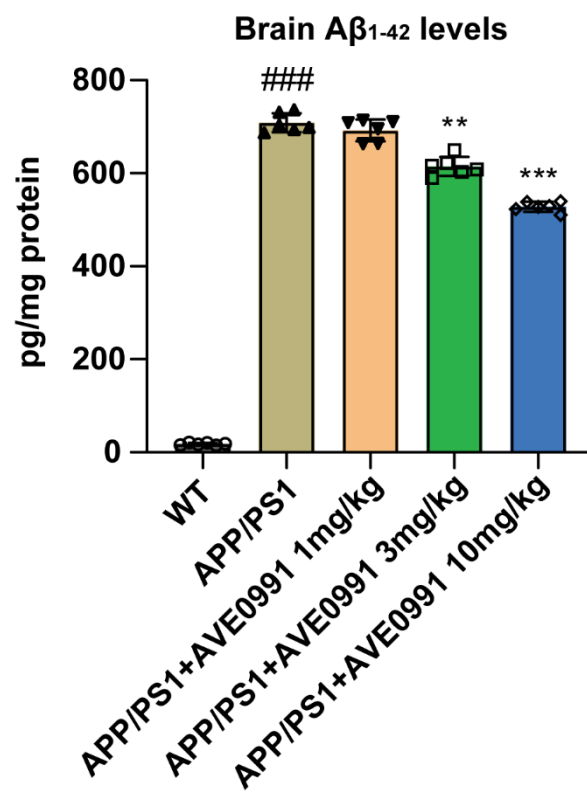


Supplemental tables

Table S1 Primer sequences used in real-time quantitative PCR assay.

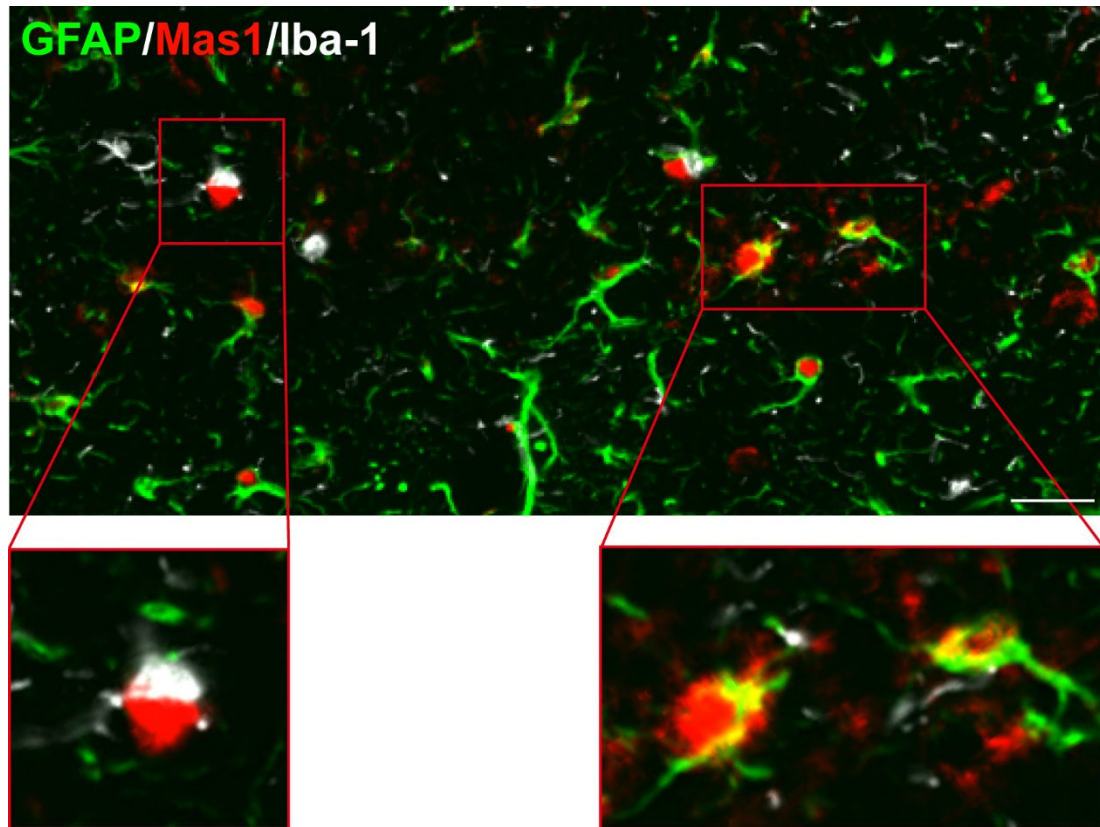
Gene	Forward primer (5'-3')	Reverse primer (5'-3')
Mas1	CATCTAGGACTGGGCAGAGC	AGTCAGGAGGTGGAGAGCAA
TNF- α	GTCTACTGAACTTCGGGGTGAT	ATGATCTGAGTGTGAGGGTCTG
IL-6	ACAAAGCCAGAGTCCTTCAGAG	CATTGGAAATTGGGGTAGGA
IL-1 β	CTTCAGGCAGGCAGTATC	CCAGCAGGTTATCATCATCA
β -actin	ACCACACCTTCTACAATGAG	ACGACCAGAGGCATACAG

