPS)	Cortex	0.325	0.537	0.176	0.355	0.003	0.003	0.003	0.003	0.116	0.077	0.439	0.439
	Hippocampus	0.190	0.091	0.003	0.003	0.077	0.218	0.326	0.572	0.312	0.315	0.326	0.229
	Cerebellum	0.474	0.429	0.199	0.069	0.305	0.238	0.227	0.294	0.176	0.176	0.328	0.118
	Striatum	0.118	0.003	0.198	0.513	0.484	0.270	0.557	0.345	0.336	0.092	0.148	0.400
	Spinal cord	0.003	0.003	0.284	0.342	0.315	0.141	0.572	0.423	0.229	0.381	0.326	0.326
Wnt-β-catenin	Cortex	2.96E-06	0.028	0.004	0.011	0.003	0.122	0.135	0.252	0.208	0.121	0.249	0.155
	Hippocampus	0.001	0.238	0.044	0.008	2.96E-07	2.96E-07	0.015	2.96E-07	0.003	0.089	0.114	0.118
	Cerebellum	0.059	0.051	0.057	0.057	0.545	0.416	0.143	0.173	0.325	0.075	0.153	0.038
	Striatum	0.177	0.200	0.181	0.072	0.003	0.113	0.573	0.870	2.96E-06	0.416	0.077	0.482
	Spinal cord	0.003	0.059	0.102	0.114	0.360	0.297	0.072	2.96E-12	0.095	0.054	0.082	0.003
Werner, DNA repair & telomere plasticity	Cortex	0.013	0.004	0.012	0.008	0.027	0.009	0.027	0.003	0.029	0.004	0.026	0.003
	Hippocampus	2.96E-06	0.002	0.008	0.021	0.573	0.066	0.013	0.008	0.035	0.003	0.021	0.007
	Cerebellum	0.013	0.027	0.008	0.046	0.003	0.027	0.019	0.066	0.003	0.030	0.048	0.013
	Striatum	0.024	0.012	0.006	0.011	0.176	0.019	0.573	0.014	0.026	0.011	0.024	0.014
	Spinal cord	0.004	0.008	0.019	0.015	0.006	0.010	0.019	0.016	0.011	0.016	0.039	0.015

## **Overview Of DIANE 1.0**

Software requirements:

DIANE 1.0 is a microarray analysis platform written in JSL (JMP Scripting language – a SAS product). It is spreadsheet based, is fast and efficient, and unlike EXCEL can accommodate very large file sizes with no decrease in processing speed. Since DIANE is written in the JSL language, it takes advantage of the computational power and visualization options found in JMP. Additionally, DIANE microarray analysis modules are free, while the basic [JMP](#) software on which DIANE is designed is inexpensive, technically well supported, and integrated with the SAS statistical package.

Modules:

DIANE has six modules and they operate in a similar manner; learning the first module aids in learning the other five. This enables the user to learn the program in a straightforward manner.

In each module one proceeds in a similar way. First the data file is opened. Then a box is provided to choose data columns to be used for calculations. A menu pops up for choices of thresholds of fold change or p-value. Having specified these choices, a click of the button operates the program. The results are appended as subsequent columns to the master file. Thus, at each stage of the analysis one file contains all the data that progressively builds the analysis.

DIANE can read data in a variety of options principally through text files or Excel sheets. The output can also be as Excel worksheets amongst a variety of choices.

### **Module 1: Data Normalization**

DIANE provides a menu of options to normalize with such as Z-normalization, log-median normalization, log transforms etc. Also it is convenient to add any user specified normalization.

### **Module 2: Principal component analysis**

This module facilitates clustering at the level of whole arrays while identifying arrays that are to be deemed outliers. PCA can be performed in 2 dimensions as well as in 3-dimensions. The user has the option of examining the clustering in a live rotating view. Output of .jpg images is provided as which can be used for publication.

### **Module 3: Generating Gene Lists**

Finds genes differentially expressed between treatment and control groups both through Z-difference formalism and ANOVA methods. As output, one receives gene lists in Excel for each comparison. Additionally, a summary sheet examines each gene for the number of distinct treatments in which it is over or under expressed. This often forms the first step in an investigator's study of one's experimental set up for it provides a comparative glance at the behavior of a gene over various treatment control pairs.

#### **Module 4: Standard Gene Clustering , N-Tuple Clustering**

This module clusters genes, which are differentially expressed, via traditional schemes such as k-means clustering or hierarchical clustering. Additionally it provides options to explore new clustering methods such as binary clustering or N-tuple clustering.

Here again, one can produce cell plots for hierarchical clustering or line plot diagrams for k-means clustering which can be made parts of manuscripts without further processing.

#### **Module 5 : Grouping by Gene Ontology (GO) categories**

Having determined a list of differentially expressed genes between treatments, the investigator is at pains to determine their distribution into biologically relevant groups such as GO functional categories, GO molecular or cellular functions , GO Biological functions or any other user determined categories. Upon specifying the functional categories of interest, DIANE produces pie charts depicting percentage distribution of genes into categories of interest. The pie chart mode can be converted to other graphical depictions that are suitable to the investigator. Efforts are underway to link clusters of Module 4 and pie charts of this module.

#### **Module 6 : Web connection to gene identifiers such as GenBank, Entrez.**

Module 3 generates lists of genes in several formats in successive columns. Typically they are gene names, identifiers from recognized databases such as GenBank , Entrez , Locuslink, Unigene etc. JMP enables opening relevant web pages corresponding to the Identifiers.The user can obtain annotations and published data relevant to the genes in module 3.

#### **Module 7 : PAGE: parametric analysis of gene set enrichment<sup>1</sup>**

This module tests for the enrichment of groups of genes between two treatments and identifies functional groups that are significantly enhanced. This facilitates a

departure from conventional microarray analysis focused on movement of individual genes and enables the user to explore functional groups of genes.

## Reference

1. Kim SY, Volsky DJ. PAGE: parametric analysis of gene set enrichment. BMC Bioinformatics. 6:144 (2005).

## Online Supplement PP

As summarized in Figure PP1 below, the proposed algorithm includes three major components: coefficient of determination (CoD) Validation, Model Construction, and Intervention Analysis. The inputs to our algorithm are the experimental specific regulatory network and the genes involved in the network. The outputs are estimated probabilities that a network transit from one state to another in response to each internal intervention or external perturbation.

Prior to the mathematical simulation, the regulatory network was validated by the coefficient of determination (CoD) to ensure the context specificity to the gene

$$\text{expression profile under examination. CoD is mathematically defined as } \theta_{\text{opt}} = \frac{\varepsilon_0 - \varepsilon_{\text{opt}}}{\varepsilon_0}$$

where  $\varepsilon_0$  is the prediction error in the absence of predictor and  $\varepsilon_{\text{opt}}$  is the error for the optimal predictors. The larger the CoD value, the better the fit of the context specificity of a network topology to expression profiles. Real-value gene expression data were converted to the ternary presentation to ensure a high and uniform certainty in specifying genes undergoing significant transcriptional changes across experiments. The computational model we constructed contains  $n$  selected genes. Each gene has a ternary expression value, which is assigned as either over-expressed {1}, equivalently-expressed {0}, or under-expressed {-1}. The model allows any number of predictor genes for each target gene based on the topology of the network. For capturing the dynamics of the network, we used the state of predictor genes at step  $t$  and the corresponding conditional probabilities, which are estimated from observed data, to derive the state of target gene at step  $t + 1$ , as characterized by equation 1..

$$g_l^{(t+1)} = \begin{cases} -1 & : \text{with } C_l^{-1}(g_{i_1}^{(t)} g_{i_2}^{(t)} \cdots g_{i_k}^{(t)}) = p(g_l^{(t+1)} = -1 | g_{i_1}^{(t)} g_{i_2}^{(t)} \cdots g_{i_k}^{(t)}) \\ 0 & : \text{with } C_l^0(g_{i_1}^{(t)} g_{i_2}^{(t)} \cdots g_{i_k}^{(t)}) = p(g_l^{(t+1)} = 0 | g_{i_1}^{(t)} g_{i_2}^{(t)} \cdots g_{i_k}^{(t)}) \\ 1 & : \text{with } C_l^1(g_{i_1}^{(t)} g_{i_2}^{(t)} \cdots g_{i_k}^{(t)}) = p(g_l^{(t+1)} = 1 | g_{i_1}^{(t)} g_{i_2}^{(t)} \cdots g_{i_k}^{(t)}) \end{cases} \quad (1)$$

The transition between gene states can be represented as a Markov chain. Considering gene perturbation, the transition probability can be formulated by equation 2.

$$\Pr\{S^{(t)} \rightarrow S^{(t+1)}\} = \left( \prod_{l=1}^n C_l^{g_l^{(t+1)}} \right) \times (1-p)^n + p^{n_0} (1-p)^{n-n_0} p_0^{n_0} \times 1_{[S^{(t)} \neq S^{(t+1)}]} \quad (2)$$

where  $S^{(t)} = (g_1^{(t)} g_2^{(t)} \dots g_n^{(t)})$ . Based on the transition matrix of the model, we constructed the intervention information matrix  $\mathbf{H}$  in which the element is defined as

$$H_K(x, y) = \sum_{k=1}^K F_k(x, y), \quad F_k(x, y) \text{ can be computed recursively as}$$

$$F_k(x, y) = \sum_{z \in [-1, 0, 1]^n - \{y\}} A(x, z) F_{k-1}(z, y). \quad \text{Each element } A(x, y) \text{ of the transition matrix } \mathbf{A} \text{ can}$$

be computed using equation 2. Each column in  $\mathbf{H}$  represents the probability that the network, starting in all possible intervened states, will visit to a given target state  $y$ . Using the intervention information matrix  $\mathbf{H}$ , we can find the best candidate genes with which of the genes in network should we intervene genes by multiple simultaneous flipping their status so that the probability that the network transit from an initial state to an target state is greatest. For simulating simple stimulus, we intervened mathematically one gene, two genes, and three genes each time and kept the rest genes unchanged for an initial state.

An advantage of computational and mathematical modeling of cellular system is the capability to simulate the *in silico* system to predict a cellular system's behavior under conditions that might not be easy to impose on a target system. The conditions may include those not existing in natural environments, but have potential clinical implications such as mutation of a gene. Such predictions could provide a new hypothesis that might be validated via independent biological experiments.

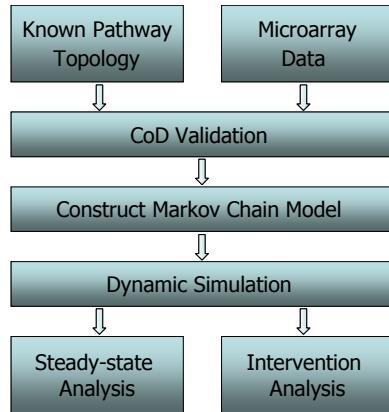


Figure PP1

## Reference

Li, H. and Zhan, M. (2005) Systematic intervention of transcription for identifying network response to disease and cellular phenotypes. *Bioinformatics* in press.

## **Gene-specific primers used for Real-Time PCR Analyses**

1. Heat shock protein 1, alpha

Forward: aagccgattggacgagaaaa;

Reverse: agaaggccccggaattctaa

2. HIF-1 alpha

Forward: caagtcaacgttggagg;

Reverse: gggttcacaaatcagcacca

3. Werner syndrome homolog

Forward: ccttccagtgc当地aaacctc;

Reverse: aggccaggagc当地tgc当地cag

4. Jagged 1

Forward: gggaggcagctgaaccaaatac;

Reverse: gtttggcaaaggcggacttc

5. ELOVL family member 6, elongation of long chain fatty acids

Forward: gatgaccaaaggc当地tgaagc;

Reverse: gtgggtggaccaggc当地tgc当地gga

6. Nemo like kinase

Forward: ctgttgggc当地acaccatcact;

Reverse: cctgcaaaggcaggtaacag

7. Glyceraldehyde-3-phosphate dehydrogenase

Forward primers: cctgc当地actcaacagcaac;

Reverse primers: ctcccttggaggccatgttagg

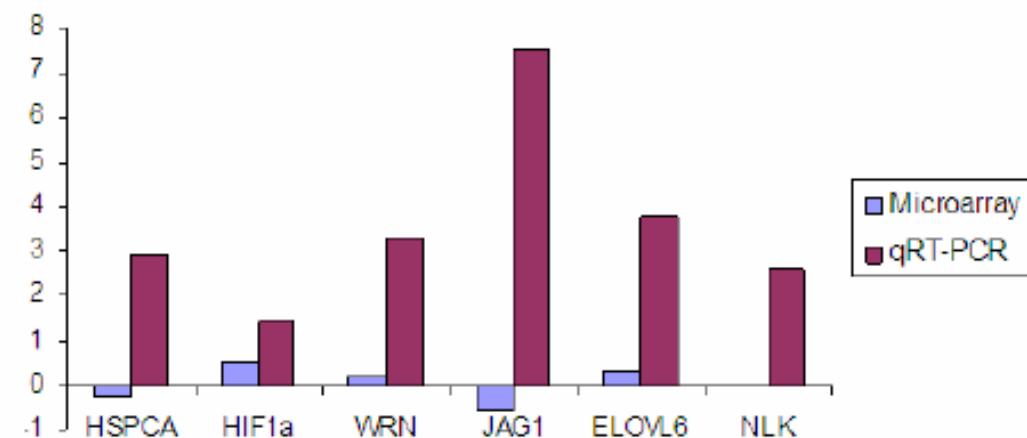
8. Hypoxanthine guanine phosphoribosyl transferase 1

Forward primers: tgccgaggattggaaaaag;

Reverse primers: tccagcaggc当地agcaaagaa

# Xu-SRTPCR. Microarray quality validation(ratio change of age/CR responsiveness) by Real-time PCR.

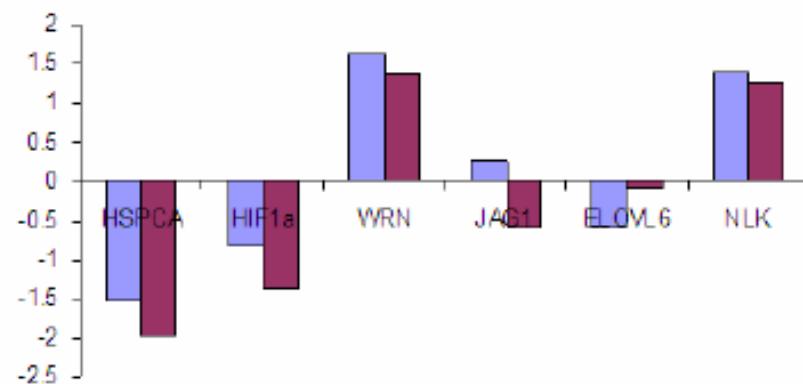
cortex 16M-AL/6M-AL



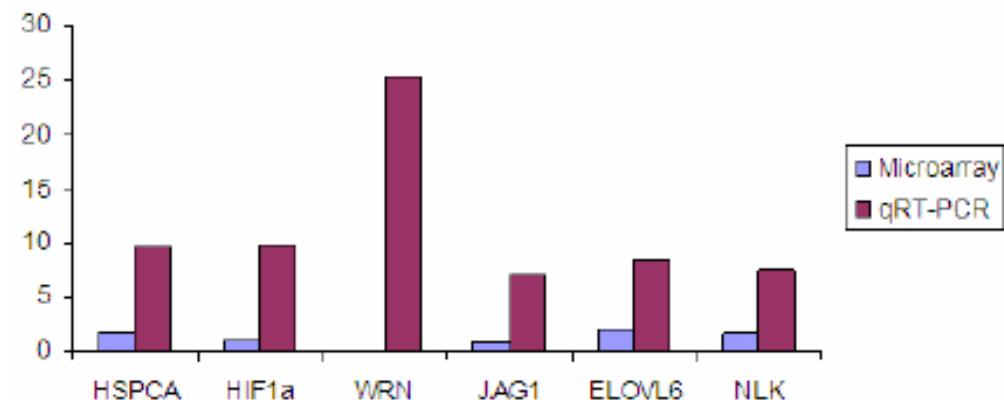
Cortex 24M -AL/16M-AL



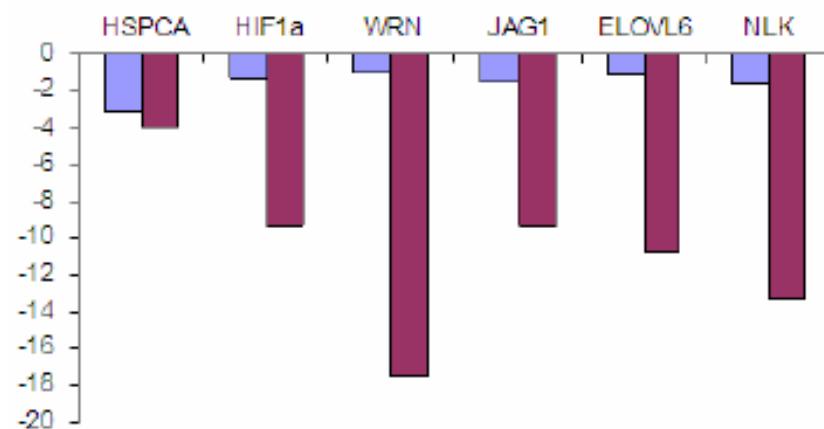
cortex 24M -CR/24M-AL



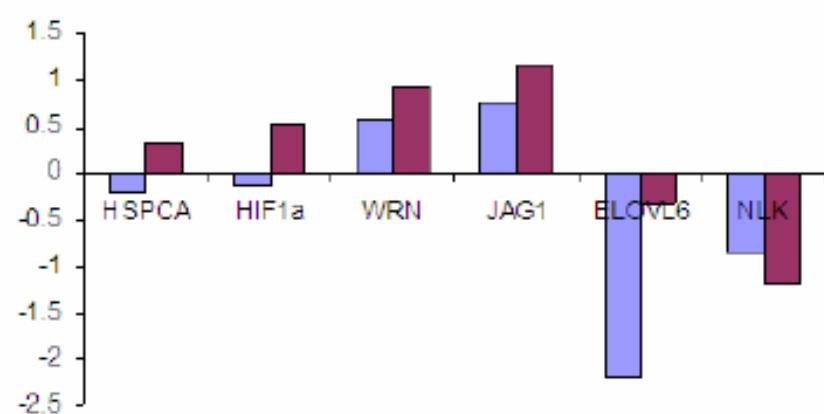
**Hippocampus 16M -AL/6M -AL**



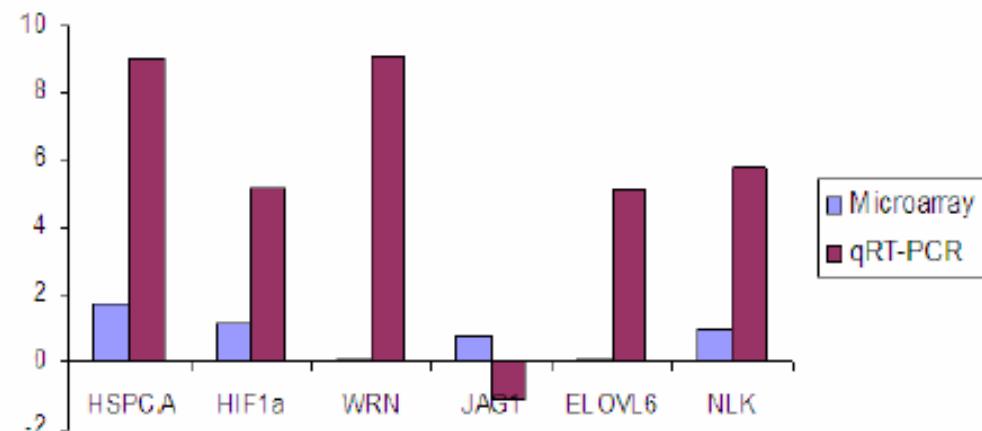
**Hippocampus 24M -AL/16M -AL**



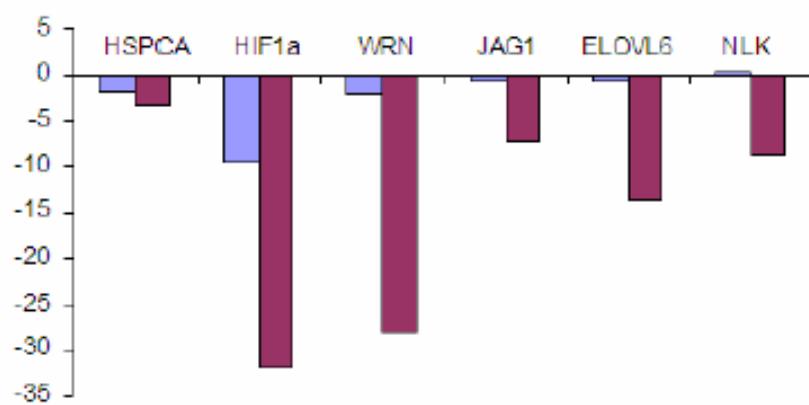
**Hippocampus 24M -CR/24M -AL**



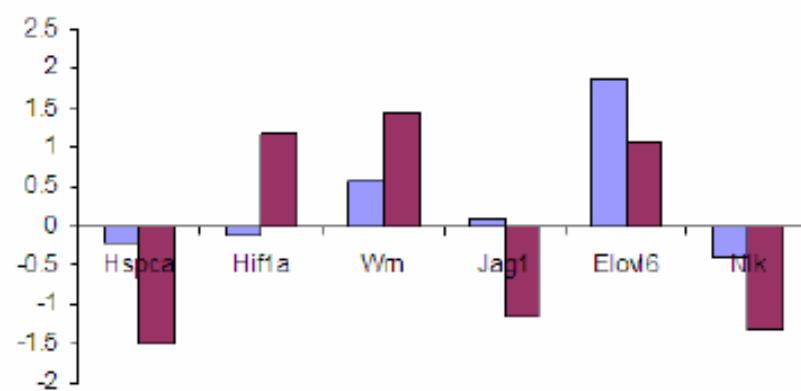
**Spinal cord 16M-AL/6M-AL**



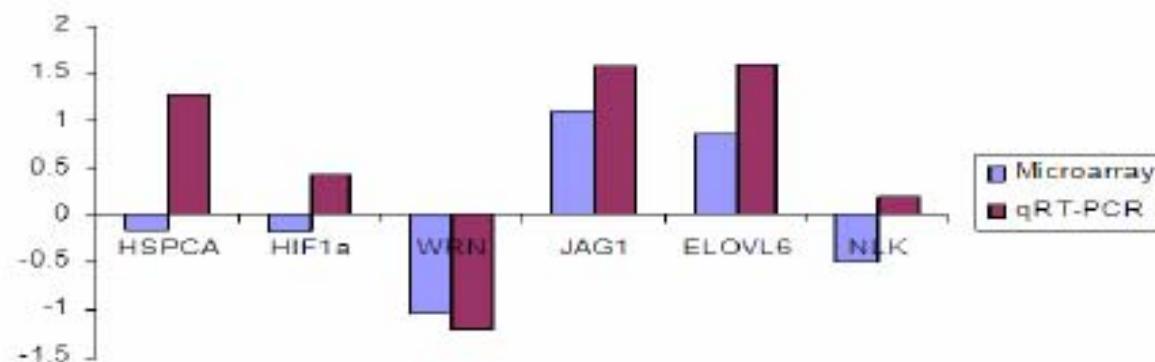
**Spinal cord 24M-AL/16M-AL**



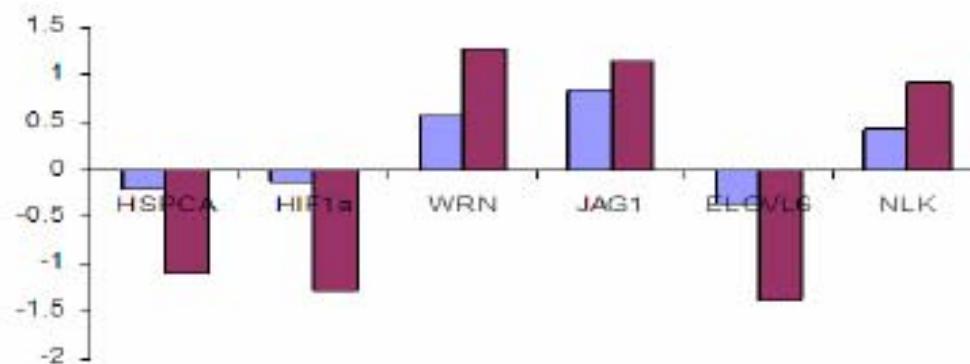
**Spinal cord 24M-CR/24M-AL**



### Striatum 24M-AL/16M-AL



### Striatum 24M-CR/24M-AL



**TableS2aP2. Gene lists of mouse CNS age-related gene expression pattern 2**

**Notes.** Cor: cortex; Hip: hippocampus; Cer: cerebellum; Str: striatum; SC: spinal cord.



Acc	Cor-p2	Hip-p2	Cer-p2	Str-p2	SC-p2	Symbol	Name
BG064774						Hsp90aa1	Heat shock protein 90kDa alpha (cytosolic), class A member 1
AU041102						Cobl	Cordon-bleu
BG066541						Pbx3	Pre B-cell leukemia transcription factor 3
BG084595						Wrn	Werner syndrome homolog (human)
BG071648						EST	
C78835						Actb	Actin, beta, cytoplasmic
BG084543						Atrx	Alpha thalassemia/mental retardation syndrome X-linked homolog (human)
BG067933						Cirh1a	Cirrhosis, autosomal recessive 1A (human)
BG073636						Psme1	Proteasome (prosome, macropain) 28 subunit, alpha
BG073467						Hba-a1	Hemoglobin alpha, adult chain 1
BG069786						Ywhab	Tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, beta polypeptide
BG065074						Ahr	Aryl-hydrocarbon receptor
BG065476						AK190093	CDNA sequence AK190093
BG064663						Anapc7	Anaphase promoting complex subunit 7
BG078146						Arbp	Acidic ribosomal phosphoprotein P0
BG069704						Isg20l1	Interferon stimulated exonuclease gene 20-like 1
BG064797						Ldha	Lactate dehydrogenase A
BG065197						Rpl5	Ribosomal protein L5
BG078477						Sec13	SEC13 homolog (S. cerevisiae)
BG064838						Tuba2	Tubulin, alpha 2
BG064785						EST	
BG064873						1700109G14Rik	RIKEN cDNA 1700109G14 gene
BG067563						Npc1	Niemann Pick type C1
BG067944						Plac11	Placenta-specific 1-like
BG073224						Ube2q1	Ubiquitin-conjugating enzyme E2Q (putative) 1

BG066934		Kalrn	Kalirin, RhoGEF kinase
BG064687		EST	Transcribed locus
BG066539		Cyp2s1	Cytochrome P450, family 2, subfamily s, polypeptide 1
BG072056		Cenpa	Centromere protein A
BG072073		Ift122	Intraflagellar transport 122 homolog (Chlamydomonas)
BQ552294		Stxbp6	Syntaxin binding protein 6 (amisyn)
AU046176		EST	
BG064846		Cdc2a	Cell division cycle 2 homolog A ( <i>S. pombe</i> )
BG064823		Pgam1	Phosphoglycerate mutase 1
AW545415		EST	
BG086444		AU020772	Expressed sequence AU020772
BG063277		Peg10	Paternally expressed 10
BG078138		Rrm2	Ribonucleotide reductase M2
BG063564		2700094F01Rik	RIKEN cDNA 2700094F01 gene
BG066503		Tmem23	Transmembrane protein 23
C76424		Lhfpl2	Lipoma HMGIC fusion partner-like 2
C76309		1110012J17Rik	RIKEN cDNA 1110012J17 gene
BG068814		AU023871	Expressed sequence AU023871
BG068466		C130039O16Rik	RIKEN cDNA C130039O16 gene
BG069669		Cep27	Centrosomal protein 27
BG073998		Hcfc1	Host cell factor C1
BG078898		Lgtn	Ligatin
BG086177		Rpl3	Ribosomal protein L3
BG079508		Tbl1x	Transducin (beta)-like 1 X-linked
BQ550996		Ywhaq	Tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, theta polypeptide
BG064441		EST	
BG066124		EST	
BG066361		EST	
BG066591		EST	
BG068694		EST	
BG069622		EST	
BG076161		2410166I05Rik	RIKEN cDNA 2410166I05 gene
BG072788		Atrn	Attractin
AW555585		Cct4	Chaperonin subunit 4 (delta)
BG076204		Clybl	Citrate lyase beta like
AW558347		EST	

BG073690				EST	
BG063524				Slc20a2	Solute carrier family 20, member 2
BG082524				Elovl6	ELOVL family member 6, elongation of long chain fatty acids (yeast)
BG070896				Jam2	Junction adhesion molecule 2
BG083613				Usp1	Ubiquitin specific peptidase 1
BG086349				Rnf11	Ring finger protein 11
BG070195				EST	
BG075822				Cdc91I1	CDC91 cell division cycle 91-like 1 ( <i>S. cerevisiae</i> )
BG071450				1110008J03Rik	RIKEN cDNA 1110008J03 gene
BG074675				2010301N04Rik	RIKEN cDNA 2010301N04 gene
BG083629				2210010A19Rik	RIKEN cDNA 2210010A19 gene
BG066198				2410016F19Rik	RIKEN cDNA 2410016F19 gene
BG070676				2600011C06Rik	RIKEN cDNA 2600011C06 gene
BG071364				2900056M20Rik	RIKEN cDNA 2900056M20 gene
BG070799				4631416L12Rik	RIKEN cDNA 4631416L12 gene
BG069528				5730405I09Rik	RIKEN cDNA 5730405I09 gene
BG063015				9430023L20Rik	RIKEN cDNA 9430023L20 gene
AA409025				Ankrd15	Ankyrin repeat domain 15
BG069506				Arhgef7	Rho guanine nucleotide exchange factor (GEF7)
BG077733				Atp1b1	ATPase, Na+/K+ transporting, beta 1 polypeptide
BG071370				AU040096	Expressed sequence AU040096
BG072043				AU046084	Expressed sequence AU046084
BG066690				Aurkaip1	Aurora kinase A interacting protein 1
BG070219				Bat2d	BAT2 domain containing 1
BG070779				Bbs2	Bardet-Biedl syndrome 2 homolog (human)
BG064920				Bex1	Brain expressed gene 1
BG079566				Btrc	Beta-transducin repeat containing protein
BG071392				C530043G21Rik	RIKEN cDNA C530043G21 gene
BG066572				Cables1	Cdk5 and Abl enzyme substrate 1
BG070322				Cacng5	Calcium channel, voltage-dependent, gamma subunit 5
BG079870				Caml	Calcium modulating ligand
BQ551014				Cast	Calpastatin
BG072084				Cc2d1b	Coiled-coil and C2 domain containing 1B
AU023920				Ccnc	Cyclin C
BG083482				Chek2	CHK2 checkpoint homolog ( <i>S. pombe</i> )
BG066703				Cltc	Clathrin, light polypeptide (Lca)
BG080972				Crygb	Crystallin, gamma B

BG075303		Cryzl1	Crystallin, zeta (quinone reductase)-like 1
BG085494		Cul3	Cullin 3
BQ550937		Cyld	Cylindromatosis (turban tumor syndrome)
BG071352		D18Ertd653e	DNA segment, Chr 18, ERATO Doi 653, expressed
BG066589		Dmd	Dystrophin, muscular dystrophy
BG070734		Dock1	Dedicator of cyto-kinesis 1
BG073773		Eef1a1	Eukaryotic translation elongation factor 1 alpha 1
BG070642		Eef2k	Eukaryotic elongation factor-2 kinase
BG071626		EG382450	Predicted gene, EG382450
BG071349		EG666469	Predicted gene, EG666469
BG070901		Eif1a	Eukaryotic translation initiation factor 1A
BG066159		Eif2s2	Eukaryotic translation initiation factor 2, subunit 2 (beta)
BG084974		Fbxo22	F-box protein 22
BG065805		Gabrb1	Gamma-aminobutyric acid (GABA-A) receptor, subunit beta 1
			UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyltransferase 4
BG066634		Galnt4	GTPase activating RANGAP domain-like 1
BG072044		Garnl1	Glycosylphosphatidylinositol specific phospholipase D1
BG074653		Gpld1	Growth factor receptor bound protein 2
BG070639		Grb2	Histone deacetylase 2
BG070643		Hdac2	Heterogeneous nuclear ribonucleoprotein C
BG076765		Hnrpc	Interleukin 10 receptor, alpha
BG074640		Il10ra	Interleukin 17 receptor E
BQ550324		Il17re	Interleukin enhancer binding factor 3
BG070889		Ilf3	Potassium inwardly-rectifying channel, subfamily K, member 6
BG069589		Kcnk6	V-Ki-ras2 Kirsten rat sarcoma viral oncogene homolog
BG080027		Kras	Low density lipoprotein receptor-related protein 2
BG066483		Lrp2	Leucine-rich PPR-motif containing
BG074685		Lrpprc	Leucine rich repeat containing 7
BG069144		Lrrc7	Mal, T-cell differentiation protein 2
BG072364		Mal2	MAP/microtubule affinity-regulating kinase 3
BG082602		Mark3	Microtubule associated serine/threonine kinase-like
BG072383		Mastl	Muscleblind-like 1 (Drosophila)
BG087841		Mbnl1	Malate dehydrogenase 2, NAD (mitochondrial)
BG084276		Mdh2	Male sterility domain containing 2
BG070800		Mlstd2	Vmyotubularin related protein 12
BG074650		Mtmr12	Non-SMC condensin I complex, subunit D2
BG086082		Ncapd2	

BQ551032		Ndor1	NADPH dependent diflavin oxidoreductase 1
BG084240		Ndufs7	NADH dehydrogenase (ubiquinone) Fe-S protein 7
BG071315		Nipbl	Nipped-B homolog (Drosophila)
BG083972		Nol10	Nucleolar protein 10
BG066700		Nol7	Nucleolar protein 7
BG072053		Nr2e1	Nuclear receptor subfamily 2, group E, member 1
BG071353		Papola	Poly (A) polymerase alpha
BG070255		Pde7a	Phosphodiesterase 7A
BG070766		Pdxk	Pyridoxal (pyridoxine, vitamin B6) kinase
BG081585		Pigf	Phosphatidylinositol glycan anchor biosynthesis, class F
BG065677		Pik3r3	Phosphatidylinositol 3 kinase, regulatory subunit, polypeptide 3 (p55)
BG084805		Pik4cb	Phosphatidylinositol 4-kinase, catalytic, beta polypeptide
BQ550997		Poldip3	Polymerase (DNA-directed), delta interacting protein 3
BG083644		Por	P450 (cytochrome) oxidoreductase
BG071336		Prkab1	Protein kinase, AMP-activated, beta 1 non-catalytic subunit
BQ550366		Prkar2a	Protein kinase, cAMP dependent regulatory, type II alpha
BG065633		Psmb2	Proteasome (prosome, macropain) subunit, beta type 2
BG071685		Ptdss1	Phosphatidylserine synthase 1
BG072681		Ptges3	Prostaglandin E synthase 3 (cytosolic)
BG072113		Ptk2	PTK2 protein tyrosine kinase 2
BG072031		Pts	6-pyruvoyl-tetrahydropterin synthase
BG071362		Pycard	PYD and CARD domain containing
BQ551650		Rab10	RAB10, member RAS oncogene family
BG070713		Rab30	RAB30, member RAS oncogene family
BG066577		Rbm6	RNA binding motif protein 6
AU040781		Rbx1	Ring-box 1
AU041357		Rhod	Ras homolog gene family, member D
BG066735		RP23-248K2.4	Hepatitis A virus cellular receptor 1-like
BQ550634		Scn3a	Sodium channel, voltage-gated, type III, alpha
BQ551887		Slc9a6	Solute carrier family 9 (sodium/hydrogen exchanger), isoform 6
BQ550611		Smad2	MAD homolog 2 (Drosophila)
BQ550540		Spn	Sialophorin
BG065620		Ss18	Synovial sarcoma translocation, Chromosome 18
BG078928		Stmn3	Stathmin-like 3
BG073342		Suhw4	Suppressor of hairy wing homolog 4 (Drosophila)
BG071689		Tbc1d15	TBC1 domain family, member 15
BG065608		Tbl2	Transducin (beta)-like 2

C77948		Tera	Teratocarcinoma expressed, serine rich
BG086091		Terf1	Telomeric repeat binding factor 1
BG084491		Tjp2	Tight junction protein 2
BG073058		Tle1	Transducin-like enhancer of split 1, homolog of Drosophila E(spl)
BG087296		Tmem50b	Transmembrane protein 50B
BG071346		Trim34	Tripartite motif protein 34
BG065689		Ube2l3	Ubiquitin-conjugating enzyme E2L 3
BQ550339		Ube3a	Ubiquitin protein ligase E3A
BG079790		Xpnpep1	X-prolyl aminopeptidase (aminopeptidase P) 1, soluble
BQ551652		Zc3h7a	Zinc finger CCCH type containing 7 A
AU046252		Zfp69	Zinc finger protein 69
AA409525		EST	
AU015835		EST	
AU040991		EST	
AU041361		EST	
AU044194		EST	Transcribed locus
BG063085		EST	
BG063918		EST	
BG064292		EST	
BG065632		EST	
BG065948		EST	
BG066530		EST	
BG066588		EST	
BG066724		EST	Transcribed locus
BG067815		EST	
BG067967		EST	
BG068086		EST	
BG068435		EST	
BG068468		EST	
BG069132		EST	
BG070244		EST	
BG070564		EST	
BG070632		EST	
BG070663		EST	
BG070691		EST	
BG070879		EST	Transcribed locus
BG070913		EST	

BG070969		EST	
BG070970		EST	
BG070980		EST	Transcribed locus, weakly similar to XP_001078904.1 similar to zinc finger protein 146 [Rattus norvegicus]
BG071361		EST	
BG071377		EST	Transcribed locus
BG071455		EST	
BG071603		EST	
BG071676		EST	
BG072094		EST	
BG072465		EST	
BG073061		EST	
BG073336		EST	
BG073377		EST	
BG073379		EST	
BG075627		EST	
BG079860		EST	
BG083198		EST	
BG083661		EST	
BG084196		EST	
BG084207		EST	
BQ550386		EST	CDNA clone IMAGE:5686051
BQ550972		EST	
BQ551030		EST	
BQ551690		EST	
BQ551862		EST	
BQ552292		EST	
C76835		EST	
BG070986	Oaz2		Ornithine decarboxylase antizyme 2
AW555133	2310028N02Rik		RIKEN cDNA 2310028N02 gene
BG076408	2610206B13Rik		RIKEN cDNA 2610206B13 gene
BG076134	9330120H11Rik		RIKEN cDNA 9330120H11 gene
BG066610	9330158F14Rik		RIKEN cDNA 9330158F14 gene
BG076127	A330009N23Rik		RIKEN cDNA A330009N23 gene
BG073838	AA536749		Expressed sequence AA536749
BG088940	Aqr		Aquarius
BG088097	Arhgap28		Rho GTPase activating protein 28

BG073860		Armcx1	Armadillo repeat containing, X-linked 1
BG064530		BC017647	CDNA sequence BC017647
BG076130		BC063749	CDNA sequence BC063749
BG076373		Ccl27	Chemokine (C-C motif) ligand 27
BG076493		Cdc42bpa	Cdc42 binding protein kinase alpha
BG088953		Col4a1	Procollagen, type IV, alpha 1
BG076180		Col5a2	Procollagen, type V, alpha 2
BG088391		Cryl1	Crystallin, lambda 1
BG076153		Dusp7	Dual specificity phosphatase 7
BG085728		Eftud2	Elongation factor Tu GTP binding domain containing 2
BG088888		Elmo2	Engulfment and cell motility 2, ced-12 homolog (C. elegans)
BG072273		Eps15	Epidermal growth factor receptor pathway substrate 15
BG074120		Fbxo42	F-box protein 42
BG088675		Fcmd	Fukuyama type congenital muscular dystrophy homolog (human)
BG088903		Fez1	Fasciculation and elongation protein zeta 1 (zygin I)
BG076167		Galnt1	UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyltransferase 1
BG087642		Glo1	Glyoxalase 1
BG087174		Gmppa	GDP-mannose pyrophosphorylase A
BG085643		Hba-x	Hemoglobin X, alpha-like embryonic chain in Hba complex
BG088567		Igfbp3	Insulin-like growth factor binding protein 3
AW555640		Immt	Inner membrane protein, mitochondrial
BQ550178		Ipp	IAP promoted placental gene
BG076207		Jmjd1c	Jumonji domain containing 1C
AW559127		Kcnq1	Potassium voltage-gated channel, subfamily Q, member 1
BG076407		Marveld2	MARVEL (membrane-associating) domain containing 2
BG088908		Mid1ip1	Mid1 interacting protein 1 (gastrulation specific G12-like (zebrafish))
BG076156		Mtx1	Metaxin 1
BG076894		Mybbp1a	MYB binding protein (P160) 1a
AW551875		Nfu1	NFU1 iron-sulfur cluster scaffold homolog (S. cerevisiae)
BG076133		Nme6	Expressed in non-metastatic cells 6, protein
BG064406		Nono	Non-POU-domain-containing, octamer binding protein
BG076129		Pcm1	Pericentriolar material 1
BG088662		Pex12	Peroxisomal biogenesis factor 12
BG088691		Pex16	Peroxisome biogenesis factor 16
BG088924		Phkb	Phosphorylase kinase beta
BQ550096		Prdx2	Peroxiredoxin 2

BG086577		Ptger2	Prostaglandin E receptor 2 (subtype EP2)
BG076377		Rabep1	Rabaptin, RAB GTPase binding effector protein 1
BG076155		Rabl4	RAB, member of RAS oncogene family-like 4
BG088950		Rac1	RAS-related C3 botulinum substrate 1
BG075206		Rpl6	Ribosomal protein L6
BG088362		Rqcd1	Rcd1 (required for cell differentiation) homolog 1 ( <i>S. pombe</i> )
BG088931		Sall2	Sal-like 2 ( <i>Drosophila</i> )
BG088667		Sesn1	Sestrin 1
BG076501		Sfrs6	Splicing factor, arginine/serine-rich 6
BG076166		Slc12a5	Solute carrier family 12, member 5
BQ550038		Tbc1d12	TBC1D12: TBC1 domain family, member 12
BG076142		Tdh	L-threonine dehydrogenase
BG088909		Tle6	Transducin-like enhancer of split 6, homolog of <i>Drosophila</i> E(spl)
BG086230		Traf7	Tnf receptor-associated factor 7
BG067405		Trip12	Thyroid hormone receptor interactor 12
AW558029		Uqcr	Ubiquinol-cytochrome c reductase (6.4kD) subunit
BG075872		Usp25	Ubiquitin specific peptidase 25
BG086567		Wbp5	WW domain binding protein 5
BG075788		Xpc	Xeroderma pigmentosum, complementation group C
BG076162		Zfp612	Zinc finger protein 612
BG076335		Zfp644	Zinc finger protein 644
AW550445		EST	
AW550680		EST	
AW551902		EST	
AW555179		EST	
AW556991		EST	
AW557207		EST	
AW557344		EST	
AW559082		EST	Transcribed locus
BG074259		EST	
BG074374		EST	
BG075833		EST	
BG076137		EST	Transcribed locus
BG076145		EST	
BG076353		EST	
BG076396		EST	Transcribed locus
BG077789		EST	

BG084425		EST	Transcribed locus
BG088902		EST	
BG088920		EST	
AW551432		1110007C02Rik	RIKEN cDNA 1110007C02 gene
BG073048		1200011O22Rik	RIKEN cDNA 1200011O22 gene
BG076839		1500032L24Rik	RIKEN cDNA 1500032L24 gene
BG073774		2700083E18Rik	RIKEN cDNA 2700083E18 gene
BG078443		2900073G15Rik	RIKEN cDNA 2900073G15 gene
BG065211		3110082I17Rik	RIKEN cDNA 3110082I17 gene
BG067919		4833405L11Rik	RIKEN cDNA 4833405L11 gene
BG065233		6530403A03Rik	RIKEN cDNA 6530403A03 gene
BG063815		Acot9	Acyl-CoA thioesterase 9
BG087449		Acp1	Acid phosphatase 1, soluble
BG072752		Actg1	Actin, gamma, cytoplasmic 1
BG064405		Ahctf1	AT hook containing transcription factor 1
BG077184		AI413782	Expressed sequence AI413782
BG064421		AI425999	Expressed sequence AI425999
BG077796		Akp2	Alkaline phosphatase 2, liver
BG065457		Aldoa	Aldolase 1, A isoform
BG072839		Alkbh3	AlkB, alkylation repair homolog 3 (E. coli)
BG073527		Anp32a	Acidic (leucine-rich) nuclear phosphoprotein 32 family, member A
BG078465		Aof2	Amine oxidase (flavin containing) domain 2
BG078689		Atp5a1	ATP synthase, H+ transporting, mitochondrial F1 complex, alpha subunit, isoform 1
BG073380		AW549542	Expressed sequence AW549542
BG078487		BC030867	CDNA sequence BC030867
BG065113		Bcat1	Branched chain aminotransferase 1, cytosolic
BG073443		Bcl9l	B-cell CLL/lymphoma 9-like
BG076617		Calm1	Calmodulin 1
AW537940		Calm2	Calmodulin 2
BG069728		Ccdc39	Coiled-coil domain containing 39
BG064770		Cct5	Chaperonin subunit 5 (epsilon)
BG073423		Cdk9	Cyclin-dependent kinase 9 (CDC2-related kinase)
BG065445		Clca6	Chloride channel calcium activated 6
BG073116		Clic1	Chloride intracellular channel 1
BG072984		Cltc	Clathrin, heavy polypeptide (Hc)
BG078639		Cnot6	CCR4-NOT transcription complex, subunit 6

BG076988		Cox8a	Cytochrome c oxidase, subunit VIIa
BG068906		Cpeb1	Cytoplasmic polyadenylation element binding protein 1
BG074423		Cstf1	Cleavage stimulation factor, 3' pre-RNA, subunit 1
BG063739		Deb1	Differentially expressed in B16F10 1
BG078439		Dnase1	Deoxyribonuclease I
BG067844		Dscaml1	Down syndrome cell adhesion molecule-like 1
BG069784		Dynlnt3	Dynein light chain Tctex-type 3
BG086487		E2f6	E2F transcription factor 6
BG064950		EG433273	Predicted gene, EG433273
BG063829		Eif2a	Eukaryotic translation initiation factor 2a
BG078409		Eno1	Enolase 1, alpha non-neuron
BG065048		Ghdc	GH3 domain containing
BG078343		Ghitm	Growth hormone inducible transmembrane protein
AU023208		Gna14	Guanine nucleotide binding protein, alpha 14
		Gnas	GNAS (guanine nucleotide binding protein, alpha stimulating) complex locus
AW556925		Gpr108	G protein-coupled receptor 108
BG066419		Gprasp1	G protein-coupled receptor associated sorting protein 1
AW551017		Gps1	G protein pathway suppressor 1
BG077204		Hars	Histidyl-tRNA synthetase
BG076882		Homer2	Homer homolog 2 (Drosophila)
BG063755		Hsp90ab1	Heat shock protein 90kDa alpha (cytosolic), class B member 1
BG079631		Hsp90b1	Heat shock protein 90kDa beta (Grp94), member 1
BG078338		Il7	Interleukin 7
BG069762		Impad1	Inositol monophosphatase domain containing 1
BG065065		Itgb1	Integrin beta 1 (fibronectin receptor beta)
AW544628		Kif3a	Kinesin family member 3A
BQ551722		Kif3b	Kinesin family member 3B
BG073322		Klhl2	Kelch-like 2, Mayven (Drosophila)
BG069796		Klhl5	Kelch-like 5 (Drosophila)
BG074228		Kntc1	Kinetochore associated 1
BG078444		Krt7	Keratin 7
BG063426		Large	Like-glycosyltransferase
BG078651		Lrrc40	Leucine rich repeat containing 40
BG078416		Marcks	Myristoylated alanine rich protein kinase C substrate
BG085378		Mdh1	Malate dehydrogenase 1, NAD (soluble)
BG080961		Mgat4b	Mannoside acetylglucosaminyltransferase 4, isoenzyme B
BG076643			

BG086273		Ndufa13	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 13
BG073544		Nfib	Nuclear factor I/B
BG078592		Nsf	N-ethylmaleimide sensitive fusion protein
BG085840		Olfm1	Olfactomedin 1
AW548258		P4ha1	Procollagen-proline, 2-oxoglutarate 4-dioxygenase (proline 4-hydroxylase), alpha 1 polypeptide
BG065345		Pak2	P21 (CDKN1A)-activated kinase 2
BG074157		Phip	Pleckstrin homology domain interacting protein
BG064066		Pip5k1c	Phosphatidylinositol-4-phosphate 5-kinase, type 1 gamma
BG078663		Pkm2	Pyruvate kinase, muscle
BG065409		Pla2g6	Phospholipase A2, group VI
BG078528		Pou5f1	POU domain, class 5, transcription factor 1
BG078454		Ppia	Peptidylprolyl isomerase A
BG068894		Preb	Prolactin regulatory element binding
BG085625		Prkci	Protein kinase C, iota
BG065166		Prmt5	Protein arginine N-methyltransferase 5
BG065053		Psmc3	Proteasome (prosome, macropain) 26S subunit, ATPase 3
BG086188		Ptprg	Protein tyrosine phosphatase, receptor type, G
BG073320		Rag1ap1	Recombination activating gene 1 activating protein 1
BG073546		Rasa3	RAS p21 protein activator 3
BG078516		Rg9mtd1	RNA (guanine-9-) methyltransferase domain containing 1
BG064438		Rod1	ROD1 regulator of differentiation 1 ( <i>S. pombe</i> )
BG078442		Rpl15	Ribosomal protein L15
BG086430		Rpl31	Ribosomal protein L31
BG063847		Rpl8	Ribosomal protein L8
BG077726		Rps15	Ribosomal protein S15
BG077529		Rps18	Ribosomal protein S18
BG076934		Rps2	Ribosomal protein S2
BG068918		Rps27a	Ribosomal protein S27a
BG076993		Rrbp1	Ribosome binding protein 1
BG072572		Rsbn1	Rosbin, round spermatid basic protein 1
BG086702		Sh2b1	SH2B adaptor protein 1
BG078449		Sh2b3	SH2B adaptor protein 3
BG078464		Slc13a4	Solute carrier family 13 (sodium/sulfate symporters), member 4
BG088856		Sltm	SAFB-like, transcription modulator
BG063417		Smpd3	Sphingomyelin phosphodiesterase 3, neutral
BG077765		Sox8	SRY-box containing gene 8

BG073524		Spint2	Serine protease inhibitor, Kunitz type 2
BG063138		Spock2	Sparc/osteonectin, cwcv and kazal-like domains proteoglycan 2
BG073409		Stmn1	Stathmin 1
BG063223		Suclg2	Succinate-Coenzyme A ligase, GDP-forming, beta subunit
AU022550		Suv39h2	Suppressor of variegation 3-9 homolog 2 (Drosophila)
BG069749		Tarbp2	TAR (HIV) RNA binding protein 2
BG067920		Tbc1d10b	TBC1 domain family, member 10b
BG063180		Tbrg4	Transforming growth factor beta regulated gene 4
BG073668		Tfb1m	Transcription factor B1, mitochondrial
BG063212		Tm9sf3	Transmembrane 9 superfamily member 3
BG076581		Tmed2	Transmembrane emp24 domain trafficking protein 2
BG082678		Tns3	Tensin 3
BG081944		Tspan5	Tetraspanin 5
BG064832		Tubb2c	Tubulin, beta 2c
BG077716		Tubb6	Tubulin, beta 6
BQ552732		Uba52	Ubiquitin A-52 residue ribosomal protein fusion product 1
BG069806		Ubc	Ubiquitin C
BG082755		Ubr2	Ubiquitin protein ligase E3 component n-recognition 2
BG086722		Uchl1	Ubiquitin carboxy-terminal hydrolase L1
BG076903		Unc45a	Unc-45 homolog A (C. elegans)
BG078411		Vps41	Vacuolar protein sorting 41 (yeast)
BG073390		Wbscr22	Williams Beuren syndrome chromosome region 22
BG065012		Ywhah	Tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, eta polypeptide
BG086134		Zc3hc1	Zinc finger, C3HC type 1
BG069830		Zdhhc7	Zinc finger, DHHC domain containing 7
BG085989		Zfp313	Zinc finger protein 313
BG065115		Zwint	ZW10 interactor
AA407855		EST	
AA409509		EST	
AW549995		EST	
AW553932		EST	
BG063139		EST	
BG065178		EST	
BG068930		EST	
BG069795		EST	Transcribed locus, weakly similar to XP_001078904.1 similar to zinc finger protein 146 [Rattus norvegicus]

BG073115		EST
BG073612		EST
BG087495		EST
BG066274	1700020O03Rik	RIKEN cDNA 1700020O03 gene
AU040159	4732418C07Rik	RIKEN cDNA 4732418C07 gene
BG069602	Acaa2	Acetyl-Coenzyme A acyltransferase 2 (mitochondrial 3-oxoacyl-Coenzyme A thiolase)
BG079065	Adam15	A disintegrin and metallopeptidase domain 15 (metarginidin)
BG069227	Aftph	Aftiphilin
BG065093	Agtrap	Angiotensin II, type I receptor-associated protein
BG068644	Arl6ip2	ADP-ribosylation factor-like 6 interacting protein 2
BG068769	AU023762	Expressed sequence AU023762
BG070749	Brd3	Bromodomain containing 3
BG070932	C030048H21Rik	RIKEN cDNA C030048H21 gene
BG071169	Camk2b	Calcium/calmodulin-dependent protein kinase II, beta
BG069436	Ccdc60	Coiled-coil domain containing 60
BG081903	Hsd3b1	Hydroxy-delta-5-steroid dehydrogenase, 3 beta- and steroid delta-isomerase 1
BQ551924	Igf1r	Insulin-like growth factor I receptor
BG085297	Jarid1b	Jumonji, AT rich interactive domain 1B (Rbp2 like)
BG073012	Mamdc1	MAM domain containing 1
BG071128	Mib1	Mindbomb homolog 1 ( <i>Drosophila</i> )
BG065778	Mll3	Myeloid/lymphoid or mixed-lineage leukemia 3
BG083317	Net1	Neuroepithelial cell transforming gene 1
BG072344	Orc1l	Origin recognition complex, subunit 1-like ( <i>S.cereviaiae</i> )
BG071215	Paqr5	Progestin and adipoQ receptor family member V
BG082619	Pcnt	Pericentrin (kendrin)
BG072296	Phf8	PHD finger protein 8
BG079960	Prkc $\zeta$	Protein kinase C, zeta
BG065725	Prps1	Phosphoribosyl pyrophosphate synthetase 1
BG071220	Rnf19	Ring finger protein (C3HC4 type) 19
BG062935	Sipa1l2	Signal-induced proliferation-associated 1 like 2
BG078901	Spcs2	Signal peptidase complex subunit 2 homolog ( <i>S. cerevisiae</i> )
BG074672	Strbp	Spermatid perinuclear RNA binding protein
BG074497	Tnrc6a	Trinucleotide repeat containing 6a
AU018221	Wwtr1	WW domain containing transcription regulator 1
AU024687	EST	

BG063494		EST	
BG065704		EST	
BG066596		EST	
BG067639		EST	Transcribed locus
BG068110		EST	
BG068321		EST	
BG068854		EST	
BG069078		EST	
BG069343		EST	
BG070824		EST	
BG070930		EST	Transcribed locus
BG071194		EST	
BG071515		EST	
BG072320		EST	Transcribed locus
BG085385	2610024E20Rik	RIKEN cDNA 2610024E20 gene	
BG064840	2610033H07Rik	RIKEN cDNA 2610033H07 gene	
BG064518	2810422J05Rik	RIKEN cDNA 2810422J05 gene	
AA410046	4921517N04Rik	RIKEN cDNA 4921517N04 gene	
BG064836	4921537D05Rik	RIKEN cDNA 4921537D05 gene	
BG073203	5033428A16Rik	RIKEN cDNA 5033428A16 gene	
BG085932	6330577E15Rik	RIKEN cDNA 6330577E15 gene	
BQ550715	Anp32b	Acidic nuclear phosphoprotein 32 family, member B	
BG075826	Arf3	ADP-ribosylation factor 3	
BG080936	Arfgap3	ADP-ribosylation factor GTPase activating protein 3	
BG065313	Atp6v1e1	VATPase, H <sup>+</sup> transporting, lysosomal V1 subunit E1	
AW553617	Bcam	Basal cell adhesion molecule	
BG066196	C78409	Expressed sequence C78409	
BQ550128	Ccdc9	Coiled-coil domain containing 9	
BG085384	Cct2	Chaperonin subunit 2 (beta)	
AW538671	Col5a3	Procollagen, type V, alpha 3	
BG064855	Cox7a2l	Cytochrome c oxidase subunit VIIa polypeptide 2-like	
BG067866	Cxadr	Coxsackievirus and adenovirus receptor	
BG064881	D1Ertd161e	DNA segment, Chr 1, ERATO Doi 161, expressed	
BG078206	D330037H05Rik	RIKEN cDNA D330037H05 gene	
BG064783	Ddx5	DEAD (Asp-Glu-Ala-Asp) box polypeptide 5	
AW554618	Diap1	Diaphanous homolog 1 ( <i>Drosophila</i> )	
BG084373	Dmxl2	Dmx-like 2	

BG079743		Dnajc7	DnaJ (Hsp40) homolog, subfamily C, member 7
BG064751		E4f1	E4F transcription factor 1
BG067161		Endod1	Endonuclease domain containing 1
C79946		Epb4.1l5	Erythrocyte protein band 4.1-like 5
C80308		Exoc7	Exocyst complex component 7
BG078212		Fignl1	Fidgetin-like 1
BG064795		Ftl1	Ferritin light chain 1
BQ552701		Fusip1	FUS interacting protein (serine-arginine rich) 1
BG065382		Gldc	Glycine decarboxylase
BG064940		Gltscr2	Glioma tumor suppressor candidate region gene 2
BQ550758		Gng2	Guanine nucleotide binding protein (G protein), gamma 2 subunit
BQ552668		Gpam	Glycerol-3-phosphate acyltransferase, mitochondrial
BG078210		Ift88	Intraflagellar transport 88 homolog (Chlamydomonas)
BG064653		Igf2bp1	Insulin-like growth factor 2 mRNA binding protein 1
BG064919		Ilf3	Interleukin enhancer binding factor 3
BG078196		Kcnq1	Potassium voltage-gated channel, subfamily G, member 1
BG072604		Lats2	Large tumor suppressor 2
BG064582		Lrrc16	Leucine rich repeat containing 16
BG087465		Mapk14	Mitogen activated protein kinase 14
BG064664		Mbc2	Membrane bound C2 domain containing protein
BG072578		Mrg1	Myeloid ecotropic viral integration site-related gene 1
BG064665		Nucks1	Nuclear casein kinase and cyclin-dependent kinase substrate 1
BG073261		Odz3	Odd Oz/ten-m homolog 3 (Drosophila)
AU017469		Pafah1b2	Platelet-activating factor acetylhydrolase, isoform 1b, alpha2 subunit
BG064599		Pappa	Pregnancy-associated plasma protein A
BG064642		Pcyt1a	Phosphate cytidylyltransferase 1, choline, alpha isoform
BG064930		Pfk1	Phosphofructokinase, liver, B-type
BG082424		Polr2h	Polymerase (RNA) II (DNA directed) polypeptide H
BG078452		Ppia	Peptidylprolyl isomerase A
BG074887		Prlr	Prolactin receptor
BG073534		Psd3	Pleckstrin and Sec7 domain containing 3
BG064701		Psmc2	Proteasome (prosome, macropain) 26S subunit, ATPase 2
BG067921		Psme2	Proteasome (prosome, macropain) 28 subunit, beta
BG076902		Pura	Purine rich element binding protein A
BG078132		Rangap1	RAN GTPase activating protein 1
BG064869		Rnmt	RNA (guanine-7-) methyltransferase
BG085977		Rpl10	Ribosomal protein 10

BG085974		Rpl14	Ribosomal protein L14
BG064641		Rpp14	Ribonuclease P 14 subunit (human)
BG064736		Rrm1	Ribonucleotide reductase M1
BG085334		Sar1a	SAR1 gene homolog A ( <i>S. cerevisiae</i> )
BG078157		Sfrs3	Splicing factor, arginine/serine-rich 3 (SRp20)
BG079955		Slc5a11	Solute carrier family 5 (sodium/glucose cotransporter), member 11 Solute carrier family 7 (cationic amino acid transporter, y <sup>+</sup> system), member 8
BG068299		Slc7a8	
BG067985		Spred1	Sprouty protein with EVH-1 domain 1, related sequence
BG078109		Tcp1	T-complex protein 1
BG067897		Tnrc6b	Trinucleotide repeat containing 6b
BG086016		Tpm1	Tropomyosin 1, alpha
BG064807		Tpp1	Tripeptidyl peptidase I
BG064856		Tpp2	Tripeptidyl peptidase II
BG073234		Trib1	Tribbles homolog 1 ( <i>Drosophila</i> )
BG086839		Trim35	Tripartite motif-containing 35
BG064677		Trpc4ap	Transient receptor potential cation channel, subfamily C, member 4 associated protein
BG066789		Upf3b	UPF3 regulator of nonsense transcripts homolog B (yeast)
BG073139		Vkorc1l1	Vitamin K epoxide reductase complex, subunit 1-like 1
BG067887		Wipf2	WAS/WASL interacting protein family, member 2
BG062990		Wiz	Widely-interspaced zinc finger motifs
BG076977		Zranb2	Zinc finger, RAN-binding domain containing 2
AW536284		EST	
AW536295		EST	
AW548714		EST	
BG064784		EST	
BG064868		EST	
BG065291		EST	
BG067886		EST	Transcribed locus, weakly similar to XP_577160.1 similar to LRRGT00088 [ <i>Rattus norvegicus</i> ]
BG073193		EST	
BG073260		EST	
BG082061		EST	
BG072306		Acaca	Acetyl-Coenzyme A carboxylase alpha
BG075316		Asb1	Ankyrin repeat and SOCS box-containing protein 1
BG076252		AU022870	Expressed sequence AU022870

BG085488		Cog8	Component of oligomeric golgi complex 8
BG080820		Dnajb4	DnaJ (Hsp40) homolog, subfamily B, member 4
BG072695		Erh	Enhancer of rudimentary homolog ( <i>Drosophila</i> )
BG086746		Fabp3	Fatty acid binding protein 3, muscle and heart
BG074610		Glb1	Galactosidase, beta 1
BQ552325		Kif3c	Kinesin family member 3C
BG083890		Ppfia1	Protein tyrosine phosphatase, receptor type, f polypeptide (PTPRF), interacting protein, alpha 1
BG087873		Rps6ka5	Ribosomal protein S6 kinase, polypeptide 5
BG072375		Ubxd8	UBX domain containing 8
AW546560		EST	
BG068446		EST	
BG071206		EST	
BG071355		EST	
BG072805		EST	
BG073325		EST	
BG076040		EST	
BG087808		EST	
BQ550895		EST	Transcribed locus
BQ551139		EST	Transcribed locus
BQ551597		EST	
C88307		2610204L23Rik	RIKEN cDNA 2610204L23 gene
BG065432		Abcf3	ATP-binding cassette, sub-family F (GCN20), member 3
BG068557		Actl6a	Actin-like 6A
BG063659		Ap1s1	Adaptor protein complex AP-1, sigma 1
BG085195		Atp2a2	ATPase, Ca++ transporting, cardiac muscle, slow twitch 2
BG071404		AU041129	Expressed sequence AU041129
BG080169		Cyb5r3	Cytochrome b5 reductase 3
BG081063		Cybb	Cytochrome b-245, beta polypeptide
BG063696		D19Wsu162e	DNA segment, Chr 19, Wayne State University 162, expressed
BG068629		EG235580	Predicted gene, EG235580
BG064471		Ext1	Exostoses (multiple) 1
AW545189		Grin1a	Glutamate receptor, ionotropic, N-methyl D-aspartate-like 1A
BG066248		Ifi30	Interferon gamma inducible protein 30
BG066801		LOC624424	Similar to poly(A) binding protein, cytoplasmic 4 isoform 1
AA410017		Nip7	Nuclear import 7 homolog ( <i>S. cerevisiae</i> )

BG063822		Pleckstrin homology domain containing, family C (with FERM domain) member 1
BG064693		Proteasome (prosome, macropain) subunit, alpha type 1
BG078672		Ribosomal protein L26
BG069613		TBC1 domain family, member 9B
BG071052		Transmembrane protein 63a
BG077865		Tumor necrosis factor superfamily, member 5-induced protein 1
BG063080		5'-3' exoribonuclease 2
AW539369	EST	
AW556716	EST	
BG064488	EST	
BG071172	EST	
BG072105	EST	
BG076368	EST	
BG085733	Septin 8	Septin 8
BG072217	0910001A06Rik	RIKEN cDNA 0910001A06 gene
BG086314	1810013L24Rik	RIKEN cDNA 1810013L24 gene
AU024060	A930005I04Rik	RIKEN cDNA A930005I04 gene
BG086303	Aip	Aryl-hydrocarbon receptor-interacting protein
AW552546	Aldh1a2	Aldehyde dehydrogenase family 1, subfamily A2
BG088087	Capzb	Capping protein (actin filament) muscle Z-line, beta
BG064532	Ccdc58	Coiled-coil domain containing 58
BG079767	Csda	Cold shock domain protein A
BQ552407	Cst3	Cystatin C
BG072903	Ctbp2	C-terminal binding protein 2
BG065918	Ctnna1	Catenin (cadherin associated protein), alpha 1
BG067487	D9Mgi6	DNA Segment, Chr 9, Mouse Genome Informatics 6
BG063515	Fth1	Ferritin heavy chain 1
BG073013	Golph4	Golgi phosphoprotein 4
BG073042	Hbb-b1	Hemoglobin, beta adult major chain
BG076621	Hspa5	Heat shock 70kD protein 5 (glucose-regulated protein)
AW538243	Itga1	Integrin alpha 1
C77408	Krt8	Keratin 8
BG079546	Ncoa6	Nuclear receptor coactivator 6
BG088100	Ndufs1	NADH dehydrogenase (ubiquinone) Fe-S protein 1
BG069369	Pdzd3	PDZ domain containing 3
BG076891	Pkp2	Plakophilin 2

BG075879		Plp1	Proteolipid protein (myelin) 1
BG077025		Pnn	Pinin
BG080270		Prpf3	PRP3 pre-mRNA processing factor 3 homolog (yeast)
BQ552383		Rcl1	RNA terminal phosphate cyclase-like 1
BG064900		Scd1	Stearoyl-Coenzyme A desaturase 1
BG075286		Slc25a3	Solute carrier family 25 (mitochondrial carrier, phosphate carrier), member 3
BG064802		Sparc	Secreted acidic cysteine rich glycoprotein
BG074398		Sparcl1	SPARC-like 1 (mast9, hevin)
BG082439		Trappc3	Trafficking protein particle complex 3
AW554361		Tspyl2	TSPY-like 2
BG067235		Ttbk2	Tau tubulin kinase 2
BG065641		Txndc5	Thioredoxin domain containing 5
C77246		Yars	Tyrosyl-tRNA synthetase
AU020246		EST	Transcribed locus, strongly similar to XP_227080.3 similar to eukaryotic translation elongation factor 1 alpha 1 [Rattus norvegicus]
AW538365		EST	
AW544835		EST	
AW548385		EST	
BG063541		EST	
BG063953		EST	
BG064632		EST	
BG066258		EST	
BG068317		EST	
BG068487		EST	
BG068668		EST	
BG068917		EST	
BG069139		EST	
BG069140		EST	
BG069152		EST	
BG069163		EST	RNA binding site for Dazl protein, clone kc7
BG072733		EST	
BG075262		EST	
BG086298		EST	
BG064872	1700019N12Rik	RIKEN cDNA 1700019N12 gene	
C87836	1810055G02Rik	RIKEN cDNA 1810055G02 gene	
BG076242	2010106G01Rik	RIKEN cDNA 2010106G01 gene	

BG064862		2010111I01Rik	RIKEN cDNA 2010111I01 gene
BG080256		2410022L05Rik	RIKEN cDNA 2410022L05 gene
AU040419		4933439F18Rik	RIKEN cDNA 4933439F18 gene
BG074949		5830404H04Rik	RIKEN cDNA 5830404H04 gene
BG069482		6330409N04Rik	RIKEN cDNA 6330409N04 gene
BG068979		9330102E08Rik	RIKEN cDNA 9330102E08 gene
BG063679		Aasdhppt	Aminoacidate-semialdehyde dehydrogenase-phosphopantetheinyl transferase
BG068195		Abce1	ATP-binding cassette, sub-family E (OABP), member 1
BG064885		Acot2	Acyl-CoA thioesterase 2
BG080292		AI481105	Expressed sequence AI481105
BG067951		Alox12e	Arachidonate lipoxygenase, epidermal
BG078211		Arl1	ADP-ribosylation factor-like 1
AW552880		Arsg	Arylsulfatase G
BG076321		Aspm	Asp (abnormal spindle)-like, microcephaly associated ( <i>Drosophila</i> )
BG077116		Auts2	Autism susceptibility candidate 2
BG072521		B3galnt2	UDP-GalNAc:betaGlcNAc beta 1,3-galactosaminyltransferase, polypeptide 2
BG072161		BC038167	CDNA sequence BC038167
BG075022		Bxdc1	Brix domain containing 1
BQ550980		Chn1	Chimerin (chimaerin) 1
BG083522		Cks2	CDC28 protein kinase regulatory subunit 2
BG072504		Col18a1	Procollagen, type XVIII, alpha 1
BG067822		Coro2b	Coronin, actin binding protein, 2B
BG066881		Cryz	Crystallin, zeta
BG074280		D430042O09Rik	RIKEN cDNA D430042O09 gene Dual specificity phosphatase 3 (vaccinia virus phosphatase VH1-related)
BG072182		Dusp3	
BG075819		E230024E03Rik	RIKEN cDNA E230024E03 gene
BG077164		Eif3s2	Eukaryotic translation initiation factor 3, subunit 2 (beta)
BG080244		Ern1	Endoplasmic reticulum (ER) to nucleus signalling 1
BG074340		Farp1	FERM, RhoGEF (Arhgef) and pleckstrin domain protein 1 (chondrocyte-derived)
BG074324		Farslb	Phenylalanine-tRNA synthetase-like, beta subunit
BG063802		Fcho2	FCH domain only 2
BG065471		Gk5	Glycerol kinase 5 (putative)
BG086996		Golga1	Golgi autoantigen, golgin subfamily a, 1

BG076263		Hdh	Huntington disease gene homolog
BG068319		Heatr1	HEAT repeat containing 1
BG077487		Hif1a	Hypoxia inducible factor 1, alpha subunit
BG085901		Ifitm2	Interferon induced transmembrane protein 2
BG087082		Ifrg15	Interferon alpha responsive gene
BG071617		Lemd3	LEM domain containing 3
AW552998		Lsm3	LSM3 homolog, U6 small nuclear RNA associated ( <i>S. cerevisiae</i> )
BG072998		Lum	Lumican
BG085859		Mc2r	Melanocortin 2 receptor
BG078181		Metap1	Methionyl aminopeptidase 1
BG067853		Mgmt	O-6-methylguanine-DNA methyltransferase
BG067984		Mll5	Myeloid/lymphoid or mixed-lineage leukemia 5
BG071638		Mrpl18	Mitochondrial ribosomal protein L18
BG087418		Ms4a6d	Membrane-spanning 4-domains, subfamily A, member 6D
BG066947		Ndp52	Nuclear domain 10 protein 52
BG087727		Nfx1	Nuclear transcription factor, X-box binding 1
BG080881		Npepps	Aminopeptidase puromycin sensitive
BG084112		Nr2f1	Nuclear receptor subfamily 2, group F, member 1
BG086787		Numa1	Nuclear mitotic apparatus protein 1
BG085485		Oaz3	Ornithine decarboxylase antizyme 3
BG072372		Pcp4l1	Purkinje cell protein 4-like 1
BG087717		Pms2	Postmeiotic segregation increased 2 ( <i>S. cerevisiae</i> )
BG087766		Pnpla8	Patatin-like phospholipase domain containing 8
		Ppp2r1b	Protein phosphatase 2 (formerly 2A), regulatory subunit A (PR 65), beta isoform
BG067151		Ptprf	Protein tyrosine phosphatase, receptor type, F
BG085163		Rab11a	RAB11a, member RAS oncogene family
BG071651		Rab11fip1	RAB11 family interacting protein 1 (class I)
BG072553		Rcn3	Reticulocalbin 3, EF-hand calcium binding domain
BG088768		Runx2	Runt related transcription factor 2
BG067185		Sart2	Squamous cell carcinoma antigen recognized by T cells 2
BG080423		Secisbp2	SECIS binding protein 2
BG081064		Sephs1	Selenophosphate synthetase 1
BG073672		Sh3tc2	SH3 domain and tetratricopeptide repeats 2
BG074293		Slc37a2	Solute carrier family 37 (glycerol-3-phosphate transporter), member 2
BG085951		Slco1b2	Solute carrier organic anion transporter family, member 1b2
BG068288		Smc6	Structural maintenance of chromosomes 6
AU022611			

BG081031		Smox	Spermine oxidase
BG071657		Smu1	Smu-1 suppressor of mec-8 and unc-52 homolog ( <i>C. elegans</i> )
BG078208		Srprb	Signal recognition particle receptor, B subunit
BG084249		Ssh1	Slingshot homolog 1 ( <i>Drosophila</i> )
BG074313		Syngr2	Synaptogyrin 2
BG071687		Synj2bp	Synaptjanin 2 binding protein
BG086829		Sypl	Synaptophysin-like protein
BG067233		Ttc32	Tetratricopeptide repeat domain 32
BG086421		Usmg5	Upregulated during skeletal muscle growth 5
BG074853		Usp34	Ubiquitin specific peptidase 34
BG074348		Wnk4	WNK lysine deficient protein kinase 4
BG074888		Xpo5	Exportin 5
BG074305		Yap1	Yes-associated protein 1
BG067943		Zcchc6	Zinc finger, CCHC domain containing 6
BG078199		Zfp281	Zinc finger protein 281
AW553287		EST	
AW558484		EST	
BG066923		EST	
BG067197		EST	
BG067209		EST	
BG067243		EST	
BG067854		EST	
BG067995		EST	Transcribed locus
BG072181		EST	
BG073099		EST	
BG073132		EST	
BG074282		EST	
BG074322		EST	Transcribed locus
BG075052		EST	
BG084523		EST	
C80679		EST	
BG078874	1110061O04Rik	RIKEN cDNA 1110061O04 gene	
AW557796	1500011J06Rik	RIKEN cDNA 1500011J06 gene	
BG082886	2010305A19Rik	RIKEN cDNA 2010305A19 gene	
BG075517	2410127E18Rik	RIKEN cDNA 2410127E18 gene	
BG085636	2610005L07Rik	RIKEN cDNA 2610005L07 gene	
AU015471	2610529C04Rik	RIKEN cDNA 2610529C04 gene	

BG068399		4930432O21Rik	RIKEN cDNA 4930432O21 gene
BG072938		4930473A06Rik	RIKEN cDNA 4930473A06 gene
BG077603		5730494M16Rik	RIKEN cDNA 5730494M16 gene
BG078323		5730536A07Rik	RIKEN cDNA 5730536A07 gene
BG066229		6720457D02Rik	RIKEN cDNA 6720457D02 gene
BG085732		9130004C02Rik	RIKEN cDNA 9130004C02 gene
AW554339		9630037P07Rik	RIKEN cDNA 9630037P07 gene
BG077905		AA881470	EST AA881470
BG067888		Aak1	AP2 associated kinase 1
BG070055		Alg13	Asparagine-linked glycosylation 13 homolog ( <i>S. cerevisiae</i> )
BG065639		Ap1gbp1	AP1 gamma subunit binding protein 1
BG063970		Atf7ip	Activating transcription factor 7 interacting protein
BG081746		Azin1	Antizyme inhibitor 1
BG078265		BC011248	CDNA sequence BC011248
BG083308		BC013481	CDNA sequence BC013481
BG065711		BC033606	CDNA sequence BC033606
BG072651		Bnc1	Basonuclin 1
BG077928		C130032J12Rik	RIKEN cDNA C130032J12 gene
BG070530		C430003P19Rik	RIKEN cDNA C430003P19 gene
BQ550730		Ccdc36	Coiled-coil domain containing 36
BG065644		Cdc5l	Cell division cycle 5-like ( <i>S. pombe</i> )
BQ550373		Cdh5	Cadherin 5
BG071313		Cdkn1c	Cyclin-dependent kinase inhibitor 1C (P57)
BG066570		Cdyl2	Chromodomain protein, Y chromosome-like 2
BG065629		Centd1	Centaurin, delta 1
BG068414		Col25a1	Procollagen, type XXV, alpha 1
		Ctr9	Ctr9, Paf1/RNA polymerase II complex component, homolog ( <i>S. cerevisiae</i> )
BG065899		Cyba	Cytochrome b-245, alpha polypeptide
BG083209		Cyp51	Cytochrome P450, family 51
BG073364		D10Ertd641e	DNA segment, Chr 10, ERATO Doi 641, expressed
BG070372		D5Ertd135e	DNA segment, Chr 5, ERATO Doi 135, expressed
BG065769		D8Ertd457e	DNA segment, Chr 8, ERATO Doi 457, expressed
BG068420		Dhx57	DEAH (Asp-Glu-Ala-Asp/His) box polypeptide 57
BG064252		Dlst	Dihydrolipoamide S-succinyltransferase (E2 component of 2-oxo-glutarate complex)
BG087920		Dmgdh	Dimethylglycine dehydrogenase precursor
BG070080			

