Supplementary Information

Maternal administration of probiotics promotes brain development and protects offspring's brain from postnatal inflammatory insults in C57/BL6J mice

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Supplemental Figure S1

Figure S1

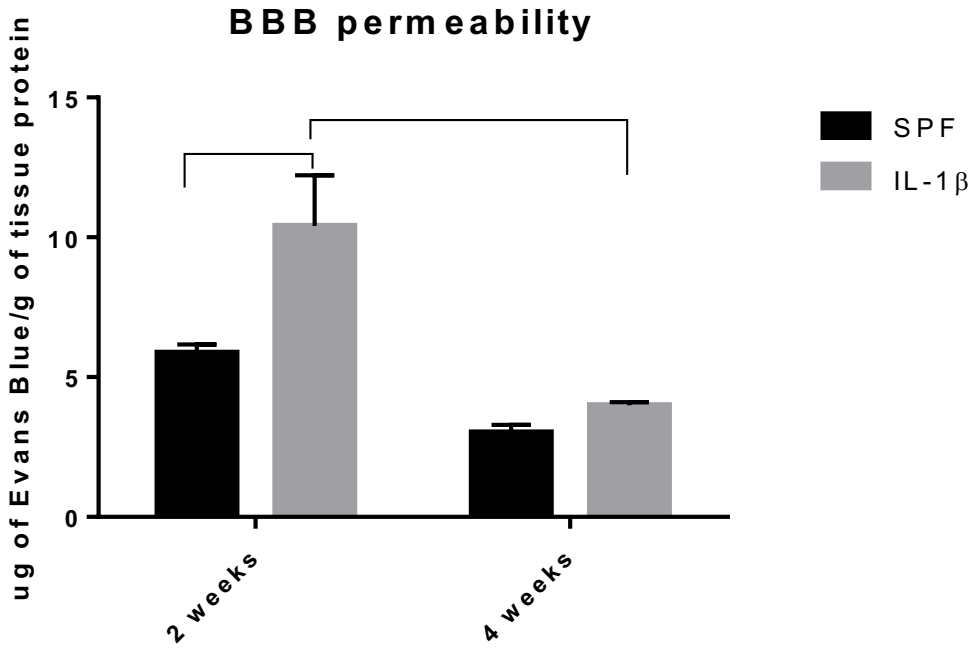
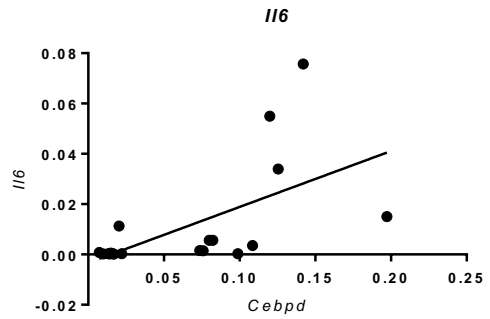
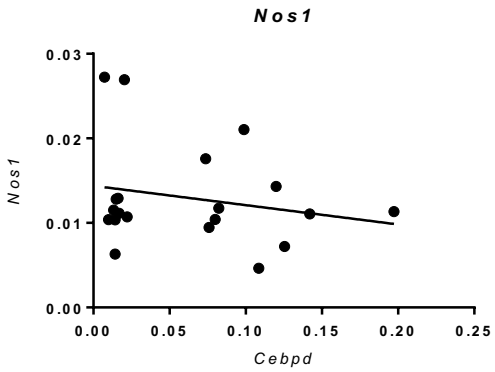


Figure S1. Evans blue permeability assay of two weeks and four weeks old phosphate buffered saline (PBS) or IL-1ß-treated SPF C57BL/6J mice. The intraperitoneally administered EB (4 mL/kg, 2% [w/v] in PBS appeared significantly higher in the homogenized brains following the injection of IL-1ß compared to the control group administered with vehicle (PBS) only at two weeks (*$p < 0.05$) but not at four weeks of age (two-way ANOVA. Interaction p=0.1002, main effects age p=0.0138 and insult p=0.0001). Data was presented as mean ± SEM.

