

**Additional file 5: Validation of RNA-seq data by qPCR.** Comparison of relative mRNA expression detected by RNAseq and qPCR. For each gene and tissue, expression levels are relative to the saline-treated *PRNP*<sup>+/+</sup> group (=1). For RNAseq, symbols represent a significant differential expression (log2 ratio  $\pm$  0.59,  $q < 0.05$ ). qPCR bars display mean expression  $\pm$  SEM with significance levels of  $p < 0.05$ ,  $p < 0.01$ ,  $p < 0.001$  (Student's t-test). Symbols are listed below. In the hippocampus, *SAA3* was not detected at rest by RNAseq and at very low levels after LPS challenge.

