

**Table S1** - Up-regulated genes in MPTP-treated substantia nigral region versus control substantia nigral region.

Probe ID	Gene symbol	Gene title	Average fold change	Average log 2 (Fold change)	P value
10469058	Ucma	upper zone of growth plate and cartilage matrix associated	1.370849	0.45506978	0.01185
10547995	Tuba3a	tubulin, alpha 3A	1.355087	0.43838501	0.007448
10415353	Tssk4	testis-specific serine kinase 4	1.318758	0.399180174	0.028788
10520706	Trim54	tripartite motif-containing 54	1.318023	0.398375034	0.013562
10353438	Tram2	translocating chain-associating membrane protein 2	1.398238	0.483609915	0.009858
10372443	Tph2	tryptophan hydroxylase 2	1.735757	0.79556489	0.006941
10355528	Tns1	tensin 1	1.42786	0.513854742	0.00437
10519060	Tnfrsf14	tumor necrosis factor receptor superfamily, member 14 (herpesvirus entry mediator)	1.396756	0.482079983	0.022391
10498273	Tm4sf1	transmembrane 4 superfamily member 1	1.324548	0.405500174	0.049599
10529636	Stk32b	serine/threonine kinase 32B	1.333922	0.415674686	0.018253
10591556	Spc24	SPC24, NDC80 kinetochore complex component, homolog ( <i>S. cerevisiae</i> )	1.496182	0.581285238	0.02509
10507719	Slfn1	schlafen like 1	1.356788	0.440194845	0.018089
10378816	Slc6a4	solute carrier family 6 (neurotransmitter transporter, serotonin), member 4	1.457832	0.543824911	0.016635
10597960	Slc6a20a	solute carrier family 6 (neurotransmitter transporter), member 20A	1.56813	0.649044991	0.015262
10541318	Slc6a13	solute carrier family 6 (neurotransmitter transporter, GABA), member 13	1.527296	0.610980034	0.011258
10386683	Slc47a1	solute carrier family 47, member 1	1.53985	0.622790098	0.037646
10501811	Slc44a3	solute carrier family 44, member 3	1.349725	0.43266511	0.022073
10461130	Slc22a6	solute carrier family 22 (organic anion transporter), member 6	1.3087	0.388134956	0.044758
10552857	Slc17a7	solute carrier family 17 (sodium-dependent inorganic phosphate cotransporter), member 7	1.468654	0.554494858	0.018079
10550593	Six5	sine oculis-related homeobox 5	1.490436	0.575734854	0.009845
10484463	Serping1	serine (or cysteine) peptidase inhibitor, clade G, member 1	1.382563	0.467345238	0.042157
10493794	S100a14	S100 calcium binding protein A14	1.568956	0.64980495	0.045956
10602966	Rs1	retinoschisis (X-linked, juvenile) 1 (human)	1.520315	0.604370117	0.032478
10344723	Rrs1	RRS1 ribosome biogenesis regulator homolog ( <i>S. cerevisiae</i> )	1.378147	0.462729931	0.016078
10367041	Rdh9	retinol dehydrogenase 9	1.385397	0.470299959	0.043342
10556059	Rbmx12	RNA binding motif protein, X-linked-like 2	1.323988	0.40489006	0.030269
10422946	Ranbp3l	RAN binding protein 3-like	1.607697	0.684995174	0.009315
10445633	Prph2	peripherin 2	1.349996	0.432954788	0.0255
10473450	Olfir998	olfactory receptor 998	1.466381	0.552259922	0.03908

10566296	Olfr642	olfactory receptor 642	1.310929	0.390590072	0.039626
10544403	Olfr459	olfactory receptor 459	1.458373	0.544360042	0.011498
10537803	Olfr448	olfactory receptor 448	1.359942	0.443544984	2.63E-04
