



ESM Fig. 2 **a** *IL6* transgene was expressed in various brain regions in *hIL6*^{tg} mice, as shown by RT-PCR analysis of *hIL6* transgene expression in brain. **b** Normal morphology of *hIL6*^{tg} mice brain was shown by haematoxylin and eosin staining of brain from wild-type and *hIL6*^{tg} mice. CA, cornu ammonis area; CC, cerebral cortex. Magnification 10×. **c** Double immunofluorescence with the astrocytes marker GFAP (green) and the microglia marker F4/80 (red). Antibody levels show that a fraction of microglia/macrophages was not increased in response to *hIL6* overexpression in brain. There was no activation of astrocytes, which appear to have normal cell body size. Double immunofluorescence was done in 10 μm thick coronal sections of hippocampi stained with the indicated antibodies and counterstained with DAPI (blue). The lower rows of each group show details of upper rows, but at higher magnification (40× vs 10×). Scale bars 100 μm in upper rows, 20 μm in lower rows of each group. **d** Results of quantitative analysis of immunoreactivity of microglial cells by F4/80 immunoreactivity in the hippocampal formation of wild-type (black bars) and *hIL6*^{tg} (grey bars) mice ($n=3$ from each genotype)