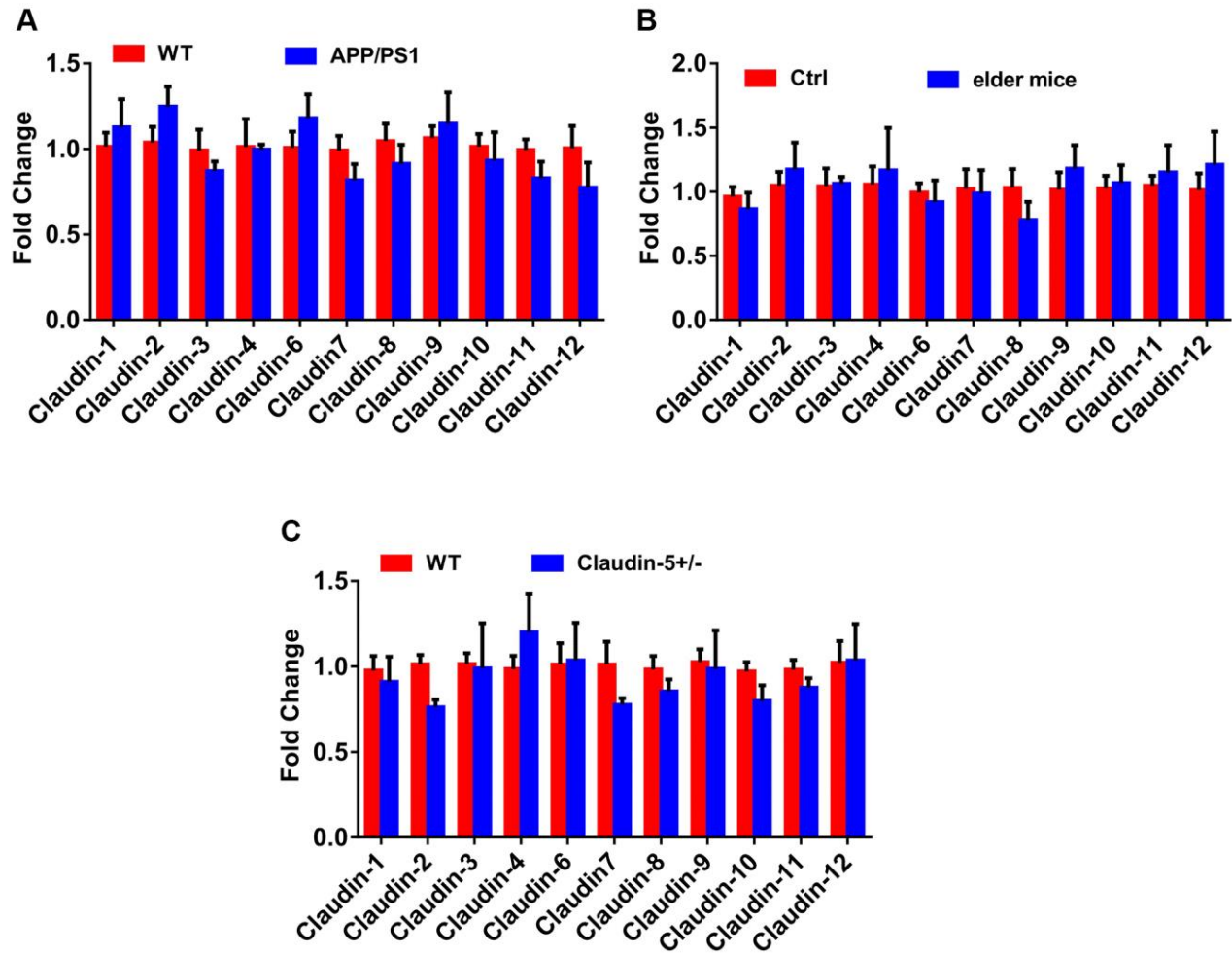
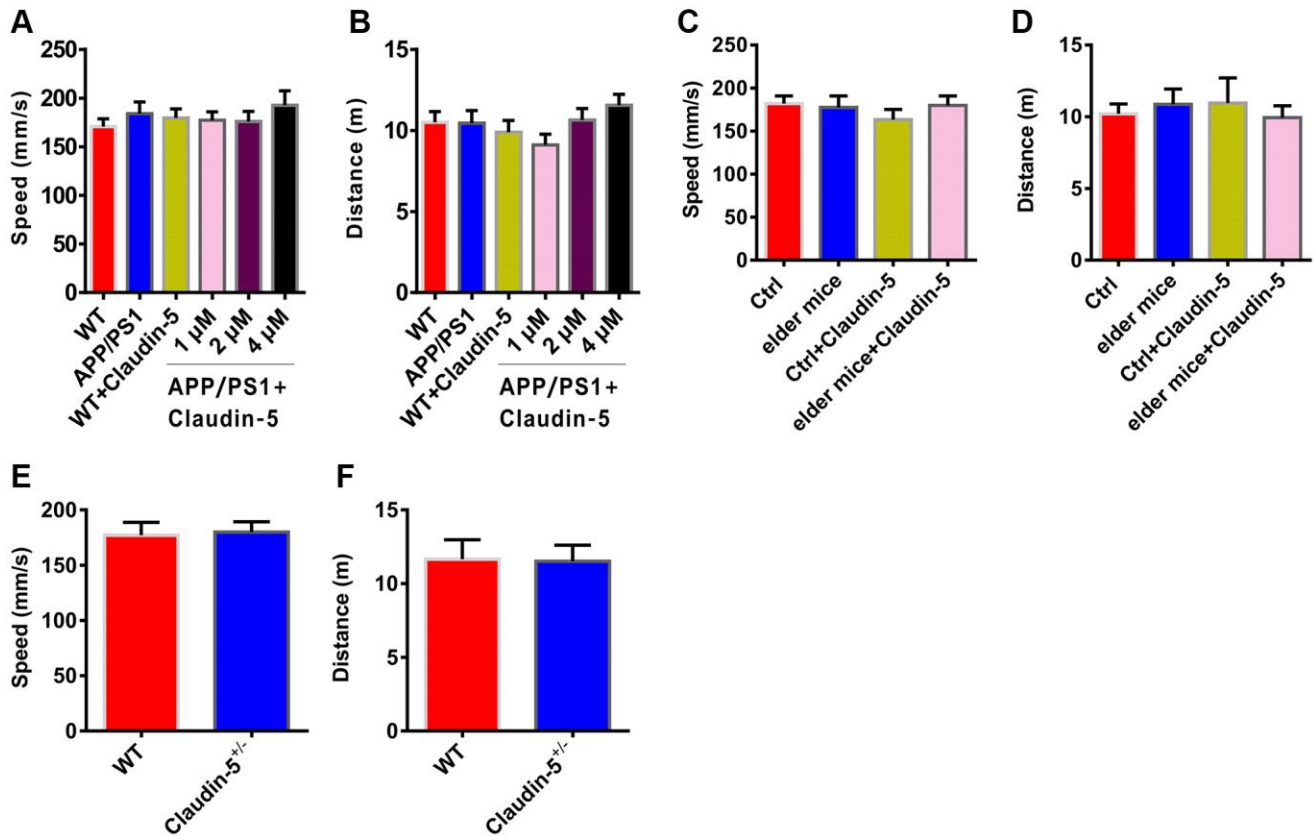


