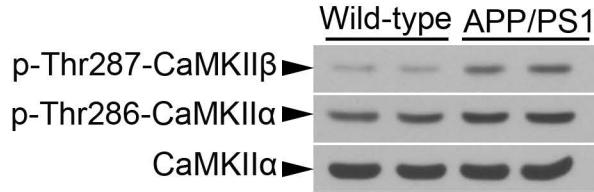


A



B

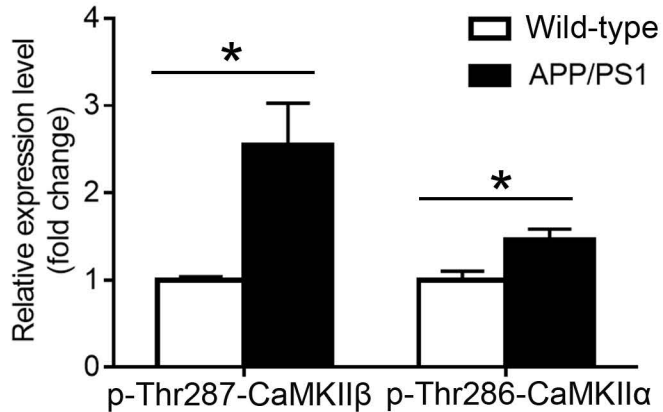


Figure S1. Changes in CaMKII phosphorylation in 3-month-old APP/PS1 mice.

(A) The phosphorylation level of CaMKII was analyzed by western blot analysis.

(B) Quantification of p-Thr287-CaMKII $\beta$  or p-Thr286-CaMKII $\alpha$ /CaMKII level in the hippocampus (n = 5, \*p < 0.05, APP/PS1 vs. Wild-type, Student's t-test).

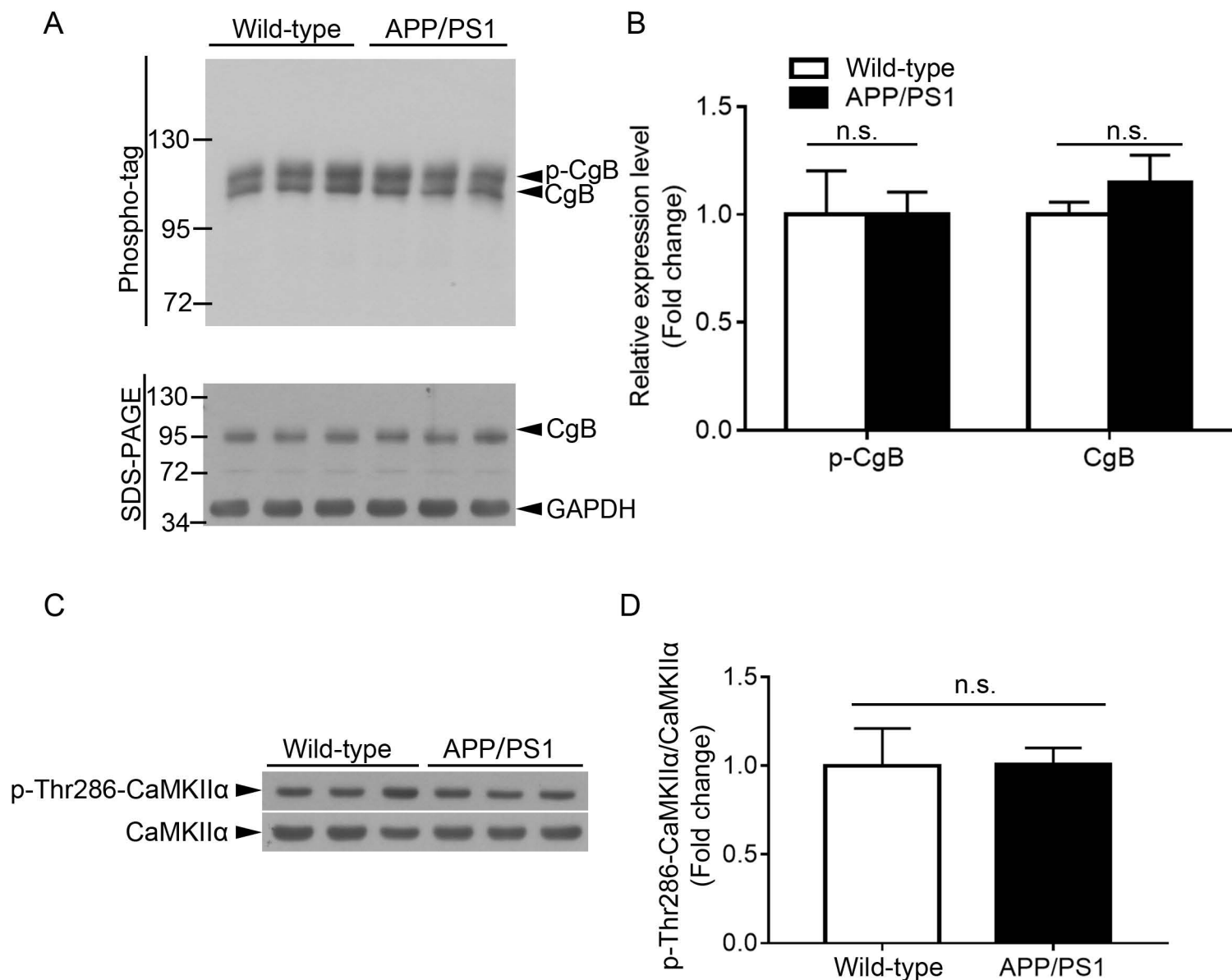


Figure. S2 The phosphorylation level of CgB and CaMKII $\alpha$  in the hippocampi of Wild-type and APP/PS1 mice at the age of 3 weeks. (A) The phosphorylation level of CgB was analyzed in a phospho-tagged gel. (B) Quantification of changes in phosphorylation (p-CgB/CgB) and total protein expression (CgB/GAPDH) ( $n = 3$ , n.s.: no significance, student's t-test). (C) The phosphorylation level of CaMKII $\alpha$  was determined by western blot. (D) Quantification of p-Thr286-CaMKII $\alpha$ /CaMKII $\alpha$  in hippocampi of Wild-type and APP/PS1 mice ( $n=3$ , n.s.: no significance, Student's t-test).