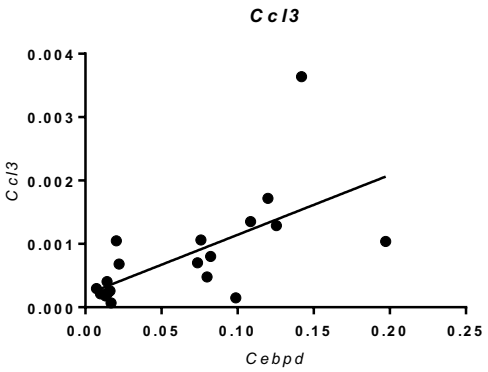
Figure S2A



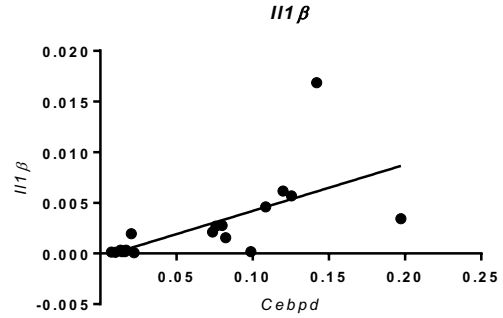
***r*(18)=0.61, *p*=0.005**



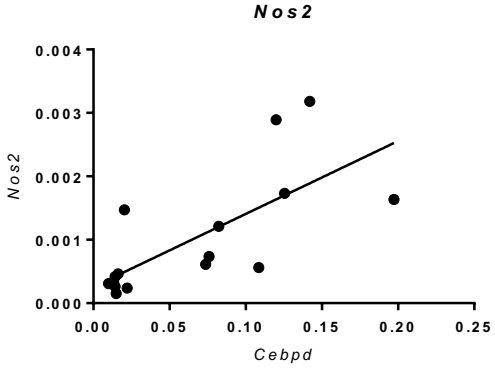
***r*(18)=-0.21, *p*=0.37**



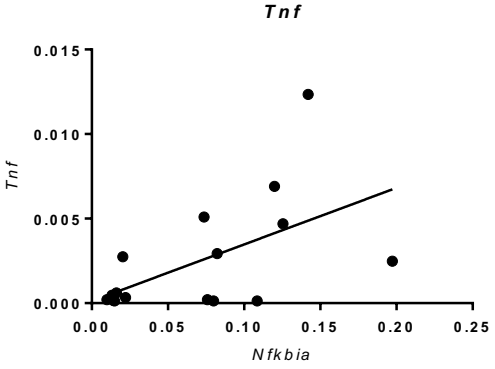
***r*(18)=0.64, *p*=0.002**



***r*(18)=0.66, *p*=0.002**



***r*(18)=0.72, *p*=0.002**



***r*(14)=0.58, *p*=0.016**

Figure S2B

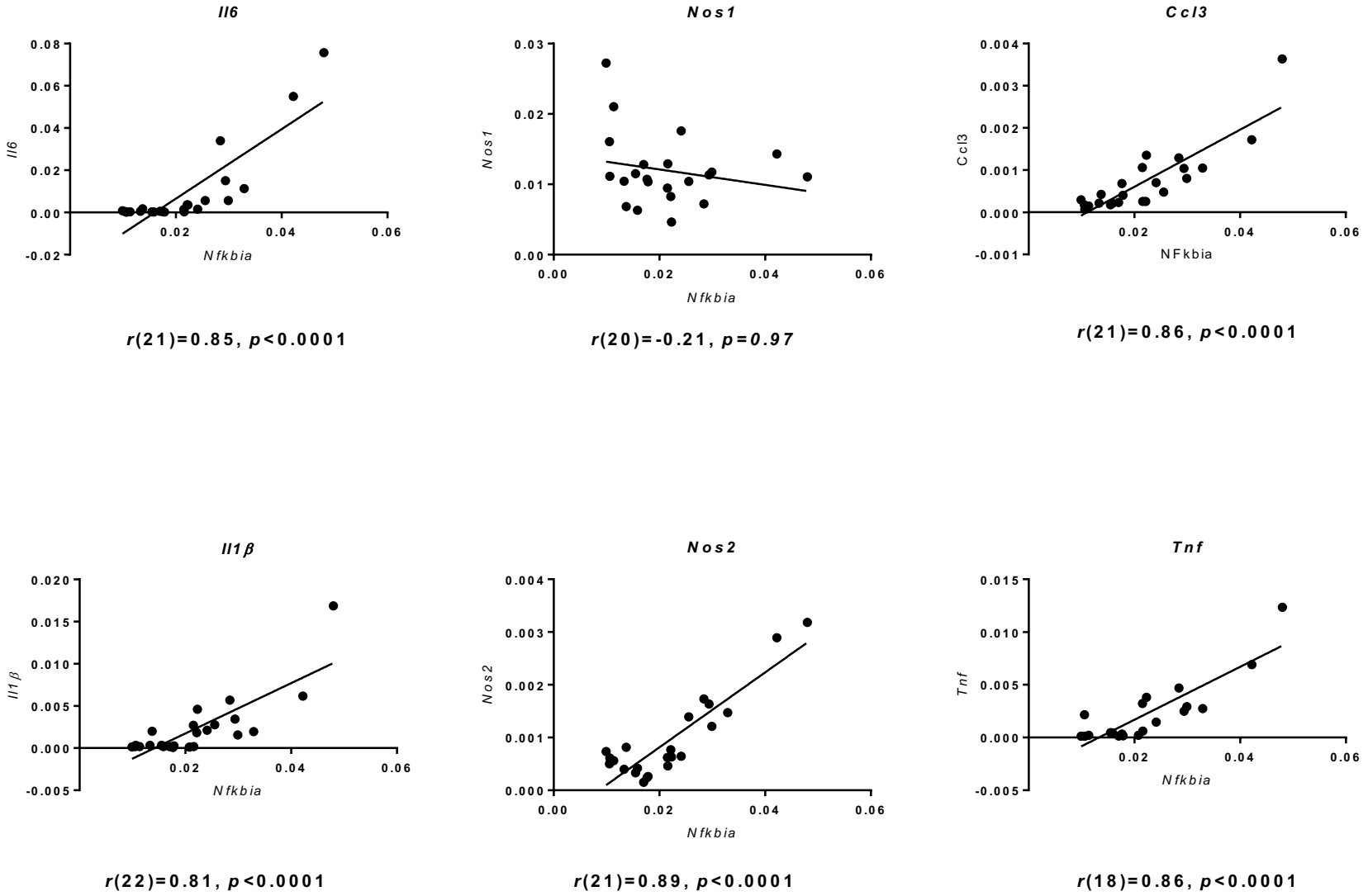