BG066580		Dsg2	Desmoglein 2
BG066292		Dtnbp1	Dystrobrevin binding protein 1
BG078920		EG668628	Predicted gene, EG668628
AU041770		Emid2	EMI domain containing 2
BG069525		Ercc4	Excision repair cross-complementing rodent repair deficiency, complementation group 4
BG065623		Etnk1	Ethanolamine kinase 1
BG065915		Etv6	Ets variant gene 6 (TEL oncogene)
BG066491		Fhod3	Formin homology 2 domain containing 3
BG086904		Fis1	Fission 1 (mitochondrial outer membrane) homolog (yeast)
BG078930		Fkbp4	FK506 binding protein 4
BG066009		Gtf3c2	General transcription factor IIIC, polypeptide 2, beta
BG069255		Hira	Histone cell cycle regulation defective homolog A ( <i>S. cerevisiae</i> )
BG073539		Hsd17b10	Hydroxysteroid (17-beta) dehydrogenase 10
BG064506		Il17d	Interleukin 17D
BG085435		Impact	Imprinted and ancient
BG087223		Itga3	Integrin alpha 3
BG072195		Jam3	Junction adhesion molecule 3
BG066271		Kars	Lysyl-tRNA synthetase
BG067748		Lrrc8e	Leucine rich repeat containing 8 family, member E
BG065612		Lrrk2	Leucine-rich repeat kinase 2
BG087954		Ltbp1	Latent transforming growth factor beta binding protein 1
BG070588		Map1lc3b	Microtubule-associated protein 1 light chain 3 beta
BG078615		Mns1	Meiosis-specific nuclear structural protein 1
BG077638		Mrpl19	Mitochondrial ribosomal protein L19
BG082228		Mybl2	Myeloblastosis oncogene-like 2
BG076620		Myo1e	Myosin IE
BI076789		Myst4	MYST histone acetyltransferase monocytic leukemia 4
BG069191		Nasp	Nuclear autoantigenic sperm protein (histone-binding)
BG073427		Nat12	N-acetyltransferase 12
BG068017		Ncoa1	Nuclear receptor coactivator 1
BG064588		Nfat5	Nuclear factor of activated T-cells 5
BG067047		Ogt	O-linked N-acetylglucosamine (GlcNAc) transferase (UDP-N-acetylglucosamine:polypeptide-N-acetylglucosaminyl transferase)
AW546675		Palld	Palladin, cytoskeletal associated protein
BG065645		Parl	Presenilin associated, rhomboid-like
BG070555		Pawr	PRKC, apoptosis, WT1, regulator

BG069544		Pde3a	Phosphodiesterase 3A, cGMP inhibited
BG087768		Pde5a	Phosphodiesterase 5A, cGMP-specific
BG084383		Pde6d	Phosphodiesterase 6D, cGMP-specific, rod, delta
BG071525		Pdzd2	PDZ domain containing 2
BG063222		Pecam1	Platelet/endothelial cell adhesion molecule 1
BG087523		Pes1	Pescadillo homolog 1, containing BRCT domain (zebrafish)
BG083442		Pex19	Peroxisome biogenesis factor 19
BG078897		Phf12	PHD finger protein 12
BG064503		Phf23	PHD finger protein 23
BG072458		Pink1	PTEN induced putative kinase 1
BG078885		Plk4	Polo-like kinase 4 (Drosophila)
BG066315		Ppm1a	Protein phosphatase 1A, magnesium dependent, alpha isoform
BG065773		Ppp2r5c	Protein phosphatase 2, regulatory subunit B (B56), gamma isoform
BG065790		Ppp2r5e	Protein phosphatase 2, regulatory subunit B (B56), epsilon isoform
BG081448		Ppp3cb	Protein phosphatase 3, catalytic subunit, beta isoform
BG069898		Psmd11	Proteasome (prosome, macropain) 26S subunit, non-ATPase, 11
BG066562		Psmd7	Proteasome (prosome, macropain) 26S subunit, non-ATPase, 7
BG086278		Ptn	Pleiotrophin
BG074880		Ptpn6	Protein tyrosine phosphatase, non-receptor type 6
BG066306		Ranbp9	RAN binding protein 9
BG068432		Rap1a	RAS-related protein-1a
BG078834		Renbp	Renin binding protein
BG072059		Rex2	Reduced expression 2
BG072629		Rhbdd3	Rhomboid domain containing 3
BG078882		Serpinb6c	Serine (or cysteine) peptidase inhibitor, clade B, member 6c
AW557944		Sfrs14	Splicing factor, arginine/serine-rich 14
BG077930		Snx10	Sorting nexin 10
BG088731		Spag9	Sperm associated antigen 9
BG069945		Stag2	Stromal antigen 2
BG069533		Suv420h1	Suppressor of variegation 4-20 homolog 1 (Drosophila)
BG076896		Tardbp	TAR DNA binding protein
BG087876		Tbc1d1	TBC1 domain family, member 1
BG064989		Tcta	T-cell leukemia translocation altered gene
BG088528		Tdrkh	Tudor and KH domain containing protein
BG086192		Tgfb1i1	Transforming growth factor beta 1 induced transcript 1
BG069517		Tnfsf12	Tumor necrosis factor (ligand) superfamily, member 12
BG066559		Tnks1bp1	Tankyrase 1 binding protein 1

BG062981		Tprkb	Tp53rk binding protein
BG079014		Trpm7	Transient receptor potential cation channel, subfamily M, member 7
BG082843		Trrap	Transformation/transcription domain-associated protein
BG066560		Tubgcp5	Tubulin, gamma complex associated protein 5
BG077640		Ufd1l	Ubiquitin fusion degradation 1 like
BG074836		Usp4	Ubiquitin specific peptidase 4 (proto-oncogene)
			Ubiquitously transcribed tetratricopeptide repeat gene, X chromosome
BG076105		Utx	
BG065616		Vcp	Valosin containing protein
AU041113		Vps54	Vacuolar protein sorting 54 (yeast)
BG076009		Wdr24	WD repeat domain 24
BG081054		Xlr3b	X-linked lymphocyte-regulated 3B
BG069367		Zfand2b	Zinc finger, AN1 type domain 2B
BG086136		Zfp51	Zinc finger protein 51
BG065890		Zfp710	Zinc finger protein 710
AW540949		EST	
AW546889		EST	
AW550178		EST	
AW552212		EST	
AW554424		EST	
AW557711		EST	
BG063053		EST	
BG063089		EST	
BG063195		EST	
			2 cells egg cDNA, RIKEN full-length enriched library, clone:B020036G17
BG063398		EST	product:unclassifiable, full insert sequence
BG063665		EST	
BG063945		EST	
BG064219		EST	
BG065610		EST	
BG065611		EST	
BG065622		EST	
BG065635		EST	
BG065650		EST	
BG065651		EST	
BG065657		EST	
BG065659		EST	

BG065666		EST	
BG065957		EST	
BG065991		EST	
BG065992		EST	
BG066066		EST	
BG066341		EST	
BG066362		EST	Transcribed locus
BG066412		EST	
BG066561		EST	
BG066579		EST	
BG066647		EST	
BG066670		EST	
BG066711		EST	
BG066720		EST	
BG066778		EST	
BG068069		EST	
BG068123		EST	
BG068347		EST	Transcribed locus, strongly similar to XP_895654.1 similar to protein kinase LYK5 [Mus musculus]
BG068410		EST	
BG068421		EST	
BG068426		EST	
BG068436		EST	
BG068456		EST	
BG068469		EST	
BG068684		EST	
BG068840		EST	
BG069127		EST	
BG069363		EST	
BG069501		EST	
BG070059		EST	
BG070182		EST	
BG070250		EST	
BG070256		EST	
BG070301		EST	
BG070436		EST	
BG070725		EST	Transcribed locus

BG070931		EST	
BG071290		EST	
BG071357		EST	
BG071395		EST	
BG071436		EST	Transcribed locus, weakly similar to NP_982429.1 [Eremothecium gossypii]
BG072130		EST	
BG072687		EST	
BG073298		EST	
BG074775		EST	
BG074909		EST	Transcribed locus, weakly similar to XP_573813.1 similar to envelope protein [Rattus norvegicus]
BG075264		EST	
BG075276		EST	
BG075416		EST	
BG075971		EST	
BG075999		EST	
BG076724		EST	
BG076725		EST	
BG079400		EST	
BG084956		EST	
BG086296		EST	
BQ550410		EST	
C76156		EST	CDNA clone IMAGE:1548559
C79706		EST	
C79832		EST	

**TableS2aP3. Gene lists of mouse CNS age-related gene expression pattern 3**

**Notes.** Cor: cortex; Hip: hippocampus; Cer: cerebellum; Str: striatum; SC: spinal cord.



Acc	Cor-p3	Hip-p3	Cer-p3	Str-p3	SC-p3	Symbol	Name
BG076195						4931419K03Rik	RIKEN cDNA 4931419K03 gene
BG075229						Atrnl1	Attractin like 1
BG076206						Bscl2	Bernardinelli-Seip congenital lipodystrophy 2 homolog (human)
BG075862						Hprt1	Hypoxanthine guanine phosphoribosyl transferase 1
BG076185						Ptbp2	Polypyrimidine tract binding protein 2
BG075873						Tbc1d20	TBC1 domain family, member 20
BG069139						EST	
BQ552212						1500011J06Rik	RIKEN cDNA 1500011J06 gene
BG066708						AU020772	Expressed sequence AU020772
BG063312						Bat3	HLA-B-associated transcript 3
AW536452						Cul4b	Cullin 4B
BG068843						Fchsd2	FCH and double SH3 domains 2
BG079611						Irak1	Interleukin-1 receptor-associated kinase 1
AA408772						Jmjd3	Jumonji domain containing 3
BG067912						Mrg1	Myeloid ecotropic viral integration site-related gene 1
BG082228						Mybl2	Myeloblastosis oncogene-like 2
BG069533						Suv420h1	Suppressor of variegation 4-20 homolog 1 (Drosophila)
BG078317						Ttc19	Tetratricopeptide repeat domain 19
BG076766						Ttr	Transthyretin
BG069606						Zfp592	Zinc finger protein 592
BG065957						EST	
BG067146						EST	
BG069183						EST	
BG069648						EST	
BG070059						EST	
BG070382						EST	
BG070913						EST	
BQ550410						EST	

BG076983		Necap2	NECAP endocytosis associated 2
BG080382		5730427N09Rik	RIKEN cDNA 5730427N09 gene
BG064553		Thumpd1	THUMP domain containing 1
BG066789		Upf3b	UPF3 regulator of nonsense transcripts homolog B (yeast)
BG065142		Zfp422	Zinc finger protein 422

**TableS2aP4. Gene lists of mouse CNS age-related gene expression pattern 4**

**Notes.** Cor: cortex; Hip: hippocampus; Cer: cerebellum; Str: striatum; SC: spinal cord.



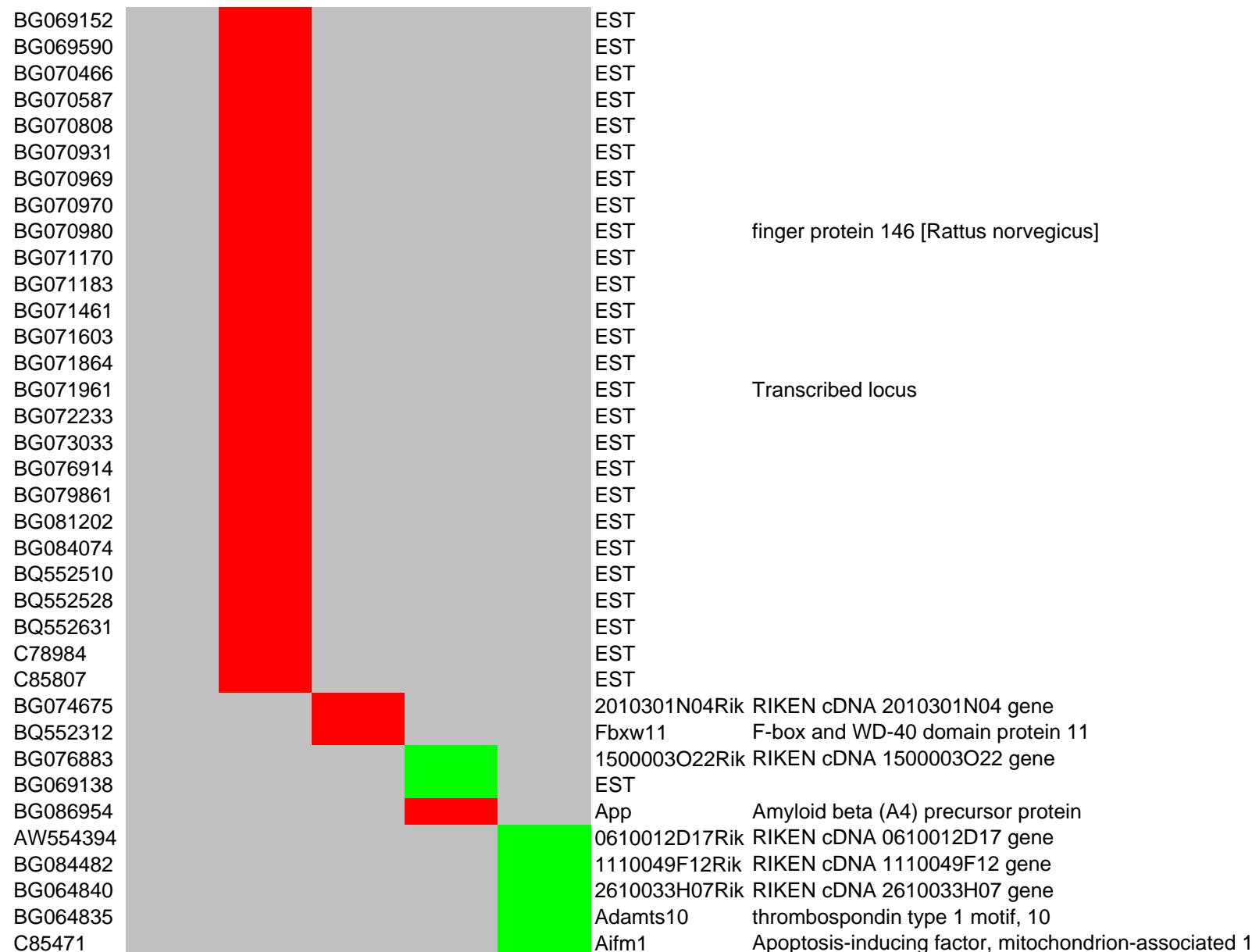
Acc	Cor-p4	Hip-p4	Cer-p4	Str-p4	SC-p4	Symbol	Name
BG074626	green	red				Prkg1	Protein kinase, cGMP-dependent, type I
BG064773	grey	green				Hsp90aa1	Heat shock protein 90kDa alpha (cytosolic), class A member 1
BG064819						Pa2g4	Proliferation-associated 2G4
BG064831						Tubb2c	Tubulin, beta 2c
BG063736					red	Nlk	Nemo like kinase
BG072287		red				Cenpk	Centromere protein K
BG066387						Pafah1b2	Platelet-activating factor acetylhydrolase, isoform 1b, alpha2 subunit
BG083661						EST	
BG072217	green					0910001A06Rik	RIKEN cDNA 0910001A06 gene
BG073451						2010003J03Rik	RIKEN cDNA 2010003J03 gene
BG073340						4921524J06Rik	RIKEN cDNA 4921524J06 gene
BG070991						AU017834	Expressed sequence AU017834
BG071340						Ccnd3	Cyclin D3
BG073423						Cdk9	Cyclin-dependent kinase 9 (CDC2-related kinase)
BG071373						Epdr2	Ependymin related protein 2 (zebrafish)
BG084192						Ik	IK cytokine
BG071473						Lrp2	Low density lipoprotein receptor-related protein 2
BG072041						Nolc1	Nucleolar and coiled-body phosphoprotein 1
BG071483						Prune	Prune homolog (Drosophila)
BG085534						Tcf4	Transcription factor 4
AU046250						EST	Transcribed locus
AW549861						EST	
BG068202						EST	
BG070789						EST	
BG071375						EST	Transcribed locus
BG072042						EST	
BG084861	red					2700050L05Rik	RIKEN cDNA 2700050L05 gene

BG075232		Aox3	Aldehyde oxidase 3
BQ550079		Cltb	Clathrin, light polypeptide (Lcb)
BG088723		Dbnl	Drebrin-like
BG075553		Ddr2	Discoidin domain receptor family, member 2
BG073936		Ehbp1I1	EH domain binding protein 1-like 1
BQ550136		Eif4a1	Eukaryotic translation initiation factor 4A1
BG073875		Esr1	Estrogen receptor 1 (alpha)
BQ552701		Fusip1	FUS interacting protein (serine-arginine rich) 1
BG088871		Gata4	GATA binding protein 4
BG087780		Gstm1	Glutathione S-transferase, mu 1
BG075825		Kifc2	Kinesin family member C2
BQ550139		Mat2a	Methionine adenosyltransferase II, alpha
BG074233		Ndfip1	Nedd4 family interacting protein 1
BG088404		Polr2d	Polymerase (RNA) II (DNA directed) polypeptide D
BG076196		Pskh1	Protein serine kinase H1
BG075069		Ptdsr	Phosphatidylserine receptor
BG076387		Rab3d	RAB3D, member RAS oncogene family
BQ550060		Rpn1	Ribophorin I
BG088850		Sh2b3	SH2B adaptor protein 3
BG076120		Smurf1	SMAD specific E3 ubiquitin protein ligase 1
BG087779		Sumo2	SMT3 suppressor of mif two 3 homolog 2 (yeast)
BG076410		Wnt4	Wingless-related MMTV integration site 4
AU040550		EST	
AW551856		EST	
AW554651		EST	
AW556496		EST	
AW558800		EST	
BG073267		EST	
BG073930		EST	
BG074399		EST	
BI076870		EST	
BG065185		3930401K13Rik	RIKEN cDNA 3930401K13 gene
BG077739		Arl6ip1	ADP-ribosylation factor-like 6 interacting protein 1
BG077799		Atp6v0c	ATPase, H <sup>+</sup> transporting, lysosomal V0 subunit C
BG065210		Cwf19l2	CWF19-like 2, cell cycle control (S. pombe)
BG063729		EG433273	Predicted gene, EG433273

BG078478		Gpc3	Glycan 3
BG063728		Morf4l2	Mortality factor 4 like 2
BG068329		Mybl1	Myeloblastosis oncogene-like 1
BG063881		Neu1	Neuraminidase 1
BG063734		Phip	Pleckstrin homology domain interacting protein
BG078451		Ppia	Peptidylprolyl isomerase A
BG073526		Ptov1	Prostate tumor over expressed gene 1
BG078499		Rab17	RAB17, member RAS oncogene family
BG065173		Rnf185	Ring finger protein 185
BG073039		Rxrb	Retinoid X receptor beta
BG064820		Sae1	SUMO1 activating enzyme subunit 1
BG078617		Sf3b2	Splicing factor 3b, subunit 2
BG069808		Tubb2b	Tubulin, beta 2b
BG086914		Txnl4	Thioredoxin-like 4
BG073487		Zfp335	Zinc finger protein 335
AW538179		EST	
AW541497		EST	
BG064458		EST	
BQ551141		1110065H08Rik	RIKEN cDNA 1110065H08 gene
BQ552212		1500011J06Rik	RIKEN cDNA 1500011J06 gene
BQ552600		1700011I03Rik	RIKEN cDNA 1700011I03 gene
BG074444		1700041C02Rik	RIKEN cDNA 1700041C02 gene
BG068366		4932414N04Rik	RIKEN cDNA 4932414N04 gene
BG083257		4933426K21Rik	RIKEN cDNA 4933426K21 gene
BG066726		8430426H19Rik	RIKEN cDNA 8430426H19 gene
AU024060		A930005I04Rik	RIKEN cDNA A930005I04 gene
BQ550902		Arf4	ADP-ribosylation factor 4
BG082495		Asl	Argininosuccinate lyase
BG070516		Auh	AU RNA binding protein/enoyl-coenzyme A hydratase
BG072468		Banp	Btg3 associated nuclear protein
BG083476		BC003331	CDNA sequence BC003331
BG066764		BC033915	CDNA sequence BC033915
BQ550730		Ccdc36	Coiled-coil domain containing 36
BG071313		Cdkn1c	Cyclin-dependent kinase inhibitor 1C (P57)
BG073943		Csnk1g1	Casein kinase 1, gamma 1
BG065713		D17Ert29e	DNA segment, Chr 17, ERATO Doi 29, expressed

BG068169		D430042O09Rik RIKEN cDNA D430042O09 gene
AU042625		Dbc1 Deleted in bladder cancer 1 (human)
BI076814		Dbt Dihydrolipoamide branched chain transacylase E2
BQ552530		Dlgh1 Discs, large homolog 1 (Drosophila)
BG079743		Dnajc7 DnaJ (Hsp40) homolog, subfamily C, member 7
BG081778		Dock4 Dediator of cytokinesis 4
BG071947		Dtna Dystrobrevin alpha
BG069356		Epb4.1l5 Erythrocyte protein band 4.1-like 5
BG083466		Etfdh Electron transferring flavoprotein, dehydrogenase
BQ551776		Fbxo30 F-box protein 30
BQ551773		Fer1l3 Fer-1-like 3, myoferlin (C. elegans)
BG086904		Fis1 Fission 1 (mitochondrial outer membrane) homolog (yeast)
BG078930		Fkbp4 FK506 binding protein 4
BG066451		Ggps1 Geranylgeranyl diphosphate synthase 1
BG087265		Hdgfrp3 Hepatoma-derived growth factor, related protein 3
BG079049		Heatr2 HEAT repeat containing 2
BG067905		Il17f Interleukin 17F
BG074597		Inoc1 INO80 complex homolog 1 (S. cerevisiae)
BG071191		Itga11 Integrin, alpha 11
BG069378		Kcnh3 Potassium voltage-gated channel, subfamily H (eag-related), member 3
BG069589		Kcnk6 Potassium inwardly-rectifying channel, subfamily K, member 6
BG073351		Kdelc2 KDEL (Lys-Asp-Glu-Leu) containing 2
C77408		Krt8 Keratin 8
C79740		Lace1 Lactation elevated 1
BG084150		Lap3 Leucine aminopeptidase 3
BG073494		Leprel2 Leprecan-like 2
BG083489		Nrg4 Neuregulin 4
BG075119		Papolg Poly(A) polymerase gamma
BQ551164		Pask PAS domain containing serine/threonine kinase
BG079475		Pik4ca Phosphatidylinositol 4-kinase, catalytic, alpha polypeptide
BG071360		Pofut1 Protein O-fucosyltransferase 1
BG074143		Polr3gl Polymerase (RNA) III (DNA directed) polypeptide G like
BG065945		Prpf3 PRP3 pre-mRNA processing factor 3 homolog (yeast)
C76498		Prr8 Proline rich 8
BG084049		Ptgis Prostaglandin I2 (prostacyclin) synthase
BG077083		Rad1 RAD1 homolog (S. pombe)

BG069368		Rfx1	Regulatory factor X, 1 (influences HLA class II expression)
BG082484		Rgs12	Regulator of G-protein signaling 12
BG079971		Rpgrip1	Retinitis pigmentosa GTPase regulator interacting protein 1
BG074764		Sfxn1	Sideroflexin 1
BG084160		Slc11a2	member 2
BG073944		Slc24a3	member 3
BG084153		Suox	Sulfite oxidase
BG079028		Trpm7	Transient receptor potential cation channel, subfamily M, member 7
BG066722		Ube2h	Ubiquitin-conjugating enzyme E2H
BG068877		Vcam1	Vascular cell adhesion molecule 1
BG071334		Wwtr1	WW domain containing transcription regulator 1
BG070918		Ywhaq	protein, theta polypeptide
BG069212		Zfp750	Zinc finger protein 750
BG070672		Zfp9	Zinc finger protein 9
AU016579		EST	
AU040379		EST	
AU040688		EST	
AU042949		EST	
BG065697		EST	
BG065888		EST	
BG065928		EST	
BG066678		EST	XP_906965 [Mus musculus]
BG066720		EST	
BG066753		EST	
BG067149		EST	
BG067603		EST	
BG067764		EST	
BG068106		EST	
BG068109		EST	
BG068189		EST	
BG068317		EST	
BG068354		EST	
BG068775		EST	
BG069127		EST	
BG069140		EST	
BG069141		EST	



BG064719		Ankrd32	Ankyrin repeat domain 32
BG080936		Arfgap3	ADP-ribosylation factor GTPase activating protein 3
BG067918		Btg2	B-cell translocation gene 2, anti-proliferative
BG067220		Btg4	B-cell translocation gene 4
BG067864		C430004E15Rik	RIKEN cDNA C430004E15 gene
BG078093		Cbx3	Chromobox homolog 3 (Drosophila HP1 gamma)
BG067909		Ccdc69	Coiled-coil domain containing 69
BG077073		Ccnh	Cyclin H
BG067933		Cirh1a	Cirrhosis, autosomal recessive 1A (human)
BG067896		Cnih	Cornichon homolog (Drosophila)
AW538671		Col5a3	Procollagen, type V, alpha 3
BG067866		Cxadr	Coxsackievirus and adenovirus receptor
BG067879		D330050I23Rik	RIKEN cDNA D330050I23 gene
BG067931		Dna2l	DNA2 DNA replication helicase 2-like (yeast)
BG064842		Emb	Embigin
C80308		Exoc7	Exocyst complex component 7
BG078212		Fignl1	Fidgetin-like 1
BG064427		Fkbp15	FK506 binding protein 15
BG067932		Glul	Glutamate-ammonia ligase (glutamine synthetase)
BG064875		Hs3st3b1	Heparan sulfate (glucosamine) 3-O-sulfotransferase 3B1
BG076621		Hspa5	Heat shock 70kD protein 5 (glucose-regulated protein)
BG077115		Hunk	Hormonally upregulated Neu-associated kinase
BG078210		Ift88	Intraflagellar transport 88 homolog (Chlamydomonas)
BG078092		Isg20l1	Interferon stimulated exonuclease gene 20-like 1
BG085919		Jrk	Jerky
BG085336		Matn2	Matrilin 2
BG080478		Mosc2	MOCO sulphurase C-terminal domain containing 2
BG074323		Nr2c2	Nuclear receptor subfamily 2, group C, member 2
BG078192		Pam	Peptidylglycine alpha-amidating monooxygenase
BG067908		Prep	Prolyl endopeptidase
BG067867		Ptpn14	Protein tyrosine phosphatase, non-receptor type 14
BG072729		Rbm12b	RNA binding motif protein 12B
BG064736		Rrm1	Ribonucleotide reductase M1
BG078138		Rrm2	Ribonucleotide reductase M2
BG074010		Ryr2	Ryanodine receptor 2, cardiac
BG085334		Sar1a	SAR1 gene homolog A (S. cerevisiae)

BG064853		Slc16a3	Solute carrier family 16 (monocarboxylic acid transporters), member 3
BG064714		Slc3a2	transport), member 2
BG067865		Slc4a8	Solute carrier family 4 (anion exchanger), member 8
BG063419		Smap1	Stromal membrane-associated protein 1
BG067985		Spred1	Sprouty protein with EVH-1 domain 1, related sequence
BG067974		Thsd7b	Thrombospondin, type I, domain containing 7B
BG064763		Top3b	Topoisomerase (DNA) III beta
BG075608		Tpi1	Triosephosphate isomerase 1
BG073370		Ttc3	Tetratricopeptide repeat domain 3
BG075001		Uqcrc2	Ubiquinol cytochrome c reductase core protein 2
BG064874		Usp38	Ubiquitin specific peptidase 38
BG077459		Utrn	Utrophin
BG064839		Wdr1	WD repeat domain 1
AW536284		EST	
AW537187		EST	
BG067877		EST	
BG067884		EST	
BG068015		EST	
BG077103		EST	Transcribed locus
C88049		EST	
BG069904	1190005F20Rik	RIKEN cDNA 1190005F20 gene	
BG082833	1500003O03Rik	RIKEN cDNA 1500003O03 gene	
BQ550748	1700081L11Rik	RIKEN cDNA 1700081L11 gene	
BQ550162	2510006D16Rik	RIKEN cDNA 2510006D16 gene	
BG070762	4930589O11Rik	RIKEN cDNA 4930589O11 gene	
BG068796	6330581L23Rik	RIKEN cDNA 6330581L23 gene	
BQ550664	8030451K01Rik	RIKEN cDNA 8030451K01 gene	
BG065753	9130011E15Rik	RIKEN cDNA 9130011E15 gene	
BG066056	9130404D08Rik	RIKEN cDNA 9130404D08 gene	
BG067331	AA388235	Expressed sequence AA388235	
BG073745	Acbd3	Acyl-Coenzyme A binding domain containing 3	
C76711	Aco2	Aconitase 2, mitochondrial	
BG070091	Arih1	( <i>Drosophila</i> )	
BG066446	Arih2	Ariadne homolog 2 ( <i>Drosophila</i> )	
BQ550263	Bcl7c	B-cell CLL/lymphoma 7C	
BG065601	Birc1c	Baculoviral IAP repeat-containing 1c	

BG066501		Brd1	Bromodomain containing 1
BG075437		C80913	Expressed sequence C80913
BG079251		Cab39	Calcium binding protein 39
BG066467		Cdh13	Cadherin 13
BQ551701		Cdh23	Cadherin 23 (otocadherin)
C79238		Chchd3	Coiled-coil-helix-coiled-coil-helix domain containing 3
BG083212		D14Ert668e	DNA segment, Chr 14, ERATO Doi 668, expressed
BG071093		D930036F22Rik	RIKEN cDNA D930036F22 gene
BG066942		Dnmt3b	DNA methyltransferase 3B
BG071581		Dtl	Denticleless homolog (Drosophila)
BG070773		Fkbp1a	FK506 binding protein 1a
BG071167		Fndc7	Fibronectin type III domain containing 7
BQ550168		Fnip1	Folliculin interacting protein 1
BG082154		Il4	Interleukin 4
BQ550134		Ilf3	Interleukin enhancer binding factor 3
BQ551582		Lass6	Longevity assurance homolog 6 ( <i>S. cerevisiae</i> )
BG077319		Lzts2	Leucine zipper, putative tumor suppressor 2
BG082854		Mesp2	Mesoderm posterior 2
BG074486		MGC107415	Hypothetical protein LOC383216
BG067912		Mrg1	Myeloid ecotropic viral integration site-related gene 1
BG067031		Narg1	NMDA receptor-regulated gene 1
BG079401		Nars	Asparaginyl-tRNA synthetase
BG064395		Nfat5	Nuclear factor of activated T-cells 5
AU014844		Ogdh	Oxoglutarate dehydrogenase (lipoamide)
BG069555		Osbpl8	Oxysterol binding protein-like 8
BG065744		Pank3	Pantothenate kinase 3
BG073605		Pawr	PRKC, apoptosis, WT1, regulator
AU021253		Ppm1a	Protein phosphatase 1A, magnesium dependent, alpha isoform
BG065524		Prei3	Preimplantation protein 3
BG079293		Psma3	Proteasome (prosome, macropain) subunit, alpha type 3
BG066125		Psma4	Proteasome (prosome, macropain) subunit, alpha type 4
BQ550154		Psma7	Proteasome (prosome, macropain) subunit, alpha type 7
C76941		Ranbp5	RAN binding protein 5
BG082817		Rb1	Retinoblastoma 1
BG072412		Sdk1	Sidekick homolog 1 (chicken)
BQ550417		Srgap2	SLIT-ROBO Rho GTPase activating protein 2

BG071533		Srpk2	Serine/arginine-rich protein specific kinase 2
BG070349		Taf1	factor
BG079504		Tug1	Taurine upregulated gene 1
BQ552073		Ufd1l	Ubiquitin fusion degradation 1 like
BG066683		Zfp292	Zinc finger protein 292
AU042966		EST	
AW556484		EST	
BG063092		EST	Transcribed locus
BG064514		EST	
BG064695		EST	Transcribed locus
BG065593		EST	
BG065670		EST	
BG065839		EST	
BG066008		EST	
BG066090		EST	
BG066122		EST	
BG066345		EST	
BG066371		EST	
BG066550		EST	
BG066598		EST	
BG066821		EST	
BG067146		EST	
BG068097		EST	
BG068461		EST	
BG068472		EST	
BG068784		EST	
BG069091		EST	
BG069113		EST	
BG069545		EST	
BG070548		EST	Transcribed locus
BG070556		EST	
BG070663		EST	
BG070930		EST	Transcribed locus
BG071376		EST	
BG071862		EST	
BG072400		EST	

BG075634		EST
BG079181		EST
BG081451		EST
BG083198		EST
BG083989		EST
BQ550180		EST
BQ550186		EST
BQ550353		EST
BQ550502		EST
BQ551838		EST
BQ552150		EST

**TableS2aP5. Gene lists of mouse CNS age-related gene expression pattern 5**

**Notes.** Cor: cortex; Hip: hippocampus; Cer: cerebellum; Str: striatum; SC: spinal cord.



Acc	Cor-p5	Hip-p5	Cer-p5	Str-p5	SC-p5	Symbol	Name
BG071669						EST	
BG074411						Scarb2	Scavenger receptor class B, member 2
AU041764						Ssr1	Signal sequence receptor, alpha
BG084523						EST	
BG069202						Flad1	RFad1, flavin adenine dinucleotide synthetase, homolog (yeast)
AW538653						EST	
BG063123						EST	
BG084482						1110049F12Rik	RIKEN cDNA 1110049F12 gene
BG066645						2410042D21Rik	RIKEN cDNA 2410042D21 gene
C80870						2610207I05Rik	RIKEN cDNA 2610207I05 gene
BG086172						Abcd4	ATP-binding cassette, sub-family D (ALD), member 4
C78625						Abpe	Androgen binding protein epsilon
BQ550902						Arf4	ADP-ribosylation factor 4
BG083148						AU015228	Expressed sequence AU015228
BG070530						C430003P19Rik	RIKEN cDNA C430003P19 gene
BG066902						C530030P08Rik	RIKEN cDNA C530030P08 gene
BG065908						C77370	Expressed sequence C77370
BG066514						C79445	Expressed sequence C79445
BG066158						Car12	Carbonic anhydrase 12
BQ550574						Cask	family)
BG079699						Cct4	Chaperonin subunit 4 (delta)
BG079442						Cnn2	Calponin 2
BG066227						Cul1	Cullin 1
BG078810						Cycs	Cytochrome c, somatic
BG070630						D630040G17Rik	RIKEN cDNA D630040G17 gene
AU040741						Dhx57	DEAH (Asp-Glu-Ala-Asp/His) box polypeptide 57
BG086487						E2f6	E2F transcription factor 6

BG072115		Fbxo10	F-box protein 10
BG073057		Gc	Group specific component
BG065591		Ggnbp2	Gametogenitin binding protein 2
BG087977		Gnaq	Guanine nucleotide binding protein, alpha q polypeptide
BG084492		Ikzf4	IKAROS family zinc finger 4
BG082794		Ixl	Intersex-like ( <i>Drosophila</i> )
BQ550722		Las1l	LAS1-like ( <i>S. cerevisiae</i> )
BG073494		Leprel2	Leprecan-like 2
BG068302		Magi2	containing 2
BG078870		Mkrn1	Makorin, ring finger protein, 1
BG077638		Mrpl19	Mitochondrial ribosomal protein L19
BG079485		Ndufa10	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex 10
BG066540		Nlk	Nemo like kinase
BG071667		Pgm2l1	Phosphoglucomutase 2-like 1
BG066925		Pkd1l3	Polycystic kidney disease 1 like 3
BG075444		Polr2j	Polymerase (RNA) II (DNA directed) polypeptide J
BG067048		Ppm1d	Protein phosphatase 1D magnesium-dependent, delta isoform
BQ550958		Prpf18	PRP18 pre-mRNA processing factor 18 homolog (yeast)
BG065852		Rcor1	REST corepressor 1
BG078875		Rogdi	Rogdi homolog ( <i>Drosophila</i> )
BG079733		Rrm2	Ribonucleotide reductase M2
BQ551136		Slc9a3r1	regulator 1
BG069386		Slco4c1	Solute carrier organic anion transporter family, member 4C1
BQ552244		Snap23	Synaptosomal-associated protein 23
BG081012		Snrbp2	U2 small nuclear ribonucleoprotein B
AU040496		Sp100	Nuclear antigen Sp100
BG069385		Stat2	Signal transducer and activator of transcription 2
BG066250		Tbx20	T-box 20
BQ550368		Tcfap2c	Transcription factor AP-2, gamma
BG081076		Tcl1	T-cell lymphoma breakpoint 1
BQ550610		Tmco1	Transmembrane and coiled-coil domains 1
BG073784		Tmem19	Transmembrane protein 19
BG066559		Tnks1bp1	Tankyrase 1 binding protein 1
BG066239		Tnks2	polymerase 2
BQ551761		Upf3b	UPF3 regulator of nonsense transcripts homolog B (yeast)
BG069853		Uqcrc1	Ubiquinol-cytochrome c reductase core protein 1

BQ551117		Wee1	Wee 1 homolog ( <i>S. pombe</i> )
BG081054		Xlr3b	X-linked lymphocyte-regulated 3B
BG069830		Zdhhc7	Zinc finger, DHHC domain containing 7
BG066657		Zfand3	Zinc finger, AN1-type domain 3
BG065559		EST	
BG065566		EST	gossypii]
BG065577		BG065577	
BG065889		BG065889	
BG066241		BG066241	
BG066550		BG066550	
BG066582		BG066582	
BG066623		BG066623	
BG066633		BG066633	
BG066659		BG066659	
BG066873		BG066873	
BG066882		BG066882	
BG066901		BG066901	
BG067922		BG067922	
BG068730		BG068730	
BG069110		BG069110	
BG070182		BG070182	
BG070231		BG070231	
BG070755		BG070755	
BG070974		BG070974	
BG074974		BG074974	
BG084924		BG084924	
BQ550394		BQ550394	
BQ550555		BQ550555	
BQ550923		BQ550923	
BQ552246		BQ552246	
BQ550412	1110018G07Rik	RIKEN cDNA 1110018G07 gene	
BG086258	2700060E02Rik	RIKEN cDNA 2700060E02 gene	
BG065860	BC013481	CDNA sequence BC013481	
BG086240	Cnbp	Cellular nucleic acid binding protein	
BG073493	Dnmt3a	DNA methyltransferase 3A	
BG063515	Fth1	Ferritin heavy chain 1	

BG067932		Glul	Glutamate-ammonia ligase (glutamine synthetase)
BG077751		Phb	Prohibitin
BG066380		Trip12	Thyroid hormone receptor interactor 12
BG085556		Wwp1	WW domain containing E3 ubiquitin protein ligase 1
AW548438		EST	
AW551760		EST	
BG071491		EST	
BG073826		EST	Transcribed locus
BG074316		EST	
BG085008		EST	
BG072609	Amotl1	Angiomotin-like 1	
BG082456	Dnajc8	DnaJ (Hsp40) homolog, subfamily C, member 8	
BG086348	Ndufb10	NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 10 dependent 4	
BG072673	Nfatc4		
BG085724	Pabpn1	Poly(A) binding protein, nuclear 1	
BG085762	Prpf31	PRP31 pre-mRNA processing factor 31 homolog (yeast)	
BG072729	Rbm12b	RNA binding motif protein 12B	
BG086013	Rnf10	Ring finger protein 10	
BG075210	Ss18l1	Synovial sarcoma translocation gene on chromosome 18-like 1	
AW557547	EST		
BG065963	EST		
BG071454	EST		
BG073099	EST		
BG073995	EST		
BI076595	EST		
BG076565	2610204K14Rik	RIKEN cDNA 2610204K14 gene	
BG073827	5730407K14Rik	RIKEN cDNA 5730407K14 gene	
BG063659	Ap1s1	Adaptor protein complex AP-1, sigma 1	
BG072887	Btbd9	BTB (POZ) domain containing 9	
BG087321	Lins2	Lines homolog 2 (Drosophila)	
BG088911	Pak2	P21 (CDKN1A)-activated kinase 2	
BG077310	Pdlim2	PDZ and LIM domain 2	
BG088924	Phkb	Phosphorylase kinase beta	
BG077025	Pnn	Pinin	
BG063946	Rest	RE1-silencing transcription factor	
BG076525	Rnf2	Ring finger protein 2	

BG075383		Sfrs2ip	Splicing factor, arginine/serine-rich 2, interacting protein
AW547223		EST	
AW553453		EST	
BG087807		EST	
BG078465		Aof2	Amine oxidase (flavin containing) domain 2
BG077878		Cald1	Caldesmon 1
BG066256		Clcn1	Chloride channel 1
BG069401		Csnk2a2	Casein kinase 2, alpha prime polypeptide
BG081063		Cybb	Cytochrome b-245, beta polypeptide
BG067879		D330050I23Rik	RIKEN cDNA D330050I23 gene
BG076418		Ela2	ElaC homolog 2 (E. coli)
BG067311		Fbxw17	F-box and WD-40 domain protein 17
BG064427		Fkbp15	FK506 binding protein 15
BG064828		Gabpb2	GA repeat binding protein, beta 2
BG068026		Hel308	Helicase, mus308-like (Drosophila)
BG066934		Kalrn	Kalirin, RhoGEF kinase
BG081236		Lats1	Large tumor suppressor
BG082425		Milt10	homolog (Drosophila)
BG080379		Nars	Asparaginyl-tRNA synthetase
BG068330		Nol8	Nucleolar protein 8
BG078193		Pam	Peptidylglycine alpha-amidating monooxygenase
BG068715		Phf21a	PHD finger protein 21A
BG066673		Phgdh	3-phosphoglycerate dehydrogenase
BG079475		Pik4ca	Phosphatidylinositol 4-kinase, catalytic, alpha polypeptide
BG080913		Pole3	Polymerase (DNA directed), epsilon 3 (p17 subunit)
BG081020		Prr13	Proline rich 13
BG063070		Psmc3	Proteasome (prosome, macropain) 26S subunit, ATPase 3
BG083038		Rnf20	Ring finger protein 20
BG076676		Rps2	Ribosomal protein S2
BG081064		Secisbp2	SECIS binding protein 2
BG068288		Slco1b2	Solute carrier organic anion transporter family, member 1b2
BG063497		Stam2	motif) 2
BG064631		Timeless	Timeless homolog (Drosophila)
BG067300		Tinag	Tubulointerstitial nephritis antigen
BG064830		Tubb2c	Tubulin, beta 2c
BG076940		Wdr3	WD repeat domain 3

C77369		Zdhhc6	Zinc finger, DHHC domain containing 6
BG064729		EST	
BG065585		EST	
BG066267		EST	
BG066678		EST	protein XP_906965 [Mus musculus]
BG067176		EST	
BG067221		EST	
BG067278		EST	
BG067877		EST	
BG067898		EST	
BG067995		EST	Transcribed locus
BG069024		EST	
BG069108		EST	
BG078136		EST	
BG082357		EST	
C78519		EST	
C85808		EST	
C87682		EST	
BG077302	Atf7ip		Activating transcription factor 7 interacting protein
BG068096	C230040D10Rik		RIKEN cDNA C230040D10 gene
BG067933	Cirh1a		Cirrhosis, autosomal recessive 1A (human)
BG077424	Dync1li2		Dynein, cytoplasmic 1 light intermediate chain 2
BG079486	Lrrc59		Leucine rich repeat containing 59
BG064287	Ncl		Nucleolin
BG063969	Ppap2b		Phosphatidic acid phosphatase type 2B
BG064583	Tegt		Testis enhanced gene transcript
BG064502	Utp15		UTP15, U3 small nucleolar ribonucleoprotein, homolog (yeast)
BG079790	Xpnpep1		X-prolyl aminopeptidase (aminopeptidase P) 1, soluble
AW538230	EST		
AW538521	EST		
AW538620	EST		
BG064219	EST		
BG067385	EST		
BG068412	EST		
C78770	EST		
BG072760	Hba-a1		Hemoglobin alpha, adult chain 1

BG087018		Rpl37	Ribosomal protein L37
BG073429		Slc2a4	Solute carrier family 2 (facilitated glucose transporter), member 4
BG072750		Tgfb1	Transforming growth factor, beta induced
AW539320		EST	
C88129		EST	
AU043423		Ankhd1	Ankyrin repeat and KH domain containing 1
BG068393		Ccdc52	Coiled-coil domain containing 52
AW547680		D4Ert22e	DNA segment, Chr 4, ERATO Doi 22, expressed
BG084444		Eef1e1	Eukaryotic translation elongation factor 1 epsilon 1
BG078883		Eif2b5	Eukaryotic translation initiation factor 2B, subunit 5 epsilon
BG065697		EST	
BG069123		EST	
BG070315		EST	
BG070808		EST	
BG076222		EST	
BQ552232		6-Mar	Membrane-associated ring finger (C3HC4) 6
BG075135		1110007L15Rik	RIKEN cDNA 1110007L15 gene
BG075147		2010311D03Rik	RIKEN cDNA 2010311D03 gene
BG073140		Cd8b1	CD8 antigen, beta chain 1
BG072331		Clstn1	Calsyntenin 1
BG088576		Ddx27	DEAD (Asp-Glu-Ala-Asp) box polypeptide 27
BG075159		Gls	Glutaminase
BG076025		Kcnk2	Potassium channel, subfamily K, member 2
BQ552413		Lhfpl2	Lipoma HMGIC fusion partner-like 2
BG075103		Mov10	Moloney leukemia virus 10
BG087589		Mtch1	Mitochondrial carrier homolog 1 ( <i>C. elegans</i> )
BG080731		Nab1	Ngfi-A binding protein 1
BG088153		Piwi2	Piwi-like homolog 2 ( <i>Drosophila</i> )
BG082377		Prpf38b	B
BG080766		Rwdd4a	RWD domain containing 4A
BG088317		Shc1	Src homology 2 domain-containing transforming protein C1
BG082016		Taf7	associated factor
BG080714		Zfp708	Zinc finger protein 708
BG072492		EST	
BG073835		EST	
BG075071		EST	Transcribed locus

BG072619		1190002N15Rik	RIKEN cDNA 1190002N15 gene
BG072777		1810009A15Rik	RIKEN cDNA 1810009A15 gene
BG072618		2310051F07Rik	RIKEN cDNA 2310051F07 gene
AU040786		2410008K03Rik	RIKEN cDNA 2410008K03 gene
BG072797		2610002J23Rik	RIKEN cDNA 2610002J23 gene
BQ550329		2610030H06Rik	RIKEN cDNA 2610030H06 gene
BG073362		3100004P22Rik	RIKEN cDNA 3100004P22 gene
AW544088		5730449L18Rik	RIKEN cDNA 5730449L18 gene
BG073481		6720475J19Rik	RIKEN cDNA 6720475J19 gene
BG073315		9130023D20Rik	RIKEN cDNA 9130023D20 gene
BG076127		A330009N23Rik	RIKEN cDNA A330009N23 gene
BG073405	AA673488		Expressed sequence AA673488
BG073394	Add3		Adducin 3 (gamma)
BG085480	Agrin		Agrin
BG077650	Ap2a1		Adaptor protein complex AP-2, alpha 1 subunit
BG085506	Arhgef19		Rho guanine nucleotide exchange factor (GEF) 19
BG072959	Cacnb3		Calcium channel, voltage-dependent, beta 3 subunit
BG072807	Car8		Carbonic anhydrase 8
BG072723	Ccdc102a		Coiled-coil domain containing 102A
BG072661	Cdc23		CDC23 (cell division cycle 23, yeast, homolog)
BG086695	Cluap1		Clusterin associated protein 1
BG085434	Crebf		CREB/ATF bZIP transcription factor
BG086320	Cxcl12		Chemokine (C-X-C motif) ligand 12
BG073492	D0H4S114		DNA segment, human D4S114
BG073307	Ddx54		DEAD (Asp-Glu-Ala-Asp) box polypeptide 54
BG073959	Eef2		Eukaryotic translation elongation factor 2
BG075252	Egln1		EGL nine homolog 1 (C. elegans)
BG074119	Eif3s8		Eukaryotic translation initiation factor 3, subunit 8
BG086148	Elp4		Elongation protein 4 homolog (S. cerevisiae)
BG074856	Fastk		Fas-activated serine/threonine kinase
BG086054	Fstl1		Follistatin-like 1
BG072833	Gnpda2		Glucosamine-6-phosphate deaminase 2
AW547240	Gramd1a		GRAM domain containing 1A
BG072757	Gspt1		G1 to S phase transition 1
BG075940	Gtlf3b		Gene trap locus F3b
AU041598	H2-K1		Histocompatibility 2, K1, K region

BG085433		Hbb-b1	Hemoglobin, beta adult major chain
BG085427		Hmgb2	High mobility group box 2
BG064511		Ints5	Integrator complex subunit 5
BG072685		Mns1	Meiosis-specific nuclear structural protein 1
BG077818		Mt1	Metallothionein 1
BG063925		Mt2	Metallothionein 2
BG073296		Ncam2	Neural cell adhesion molecule 2
BG074233		Ndfip1	Nedd4 family interacting protein 1
BG073415		Nedd4	gene 4
BG071356		Nf1	Neurofibromatosis 1
BG085596		Npc2	Niemann Pick type C2
BG072813		Opa1	Optic atrophy 1 homolog (human)
BG087899		Pdgfa	Platelet derived growth factor, alpha
BG064375		Phactr1	Phosphatase and actin regulator 1
BG087909		Phka2	Phosphorylase kinase alpha 2
BG072843		Pnpt1	Polyribonucleotide nucleotidyltransferase 1
BG072746		Psmd7	Proteasome (prosome, macropain) 26S subunit, non-ATPase, 7
BG087931		Rhoa	Ras homolog gene family, member A
BG075372		Rpa2	Replication protein A2
BG085647		Rpl23a	Ribosomal protein L23a
BG073438		Rpl38	Ribosomal protein L38
BG072819		Rpsa	Ribosomal protein SA
BG072662		Runx1	Runt related transcription factor 1
BG085555		Sec23ip	Sec23 interacting protein
BG086781		Setdb1	SET domain, bifurcated 1
BG073339		Sfrs5	Splicing factor, arginine-serine-rich 5 (SRp40, HRS)
AW539785		Sh3bp5l	SH3 binding domain protein 5 like
BG085411		Slbp	Stem-loop binding protein
BG085656		Smc1a	Structural maintenance of chromosomes 1A
BG072734		Tcf25	Transcription factor 25 (basic helix-loop-helix)
AW557486		Tdrd9	Tudor domain containing 9
BG087942		Tfdp1	Transcription factor Dp 1
BG085629		Tfip11	Tuftelin interacting protein 11
AW553913		Tinagl	Tubulointerstitial nephritis antigen-like
BG075363		Tmem64	Transmembrane protein 64
AW550270		Tnc	Tenascin C

BG075295		Traf3ip1	TNF receptor-associated factor 3 interacting protein 1
BG086230		Traf7	Tnf receptor-associated factor 7
BG087363		Vps45	Vacuolar protein sorting 45 (yeast)
BG086084		Wnt4	Wingless-related MMTV integration site 4
BG073328		Xrcc4	cells 4
BG076045		Zbed3	Zinc finger, BED domain containing 3
AW544782		EST	
AW546571		EST	Transcribed locus
AW550445		EST	
AW558132		EST	
BG063767		EST	
BG064209		EST	
BG070115		EST	
BG072733		EST	
BG072745		EST	
BG073317		EST	
BG074049		EST	
BG074259		EST	
BG074646		EST	
BG074788		EST	
BG075263		EST	
BG075339		EST	
BI076837		EST	

**TableS2aP6. Gene lists of mouse CNS age-related gene expression pattern 6**

**Notes.** Cor: cortex; Hip: hippocampus; Cer: cerebellum; Str: striatum; SC: spinal cord.



Acc	Cor-p6	Hip-p6	Cer-p6	Str-p6	SC-p6	Symbol	Name
BG071280	green				green	Vldlr	Very low density lipoprotein receptor
BG067592			green			Ncor2	Nuclear receptor co-repressor 2
AW538270		red				EST	
AW544088						5730449L18Rik	RIKEN cDNA 5730449L18 gene
BG088919						Glg1	Golgi apparatus protein 1
AW545215					red	Ykt6	YKT6 homolog (S. Cerevisiae)
AW538365		red				EST	
BG080227						Csrp2bp	Cysteine and glycine-rich protein 2 binding protein
BG080710						Eef2	Eukaryotic translation elongation factor 2
BG063381						Rnpep	Arginyl aminopeptidase (aminopeptidase B)
BG080059						Senp6	SUMO/sentrin specific peptidase 6
AW540988						EST	
BG078581					green	Ints3	Integrator complex subunit 3
BG064029					green	Morf4l1	Mortality factor 4 like 1
AW551702	green					A230048G03Rik	RIKEN cDNA A230048G03 gene
BG065924						Akap2	A kinase (PRKA) anchor protein 2
BQ550885						Btaf1	(Mot1 homolog, S. cerevisiae)
BG084134						Chst10	Carbohydrate sulfotransferase 10
BG071624						Defb8	Defensin beta 8
BG072272						LOC629750	Similar to ubiquitin A-52 residue ribosomal protein fusion product 1
BQ551162						Tgfb1	Transforming growth factor, beta receptor I
C81011						Tmem132d	Transmembrane protein 132D
BG084284	green					Vamp8	Vesicle-associated membrane protein 8
AW548741						EST	
BG071263						EST	
BG071273						EST	
BG071600	green						Transcribed locus

BG086520		1110004F10Rik	RIKEN cDNA 1110004F10 gene
BG084307		Apcdd1	Adenomatosis polyposis coli down-regulated 1
BG073427		Nat12	N-acetyltransferase 12
BG086250		Plxna4	Plexin A4
BG087432		Soat1	Sterol O-acyltransferase 1
AU041552		EST	
AW552320		EST	
BG085155		Gaa	Glucosidase, alpha, acid
BG062985		Srrm2	Serine/arginine repetitive matrix 2
BG084201		St8sia2	ST8 alpha-N-acetyl-neuraminate alpha-2,8-sialyltransferase 2
BQ550176		Top1	Topoisomerase (DNA) I
BG065746		Tssc1	Tumor suppressing subtransferable candidate 1
BG066782		EST	
BG068069		EST	
BG070566		EST	ubiquitin specific protease 34 [Rattus norvegicus]
BG088896		2310047M15Rik	RIKEN cDNA 2310047M15 gene
BG084861		2700050L05Rik	RIKEN cDNA 2700050L05 gene
BG076192		2810021B07Rik	RIKEN cDNA 2810021B07 gene
AW556296		4121402D02Rik	RIKEN cDNA 4121402D02 gene
BG077031		4632428N05Rik	RIKEN cDNA 4632428N05 gene
BG076170		4932417I16Rik	RIKEN cDNA 4932417I16 gene
BG068349		6430706D22Rik	RIKEN cDNA 6430706D22 gene
BG076134		9330120H11Rik	RIKEN cDNA 9330120H11 gene
BG078031		Abcf1	ATP-binding cassette, sub-family F (GCN20), member 1
BG076190		Al462493	Expressed sequence Al462493
BG088685		Als2	Amyotrophic lateral sclerosis 2 (juvenile) homolog (human)
BG077043		Aph1a	Anterior pharynx defective 1a homolog (C. elegans)
AW544549		Appbp2	Amyloid beta precursor protein (cytoplasmic tail) binding protein 2
BG075349		Atxn7	Ataxin 7
BG086907		C80913	Expressed sequence C80913
BG088653		Cdc42se1	CDC42 small effector 1
BG085684		Edc3	Enhancer of mRNA decapping 3 homolog (S. cerevisiae)
BG076147		Emilin3	Elastin microfibril interfacer 3
BG074239		Exoc6b	Exocyst complex component 6B
BG076054		Fgfr1	Fibroblast growth factor receptor 1
BG078813		Fsd1	Fibronectin type 3 and SPRY domain-containing protein

AW539304		Fytd1	Forty-two-three domain containing 1
BQ551676		Gab1	Growth factor receptor bound protein 2-associated protein 1
BG063693		Gas5	Growth arrest specific 5
BG069204		Gdap2	Ganglioside-induced differentiation-associated-protein 2
AW538113		Grb2	Growth factor receptor bound protein 2
BG088340		Grina	protein 1 (glutamate binding)
BG062947		H2afj	H2A histone family, member J
BG073509		Hmbox1	Homeobox containing 1
BG077732		Hmox1	Heme oxygenase (decycling) 1
BG075403		Hoxc9	Homeo box C9
BG077623		Hprt1	Hypoxanthine guanine phosphoribosyl transferase 1
BG076144		Il10rb	Interleukin 10 receptor, beta
AW543967		Itfg2	Integrin alpha FG-GAP repeat containing 2
C79029		Lrrc16	Leucine rich repeat containing 16
AW539214		Mars2	Methionine-tRNA synthetase 2 (mitochondrial)
BG077730		Mrpl38	Mitochondrial ribosomal protein L38
BG076160		Ms4a6d	Membrane-spanning 4-domains, subfamily A, member 6D
BG076133		Nme6	Expressed in non-metastatic cells 6, protein
BG076033		Nr3c2	Nuclear receptor subfamily 3, group C, member 2
BG086925		Nras	Neuroblastoma ras oncogene
AW552556		Osbpl8	Oxysterol binding protein-like 8
BG087474		Pcolce	Procollagen C-endopeptidase enhancer protein
BG088662		Pex12	Peroxisomal biogenesis factor 12
AW539318		Pif	Proliferin
AW556297		Ppp3ca	Protein phosphatase 3, catalytic subunit, alpha isoform
BG064693		Psma1	Proteasome (prosome, macropain) subunit, alpha type 1
BG076094		Rab11fip2	RAB11 family interacting protein 2 (class I)
BG077041		Rap1gap	Rap1 GTPase-activating protein
BG088740		Sart3	Squamous cell carcinoma antigen recognized by T-cells 3
BG076146		Scamp5	Secretory carrier membrane protein 5
BG076183		Smc1b	Structural maintenance of chromosomes 1B
BG072876		Spg7	Spastic paraplegia 7 homolog (human)
BG088728		Strap	Serine/threonine kinase receptor associated protein
BG088835		Supt6h	Suppressor of Ty 6 homolog (S. cerevisiae)
BG088380		Syce1	Synaptonemal complex central element protein 1
BG076157		Sycp1	Synaptonemal complex protein 1

BG076124		Sycp3	Synaptonemal complex protein 3
BG075062		Tars	Threonyl-tRNA synthetase
BG075406		Tex10	Testis expressed gene 10
BG076143		Tex9	Testis expressed gene 9
BG082196		Tiparp	TCDD-inducible poly(ADP-ribose) polymerase
BG087081		Tmem59	Transmembrane protein 59
AW552470		Tpd52l2	Tumor protein D52-like 2
BG063720		Tram1	Translocating chain-associating membrane protein 1
BG086643		Ube2i	Ubiquitin-conjugating enzyme E2I
BG086935		Usp3	Ubiquitin specific peptidase 3
BG075806		Xrcc6	cells 6
AW539280		Yif1a	Yip1 interacting factor homolog A ( <i>S. cerevisiae</i> )
BG076083		Zc3h13	Zinc finger CCCH type containing 13
BG086644		Zfp289	Zinc finger protein 289
BG088420		Zfp592	Zinc finger protein 592
AW536084		EST	
AW536190		EST	
AW536243		EST	
AW536804		EST	
AW537455		EST	
AW537634		EST	
AW538486		EST	
AW539112		EST	
AW539114		EST	
AW540995		EST	
AW542384		EST	
AW542467		EST	
AW543461		EST	
AW543642		EST	
AW543815		EST	
AW543851		EST	
AW544006		EST	
AW544036		EST	
AW544238		EST	
AW544269		EST	
AW544673		EST	

AW545291			EST	
AW545786			EST	
AW551807			EST	
AW555400			EST	
AW556284			EST	
AW556716			EST	
AW557422			EST	
AW558227			EST	
AW558484			EST	
AW558981			EST	
AW559013			EST	
BG063767			EST	
BG063953			EST	
BG064861			EST	
BG064957			EST	
BG064969			EST	
BG071446			EST	
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BG074841			EST	
BG075513			EST	
BG076136			EST	Transcribed locus
BG076145			EST	
BG076171			EST	
BG088709			EST	
BI076469			EST	
BI076559			EST	
BG069453		9530010C24Rik	RIKEN cDNA 9530010C24 gene	
BG080292		AI481105	Expressed sequence AI481105	
BG067933		Cirh1a	Cirrhosis, autosomal recessive 1A (human)	
BG067580		Myo1d	Myosin ID	
AU022584		Smc6	Structural maintenance of chromosomes 6	
BG066630		Tpk1	Thiamine pyrophosphokinase	
AW538269		EST		
BG066911		EST		
BG067568		EST	Transcribed locus	
BG067639		EST	Transcribed locus	

BG067651		EST
C78482		EST
BG078425		1110014N23Rik RIKEN cDNA 1110014N23 gene
BG077907		1810011O16Rik RIKEN cDNA 1810011O16 gene
BG063434		2010315L10Rik RIKEN cDNA 2010315L10 gene
BG080883		3830406C13Rik RIKEN cDNA 3830406C13 gene
BG069307		4631424J17Rik RIKEN cDNA 4631424J17 gene
BG077589		4930548G07Rik RIKEN cDNA 4930548G07 gene
BG063260		4933437F05Rik RIKEN cDNA 4933437F05 gene
BG063187		9230114K14Rik RIKEN cDNA 9230114K14 gene
BG063015		9430023L20Rik RIKEN cDNA 9430023L20 gene
BG067452		9430053O09Rik RIKEN cDNA 9430053O09 gene
BG077905	AA881470	EST AA881470
BG077011	Aaas	Achalasia, adrenocortical insufficiency, alacrimia
BG067888	Aak1	AP2 associated kinase 1
BG065432	Abcf3	ATP-binding cassette, sub-family F (GCN20), member 3
C78625	Abpe	Androgen binding protein epsilon
AW538652	Acly	ATP citrate lyase
BG063815	Acot9	Acyl-CoA thioesterase 9
BG063870	Actb	Actin, beta, cytoplasmic
BG077400	Agpat1	acid acyltransferase, alpha)
BG077350	Ahcy	S-adenosylhomocysteine hydrolase
BG080412	Ak7	Adenylate kinase 7
BG082884	Akr1c13	Aldo-keto reductase family 1, member C13
BG063209	Akt1s1	AKT1 substrate 1 (proline-rich)
BG063937	Alad	Aminolevulinate, delta-, dehydratase
BG064654	Alg5	phosphate beta-glucosyltransferase)
C85923	Alms1	Alstrom syndrome 1 homolog (human)
BG065567	Ankrd17	Ankyrin repeat domain 17
BG077192	Ankrd50	Ankrin repeat domain 50
BG077331	Anln	Anillin, actin binding protein (scraps homolog, Drosophila)
BG076932	Anxa1	Annexin A1
BG077650	Ap2a1	Adaptor protein complex AP-2, alpha 1 subunit
C88059	Aph1c	Anterior pharynx defective 1c homolog (C. elegans)
BG068041	Arih1	1 (Drosophila)
BG076736	Arl5a	ADP-ribosylation factor-like 5A

BG063662		Arpc2	Actin related protein 2/3 complex, subunit 2
AW539588		Arpc4	Actin related protein 2/3 complex, subunit 4
C86170		Atf2	Activating transcription factor 2
AW539206		Atg7	Autophagy-related 7 (yeast)
BG077733		Atp1b1	ATPase, Na+/K+ transporting, beta 1 polypeptide
BG077252		Atp6v1b2	ATPase, H+ transporting, lysosomal V1 subunit B2
BG078612		Atpaf2	ATP synthase mitochondrial F1 complex assembly factor 2
BG068814		AU023871	Expressed sequence AU023871
BG077551		B4galt3	UDP-Gal:betaGlcNAc beta 1,4-galactosyltransferase, polypeptide 3
BG078216		BC003940	CDNA sequence BC003940
BG064074		Bcap31	B-cell receptor-associated protein 31
BG078694		Bckdk	Branched chain ketoacid dehydrogenase kinase
BG064920		Bex1	Brain expressed gene 1
BG069214		Birc3	Baculoviral IAP repeat-containing 3
BG077446		Braf	Braf transforming gene
BG077363		Brms1	Breast cancer metastasis-suppressor 1
BG064376		Bub3	Budding uninhibited by benzimidazoles 3 homolog (S. cerevisiae)
BG077280		Bxdc2	Brix domain containing 2
BG068466		C130039O16Rik	RIKEN cDNA C130039O16 gene
C78859		C78859	Expressed sequence C78859
AW544560		Calm1	Calmodulin 1
BG067546		Caskin2	Cask-interacting protein 2
AA409074		Ccdc101	Coiled-coil domain containing 101
BG064532		Ccdc58	Coiled-coil domain containing 58
BG066467		Cdh13	Cadherin 13
BG064644		Ceacam9	CEA-related cell adhesion molecule 9
BG069669		Cep27	Centrosomal protein 27
AA408840		Cflar	CASP8 and FADD-like apoptosis regulator
BG068213		Chd1l	Chromodomain helicase DNA binding protein 1-like
BG063027		Cited2	terminal domain, 2
BG079988		Ckmt1	Creatine kinase, mitochondrial 1, ubiquitous
BG063927		Clic4	Chloride intracellular channel 4 (mitochondrial)
BG076923		Clpp	homolog (E. coli)
BG064000		Cltc	Clathrin, heavy polypeptide (Hc)
BG063345		Cmtm3	CKLF-like MARVEL transmembrane domain containing 3
BG065804		Col22a1	Collagen, type XXII, alpha 1

BG067260		Cox4nb	COX4 neighbor
BG080272		Cpeb3	Cytoplasmic polyadenylation element binding protein 3
BG078625		Cpsf2	Cleavage and polyadenylation specific factor 2
BG069122		Cs	Citrate synthase
BG080623		Ctsc	Cathepsin C
BG082948		Cul1	Cullin 1
BG067510		Cxxc6	CXXC finger 6
BG076814		Cyc1	Cytochrome c-1
BG065253		Cyfip1	Cytoplasmic FMR1 interacting protein 1
BG082508		D2Ertd750e	DNA segment, Chr 2, ERATO Doi 750, expressed
BG077300		Dcakd	Dephospho-CoA kinase domain containing
BG080329		Dcamkl2	Doublecortin and CaM kinase-like 2
BG068568		Dcamkl3	Doublecortin and CaM kinase-like 3
BG065404		Dcbld2	Discoidin, CUB and LCCL domain containing 2
BG063457		Ddi2	DNA-damage inducible protein 2
BG063739		Deb1	Differentially expressed in B16F10 1
BG076879		Dhx8	DEAH (Asp-Glu-Ala-His) box polypeptide 8
BG063067		Dido1	Death inducer-obliterator 1
BG063488		Dscr3	Down syndrome critical region gene 3
BG066834		E030041M21Rik	RIKEN cDNA E030041M21 gene
BG076471		E2f8	E2F transcription factor 8
BG077341		Eef1g	Eukaryotic translation elongation factor 1 gamma
BG063057		Efna1	Ephrin A1
BG064453		Ehd4	EH-domain containing 4
BG063829		Eif2a	Eukaryotic translation initiation factor 2a
AW539204		Eif4g3	Eukaryotic translation initiation factor 4 gamma, 3
BG077800		Entpd5	Ectonucleoside triphosphate diphosphohydrolase 5
BG077770		Exosc1	Exosome component 1
BG076800		Exosc5	Exosome component 5
BG066491		Fhod3	Formin homology 2 domain containing 3
BG080743		Fmn2	Formin 2
BG064040		Fmr1nb	Fragile X mental retardation 1 neighbor
BG080586		Frrs1	Ferric-chelate reductase 1
AW539348		Fuca2	Fucosidase, alpha-L- 2, plasma
BG067419		Gadd45g	Growth arrest and DNA-damage-inducible 45 gamma
BG068200		Gata6	GATA binding protein 6

BG063176		Gjb3	Gap junction membrane channel protein beta 3
BG067923		Gm1965	Gene model 1965, (NCBI)
BG063237		Gnaq	Guanine nucleotide binding protein, alpha q polypeptide
AW545189		Grin1a	Glutamate receptor, ionotropic, N-methyl D-aspartate-like 1A
BG066979		Grtp1	GH regulated TBC protein 1
BG081442		Gtpbp4	GTP binding protein 4
BG067430		H3f3b	H3 histone, family 3B
BG063859		Hcfc1	Host cell factor C1
BG063068		Hdlbp	High density lipoprotein (HDL) binding protein
BG080248		Hectd1	HECT domain containing 1
BG068108		Heph1	Hephaestin-like 1
BG062969		Hnrpd1	Heterogeneous nuclear ribonucleoprotein D-like
BG063830		Htf9c	Hpall tiny fragments locus 9c
BG081213		Idh2	Isocitrate dehydrogenase 2 (NADP+), mitochondrial
AA408993		Il13ra1	Interleukin 13 receptor, alpha 1
BG077262		Imp4	IMP4, U3 small nucleolar ribonucleoprotein, homolog (yeast)
AA408208		Ipmk	Inositol polyphosphate multikinase
BG069704		Isg20l1	Interferon stimulated exonuclease gene 20-like 1
BG067332		Itga9	Integrin alpha 9
BG079495		Josd3	Josephin domain containing 3
BG066980		Kif22	Kinesin family member 22
BG064062		Klf4	Kruppel-like factor 4 (gut)
BG080722		Klf6	Kruppel-like factor 6
C81600		Lats1	Large tumor suppressor
BG066801		LOC624424	Similar to poly(A) binding protein, cytoplasmic 4 isoform 1
BG069144		Lrrc7	Leucine rich repeat containing 7
BG068212		Lrrc8c	Leucine rich repeat containing 8 family, member C
AW536733		Lyst	Lysosomal trafficking regulator
BG064470		Magi1	containing 1
BG064189		Mapkapk5	MAP kinase-activated protein kinase 5
BG082602		Mark3	MAP/microtubule affinity-regulating kinase 3
BG064075		Mat2a	Methionine adenosyltransferase II, alpha
BG077781		Mbnl3	Muscleblind-like 3 (Drosophila)
BG080359		Mdm4	Transformed mouse 3T3 cell double minute 4
BG063791		Mib1	Mindbomb homolog 1 (Drosophila)
BG063049		Milt1	homolog (Drosophila)

AW541504		Mmp9	Matrix metallopeptidase 9
BG077638		Mrpl19	Mitochondrial ribosomal protein L19
BG064572		Mrpl28	Mitochondrial ribosomal protein L28
BG063751		Mrps9	Mitochondrial ribosomal protein S9
BG077818		Mt1	Metallothionein 1
AW538327		Mtdh	Metadherin
BG069750		Mthfr	5,10-methylenetetrahydrofolate reductase
BG076482		Mum1	Melanoma associated antigen (mutated) 1
BG064278		Nap1l1	Nucleosome assembly protein 1-like 1
BG068017		Ncoa1	Nuclear receptor coactivator 1
BG079485		Ndufa10	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex 10
BG076562		Ndufb7	NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 7
BG076983		Necap2	NECAP endocytosis associated 2
AA409376		Nfyα	Nuclear transcription factor-Y alpha
BG066937		Npr3	Natriuretic peptide receptor 3
BG067058		Nsd1	Nuclear receptor-binding SET-domain protein 1
BG077110		Nup153	Nucleoporin 153
BG077817		Nxf1	Nuclear RNA export factor 1 homolog ( <i>S. cerevisiae</i> )
BG077570		Oaz2	Ornithine decarboxylase antizyme 2
BG067047		Ogt	acetylglucosamine:polypeptide-N-acetylglucosaminyl transferase)
BG081674		Osbpl3	Oxysterol binding protein-like 3
BG063876		Pabpc1	Poly A binding protein, cytoplasmic 1
BG077937		Pak1ip1	PAK1 interacting protein 1
BG077121		Pcmt1	Protein-L-isoaspartate (D-aspartate) O-methyltransferase 1
BG064247		Pdcd2l	Programmed cell death 2-like
BG065306		Perp	PERP, TP53 apoptosis effector
BG078897		Phf12	PHD finger protein 12
BG068755		Phr1	Pam, highwire, rpm 1
BG064353		Pin1	Protein (peptidyl-prolyl cis/trans isomerase) NIMA-interacting 1
AA408069		Plac8	Placenta-specific 8
BG063822		Plekhc1	domain) member 1
BG078885		Plk4	Polo-like kinase 4 ( <i>Drosophila</i> )
BG078107		Plp2	Proteolipid protein 2
BG076915		Pole4	Polymerase (DNA-directed), epsilon 4 (p12 subunit)
BG082556		Ppil1	Peptidylprolyl isomerase (cyclophilin)-like 1
BG068154		Prdm10	PR domain containing 10

BG063156		Prkcbp1	Protein kinase C binding protein 1
BG080402		Prpsap1	Phosphoribosyl pyrophosphate synthetase-associated protein 1
BG066125		Psma4	Proteasome (prosome, macropain) subunit, alpha type 4
BG065633		Psmb2	Proteasome (prosome, macropain) subunit, beta type 2
BG077488		Psmb4	Proteasome (prosome, macropain) subunit, beta type 4
BG077683		Psmd9	Proteasome (prosome, macropain) 26S subunit, non-ATPase, 9
BG064342		Ptcd1	Pentatricopeptide repeat domain 1
BG066969		R3hdm1	R3H domain 1 (binds single-stranded nucleic acids)
BG080505		Rasa3	RAS p21 protein activator 3
BG066577		Rbm6	RNA binding motif protein 6
BG063048		Rbm9	RNA binding motif protein 9
BG065852		Rcor1	REST corepressor 1
BG078834		Renbp	Renin binding protein
BG080598		Rg9mtd1	RNA (guanine-9-) methyltransferase domain containing 1
BG066301		Rnf12	Ring finger protein 12
BG064110		Rnf128	Ring finger protein 128
BG078875		Rogdi	Rogdi homolog (Drosophila)
BG066735		RP23-248K2.4	Hepatitis A virus cellular receptor 1-like
BG063732		Rpl23	Ribosomal protein L23
BG077726		Rps15	Ribosomal protein S15
BG063380		Rpusd4	RNA pseudouridylate synthase domain containing 4
BG067236		Rsrc1	Arginine/serine-rich coiled-coil 1
BG080206		Scg3	Secretogranin III
BG068224		Sema3e	secreted, (semaphorin) 3E
BG076434		Sepx1	Selenoprotein X 1
BG063762		Serinc2	Serine incorporator 2
BG067375		Serinc5	Serine incorporator 5
BG063058		Sf3a2	Splicing factor 3a, subunit 2
BG065362		Sfrs11	Splicing factor, arginine/serine-rich 11
AW545127		Shroom2	Shroom family member 2
BG064643		SigIRR	Single immunoglobulin and toll-interleukin 1 receptor (TIR) domain
BG077242		Slc35a1	Solute carrier family 35 (CMP-sialic acid transporter), member 1
BG077540		Slc35b4	Solute carrier family 35, member B4
BG063804		Slc39a14	Solute carrier family 39 (zinc transporter), member 14
AU018293		Slc5a6	member 6
BG063782		Smurf2	SMAD specific E3 ubiquitin protein ligase 2

