

Supplementary Table 3. List of outlier genes identified by comparing L5 nerve root ligation (LR) and L5 spinal nerve transection (L5tx) lumbar spinal cord gene expression to corresponding sham operated controls at **14 days post-surgery**. Color coding corresponds to Fig. 3

1. LR Specific Outlier Genes

Probe Set ID	Gene Title	Ratio LR/Sham
1386115_at	EST	2.39
1389855_at	EST	2.35
1389452_at	EST	1.85
1367851_at	prostaglandin D2 synthase	1.79
1372335_at	EST	1.71
1376915_at	EST	1.67
1375674_at	similar to chromosome 16 open reading frame 5 (predicted)	1.67
1367648_at	EST	1.65
1388284_at	keratin associated protein 3-1 (predicted)	1.62
1370214_at	parvalbumin	1.54
1367574_at	vimentin	1.52
1398385_at	EST	1.50
1372810_at	heterogeneous nuclear ribonucleoprotein D-like (predicted)	1.47
1386890_at	S100 calcium binding protein A10 (calpactin)	1.44
1387436_at	septin 7	1.43
1367690_at	signal sequence receptor 4	1.42
1374396_at	Similar to Vacuolar ATP synthase subunit C (V-ATPase C subunit) (Vacuolar proton pump C subunit)	1.41
1368981_at	aquaporin 4	1.41
1373773_at	Glycoprotein m6a	1.40
1367927_at	prohibitin	1.39
1388337_at	nucleoside phosphorylase	1.39
1389012_at	NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 2 (predicted)	1.37
1398909_at	similar to QIL1	1.37
1398301_at	ribosomal protein L36	1.37
1386874_at	ribosomal protein S15	1.36
1373193_at	EST	1.35
1370124_at	metallothionein 3	1.34
1368028_at	peripherin 1	1.33
1388160_at	isocitrate dehydrogenase 3 (NAD+) beta	1.32
1398949_at	EST	1.31
1373974_at	Similar to oxysterol-binding protein - rabbit	1.31
1369961_at	phosphatidic acid phosphatase 2a	1.30
1398754_at	ubiquitin A-52 residue ribosomal protein fusion product 1	1.30
1389820_at	EST	1.29
1398780_at	Rab acceptor 1 (prenylated)	1.28
1367576_at	EST	1.28
1367667_at	farnesyl diphosphate synthase	1.27
1388389_at	septin 2	1.27
1367808_at	translocase of inner mitochondrial membrane 8 homolog b (yeast)	1.27

1369927_at	malate dehydrogenase, mitochondrial	1.26
1367709_at	CD63 antigen	1.26
1373414_at	similar to Brain specific membrane-anchored protein precursor (predicted)	1.26
1367721_at	syndecan 4	1.26
1368440_at	solute carrier family 3, member 1	1.26
1398775_at	ribosomal protein S15a	1.26
1375219_at	ribosomal protein S2	1.25
1388989_at	EST	1.24
1389866_at	EST	1.24
1372193_at	EST	1.24
1370062_at	hypoxia induced gene 1	1.24
1372513_at	ras-related C3 botulinum toxin substrate 1	1.24
1398852_at	ribosomal protein S21	1.23
1387856_at	calponin 3, acidic	1.23
1387015_at	profilin 2	1.23
1368353_at	glial fibrillary acidic protein	1.22
1398750_at	calreticulin	1.22
1367569_at	laminin receptor 1 (67kD, ribosomal protein SA)	1.22
1390566_at	creatine kinase, mitochondrial 1, ubiquitous	1.22
1398850_at	peptidylprolyl isomerase A	1.21
1386868_at	ribosomal protein S10	1.20
1367460_at	GDP dissociation inhibitor 2	1.20
1367640_at	ribosomal protein S12	1.20
1371573_at	ribosomal protein L36a (predicted)	1.19
1398831_at	proteasome (prosome, macropain) subunit, beta type 4	1.19
1387121_at	N-myc downstream regulated gene 2	1.19
1370855_at	cystatin C	1.18
1371402_at	ATPase, H ⁺ transporting, lysosomal (vacuolar proton pump), beta 56/58 kDa, isoform 2	1.18
1387883_at	thymosin, beta 4	1.18
1367783_at	GABA(A) receptor-associated protein like 2	1.18
1371761_at	ribosomal protein L34 (predicted)	1.17
1370378_at	ATP synthase, H ⁺ transporting, mitochondrial F1 complex, alpha subunit, isoform 1.	1.17
1371422_at	MORF-related gene X	1.17
1367864_at	phosphofructokinase, muscle	1.17
1387019_at	EST	1.17
1367717_at	ribosomal protein S27	1.16
1387361_at	phosphoglycerate kinase 1	1.16
1367573_at	ribosomal protein S6	1.15
1386875_at	clathrin, light polypeptide (Lca)	1.15
1371342_at	cytochrome c-1 (predicted)	1.15
1367575_at	enolase 1, alpha	1.15
1367992_at	secretory granule neuroendocrine protein 1	1.15
1367599_at	ATP synthase, H ⁺ transporting, mitochondrial F0 complex, subunit c (subunit 9), isoform 1	1.15
1367651_at	cathepsin D	1.15
1371304_at	myosin, light polypeptide 6, alkali, smooth muscle and non-muscle (predicted)	1.15