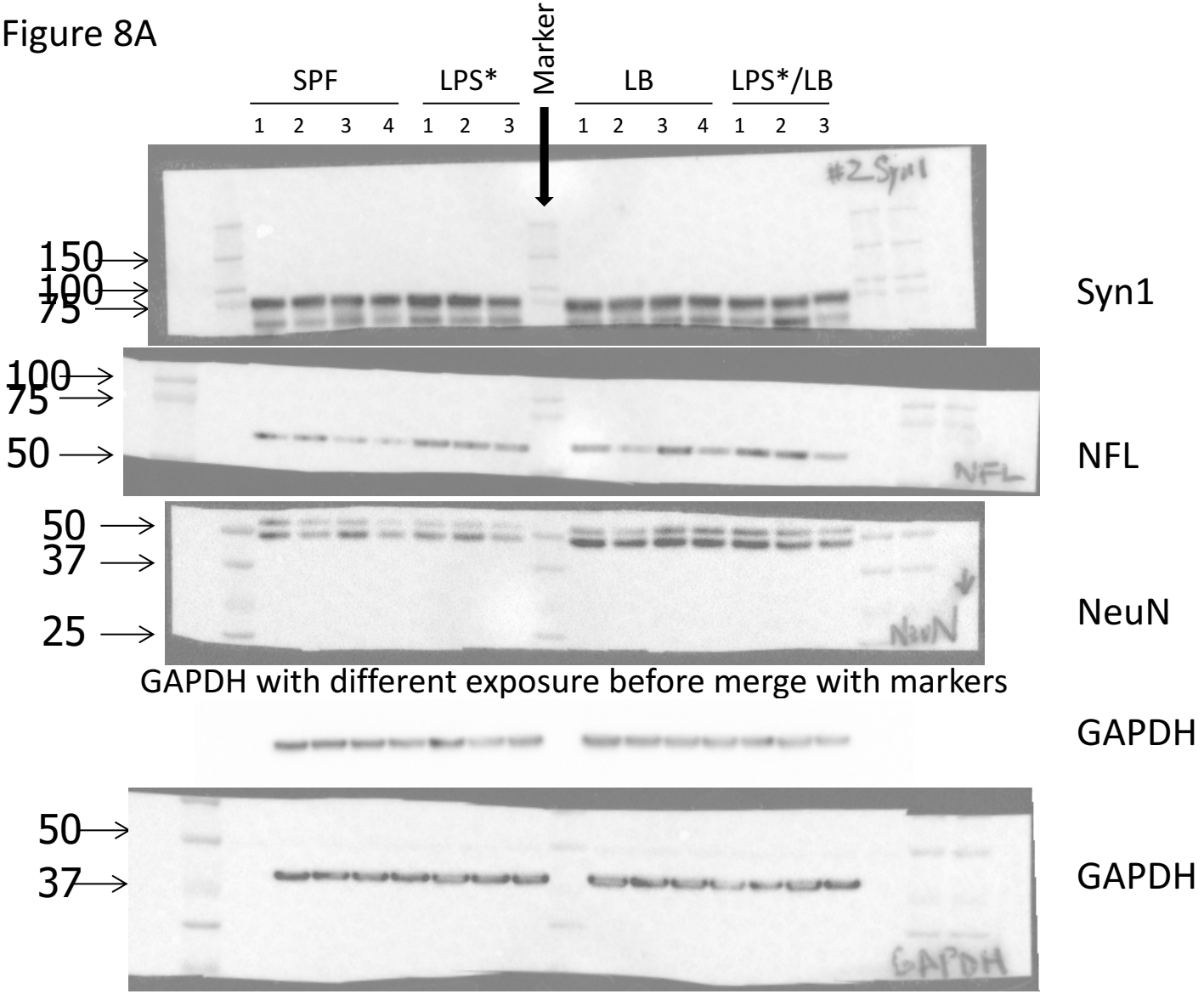


Figure S2. Correlation plots and Pearson's correlation coefficients (r) for *Cebpd* (2A), and *Nfkbia* (2B) versus neuroinflammation markers. There were strong statistically significant correlations for these comparisons (see *r* values and *p* values under each plot), with the exception of two comparisons: *Cebpd* or *Nfkbia* versus brain levels of *Nos1*.

Supplemental Figure S3

Blots with molecular markers illustrated in Figure 8.

Figure 8A



*For this manuscript these blots are used to demonstrate difference between SPF and LB groups. LPS was administrated to the mothers, not to the pups in these sets of blots. Maternal LPS challenge is not the focus of this study.

Supplemental Figure S3 Blots with molecular markers illustrated in Figure 8.

Figure 8B