

Table 1: Two-hundred genes whose expression levels were most strongly positively correlated with *COMT* expression levels by brain area.

	PFC	Cerebellum	TemporalCW	Pons
1	GPM6B	GPM6B	GPM6B	GPM6B
2	LOC441775	GPM6B	GATM	KLK3
3	SLC3A2	PMP22	GPM6B	KUA-UEV
4	CAT	SEC22C	MGLL	FNTA
5	S-COMT	CPQ	CAT	FEZ1
6	ACY1	CAT	NTSR2	MRPL43
7	COA4	PCCB	MMP28	KLK6
8	GPM6B	FUCA2	SNAP23	FBXO32
9	NTSR2	TMEM170A	CDC14B	C2ORF28
10	ATRAID	FNTA	SEC22C	SEC22C
11	GATM	RAB9A	SLC3A2	S-COMT
12	MYO6	MBOAT2	PLPP3	HIST1H2AC
13	LOC390354	S-COMT	THSD1	GPM6B
14	C1orf122	CYB5D2	PMP22	PMP22
15	FBLN1	ACTG1	PTTG1IP	SYPL1
16	LOC646531	ATRAID	DTYMK	FNTA
17	CDC14B	SELENOP	PLPP3	TMEM170
18	EDNRB	TMEM189.UBE2V1	S-COMT	PRDX4
19	PLPP3	CBR1	ALDH2	PPAP2A
20	PDLIM3	VPS41	CLDN10	GATM
21	C6orf48	PIGT	EDNRB	CAT
22	CPQ	TMEM98	ECH1	PCSK6
23	PPIB	GRHPR	ARL6IP6	PSEN1

Table 1: (*Top Positively Correlated Genes*)

	PFC	Cerebellum	TemporalCW	Pons
24	ECH1	DEGS1	SLC25A20	CLU
25	DTYMK	CHMP2A	TSPO	SLCO3A1
26	HSCB	SELENOS	UBE2L6	HIST1H2BK
27	BAALC	PFN1	GLUL	SPAG9
28	TTLL4	MARCKSL1	AQP4	MEGF10
29	TSPO	PYCR2	MEGF10	C20ORF23
30	PMP22	FNTA	FGFR3	HSPA2
31	SEC22C	PLPP1	IL17RB	KUA-UEV
32	PNKD	MYO6	GSTM2	AGPS
33	CSTB	PDE6D	ARHGAP24	QKI
34	MEGF10	LOC285382	PKM	B3GAT1
35	MGLL	DIRC2	HSCB	SYPL1
36	ETFB	SRI	PIR	ADIPOR1
37	LOC440093	GRM3	DPY19L3	PIGM
38	FGFR3	PDE4B	MLC1	PIGT
39	POLR2F	B3GAT1	PNPO	TMEM98
40	CLDN10	QKI	SLC39A12	ARL6IP6

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	PFC	Cerebellum	TemporalCW	Pons
41	HIP1R	GAMT	HIST1H2AC	LOC220416
42	LOC440589	PLPP3	MTM1	GSN
43	ZFAND3	PPIB	LRP4	MOG
44	CLU	ABCA9	CSTB	MTM1
45	SERF2	MTX1	CLDN10	SEC22C
46	PTTG1IP	TYW1	STOM	LGALS3BP
47	PKM	TIMMDC1	RGCC	THRAP6
48	RPL19	PTPRZ1	ACY1	TMBIM4
49	RPLP0	PEMT	PLPP1	DUSP22
50	COPE	WLS	ASRGL1	C7ORF11
51	AASS	SYPL1	CRB1	UGT8
52	RPS14	FAXDC2	PGM1	SELS
53	SPX	ETFB	LRRC3B	PPIB
54	SPAG9	TJP2	ARHGAP24	TJP2
55	LIMS1	LAMP2	CYP2J2	SPTLC2
56	SNAP23	CPT2	WDFY2	POLR2F
57	PABPC1	FGFR2	RAB9A	PET112L
58	PLPP3	HIST1H2BK	CAMKMT	TP53AP1
59	ZMAT5	PLPP1	AASS	CHMP2A
60	SCNM1	CLN8	AQP4	CD9
61	RPS5	HIP1	PTPRZ1	ITGB1
62	RPL13A	TP53TG1	MLC1	PFN1
63	BCAN	ISOC1	PON2	PCSK6
64	NKAIN4	LRRC8D	SASH1	HIST1H4H