C81302		Snap25	Synaptosomal-associated protein 25
BG067046		Son	Son cell proliferation protein
BG078928		Stmn3	Stathmin-like 3
BG077514		Stt3a	A ( <i>S. cerevisiae</i> )
BG076886		Stx12	Syntaxin 12
BG077301		Stx4a	Syntaxin 4A (placental) associated factor
BG063899		Taf3	TAR DNA binding protein
BG076896		Tardbp	Transducin (beta)-like 2
BG065608		Tbl2	Transcription factor 25 (basic helix-loop-helix)
BG080018		Tcf25	Transglutaminase 1, K polypeptide
BG076966		Tgm1	Thrombospondin, type I, domain containing 7A
BG068131		Thsd7a	Tumor necrosis factor (ligand) superfamily, member 12
BG069517		Tnfsf12	Translocase of outer mitochondrial membrane 40 homolog (yeast)
BG077271		Tomm40	Tp53rk binding protein
BG062981		Tprkb	Thyroid hormone receptor interactor 4
BG077669		Trip4	Tubulin tyrosine ligase-like family, member 6
BG067035		Ttll6	Titin
BG066180		Ttn	Tubulin, beta 5
BG077434		Tubb5	Ubiquitin-activating enzyme E1, Chr X
BG078001		Ube1x	Ubiquitin-conjugating enzyme E2D 2
BG081756		Ube2d2	Ubiquitin carboxy-terminal hydrolase L1
BG067910		Uchl1	Uronyl-2-sulfotransferase
BG068064		Ust	Vacuolar protein sorting 11 (yeast)
BG080495		Vps11	Vacuolar protein sorting 25 (yeast)
BG064501		Vps25	WD repeat domain 25
BG068802		Wdr25	WD repeat domain 5
BG080472		Wdr5	WD repeat domain 55
BG077263		Wdr55	WAS/WASL interacting protein family, member 2
BG063028		Wipf2	EST X83328
BG063226		X83328	Ylp motif containing 1
BG065229		Ylpm1	Zinc finger protein 292
BG076845		Zfp292	Zinc finger protein 507
BG068052		zfp507	Zinc finger protein 568
BG069504		Zfp568	Zinc finger protein 91
BG064571		Zfp91	
AA407331		EST	

AA408676		EST
AA409509		EST
AA409525		EST
AU024798		EST
AW536180		EST
AW537468		EST
AW537514		EST
AW538201		EST
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AW539320		EST
AW539491		EST
AW539518		EST
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AW545303		EST
AW545321		EST
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BG064011		EST
BG064021		EST
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BG064161		EST

BG064170		EST	
BG064198		EST	length enriched library, clone:M5C1046G24 product:hypothetical
BG064227		EST	
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BG066724		EST	Transcribed locus
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BG067225		EST	
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BG068694		EST	
BG069132		EST	
BG069587		EST	clone:E860019P17 product:unclassifiable, full insert sequence
BG069622		EST	
BG079400		EST	
BG079860		EST	
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BI076553		EST	
BI076568		EST	
BI076577		EST	
BI076582		EST	
C78858		EST	
C79547		EST	
C81385		EST	
C85250		EST	
C85780		EST	
C85922		EST	
BG073134	Arid4a		AT rich interactive domain 4A (Rbp1 like)
BG064852	EST		
BG065601	Birc1c		Baculoviral IAP repeat-containing 1c

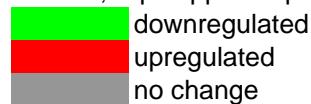
BG078883		Eif2b5	Eukaryotic translation initiation factor 2B, subunit 5 epsilon
BG084874		Fbxo3	F-box protein 3
BG073587		Pik3c2a	polypeptide
BG065677		Pik3r3	(p55)
BG070632		EST	
BG067289		1300013D18Rik	RIKEN cDNA 1300013D18 gene
BG071567		4933400E14Rik	RIKEN cDNA 4933400E14 gene
BQ552717		Als2	Amyotrophic lateral sclerosis 2 (juvenile) homolog (human)
BG076252		AU022870	Expressed sequence AU022870
BG071277		Ccdc15	Coiled-coil domain containing 15
BG074361		D930036F22Rik	RIKEN cDNA D930036F22 gene
BG084149		Drd1ip	Dopamine receptor D1 interacting protein
BG085740		Etv5	Ets variant gene 5
BG087589		Mtch1	Mitochondrial carrier homolog 1 (C. elegans)
BQ550195		Mtrf1	Mitochondrial fission regulator 1
BG087125		Nr0b2	Nuclear receptor subfamily 0, group B, member 2
BG071276		Pggt1b	Protein geranylgeranyltransferase type I, beta subunit
BG088153		Piwi2	Piwi-like homolog 2 (Drosophila)
BG075144		Rab11fip4	RAB11 family interacting protein 4 (class II)
BQ552754		Rabep1	Rabaptin, RAB GTPase binding effector protein 1
BG071937		Rex2	Reduced expression 2
BQ552268		S100pbp	S100P binding protein
BG078066		Stt3a	A ( <i>S. cerevisiae</i> )
BG075092		Tbc1d8	TBC1 domain family, member 8
BG067235		Ttbk2	Tau tubulin kinase 2
BG072375		Ubxd8	UBX domain containing 8
AU040400		EST	
BG071252		EST	
BG071669		EST	
BG071941		EST	
BG073183		EST	
BG075797		EST	
BQ550149		EST	
BQ552675		EST	
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BQ550412		1110018G07Rik	RIKEN cDNA 1110018G07 gene

BG075542		1700112E06Rik	RIKEN cDNA 1700112E06 gene
BG086258		2700060E02Rik	RIKEN cDNA 2700060E02 gene
BG063549		9330175B10Rik	RIKEN cDNA 9330175B10 gene
AW552546		Aldh1a2	Aldehyde dehydrogenase family 1, subfamily A2
BG086158		Amotl2	Angiomotin like 2
C78001		Ap2a2	Adaptor protein complex AP-2, alpha 2 subunit
BG073437		Atp5b	subunit
BG084151		Cox4i1	Cytochrome c oxidase subunit IV isoform 1
BG068906		Cpeb1	Cytoplasmic polyadenylation element binding protein 1
BG078926		Cst3	Cystatin C
BG087383		Ctsd	Cathepsin D
BG078496		Ctsl	Cathepsin L
BG072684	D12Ert551e	DNA segment, Chr 12, ERATO Doi 551, expressed	
BG086761		Dscr1	Down syndrome critical region homolog 1 (human)
BG077978		Eif1	Eukaryotic translation initiation factor 1
AW546565		Exosc7	Exosome component 7
BG063515		Fth1	Ferritin heavy chain 1
BG063873		Ftl1	Ferritin light chain 1
BG086135		Hbp1	High mobility group box transcription factor 1
BG063128		Ing1	Inhibitor of growth family, member 1
AW538243		Itga1	Integrin alpha 1
BG086046		Pcid2	PCI domain containing 2
BG076891		Pkp2	Plakophilin 2
BG077025		Pnn	Pinin
AW556719		Ppp1r10	Protein phosphatase 1, regulatory subunit 10
BG068894		Preb	Prolactin regulatory element binding
BG086073		Rala	V-ral simian leukemia viral oncogene homolog A (ras related)
BG076749		Rpl17	Ribosomal protein L17
BG076690		Rpl18a	Ribosomal protein L18A
BG080015		Rpl37a	Ribosomal protein L37a
BG068918		Rps27a	Ribosomal protein S27a
BG086181		Scp2	Sterol carrier protein 2, liver
BG073510		Syce2	Synaptonemal complex central element protein 2
BG072696		Tpt1	Tumor protein, translationally-controlled 1
BG063282		Trio	Triple functional domain (PTPRF interacting)
BG074132		Ube1l2	Ubiquitin-activating enzyme E1-like 2

BG075353		Zfyve21	Zinc finger, FYVE domain containing 21
AW539380		EST	
AW546625		EST	
BG063541		EST	
BG063921		EST	
BG068930		EST	
BG073361		EST	
BG075274		EST	
BG086297		EST	

**TableS2b. Gene lists of mouse CNS AAGs**

**Notes.** Cor: cortex; Hip: hippocampus; Cer: cerebellum; Str: striatum; SC: spinal cord.



Acc	CorAAG	HipAAG	CerAAG	StrAAG	SCAAG	Symbol	Name
BG078138						Rrm2	Ribonucleotide reductase M2
BQ551761			grey			Upf3b	UPF3 regulator of nonsense transcripts homolog B (yeast)
BG084523			grey			EST	
BG064829	grey					Hsp90aa1	Heat shock protein 90kDa alpha (cytosolic), class A member 1
BG069704						Isg20l1	Interferon stimulated exonuclease gene 20-like 1
BG064832		grey		grey		Tubb2c	Tubulin, beta 2c
BG066934	grey					Kalrn	Kalirin, RhoGEF kinase
C78835						Actb	Actin, beta, cytoplasmic
BG084543						Atrx	Alpha thalassemia/mental retardation syndrome X-linked homolog (human)
BG073423						Cdk9	Cyclin-dependent kinase 9 (CDC2-related kinase)
BG086487						E2f6	E2F transcription factor 6
BG074411						Scarb2	Scavenger receptor class B, member 2
AU041764						Ssr1	Signal sequence receptor, alpha
BG069830						Zdhhc7	Zinc finger, DHHC domain containing 7
BG070913				grey		EST	
BG084482						1110049F12Rik	RIKEN cDNA 1110049F12 gene
AU041102						Cobl	Cordon-bleu
BG078898						Lgtn	Ligatin
BG071638						Mrpl18	Mitochondrial ribosomal protein L18
BG066541						Pbx3	Pre B-cell leukemia transcription factor 3
BG084595						Wrn	Werner syndrome homolog (human)
BG071648						EST	
BG071669						EST	
BG065074	grey					Ahr	Aryl-hydrocarbon receptor
BG065476						AK190093	CDNA sequence AK190093
BG064663						Anapc7	Anaphase promoting complex subunit 7
BG078465						Aof2	Amine oxidase (flavin containing) domain 2

BG078146			Arbp	Acidic ribosomal phosphoprotein P0
BG077676			Dnajc7	DnaJ (Hsp40) homolog, subfamily C, member 7
BG064797			Ldha	Lactate dehydrogenase A
BG065053			Psmc3	Proteasome (prosome, macropain) 26S subunit, ATPase 3
BG065197			Rpl5	Ribosomal protein L5
BG076934			Rps2	Ribosomal protein S2
BG078477			Sec13	SEC13 homolog ( <i>S. cerevisiae</i> )
BG064838			Tuba2	Tubulin, alpha 2
BG064785			EST	
BG078454			Ppia	Peptidylprolyl isomerase A
BG081063			Cybb	Cytochrome b-245, beta polypeptide
BG073467			Hba-a1	Hemoglobin alpha, adult chain 1
BG069786			Ywhab	Tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, beta polypeptide
BG064819			Pa2g4	Proliferation-associated 2G4
BG073636			Psme1	Proteasome (prosome, macropain) 28 subunit, alpha
BG072729			Rbm12b	RNA binding motif protein 12B
BG073099			EST	
BG064873			1700109G14Rik	RIKEN cDNA 1700109G14 gene
BG064840			2610033H07Rik	RIKEN cDNA 2610033H07 gene
BG080936			Arfgap3	ADP-ribosylation factor GTPase activating protein 3
AW538671			Col5a3	Procollagen, type V, alpha 3
BG067879			D330050I23Rik	RIKEN cDNA D330050I23 gene
C80308			Exoc7	Exocyst complex component 7
BG078212			Fignl1	Fidgetin-like 1
BG064427			Fkbp15	FK506 binding protein 15
BG078210			Ift88	Intraflagellar transport 88 homolog ( <i>Chlamydomonas</i> )
BG067563			Npc1	Niemann Pick type C1
BG085485			Oaz3	Ornithine decarboxylase antizyme 3
BG078193			Pam	Peptidylglycine alpha-amidating monooxygenase
BG067944			Plac1l	Placenta-specific 1-like
BG064736			Rrm1	Ribonucleotide reductase M1
BG085334			Sar1a	SAR1 gene homolog A ( <i>S. cerevisiae</i> )
BG081064			Secisbp2	SECIS binding protein 2
BG068288			Slco1b2	Solute carrier organic anion transporter family, member 1b2
BG067985			Spred1	Sprouty protein with EVH-1 domain 1, related sequence
BG073224			Ube2q1	Ubiquitin-conjugating enzyme E2Q (putative) 1

AW536284				EST	
BG067877				EST	
BG067995				EST	Transcribed locus
BG067866			Cxadr	Coxsackievirus and adenovirus receptor	
BG064687			EST	Transcribed locus	
BG088924			Phkb	Phosphorylase kinase beta	
BG063515			Fth1	Ferritin heavy chain 1	
BG073690			EST		
BG076161		2410166I05Rik	RIKEN cDNA 2410166I05 gene		
BG076127		A330009N23Rik	RIKEN cDNA A330009N23 gene		
BG072788		Atrn	Attractin		
AW555585		Cct4	Chaperonin subunit 4 (delta)		
BG076204		Clybl	Citrate lyase beta like		
BG074233		Ndfip1	Nedd4 family interacting protein 1		
BG086230		Traf7	Tnf receptor-associated factor 7		
BG076410		Wnt4	Wingless-related MMTV integration site 4		
AW550445		EST			
AW558347		EST			
BG074259		EST			
BG065860	BC013481	CDNA sequence BC013481			
BG069202	Flad1	RFad1, flavin adenine dinucleotide synthetase, homolog (yeast)			
AW538653	EST				
C77408	Krt8	Keratin 8			
BG077025	Pnn	Pinin			
BG065945	Prpf3	PRP3 pre-mRNA processing factor 3 homolog (yeast)			
BG063524	Slc20a2	Solute carrier family 20, member 2			
BG065697	EST				
BG068317	EST				
BG069139	EST				
BG069140	EST				
BG069152	EST				
BG070808	EST				
AU024060	A930005I04Rik	RIKEN cDNA A930005I04 gene			
BQ550730	Ccdc36	Coiled-coil domain containing 36			
BG071313	Cdkn1c	Cyclin-dependent kinase inhibitor 1C (P57)			
BG072287	Cenpk	Centromere protein K			
BG082524	Elov16	ELOVL family member 6, elongation of long chain fatty acids (yeast)			

BG086904			Fis1	Fission 1 (mitochondrial outer membrane) homolog (yeast)
BG078930			Fkbp4	FK506 binding protein 4
BG070896			Jam2	Junction adhesion molecule 2
BG079028			Trpm7	Transient receptor potential cation channel, subfamily M, member 7
BG083613			Usp1	Ubiquitin specific peptidase 1
BG063123			EST	
BG066720			EST	
BG069127			EST	
BG070930			EST	
BG070931			EST	
BG077302			Atf7ip	Activating transcription factor 7 interacting protein
BG064219			EST	
BG073042			Hbb-b1	Hemoglobin, beta adult major chain
BG086349			Rnf11	Ring finger protein 11
BG070195			EST	
BG072733			EST	
BG066540			Nlk	Nemo like kinase
C76424			Lhfpl2	Lipoma HMGIC fusion partner-like 2
			Ywhaq	Tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, theta polypeptide
BQ550996			EST	
BG083661			Ilf3	Interleukin enhancer binding factor 3
BG070889			Tmem23	Transmembrane protein 23
BG066503			Cirh1a	Cirrhosis, autosomal recessive 1A (human)
BG067933			1500011J06Rik	RIKEN cDNA 1500011J06 gene
BQ552212			Pafah1b2	Platelet-activating factor acetylhydrolase, isoform 1b, alpha2 subunit
BG066387			Mrg1	Myeloid ecotropic viral integration site-related gene 1
BG072578			Arf4	ADP-ribosylation factor 4
BQ550902			Cyp2s1	Cytochrome P450, family 2, subfamily s, polypeptide 1
BG066539			Kcnk6	Potassium inwardly-rectifying channel, subfamily K, member 6
BG069589			Leprel2	Leprecan-like 2
BG073494			EST	
BG065888			EST	
BG070969			EST	
BG070970			EST	
			EST	Transcribed locus, weakly similar to XP_001078904.1 similar to zinc finger protein 146 [Rattus norvegicus]
BG070980			EST	
BG071603			EST	

BG074626			Prkg1	Protein kinase, cGMP-dependent, type I
BG074675			2010301N04Rik	RIKEN cDNA 2010301N04 gene
BG072056			Cenpa	Centromere protein A
BG072073			Ift122	Intraflagellar transport 122 homolog (Chlamydomonas)
BQ552294			Stxbp6	Syntaxin binding protein 6 (amisyn)
BG079790			Xpnpep1	X-prolyl aminopeptidase (aminopeptidase P) 1, soluble
AU046176			EST	
BG072217			0910001A06Rik	RIKEN cDNA 0910001A06 gene
BG073773			Eef1a1	Eukaryotic translation elongation factor 1 alpha 1
C76309			1110012J17Rik	RIKEN cDNA 1110012J17 gene
BG068814			AU023871	Expressed sequence AU023871
BG068466			C130039O16Rik	RIKEN cDNA C130039O16 gene
BG070530			C430003P19Rik	RIKEN cDNA C430003P19 gene
BG069669			Cep27	Centrosomal protein 27
AU040741			Dhx57	DEAH (Asp-Glu-Ala-Asp/His) box polypeptide 57
BG073998			Hcfc1	Host cell factor C1
BG086177			Rpl3	Ribosomal protein L3
BG079508			Tbl1x	Transducin (beta)-like 1 X-linked
BG066559			Tnks1bp1	Tankyrase 1 binding protein 1
BG081054			Xlr3b	X-linked lymphocyte-regulated 3B
BG064441			EST	
BG066124			EST	
BG066361			EST	
BG066550			EST	
BG066591			EST	
BG068694			EST	
BG069622			EST	
BG070182			EST	
BG070663			EST	
BG083198			EST	
BG075822			Cdc91l1	CDC91 cell division cycle 91-like 1 ( <i>S. cerevisiae</i> )
BG088850			Sh2b3	SH2B adaptor protein 3
BQ552701			Fusip1	FUS interacting protein (serine-arginine rich) 1
BG067932			Glul	Glutamate-ammonia ligase (glutamine synthetase)
BG069356			Epb4.1l5	Erythrocyte protein band 4.1-like 5
BG079475			Pik4ca	Phosphatidylinositol 4-kinase, catalytic, alpha polypeptide

BG066678						Transcribed locus, weakly similar to XP_912058.1 hypothetical protein
BG063659						XP_906965 [Mus musculus]
BG068169						Adaptor protein complex AP-1, sigma 1
BG064846					D430042O09Rik	RIKEN cDNA D430042O09 gene
BG064823					Cdc2a	Cell division cycle 2 homolog A ( <i>S. pombe</i> )
AW545415					Pgam1	Phosphoglycerate mutase 1
BG063564					EST	
BG080379					2700094F01Rik	RIKEN cDNA 2700094F01 gene
BG086444					Nars	Asparaginyl-tRNA synthetase
BG082228					AU020772	Expressed sequence AU020772
BG063277					Mybl2	Myeloblastosis oncogene-like 2
BG069533					Peg10	Paternally expressed 10
BG065957					Suv420h1	Suppressor of variegation 4-20 homolog 1 ( <i>Drosophila</i> )
BG067146					EST	
BG070059					EST	
BQ550410					EST	
BG076621					Hspa5	Heat shock 70kD protein 5 (glucose-regulated protein)
BG071450					1110008J03Rik	RIKEN cDNA 1110008J03 gene
BG073451					2010003J03Rik	RIKEN cDNA 2010003J03 gene
BG083629					2210010A19Rik	RIKEN cDNA 2210010A19 gene
BG066198					2410016F19Rik	RIKEN cDNA 2410016F19 gene
BG066645					2410042D21Rik	RIKEN cDNA 2410042D21 gene
BG070676					2600011C06Rik	RIKEN cDNA 2600011C06 gene
C80870					2610207I05Rik	RIKEN cDNA 2610207I05 gene
BG071364					2900056M20Rik	RIKEN cDNA 2900056M20 gene
BG070799					4631416L12Rik	RIKEN cDNA 4631416L12 gene
BG073340					4921524J06Rik	RIKEN cDNA 4921524J06 gene
BG069528					5730405I09Rik	RIKEN cDNA 5730405I09 gene
BG063015					9430023L20Rik	RIKEN cDNA 9430023L20 gene
BG086172					Abcd4	ATP-binding cassette, sub-family D (ALD), member 4
C78625					Abpe	Androgen binding protein epsilon
AA409025					Ankrd15	Ankyrin repeat domain 15
BG069506					Arhgef7	Rho guanine nucleotide exchange factor (GEF7)
BG077733					Atp1b1	ATPase, Na+/K+ transporting, beta 1 polypeptide
BG083148					AU015228	Expressed sequence AU015228
BG070991					AU017834	Expressed sequence AU017834

BG071370		AU040096	Expressed sequence AU040096
BG072043		AU046084	Expressed sequence AU046084
BG066690		Aurkaip1	Aurora kinase A interacting protein 1
BG070219		Bat2d	BAT2 domain containing 1
BG070779		Bbs2	Bardet-Biedl syndrome 2 homolog (human)
BG064920		Bex1	Brain expressed gene 1
BG079566		Btrc	Beta-transducin repeat containing protein
BG066902		C530030P08Rik	RIKEN cDNA C530030P08 gene
BG071392		C530043G21Rik	RIKEN cDNA C530043G21 gene
BG065908		C77370	Expressed sequence C77370
BG066514		C79445	Expressed sequence C79445
BG066572		Cables1	Cdk5 and Abl enzyme substrate 1
BG070322		Cacng5	Calcium channel, voltage-dependent, gamma subunit 5
BG079870		Caml	Calcium modulating ligand
BG066158		Car12	Carbonic anyhydrase 12
BQ550574		Cask	Calcium/calmodulin-dependent serine protein kinase (MAGUK family)
BQ551014		Cast	Calpastatin
BG072084		Cc2d1b	Coiled-coil and C2 domain containing 1B
AU023920		Ccnc	Cyclin C
BG071340		Ccnd3	Cyclin D3
BG083482		Chek2	CHK2 checkpoint homolog (S. pombe)
BG066703		Clta	Clathrin, light polypeptide (Lca)
BG079442		Cnn2	Calponin 2
BG080972		Crygb	Crystallin, gamma B
BG075303		Cryzl1	Crystallin, zeta (quinone reductase)-like 1
BG066227		Cul1	Cullin 1
BG085494		Cul3	Cullin 3
BG078810		Cycts	Cytochrome c, somatic
BQ550937		Cyld	Cylindromatosis (turban tumor syndrome)
BG071352		D18Ert653e	DNA segment, Chr 18, ERATO Doi 653, expressed
BG070630		D630040G17Rik	RIKEN cDNA D630040G17 gene
BG066589		Dmd	Dystrophin, muscular dystrophy
BG070734		Dock1	Dedicator of cyto-kinesis 1
BG070642		Eef2k	Eukaryotic elongation factor-2 kinase
BG071626		EG382450	Predicted gene, EG382450
BG071349		EG666469	Predicted gene, EG666469

BG070901		Eif1a	Eukaryotic translation initiation factor 1A
BG066159		Eif2s2	Eukaryotic translation initiation factor 2, subunit 2 (beta)
BG071373		Epdr2	Ependymin related protein 2 (zebrafish)
BG072115		Fbxo10	F-box protein 10
BG084974		Fbxo22	F-box protein 22
BG065805		Gabrb1	Gamma-aminobutyric acid (GABA-A) receptor, subunit beta 1
			UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyltransferase 4
BG066634		Galnt4	GTPase activating RANGAP domain-like 1
BG072044		Garnl1	Group specific component
BG073057		Gc	Gametogenitin binding protein 2
BG065591		Ggnbp2	Guanine nucleotide binding protein, alpha q polypeptide
BG087977		Gnaq	Glycosylphosphatidylinositol specific phospholipase D1
BG074653		Gpld1	Growth factor receptor bound protein 2
BG070639		Grb2	Histone deacetylase 2
BG070643		Hdac2	Heterogeneous nuclear ribonucleoprotein C
BG076765		Hnrcpc	IK cytokine
BG084192		Ik	IKAROS family zinc finger 4
BG084492		Ikzf4	Interleukin 10 receptor, alpha
BG074640		Il10ra	Interleukin 17 receptor E
BQ550324		Il17re	Intersex-like (Drosophila)
BG082794		Ixl	V-Ki-ras2 Kirsten rat sarcoma viral oncogene homolog
BG080027		Kras	LAS1-like ( <i>S. cerevisiae</i> )
BQ550722		Las1l	Low density lipoprotein receptor-related protein 2
BG071473		Lrp2	Leucine-rich PPR-motif containing
BG074685		Lrpprc	Leucine rich repeat containing 7
BG069144		Lrrc7	Membrane associated guanylate kinase, WW and PDZ domain containing 2
		Magi2	Mal, T-cell differentiation protein 2
BG068302		Mal2	MAP/microtubule affinity-regulating kinase 3
BG072364		Mark3	Mastl
BG082602		Mastl	Microtubule associated serine/threonine kinase-like
BG072383		Mbnl1	Muscleblind-like 1 (Drosophila)
BG087841		Mdh2	Malate dehydrogenase 2, NAD (mitochondrial)
BG084276		Mkrn1	Makorin, ring finger protein, 1
BG078870		Mlstd2	Male sterility domain containing 2
BG070800		Mtmr12	Vmyotubularin related protein 12
BG074650		Ncapd2	Non-SMC condensin I complex, subunit D2
BG086082			

BQ551032		Ndor1	NADPH dependent diflavin oxidoreductase 1
BG079485		Ndufa10	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex 10
BG084240		Ndufs7	NADH dehydrogenase (ubiquinone) Fe-S protein 7
BG071315		Nipbl	Nipped-B homolog (Drosophila)
BG083972		Nol10	Nucleolar protein 10
BG066700		Nol7	Nucleolar protein 7
BG072041		Nolc1	Nucleolar and coiled-body phosphoprotein 1
BG072053		Nr2e1	Nuclear receptor subfamily 2, group E, member 1
BG070986		Oaz2	Ornithine decarboxylase antizyme 2
BG071353		Papola	Poly (A) polymerase alpha
BG070255		Pde7a	Phosphodiesterase 7A
BG070766		Pdxk	Pyridoxal (pyridoxine, vitamin B6) kinase
BG071667		Pgm2l1	Phosphoglucomutase 2-like 1
BG081585		Pigf	Phosphatidylinositol glycan anchor biosynthesis, class F
BG065677		Pik3r3	Phosphatidylinositol 3 kinase, regulatory subunit, polypeptide 3 (p55)
BG084805		Pik4cb	Phosphatidylinositol 4-kinase, catalytic, beta polypeptide
BG066925		Pkd1l3	Polyzystic kidney disease 1 like 3
BQ550997		Poldip3	Polymerase (DNA-directed), delta interacting protein 3
BG075444		Polr2j	Polymerase (RNA) II (DNA directed) polypeptide J
BG083644		Por	P450 (cytochrome) oxidoreductase
BG067048		Ppm1d	Protein phosphatase 1D magnesium-dependent, delta isoform
BG071336		Prkab1	Protein kinase, AMP-activated, beta 1 non-catalytic subunit
BQ550366		Prkar2a	Protein kinase, cAMP dependent regulatory, type II alpha
BQ550958		Prpf18	PRP18 pre-mRNA processing factor 18 homolog (yeast)
BG071483		Prune	Prune homolog (Drosophila)
BG065633		Psmb2	Proteasome (prosome, macropain) subunit, beta type 2
BG071685		Ptdss1	Phosphatidylserine synthase 1
BG072681		Ptges3	Prostaglandin E synthase 3 (cytosolic)
BG072113		Ptk2	PTK2 protein tyrosine kinase 2
BG072031		Pts	6-pyruvoyl-tetrahydropterin synthase
BG071362		Pycard	PYD and CARD domain containing
BQ551650		Rab10	RAB10, member RAS oncogene family
BG070713		Rab30	RAB30, member RAS oncogene family
BG066577		Rbm6	RNA binding motif protein 6
AU040781		Rbx1	Ring-box 1
BG065852		Rcor1	REST corepressor 1

AU041357		Rhod	Ras homolog gene family, member D
BG078875		Rogdi	Rogdi homolog (Drosophila)
BG066735		RP23-248K2.4	Hepatitis A virus cellular receptor 1-like
BQ550634		Scn3a	Sodium channel, voltage-gated, type III, alpha
BQ551136		Slc9a3r1	Solute carrier family 9 (sodium/hydrogen exchanger), isoform 3 regulator 1
BQ551887		Slc9a6	Solute carrier family 9 (sodium/hydrogen exchanger), isoform 6
BG069386		Slco4c1	Solute carrier organic anion transporter family, member 4C1
BQ550611		Smad2	MAD homolog 2 (Drosophila)
BQ552244		Snap23	Synaptosomal-associated protein 23
BG081012		Snrbp2	U2 small nuclear ribonucleoprotein B
AU040496		Sp100	Nuclear antigen Sp100
BQ550540		Spn	Sialophorin
BG065620		Ss18	Synovial sarcoma translocation, Chromosome 18
BG069385		Stat2	Signal transducer and activator of transcription 2
BG078928		Stmn3	Stathmin-like 3
BG073342		Suhw4	Suppressor of hairy wing homolog 4 (Drosophila)
BG071689		Tbc1d15	TBC1 domain family, member 15
BG065608		Tbl2	Transducin (beta)-like 2
BG066250		Tbx20	T-box 20
BG085534		Tcf4	Transcription factor 4
BQ550368		Tcfap2c	Transcription factor AP-2, gamma
BG081076		Tcl1	T-cell lymphoma breakpoint 1
C77948		Tera	Teratocarcinoma expressed, serine rich
BG086091		Terf1	Telomeric repeat binding factor 1
BG084491		Tjp2	Tight junction protein 2
BG073058		Tle1	Transducin-like enhancer of split 1, homolog of Drosophila E(spl)
BQ550610		Tmco1	Transmembrane and coiled-coil domains 1
BG073784		Tmem19	Transmembrane protein 19
BG087296		Tmem50b	Transmembrane protein 50B
BG066239		Tnks2	Tankyrase, TRF1-interacting ankyrin-related ADP-ribose polymerase 2
BG071346		Trim34	Tripartite motif protein 34
BG065689		Ube2l3	Ubiquitin-conjugating enzyme E2L 3
BQ550339		Ube3a	Ubiquitin protein ligase E3A
BG069853		Uqcrc1	Ubiquinol-cytochrome c reductase core protein 1
BQ551117		Wee1	Wee 1 homolog (S. pombe)

BQ551652		Zc3h7a	Zinc finger CCCH type containing 7 A
BG066657		Zfand3	Zinc finger, AN1-type domain 3
AU046252		Zfp69	Zinc finger protein 69
AA409525		EST	
AU015835		EST	
AU040991		EST	
AU041361		EST	
AU044194		EST	Transcribed locus
AU046250		EST	Transcribed locus
AW549861		EST	
BG063085		EST	
BG063918		EST	
BG064292		EST	
BG065559		EST	
BG065566		EST	Transcribed locus, weakly similar to NP_983802.1 [Eremotheium gossypii]
BG065577		EST	
BG065632		EST	
BG065948		EST	
BG066241		EST	
BG066530		EST	
BG066582		EST	
BG066588		EST	
BG066623		EST	
BG066633		EST	
BG066659		EST	
BG066724		EST	Transcribed locus
BG066873		EST	
BG066882		EST	
BG066901		EST	
BG067815		EST	
BG067922		EST	
BG067967		EST	
BG068086		EST	
BG068202		EST	
BG068435		EST	
BG068468		EST	

BG068730		EST
BG069110		EST
BG069132		EST
BG070231		EST
BG070244		EST
BG070564		EST
BG070632		EST
BG070691		EST
BG070755		EST
BG070789		EST
BG070879		EST
BG070974		EST
BG071361		EST
BG071375		EST
BG071377		EST
BG071455		EST
BG071676		EST
BG072042		EST
BG072094		EST
BG072465		EST
BG073061		EST
BG073336		EST
BG073377		EST
BG073379		EST
BG074974		EST
BG075627		EST
BG079860		EST
BG084196		EST
BG084207		EST
BG084924		EST
BQ550386		EST
BQ550394		EST
BQ550555		EST
BQ550923		EST
BQ550972		EST
BQ551030		EST
BQ551690		EST

BQ551862		EST
BQ552246		EST
BQ552292		EST
C76835		EST
BQ550412		1110018G07Rik RIKEN cDNA 1110018G07 gene
AW555133		2310028N02Rik RIKEN cDNA 2310028N02 gene
BG076408		2610206B13Rik RIKEN cDNA 2610206B13 gene
BG084861		2700050L05Rik RIKEN cDNA 2700050L05 gene
BG086258		2700060E02Rik RIKEN cDNA 2700060E02 gene
BG076195		4931419K03Rik RIKEN cDNA 4931419K03 gene
BG076134		9330120H11Rik RIKEN cDNA 9330120H11 gene
BG066610		9330158F14Rik RIKEN cDNA 9330158F14 gene
BG073838	AA536749	Expressed sequence AA536749
BG075232	Aox3	Aldehyde oxidase 3
BG088940	Aqr	Aquarius
BG088097	Arhgap28	Rho GTPase activating protein 28
BG073860	Armcx1	Armadillo repeat containing, X-linked 1
BG075229	Atrnl1	Attractin like 1
BG064530	BC017647	CDNA sequence BC017647
BG076130	BC063749	CDNA sequence BC063749
BG076206	Bscl2	Bernardinelli-Seip congenital lipodystrophy 2 homolog (human)
BG076373	Ccl27	Chemokine (C-C motif) ligand 27
BG076493	Cdc42bpa	Cdc42 binding protein kinase alpha
BQ550079	Cltb	Clathrin, light polypeptide (Lcb)
BG086240	Cnbp	Cellular nucleic acid binding protein
BG088953	Col4a1	Procollagen, type IV, alpha 1
BG076180	Col5a2	Procollagen, type V, alpha 2
BG088391	Cryl1	Crystallin, lambda 1
BG088723	Dbnl	Drebrin-like
BG075553	Ddr2	Discoidin domain receptor family, member 2
BG073493	Dnmt3a	DNA methyltransferase 3A
BG076153	Dusp7	Dual specificity phosphatase 7
BG085728	Eftud2	Elongation factor Tu GTP binding domain containing 2
BG073936	Ehbp1l1	EH domain binding protein 1-like 1
BQ550136	Eif4a1	Eukaryotic translation initiation factor 4A1
BG088888	Elmo2	Engulfment and cell motility 2, ced-12 homolog (C. elegans)
BG072273	Eps15	Epidermal growth factor receptor pathway substrate 15

BG073875		Esr1	Estrogen receptor 1 (alpha)
BG074120		Fbxo42	F-box protein 42
BG088675		Fcmd	Fukuyama type congenital muscular dystrophy homolog (human)
BG088903		Fez1	Fasciculation and elongation protein zeta 1 (zygin I)
BG076167		Galnt1	UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyltransferase 1
BG088871		Gata4	GATA binding protein 4
BG087642		Glo1	Glyoxalase 1
BG087174		Gmppa	GDP-mannose pyrophosphorylase A
BG087780		Gstm1	Glutathione S-transferase, mu 1
BG085643		Hba-x	Hemoglobin X, alpha-like embryonic chain in Hba complex
BG075862		Hprt1	Hypoxanthine guanine phosphoribosyl transferase 1
BG088567		Igfbp3	Insulin-like growth factor binding protein 3
AW555640		Immt	Inner membrane protein, mitochondrial
BQ550178		Ipp	IAP promoted placental gene
BG076207		Jmjd1c	Jumonji domain containing 1C
AW559127		Kcnq1	Potassium voltage-gated channel, subfamily Q, member 1
BG075825		Kifc2	Kinesin family member C2
BG076407		Marveld2	MARVEL (membrane-associating) domain containing 2
BQ550139		Mat2a	Methionine adenosyltransferase II, alpha
BG088908		Mid1ip1	Mid1 interacting protein 1 (gastrulation specific G12-like (zebrafish))
BG076156		Mtx1	Metaxin 1
BG076894		Mybbp1a	MYB binding protein (P160) 1a
AW551875		Nfu1	NFU1 iron-sulfur cluster scaffold homolog (S. cerevisiae)
BG076133		Nme6	Expressed in non-metastatic cells 6, protein
BG064006		Nono	Non-POU-domain-containing, octamer binding protein
BG076129		Pcm1	Pericentriolar material 1
BG088662		Pex12	Peroxisomal biogenesis factor 12
BG088691		Pex16	Peroxisome biogenesis factor 16
BG077751		Phb	Prohibitin
BG088404		Polr2d	Polymerase (RNA) II (DNA directed) polypeptide D
BQ550096		Prdx2	Peroxiredoxin 2
BG076196		Pskh1	Protein serine kinase H1
BG076185		Ptbp2	Polypyrimidine tract binding protein 2
BG075069		Ptdsr	Phosphatidylserine receptor
BG086577		Ptger2	Prostaglandin E receptor 2 (subtype EP2)
BG076387		Rab3d	RAB3D, member RAS oncogene family

BG076377		Rabep1	Rabaptin, RAB GTPase binding effector protein 1
BG076155		Rabl4	RAB, member of RAS oncogene family-like 4
BG088950		Rac1	RAS-related C3 botulinum substrate 1
BG075206		Rpl6	Ribosomal protein L6
BQ550060		Rpn1	Ribophorin I
BG088362		Rqcd1	Rcd1 (required for cell differentiation) homolog 1 ( <i>S. pombe</i> )
BG088931		Sall2	Sal-like 2 ( <i>Drosophila</i> )
BG088667		Sesn1	Sestrin 1
BG076501		Sfrs6	Splicing factor, arginine/serine-rich 6
BG076166		Slc12a5	Solute carrier family 12, member 5
BG076120		Smurf1	SMAD specific E3 ubiquitin protein ligase 1
BG087779		Sumo2	SMT3 suppressor of mif two 3 homolog 2 (yeast)
BQ550038		Tbc1d12	TBC1D12: TBC1 domain family, member 12
BG075873		Tbc1d20	TBC1 domain family, member 20
BG076142		Tdh	L-threonine dehydrogenase
BG088909		Tle6	Transducin-like enhancer of split 6, homolog of <i>Drosophila</i> E(spl)
BG066380		Trip12	Thyroid hormone receptor interactor 12
AW558029		Uqcr	Ubiquinol-cytochrome c reductase (6.4kD) subunit
BG075872		Usp25	Ubiquitin specific peptidase 25
BG086567		Wbp5	WW domain binding protein 5
BG085556		Wwp1	WW domain containing E3 ubiquitin protein ligase 1
BG075788		Xpc	Xeroderma pigmentosum, complementation group C
BG076162		Zfp612	Zinc finger protein 612
BG076335		Zfp644	Zinc finger protein 644
AU040550		EST	
AW548438		EST	
AW550680		EST	
AW551760		EST	
AW551856		EST	
AW551902		EST	
AW554651		EST	
AW555179		EST	
AW556496		EST	
AW556991		EST	
AW557207		EST	
AW557344		EST	
AW558800		EST	

AW559082		EST	Transcribed locus
BG071491		EST	
BG073267		EST	
BG073826		EST	Transcribed locus
BG073930		EST	
BG074316		EST	
BG074374		EST	
BG074399		EST	
BG075833		EST	
BG076137		EST	Transcribed locus
BG076145		EST	
BG076353		EST	
BG076396		EST	Transcribed locus
BG077789		EST	
BG084425		EST	Transcribed locus
BG085008		EST	
BG088902		EST	
BG088920		EST	
BI076870		EST	
AW551432	1110007C02Rik	RIKEN cDNA 1110007C02 gene	
BG073048	1200011O22Rik	RIKEN cDNA 1200011O22 gene	
BG076839	1500032L24Rik	RIKEN cDNA 1500032L24 gene	
BG073774	2700083E18Rik	RIKEN cDNA 2700083E18 gene	
BG078443	2900073G15Rik	RIKEN cDNA 2900073G15 gene	
BG065211	3110082I17Rik	RIKEN cDNA 3110082I17 gene	
BG065185	3930401K13Rik	RIKEN cDNA 3930401K13 gene	
BG067919	4833405L11Rik	RIKEN cDNA 4833405L11 gene	
BG065233	6530403A03Rik	RIKEN cDNA 6530403A03 gene	
BG063815	Acot9	Acyl-CoA thioesterase 9	
BG087449	Acp1	Acid phosphatase 1, soluble	
BG072752	Actg1	Actin, gamma, cytoplasmic 1	
BG064405	Ahctf1	AT hook containing transcription factor 1	
BG077184	AI413782	Expressed sequence AI413782	
BG064421	AI425999	Expressed sequence AI425999	
BG077796	Akp2	Alkaline phosphatase 2, liver	
BG065457	Aldoa	Aldolase 1, A isoform	
BG072839	Alkbh3	AlkB, alkylation repair homolog 3 (E. coli)	

BG072609			Amotl1	Angiomotin-like 1
BG073527			Anp32a	Acidic (leucine-rich) nuclear phosphoprotein 32 family, member A
BG077739			Arl6ip1	ADP-ribosylation factor-like 6 interacting protein 1
BG078689			Atp5a1	ATP synthase, H <sup>+</sup> transporting, mitochondrial F1 complex, alpha subunit, isoform 1
BG077799			Atp6v0c	ATPase, H <sup>+</sup> transporting, lysosomal V0 subunit C
BG073380			AW549542	Expressed sequence AW549542
BG078487			BC030867	CDNA sequence BC030867
BG065113			Bcat1	Branched chain aminotransferase 1, cytosolic
BG073443			Bcl9l	B-cell CLL/lymphoma 9-like
BG076617			Calm1	Calmodulin 1
AW537940			Calm2	Calmodulin 2
BG069728			Ccdc39	Coiled-coil domain containing 39
BG064770			Cct5	Chaperonin subunit 5 (epsilon)
BG065445			Clca6	Chloride channel calcium activated 6
BG073116			Clic1	Chloride intracellular channel 1
BG072984			Cltc	Clathrin, heavy polypeptide (Hc)
BG078639			Cnot6	CCR4-NOT transcription complex, subunit 6
BG076988			Cox8a	Cytochrome c oxidase, subunit VIIa
BG068906			Cpeb1	Cytoplasmic polyadenylation element binding protein 1
BG074423			Cstf1	Cleavage stimulation factor, 3' pre-RNA, subunit 1
BG065210			Cwf19l2	CWF19-like 2, cell cycle control (S. pombe)
BG063739			Deb1	Differentially expressed in B16F10 1
BG082456			Dnajc8	DnaJ (Hsp40) homolog, subfamily C, member 8
BG078439			Dnase1	Deoxyribonuclease I
BG067844			Dscaml1	Down syndrome cell adhesion molecule-like 1
BG069784			Dynlt3	Dynein light chain Tctex-type 3
BG064950			EG433273	Predicted gene, EG433273
BG063829			Eif2a	Eukaryotic translation initiation factor 2a
BG078409			Eno1	Enolase 1, alpha non-neuron
BG065048			Ghdc	GH3 domain containing
BG078343			Ghitm	Growth hormone inducible transmembrane protein
AU023208			Gna14	Guanine nucleotide binding protein, alpha 14
AW556925			Gnas	GNAS (guanine nucleotide binding protein, alpha stimulating) complex locus
BG078478			Gpc3	Glypican 3
BG066419			Gpr108	G protein-coupled receptor 108

AW551017		Gprasp1	G protein-coupled receptor associated sorting protein 1
BG077204		Gps1	G protein pathway suppressor 1
BG076882		Hars	Histidyl-tRNA synthetase
BG063755		Homer2	Homer homolog 2 ( <i>Drosophila</i> )
BG079631		Hsp90ab1	Heat shock protein 90kDa alpha (cytosolic), class B member 1
BG078338		Hsp90b1	Heat shock protein 90kDa beta (Grp94), member 1
BG069762		Il7	Interleukin 7
BG065065		Impad1	Inositol monophosphatase domain containing 1
AW544628		Itgb1	Integrin beta 1 (fibronectin receptor beta)
BQ551722		Kif3a	Kinesin family member 3A
BG073322		Kif3b	Kinesin family member 3B
BG069796		Klhl2	Kelch-like 2, Mayven ( <i>Drosophila</i> )
BG074228		Klhl5	Kelch-like 5 ( <i>Drosophila</i> )
BG078444		Kntc1	Kinetochore associated 1
BG063426		Krt7	Keratin 7
BG078651		Large	Like-glycosyltransferase
BG078416		Lrrc40	Leucine rich repeat containing 40
BG085378		Marcks	Myristoylated alanine rich protein kinase C substrate
BG080961		Mdh1	Malate dehydrogenase 1, NAD (soluble)
BG076643		Mgat4b	Mannoside acetylglucosaminyltransferase 4, isoenzyme B
BG063728		Morf4l2	Mortality factor 4 like 2
BG068329		Mybl1	Myeloblastosis oncogene-like 1
BG086273		Ndufa13	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 13
BG086348		Ndufb10	NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 10
BG063881		Neu1	Neuraminidase 1
BG072673		Nfatc4	Nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 4
BG073544		Nfib	Nuclear factor I/B
BG078592		Nsf	N-ethylmaleimide sensitive fusion protein
BG085840		Olfm1	Olfactomedin 1
AW548258		P4ha1	Procollagen-proline, 2-oxoglutarate 4-dioxygenase (proline 4-hydroxylase), alpha 1 polypeptide
BG085724		Pabpn1	Poly(A) binding protein, nuclear 1
BG065345		Pak2	P21 ( <i>CDKN1A</i> )-activated kinase 2
BG074157		Phip	Pleckstrin homology domain interacting protein
BG064066		Pip5k1c	Phosphatidylinositol-4-phosphate 5-kinase, type 1 gamma
BG078663		Pkm2	Pyruvate kinase, muscle

BG065409			Pla2g6	Phospholipase A2, group VI
BG078528			Pou5f1	POU domain, class 5, transcription factor 1
BG068894			Preb	Prolactin regulatory element binding
BG085625			Prkci	Protein kinase C, iota
BG065166			Prmt5	Protein arginine N-methyltransferase 5
BG085762			Prpf31	PRP31 pre-mRNA processing factor 31 homolog (yeast)
BG073526			Ptov1	Prostate tumor over expressed gene 1
BG086188			Ptprg	Protein tyrosine phosphatase, receptor type, G
BG078499			Rab17	RAB17, member RAS oncogene family
BG073320			Rag1ap1	Recombination activating gene 1 activating protein 1
BG073546			Rasa3	RAS p21 protein activator 3
BG078516			Rg9mtd1	RNA (guanine-9-) methyltransferase domain containing 1
BG086013			Rnf10	Ring finger protein 10
BG065173			Rnf185	Ring finger protein 185
BG064438			Rod1	ROD1 regulator of differentiation 1 ( <i>S. pombe</i> )
BG078442			Rpl15	Ribosomal protein L15
BG086430			Rpl31	Ribosomal protein L31
BG063847			Rpl8	Ribosomal protein L8
BG077726			Rps15	Ribosomal protein S15
BG077529			Rps18	Ribosomal protein S18
BG068918			Rps27a	Ribosomal protein S27a
BG076993			Rrbp1	Ribosome binding protein 1
BG072572			Rsbn1	Rosbin, round spermatid basic protein 1
BG073039			Rxrb	Retinoid X receptor beta
BG064820			Sae1	SUMO1 activating enzyme subunit 1
BG078617			Sf3b2	Splicing factor 3b, subunit 2
BG086702			Sh2b1	SH2B adaptor protein 1
BG078464			Slc13a4	Solute carrier family 13 (sodium/sulfate symporters), member 4
BG088856			Sltm	SAFB-like, transcription modulator
BG063417			Smpd3	Sphingomyelin phosphodiesterase 3, neutral
BG077765			Sox8	SRY-box containing gene 8
BG073524			Spint2	Serine protease inhibitor, Kunitz type 2
BG063138			Spock2	Sparc/osteonectin, cwcv and kazal-like domains proteoglycan 2
BG075210			Ss18l1	Synovial sarcoma translocation gene on chromosome 18-like 1
BG073409			Stmn1	Stathmin 1
BG063223			Suclg2	Succinate-Coenzyme A ligase, GDP-forming, beta subunit
AU022550			Suv39h2	Suppressor of variegation 3-9 homolog 2 ( <i>Drosophila</i> )

BG069749		Tarbp2	TAR (HIV) RNA binding protein 2
BG067920		Tbc1d10b	TBC1 domain family, member 10b
BG063180		Tbrg4	Transforming growth factor beta regulated gene 4
BG073668		Tfb1m	Transcription factor B1, mitochondrial
BG063212		Tm9sf3	Transmembrane 9 superfamily member 3
BG076581		Tmed2	Transmembrane emp24 domain trafficking protein 2
BG082678		Tns3	Tensin 3
BG081944		Tspan5	Tetraspanin 5
BG069808		Tubb2b	Tubulin, beta 2b
BG077716		Tubb6	Tubulin, beta 6
BG086914		Txnl4	Thioredoxin-like 4
BQ552732		Uba52	Ubiquitin A-52 residue ribosomal protein fusion product 1
BG069806		Ubc	Ubiquitin C
BG082755		Ubr2	Ubiquitin protein ligase E3 component n-recognition 2
BG086722		Uchl1	Ubiquitin carboxy-terminal hydrolase L1
BG076903		Unc45a	Unc-45 homolog A ( <i>C. elegans</i> )
BG078411		Vps41	Vacuolar protein sorting 41 (yeast)
BG073390		Wbscr22	Williams Beuren syndrome chromosome region 22
			Tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, eta polypeptide
BG065012		Ywhah	Zinc finger, C3HC type 1
BG086134		Zc3hc1	Zinc finger protein 313
BG085989		Zfp313	Zinc finger protein 335
BG073487		Zfp335	ZW10 interactor
BG065115		Zwint	
AA407855		EST	
AA409509		EST	
AW538179		EST	
AW541497		EST	
AW549995		EST	
AW553932		EST	
AW557547		EST	
BG063139		EST	
BG064458		EST	
BG065178		EST	
BG065963		EST	
BG068930		EST	

BG069795		EST	Transcribed locus, weakly similar to XP_001078904.1 similar to zinc finger protein 146 [Rattus norvegicus]
BG071454		EST	
BG073115		EST	
BG073612		EST	
BG073995		EST	
BG087495		EST	
BI076595		EST	
BQ551141		1110065H08Rik	RIKEN cDNA 1110065H08 gene
BQ552600		1700011I03Rik	RIKEN cDNA 1700011I03 gene
BG066274		1700020O03Rik	RIKEN cDNA 1700020O03 gene
BG074444		1700041C02Rik	RIKEN cDNA 1700041C02 gene
BG076565		2610204K14Rik	RIKEN cDNA 2610204K14 gene
AU040159		4732418C07Rik	RIKEN cDNA 4732418C07 gene
BG068366		4932414N04Rik	RIKEN cDNA 4932414N04 gene
BG083257		4933426K21Rik	RIKEN cDNA 4933426K21 gene
BG073827		5730407K14Rik	RIKEN cDNA 5730407K14 gene
BG066726		8430426H19Rik	RIKEN cDNA 8430426H19 gene
BG069602		Acaa2	Acetyl-Coenzyme A acyltransferase 2 (mitochondrial 3-oxoacyl-Coenzyme A thiolase)
BG079065		Adam15	A disintegrin and metallopeptidase domain 15 (metargidin)
BG069227		Aftph	Aftiphilin
BG065093		Agtrap	Angiotensin II, type I receptor-associated protein
BG068644		Arl6ip2	ADP-ribosylation factor-like 6 interacting protein 2
BG082495		Asl	Argininosuccinate lyase
BG068769		AU023762	Expressed sequence AU023762
BG070516		Auh	AU RNA binding protein/enoyl-coenzyme A hydratase
BG072468		Banp	Btg3 associated nuclear protein
BG083476		BC003331	CDNA sequence BC003331
BG066764		BC033915	CDNA sequence BC033915
BG070749		Brd3	Bromodomain containing 3
BG072887		Btbd9	BTB (POZ) domain containing 9
BG070932		C030048H21Rik	RIKEN cDNA C030048H21 gene
BG071169		Camk2b	Calcium/calmodulin-dependent protein kinase II, beta
BG069436		Ccdc60	Coiled-coil domain containing 60
BG073943		Csnk1g1	Casein kinase 1, gamma 1
BG065713		D17Ert29e	DNA segment, Chr 17, ERATO Doi 29, expressed

AU042625			Dbc1	Deleted in bladder cancer 1 (human)
BI076814			Dbt	Dihydrolipoamide branched chain transacylase E2
BQ552530			Dlgh1	Discs, large homolog 1 ( <i>Drosophila</i> )
BG081778			Dock4	Dedicator of cytokinesis 4
BG071947			Dtna	Dystrobrevin alpha
BG083466			Etfdh	Electron transferring flavoprotein, dehydrogenase
BQ551776			Fbxo30	F-box protein 30
BQ551773			Fer1l3	Fer-1-like 3, myoferlin ( <i>C. elegans</i> )
BG066451			Ggps1	Geranylgeranyl diphosphate synthase 1
BG087265			Hdgfrp3	Hepatoma-derived growth factor, related protein 3
BG079049			Heatr2	HEAT repeat containing 2
BG081903			Hsd3b1	Hydroxy-delta-5-steroid dehydrogenase, 3 beta- and steroid delta-isomerase 1
BQ551924			Igf1r	Insulin-like growth factor I receptor
BG067905			Il17f	Interleukin 17F
BG074597			Inoc1	INO80 complex homolog 1 ( <i>S. cerevisiae</i> )
BG071191			Itga11	Integrin, alpha 11
BG085297			Jarid1b	Jumonji, AT rich interactive domain 1B (Rbp2 like)
BG069378			Kcnh3	Potassium voltage-gated channel, subfamily H (eag-related), member 3
BG073351			Kdels2	KDEL (Lys-Asp-Glu-Leu) containing 2
C79740			Lace1	Lactation elevated 1
BG084150			Lap3	Leucine aminopeptidase 3
BG087321			Lins2	Lines homolog 2 ( <i>Drosophila</i> )
BG073012			Mamdc1	MAM domain containing 1
BG071128			Mib1	Mindbomb homolog 1 ( <i>Drosophila</i> )
BG065778			Mll3	Myeloid/lymphoid or mixed-lineage leukemia 3
BG083317			Net1	Neuroepithelial cell transforming gene 1
BG083489			Nrg4	Neuregulin 4
BG072344			Orc1l	Origin recognition complex, subunit 1-like ( <i>S.cereviaiae</i> )
BG075119			Papolg	Poly(A) polymerase gamma
BG071215			Paqr5	Progesterin and adipoQ receptor family member V
BQ551164			Pask	PAS domain containing serine/threonine kinase
BG082619			Pcnt	Pericentrin (kendrin)
BG077310			Pdlim2	PDZ and LIM domain 2
BG072296			Phf8	PHD finger protein 8
BG071360			Pofut1	Protein O-fucosyltransferase 1

BG074143		Polr3gl	Polymerase (RNA) III (DNA directed) polypeptide G like
BG079960		Prkc $\zeta$	Protein kinase C, zeta
BG065725		Prps1	Phosphoribosyl pyrophosphate synthetase 1
C76498		Prr8	Proline rich 8
BG084049		Ptgis	Prostaglandin I2 (prostacyclin) synthase
BG077083		Rad1	RAD1 homolog (S. pombe)
BG063946		Rest	RE1-silencing transcription factor
BG069368		Rfx1	Regulatory factor X, 1 (influences HLA class II expression)
BG082484		Rgs12	Regulator of G-protein signaling 12
BG071220		Rnf19	Ring finger protein (C3HC4 type) 19
BG076525		Rnf2	Ring finger protein 2
BG079971		Rppgrip1	Retinitis pigmentosa GTPase regulator interacting protein 1
BG075383		Sfrs2ip	Splicing factor, arginine/serine-rich 2, interacting protein
BG074764		Sfxn1	Sideroflexin 1
BG062935		Sipa1l2	Signal-induced proliferation-associated 1 like 2
BG084160		Slc11a2	Solute carrier family 11 (proton-coupled divalent metal ion transporters), member 2
BG073944		Slc24a3	Solute carrier family 24 (sodium/potassium/calcium exchanger), member 3
BG078901		Spc82	Signal peptidase complex subunit 2 homolog (S. cerevisiae)
BG074672		Strbp	Spermatid perinuclear RNA binding protein
BG084153		Suox	Sulfite oxidase
BG074497		Tnrc6a	Trinucleotide repeat containing 6a
BG066722		Ube2h	Ubiquitin-conjugating enzyme E2H
BG068877		Vcam1	Vascular cell adhesion molecule 1
AU018221		Wwtr1	WW domain containing transcription regulator 1
BG069212		Zfp750	Zinc finger protein 750
BG070672		Zfp9	Zinc finger protein 9
AU016579		EST	
AU024687		EST	
AU040379		EST	
AU040688		EST	
AU042949		EST	
AW547223		EST	
AW553453		EST	
BG063494		EST	
BG065704		EST	

BG065928		EST
BG066596		EST
BG066753		EST
BG067149		EST
BG067603		EST
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BG067764		EST
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BG068110		EST
BG068189		EST
BG068321		EST
BG068354		EST
BG068775		EST
BG068854		EST
BG069078		EST
BG069141		EST
BG069343		EST
BG069590		EST
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BG070587		EST
BG070824		EST
BG071170		EST
BG071183		EST
BG071194		EST
BG071461		EST
BG071515		EST
BG071864		EST
BG071961		EST
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BG072320		EST
BG073033		EST
BG076914		EST
BG079861		EST
BG081202		EST
BG084074		EST
BG087807		EST

Transcribed locus

Transcribed locus

Transcribed locus

BQ552510			EST
BQ552528			EST
BQ552631			EST
C78984			EST
C85807			EST
BG085385		2610024E20Rik	RIKEN cDNA 2610024E20 gene
BG064518		2810422J05Rik	RIKEN cDNA 2810422J05 gene
AA410046		4921517N04Rik	RIKEN cDNA 4921517N04 gene
BG064836		4921537D05Rik	RIKEN cDNA 4921537D05 gene
BG073203		5033428A16Rik	RIKEN cDNA 5033428A16 gene
BG085932		6330577E15Rik	RIKEN cDNA 6330577E15 gene
BQ550715	Anp32b		Acidic nuclear phosphoprotein 32 family, member B
BG075826	Arf3		ADP-ribosylation factor 3
BG065313	Atp6v1e1		VATPase, H <sup>+</sup> transporting, lysosomal V1 subunit E1
AW553617	Bcam		Basal cell adhesion molecule
BG066196	C78409		Expressed sequence C78409
BG077878	Cald1		Caldesmon 1
BQ550128	Ccdc9		Coiled-coil domain containing 9
BG085384	Cct2		Chaperonin subunit 2 (beta)
BG066256	Clcn1		Chloride channel 1
BG064855	Cox7a2l		Cytochrome c oxidase subunit VIIa polypeptide 2-like
BG069401	Csnk2a2		Casein kinase 2, alpha prime polypeptide
BG064881	D1Ertd161e		DNA segment, Chr 1, ERATO Doi 161, expressed
BG078206	D330037H05Rik		RIKEN cDNA D330037H05 gene
BG064783	Ddx5		DEAD (Asp-Glu-Ala-Asp) box polypeptide 5
AW554618	Diap1		Diaphanous homolog 1 (Drosophila)
BG084373	Dmxl2		Dmx-like 2
BG064751	E4f1		E4F transcription factor 1
BG076418	Elac2		ElaC homolog 2 (E. coli)
BG067161	Endod1		Endonuclease domain containing 1
BG067311	Fbxw17		F-box and WD-40 domain protein 17
BG064795	Ftl1		Ferritin light chain 1
BG064828	Gabpb2		GA repeat binding protein, beta 2
BG065382	Gldc		Glycine decarboxylase
BG064940	Gltscr2		Glioma tumor suppressor candidate region gene 2
BQ550758	Gng2		Guanine nucleotide binding protein (G protein), gamma 2 subunit
BQ552668	Gpam		Glycerol-3-phosphate acyltransferase, mitochondrial

BG068026			Hel308	Helicase, mus308-like (Drosophila)
BG064653			Igf2bp1	Insulin-like growth factor 2 mRNA binding protein 1
BG078196			Kcnq1	Potassium voltage-gated channel, subfamily G, member 1
BG081236			Lats1	Large tumor suppressor
BG072604			Lats2	Large tumor suppressor 2
BG064582			Lrrc16	Leucine rich repeat containing 16
BG087465			Mapk14	Mitogen activated protein kinase 14
BG064664			Mbc2	Membrane bound C2 domain containing protein
			Mllt10	Myeloid/lymphoid or mixed lineage-leukemia translocation to 10 homolog (Drosophila)
BG082425			Nol8	Nucleolar protein 8
BG068330			Nucks1	Nuclear casein kinase and cyclin-dependent kinase substrate 1
BG064665			Pappa	Pregnancy-associated plasma protein A
BG064599			Pcyt1a	Phosphate cytidylyltransferase 1, choline, alpha isoform
BG064642			Pfkl	Phosphofructokinase, liver, B-type
BG064930			Phf21a	PHD finger protein 21A
BG068715			Phgdh	3-phosphoglycerate dehydrogenase
BG066673			Pole3	Polymerase (DNA directed), epsilon 3 (p17 subunit)
BG080913			Polr2h	Polymerase (RNA) II (DNA directed) polypeptide H
BG082424			Prlr	Prolactin receptor
BG074887			Prr13	Proline rich 13
BG081020			Psd3	Pleckstrin and Sec7 domain containing 3
BG073534			Psmc2	Proteasome (prosome, macropain) 26S subunit, ATPase 2
BG064701			Psme2	Proteasome (prosome, macropain) 28 subunit, beta
BG067921			Pura	Purine rich element binding protein A
BG076902			Rangap1	RAN GTPase activating protein 1
BG078132			Rnf20	Ring finger protein 20
BG083038			Rnmt	RNA (guanine-7-) methyltransferase
BG064869			Rpl10	Ribosomal protein 10
BG085977			Rpl14	Ribosomal protein L14
BG085974			Rpp14	Ribonuclease P 14 subunit (human)
BG064641			Sfrs3	Splicing factor, arginine/serine-rich 3 (SRp20)
BG078157			Slc5a11	Solute carrier family 5 (sodium/glucose cotransporter), member 11
BG079955			Slc7a8	Solute carrier family 7 (cationic amino acid transporter, y+ system), member 8
BG068299			Stam2	Signal transducing adaptor molecule (SH3 domain and ITAM motif) 2
BG063497			Tcp1	T-complex protein 1
BG078109				

BG064631		Timeless	Timeless homolog (Drosophila)
BG067300		Tinag	Tubulointerstitial nephritis antigen
BG067897		Tnrc6b	Trinucleotide repeat containing 6b
BG086016		Tpm1	Tropomyosin 1, alpha
BG064807		Tpp1	Tripeptidyl peptidase I
BG064856		Tpp2	Tripeptidyl peptidase II
BG073234		Trib1	Tribbles homolog 1 (Drosophila)
BG086839		Trim35	Tripartite motif-containing 35
BG064677		Trpc4ap	Transient receptor potential cation channel, subfamily C, member 4 associated protein
BG073139		Vkorc1l1	Vitamin K epoxide reductase complex, subunit 1-like 1
BG076940		Wdr3	WD repeat domain 3
BG067887		Wipf2	WAS/WASL interacting protein family, member 2
BG062990		Wiz	Widely-interspaced zinc finger motifs
C77369		Zdhhc6	Zinc finger, DHHC domain containing 6
BG076977		Zranb2	Zinc finger, RAN-binding domain containing 2
AW536295		EST	
AW548714		EST	
BG064729		EST	
BG064784		EST	
BG064868		EST	
BG065291		EST	
BG065585		EST	
BG066267		EST	
BG067176		EST	
BG067221		EST	
BG067278		EST	
BG067886		EST	Transcribed locus, weakly similar to XP_577160.1 similar to LRRGT00088 [Rattus norvegicus]
BG067898		EST	
BG069024		EST	
BG069108		EST	
BG073193		EST	
BG073260		EST	
BG078136		EST	
BG082061		EST	
BG082357		EST	

C78519		EST	
C85808		EST	
C87682		EST	
BG072306		Acaca	Acetyl-Coenzyme A carboxylase alpha
BG075316		Asb1	Ankyrin repeat and SOCS box-containing protein 1
BG076252		AU022870	Expressed sequence AU022870
BG068096		C230040D10Rik	RIKEN cDNA C230040D10 gene
BG085488		Cog8	Component of oligomeric golgi complex 8
BG077424		Dync1li2	Dynein, cytoplasmic 1 light intermediate chain 2
BG072695		Erh	Enhancer of rudimentary homolog (Drosophila)
BG086746		Fabp3	Fatty acid binding protein 3, muscle and heart
BQ552312		Fbxw11	F-box and WD-40 domain protein 11
BG074610		Glb1	Galactosidase, beta 1
BQ552325		Kif3c	Kinesin family member 3C
BG079486		Lrrc59	Leucine rich repeat containing 59
BG064287		Ncl	Nucleolin
BG063969		Ppap2b	Phosphatidic acid phosphatase type 2B Protein tyrosine phosphatase, receptor type, f polypeptide (PTPRF), interacting protein, alpha 1
BG083890		Ppfia1	Ribosomal protein S6 kinase, polypeptide 5
BG087873		Rps6ka5	Testis enhanced gene transcript
BG064583		Tegt	UBX domain containing 8
BG072375		Ubxd8	UTP15, U3 small nucleolar ribonucleoprotein, homolog (yeast)
BG064502		Utp15	
AW538230		EST	
AW538521		EST	
AW538620		EST	
AW546560		EST	
BG067385		EST	
BG068412		EST	
BG068446		EST	
BG071206		EST	
BG071355		EST	
BG072805		EST	
BG073325		EST	
BG076040		EST	
BG087808		EST	
BQ550895		EST	Transcribed locus

BQ551139		EST	Transcribed locus
BQ551597		EST	
C78770		EST	
BG080820	Dnajb4	DnaJ (Hsp40) homolog, subfamily B, member 4	
BG076883	1500003O22Rik	RIKEN cDNA 1500003O22 gene	
C88307	2610204L23Rik	RIKEN cDNA 2610204L23 gene	
BG065432	Abcf3	ATP-binding cassette, sub-family F (GCN20), member 3	
BG068557	Actl6a	Actin-like 6A	
BG085195	Atp2a2	ATPase, Ca++ transporting, cardiac muscle, slow twitch 2	
BG071404	AU041129	Expressed sequence AU041129	
BG063312	Bat3	HLA-B-associated transcript 3	
AW536452	Cul4b	Cullin 4B	
BG080169	Cyb5r3	Cytochrome b5 reductase 3	
BG063696	D19Wsu162e	DNA segment, Chr 19, Wayne State University 162, expressed	
BG068629	EG235580	Predicted gene, EG235580	
BG064471	Ext1	Exostoses (multiple) 1	
BG068843	Fchsd2	FCH and double SH3 domains 2	
AW545189	Grin1a	Glutamate receptor, ionotropic, N-methyl D-aspartate-like 1A	
BG066248	Ifi30	Interferon gamma inducible protein 30	
BG079611	Irak1	Interleukin-1 receptor-associated kinase 1	
AA408772	Jmjd3	Jumonji domain containing 3	
BG066801	LOC624424	Similar to poly(A) binding protein, cytoplasmic 4 isoform 1	
AA410017	Nip7	Nuclear import 7 homolog (S. cerevisiae)	
	Plekhc1	Pleckstrin homology domain containing, family C (with FERM domain) member 1	
BG063822	Psma1	Proteasome (prosome, macropain) subunit, alpha type 1	
BG064693	Rpl26	Ribosomal protein L26	
BG078672	Rpl37	Ribosomal protein L37	
BG087018	Slc2a4	Solute carrier family 2 (facilitated glucose transporter), member 4	
BG073429	Tbc1d9b	TBC1 domain family, member 9B	
BG069613	Tgfb1	Transforming growth factor, beta induced	
BG072750	Tmem63a	Transmembrane protein 63a	
BG071052	Tnfsf5ip1	Tumor necrosis factor superfamily, member 5-induced protein 1	
BG077865	Ttc19	Tetratricopeptide repeat domain 19	
BG078317	Ttr	Transthyretin	
BG076766	Xrn2	5'-3' exoribonuclease 2	
BG063080	Zfp592	Zinc finger protein 592	
BG069606			

AW539320			EST
AW539369			EST
AW556716			EST
BG064488			EST
BG069138			EST
BG069183			EST
BG069648			EST
BG070382			EST
BG071172			EST
BG072105			EST
BG076368			EST
C88129			EST
BG085733	Septin 8	Septin 8	
BG086314	1810013L24Rik	RIKEN cDNA 1810013L24 gene	
BG086303	Aip	Aryl-hydrocarbon receptor-interacting protein	
AW552546	Aldh1a2	Aldehyde dehydrogenase family 1, subfamily A2	
AU043423	Ankhd1	Ankyrin repeat and KH domain containing 1	
BG086954	App	Amyloid beta (A4) precursor protein	
BG088087	Capzb	Capping protein (actin filament) muscle Z-line, beta	
BG068393	Ccdc52	Coiled-coil domain containing 52	
BG064532	Ccdc58	Coiled-coil domain containing 58	
BG079767	Csda	Cold shock domain protein A	
BQ552407	Cst3	Cystatin C	
BG072903	Ctbp2	C-terminal binding protein 2	
BG065918	Ctnna1	Catenin (cadherin associated protein), alpha 1	
AW547680	D4Ert22e	DNA segment, Chr 4, ERATO Doi 22, expressed	
BG067487	D9Mgi6	DNA Segment, Chr 9, Mouse Genome Informatics 6	
BG078883	Eif2b5	Eukaryotic translation initiation factor 2B, subunit 5 epsilon	
BG073013	Golph4	Golgi phosphoprotein 4	
AW538243	Itga1	Integrin alpha 1	
AU021923	Jag1	Jagged 1	
BG079546	Ncoa6	Nuclear receptor coactivator 6	
BG088100	Ndufs1	NADH dehydrogenase (ubiquinone) Fe-S protein 1	
BG076983	Necap2	NECAP endocytosis associated 2	
BG069369	Pdzd3	PDZ domain containing 3	
BG076891	Pkp2	Plakophilin 2	
BG075879	Plp1	Proteolipid protein (myelin) 1	

BQ552383		Rcl1	RNA terminal phosphate cyclase-like 1
BG064900		Scd1	Stearoyl-Coenzyme A desaturase 1
BG075286		Slc25a3	Solute carrier family 25 (mitochondrial carrier, phosphate carrier), member 3
BG064802		Sparc	Secreted acidic cysteine rich glycoprotein
BG074398		Sparcl1	SPARC-like 1 (mast9, hevin)
BG082439		Trappc3	Trafficking protein particle complex 3
AW554361		Tspyl2	TSPY-like 2
BG067235		Ttbk2	Tau tubulin kinase 2
BG065641		Txndc5	Thioredoxin domain containing 5
C77246		Yars	Tyrosyl-tRNA synthetase
AU020246		EST	Transcribed locus, strongly similar to XP_227080.3 similar to eukaryotic translation elongation factor 1 alpha 1 [Rattus norvegicus]
AW538365		EST	
AW544835		EST	
AW548385		EST	
BG063541		EST	
BG063953		EST	
BG064632		EST	
BG066258		EST	
BG068487		EST	
BG068668		EST	
BG068917		EST	
BG069123		EST	
BG069163		EST	RNA binding site for Dazl protein, clone kc7
BG070315		EST	
BG075262		EST	
BG076222		EST	
BG086298		EST	
BQ552232			6-Mar Membrane-associated ring finger (C3HC4) 6
AW554394		0610012D17Rik	RIKEN cDNA 0610012D17 gene
BG075135		1110007L15Rik	RIKEN cDNA 1110007L15 gene
BG064872		1700019N12Rik	RIKEN cDNA 1700019N12 gene
C87836		1810055G02Rik	RIKEN cDNA 1810055G02 gene
BG076242		2010106G01Rik	RIKEN cDNA 2010106G01 gene
BG064862		2010111I01Rik	RIKEN cDNA 2010111I01 gene
BG075147		2010311D03Rik	RIKEN cDNA 2010311D03 gene

BG080256		2410022L05Rik RIKEN cDNA 2410022L05 gene
AU040419		4933439F18Rik RIKEN cDNA 4933439F18 gene
BG080382		5730427N09Rik RIKEN cDNA 5730427N09 gene
BG074949		5830404H04Rik RIKEN cDNA 5830404H04 gene
BG069482		6330409N04Rik RIKEN cDNA 6330409N04 gene
BG068979		9330102E08Rik RIKEN cDNA 9330102E08 gene
BG063679	Aasdhppt	Aminoadipate-semialdehyde dehydrogenase-phosphopantetheinyl transferase
BG068195	Abce1	ATP-binding cassette, sub-family E (OABP), member 1
BG064885	Acot2	Acyl-CoA thioesterase 2
BG064835	Adamts10	A disintegrin-like and metallopeptidase (reprolysin type) with thrombospondin type 1 motif, 10
BG080292	AI481105	Expressed sequence AI481105
C85471	Aifm1	Apoptosis-inducing factor, mitochondrion-associated 1
BG067951	Alox12e	Arachidonate lipoxygenase, epidermal
BG064719	Ankrd32	Ankyrin repeat domain 32
BG078211	Arl1	ADP-ribosylation factor-like 1
AW552880	Arsg	Arylsulfatase G
BG076321	Aspm	Asp (abnormal spindle)-like, microcephaly associated ( <i>Drosophila</i> )
BG077116	Auts2	Autism susceptibility candidate 2
BG072521	B3galnt2	UDP-GalNAc:betaGlcNAc beta 1,3-galactosaminyltransferase, polypeptide 2
BG072161	BC038167	CDNA sequence BC038167
BG067918	Btg2	B-cell translocation gene 2, anti-proliferative
BG067220	Btg4	B-cell translocation gene 4
BG075022	Bxdc1	Brix domain containing 1
BG067864	C430004E15Rik	RIKEN cDNA C430004E15 gene
BG078093	Cbx3	Chromobox homolog 3 ( <i>Drosophila</i> HP1 gamma)
BG067909	Ccdc69	Coiled-coil domain containing 69
BG077073	Ccnh	Cyclin H
BG073140	Cd8b1	CD8 antigen, beta chain 1
BQ550980	Chn1	Chimerin (chimaerin) 1
BG083522	Cks2	CDC28 protein kinase regulatory subunit 2
BG072331	Clstn1	Calsyntenin 1
BG067896	Cnih	Cornichon homolog ( <i>Drosophila</i> )
BG072504	Col18a1	Procollagen, type XVIII, alpha 1
BG067822	Coro2b	Coronin, actin binding protein, 2B

BG066881		Cryz	Crystallin, zeta
BG088576		Ddx27	DEAD (Asp-Glu-Ala-Asp) box polypeptide 27
BG067931		Dna2l	DNA2 DNA replication helicase 2-like (yeast)
BG072182		Dusp3	Dual specificity phosphatase 3 (vaccinia virus phosphatase VH1-related)
BG075819		E230024E03Rik	RIKEN cDNA E230024E03 gene
BG077164		Eif3s2	Eukaryotic translation initiation factor 3, subunit 2 (beta)
BG064842		Emb	Emargin
BG080244		Ern1	Endoplasmic reticulum (ER) to nucleus signalling 1
BG074340		Farp1	FERM, RhoGEF (Arhgef) and pleckstrin domain protein 1 (chondrocyte-derived)
BG074324		Farslb	Phenylalanine-tRNA synthetase-like, beta subunit
BG063802		Fcho2	FCH domain only 2
BG065471		Gk5	Glycerol kinase 5 (putative)
BG075159		Gls	Glutaminase
BG086996		Golga1	Golgi autoantigen, golgin subfamily a, 1
BG076263		Hdh	Huntington disease gene homolog
BG068319		Heatr1	HEAT repeat containing 1
BG077487		Hif1a	Hypoxia inducible factor 1, alpha subunit
BG064875		Hs3st3b1	Heparan sulfate (glucosamine) 3-O-sulfotransferase 3B1
BG077115		Hunk	Hormonally upregulated Neu-associated kinase
BG085901		Ifitm2	Interferon induced transmembrane protein 2
BG087082		Ifrrg15	Interferon alpha responsive gene
BG085919		Jrk	Jerky
BG076025		Kcnk2	Potassium channel, subfamily K, member 2
BG071617		Lemd3	LEM domain containing 3
AW552998		Lsm3	LSM3 homolog, U6 small nuclear RNA associated ( <i>S. cerevisiae</i> )
BG072998		Lum	Lumican
BG085336		Matn2	Matrilin 2
BG085859		Mc2r	Melanocortin 2 receptor
BG078181		Metap1	Methionyl aminopeptidase 1
BG067853		Mgmt	O-6-methylguanine-DNA methyltransferase
BG067984		Mll5	Myeloid/lymphoid or mixed-lineage leukemia 5
BG080478		Mosc2	MOCO sulphurase C-terminal domain containing 2
BG075103		Mov10	Moloney leukemia virus 10
BG087418		Ms4a6d	Membrane-spanning 4-domains, subfamily A, member 6D
BG087589		Mtch1	Mitochondrial carrier homolog 1 ( <i>C. elegans</i> )