1367625_at	EST	1.14
1388303_at	ribosomal protein L26 (predicted)	1.14
1369929_at	EST	1.14
1388163_at	solute carrier family 25 (mitochondrial carrier; adenine nucleotide translocator), member 5	1.14
1368157_at	stathmin-like 3	1.14
1367596_at	ribosomal protein S26	1.14
1371568_at	synuclein, beta	1.14
1367578_at	peroxiredoxin 2	1.13
1367685_at	ribosomal protein S27a	1.13
1371307_at	ribosomal protein, large, P1	1.13
1398774_at	ribosomal protein L30	1.13
1370238_at	upregulated during skeletal muscle growth 5	1.12
1367565_at	ferritin, heavy polypeptide 1	1.12
1371330_at	ribosomal protein L11 (predicted)	1.12
1367579_at	tubulin, alpha 1 /// tubulin, alpha 6 (predicted)	1.09
1386998_at	aldolase C, fructose-biphosphate	1.07
1370275_at	ATP synthase, H ⁺ transporting, mitochondrial F1 complex, beta polypeptide	-1.02
1389956_at	EST	-1.03
1398800_at	tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, beta polypeptide	-1.04
1369937_at	calmodulin 1	-1.04
1387112_at	proteolipid protein	-1.04
1371682_at	microtubule-associated protein 1 light chain 3 alpha	-1.05
1367634_at	ribosomal protein L31	-1.06
1370228_at	Transferrin	-1.06
1367632_at	glutamine synthetase 1	-1.07
1388297_at	eukaryotic translation elongation factor 1 gamma	-1.07
1370313_at	brain acyl-CoA hydrolase	-1.07
1370996_at	RAS protein-specific guanine nucleotide-releasing factor 1	-1.07
1388670_at	Similar to kinesin family protein KIF1a	-1.07
1368969_at	sclerostin	-1.08
1368292_at	dynamamin 1	-1.08
1383161_at	EST	-1.09
1375206_at	EST	-1.09
1387855_at	guanosine diphosphate dissociation inhibitor 1	-1.10
1369944_at	MARCKS-like protein	-1.10
1367956_at	neurochondrin	-1.10
1369952_at	poly(A) binding protein, cytoplasmic 1	-1.11
1371702_at	Transmembrane 4 superfamily member 2	-1.12
1387200_at	oligodendrocyte transcription factor 1	-1.12
1372381_at	EST	-1.12
1368853_at	visinin-like 1	-1.12
1367845_at	neurofilament 3, medium	-1.12
1369065_at	ATPase, Ca ⁺⁺ transporting, cardiac muscle, slow twitch 2	-1.13
1373367_at	EST	-1.13
1370243_at	prothymosin alpha	-1.13
1386943_at	transmembrane 4 superfamily member 11	-1.13
1390196_at	Synapsin I	-1.13

1368275_at	sterol-C4-methyl oxidase-like	-1.14
1373255_at	EST	-1.14
1368263_at	myelin-associated oligodendrocytic basic protein	-1.14
1367853_at	solute carrier family 12, member 2	-1.14
1371607_at	Microtubule-associated protein 4	-1.14
1388039_at	gamma-aminobutyric acid (GABA) B receptor 1	-1.14
1372012_at	Similar to 24-dehydrocholesterol reductase	-1.14
1374160_at	Similar to nuclear protein with a coiled coil-4 domain of bilateral origin like (3L720)	-1.15
1367585_at	ATPase, Na ⁺ /K ⁺ transporting, alpha 1 polypeptide	-1.15
1368861_at	myelin-associated glycoprotein	-1.15
1388551_at	protocadherin gamma subfamily A, 10 (predicted)	-1.16
1372741_at	EST	-1.17
1376637_at	EST	-1.17
1371414_at	gelsolin	-1.17
1375119_at	neural precursor cell expressed, developmentally down-regulated gene 4A	-1.17
1387861_at	amino-terminal enhancer of split	-1.17
1368701_at	ATPase, Na ⁺ /K ⁺ transporting, alpha 3 polypeptide	-1.18
1371547_at	similar to C10 (predicted)	-1.18
1389301_at	Similar to muscleblind-like protein 2 isoform 1; muscleblind-like protein MBLL39	-1.18
1371481_at	deleted in polyposis 1 (predicted)	-1.18
1375231_at	CXXC finger 5	-1.19
1371711_at	EST	-1.19
1367894_at	EST	-1.19
1368536_at	ectonucleotide pyrophosphatase/phosphodiesterase 2	-1.19
1372878_at	Similar to zinc finger RNA binding protein	-1.19
1370339_at	EST	-1.19
1367971_at	protein tyrosine phosphatase 4a2	-1.20
1383162_at	EST	-1.20
1388480_at	similar to Glycolipid transfer protein	-1.21
1390097_at	TSPY-like 4 (predicted)	-1.21
1370176_at	amyotrophic lateral sclerosis 2 (juvenile) chromosome region, candidate 3 homolog (human)	-1.22
1372740_at	Similar to misshapen/NIK-related kinase isoform 2; GCK family kinase MINK; serine/threonine protein kinase	-1.22
1388715_at	glycyl-tRNA synthetase (predicted)	-1.22
1375421_at	praja 2, RING-H2 motif containing	-1.22
1374387_at	ADP-ribosylation factor-like 6 interacting protein 5	-1.23
1374394_at	EST	-1.23
1375307_at	chromobox homolog 6 (predicted)	-1.23
1388612_at	EST	-1.23
1373067_at	Beta-catenin	-1.23
1387182_at	G protein-coupled receptor 37	-1.23
1373365_at	similar to UMP-CMP kinase (predicted)	-1.24
1369008_at	olfactomedin 1	-1.25
1368138_at	microtubule-associated protein tau	-1.25
1387039_at	glypican 1	-1.26
1375278_at	tripartite motif protein 2 (predicted)	-1.26

