

Table 3. Complete List of genes regulated by Nex1

Description	Accession Number	Fold regulation
Cytoskeletal Genes		
MAP-1A	M83196	2
MAP-2	X54100	2
Tau	X79321	2
NF-M	Z12152	3.3
NF-H	M21964	2
Kinesin-related prorein (KIF-1D)	AJ000696	2
Cytoplasmic dynein intermediate chain 2C	U39046	2.2
Cytokeratin 8	M63482	2.2
Cytocentrin	U82623	2.6
Bithoraxoid-like protein	AF073839	2
Tropomyosin beta subunit	AA012678	2
Cell Adhesion Encoding Genes		
Brevican	X79881	4.8
Ryudocan	M81786	2
S-laminin	X16563	2
Laminin receptor	M27798	2.1
Thy-1	X03150	-4.9
TAG-1	M31725	-6.3
Neurologin-1	U22952	-4
Neural cell adhesion molecule L1	X59149	-3
Vesicular Trafficking/Synapse Related Genes		
SynGAP-b1	AF058789	2
Synaptotagmin VII	U20106	2.1
Synaptogyrin 1	U39549	2
Complexin I	U35098	2
Sortilin	AF019109	2.5
SAPAP2	U67138	18
Synaptogyrin 2	AF039085	-2
Rabphilin 3A	U12571	-10
Synaptotagmin VI	U20105	-3
Complexin II	U35099	-2
Synaptonemal complex lateral element protein 2	Y08981	2
Synaptonemal complex lateral element protein 3	X65454	3.7
Synaptic membrane glycoprotein gp55	X99337	2
EF-hand calcium binding protein p22	U39875	2
Lin-10 protein homolog	U92010	2
Cript	AF047384	2
n-chimaerin	X67250	2
Rabin 3	U19181	2
Rab28	X78606	2.5
B/K protein	U30831	2.0
SC65 synaptonemal complex protein	X65454	2.1
Vesicle-associated membrane protein 1B	U74621	-2.2
SNAP-25 interacting protein HRS-2m	U7863	-2.3
GTPase Rab8b	U53475	-2.8
Vacuolar adenosine triphosphate subunit B	Y12635	-3
GFI2 protein	L36459	-2
Chromogranin B	AF019974	-2
Metabolic Related Genes		
Beta-glucuronidase	M13962	3.5
Fumerase	J04473	3.3
Creatine kinase	M14864	2
GM3 synthase	AB018049	2.5
Carnitine octanoyltransferase	U26033	2

Arginosuccinate synthase	M36708	7
Ornithine transcarbamylase	M11266	2.4
Ornithine aminotransferase	M11842	5.2
Ornithine decarboxylase	X07944	2
Guanyl cyclase	M57507	2.3
Glutamate dehydrogenase	X14223	2.2
Beta-4N-acetylgalactosaminyltransferase	D17809	3.9
Stearyl-CoA desaturase 2	U67995	3.3
Mevalonate kinase	M29472	2
Beta-alanine pyruvate aminotransferase	AB002584	2
Guanosine monophosphate reductase	AF090867	2.3
5-oxo-L-prolinase	U70825	3
GTP cyclohydrolase 1	M58364	2.5
Carboxypeptidase	J00713	2
Betaine homocystein methyltransferase	AF038870	3.1
Branched-chain alpha ketoacid dehydrogenase kinase	M93271	3.3
Sarcosine dehydrogenase	AF067650	2
Uroporphyrinogen decarboxylase	Y00350	2.1
Isovaleryl-CoA dehydrogenase	J05031	2
Peroxisomal multifunctional enzyme type 2	U37486	2
Mitochondrial enoyl-CoA hydratase precursor	X15958	2
Oxidative 17-beta hydroxysteroid dehydrogenase type 6	U89280	2.5
Heme-oxygenase 3	AF058787	2
Hydroxyindole-o-methyltransferase	L78306	2.7
Acyl-CoA synthase 5	AB012933	-2
Cytochrome c oxidase subunit VIa	X12553	-2
Epoxide hydrolase	M26125	-2.3
ABC transporter	AJ003004	-2
Proton pump polypeptide	M58758	-2
N-acetylglucosaminyltransferase I	D16802	-2.2
PHAS-1 protein	U05014	-2.1
Apolipoprotein B	M21842	-5
Stress Response Related Genes		
Lens aldolase reductase	M60322	2
Stress-inducible chaperone Grpe	U62940	2
Glutathione S-transferase M3	J02744	-2.2
Mitochondrial Genes		
Delta subunit of F1F0 ATPase	U00926	2.2
Mitochondrial processing protease p52	D13907	2.0
RNA Processing		
RNA splicing related protein YT521	D78303	3.5
RNA helicase 117	U25746	2
Kinases and Phosphatases		
Calcium/calmodulin-dependent protein kinase 1 beta	D86556	2
Serine/threonine phosphatase alpha 1 catalytic subunit	D90163	4
Serine/threonine phosphatase beta 1 catalytic subunit	D90164	2
Serine/threonine phosphatases gamma catalytic subunit	D90165	2
Receptors		
Glutamate receptor KA2 subunit	U08258	-2
JAG1	L38483	-3.3
VTR-15-20 receptor (G-protein)	AF053362	-3
Transcription Factors & Chromatin-Related Genes		
Mash-1	X53527	2.3
HNF-3gamma	L09648	3.3
Arix	U25967	2
Retinoblastoma binding protein	L07126	2
Cart-1	L14018	2
RNA polymerase II polypeptide gene	Z71925	2.3

RNA polymerase I 127 kDa subunit	AF025424	3
Nuclear receptor binding factor 1	AB015724	2
Small nuclear RING finger protein	AF022081	2
NAC1	AF015911	2
Histone 1T	M28409	-6
Death effector domain containing protein	AF053362	2
Others		
Regeneration associated serpin precursor	U55765	3.7
Calpain like protease	AF067793	2
Emerin	X98377	2.1
Nucleoporin 107 kDa	L31840	2
Nucleoporin 84 kDa	U93692	2
Pore membrane complex protein 121 kDa	Z21513	2.2
Phosphatidylethanolamine binding protein	X75253	2
Nucleopore glycoprotein 62	J04143	2.4
Protein kinase C binding protein Enigma	U48247	3.2
Pituitary LL5	X74226	2
Thyroglobulin	M35965	2
TSH-regulated gene	X68101	2.3
Stanniocalcin	U62667	-2.3
Preprohypocretin	AF019565	-3
S100 related protein 42C	J03627	-2.8
S100-related protein 42A	J03628	-2.1
Major prion protein precursor	D50093	-2
Vacuolar adenosine triphosphate subunit B	Y12635	-3
Cortixin	L15011	-2

Genes significantly modulated by Nex1 (P values ≤ 0.05) were grouped into functional categories based on information from GeneBank.