BG080731	Nab1	Ngfi-A binding protein 1
BG066947	Ndp52	Nuclear domain 10 protein 52
BG087727	Nfx1	Nuclear transcription factor, X-box binding 1
BG080881	Npepps	Aminopeptidase puromycin sensitive
BG074323	Nr2c2	Nuclear receptor subfamily 2, group C, member 2
BG084112	Nr2f1	Nuclear receptor subfamily 2, group F, member 1
BG086787	Numa1	Nuclear mitotic apparatus protein 1
BG072372	Pcp4l1	Purkinje cell protein 4-like 1
BG088153	Piwil2	Piwi-like homolog 2 ( <i>Drosophila</i> )
BG087717	Pms2	Postmeiotic segregation increased 2 ( <i>S. cerevisiae</i> )
BG087766	Pnpla8	Patatin-like phospholipase domain containing 8
	Ppp2r1b	Protein phosphatase 2 (formerly 2A), regulatory subunit A (PR 65), beta isoform
BG067151	Prep	Prolyl endopeptidase
BG067908	Prpf38b	PRP38 pre-mRNA processing factor 38 (yeast) domain containing B
BG082377	Ptpn14	Protein tyrosine phosphatase, non-receptor type 14
BG067867	Ptprf	Protein tyrosine phosphatase, receptor type, F
BG085163	Rab11a	RAB11a, member RAS oncogene family
BG071651	Rab11fip1	RAB11 family interacting protein 1 (class I)
BG072553	Rcn3	Reticulocalbin 3, EF-hand calcium binding domain
BG088768	Runx2	Runt related transcription factor 2
BG067185	Rwdd4a	RWD domain containing 4A
BG080766	Ryr2	Ryanodine receptor 2, cardiac
BG074010	Sart2	Squamous cell carcinoma antigen recognized by T cells 2
BG080423	Sephs1	Selenophosphate synthetase 1
BG073672	Sh3tc2	SH3 domain and tetratricopeptide repeats 2
BG074293	Shc1	Src homology 2 domain-containing transforming protein C1
BG088317	Slc16a3	Solute carrier family 16 (monocarboxylic acid transporters), member 3
	Slc37a2	Solute carrier family 37 (glycerol-3-phosphate transporter), member 2
BG064853	Slc3a2	Solute carrier family 3 (activators of dibasic and neutral amino acid transport), member 2
BG085951	Slc4a8	Solute carrier family 4 (anion exchanger), member 8
BG064714	Smap1	Stromal membrane-associated protein 1
BG067865	Smc6	Structural maintenance of chromosomes 6
BG063419	Smox	Spermine oxidase
AU022611		
BG081031		

BG071657		Smu1	Smu-1 suppressor of <i>mec-8</i> and <i>unc-52</i> homolog ( <i>C. elegans</i> )
BG078208		Srprb	Signal recognition particle receptor, B subunit
BG084249		Ssh1	Slingshot homolog 1 ( <i>Drosophila</i> )
BG074313		Syngr2	Synaptogyrin 2
BG071687		Synj2bp	Synaptjanin 2 binding protein
BG086829		Sypl	Synaptophysin-like protein
BG082016		Taf7	TAF7 RNA polymerase II, TATA box binding protein (TBP)-associated factor
BG067974		Thsd7b	Thrombospondin, type I, domain containing 7B
BG064553		Thumpd1	THUMP domain containing 1
BG064763		Top3b	Topoisomerase (DNA) III beta
BG075608		Tpi1	Triosephosphate isomerase 1
BG073370		Ttc3	Tetratricopeptide repeat domain 3
BG067233		Ttc32	Tetratricopeptide repeat domain 32
BG075001		Uqcrc2	Ubiquinol cytochrome c reductase core protein 2
BG086421		Usmg5	Upregulated during skeletal muscle growth 5
BG074853		Usp34	Ubiquitin specific peptidase 34
BG064874		Usp38	Ubiquitin specific peptidase 38
BG077459		Utrn	Utrophin
BG064839		Wdr1	WD repeat domain 1
BG074348		Wnk4	WNK lysine deficient protein kinase 4
BG074888		Xpo5	Exportin 5
BG074305		Yap1	Yes-associated protein 1
BG067943		Zcchc6	Zinc finger, CCHC domain containing 6
BG078199		Zfp281	Zinc finger protein 281
BG065142		Zfp422	Zinc finger protein 422
BG080714		Zfp708	Zinc finger protein 708
AW537187		EST	
AW553287		EST	
AW558484		EST	
BG066923		EST	
BG067197		EST	
BG067209		EST	
BG067243		EST	
BG067854		EST	
BG067884		EST	
BG068015		EST	

BG072181		EST	
BG072492		EST	
BG073132		EST	
BG073835		EST	
BG074282		EST	
BG074322		EST	Transcribed locus
BG075052		EST	
BG075071		EST	Transcribed locus
BG077103		EST	Transcribed locus
C80679		EST	
C88049		EST	
BG078874		1110061O04Rik	RIKEN cDNA 1110061O04 gene
BG072619		1190002N15Rik	RIKEN cDNA 1190002N15 gene
BG069904		1190005F20Rik	RIKEN cDNA 1190005F20 gene
BG082833		1500003O03Rik	RIKEN cDNA 1500003O03 gene
BQ550748		1700081L11Rik	RIKEN cDNA 1700081L11 gene
BG072777		1810009A15Rik	RIKEN cDNA 1810009A15 gene
BG082886		2010305A19Rik	RIKEN cDNA 2010305A19 gene
BG072618		2310051F07Rik	RIKEN cDNA 2310051F07 gene
AU040786		2410008K03Rik	RIKEN cDNA 2410008K03 gene
BG075517		2410127E18Rik	RIKEN cDNA 2410127E18 gene
BQ550162		2510006D16Rik	RIKEN cDNA 2510006D16 gene
BG072797		2610002J23Rik	RIKEN cDNA 2610002J23 gene
BG085636		2610005L07Rik	RIKEN cDNA 2610005L07 gene
BQ550329		2610030H06Rik	RIKEN cDNA 2610030H06 gene
AU015471		2610529C04Rik	RIKEN cDNA 2610529C04 gene
BG073362		3100004P22Rik	RIKEN cDNA 3100004P22 gene
BG068399		4930432O21Rik	RIKEN cDNA 4930432O21 gene
BG072938		4930473A06Rik	RIKEN cDNA 4930473A06 gene
BG070762		4930589O11Rik	RIKEN cDNA 4930589O11 gene
AW544088		5730449L18Rik	RIKEN cDNA 5730449L18 gene
BG077603		5730494M16Rik	RIKEN cDNA 5730494M16 gene
BG078323		5730536A07Rik	RIKEN cDNA 5730536A07 gene
BG068796		6330581L23Rik	RIKEN cDNA 6330581L23 gene
BG066229		6720457D02Rik	RIKEN cDNA 6720457D02 gene
BG073481		6720475J19Rik	RIKEN cDNA 6720475J19 gene
BQ550664		8030451K01Rik	RIKEN cDNA 8030451K01 gene

BG085732		9130004C02Rik RIKEN cDNA 9130004C02 gene
BG065753		9130011E15Rik RIKEN cDNA 9130011E15 gene
BG073315		9130023D20Rik RIKEN cDNA 9130023D20 gene
BG066056		9130404D08Rik RIKEN cDNA 9130404D08 gene
AW554339		9630037P07Rik RIKEN cDNA 9630037P07 gene
BG067331	AA388235	Expressed sequence AA388235
BG073405	AA673488	Expressed sequence AA673488
BG077905	AA881470	EST AA881470
BG067888	Aak1	AP2 associated kinase 1
BG073745	Acbd3	Acyl-Coenzyme A binding domain containing 3
C76711	Aco2	Aconitase 2, mitochondrial
BG073394	Add3	Adducin 3 (gamma)
BG085480	Agrin	Agrin
BG070055	Alg13	Asparagine-linked glycosylation 13 homolog (S. cerevisiae)
BG065639	Ap1gbp1	AP1 gamma subunit binding protein 1
BG077650	Ap2a1	Adaptor protein complex AP-2, alpha 1 subunit
BG085506	Arhgef19	Rho guanine nucleotide exchange factor (GEF) 19
	Arih1	Ariadne ubiquitin-conjugating enzyme E2 binding protein homolog 1 (Drosophila)
BG070091	Arih2	Ariadne homolog 2 (Drosophila)
BG066446	Azin1	Antizyme inhibitor 1
BG081746	BC011248	CDNA sequence BC011248
BG078265	BC033606	CDNA sequence BC033606
BG065711	Bcl7c	B-cell CLL/lymphoma 7C
BQ550263	Birc1c	Baculoviral IAP repeat-containing 1c
BG065601	Bnc1	Basonuclin 1
BG072651	Brd1	Bromodomain containing 1
BG066501	C130032J12Rik	RIKEN cDNA C130032J12 gene
BG077928	C80913	Expressed sequence C80913
BG075437	Cab39	Calcium binding protein 39
BG079251	Cacnb3	Calcium channel, voltage-dependent, beta 3 subunit
BG072959	Car8	Carbonic anhydrase 8
BG072807	Ccdc102a	Coiled-coil domain containing 102A
BG072723	Cdc23	CDC23 (cell division cycle 23, yeast, homolog)
BG072661	Cdc5l	Cell division cycle 5-like (S. pombe)
BG065644	Cdh13	Cadherin 13
BG066467	Cdh23	Cadherin 23 (otocadherin)
BQ551701		

BQ550373		Cdh5	Cadherin 5
BG066570		Cdyl2	Chromodomain protein, Y chromosome-like 2
BG065629		Centd1	Centaurin, delta 1
C79238		Chchd3	Coiled-coil-helix-coiled-coil-helix domain containing 3
BG086695		Cluap1	Clusterin associated protein 1
BG068414		Col25a1	Procollagen, type XXV, alpha 1
BG085434		Crebfz	CREB/ATF bZIP transcription factor
BG065899		Ctr9	Ctr9, Paf1/RNA polymerase II complex component, homolog (S. cerevisiae)
BG086320		Cxcl12	Chemokine (C-X-C motif) ligand 12
BG083209		Cyba	Cytochrome b-245, alpha polypeptide
BG073364		Cyp51	Cytochrome P450, family 51
BG073492		D0H4S114	DNA segment, human D4S114
BG070372		D10Ert641e	DNA segment, Chr 10, ERATO Doi 641, expressed
BG083212		D14Ert668e	DNA segment, Chr 14, ERATO Doi 668, expressed
BG065769		D5Ert6135e	DNA segment, Chr 5, ERATO Doi 135, expressed
BG068420		D8Ert6457e	DNA segment, Chr 8, ERATO Doi 457, expressed
BG071093		D930036F22Rik	RIKEN cDNA D930036F22 gene
BG073307		Ddx54	DEAD (Asp-Glu-Ala-Asp) box polypeptide 54
BG087920		Dlst	Dihydrolipoamide S-succinyltransferase (E2 component of 2-oxo-glutarate complex)
BG070080		Dmgdh	Dimethylglycine dehydrogenase precursor
BG066942		Dnmt3b	DNA methyltransferase 3B
BG066580		Dsg2	Desmoglein 2
BG071581		Dtl	Denticleless homolog (Drosophila)
BG066292		Dtnbp1	Dystrobrevin binding protein 1
BG073959		Eef2	Eukaryotic translation elongation factor 2
BG078920		EG668628	Predicted gene, EG668628
BG075252		Egln1	EGL nine homolog 1 (C. elegans)
BG074119		Eif3s8	Eukaryotic translation initiation factor 3, subunit 8
BG086148		Elp4	Elongation protein 4 homolog (S. cerevisiae)
AU041770		Emid2	EMI domain containing 2
BG069525		Ercc4	Excision repair cross-complementing rodent repair deficiency, complementation group 4
BG065623		Etnk1	Ethanolamine kinase 1
BG065915		Etv6	Ets variant gene 6 (TEL oncogene)
BG074856		Fastk	Fas-activated serine/threonine kinase

BG066491		Fhod3	Formin homology 2 domain containing 3
BG070773		Fkbp1a	FK506 binding protein 1a
BG071167		Fndc7	Fibronectin type III domain containing 7
BQ550168		Fnip1	Folliculin interacting protein 1
BG086054		Fstl1	Follistatin-like 1
BG072833		Gnpda2	Glucosamine-6-phosphate deaminase 2
AW547240		Gramd1a	GRAM domain containing 1A
BG072757		Gspt1	G1 to S phase transition 1
BG066009		Gtf3c2	General transcription factor IIIC, polypeptide 2, beta
BG075940		Gtlf3b	Gene trap locus F3b
AU041598		H2-K1	Histocompatibility 2, K1, K region
BG069255		Hira	Histone cell cycle regulation defective homolog A ( <i>S. cerevisiae</i> )
BG085427		Hmgb2	High mobility group box 2
BG073539		Hsd17b10	Hydroxysteroid (17-beta) dehydrogenase 10
BG064506		Il17d	Interleukin 17D
BG082154		Il4	Interleukin 4
BG085435		Impact	Imprinted and ancient
BG064511		Ints5	Integrator complex subunit 5
BG087223		Itga3	Integrin alpha 3
BG072195		Jam3	Junction adhesion molecule 3
BG066271		Kars	Lysyl-tRNA synthetase
BQ551582		Lass6	Longevity assurance homolog 6 ( <i>S. cerevisiae</i> )
BG069534		Lman2l	Lectin, mannose-binding 2-like
BG067748		Lrrc8e	Leucine rich repeat containing 8 family, member E
BG065612		Lrrk2	Leucine-rich repeat kinase 2
BG087954		Ltbp1	Latent transforming growth factor beta binding protein 1
BG077319		Lzts2	Leucine zipper, putative tumor suppressor 2
BG070588		Map1lc3b	Microtubule-associated protein 1 light chain 3 beta
BG082854		Mesp2	Mesoderm posterior 2
BG074486		MGC107415	Hypothetical protein LOC383216
BG072685		Mns1	Meiosis-specific nuclear structural protein 1
BG077638		Mrpl19	Mitochondrial ribosomal protein L19
BG077818		Mt1	Metallothionein 1
BG063925		Mt2	Metallothionein 2
BG076620		Myo1e	Myosin IE
BI076789		Myst4	MYST histone acetyltransferase monocytic leukemia 4
BG067031		Narg1	NMDA receptor-regulated gene 1

BG069191	Nasp	Nuclear autoantigenic sperm protein (histone-binding)
BG073427	Nat12	N-acetyltransferase 12
BG073296	Ncam2	Neural cell adhesion molecule 2
BG068017	Ncoa1	Nuclear receptor coactivator 1
BG073415	Nedd4	Neural precursor cell expressed, developmentally down-regulated gene 4
BG071356	Nf1	Neurofibromatosis 1
BG064395	Nfat5	Nuclear factor of activated T-cells 5
BG085596	Npc2	Niemann Pick type C2
AU014844	Ogdh	Oxoglutarate dehydrogenase (lipoamide)
BG067047	Ogt	O-linked N-acetylglucosamine (GlcNAc) transferase (UDP-N-acetylglucosamine:polypeptide-N-acetylglucosaminyl transferase)
BG072813	Opa1	Optic atrophy 1 homolog (human)
BG069555	Osbpl8	Oxysterol binding protein-like 8
AW546675	Palld	Palladin, cytoskeletal associated protein
BG065744	Pank3	Pantothenate kinase 3
BG065645	Parl	Presenilin associated, rhomboid-like
BG070555	Pawr	PRKC, apoptosis, WT1, regulator
BG069544	Pde3a	Phosphodiesterase 3A, cGMP inhibited
BG087768	Pde5a	Phosphodiesterase 5A, cGMP-specific
BG084383	Pde6d	Phosphodiesterase 6D, cGMP-specific, rod, delta
BG087899	Pdgfa	Platelet derived growth factor, alpha
BG071525	Pdzd2	PDZ domain containing 2
BG063222	Pecam1	Platelet/endothelial cell adhesion molecule 1
BG087523	Pes1	Pescadillo homolog 1, containing BRCT domain (zebrafish)
BG083442	Pex19	Peroxisome biogenesis factor 19
BG064375	Phactr1	Phosphatase and actin regulator 1
BG078897	Phf12	PHD finger protein 12
BG064503	Phf23	PHD finger protein 23
BG087909	Phka2	Phosphorylase kinase alpha 2
BG072458	Pink1	PTEN induced putative kinase 1
BG078885	Plk4	Polo-like kinase 4 (Drosophila)
BG072843	Pnpt1	Polyribonucleotide nucleotidyltransferase 1
AU021253	Ppm1a	Protein phosphatase 1A, magnesium dependent, alpha isoform
BG065773	Ppp2r5c	Protein phosphatase 2, regulatory subunit B (B56), gamma isoform
BG065790	Ppp2r5e	Protein phosphatase 2, regulatory subunit B (B56), epsilon isoform
BG081448	Ppp3cb	Protein phosphatase 3, catalytic subunit, beta isoform

BG065524		Prei3	Preimplantation protein 3
BG079293		Psma3	Proteasome (prosome, macropain) subunit, alpha type 3
BG066125		Psma4	Proteasome (prosome, macropain) subunit, alpha type 4
BQ550154		Psma7	Proteasome (prosome, macropain) subunit, alpha type 7
BG069898		Psmd11	Proteasome (prosome, macropain) 26S subunit, non-ATPase, 11
BG072746		Psmd7	Proteasome (prosome, macropain) 26S subunit, non-ATPase, 7
BG086278		Ptn	Pleiotrophin
BG074880		Ptpn6	Protein tyrosine phosphatase, non-receptor type 6
C76941		Ranbp5	RAN binding protein 5
BG066306		Ranbp9	RAN binding protein 9
BG068432		Rap1a	RAS-related protein-1a
BG082817		Rb1	Retinoblastoma 1
BG078834		Renbp	Renin binding protein
BG072059		Rex2	Reduced expression 2
BG072629		Rhbdd3	Rhomboid domain containing 3
BG087931		Rhoa	Ras homolog gene family, member A
BG075372		Rpa2	Replication protein A2
BG085647		Rpl23a	Ribosomal protein L23a
BG073438		Rpl38	Ribosomal protein L38
BG072819		Rpsa	Ribosomal protein SA
BG072662		Runx1	Runt related transcription factor 1
BG072412		Sdk1	Sidekick homolog 1 (chicken)
BG085555		Sec23ip	Sec23 interacting protein
BG078882		Serpinb6c	Serine (or cysteine) peptidase inhibitor, clade B, member 6c
BG086781		Setdb1	SET domain, bifurcated 1
AW557944		Sfrs14	Splicing factor, arginine-serine-rich 14
BG073339		Sfrs5	Splicing factor, arginine-serine-rich 5 (SRp40, HRS)
AW539785		Sh3bp5l	SH3 binding domain protein 5 like
BG085411		Slbp	Stem-loop binding protein
BG085656		Smc1a	Structural maintenance of chromosomes 1A
BG077930		Snx10	Sorting nexin 10
BG088731		Spag9	Sperm associated antigen 9
BQ550417		Srgap2	SLIT-ROBO Rho GTPase activating protein 2
BG071533		Srk2	Serine/arginine-rich protein specific kinase 2
BG069945		Stag2	Stromal antigen 2
BG070349		Taf1	TAF1 RNA polymerase II, TATA box binding protein (TBP)-associated factor

BG076896		Tardbp	TAR DNA binding protein
BG087876		Tbc1d1	TBC1 domain family, member 1
BG072734		Tcf25	Transcription factor 25 (basic helix-loop-helix)
BG064989		Tcta	T-cell leukemia translocation altered gene
AW557486		Tdrd9	Tudor domain containing 9
BG088528		Tdrkh	Tudor and KH domain containing protein
BG087942		Tfdp1	Transcription factor Dp 1
BG085629		Tfip11	Tuftelin interacting protein 11
BG086192		Tgfb1i1	Transforming growth factor beta 1 induced transcript 1
AW553913		Tinagl	Tubulointerstitial nephritis antigen-like
BG075363		Tmem64	Transmembrane protein 64
AW550270		Tnc	Tenascin C
BG069517		Tnfsf12	Tumor necrosis factor (ligand) superfamily, member 12
BG062981		Tprkb	Tp53rk binding protein
BG075295		Traf3ip1	TNF receptor-associated factor 3 interacting protein 1
BG082843		Trap	Transformation/transcription domain-associated protein
BG066560		Tubgcp5	Tubulin, gamma complex associated protein 5
BG079504		Tug1	Taurine upregulated gene 1
BQ552073		Ufd1l	Ubiquitin fusion degradation 1 like
BG074836		Usp4	Ubiquitin specific peptidase 4 (proto-oncogene)
BG076105		Utx	Ubiquitously transcribed tetratricopeptide repeat gene, X chromosome
BG065616		Vcp	Valosin containing protein
BG087363		Vps45	Vacuolar protein sorting 45 (yeast)
AU041113		Vps54	Vacuolar protein sorting 54 (yeast)
BG076009		Wdr24	WD repeat domain 24
BG073328		Xrcc4	X-ray repair complementing defective repair in Chinese hamster cells 4
BG076045		Zbed3	Zinc finger, BED domain containing 3
BG069367		Zfand2b	Zinc finger, AN1 type domain 2B
BG066683		Zfp292	Zinc finger protein 292
BG086136		Zfp51	Zinc finger protein 51
BG065890		Zfp710	Zinc finger protein 710
AU042966		EST	
AW540949		EST	
AW544782		EST	
AW546571		EST	Transcribed locus

AW546889		EST	
AW550178		EST	
AW552212		EST	
AW554424		EST	
AW556484		EST	
AW557711		EST	
AW558132		EST	
BG063053		EST	
BG063089		EST	
BG063092		EST	Transcribed locus
BG063195		EST	
BG063398		EST	2 cells egg cDNA, RIKEN full-length enriched library, clone:B020036G17
BG063665		EST	product:unclassifiable, full insert sequence
BG063767		EST	
BG063945		EST	
BG064209		EST	
BG064514		EST	
BG064695		EST	Transcribed locus
BG065593		EST	
BG065610		EST	
BG065611		EST	
BG065622		EST	
BG065635		EST	
BG065650		EST	
BG065651		EST	
BG065657		EST	
BG065659		EST	
BG065666		EST	
BG065670		EST	
BG065839		EST	
BG065991		EST	
BG065992		EST	
BG066008		EST	
BG066066		EST	
BG066090		EST	
BG066122		EST	

BG066341		EST	
BG066345		EST	
BG066362		EST	Transcribed locus
BG066371		EST	
BG066412		EST	
BG066561		EST	
BG066579		EST	
BG066598		EST	
BG066647		EST	
BG066670		EST	
BG066711		EST	
BG066778		EST	
BG066821		EST	
BG066997		EST	
BG068069		EST	
BG068097		EST	
BG068123		EST	
BG068347		EST	Transcribed locus, strongly similar to XP_895654.1 similar to protein kinase LYK5 [Mus musculus]
BG068410		EST	
BG068421		EST	
BG068426		EST	
BG068436		EST	
BG068456		EST	
BG068461		EST	
BG068469		EST	
BG068472		EST	
BG068684		EST	
BG068784		EST	
BG068840		EST	
BG069091		EST	
BG069113		EST	
BG069363		EST	
BG069501		EST	
BG069545		EST	
BG070115		EST	
BG070250		EST	

BG070256		EST	
BG070301		EST	
BG070436		EST	
BG070548		EST	Transcribed locus
BG070556		EST	
BG070725		EST	Transcribed locus
BG071290		EST	
BG071357		EST	
BG071376		EST	
BG071395		EST	
BG071436		EST	Transcribed locus, weakly similar to NP_982429.1 [Eremothecium gossypii]
BG071862		EST	
BG072130		EST	
BG072400		EST	
BG072687		EST	
BG072745		EST	
BG073298		EST	
BG073317		EST	
BG074049		EST	
BG074646		EST	
BG074775		EST	
BG074788		EST	
BG074909		EST	Transcribed locus, weakly similar to XP_573813.1 similar to envelope protein [Rattus norvegicus]
BG075263		EST	
BG075264		EST	
BG075276		EST	
BG075339		EST	
BG075416		EST	
BG075634		EST	
BG075971		EST	
BG075999		EST	
BG076724		EST	
BG076725		EST	
BG079181		EST	
BG079400		EST	

BG081451		EST
BG083989		EST
BG084956		EST
BG086296		EST
BI076837		EST
BQ550180		EST
BQ550186		EST
BQ550353		EST
BQ550502		EST
BQ551838		EST
BQ552150		EST
C76156		EST
C79706		EST
C79832		EST

CDNA clone IMAGE:1548559

**TableS3. Functional categories of mouse CNS known AAGs**

Notes. Cor: cortex; Hip: hippocampus; Cer: cerebellum; Str: striatum; SC: spinal cord.

Red color represents upregulation; blue color represents downregulation.

**CORTEX**

Z-ratio					Name
16M/6M	24M/6M	24M/16M	Acc	Symbol	
-2.96	1.19	3.71	BG088404	Polr2d	<b>DNA replication &amp; repair</b>
-1.12	1.29	2.20	BG076133	Nme6	Polymerase (RNA) II (DNA directed) polypeptide D Expressed in non-metastatic cells 6, protein
-0.27	1.63	1.78	BG076129	Pcm1	Pericentriolar material 1
0.72	1.56	0.84	BG073493	Dnmt3a	DNA methyltransferase 3A
0.40	-1.45	-1.72	BG084543	Atrx	Alpha thalassemia/mental retardation syndrome X-linked homolog (human)
-0.38	-1.77	-1.34	BG066559	Tnks1bp1	Tankyrase 1 binding protein 1
0.10	-1.64	-1.64	BG072056	Cenpa	Centromere autoantigen A
-0.37	-1.64	-1.22	BG079733	Rrm2	Ribonucleotide reductase M2
0.31	-1.62	-1.80	BG086091	Terf1	Telomeric repeat binding factor 1
1.00	-1.24	-2.04	BG072681	Tebp	Telomerase binding protein, p23
0.21	-1.63	-1.73	BG084595	Wrn	Werner syndrome homolog (human)
<b>Transcription regulators</b>					
-0.38	1.72	1.96	BG088931	Sall2	Sal-like 2 (Drosophila)
0.52	1.61	1.06	BG086240	Cnbp1	Cellular nucleic acid binding protein 1
-0.84	1.61	2.26	BG076353	Atbf1	AT motif binding factor 1
-1.81	0.64	2.18	BG088871	Gata4	GATA binding protein 4
-0.50	1.33	1.69	BG076162	Zfp612	Zinc finger protein 612
-1.21	0.65	1.67	BG076335	Zfp644	Zinc finger protein 644
-0.09	-1.95	-1.76	BG073061	Asxl2	Additional sex combs like 2 (Drosophila)
-0.33	-1.66	-1.28	BQ550368	Tcfap2c	Transcription factor AP-2, gamma
-0.10	-1.53	-1.36	BG069830	Zdhhc7	Zinc finger, DHHC domain containing 7
-0.30	-1.64	-1.28	BG084492	Zfpn1a4	Zinc finger protein, subfamily 1A, 4 (Eos)
0.89	-0.87	-1.61	BG070643	Hdac2	Histone deacetylase 2
-0.31	-1.68	-1.32	BG065852	Rcor1	REST corepressor 1
1.97	-0.27	-1.97	BG085534	Tcf4	Transcription factor 4
-0.07	-1.65	-1.49	BG066582	B430306D02Rik	RIKEN cDNA B430306D02 gene
-0.18	-2.04	-1.77	BQ550611	Smad2	MAD homolog 2 (Drosophila)

-0.20	-1.83	-1.55	BG083661	Ilf3	Interleukin enhancer binding factor 3
-0.05	-1.68	-1.55	BG070913	Ankrd25	Ankyrin repeat domain 25
0.52	-1.83	-2.18	BG066724	Asb8	Ankyrin repeat and SOCS box-containing protein 8
0.76	-1.07	-1.68	BG072053	Nr2e1	Nuclear receptor subfamily 2, group E, member 1
-0.52	-1.62	-1.07	BG086487	E2f6	E2F transcription factor 6
-0.89	-2.01	-1.12	BG066250	Tbx20	T-box 20
0.69	-1.85	-2.36	BG066700	Nol7	Nucleolar protein 7
0.34	-1.38	-1.60	BG068694	Nup155	Nucleoporin 155
0.33	-1.38	-1.59	AA409025	D330024H06Rik	RIKEN cDNA D330024H06 gene
-0.18	-2.38	-2.10	BG066541	Pbx3	RIKEN cDNA B930068K11 gene
<b>RNA editing/processing</b>					
-1.84	1.56	3.08	BG076185	Ptbp2	Polypyrimidine tract binding protein 2
-3.98	1.04	4.47	BQ552701	Fusip1	FUS interacting protein (serine-arginine rich) 1
-1.29	1.00	2.08	BG076501	Sfrs6	Splicing factor, arginine-serine-rich 6
0.51	2.06	1.50	BG064006	Nono	Non-POU-domain-containing, octamer binding protein
-0.75	1.02	1.62	AW559082	Rbm9	RNA binding motif protein 9
-0.69	-1.75	-1.05	BG081012	Snrbp2	U2 small nuclear ribonucleoprotein B
1.40	-0.61	-1.80	BG076765	Hnrcpc	Heterogeneous nuclear ribonucleoprotein C
1.38	-1.40	-2.53	BG070676	2600011C06Rik	RIKEN cDNA 2600011C06 gene
<b>Protein synthesis/ degradation</b>					
-1.77	1.07	2.56	BQ550136	Eif4a1	Eukaryotic translation initiation factor 4A1
-0.65	1.18	1.68	BG075206	Rpl6	Ribosomal protein L6
-2.14	-0.24	1.64	BQ550060	Rpn1	Ribophorin I
-1.37	2.15	3.22	BG067405	Trip12	Thyroid hormone receptor interactor 12
0.39	2.28	1.81	BG074120	Fbxo42	F-box protein 42
-0.89	1.52	2.22	BG076166	Ube2e1	Ubiquitin-conjugating enzyme E2E 1, UBC4/5 homolog (yeast)
-1.09	2.07	2.91	BG075872	Usp25	Ubiquitin specific protease 25
0.39	1.62	1.18	BG085556	Wwp1	WW domain containing E3 ubiquitin protein ligase 1
UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyltransferase 1					
-0.97	1.19	1.98	BG076167	Galnt1	Queuine tRNA-ribosyltransferase 1
0.13	-1.52	-1.55	BG070889	Qtrt1	F-box only protein 22
1.15	-0.67	-1.64	BG084974	Fbxo22	Eukaryotic translation elongation factor 1 alpha 1
0.34	-1.41	-1.63	BG073773	Eef1a1	Ligatin
0.72	-1.09	-1.66	BG078898	Lgtn	Ribosomal protein L3
0.15	-1.63	-1.67	BG086177	Rpl3	RIKEN cDNA A230062I15 gene
0.33	-1.81	-2.01	BG083198	Paip2	X-prolyl aminopeptidase (aminopeptidase P) 1, soluble
-0.31	-2.18	-1.79	BG079790	Xpnpep1	

0.85	-1.49	-2.15	AU040781	Rbx1	Ring-box 1
-0.34	-1.76	-1.37	BG066227	Cul1	Cullin 1
1.34	-0.38	-1.53	BG085494	Cul3	Cullin 3
0.99	-0.91	-1.72	BG065633	Psmb2	Proteasome (prosome, macropain) subunit, beta type 2
0.29	-1.39	-1.57	BQ550339	Ube3a	Ubiquitin protein ligase E3A
0.45	-1.40	-1.71	BG065689	Ube2l3	Ubiquitin-conjugating enzyme E2L 3
0.62	-1.70	-2.14	BQ551030	Al840826	Expressed sequence Al840826
-0.14	-2.15	-1.90	BQ550937	Cyld	Cylindromatosis (turban tumor syndrome)
-0.52	-1.52	-0.98	BG078870	Mkrn1	Makorin, ring finger protein, 1
0.34	-1.29	-1.52	BG079508	Tbl1x	Transducin (beta)-like 1 X-linked
<b>Signal transduction</b>					
-0.31	1.52	1.71	BG088924	Phkb	Phosphorylase kinase beta
-2.54	0.52	2.71	BG087779	Sumo2	YEATS domain containing 2
-0.15	1.78	1.81	BG086567	Wbp5	WW domain binding protein 5
0.37	1.50	1.09	BG073826	Lrrtm1	Leucine rich repeat transmembrane neuronal 1
-0.96	1.44	2.20	BG073860	Armcx1	Armadillo repeat containing, X-linked 1
0.45	2.11	1.60	BG076894	Mybbp1a	MYB binding protein (P160) 1a
-0.45	2.21	2.48	BG088909	Tle6	Transducin-like enhancer of split 6, homolog of Drosophila E(spl)
-1.78	0.04	1.59	BG076410	Wnt4	Wingless-related MMTV integration site 4
-1.67	0.86	2.27	BG073875	Esr1	Estrogen receptor 1 (alpha)
-0.65	1.17	1.68	BG076153	Dusp7	Dual specificity phosphatase 7
-1.37	0.75	1.92	BG076155	Rabl4	RAB, member of RAS oncogene family-like 4
-0.76	0.88	1.50	BG085728	Snrp116	U5 small nuclear ribonucleoprotein
-0.85	1.72	2.38	BG088950	Rac1	RAS-related C3 botulinum substrate 1
-1.87	0.36	1.98	BG076387	Rab3d	RAB3D, member RAS oncogene family
-1.79	1.64	3.11	BG075229	Atrnl1	Attractin like 1
-0.82	1.31	1.96	BG086577	Ptger2	Prostaglandin E receptor 2 (subtype EP2)
-2.37	1.71	3.69	BG075873	2810442O16Rik	RIKEN cDNA 2810442O16 gene
0.48	-1.36	-1.71	BG074650	Pip3ap	Phosphatidylinositol-3-phosphatase associated protein
-0.28	-1.76	-1.41	BG078875	Lzf	Leucine zipper domain protein
0.87	-0.86	-1.57	BG074685	Lrpprc	Leucine-rich PPR-motif containing
0.85	-1.09	-1.77	BG072073	Wdr10	WD repeat domain 10
1.99	-0.56	-2.27	BG072042	Rapgef2	RIKEN cDNA B930012P20 gene
-0.51	-1.63	-1.09	BG073784	Tmem19	Transmembrane protein 19
0.20	-1.82	-1.90	BG079566	Btrc	Beta-transducin repeat containing protein
0.11	-1.63	-1.63	BG079870	Caml	Calcium modulating ligand
-0.03	-1.56	-1.45	BQ551117	Wee1	Wee 1 homolog (S. pombe)

-0.01	-1.60	-1.50	BG066540	Nlk	Nemo like kinase
-0.68	-1.66	-0.97	BG065577	Ptprg	Protein tyrosine phosphatase, receptor type, G
0.42	-1.33	-1.63	BQ550366	Prkar2a	Protein kinase, cAMP dependent regulatory, type II alpha
0.81	-0.88	-1.54	BG073058	Tle1	Transducin-like enhancer of split 1, homolog of Drosophila E(spl)
-0.58	-1.84	-1.24	BQ551136	Slc9a3r1	Solute carrier family 9 (sodium/hydrogen exchanger), isoform 3 regulator 1
0.54	-1.23	-1.64	BG071336	Prkab1	Protein kinase, AMP-activated, beta 1 non-catalytic subunit
-0.76	-1.90	-1.13	BG069385	Stat2	Signal transducer and activator of transcription 2
0.14	-1.74	-1.77	BG084491	Tjp2	Tight junction protein 2
-0.47	-2.06	-1.53	BG069506	Arhgef7	Rho guanine nucleotide exchange factor (GEF7)
0.08	-1.67	-1.64	BG072044	Garnl1	GTPase activating RANGAP domain-like 1
0.92	-1.06	-1.80	AU041357	Rhod	Ras homolog gene family, member D
-0.33	-1.90	-1.51	BG080027	Kras2	Kirsten rat sarcoma oncogene 2, expressed
0.65	-1.55	-2.03	BG070713	Rsb30	RIKEN cDNA 2010107C10 gene
0.61	-1.19	-1.66	BQ551650	Rab10	RAB10, member RAS oncogene family
1.02	-1.16	-1.98	BG070800	Mlstd2	Male sterility domain containing 2
-0.31	-1.60	-1.24	C80870	C130002K18Rik	RIKEN cDNA C130002K18 gene
1.35	-0.39	-1.56	BG071346	Trim34	Tripartite motif protein 34
-0.12	-1.65	-1.45	BG068302	Acvrinp1	Activin receptor interacting protein 1
0.07	-2.19	-2.13	BG078928	Stmn3	Stathmin-like 3
-0.25	-1.65	-1.34	BQ552244	Snap23	Synaptosomal-associated protein 23
-0.56	-1.67	-1.09	AU041764	Ssr1	Signal sequence receptor, alpha
1.49	-0.49	-1.77	BG083482	Chek2	CHK2 checkpoint homolog (S. pombe)
1.44	-0.34	-1.58	BG072113	Ptk2	PTK2 protein tyrosine kinase 2
-0.21	-1.52	-1.25	BQ550574	Cask	Calcium/calmodulin-dependent serine protein kinase
<b>Growth factors &amp; signalling</b>					
-0.89	1.04	1.76	BG088567	Igfbp3	Insulin-like growth factor binding protein 3
-0.57	1.69	2.10	BG072273	Eps15	Epidermal growth factor receptor pathway substrate 15
<b>Channels &amp; transporters</b>					
-0.66	1.81	2.28	AW559127	Kcnq1	Tumor-suppressing subchromosomal transferable fragment 8
0.61	2.04	1.39	BG063515	Fth1	Ferritin heavy chain 1
0.70	-0.95	-1.51	BG077733	Atp1b1	ATPase, Na+/K+ transporting, beta 1 polypeptide
0.41	-1.24	-1.53	BG070244	Atad1	ATPase family, AAA domain containing 1
0.64	-1.44	-1.91	BG070322	Cacng5	Calcium channel, voltage-dependent, gamma subunit 5
0.66	-1.13	-1.65	BQ550634	Scn3a	Sodium channel, voltage-gated, type III, alpha polypeptide
-0.68	-1.90	-1.20	BG066550	Kctd5	Potassium channel tetramerisation domain containing 5
0.62	-1.31	-1.78	BG069589	Kcnk6	Potassium inwardly-rectifying channel, subfamily K, member 6

0.73	-1.21	-1.78	BQ551887	Slc9a6	Solute carrier family 9 (sodium/hydrogen exchanger), isoform 6
-0.71	-1.53	-0.83	BG069386	Slco4c1	Solute carrier organic anion transporter family, member 4C1
-0.90	-1.91	-1.01	BG066925	Pkd1l3	Polycystic kidney disease 1 like 3
					<b>Cytoskeleton</b>
-1.05	0.76	1.64	BQ550178	Ipp	IAP promoted placental gene
0.98	-0.82	-1.63	C78835	Actb	Actin, beta, cytoplasmic
-0.33	-1.70	-1.32	BG073057	Gc	Group specific component
-0.72	-1.74	-1.02	BG079442	Cnn2	Calponin 2
0.21	-1.58	-1.67	BG066589	Dmd	Dystrophin, muscular dystrophy
0.53	-1.50	-1.88	BG073379	Nckap1	NCK-associated protein 1
0.27	-1.56	-1.71	BG072383	Mastl	Microtubule associated serine/threonine kinase-like
0.65	-1.60	-2.08	BG082602	Mark3	MAP/microtubule affinity-regulating kinase 3
-0.65	-1.68	-1.02	BG081076	Tcl1	T-cell lymphoma breakpoint 1
					<b>Trafficking</b>
-1.53	0.43	1.75	BQ550079	Cltb	Clathrin, light polypeptide (Lcb)
-2.11	1.34	3.11	BG075825	Kifc2	Kinesin family member C2
-2.20	1.33	3.18	BG088723	Dbnl	Drebrin-like
-0.62	1.89	2.33	BG088908	Mid1ip1	Mid1 interacting protein 1 (gastrulation specific G12-like (zebrafish))
-0.11	-1.59	-1.40	BG084924	Dnclic1	RIKEN cDNA 1110053F02 gene
1.29	-0.68	-1.78	AU041102	Cobl	Cordon-bleu
1.80	-0.03	-1.60	BG073340	4921524J06Rik	RIKEN cDNA 4921524J06 gene
					<b>Stress response</b>
-1.06	1.45	2.30	BG088391	Cryl1	Crystallin, lamda 1
-0.35	1.40	1.63	BG088662	Pex12	Peroxisomal biogenesis factor 12
-1.21	1.35	2.33	BG088691	Pex16	Peroxisome biogenesis factor 16
-0.18	-1.56	-1.31	BG079699	Cct4	Chaperonin subunit 4 (delta)
0.32	-1.45	-1.65	BG080972	Crygb	Crystallin, gamma C
-0.25	-1.65	-1.34	BQ551761	Upf3b	UPF3 regulator of nonsense transcripts homolog B (yeast)
					<b>Immuno responsive genes</b>
-0.62	1.83	2.27	BG076373	Ccl27	Chemokine (C-C motif) ligand 27
0.42	1.99	1.51	BG072788	Atrn	Attractin
-0.93	1.16	1.91	BG088888	Elmo2	Engulfment and cell motility 2, ced-12 homolog (C. elegans)
-1.11	1.27	2.17	BQ550096	Prdx2	Peroxiredoxin 2
-2.57	-0.57	1.71	BG075069	Ptdsr	Phosphatidylserine receptor
-1.55	0.60	1.92	BG088850	Lnk	Linker of T-cell receptor pathways
-1.33	0.40	1.54	BG064530	Traf4	Tnf receptor associated factor 4
-0.11	1.63	1.64	BG086230	Traf7	Tnf receptor-associated factor 7

0.20	-1.46	-1.55	BG074640	Ii10ra	Interleukin 10 receptor, alpha
1.79	-1.47	-2.96	BG084192	Ik	IK cytokine
0.50	-1.23	-1.60	BG070734	Dock1	Dedicator of cyto-kinesis 1
0.37	-1.34	-1.59	BG071362	Pycard	PYD and CARD domain containing
0.21	1.79	1.51	AW558029	Uqcr	Mitochondria
-0.98	1.36	2.15	AW555640	Immt	Ubiquinol-cytochrome c reductase (6.4kD) subunit
-0.73	0.93	1.52	BG076156	Mtx1	Inner membrane protein, mitochondrial
-0.91	0.75	1.50	BG085643	Hba-x	Metaxin 1
0.43	1.84	1.36	BG077751	Phb	Hemoglobin X, alpha-like embryonic chain in Hba complex
-0.43	-1.65	-1.18	BG077638	Mrpl19	Prohibitin
-0.50	-1.52	-1.01	BG078810	Cyccs	Mitochondrial ribosomal protein L19
-0.97	-2.62	-1.63	BG071689	Tbc1d15	Cytochrome c, somatic
-0.57	-1.82	-1.22	BG069853	Uqcrc1	TBC1 domain family, member 15
-0.60	-2.16	-1.52	BG066539	Cyp2s1	Ubiquinol-cytochrome c reductase core protein 1
0.29	-1.42	-1.60	BG083644	Por	Cytochrome P450, family 2, subfamily s, polypeptide 1
0.25	-1.58	-1.71	BG075303	Cryzl1	P450 (cytochrome) oxidoreductase
1.12	-0.75	-1.69	BG084240	Ndufs7	Crystallin, zeta (quinone reductase)-like 1
-0.13	-1.69	-1.49	BG079485	Ndufa10	NADH dehydrogenase (ubiquinone) Fe-S protein 7
-0.31	-1.58	-1.22	BG074411	Scarb2	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex 10
-0.41	-1.79	-1.33	BG086172	Abcd4	Scavenger receptor class B, member 2
					ATP-binding cassette, sub-family D (ALD), member 4
-1.10	0.80	1.72	AW551875	Hirip5	Cell cycle
-0.64	2.10	2.54	BG088667	Sesn1	Histone cell cycle regulation defective interacting protein 5
2.01	-0.36	-2.10	BG073423	Cdk9	Sestrin 1
0.72	-0.96	-1.53	BG066572	Cables1	Cyclin-dependent kinase 9 (CDC2-related kinase)
0.60	-1.71	-2.14	BG069528	5730405I09Rik	DNA segment, Chr 18, ERATO Doi 289, expressed
0.37	-1.54	-1.77	AU046176	2810418N01Rik	RIKEN cDNA 5730405I09 gene
0.82	-1.08	-1.74	BG086082	2810406C15Rik	RIKEN cDNA 2810418N01 gene
					RIKEN cDNA 2810406C15 gene
-1.42	0.82	2.02	BG087642	Glo1	Glucose metabolism
-1.78	0.03	1.59	BG075232	Aox3	Glyoxalase 1
-0.71	-1.78	-1.06	BG066158	Car12	Aldehyde oxidase 3
-0.42	-1.70	-1.23	BG071667	Pgm2l1	Carbonic anhydrase 12
1.84	-0.43	-2.02	BG071483	Prune	Phosphoglucomutase 2-like 1
0.69	-1.07	-1.61	BG084276	Mdh2	Prune homolog (Drosophila)
					Malate dehydrogenase 2, NAD (mitochondrial)
					Lipid metabolism

0.79	-1.06	-1.70	BG070255	Pde7a	Phosphodiesterase 7A
0.32	-1.40	-1.60	BG071685	Ptdss1	Phosphatidylserine synthase 1
1.01	-0.79	-1.63	BG066483	Lrp2	Low density lipoprotein receptor-related protein 2
-0.34	-2.37	-1.95	BG071626		Similar to glyceraldehyde-3-phosphate dehydrogenase
					<b>Amino acid modification</b>
-1.69	2.24	3.59	BG075862	Hprt1	Hypoxanthine guanine phosphoribosyl transferase 1
-1.45	0.61	1.85	BG087174	Gmppa	GDP-mannose pyrophosphorylase A
-1.79	0.42	1.96	BG087780	Gstm6	Glutathione S-transferase, mu 6
-0.63	1.29	1.78	BG076142	Tdh	L-threonine dehydrogenase
-3.16	-0.81	2.00	BQ550139	Mat2a	Methionine adenosyltransferase II, alpha
0.23	1.53	1.24	BG067932	Glul	RIKEN cDNA 5830403L16 gene
0.44	-1.28	-1.60	C76424	Lhfpl2	Lipoma HMGIC fusion partner-like 2
-0.23	-2.21	-1.89	BG070986	Oaz2	Ornithine decarboxylase antizyme 2

## HIPPOCAMPUS

Z-ratio					Name
16M/6M	24M/6M	24M/16M	Acc	Symbol	DNA replication & repair
-1.40	-0.19	1.54	BG072344	Orc1l	origin recognition complex, subunit 1-like (S.cereviciae)
-1.69	-0.33	1.77	BG075119	Papolg	poly(A) polymerase gamma
-1.71	-0.63	1.54	BG077083	Rad1	RAD1 homolog (S. pombe)
-1.25	0.81	2.22	BG082619	Pcnt2	pericentrin 2
1.28	-0.81	-2.27	BG078138	Rrm2	ribonucleotide reductase M2
					alpha thalassemia/mental retardation syndrome X-linked homolog (human)
Transcription regulators					Transcription regulators
0.82	2.51	1.18	BG063946	Rest	RE1-silencing transcription factor
-1.45	-0.01	1.75	AU018221	Wwtr1	WW domain containing transcription regulator 1
-2.26	-1.08	1.82	BG070672	Zfp9	zinc finger protein 9
-1.24	-0.01	1.51	BG085297	Jarid1b	jumonji, AT rich interactive domain 1B (Rbp2 like)
1.42	-0.51	-2.18	BG064405	Elys	transcription factor ELYS
1.55	0.03	-1.86	BG065185	3930401K13Rik	cytokine-like nuclear factor n-pac
0.84	-0.81	-1.74	BG067709	Mll3	myeloid/lymphoid or mixed-lineage leukemia 3
1.41	-0.83	-2.45	BG069830	Zdhhc7	zinc finger, DHHC domain containing 7
0.38	-1.46	-1.73	BG072572	Rsbn1	rosbin, round spermatid basic protein 1
1.56	0.12	-1.80	BG073039	Rxrb	retinoid X receptor beta

1.56	-0.46	-2.30	BG063728	Morf4l2	mortality factor 4 like 2
1.58	0.23	-1.73	BG073487	Znf335	zinc finger protein 335
0.91	-0.58	-1.61	BG077765	Sox8	SRY-box containing gene 8
1.18	-0.72	-2.07	BG078528	Pou5f1	POU domain, class 5, transcription factor 1
0.45	-1.97	-2.26	BG085989	Zfp313	zinc finger protein 313
0.76	-0.90	-1.71	BG086134	Zc3hc1	zinc finger, C3HC type 1
0.23	-1.43	-1.52	BG086487	E2f6	E2F transcription factor 6
-0.96	-1.52	-0.16	BG075210	Ss18l1	Synovial sarcoma translocation gene on chromosome 18-like 1
<b>RNA editing/processing</b>					
0.48	1.64	0.83	BG075383	Sfrs2ip	Splicing factor, arginine/serine-rich 2, interacting protein
1.09	-0.40	-1.67	BG064438	Rod1	ROD1 regulator of differentiation 1 ( <i>S. pombe</i> )
1.17	-1.34	-2.59	BG068906	Cpeb1	cytoplasmic polyadenylation element binding protein 1
1.17	-0.16	-1.57	BG074423	Cstf1	cleavage stimulation factor, 3' pre-RNA, subunit 1
1.43	-0.51	-2.19	BG076934	Rnu64	RNA, U64 small nucleolar
1.42	-0.52	-2.19	BG078516	Rg9mtd1	RNA (guanine-9-) methyltransferase domain containing 1
1.55	0.09	-1.82	BG078617	Sf3b2	splicing factor 3b, subunit 2
-0.83	-1.60	-0.38	BG085762	Prpf31	PRP31 pre-mRNA processing factor 31 homolog (yeast)
-0.78	-1.53	-0.38	BG085724	Pabpn1	Poly(A) binding protein, nuclear 1
-1.01	-1.73	-0.28	BG072729	3000004N20Rik	RIKEN cDNA 3000004N20 gene
<b>Protein synthesis/ degradation</b>					
-2.07	-0.62	1.99	BQ551776	Fbxo30	F-box protein 30
-1.48	0.11	1.89	BG083613	Usp1	ubiquitin specific protease 1
-1.28	0.06	1.61	BG079065	Adam15	a disintegrin and metalloproteinase domain 15 (metarginidin)
0.63	1.95	0.92	BG076525	Rnf2	Ring finger protein 2
-1.29	0.40	1.93	BG070824	Pzp	pregnancy zone protein
-1.19	0.21	1.63	BG071220	Rnf19	ring finger protein (C3HC4 type) 19
1.33	-0.14	-1.75	BG063829	D3Ertd194e	DNA segment, Chr 3, ERATO Doi 194, expressed
1.40	-0.13	-1.82	BG063847	Rpl8	ribosomal protein L8
1.90	0.30	-2.06	BG063881	Neu1	neuraminidase 1
1.24	-1.31	-2.65	BG064817	Arbp	acidic ribosomal phosphoprotein P0
1.78	-0.03	-2.20	BG064820	Uble1a	ubiquitin-like 1 (sentrin) activating enzyme E1A
1.10	-0.73	-1.98	BG065053	Psmc3	proteasome (prosome, macropain) 26S subunit, ATPase 3
1.28	-0.89	-2.33	BG065197	Rpl5	ribosomal protein L5
1.24	-1.65	-2.95	BG068918	Rps27a	ribosomal protein S27a
1.15	-1.08	-2.34	BG069806	Ubc	ubiquitin C
-0.77	-1.70	-0.54	BG086013	Rnf10	Ring finger protein 10
1.07	-0.48	-1.73	BG073524	Spint2	serine protease inhibitor, Kunitz type 2

0.21	-1.50	-1.56	BG076882	Hars	histidyl-tRNA synthetase
0.72	-0.85	-1.62	BG076993	Rrbp1	ribosome binding protein 1
1.01	-0.87	-1.99	BG077726	Rps15	ribosomal protein S15
0.66	-0.87	-1.55	BG078442	Rpl15	ribosomal protein L15
1.45	-0.68	-2.35	BG082755	E130209G04Rik	ubiquitin ligase E3 alpha-II
0.09	-2.01	-1.85	BG086430	Rpl31	ribosomal protein L31
0.87	-0.96	-1.89	BG086722	Uchl1	ubiquitin carboxy-terminal hydrolase L1
0.49	-1.67	-2.05	BQ552732	Uba52	ubiquitin A-52 residue ribosomal protein fusion product 1
<b>Signal transduction</b>					
-2.57	-0.66	2.56	BG065928	Dlg7	discs, large homolog 7 (Drosophila)
0.49	2.29	1.39	BG077310	Pdlim2	PDZ and LIM domain 2
-1.79	-0.39	1.84	BG073943	Pbib	casein kinase 1, gamma 1
-2.28	-0.80	2.08	BG079475	Pik4ca	phosphatidylinositol 4-kinase, catalytic, alpha polypeptide
-1.43	-0.15	1.62	BG079960	Prkcz	protein kinase C, zeta
-1.83	-0.37	1.91	BG079971	Rpgrip1	retinitis pigmentosa GTPase regulator interacting protein 1
-1.67	0.44	2.42	BG081778	Dock4	dedicator of cytokinesis 4
-2.29	-0.32	2.51	BQ551164	Pask	PAS domain containing serine/threonine kinase
0.69	1.90	0.81	BG088924	Phkb	Phosphorylase kinase beta
0.45	1.72	0.95	BG072887	Btbd9	BTB (POZ) domain containing 9
-2.67	-0.49	2.83	BG082484	Rgs12	regulator of G-protein signaling 12
-0.78	0.71	1.56	BG083317	Net1	neuroepithelial cell transforming gene 1
0.97	-1.20	-2.22	BG081944	Tm4sf9	transmembrane 4 superfamily member 9
1.19	-0.50	-1.88	BG085625	Prkci	protein kinase C, iota
0.92	-0.78	-1.79	BG086188	Ptprg	protein tyrosine phosphatase, receptor type, G
0.72	-0.98	-1.73	BG087449	Acp1	acid phosphatase 1, soluble
-0.75	-1.65	-0.52	AU041764	Ssr1	Signal sequence receptor, alpha
0.80	-1.53	-2.30	BG076617	Calm1	calmodulin 1
0.09	-1.98	-1.82	AW537940	Calm2	calmodulin 2
0.74	-0.80	-1.60	BG063138	Spock2	sparc/osteonectin, cwcv and kazal-like domains proteoglycan 2
1.96	0.74	-1.75	BG063734	Phip	pleckstrin homology domain interacting protein
1.83	0.69	-1.64	BG063736	Nlk	nemo like kinase
0.82	-0.83	-1.72	BG064066	Pip5k1c	phosphatidylinositol-4-phosphate 5-kinase, type 1 gamma
1.29	-1.68	-3.03	BG065409	Pla2g6	phospholipase A2, group VI
1.22	-0.31	-1.75	BG073320	Csnk1g1	recombination activating gene 1 gene activation
<b>Growth factors &amp; signalling</b>					
-1.47	-0.12	1.68	BQ551924	IGF-1RP	Insulin-like growth factor I receptor precursor
-1.23	0.36	1.81	BG065093	Agtrap	angiotensin II, type I receptor-associated protein

-2.16	-0.16	2.50	BG083489	Nrg4	neuregulin 4
-1.76	-0.70	1.54	BG087265	Hdgfrp3	hepatoma-derived growth factor, related protein 3
0.22	-1.76	-1.79	AW551017	Gprasp2	G protein-coupled receptor associated sorting protein 2
1.08	-1.48	-2.61	BG066419	Gpr108	G protein-coupled receptor 108
1.14	-1.61	-2.79	BG068894	Preb	prolactin regulatory element binding
0.46	-1.19	-1.60	BG078343	Ghitm	growth hormone inducible transmembrane protein
0.98	-0.45	-1.59	BG086702	Sh2bpsm1	SH2-B PH domain containing signaling mediator 1
<b>Channels &amp; transporters</b>					
-2.43	-0.65	2.40	BG069378	Kcnh3	potassium voltage-gated channel, subfamily H (eag-related), member 3
-1.69	0.01	2.07	BG069589	Kcnk6	potassium inwardly-rectifying channel, subfamily K, member 6
-1.83	-0.45	1.85	BG084160	Slc11a2	solute carrier family 11 (proton-coupled divalent metal ion transporters), member 2
-0.05	1.72	1.55	BG063524	Slc20a2	solute carrier family 20, member 2
-1.63	-0.11	1.89	BG073944	Slc24a3	solute carrier family 24 (sodium/potassium/calcium exchanger), member 3
-1.94	-0.67	1.78	BG079028	Trpm7	transient receptor potential cation channel, subfamily M, member 7
1.15	-0.65	-1.97	BG065445	Clica6	chloride channel calcium activated 6
0.84	-0.70	-1.64	BG073116	Clic1	chloride intracellular channel 1
1.64	-0.51	-2.44	BG077799	Atp6v0c	ATPase, H <sup>+</sup> transporting, V0 subunit C
1.37	-0.87	-2.43	BG078464	Slc13a4	solute carrier family 13 (sodium/sulfate symporters), member 4
1.25	-1.12	-2.50	BG078477	Sec13l1	SEC13-like 1 (S. cerevisiae)
1.24	-0.63	-2.05	BG078592	Nsf	N-ethylmaleimide sensitive fusion protein
<b>Cytoskeleton</b>					
0.38	1.63	0.95	BG063659	Ap1s1	Adaptor protein complex AP-1, sigma 1
-3.10	-1.03	2.89	BG069356	Epb4.1l5	erythrocyte protein band 4.1-like 5
0.55	-1.27	-1.77	BG063426	Krt2-7	keratin complex 2, basic, gene 7
1.34	-0.11	-1.73	BG063755	Homer2	homer homolog 2 (Drosophila)
1.91	-0.93	-3.14	BG064831	4930542G03Rik	tubulin Mbta 3
1.07	-1.15	-2.30	BG064838	Tuba2	tubulin, alpha 2
0.93	-1.58	-2.50	BG065476	Gapd	glyceraldehyde-3-phosphate dehydrogenase
1.27	-0.93	-2.36	BG069796	Klh12	kelch-like 2, Mayven (Drosophila)
1.11	-1.77	-2.89	BG074228	Klh15	kelch-like 5 (Drosophila)
1.07	-0.94	-2.12	BG072752	Actg	actin, gamma, cytoplasmic
1.35	-0.88	-2.41	BG077072	Actb	actin, beta, cytoplasmic
1.05	-0.69	-1.88	BG077716	Tubb6	tubulin, beta 6
1.24	-0.90	-2.29	BG078443	Mylc2b	myosin light chain, regulatory B
<b>Trafficking</b>					

-1.33	0.50	2.06	BG071194	Rab27a	RAB27A, member RAS oncogene family	
-1.69	-0.56	1.58	BQ552530	Dlgh1	discs, large homolog 1 (Drosophila)	
0.21	-1.47	-1.54	BG072984	Cltc	clathrin, heavy polypeptide (Hc)	
0.67	-1.08	-1.75	BG073322	Kif3b	kinesin family member 3B	
0.98	-0.70	-1.81	BG073546	Rasa3	RAS p21 protein activator 3	
0.93	-0.89	-1.91	BG078411	Vps41	vacuolar protein sorting 41 (yeast)	
1.51	-0.43	-2.21	BG078499	Rab17	RAB17, member RAS oncogene family	
0.98	-2.53	-3.38	BQ551722	Kif3a	kinesin family member 3A	
0.79	-0.86	-1.70	BG073409	Stmn1	<b>Other synaptic function related</b>	
0.96	-0.68	-1.75	BG073527	Anp32a	stathmin 1	
acidic (leucine-rich) nuclear phosphoprotein 32 family, member A						
-1.51	-0.24	1.63	BG078930	Fkbp4	<b>Stress response</b>	
1.21	-1.02	-2.35	BG064770	Cct5	FK506 binding protein 4	
0.83	-2.05	-2.79	BG064774	Hspca	chaperonin subunit 5 (epsilon)	
0.66	-1.52	-2.13	BG078338	GRP94	heat shock protein 1, alpha	
1.58	-0.75	-2.58	BG078451	Ppia	GRP94	
-1.14	-2.24	-0.54	BG082456	Dnajc8	peptidylprolyl isomerase A	
0.57	-2.04	-2.47	BG079631	Hspcb	DnAJ (Hsp40) homolog, subfamily C, member 8	
heat shock protein 1, beta						
<b>Immuno responsive genes</b>						
-2.43	-0.66	2.39	BG083661	Ilf3	interleukin enhancer binding factor 3	
-1.96	-0.61	1.86	BG068877	CD106	vascular cell adhesion molecule 1	
-2.12	-0.27	2.36	BG069368	Rfx1	regulatory factor X, 1 (influences HLA class II expression)	
1.41	-1.19	-2.74	BG069762	Il7	interleukin 7	
-0.85	-1.63	-0.38	BG072673	Nfatc4	Nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 4	
0.77	-1.47	-2.22	BG078439	Trap1	TNF receptor-associated protein 1	
1.09	-1.18	-2.35	AW544628	Itgb1	integrin beta 1 (fibronectin receptor beta)	
1.15	-0.37	-1.73	BG078449	Lnk	linker of T-cell receptor pathways	
<b>Mitochondria</b>						
-1.84	-0.68	1.65	BG083466	Etfdh	electron transferring flavoprotein, dehydrogenase	
-1.66	-0.18	1.87	BG084153	Suox	sulfite oxidase	
0.83	-0.58	-1.51	BG063223	Suclg2	succinate-Coenzyme A ligase, GDP-forming, beta subunit	
1.11	-0.54	-1.82	BG063815	Acate2	acyl-Coenzyme A thioesterase 2, mitochondrial	
1.01	-1.49	-2.53	BG073668	Tfb1m	transcription factor B1, mitochondrial	
1.36	-0.06	-1.72	BG076988	Cox8a	cytochrome c oxidase, subunit VIIa	
ATP synthase, H <sup>+</sup> transporting, mitochondrial F1 complex, alpha subunit, isoform 1						
1.10	-1.45	-2.60	BG078689	Atp5a1		

-0.70	-1.52	-0.47	BG074411	Scarb2	Scavenger receptor class B, member 2
-0.87	-1.75	-0.46	BG086348	Ndufb10	NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 10
-2.02	-0.94	1.64	BG071313	Cdkn1c	Cell cycle
1.06	-0.56	-1.78	BG063180	Tbrg4	cyclin-dependent kinase inhibitor 1C (P57)
0.05	-2.14	-1.92	BG063851	Cdc91l1	transforming growth factor beta regulated gene 4
1.56	-0.37	-2.22	BG064819	Pa2g4	CDC91 cell division cycle 91-like 1 ( <i>S. cerevisiae</i> )
1.96	0.43	-2.02	BG065210	Cwf19l2	proliferation-associated 2G4
1.39	-0.39	-2.03	BG065345	Pak2	CWF19-like 2, cell cycle control ( <i>S. pombe</i> )
1.30	-0.17	-1.73	BG073423	Cdk9	p21 (CDKN1A)-activated kinase 2
0.92	-0.82	-1.83	BG078444	Kntc1	cyclin-dependent kinase 9 (CDC2-related kinase)
					kinetochore associated 1
-1.44	0.12	1.87	BG068321	Pgm2	Glucose metabolism
1.01	-1.42	-2.47	BG064797	Ldh1	phosphoglucomutase 2
1.31	-0.85	-2.34	BG064914	Mdh1	lactate dehydrogenase 1, A chain
1.48	-0.63	-2.35	BG065457	Aldo1	malate dehydrogenase 1, NAD (soluble)
0.88	-0.78	-1.75	BG078663	Pkm2	aldolase 1, A isoform
					pyruvate kinase, muscle
-1.69	0.27	2.29	BG066764	Apoa4	Lipid metabolism
-1.39	0.43	2.06	BG069602	Acaa2	apolipoprotein A-IV
-0.89	1.12	2.06	BG081903	Hsd3b1	acetyl-Coenzyme A acyltransferase 2 (mitochondrial 3-oxoacyl-Coenzyme A thiolase)
-1.15	0.86	2.16	BG082524	Elovl6	hydroxysteroid dehydrogenase-1, delta<5>-3-beta
-1.60	-0.39	1.61	BI076814	Deb1	ELOVL family member 6, elongation of long chain fatty acids ( <i>yeast</i> )
0.60	1.57	0.63	BG073827	5730407K14Rik	dihydrolipoamide branched chain transacylase E2
0.76	-0.74	-1.57	BG063417	Smpd3	RIKEN cDNA 5730407K14 gene
					sphingomyelin phosphodiesterase 3, neutral
-1.33	0.10	1.71	BG065725	Prps1	Amino acid modification
-1.57	0.24	2.13	BG066387	Pafah1b2	phosphoribosyl pyrophosphate synthetase 1
-1.60	0.20	2.13	BG066451	Ggps1	Platelet-activating factor acetylhydrolase, isoform 1b, alpha2 subunit (Pafah1b2)
-1.36	-0.09	1.58	BG066539	Cyp2s1	geranylgeranyl diphosphate synthase 1
-2.08	-0.43	2.16	BG071360	Pofut1	cytochrome P450, family 2, subfamily s, polypeptide 1
-1.74	-0.68	1.54	BG073494	Leprel2	protein O-fucosyltransferase 1
-2.74	-1.53	2.02	BG081202	Sms	leprecan-like 2
-1.99	-0.79	1.74	BG082495	Asl	spermine synthase
-1.50	-0.32	1.55	BG084150	Lap3	argininosuccinate lyase
					leucine aminopeptidase 3

-1.29	0.36	1.88	C76424	Lhfpl2	lipoma HMGIC fusion partner-like 2 procollagen-proline, 2-oxoglutarate 4-dioxygenase (proline 4-hydroxylase), alpha 1 polypeptide eta polypeptide
-0.21	-2.11	-1.57	AW548258	P4ha1	branched chain aminotransferase 1, cytosolic
0.46	-1.35	-1.73	BG065012	Ywhah	SKB1 homolog (S. pombe)
1.35	-0.74	-2.29	BG065113	Bcat1	ADP-ribosylation factor-like 6 interacting protein 2
0.61	-1.51	-2.05	BG065166	Skb1	tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, beta polypeptide
-0.92	0.92	1.92	BG068644	Arl6ip2	Williams Beuren syndrome chromosome region 22
1.39	-0.52	-2.15	BG069786	Ywhab	mannoside acetylglucosaminyltransferase 4, isoenzyme B
1.21	-0.34	-1.77	BG073390	Wbscr22	ADP-ribosylation factor-like 6 interacting protein 1
1.39	-0.75	-2.35	BG076643	Mgat4b	alkaline phosphatase 2, liver
1.60	0.15	-1.82	BG077739	Arl6ip1	enolase 1, alpha non-neuron
1.10	-0.43	-1.72	BG077796	Akp2	amine oxidase (flavin containing) domain 2
1.29	-0.39	-1.91	BG078410	Eno1	like-glycosyltransferase
1.28	-0.81	-2.27	BG078465	Aof2	DNA segment, Chr 18, Wayne State University 98, expressed
0.68	-0.96	-1.66	BG078651	Large	
2.09	1.00	-1.68	BG086914	D18Wsu98e	

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16M/6M	Z-ratio 24M/6M	24M/16M	Acc	Symbol	Name
					DNA replication & repair
-0.88	0.46	1.56	BG072056	Cenpa	Centromere autoantigen A
-0.70	-1.57	-1.42	BG080913	Pole3	Polymerase (DNA directed), epsilon 3 (p17 subunit)
-0.47	-1.90	-2.13	BG064736	Rrm1	Ribonucleotide reductase M1
-1.07	-1.98	-1.60	BG078138	Rrm2	Ribonucleotide reductase M2
-0.50	-1.99	-2.21	BG082424	Polr2h	Similar to polymerase (RNA) II (DNA directed) polypeptide H
-0.09	-1.36	-1.78	BG064783	Ddx5	DEAD (Asp-Glu-Ala-Asp) box polypeptide 5
0.16	-1.12	-1.71	BG078092	2700083B06Rik	RIKEN cDNA 2700083B06 gene
-1.36	-1.52	-0.65	BG068026	Hel308	Helicase, mus308-like (Drosophila)
Transcription regulators					
-0.97	0.55	1.78	BG072695	Erh	Enhancer of rudimentary homolog (Drosophila)
-0.84	0.46	1.51	BG075316	Asb1	Ankyrin repeat and SOCS box-containing protein 1
1.38	1.80	1.01	BG077302	Atf7ip	Activating transcription factor 7 interacting protein
1.06	1.76	1.30	BG064287	Ncl	Nucleolin
-0.82	0.47	1.52	BG076040	Zdhhc2	Zinc finger, DHHC domain containing 2

-1.08	0.27	1.51	BG072805	4930522L14Rik	RIKEN cDNA 4930522L14 gene
-1.23	-1.56	-0.84	BG068715	Bhc80	BRAF35/HDAC2 complex
-0.83	-1.83	-1.63	BG064751	E4f1	E4F transcription factor 1
-0.20	-1.24	-1.50	BG076977	Zfp265	Zinc finger protein 265
-1.38	-1.67	-0.83	C77369	Zdhhc6	Zinc finger, DHHC domain containing 6
-1.94	-2.62	-1.56	BG067933	Tex292	Testis expressed gene 292
-1.34	-1.89	-1.18	BG064631	Timeless	Timeless homolog (Drosophila)
-0.80	-1.83	-1.67	BG076902	Pura	Purine rich element binding protein A
0.32	-0.87	-1.54	BG072578	Mrg1	Myeloid ecotropic viral integration site-related gene 1
					Myeloid/lymphoid or mixed lineage-leukemia translocation to 10 homolog
-1.12	-1.58	-0.99	BG082425	Milt10	(Drosophila)
0.92	-0.41	-1.53	BQ550128	2610014I16Rik	Coiled-coil domain containing 9
-1.07	-1.62	-1.10	BG068330	Nol8	Nucleolar protein 8
-0.74	-2.06	-2.04	BG064881	D1Ertd161e	Galactosidase, beta 1-like
					<b>RNA editing/processing</b>
1.15	-0.26	-1.57	BQ552701	Fusip1	FUS interacting protein (serine-arginine rich) 1
0.69	-1.87	-3.30	BG064869	Rnmt	RNA (guanine-7-) methyltransferase
-0.10	-1.61	-2.11	BG066789	Upf3b	UPF3 regulator of nonsense transcripts homolog B (yeast)
-0.52	-1.89	-2.04	BG064641	Rpp14	RIKEN cDNA A230065C20 gene
-0.86	-2.03	-1.87	BG067897	D230019K20Rik	RIKEN cDNA D230019K20 gene
-0.48	-1.56	-1.63	BG064840	2610033H07Rik	RIKEN cDNA 2610033H07 gene
-0.51	-1.58	-1.64	BG067161	2310067E08Rik	RIKEN cDNA 2310067E08 gene
-0.85	-1.56	-1.25	BG076418	Elac2	elaC homolog 2
					<b>Protein synthesis/ degradation</b>
1.25	1.61	0.89	BG079790	Xpnpep1	X-prolyl aminopeptidase (aminopeptidase P) 1, soluble
-1.81	0.36	2.41	BQ552312	Fbxw11	F-box and WD-40 domain protein 11
-1.12	0.28	1.57	BG087873	Rps6ka5	Ribosomal protein S6 kinase, polypeptide 5
-1.14	-1.84	-1.32	BG081064	Secisbp2	SECIS binding protein 2
0.68	-0.92	-1.99	BG065197	Rpl5	Ribosomal protein L5
0.30	-1.02	-1.71	BG085977	Rpl10	Ribosomal protein 10
0.34	-0.86	-1.54	BG085974	Rpl14	Ribosomal protein L14
-1.19	-1.57	-0.90	BG076676	Rnu64	Similar to 40S ribosomal protein S2
-0.73	-2.20	-2.25	BG064817	Arbp	Acidic ribosomal phosphoprotein P0
-1.41	-1.53	-0.61	BG080379	Nars	Asparaginyl-tRNA synthetase
-0.70	-1.94	-1.93	BG064807	Cln2	Ceroid-lipofuscinosis, neuronal 2
0.52	-1.05	-1.99	BG078452	Ppia	Peptidylprolyl isomerase A
-0.84	-1.64	-1.36	BG078193	Pam	Peptidylglycine alpha-amidating monooxygenase

-1.05	-1.54	-1.01	BG083038	Rnf20	Ring finger protein 20
-1.25	-1.73	-1.06	BG067311	Fbxw17	F-box and WD-40 domain protein 17
-0.12	-1.24	-1.58	BG073224	Ube2q	Ubiquitin-conjugating enzyme E2Q (putative)
0.14	-1.41	-2.08	BG064701	Psmc2	Proteasome (prosome, macropain) 26S subunit, ATPase 2
-1.16	-1.61	-0.98	BG063070	Psmc3	Proteasome (prosome, macropain) 26S subunit, ATPase 3
-0.74	-1.53	-1.32	C85808	Serpina3g	Serine (or cysteine) proteinase inhibitor, clade A, member 3G
3.12	0.48	-2.63	BG064599	Pappa	Pregnancy-associated plasma protein A
-1.43	-1.58	-0.66	BG067300	Tinag	Tubulointerstitial nephritis antigen
0.79	-0.88	-2.05	BG064856	Tpp2	Tripeptidyl peptidase II
<b>Signal transduction</b>					
1.18	1.73	1.13	C78770	Rapgef2	RIKEN cDNA B930012P20 gene
-1.11	0.75	2.20	BG072073	Wdr10	WD repeat domain 10
-0.88	0.62	1.78	BG084873	Tmem23	Transmembrane protein 23
-0.95	0.41	1.57	BG083890	Ppfia1	Protein tyrosine phosphatase, receptor type, f polypeptide (PTPRF), interacting protein, alpha 1
-1.25	-2.28	-1.82	BG067921	Olfr56	Olfactory receptor 56
1.17	-0.70	-2.21	BQ550758	Gng2	Guanine nucleotide binding protein (G protein), gamma 2 subunit
-0.96	-1.53	-1.09	BG063497	Stam2	Signal transducing adaptor molecule (SH3 domain and ITAM motif) 2
-1.22	-1.68	-1.01	BG069401	Csnk2a2	Casein kinase II, alpha 2, polypeptide
1.17	-0.49	-1.92	BG087465	Mapk14	Mitogen activated protein kinase 14
-1.29	-1.69	-0.97	BG079475	Pik4ca	Phosphatidylinositol 4-kinase, catalytic, alpha polypeptide
1.23	-0.46	-1.93	BG075826	Arf3	ADP-ribosylation factor 3
2.59	0.52	-2.02	BG064665	8430423A01Rik	RIKEN cDNA 8430423A01 gene
0.01	-1.08	-1.50	BG085334	Sara1	SAR1a gene homolog 1 ( <i>S. cerevisiae</i> )
0.32	-0.86	-1.52	BG085385	2610024E20Rik	RIKEN cDNA 2610024E20 gene
1.63	-0.11	-1.87	BG078132	Rangap1	RAN GTPase activating protein 1
-0.98	-2.03	-1.75	BG080936	Arfgap3	ADP-ribosylation factor GTPase activating protein 3
-1.45	-1.78	-0.91	BG066934	2210407G14Rik	RIKEN cDNA 2210407G14 gene
1.46	-0.37	-2.06	BG086839	Trim35	Tripartite motif-containing 35
0.10	-1.50	-2.16	BG078210	Ttc10	Tetratricopeptide repeat domain 10
-1.26	-1.71	-1.02	BG076940	Wdr3	WD repeat domain 3
-1.02	-2.25	-2.03	BG067866	Cxadr	Coxsackievirus and adenovirus receptor
<b>Growth factors &amp; signalling</b>					
-0.81	-2.14	-2.09	BG064653	Igf2bp1	Insulin-like growth factor 2, binding protein 1
<b>Channels &amp; transporters</b>					
-0.74	-1.80	-1.69	BG064796	Ftl1	Ferritin light chain 1
-1.18	-1.52	-0.84	BG066256	Clcn1	Chloride channel 1