Supplemental figures

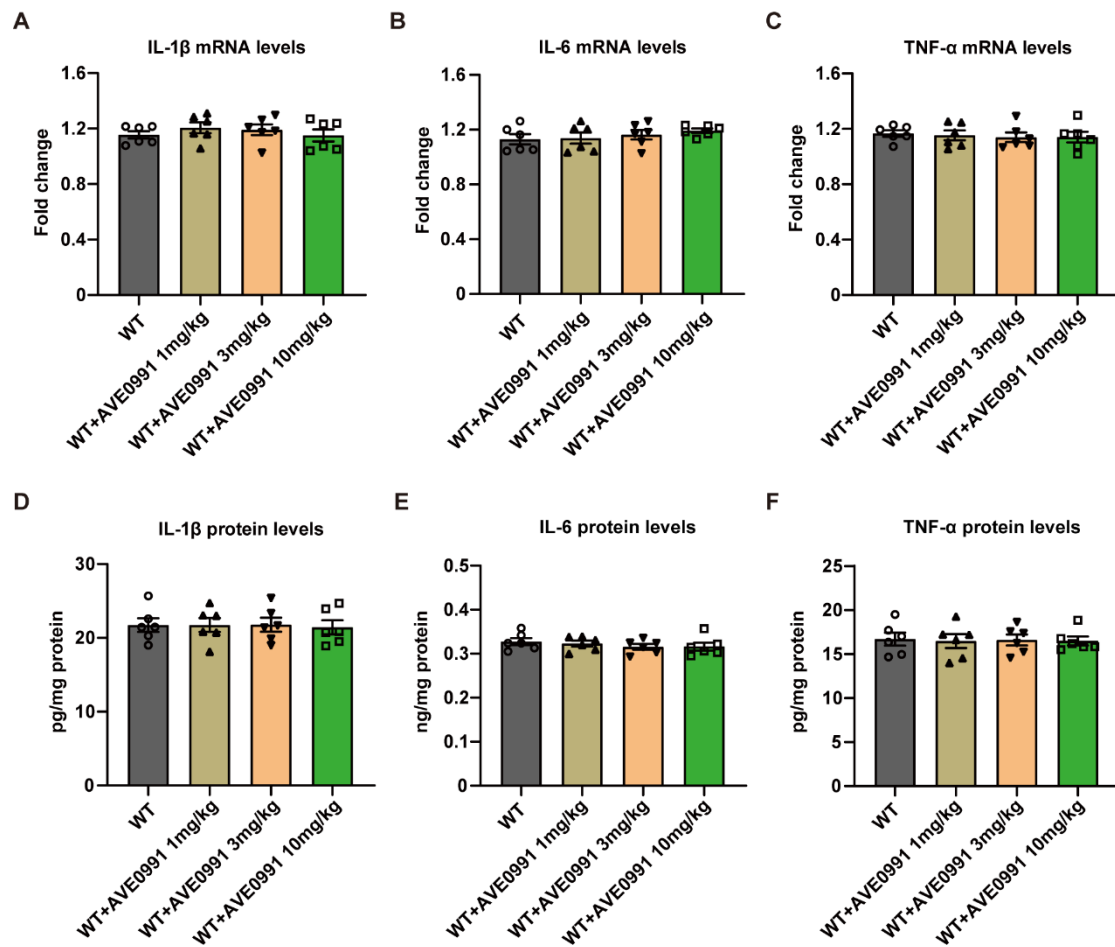


Supplementary Figure 1 AVE 0991 reduces soluble A β ₁₋₄₂ concentrations in the brain cortex of APP/PS1 mice. The levels of soluble A β ₁₋₄₂ in the brain cortex of mice