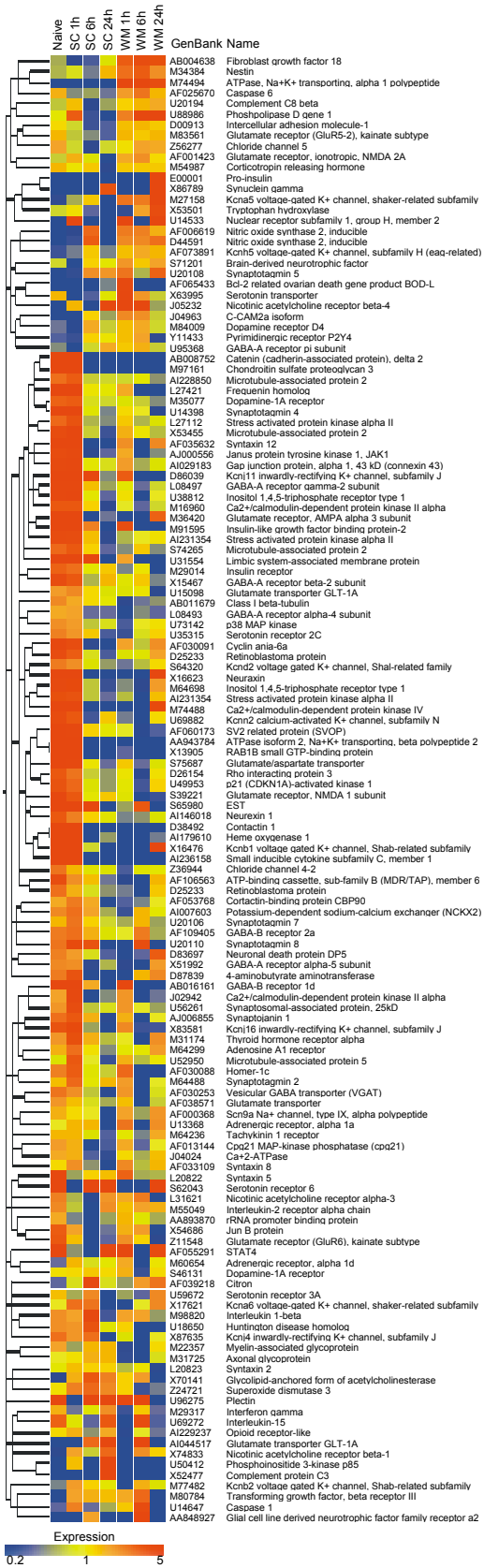
Naive
SC 1h
SC 6h
SC 24h
WM 1h
WM 6h
WM 24h
GenBank Name
AB004638 Fibroblast growth factor 18
M34384 Nestin
M74494 ATPase, Na+K+ transporting, alpha 1 polypeptide
AF025670 Caspase 6
U20194 Complement C8 beta
U88986 Phosholipase D gene 1
D00913 Intercellular adhesion molecule-1
M83561 Glutamate receptor (GluR5-2), kainate subtype
Z56277 Chloride channel 5
AF001423 Glutamate receptor, ionotropic, NMDA 2A
M54987 Corticotropin releasing hormone
E00001 Pro-insulin
X86789 Synuclein gamma
M27158 Kcna5 voltage-gated K+ channel, shaker-related subfamily
X53501 Tryptophan hydroxylase
U14533 Nuclear receptor subfamily 1, group H, member 2
AF006619 Nitric oxide synthase 2, inducible
D44591 Nitric oxide synthase 2, inducible
AF073891 Kcnh5 voltage-gated K+ channel, subfamily H (eag-related)
S71201 Brain-derived neurotrophic factor
U20108 Synaptotagmin 5
AF065433 Bcl-2 related ovarian death gene product BOD-L
X63995 Serotonin transporter
J05232 Nicotinic acetylcholine receptor beta-4
J04963 C-CAM2a isoform
M84009 Dopamine receptor D4
Y11433 Pyrimidinergic receptor P2Y4
U95368 GABA-A receptor pi subunit
AB008752 Catenin (cadherin-associated protein), delta 2
M97161 Chondroitin sulfate proteoglycan 3
AI228850 Microtubule-associated protein 2
L27421 Frequenin homolog
M35077 Dopamine-1A receptor
U14398 Synaptotagmin 4
L27112 Stress activated protein kinase alpha II
X53455 Microtubule-associated protein 2
AF035632 Syntaxin 12
AJ000556 Janus protein tyrosine kinase 1, JAK1
AI029183 Gap junction protein, alpha 1, 43 kD (connexin 43)
D86039 Kcnj11 inwardly-rectifying K+ channel, subfamily J
L08497 GABA-A receptor gamma-2 subunit
U38812 Inositol 1,4,5-triphosphate receptor type 1
M16960 Ca2+/calmodulin-dependent protein kinase II alpha
M36420 Glutamate receptor, AMPA alpha 3 subunit
M91595 Insulin-like growth factor binding protein-2
AI231354 Stress activated protein kinase alpha II
S74265 Microtubule-associated protein 2
U31554 Limbic system-associated membrane protein
M29014 Insulin receptor
X15467 GABA-A receptor beta-2 subunit
U15098 Glutamate transporter GLT-1A
AB011679 Class I beta-tubulin
L08493 GABA-A receptor alpha-4 subunit
U73142 p38 MAP kinase
U35315 Serotonin receptor 2C
AF030091 Cyclin ania-6a
D25233 Retinoblastoma protein
S64320 Kcnd2 voltage gated K+ channel, Shal-related family
X16623 Neuraxin
M64698 Inositol 1,4,5-triphosphate receptor type 1
AI231354 Stress activated protein kinase alpha II
M74488 Ca2+/calmodulin-dependent protein kinase IV
U69882 Kcnn2 calcium-activated K+ channel, subfamily N
AF060173 SV2 related protein (SVOP)
AA943784 ATPase isoform 2, Na+K+ transporting, beta polypeptide 2
X13905 RAB1B small GTP-binding protein
S75687 Glutamate/aspartate transporter
D26154 Rho interacting protein 3
U49953 p21 (CDKN1A)-activated kinase 1
S39221 Glutamate receptor, NMDA 1 subunit
S65980 EST
AI146018 Neurexin 1
D38492 Contactin 1
AI179610 Heme oxygenase 1
X16476 Kcnb1 voltage gated K+ channel, Shab-related subfamily
AI236158 Small inducible cytokine subfamily C, member 1
Z36944 Chloride channel 4-2
AF106563 ATP-binding cassette, sub-family B (MDR/TAP), member 6
D25233 Retinoblastoma protein
AF053768 Cortactin-binding protein CBP90