-0.02	-1.37	-1.87	BG065313	Atp6v1e1	ATPase, H+ transporting, V1 subunit E isoform 1
-0.15	-1.26	-1.57	BG065073	Atp6v0c	ATPase, H+ transporting, V0 subunit C
-1.05	-1.60	-1.10	BG068288	Slco1b2	Solute carrier organic anion transporter family, member 1b2
-1.10	-2.08	-1.71	BG079955	Slc5a11	Solute carrier family 5 (sodium/glucose cotransporter), member 11
-1.05	-1.95	-1.58	BG068299	Slc7a8	Solute carrier family 7 (cationic amino acid transporter, y+ system), member 8
2.17	-0.51	-2.99	BG078196		Similar to Potassium voltage-gated channel subfamily G member 1 (Voltage-gated potassium channel subunit Kv6.1) (kH2)
1.07	-0.48	-1.79	BG064677	Trpc4ap	Transient receptor potential cation channel, subfamily C, member 4 associated protein
-0.41	-1.50	-1.64	BG067563	Npc1	Niemann Pick type C1
<b>Cytoskeleton</b>					
-1.00	-1.54	-1.06	BG077878	Cald1	caldesmon 1
0.05	-1.36	-1.92	BG086016	Tpm1	Tropomyosin 1, alpha
-0.36	-1.87	-2.19	BG064838	Tuba2	Tubulin, alpha 2
-0.87	-1.62	-1.31	BG064830	4930542G03Rik	RIKEN cDNA 4930542G03 gene
1.87	2.76	1.82	BG068096	C230040D10Rik	RIKEN cDNA C230040D10 gene
1.04	-0.73	-2.11	BG078109	Tcp1	T-complex protein 1
<b>Trafficking</b>					
-0.98	0.49	1.71	BG085488	2610019N19Rik	Vacuolar protein sorting 4a (yeast)
-1.14	0.76	2.26	BQ552325	Kif3c	Kinesin family member 3C
1.47	1.51	0.53	BG077424	Dncli2	Dynein, cytoplasmic, light intermediate polypeptide 2
-1.31	0.49	2.06	BQ552294	Stxbp6	Syntaxin binding protein 6 (amisyn)
0.76	-0.52	-1.52	AW554618	Diap1	Diaphanous homolog 1 (Drosophila)
-0.68	-2.06	-2.12	C80308	Exoc7	Exocyst complex component 7
0.26	-1.42	-2.22	BG078477	Sec13l1	SEC13-like 1 (S. cerevisiae)
<b>Stress response</b>					
-1.43	0.52	2.24	BG080820	Dnajb4	DnaJ (Hsp40) homolog, subfamily B, member 4
-0.41	-1.93	-2.22	BG064774	Hspca	Heat shock protein 1, alpha
-0.93	-1.89	-1.62	BG079743	Dnajc7	DnaJ (Hsp40) homolog, subfamily C, member 7
0.50	-0.86	-1.71	BG085384	Cct2	Chaperonin subunit 2 (beta)
<b>Immuno responsive genes</b>					
0.18	-1.32	-2.01	BG064919	Ilf3	Interleukin enhancer binding factor 3
<b>Mitochondria</b>					
-1.09	-1.66	-1.13	BG081063	Cybb	Cytochrome b-245, beta polypeptide
1.41	-0.43	-2.08	BQ552668	Gpam	Glycerol-3-phosphate acyltransferase, mitochondrial
<b>Cell cycle</b>					

-1.05	0.70	2.08	AU046176	2810418N01Rik	RIKEN cDNA 2810418N01 gene
-0.11	-1.43	-1.86	BG064663	Anapc7	Anaphase promoting complex subunit 7
0.47	-0.80	-1.60	BQ550715	Anp32b	Acidic nuclear phosphoprotein 32 family, member B
0.09	-1.15	-1.68	BG072604	Lats2	Large tumor suppressor 2
1.84	-0.71	-2.92	BG064846	Cdc2a	Cell division cycle 2 homolog A (S. pombe)
					<b>Glucose metabolism</b>
0.10	-1.10	-1.62	BG064930	PfkI	Phosphofructokinase, liver, B-type
-1.13	-2.15	-1.77	BG064797	Ldh1	Lactate dehydrogenase 1, A chain
-0.15	-1.59	-2.04	BG065476	LOC14433	Similar to glyceraldehyde-3-phosphate dehydrogenase
3.37	1.36	-1.69	BG064582	Lrrc16	Leucine rich repeat containing 16
					<b>Lipid metabolism</b>
-0.90	0.44	1.56	BG074610	Glb1	RIKEN cDNA C130097A14 gene
-1.30	0.64	2.25	BG086746	Fabp3	Fatty acid binding protein 3, muscle and heart
1.31	1.61	0.83	BG063969	Ppap2b	Phosphatidic acid phosphatase type 2B
0.47	-0.78	-1.57	BG073139	Vkorc1l1	Vitamin K epoxide reductase complex, subunit 1-like 1
1.18	-1.31	-3.05	BG064823	Pgam1	Phosphoglycerate mutase 1
3.15	1.23	-1.64	BG064642	Pcyt1a	Phosphate cytidylyltransferase 1, choline, alpha isoform
0.02	-1.27	-1.77	AU017469	Pafah1b2	Platelet-activating factor acetylhydrolase, isoform 1b, alpha2 subunit
					<b>Amino acid modification</b>
-0.03	-1.31	-1.78	BG065382	Gldc	Glycine decarboxylase
0.76	-0.56	-1.57	BG073234	Trib1	Tribbles homolog 1 (Drosophila)
-0.79	-1.57	-1.32	BG078465	Aof2	Amine oxidase (flavin containing) domain 2
-1.29	-1.60	-0.84	BG066673	Phgdh	3-phosphoglycerate dehydrogenase

## STRIATUM

16M/6M	Z-ratio 24M/6M	24M/16M	Acc	Symbol	Name
					Transcription regulators
0.50	1.83	1.53	BG079546	Ncoa6	Nuclear receptor coactivator 6
0.24	1.56	1.54	AW554361	DXBwg1396e	CASK interacting nucleosome assembly protein
-1.02	0.20	1.54	BG072903	Ctbp2	Zinc finger, RAN-binding domain containing 1
-0.71	0.81	1.88	BG086303	Aip	Aryl-hydrocarbon receptor-interacting protein
-0.36	1.62	2.38	BG067487	A730098D12Rik	RIKEN cDNA A730098D12 gene
2.85	1.57	-1.81	BG069606	Zfp592	Zinc finger protein 592
3.17	2.15	-1.54	BG070913	Ankrd25	Ankyrin repeat domain 25
3.53	2.22	-1.92	BG069533	Suv420h1	Suppressor of variegation 4-20 homolog 1 (Drosophila)

2.79	1.69	-1.60	BG067912	Mrg1	Myeloid ecotropic viral integration site-related gene 1 <b>RNA editing/processing</b>
0.36	3.16	3.27	BQ552383	Rcl1	RNA terminal phosphate cyclase-like 1
0.82	2.88	2.34	BG080270	Prpf3	PRP3 pre-mRNA processing factor 3 homolog (yeast)
0.75	-1.08	-2.24	BG063080	Xrn2	5'-3' exoribonuclease 2 <b>Protein synthesis/ degradation</b>
-0.05	1.88	2.28	C77246	Yars	Tyrosyl-tRNA synthetase
1.49	3.02	1.64	BG065641	Txndc5	Thioredoxin domain containing 5
1.21	4.25	3.46	BQ552407	Cst3	Cystatin C
0.10	1.51	1.66	BG073013	Golph4	Golgi phosphoprotein 4
0.98	1.81	0.88	BG084444	Eef1e1	Eukaryotic translation elongation factor 1 epsilon 1
1.62	3.01	1.47	BG078883	Eif2b5	Eukaryotic translation initiation factor 2B, subunit 5 epsilon
-1.77	0.03	2.32	BG086954	App	Amyloid beta (A4) precursor protein
-1.34	0.27	2.05	BG086349	Rnf11	Ring finger protein 11
0.50	-0.99	-1.80	AA410017	1110017C15Rik	RIKEN cDNA 1110017C15 gene
-0.06	-1.54	-1.74	BG078672	Rpl26	Ribosomal protein L26
-0.23	-1.75	-1.77	BG064471	Ext1	Exostoses (multiple) 1
2.65	1.54	-1.59	AW536452	Cul4b	Cullin 4B
-0.02	-1.78	-2.08	BG064693	Psma1	Proteasome (prosome, macropain) subunit, alpha type 1 <b>Signal transduction</b>
0.05	1.65	1.88	BG067235	Ttbk1	tau tubulin kinase 1
0.96	4.64	4.25	BG076891	Pkp2	Plakophilin 2
-1.31	0.55	2.35	BG069369	Pdzk2	PDZ domain containing 2
-0.53	1.56	2.53	BG077025	Pnn	Pinin
0.27	1.57	1.52	BG085733	8-Sep	Septin 8
-0.15	1.79	2.30	BG064802	Sparc	Secreted acidic cysteine rich glycoprotein
-0.98	1.02	2.47	BG074398	Sparcl1	SPARC-like 1 (mast9, hevin)
-0.66	-1.74	-1.21	BG072750	Tgfb1	Transforming growth factor, beta induced
					Pleckstrin homology domain containing, family C (with FERM domain) member 1
-1.01	-2.47	-1.62	BG063822	Plekhc1	jumonji domain containing 3
4.52	3.59	-1.57	AA408772	Jmjd3	Similar to alpha-3 collagen type VI
-0.56	-1.95	-1.58	BG068629	Fchsd2	FCH and double SH3 domains 2
3.90	2.95	-1.54	BG068843	Ttc19	tetratricopeptide repeat domain 19
2.82	1.55	-1.80	BG078317		
1.45	0.22	-1.61	BG069613	2700008N14Rik	RIKEN cDNA 2700008N14 gene
-1.26	-2.68	-1.53	BG066934	2210407G14Rik	RIKEN cDNA 2210407G14 gene <b>Growth factors &amp; signaling</b>

-0.58	1.66	2.70	AU021923	Jag1	Jagged 1
5.44	3.51	-2.86	BG076766	Ttr	Transthyretin
-0.85	-1.52	-0.70	AW539320	Csh1	Chorionic somatomammotropin hormone 1
1.19	5.70	5.20	BG063515	Fth1	Ferritin heavy chain 1
0.81	2.66	2.10	BG063524	Slc20a2	Solute carrier family 20, member 2
-1.43	-0.07	1.76	BG075286	Slc25a3	Solute carrier family 25 (mitochondrial carrier, phosphate carrier), member 3
-0.41	-1.78	-1.57	BG085195	Atp2a2	ATPase, Ca++ transporting, cardiac muscle, slow twitch 2
-0.67	-1.68	-1.13	BG073429	Slc2a4	Solute carrier family 2 (facilitated glucose transporter), member 4
-1.39	-3.45	-2.28	BG065432	Abcf3	ATP-binding cassette, sub-family F (GCN20), member 3
-1.40	-0.24	1.52	BG088087	Capzb	Capping protein (actin filament) muscle Z-line, beta
0.29	1.60	1.52	BG065918	Catna1	Catenin alpha 1
-0.81	-2.53	-1.94	BG068557	Actl6a	Actin-like 6A
0.29	1.81	1.76	BG082439	Trappc3	Trafficking protein particle complex 3
0.56	-0.99	-1.88	BG063659	Ap1s1	Adaptor protein complex AP-1, sigma 1
-0.50	-2.17	-1.91	AW545189	Grnl1a	Other synaptic function related
0.10	1.76	1.95	BG076621	Hspa5	Glutamate receptor, ionotropic, N-methyl D-aspartate-like 1A
0.61	2.51	2.17	BG079767	Csda	Heat shock 70kD protein 5 (glucose-regulated protein)
-0.92	1.60	3.08	BG064846	Cdc2a	Cold shock domain protein A
-1.18	0.12	1.67	BG073042	Hbb-bh1	Cell division cycle 2 homolog A ( <i>S. pombe</i> )
-0.58	-2.22	-1.88	BG079788	Hba-a1	Hemoglobin Z, beta-like embryonic chain
-0.70	-2.28	-1.78	BG069786	Ywhab	Hemoglobin alpha, adult chain 1
-0.50	-2.01	-1.73	BG066248	Ifi30	Tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, beta polypeptide
3.29	1.87	-2.02	BG079611	Irak1	Immuno responsive genes
4.10	2.03	-2.88	BG063312	Bat3	Interferon gamma inducible protein 30
0.71	-0.92	-2.00	BG077865	Tnfsf5ip1	Interleukin-1 receptor-associated kinase 1
-1.01	0.51	1.90	BG088100	Ndufs1	HLA-B-associated transcript 3
-0.33	-1.73	-1.62	BG081063	Cybb	Tumor necrosis factor superfamily, member 5-induced protein 1
1.46	-0.77	-2.79	BG080169	Dia1	Mitochondria
					NADH dehydrogenase (ubiquinone) Fe-S protein 1
					Cytochrome b-245, beta polypeptide
					Dia1: diaphorase 1 (NADH)

0.62	1.96	1.52	BG064900	Scd2
-0.56	1.91	2.99	BG075879	Plp1
-0.86	1.54	2.93	BG064823	Pgam1
-0.84	0.57	1.76	AW552546	Aldh1a2

#### Lipid metabolism

Stearoyl-Coenzyme A desaturase 2

Proteolipid protein (myelin) 1

Phosphoglycerate mutase 1

#### Amino acid modification

Aldehyde dehydrogenase family 1, subfamily A2

### SPINAL CORD

Z-ratio					Name
16M/6M	24M/6M	24M/16M	Acc	Symbol	DNA replication & repair
1.67	2.98	1.75	BG073328	Xrcc4	X-ray repair complementing defective repair in Chinese hamster cells 4
-1.33	0.63	2.67	BG069525	Ercc4	Excision repair cross-complementing rodent repair deficiency, complementation group 4
-1.03	0.33	1.86	BG066559	Tnks1bp1	Tankyrase 1 binding protein 1
2.03	3.35	1.75	BG085656	Smc1l1	SMC (structural maintenance of chromosomes 1)-like 1 ( <i>S. cerevisiae</i> )
-1.79	1.38	4.32	AW556484	Rtel1	Regulator of telomere elongation helicase 1
-1.03	0.21	1.69	BG079733	Rrm2	Ribonucleotide reductase M2
2.58	4.39	2.40	BG075372	Rpa2	Replication protein A2
0.49	1.87	1.86	BG087523	Pes1	Pescadillo homolog 1, containing BRCT domain (zebrafish)
-1.75	-0.19	2.14	BQ550353	Hmgn1	Hypothetical gene supported by AK080436
-1.73	-0.45	1.75	BG066942	Dnmt3b	DNA methyltransferase 3B
0.57	-1.05	-2.20	BG084595	Wrn	Werner syndrome homolog (human)
2.44	0.94	-2.07	BG064763	Top3b	Topoisomerase (DNA) III beta
-0.69	-1.88	-1.59	AU022611	Smc6l1	SMC6 structural maintenance of chromosomes 6-like 1 (yeast)
1.58	0.32	-1.74	BG078138	Rrm2	Ribonucleotide reductase M2
2.04	0.79	-1.73	BG064736	Rrm1	Ribonucleotide reductase M1
0.57	-0.91	-2.01	BG087717	Pms2	Postmeiotic segregation increased 2 ( <i>S. cerevisiae</i> )
0.79	-1.01	-2.46	BG067853	Mgmt	O-6-methylguanine-DNA methyltransferase
1.76	0.41	-1.85	BG067931	Dna2l	DNA2 DNA replication helicase 2-like ( <i>yeast</i> )
2.00	3.44	1.91	BG072618	Chrac1	RIKEN cDNA 2310051F07 gene
2.02	0.88	-1.58	BG078093	Cbx3	Chromobox homolog 3 ( <i>Drosophila HP1 gamma</i> )
2.31	1.18	-1.57	BG078092	2700083B06Rik	RIKEN cDNA 2700083B06 gene
					Transcription regulators
-1.47	-0.28	1.64	BG065915	Etv6	Ets variant gene 6 (TEL oncogene)
0.92	1.67	0.99	BG085427	Hmgb2	High mobility group box 2

-1.04	0.60	2.23	BG078897	Phf12	PHD finger protein 12
0.76	2.04	1.72	BG069255	Hira	Histone cell cycle regulation defective homolog A ( <i>S. cerevisiae</i> )
-1.37	0.93	3.14	BG082843	AI481500	Expressed sequence AI481500
-1.44	-0.33	1.52	BG065991	Ncor1	nuclear receptor co-repressor 1
-0.39	1.64	2.76	BG070725	Nfe2l2	Nuclear factor, erythroid derived 2, like 2
-2.00	-0.70	1.79	BG064395	Nfat5	Nuclear factor of activated T-cells 5
-1.35	-0.21	1.57	BG066009	Gtf3c2	General transcription factor IIIC, polypeptide 2, beta
0.62	1.77	1.55	BG076896	Tardbp	TAR DNA binding protein
2.98	4.78	2.37	BG086781	Setdb1	SET domain, bifurcated 1
-1.26	0.21	2.01	BG069533	Suv420h1	Suppressor of variegation 4-20 homolog 1 ( <i>Drosophila</i> )
-1.73	-0.04	2.31	BG082817	Rb1	Retinoblastoma 1
1.66	2.90	1.66	BG087942	Tfdp1	Transcription factor Dp 1
2.23	4.13	2.53	BG072662	Runx1	Runt related transcription factor 1
-1.69	-0.49	1.65	BG067912	Mrg1	Myeloid ecotropic viral integration site-related gene 1
1.48	2.65	1.56	BG086136	Zfp51	Zinc finger protein 51
-1.75	-0.51	1.71	BG064695	Zfp482	Zinc finger protein 482
1.42	3.22	2.41	BG072651	Bnc1	RIKEN cDNA 4833418N17 gene
-1.78	-0.28	2.06	BG070349	B430306D02Rik	RIKEN cDNA B430306D02 gene
-1.56	-0.30	1.73	BG068796	6330581L23Rik	RIKEN cDNA 6330581L23 gene
-1.34	-2.47	-1.51	BG085163	Taf1a	TATA box binding protein (Tbp)-associated factor, RNA polymerase I, A
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-0.94	-1.77	-1.11	BG082016	Taf7	TAF7 RNA polymerase II, TATA box binding protein (TBP)-associated factor
0.94	-0.33	-1.73	BG067185	Runx2	Runt related transcription factor 2
1.04	-0.24	-1.75	BG067984	Mll5	Myeloid/lymphoid or mixed-lineage leukemia 5
1.25	-0.17	-1.95	BG067943	Zcchc6	Zinc finger, CCHC domain containing 6
0.91	-0.39	-1.76	BG078199	Zfp281	Zinc finger protein 281
1.55	-0.25	-2.47	BG064719	Ankrd32	Ankyrin repeat domain 32
2.03	0.73	-1.80	BG077103	Jarid1a	RIKEN cDNA D230014I24 gene
-0.59	-1.59	-1.34	BG080731	Nab1	Ngfi-A binding protein 1
-0.75	-1.95	-1.61	BG087727	Nfx1	Nuclear transcription factor, X-box binding 1
0.23	-0.91	-1.54	BG084112	Nr2f1	Nuclear receptor subfamily 2, group F, member 1
1.67	0.52	-1.58	BG074323	Nr2c2	Nuclear receptor subfamily 2, group C, member 2
2.03	0.18	-2.54	BG064819	Pa2g4	Proliferation-associated 2G4
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1.36	2.94	2.10	AW557944	Sfrs14	Splicing factor, arginine/serine-rich 14
2.22	4.12	2.53	BG085411	Slbp	Stem-loop binding protein
-1.63	0.17	2.47	BG069904	1190005F20Rik	RIKEN cDNA 1190005F20 gene

1.66	2.84	1.56	BG073307	Ddx54	DEAD (Asp-Glu-Ala-Asp) box polypeptide 54
1.01	1.87	1.14	AW544088	5730449L18Rik	DNA Segment, Chr 6, Mouse Genome Informatics 32
0.75	1.76	1.34	BG072843	Pnpt1	Polyribonucleotide nucleotidyltransferase 1
1.52	3.35	2.45	BG073362	3100004P22Rik	RIKEN cDNA 3100004P22 gene
-0.76	-1.68	-1.23	BG088576	Ddx27	DEAD (Asp-Glu-Ala-Asp) box polypeptide 27
1.81	0.65	-1.60	BG072729	3000004N20Rik	RIKEN cDNA 3000004N20 gene
Protein synthesis/ degradation					
-1.75	-0.59	1.59	BG079401	Nars	Asparaginyl-tRNA synthetase
1.02	1.80	1.03	BG073438	Rpl38	Ribosomal protein L38
-0.93	0.39	1.81	BG079511	Rpl3	Ribosomal protein L3
1.08	2.04	1.27	BG085647	Rpl23a	Ribosomal protein L23a
1.95	3.51	2.07	BG074119	Eif3s8	Eukaryotic translation initiation factor 3, subunit 8
1.89	3.12	1.63	BG073959	Eef2	Eukaryotic translation elongation factor 2
1.94	3.95	2.69	BG086148	Elp4	Elongation protein 4 homolog (S. cerevisiae)
0.62	2.06	1.93	BG086349	Rnf11	Ring finger protein 11
1.08	3.06	2.66	BG074836	Usp4	Ubiquitin specific protease 4 (proto-oncogene)
-1.28	-0.08	1.64	BG066359	Usp1	Ubiquitin specific protease 1
-2.04	-0.77	1.75	BQ552073	Ufd1l	Ubiquitin fusion degradation 1 like
-2.00	-0.71	1.79	BG066446	Arih2	RIKEN cDNA 8030474H12 gene
-1.87	0.25	2.90	BG066125	Psma4	Proteasome (prosome, macropain) subunit, alpha type 4
1.69	3.26	2.09	BG072746	Psmd7	Proteasome (prosome, macropain) 26S subunit, non-ATPase, 7
0.05	1.56	2.05	BG071436	Psmc6	Proteasome (prosome, macropain) 26S subunit, ATPase, 6
1.81	2.98	1.54	BG073415	Nedd4	Neural precursor cell expressed, developmentally down-regulated gene 4
0.85	1.78	1.25	BG074233	Ndfip1	Nedd4 family interacting protein 1
-0.49	0.67	1.58	BG066271	Kars	Lysyl-tRNA synthetase
1.75	4.13	3.19	AW553913	Lcn7	Lipocalin 7
2.19	3.76	2.08	BG072819	Lamr1	Laminin receptor 1 (ribosomal protein SA)
-0.66	0.44	1.50	BG079508	Tbl1x	Transducin (beta)-like 1 X-linked
-1.12	0.38	2.05	BG066997	Thnsl1	Threonine synthase-like 1 (bacterial)
-1.78	-0.21	2.17	BG079293	Psma3	Similar to proteasome alpha7/C8 subunit
-0.46	0.74	1.62	BG078882	Serpinb6c	Serine (or cysteine) proteinase inhibitor, clade B, member 6c
-1.35	-0.16	1.63	BG078920	Khsrp	KH-type splicing regulatory protein
2.72	5.46	3.66	BG072807	Car8	Carbonic anhydrase 8
-0.63	1.17	2.44	BG066341	Man2a1	Mannosidase 2, alpha 1
A disintegrin-like and metalloprotease (reprolysin type) with thrombospondin type 1 motif, 10					
1.54	0.39	-1.59	BG064835	Adams10	
1.74	0.48	-1.73	BG064840	2610033H07Rik	RIKEN cDNA 2610033H07 gene

1.39	0.25	-1.56	BG077164	Eif3s2	Eukaryotic translation initiation factor 3, subunit 2 (beta)
1.03	-0.14	-1.60	BG073224	Ube2q	Ubiquitin-conjugating enzyme E2Q (putative)
1.59	-0.10	-2.31	BG064874	Usp38	Ubiquitin specific protease 38
-0.90	-2.75	-2.49	BG073636	Psme1	Proteasome (prosome, macropain) 28 subunit, alpha
1.96	0.69	-1.75	BG067908	Prep	Prolyl endopeptidase
0.43	-1.26	-2.29	AW552998	Lsm3	LSM3 homolog, U6 small nuclear RNA associated ( <i>S. cerevisiae</i> )
0.84	-0.70	-2.10	BG081064	Secisbp2	SECIS binding protein 2
1.60	0.40	-1.65	BG085919	Jrk	Jerky
1.18	-0.08	-1.72	BG080881	Npepps	Aminopeptidase puromycin sensitive
0.14	-1.08	-1.65	BG063679	Aasdhppt	Aminoadipate-semialdehyde dehydrogenase-phosphopantetheinyl transferase
-0.68	-2.77	-2.83	BG076242	2010106G01Rik	RIKEN cDNA 2010106G01 gene
Signal transduction					
0.94	1.86	1.23	BG086084	Wnt4	Wingless-related MMTV integration site 4
0.94	2.11	1.56	BG076105	Utx	Ubiquitously transcribed tetratricopeptide repeat gene, X chromosome
2.49	4.97	3.31	AW557486	Tdrd9	Tudor domain containing 9
0.53	2.12	2.15	BG088528	Tdrkh	Tudor and KH domain containing protein
0.97	2.24	1.70	BG086192	Tgfb1i1	Transforming growth factor beta 1 induced transcript 1
-1.37	-0.09	1.75	BG086904	Ttc11	Tetratricopeptide repeat domain 11
1.31	2.67	1.82	BG087876	Tbc1d1	TBC1 domain family, member 1
-2.43	-0.68	2.41	BG072287	Solt	SoxLZ/Sox6 leucine zipper binding protein in testis
-0.99	0.33	1.80	BG077930	Snx10	Sorting nexin 10
-1.53	-0.25	1.77	BQ550417	Srgap2	SLIT-ROBO Rho GTPase activating protein 2
-1.35	-0.12	1.69	C79706	Stam2	Signal transducing adaptor molecule (SH3 domain and ITAM motif) 2
-1.89	-0.71	1.64	BQ550334	Sidt2	SID1 transmembrane family, member 2
-1.47	-0.05	1.95	BG065899	Sh2bp1	SH2 domain binding protein 1 (tetratricopeptide repeat containing)
-0.61	0.94	2.11	BG078874	1110061O04Rik	RIKEN cDNA 1110061O04 gene
1.34	2.21	1.16	BG085506	Arhgef19	Rho guanine nucleotide exchange factor (GEF) 19
-1.09	0.20	1.77	BG068432	Rap1a	RAS-related protein-1a
1.63	3.04	1.89	BG087931	Rhoa	Ras homolog gene family, member A
-1.94	-0.85	1.51	C76941	Ranbp5	RAN binding protein 5
0.04	1.31	1.72	BG072458	Pink1	PTEN induced putative kinase 1
-0.69	0.47	1.59	BG081448	Ppp3cb	Protein phosphatase 3, catalytic subunit, beta isoform
-1.45	-0.26	1.63	BG065773	Ppp2r5c	Protein phosphatase 2, regulatory subunit B (B56), gamma isoform
-1.30	-0.12	1.61	BG065790	Ppp2r5e	Protein phosphatase 2, regulatory subunit B (B56), epsilon isoform
-1.77	-0.13	2.24	AU021253	Ppm1a	Protein phosphatase 1A, magnesium dependent, alpha isoform
2.38	4.35	2.63	BG087909	Phka2	Phosphorylase kinase alpha 2

-0.32	1.60	2.60	BG084383	Pde6d	Phosphodiesterase 6D, cGMP-specific, rod, delta
-1.26	0.25	2.07	BG069544	Pde3a	Phosphodiesterase 3A, cGMP inhibited
-1.34	-0.12	1.68	BG066066	Pik3r3	Phosphatidylinositol 3 kinase, regulatory subunit, polypeptide 3 (p55)
0.05	2.15	2.83	BG071525	Pdzk3	PDZ domain containing 3
0.66	1.78	1.50	BG072813	Opa1	Optic atrophy 1 homolog (human)
-1.63	-0.22	1.94	BG070274	Nlk	Nemo like kinase
1.27	2.72	1.93	BG087954	Ltbp1	Latent transforming growth factor beta binding protein 1
0.28	1.88	2.16	BG072195	Jam3	Junction adhesion molecule 3
0.32	1.62	1.75	BG070896	Jam2	Junction adhesion molecule 2
0.78	2.71	2.60	BG087223	Itga3	Integrin alpha 3
0.95	1.74	1.05	BG086054	Fstl1	Follistatin-like 1
-1.47	-0.26	1.66	BG068469	Ednrb	Endothelin receptor type B
-1.40	0.29	2.32	BG066580	Dsg2	Desmoglein 2
-0.04	1.65	2.29	BQ550373	Cdh5	Cadherin 5
1.49	2.61	1.48	BG077818	Mt1	Metallothionein 1
2.50	4.16	2.19	BG063925	Mt2	Metallothionein 2
1.49	0.14	-1.85	BG087418	Ms4a6d	Membrane-spanning 4-domains, subfamily A, member 11
1.69	0.47	-1.68	BG085336	Matn2	Matrilin 2
2.09	0.37	-2.36	BG067866	Cxadr	Coxsackievirus and adenovirus receptor
-0.78	-1.91	-1.51	BQ550980	Chn1	Chimerin (chimaerin) 1
-1.71	-2.88	-1.56	BG072331	Clstn1	Calsyntenin 1
-1.16	-3.24	-2.80	BG076321	Calmbp1	Calmodulin binding protein 1
-0.70	-2.19	-2.00	BG088768	Rcn3	Reticulocalbin 3, EF-hand calcium binding domain
-0.66	-1.62	-1.29	BG088317	Shc1	Src homology 2 domain-containing transforming protein C1
1.78	0.45	-1.84	BG078210	Ttc10	Tetratricopeptide repeat domain 10
3.02	1.91	-1.55	BG064553	Thumpd1	THUMP domain containing 1
1.88	0.49	-1.90	BG073370	Ttc3	Tetratricopeptide repeat domain 3
1.34	0.07	-1.74	BG078208	Srprb	Signal recognition particle receptor, B subunit
1.70	0.35	-1.86	BG085334	Sara1	SAR1a gene homolog 1 ( <i>S. cerevisiae</i> )
2.22	0.74	-2.04	BG074010	Ryr2	Ryanodine receptor 2, cardiac
0.83	-0.28	-1.52	BG065471	C330018K18Rik	RIKEN cDNA C330018K18 gene
1.10	-0.09	-1.64	BG066934	2210407G14Rik	RIKEN cDNA 2210407G14 gene
1.24	-0.42	-2.27	BG074348	Prkwnk4	Protein kinase, lysine deficient 4
-1.31	-3.18	-2.50	BG071651	Rab11a	RAB11a, member RAS oncogene family
1.75	0.33	-1.96	BG067867	Ptpn14	Protein tyrosine phosphatase, non-receptor type 14
1.27	-0.06	-1.83	BG072553	Rab11fip1	RAB11 family interacting protein 1 (class I)
1.46	0.02	-1.98	BG078211	Arl1	ADP-ribosylation factor-like 1

1.63	0.28	-1.86	BG080936	Arfgap3	ADP-ribosylation factor GTPase activating protein 3
2.89	5.30	3.21	BG073492	D0H4S114	<b>Growth factors &amp; signaling</b>
0.84	1.95	1.48	BG087899	Pdgfa	DNA segment, human D4S114
1.55	0.32	-1.69	BG077115	Hunk	Platelet derived growth factor, alpha
0.35	-1.05	-1.90	BG085859	Mc2r	Hormonally upregulated Neu-associated kinase
					Melanocortin 2 receptor
-1.62	-0.03	2.19	BG066550	Kctd5	<b>Channels &amp; transporters</b>
0.87	1.55	0.90	BG072959	Cacnb3	Potassium channel tetramerisation domain containing 5
-0.41	0.71	1.52	BG079014	Trpm7	Calcium channel, voltage-dependent, beta 3 subunit
-1.06	0.81	2.56	BG068694	Nup155	Transient receptor potential cation channel, subfamily M, member 7
1.23	-0.01	-1.71	C80679	Atp6ap1	Nucleoporin 155
0.75	-0.70	-1.98	BG068288	Slco1b2	ATPase, H+ transporting, lysosomal accessory protein 1
1.76	-0.24	-2.73	BG067865	Slc4a8	Solute carrier organic anion transporter family, member 1b2
					Solute carrier family 4 (anion exchanger), member 8
					Solute carrier family 3 (activators of dibasic and neutral amino acid transport), member 2
1.53	0.42	-1.52	BG064714	Slc3a2	Solute carrier family 37 (glycerol-3-phosphate transporter), member 2
1.48	0.08	-1.92	BG085951	Slc37a2	Solute carrier family 16 (monocarboxylic acid transporters), member 3
1.72	-0.27	-2.72	BG064853	Slc16a3	Potassium channel, subfamily K, member 4
1.15	-0.10	-1.71	BG064872	Kcnk4	Potassium channel, subfamily K, member 2
-0.85	-1.71	-1.15	BG076025	Kcnk2	Exportin 5
0.96	-0.58	-2.11	BG074888	Xpo5	Exocyst complex component 7
2.38	1.06	-1.83	C80308	Exoc7	<b>Cytoskeleton</b>
1.39	2.46	1.43	BG073394	Add3	Adducin 3 (gamma)
0.65	1.51	1.16	BG077650	Ap2a1	Adaptor protein complex AP-2, alpha 1 subunit
-0.70	0.57	1.73	BG065639	Ap1gbp1	AP1 gamma subunit binding protein 1
-1.48	0.18	2.27	BG067888	Aak1	AP2 associated kinase 1
2.40	3.92	2.01	BG072685	Mns1	Meiosis-specific nuclear structural protein 1
-1.39	-0.14	1.72	BG076620	Myo1e	Myosin IE
-0.65	0.47	1.53	BG065992	2310045N14Rik	Similar to myosin light chain kinase
1.47	2.57	1.47	BG064375	Phactr1	Phosphatase and actin regulator 1
2.54	1.23	-1.81	BG064839	Wdr1	WD repeat domain 1
1.52	0.31	-1.67	BG077459	Utrn	Utrophin
1.24	0.14	-1.50	BG067822	Coro2b	Coronin, actin binding protein, 2B
0.03	-1.48	-2.05	AU045206	Cobl	Cordon-bleu
2.04	0.61	-1.98	BG064830	4930542G03Rik	RIKEN cDNA 4930542G03 gene
					<b>Trafficking</b>

1.99	3.57	2.10	BG087363	Vps45	Vacuolar protein sorting 45 (yeast)
1.16	2.81	2.21	AU041113	Vps54	Vacuolar protein sorting 54 (yeast)
-0.56	0.59	1.57	BG065616	Vcp	Valosin containing protein
-0.42	1.75	2.94	BG070588	Map1lc3b	Microtubule-associated protein 1 light chain 3 beta
-2.06	-0.92	1.57	BQ550134	Dnm2	Dynamin 2
<b>Other synaptic function related</b>					
-1.53	-0.39	1.57	BG067031	Narg1	NMDA receptor-regulated gene 1
1.65	2.81	1.55	BG085480	Agrn	Agrin
-1.42	0.55	2.70	BG083097	Stx1b1	Syntaxin 1B2
2.65	4.61	2.60	BG073296	Ncam2	Neural cell adhesion molecule 2
1.26	-0.24	-2.04	BG071687	Synj2bp	Synaptjanin 2 binding protein
1.15	-0.21	-1.86	BG074313	Syngr2	Synaptogyrin 2
1.36	0.11	-1.71	BG086829	Sypl	Synaptophysin-like protein
<b>Stress response</b>					
0.69	1.58	1.19	AU041598	H2-K1	Histocompatibility 2, K1, K region
-1.60	-0.44	1.60	BG070773	Fkbp1a	FK506 binding protein 1a
-0.84	0.56	1.91	BG078930	Fkbp4	FK506 binding protein 4
-2.37	-1.18	1.65	BG075437	C80913	Expressed sequence C80913
-1.21	0.14	1.86	BG079699	Cct4	Chaperonin subunit 4 (delta)
1.39	-0.07	-2.00	BG064829	Hspca	Heat shock protein 1, alpha
1.85	0.68	-1.61	BG076621	Hspa5	Heat shock 70kD protein 5 (glucose-regulated protein)
3.05	1.93	-1.57	BG066789	Upf3b	UPF3 regulator of nonsense transcripts homolog B (yeast)
2.32	0.65	-2.30	BG078212	Fignl1	Fidgetin-like 1
<b>Immuno responsive genes</b>					
1.29	2.14	1.13	BG086320	Cxcl12	Chemokine (C-X-C motif) ligand 12
-0.40	0.93	1.81	BG069517	Tnfsf13	Tumor necrosis factor (ligand) superfamily, member 13
1.83	3.80	2.63	BG086230	Traf7	Tnf receptor-associated factor 7
1.26	2.09	1.10	BG075295	Traf3ip1	TNF receptor-associated factor 3 interacting protein 1
-0.72	0.41	1.54	BG069534	Lman2l	Lectin, mannose-binding 2-like
0.65	1.78	1.53	BG074880	Hcph	Hemopoietic cell phosphatase
-2.32	-1.21	1.55	BG083661	Ilf3	Interleukin enhancer binding factor 3
0.08	-2.51	-3.51	BG086996	Golga1	Golgi autoantigen, golgin subfamily a, 1
0.32	-2.14	-3.33	BG085901	Ifitm2	Interferon induced transmembrane protein 2
-0.19	-1.74	-2.09	BG087082	9430034N14Rik	Interferon alpha responsive gene
1.79	0.46	-1.84	BG067896	Cnih	Cornichon homolog (Drosophila)
0.69	-0.51	-1.64	BG063802	5832424M12Rik	RIKEN cDNA 5832424M12 gene
<b>Mitochondria</b>					

-0.62	0.83	1.98	BG077638	Mrpl19	Mitochondrial ribosomal protein L19
1.59	2.98	1.84	BG085433	Hbb-bh1	Hemoglobin Z, beta-like embryonic chain
1.12	1.93	1.08	BG075252	Egln1	EGL nine homolog 1 (C. elegans)
0.78	2.13	1.81	BG073539	Hadhd2	Hydroxyacyl-Coenzyme A dehydrogenase type I
-0.59	0.76	1.84	BG083209	Cyba	Cytochrome b-245, alpha polypeptide
-1.59	-0.34	1.73	BG073745	Acbd3	Acyl-Coenzyme A binding domain containing 3
-1.27	-0.11	1.59	BG066570	Cdyl2	Chromodomain protein, Y chromosome-like 2
-1.79	-0.56	1.70	AU014844	Ogdh	Oxoglutarate dehydrogenase (lipoamide)
1.08	-0.34	-1.94	BG067951	Alox12e	Arachidonate lipoxygenase, epidermal
1.89	0.37	-2.08	BG078192	Pam	Peptidylglycine alpha-amidating monooxygenase
0.68	-0.50	-1.62	BG068195	Abce1	ATP-binding cassette, sub-family E (OABP), member 1
1.77	0.26	-2.08	BG078193	Pam	Peptidylglycine alpha-amidating monooxygenase
2.45	1.09	-1.88	C85471	Pdcdb8	Programmed cell death 8
1.88	0.59	-1.78	BG075001	Uqcrc2	Ubiquinol cytochrome c reductase core protein 2
1.10	-0.63	-2.36	BG071638	Mrpl18	Mitochondrial ribosomal protein L18
-1.57	-2.43	-1.13	BG087589	Mtch1	Mitochondrial carrier homolog 1 (C. elegans)
0.73	-6.25	-9.46	BG077487	Hif1a	Hypoxia inducible factor 1, alpha subunit
-0.85	-1.60	-1.01	BG075159	Gls	Glutaminase
0.61	-1.02	-2.22	BG066881	Cryz	Crystallin, zeta
2.15	0.91	-1.72	BG080478	2810484M10Rik	RIKEN cDNA 2810484M10 gene
1.23	-0.28	-2.07	BG081031	Smox	RIKEN cDNA B130066H01 gene
<b>Cell cycle</b>					
2.42	4.02	2.11	BG072661	Cdc23	CDC23 (cell division cycle 23, yeast, homolog)
-1.34	0.13	2.02	BG065644	Cdc5l	Cell division cycle 5-like (S. pombe)
0.64	1.98	1.80	BG071313	Cdkn1c	Cyclin-dependent kinase inhibitor 1C (P57)
1.70	2.88	1.56	BG072757	Gspt1	G1 to S phase transition 1
-1.51	-0.03	2.04	BG077319	Lzts2	Leucine zipper, putative tumor suppressor 2
1.28	2.42	1.51	BG086278	Ptn	Pleiotrophin
1.71	0.58	-1.55	BG077073	Ccnh	Cyclin H
1.23	-0.94	-2.95	BG083522	Cks2	CDC28 protein kinase regulatory subunit 2
1.36	-0.02	-1.89	BG086421	Usmg5	Upregulated during skeletal muscle growth 5
<b>Glucose metabolism</b>					
1.38	2.85	1.96	BG087920	Dlst	Dihydrolipoamide S-succinyltransferase (E2 component of 2-oxo-glutarate complex)
0.50	1.83	1.80	BG078834	Renbp	Renin binding protein
2.00	0.72	-1.77	BG064875	Hs3st3b1	Heparan sulfate (glucosamine) 3-O-sulfotransferase 3B1
1.49	0.37	-1.54	BG072521	D230016N13Rik	RIKEN cDNA D230016N13 gene

-0.04	1.47	2.05	BG082524	Elovl6
-1.57	-0.09	2.03	BQ551582	Lass6
1.72	3.57	2.48	BG071356	AU040972
-1.56	0.21	2.42	BG069555	Osbpl8
1.57	0.00	-2.16	BG075608	Tpi1
-1.28	0.11	1.91	BG081746	Oazin
-1.43	0.01	1.96	BG064989	AMT
0.61	2.29	2.25	BG073427	4930487N19Rik
-1.02	0.62	2.24	BG065623	Etnk1
-2.11	-0.87	1.72	BG065744	Pank3
1.53	0.16	-1.88	BG067932	Glul
1.22	0.04	-1.62	BG085485	Oaz3
0.91	2.98	2.77	BG072788	Atrn
-0.51	0.67	1.61	BG066292	Dtnbp1
-1.62	-0.08	2.12	BG082854	Mesp2
0.99	-0.31	-1.78	BG067952	Pbx3
1.63	3.01	1.84	BG074856	Fastk
1.77	0.16	-2.22	BG067918	Btg2
0.94	-0.29	-1.69	BG080244	Ern1
-0.38	-1.52	-1.54	BG076263	Hdh

#### Lipid metabolism

ELOVL family member 6, elongation of long chain fatty acids (yeast)  
 Longevity assurance homolog 6 (*S. cerevisiae*)  
 Oligodendrocyte myelin glycoprotein  
 Oxysterol binding protein-like 8  
 Triosephosphate isomerase 1

#### Amino acid modification

Ornithine decarboxylase antizyme inhibitor  
 Similar to aminomethyltransferase  
 RIKEN cDNA 4930487N19 gene  
 Ethanolamine kinase 1  
 Pantothenate kinase 3  
 glutamate-ammonia ligase (glutamine synthase)|  
 Ornithine decarboxylase antizyme 3

#### Development

Attractin  
 Dystrobrevin binding protein 1  
 Mesoderm posterior 2  
 RIKEN cDNA B930068K11 gene

#### Apoptosis

Fas-activated serine/threonine kinase  
 B-cell translocation gene 2, anti-proliferative  
 Endoplasmic reticulum (ER) to nucleus signalling 1  
 Huntington disease gene homolog

**Table 1. Genes consistently responsive to CR across advancing age in mouse CNS**

	Upregulated
	Downregulated
	No change

### Cortex

6M-CR/Ad	16M-CR/Ad	24M-CR/Ad	Acc	Symbol	Name
			C85807	EST	
			BG071636	EST	
			C79706	Stam2	Signal transducing adaptor molecule 2
			BG075206	4930429A22Rik	RIKEN cDNA 4930429A22 gene
			BG077638	Mrpl19	Mitochondrial ribosomal protein L19
			BG066250	Tbx20	T-box transcription factor TBX20
			BG068414	Col25a1	Procollagen, type XXV, alpha 1, transcript variant 1
			BG087355	Sas	Sarcoma amplified sequence
			BG071355	EST	
			BG066559	Tnks1bp1	Tankyrase 1 binding protein 1
			BG071581	2810047L02Rik	RIKEN cDNA 2810047L02 gene
			BG074649	EST	

### Hippocampus

6M-CR/Ad	16M-CR/Ad	24M-CR/Ad	Acc	Symbol	Name
			AW545298	Nubp2	Nucleotide binding protein 2
			BG085518	Eraf	Erythroid associated factor
			BG081202	EST	
			BG068469	Ednrb	Endothelin receptor type B
			BG065982	Vav2	Vav2 oncogene
			BG073013	Golph4	Golgi phosphoprotein 4
			BG066800	9030625G08Rik	RIKEN cDNA 9030625G08 gene
			BG063666	Tex19	Testis expressed gene 19
			BG087964	Fkbp9	FK506 binding protein 9

	BG088166	Entpd4	Ectonucleoside triphosphate diphosphohydrolase 4
	BG072757	Gspt1	G1 to S phase transition 1
	BQ550134	Dnm2	Dynamin 2
	BG066241	EST	
	BG065910	EST	
	BG069719	Celsr1	Cadherin EGF LAG seven-pass G-type receptor 1
	C88217	EST	
	BG083097	Stx1b1	Syntaxin 1B2
	BG079167	EST	
	BG065890	5430400N05Rik	RIKEN cDNA 5430400N05 gene

### Cerebellum

6M-CR/Ad	16M-CR/Ad	24M-CR/Ad	Acc	Symbol	Name
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### Striatum

6M-CR/Ad	16M-CR/Ad	24M-CR/Ad	Acc	Symbol	Name
			BG067974	D130067I03Rik	RIKEN cDNA D130067I03 gene

### Spinal cord

6M-CR/Ad	16M-CR/Ad	24M-CR/Ad	Acc	Symbol	Name
			BG063372	Safb2	Scaffold attachment factor B2
			BG062985	Prss32	Protease, serine, 32
			BG078926	Cst3	Cystatin C
			BG063697	Cbfa2t2h	Core-binding factor, runt domain, alpha subunit 2
			BG069013	EST	
			BG071239	EST	
			AA409376	Nfyα	Nuclear transcription factor-Y alpha
			BG071231	1300007B12Rik	RIKEN cDNA 1300007B12 gene
			AA408075	EST	
			BG067447	D1Ertd251e	Transcriptional adaptor 1 (HFI1 homolog, yeast) like
			BG075683	Cdk5rap2	CDK5 regulatory subunit associated protein 2
			BG063222	EST	
			AU040617	Ss18	Synovial sarcoma translocation, Chromosome 18

		BG071679	D19Ertd678e	DNA segment, Chr 19, ERATO Doi 678, expressed
		BG077934	Tpm4	Tropomyosin 4
		BG083097	Stx1b1	Syntaxin 1B2
		BG066720	EST	
		BG067472	Banp	Btg3 associated nuclear protein
		BG077413	Pnpo	Pyridoxine 5'-phosphate oxidase
		BG067471	EST	
		BG067575	EST	
		BG080549	EST	
		BG067245	2210009G21Rik	RIKEN cDNA 2210009G21 gene
		BG081236	Lats1	Large tumor suppressor 1
		AU021253	Ppm1a	Protein phosphatase 1A, magnesium dependent, alpha isoform
		BG067563	Npc1	Niemann Pick type C1
		AU016199	Tex27	Testis expressed gene 27
		BG063043	B230333C21Rik	RIKEN cDNA B230333C21
		BG076562	Ndufb7	NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 7
		BG069058	EST	
		BG063039	AI428936	Expressed sequence AI428936
		BG067080	EST	
		BG063740	Canx	Calnexin
		BG067356	Rragc	Ras-related GTP binding C
		BG068017	EST	
		BG066008	EST	
		BG063398	B230219D22Rik	RIKEN cDNA B230219D22 gene
		BG065769	D5Ertd135e	DNA segment, Chr 5, ERATO Doi 135, expressed
		BG082154	EST	
		BG072412	EST	
		BQ550036	Dhx37	MKIAA1517 protein
		BG072287	Solt	SoxLZ/Sox6 leucine zipper binding protein in testis
		BG066683	EST	
		C76711	EST	
		BG071862	EST	
		BG070274	Nlk	Nemo like kinase
		BG069113	EST	
		BG068472	EST	
		BG079181	EST	
		BG066708	AU020772	Expressed sequence AU020772

	BG065524	Prei3	Preimplantation protein 3
	BG070349	B430306D02Rik	TAF1 RNA polymerase II, TATA box binding protein-associated factor
	BG074676	Rnf12	Ring finger protein 12
	BG066122	EST	
	BG071371	EST	
	C79520	EST	
	BQ550326	EST	
	BG066598	EST	
	BQ552422	EST	
	BG068961	EST	
	BG083308	BC013481	CDNA sequence BC013481
	BQ552525	Mrpl45	Mitochondrial ribosomal protein L45
	BG065779	EST	
	C78094	Mapkap1	Mitogen-activated protein kinase associated protein 1
	BG066371	EST	
	BG083661	Ilf3	Interleukin enhancer binding factor 3
	BQ552335	Stxbp4	Syntaxin binding protein 4
	BG065684	EST	
	BG075437	EST	
	BQ550610	4930403O06Rik	Transmembrane and coiled-coil domains 1
	BG070889	Qtrt1	Queuine tRNA-ribosyltransferase 1
	BG067416	EST	

**TableS4a-6M. CR responsive gene lists of 6M mouse CNS.**

**Notes.** Cor: cortex; Hip: hippocampus; Cer: cerebellum; Str: striatum; SC: spinal cord.



Acc	Cor-6M	Hip-6M	Cer-6M	Str-6M	SC-6M	Symbol	Name
BG065641						Txndc5	Thioredoxin domain containing 5
BG064663						Anapc7	Anaphase promoting complex subunit 7
BG066235						2610207I05Rik	RIKEN cDNA 2610207I05 gene
BG069368						Rfx1	Regulatory factor X, 1 (influences HLA class II expression)
C77369						Zdhhc6	Zinc finger, DHHC domain containing 6
BG078926						Cst3	Cystatin C
BG070584						E330021D16Rik	RIKEN cDNA E330021D16 gene
BG066912						Gnpnat1	Glucosamine-phosphate N-acetyltransferase 1
AU022584						Smc6	Structural maintenance of chromosomes 6
BG068016						Trerf1	Transcriptional regulating factor 1
AA408075						EST	
BG067963						EST	
BG068354						EST	
BG073013						Golph4	Golgi phosphoprotein 4
BG069026						Gpr1	G protein-coupled receptor 1
BG062985						Srrm2	Serine/arginine repetitive matrix 2
BG068443						EST	
BG081397						Arnt	Aryl hydrocarbon receptor nuclear translocator
BG080169						Cyb5r3	Cytochrome b5 reductase 3
BG073867						2900097C17Rik	RIKEN cDNA 2900097C17 gene
BG063925						Mt2	Metallothionein 2
BG086164						Slc12a5	Solute carrier family 12, member 5
BG084482						1110049F12Rik	RIKEN cDNA 1110049F12 gene
BG078874						1110061O04Rik	RIKEN cDNA 1110061O04 gene
AA410046						4921517N04Rik	RIKEN cDNA 4921517N04 gene
BG068366						4932414N04Rik	RIKEN cDNA 4932414N04 gene
BG079190						9430057O19Rik	RIKEN cDNA 9430057O19 gene
AU014878						9530053H05Rik	RIKEN cDNA 9530053H05 gene

C78625		Abpe	Androgen binding protein epsilon
BG067718		Acacb	Acetyl-Coenzyme A carboxylase beta
BG065605		Acp1	Acid phosphatase 1, soluble
BG065926		Adnp	Activity-dependent neuroprotective protein
BG065924		Akap2	A kinase (PRKA) anchor protein 2
BQ550902		Arf4	ADP-ribosylation factor 4
BG064531		Arl6ip5	ADP-ribosylation factor-like 6 interacting protein 5
BG082495		Asl	Argininosuccinate lyase
BG065913		BC021395	CDNA sequence BC021395
BG066972		Birc2	Baculoviral IAP repeat-containing 2
BQ550885		Btaf1	BTAF1 RNA polymerase II, B-TFIID transcription factor-associated
BG079699		Cct4	Chaperonin subunit 4 (delta)
BG065916		Cdc14a	CDC14 cell division cycle 14 homolog A ( <i>S. cerevisiae</i> )
BG065925		Clasp2	CLIP associating protein 2
BG068414		Col25a1	Procollagen, type XXV, alpha 1
BG078879		Cox4i1	Cytochrome c oxidase subunit IV isoform 1
BG065918		Ctnna1	Catenin (cadherin associated protein), alpha 1
AA408369		Cubn	Cubilin (intrinsic factor-cobalamin receptor)
BG069391		D10Wsu102e	DNA segment, Chr 10, Wayne State University 102, expressed
AA407681		D17Wsu92e	DNA segment, Chr 17, Wayne State University 92, expressed
BG070630		D630040G17Rik	RIKEN cDNA D630040G17 gene
BG068420		D8Ertd457e	DNA segment, Chr 8, ERATO Doi 457, expressed
BG069402		Ddef2	Development and differentiation enhancing factor 2
BG066942		Dnmt3b	DNA methyltransferase 3B
BG078883		Eif2b5	Eukaryotic translation initiation factor 2B, subunit 5 epsilon
BG066167		Eif4enif1	Eukaryotic translation initiation factor 4E nuclear import factor 1
BQ550267		Ep400	E1A binding protein p400
BG069525		Ercc4	Excision repair cross-complementing complementation group 4
BG063061		Ermap	Erythroblast membrane-associated protein
BG065915		Etv6	Ets variant gene 6 (TEL oncogene)
BG074610		Glb1	Galactosidase, beta 1
BG079049		Heatr2	HEAT repeat containing 2
BG083210		Ift20	Intraflagellar transport 20 homolog ( <i>Chlamydomonas</i> )
BG082154		Il4	Interleukin 4
BG087223		Itga3	Integrin alpha 3
C77408		Krt8	Keratin 8
C79740		Lace1	Lactation elevated 1

BQ550722		Las1l	LAS1-like ( <i>S. cerevisiae</i> )
C78577		Lct	Lactase
C77316		Lima1	LIM domain and actin binding 1
AW544994		Limk1	LIM-domain containing, protein kinase
BG069375		Lin7c	Lin-7 homolog C ( <i>C. elegans</i> )
BG066247		Lmo7	LIM domain only 7
BG063022		Lyn	Yamaguchi sarcoma viral (v-yes-1) oncogene homolog
BG077319		Lzts2	Leucine zipper, putative tumor suppressor 2
BG078870		Mkrn1	Makorin, ring finger protein, 1
BG077638		Mrpl19	Mitochondrial ribosomal protein L19
BG066667		Mtap4	Microtubule-associated protein 4
C77431		Mterfd2	MTERF domain containing 2
BG065826		Nek2	NIMA (never in mitosis gene a)-related expressed kinase 2
BG071293		Nhlrc2	NHL repeat containing 2
AU014844		Ogdh	Oxoglutarate dehydrogenase (lipoamide)
BG072344		Orc1l	Origin recognition complex, subunit 1-like ( <i>S.cereviaiae</i> )
AU041088		Pdlim1	PDZ and LIM domain 1 (elfin)
BG078872		Pfkfb2	6-phosphofructo-2-kinase/fructose-2,6-biphosphatase 2
BG079475		Pik4ca	Phosphatidylinositol 4-kinase, catalytic, alpha polypeptide
BG074626		Prkg1	Protein kinase, cGMP-dependent, type I
BG066674		Prune	Prune homolog ( <i>Drosophila</i> )
BG066621		Pttg1ip	Pituitary tumor-transforming 1 interacting protein
BG066306		Ranbp9	RAN binding protein 9
BG082817		Rb1	Retinoblastoma 1
BG082484		Rgs12	Regulator of G-protein signaling 12
AU040596		Rgs3	Regulator of G-protein signaling 3
BG063650		Rnf14	Ring finger protein 14
BG069143		Rpl23a	Ribosomal protein L23a
BG071958		Rpl7l1	Ribosomal protein L7-like 1
BG076676		Rps2	Ribosomal protein S2
BG066757		Sav1	Salvador homolog 1 ( <i>Drosophila</i> )
BG081064		Secisbp2	SECIS binding protein 2
BG078882		Serpinb6c	Serine (or cysteine) peptidase inhibitor, clade B, member 6c
BG066686		Sfxn2	Sideroflexin 2
C78620		Sgta	Small glutamine-rich tetratricopeptide repeat (TPR)-containing, alpha
BG073944		Slc24a3	Solute carrier family 24 , member 3
BG069386		Slco4c1	Solute carrier organic anion transporter family, member 4C1

BG083050		Snap23	Synaptosomal-associated protein 23
BG070178		Snrpc	U1 small nuclear ribonucleoprotein C
BG066685		Tanc1	Tetratricopeptide repeat, ankyrin repeat and coiled-coil containing 1
BG081408		Tanc2	Tetratricopeptide repeat, ankyrin repeat and coiled-coil containing 2
BG075092		Tbc1d8	TBC1 domain family, member 8
BG066250		Tbx20	T-box 20
BG066559		Tnks1bp1	Tankyrase 1 binding protein 1
BG079172		Top2a	Topoisomerase (DNA) II alpha
BG087355		Tspan31	Tetraspanin 31
BG069398		Ttc7b	Tetratricopeptide repeat domain 7B
BG066560		Tubgcp5	Tubulin, gamma complex associated protein 5
BG079504		Tug1	Taurine upregulated gene 1
BG077259		Ubxd1	UBX domain containing 1
BG066789		Upf3b	UPF3 regulator of nonsense transcripts homolog B (yeast)
BG079187		Vnn1	Vanin 1
BG076940		Wdr3	WD repeat domain 3
BQ551652		Zc3h7a	Zinc finger CCCH type containing 7 A
BG087501		Zcrb1	Zinc finger CCHC-type and RNA binding motif 1
AU016199		Zfand3	Zinc finger, AN1-type domain 3
BG066277		Zfp213	Zinc finger protein 213
BG068749		Zfp53	Zinc finger protein 53
BG066653		Zw10	ZW10 homolog (Drosophila), centromere/kinetochore protein
AU043706		EST	
AW538289		EST	
AW539579		EST	
BG063085		EST	
BG063888		EST	Transcribed locus
BG063926		EST	
BG064673		EST	
BG065585		EST	
BG065597		EST	Transcribed locus
BG065827		EST	Transcribed locus
BG065886		EST	
BG065888		EST	
BG065894		EST	
BG065917		EST	
BG065927		EST	

BG065928		EST	
BG065957		EST	
BG066273		EST	
BG066278		EST	
BG066288		EST	
BG066633		EST	
BG066668		EST	
BG066678		EST	weakly similar to XP_912058.1 hypothetical protein XP_906965
BG066964		EST	
BG067603		EST	
BG067898		EST	
BG067995		EST	Transcribed locus
BG068090		EST	
BG068410		EST	
BG068421		EST	
BG069363		EST	
BG070250		EST	
BG070572		EST	
BG070583		EST	
BG070587		EST	
BG070633		EST	Transcribed locus
BG071355		EST	
BG071603		EST	
BG071636		EST	
BG074900		EST	
BG076724		EST	
BG076725		EST	
BG076733		EST	
BG077241		EST	
BG079181		EST	
BQ550923		EST	
BQ552246		EST	
BQ552254		EST	
C79706		EST	
C79832		EST	
C85807		EST	
BG070497		1700055N04Rik RIKEN cDNA 1700055N04 gene	

BG076134		9330120H11Rik	RIKEN cDNA 9330120H11 gene
BG066705		Ak3l1	Adenylate kinase 3 alpha-like 1
C76512		E2f3	E2F transcription factor 3
C76805		Myl4	Myosin, light polypeptide 4
BG087703		Rgl2	Ral guanine nucleotide dissociation stimulator-like 2
BG064649		Rnps1	Ribonucleic acid binding protein S1
BG075206		Rpl6	Ribosomal protein L6
BG086119		Smarca5	SWI/SNF related actin dependent regulator of chromatin member 5
BG085591		Spop	Speckle-type POZ protein
BG070720		Trmt11	TRNA methyltransferase 11 homolog ( <i>S. cerevisiae</i> )
BG071061		Ubp1	Upstream binding protein 1
AU015835		EST	
BG064980		EST	
BG072741		EST	CDNA, clone:Y2G0125B10
AW552799		2310065K24Rik	RIKEN cDNA 2310065K24 gene
BG086078		2900057D21Rik	RIKEN cDNA 2900057D21 gene
BG083257		4933426K21Rik	RIKEN cDNA 4933426K21 gene
BG064640		9230105E10Rik	RIKEN cDNA 9230105E10 gene
BG066196		C78409	Expressed sequence C78409
BG080183		Cd63	Cd63 antigen
BG076465		Cdk7	Cyclin-dependent kinase 7
BG073002		Cnbp	Cellular nucleic acid binding protein
BG085434		Crebzf	CREB/ATF bZIP transcription factor
BG085203		Derl2	Der1-like domain family, member 2
BG067113		Dpp7	Dipeptidylpeptidase 7
BG068310		Ednrb	Endothelin receptor type B
BG085518		Eraf	Erythroid associated factor
BG073045		Hbb-b1	Hemoglobin, beta adult major chain
BG085435		Impact	Imprinted and ancient
AW547817		Kit	Kit oncogene
BG064652		Maea	Macrophage erythroblast attacher
BG074668		Mcm2	Minichromosome maintenance deficient 2 mitotin ( <i>S. cerevisiae</i> )
BG072673		Nfatc4	Nuclear factor of activated T-cells calcineurin-dependent 4
AW545298		Nubp2	Nucleotide binding protein 2
BG073000		Pcdhgc3	Protocadherin gamma subfamily C, 3
BG080166		Rabl3	RAB, member of RAS oncogene family-like 3
BG085760		Rgs19	Regulator of G-protein signaling 19

BG064641		Rpp14	Ribonuclease P 14 subunit (human)
BG085460		Rras2	Related RAS viral (r-ras) oncogene homolog 2
BG072662		Runx1	Runt related transcription factor 1
BG083409		S100a6	S100 calcium binding protein A6 (calcyclin)
BG085499		Sat1	Spermidine/spermine N1-acetyl transferase 1
BG068299		Slc7a8	Solute carrier family 7, member 8
BG068288		Slco1b2	Solute carrier organic anion transporter family, member 1b2
BG063419		Smap1	Stromal membrane-associated protein 1
BG084201		St8sia2	ST8 alpha-N-acetyl-neuraminate alpha-2,8-sialyltransferase 2
BG073155		Thap2	THAP domain containing, apoptosis associated protein 2
BG086085		Thg1l	TRNA-histidine guanylyltransferase 1-like (S. cerevisiae)
BG085549		Trfp	Trf (TATA binding protein-related factor)-proximal protein homolog
BG063676		Trnt1	TRNA nucleotidyl transferase, CCA-adding, 1
BG073370		Ttc3	Tetratricopeptide repeat domain 3
BG076486		U2af1l4	U2 small nuclear RNA auxiliary factor 1-like 4
BG086421		Usmg5	Upregulated during skeletal muscle growth 5
BG065982		Vav2	Vav2 oncogene
BG072642		Zfp508	Zinc finger protein 508
BG075241		Zfp521	Zinc finger protein 521
AW557547		EST	
BG063735		EST	
BG064580		EST	
BG067928		EST	
BG068316		EST	
BG072970		EST	
BG073099		EST	
BG073183		EST	
BG074614		EST	Transcribed locus
BG074801		EST	
BG075264		EST	
BG075277		EST	
BG075278		EST	
BG078136		EST	
BG081202		EST	
BG087986		EST	
BG066318		1500011H22Rik	RIKEN cDNA 1500011H22 gene
AU040419		4933439F18Rik	RIKEN cDNA 4933439F18 gene

BG087608		9130011J15Rik	RIKEN cDNA 9130011J15 gene
BG077733		Atp1b1	ATPase, Na+/K+ transporting, beta 1 polypeptide
BG081377		Atp6v1a	ATPase, H+ transporting, lysosomal V1 subunit A
BG072887		Btbd9	BTB (POZ) domain containing 9
BG066233		C78532	Expressed sequence C78532
BG086283		Eif4e2	Eukaryotic translation initiation factor 4E member 2
BG088952		Gstm1	Glutathione S-transferase, mu 1
BG087638		H19	H19 fetal liver mRNA
BQ552620		Jag1	Jagged 1
BG086291		LOC245350	Similar to ubiquitin-conjugating enzyme E2Q (putative) 2
BG085336		Matn2	Matrilin 2
BG075177		Myst3	MYST histone acetyltransferase (monocytic leukemia) 3
BG078945		Nsf	N-ethylmaleimide sensitive fusion protein
BG087474		Pcolce	Procollagen C-endopeptidase enhancer protein
BG070942		Poldip3	Polymerase (DNA-directed), delta interacting protein 3
BG072553		Rab11fip1	RAB11 family interacting protein 1 (class I)
BG075169		Scoc	Short coiled-coil protein
BG081012		Snrbp2	U2 small nuclear ribonucleoprotein B
BG085672		Txnl5	Thioredoxin-like 5
BG075178		Ubr1	Ubiquitin protein ligase E3 component n-recognition 1
BG063694		Vcl	Vinculin
AW544835		EST	
BG064292		EST	
BG074841		EST	
BG077653		EST	
BG084098		EST	
BQ550064		EST	
BG068253		3110031B13Rik	RIKEN cDNA 3110031B13 gene
BG077620		Abcb6	ATP-binding cassette, sub-family B (MDR/TAP), member 6
BG069344		Acsl4	Acyl-CoA synthetase long-chain family member 4
BG071216		Adc	Arginine decarboxylase
AW536428		Blmh	Bleomycin hydrolase
C87415		Chchd2	Coiled-coil-helix-coiled-coil-helix domain containing 2
BG069365		Dph3	DPH3 homolog (KT111, <i>S. cerevisiae</i> )
BG063112		Gemin5	Gem (nuclear organelle) associated protein 5
BG067706		Gpt2	Glutamic pyruvate transaminase (alanine aminotransferase) 2
BG086684		Sh2d4a	SH2 domain containing 4A

BG082669		Snap29	Synaptosomal-associated protein
BG064925		Stx3	Syntaxin 3
BG074161		Tmem123	Transmembrane protein 123
C79533		EST	
BG066697		Hn1	Hematological and neurological expressed sequence 1
BG067211		Cald1	Caldesmon 1
BG081778		Dock4	Dedicator of cytokinesis 4
BG067668		Emr4	EGF-like module containing, hormone receptor-like sequence 4
BG067311		Fbxw17	F-box and WD-40 domain protein 17
BG067296		Fut10	Fucosyltransferase 10
BG068682		Hs3st5	Heparan sulfate (glucosamine) 3-O-sulfotransferase 5
BG087199		Jtv1	JTV1 gene
BG079912		Mllt3	Myeloid/lymphoid translocation to 3 homolog (Drosophila)
BG066947		Ndp52	Nuclear domain 10 protein 52
BG067252		Nf1	Neurofibromatosis 1
BG067626		Ptgfrn	Prostaglandin F2 receptor negative regulator
BG074312		Ptprs	Protein tyrosine phosphatase, receptor type, S
AW553963		Rbm19	RNA binding motif protein 19
BG080375		Sars2	Seryl-aminoacyl-tRNA synthetase 2
BG081031		Smox	Spermine oxidase
BG067974		Thsd7b	Thrombospondin, type I, domain containing 7B
BG080366		Tieg3	TGFB inducible early growth response 3
BG067300		Tinag	Tubulointerstitial nephritis antigen
BG066958		EST	
BG066978		EST	
BG067243		EST	
BG067651		EST	
BG068752		EST	
BG074322		EST	Transcribed locus
BG076211		EST	Transcribed locus
C87682		EST	
BG069658		Ccdc65	Coiled-coil domain containing 65
BG069669		Cep27	Centrosomal protein 27
BG072092		Gnai2	Guanine nucleotide binding protein, alpha inhibiting 2
BG069607		Klf5	Kruppel-like factor 5
BG072106		Nfatc3	Nuclear factor of activated T-cells calcineurin-dependent 3
AU042865		Nfia	Nuclear factor I/A

BG084586		Rasd2	RASD family, member 2
BG070495		EST	
BI076458		EST	
BG071239	1300007C21Rik	RIKEN cDNA 1300007C21 gene	
BG071422	2410003P15Rik	RIKEN cDNA 2410003P15 gene	
BG069482	6330409N04Rik	RIKEN cDNA 6330409N04 gene	
BG067132	A330019N05Rik	RIKEN cDNA A330019N05 gene	
BG065410	Adipor1	Adiponectin receptor 1	
BG073281	Ankrd12	Ankyrin repeat domain 12	
BG079901	Arl14	ADP-ribosylation factor-like 14	
BG064661	Basp1	Brain abundant, membrane attached signal protein 1	
BG086840	Btf3l4	Basic transcription factor 3-like 4	
BG063697	Cbfa2t2	Core-binding factor, runt domain, alpha subunit 2, translocated to, 2	
BG071679	Ccdc86	Coiled-coil domain containing 86	
BG066811	Ccdc96	Coiled-coil domain containing 96	
AU045206	Cobl	Cordon-bleu	
BG070570	D030022P06Rik	RIKEN cDNA D030022P06 gene	
BG071270	D18Ert653e	DNA segment, Chr 18, ERATO Doi 653, expressed	
C77319	Fanca	Fanconi anemia, complementation group A	
BG065048	Ghdc	GH3 domain containing	
BG071378	Gstcd	Glutathione S-transferase, C-terminal domain containing	
BG069255	Hira	Histone cell cycle regulation defective homolog A ( <i>S. cerevisiae</i> )	
BG070896	Jam2	Junction adhesion molecule 2	
C87853	Kns2	Kinesin 2	
BG071666	Ldb2	LIM domain binding 2	
AU041108	Map2k1	Mitogen activated protein kinase kinase 1	
BG070504	Map4k4	Mitogen-activated protein kinase kinase kinase kinase 4	
BG062982	Mrps7	Mitochondrial ribosomal protein S7	
BG067927	Mtf1	Metal response element binding transcription factor 1	
BG076562	Ndufb7	NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 7	
AA409376	Nfyα	Nuclear transcription factor-Y alpha	
BG063222	Pecam1	Platelet/endothelial cell adhesion molecule 1	
BG069085	Pex2	Peroxin 2	
BG063170	Phkb	Phosphorylase kinase beta	
BG064672	Procr	Protein C receptor, endothelial	
BG079933	Rnf8	Ring finger protein 8	
BG063372	Safb2	Scaffold attachment factor B2	

BG071387		Slc39a8	Solute carrier family 39 (metal ion transporter), member 8
AU040617		Ss18	Synovial sarcoma translocation, Chromosome 18
BG068391		Sugt1	SGT1, suppressor of G2 allele of SKP1 ( <i>S. cerevisiae</i> )
BG082016		Taf7	TAF7 RNA polymerase II TATA box binding protein-associated factor
BG071231		Tmem183a	Transmembrane protein 183A
BG077934		Tpm4	Tropomyosin 4
AU019171		Ttpa	Tocopherol (alpha) transfer protein
BG063080		Xrn2	5'-3' exoribonuclease 2
BG066091		EST	
BG066734		EST	
BG067939		EST	
BG068312		EST	
BG069001		EST	
BG069013		EST	
BG069027		EST	Transcribed locus
BG071184		EST	
BG071413		EST	
BG073835		EST	
BG084304		EST	
BG087407		EST	
BQ550895		EST	Transcribed locus
BG064116		EST	Membrane-associated ring finger (C3HC4) 7
BG080498		1700124P09Rik	RIKEN cDNA 1700124P09 gene
BG067245		2210009G21Rik	RIKEN cDNA 2210009G21 gene
BG076408		2610206B13Rik	RIKEN cDNA 2610206B13 gene
BG064481		2810403A07Rik	RIKEN cDNA 2810403A07 gene
BG076132		Abhd14a	Abhydrolase domain containing 14A
BG077302		Atf7ip	Activating transcription factor 7 interacting protein
BG067472		Banp	Btg3 associated nuclear protein
BG067486		BC004728	CDNA sequence BC004728
BG067471		BC063749	CDNA sequence BC063749
BG069214		Birc3	Baculoviral IAP repeat-containing 3
BG067622		C86942	Expressed sequence C86942
BG067632		Ccdc32	Coiled-coil domain containing 32
BG072648		Cript	Cysteine-rich PDZ-binding protein
BG067477		D1Ert448e	DNA segment, Chr 1, ERATO Doi 448, expressed
BG086416		Eif4g3	Eukaryotic translation initiation factor 4 gamma, 3

BG067419		Gadd45g	Growth arrest and DNA-damage-inducible 45 gamma
AW551017		Gprasp1	G protein-coupled receptor associated sorting protein 1
BG067430		H3f3b	H3 histone, family 3B
BG072751		Hdac11	Histone deacetylase 11
BG067483		Hddc3	HD domain containing 3
BG074924		Itfg1	Integrin alpha FG-GAP repeat containing 1
BG067445		Kpna6	Karyopherin (importin) alpha 6
BG074351		Lmcd1	LIM and cysteine-rich domains 1
BG088292		Mapk8ip3	Mitogen-activated protein kinase 8 interacting protein 3
BG067469		Mef2a	Myocyte enhancer factor 2A
BG075365		Msl31	Male-specific lethal-3 homolog 1 (Drosophila)
BG066971		Nudt4	Nudix (nucleoside diphosphate linked moiety X)-type motif 4
BG080492		Oas1c	2'-5' oligoadenylate synthetase 1C
BG080500		Ovgp1	Oviductal glycoprotein 1
BG080549		Plac9	Placenta specific 9
BG077413		Pnpo	Pyridoxine 5'-phosphate oxidase
BG067409		Rapgef2	Rap guanine nucleotide exchange factor (GEF) 2
AW539814		Rbm26	RNA binding motif protein 26
BG076087		Rpl21	Ribosomal protein L21
BG088213		Rps15	Ribosomal protein S15
AW539298		Sars	Seryl-aminoacyl-tRNA synthetase
AW539785		Sh3bp5l	SH3 binding domain protein 5 like
BG075644		Smad3	MAD homolog 3 (Drosophila)
BG067447		Tada1l	Transcriptional adaptor 1 (HFI1 homolog, yeast) like
BG075809		Tbl1x	Transducin (beta)-like 1 X-linked
BG075419		Tmem55b	Transmembrane protein 55b
BG064433		Tomm34	Translocase of outer mitochondrial membrane 34
BG086976		Tut1	Terminal uridylyl transferase 1, U6 snRNA-specific
BG074925		Ube2j1	Ubiquitin-conjugating enzyme E2, J1
BG088167		Vars2l	Valyl-tRNA synthetase 2-like
AW552886		Vcp	Valosin containing protein
AW542365		Vil2	Villin 2
BG075633		Wdr47	WD repeat domain 47
BG075330		Wdr62	WD repeat domain 62
BG075683		Ywhaq	Tyrosine 3-monooxygenaseactivation protein theta
AW549478	EST		
AW553271	EST		

AW555035		EST	
AW555711		EST	
BG067398		EST	
BG067418		EST	Transcribed locus
BG067431		EST	
BG067459		EST	
BG067470		EST	strongly similar to XP_342893.2 similar to KIAA0467 protein
BG067473		EST	
BG067474		EST	clone:G730002L02 product:unclassifiable, full insert sequence
BG067476		EST	
BG067494		EST	
BG067575		EST	
BG067620		EST	
BG067621		EST	
BG069712		EST	
BG074316		EST	
BG076798		EST	
BG080198		EST	
BG080525		EST	
BG080543		EST	
BI076469		EST	
BI076614		EST	
BI076812		EST	
BQ550570		EST	
BQ550698		EST	
C85257		EST	