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	PFC	Cerebellum	TemporalCW	Pons
65	LOC285382	IFIT3	ZFAND3	DTYMK
66	RPL12	DAD1	RIT1	SPAG9
67	ELP4	SLC31A2	MGST1	TJP2
68	PDE6D	CLDN10	MERTK	Septin 10
69	GSN	HIP1R	QKI	SFT2D1
70	THSD1	CD9	DOCK7	CBR1
71	MMP28	HHLA3	BAALC	C9ORF77
72	LRRC3B	DFFA	MYO6	BRP44L
73	ALDH2	ATP6V0E1	RANBP3L	RAB9A
74	RPL13	EDNRB	LIMS1	CHCHD8
75	IDH2	LYPLAL1	ETNPPL	KLHL4
76	ADA	PLPP3	LOC285382	BVES
77	RFXANK	LYRM2	SRI	STX2
78	SRI	CRTAP	IQCK	ACTL6A
79	PGLS	ELMO1	HIP1	BTD
80	IVD	PEX2	APCDD1	PGCP

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	PFC	Cerebellum	TemporalCW	Pons
81	QKI	LAMP2	THBS4	ACTB
82	HSD17B6	FEZ1	BMP2K	FNTB
83	PGM1	SPAG9	HSD17B6	C6ORF129
84	MRPL43	TMEM189.UBE2V1	RGN	ATG3
85	STOM	ACTB	SPAG9	SLC9A9
86	APOE	DIABLO	ITPR2	PIR
87	PIR	PPP2R5C	SCARA3	MARCKSL1
88	RGCC	MOG	TNFSF13	TLE4
89	MSI2	TMEM42	FBLN1	C10ORF78
90	OLIG1	TMEM165	NTRK2	SCHIP1
91	BCAN	SERPINI1	MXRA7	EDIL3
92	ACP6	PRTFDC1	SGPL1	HIP1
93	CPT2	NCAM2	FXYD1	C8ORF61
94	DFFA	PCSK6	ACAA2	SSR4
95	CHCHD5	DUSP22	NR2E1	LAMP2
96	TECR	PRMT2	TPD52L1	MYO1D
97	APCDD1	MAPRE1	MSI2	LRRC8D
98	MLC1	ABCA8	WLS	FA2H
99	SLC25A20	FANCL	EMX2	SNAP23
100	LOC441246	OMG	WWOX	MOBKL2B
101	RPS3	COA4	BBS2	DYNC1H2
102	ARL6IP6	CDC14B	ATP1B2	STXBP3
103	ARHGAP24	HSPA2	ATRAID	DYNLT1
104	HSD17B8	CLDN11	ACP6	AASS

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	PFC	Cerebellum	TemporalCW	Pons
105	ZHX2	ARMC10	ADGRV1	SEPP1
106	IQCK	RPLP0	TTLL4	ANKS1B
107	PIK3C2A	PLPPR1	TJP2	PPP2R5C
108	ARHGAP24	CNPY3	PEX2	DAD1
109	UBE2L6	SFR1	CBR1	RPLP0
110	ACAA2	HNMT	MGST1	PTTG1IP
111	ABTB2	SEC22C	CHDH	ABCA9
112	BGLAP	CKS1B	RAB5C	PXK
113	SLC50A1	CERS1	ALDH6A1	EDG2
114	YIF1A	TPPP3	C4orf19	CLU
115	PRDX4	NSDHL	RELA	USH1C
116	CRTAP	SUMF1	ETFB	SLC31A2
117	PCCB	SPTLC2	PITPNC1	AFMID
118	ALAD	FEZ1	TP53BP2	C1ORF122
119	S100A13	PXK	DGLUCY	KCTD3
120	COX20	KLK6	PSAT1	TIMP2

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	PFC	Cerebellum	TemporalCW	Pons
121	RHBDD1	GSN	PXMP2	ACTG1
122	AMER2	COPE	LAMA1	STAMBP
123	SCAMP2	PEPD	ITSN1	FEZ1
124	STAT3	LLPH	LRIG1	WSB1
125	S100A16	IQCK	ATP6V0E1	HSCB
126	HIST1H2AC	MPC1	PSMB8	C2ORF28
127	TTYH1	GALNT10	PPP2R5C	PRKCSH
128	PMF1	GTF2IRD2	SLC1A2	CDKN1C
129	CIB1	KLK3	LHX2	DAZAP2
130	DIRC2	FAM213A	PCDHGC3	ERBB3
131	WIP1	LAMP2	CHST7	DHRS4L2
132	RBP1	PRDX4	COQ9	KRT10
133	ATP6V0E1	AASS	IDH1	GOLGA7
134	CLCN2	IGSF11	COA4	PAPSS1
135	EEF1A1	DNAJB12	CA2	HINT3
136	TPT1	PIR	APOE	RHBDD1
137	MAPRE1	FAM177A1	TSC22D4	PHF16
138	GPR17	KIF16B	ALDH4A1	MYLK
139	S100A13	GRN	AGPAT3	ATP8A1
140	LOC440926	PAOX	CHPT1	MAPRE2
141	PSMB8	NLGN3	LGALS3	DEGS1
142	MGST1	HSD17B6	FYN	ELOVL6
143	CBR1	PMF1	SLCO1C1	DIXDC1
144	WDFY2	ZDHHC9	TJP2	GPR27

