

Table S1: All proteins with altered expression levels >20% in wild-type striatal synaptosome preparations at 24 and/or 48hrs after cortical lesion

Accession Number	Symbol	Protein Name	Mol Weight (Da)	Peptides	Score	emPAI	Average Ratio 24hrs vs Unlesioned	Average Ratio 48hrs vs Unlesioned
IP00239927.4	NFAC	Neurofascin	155723	34	51.2	0.04	1.528	2.030
IP00751955.1	TMX2	Putative Uncharacterized Protein Tmx2	23998	17	179.4	0.09	1.623	1.623
IP00075866.1	NMA1C5	23 KDa Protein	38769	15	386.7	0.15	1.431	1.756
IP00487545.4	PLNMA4	Plexin-A4	250164	54	85.9	0.01	1.464	1.694
IP004880340.4	DCLK1	Isomorph 1 of Serine/Threonine-Protein Kinase Dclk1	200	79.2	0.30	1.00794	2.0	1.402
IP00762713.1	DNAJC5	Isomorph 3 of Putative Tyrosine-Protein Phosphatase Auxilin	123424	27	41.2	0.08	1.071	1.454
IP00108150.1	ROCK2	Rho-Associated Protein Kinase 2	206952	68	89.1	0.02	1.457	1.453
IP00471728.1	RPL14	Putative Uncharacterized Protein	134308	67	10.0	0.09	1.453	1.453
IP00467530.3	ABLIM1	Isomorph 1 of Actin-Binding Lim Protein 1	115052	29	61.7	0.03	1.098	1.428
IP00062506.3	ANK3	Brain-Specific Ankyrin-G	577303	106	21.2	0.01	0.761	1.427
IP00039564.1	NSCAM	Isomorph 3 of Neuronal Cell Adhesion Molecule	162929	18	82.0	0.02	1.349	1.425
IP00122399.1	GLG1	Golgi Apparatus Protein 1	164294	39	87.4	0.29	1.635	1.424
IP00062174.7	GLD1	Lactoylglutathione Lyase	26747	38	112.5	0.42	1.552	1.424
IP00469897.3	GFAT2	Glutamine Deaminase	59707	38	66.9	0.17	1.269	1.419
IP00126048.2	PSMD13	Isomorph 1 of 26S Proteasome Non-ATPase Regulatory Subunit 13	50425	14	52.6	0.07	0.967	1.410
IP00039905.5	PF3C3	Liprin-Alpha-3	134308	79.4	0.02	1.451	1.409	1.409
IP000331174.5	CCT7	T-Complex Protein 1 Subunit Eta	73208	81	89.0	0.09	1.279	1.400
IP00027033.3	HIST2HZAC	Histone H2A Type 2-C	18543	9	170.1	0.95	1.360	1.399
IP00022457.2	DIRX5	Aspartyl-TRNA Synthetase, Cytoplasmic Isomorph 1	66968	23	45.6	0.05	0.949	1.398
IP000471246.2	IVD	Isovaleryl-Coa Dehydrogenase, Mitochondrial	54604	19	127.6	0.06	1.269	1.391
IP00071166.4	HIT1	Huntingtin	385122	111	66.6	0.01	1.386	1.388
IP00116331.1	SCTA	Isomorph 1 of Small Glutamine-Rich Tetratricopeptide Repeat-Containing Protein	38788	15	114.3	0.28	1.266	1.376
IP00153176.2	FBXO2	F-Box Only Protein 2	36678	5	56.8	0.09	0.576	1.376
IP000524600.3	PFAS	Phosphoribosylformylglycinamide Synthase	159634	27	137.1	0.02	2.063	1.365
IP000226790.2	PIGT	Loc10046871 Gpi Transamidase Component Pig-T	73344	20	92.9	0.04	1.602	1.353
IP000230449.7	HPCAL1	Hippocalcin-Like Protein 1	27914	17	119.0	0.40	1.114	1.346
IP000890117.1	CLF1	Cofilin-1	26685	50	171.6	0.80	1.254	1.343
IP00408668.2	DLG1	Loc10047603 Isomorph 1 of Disks Large Homolog 1	117797	27	82.5	0.03	1.063	1.336