**TableS4a-16M. CR responsive gene lists of 16M mouse CNS.**

**Notes.** Cor: cortex; Hip: hippocampus; Cer: cerebellum; Str: striatum; SC: spinal cord.

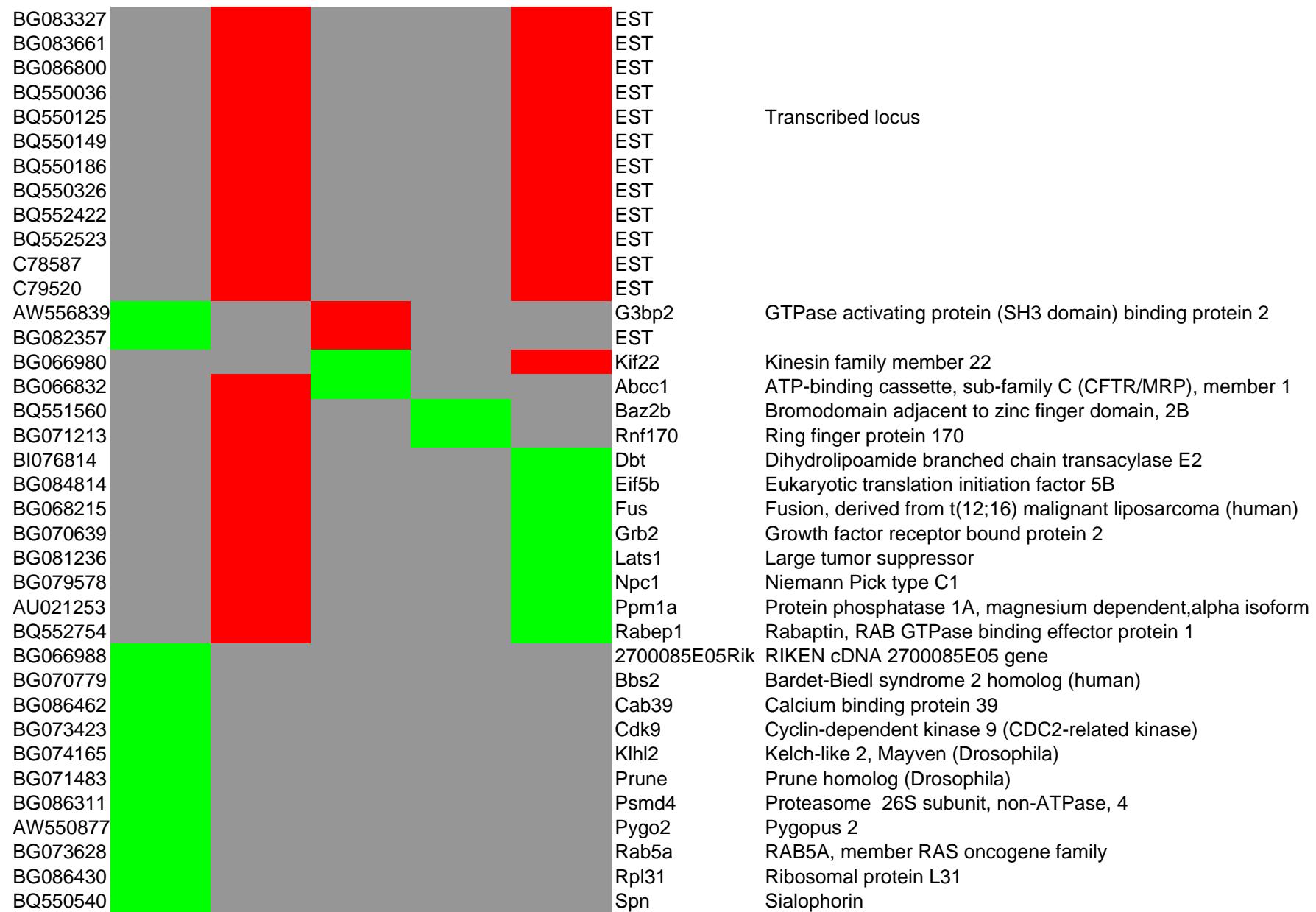


Acc	Cor-16-cr	Hip-16-cr	Cer-16-cr	Str-16-cr	SC-16-cr	Symbol	Name
C86087						0610012H03Rik	RIKEN cDNA 0610012H03 gene
BG063365						Cxcr4	Chemokine (C-X-C motif) receptor 4
BG078505						Snta1	Syntrophin, acidic 1
AW548741						EST	
BG069856						Ccnc	Cyclin C
C85066						4933427D06Rik	RIKEN cDNA 4933427D06 gene
BG067190						Ankrd6	Ankyrin repeat domain 6
BG085595						Bmp1	Bone morphogenetic protein 1
BG064962						Purb	Purine rich element binding protein B
BG073370						Ttc3	Tetratricopeptide repeat domain 3
BG077072						Actb	Actin, beta, cytoplasmic
BG078597						Arl6ip1	ADP-ribosylation factor-like 6 interacting protein 1
BG065313						Atp6v1e1	VATPase, H <sup>+</sup> transporting, lysosomal V1 subunit E1
BG063697						Cbfa2t2	Core-binding factor, runt domain translocated to 2
AU021534						Fen1	Flap structure specific endonuclease 1
BG063707						Lmln	Leishmanolysin-like (metallopeptidase M8 family)
BG064569						Ncbp2	Nuclear cap binding protein subunit 2
BG078157						Sfrs3	Splicing factor, arginine/serine-rich 3 (SRp20)
BG086829						Sypl	Synaptophysin-like protein
BG063666						Tex19	Testis expressed gene 19
AW538365						EST	
BG080382						5730427N09Rik	RIKEN cDNA 5730427N09 gene
BG067365						A430060F13Rik	RIKEN cDNA A430060F13 gene
BG067334						Abr	Active BCR-related gene
BG063733						Cs	Citrate synthase
BG067344						Eya1	Eyes absent 1 homolog (Drosophila)
BG077082						Fbxl5	F-box and leucine-rich repeat protein 5
BG078495						Smarce1	SWI/SNF, regulator of chromatin member 1

BG064553			Thumpd1	THUMP domain containing 1
BG076581			Tmed2	Transmembrane emp24 domain trafficking protein 2
BG067312			Tnfsf13b	Tumor necrosis factor (ligand) superfamily, member 13b
BG064591			Tomm70a	Translocase of outer mitochondrial membrane 70 homolog A
BG063028			Wipf2	WAS/WASL interacting protein family, member 2
AA409509			EST	
AU024393			EST	
BG063085			EST	
BG077145			EST	
BG063241			EST	
BG072287		Cenpk	Centromere protein K	
C85807		EST		
AU015471	2610529C04Rik	RIKEN cDNA 2610529C04 gene		
BG074649	A530089I17Rik	RIKEN cDNA A530089I17 gene		
BG068370	Clasp2	CLIP associating protein 2		
BG079703	Cstf3	Cleavage stimulation factor, 3' pre-RNA, subunit 3		
BG072223	Dst	Dystonin		
BG071581	Dtl	Denticleless homolog (Drosophila)		
BG065623	Etnk1	Ethanolamine kinase 1		
BG065612	Lrrk2	Leucine-rich repeat kinase 2		
BG085736	Pias1	Protein inhibitor of activated STAT 1		
BG066098	EST			
AU014878	9530053H05Rik	RIKEN cDNA 9530053H05 gene		
BG071181	Shroom3	Shroom family member 3		
BG066800	Thap2	THAP domain containing, apoptosis associated protein 2		
BG069655	Xrcc1	X-ray repair complementing defective repair in hamster cells 1		
BG065827	EST	Transcribed locus		
BG065989	EST			
BG066123	EST			
BG066596	EST			
BG064439	Nsdhl	NAD(P) dependent steroid dehydrogenase-like		
BQ550162	2510006D16Rik	RIKEN cDNA 2510006D16 gene		
BG066635	2900009I07Rik	RIKEN cDNA 2900009I07 gene		
BG078323	5730536A07Rik	RIKEN cDNA 5730536A07 gene		
C78625	Abpe	Androgen binding protein epsilon		
C76711	Aco2	Aconitase 2, mitochondrial		
BG065093	Agtrap	Angiotensin II, type I receptor-associated protein		

BQ550170				Ap3b1	Adaptor-related protein complex 3, beta 1 subunit
BQ550902				Arf4	ADP-ribosylation factor 4
BG070091				Arih1	Ariadne ubiquitin-conjugating enzyme E2 binding protein 1
BG065780				Atp6v0a2	ATPase, H <sup>+</sup> transporting, lysosomal V0 subunit A2
BG066708				AU020772	Expressed sequence AU020772
BG079668				Baz1a	Bromodomain adjacent to zinc finger domain 1A
BG083308				BC013481	CDNA sequence BC013481
AU043350				Bub3	Budding uninhibited by benzimidazoles 3 homolog
BG075437				C80913	Expressed sequence C80913
BG065916				Cdc14a	CDC14 cell division cycle 14 homolog A ( <i>S. cerevisiae</i> )
BG069719				Celsr1	Cadherin EGF LAG seven-pass G-type receptor 1
BQ550384				Chd4	Chromodomain helicase DNA binding protein 4
BG072062				Chordc1	Cysteine and histidine-rich domain-, zinc-binding protein 1
BG084126				Ctdsp1	CTD small phosphatase 1
BG066339				D12Ertd216e	DNA segment, Chr 12, ERATO Doi 216, expressed
BG066604				D3Ertd254e	DNA segment, Chr 3, ERATO Doi 254, expressed
BG065769				D5Ertd135e	DNA segment, Chr 5, ERATO Doi 135, expressed
BG075447				Denr	Density-regulated protein
BQ550786				Eif4g1	Eukaryotic translation initiation factor 4, gamma 1
BQ550168				Fnip1	Folliculin interacting protein 1
BG065768				Foxo3a	Forkhead box O3a
BQ551226				Hbxip	Hepatitis B virus x interacting protein
BG083097				Hcfc1	Host cell factor C1
BG072073				Ift122	Intraflagellar transport 122 homolog ( <i>Chlamydomonas</i> )
BG070889				Ilf3	Interleukin enhancer binding factor 3
BG072272				LOC629750	ubiquitin A-52 residue ribosomal protein fusion product 1
BQ552466				Mapkap1	Mitogen-activated protein kinase associated protein 1
BG067912				Mrg1	Myeloid ecotropic viral integration site-related gene 1
BQ552525				Mrpl45	Mitochondrial ribosomal protein L45
BG070274				Nlk	Nemo like kinase
AU044227				Paf1	Paf1, RNA polymerase II associated factor, homolog
BG069047				Pam	Peptidylglycine alpha-amidating monooxygenase
BG069649				Ppp4r2	Protein phosphatase 4, regulatory subunit 2
BG065524				Prei3	Preimplantation protein 3
BG079293				Psma3	Proteasome (prosome, macropain) subunit, alpha type 3
BQ550154				Psma7	Proteasome (prosome, macropain) subunit, alpha type 7
C76941				Ranbp5	RAN binding protein 5

BG074676		Rnf12	Ring finger protein 12
BG072412		Sdk1	Sidekick homolog 1 (chicken)
BG066516		Smtn	Smoothelin
BG079034		Sphk2	Sphingosine kinase 2
BG069945		Stag2	Stromal antigen 2
BQ552335		Stxbp4	Syntaxin binding protein 4
BQ550610		Tmco1	Transmembrane and coiled-coil domains 1
BQ551834		Tshz2	Teashirt zinc finger family member 2
BG083613		Usp1	Ubiquitin specific peptidase 1
BQ551195		Ypel1	Yippee-like 1 ( <i>Drosophila</i> )
BQ550996		Ywhaq	Tyrosine 3-monoxygenase activation protein, theta
BG066683		Zfp292	Zinc finger protein 292
BG062993		EST	
BG063398		EST	clone:B020036G17 product:unclassifiable
BG063492		EST	
BG064384		EST	
BG064695		EST	
BG065779		EST	
BG066008		EST	
BG066122		EST	
BG066371		EST	
BG066494		EST	
BG066720		EST	
BG066821		EST	
BG067146		EST	
BG068191		EST	
BG068598		EST	
BG069298		EST	
BG069377		EST	
BG070142		EST	
BG071272		EST	
BG071371		EST	
BG071862		EST	
BG071206		EST	
BG075658		EST	
BG076121		EST	
BG079181		EST	Transcribed locus



BG073446		Th11	TH1-like homolog (Drosophila)
BG074132		Ube1l2	Ubiquitin-activating enzyme E1-like 2
AW551043		Zbtb5	Zinc finger and BTB domain containing 5
BG064580		EST	
BG068443		EST	
BG068646		EST	
BG076521		EST	
BG072966		A530054K11Rik	RIKEN cDNA A530054K11 gene
BG084818		A930015D03Rik	RIKEN cDNA A930015D03 gene
BG075232		Aox3	Aldehyde oxidase 3
BG072984		Cltc	Clathrin, heavy polypeptide (Hc)
BG069355		E2f7	E2F transcription factor 7
BG072869		Emx2	Empty spiracles homolog 2 (Drosophila)
C88347		Fbxl17	F-box and leucine-rich repeat protein 17
BG066226		Gnl2	Guanine nucleotide binding protein-like 2 (nucleolar)
BG086162		Meis1	Myeloid ecotropic viral integration site 1
BG068193		Ndfip1	Nedd4 family interacting protein 1
AU022521		Nsun3	NOL1/NOP2/Sun domain family 3
BG084681		Rplp2	Ribosomal protein, large P2
BG063524		Slc20a2	Solute carrier family 20, member 2
BG076120		Smurf1	SMAD specific E3 ubiquitin protein ligase 1
BG066876		Tgif2	TGFB-induced factor 2
BG066180		Ttn	Titin
BG065129		EST	
BG065624		EST	
BG066670		EST	
BG068148		EST	
BG070566		EST	similar to ubiquitin specific protease 34
BG071636		EST	
BG072070		EST	
BG072236		EST	moderately similar to NP_001029309.1 nuclear body protein
BG072975		EST	
BG073953		EST	
C80706		EST	
BG063535		1810008A14Rik	RIKEN cDNA 1810008A14 gene
BG067755		2610042O14Rik	RIKEN cDNA 2610042O14 gene
BG077031		4632428N05Rik	RIKEN cDNA 4632428N05 gene

BG074315		4930566A11Rik	RIKEN cDNA 4930566A11 gene
BG076093		4933425L03Rik	RIKEN cDNA 4933425L03 gene
BG076997		4933439C20Rik	RIKEN cDNA 4933439C20 gene
BG064168		5830416A07Rik	RIKEN cDNA 5830416A07 gene
BG085932		6330577E15Rik	RIKEN cDNA 6330577E15 gene
BG067084		6430524H05Rik	RIKEN cDNA 6430524H05 gene
BG076134		9330120H11Rik	RIKEN cDNA 9330120H11 gene
BG078031		Abcf1	ATP-binding cassette, sub-family F (GCN20), member 1
BG068560		Acacb	Acetyl-Coenzyme A carboxylase beta
BG064929		Aga	Aspartylglucosaminidase
BG076190		AI462493	Expressed sequence AI462493
BG079989		Alb1	Albumin 1
BG064654		Alg5	Asparagine-linked glycosylation 5 homolog
BG078088		Alg9	Asparagine-linked glycosylation 9 homolog
BG067799		Angpt2	Angiopoietin 2
BG067528		Angpt4	Angiopoietin 4
AW545312		Apoa1bp	Apolipoprotein A-I binding protein
BG088532		Arl8b	ADP-ribosylation factor-like 8B
AW552880		Arsg	Arylsulfatase G
BG080320		Atg5	Autophagy-related 5 (yeast)
AW539206		Atg7	Autophagy-related 7 (yeast)
AW539306		Atp13a1	ATPase type 13A1
BG088873		Atp5e	ATP synthase, mitochondrial F1 complex, epsilon subunit
AA408469		AU022870	Expressed sequence AU022870
BG065113		Bcat1	Branched chain aminotransferase 1, cytosolic
BG064818		Bmp2k	BMP2 inducible kinase
BG067443		C86371	Expressed sequence C86371
BG064770		Cct5	Chaperonin subunit 5 (epsilon)
BG064644		Ceacam9	CEA-related cell adhesion molecule 9
BG077858		Chchd4	Coiled-coil-helix-coiled-coil-helix domain containing 4
BG064557		Cramp1l	Crm, cramped-like ( <i>Drosophila</i> )
BG063848		Csh1	Chorionic somatomammotropin hormone 1
BG067266		Csmd1	CUB and Sushi multiple domains 1
C85908		Cyp1b1	Cytochrome P450, family 1, subfamily b, polypeptide 1
BG075368		D10Bwg1364e	Chr 10, Brigham & Women's Genetics 1364 expressed
BG080329		Dcamkl2	Doublecortin and CaM kinase-like 2
BG064850		Diablo	Diablo homolog ( <i>Drosophila</i> )

BG078688		Dtnb	Dystrobrevin, beta
BG066834		E030041M21Rik	RIKEN cDNA E030041M21 gene
BG067562		E230022H04Rik	RIKEN cDNA E230022H04 gene
BG063729		EG433273	Predicted gene, EG433273
BG088888		Elmo2	Engulfment and cell motility 2, ced-12 homolog ( <i>C. elegans</i> )
BG064847		Emb	Embigin
BG088166		Entpd4	Ectonucleoside triphosphate diphosphohydrolase 4
BG085518		Eraf	Erythroid associated factor
BG063865		Errf1	ERBB receptor feedback inhibitor 1
C86775		Exoc1	Exocyst complex component 1
BG087964		Fkbp9	FK506 binding protein 9
BG080476		Folr4	Folate receptor 4 (delta)
BG087011		Gatm	Glycine amidinotransferase
BG067640		Gdf9	Growth differentiation factor 9
BG064771		Gnpda1	Glucosamine-6-phosphate deaminase 1
BG064747		Gpt1	Glutamic pyruvic transaminase 1, soluble
BG072757		Gspt1	G1 to S phase transition 1
BG070501		Gstm2	Glutathione S-transferase, mu 2
BG064676		Gtf2h4	General transcription factor II H, polypeptide 4
BG062947		H2afj	H2A histone family, member J
BG072751		Hdac11	Histone deacetylase 11
BG075868		Hebp1	Heme binding protein 1
AU020524		Hmgcs1	3-hydroxy-3-methylglutaryl-Coenzyme A synthase 1
BG064772		Hsp90aa1	Heat shock protein 90kDa alpha (cytosolic), class A member 1
BG080499		Hspbap1	Hspb associated protein 1
BG063830		Htf9c	Hpall tiny fragments locus 9c
BG078204		Ict1	Immature colon carcinoma transcript 1
BG085901		Ifitm2	Interferon induced transmembrane protein 2
BG075038		Igf2r	Insulin-like growth factor 2 receptor
BG086828		Ipo13	Importin 13
AW543967		Itfg2	Integrin alpha FG-GAP repeat containing 2
C87450		Kbtbd8	Kelch repeat and BTB (POZ) domain containing 8
BG064797		Ldha	Lactate dehydrogenase A
BG079450		Lima1	LIM domain and actin binding 1
BG080364		LOC632361	Similar to L-plastin (Lymphocyte cytosolic protein 1) (LCP-1)
BG064854		Lrp2	Low density lipoprotein receptor-related protein 2
BG072998		Lum	Lumican

BG077180		Map2k3	Mitogen activated protein kinase kinase 3
BG075357		Mcm6	Minichromosome maintenance deficient 6
BG067541		Mcoln2	Mucolipin 2
BG080755		Mef2d	Myocyte enhancer factor 2D
BG077972		Mical2	Microtubule associated monooxygenase,
BG077730		Mrpl38	Mitochondrial ribosomal protein L38
BG077482		Mtdh	Metadherin
BG073634		Mterfd3	MTERF domain containing 3
AW543748		Myo1c	Myosin IC
BG063881		Neu1	Neuraminidase 1
BG067465		Nlrp14	NLR family, pyrin domain containing 14
BG064905		Nol1	Nucleolar protein 1
BG067766		Nr1h2	Nuclear receptor subfamily 1, group H, member 2
BG074323		Nr2c2	Nuclear receptor subfamily 2, group C, member 2
BG076033		Nr3c2	Nuclear receptor subfamily 3, group C, member 2
BG064733		Nrbp1	Nuclear receptor binding protein 1
BG074139		Nsun4	NOL1/NOP2/Sun domain family, member 4
AW545298		Nubp2	Nucleotide binding protein 2
BG076212		Nup43	Nucleoporin 43
BG067274		Onecut1	One cut domain, family member 1
BG078151		Oxsr1	Oxidative-stress responsive 1
BG064819		Pa2g4	Proliferation-associated 2G4
AW543682		Panx1	Pannexin 1
BG063644		Papss1	3'-phosphoadenosine 5'-phosphosulfate synthase 1
BG080462		Pard3	Par-3 (partitioning defective 3) homolog (C. elegans)
BG067246		Pctk3	PCTAIRE-motif protein kinase 3
BG080838		Pde8a	Phosphodiesterase 8A
BG082933		Pdlim7	PDZ and LIM domain 7
AW557879		Pdzk1	PDZ domain containing 1
BG085578		Pes1	Pescadillo homolog 1, containing BRCT domain (zebrafish)
BG065238		Phf17	PHD finger protein 17
BG074157		Phip	Pleckstrin homology domain interacting protein
AW539318		Plf	Proliferin
AW544029		Plxnb2	Plexin B2
BG080374		Ppp2cb	Phosphatidic acid phosphatase type 2B
C75970		Pprc1	Protein phosphatase 2, catalytic subunit, beta isoform
BG076080			Peroxisome proliferative activated receptorgamma coactivator-1

BG066825		Pramel6	Preferentially expressed antigen in melanoma like 6
BG074189		Prim1	DNA primase, p49 subunit
BG064767		Prmt3	Protein arginine N-methyltransferase 3
BG064866		Prps1	Phosphoribosyl pyrophosphate synthetase 1
BG078023		Psmc2	Proteasome (prosome, macropain) 26S subunit, ATPase 2
BG080618		Pvr	Poliovirus receptor
BG088279		Rab3b	RAB3B, member RAS oncogene family
BG077349		Rbm28	RNA binding motif protein 28
BG076295		Rbm6	RNA binding motif protein 6
BG080756		Rin3	Ras and Rab interactor 3
BG078823		rp9	Retinitis pigmentosa 9 (human)
BG078679		Rpl30	Ribosomal protein L30
BG077851		Rpl41	Ribosomal protein L41
BG072822		Rpsa	Ribosomal protein SA
BG078138		Rrm2	Ribonucleotide reductase M2
BG064820		Sae1	SUMO1 activating enzyme subunit 1
BG064756		Sall4	Sal-like 4 (Drosophila)
BG085555		Sec23ip	Sec23 interacting protein
BG079624		Serpine2	Serine (or cysteine) peptidase inhibitor, clade E, member 2
BG080632		Sfmbt1	Scm-like with four mbt domains 1
BG088842		Sh3d19	SH3 domain protein D19
BG074293		Sh3tc2	SH3 domain and tetratricopeptide repeats 2
BG064126		Slc2a1	Solute carrier family 2 member 1
BG076188		Slc39a4	Solute carrier family 39 (zinc transporter), member 4
BG072739		Sox11	SRY-box containing gene 11
BG067720		Spfh2	SPFH domain family, member 2
BG074133		Spsb1	SplA/ryanodine receptor domain and SOCS box containing 1
BG064318		Srebf1	Sterol regulatory element binding factor 1
BG074052		Srfbp1	Serum response factor binding protein 1
BG080331		Star	Steroidogenic acute regulatory protein
BG080328		Stk11	Serine/threonine kinase 11
BG073409		Stmn1	Stathmin 1
BG076031		Sumo3	SMT3 suppressor of mif two 3 homolog 3 (yeast)
BG067810		Tanc2	Tetratricopeptide repeat and coiled-coil containing 2
BG088774		Tcfcp2l1	Transcription factor CP2-like 1
BG082196		Tiparp	TCDD-inducible poly(ADP-ribose) polymerase
BG087081		Tmem59	Transmembrane protein 59

BG083135		Tmod3	Tropomodulin 3
BG067553		Tnc	Tenascin C
BG078038		Topors	Topoisomerase I binding, arginine/serine-rich
BG074369		Trio	Triple functional domain (PTPRF interacting)
BG067542		Troap	Trophinin associated protein
BG075029		Trp53	Transformation related protein 53
BG067378		Trp53bp1	Transformation related protein 53 binding protein 1
BG064838		Tuba2	Tubulin, alpha 2
BG064831		Tubb2c	Tubulin, beta 2c
BG078001		Ube1x	Ubiquitin-activating enzyme E1, Chr X
BG086847		Ube3b	Ubiquitin protein ligase E3B
BG087946		Ubtf	Upstream binding transcription factor, RNA polymerase I
BG065028		Uhrf1	Ubiquitin-like, containing PHD and RING finger domains, 1
BG081577		Wdr42a	WD repeat domain 42A
BG077395		Yars	Tyrosyl-tRNA synthetase
AW539280		Yif1a	Yip1 interacting factor homolog A ( <i>S. cerevisiae</i> )
BG065229		Ylpm1	YLP motif containing 1
BG085929		Zfp354a	Zinc finger protein 354A
BG067516		Zfp511	Zinc finger protein 511
BG067388		Zfp84	Zinc finger protein 84
AA409278		EST	
AW536084		EST	
AW536156		EST	
AW536190		EST	
AW536196		EST	
AW536421		EST	
AW536624		EST	
AW536769		EST	
AW536804		EST	
AW537378		EST	
AW537693		EST	
AW538179		EST	
AW538220		EST	
AW538990		EST	
AW539387		EST	
AW542384		EST	
AW543461		EST	

AW543498		EST
AW543520		EST
AW543642		EST
AW543644		EST
AW543755		EST
AW543815		EST
AW543851		EST
AW544006		EST
AW544036		EST
AW544269		EST
AW544673		EST
AW545121		EST
AW545291		EST
AW545786		EST
AW552440		EST
AW554069		EST
AW557840		EST
AW559013		EST
BG063767		EST
BG063854		EST
BG063906		EST
BG063953		EST
BG064148		EST
BG064176		EST
BG064790		EST
BG064793		EST
BG064852		EST
BG065369		EST
BG066814		EST
BG066835		EST
BG067247		EST
BG067253		EST
BG067527		EST
BG067551		EST
BG067593		EST
BG067670		EST
BG069857		EST

BG074062		EST	
BG074304		EST	Transcribed locus
BG075402		EST	
BG076041		EST	
BG076673		EST	
BG077163		EST	
BG080332		EST	
BG080372		EST	
BG080511		EST	
BG080594		EST	
BG080616		EST	
BG083137		EST	
BG086994		EST	
BG088902		EST	
BI076464		EST	
BQ550258		EST	
C80376		EST	
C85780		EST	
BQ552232		EST	Membrane-associated ring finger (C3HC4) 6
AU041154		1110002N22Rik	RIKEN cDNA 1110002N22 gene
BG072391		1110005A03Rik	RIKEN cDNA 1110005A03 gene
C76309		1110012J17Rik	RIKEN cDNA 1110012J17 gene
AU043344		1110039B18Rik	RIKEN cDNA 1110039B18 gene
BQ551141		1110065H08Rik	RIKEN cDNA 1110065H08 gene
BG069904		1190005F20Rik	RIKEN cDNA 1190005F20 gene
BG082833		1500003O03Rik	RIKEN cDNA 1500003O03 gene
BQ552212		1500011J06Rik	RIKEN cDNA 1500011J06 gene
BG071572		1700036D21Rik	RIKEN cDNA 1700036D21 gene
BG074444		1700041C02Rik	RIKEN cDNA 1700041C02 gene
BQ550748		1700081L11Rik	RIKEN cDNA 1700081L11 gene
BG065840		1700095A21Rik	RIKEN cDNA 1700095A21 gene
BG071214		1810037I17Rik	RIKEN cDNA 1810037I17 gene
BG083629		2210010A19Rik	RIKEN cDNA 2210010A19 gene
BG066645		2410042D21Rik	RIKEN cDNA 2410042D21 gene
BG065728		2610018G03Rik	RIKEN cDNA 2610018G03 gene
BG066930		2610019A05Rik	RIKEN cDNA 2610019A05 gene
BG072382		2610203C20Rik	RIKEN cDNA 2610203C20 gene

BG065667		2700094F01Rik RIKEN cDNA 2700094F01 gene
BG071462		2810006K23Rik RIKEN cDNA 2810006K23 gene
BG073340		4921524J06Rik RIKEN cDNA 4921524J06 gene
BG088239		4930518F03Rik RIKEN cDNA 4930518F03 gene
BG070762		4930589O11Rik RIKEN cDNA 4930589O11 gene
BG068366		4932414N04Rik RIKEN cDNA 4932414N04 gene
BG071567		4933400E14Rik RIKEN cDNA 4933400E14 gene
BG070659		5133401H06Rik RIKEN cDNA 5133401H06 gene
BG070437		5730406M06Rik RIKEN cDNA 5730406M06 gene
BG071335		5730469M10Rik RIKEN cDNA 5730469M10 gene
BG069515		5830428H23Rik RIKEN cDNA 5830428H23 gene
AU041536		6330514A18Rik RIKEN cDNA 6330514A18 gene
BQ550664		8030451K01Rik RIKEN cDNA 8030451K01 gene
BQ550756		8430426H19Rik RIKEN cDNA 8430426H19 gene
BQ551609		9130020K20Rik RIKEN cDNA 9130020K20 gene
BG066056		9130404D08Rik RIKEN cDNA 9130404D08 gene
BG066119		A130030D10Rik RIKEN cDNA A130030D10 gene
BQ550649		A530080P10 Hypothetical protein A530080P10
AU042892	Abcb5	ATP-binding cassette, sub-family B (MDR/TAP), member 5
BQ551854	Abi2	Abl-interactor 2
BG072128	Abl1	V-abl Abelson murine leukemia oncogene 1
BG069602	Acaa2	Acetyl-Coenzyme A acyltransferase 2
BG072306	Acaca	Acetyl-Coenzyme A carboxylase alpha
BG073745	Acbd3	Acyl-Coenzyme A binding domain containing 3
BQ550460	Acot8	Acyl-CoA thioesterase 8
BQ551244	Adamts10	A disintegrin-like and metallopeptidase
BG065926	Adnp	Activity-dependent neuroprotective protein
BG071168	Aftph	Aftiphilin
BG079132	Agl	Amylo-1,6-glucosidase, 4-alpha-glucanotransferase
BG075166	AK122209	CDNA sequence AK122209
BG066705	Ak3I1	Adenylate kinase 3 alpha-like 1
BG065924	Akap2	A kinase (PRKA) anchor protein 2
C80443	Akap7	A kinase (PRKA) anchor protein 7
BG086574	AL033314	Expressed sequence AL033314
BG070055	Alg13	Asparagine-linked glycosylation 13 homolog ( <i>S. cerevisiae</i> )
BG072388	Ap2b1	Adaptor-related protein complex 2, beta 1 subunit
BG073077	Ap1p2	Amyloid beta (A4) precursor-like protein 2

C76493		App	Amyloid beta (A4) precursor protein
AU016873		Araf	V-raf murine sarcoma 3611 viral oncogene homolog
BQ550413		Arfgap1	ADP-ribosylation factor GTPase activating protein 1
BG087019		Arhgap29	Rho GTPase activating protein 29
BG083351		Arhgap6	Rho GTPase activating protein 6
BG066446		Arih2	Ariadne homolog 2 ( <i>Drosophila</i> )
BG074583		Atp5g1	ATP synthase, mitochondrial F0 complex, subunit c, isoform 1
BG073220		Atp5s	ATP synthase, mitochondrial F0 complex, subunit s
BG070482		AU016126	Expressed sequence AU016126
BG068075		AU021880	Expressed sequence AU021880
BG068186		AU022252	Expressed sequence AU022252
BG068769		AU023762	Expressed sequence AU023762
BG068814		AU023871	Expressed sequence AU023871
BG072095		AU041480	Expressed sequence AU041480
BG070516		Auh	AU RNA binding protein/enoyl-coenzyme A hydratase
BG081746		Azin1	Antizyme inhibitor 1
BQ550662		B3gnt7	betaGal beta-1,3-N-acetylglucosaminyltransferase 7
BG072468		Banp	Btg3 associated nuclear protein
BG083476		BC003331	CDNA sequence BC003331
BG069471		BC008163	CDNA sequence BC008163
BG072112		BC013491	CDNA sequence BC013491
BG065913		BC021395	CDNA sequence BC021395
BG065910		BC026657	CDNA sequence BC026657
BG075706		BC032203	CDNA sequence BC032203
BG065711		BC033606	CDNA sequence BC033606
BG066764		BC033915	CDNA sequence BC033915
BQ552459		BC039210	CDNA sequence BC039210
BQ551351		BC055324	CDNA sequence BC055324
BQ552265		Bckdk	Branched chain ketoacid dehydrogenase kinase
BQ550263		Bcl7c	B-cell CLL/lymphoma 7C
BQ551022		Bicc1	Bicaudal C homolog 1 ( <i>Drosophila</i> )
BG065601		Birc1c	Baculoviral IAP repeat-containing 1c
BG073154		Bnipl	BCL2/adenovirus E1B 19kD interacting protein like
BG063789		Bpnt1	Bisphosphate 3'-nucleotidase 1
BG065082		Brd3	Bromodomain containing 3
BG069361		Brp16	Brain protein 16
BQ550885		Btaf1	BTAF1 RNA polymerase II B-TFIID transcription factor

BG074705		Btbd7	BTB (POZ) domain containing 7
BG071345		C030002B11Rik	RIKEN cDNA C030002B11 gene
BG071808		C1rl	Complement component 1, r subcomponent-like
BQ550332		C330019G07Rik	RIKEN cDNA C330019G07 gene
BG070384		C330024D21Rik	RIKEN cDNA C330024D21 gene
BG084836		Cacna1d	Calcium channel, voltage-dependent, L type, alpha 1D subunit
BQ551014		Cast	Calpastatin
BG071322		Cbr2	Carbonyl reductase 2
BG072084		Cc2d1b	Coiled-coil and C2 domain containing 1B
BQ550730		Ccdc36	Coiled-coil domain containing 36
BG072484		Ccdc78	Coiled-coil domain containing 78
BG083664		Ccnl1	Cyclin L1
BG072445		Cct7	Chaperonin subunit 7 (eta)
BG075695		Cd151	CD151 antigen
BG073086		Cd2ap	CD2-associated protein
BG079263		Cdc25c	Cell division cycle 25 homolog C (S. cerevisiae)
BQ551777		Cdc2l6	Cell division cycle 2-like 6 (CDK8-like)
BG065644		Cdc5l	Cell division cycle 5-like (S. pombe)
BG072467		Cdh1	Cadherin 1
BQ551701		Cdh23	Cadherin 23 (otocadherin)
BQ550373		Cdh5	Cadherin 5
BQ550518		Cdk2ap1	CDK2 (cyclin-dependent kinase 2)-associated protein 1
BG071313		Cdkn1c	Cyclin-dependent kinase inhibitor 1C (P57)
BG072056		Cenpa	Centromere protein A
BG072415		Cggbp1	CGG triplet repeat binding protein 1
BG084134		Chst10	Carbohydrate sulfotransferase 10
BQ550738		Ckap2	Cytoskeleton associated protein 2
BQ552736		Clcn6	Chloride channel 6
BQ551100		Cldn4	Claudin 4
BG072331		Clstn1	Calsyntenin 1
BG072323		Cnn3	Calponin 3, acidic
BG085488		Cog8	Component of oligomeric golgi complex 8
BQ552453		Cox5a	Cytochrome c oxidase, subunit Va
BG066603		Crtap	Cartilage associated protein
BG075303		Cryz1l	Crystallin, zeta (quinone reductase)-like 1
BG073943		Csnk1g1	Casein kinase 1, gamma 1
BG071686		Cst12	Cystatin 12

BG066669		Ctnna1	Catenin (cadherin associated protein), alpha 1
BG075323		Ctps2	Cytidine 5'-triphosphate synthase 2
BG065899		Ctr9	Ctr9, Paf1/RNA polymerase II complex component, homolog
BQ550937		Cyld	Cylindromatosis (turban tumor syndrome)
BG071067		Cyp11a1	Cytochrome P450, family 11, subfamily a, polypeptide 1
BG066539		Cyp2s1	Cytochrome P450, family 2, subfamily s, polypeptide 1
BG065713		D17Ertd29e	DNA segment, Chr 17, ERATO Doi 29, expressed
BQ550039		D17Wsu92e	DNA segment, Chr 17, Wayne State University 92, expressed
BG084796		D6Wsu176e	DNA segment, Chr 6, Wayne State University 176, expressed
BG068420		D8Ertd457e	DNA segment, Chr 8, ERATO Doi 457, expressed
BG071093		D930036F22Rik	RIKEN cDNA D930036F22 gene
BQ551641		Ddx18	DEAD (Asp-Glu-Ala-Asp) box polypeptide 18
BG066896		Depdc6	DEP domain containing 6
BG064252		Dhx57	DEAH (Asp-Glu-Ala-Asp/His) box polypeptide 57
BG065647		Dicer1	Dicer1, Dcr-1 homolog (Drosophila)
BQ552530		Dlgh1	Discs, large homolog 1 (Drosophila)
BG079743		Dnajc7	DnaJ (Hsp40) homolog, subfamily C, member 7
BG066942		Dnmt3b	DNA methyltransferase 3B
BG084050		Dnmt3l	DNA (cytosine-5-)-methyltransferase 3-like
BG070734		Dock1	Dedicator of cyto-kinesis 1
BG085288		Dscr6	Down syndrome critical region homolog 6 (human)
BG066580		Dsg2	Desmoglein 2
BQ550597		Dub2a	Deubiquitinating enzyme 2a
BQ551160		Dusp11	Dual specificity phosphatase 11
BG071403		E030031F02Rik	RIKEN cDNA E030031F02 gene
BG069593		E030046B03Rik	RIKEN cDNA E030046B03 gene
BG065372		E130013N09Rik	RIKEN cDNA E130013N09 gene
BG065803		E230006M18Rik	RIKEN cDNA E230006M18 gene
BG072004		EG547109	Predicted gene, EG547109
BG071349		EG666469	Predicted gene, EG666469
BG079113		Eif4enif1	Eukaryotic translation initiation factor 4E nuclear import factor 1
BQ550267		Ep400	E1A binding protein p400
BG069356		Epb4.1i5	Erythrocyte protein band 4.1-like 5
BG069525		Ercc4	Excision repair cross-complementing complementation group 4
BG071861		Espl1	Extra spindle poles-like 1 ( <i>S. cerevisiae</i> )
BQ551349		Etaa1	Ewing's tumor-associated antigen 1
BG083466		Etfdh	Electron transferring flavoprotein, dehydrogenase

BG065915		Etv6	Ets variant gene 6 (TEL oncogene)
BG074661		Extl2	Exotoses (multiple)-like 2
BG072083		Fancg	Fanconi anemia, complementation group G
BG072115		Fbxo10	F-box protein 10
BG084874		Fbxo3	F-box protein 3
BQ551776		Fbxo30	F-box protein 30
BQ551246		Fbxw11	F-box and WD-40 domain protein 11
BG068843		Fchsd2	FCH and double SH3 domains 2
BQ551773		Fer1l3	Fer-1-like 3, myoferlin (C. elegans)
BG075786		Fgd1	FYVE, RhoGEF and PH domain containing 1
BG086904		Fis1	Fission 1 (mitochondrial outer membrane) homolog (yeast)
BG070773		Fkbp1a	FK506 binding protein 1a
BG078930		Fkbp4	FK506 binding protein 4
BG072325		Fnbp1	Formin binding protein 1
BG073778		Fndc3a	Fibronectin type III domain containing 3a
BG071167		Fndc7	Fibronectin type III domain containing 7
BG068663		Foxn2	Forkhead box N2
BQ551359		Fras1	Fraser syndrome 1 homolog (human)
BG084806		Fxyd4	FXYD domain-containing ion transport regulator 4
BG071490		Fzd3	Frizzled homolog 3 (Drosophila)
BG066634		Galnt4	UDP-N-acetyl-alpha-D-galactosamine
BG072044		Garnl1	GTPase activating RANGAP domain-like 1
BQ550593		Gbp2	Guanylate nucleotide binding protein 2
BG065591		Ggnbp2	Gametogenitin binding protein 2
BG066451		Ggps1	Geranylgeranyl diphosphate synthase 1
BG074610		Glb1	Galactosidase, beta 1
BG071936		Gm1305	Gene model 1305, (NCBI)
BG072058		Gm97	Gene model 97, (NCBI)
BG071872		Gnpat	Glyceroneophosphate O-acyltransferase
BG066912		Gnpnat1	Glucosamine-phosphate N-acetyltransferase 1
BG079035		Gosr2	Golgi SNAP receptor complex member 2
BG065592		Grl12	Grainyhead-like 2 (Drosophila)
BG072298		Gripap1	GRIP1 associated protein 1
BG066009		Gtf3c2	General transcription factor IIIC, polypeptide 2, beta
BG082217		Gzmm	Granzyme M (lymphocyte met-ase 1)
BG066251		Hat1	Histone aminotransferase 1
BG079049		Heatr2	HEAT repeat containing 2

BG065732		Hel308	Helicase, mus308-like ( <i>Drosophila</i> )
BG075724		Hipk2	Homeodomain interacting protein kinase 2
BQ550683		Hmbs	Hydroxymethylbilane synthase
BG071011		Hmgb2l1	High mobility group box 2-like 1
BG084145		Hps4	Hermansky-Pudlak syndrome 4 homolog (human)
BQ551782		Hyal1	Hyaluronoglucosaminidase 1
BQ551924		Igf1r	Insulin-like growth factor I receptor
BG068536		Igfbp7	Insulin-like growth factor binding protein 7
BG084192		Ik	IK cytokine
BG067905		Il17f	Interleukin 17F
BG074597		Inoc1	INO80 complex homolog 1 ( <i>S. cerevisiae</i> )
BG088202		Isgf3g	Interferon dependent positive acting transcription factor 3 gamma
BG071191		Itga11	Integrin, alpha 11
BG077912		Itga5	Integrin alpha 5 (fibronectin receptor alpha)
BG070896		Jam2	Junction adhesion molecule 2
BG088542		Jarid1a	Jumonji, AT rich interactive domain 1A (Rbp2 like)
BG085297		Jarid1b	Jumonji, AT rich interactive domain 1B (Rbp2 like)
BG070185		Jmjdc1c	Jumonji domain containing 1C
BG070100		Jmjdc2b	Jumonji domain containing 2B
BG066513		Kbtbd2	Kelch repeat and BTB (POZ) domain containing 2
BG069378		Kcnh3	Potassium voltage-gated channel, subfamily H, member 3
BG069589		Kcnk6	Potassium inwardly-rectifying channel, subfamily K, member 6
BG073351		Kdelc2	KDEL (Lys-Asp-Glu-Leu) containing 2
C77408		Krt8	Keratin 8
C79740		Lace1	Lactation elevated 1
BQ550742		Lamc1	Laminin, gamma 1
BQ550722		Las1l	LAS1-like ( <i>S. cerevisiae</i> )
BQ551582		Lass6	Longevity assurance homolog 6 ( <i>S. cerevisiae</i> )
BQ550734		Lcor	Ligand dependent nuclear receptor corepressor
C78577		Lct	Lactase
BG073494		Leprel2	Leprecan-like 2
BG078898		Lgtn	Ligatin
C76424		Lhfpl2	Lipoma HMGIC fusion partner-like 2
BG071348		LOC435727	Similar to SET translocation (predicted)
BG083465		LOC667666	Similar to reduced expression 2
BQ551390		LOC668621	Similar to gonadotropin inducible ovarian transcription factor 1
BG079713		Lpin2	Lipin 2

BG075194		Lrba	LPS-responsive beige-like anchor
BG071205		Lrig1	Leucine-rich repeats and immunoglobulin-like domains 1
BG071400		Lrrc8c	Leucine rich repeat containing 8 family, member C
BG067748		Lrrc8e	Leucine rich repeat containing 8 family, member E
AU017683		Ltbr	Lymphotoxin B receptor
BG065699		Luzp1	Leucine zipper protein 1
BG077319		Lzts2	Leucine zipper, putative tumor suppressor 2
BG065891		Magi2	Membrane associated guanylate kinase
BG070588		Map1lc3b	Microtubule-associated protein 1 light chain 3 beta
AU041989		Map4k5	Mitogen-activated protein kinase kinase kinase kinase 5
BG072107		Mbnl2	Muscleblind-like 2
BG082854		Mesp2	Mesoderm posterior 2
BG070512		Mettl9	Methyltransferase like 9
BG065902		Mfhas1	Malignant fibrous histiocytoma amplified sequence 1
BG074486		MGC107415	Hypothetical protein LOC383216
BG070800		Mlstd2	Male sterility domain containing 2
BG075512		Mme	Membrane metallo endopeptidase
BQ551130		Mnab	Membrane associated DNA binding protein
BG078615		Mns1	Meiosis-specific nuclear structural protein 1
BQ551184		Morf4l1	Mortality factor 4 like 1
BG085631		Mrpl27	Mitochondrial ribosomal protein L27
BG066667		Mtap4	Microtubule-associated protein 4
C77431		Mterfd2	MTERF domain containing 2
BG071118		Mtg1	Mitochondrial GTPase 1 homolog (S. cerevisiae)
BG074650		Mtmr12	Vmyotubularin related protein 12
BG083487		Mtmr2	Myotubularin related protein 2
BG085713		Mtmr9	Myotubularin related protein 9
BG082228		Mybl2	Myeloblastosis oncogene-like 2
C76805		Myl4	Myosin, light polypeptide 4
BG072239		Mylk	Myosin, light polypeptide kinase
BG066671		Myo1d	Myosin ID
BQ552055		Myo9b	Myosin IXb
BG071204		Mysm1	Myb-like, SWIRM and MPN domains 1
BG079815		Naalad2	N-acetylated alpha-linked acidic dipeptidase 2
BG066401		Nbn	Nibrin
BQ551032		Ndor1	NADPH dependent diflavin oxidoreductase 1
BG065776		Nek1	NIMA (never in mitosis gene a)-related expressed kinase 1

BG071104		Nek8	NIMA (never in mitosis gene a)-related expressed kinase 8
BG083317		Net1	Neuroepithelial cell transforming gene 1
BG071222		Nhlrc2	NHL repeat containing 2
BG071236		Nipbl	Nipped-B homolog (Drosophila)
BG087125		Nr0b2	Nuclear receptor subfamily 0, group B, member 2
BG072053		Nr2e1	Nuclear receptor subfamily 2, group E, member 1
BG083489		Nrg4	Neuregulin 4
BG072413		Nrp	Neural regeneration protein
BQ550752		Nucks1	Nuclear casein kinase and cyclin-dependent kinase substrate 1
BQ550616		Nudcd2	NudC domain containing 2
BG070110		Nudt21	Nudix (nucleoside diphosphate linked moiety X)-type motif 21
AU042946		Nup214	Nucleoporin 214
BG070986		Oaz2	Ornithine decarboxylase antizyme 2
BQ551151		Odz4	Odd Oz/ten-m homolog 4 (Drosophila)
AU014844		Ogdh	Oxoglutarate dehydrogenase (lipoamide)
BG068751		Olf75-ps1	Olfactory receptor 75, pseudogene 1
BG079929		Orc2l	Origin recognition complex, subunit 2-like (S. cerevisiae)
BG071973		Osbp2	Oxysterol binding protein 2
BG069555		Osbp18	Oxysterol binding protein-like 8
BG074515		Pacs1	Phosphofuran acidic cluster sorting protein 1
BQ550334		Pafah1b2	Platelet-activating factor acetylhydrolase, alpha2 subunit
BG075672		Papola	Poly (A) polymerase alpha
BG075119		Papolg	Poly(A) polymerase gamma
BG071589		Parl	Presenilin associated, rhomboid-like
BQ551164		Pask	PAS domain containing serine/threonine kinase
BG073605		Pawr	PRKC, apoptosis, WT1, regulator
BG066651		Pcca	Propionyl-Coenzyme A carboxylase, alpha polypeptide
BQ552727		Pcgf3	Polycomb group ring finger 3
BG082619		Pcnt	Pericentrin (kendrin)
BG069544		Pde3a	Phosphodiesterase 3A, cGMP inhibited
BG084383		Pde6d	Phosphodiesterase 6D, cGMP-specific, rod, delta
BG070255		Pde7a	Phosphodiesterase 7A
BG071525		Pdzd2	PDZ domain containing 2
BG083442		Pex19	Peroxisome biogenesis factor 19
BG078897		Phf12	PHD finger protein 12
BG072257		Phf20	PHD finger protein 20
BG068715		Phf21a	PHD finger protein 21A

BG066086		Phf3	PHD finger protein 3
BQ552300		Pip5k3	Phosphatidylinositol-3-phosphate, type III
BG075777		Pkp2	Plakophilin 2
BQ552256		Plagl2	Pleiomorphic adenoma gene-like 2
BQ551306		Plce1	Phospholipase C, epsilon 1
BG072459		Pldn	Pallidin
BQ550711		Plekha1	Pleckstrin homology domain containing, family A member 1
BG078885		Plk4	Polo-like kinase 4 (Drosophila)
BG066713		Pllp	Plasma membrane proteolipid
BG071360		Pofut1	Protein O-fucosyltransferase 1
BQ550997		Poldip3	Polymerase (DNA-directed), delta interacting protein 3
BG085159		Polr1e	Polymerase (RNA) I polypeptide E
BG074143		Polr3gl	Polymerase (RNA) III (DNA directed) polypeptide G like
BG072347		Polr3h	Polymerase (RNA) III (DNA directed) polypeptide H
BG083644		Por	P450 (cytochrome) oxidoreductase
BG066638		Pou6f1	POU domain, class 6, transcription factor 1
BG069643		Ppp1cc	Protein phosphatase 1, catalytic subunit, gamma isoform
BG074077		Ppp1r12b	Protein phosphatase 1, regulatory (inhibitor) subunit 12B
BQ550137		Ppp1r7	Protein phosphatase 1, regulatory (inhibitor) subunit 7
BG066099		Ppp2ca	Protein phosphatase 2, catalytic subunit, alpha isoform
BQ551412		Ppp2r5a	Protein phosphatase 2 regulatory subunit B (B56) alpha isoform
BG065790		Ppp2r5e	Protein phosphatase 2 regulatory subunit B (B56) epsilon
BG081448		Ppp3cb	Protein phosphatase 3, catalytic subunit, beta isoform
BG074626		Prkg1	Protein kinase, cGMP-dependent, type I
C76498		Prr8	Proline rich 8
BG069898		Psmd11	Proteasome (prosome, macropain) 26S subunit non-ATPase, 11
BG072681		Ptges3	Prostaglandin E synthase 3 (cytosolic)
BG076324		Ptpn18	Protein tyrosine phosphatase, non-receptor type 18
BQ552544		Ptpn2	Protein tyrosine phosphatase, non-receptor type 2
BG071033		Ptprg	Protein tyrosine phosphatase, receptor type, G
BG072031		Pts	6-pyruvoyl-tetrahydropterin synthase
BG083621		Pvrl3	Poliovirus receptor-related 3
BQ551650		Rab10	RAB10, member RAS oncogene family
AU042813		Racgap1	Rac GTPase-activating protein 1
BG074447		Rapgef1	Rap guanine nucleotide exchange factor (GEF) 1
BG084341		Rarsl	Arginyl-tRNA synthetase-like
BG084218		Rbbp9	Retinoblastoma binding protein 9

BG079627		Rbm34	RNA binding motif protein 34
BG069654		Reep5	Receptor accessory protein 5
BG071937		Rex2	Reduced expression 2
BG066639		Rhoa	Ras homolog gene family, member A
AU041357		Rhod	Ras homolog gene family, member D
BG069563		Rhoh	Ras homolog gene family, member H
BG071220		Rnf19	Ring finger protein (C3HC4 type) 19
BG073529		Rnh1	Ribonuclease/angiogenin inhibitor 1
BG078875		Rogdi	Rogdi homolog ( <i>Drosophila</i> )
BG079971		Rpgrip1	Retinitis pigmentosa GTPase regulator interacting protein 1
BG079511		Rpl3	Ribosomal protein L3
BG071958		Rpl7l1	Ribosomal protein L7-like 1
BG072722		Rps6ka3	Ribosomal protein S6 kinase polypeptide 3
BG066225		Rreb1	Ras responsive element binding protein 1
BQ552268		S100ppb	S100P binding protein
BG073400		Sap18	Sin3-associated polypeptide 18
BQ550640		Sap30l	SAP30-like
BQ550634		Scn3a	Sodium channel, voltage-gated, type III, alpha
BQ552261		Sec14l1	SEC14-like 1 ( <i>S. cerevisiae</i> )
BG079877		Sfrs11	Splicing factor, arginine-serine-rich 11
BG083967		Sfxn1	Sideroflexin 1
BG066686		Sfxn2	Sideroflexin 2
BG075471		Sirpa	Signal-regulatory protein alpha
BG084160		Slc11a2	Solute carrier family 11 member 2
BG073944		Slc24a3	Solute carrier family 24 member 3
BG079299		Slc25a1	Solute carrier family 25 member 1
BQ551136		Slc9a3r1	Solute carrier family 9 isoform 3 regulator 1
BG069963		Slco4c1	Solute carrier organic anion transporter family, member 4C1
BQ552710		Smc6	Structural maintenance of chromosomes 6
BG083050		Snap23	Synaptosomal-associated protein 23
BG070178		Snrpc	U1 small nuclear ribonucleoprotein C
BG065775		Son	Son cell proliferation protein
BG065712		Spag9	Sperm associated antigen 9
BG066112		Spata5	Spermatogenesis associated 5
BQ550417		Srgap2	SLIT-ROBO Rho GTPase activating protein 2
BG068698		Srp54	Signal recognition particle 54
BG071533		Srk2	Serine/arginine-rich protein specific kinase 2

BG071865		Srrm1	Serine/arginine repetitive matrix 1
BG084144		Stag1	Stromal antigen 1
BG065895		Stard13	Serologically defined colon cancer antigen 13
BG071347		Stard3nl	STARD3 N-terminal like
BQ550188		Stk16	Serine/threonine kinase 16
BG074672		Strbp	Spermatid perinuclear RNA binding protein
BG075183		Stx6	Syntaxin 6
BQ552294		Stxbp6	Syntaxin binding protein 6 (amisyn)
BG073342		Suhw4	Suppressor of hairy wing homolog 4 (Drosophila)
BG084153		Suox	Sulfite oxidase
BG069533		Suv420h1	Suppressor of variegation 4-20 homolog 1 (Drosophila)
BQ552500		Synj1	Synaptjanin 1
BG070708		Syt14	Synaptotagmin-like 4
BG068551		Tbl1x	Transducin (beta)-like 1 X-linked
BG065608		Tbl2	Transducin (beta)-like 2
BG064989		Tcta	T-cell leukemia translocation altered gene
BQ552542		Tgoln1	Trans-golgi network protein
BG075651		Thrap3	Thyroid hormone receptor associated protein 3
BG063428		Tirap	Toll-interleukin 1 receptor domain-containing adaptor protein
BQ552553		Tmem132d	Transmembrane protein 132D
BG066503		Tmem23	Transmembrane protein 23
BG079319		Tmem38b	Transmembrane protein 38B
BG086435		Tmem4	Transmembrane protein 4
BG067938		Tmem50a	Transmembrane protein 50A
BG069517		Tnfsf12	Tumor necrosis factor (ligand) superfamily, member 12
BQ551158		Tnks	Tankyrase TRF1-interacting ADP-ribose polymerase
BG066559		Tnks1bp1	Tankyrase 1 binding protein 1
BQ551138		Tnks2	Tankyrase, TRF1-interacting ADP-ribose polymerase 2
BG075686		Tnpo2	Transportin 2 (importin 3, karyopherin beta 2b)
BQ550176		Top1	Topoisomerase (DNA) I
BG062981		Tprkb	Tp53rk binding protein
BG071346		Trim34	Tripartite motif protein 34
BG082843		Trrap	Transformation/transcription domain-associated protein
BG084103		Tsc22d1	TSC22 domain family, member 1
BQ551987		Ttl4	Tubulin tyrosine ligase-like family, member 4
BG066560		Tubgcp5	Tubulin, gamma complex associated protein 5
BG079504		Tug1	Taurine upregulated gene 1

BG071302		Tulp3	Tubby-like protein 3
BG071871		Txndc10	Thioredoxin domain containing 10
BG078134		Ube2c	Ubiquitin-conjugating enzyme E2C
BQ550339		Ube3a	Ubiquitin protein ligase E3A
BG072375		Ubxd8	UBX domain containing 8
BG083915		Uck2	Uridine-cytidine kinase 2
BQ552073		Ufd1l	Ubiquitin fusion degradation 1 like
BQ551972		Umps	Uridine monophosphate synthetase
BG069366		Upf2	UPF2 regulator of nonsense transcripts homolog (yeast)
BQ551761		Upf3b	UPF3 regulator of nonsense transcripts homolog B (yeast)
BG074667		Utrn	Utrophin
BG065982		Vav2	Vav2 oncogene
BG065616		Vcp	Valosin containing protein
BG079187		Vnn1	Vanin 1
BQ552115		Wdr81	WD repeat domain 81
BQ551117		Wee1	Wee 1 homolog ( <i>S. pombe</i> )
BG065802		Wipf1	WAS/WASL interacting protein family, member 1
AU041408		Wnk1	WNK lysine deficient protein kinase 1
BG079111		Wnt3a	Wingless-related MMTV integration site 3A
BG072447		Wnt5b	Wingless-related MMTV integration site 5B
BG072532		Wwc1	WW, C2 and coiled-coil domain containing 1
BG071334		Wwtr1	WW domain containing transcription regulator 1
BG079790		Xpnpep1	X-prolyl aminopeptidase (aminopeptidase P) 1, soluble
BG070812		Xrcc6bp1	XRCC6 binding protein 1
BQ551652		Zc3h7a	Zinc finger CCCH type containing 7 A
BG079167		Zfp42	Zinc finger protein 42
BG068749		Zfp53	Zinc finger protein 53
BG073125		Zfp617	Zinc finger protein 617
AU046252		Zfp69	Zinc finger protein 69
BG065890		Zfp710	Zinc finger protein 710
BG078447		Zfp809	Zinc finger protein 809
BG070672		Zfp9	Zinc finger protein 9
BG076048		Zfpm2	Zinc finger protein, multitype 2
BQ551737		Zmiz1	Zinc finger, MIZ-type containing 1
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Transcribed locus

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Transcribed locus

Transcribed locus

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Transcribed locus

Transcribed locus

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BG066678		EST	weakly similar to XP_912058.1 hypothetical protein XP_906965
BG066691		EST	
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Transcribed locus

Transcribed locus

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Transcribed locus

Transcribed locus

Transcribed locus

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BG071107		EST	Transcribed locus
BG071117		EST	Transcribed locus
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Transcribed locus

Transcribed locus

Transcribed locus

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BQ551082		EST
BQ551139		EST
BQ551446		EST
BQ551458		EST
BQ551512		EST
BQ551513		EST
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BQ551690		EST
BQ551698		EST
BQ551765		EST
BQ551838		EST
BQ551862		EST
BQ552076		EST
BQ552078		EST
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BQ552246		EST
BQ552254		EST

Transcribed locus

Transcribed locus

Transcribed locus

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C76839		EST	
C77806		EST	
C78061		EST	
C79547		EST	
C79706		EST	
C79832		EST	
C88217		EST	
C78984		EST	
BG076208	3300001P08Rik	RIKEN cDNA 3300001P08 gene	
BG077589	4930548G07Rik	RIKEN cDNA 4930548G07 gene	
BG063937	Alad	Aminolevulinate, delta-, dehydratase	
C85923	Alms1	Alstrom syndrome 1 homolog (human)	
BG077976	Arpc4	Actin related protein 2/3 complex, subunit 4	
C86170	Atf2	Activating transcription factor 2	
BG078216	BC003940	CDNA sequence BC003940	
BG069214	Birc3	Baculoviral IAP repeat-containing 3	
BG068767	Bola1	BolA-like 1 ( <i>E. coli</i> )	
C78859	C78859	Expressed sequence C78859	
BG067002	Ccnt2	Cyclin T2	
BG067091	Ccpg1	Cell cycle progression 1	
AA408840	Cflar	CASP8 and FADD-like apoptosis regulator	
BG063927	Clic4	Chloride intracellular channel 4 (mitochondrial)	
BG065253	Cyfip1	Cytoplasmic FMR1 interacting protein 1	
BG063067	Dido1	Death inducer-obliterator 1	
BG066589	Dmd	Dystrophin, muscular dystrophy	
AW545189	Grnl1a	Glutamate receptor, ionotropic, N-methyl D-aspartate-like 1A	
BG066979	Grtp1	GH regulated TBC protein 1	

BG087780		Gstm1	Glutathione S-transferase, mu 1
BG077262		Imp4	IMP4, U3 small nucleolar ribonucleoprotein, homolog (yeast)
BG078581		Ints3	Integrator complex subunit 3
BG088728		Strap	Serine/threonine kinase receptor associated protein
BG067035		Ttll6	Tubulin tyrosine ligase-like family, member 6
BG065643		Tufm	Tu translation elongation factor, mitochondrial
BG079801		Ube2l3	Ubiquitin-conjugating enzyme E2L 3
BG088727		Vil2	Villin 2
BG077263		Wdr55	WD repeat domain 55
BG068052		Zfp507	Zinc finger protein 507
BG064571		Zfp91	Zinc finger protein 91
AW545303		EST	
BG065666		EST	
BG066960		EST	
BG068051		EST	
BG080067		EST	
C85922		EST	
BG064582		Lrrc16	Leucine rich repeat containing 16
BG066313		Mapkbp1	Mitogen activated protein kinase binding protein 1
BG064572		Mrpl28	Mitochondrial ribosomal protein L28
BG085939		Ncaph	Non-SMC condensin I complex, subunit H
BG076983		Necap2	NECAP endocytosis associated 2
BG064599		Pappa	Pregnancy-associated plasma protein A
BG076198		Pb1	Polybromo 1
BG080463		Pcnp	PEST proteolytic signal containing nuclear protein
BG064247		Pdcd2l	Programmed cell death 2-like
BG065306		Perp	PERP, TP53 apoptosis effector
BG068755		Phr1	Pam, highwire, rpm 1
BG067355		Poll	Polymerase (DNA directed), lambda
BG080402		Prpsap1	Phosphoribosyl pyrophosphate synthetase-associated protein 1
BG064542		Psmb1	Proteasome (prosome, macropain) subunit, beta type 1
BG066969		R3hdm1	R3H domain 1 (binds single-stranded nucleic acids)
BG063048		Rbm9	RNA binding motif protein 9
BG080059		Senp6	SUMO/sentrin specific peptidase 6
BG067375		Serinc5	Serine incorporator 5
BG063058		Sf3a2	Splicing factor 3a, subunit 2
BG082362		Sfrs2	Splicing factor, arginine/serine-rich 2 (SC-35)

BG079545		Slc15a2	Solute carrier family 15 (H+/peptide transporter), member 2
BG067025		Slc16a1	Solute carrier family 16 member 1
BG077242		Slc35a1	Solute carrier family 35 (CMP-sialic acid transporter), member 1
BG066811		Ccdc96	Coiled-coil domain containing 96
BG066114		Dusp13	Dual specificity phosphatase 13
BG079012		Hnrpa1	Heterogeneous nuclear ribonucleoprotein A1
BG065813		LOC627905	Similar to gonadotropin inducible ovarian transcription factor 1
BG068602		Lrp12	Low density lipoprotein-related protein 12
BG069488		Tbx20	T-box 20
AW538269		EST	
BG063668		EST	
BG065741		EST	
BG065815		EST	
BG069293		EST	
BG069550		EST	Transcribed locus
BG064719		Ankrd32	Ankyrin repeat domain 32
BG069406		AU018829	Expressed sequence AU018829
BG063312		Bat3	HLA-B-associated transcript 3
AW552725		Cdk5rap3	CDK5 regulatory subunit associated protein 3
BG067933		Cirh1a	Cirrhosis, autosomal recessive 1A (human)
BG081063		Cybb	Cytochrome b-245, beta polypeptide
BG067879		D330050I23Rik	RIKEN cDNA D330050I23 gene
BG067844		Dscaml1	Down syndrome cell adhesion molecule-like 1
BG066542		E430002G05Rik	RIKEN cDNA E430002G05 gene
BG078947		Elov6	ELOVL family member 6, elongation of long chain fatty acids
BG067709		Mll3	Myeloid/lymphoid or mixed-lineage leukemia 3
BG074155		Mrpl36	Mitochondrial ribosomal protein L36
BG077130		Mrpl48	Mitochondrial ribosomal protein L48
BG078939		Nt5dc1	5'-nucleotidase domain containing 1
BG072848		Pigc	Phosphatidylinositol glycan anchor biosynthesis, class C
BG067944		Plac1l	Placenta-specific 1-like
BG067921		Psme2	Proteasome (prosome, macropain) 28 subunit, beta
BG067867		Ptpn14	Protein tyrosine phosphatase, non-receptor type 14
BG068408		Rnf141	Ring finger protein 141
BG087018		Rpl37	Ribosomal protein L37
BG080015		Rpl37a	Ribosomal protein L37a
BG081064		Secisbp2	SECIS binding protein 2

BG068027		Slc2a13	Solute carrier family 2 member 13
BG067985		Spred1	Sprouty protein with EVH-1 domain 1, related sequence
AU040617		Ss18	Synovial sarcoma translocation, Chromosome 18
BG071664		Stk24	Serine/threonine kinase 24 (STE20 homolog, yeast)
BG067974		Thsd7b	Thrombospondin, type I, domain containing 7B
BG066733		EST	
BG067963		EST	
BG068015		EST	
BG070814		EST	
BG072492		EST	
BG073602		EST	
C88049		EST	
BG069380	Them4		Thioesterase superfamily member 4
AW545825	EST		
BG063989	EST		
AW554394	0610012D17Rik	RIKEN cDNA 0610012D17 gene	
BG076564	1110002B05Rik	RIKEN cDNA 1110002B05 gene	
BG071239	1300007C21Rik	RIKEN cDNA 1300007C21 gene	
BG064173	2310028O11Rik	RIKEN cDNA 2310028O11 gene	
BG064581	4921506J03Rik	RIKEN cDNA 4921506J03 gene	
AA410046	4921517N04Rik	RIKEN cDNA 4921517N04 gene	
AU040419	4933439F18Rik	RIKEN cDNA 4933439F18 gene	
BG068979	9330102E08Rik	RIKEN cDNA 9330102E08 gene	
BG062932	9930021J03Rik	RIKEN cDNA 9930021J03 gene	
BG063017	AA407452	EST AA407452	
BG076953	AA536749	Expressed sequence AA536749	
BG063679	Aasdhppt	Aasdhppt	
BG077214	Abtb2	Ankyrin repeat and BTB (POZ) domain containing 2	
BG062940	Actr2	ARP2 actin-related protein 2 homolog (yeast)	
BG076941	Adi1	Acireductone dioxygenase 1	
BG077184	AI413782	Expressed sequence AI413782	
BG063039	AI428936	Expressed sequence AI428936	
BG067100	Angel2	Angel homolog 2 (Drosophila)	
BG077192	Ankrd50	Ankrin repeat domain 50	
BG086890	Apbb2	Amyloid beta precursor protein-binding, family B, member 2	
BG085960	Apoc2	Apolipoprotein C-II	
BG071887	Arcn1	Archain 1	

BG078211		Arl1	ADP-ribosylation factor-like 1
BG063043		B230333C21Rik	RIKEN cDNA B230333C21 gene
BG078494		Bap1	Brca1 associated protein 1
BG085997		BC020002	CDNA sequence BC020002
BG072161		BC038167	CDNA sequence BC038167
BG067918		Btg2	B-cell translocation gene 2, anti-proliferative
BG067220		Btg4	B-cell translocation gene 4
BG070072		C130038G02Rik	RIKEN cDNA C130038G02 gene
BG062931		C1qbp	Complement component 1, q subcomponent binding protein
BG063740		Canx	Calnexin
BG072550		Carhsp1	Calcium regulated heat stable protein 1
BG077060		Carm1	Coactivator-associated arginine methyltransferase 1
BG086830		Cbara1	Calcium binding atopy-related autoantigen 1
BG078093		Cbx3	Chromobox homolog 3 (Drosophila HP1 gamma)
BG071910		Ccdc115	Coiled-coil domain containing 115
BG076416		Ccdc99	Coiled-coil domain containing 99
BG077089		Ccnf	Cyclin F
BG077073		Ccnh	Cyclin H
BG063851		Cdc91I1	CDC91 cell division cycle 91-like 1 ( <i>S. cerevisiae</i> )
C85897		Cdca2	Cell division cycle associated 2
AA409659		Cdcp1	CUB domain containing protein 1
BG076465		Cdk7	Cyclin-dependent kinase 7
BG063027		Cited2	Cbp/p300-interacting transactivator
BG083522		Cks2	CDC28 protein kinase regulatory subunit 2
BG080435		Cog2	Component of oligomeric golgi complex 2
AW538671		Col5a3	Procollagen, type V, alpha 3
BG076807		Comm9	COMM domain containing 9
BG066881		Cryz	Crystallin, zeta
BG078926		Cst3	Cystatin C
BG067675		Ctf2	Cardiotrophin 2
BG087382		Ctsd	Cathepsin D
BG068969		D030074E01Rik	RIKEN cDNA D030074E01 gene
BG063062		D11Ertd497e	DNA segment, Chr 11, ERATO Doi 497, expressed
BG062930		D11Wsu99e	DNA segment, Chr 11, Wayne State University 99, expressed
AA409982		D7Wsu130e	DNA segment, Chr 7, Wayne State University 130, expressed
BG064783		Ddx5	DEAD (Asp-Glu-Ala-Asp) box polypeptide 5
BG063739		Deb1	Differentially expressed in B16F10 1

BG063807		Dph5	DPH5 homolog (S. cerevisiae)
BG076954		Dynll1	Dynein light chain LC8-type 1
BG067080		EG668019	Predicted gene, EG668019
BG077176		Eif3s9	Eukaryotic translation initiation factor 3, subunit 9 (eta)
BG076418		Elac2	ElaC homolog 2 (E. coli)
BG063717		Exosc4	Exosome component 4
AW536970		Fkbp15	FK506 binding protein 15
BG064794		Ftl1	Ferritin light chain 1
BG063037		Gapvd1	GTPase activating protein and VPS9 domains 1
BG065281		Gmfb	Glia maturation factor, beta
BG064749		Gpr172b	G protein-coupled receptor 172B
BG067069		Gss	Glutathione synthetase
BG063040		Hist1h2ao	Histone cluster 1, H2ao
BG067688		Hnrpa3	Heterogeneous nuclear ribonucleoprotein A3
BG063051		Homer2	Homer homolog 2 (Drosophila)
BG063259		Ift74	Intraflagellar transport 74 homolog (Chlamydomonas)
BG067332		Itga9	Integrin alpha 9
AA408772		Jmj3d	Jumonji domain containing 3
BG077966		Krt18	Keratin 18
BG083078		Lanc2	LanC (bacterial lantibiotic synthetase component C)-like 2
BG074178		Loh11cr2a	Loss of heterozygosity, 11, chromosomal region 2, gene A
BG071250		Lrch2	Leucine-rich repeats and CH domain containing 2
BG063060		Lsg1	Large subunit GTPase 1 homolog (S. cerevisiae)
BG065170		Mapk8ip2	Mitogen-activated protein kinase 8 interacting protein 2
BG085336		Matn2	Matrilin 2
BG078181		Metap1	Methionyl aminopeptidase 1
BG063680		Mobkl2a	MOB1, Mps One Binder kinase activator-like 2A (yeast)
BG063606		Ndufaf1	NADH dehydrogenase 1 alpha subcomplex, assembly factor 1
BG076562		Ndufb7	NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 7
AA409376		Nfyα	Nuclear transcription factor-Y alpha
BG063385		Nmd3	NMD3 homolog (S. cerevisiae)
BG063624		Pbk	PDZ binding kinase
BG088805		Pde5a	Phosphodiesterase 5A, cGMP-specific
BG078506		Pisd	Phosphatidylserine decarboxylase
AW537841		Pitpnb	Phosphatidylinositol transfer protein, beta
AW538496		Plac8	Placenta-specific 8
BG078528		Pou5f1	POU domain, class 5, transcription factor 1

BG063033		Ppih	Peptidyl prolyl isomerase H
AA408595		Prlpa	Prolactin-like protein A
BG077050		Prpf19	PRP19/PSO4 pre-mRNA processing factor 19 homolog
BG063070		Psmc3	Proteasome (prosome, macropain) 26S subunit, ATPase 3
BG076919		Rbms1	RNA binding motif, single stranded interacting protein 1
BQ552383		Rcl1	RNA terminal phosphate cyclase-like 1
BG080391		Rdh11	Retinol dehydrogenase 11
BG084537		Recc1	Replication factor C 1
BG069058		Rgs17	Regulator of G-protein signaling 17
BG063030		Rnf5	Ring finger protein 5
BG063016		Rod1	ROD1 regulator of differentiation 1 ( <i>S. pombe</i> )
BG076749		Rpl17	Ribosomal protein L17
AW538640		Rpl21	Ribosomal protein L21
BG063667		Rps11	Ribosomal protein S11
BG067356		Rragc	Ras-related GTP binding C
BG063372		Safb2	Scaffold attachment factor B2
BG080423		Sart2	Squamous cell carcinoma antigen recognized by T cells 2
BG072628		Scmh1	Sex comb on midleg homolog 1
BG062929		Sct	Secretin
BG076434		Sepx1	Selenoprotein X 1
BG076972		Serpinb9b	Serine (or cysteine) peptidase inhibitor, clade B, member 9b
AA409665		Sfrs7	Splicing factor, arginine/serine-rich 7
BG063442		Sh3bgrl3	SH3 domain binding glutamic acid-rich protein-like 3
BG077091		Slc25a39	Solute carrier family 25, member 39
BG067865		Slc4a8	Solute carrier family 4 (anion exchanger), member 8
BG088856		Sltm	SAFB-like, transcription modulator
BG063419		Smap1	Stromal membrane-associated protein 1
BG068028		Smarca5	SWI/SNF related,regulator of chromatin, subfamily a, member 5
BG063782		Smurf2	SMAD specific E3 ubiquitin protein ligase 2
BG071703		Snx5	Sorting nexin 5
AU040496		Sp100	Nuclear antigen Sp100
BG062985		Srrm2	Serine/arginine repetitive matrix 2
BG069374		St3gal1	ST3 beta-galactoside alpha-2,3-sialyltransferase 1
AU022550		Suv39h2	Suppressor of variegation 3-9 homolog 2 ( <i>Drosophila</i> )
BG063718		Tbc1d7	TBC1 domain family, member 7
AW538495		Tmed9	Transmembrane emp24 protein transport domain containing 9
BG063347		Tmem11	Transmembrane protein 11

C86115		Tmem171	Transmembrane protein 171
BG071231		Tmem183a	Transmembrane protein 183A
BG063018		Tmem30a	Transmembrane protein 30A
BG064763		Top3b	Topoisomerase (DNA) III beta
BG077822		Tpm3	Tropomyosin 3, gamma
BG063676		Trnt1	TRNA nucleotidyl transferase, CCA-adding, 1
BG063019		Tspan32	Tetraspanin 32
BG069806		Ubc	Ubiquitin C
BG074177		Ube2i	Ubiquitin-conjugating enzyme E2i
BG073224		Ube2q1	Ubiquitin-conjugating enzyme E2Q (putative) 1
BG063031		Ube2v1	Ubiquitin-conjugating enzyme E2 variant 1
BG063823		Usp8	Ubiquitin specific peptidase 8
BG064839		Wdr1	WD repeat domain 1
BG063032		Wdr74	WD repeat domain 74
BG063059		Wnt6	Wingless-related MMTV integration site 6
BG076427		Zbtb20	Zinc finger and BTB domain containing 20
AU016199		Zfand3	Zinc finger, AN1-type domain 3
BG063020		Zmym6	Zinc finger, MYM-type 6
AA408075		EST	
AA409862		EST	
AW536284		EST	
AW537187		EST	
AW544945		EST	
AW549112		EST	
BG062939		EST	
BG062970		EST	
BG063041		EST	
BG063042		EST	
BG063052		EST	
BG063075		EST	
BG063874		EST	
BG064705		EST	Transcribed locus
BG065291		EST	
BG066525		EST	
BG067324		EST	
BG067884		EST	
BG068924		EST	Transcribed locus