1372612 at	dynein light chain-2	-1.26
1390487 at	EST	-1.26
1367882 at	microtubule-associated protein 1 A	-1.27
1375517 at	RGD:735085 hypothetical protein	-1.27
1390674 at	EST	-1.27
1368137 at	microtubule-associated protein tau	-1.30
1375246 at	EST	-1.30
1390174 at	Similar to echinoderm microtubule associated protein like 1	-1.32
1399027 at	plysia ras-related homolog A2	-1.33
1368277 at	protein phosphatase 3, catalytic subunit, alpha isoform	-1.34
1374271 at	EST	-1.34
1377054 at	EST	-1.34
1388283 at	similar to TL antigen	-1.34
1376553 at	thymine glycol DNA glycosylase/AP lyase (predicted)	-1.35
1370427 at	platelet derived growth factor, alpha	-1.36
1374825 at	Similar to Type I transmembrane receptor (seizure-related protein)	-1.37
1387971 at	mitogen activated protein kinase 8 interacting protein	-1.37
1389120 at	potassium voltage gated channel, Shaw-related subfamily, member 3	-1.38
1372472 at	EST	-1.39
1388076 at	PAI-1 mRNA-binding protein	-1.39
1386883 at	EST	-1.39
1368182 at	acyl-CoA synthetase long-chain family member 6	-1.41
1398335 at	Similar to tweety homolog 2	-1.43
1371671 at	Similar to orphan G protein-coupled receptor	-1.43
1369993 at	calcium/calmodulin-dependent protein kinase II gamma	-1.43
1371365 at	EST	-1.44
1388622 at	nucleolar protein 5A (predicted)	-1.45
1392453 at	chloride channel 3	-1.46
1377458 at	sortilin-related receptor, L(DLR class) A repeats-containing (predicted)	-1.48
1387693 at	solute carrier family 6 (neurotransmitter transporter, glycine), member 9	-1.49
1367563 at	secreted acidic cysteine rich glycoprotein	-1.50
1370050 at	ATPase, Ca ⁺⁺ transporting, plasma membrane 1	-1.52
1368209 at	membrane-associated protein 17	-1.55
1387367 at	golgi apparatus protein 1	-1.61
1375396 at	pumilio 1 (Drosophila) (predicted)	-1.61
1369310 at	brain abundant, membrane attached signal protein 1	-1.63
1377457 a at	sortilin-related receptor, L(DLR class) A repeats-containing (predicted)	-1.71
1370638 at	ankyrin 3, epithelial isoform g	-1.73
1368972 at	neurotrophic tyrosine kinase, receptor, type 2	-1.76
1372812 at	similar to Hypothetical protein KIAA0256	-1.79
1390710 x at	sortilin-related receptor, L(DLR class) A repeats-containing (predicted)	-1.81
1398251 at	calcium/calmodulin-dependent protein kinase II beta subunit	-1.82
1373497 at	EST	-1.84
1368879 at	guanine nucleotide binding protein, alpha o	-1.88
1370545 at	potassium voltage-gated channel, shaker-related subfamily, member 1	-1.95
1375144 at	Tissue inhibitor of metalloproteinase 2	-1.96
1375875 at	Kinesin family member 5A	-1.98
1390227 at	EST	-1.99
1374742 at	EST	-2.01
1370544 at	echinoderm microtubule associated protein like 2	-2.21

1386514_at	EST	-2.28
1375342_at	Nuclear factor I/C	-2.51
1368815_at	myelin protein zero	-2.80
1377095_at	similar to ataxin 2-binding protein 1 isoform 1; hexaribonucleotide binding protein 1	-3.27
1392890_at	platelet-activating factor acetylhydrolase, isoform Ib, alpha subunit 45kDa	-3.41
1370853_at	CaM-kinase II inhibitor alpha	-4.42
1375212_at	EST	-4.67