10351903	Olfr420	olfactory receptor 420	1.307295	0.386584997	0.012782
10376412	Olfr314	olfactory receptor 314	1.401965	0.487450123	0.021474
10565399	Olfr294	olfactory receptor 294	1.327521	0.408734918	0.020398
10432129	Olfr288	olfactory receptor 288	1.77269	0.825939894	0.042144
10440158	Olfr191	olfactory receptor 191	1.541815	0.624629915	0.044143
10405063	Ogn	osteoglycin	1.953315	0.965924978	0.012938
10574161	Nlrc5	NLR family, CARD domain containing 5	1.40577	0.491360188	0.048339
10349993	Myog	myogenin	1.304381	0.383364916	0.047116
10399421	Mycn	v-myc myelocytomatosis viral related oncogene, neuroblastoma derived (avian)	1.313312	0.393209934	0.00864
10584827	Mpzl2	myelin protein zero-like 2	1.547222	0.629680157	0.00967
10499512	Mir92b	microRNA 92b	1.300598	0.379174948	0.008433
10434804	Mir28	microRNA 28	1.581842	0.66160512	0.004448
10460829	Mir194-2	microRNA 194-2	1.453595	0.539625168	0.049373
10532169	Mfsd7a	major facilitator superfamily domain containing 7A	1.370607	0.454815149	0.00524
10429506	Lypd2	Ly6/Plaur domain containing 2	1.385767	0.470685005	0.036528
10504761	LOC641050	uncharacterized protein LOC641050	1.313722	0.393660069	0.033307
10504753	LOC641050	uncharacterized protein LOC641050	1.364517	0.448390126	0.025779
10373016	LOC100504608	protein FAM119B-like	1.395445	0.48072505	0.0414
10569288	Krtap5-4	keratin associated protein 5-4	1.318073	0.398430109	0.002074
10432918	Krt8	keratin 8	1.322254	0.402999878	0.035143
10552608	Klk1b3	kallikrein 1-related peptidase b3	1.620597	0.696525037	0.03014
10601867	Kir3dl1	killer cell immunoglobulin-like receptor, three domains, long cytoplasmic tail, 1	1.495134	0.580275059	3.96E-04
10480003	Itih2	inter-alpha trypsin inhibitor, heavy chain 2	1.355613	0.438945055	0.02437
10402991	Igh-VX24	immunoglobulin heavy chain (X24 family)	1.397269	0.482609987	0.022955
10450372	Hspa11	heat shock protein 1-like	1.546922	0.629400015	0.018308
10531645	Hnrpdl	heterogeneous nuclear ribonucleoprotein D-like	1.358882	0.442420006	0.008815
10369735	Herc4	hect domain and RLD 4	1.35651	0.43990016	0.007765
10582188	Gse1	genetic suppressor element 1	1.32593	0.407005072	0.04699
10533725	Gpr81	G protein-coupled receptor 81	1.325126	0.406129837	0.031722
10460782	Gpha2	glycoprotein hormone alpha 2	1.319476	0.399965048	0.024431
10554221	Gm9885	predicted gene 9885	1.559648	0.641220212	0.034653
10585543	Gm7444	ring finger protein 19A pseudogene	1.402956	0.488470078	0.030915
10580516	Gm6625	predicted gene 6625	1.416165	0.501989841	0.015037

10607465	Gm4997	predicted gene 4997	1.499987	0.584950209	0.020923
10510225	Gm13235	predicted gene 13235	1.713125	0.776630044	0.04373
10510170	Gm13235	predicted gene 13235	1.713125	0.776630044	0.04373
10404339	Gm11360	dynein, axonemal, heavy chain 9 pseudogene	1.337784	0.419845104	0.014737
10436890	Gm10785	predicted gene 10785	1.557298	0.639045	0.023735
10487619	Gm10183	predicted gene 10183	1.312339	0.392139912	0.03056
10366368	Glipr112	GLI pathogenesis-related 1 like 2	1.427989	0.513984919	0.017321
