



**Supplementary Figure 1. Lack of endogenous SP decreases microglial density in the SN in the aging mice.** Microglia were stained with anti-Iba-1 antibody in the SN of both WT and *TAC1*<sup>-/-</sup> mice at the indicated age. The density of microglia in the SN was quantified by counting Iba-1-immunoreactive cells. Results are expressed as mean  $\pm$  SEM. \*\* $p < 0.01$ .  $n = 3$  in each group at each time point with total 12 and 12 for WT and *TAC1*<sup>-/-</sup> mice, respectively.