IP000624192.3	DPYSL5	Dihydropyrimidine-Related Protein 5	17182	32	161.4	0.09	1.128	1.328
IP00054399.3	ARS2	Threonyl-TRNA Synthetase, Mitochondrial	134249	32	88.5	0.02	0.298	1.327
IP000337930.4	CKAP5	Isomorph 1 of Cytoskeleton-Associated Protein 5	282550	73	257.7	0.02	1.538	1.317
IP000652377.2	WDK7	Wdr7 Protein	183911	57	6.0	0.05	1.198	1.317
IP00136716.1	GRM3	Metabotropic Glutamate Receptor 3	114621	20	35.7	0.06	1.283	1.316
IP000318522.3	GAD3	Glutamate Decarboxylase 3	77901	44	226.7	0.28	1.106	1.311
IP00133284.1	D10H8UE1	Loc10046848 Est Protein Homolog, Mitochondrial	34949	84.1	13.0	20.0	1.411	1.308
IP00468688.4	TARS	Threonyl-TRNA Synthetase, Cytoplasmic	103684	17	35.2	0.03	1.411	1.306
IP00087896.1	64305480MRK1	Hypothetical Protein Loc234797 Isomorph B	54772	5	48.6	0.06	1.246	1.298
IP00018347.1	SPPLC1	75 KDa Protein	87979	11	80.1	0.08	1.111	1.297
IP00126072.2	VAT1	Synaptic Vesicle Membrane Protein Vat-1 Homolog	49381	11	109.8	0.07	0.974	1.290
IP00079868.1	USP9X	Ubiquitin Carboxyl-Terminus Hydrolase 9	134308	61	64.1	0.02	1.031	1.286
IP00054923.1	CLTB	Isomorph 2 of Clathrin Light Chain B	28446	15	40.8	0.39	0.995	1.285
IP00137277.1	RAB2A	Ras-Related Protein Rab-2A	27658	10	98.8	0.26	1.220	1.278
IP00067436.2	SMXO2	Similar To Proteasome (Prosome, Macropain) 26S Subunit, Non-ATPase, 2 Isomorph 1	190622	6	158.6	0.41	0.033	1.274
IP00134353.3	NOL3	Nucleolar Protein 3	25693	6	87.4	0.13	1.393	1.258
IP000890744.1	DMX2	Dmx-Like Protein 2	392746	81	497.4	0.03	1.060	1.256
IP00124291.1	VPS45	Vacuolar Protein Sorting-Associated Protein 45	77979	52.3	0.34	0.21	1.251	1.251
IP00018614.9	IDH2	Isocitrate Dehydrogenase (NADP), Mitochondrial	62890	28	59.2	0.05	1.277	1.249
IP00021577.1	CPT1C	Carnitine D-Palmitoyltransferase 1, Brain Isomorph	15111	15.1	151.1	0.03	0.957	1.247
IP000468112.2	PRK-LL1	Band 4.1-Like Protein 1 Isomorph A	118655	39	37.8	0.03	1.097	1.248
IP00025961.5	PHGDH	D-3-Phosphoglycerate Dehydrogenase	65257	23	95.8	0.05	1.155	1.239
IP000120503.1	CGP81	Customer Subunit Beta	129432	41.7	67.0	0.03	0.902	1.237
IP000223757.4	AKR1B3	Aldehyde Reductase	44265	13	34.4	0.07	1.527	1.232
IP00134344.6	SPNB3	Putative Uncharacterized Protein	209135	78	83.1	0.05	1.025	1.232
IP00118120.1	MYO2A	Myosin-II	187815	198	108.8	0.21	1.028	1.231
IP00088106.1	NAPC	Putative Uncharacterized Protein Napp	49418	34	206.7	0.38	1.278	1.217
IP00135952.2	ITNA	Alpha-Interneuron	63789	47	127.5	0.15	1.057	1.216
IP00030566.4	CNG7	Guanine Nucleotide-Binding Protein G(I)/G(S)/G(O) Subunit Gamma-7	9849	17	106.7	0.35	0.831	1.216
IP00031351.3	DPYSL4	Isomorph 1 of Dihydropyrimidine-Related Protein 4	72227	32	53.0	0.14	1.084	1.210
IP000283511.1	FOXK	Foxk1 Protein	40753	261.7	40.1	0.73	1.009	1.204
IP00116697.1	RAB6	Isomorph 1 of Ras-Related Protein Rab-6A	27948	26	60.0	0.25	1.241	1.195