SUPPLEMENTARY FIGURES



Supplementary Figure 1. The claudins expression profile in the hippocampus of mice after different treatment. (A) Claudins mRNA level in the hippocampus of APP/PS1 mice and their control littermates ($n = 6$ per group; two-tailed Student's t -test). (B) Claudins mRNA level in the hippocampus of elder mice and adult control mice ($n = 6$ per group; two-tailed Student's t -test). (C) Claudins mRNA level in the hippocampus of claudin-5^{+/-} mice and their control littermates ($n = 6$ per group; two-tailed Student's t -test). Data show mean \pm s.e.m.



Supplementary Figure 2. The swimming speed and locomotor activity after different treatment. (A, B) Swimming speed in the MWM (A, $n = 9-10$ per group; one-way ANOVA) and locomotor activity in the open field test (B, $n = 9-10$ per group; one-way ANOVA) for APP/PS1 mice with or without intravenous injection of claudin-5. (C, D) Swimming speed in the MWM (C, $n = 8-10$ per group; one-way ANOVA) and locomotor activity in the open field test (D, $n = 8-10$ per group; one-way ANOVA) for elder mice with or without intravenous injection of claudin-5. (E, F) Swimming speed in the MWM (E, $n = 9-10$ per group; two-tailed Student's t -test) and locomotor activity in the open field test (F, $n = 9-10$ per group; two-tailed Student's t -test) for WT and claudin-5^{+/-} mice. Data show mean \pm s.e.m.