AI007603 Potassium-dependent sodium-calcium exchanger (NCKX2)
U20106 Synaptotagmin 7
AF109405 GABA-B receptor 2a
U20110 Synaptotagmin 8
D83697 Neuronal death protein DP5
X51992 GABA-A receptor alpha-5 subunit
D87839 4-aminobutyrate aminotransferase
AB016161 GABA-B receptor 1d
J02942 Ca2+/calmodulin-dependent protein kinase II alpha
U56261 Synaptosomal-associated protein, 25kD
AJ006855 Synaptojanin 1
X83581 Kcnj16 inwardly-rectifying K+ channel, subfamily J
M31174 Thyroid hormone receptor alpha
M64299 Adenosine A1 receptor
U52950 Microtubule-associated protein 5
AF030088 Homer-1c
M64488 Synaptotagmin 2
AF030253 Vesicular GABA transporter (VGAT)
AF038571 Glutamate transporter
AF000368 Scn9a Na+ channel, type IX, alpha polypeptide
U13368 Adrenergic receptor, alpha 1a
M64236 Tachykinin 1 receptor
AF013144 Cpq21 MAP-kinase phosphatase (cpq21)
J04024 Ca+2-ATPase
AF033109 Syntaxin 8
L20822 Syntaxin 5
S62043 Serotonin receptor 6
L31621 Nicotinic acetylcholine receptor alpha-3
M55049 Interleukin-2 receptor alpha chain
AA893870 rRNA promoter binding protein
X54686 Jun B protein
Z11548 Glutamate receptor (GluR6), kainate subtype
AF055291 STAT4
M60654 Adrenergic receptor, alpha 1d
S46131 Dopamine-1A receptor
AF039218 Citron
U59672 Serotonin receptor 3A
X17621 Kcna6 voltage-gated K+ channel, shaker-related subfamily
M98820 Interleukin 1-beta
U18650 Huntington disease homolog
X87635 Kcnj4 inwardly-rectifying K+ channel, subfamily J
M22357 Myelin-associated glycoprotein
M31725 Axonal glycoprotein
L20823 Syntaxin 2
X70141 Glycolipid-anchored form of acetylcholinesterase
Z24721 Superoxide dismutase 3
U96275 Plectin
M29317 Interferon gamma
U69272 Interleukin-15
AI229237 Opioid receptor-like
AI044517 Glutamate transporter GLT-1A
X74833 Nicotinic acetylcholine receptor beta-1
U50412 Phosphoinositide 3-kinase p85
X52477 Complement protein C3
M77482 Kcnb2 voltage gated K+ channel, Shab-related subfamily
M80784 Transforming growth factor, beta receptor III
U14647 Caspase 1
AA848927 Glial cell line derived neurotrophic factor family receptor a2
Expression
0.2
1
5

Figure legend: Differential gene expression during water maze learning. A hierarchical clustering algorithm (Pearson correlation, separation ratio 0.5, minimum distance 0.001) was used to order in a dendrogram differentially expressed genes in swimming control (SC) and water maze (WM) trained animals at 1, 6 and 24 h after training. In this dendrogram the pattern and length of the branches reflects the relatedness of the samples. Data are presented in a matrix format: each row represent a single genes and each column an experimental condition. The averaged normalized intensity from two replicates is represented by the color of the corresponding cell in the matrix. Blue, yellow and red cells, respectively, represent transcript levels below, equal or above the median abundance across all conditions. Color intensity reflects the magnitude of the deviation from the median (see scale at the bottom). Additional information are found in: Cavallaro S., D'Agata V., Manickam P., Dufour F., Alkon D.L., Memory specific temporal profiles of gene expression in the hippocampus. Proc. Natl. Acad. Sci. USA, 99(25):16279-16284, 2002.