2. L5tx Outlier Genes

Probe Set ID	Gene Title	Ratio L5tx/Sham
1398390_at	EST	5.44
1370333_a_at	insulin-like growth factor 1	2.29
1371103_at	RAB6, member RAS oncogene family (predicted)	1.53
1370519_at	syntaxin binding protein 1	1.46
1387918_at	tropomyosin isoform 6	1.37
1371590_s_at	EST	1.35
1369651_at	thymus cell antigen 1, theta	1.32
1367633_at	glutamine synthetase 1	1.30
1388121_at	sperm membrane protein (YWK-II)	1.29
1373250_at	EST	1.28
1389759_at	EST	1.27
1398330_at	syntaxin binding protein 1	1.27
1370556_at	EST	1.24
1370042_at	stathmin-like 2	1.20
1373058_at	EST	1.18
1370869_at	EST	1.18
1369621_s_at	FK506-binding protein 1a /// FK506 binding protein 2	1.18
1371505_at	heterogeneous nuclear ribonucleoprotein C (predicted)	1.18
1367628_at	lectin, galactose binding, soluble 1	1.18
1389147_at	EST	1.17
1387340_at	reticulon 3	1.17
1373951_at	Protein kinase, cAMP dependent regulatory, type I, alpha	1.17
1367624_at	activating transcription factor 4	1.16
1367930_at	growth associated protein 43	1.16
1371618_s_at	tubulin, beta 3	1.15
1370873_at	calmodulin 3	1.15
1371572_at	EST	1.15
1388868_at	zinc finger protein 216 (predicted)	1.15
1368562_at	sulfotransferase family 4A, member 1	1.14
1367716_at	T-cell immunomodulatory protein	1.14
1372947_at	EST	1.14
1370059_at	neurofilament, light polypeptide	1.14
1388373_at	adiponectin receptor 1	1.14
1379371_at	EST	1.13
1390493_at	EST	1.13
1367799_at	statin-like	1.13

1389109_at	Phosphatidylinositol-4-phosphate 5-kinase, type II, alpha	1.13
1371851_at	Unknown (protein for MGC:72968)	1.13
1370903_a_at	Eph receptor B1	1.12
1370825_a_at	cell division cycle 42 homolog (<i>S. cerevisiae</i>)	1.12
1375855_at	upregulated in colorectal cancer gene 1 protein	1.12
1387805_at	BCL2/adenovirus E1B 19 kDa-interacting protein 3	1.12
1375861_at	EST	1.11
1387757_at	liver regeneration p-53 related protein	1.11
1368272_at	glutamate oxaloacetate transaminase 1	1.10
1371956_at	EST	1.10
1373634_at	EST	1.09
1367462_at	calpain, small subunit 1	1.09
1367873_at	ATPase, H ⁺ transporting, lysosomal (vacuolar proton pump), subunit 1	1.09
1386886_at	CD164 antigen	1.09
1371835_at	Similar to cAMP-dependent protein kinase, beta-2-catalytic subunit (PKA C-beta-2)	1.09
1367532_at	Similar to DAZ associated protein 2; deleted in azoospermia associated protein 2	1.09
1373336_at	Similar to orphan G protein-coupled receptor	1.09
1388978_at	EST	1.08
1369958_at	rhoB gene	1.08
1388300_at	microsomal glutathione S-transferase 3 (predicted)	1.08
1371358_at	glycoprotein, synaptic 2	1.08
1367835_at	proprotein convertase subtilisin/kexin type 1 inhibitor	1.08
1373510_at	vesicle-associated membrane protein 1	1.08
1367653_a_at	malate dehydrogenase 1, NAD (soluble)	1.08
1368515_at	erythrocyte protein band 4.1-like 3	1.07
1371344_at	ribosomal protein L27a (predicted)	1.07
1398245_at	EST	1.07
1373098_at	breast carcinoma amplified sequence 1	1.07
1367693_at	tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, eta polypeptide	1.06
1375336_at	heat shock 90kDa protein 1, beta	1.06
1372190_at	Aquaporin 4	1.06
1387906_a_at	GNAS complex locus	1.06
1370229_at	N-myc downstream regulated 4	1.06
1368858_at	UDP-glucuronosyltransferase 8	1.06
1367784_a_at	clusterin	1.06
1374431_at	Similar to ATPase, H ⁺ transporting, V1 subunit A, isoform 1	1.05
1399057_at	mortality factor 4 like 1 (predicted)	1.05
1367711_at	proteasome (prosome, macropain) 26S subunit, ATPase 2	1.05
1388903_at	T-complex associated-testis-expressed 1-like (Protein 91/23)	1.05
1369652_at	thymus cell antigen 1, theta	1.04
1367929_at	EST	1.04
1371371_at	NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 4, 15kDa (predicted)	1.04
1374513_at	CDC10 (cell division cycle 10, <i>S.cerevisiae</i> , homolog)	1.04
1388748_at	lysosomal-associated protein transmembrane 4 alpha	1.04
1371642_at	eukaryotic translation initiation factor 4A2 (predicted)	1.04
1372707_at	RAB6, member RAS oncogene family	1.03
1371571_at	amyloid beta (A4) precursor protein	1.03