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145	ELOVL2	LOC646531	CLU	MYO6
146	CYP2J2	TUBA1A	VPS72	CKS1B
147	GALNT10	PMP22	LARS2	TMEM87A
148	SGPL1	RNF13	POLR2F	PIGG
149	GLUL	ATG3	CPT2	TALDO1
150	MLC1	SLC44A1	HEXIM1 /// S1PR1	TMEM116
151	NTRK2	KLHL4	DFFA	H2AFY
152	PLA2G5	MRPL43	DDR1	ALDH3A2
153	MXRA7	ATP5S	MARCKSL1	DICER1
154	THRA	GPR27	CLCC1	MPDZ
155	KRT10	TMEM59	ZFHX4	PQLC3
156	SASH1	SH3KBP1	DBI	IGSF11
157	EIF3G	SH3BGR	PDLIM3	NRBP2
158	FAU	RNH1	SYPL1	SLC44A1
159	CRB1	TMEM87A	IDH2	KLK6
160	GINM1	SMIM7	BCAN	AGPAT3

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	PFC	Cerebellum	TemporalCW	Pons
161	EEF1D	SFT2D1	GNAO1	ANXA5
162	RELA	JADE3	SLC15A2	SCCPDH
163	ITSN1	MASP1	ZNF22	ABCA8
164	MON1B	SLC25A26	SCRG1	EMILIN2
165	PHGDH	DTD1	TMEM136	C20ORF4
166	PTPRZ1	C6orf48	ACSBG1	HRASLS3
167	FXYP1	ZMAT5	PIPOX	RNH1
168	GNG5	GATM	ZHX2	FBXO32
169	PFN1	ACO2	MYBPC1	ILF3
170	NT5C	SLCO3A1	MASP1	NFE2L3
171	CHDH	ABTB2	ACOX2	BTG3
172	TNFSF13	RHBDD1	GRN	POLR2G
173	NSMCE1	SGPL1	DVL3	MED8
174	PCDHGC3	ALG14	ZMAT5	MXRA7
175	NME6	TTYH2	ACTL6A	ZDHHC9
176	CTNNA1	TYMS	CDKN2C	TIA1
177	CXorf38	PCDH10	ATPAF1	CTNNA1
178	RPS17	GTDC1	PNKD	TSPAN8
179	LRP4	SLC24A2	ELOVL2	DHRS4
180	ADA2	BRMS1	SOX21	LAMP2
181	FER	LGALS3BP	ETFDH	CLCC1
182	TST	SLC50A1	GNG12	SALL1
183	GNAI2	SLC9A9	PPP1R1B	ENPP6
184	NUBP1	CREG1	IL33	KIAA1026

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	PFC	Cerebellum	TemporalCW	Pons
185	FTL	SPCS1	PRDX4	ENPP2
186	MAX	MAPRE2	HIP1R	C9ORF164
187	HIP1	C12orf76	GPAM	RKHD1
188	AGPAT3	STOM	FAM89A	TMEM38B
189	ALDH1A1	C1orf122	RIDA	CTTNBP2
190	BCCIP	GMPR2	RHBDD1	WDFY2
191	ATPAF1	PTTG1IP	DYNLT1	ATP5S
192	RAB9A	DSCAML1	AK4P3	C5ORF4
193	DYNLT1	TMBIM4	CRTAP	ST18
194	MYBPC1	ACBD5	EPB41L5	SASH1
195	AKR7A3	ANKS1B	LOC441775	EXDL2
196	SLC35A2	TTLL7	CTSH	ATP6V0E1
197	PXMP2	USP54	PPIB	DSCAML1
198	CLK3	PSEN1	COPE	C22ORF5
199	LGALS3BP	FBXO7	DTNA	NLN
200	RPP25L	PSMB2	PHLPP1	PDE4B