BG068991		EST
BG069013		EST
BG069024		EST
BG071929		EST
BG073099		EST
BG076942		EST
BG078136		EST
BG076610	4732418C07Rik	RIKEN cDNA 4732418C07 gene
BG079065	Adam15	A disintegrin and metallopeptidase domain 15 (metarginidin)
BG070457	AU023851	Expressed sequence AU023851
BG078265	BC011248	CDNA sequence BC011248
BG066501	Brd1	Bromodomain containing 1
BG088218	Bsdc1	BSD domain containing 1
BG068484	Ccdc51	Coiled-coil domain containing 51
BG083212	D14Ertd668e	DNA segment, Chr 14, ERATO Doi 668, expressed
BG070001	D4Ertd617e	DNA segment, Chr 4, ERATO Doi 617, expressed
BG084373	Dmxl2	Dmx-like 2
BG064417	Ext1	Exostoses (multiple) 1
BG069620	Eya2	Eyes absent 2 homolog (Drosophila)
BG079093	Gltp	Glycolipid transfer protein
BG066139	Hip1r	Huntingtin interacting protein 1 related
BG082154	Il4	Interleukin 4
BG069617	Kremen1	Kringle containing transmembrane protein 1
BG066709	Lamb1-1	Laminin B1 subunit 1
BG070791	Lrp6	Low density lipoprotein receptor-related protein 6
BG070403	Mrps6	Mitochondrial ribosomal protein S6
BG066627	Mtus1	Mitochondrial tumor suppressor 1
C78261	Myom1	Myomesin 1
BG068017	Ncoa1	Nuclear receptor coactivator 1
BG085428	Ndufa12	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 12
BG064395	Nfat5	Nuclear factor of activated T-cells 5
BG066471	Ogdhl	Oxoglutarate dehydrogenase-like
BG065744	Pank3	Pantothenate kinase 3
BG065814	Pcsk7	Proprotein convertase subtilisin/kexin type 7
BG066447	Pde4a	Phosphodiesterase 4A, cAMP specific
BG070320	Pla2r1	Phospholipase A2 receptor 1
BG074378	Pogk	Pogo transposable element with KRAB domain

BG072470		Pop4	Processing of precursor 4, ribonuclease P/MRP family
BG066817		Ppapdc1	Phosphatidic acid phosphatase type 2 domain containing 1
BG079960		Prkcz	Protein kinase C, zeta
BG074357		Psmc1	Protease (prosome, macropain) 26S subunit, ATPase 1
BG082759		Rps3	Ribosomal protein S3
BG073477		Syt7	Synaptotagmin VII
BG070349		Taf1	TAF1 RNA polymerase II, TBP-associated factor
BG067393		Tmem45a	Transmembrane protein 45a
BG067143		Twsg1	Twisted gastrulation homolog 1 (Drosophila)
BG066181		Wdr7	WD repeat domain 7
AU040400		EST	
BG065649		EST	
BG065684		EST	
BG065837		EST	
BG066060		EST	
BG066598		EST	
BG066836		EST	
BG067149		EST	
BG067416		EST	
BG067428		EST	
BG068265		EST	
BG068472		EST	
BG068989		EST	
BG069113		EST	
BG069257		EST	
BG070123		EST	
BG075125		EST	
BG081317		EST	
C78903		EST	
BG066653		Zw10	ZW10 homolog (Drosophila), centromere/kinetochore protein

**TableS4a-24M. CR responsive gene lists of 24M mouse CNS.**

**Notes.** Cor: cortex; Hip: hippocampus; Cer: cerebellum; Str: striatum; SC: spinal cord.



Acc	Cor-24-cr	Hip-24-cr	Cer-24-cr	Str-24-cr	SC-24-cr	Symbol	Name
BQ550334	green				green	Pafah1b2	Platelet-activating factor acetylhydrolase, alpha2 subunit
BG069606					green	Zfp592	Zinc finger protein 592
C79706	green				green	EST	
BG077928			green		green	C130032J12Rik	RIKEN cDNA C130032J12 gene
BG074610			green		green	Glb1	Galactosidase, beta 1
BG066596				green	green	EST	
BG064537		red				Mark2	MAP/microtubule affinity-regulating kinase 2
BG069382		red				EST	
BG071091	gray	red			red	Arid2	AT rich interactive domain 2 (Arid-rfx like)
AW539315		green				Ilf3	Interleukin enhancer binding factor 3
AW539112		green			red	EST	
BG076211	red	green			red	EST	Transcribed locus
BG067409	red	green			red	Rapgef2	Rap guanine nucleotide exchange factor (GEF) 2
BG077811		gray		red	green	Nap1l1	Nucleosome assembly protein 1-like 1
BG079495	red	gray	green		green	Josd3	Josephin domain containing 3
BG074676	red	gray	green		green	Rnf12	Ring finger protein 12
BG065712	red	green			green	Spag9	Sperm associated antigen 9
BG065910		red			green	BC026657	CDNA sequence BC026657
BG066231		red			green	Cfdp1	Craniofacial development protein 1
AW536452		red			green	Cul4b	Cullin 4B
BG079165		red			green	D14Ert436e	DNA segment, Chr 14, ERATO Doi 436, expressed
BG082456		red			green	Dnajc8	Dnaj (Hsp40) homolog, subfamily C, member 8
BG083097		red			green	Hfcf1	Host cell factor C1
BG064506		red			green	Il17d	Interleukin 17D
BG063222		red			green	Pecam1	Platelet/endothelial cell adhesion molecule 1
BG077930		red			green	Snx10	Sorting nexin 10
BG079167		red			green	Zfp42	Zinc finger protein 42
BG065890		red			green	Zfp710	Zinc finger protein 710

AU014963			EST	
BG065963			EST	
BG066241			EST	
BG068347			EST	strongly similar to XP_895654.1
BG070566			EST	strongly similar to XP_573676.1
BG066528			4933400N17Rik	RIKEN cDNA 4933400N17 gene
BG063260			4933437F05Rik	RIKEN cDNA 4933437F05 gene
BG069528			5730405I09Rik	RIKEN cDNA 5730405I09 gene ATP-binding cassette, sub-family C (CFTR/MRP), member 1
C76153			Abcc1	
BG069506			Arhgef7	Rho guanine nucleotide exchange factor (GEF7)
BG070219			Bat2d	BAT2 domain containing 1
BG065711			BC033606	CDNA sequence BC033606
BG068767			Bola1	Bola-like 1 (E. coli)
BG079566			Btrc	Beta-transducin repeat containing protein
BG079870			Caml	Calcium modulating ligand
BG078574			Cbx5	Chromobox homolog 5 (Drosophila HP1a)
AU023920			Ccnc	Cyclin C
BG065644			Cdc5l	Cell division cycle 5-like (S. pombe)
BG068414			Col25a1	Procollagen, type XXV, alpha 1
BG079872			Csh2	Chorionic somatomammotropin hormone 2
BG064252			Dhx57	DEAH (Asp-Glu-Ala-Asp/His) box polypeptide 57
BG066589			Dmd	Dystrophin, muscular dystrophy
BG071581			Dtl	Denticleless homolog (Drosophila)
BG066292			Dtnbp1	Dystrobrevin binding protein 1
BG078920			EG668628	Predicted gene, EG668628
BG079822			Htra2	HtrA serine peptidase 2
			Kcnk6	Potassium inwardly-rectifying channel, subfamily K, member 6
BG069589			Lgtn	Ligatin
BG078898			Mesp2	Mesoderm posterior 2
BG082854			Mrpl19	Mitochondrial ribosomal protein L19
BG077638			Myst4	MYST histone acetyltransferase monocytic leukemia 4
BI076789			Nedd4l	Neural precursor cell expressed, developmentally down-regulated gene 4-like
BG066991				

BG067047		Ogt	O-linked N-acetylglucosamine (GlcNAc) transferase (UDP-N-acetylglucosamine:polypeptide-N-acetylglucosaminyl transferase)
BG069555		Osbpl8	Oxysterol binding protein-like 8
BG069544		Pde3a	Phosphodiesterase 3A, cGMP inhibited
BG078897		Phf12	PHD finger protein 12
AU021253		Ppm1a	Protein phosphatase 1A, magnesium dependent, alpha isoform
BG068154		Prdm10	PR domain containing 10
BG072059		Rex2	Reduced expression 2
BG078875		Rogdi	Rogdi homolog (Drosophila)
BG065620		Ss18	Synovial sarcoma translocation, Chromosome 18
BG067059		Tacr1	Tachykinin receptor 1
BG079508		Tbl1x	Transducin (beta)-like 1 X-linked
BG066559		Tnks1bp1	Tankyrase 1 binding protein 1
BG079801		Ube2l3	Ubiquitin-conjugating enzyme E2L 3
AA407331		EST	
BG063029		EST	
BG063918		EST	
BG064219		EST	
BG065589		EST	
BG065610		EST	
BG065657		EST	
BG066361		EST	
BG066362		EST	Transcribed locus
BG066527		EST	
BG066550		EST	
BG066561		EST	
BG066591		EST	
BG066724		EST	Transcribed locus
BG066736		EST	
BG068487		EST	
BG083198		EST	
C76156		EST	CDNA clone IMAGE:1548559
BG079860		EST	
BG069622		EST	
BG076883		1500003O22Rik RIKEN cDNA 1500003O22 gene	

BG063464		1600029D21Rik RIKEN cDNA 1600029D21 gene
BG069487		9830169C18Rik RIKEN cDNA 9830169C18 gene
BG077677		Actb Actin, beta, cytoplasmic
BG065410		Adipor1 Adiponectin receptor 1
BG069970		Aox3l1 Aldehyde oxidase 3-like 1
BG067220		Btg4 B-cell translocation gene 4
BG069015		C030046E11Rik RIKEN cDNA C030046E11 gene
BG075832		Ccnd2 Cyclin D2
BG063496		Cep55 Centrosomal protein 55
BG067933		Cirh1a Cirrhosis, autosomal recessive 1A (human)
BG067866		Cxadr Coxsackievirus and adenovirus receptor
BG073936		Ehbp1l1 EH domain binding protein 1-like 1
BG063430		Eif4a1 Eukaryotic translation initiation factor 4A1
BG075205		Foxj2 Forkhead box J2
BG064794		Ftl1 Ferritin light chain 1
BG085373		Gli2 GLI-Kruppel family member GLI2
BG067932		Glul Glutamate-ammonia ligase (glutamine synthetase)
BG087174		Gmppa GDP-mannose pyrophosphorylase A
BG077174		Gpbp1l1 GC-rich promoter binding protein 1-like 1
BG069026		Gpr1 G protein-coupled receptor 1
BG082403		Hist1h4m Histone cluster 1, H4m
BG075825		Kifc2 Kinesin family member C2
AU043086		Lypla1 Lysophospholipase 1
BG073937		Msi2 Musashi homolog 2 (Drosophila)
BG076894		Mybbp1a MYB binding protein (P160) 1a
BG085939		Ncaph Non-SMC condensin I complex, subunit H
BG086032		Nkiras2 NFKB inhibitor interacting Ras-like protein 2
BG077751		Phb Prohibitin
BG088924		Phkb Phosphorylase kinase beta
BG072867		Prx Periaxin
BG069304		Rnf41 Ring finger protein 41
BG075206		Rpl6 Ribosomal protein L6
BG068299	Slc7a8	Solute carrier family 7 (cationic amino acid transporter, y+ system), member 8
BG068288	Slco1b2	Solute carrier organic anion transporter family, member 1b2
BG063419	Smap1	Stromal membrane-associated protein 1
BG082333	Smc6	Structural maintenance of chromosomes 6

BG070492		Synpr	Synaptoporin
BG082412		Tbp	TATA box binding protein
BG064631		Timeless	Timeless homolog (Drosophila)
BG067897		Tnrc6b	Trinucleotide repeat containing 6b
BG078718		Usf2	Upstream transcription factor 2
AW545973		Wac	WW domain containing adaptor with coiled-coil
BG067887		Wipf2	WAS/WASL interacting protein family, member 2
BG073159		Zdhhc16	Zinc finger, DHHC domain containing 16
BG078433		Zfp94	Zinc finger protein 94
AW546006		EST	
AW548741		EST	
AW551593		EST	
BG063874		EST	
BG066091		EST	
BG068197		EST	
BG068320		EST	
BG069293		EST	
BG071172		EST	
BG073099		EST	
BG066052	0610007P14Rik	RIKEN cDNA 0610007P14 gene	
BG071450	1110008J03Rik	RIKEN cDNA 1110008J03 gene	
BG074675	2010301N04Rik	RIKEN cDNA 2010301N04 gene	
BG081908	4833439L19Rik	RIKEN cDNA 4833439L19 gene	
BG065710	6230416J20Rik	RIKEN cDNA 6230416J20 gene	
BG063015	9430023L20Rik	RIKEN cDNA 9430023L20 gene	
BG074649	A530089I17Rik	RIKEN cDNA A530089I17 gene	
BG086172	Abcd4	ATP-binding cassette, sub-family D (ALD), member 4	
BG065930	Actn1	Actinin, alpha 1	
BQ550304	Afg3l2	AFG3(ATPase family gene 3)-like 2 (yeast)	
AA409025	Ankrd15	Ankyrin repeat domain 15	
BG072388	Ap2b1	Adaptor-related protein complex 2, beta 1 subunit	
BG074665	Arhgap10	Rho GTPase activating protein 10	
BG082246	Arih1	Ariadne ubiquitin-conjugating enzyme E2 binding protein	
AW539588	Arpc4	homolog 1 (Drosophila)	
BG072043	AU046084	Actin related protein 2/3 complex, subunit 4	
BG066690	Aurkaip1	Expressed sequence AU046084	
		Aurora kinase A interacting protein 1	

BQ550662				UDP-GlcNAc:betaGal beta-1,3-N-acetylglucosaminyltransferase 7
BQ550241			BC031781	CDNA sequence BC031781
BG069216			Bcas3	Breast carcinoma amplified sequence 3
BG084158			Bcat1	Branched chain aminotransferase 1, cytosolic
BG064920			Bex1	Brain expressed gene 1
BG078929			Bhmt	Betaine-homocysteine methyltransferase
BG066723			C80140	Expressed sequence C80140
BQ551014			Cast	Calpastatin
BG068393			Ccdc52	Coiled-coil domain containing 52
BG070939			Chek1	Checkpoint kinase 1 homolog (S. pombe)
			Cited2	Cbp/p300-interacting transactivator, with Glu/Asp-rich carboxy-terminal domain, 2
BG063027			Col23a1	Procollagen, type XXIII, alpha 1
BG067015			Cryzl1	Crystallin, zeta (quinone reductase)-like 1
BG075303			Cs	Citrate synthase
BG069122			Cyfip1	Cytoplasmic FMR1 interacting protein 1
BG065253			D11Wsu99e	DNA segment, Chr 11, Wayne State University 99, expressed
			D2Ertd750e	DNA segment, Chr 2, ERATO Doi 750, expressed
BG062930			Dgkg	Diacylglycerol kinase, gamma
BG082508			Dhdds	Dehydrodolichyl diphosphate synthase
BG066590			Dnajb9	DnaJ (Hsp40) homolog, subfamily B, member 9
BG072914			Dnajc2	DnaJ (Hsp40) homolog, subfamily C, member 2
BG082615			Dppa4	Developmental pluripotency associated 4
BG069670			E030046B03Rik	RIKEN cDNA E030046B03 gene
C76608			Eftud1	Elongation factor Tu GTP binding domain containing 1
BG069593			Ehd4	EH-domain containing 4
BG069494			Elovl6	ELOVL family member 6, elongation of long chain fatty acids (yeast)
BQ552280			Fbxo30	F-box protein 30
			Fcho2	FCH domain only 2
BG082524			Frmpd1	FERM and PDZ domain containing 1
BQ551776			Gapvd1	GTPase activating protein and VPS9 domains 1
BG064544			Garnl1	GTPase activating RANGAP domain-like 1
BG070589			Ggnbp2	Gametogenitin binding protein 2
BG063037			Gss	Glutathione synthetase
BG072044				
BG065591				
BG067069				

BG066009		Gtf3c2	General transcription factor IIIC, polypeptide 2, beta
BG076718		H19	H19 fetal liver mRNA
BQ550683		Hmbs	Hydroxymethylbilane synthase
BG067688		Hnrpa3	Heterogeneous nuclear ribonucleoprotein A3
BG076765		Hnrcpc	Heterogeneous nuclear ribonucleoprotein C
BG063259		Ift74	Intraflagellar transport 74 homolog (Chlamydomonas)
BQ550324		Il17re	Interleukin 17 receptor E
BG079507		Jarid1b	Jumonji, AT rich interactive domain 1B (Rbp2 like)
BG066271		Kars	Lysyl-tRNA synthetase
C81188		Kctd15	Potassium channel tetramerisation domain containing 15
BG082558		Kpna1	Karyopherin (importin) alpha 1
BG076451		Lama5	Laminin, alpha 5
BG073494		Leprel2	Leprecan-like 2
BG071597		Lman1	Lectin, mannose-binding, 1
BG071311		Lmtk2	Lemur tyrosine kinase 2
BG065340		Lrrc28	Leucine rich repeat containing 28
BG065699		Luzp1	Leucine zipper protein 1
BG070588		Map1lc3b	Microtubule-associated protein 1 light chain 3 beta
BG082602		Mark3	MAP/microtubule affinity-regulating kinase 3
BG064965		Mtif2	Mitochondrial translational initiation factor 2
BG079882		Myo1b	Myosin IB
BG079546		Ncoa6	Nuclear receptor coactivator 6
BG079485		Ndufa10	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex 10
BG066700		Nol7	Nucleolar protein 7
BG071285		Nsun4	NOL1/NOP2/Sun domain family, member 4
C80273		Nsun5	NOL1/NOP2/Sun domain family, member 5
BG077570		Oaz2	Ornithine decarboxylase antizyme 2
BG083220		Pdia5	Protein disulfide isomerase associated 5
BG070766		Pdpxk	Pyridoxal (pyridoxine, vitamin B6) kinase
BG083442		Pex19	Peroxisome biogenesis factor 19
BG068755		Phr1	Pam, highwire, rpm 1
BQ550997		Poldip3	Polymerase (DNA-directed), delta interacting protein 3
BG079588		Pqlc1	PQ loop repeat containing 1
BG070047		Pramel5	Preferentially expressed antigen in melanoma like 5
BG083143		Prei4	Preimplantation protein 4
AA408595		Prlpa	Prolactin-like protein A
BG065678		Prps1	Phosphoribosyl pyrophosphate synthetase 1

BG072681		Ptges3	Prostaglandin E synthase 3 (cytosolic)
BG072031		Pts	6-pyruvoyl-tetrahydropterin synthase
BG066969		R3hdm1	R3H domain 1 (binds single-stranded nucleic acids)
BG069603		Rbbp7	Retinoblastoma binding protein 7
BG070623		Rerg	RAS-like, estrogen-regulated, growth-inhibitor
BQ550347		Rhog	Ras homolog gene family, member G
BG072080		Rnf44	Ring finger protein 44
BG063016		Rod1	ROD1 regulator of differentiation 1 ( <i>S. pombe</i> )
BG066735		RP23-248K2.4	Hepatitis A virus cellular receptor 1-like
BG062929		Sct	Secretin
BG080079		Senp6	SUMO/sentrin specific peptidase 6
BG065362		Sfrs11	Splicing factor, arginine-serine-rich 11
BG068028		Smarca5	SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 5
BG078866		Stub1	STIP1 homology and U-Box containing protein 1
BQ552294		Stxbp6	Syntaxin binding protein 6 (amisyn)
BG063899		Taf3	TAF3 RNA polymerase II, TATA box binding protein (TBP)-associated factor
BG066250		Tbx20	T-box 20
BQ550368		Tcfap2c	Transcription factor AP-2, gamma
AW556778		Tcn2	Transcobalamin 2
BQ550310		Tkt	Transketolase
BG079834		Tktl1	Transketolase-like 1
C87464		Tpd52	Tumor protein D52
BG087355		Tspan31	Tetraspanin 31
BG071300		Wrnip1	Werner helicase interacting protein 1
BG079790		Xpnpep1	X-prolyl aminopeptidase (aminopeptidase P) 1, soluble
BQ550996		Ywhaq	Tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, theta polypeptide
BG065690		Zfml	Zinc finger, matrin-like
AA408676		EST	
			Adult male cecum cDNA, RIKEN full-length enriched library, clone:9130219M01 product:unclassifiable, full insert sequence
AU022997		EST	
BG065668		EST	
BG065698		EST	
BG065700		EST	

BG065948		EST
BG066525		EST
BG066588		EST
BG066738		EST
BG066960		EST
BG066981		EST
BG068143		EST
BG068155		EST
BG069123		EST
BG069132		EST
BG070231		EST
BG070930	EST	Transcribed locus
BG071312	EST	Transcribed locus
BG071355		EST
BG072465		EST
BG073379		EST
BG079861		EST
BG080067		EST
BG082809		EST
C76835		EST
C79862		EST
BG080498	1700124P09Rik	RIKEN cDNA 1700124P09 gene
BG067190	Ankrd6	Ankyrin repeat domain 6
BG066189	Baz2a	Bromodomain adjacent to zinc finger domain, 2A
BG067546	Caskin2	Cask-interacting protein 2
BG071910	Ccdc115	Coiled-coil domain containing 115
BG073151	Cdc42bpb	Cdc42 binding protein kinase beta
BG076180	Col5a2	Procollagen, type V, alpha 2
BG088166	Entpd4	Ectonucleoside triphosphate diphosphohydrolase 4
BG087964	Fkbp9	FK506 binding protein 9
BG076556	Fntb	Farnesyltransferase, CAAX box, beta
BG064678	Gle1l	GLE1 RNA export mediator-like (yeast)
BG073013	Golph4	Golgi phosphoprotein 4
BG086530	Hrc	Histidine rich calcium binding protein
BG073156	Klh17	Kelch-like 17 (Drosophila)
BG073173	Matr3	Matrin 3
BG087418	Ms4a6d	Membrane-spanning 4-domains, subfamily A, member 6D

BG075240		Prkar1a	Protein kinase, cAMP dependent regulatory, type I, alpha
BG088571		Psmb5	Proteasome (prosome, macropain) subunit, beta type 5
BG080698		Ptpn21	Protein tyrosine phosphatase, non-receptor type 21
BG087837		Ruvbl2	RuvB-like protein 2
BG087976		Smu1	Smu-1 suppressor of mec-8 and unc-52 homolog (C. elegans)
BG072876		Spg7	Spastic paraplegia 7 homolog (human)
BG073135		Syn3	Synapsin III
BG075873		Tbc1d20	TBC1 domain family, member 20
BG080018		Tcf25	Transcription factor 25 (basic helix-loop-helix)
BG063666		Tex19	Testis expressed gene 19
BG073155		Thap2	THAP domain containing, apoptosis associated protein 2
AW551856		EST	
AW558347		EST	
BG067439		EST	
BG069078		EST	
BG072733		EST	
BG072916		EST	
BG073930		EST	
BG074855		EST	
BG080562		EST	
			12 days embryo spinal cord cDNA, RIKEN full-length enriched library, clone:C530050B12 product:unclassifiable, full insert sequence
BG075830		EST	
C88307		2610204L23Rik	RIKEN cDNA 2610204L23 gene
BG066215		4921505C17Rik	RIKEN cDNA 4921505C17 gene
BG073921		Aff1	AF4/FMR2 family, member 1
BG079480		Anxa7	Annexin A7
BG070935		Arnt	Aryl hydrocarbon receptor nuclear translocator
BG066223		Arpc2	Actin related protein 2/3 complex, subunit 2
BG065908		C77370	Expressed sequence C77370
BG069719		Celsr1	Cadherin EGF LAG seven-pass G-type receptor 1
BG077911		Edem1	ER degradation enhancer, mannosidase alpha-like 1
BG079368		EG210583	Predicted gene, EG210583
BG065836		Erc1	ELKS/RAB6-interacting/CAST family member 1
BG086478		Gspt1	G1 to S phase transition 1
BG074724		Kns2	Kinesin 2

BG085378		Marcks	Myristoylated alanine rich protein kinase C substrate
BG077006		Ogfr	Opioid growth factor receptor
BG069339		Pafah1b1	Platelet-activating factor acetylhydrolase, isoform 1b, beta1 subunit
C78402		Ppp2r2a	Protein phosphatase 2 (formerly 2A), regulatory subunit B (PR52), alpha isoform
BG073656		Slk	STE20-like kinase (yeast)
BG078928		Stmn3	Stathmin-like 3
BG073668		Tfb1m	Transcription factor B1, mitochondrial
BG066486		Tmtc1	Transmembrane and tetratricopeptide repeat containing 1
BG064504		EST	
BG065892		EST	
BG066782		EST	
BG067971		EST	
BG069057		EST	
BG069064		EST	
BG069349		EST	
BG070143		EST	
BG070486		EST	
BG071196		EST	
BG072204		EST	
BG072531		EST	
C78475		EST	
C88217		EST	
BG072382	2610203C20Rik	RIKEN cDNA 2610203C20 gene	
BG087796	Cdc14b	CDC14 cell division cycle 14 homolog B ( <i>S. cerevisiae</i> )	
BG087310	Dek	DEK oncogene (DNA binding)	
BG069253	Dnajc5	Dnaj (Hsp40) homolog, subfamily C, member 5	
AW558570	Ednra	Endothelin receptor type A	
BG068108	Heph1	Hephaestin-like 1	
BG072073	Ift122	Intraflagellar transport 122 homolog ( <i>Chlamydomonas</i> )	
BQ552325	Kif3c	Kinesin family member 3C	
BG072307	Ncdn	Neurochondrin	
BG078697	Plcb3	Phospholipase C, beta 3	
BG083890	Ppfia1	Protein tyrosine phosphatase, receptor type, f polypeptide (PTPRF), interacting protein, alpha 1	
BQ550366	Prkar2a	Protein kinase, cAMP dependent regulatory, type II alpha	

BQ550958		Prpf18	PRP18 pre-mRNA processing factor 18 homolog (yeast)
BG073814		Sccpdh	Saccharopine dehydrogenase (putative)
BG068459		Slc45a3	Solute carrier family 45, member 3
BG077765		Sox8	SRY-box containing gene 8
BG086435		Tmem4	Transmembrane protein 4
BG072375		Ubxd8	UBX domain containing 8
AU040661		EST	
BG073325		EST	
BQ551139		EST	
C78728		EST	Transcribed locus
AU019203	Red	Alg2	Asparagine-linked glycosylation 2 homolog (yeast, alpha-1,3-mannosyltransferase)
BG078088		Alg9	Asparagine-linked glycosylation 9 homolog (yeast, alpha 1,2-mannosyltransferase)
AU041770		Emid2	EMI domain containing 2
BG083840		Mapk13	Mitogen activated protein kinase 13
BG064665		Nucks1	Nuclear casein kinase and cyclin-dependent kinase substrate 1
BG064799		Polg	Polymerase (DNA directed), gamma
BG077328		Rbm26	RNA binding motif protein 26
BG064869		Rnmt	RNA (guanine-7-) methyltransferase
BG069332		Tbc1d15	TBC1 domain family, member 15
BG064677	Red	Trpc4ap	Transient receptor potential cation channel, subfamily C, member 4 associated protein
AW551611		EST	
AW554445		EST	
BG064868		EST	
BG065585		EST	
BG085515		EST	
BG067113		Dpp7	Dipeptidylpeptidase 7
BG066251		Hat1	Histone aminotransferase 1
BG067074		Hivep2	Human immunodeficiency virus type I enhancer binding protein 2
BG067007		Idh3a	Isocitrate dehydrogenase 3 (NAD+) alpha
BG067079		Mier3	Mesoderm induction early response 1, family member 3
C85129		Nlgn1	Neuroligin 1
BG080137		Zfp276	Zinc finger protein (C2H2 type) 276

BG065697		EST	
BG067704		EST	
BG076849		Bcs1l	BCS1-like (yeast)
BG073654		Ebf1	Early B-cell factor 1
BG065471		Gk5	Glycerol kinase 5 (putative)
AA408226		Ints2	Integrator complex subunit 2
BG077749		Mif	Macrophage migration inhibitory factor
BG077788		Mtmr4	Myotubularin related protein 4
BG076893		Rhob	Ras homolog gene family, member B
BG078672		Rpl26	Ribosomal protein L26
BG064458		EST	
C76309	1110012J17Rik	RIKEN cDNA 1110012J17 gene	
BG069904	1190005F20Rik	RIKEN cDNA 1190005F20 gene	
BG082833	1500003O03Rik	RIKEN cDNA 1500003O03 gene	
BG065840	1700095A21Rik	RIKEN cDNA 1700095A21 gene	
BG071214	1810037I17Rik	RIKEN cDNA 1810037I17 gene	
BG082886	2010305A19Rik	RIKEN cDNA 2010305A19 gene	
BG083629	2210010A19Rik	RIKEN cDNA 2210010A19 gene	
BG063238	2310002J21Rik	RIKEN cDNA 2310002J21 gene	
BG066930	2610019A05Rik	RIKEN cDNA 2610019A05 gene	
BG065667	2700094F01Rik	RIKEN cDNA 2700094F01 gene	
BG071462	2810006K23Rik	RIKEN cDNA 2810006K23 gene	
BG076569	2810417H13Rik	RIKEN cDNA 2810417H13 gene	
BG069307	4631424J17Rik	RIKEN cDNA 4631424J17 gene	
BG073340	4921524J06Rik	RIKEN cDNA 4921524J06 gene	
BG068399	4930432O21Rik	RIKEN cDNA 4930432O21 gene	
BG070762	4930589O11Rik	RIKEN cDNA 4930589O11 gene	
BG068796	6330581L23Rik	RIKEN cDNA 6330581L23 gene	
BG066229	6720457D02Rik	RIKEN cDNA 6720457D02 gene	
BQ550664	8030451K01Rik	RIKEN cDNA 8030451K01 gene	
BQ551609	9130020K20Rik	RIKEN cDNA 9130020K20 gene	
BG066056	9130404D08Rik	RIKEN cDNA 9130404D08 gene	
AU014878	9530053H05Rik	RIKEN cDNA 9530053H05 gene	
BG065302	Aaas	Achalasia, adrenocortical insufficiency, alacrimia	
BG067888	Aak1	AP2 associated kinase 1	
AA409115	Abl1	V-abl Abelson murine leukemia oncogene 1	

BG069602		Acaa2	Acetyl-Coenzyme A acyltransferase 2 (mitochondrial 3-oxoacyl-Coenzyme A thiolase)
BG067718		Acacb	Acetyl-Coenzyme A carboxylase beta
BG073745		Acbd3	Acyl-Coenzyme A binding domain containing 3
C76711		Aco2	Aconitase 2, mitochondrial
BQ550460		Acot8	Acyl-CoA thioesterase 8
BG079132		Agl	Amylo-1,6-glucosidase, 4-alpha-glucanotransferase
BG063039		AI428936	Expressed sequence AI428936
BG080412		Ak7	Adenylate kinase 7
C80443		Akap7	A kinase (PRKA) anchor protein 7
BG070055		Alg13	Asparagine-linked glycosylation 13 homolog (S. cerevisiae)
BG065639		Ap1gbp1	AP1 gamma subunit binding protein 1
BG068431		Armcx1	Armadillo repeat containing, X-linked 1
BG066708		AU020772	Expressed sequence AU020772
BG068814		AU023871	Expressed sequence AU023871
BG081746		Azin1	Antizyme inhibitor 1
BG063043		B230333C21Rik	RIKEN cDNA B230333C21 gene
BG072468		Banp	Btg3 associated nuclear protein
BQ551560		Baz2b	Bromodomain adjacent to zinc finger domain, 2B
BG083308		BC013481	CDNA sequence BC013481
BG065913		BC021395	CDNA sequence BC021395
BG075706		BC032203	CDNA sequence BC032203
BG066329		BC038822	CDNA sequence BC038822
BQ552459		BC039210	CDNA sequence BC039210
BQ550263		Bcl7c	B-cell CLL/lymphoma 7C
BQ551022		Bicc1	Bicaudal C homolog 1 (Drosophila)
BG065601		Birc1c	Baculoviral IAP repeat-containing 1c
BG069361		Brp16	Brain protein 16
BG068466		C130039O16Rik	RIKEN cDNA C130039O16 gene
BG070530		C430003P19Rik	RIKEN cDNA C430003P19 gene
BG075437		C80913	Expressed sequence C80913
BG070322		Cacng5	Calcium channel, voltage-dependent, gamma subunit 5
BG070471		Calcoco1	Calcium binding and coiled coil domain 1
BG065922		Ccdc130	Coiled-coil domain containing 130
BQ550730		Ccdc36	Coiled-coil domain containing 36
BG083664		Ccnl1	Cyclin L1
BG079699		Cct4	Chaperonin subunit 4 (delta)

BG073086		Cd2ap	CD2-associated protein
BQ551777		Cdc2l6	Cell division cycle 2-like 6 (CDK8-like)
BG066467		Cdh13	Cadherin 13
BG066570		Cdyl2	Chromodomain protein, Y chromosome-like 2
BG072287		Cenpk	Centromere protein K
BG065629		Centd1	Centaurin, delta 1
BG069669		Cep27	Centrosomal protein 27
C87415		Chchd2	Coiled-coil-helix-coiled-coil-helix domain containing 2
BG065893		Coq4	Coenzyme Q4 homolog (yeast)
BG079703		Cstf3	Cleavage stimulation factor, 3' pre-RNA, subunit 3
BG065899		Ctr9	Ctr9, Paf1/RNA polymerase II complex component, homolog (S. cerevisiae)
BG083209		Cyba	Cytochrome b-245, alpha polypeptide
BG066539		Cyp2s1	Cytochrome P450, family 2, subfamily s, polypeptide 1
BG070372		D10Ertd641e	DNA segment, Chr 10, ERATO Doi 641, expressed
BG070247		D17Ertd657e	DNA segment, Chr 17, ERATO Doi 657, expressed
		D17Wsu92e	DNA segment, Chr 17, Wayne State University 92, expressed
AA407681		D5Ertd135e	DNA segment, Chr 5, ERATO Doi 135, expressed
BG065769		D6Ertd47e	DNA segment, Chr 6, ERATO Doi 47, expressed
BG065959		D8Ertd457e	DNA segment, Chr 8, ERATO Doi 457, expressed
BG068420		D930036F22Rik	RIKEN cDNA D930036F22 gene
BG071093		Dmgdh	Dimethylglycine dehydrogenase precursor
BG070080		Dnmt3b	DNA methyltransferase 3B
BG066942		Dsg2	Desmoglein 2
BG066580		Dst	Dystonin
BG072223		E030031F02Rik	RIKEN cDNA E030031F02 gene
BG071403		E230006M18Rik	RIKEN cDNA E230006M18 gene
BG065803		E2f3	E2F transcription factor 3
C76512		EG668019	Predicted gene, EG668019
BG067080		Eif2b5	Eukaryotic translation initiation factor 2B, subunit 5 epsilon
BG067005			Excision repair cross-complementing rodent repair deficiency, complementation group 4
BG069525		Ercc4	Erythroblast membrane-associated protein
BG063061		Ermap	Ethanolamine kinase 1
BG065623		Etnk1	Ets variant gene 6 (TEL oncogene)
BG065915		Etv6	Formin homology 2 domain containing 3
BG066491		Fhod3	

BG086904		Fis1	Fission 1 (mitochondrial outer membrane) homolog (yeast)
BG070773		Fkbp1a	FK506 binding protein 1a
BG078930		Fkbp4	FK506 binding protein 4
BG072325		Fnbp1	Formin binding protein 1
BG073778		Fndc3a	Fibronectin type III domain containing 3a
BG071167		Fndc7	Fibronectin type III domain containing 7
BG066634		Galnt4	UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyltransferase 4
		Gcn1l1	GCN1 general control of amino-acid synthesis 1-like 1 (yeast)
BG064373		Gm288	Gene model 288, (NCBI)
BG079678		Gnaq	Guanine nucleotide binding protein, alpha q polypeptide
BG067019		Gosr2	Golgi SNAP receptor complex member 2
BG079035		Grhl2	Grainyhead-like 2 ( <i>Drosophila</i> )
BG065592		Gripap1	GRIP1 associated protein 1
BG072298		Heatr2	HEAT repeat containing 2
BG079049		Il4	Interleukin 4
BG082154		Inoc1	INO80 complex homolog 1 ( <i>S. cerevisiae</i> )
BG074597		Ints7	Integrator complex subunit 7
BG070709		Ipo7	Importin 7
BG082348		Irak1	Interleukin-1 receptor-associated kinase 1
BG076768		Itga11	Integrin, alpha 11
BG071191		Jmjd1c	Jumonji domain containing 1C
BG070185		Kbtbd2	Kelch repeat and BTB (POZ) domain containing 2
BG066513		Kdelc2	KDEL (Lys-Asp-Glu-Leu) containing 2
BG073351		Kihl21	Kelch-like 21 ( <i>Drosophila</i> )
BG069360		Kpna3	Karyopherin (importin) alpha 3
BG066275		Lass6	Longevity assurance homolog 6 ( <i>S. cerevisiae</i> )
BQ551582		Lats1	Large tumor suppressor
BG081357		Lhfpl2	Lipoma HMGIC fusion partner-like 2
C76424		Lman2l	Lectin, mannose-binding 2-like
BG069534		LOC245263	Similar to double homeobox, 4
BG069518		LOC435727	Similar to SET translocation (predicted)
BG071348		Lrp2	Low density lipoprotein receptor-related protein 2
BG071473		Lrrc59	Leucine rich repeat containing 59
BG079486		Lrrc7	Leucine rich repeat containing 7
BG069144		Lrrc8e	Leucine rich repeat containing 8 family, member E
BG067748			

BG065612		Lrrk2	Leucine-rich repeat kinase 2
AU017683		Ltbr	Lymphotoxin B receptor
BG077319		Lzts2	Leucine zipper, putative tumor suppressor 2
			Membrane associated guanylate kinase, WW and PDZ domain containing 2
BG065891		Magi2	
BQ552466		Mapkap1	Mitogen-activated protein kinase associated protein 1
BG074486		MGC107415	Hypothetical protein LOC383216
BG078615		Mns1	Meiosis-specific nuclear structural protein 1
BQ552525		Mrpl45	Mitochondrial ribosomal protein L45
BG071118		Mtg1	Mitochondrial GTPase 1 homolog ( <i>S. cerevisiae</i> )
BG074650		Mtmmr12	Vmyotubularin related protein 12
BG079321		Mvp	Major vault protein
BG082228		Mybl2	Myeloblastosis oncogene-like 2
BG079815		Naalad2	N-acetylated alpha-linked acidic dipeptidase 2
BG069191		Nasp	Nuclear autoantigenic sperm protein (histone-binding)
BG066401		Nbn	Nibrin
BG068017		Ncoa1	Nuclear receptor coactivator 1
BG071104		Nek8	NIMA (never in mitosis gene a)-related expressed kinase 8
BG071222		Nhlrc2	NHL repeat containing 2
BG071315		Nipbl	Nipped-B homolog ( <i>Drosophila</i> )
BG066540		Nlk	Nemo like kinase
C78607		Nlrp6	NLR family, pyrin domain containing 6
BG079578		Npc1	Niemann Pick type C1
BG072053		Nr2e1	Nuclear receptor subfamily 2, group E, member 1
BG068592		Nr6a1	Nuclear receptor subfamily 6, group A, member 1
BQ550616		Nudcd2	NudC domain containing 2
AU042946		Nup214	Nucleoporin 214
AU014844		Ogdh	Oxoglutarate dehydrogenase (lipoamide)
BG068961		Pam	Peptidylglycine alpha-amidating monooxygenase
BG075672		Papola	Poly (A) polymerase alpha
BG066648		Parp8	Poly (ADP-ribose) polymerase family, member 8
BG073605		Pawr	PRKC, apoptosis, WT1, regulator
BG066651		Pcca	Propionyl-Coenzyme A carboxylase, alpha polypeptide
AA407948		Peg10	Paternally expressed 10
BG066552		Phf17	PHD finger protein 17
BQ552256		Plagl2	Pleiomorphic adenoma gene-like 2
BG078885		Plk4	Polo-like kinase 4 ( <i>Drosophila</i> )

BG066713		Pllp	Plasma membrane proteolipid
BG071360		Pofut1	Protein O-fucosyltransferase 1
BG071480		Pole2	Polymerase (DNA directed), epsilon 2 (p59 subunit)
BG072347		Polr3h	Polymerase (RNA) III (DNA directed) polypeptide H
BG083644		Por	P450 (cytochrome) oxidoreductase
BG067048		Ppm1d	Protein phosphatase 1D magnesium-dependent, delta isoform
BG081448		Ppp3cb	Protein phosphatase 3, catalytic subunit, beta isoform
BG065524		Prei3	Preimplantation protein 3
BG071336		Prkab1	Protein kinase, AMP-activated, beta 1 non-catalytic subunit
BG066674		Prune	Prune homolog ( <i>Drosophila</i> )
BG066125		Psma4	Proteasome (prosome, macropain) subunit, alpha type 4
BG065633		Psmb2	Proteasome (prosome, macropain) subunit, beta type 2
BG069898		Psmd11	Proteasome (prosome, macropain) 26S subunit, non-ATPase, 11
BG066562		Psmd7	Proteasome (prosome, macropain) 26S subunit, non-ATPase, 7
BG067054		Rab10	RAB10, member RAS oncogene family
BG066306		Ranbp9	RAN binding protein 9
BG068432		Rap1a	RAS-related protein-1a
BG082817		Rb1	Retinoblastoma 1
BG066577		Rbm6	RNA binding motif protein 6
BG065852		Rcor1	REST corepressor 1
BG082634		Rfx3	Regulatory factor X, 3 (influences HLA class II expression)
BG065580		Rfx4	Regulatory factor X, 4 (influences HLA class II expression)
BG069058		Rgs17	Regulator of G-protein signaling 17
BG066639		Rhoa	Ras homolog gene family, member A
BG063313		Rnf187	Ring finger protein 187
BG079511		Rpl3	Ribosomal protein L3
BG079733		Rrm2	Ribonucleotide reductase M2
BG072412		Sdk1	Sidekick homolog 1 ( <i>chicken</i> )
BG066686		Sfxn2	Sideroflexin 2
BG082445		Slc35f2	Solute carrier family 35, member F2
BG070178		Snrpc	U1 small nuclear ribonucleoprotein C
BG067008		Snx5	Sorting nexin 5
BG069359		Spata5	Spermatogenesis associated 5
BG064948		Spbc24	Spindle pole body component 24 homolog ( <i>S. cerevisiae</i> )

BQ550417		Srgap2	SLIT-ROBO Rho GTPase activating protein 2
BG071533		Srk2	Serine/arginine-rich protein specific kinase 2
BG066281		Srrp	Serine-arginine repressor protein
BQ552335		Stxbp4	Syntaxin binding protein 4
BG073342		Suhw4	Suppressor of hairy wing homolog 4 (Drosophila)
BG069533		Suv420h1	Suppressor of variegation 4-20 homolog 1 (Drosophila)
		Taf1	TAF1 RNA polymerase II, TATA box binding protein (TBP)-associated factor
BG070349		Tbl2	Transducin (beta)-like 2
BG065608		Tcf12	Transcription factor 12
BG066999		Tcta	T-cell leukemia translocation altered gene
BG064989		Thap4	THAP domain containing 4
BG079123		Timm8b	Translocase of inner mitochondrial membrane 8 homolog b (yeast)
		Tmco1	Transmembrane and coiled-coil domains 1
BG080049		Tmem181	Transmembrane protein 181
BQ550610		Tmem23	Transmembrane protein 23
C77314		Tmem50a	Transmembrane protein 50A
BG066503		Tnfaip2	Tumor necrosis factor, alpha-induced protein 2
BG067938		Tnfsf12	Tumor necrosis factor (ligand) superfamily, member 12
BG065761		Tom1	Target of myb1 homolog (chicken)
BG069517		Trkrb	Tp53rk binding protein
BG069372		Trpm7	Transient receptor potential cation channel, subfamily M, member 7
BG062981		Trrap	Transformation/transcription domain-associated protein
		Ttll11	Tubulin tyrosine ligase-like family, member 11
BG079014		Tubgcp5	Tubulin, gamma complex associated protein 5
BG082843		Tufm	Tu translation elongation factor, mitochondrial
BG070129		Txndc10	Thioredoxin domain containing 10
BG066560		Ubap2	Ubiquitin-associated protein 2
BG065643		Ube2c	Ubiquitin-conjugating enzyme E2C
BG071871		Ufd1l	Ubiquitin fusion degradation 1 like
BG067062		Upf2	UPF2 regulator of nonsense transcripts homolog (yeast)
BG078134		Vcp	Valosin containing protein
BQ552073		Vnn1	Vanin 1
BG065701		Wipf1	WAS/WASL interacting protein family, member 1
BG065616		Xpo4	Exportin 4
BG079187			
BG065802			
AU022767			

BQ551652		Zc3h7a	Zinc finger CCCH type containing 7 A
BG066657		Zfand3	Zinc finger, AN1-type domain 3
BG066683		Zfp292	Zinc finger protein 292
BG073125		Zfp617	Zinc finger protein 617
AU046252		Zfp69	Zinc finger protein 69
BG070672		Zfp9	Zinc finger protein 9
AA408075		EST	
AA409525		EST	
AU016350		EST	
AU018238		EST	
AU040933		EST	
AU041304		EST	
AU042897		EST	Transcribed locus
AU042949		EST	
AU042966		EST	
AU044194		EST	Transcribed locus
BG063053		EST	
BG063089		EST	
BG063092		EST	Transcribed locus
BG063095		EST	
BG063195		EST	
BG063310		EST	Transcribed locus 2 cells egg cDNA, RIKEN full-length enriched library, clone:B020036G17 product:unclassifiable, full insert sequence
BG063398		EST	
BG063401		EST	
BG063532		EST	
BG063665		EST	
BG063959		EST	
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BG064514		EST	
BG064533		EST	Transcribed locus
BG065549		EST	
BG065559		EST	
BG065577		EST	
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BG066341		EST
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BG066399		EST

Transcribed locus

BG066412		EST	
BG066479		EST	
BG066530		EST	
BG066568		EST	Adult male corpora quadrigemina cDNA, RIKEN full-length enriched library, clone:B230210N13 product:unclassifiable, full insert sequence
BG066573		EST	
BG066579		EST	
BG066598		EST	
BG066601		EST	
BG066602		EST	
BG066623		EST	
BG066624		EST	
BG066647		EST	
BG066659		EST	
BG066670		EST	
BG066691		EST	Transcribed locus
BG066711		EST	
BG066716		EST	
BG066720		EST	
BG066740		EST	
BG066778		EST	
BG066783		EST	
BG066901		EST	
BG066913		EST	
BG066997		EST	
BG067000		EST	
BG067042		EST	
BG067385		EST	
BG067815		EST	
BG068055		EST	
BG068069		EST	
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BG068421		EST	

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BG068435		EST	
BG068436		EST	
BG068456		EST	
BG068461		EST	
BG068468		EST	
BG068469		EST	
BG068472		EST	
BG068486		EST	Transcribed locus
BG068684		EST	
BG068694		EST	
BG068784		EST	
BG068840		EST	
BG068994		EST	Transcribed locus
BG069008		EST	
BG069091		EST	
BG069113		EST	
BG069127		EST	
BG069152		EST	
BG069183		EST	
BG069215		EST	
BG069363		EST	
BG069458		EST	
BG069501		EST	
BG069545		EST	
BG069629		EST	
BG069940		EST	
BG070059		EST	
BG070182		EST	
BG070195		EST	
BG070244		EST	
BG070250		EST	
BG070256		EST	
BG070301		EST	
BG070556		EST	
BG070572		EST	

BG070581		EST	Transcribed locus
BG070587		EST	
BG070648		EST	
BG070663		EST	
BG070697		EST	
BG070717		EST	
BG070753		EST	
BG070867		EST	
BG070879		EST	Transcribed locus
BG070931		EST	
BG070967		EST	
BG071106		EST	
BG071141		EST	
BG071170		EST	
BG071179		EST	
BG071183		EST	
BG071323		EST	
BG071357		EST	
BG071361		EST	
BG071371		EST	
BG071376		EST	
BG071380		EST	
BG071461		EST	
BG071739		EST	
BG071862		EST	
BG071864		EST	
BG071873		EST	
BG072392		EST	
BG072400		EST	
BG072414		EST	
BG072469		EST	
BG073033		EST	
BG073476		EST	
BG073675		EST	
BG075634		EST	
BG079181		EST	
BG079188		EST	

BG079400		EST
BG079819		EST
BG080992		EST
BG081451		EST
BG083560		EST
BG083661		EST
BG083945		EST
BG083989		EST
BG084924		EST
BG087979		EST
BQ550180		EST
BQ550326		EST
BQ550353		EST
BQ550466		EST
BQ550502		EST
BQ550555		EST
BQ551082	EST	Transcribed locus
BQ551838	EST	
BQ552076	EST	
BQ552150	EST	
BQ552422	EST	
BQ552528	EST	
C79520	EST	
C79547	EST	
C79832	EST	
C79876	EST	
C79973	EST	
BG076251	0610025P10Rik	RIKEN cDNA 0610025P10 gene
BG077473	0610031J06Rik	RIKEN cDNA 0610031J06 gene
BG077425	0610038F07Rik	RIKEN cDNA 0610038F07 gene
BG076241	1700001L05Rik	RIKEN cDNA 1700001L05 gene
BG067245	2210009G21Rik	RIKEN cDNA 2210009G21 gene
BG077494	2810430M08Rik	RIKEN cDNA 2810430M08 gene
BG068558	4732496O08Rik	RIKEN cDNA 4732496O08 gene
BG076093	4933425L03Rik	RIKEN cDNA 4933425L03 gene
BG064168	5830416A07Rik	RIKEN cDNA 5830416A07 gene
BG070420	5830484A20Rik	RIKEN cDNA 5830484A20 gene

BG067505		9030416H16Rik RIKEN cDNA 9030416H16 gene
BG076134		9330120H11Rik RIKEN cDNA 9330120H11 gene
BG068195	Abce1	ATP-binding cassette, sub-family E (OABP), member 1
BG078031	Abcf1	ATP-binding cassette, sub-family F (GCN20), member 1
BG065421	Abi1	Abl-interactor 1
BG076298	Abi2	Abl-interactor 2
BG080706	Acpl2	Acid phosphatase-like 2
BG076190	AI462493	Expressed sequence AI462493
BG067269	Ak2	Adenylate kinase 2
BG080773	Ampd3	AMP deaminase 3
BG067528	Angpt4	Angiopoietin 4
BG063987	Anxa11	Annexin A11
		Amyloid beta precursor protein (cytoplasmic tail) binding protein 2
AW544549	Appbp2	
BG064139	Arih2	Ariadne homolog 2 (Drosophila)
BG075032	Armcx6	Armadillo repeat containing, X-linked 6
BG077307	Arpc5	Actin related protein 2/3 complex, subunit 5
AW539306	Atp13a1	ATPase type 13A1
BG079910	Atp6v0a1	ATPase, H+ transporting, lysosomal V0 subunit A1
BG080527	Atp6v0a4	ATPase, H+ transporting, lysosomal V0 subunit A4
BG064408	AU022875	Expressed sequence AU022875
BG076340	BC003324	CDNA sequence BC003324
BG067471	BC063749	CDNA sequence BC063749
BG075041	C730024G19Rik	RIKEN cDNA C730024G19 gene
BG067811	C87011	Expressed sequence C87011
BG067211	Cald1	Caldesmon 1
BG077365	Canx	Calnexin
BG075808	Ccdc46	Coiled-coil domain containing 46
BG066826	Ccdc86	Coiled-coil domain containing 86
BG080262	Cib1	Calcium and integrin binding 1 (calmyrin)
BG080327	Cita	Clathrin, light polypeptide (Lca)
BG067515	Csmd1	CUB and Sushi multiple domains 1
BG067383	Ctsb	Cathepsin B
BG067467	D10Ert447e	DNA segment, Chr 10, ERATO Doi 447, expressed
BG063993	Dcbl2	Discoidin, CUB and LCCL domain containing 2
BG077491	Dym	Dymeclin
BG080282	EG665317	Predicted gene, EG665317

AW537726		Eif5	Eukaryotic translation initiation factor 5
BG080787		Eps15	Epidermal growth factor receptor pathway substrate 15
BG064195		Esam1	Endothelial cell-specific adhesion molecule
BG077308		Etf1	Eukaryotic translation termination factor 1
BG074239		Exoc6b	Exocyst complex component 6B
BG078032		Fbxl18	F-box and leucine-rich repeat protein 18
BG067311		Fbxw17	F-box and WD-40 domain protein 17
AU023208		Gna14	Guanine nucleotide binding protein, alpha 14
BG086996		Golga1	Golgi autoantigen, golgin subfamily a, 1
BG080751		Gpi1	Glucose phosphate isomerase 1
BG064747		Gpt1	Glutamic pyruvic transaminase 1, soluble
BG062947		H2afj	H2A histone family, member J
BG067847		Hif3a	Hypoxia inducible factor 3, alpha subunit
BG078700		Hmgb3	High mobility group box 3
BG077623		Hprt1	Hypoxanthine guanine phosphoribosyl transferase 1
AW544146		Igf2bp1	Insulin-like growth factor 2 mRNA binding protein 1
BG076144		Il10rb	Interleukin 10 receptor, beta
		Ilkap	Integrin-linked kinase-associated serine/threonine phosphatase 2C
BG088536		Ing1	Inhibitor of growth family, member 1
BG077144		Itpk1	Inositol 1,3,4-triphosphate 5/6 kinase
BG080578		Itpr2	Inositol 1,4,5-triphosphate receptor 2
BG067589		Kif16b	Kinesin family member 16B
BG076299		Ldlr	Low density lipoprotein receptor
BG063992		Lin9	Lin-9 homolog (C. elegans)
BG067268		Lrrc16	Leucine rich repeat containing 16
C79029		Ltbp1	Latent transforming growth factor beta binding protein 1
BG066400		Marcks1	MARCKS-like 1
BG077510		Mars2	Methionine-tRNA synthetase 2 (mitochondrial)
AW539214		Mcc	Mutated in colorectal cancers
BG080557		Mcm10	Minichromosome maintenance deficient 10 (S. cerevisiae)
BG080212		Mdm2	Transformed mouse 3T3 cell double minute 2
BG080240		Med28	Mediator of RNA polymerase II transcription, subunit 28 homolog (yeast)
BG077636		Mmp2	Matrix metallopeptidase 2
BG076331		Mrpl38	Mitochondrial ribosomal protein L38
BG077730		Mtdh	Metadherin
BG077482			

BG063646		Mucdhl	Mucin and cadherin like
BG068329		Mybl1	Myeloblastosis oncogene-like 1
BG067580		Myo1d	Myosin ID
BG067588		Nup160	Nucleoporin 160
BG077430		Obfc2a	Oligonucleotide/oligosaccharide-binding fold containing 2A
BG080730		Paip1	Polyadenylate binding protein-interacting protein 1
BG067246		Pctk3	PCTAIRE-motif protein kinase 3
BG077755		Pfpl	Pore forming protein-like
BG077815		Phf16	PHD finger protein 16
BG080549		Plac9	Placenta specific 9
BG067450		Plekha5	Pleckstrin homology domain containing, family A member 5
BG087717		Pms2	Postmeiotic segregation increased 2 ( <i>S. cerevisiae</i> )
BG077413		Pnpo	Pyridoxine 5'-phosphate oxidase
BG080716		Polr2c	Polymerase (RNA) II (DNA directed) polypeptide C
BG067404		Ppil5	Peptidylprolyl isomerase (cyclophilin) like 5
BG076307		Prkab2	Protein kinase, AMP-activated, beta 2 non-catalytic subunit
BG076094		Rab11fip2	RAB11 family interacting protein 2 (class I)
AW543826		Rab2	RAB2, member RAS oncogene family
BG077338		Rcc1	Regulator of chromosome condensation 1
BG063781		Rnf2	Ring finger protein 2
BG066381		Rpl27	Ribosomal protein L27
BG067517		Rragc	Ras-related GTP binding C
BG064126		Slc2a1	Solute carrier family 2 (facilitated glucose transporter), member 1
BG088937		Smarca4	SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 4
BG080589		Smarcd3	SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily d, member 3
BG076183		Smc1b	Structural maintenance of chromosomes 1B
BG067180		Srbd1	S1 RNA binding domain 1
BG064318		Srebf1	Sterol regulatory element binding factor 1
BG067560		Ssbp2	Single-stranded DNA binding protein 2
BG088369		St5	Suppression of tumorigenicity 5
BG080328		Stk11	Serine/threonine kinase 11
BG067447		Tada1l	Transcriptional adaptor 1 (HFI1 homolog, yeast) like
BG080604		Tank	TRAF family member-associated Nf-kappa B activator
BG080542		Taok2	TAO kinase 2

BG080602		Tax1bp1	Tax1 (human T-cell leukemia virus type I) binding protein 1
BG064135		Thada	Thyroid adenoma associated
BG082196		Tiparp	TCDD-inducible poly(ADP-ribose) polymerase
BG076403		Tmtc4	Transmembrane and tetratricopeptide repeat containing 4
BG067553		Tnc	Tenascin C
BG078038		Topors	Topoisomerase I binding, arginine/serine-rich
BG075608		Tpi1	Triosephosphate isomerase 1
AW537534		Tpm4	Tropomyosin 4
BG067120		Traf3ip2	Traf3 interacting protein 2
BG078643		Trh	Thyrotropin releasing hormone
BG067444		Trim46	Tripartite motif protein 46
BG066380		Trip12	Thyroid hormone receptor interactor 12
BG077537		Tsc22d4	TSC22 domain family 4
BG067233		Ttc32	Tetratricopeptide repeat domain 32
BG064124		Txndc1	Thioredoxin domain containing 1
BG078001		Ube1x	Ubiquitin-activating enzyme E1, Chr X
BG080481		Ubxd2	UBX domain containing 2
		Utp15	UTP15, U3 small nucleolar ribonucleoprotein, homolog (yeast)
BG064150		Wdr26	WD repeat domain 26
BG063952		Wdr68	WD repeat domain 68
BG076339		Zfp36l2	Zinc finger protein 36, C3H type-like 2
BG064105		Zfp422-rs1	Zinc finger protein 422, related sequence 1
BG067234		Zfp445	Zinc finger protein 445
BG076391		Zfp511	Zinc finger protein 511
BG067516		EST	
AA410137		EST	
AW536084		EST	
AW536190		EST	
AW536769		EST	
AW536804		EST	
AW537378		EST	
AW537455		EST	
AW537468		EST	
AW537491		EST	
AW537514		EST	
AW537542		EST	
AW537634		EST	

AW537693		EST
AW537910		EST
AW538179		EST
AW538759		EST
AW538984		EST
AW538990		EST
AW539114		EST
AW539443		EST
AW542384		EST
AW542467		EST
AW543461		EST
AW543494		EST
AW543498		EST
AW543642		EST
AW543654		EST
AW543679		EST
AW544448		EST
AW544592		EST
AW544673		EST
AW548043		EST
AW553287		EST
BG063395		EST
BG063842		EST
BG063906		EST
BG063953		EST
BG064088		EST
BG064094		EST
BG064159		EST
BG064174		EST
BG064176		EST
BG064793		EST
BG066803		EST
BG067210		EST
BG067243		EST
BG067416		EST
BG067503		EST
BG067504		EST

Transcribed locus

BG067527		EST	
BG067531		EST	
BG067551		EST	
BG067575		EST	
BG067598		EST	
BG067611		EST	
BG067647		EST	
BG071920		EST	
BG073132		EST	
BG074282		EST	
BG075466		EST	
BG076137		EST	Transcribed locus
BG076370		EST	Transcribed locus
			Transcribed locus
BG080577		EST	
BG080593		EST	
BG080594		EST	
BG080616		EST	
BI076560		EST	
C85808		EST	2 days pregnant adult female ovary cDNA, RIKEN full-length enriched library, clone:E330027H18 product:unclassifiable, full insert sequence

**TableS4c. The impact of CR on the reversion of AAGs expression.**

Notes. Red color represents upregulation in aging; blue color represents downregulation in aging.

Green color represents reversion of upregulated AAGs; Purple color represents reversion of downregulated AAG.

**CORTEX**

<b>Ratio</b>	<b>Ratio</b>				<b>Chromosome</b>
<b>24M-CR/AD</b>	<b>AD-24M/16M</b>	<b>Acc</b>	<b>Symbol</b>	<b>Name</b>	
-1.94	1.71	BG088924	Phkb	Phosphorylase kinase beta	8
-2.74	1.60	BG076894	Mybbp1a	MYB binding protein 1a	11
-1.76	1.64	BG073936	LOC114601	Tangerin	19
-2.48	3.11	BG075825	Kifc2	Kinesin family member C2	15
-1.56	1.85	BG087174	Gmppa	GDP-mannose pyrophosphorylase A	1
-1.91	1.68	BG075206	4930429A22Rik	RIKEN cDNA 4930429A22 gene	1
1.98	-1.71	BG065689	Ube2l3	Ubiquitin-conjugating enzyme E2L 3	
1.82	-2.04	BG072681	Tebp	Prostaglandin E synthase 3	10
1.79	-1.52	BG079508	Tbl1x	Transducin -like 1 X-linked	X
2.29	-1.55	BG065620	Ss18	Synovial sarcoma translocation, Chromosome 18	18
2.22	-1.51	BG064920	Rex3	Brain expressed X-linked protein 1	X
1.78	-1.85	BG070766	Pdxfk	Pyridoxal kinase	10
2.17	-2.01	BG083198	Paip2	Polyadenylate-binding protein-interacting protein 2	18
2.51	-2.36	BG066700	Nol7	Nucleolar protein 7	13
1.94	-1.88	BG073379	Nckap1	NCK-associated protein 1	2
2.15	-2.08	BG082602	Mark3	MAP/microtubule affinity-regulating kinase 3	12
2.25	-1.66	BG078898	Lgtn	Ligatin	1
2.18	-1.78	BG069589	Kcnk6	TWIK-2 two-pore-domain K+ channel	7
2.52	-2.33	BG071450	Iqcd	IQ motif containing D	5
1.89	-1.80	BG076765	Hnrcpc	Heterogeneous nuclear ribonucleoprotein C	4
1.67	-1.64	BG072044	Garnl1	GTPase activating RANGAP domain-like 1 , transcript variant 2	12
2.26	-1.67	BG066589	Dmd	Dystrophin, muscular dystrophy	X
1.77	-1.71	BG075303	Cryzl1	Crystallin, zeta -like 1	16
1.71	-1.68	BQ550996	Cdk5rap2	CDK5 regulatory subunit associated protein 2	4
2.21	-1.63	BG079870	Caml	Calcium modulating ligand	13
2.26	-1.90	BG079566	Btrc	Beta-transducin repeat containing protein	19
1.99	-1.53	BG069506	Arhgef7	Rho guanine nucleotide exchange factor	8
1.73	-1.59	AA409025	Ankrd15	Ankyrin repeat domain 15	19
2.48	-1.64	BG063015	9430023L20Rik	RIKEN cDNA 9430023L20 gene	15

2.41	-2.14	BG069528	5730405I09Rik	RIKEN cDNA 5730405I09 gene	18
1.65	-1.70	BG074675	2010301N04Rik	RIKEN cDNA 2010301N04 gene	6
2.13	-1.68	BG070219	1810043M20Rik	BAT2 domain containing 1	1
1.69	-1.50	BG066690	0610033H09Rik	Aurora kinase A interacting protein 1	4
1.98	-1.59	BG066735	EST		
2.37	-2.18	BG066724	EST		
1.57	-1.51	BG066591	EST		
2.54	-1.64	BG063918	EST		
2.10	-1.65	AU023920	EST		
2.15	-1.66	BQ550324	EST		
1.60	-1.67	BG072465	EST		
2.29	-1.68	BQ550997	EST		
1.78	-1.69	BG069622	EST		
1.85	-1.70	BG079860	EST		
2.01	-1.88	BQ551014	EST		
2.30	-1.94	BG072031	EST		
2.37	-1.95	BG069132	EST		
2.74	-2.05	BG066361	EST		
2.74	-2.29	BG066588	EST		
2.98	-2.37	BG065948	EST		
2.40	-3.30	BG072043	EST		

	AAG	CR respons	Reverted
Up	145.00	6	4.1
Down	305.00	44	14.4

## HIPPOCAMPUS

24M-CR/AD	AD-24M/16M	Acc	Symbol	Name	Chromosome
1.78	-2.53	BG073668	Tfb1m	Transcription factor B1, mitochondrial (Tfb1m), mRNA	17
1.53	-1.65	BG085378	EST		

	AAG	CR	Reverted (%)
Up	192.00		0 0 (down)
Down	208.00		2 1.0 (up)

## CEREBELLUM

24M-CR/AD	AD-24M/16M	Acc	Symbol	Name	Chromosome
-2.1801323	2.20341149	BG072073	Wdr10	MFLJ00025 protein	6
-1.593072	1.56066728	BG074610	Glb1	Galactosidase, beta 1, mRNA (cDNA clone MGC:25403 IMAGE:4240285)	9
-2.1453543	1.56546235	BG083890	Ppfia1	PREDICTED: similar to Liprin-alpha 1 (Protein tyrosine phosphatase receptor type f polypeptide-interacting protein alpha 1) (PTPRF-interacting protein alpha 1) (LAR-interacting protein 1) (LIP.1) [Mus musculus], mRNA sequence	7
-2.2595158	2.46101756	BG072375	2210404D11Rik	RIKEN cDNA 2210404D11 gene (2210404D11Rik), mRNA	13
-1.6579216	1.78334667	BQ551139	EST		
-1.6654181	1.69258313	BG073325	EST		
-2.8313557	2.2562481	BQ552325	EST		
2.75371048	-3.29844015	BG064869	Rnmt	IMAGE:4208274)	18
2.27897993	-2.02419775	BG064665	Nucks1	nuclear casein kinase and cyclin-dependent kinase substrate 1	1
1.82364747	-1.78847761	BG064677	Trpc4ap	Transient receptor potential cation channel, subfamily C, member 4 associated protein, mRNA (cDNA clone MGC:25542 IMAGE:3673725)	2
2.51827545	-3.39696633	BG064868	EST		

AAG CR

	AAG	CR	Reverted (%)
Up	49		7 14.3 (down)
Down	166		4 2.4 (up)

## STRIATUM

### Zero

AAG CR Reverted (%)

	AAG	CR	Reverted (%)
Up	75		0 0 (down)
Down	63		0 0 (up)

## SPINAL CORD

24M-CR/AD	AD-24M/16M Acc	Symbol	Name	Chromosome
-1.76	1.75	BQ552073	Ufd1l Ubiquitin fusion degradation 1 like, mRNA (cDNA clone MGC:11477 IMAGE:3708320)	16
-1.92	1.52	BG065991	Ttc19 Tetratricopeptide repeat domain 19, mRNA (cDNA clone MGC:47198 IMAGE:5370464)	11
-1.56	1.75	BG086904	Ttc11 Tetratricopeptide repeat domain 11, mRNA (cDNA clone MGC:18717 IMAGE:4221162)	5
-3.41	3.14	BG082843	Trrap Transformation/transcription domain-associated protein, mRNA (cDNA clone IMAGE:5043876)	5
-2.31	1.52	BG079014	Trpm7 LTRPC7 (Ltrpc7)	2
-2.53	1.86	BG066559	Tnks1bp1 Tankyrase 1 binding protein 1, mRNA (cDNA clone IMAGE:4982635)	2
-2.31	1.81	BG069517	Tnfsf13 Tumor necrosis factor (ligand) superfamily, member 13 (Tnfsf13), mRNA	11
-2.06	1.70	BG066503	Tmem23 Transmembrane protein 23 (Tmem23), mRNA	19
-2.69	2.05	BG066997	Thns1l Threonine synthase-like 1 (bacterial), mRNA (cDNA clone IMAGE:5037172)	2
-1.92	1.96	BG064989	Tcta T-cell leukemia translocation altered gene, mRNA (cDNA clone MGC:25540 IMAGE:3672301)	9
-1.62	1.50	BG079508	Tbl1x Transducin (beta)-like 1 X-linked (Tbl1x), mRNA	X
-2.07	2.01	BG069533	Suv420h1 Suppressor of variegation 4-20 homolog 1 (Drosophila) (Suv420h1), mRNA	19
-3.50	2.70	BG083097	Stx1b1 Syntaxin 1B2 (Stx1b2), mRNA	7
-1.62	1.69	C79706	Stam2 Signal transducing adaptor molecule (SH3 domain and ITAM motif) 2, mRNA (cDNA clone MGC:18336 IMAGE:3671426)	2
-1.86	1.77	BQ550417	Srgap2 GAP2	1
-2.09	2.41	BG072287	Solt SoxLZ/Sox6 leucine zipper binding protein in testis (Solt), transcript variant 1, mRNA	13
-1.81	1.80	BG077930	Snx10 Sorting nexin 10 (Snx10), mRNA	6
-3.25	1.95	BG065899	Sh2bp1 SH2 domain binding protein 1 (tetratricopeptide repeat containing) (Sh2bp1), mRNA	7
-2.81	1.69	BG079733	Rrm2 Ribonucleotide reductase M2 (Rrm2), mRNA	12
-2.74	1.81	BG079511	Rpl3 Ribosomal protein L3, mRNA (cDNA clone MGC:6334 IMAGE:3485069)	?
-2.10	2.31	BG082817	Rb1 Retinoblastoma 1 (Rb1), mRNA	14
-2.29	1.77	BG068432	Rap1a RAS-related protein-1a (Rap1a), mRNA	3
-2.04	1.81	BG066562	Psmd7 Proteasome (prosome, macropain) 26S subunit, non-ATPase, 7 (Psmd7), mRNA	8
-1.97	1.64	BG065524	Prei3 Preimplantation protein 3 (Prei3), mRNA	1
-2.57	1.59	BG081448	Ppp3cb Calmodulin dependent phosphatase catalytic subunit (Cam-Prp) mRNA, 3' end	14

-2.11	2.24	AU021253	Ppm1a	Protein phosphatase 1A, magnesium dependent, alpha isoform, mRNA (cDNA clone MGC:6077 IMAGE:3581897)	12
-1.60	1.95	BG066345	Pkp4	Plakophilin 4, mRNA (cDNA clone MGC:100358 IMAGE:30648695)	2
-1.75	1.68	BG066066	Pik3r3	Phosphatidylinositol 3 kinase, regulatory subunit, polypeptide 3 (p55) (Pik3r3), mRNA	4
-3.03	2.23	BG078897	Phf12	PHD finger protein 12, mRNA (cDNA clone IMAGE:4457783)	11
-1.59	2.07	BG069544	Pde3a	Phosphodiesterase 3A, cGMP inhibited (Pde3a), mRNA	6
-2.15	2.04	BG083198	Paip2	Polyadenylate-binding protein-interacting protein 2, mRNA (cDNA clone MGC:11595 IMAGE:3964799)	18
-1.65	1.64	BQ550334	Pafah1b2	Platelet-activating factor acetylhydrolase, isoform 1b, alpha2 subunit, mRNA (cDNA clone MGC:5963 IMAGE:3486003)	9
-1.96	2.42	BG069555	Osbpl8	Oxysterol binding protein-like 8 (Osbpl8), transcript variant 2, mRNA	10
-2.19	1.70	AU014844	Ogdh	Oxoglutarate dehydrogenase (lipoamide), mRNA (cDNA clone IMAGE:4983309)	11
-2.97	1.91	BG081746	Oazin	Antizyme inhibitor 1, mRNA (cDNA clone MGC:30222 IMAGE:5151406)	15
-3.55	2.56	BG068694	Nup155	Nucleoporin 155 (Nup155), mRNA	15
-2.03	1.80	BG079578	Npc1	Niemann Pick type C1 (Npc1), mRNA	18
-1.91	1.94	BG070274	Nlk	Nemo like kinase (Nlk), mRNA	11
-2.24	1.98	BG077638	Mrpl19	Mitochondrial ribosomal protein L19, mRNA (cDNA clone IMAGE:5029482)	6
-2.38	2.06	BG078615	Mns1	Meiosis-specific nuclear structural protein 1 (Mns1), mRNA	9
-1.70	2.12	BG082854	Mesp2	Mesoderm posterior 2 (Mesp2), mRNA	7
-1.94	1.51	BG068456	Map3k3	Mitogen activated protein kinase kinase kinase 3, mRNA (cDNA clone MGC:38453 IMAGE:5346982)	11
-1.69	2.04	BG077319	Lzts2	Leucine zipper, putative tumor suppressor 2 (Lzts2), mRNA	19
-2.27	2.05	BG068814	Ly6g6c	Ly6g6c protein, splice variant 1	17
-2.48	2.12	BG065612	Lrrk2	Leucine-rich repeat kinase 2, mRNA (cDNA clone IMAGE:4242403)	15
-1.80	1.54	BG069534	Lman2l	Lectin, mannose-binding 2-like (Lman2l), mRNA	1
-1.70	1.81	C76424	Lhfpl2	Lipoma HMGIC fusion partner-like 2, mRNA (cDNA clone MGC:27827 IMAGE:3484974)	13
-2.01	1.86	BG078898	Lgtm	Ligatin, mRNA (cDNA clone MGC:36900 IMAGE:4935223)	1
-2.33	2.03	BQ551582	Lass6	Longevity assurance homolog 6 ( <i>S. cerevisiae</i> ), mRNA (cDNA clone MGC:67674 IMAGE:4224547)	2
-1.85	1.63	BG078920	Khsrp	KH-type splicing regulatory protein (Khsrp), mRNA	17
-2.74	2.19	BG066550	Kctd5	Potassium channel tetramerisation domain containing 5, mRNA (cDNA clone MGC:28594 IMAGE:4215964)	17
-1.63	1.55	BG083661	Ilf3	Interleukin enhancer binding factor 3 (Ilf3), mRNA	9

-1.82	<b>2.31</b>	BG064506	Il17d	Interleukin 17D (Il17d), mRNA	14
-2.73	<b>2.14</b>	BQ550353	Hmgn1	High mobility group nucleosomal binding domain 1 (Hmgn1), mRNA	16
-1.90	<b>1.91</b>	BG078930	Fkbp4	FK506 binding protein 4, mRNA (cDNA clone MGC:6528 IMAGE:2651490)	6
-2.09	<b>1.60</b>	BG070773	Fkbp1a	FK506 binding protein 1a, mRNA (cDNA clone MGC:6253 IMAGE:3498682)	2
-1.84	<b>1.72</b>	BG066491	FHOS2	MKIAA1695 protein	18
-1.70	<b>1.64</b>	BG065915	Etv6	Ets variant gene 6 (TEL oncogene) (Etv6), mRNA	6
-2.60	<b>2.24</b>	BG065623	Etnk1	PREDICTED: ethanolamine kinase 1 [Mus musculus], mRNA sequence	6
-2.91	<b>2.67</b>	BG069525	Ercc4	Excision repair cross-complementing rodent repair deficiency, complementation group 4, mRNA (cDNA clone MGC:30522 IMAGE:4911382)	16
-1.65	<b>1.66</b>	BG068469	Ednrb	Endothelin receptor type B, mRNA (cDNA clone MGC:36102 IMAGE:4971909)	14
-1.85	<b>1.79</b>	BG071167	E230011A21Rik	Fibronectin type III domain containing 7 (Fndc7), mRNA	3
				PREDICTED: hypothetical protein E130307A14 [Mus musculus], mRNA	
-2.96	<b>2.53</b>	BG070195	E130307A14Rik	sequence	10
				Dystrobrevin binding protein 1, mRNA (cDNA clone MGC:25855	
-2.81	<b>1.61</b>	BG066292	Dtnbp1	IMAGE:4195234)	13
-2.00	<b>2.32</b>	BG066580	Dsg2	Desmoglein 2 (Dsg2), mRNA	18
				DNA cytosine methyltransferase 3b6 (Dnmt3b6) mRNA, complete cds;	
-1.96	<b>1.75</b>	BG066942	Dnmt3b	alternatively spliced	2
-1.60	<b>1.50</b>	BG070080	Dmgdh	Dimethylglycine dehydrogenase precursor (Dmgdh), mRNA	13
				RIKEN cDNA D930036F22 gene, mRNA (cDNA clone MGC:99412	
-1.66	<b>1.70</b>	BG071093	D930036F22Rik	IMAGE:30544145)	12
				DNA segment, Chr 8, ERATO Doi 457, expressed, mRNA (cDNA clone	
-2.93	<b>2.72</b>	BG068420	D8Ertd457e	MGC:38639 IMAGE:5355869)	8
				DNA segment, Chr 5, ERATO Doi 135, expressed, mRNA (cDNA clone	
-2.28	<b>1.62</b>	BG065769	D5Ertd135e	MGC:69960 IMAGE:6516578)	5
				DNA segment, Chr 10, ERATO Doi 641, expressed, mRNA (cDNA clone	
-1.55	<b>1.77</b>	BG070372	D10Ertd641e	MGC:35747 IMAGE:3984181)	10
-1.76	<b>1.84</b>	BG083209	Cyba	Cytochrome b-245, alpha polypeptide (Cyba), mRNA	8
-2.50	<b>1.92</b>	BG068414	Col25a1	Procollagen, type XXV, alpha 1 (Col25a1), transcript variant 1, mRNA	3
-2.98	<b>1.80</b>	BG065629	Centd1	Centaurin, delta 1, mRNA (cDNA clone IMAGE:3710592)	5
-1.61	<b>1.59</b>	BG066570	Cdyl2	Chromodomain protein, Y chromosome-like 2 (Cdyl2), mRNA	8
-2.23	<b>2.02</b>	BG065644	Cdc5l	Cell division cycle 5-like (S. pombe) (Cdc5l), mRNA	?
-2.50	<b>1.86</b>	BG079699	Cct4	Chaperonin subunit 4 (delta) (Cct4), mRNA	11