1398755_at	ATPase, H ⁺ transporting, V0 subunit C	1.03
1368097_a_at	reticulon 1	1.03
1398764_at	ribosomal protein L21	1.03
1367617_at	aldolase A	1.03
1367469_at	eukaryotic translation initiation factor 4 gamma, 2	1.02
1398842_at	clathrin, heavy polypeptide (Hc)	1.02
1370334_at	evectin-1	1.02
1370274_at	polyubiquitin	1.02
1388159_at	EST	1.02
1367757_at	cytochrome c oxidase, subunit VIc	1.01
1370434_a_at	myelin-associated oligodendrocytic basic protein	1.01
1386866_at	tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, gamma polypeptide	1.01
1386852_x_at	polyubiquitin	1.01
1367567_at	ribosomal protein L6	1.01
1369897_s_at	GNAS complex locus /// XLas protein	1.00
1386865_at	SPARC-like 1 (mast9, hevin)	-1.08
1370156_at	prion protein	-1.09
1386887_at	cytochrome c oxidase subunit Vb	-1.11
1398761_at	ribosomal protein L5	-1.11
1371387_at	cytochrome c oxidase subunit VIIb	-1.11
1398258_at	apolipoprotein D	-1.12
1371340_at	EST	-1.12
1376711_at	Claudin 11	-1.12
1372250_at	EST	-1.12
1371407_at	Similar to component of oligomeric golgi complex 2	-1.12
1371701_at	NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 9 (predicted)	-1.12
1386921_at	carboxypeptidase E	-1.13
1398749_at	ribosomal protein L4	-1.13
1372542_at	EST	-1.13
1371798_at	Guanine nucleotide binding protein, alpha 12	-1.13
1373051_at	liver regeneration p-53 related protein	-1.14
1367512_at	EST	-1.14
1367740_at	creatine kinase, brain	-1.14
1367561_at	ribosomal protein L27	-1.14
1375197_at	EST	-1.15
1369939_at	cytochrome c, somatic	-1.15
1367607_at	cytochrome c oxidase subunit IV isoform 1	-1.15
1388318_at	phosphoglycerate kinase 1	-1.15
1371334_at	integral membrane protein 2C (predicted)	-1.15
1369930_at	proteasome (prosome, macropain) subunit, alpha type 6	-1.15
1371335_at	similar to CG6105-PA	-1.15
1373479_at	Protein phosphatase 3, catalytic subunit, alpha isoform	-1.15
1370213_at	nuclease sensitive element binding protein 1	-1.16
1368170_at	GABA transporter protein	-1.16
1367588_a_at	ribosomal protein L13A	-1.16
1388372_at	EST	-1.16
1398760_at	ribosomal protein L35a	-1.16
1389586_at	EST	-1.17
1371482_at	NADH dehydrogenase (ubiquinone) Fe-S protein 2 (predicted)	-1.17

1371398_at	EST	-1.17
1367618_a_at	guanine nucleotide binding protein, beta polypeptide 2-like 1	-1.17
1386911_at	ATPase, Na ⁺ /K ⁺ transporting, alpha 2 polypeptide	-1.17
1388795_at	EST	-1.17
1388307_at	tumor differentially expressed 1, like	-1.17
1386864_at	phosphoglycerate mutase 1	-1.17
1372484_at	Similar to Probable RNA-dependent helicase p68 (DEAD-box protein p68) (DEAD-box protein 5)	-1.18
1375189_at	endothelial differentiation-related factor 1 (predicted)	-1.18
1368384_at	kallikrein 6	-1.18
1388362_at	similar to novel cell death-regulatory protein GRIM19	-1.18
1398893_at	Similar to Nedd4 WW domain-binding protein 5	-1.18
1384548_at	ribosomal protein L32	-1.18
1389221_at	Similar to monocyte-to-macrophage differentiation factor 2	-1.19
1375413_at	sirtuin 2 (silent mating type information regulation 2, homolog) 2 (<i>S. cerevisiae</i>)	-1.19
1388152_at	microtubule-associated protein 2	-1.20
1370865_at	isocitrate dehydrogenase 3, gamma	-1.20
1371594_at	tetratricopeptide repeat domain 11 (predicted)	-1.20
1368688_at	neurotensin receptor 2	-1.20
1370244_at	cathepsin L	-1.20
1398762_at	syndecan binding protein	-1.20
1367475_at	cell division cycle 42 homolog (<i>S. cerevisiae</i>)	-1.20
1367467_at	similar to nitrogen fixation cluster-like (predicted)	-1.20
1367934_at	ribosomal protein L39	-1.20
1371686_at	calnexin	-1.21
1371884_at	EST	-1.21
1384178_at	EST	-1.21
1398888_at	H3 histone, family 3B	-1.21
1370276_at	ATP synthase, H ⁺ transporting, mitochondrial F1 complex, O subunit	-1.22
1368051_at	smooth muscle-specific 17 beta-hydroxysteroid dehydrogenase type 3	-1.22
1398923_at	similar to D11Bwg0434e protein (predicted)	-1.22
1389483_at	EST	-1.22
1389521_at	influenza virus NS1A binding protein (predicted)	-1.22
1367854_at	ATP citrate lyase	-1.22
1372345_at	EST	-1.22
1371841_at	myotrophin	-1.22
1367766_at	expressed in non-metastatic cells 2	-1.22
1389957_at	EST	-1.23
1373040_at	eukaryotic translation initiation factor 3, subunit 5 (epsilon) (predicted)	-1.23
1388874_at	EST	-1.23
1367839_at	farnesyl diphosphate farnesyl transferase 1	-1.24
1368656_at	secretogranin III	-1.24
1387811_at	angiotensinogen	-1.25
1388446_at	Similar to heterogeneous nuclear ribonucleoprotein A0; hnRNA binding protein	-1.25
1371363_at	EST	-1.25
1388390_at	eukaryotic translation initiation factor 3, subunit 3 gamma, 40kDa	-1.25
1367610_at	ribosomal protein L19	-1.25
1388301_at	ubiquinol-cytochrome c reductase core protein I	-1.25

