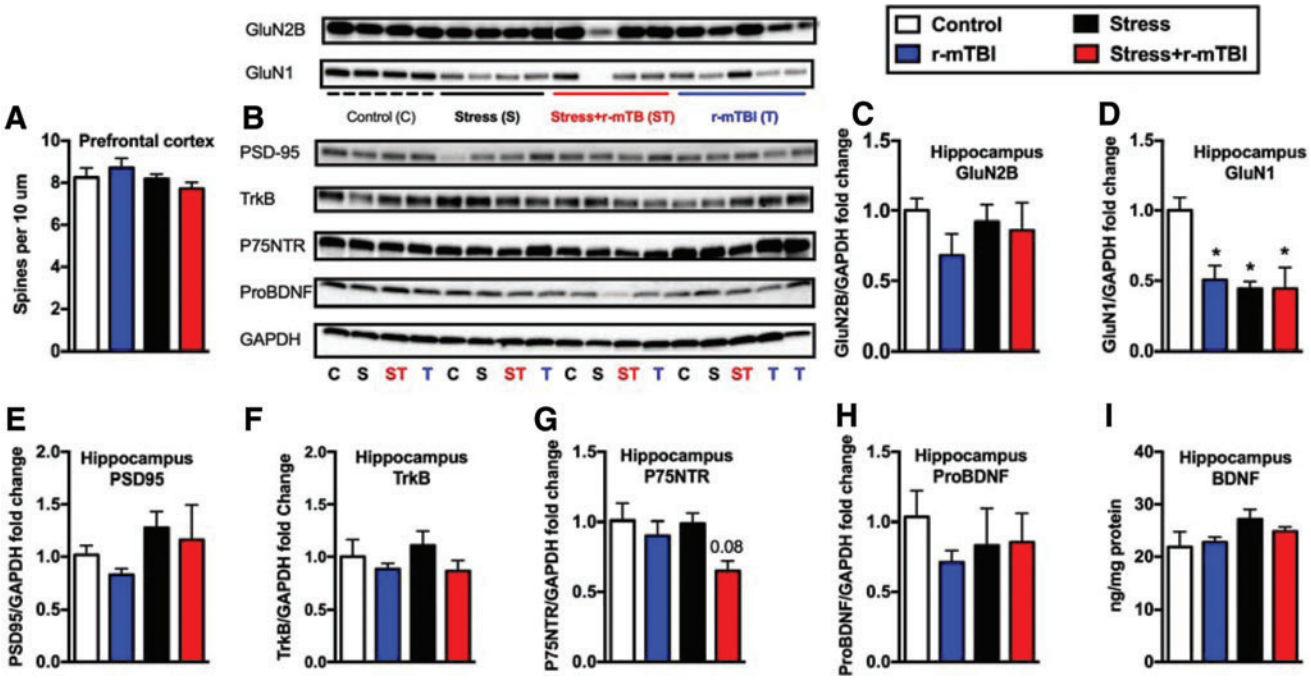

SUPPLEMENTARY FIG. S8. Effect of stress and repetitive mild traumatic brain injury (r-mTBI) on a number of hippocampal synaptic plasticity markers and neurotrophic factors and receptors at the acute time-point. Quantification of spine density in the frontal cortex **(A)**. Representative Western blot images for the hippocampal markers at the acute time-point **(B)**. Quantification of GluN2B (C), GluN1 (D), PSD-95 (E), TrkB (F), P75NTR (G), and ProBDNF (H) levels in the hippocampus at the acute time-point. Hippocampal brain-derived neurotrophic factor (BDNF) levels were estimated using a commercial enzyme-linked immunosorbent assay kit (I). Levels of GluN1 were significantly reduced in the stress, r-mTBI and stress+r-mTBI groups compared with the control group, while P7NTR levels trend towards downregulation in the stress+r-mTBI group relative to control animals at the acute time-point. Data in **(A, C–I)** were analyzed using two-way analysis of variance followed by two-stage linear step-up procedure of Benjamini, Krieger, and Yekutieli to correct for multiple comparisons ($n = 4$–5). Statistically significant discoveries versus the control group are denoted by ''*''. In the bottom of panel (B) each study group is labeled as follows; Control (C), stress (S), r-mTBI (T), stress+r-mTBI (ST).