10594758	Gcnt3	glucosaminyl (N-acetyl) transferase 3, mucin type	1.377837	0.462404966	0.01679
10397346	Fos	FBJ osteosarcoma oncogene	1.628428	0.703480005	0.019194
10481262	Fcnb	ficolin B	1.442454	0.528525114	0.027446
10570606	Defb14	defensin beta 14	1.366769	0.450769901	0.025805
10507152	Cyp4a12b	cytochrome P450, family 4, subfamily a, polypeptide 12B	1.486583	0.572000027	0.036575
10551293	Cyp2f2	cytochrome P450, family 2, subfamily f, polypeptide 2	1.53003	0.613560081	0.03154
10380297	Cox11	COX11 homolog, cytochrome c oxidase assembly protein (yeast)	1.344207	0.426754951	0.033132
10575052	Cdh1	cadherin 1	1.62967	0.70457983	0.001501
10346783	Cd28	CD28 antigen	1.304684	0.383700013	0.021589
10389072	Cct6b	chaperonin containing Tcp1, subunit 6b (zeta)	1.443864	0.529935002	0.048596
10411527	Cartpt	CART prepropeptide	1.341294	0.423624992	0.044706
10450242	C4b	complement component 4B (Chido blood group)	1.381227	0.465950012	0.038342
10410475	BC018507	cDNA sequence BC018507	1.307463	0.386769772	0.010261
10450412	AU023871	expressed sequence AU023871	1.319009	0.399454951	0.020676
10365637	Arl1	ADP-ribosylation factor-like 1	1.33243	0.414060116	0.00691
10425049	Apol9b	apolipoprotein L 9b	1.320945	0.401570082	0.040158
10382189	Apoh	apolipoprotein H	1.312089	0.391865134	0.006738
10546430	Adamts9	a disintegrin-like and metallopeptidase (reprolysin type) with thrombospondin type 1 motif, 9	1.349579	0.432509899	0.003226
10447239	Abcg8	ATP-binding cassette, sub-family G (WHITE), member 8	1.308324	0.387720108	0.002602
10438442	A930003A15Rik	RIKEN cDNA A930003A15 gene	1.311447	0.391160011	0.022121
10568865	6430531B16Rik	RIKEN cDNA 6430531B16 gene	1.419709	0.505595207	0.033218
10599342	6030498E09Rik	RIKEN cDNA 6030498E09 gene	1.711498	0.775259972	0.038857
10431946	5830453K13Rik	RIKEN cDNA 5830453K13 gene	1.316822	0.397059798	0.011451
10531479	4932430I15Rik	RIKEN cDNA 4932430I15 gene	1.350038	0.432999969	0.03692
10545524	4931417E11Rik	RIKEN cDNA 4931417E11 gene	1.428771	0.514775038	0.033142
10605651	4930415L06Rik	RIKEN cDNA 4930415L06 gene	1.606182	0.683634996	0.032499
10484256	4930401B11Rik	RIKEN cDNA 4930401B11 gene	1.466676	0.552550077	0.027011
10397538	1810035L17Rik	RIKEN cDNA 1810035L17 gene	1.308501	0.387915134	0.02803
10399389	1700034J04Rik	RIKEN cDNA 1700034J04 gene	1.540304	0.623215079	0.025798

10479058	1700021F07Rik	RIKEN cDNA 1700021F07 gene	1.391379	0.476515055	0.027232
10338184	---	---	1.812945	0.85833478	0.020253
10338317	---	---	1.605285	0.682829857	0.025985
10338391	---	---	1.724873	0.786489964	0.021293
10338427	---	---	1.476468	0.56215024	0.001343
10338448	---	---	1.783251	0.834509969	0.023987
10338456	---	---	1.733617	0.793784857	0.01089
10338507	---	---	1.59359	0.672280073	0.027407
10338591	---	---	1.872357	0.904855251	0.005571
10338602	---	---	1.3623	0.446044922	0.01494
10338657	---	---	1.571372	0.652024984	0.009592
10338748	---	---	1.32034	0.400909901	0.047195
10338779	---	---	1.373789	0.458159924	0.017361
10338863	---	---	2.699749	1.432825208	0.049832
