

Genes co-expressed with *COMT* (n = 500) from <http://coexpresdb.jp/> that overlap in each brain area with the 500 most strongly *COMT* – correlated genes (ranked by p-value) from the NIH data set.

	geneSymbol	chromosome
1	ACAA1	3
2	ACO2	22
3	BCAN	1
4	BCAT2	19
5	CAT	11
6	COMT	22
7	COPE	19
8	ECH1	19
9	FAH	15
10	FUCA2	6
11	GRHPR	9
12	MGST1	12
13	MIF4GD	17
14	MSRB2	10
15	PGLS	19
16	PPIB	15
17	RPS9	19
18	SERF2	15
19	SLC25A1	22
20	TAX1BP3	17
21	TECR	19
22	TST	22
23	TUFM	16
24	UQCR10	22
25	YIF1A	11
26	ZMAT5	22

Table 1: Genes co-expressed with COMT from <http://coexpresdb.jp/> matching the top 500 positively COMT - correlated genes in Prefrontal

	geneSymbol	chromosome
1	ACO2	22
2	CAT	11
3	CNPY3	6
4	CNTN2	1
5	COMT	22
6	COPE	19
7	CRTAP	3
8	DESI1	22
9	ECH1	19
10	FUCA2	6
11	GMPR2	14
12	GRHPR	9
13	PEPD	19
14	PIGT	20
15	PPIB	15
16	RNH1	11
17	SERF2	15
18	TST	22
19	YIF1B	19
20	ZMAT5	22

Table 2: Genes co-expressed with COMT from <http://coexpresdb.jp/> matching the top 500 positively COMT - correlated genes in Cerebellum

	geneSymbol	chromosome
1	ACAA1	3
2	ACO2	22
3	BCAN	1
4	CAT	11
5	CNPY3	6
6	COMT	22
7	COPE	19
8	DNASE2	19
9	ECH1	19
10	FAH	15
11	GRHPR	9
12	GSTK1	7
13	KIAA0930	22
14	MGST1	12
15	MIF4GD	17
16	MSRB2	10
17	PCBD1	10
18	PEPD	19
19	PPIB	15
20	SERF2	15
21	TECR	19
22	TST	22
23	ZMAT5	22

Table 3: Genes co-expressed with COMT from <http://coexpresdb.jp/> matching the top 500 positively COMT - correlated genes in Temporal

	geneSymbol	chromosome
1	CAT	11
2	CERS2	1
3	CNPY3	6
4	COMT	22
5	COPE	19
6	ELOVL1	1
7	GRHPR	9
8	MIF4GD	17
9	PGLS	19
10	PIGT	20
11	PPIB	15
12	RNH1	11
13	SERF2	15
14	YIF1A	11
15	ZMAT5	22

Table 4: Genes co-expressed with COMT from <http://coexpresdb.jp/> matching the top 500 positively COMT - correlated genes in Pons

	geneSymbol	chromosome
1	SMARCA2	9

Table 5: Genes co-expressed with COMT from <http://coexpresdb.jp/> matching the top 500 negatively COMT - correlated genes in Prefrontal

	geneSymbol	chromosome
1	ARHGAP44	17

Table 6: Genes co-expressed with COMT from <http://coxpresdb.jp/> matching the top 500 negatively COMT - correlated genes in Cerebellum

geneSymbol	chromosome
1	

Table 7: Genes co-expressed with COMT from <http://coexpresdb.jp/> matching the top 500 negatively COMT - correlated genes in Temporal

	geneSymbol	chromosome
1	ARHGAP44	17
2	BCAP31	X
3	KIAA0100	17
4	PDXK	21

Table 8: Genes co-expressed with COMT from <http://coxpresdb.jp/> matching the top 500 negatively COMT - correlated genes in Pons