IP00118900.1	POE1B	Calcium/Calmodulin-Dependent 3',5'-Cyclic Nucleotide Phosphodiesterase 1B	71130	25	166.3	0.09	1.277	1.173
IP00120342.6	SLC11R6	Solute Carrier Family 12 (Sodium/Proton) Cotransporter 2	74329	23	114.8	0.19	1.168	1.169
IP000273164.1	ALDH5A1	Succinate-Semialdehyde Dehydrogenase, Mitochondrial	66542	43	126.4	0.21	1.245	1.168
IP00030808.5	UNC13A	Putative Uncharacterized Protein Unc13A	244240	39	81.6	0.01	1.291	1.164
IP00067851.1	CADPS2	Isomorph 1 of Calcium-Dependent Secretion Activator 2	75106	69	69.4	0.09	1.149	1.164
IP00012305.2	SYP	Synaptophysin	38546	53	152.5	0.78	1.265	1.161
IP00061232.3	HSOL7B10	Hydroxyesterase (17-Beta) Dehydrogenase 10	22749	37	23.4	0.24	1.137	1.137
IP00115429.1	GGT7	Gamma-Glutamyltransferase 7	74611	23	187.8	0.04	1.285	1.137
IP00028645.5	PFN2	Isomorph 1 of Profilin-2	18406	18	50.6	0.66	1.320	1.135
IP00108783.1	NF1	Isomorph 2 of Neurofibromin	175725	41	158.5	0.45	1.001	1.131
IP00095134.1	ARPC4	Putative Uncharacterized Protein	24068	54	76.1	0.68	1.273	1.129
IP00116277.3	CCT4	T-Complex Protein 1 Subunit Delta	70711	34	804.5	0.15	1.316	1.125
IP00129519.3	CTD4	Brain Acid Soluble Protein 4	30896	6	626.5	0.10	1.232	1.115
IP00127707.1	PCBP2	Isomorph 1 of Poly(Rc)-Binding Protein 2	44072	23	34.8	0.07	1.203	1.105
IP00118663.3	MAPK1	Mitogen-Activated Protein Kinase 1	48949	118	119.8	0.48	1.097	1.103
IP00118880.5	GUCY1B3	Guanylate Cyclase Soluble Subunit Beta-1	81390	28	70.2	0.08	1.201	1.093
IP00112414.1	CSEL1	Expontin-2	129131	31	41.0	0.03	1.237	1.090
IP00112001.1	CA92	Adenylyl Cyclase-Associated Protein 2	63353	36.5	20.1	1.11	1.066	1.085
IP00135677.2	EHD3	EH Domain-Containing Protein 3	74833	28	128.2	0.09	1.809	1.080
IP00030844.3	SPARCL1	Sparc-Like Protein 1	68814	24	40.2	0.04	1.268	1.076
IP000471232.2	WASH1	Wiskott-Aldrich Syndrome Protein Family Member 1	93261	26.3	8.6	0.26	1.066	1.074
IP00025470.1	GPHN	Gephyrin	95227	31	260.0	0.07	1.399	1.070
IP00041883.3	ACA1A1	3-Hydroxy-Coa Thioester, Peroxisomal	49553	13	120.5	0.15	1.019	1.072
IP00041883.3	AAB3B	Ras-Related Protein Rab-3B	19532	31	152.5	0.71	1.221	1.072
IP00084909.4	MTAF1A	Isomorph 1 of Microtubule-Associated Protein 1A	369950	61	69.1	0.02	0.783	1.067
IP00083056.1	DPY10	Putative Uncharacterized Protein Dpy10	100667	35	103.7	0.06	1.067	1.066
IP00024093.2	PHYHIP1	Isomorph 1 of Phytanoyl-Coa Hydroxylase-Interacting Protein-Like	51706	11	45.7	0.06	0.566	1.040
IP00031995.3	PSMD6	26S Proteasome Non-ATPase Regulatory Subunit 6	54006	26	60.0	0.06	0.767	1.034
IP00122747.1	GRM6	Neuronal Membrane G-Protein Receptor 6	35824	4	115.2	0.42	1.213	1.032
IP00111013.1	CTSD	Cathepsin D	54507	44	48.0	0.19	1.252	1.028
