

Supporting Information

Kundakovic et al. 10.1073/pnas.1408355111

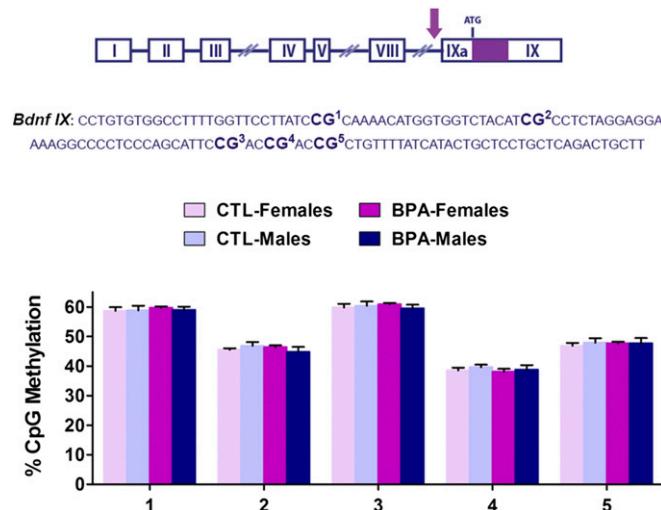


Fig. S1. CpG methylation of *Bdnf* IX in the P28 hippocampus after prenatal BPA exposure. Schematic representation of the *Bdnf* gene and the sequence of *Bdnf* promoter IX including five CpG sites that were examined using the bisulfite pyrosequencing method.

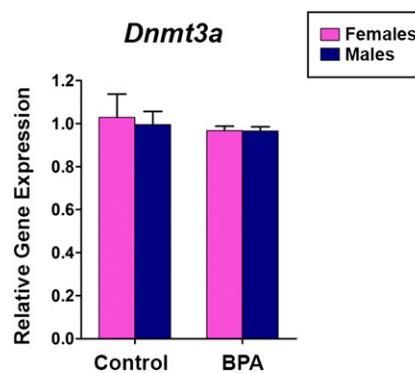


Fig. S2. Gene expression analysis of *Dnmt3a* in the P60 hippocampus of males and females prenatally exposed to BPA (200 µg/kg per day) or vehicle (CTL).

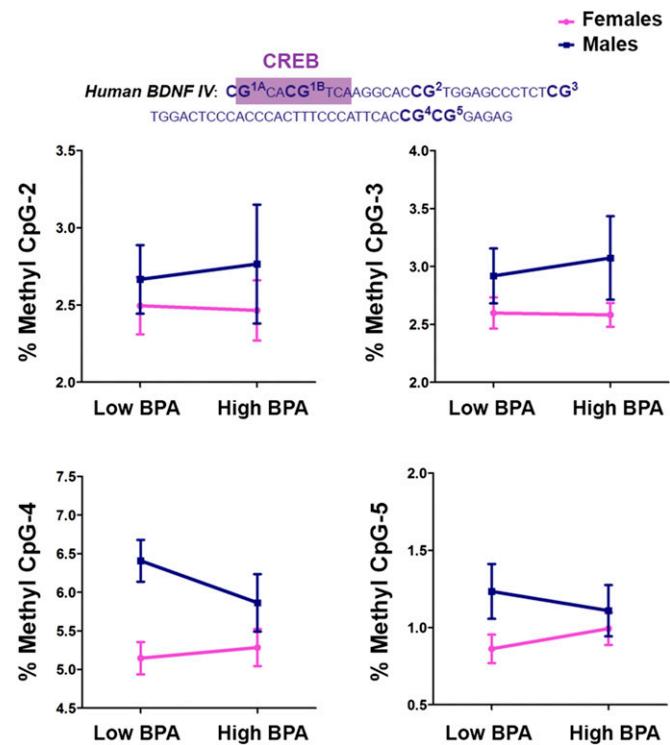


Fig. S3. The sequence of the human *BDNF* promoter IV and four CpG sites (CpG2 to -5) that did not show any associations with maternal BPA levels in humans.

Table S1. Primers used for gene expression analysis

| Gene | Forward primer | Reverse primer |
|----------------|-------------------------|------------------------|
| <i>Bdnf</i> | CATAAGGACGCCGACTTGTACA | AGACATGTTGCCGCATCCA |
| <i>Grin2b</i> | TGAAGATGGCTACCAGATGC | GCAGGGACTTGTCTTCCAT |
| <i>Gadd45b</i> | AGACATTGGCACAAACCGAA | ACCCATTGGTTATTGCCTCTGC |
| <i>Dnmt1</i> | GCCATGTGAAACAGGAAGATGAC | GTCCAAGTGAGTTCCGGTCTT |
| <i>Dnmt3a</i> | TCTTGAGTCTAACCCCGTATG | CCTCACTTTGCTGAACCTGGCT |
| <i>CypA</i> | GAGCTGTTGCAGACAAAGTTC | CCCTGGCACATGAATCCTGG |

RNA samples were treated with DNase I, and primers were designed to cross an intron/exon boundary or to span a long intron to exclude any possibility of genomic DNA contamination.

Table S2. PCR and pyrosequencing primers used for DNA methylation analysis

| Genomic region | Primer sequence |
|--|------------------------------------|
| Mouse <i>Bdnf</i> IV; CpG sites 1–4; chr2:109,532,399–109,532,715* | |
| PCR primer forward | TAGGATTGGAAGTGAAAATTTATAAAGT |
| PCR primer reverse-biotinylated | /5Biosg/CCTTCAACCAAAACTCCATTAAATCT |
| Pyrosequencing primer | AGAGGAGGTATTATATGATAG |
| Mouse <i>Bdnf</i> IX; CpG sites 1–5; chr2:109,562,918–109,563,064* | |
| PCR primer forward | GGTGTGGTGGTGGTAAAGTAGTT |
| PCR primer reverse-biotinylated | /5Biosg/ACAAATCCTATATAACCTTTAATTCC |
| Pyrosequencing primer | TGAGTAGGAGTAGTATGATAA |
| Mouse <i>Grin2b</i> ; CpG sites 1–5; chr6:136,123,503–136,123,781* | |
| PCR primer forward | AGGTTTAGGAGGAGAAATTAAAGAG |
| PCR primer reverse-biotinylated | /5Biosg/TAACCACTATTCCCCCTCCCTTA |
| Pyrosequencing primer F1 (CpG 1–3) | TGAGTTGAGGTTGTT |
| Pyrosequencing primer F2 (CpG 4–5) | TTTTGGTAGTAAGAAGGA |
| Human <i>BDNF</i> IV; CpG sites 1–6; chr11:27,723,070–27,723,280† | |
| PCR primer forward | GATTTGGTAATTAGTGTATTAGAGTGTT |
| PCR primer reverse-biotinylated | /5Biosg/ATCAACCAAAACTCCATTAAATCTC |
| Pyrosequencing primer | GGTAGAGGAGGTATTATATGATAG |

*Genomic coordinates show genomic regions amplified by PCR and are based on the University of California, Santa Cruz (UCSC) Genome Browser Mouse July 2007 (NCBI37/mm9) Assembly.

†Genomic coordinates show genomic region amplified by PCR and are based on the UCSC Genome Browser Human February 2009 (GRCh37/hg19) Assembly.