10338889	---	---	3.106037	1.635075092	0.013942
10338936	---	---	2.198074	1.136240125	0.019201
10338957	---	---	1.349977	0.432934761	0.046669
10338989	---	---	2.064604	1.045864999	0.029468
10339267	---	---	1.55975	0.641314983	0.048801
10339308	---	---	1.849711	0.887300253	0.030691
10339355	---	---	1.334293	0.416074991	0.014895
10339444	---	---	2.297731	1.200210094	0.004966
10339505	---	---	1.496954	0.582030058	0.046597
10339560	---	---	1.334468	0.41626507	0.01795
10339599	---	---	1.497639	0.582689762	0.014255
10339734	---	---	1.415258	0.501065016	0.035849
10339744	---	---	1.657432	0.728949904	0.013787
10339946	---	---	1.539839	0.622779965	0.026659
10339949	---	---	1.71744	0.780260086	0.022276
10340014	---	---	1.411423	0.497149944	0.008355
10340162	---	---	1.473243	0.558995008	0.039729
10340185	---	---	1.474484	0.560209751	0.02925
10340239	---	---	2.040998	1.02927494	1.78E-04
10340263	---	---	1.799916	0.847929955	3.40E-04
10340310	---	---	1.673914	0.743224978	0.025166
10340326	---	---	1.393246	0.4784449821	0.00266
10340346	---	---	2.079562	1.056280017	0.033719
10340364	---	---	1.65337	0.725409865	0.008272
10340368	---	---	1.861254	0.896275282	0.026863
10340546	---	---	1.430689	0.516709805	0.044891

10340700	---	---	1.353636	0.436840057	0.03687
10340866	---	---	1.407388	0.493020058	0.049769
10340869	---	---	1.352422	0.435544968	0.032703
10340949	---	---	2.085973	1.060720205	0.018324
10341069	---	---	1.674871	0.744050145	0.00928
10341084	---	---	2.383316	1.25296998	0.010827
10341113	---	---	1.842181	0.881415129	0.021909
10341131	---	---	1.847975	0.885945082	0.018775
10341157	---	---	1.658673	0.730029821	0.011273
10341253	---	---	1.336255	0.418195248	0.048286
10341344	---	---	1.724849	0.786469936	0.043221
10341402	---	---	2.19908	1.136900187	0.029531
10341420	---	---	1.30415	0.383110046	0.047312
10341422	---	---	1.311656	0.391389847	0.021195
10341463	---	---	1.506719	0.591410041	0.030764
10341577	---	---	1.311338	0.391039848	0.040125
10341620	---	---	1.964681	0.974295139	0.032495
10341692	---	---	1.513711	0.598089874	0.02702
10341816	---	---	1.389769	0.474845171	0.042428
10341833	---	---	1.681606	0.749840021	0.014337
10341862	---	---	3.033325	1.600899935	0.002128
10342089	---	---	1.318662	0.399075031	0.032942
10342164	---	---	1.307046	0.386310101	5.94E-04
10342239	---	---	1.869886	0.902950048	0.044075
10342240	---	---	2.1628	1.112900019	0.019963
10342273	---	---	1.631818	0.706480026	0.028191
10342299	---	---	2.04724	1.033679962	0.040167
10342370	---	---	1.588687	0.667834997	0.046557
10342431	---	---	1.738617	0.797940016	3.60E-04
10342548	---	---	1.442354	0.528425694	0.012855
10342668	---	---	1.492566	0.577795029	0.045275
10342730	---	---	1.634319	0.708689928	0.040195
10342770	---	---	1.503589	0.588410139	0.048278
10342771	---	---	1.576592	0.656809807	0.037307
10342960	---	---	2.321561	1.215095043	0.032701
10343049	---	---	1.74391	0.802325249	0.019259
10343150	---	---	1.673989	0.743289948	0.035481
10343353	---	---	1.329234	0.41059494	0.037767
10343377	---	---	2.197785	1.136049986	0.029744