1388361_at	NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 10 (predicted)	-1.25
1374496_at	EST	-1.26
1388598_at	similar to death effector filament-forming Ced-4-like apoptosis protein isoform 2; caspase recruitment domain protein 7; NAC-alpha/beta/gamma/delta	-1.26
1398315_at	ribosomal protein L15	-1.26
1370866_at	ribosomal protein L41	-1.26
1398327_at	pleckstrin homology domain containing, family C (with FERM domain) member 1 (predicted)	-1.27
1374591_at	Similar to protein tyrosine phosphatase, receptor type, D isoform 3 precursor; protein tyrosine phosphatase, receptor type, delta polypeptide; protein tyrosine phosphatase delta	-1.27
1370057_at	cysteine and glycine-rich protein 1	-1.27
1387797_at	RAB7, member RAS oncogene family	-1.27
1376209_at	EST	-1.27
1392530_at	EST	-1.27
1367857_at	fatty acid desaturase 1	-1.27
1370861_at	cytochrome c oxidase, subunit VIa, polypeptide 1	-1.27
1372344_at	Hbs1-like (<i>S. cerevisiae</i>) (predicted)	-1.27
1387040_at	myelin and lymphocyte protein	-1.27
1367562_at	secreted acidic cysteine rich glycoprotein	-1.27
1390265_at	EST	-1.28
1373985_at	EST	-1.28
1388853_at	mitochondrial ribosomal protein L54 (predicted)	-1.28
1368105_at	tetraspan 2	-1.28
1367811_at	3-phosphoglycerate dehydrogenase	-1.28
1370286_at	solute carrier family 38, member 2	-1.28
1368344_at	glutamate decarboxylase 1	-1.28
1368253_at	guanidinoacetate methyltransferase	-1.29
1371341_at	small nuclear ribonucleoprotein D2 (predicted)	-1.29
1375856_at	EST	-1.29
1370881_at	Thiosulfate sulfurtransferase	-1.30
1373582_at	EST	-1.30
1377617_at	EST	-1.30
1374417_at	Similar to nuclear receptor binding protein; HLS7-interacting protein kinase	-1.31
1388983_at	EST	-1.31
1389687_at	EST	-1.32
1371979_at	Sterol regulatory element binding protein 2	-1.33
1387938_at	brain and acute leukemia, cytoplasmic	-1.33
1389288_at	EST	-1.33
1379243_at	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 6 (B14) (predicted)	-1.33
1374414_at	EST	-1.34
1367768_at	latexin	-1.34
1368565_at	solute carrier family 1 (glial high affinity glutamate transporter), member 3	-1.34
1370006_at	NADH dehydrogenase (ubiquinone) Fe-S protein 6	-1.35
1367813_at	protein phosphatase 1, regulatory (inhibitor) subunit 14A	-1.36
1388793_at	phosphatidylinositol glycan, class Q	-1.36
1375090_at	EST	-1.36
1367762_at	somatostatin	-1.37
1371417_at	Low molecular mass ubiquinone-binding protein (Qpc)	-1.38

1387817_at	neuron specific gene family member 1	-1.39
1370070_at	synaptojanin 1	-1.39
1372761_at	EST	-1.39
1381995_at	bruno-like 4, RNA binding protein (Drosophila) (predicted)	-1.40
1367559_at	ferritin light chain 1	-1.44
1368104_at	tetraspan 2	-1.47
1372600_at	EST	-1.49
1387146_a_at	endothelin receptor type B	-1.50
1367969_at	peroxiredoxin 6	-1.56
1388357_at	EST	-1.62
1390189_at	similar to Zfp277 protein	-1.87
1389986_at	EST	-1.94
1386239_at	doublesex and mab-3 related transcription factor like family A1 (predicted)	-2.49