-1.98	2.13	BG077928	C130032J12Rik	RIKEN cDNA C130032J12 gene, mRNA (cDNA clone IMAGE:6850209) CDNA sequence BC013481, mRNA (cDNA clone MGC:37504	14
-1.77	1.59	BG083308	BC013481	IMAGE:4984936) TAF1 RNA polymerase II, TATA box binding protein (TBP)-associated factor,	?
-1.92	2.06	BG070349	B430306D02Rik	mRNA (cDNA clone MGC:107711 IMAGE:6833930)	X
-2.30	1.81	BG063398	B230219D22Rik	RIKEN cDNA B230219D22 gene, mRNA (cDNA clone IMAGE:3711169) DEAH (Asp-Glu-Ala-Asp/His) box polypeptide 57, mRNA (cDNA clone	13
-1.91	2.10	BG064252	AW494914	IMAGE:4489006) Expressed sequence AU020772, mRNA (cDNA clone MGC:122966	17
-1.97	1.83	BG066708	AU020772	IMAGE:30643564)	7
-1.76	1.73	BG065639	Ap1gbp1	AP1 gamma subunit binding protein 1 (Ap1gbp1), mRNA	?
-2.49	1.73	BG073745	Acbd3	Peripheral benzodiazepine receptor associated protein (Pap7) PREDICTED: hypothetical protein XP_485801 [Mus musculus], mRNA	1
-1.81	2.27	BG067888	Aak1	sequence Expressed sequence AA407526, mRNA (cDNA clone MGC:67689	6
-1.81	1.60	AU042966	AA407526	IMAGE:5353891)	5
-1.91	1.70	BG070663	A630082K20Rik	RIKEN cDNA A630082K20 gene, mRNA (cDNA clone IMAGE:3488682)	6
-1.59	1.70	BG066056	9130404D08Rik	RIKEN cDNA 9130404D08 gene (9130404D08Rik), mRNA	8
-2.26	2.48	BQ550664	8030451K01Rik	MKIAA4083 protein	3
-1.94	1.73	BG068796	6330581L23Rik	RIKEN cDNA 6330581L23 gene (6330581L23Rik), mRNA	7
-2.65	1.83	BG063195	6030458H05	Hypothetical protein 6030458H05 (6030458H05), mRNA RIKEN cDNA 5430400N05 gene, mRNA (cDNA clone MGC:79151	8
-2.54	1.51	BG065890	5430400N05Rik	IMAGE:6849964)	7
-1.83	1.53	BG065711	4930539A06Rik	PREDICTED: RIKEN cDNA 4930539A06 [Mus musculus], mRNA sequence RIKEN cDNA 4930432O21 gene, mRNA (cDNA clone MGC:90082	5
-2.01	1.56	BG068399	4930432O21Rik	IMAGE:6418362)	17
-2.52	2.65	BG069898	4930402H24Rik	RIKEN cDNA 4930402H24 gene, mRNA (cDNA clone IMAGE:5366525) RIKEN cDNA 4632428N05 gene, mRNA (cDNA clone MGC:7407	2
-2.54	2.55	BQ551701	4632428N05Rik	IMAGE:3488482) RIKEN cDNA 2810047L02 gene, mRNA (cDNA clone MGC:64712	10
-2.47	2.72	BG071581	2810047L02Rik	IMAGE:6837782) RIKEN cDNA 2810002D13 gene, mRNA (cDNA clone MGC:41417	1
-2.06	1.82	BG069669	2810002D13Rik	IMAGE:3328402) RIKEN cDNA 2700094F01 gene, mRNA (cDNA clone MGC:73433	2
-2.49	2.16	BG065667	2700094F01Rik	IMAGE:6400080)	6

			PREDICTED: Mus musculus RIKEN cDNA 2510002D24 gene	
-2.25	1.73	BG063089	2510002D24Rik (2510002D24Rik), mRNA RIKEN cDNA 2010305A19 gene, mRNA (cDNA clone MGC:8003	16
-2.24	1.70	BG082886	2010305A19Rik IMAGE:3585966) Leucine rich repeat containing 8 family, member E, mRNA (cDNA clone	4
-2.10	2.13	BG067748	1810049O03Rik IMAGE:4019849) RIKEN cDNA 1810034M08 gene, mRNA (cDNA clone MGC:38694	8
-1.84	1.61	BG062981	1810034M08Rik IMAGE:5357332)	6
-2.57	2.22	BQ551838	1700022N24Rik Ring finger protein 185 (Rnf185), mRNA	11
-2.24	1.57	BG065616	1700022I11Rik RIKEN cDNA 1700022I11 gene (1700022I11Rik), mRNA	4
-2.73	2.21	BG082833	1500003O03Rik RIKEN cDNA 1500003O03 gene (1500003O03Rik), mRNA	2
-2.63	2.47	BG069904	1190005F20Rik RIKEN cDNA 1190005F20 gene, mRNA (cDNA clone IMAGE:4459087)	1
-2.12	1.76	BG070762	1110003E01Rik RIKEN cDNA 1110003E01 gene (1110003E01Rik), mRNA	5
-2.12	1.58	BQ550263	EST CDNA, clone:Y2G0113F14, strand:unspecified	7
-1.65	1.80	BG072059	EST Transcribed locus	4
-2.07	1.56	BG066720	EST PREDICTED: Mus musculus similar to GPAD9366 (LOC546998), mRNA PREDICTED: similar to OTTMUSP00000000621 [Mus musculus], mRNA	7
-1.84	1.53	BG065992	EST sequence	13
-1.76	1.59	C76156	EST CDNA clone IMAGE:1548559	1
-1.76	1.83	BG063092	EST Transcribed locus	13
-3.58	1.89	BG066229	EST PREDICTED: similar to RIKEN cDNA 8430426H19 [Mus musculus], mRNA	13
-3.58	1.89	BG066229	EST sequence	13
-1.87	1.63	BG070059	EST Transcribed locus, moderately similar to NP_795929.1 hypothetical protein LOC319587 [Mus musculus]	8
-1.74	2.90	BG066125	EST CDNA, clone:Y2G0121L09, strand:minus, reference:ENSEMBL:Mouse-Transcript-ENST:ENSMUST00000034848, based on BLAT search	18
-2.08	1.51	BG066683	EST 10, 11 days embryo whole body cDNA, RIKEN full-length enriched library, clone:2810040C05 product:unclassifiable, full insert sequence	4
-1.69	2.06	BG065657	EST Transcribed locus	X
-2.68	2.36	BG068017	EST Transcribed locus, moderately similar to NP_076356.1 hypothetical protein LOC77547 [Mus musculus]	12
-2.01	1.52	BG066362	EST Transcribed locus, moderately similar to NP_795929.1 hypothetical protein LOC319587 [Mus musculus]	2
-2.06	2.41	BG079400	EST PREDICTED: similar to Mthfd1l protein [Mus musculus], mRNA sequence	12
-3.00	1.72	BG066647	EST Transcribed locus, moderately similar to NP_795929.1 hypothetical protein LOC319587 [Mus musculus]	17
-2.75	3.58	BQ552150	EST	

-2.81	<b>3.25</b>	BG081451	EST
-3.20	<b>2.77</b>	BG068784	EST
-2.49	<b>2.73</b>	BG066008	EST
-3.65	<b>2.72</b>	BG063053	EST
-2.57	<b>2.68</b>	BG068069	EST
-2.73	<b>2.63</b>	BG066412	EST
-2.98	<b>2.61</b>	BG064514	EST
-2.16	<b>2.56</b>	BG068461	EST
-2.83	<b>2.50</b>	BG065622	EST
-3.20	<b>2.47</b>	BG069091	EST
-2.62	<b>2.44</b>	BG066341	EST
-2.26	<b>2.43</b>	BG082154	EST
-2.80	<b>2.40</b>	BG068466	EST
-2.81	<b>2.37</b>	BG065611	EST
-2.93	<b>2.37</b>	BG065957	EST
-2.59	<b>2.33</b>	BG071357	EST
-3.25	<b>2.32</b>	BG070556	EST
-1.86	<b>2.32</b>	BI076789	EST
-3.28	<b>2.31</b>	BG070555	EST
-2.69	<b>2.25</b>	BG065610	EST
-1.98	<b>2.21</b>	BG079181	EST
-1.66	<b>2.20</b>	BG066371	EST
-2.38	<b>2.20</b>	BG068421	EST
-2.13	<b>2.19</b>	C79832	EST
-2.49	<b>2.19</b>	BG066467	EST
-2.13	<b>2.18</b>	BG072412	EST
-2.15	<b>2.18</b>	BG066778	EST
-2.95	<b>2.16</b>	BG069363	EST
-2.40	<b>2.12</b>	BG066560	EST
-2.11	<b>2.12</b>	BG069545	EST
-2.74	<b>2.10</b>	BG078885	EST
-2.13	<b>2.09</b>	BG066090	EST
-2.40	<b>2.07</b>	BG063665	EST
-1.93	<b>2.05</b>	BG070931	EST
-1.79	<b>2.01</b>	BG065601	EST
-2.91	<b>2.01</b>	BG070182	EST
-2.16	<b>2.00</b>	BG082228	EST

-2.08	2.00	C76711	EST
-2.26	1.98	BG068840	EST
-1.86	1.97	BG066598	EST
-2.22	1.97	BG066306	EST
-2.87	1.95	BG068436	EST
-2.17	1.94	BG068410	EST
-2.82	1.90	BG066670	EST
-1.91	1.90	BG069501	EST
-2.52	1.88	BG066711	EST
-2.02	1.88	BG065839	EST
-2.40	1.87	BG070256	EST
-2.22	1.85	BG071376	EST
-1.66	1.84	BG068426	EST
-2.69	1.84	AA407948	EST
-1.96	1.82	BG066561	EST
-2.76	1.81	BG070530	EST
-2.43	1.80	BG070301	EST
-2.06	1.79	C76309	EST
-1.88	1.79	BG065635	EST
-1.52	1.78	BQ550180	EST
-2.35	1.78	BG075634	EST
-2.40	1.77	BG067047	EST
-2.03	1.75	BG069113	EST
-1.79	1.74	BG068097	EST
-2.67	1.74	BG068684	EST
-1.90	1.72	BG069127	EST
-1.70	1.71	BG065659	EST
-2.42	1.71	BG069191	EST
-1.78	1.70	BG074486	EST
-1.85	1.69	BG071533	EST
-2.11	1.68	BG068347	EST
-1.83	1.68	BG068961	EST
-1.91	1.67	BG066122	EST
-2.02	1.67	BG068472	EST
-1.76	1.65	BG065666	EST
-1.58	1.65	BG075437	EST
-2.07	1.65	BG071862	EST

-1.72	1.64	BG070055	EST				
-2.26	1.62	BG066124	EST				
-1.89	1.61	BG064441	EST				
-2.33	1.61	BG066361	EST				
-1.81	1.61	BQ550502	EST				
-2.23	1.58	BG066315	EST				
-1.51	1.57	BG066579	EST				
-1.83	1.56	BG070250	EST				
-1.94	1.56	BG083989	EST				
-1.86	1.56	BG064219	EST				
-2.19	1.55	BG063222	EST				
-1.68	1.55	BG073605	EST				
-2.10	1.55	BG072400	EST				
-1.62	1.52	BQ550730	EST				
-2.30	1.52	BG066591	EST				
-1.83	1.51	BG069622	EST				
2.16	-2.01	BG087717	Pms2	Postmeiotic segregation increased 2 ( <i>S. cerevisiae</i> ) (Pms2), mRNA			5
1.53	-2.16	BG075608	Tpi1	Triosephosphate isomerase 1 (Tpi1), mRNA			6
				Golgi autoantigen, golgin subfamily a, 1, mRNA (cDNA clone MGC:91089 IMAGE:30110235)			
2.19	-3.51	BG086996	Golga1	ATP-binding cassette, sub-family E (OABP), member 1, mRNA (cDNA clone MGC:5781 IMAGE:3489529)			2
2.17	-1.62	BG068195	Abce1	MGC:5781 IMAGE:3489529)			8
2.05	-1.77	BG067233	1700013G20Rik	RIKEN cDNA 1700013G20 gene (1700013G20Rik), mRNA			12
1.94	-1.76	BG067243	EST				
1.76	-2.95	BG074282	EST				

	AAG	CR	Reverted (%)	
Up	441.00		215 48.8 (down)	
Down	207.00		7 3.4(up)	

**TableS5b,c. Genes differentially affected by CR in males and females**

**Notes.** Red color represents higher expressed in female; blue color represents lower expression in female.

**CORTEX**

Z-ratio	Z-ratio	Z-ratio			Name
CR-6M-F/M	CR-16M-F/M	CR-24M-F/M	Acc	Symbol	
0.36	0.04	-0.11	BG070467	Zfp622	Zinc finger protein 622
2.35	0.94	1.76	BG070251	Zfp238	Transcriptional repressor RP58
1.51	-0.24	2.61	BG079807	Usp24	Ubiquitin specific peptidase 24
0.87	2.26	0.41	BG073370	Ttc3	Tetratricopeptide repeat domain 3
0.75	1.28	2.21	BG076546	Trim8	Tripartite motif protein 8
0.99	1.08	1.16	AW538640	Snx14	Ribosomal protein L21
-0.85	0.96	0.18	AW554387	Sgpl1	Sphingosine phosphate lyase 1
0.50	-0.25	0.97	BG068826	Serpinb7	Serine peptidase inhibitor, clade B, member 7
-2.16	2.54	-1.45	BG069849	Rpp30	Ribonuclease P/MRP 30 subunit
0.13	-0.44	0.50	BG069542	Pcbp1	Poly binding protein 1
-0.71	0.44	0.19	BG068751	Olfr75-ps1	V1 olfactory receptor protein
0.25	1.40	0.27	BG064652	Maea	Macrophage erythroblast attacher
0.05	-0.32	0.24	BG066737	Itgav	Integrin alpha V
1.39	0.82	5.43	BG069958	E330013P04Rik	RIKEN cDNA E330013P04 gene
1.78	1.26	1.44	BG064608	Calr	Calreticulin
1.14	0.18	-0.56	BG068473	Birc4	Baculoviral IAP repeat-containing 4
0.56	0.45	0.86	BG064661	Basp1	Brain abundant, membrane attached signal protein 1
1.21	-0.10	1.63	BG076540	AA407930	Zinc finger, AN1-type domain 2A
0.96	-1.11	1.38	C79009	1810042K04Rik	RIKEN cDNA 1810042K04 gene
0.28	-0.60	1.01	BG069565	1700029G01Rik	RIKEN cDNA 1700029G01 gene
1.16	0.86	0.15	C86087	0610012H03Rik	RIKEN cDNA 0610012H03 gene
1.47	0.15	1.52	BG065393	EST	
0.73	-1.34	0.30	BG068104	EST	
-1.62	1.53	-0.47	BG069825	EST	
-0.37	-0.79	1.51	BG068886	EST	
1.56	-0.48	-0.10	AU023920	EST	
1.54	2.15	1.22	BG065291	EST	
-1.72	2.88	-0.96	BG068388	EST	
0.77	-0.79	1.04	BG068500	EST	
1.04	-1.21	1.06	BG065302	EST	

-1.53	-0.73	-1.71	BG085672	Txnl5	Thioredoxin-like 5
-0.41	0.44	-1.13	BG070585	Tsfm	Ts translation elongation factor, mitochondrial
-1.20	-0.10	-1.95	BQ550736	Tcea3	Transcription elongation factor A , 3
-0.47	-0.31	-0.42	BG065064	Taf9	TAF9 RNA polymerase II, TATA box binding protein -associated factor, transcript variant 2
-2.20	0.00	-0.79	BG066688	Siat7c	ST6 -N-acetylgalactosaminide alpha-2,6-sialyltransferase 3
-0.90	-1.62	-1.28	BG083236	Pten	Phosphatase and tensin homolog
0.69	-0.57	-0.09	BG081537	Kpna3	Karyopherin alpha 3
-2.83	0.43	-1.13	BG069838	Ddhd1	DDHD domain containing 1
0.69	-0.66	-1.83	BG070401	Cnnm2	Cyclin M2
-1.63	-1.66	-0.84	BG075132	AW555464	Expressed sequence AW555464
-4.23	-0.90	-4.68	BQ552053	2810055G20Rik	PREDICTED: hypothetical protein LOC77994 [Mus musculus]
-1.68	0.15	-0.50	BG066685	1200003E16Rik	RIKEN cDNA 1200003E16 gene
-2.43	-0.69	-1.62	BG070924	EST	
1.15	-1.71	0.83	C78986	EST	
-0.89	1.27	-1.45	BG070205	EST	
-0.57	-0.81	0.05	BG081620	EST	

## HIPPOCAMPUS

Z-ratio	Z-ratio	Z-ratio	CR-6M-F/M	CR-16M-F/M	CR-24M-F/M	Acc	Symbol	Name
1.85	1.46	1.17	BG069606	Zfp592				Zinc finger protein 592
								X-ray repair complementing defective repair in Chinese hamster cells 1
1.10	1.97	1.65	BG069655	Xrcc1				
1.27	1.27	0.96	BG066181	Wdr7				MKIAA0541 protein
1.79	1.75	1.93	BG065630	Wdr45l				Wdr45 like
1.61	0.50	1.99	BG065802	Wasip1				Wiskott-Aldrich syndrome protein interacting protein
1.72	0.68	1.29	BG085488	Vps4a				Vacuolar protein sorting 4a
1.94	1.09	1.76	BQ550655	Usp19				Ubiquitin specific peptidase 19
0.67	0.49	-0.19	BG073370	Ttc3				Tetratricopeptide repeat domain 3
2.02	1.62	1.99	BG065991	Ttc19				Tetratricopeptide repeat domain 19
2.37	1.85	1.78	BQ551339	Tssc1				Tumor suppressing subtransferable candidate 1
0.57	1.33	0.79	BG072497	Trim24				Tripartite motif protein 24
2.27	1.62	1.46	BG071020	Tdp1				Tyrosyl-DNA phosphodiesterase 1
2.03	1.17	2.44	BG065592	Tcfcp2l3				Grainyhead-like 2

1.34	0.55	0.42	BG069294	Tcf19	Transcription factor 19
1.77	1.06	2.16	BG069533	Suv420h1	Suppressor of variegation 4-20 homolog 1
1.61	2.46	1.99	BG079034	Sphk2	Sphingosine kinase 2, transcript variant 1
1.02	1.07	0.19	BQ550430	Snrk	SNF related kinase
1.07	0.88	2.09	AA407331	Smad2	MAD homolog 2
0.66	0.90	1.12	BG085322	Slc30a7	Solute carrier family 30 , member 7
1.75	0.84	1.62	BG065899	Sh2bp1	SH2 domain binding protein 1
1.17	0.44	1.55	BQ552581	Serpina3g	Spi2 proteinase inhibitor mRNA, 3' end
1.21	0.97	0.90	BQ552557	Sec22l1	SEC22 vesicle trafficking protein-like 1
2.12	0.57	0.25	BG064641	Rpp14	Ribonuclease P 14 subunit
1.49	3.23	1.83	BG066731	Rnf3	Polycomb group ring finger 3
-0.71	-0.37	0.76	BG087385	Rad18	RAD18 homolog
3.01	0.32	1.61	BG066621	Pttg1ip	Pituitary tumor-transforming 1 interacting protein
0.27	2.10	1.62	BQ550679	Ptpn9	Protein tyrosine phosphatase, non-receptor type 9
1.49	2.05	1.73	BG065790	Ppp2r5e	MKIAA4006 protein
0.59	0.54	-0.13	BG072730	Ppgb	Protective protein for beta-galactosidase
0.47	0.45	1.12	BG080231	Pld2	Phospholipase D2
1.97	0.61	1.49	BG086437	Pkig	Protein kinase inhibitor, gamma
1.16	3.01	0.90	BG079995	Oraov1	Oral cancer overexpressed 1
1.81	0.79	1.13	BQ551869	Odz3	ODZ3
0.73	2.05	1.69	BG081608	Nup37	Nucleoporin 37
0.35	1.29	-0.25	BG063054	Nolc1	Nucleolar and coiled-body phosphoprotein 1
1.72	0.38	1.78	BG071156	Nin	Ninein
					Nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 2 interacting protein
2.11	2.78	2.75	BG066755	Nfatc2ip	Nuclear distribution gene E homolog 1
2.05	1.01	1.19	BG085296	Nde1	N-acetylated alpha-linked acidic dipeptidase 2
1.66	1.26	2.10	BG079815	Naalad2	Mitochondrial tumor suppressor 1
0.34	0.31	0.51	BG068957	Mtus1	Myelin protein zero-like 1
0.68	1.15	1.39	BQ551264	Mpzl1	Membrane protein, palmitoylated 5
0.35	0.96	1.61	BQ550599	Mpp5	Meiosis-specific nuclear structural protein 1
1.39	1.30	1.82	BG078615	Mns1	Matrix metallopeptidase 7
1.87	0.99	2.54	BG071031	Mmp7	Makorin, ring finger protein 1, pseudogene 1
1.46	0.97	2.08	BG078870	Mkrn1-ps1	MAX gene associated
1.89	1.41	1.05	BQ552370	Mga	Mitogen activated protein kinase kinase 3
1.14	1.82	1.81	BG065788	Map2k3	Microtubule-actin crosslinking factor
0.88	1.09	0.04	BG086554	Macf1	Leucine zipper domain protein
1.57	1.42	1.99	BG078875	Lzf	

1.99	1.10	1.34	AA407765	Lyn	Yamaguchi sarcoma viral oncogene homolog
2.14	0.25	0.17	BG068242	LOC209387	Expressed sequence AI451617
0.47	0.44	1.68	BG069534	Lman2	Lectin, mannose-binding 2-like
1.20	0.25	2.24	BG081236	Lats1	Large tumor suppressor 1
0.80	2.25	1.58	BG082622	Il4ra	Interleukin 4 receptor, alpha
0.76	1.66	1.47	BG079889	Idi1	Isopentenyl-diphosphate delta isomerase
0.77	2.19	1.26	BG079012	Hnra1	Heterogeneous nuclear ribonucleoprotein A1
0.73	1.52	0.74	BG065104	Hmgb1	High mobility group box 1
0.30	0.56	0.47	BG066728	Hdgf	Hepatoma-derived growth factor
1.62	1.82	3.11	BG070049	H6pd	Hexose-6-phosphate dehydrogenase
0.44	2.82	1.18	BG066629	Gt(ROSA)26asSor	THUMP domain containing 3
1.68	1.75	1.26	BG069549	Grm5	Glutamate receptor, metabotropic 5
1.85	3.19	2.93	BG079093	Gltp	Glycolipid transfer protein
1.35	1.83	1.28	BQ551115	Ggps1	Geranylgeranyl diphosphate synthase 1
0.63	0.25	0.43	BG077096	Gcnt2	Glucosaminyl transferase 2, I-branching enzyme , transcript variant 2
0.32	1.46	1.99	BG082672	Fzd3	Frizzled homolog 3
0.87	1.67	1.21	BG071394	Fgfrl1	Fibroblast growth factor receptor-like 1
1.37	1.60	1.08	BG084874	Fbxo3	F-box only protein 3
1.30	0.10	0.94	BG072695	Erh	Enhancer of rudimentary homolog
1.12	1.70	0.40	BG072453	Ephx1	Epoxide hydrolase 1, microsomal
2.67	2.44	2.11	BG066167	Eif4enif1	Eukaryotic translation initiation factor 4E nuclear import factor 1
0.18	1.16	0.83	BG069521	Efhd1	EF hand domain containing 1
1.68	0.74	1.27	BQ551978	Ebf3	Early B-cell factor 3
1.22	0.45	1.22	BQ550589	Dppa4	Developmental pluripotency associated 4 , transcript variant 1
0.82	1.44	1.08	BG079268	Dnajc11	DnaJ homolog, subfamily C, member 11
0.92	1.71	1.09	BG082508	D2Ertd750e	DNA segment, Chr 2, ERATO Doi 750, expressed
1.32	0.86	0.59	BG071679	D19Ertd678e	DNA segment, Chr 19, ERATO Doi 678, expressed
1.68	0.56	1.84	BG068599	D11Ertd461e	DNA segment, Chr 11, ERATO Doi 461, expressed
0.98	1.01	1.21	BG085306	Cox6c	Cytochrome c oxidase, subunit VIc
0.31	2.04	0.98	BG068207	Comtd1	Catechol-O-methyltransferase domain containing 1
0.17	0.78	1.64	BG068414	Col25a1	Procollagen, type XXV, alpha 1 , transcript variant 1
1.12	1.29	0.45	BQ552575	Chd9	Chromodomain helicase DNA binding protein 9
1.27	3.93	1.16	BG079080	C77032	Guanine nucleotide binding protein-like 3 , transcript variant 1
1.85	2.40	2.44	BG071124	C230072F16Rik	RIKEN cDNA C230072F16 gene
1.17	1.59	0.57	BQ551272	BC058638	Leucine zipper, down-regulated in cancer 1-like
0.55	0.60	1.05	BG066348	BC031407	GATA zinc finger domain containing 2A

1.01	2.55	1.38	BG066773	B4galt6	UDP-Gal:betaGlcNAc beta 1,4-galactosyltransferase, polypeptide 6
1.03	1.32	1.23	BG070349	B430306D02Rik	TAF1 RNA polymerase II, TATA box binding protein -associated factor
0.95	0.65	0.81	BG064502	AW544865	Expressed sequence AW544865
1.26	1.37	1.30	BG064252	AW494914	DEAH box polypeptide 57
0.88	2.55	2.48	BG066708	AU020772	Expressed sequence AU020772
1.43	1.62	0.81	BG066388	Atrx	Alpha thalassemia/mental retardation syndrome X-linked homolog
0.90	0.67	0.64	BG082324	Ascc1	Activating signal cointegrator 1 complex subunit 1
2.03	1.94	1.58	BG065639	Ap1gbp1	AP1 gamma subunit binding protein 1
1.58	0.47	1.84	BQ552281	Anxa6	Annexin A6
1.27	1.88	1.83	BQ550700	Ankrd28	Ankyrin repeat domain 28
0.95	1.36	2.07	BG079065	Adam15	A disintegrin and metallopeptidase domain 15
2.09	0.38	1.54	BQ550744	A030012M09Rik	RIKEN cDNA A030012M09 gene
1.07	1.91	1.35	BG065753	9130011E15Rik	RIKEN cDNA 9130011E15 gene
0.35	1.47	1.09	BQ551101	9030405D14Rik	RIKEN cDNA 9030405D14 gene
1.57	1.17	0.48	BQ551201	5830417I10Rik	RIKEN cDNA 5830417I10 gene
0.89	0.81	1.28	BQ552642	4930406H16Rik	RIKEN cDNA 4930406H16 gene
1.67	1.52	1.50	BQ551228	4632407F12Rik	RIKEN cDNA 4632407F12 gene
2.29	1.76	2.16	BG066120	4432411E13Rik	Hyperplastic discs protein
1.05	1.52	0.92	BG083609	425O18-1	CD320 antigen
1.06	0.41	0.87	BQ551334	3526402J09Rik	RIKEN cDNA 3526402J09 gene
0.72	2.07	1.64	BG066489	3300001M20Rik	MKIAA1153 protein
1.37	1.55	2.01	BG065616	1700022I11Rik	RIKEN cDNA 1700022I11 gene
-0.62	-0.41	0.45	BG066665	1700017B05Rik	RIKEN cDNA 1700017B05 gene
1.30	1.03	2.19	BG069904	1190005F20Rik	RIKEN cDNA 1190005F20 gene
2.03	1.08	1.88	BG068973	1110064P04Rik	RIKEN cDNA 1110064P04 gene
0.55	1.56	1.21	BG068171	1110005A23Rik	RIKEN cDNA 1110005A23 gene
0.52	3.30	1.72	BG066155	EST	
2.02	1.06	2.22	BG065992	EST	
2.03	-0.07	1.92	BG070515	EST	
1.72	1.20	2.33	C76156	EST	
0.66	1.70	0.87	BQ550977	EST	
1.66	1.45	2.02	BG065651	EST	
1.61	1.11	2.15	BG066527	EST	
2.45	2.95	1.29	BG068645	EST	

2.42	0.62	1.09	BQ551745	EST
0.77	0.67	0.94	BG079167	EST
1.46	2.30	1.26	BG079313	EST
1.02	1.85	1.15	BG069649	EST
0.23	1.13	0.94	BG070093	EST
1.34	2.36	1.61	BG068994	EST
0.53	1.29	0.63	BG063636	EST
0.86	0.67	1.84	BG083742	EST
3.14	0.51	2.54	BG068312	EST
2.26	1.23	1.63	AU023571	EST
1.95	0.64	2.09	BG078447	EST
2.67	0.69	2.31	BG063401	EST
1.74	0.22	1.88	BG066523	EST
1.84	1.24	2.14	BG070493	EST
2.05	0.91	2.17	BG064219	EST
2.98	0.76	2.34	BG066611	EST
1.44	0.47	2.09	BG070409	EST
1.68	0.93	1.78	BG065911	EST
1.35	1.73	2.12	BG066399	EST
3.02	1.77	2.21	BG065593	EST
1.98	2.71	2.22	BG065813	EST
2.11	0.90	1.82	BG065083	EST
1.19	2.59	2.60	BG065589	EST
1.32	0.90	1.78	BG067875	EST
1.76	1.49	2.21	BG071434	EST
1.95	0.57	1.84	AU040924	EST
1.18	1.56	1.76	AU014677	EST
1.21	0.85	1.95	BG063665	EST
0.84	1.13	1.63	BG063260	EST
2.14	1.77	1.88	C79973	EST
1.12	1.31	1.79	BG082228	EST
2.12	0.74	2.20	BG071134	EST
1.72	1.11	2.12	BG068428	EST
-0.61	1.64	-0.29	BG086711	EST
0.36	1.66	0.91	BG066831	EST
0.97	1.66	1.67	BG065371	EST
0.32	1.54	1.36	BG068069	EST

1.58	2.00	1.49	BG066122	EST
1.56	1.88	1.39	AU040661	EST
1.54	1.68	1.16	BG068983	EST
0.84	2.74	0.72	BG068899	EST
0.87	2.26	1.41	BG068902	EST
0.07	1.83	0.20	BQ552472	EST
1.15	3.04	1.80	BG069631	EST
0.49	1.62	0.39	BG065615	EST
1.53	1.76	1.17	AW544771	EST
1.16	1.03	1.52	BG066561	EST
0.74	0.31	0.85	BG068055	EST
1.58	0.42	0.93	AW546560	EST
1.52	-0.22	1.29	BG070618	EST
1.09	0.45	0.96	C80485	EST
0.98	0.86	1.50	BG064673	EST
1.86	0.45	1.48	BG073336	EST
1.54	1.01	1.07	BG072022	EST
1.94	1.11	1.37	BG065892	EST
1.88	1.31	1.30	BG065822	EST
1.67	0.88	1.02	BG066659	EST
1.69	0.10	0.98	BG065910	EST
1.50	0.47	0.80	BG072149	EST
0.41	1.06	0.83	BQ550401	EST
1.22	1.43	0.85	BG074021	EST
0.92	1.14	0.85	BG064947	EST
1.09	1.20	0.93	BG072204	EST
1.61	1.41	0.99	BG072441	EST
0.62	1.05	1.01	BG069522	EST
1.07	1.01	1.21	BG066530	EST
0.98	1.28	1.25	BG064716	EST
1.49	0.17	1.31	AU040439	EST
0.75	1.35	1.37	BG067162	EST
1.84	0.78	1.40	BG071522	EST
0.93	1.21	1.46	BG063834	EST
0.42	0.38	1.47	BG070769	EST
0.53	0.87	1.48	BQ552391	EST
0.94	0.42	-0.39	BG067939	EST

2.12	0.75	0.28	BG062938	EST	
0.43	1.22	0.21	BG064292	EST	
0.95	1.28	0.18	BQ550345	EST	
-2.33	-0.25	-1.40	BG075897	Zfx	Zinc finger protein X-linked
-0.62	0.02	-0.68	BG067234	Zfp422-rs1	Zinc finger protein 422, related sequence 1
-1.40	-1.27	-1.55	BG088701	Ypel5	Yippee-like 5
-2.22	-4.70	-2.18	BG075867	Wdr5b	WD repeat domain 5B
-1.64	-1.51	-1.30	BG080472	Wdr5	WD repeat domain 5
-1.10	-0.87	-2.51	BG080565	Wbscr21	Abhydrolase domain containing 11
-1.43	-1.47	-1.86	BG078001	Ube1x	Ubiquitin-activating enzyme E1, Chr X
-2.73	-0.35	-2.78	BG064620	Trmt1	TRNA 5-methylaminomethyl-2-thiouridylate methyltransferase
-2.62	-1.18	-1.68	BG067444	Trim46	Tripartite motif protein 46 , transcript variant 1
-1.28	-0.72	-2.26	BG088359	Tomm20	Translocase of outer mitochondrial membrane 20 homolog
-1.57	-0.94	-1.80	BG067399	Tmod2	Tropomodulin 2
-1.24	-1.27	-1.06	BG087083	Tde1	Tumor differentially expressed 1
-1.95	-1.23	-1.97	BG078075	Stag2	Stromal antigen 2
-1.49	-0.92	-1.23	AW538113	Slc25a19	Solute carrier family 25 , member 19
-1.86	-3.64	-1.78	BG065547	Sf3a3	Splicing factor 3a, subunit 3
-1.50	-1.01	-1.07	BG088179	Setdb1	SET domain, bifurcated 1
-1.64	-4.31	-1.91	BG070053	Serpina1e	Serine peptidase inhibitor, clade A, member 1e
-1.71	-0.68	-1.83	BG064675	Sdf4	Stromal cell derived factor 4
-1.48	-1.33	-0.45	BG088740	Sart3	Squamous cell carcinoma antigen recognized by T-cells 3
-1.54	-0.66	-1.31	BG087837	Ruvbl2	RuvB-like protein 2
-2.67	-1.78	-1.74	BG067455	Rps6kb1	Ribosomal protein S6 kinase, polypeptide 1
-1.46	-0.45	-1.29	BG087931	Rhoa	Ras homolog gene family, member A
-0.79	-0.79	-1.32	BG075399	Rbms3	RNA binding motif, single stranded interacting protein
-0.99	-0.28	-1.18	AW553963	Rbm19	RNA binding motif protein 19
-1.00	0.22	-0.86	BG085912	Rad50	RAD50 homolog
-0.66	-1.14	-0.99	BG074549	Rab35	RAB35, member RAS oncogene family
-3.33	-1.08	-0.60	BQ552156	Rab14	RAB14, member RAS oncogene family
-1.89	-0.32	-2.40	BG064866	Prps1	Phosphoribosyl pyrophosphate synthetase 1
-2.63	-0.06	-2.05	BG064798	Ppil2	Peptidylprolyl isomerase -like 2
-1.58	-1.82	-0.90	BG067355	Poll	Polymerase , lambda
-1.89	-0.72	-2.26	BG064799	Polg	Polymerase , gamma
-1.10	-1.17	-1.97	BG078107	Plp2	Proteolipid protein 2
-1.37	-0.56	-1.57	BG078775	Pias1	Protein inhibitor of activated STAT 1
-1.21	-0.89	-1.00	BG087909	Phka2	Phosphorylase kinase alpha 2

-1.08	-0.59	-0.92	BG075801	Phf1	PHD finger protein 1
-2.41	-0.21	-2.76	BG064642	Pcyt1a	Phosphate cytidylyltransferase 1, choline, alpha isoform
-1.57	-1.53	-1.58	BG088487	Pcbp4	Poly binding protein 4
-2.62	-0.67	-2.63	BG064599	Pappa	Pregnancy-associated plasma protein A
-4.57	-3.19	-3.07	AW557129	Papola	Polymerase alpha
-0.94	-4.72	-1.66	BQ551813	Odz4	Odd Oz/ten-m homolog 4
-2.07	-0.61	-1.32	BG088180	Nf2	Neurofibromatosis 2
-0.47	-0.89	0.27	BG072955	Myo5a	Myosin Va
-2.43	-0.89	-1.02	BG074317	Mtus1	Mitochondrial tumor suppressor 1
-0.44	-0.76	-1.42	BG072800	MTERF	Mitochondrial transcription termination factor 1
-1.52	-0.75	-1.07	BG074344	Msln	Mesothelin
-1.14	-0.83	-0.93	BG080710	MGC65558	RIKEN cDNA 4933439C20 gene
-2.09	-0.53	-1.49	BG075896	Mfhas1	Malignant fibrous histiocytoma amplified sequence 1
-1.67	-1.78	-1.00	BQ551517	Meis1	Myeloid ecotropic viral integration site 1
-2.69	-1.00	-3.02	BG064664	Mbc2	Membrane bound C2 domain containing protein
-1.33	-0.03	-1.53	BG075866	Mad2l2	MAD2 mitotic arrest deficient-like 2
-2.57	-0.96	-1.47	BG067456	Lyzs	Lysozyme
-2.14	-0.38	-2.47	BG064854	Lrp2	Low density lipoprotein receptor-related protein 2 LRP2
-0.92	-0.92	-0.73	C81600	Lats1	Large tumor suppressor 1
-1.61	-0.88	-1.37	BG080488	Kns2	Kinesin 2 , transcript variant a
-1.11	-2.06	-0.99	BG064062	Klf4	Kruppel-like factor 4
-0.81	-1.09	-0.87	BG076207	Jmjd1c	MKIAA1380 protein
-1.32	-1.99	-1.31	BG080552	Insig1	Insulin induced gene 1
-0.70	-1.35	-1.28	BG075852	Inpp5a	Inositol polyphosphate-5-phosphatase A
-1.38	-0.65	-1.64	AW557873	ldb3	Inhibitor of DNA binding 3
-0.66	-1.04	-1.04	BG076176	Hspg2	Perlecan
-1.98	-2.23	-1.89	BG064250	Herc1	Hect (carboxyl terminus) domain and RCC1 -like domain 1
-1.15	-1.84	-1.29	BG080248	Hectd1	HECT domain containing 1
-1.93	-1.35	-2.08	BG063859	Hcfc1	Host cell factor C1
-0.94	-0.05	-1.22	BG072757	Gspt1	G1 to S phase transition 1
-2.20	-2.08	-1.15	BG075963	Gpihbp1	HBP1 mRNA for high density lipoprotein binding protein 1
-2.16	0.04	-0.97	BG067843	Gna14	Guanine nucleotide binding protein, alpha 14
-4.91	-4.70	-5.27	BG088251	Fmip	Fms interacting protein
-0.34	-1.20	-1.12	BG075855	Fchsd2	FCH and double SH3 domains 2
-1.34	-1.89	-1.84	BG064030	F3	Coagulation factor III
-1.63	-1.77	-1.75	BG067420	Elk4	ELK4, member of ETS oncogene family
-0.64	-2.04	-4.01	BG076103	Eif3s3	Eukaryotic translation initiation factor 3, subunit 3

0.47	-0.12	-0.05	BG063097	Ehd1	MPAST1
-1.35	-1.64	-0.55	BG062947	E130307C13	Hypothetical protein E130307C13
-3.22	-2.24	-2.22	BG066834	E030041M21Rik	RIKEN cDNA E030041M21 gene
-1.09	-0.80	-0.94	BG075865	Dscr1l2	Down syndrome critical region gene 1-like 2
-1.23	-0.90	-1.51	BG087920	Dlst	Dihydrolipoamide S-succinyltransferase
-4.44	-6.54	-0.62	BQ552147	Dkk2	Dickkopf homolog 2
-2.38	-1.72	-2.03	BG080018	D8Ertd325e	DNA segment, Chr 8, ERATO Doi 325, expressed
-1.48	-1.37	-0.87	BG063307	D5Wsu178e	DNA segment, Chr 5, Wayne State University 178, expressed
					DNA segment, Chr 11, ERATO Doi 730, expressed , transcript variant
-1.37	-1.07	0.12	BG082899	D11Ertd730e	1
-1.89	-1.35	-1.04	BG063108	D10Wsu93e	Methyl-CpG binding domain protein 6
-0.83	-2.69	-2.39	BG082948	Cul1	Cullin 1
-3.20	-1.96	-2.56	BG063848	Csh1	Chorionic somatomammotropin hormone 1
-1.01	-0.39	-0.75	BG075864	Col6a2	Procollagen, type VI, alpha 2
-1.46	-0.36	-1.39	BG078313	Cnot1	CCR4-NOT transcription complex, subunit 1
-2.32	-0.31	-1.38	BG074339	MKIAA0593	MKIAA0593 protein
-1.75	-1.85	-1.27	BG067357	Cnn1	Calponin 1
-0.79	-1.02	-1.29	BG079988	Ckmt1	Creatine kinase, mitochondrial 1, ubiquitous
-1.83	-1.27	-2.59	BG064644	Ceacam9	CEA-related cell adhesion molecule 9
-1.26	-0.99	-1.26	BG082990	Cdc42bpb	MKIAA1124 protein
-3.58	-3.37	-2.56	BG069986	Ccna2	Cyclin A2
-1.50	-0.43	-0.98	BG078772	Ccdc2	Coiled-coil domain containing 2
-1.93	-0.03	-0.93	BG075961	C030048B08Rik	RIKEN cDNA C030048B08 gene
-0.50	-1.05	-1.18	BG087065	Btrc	Beta-transducin repeat containing protein
-1.76	-0.59	-1.64	BG076130	BC063749	MKIAA1754 protein
-7.07	-7.35	-1.03	BG069923	BC002216	CDNA sequence BC002216
-0.64	-0.58	-0.16	BG075229	Atrnl1	Attractin like 1
-3.70	-3.08	-3.51	BG075876	Atp9a	ATPase, class II, type 9A
-1.05	-1.32	-1.02	C86857	Atp6v1c1	ATPase, H+ transporting, V1 subunit C, isoform 1
-1.07	-0.51	-1.38	BG088532	Arl10c	ADP-ribosylation factor-like 10C
-1.16	-1.31	-2.12	AW539206	Apg7l	Autophagy-related 7
-1.64	-1.16	-2.40	BG064654	Alg5	Asparagine-linked glycosylation 5 homolog
-0.47	-1.31	0.20	BG072945	Alcam	Activated leukocyte cell adhesion molecule
-2.54	-2.60	-3.29	BG079989	Alb1	Serum albumin
-0.99	-1.70	-1.75	BG064643	AI256711	Expressed sequence AI256711
-2.91	0.24	-1.25	BG080706	Acpl2	Acid phosphatase-like 2
-0.83	-1.01	-1.17	BG074711	A530057A03Rik	MFLJ00202 protein

-0.52	-1.78	-2.06	BG088481	A230072I16Rik	RIKEN cDNA A230072I16 gene
0.38	-0.47	0.16	BG063020	9330177P20Rik	Zinc finger protein 258
-1.01	-1.03	-1.45	BG064997	5830472M02Rik	RIKEN cDNA 5830472M02 gene
0.02	-1.26	0.35	BG067988	5031400M07Rik	RIKEN cDNA 5031400M07 gene
-0.26	0.00	-0.24	BG075087	4933427D14Rik	MKIAA0753 protein
-0.64	-0.19	-1.17	BG076170	4932417I16Rik	RIKEN cDNA 4932417I16 gene
-1.14	-2.04	-1.21	BG080463	4732460K03Rik	PEST-containing nuclear protein
-3.31	-1.25	-0.71	BG069932	4632404H22Rik	RIKEN cDNA 4632404H22 gene
-1.84	-1.29	-2.70	BG078065	2810475A17Rik	Transmembrane protein 48
-1.75	-2.12	-1.68	BG067546	2310067B10Rik	RIKEN cDNA 2310067B10 gene
-0.66	-0.40	-0.84	BQ552662	2310061A22Rik	Golgi transport 1 homolog B
-2.63	-0.98	-0.94	BQ551673	1810073N04Rik	RIKEN cDNA 1810073N04 gene
-1.46	-3.08	-2.76	AW557010	1700065A05Rik	RIKEN cDNA 1700065A05 gene
-1.38	-0.84	-0.95	AW552972	1300002A08Rik	RIKEN cDNA 1300002A08 gene
-0.57	-0.96	-1.06	BG087957	1110028E10Rik	Solute carrier family 44, member 2
-1.24	-1.17	-1.35	BG075409	1110007C02Rik	RIKEN cDNA 1110007C02 gene
-2.20	-2.32	-1.73	BG067378	EST	
-2.03	-1.67	-2.82	BG067204	EST	
0.28	-0.87	0.35	BG062932	EST	
-1.40	-1.40	-1.28	BG075804	EST	
-1.61	-1.25	-1.51	BG065393	EST	
-0.22	-0.16	-1.06	BQ551495	EST	
-1.38	-0.32	-0.82	BG087293	EST	
-0.96	-0.65	-0.22	BG068285	EST	
-1.79	-1.30	-1.26	BG080498	EST	
-2.03	-1.08	-1.22	BQ552379	EST	
0.14	-1.13	-0.99	BG075847	EST	
-0.69	-1.57	-0.80	BG067407	EST	
-0.17	-1.40	-1.25	BG077341	EST	
-1.92	-1.22	-1.98	BG074340	EST	
-1.08	-0.38	-2.17	BI076577	EST	
-1.67	-2.54	-2.63	BG066814	EST	
-1.37	-1.45	-1.93	BG074385	EST	
-1.28	-1.12	-1.56	BG075410	EST	
-2.34	-1.93	-2.47	BG069683	EST	
-3.52	-2.25	-2.16	BG067391	EST	
-1.20	-1.83	-2.71	BG067561	EST	

-1.29	-1.78	-1.61	AW557442	EST
-1.68	-1.47	-1.59	BG067201	EST
-2.06	-2.24	-2.20	BG066825	EST
-1.34	-0.83	-1.79	BG073093	EST
-1.16	-1.32	-1.97	AW536084	EST
-0.87	-2.62	-1.98	BG063953	EST
-2.79	-1.27	-2.02	BG078783	EST
-1.81	-1.16	-1.80	BI076824	EST
-1.05	-2.28	-1.75	AW538866	EST
-0.73	-1.04	-1.97	BG064787	EST
-0.70	-4.18	-1.10	BG064944	EST
-0.69	-2.29	-1.48	BG064011	EST
-0.99	-1.54	-1.17	BI076786	EST
-0.91	-2.00	-0.53	AW557243	EST
-1.08	-1.76	-1.11	AW546939	EST
-0.86	-1.50	-1.30	AW544531	EST
-2.58	-0.26	-1.02	BG075952	EST
-1.93	0.34	-1.06	BG072733	EST
-1.60	-1.08	-1.20	BG067157	EST
-0.92	-0.02	-0.86	BG076194	EST
-1.15	-0.75	-1.31	AW557840	EST
-1.35	-0.86	-1.18	AW557899	EST
0.30	-0.55	-0.26	BG068363	EST
-1.40	-0.46	-1.46	BG075339	EST
-1.43	-1.05	-1.35	BG074374	EST
-0.58	-0.77	-1.33	BG076380	EST
-1.35	-1.08	-1.24	AW555179	EST
-1.38	-1.19	-1.19	AW543498	EST
-1.39	-0.22	-1.19	AW554900	EST
-1.07	-0.31	-1.14	AW554541	EST
-0.57	-0.86	-1.04	AW555717	EST
-0.64	-0.72	-1.02	BG073655	EST
-0.33	-0.98	-1.00	BG088706	EST
-0.75	-0.94	-1.00	AW556995	EST
-0.68	-0.33	-0.91	BG073160	EST
-1.09	-0.86	-0.90	BG075822	EST
-1.18	-0.92	-0.90	AW547864	EST

-0.96	-1.06	-0.88	BG073267	EST
-1.40	-1.36	-0.81	BG068274	EST
-0.93	-1.00	-0.73	BG075669	EST
-0.79	-1.25	-0.71	AW556499	EST
-1.45	-1.00	-0.59	BG074289	EST
-0.51	-0.61	-0.48	AW557368	EST
-0.96	-1.05	-0.34	BG076308	EST
-0.35	-0.37	-0.23	BG088286	EST
0.84	0.23	-0.22	BG066920	EST
1.02	-0.40	0.41	AU023080	EST

## CEREBELLUM

Z-ratio	Z-ratio	Z-ratio			Name
CR-6M-F/M	CR-16M-F/M	CR-24M-F/M	Acc	Symbol	
0.75	0.92	-0.60	BQ550314	Yeats4	YEATS domain containing 4
0.29	0.62	-0.34	BG070995	Slc35e3	Solute carrier family 35, member E3
0.69	0.91	0.17	BQ551051	Prune	Prune homolog
0.88	3.87	1.91	BQ551635	Ppp2r5e	MKIAA4006 protein
0.17	3.11	2.16	BQ551521	Phip	Ndrp mRNA for neuronal differentiation related protein
0.16	1.12	2.05	BQ550069	Irs3	Insulin receptor substrate 3
1.34	0.81	1.14	BQ552002	BC057079	CDNA sequence BC057079
2.76	3.60	2.86	BG076053	Apbb2	Amyloid beta precursor protein-binding, family B, member 2
0.07	2.32	2.04	BG076712	A2m	Alpha-2-macroglobulin
4.69	2.85	2.23	BQ551363	9330182L06Rik	RIKEN cDNA 9330182L06 gene
4.48	1.35	2.40	BG070181	8430423A01Rik	JC7
0.37	1.04	2.02	BQ550807	6430596G11Rik	Premature mRNA for mKIAA1722 protein
2.01	1.94	2.11	BQ552166	EST	
3.76	4.72	4.25	BG069837	EST	
1.15	1.68	1.22	BG064527	EST	
-0.69	-1.27	-0.55	BG087064	Rpl35a	Ribosomal protein L35a
-0.92	-1.37	-0.80	BG066755	Nfatc2ip	Nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 2 interacting protein
-1.19	-1.16	-1.19	BG071516	Guk1	Guanylate kinase 1
-0.30	-1.16	-0.40	BG073437	Atp5b	ATP synthase, H <sup>+</sup> transporting mitochondrial F1 complex, beta subunit

-0.27	-3.03	-2.19	BG066146	EST
-0.43	-1.78	-0.35	BG086382	EST

## STRIATUM

Z-ratio	Z-ratio	Z-ratio			Name
CR-6M-F/M	CR-16M-F/M	CR-24M-F/M	Acc	Symbol	
-0.11	2.66	1.64	BQ552684	EST	
1.27	0.85	0.90	BQ551985	EST	
-0.03	-0.55	-0.18	BQ550357	Tpr	Translocated promoter region
-0.50	-2.06	-1.79	BG073458	Top2b	Topoisomerase II beta
-1.42	-1.78	-0.98	BG063207	Sh3bgrl2	SH3 domain binding glutamic acid-rich protein like 2
-0.91	-2.78	-0.98	BG069793	Pdcd10	Programmed cell death 10
0.52	-1.37	-0.47	BG081608	Nup37	Nucleoporin 37
0.68	-0.15	-0.39	BG069218	LOC384077	PREDICTED: <i>Mus musculus</i> Unknown
-2.58	-2.00	-0.30	BG069770	Eif2s3y	Eukaryotic translation initiation factor 2, subunit 3, structural gene Y-linked
-1.10	-1.52	-1.63	BG065510	2810421I24Rik	RIKEN cDNA 2810421I24 gene
-0.51	-0.76	-1.72	BQ550237	1500031L02Rik	RIKEN cDNA 1500031L02 gene
-0.50	-0.76	-0.14	BG070876	1110007C24Rik	Transmembrane protein 57

## SPINAL CORD

Z-ratio	Z-ratio	Z-ratio			Name
CR-6M-F/M	CR-16M-F/M	CR-24M-F/M	Acc	Symbol	
0.64	0.08	-0.08	BG085958	Wwp2	Ribosomal protein S26
1.55	0.58	0.74	BG078505	Snta1	Syntrophin, acidic 1
6.22	2.39	-0.05	BG087385	Rad18	RAD18 homolog
1.00	0.68	1.00	BG077050	Prp19	PRP19/PSO4 homolog
-0.22	1.14	0.74	C80566	Plrg1	Pleiotropic regulator 1, PRL1 homolog
0.35	0.43	1.37	BG072249	Park2	Parkin
0.09	-0.21	0.32	BG062953	Nola1	Nucleolar protein family A, member 1
0.10	-0.65	0.89	BG068957	Mtus1	Mitochondrial tumor suppressor 1
0.33	-0.67	1.03	BQ552279	Foxp1	Forkhead box P1

0.52	0.98	0.39	BG073691	Fip1l1	FIP1 like 1
1.32	0.74	1.37	BG077082	Fbxl5	F-box and leucine-rich repeat protein 5
1.33	-0.98	0.59	BG076418	Elac2	ElaC homolog 2
0.42	0.64	0.74	BG071244	Ehd3	EH-domain containing protein 2
0.25	0.30	0.31	BG063097	Ehd1	MPAST1
0.82	-0.19	0.32	BG077091	D11Ert333e	DNA segment, Chr 11, ERATO Doi 333, expressed
0.84	1.66	0.63	BG070738	Chst12	Carbohydrate sulfotransferase 12
0.98	1.00	1.39	BG063043	B230333C21Rik	RIKEN cDNA B230333C21 gene
1.02	1.53	1.28	BG067721	6720407G21Rik	Ring finger protein 170
0.73	0.54	1.11	BG088856	5730555F13Rik	RIKEN cDNA 5730555F13 gene , transcript variant 1
0.43	0.65	1.43	BG084366	2810452K22Rik	RIKEN cDNA 2810452K22 gene
0.13	2.23	-0.29	BG070141	EST	
1.48	0.50	0.84	BG067365	EST	
2.03	-0.05	1.06	BG068991	EST	
16.80	4.97	2.55	BG072479	EST	
1.42	-0.06	1.71	BG063042	EST	
3.20	1.11	0.70	BG071757	EST	
0.39	0.92	1.33	BG071590	EST	
1.40	0.39	0.94	C85066	EST	
0.17	0.36	0.88	BG071255	EST	
-0.82	-0.83	-1.23	BG076505	Trim62	Tripartite motif-containing 62
-1.45	-0.50	-0.76	BG075406	Tex10	Testis expressed gene 10
-0.42	-0.01	-0.87	BG074984	Sfpq	Splicing factor proline/glutamine rich
-0.26	-0.03	0.10	BG068853	Ppil4	Peptidylprolyl isomerase -like 4
-0.14	0.45	-0.11	BG068996	Pik3r1	Phosphatidylinositol 3-kinase, regulatory subunit, polypeptide 1
-0.37	-1.85	-1.89	BG081195	Phf3	PHD finger protein 3
-0.11	-0.62	-1.11	BG075177	Myst3	MYST histone acetyltransferase 3
-1.10	-1.01	-1.51	BG076618	Mtpn	Myotrophin
8.39	-3.39	-5.61	BQ552161	Galnt4	UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyltransferase 4
-1.91	-1.11	-1.45	BG075495	Eml4	Echinoderm microtubule associated protein like 4
-2.58	-0.88	-2.02	BG068185	Cenpc1	Centromere autoantigen C1
-1.37	-0.47	-1.28	AU022477	Bid	BH3 interacting domain death agonist
-1.75	-1.05	-1.21	BQ550449	2810423E13Rik	RIKEN cDNA 2810423E13 gene
-0.57	-0.22	-1.06	BG068104	EST	
-3.22	-1.41	-2.33	BG067107	EST	
-0.60	-5.24	-5.61	BQ551454	EST	

-0.23	0.63	-0.23	BG074890	EST
-0.95	-0.23	-1.20	BG086541	EST

**TableS5d. Age-responsive genes that were reverted by CR in males compared to females**

Notes. Blue color represents reversion of upregulated AAGs; Red color represents reversion of downregulated AAG.

**24M-M-hippo-AAGs reverted by CR**

Z-ratio	Z-ratio				Name
24M-M-CR/Ad	AD-M-24M/16M	Acc	Symbol		
-2.43	2.73	BG070986	Zfp609		Zinc finger protein 609
-1.95	2.08	BG069366	Upf2		UPF2 regulator of nonsense transcripts homolog
0.00	1.65	BQ552073	Ufd1l		Ubiquitin fusion degradation 1 like
-1.64	1.79	BG065688	Uba52		Ubiquitin A-52 residue ribosomal protein fusion product 1
-2.40	1.61	BG068016	Trerf1		Transcriptional regulating factor 1
-2.13	2.06	BG065592	Tcfcp2l3		Grainyhead-like 2
-1.65	2.31	BG065895	Stard13		Serologically defined colon cancer antigen 13
-2.56	2.23	C79706	Stam2		Signal transducing adaptor molecule 2
-2.10	1.73	BG071865	Srrm1		Serine/arginine repetitive matrix 1
-1.74	1.52	BG084414	Sp100-rs1		Sp100-rs1 mRNA, partial sequence
-2.24	2.16	BG070178	Snrp1c		U1 small nuclear ribonucleoprotein 1C
-2.21	1.83	BG066686	Sfxn2		Sideroflexin 2
-1.99	2.18	BG073529	Rnh1		Ribonuclease/angiogenin inhibitor 1
-1.71	2.12	BG082484	Rgs12		Regulator of G-protein signaling 12
-3.41	2.85	BG082817	Rb1		Retinoblastoma 1
-2.01	2.02	C76941	Ranbp5		RAN binding protein 5
-1.97	2.03	BG071194	Rab27a		RAB27A, member RAS oncogene family
-1.72	2.02	BG070824	Pzp		Pregnancy zone protein
-1.65	1.83	BG068625	Prdm10		PR domain containing 10
-1.54	1.77	BQ550137	Ppp1r7		Protein phosphatase 1, regulatory subunit 7
-1.71	1.90	BG068321	Pgm2		Phosphoglucomutase 2
-2.10	1.67	BG078872	Pfkfb2		6-phosphofructo-2-kinase/fructose-2,6-biphosphatase 2
-1.71	1.65	BG066651	Pcca		Propionyl-Coenzyme A carboxylase, alpha polypeptide
-1.55	1.75	BG075119	Papolg		Poly polymerase gamma
-1.74	1.91	BG083198	Paip2		Polyadenylate-binding protein-interacting protein 2
-2.11	2.19	BG068751	Olf75-ps1		V1 olfactory receptor protein
-2.09	1.70	BG085034	Nup160		Nucleoporin 160
-2.12	2.25	BG067163	Nrp1		Neuropilin 1
-1.99	1.85	BG071222	Nhlrc2		NHL repeat containing 2
-2.06	1.57	BG064588	Nfat5		Nuclear factor of activated T-cells 5
-3.12	2.64	BG079049	MGC60818		Similar to hypothetical protein FLJ20397

-2.41	2.53	BG070588	Map1lc3b	Microtubule-associated protein 1 light chain 3 beta
-1.77	2.02	AU017683	Ltbr	Lymphotoxin B receptor
-1.59	1.69	BG066247	Lmo7	LIM domain only 7
-1.93	1.77	C76424	Lhfpl2	Lipoma HMGIC fusion partner-like 2
-2.16	2.05	BQ551582	Lass6	Longevity assurance homolog 6
-1.67	1.89	BG063499	Ktn1	Kinetin 1
-1.81	2.04	AU040688	Kpna4	Karyopherin alpha 4
-2.08	1.70	BG070797	Kctd4	Potassium channel tetramerisation domain containing 4
-1.62	1.50	AU043124	Gna13	Guanine nucleotide binding protein, alpha 13
-2.47	1.81	BG079093	Gltp	Glycolipid transfer protein
-2.07	2.08	BG066451	Ggps1	Geranylgeranyl diphosphate synthase 1
-1.90	1.77	BG065915	Etv6	Ets variant gene 6
-2.29	2.43	BG069356	Epb4.1I5	Erythrocyte protein band 4.1-like 5
-1.91	1.93	BQ550267	Ep400	E1A binding protein p400
-1.88	2.28	BQ550786	Eif4g1	Eukaryotic translation initiation factor 4, gamma 1
-3.32	2.39	BQ550597	Dub2a	Deubiquitinating enzyme 2A
-2.14	1.85	BG072223	Dst	Bpag1-e mRNA for bullous pemphigoid antigen 1-e
-2.99	2.49	BG081778	Dock4	MKIAA0716 protein
-2.46	1.95	BG066942	Dnmt3b	DNA cytosine methyltransferase 3b6
-2.36	2.30	BG065928	Dlg7	Discs, large homolog 7
-1.71	2.02	BG066896	Depdc6	DEP domain containing 6
-2.29	1.90	BG075447	Denr	Density-regulated protein
-3.25	2.06	BG069143	D230005D02Rik	RIKEN cDNA D230005D02 gene
-1.70	1.93	BG084134	Chst10	Carbohydrate sulfotransferase 10
-2.47	2.07	BG065916	Cdc14a	CDC14 cell division cycle 14 homolog A
-2.13	2.53	BG065918	Catna1	Catenin , alpha 1
-1.92	1.68	BG073814	C330023F11Rik	Saccharopine dehydrogenase
-2.47	2.59	BQ552246	C130032J12Rik	RIKEN cDNA C130032J12 gene
-1.71	1.78	BG069361	Brp16	Brain protein 16
-1.76	2.87	BG068715	Bhc80	PHD finger protein 21A
-2.50	2.41	BG070203	B3gnt1	UDP-GlcNAc:betaGal beta-1,3-N-acetylglucosaminyltransferase 1
-1.99	1.75	BG066708	AU020772	Expressed sequence AU020772
-2.12	1.74	BG065780	Atp6v0a2	ATPase, H+ transporting, lysosomal V0 subunit a isoform 2
-4.10	3.60	BG083351	Arhgap6	Rho-type GTPase-activating protein rhoGAPX-1
-1.99	1.82	BG070913	Ankrd25	Ankyrin repeat domain 25
-1.61	1.58	AU042892	9230106F14Rik	ATP-binding cassette, sub-family B (MDR/TAP), member 5
-1.71	2.36	BG070516	5730421E18Rik	RIKEN cDNA 5730421E18 gene

-2.17	2.36	BG068399	4930432O21Rik	RIKEN cDNA 4930432O21 gene
-1.75	1.61	BQ550610	4930403O06Rik	Transmembrane and coiled-coil domains 1
-2.22	1.84	BG071581	2810047L02Rik	RIKEN cDNA 2810047L02 gene
-1.66	1.75	BG071462	2810006K23Rik	RIKEN cDNA 2810006K23 gene
-1.75	1.63	BG065667	2700094F01Rik	RIKEN cDNA 2700094F01 gene
-2.07	2.55	BQ552100	2510027N19Rik	Non-SMC element 1 homolog
-1.96	1.89	BG067748	1810049O03Rik	Leucine rich repeat containing 8 family, member E
-1.80	1.51	BG071214	1810037I17Rik	RIKEN cDNA 1810037I17 gene
-1.80	2.07	BG063492	1110064N10Rik	Brix domain containing 2
-1.86	2.16	BG070867	0610011F06Rik	RIKEN cDNA 0610011F06 gene
-4.50	3.65	BG068075	EST	
-1.87	2.39	BG063092	EST	
-3.26	3.53	BG066339	EST	
-2.38	2.04	BG068670	EST	
-2.10	2.02	BG066683	EST	
-2.21	2.46	BG070561	EST	
-1.59	1.62	BG066362	EST	
-1.69	1.61	BG073476	EST	
-2.24	2.27	BG073795	EST	
-1.64	1.70	BG071455	EST	
-1.58	1.68	BQ550972	EST	
-2.22	2.29	BG070967	EST	
-1.63	1.76	BG068999	EST	
-1.89	1.80	BG071141	EST	
-2.01	2.03	BG071864	EST	
-2.17	1.82	BG068126	EST	
-2.22	2.19	BG070879	EST	
-1.90	2.41	AU016579	EST	
-3.61	2.70	BG065945	EST	
-1.67	2.09	AU046252	EST	
-1.89	2.35	BG066119	EST	
-3.74	4.02	BG068090	EST	
-2.12	1.88	C76711	EST	
-1.64	1.77	BG076725	EST	
-2.91	2.56	BG066276	EST	
-1.54	1.87	BG074626	EST	
-2.26	2.04	BG065989	EST	

-1.64	1.90	BG070466	EST
-2.18	2.15	BG083442	EST
-1.78	1.55	BG069343	EST
-2.17	1.69	BG067568	EST
-2.48	2.95	BG070970	EST
-3.59	3.50	BG066177	EST
-2.96	3.06	BG068752	EST
-2.72	2.04	BG081225	EST
-1.63	1.72	BG071937	EST
-1.51	1.65	BG066591	EST
-1.74	1.69	BG065924	EST
-4.45	3.80	BG068086	EST
-3.13	2.43	BG066300	EST
-1.58	1.70	BG066640	EST
-2.37	2.29	BG068668	EST
-2.28	1.80	BG075437	EST
-1.83	1.88	BG072304	EST
-1.98	1.66	BG071862	EST
-1.82	2.19	BG071170	EST
-2.08	1.54	C86319	EST
-2.52	1.78	BG066611	EST
-3.29	2.73	BG069141	EST
-1.71	1.68	BG067639	EST
-1.89	2.03	C78903	EST
-3.00	2.48	BG068189	EST
-2.12	1.69	BG070808	EST
-2.12	2.08	BG067603	EST
-3.44	3.24	BG065894	EST
-3.27	2.49	BG066288	EST
-2.78	1.86	C79740	EST
-1.70	2.19	BG076914	EST
-1.56	1.84	BG071263	EST
-2.31	1.69	BG070776	EST
-2.27	1.90	BG068312	EST
-2.75	2.54	BG065888	EST
-2.52	1.75	BG069005	EST
-1.64	2.03	BG072805	EST

-2.33	2.03	BG067308	EST	
-1.65	1.52	BG066912	EST	
-3.42	2.64	BG068775	EST	
-2.96	2.08	AU024687	EST	
-2.24	1.76	BG071206	EST	
-2.06	1.62	BG071153	EST	
-3.00	1.77	BG068682	EST	
1.61	-1.69	BG064042	Ywhag	3-monooxygenase/tryptophan 5-monooxygenase activation protein, gamma polypeptide
1.74	-1.93	BG069786	Ywhab	Tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, beta polypeptide
1.84	-1.57	BG086722	Uchl1	Ubiquitin carboxyl-terminal hydrolase PGP9.5
2.23	-1.65	BG078439	Trap1	TNF receptor-associated protein 1
1.93	-1.67	BG063877	Timm17a	Translocator of inner mitochondrial membrane 17a
1.56	-1.87	BG080816	Tgfb1i4	TSC22-related inducible leucine zipper 1b
2.08	-1.98	BG073668	Tfb1m	Transcription factor B1, mitochondrial
2.05	-1.62	BG063180	Tbrg4	Transforming growth factor beta regulated gene 4
2.30	-1.96	BG066777	Suhw4	Suppressor of hairy wing homolog 4
1.76	-1.64	BG077105	Spnb2	Spectrin beta 2
1.67	-1.54	BG074398	Sparcl1	SPARC-like 1
1.60	-1.64	BG063782	Smurf2	SMAD specific E3 ubiquitin protein ligase 2
1.58	-1.74	BG065166	Skb1	SKB1 homolog
1.68	-1.91	BG078617	Sf3b2	Splicing factor 3b, subunit 2
2.04	-2.15	BG069819	Setbp1	SET binding protein 1
1.51	-1.56	AW539298	Sars1	Seryl-aminoacyl-tRNA synthetase 1
1.73	-2.02	BG064438	Rod1	ROD1 regulator of differentiation 1 , transcript variant 1
1.81	-1.51	BG073320	Rga	Recombination activating gene 1 gene activation
1.64	-1.77	BG077488	Psmb4	Proteasome subunit, beta type 4
1.99	-2.09	BG078451	Ppia	Peptidylprolyl isomerase A
2.19	-2.51	BG065409	Pla2g6	Phospholipase A2, group VI
1.90	-1.78	AW557879	Pdzk1	Hydrophilic CFTR-binding protein CAP70
1.88	-2.06	BG078326	Pck2	Phosphoenolpyruvate carboxykinase 2
2.04	-2.41	BG078151	Oxsr1	Oxidative-stress responsive 1
1.68	-1.73	BG085840	Olfm1	Olfactomedin 1
1.51	-1.74	BG080961	Mdh1	Malate dehydrogenase 1, NAD
2.29	-1.76	BG063871	Mars2	Methionine-tRNA synthetase 2
1.58	-1.95	BG078449	Lnk	Linker of T-cell receptor pathways

1.56	-1.73	BG069785	Limd1	LIM domains containing 1
1.92	-1.92	BG069796	Klhl2	Kelch-like 2, Mayven
2.02	-1.57	BG077103	Jarid1a	Jumonji, AT rich interactive domain 1A
2.31	-2.27	AW544628	Itgb1	Integrin beta 1
2.01	-2.10	BG069832	Inpp5e	Inositol polyphosphate-5-phosphatase E
1.85	-2.15	BG069762	Ii7	Interleukin 7
2.04	-1.57	BG078349	Igf2bp1	Insulin-like growth factor 2, binding protein 1
2.68	-2.18	AU023208	Gna14	Guanine nucleotide binding protein, alpha 14
2.59	-2.40	BG082755	E130209G04Rik	Ubiquitin protein ligase E3 component n-recognin 2
1.94	-1.80	BG067844	Dscaml1	Clone cDSL-19 Down syndrome cell adhesion molecule-like protein
2.26	-1.96	BG069855	Crip3	Cysteine-rich protein 3 , transcript variant TLP-B
2.13	-2.30	BG064770	Cct5	Chaperonin subunit 5
2.44	-2.12	BG076617	Calm1	Calmodulin 1
1.89	-1.62	BG064703	C330018L13Rik	U box domain containing 5
1.56	-1.55	BG078474	Brd8	Bromodomain containing 8
2.00	-1.79	BG077446	Braf	Braf transforming gene
2.19	-1.77	BG065113	Bcat1	Branched chain aminotransferase 1, cytosolic , transcript variant 2
2.48	-1.83	BG086439	Anxa2	Annexin A2
1.92	-1.76	BG077184	AI413782	Expressed sequence AI413782
1.99	-1.92	BG072752	Actg1	Actin, gamma, cytoplasmic 1
1.80	-2.11	BG063815	Acate2	Acyl-CoA thioesterase 9
1.77	-1.90	BG088856	5730555F13Rik	RIKEN cDNA 5730555F13 gene , transcript variant 1
2.41	-2.41	BG069820	5330431K02Rik	RIKEN cDNA 5330431K02 gene
2.44	-2.39	BG064832	4930542G03Rik	RIKEN cDNA 4930542G03 gene
3.45	-1.60	BG068558	4732496O08Rik	RIKEN cDNA 4732496O08 gene
2.20	-1.84	BG078092	2700083B06Rik	Interferon stimulated exonuclease gene 20-like 1
2.59	-2.60	BG069808	2410129E14Rik	RIKEN cDNA 2410129E14 gene
1.69	-1.50	AW538352	2310075A12Rik	RIKEN cDNA 2310075A12 gene
2.23	-1.84	BG065173	1700022N24Rik	Ring finger protein 185
1.60	-2.08	BG063865	1300002F13Rik	ERBB receptor feedback inhibitor 1
2.02	-2.02	AA408475	EST	
1.84	-1.73	BG064100	EST	
1.94	-1.85	BG065476	EST	
1.70	-1.90	BG078410	EST	
2.38	-2.10	BG082743	EST	
1.73	-1.63	BG077186	EST	
1.92	-1.65	BG077162	EST	

1.86	-1.50	BG086430	EST
1.81	-1.79	BG078495	EST
1.53	-1.63	AW538866	EST
2.03	-1.60	BG063139	EST
2.46	-2.36	BG065115	EST

#### 24M-F-hippo-AAGs reverted by CR

Z-ratio 24M-F-CR/Ad	Z-ratio AD-F-24M/16M	Acc	Symbol	Name
-2.26	3.06	BG064443	EST	
2.00	-2.22	BG064166	Wdfy3	MKIAA0993 protein
1.54	-2.31	C80870	C130002K18Rik	RIKEN cDNA 2610207I05 gene (2610207I05Rik), mRNA
2.30	-2.58	BG070143	5730596K20Rik	RIKEN cDNA 5730596K20 gene (5730596K20Rik), mRNA
2.40	-2.60	BG065852	Rcor1	REST corepressor 1 (Rcor1), mRNA
				Histone cell cycle regulation defective homolog A ( <i>S. cerevisiae</i> ) (Hira), transcript variant 1, mRNA
1.57	-1.94	BG079103	Hira	
2.60	-1.91	BG077912	EST	
2.55	-2.29	BG069038	EST	
2.00	-1.87	BG066604	EST	
1.69	-1.59	BG066523	EST	
1.51	-2.15	AU014963	EST	
1.62	-2.28	BG063486	EST	

**TableS7a**

**Age-associated cortex genes common between the present study and previous mouse (Lee, et. al.) and human (Lu, et. al.) studies.**

Gene Symbol Gene Name

GFAP	Glial fibrillary acidic protein
ICAM2	Intercellular adhesion molecule 2
NDRG1	N-myc downstream regulated gene 1
VIM	Vimentin
FRAP1	FK506 binding protein 12-rapamycin associated protein 1

**Notes.** Red color represents upregulation; blue color represents downregulation.

**TableS7b****Genes significantly affected by aging in the present study and the study of Lee et. al.**

Acc	Symbol	Name
C76805	Myl4	Myosin, light polypeptide 4 (Myl4)
BQ551034	Bmp8b	Bone morphogenetic protein 8b (Bmp8b)
AW537663	Gspt1	G1 to S phase transition 1 (Gspt1)
BG077751	Phb	Prohibitin (Phb)
BG087410	Cd9	CD9 antigen (Cd9)
BG066498	Ppp1r2	Protein phosphatase 1, regulatory (inhibitor) subunit 2 (Ppp1r2)
BG073175	Tcf1	Transcription factor-like 1
AW544994	Limk1	LIM-domain containing, protein kinase (Limk1)
BG064965	Mtif2	Mitochondrial translational initiation factor 2 (Mtif2)

**Notes.** Red color represents upregulation; blue color represents downregulation.

**TableS7c****Cerebellar genes significantly affected by aging in the present study and the study of Lee et. al.**

Acc	Symbol	Name
BG065086	Usp46	Ubiquitin specific peptidase 46 (Usp46)
BG064918	Smarca4	SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 4
BG083256#	Tgfb3	Transforming growth factor, beta receptor III
BG070287*	Igh-6	Immunoglobulin heavy chain 6 (heavy chain of IgM)
AA409376*	Nfyα	Nuclear transcription factor-Y alpha
BG081585*	Pigf	Phosphatidylinositol glycan, class F
BQ551960	Nos3	Nitric oxide synthase 3, endothelial cell (Nos3)
BG077611	Ctsz	Cathepsin Z

Note: # which shown the aging pattern 4 in our aging dataset. \* which represents the aging pattern 6 in our datasets  
Red color represents upregulation; blue color represents downregulation.

**TableS7d****Comparison of regulated genes between the mouse cortex and human cortex aging data.**

Symbol	Name
Cacnb2	Calcium channel, voltage-dependent, beta 2 subunit (Cacnb2)
Gabrb3	Gamma-aminobutyric acid (GABA-A) receptor, subunit beta 3 (Gabrb3)
Ep400	E1A binding protein p400
Mef2c	Myocyte enhancer factor 2C
Rbbp4	Retinoblastoma binding protein 4 (Rbbp4)
Calm3	Calmodulin III (Calm3)
Txnip	Thioredoxin interacting protein
Plxnb1	PlexinB1
Pik3c2a	Phosphatidylinositol 3-kinase, C2 domain containing, alpha polypeptide (Pik3c2a)

**Notes.** Red color represents upregulation; blue color represents downregulation.