Suppl Fig. S1. Structure of the Bdnf gene. The Bdnf gene contains five non-coding exons I-V, upstream of the coding exon VI in mouse. Exons I-V can be each alternatively spliced next to exon VI, to form the 5’ UTR region of different mRNA splice variants, Bdnf I-V. The Bdnf gene also contains unique promoter regions upstream of each exon I-V, Bdnf P1-5, which can promote the expression of their corresponding transcript variants. Representation of the homology in the Bdnf gene between rat and mouse is also illustrated. Exon I, II, IV, V, and VI in mouse are homologous to exons I, II, III, IV, and V in rat, correspondingly. Exon III in mouse does not have a reported and annotated homologous sequence in rat, however, exon III in mouse is homologous to a human Bdnf exon. The homology analysis is based on data available in NCBI. For mRNA analysis of total Bdnf, primers amplified exon VI. For mRNA analysis of Bdnf I-V, primers were designed to specifically amplify each exon I-V. For ChIP analysis, primers were designed around the putative promoters, P1-P5, which are located upstream of exons I-V.