3. Co-regulated Outlier Genes

Probe Set ID	Gene Title	LR Fold Change	L5tx Fold Change
1369520_a_at	branched chain aminotransferase 1, cytosolic	-1.30	2.09
1367571_a_at	insulin-like growth factor 2	1.71	2.01
1368816_at	myelin protein zero	-3.90	1.84
1376836_at	EST	1.89	1.48
1367581_a_at	secreted phosphoprotein 1	1.26	1.41
1387664_at	ATPase, H ⁺ transporting, V1 subunit B, isoform 2	1.34	1.40
1369116_a_at	calcitonin/calcitonin-related polypeptide, alpha	1.87	1.39
1370625_at	Fas apoptotic inhibitory molecule 2	-1.12	1.39
1367970_at	profilin 2	1.56	1.35
1370775_a_at	calcitonin/calcitonin-related polypeptide, alpha	1.59	1.33
1388027_a_at	reticulon 4	-1.15	1.25
1367584_at	annexin A2	1.37	1.25
1368840_at	TORID	1.41	1.22
1398883_at	heterogeneous nuclear ribonucleoprotein A2/B1 (predicted)	1.57	1.20
1375705_at	EST	1.45	1.18
1386870_at	glutamine synthetase 1	-1.05	1.17
1370500_a_at	myelin-associated oligodendrocytic basic protein	1.08	1.16
1388850_at	heat shock protein 1, alpha	-1.06	1.16
1375338_at	RAB10, member RAS oncogene family	-1.36	1.14
1371323_at	EST	1.14	1.13
1387005_at	cathepsin S	1.15	1.13
1398892_at	Niemann Pick type C2	1.30	1.12
1375687_at	RAB14, member RAS oncogene family	-1.35	1.12
1370247_a_at	peripheral myelin protein 22	-1.48	1.11
1398753_at	aldo-keto reductase family 1, member A1	1.28	1.10
1398389_at	Platelet-activating factor acetylhydrolase, isoform Ib, alpha subunit 45kDa	-1.17	1.08
1374426_at	ubiquinol-cytochrome c reductase binding protein (predicted)	-1.05	1.08
1386889_at	stearoyl-Coenzyme A desaturase 2	1.10	1.08
1373363_at	microtubule-associated protein 1b	-1.10	1.07

1367557_s_at	glyceraldehyde-3-phosphate dehydrogenase	1.17	1.07
1389307_at	EST	-1.17	1.07
1371353_at	sequestosome 1	1.14	1.07
1398787_at	Ras homolog enriched in brain	1.22	1.07
1372724_at	glutamate receptor, ionotropic, N-methyl D-aspartate-associated protein 1 (glutamate binding)	-1.06	1.07
1398855_at	ATP synthase, H ⁺ transporting, mitochondrial F0 complex, subunit b, isoform 1	1.20	1.06
1398240_at	heat shock protein 8	-1.01	1.06
1370277_at	solute carrier family 25 (mitochondrial carrier; adenine nucleotide translocator), member 3	1.15	1.06
1375340_at	EST	-1.07	1.06
1398849_at	H3 histone, family 3B	1.25	1.05
1370179_at	dynein, cytoplasmic, light chain 2A	-1.07	1.05
1371319_at	integral membrane protein 2B	1.12	1.05
1398871_at	ribosomal protein L17	1.13	1.05
1386937_at	ATPase, Na ⁺ /K ⁺ transporting, beta 1 polypeptide	1.17	1.05
1371297_at	ribosomal protein L7a (predicted)	1.09	1.04
1372701_at	heat shock protein 1, alpha	1.13	1.04
1370803_at	ZW10 interactor	1.14	1.04
1370109_s_at	eukaryotic translation elongation factor 1 alpha 1	1.18	1.04
1398357_at	Complexin 1	1.10	1.03
1372437_at	similar to S-phase kinase-associated protein 1A isoform b; organ of Corti protein 2; transcription elongation factor B (SIII), polypeptide 1-like; RNA polymerase II elongation factor-like protein OCP2; cyclin A/CDK2-associated p19	1.15	1.03
1375651_at	EST	-1.04	1.03
1367630_at	ribosomal protein S11	1.23	1.02
1368810_a_at	myelin basic protein	1.12	1.02
1370862_at	apolipoprotein E	1.11	1.02
1386903_at	S100 protein, beta polypeptide	1.06	1.01
1367629_at	cytochrome c oxidase, subunit 7a 3	1.13	1.01
1367668_a_at	stearoyl-Coenzyme A desaturase 2	-1.05	1.01
1370246_at	calmodulin 2	1.09	1.01
1398767_at	ubiquitin C	1.18	1.01
1371504_at	EST	1.15	1.00
1367606_at	ribosomal protein S3a	1.17	1.00
1375108_at	EST	1.12	1.00
1375107_at	EST	1.10	1.00
1371300_at	ribosomal protein L3	1.10	1.00
1387890_at	ribosomal protein S29	1.13	0.99
1371327_a_at	similar to gamma actin-like protein /// similar to put. type 5 nonmuscle actin	1.10	0.99
1387341_a_at	myelin basic protein	1.12	0.98
1370815_at	EST	-1.07	-1.09
1370058_at	neurofilament, light polypeptide	-1.07	-1.09
1398324_at	similar to 60S ribosomal protein L18a	1.12	-1.09
1367595_s_at	beta-2 microglobulin	1.11	-1.09
1368806_at	selenoprotein P, plasma, 1	1.14	-1.10