IP00082723.1	ARKS27	Isomorph G of Rho Guanine Nucleotide Exchange Factor 7	109939	30	206.1	0.06	1.209	1.026
IP00061995.4	MYO18A	Isomorph 3 of Myosin-Xviii	281702	57	77.9	0.01	0.402	1.025
IP00033660.4	DLAT	Dihydropyridine-Residue Acetyltransferase/Component of Pyruvate Dehydrogenase	80941	24	94.5	0.08	0.792	1.005
IP00077867.1	SLC14A2	Solute Carrier Family 14 (Sodium/Potassium/Calcium Exchanger), Member 2 Isomorph	79907	27	222.2	0.14	1.004	1.002
IP00032360.4	CORO1A	Coronin-1A	58638	19	36.3	0.12	1.233	0.993
IP00033033.7	LOC100046997	Atc-Bifunctional Purine Biosynthesis Protein Purh	75338	14	89.4	0.04	1.233	0.989
IP000890311.1	LOC100044110	Similar To Guanine Nucleotide Binding Protein, Alpha 2 Subunit	47346	17	107.0	0.07	1.031	0.987
IP00118735.5	PPP1CB	Serine/Threonine-Protein Phosphatase Pp1-Beta Subunit	44045	17	36.2	0.16	0.795	0.986
IP00128880.3	IFP4	Interph-4	133096	45	42.8	0.02	1.296	0.984
IP00131696.3	ALB	Serum Albumin	68519	55	5.5	0.08	0.555	0.984
IP000464208.3	ATAD3A	Isomorph 2 of Atadp Family Aaa Domain-Containing Protein 3	68154	19	58.7	0.05	1.544	0.969
IP00123966.3	PP1D	Ppp1gamma-Prolyl Coa-Trans Isomerase D	53388	68	79.0	0.06	0.683	0.968
IP00133387.1	HSP41	Heat Shock Factor-Binding Protein 1	10430	5	25.5	0.77	0.641	0.944
IP00031999.2	HSPA1	78 KDa Glucose-Regulated Protein 1	91352	58	205.4	0.19	0.781	0.940
IP00118963.1	MRPL12	35S Ribosomal Protein L12, Mitochondrial	77589	67	114.2	0.76	0.620	0.937
IP00025390.5	CXO6B1	Cytochrome C Oxidase Subunit 6B1	13335	9	63.0	0.26	0.703	0.916
IP00124778.1	BLIAF2	Isomorph 2 of Brain-Specific Angiogenesis Inhibitor 1-Associated Protein 2	70869	31	85.6	0.05	0.796	0.915
IP00068972.4	GUCY1A2	Loc10004215 Guanylate Cyclase 1, Soluble, Alpha 2	96000	13	446.3	0.07	0.637	0.907
IP00113849.1	CDC42	Isomorph 2 of Cell Division Control 2/42 Homolog	27063	11	49.7	0.26	0.711	0.907
IP00134746.5	AS51	Acquisinucleonin Synthase	57183	59.3	59.3	0.12	0.780	0.905
IP00119138.1	UQCRC2	Cytochrome B-C1 Complex Subunit 2, Mitochondrial	56780	46	142.8	0.12	0.717	0.898
IP00116112.3	DCTN2	Dynactin Subunit 2	54243	20	37.8	0.19	0.621	0.889
IP00125011.1	PRK-LL3	Isomorph 1 of Band 4.1-Like Protein 3	14721	11	145.0	0.11	1.040	0.881
IP000850217.1	LOC100004619	Similar To Ubiquitin-Conjugating Enzyme E2 Ubch-Ben	29691	17	91.2	0.24	0.795	0.880
IP000378694.4	HMGCL	Hydroxymethylglutaryl-Coa Lyase, Mitochondrial Precursor	41365	12	57.6	0.08	0.639	0.877
IP00121524.11	CAR2	Carbonic Anhydrase 2	32113	14.3	123.1	0.43	1.034	0.874
IP000123058.1	CNTN1	Contactin-1	131512	61	134.7	0.13	1.050	0.870
IP000221788.3	HPCAL4	Hippocalcin-Like Protein 4	27848	39	90.6	0.16	0.725	0.863
IP000340165.5	N/A	Putative Uncharacterized Protein Ensmus00000002571	25217	59	218.7	0.65	0.761	0.859
IP00078764.6	VGF</							