

Table 1: Heptamer motifs in the promoter regions of genes in Prefrontal Cortex for which the proportion of positively *COMT* – correlated genes containing that motif differs significantly (after Bonferroni correction) from the proportion of negatively *COMT* – correlated genes containing that motif (ordered by p value). Motifs were only tested for significance if the proportion of promoters containing at least one instance of that motif in both positively and negatively correlated genes exceeded 20%.

Motif	Prop. Positive	Prop. Negative	<i>p</i>
TTTTTATT	0.30	0.51 ^a	0.00000477298
CCCAGGC	0.41	0.22	0.00004714961
TTTTTGTT	0.30	0.48	0.00007816069
TATTTTA	0.22	0.39	0.00007819338

^a The significantly larger of the two proportions is indicated in bold. As with hexamer motifs, when these heptamer motifs were present in promoters, they tended to be present proportionately more often in genes whose expression levels were negatively correlated with *COMT* expression. Additionally, as with the hexamer motifs, the motifs present proportionately more often in the negatively correlated genes tended to be [A,T] – enriched compared to the [C,G] enrichment in the promoters of the positively correlated genes.