1372002_at	gap junction membrane channel protein alpha 1	-1.04	-1.10
1386871_at	glutathione peroxidase 4	1.12	-1.11
1373375_at	Rab6 interacting protein 1 (predicted)	1.23	-1.11
1387897_at	Cyclic nucleotide phosphodiesterase 1	-1.08	-1.11
1388146_at	Brain Ntab mRNA sequence	-1.05	-1.12
1371301_at	ribosomal protein L9	1.22	-1.12
1371889_at	solute carrier family 22 (organic cation transporter), member 17	-1.04	-1.13
1398839_at	thioredoxin	1.23	-1.13
1371299_at	EST	1.14	-1.13
1369628_at	synaptic vesicle glycoprotein 2b	-1.34	-1.13
1375181_at	ribosomal protein L12 (predicted)	1.20	-1.14
1398789_at	ribosomal protein L37	1.25	-1.14
1398851_at	tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, epsilon polypeptide	-1.11	-1.14
1388375_at	Protein kinase, cAMP dependent regulatory, type I, alpha	-1.05	-1.14
1367932_at	3-hydroxy-3-methylglutaryl-Coenzyme A synthase 1	-1.14	-1.14
1398830_at	ribosomal protein L28	1.15	-1.14
1375296_at	EST	1.19	-1.15
1367645_at	ribosomal protein S17	1.21	-1.15
1388296_at	ribosomal protein S18	1.25	-1.16
1370278_at	ATP synthase, H ⁺ transporting, mitochondrial F1 complex, delta subunit	1.13	-1.18
1370242_at	ribosomal protein S23	1.13	-1.18
1386857_at	stathmin 1	-1.07	-1.18
1371435_at	nascent-polypeptide-associated complex alpha polypeptide (predicted)	1.21	-1.18
1388414_at	NADH dehydrogenase (ubiquinone) Fe-S protein 5b, 15kDa (NADH-coenzyme Q reductase) (predicted)	1.22	-1.19
1370235_at	diazepam binding inhibitor	1.26	-1.19
1370281_at	fatty acid binding protein 5, epidermal	1.16	-1.19
1371506_at	CD37 antigen (Leukocyte antigen)	-1.13	-1.19
1373351_at	EST	-1.15	-1.19
1367708_a_at	fatty acid synthase	-1.22	-1.20
1386973_a_at	mitogen activated protein kinase 8 interacting protein	-1.22	-1.20
1388122_at	glutathione-S-transferase, pi 1 /// glutathione S-transferase, pi 2	-1.10	-1.20
1390019_at	H3 histone, family 3B	1.20	-1.20
1370253_at	ribosomal protein L22	1.23	-1.21
1367639_a_at	ribosomal protein S2	1.15	-1.21
1367979_s_at	cytochrome P450, subfamily 51	-1.20	-1.21
1369999_a_at	neuronatin	-1.03	-1.21
1370693_a_at	cyclic nucleotide phosphodiesterase 1	-1.20	-1.22
1387934_at	brevican	-1.14	-1.22
1370200_at	glutamate dehydrogenase 1	1.22	-1.22

1388004_at	G protein-coupled receptor 37-like 1	-1.15	-1.22
1398257_at	myelin oligodendrocyte glycoprotein	-1.10	-1.23
1375632_at	EST	1.17	-1.23
1371377_at	ribosomal protein S19	1.16	-1.25
1398932_at	histidine triad nucleotide binding protein 1 (predicted)	1.30	-1.26
1387071_a at	microtubule-associated protein tau	1.15	-1.27
1386859_at	transketolase	-1.17	-1.27
1373613_at	EST	1.19	-1.27
1371302_at	small EDRK-rich factor 2 (predicted)	1.22	-1.28
1375305_at	LOC362256	-1.28	-1.28
1370284_at	ATP synthase, H ⁺ transporting, mitochondrial F1 complex, epsilon subunit	1.18	-1.28
1371474_at	mitochondrial carrier homolog 1 (C. elegans) (predicted)	-1.09	-1.29
1371254_at	EST	1.18	-1.29
1372521_at	Similar to RhoN	-1.08	-1.34
1376263_at	EST	-1.92	-1.34
1368081_at	ATP-binding cassette, sub-family A (ABC1), member 2	1.42	-1.37
1390048_at	hypothetical protein, MNCb-4760 (predicted)	-2.20	-1.38
1367731_at	guanine nucleotide binding protein, beta 1	-1.80	-1.43
1388071_x at	RT1 class Ib, locus Aw2	1.32	-1.44
1367918_at	fasciculation and elongation protein zeta 1 (zygin I)	-1.07	-1.46
1371102_x at	EST	-1.57	-1.49
1375519_at	similar to alpha globin	-1.60	-1.56
1368887_at	cadherin 22	-1.38	-1.58
1371245_a at	EST	-1.89	-1.59