10343396	---	---	1.355834	0.439180374	0.018024

10343410	---	---	1.366798	0.450799942	0.046624
10343440	---	---	1.727966	0.789074898	0.046091
10343510	---	---	1.630676	0.705470085	0.045568
10343531	---	---	1.598169	0.676420212	0.028192
10343533	---	---	4.068114	2.024359941	0.007503
10343539	---	---	3.017942	1.593565106	0.017486
10343561	---	---	1.35418	0.437419891	0.039577
10343645	---	---	3.139664	1.65060997	0.021878
10343743	---	---	2.392261	1.258374929	0.032057
10343766	---	---	1.606978	0.684349895	0.033385
10343821	---	---	1.762087	0.817285061	0.03609
10343867	---	---	1.378319	0.462909937	0.044873
10343870	---	---	1.327659	0.408885002	0.021097
10343922	---	---	1.614783	0.691340208	0.029395
10344011	---	---	1.38173	0.466475487	0.019112
10344134	---	---	1.326597	0.407729626	0.031507
10344355	---	---	1.392739	0.477924824	0.030309
10344397	---	---	2.100372	1.070644975	0.049909
10344419	---	---	2.778083	1.474089861	0.038064
10344426	---	---	1.587003	0.666305065	0.018729
10344434	---	---	1.82187	0.865420222	0.010277
10344471	---	---	1.304024	0.382970095	0.045505
10344523	---	---	4.277522	2.096775174	0.035358
10347728	---	---	1.347528	0.430315018	0.029744
10411609	---	---	1.392421	0.477595329	0.034878
10452138	---	---	1.507032	0.591710091	0.036382
10423383	---	---	1.330331	0.411784887	0.027879
10348119	---	---	1.318968	0.39940989	7.21E-04
10345704	---	---	1.3243	0.405229807	0.032853
10520040	---	---	1.434775	0.520824909	0.005203
10504466	---	---	1.612099	0.688940048	0.011622
10552351	---	---	1.328179	0.409450054	0.015941
10595165	---	---	1.355913	0.439265013	0.020655
10434283	---	---	1.377847	0.462415218	0.039113
10427742	---	---	1.330557	0.412029982	0.030232
10562649	---	---	1.367803	0.451859951	0.032121
10563718	---	---	1.532211	0.615615129	0.002321
10531049	---	---	1.331692	0.413259983	0.019935
10598073	---	---	1.883629	0.913514853	0.028195
10509161	---	---	1.317114	0.397380114	0.024326

10593167	---	---	1.362216	0.445955038	0.032234
10542371	---	---	1.417093	0.502934933	0.018801
10394938	---	---	1.335824	0.417729855	0.026705
10444995	---	---	1.525879	0.609640121	0.015345
10417702	---	---	1.477246	0.56291008	0.002818
10364371	---	---	1.534895	0.618140101	0.040686
10424381	---	---	1.486763	0.572174549	0.009046
10400708	---	---	1.447532	0.533595085	0.020113
10399657	---	---	1.335824	0.417729855	0.026705
10584582	---	---	1.517141	0.601354837	0.027428
10403071	---	---	1.42611	0.512085199	0.022015
10600810	---	---	1.311734	0.391475201	0.040011
10594513	---	---	1.440226	0.526294947	0.038166
10503148	---	---	1.380088	0.464759827	0.005426
10545513	---	---	1.322186	0.402924895	0.033134
10441751	---	---	1.356929	0.440345049	0.031161
10540287	---	---	1.424963	0.510924816	0.048536
10552343	---	---	1.316936	0.397185087	0.039797
10580981	---	---	1.310076	0.389650106	0.012525
10415011	---	---	1.557498	0.639230013	0.034426
10366583	---	---	1.301049	0.379674971	0.007086
10392822	---	---	1.358665	0.442189932	0.011954
10399720	---	---	1.347813	0.430619955	0.031804