injected with AVE 0991 was measured by ELISA assay (n = 6). All data are presented as mean \pm SEM. ### P <

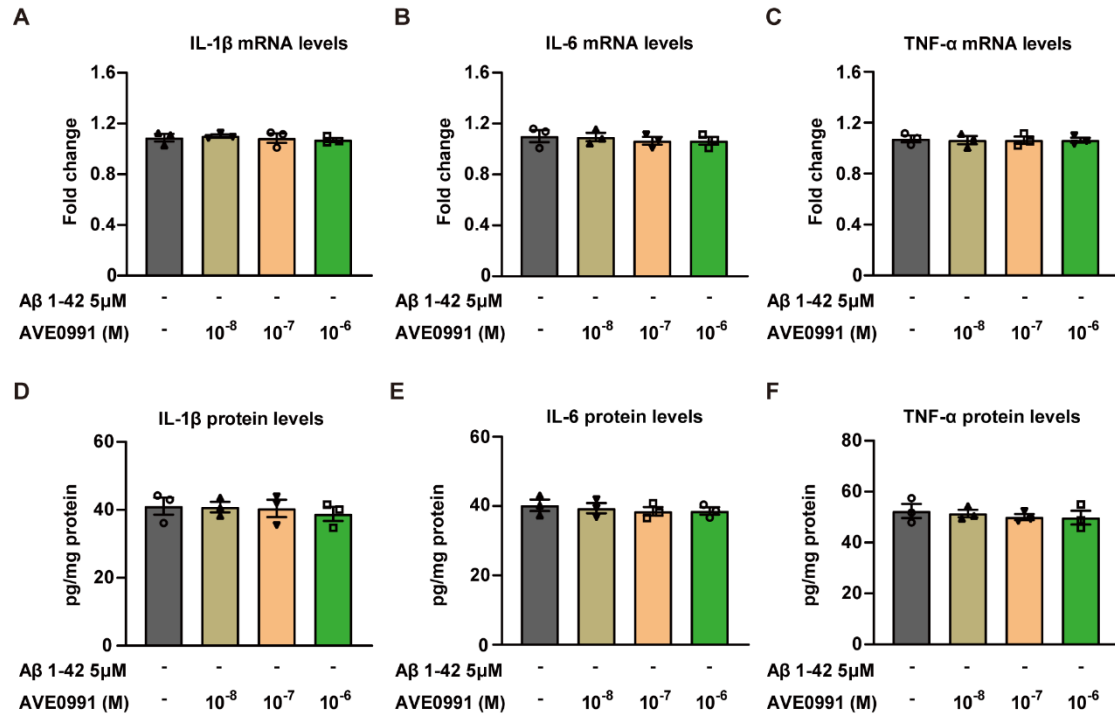
0.001 vs. the WT group; ** $P < 0.01$ and *** $P < 0.001$ vs. the APP/PS1 group.



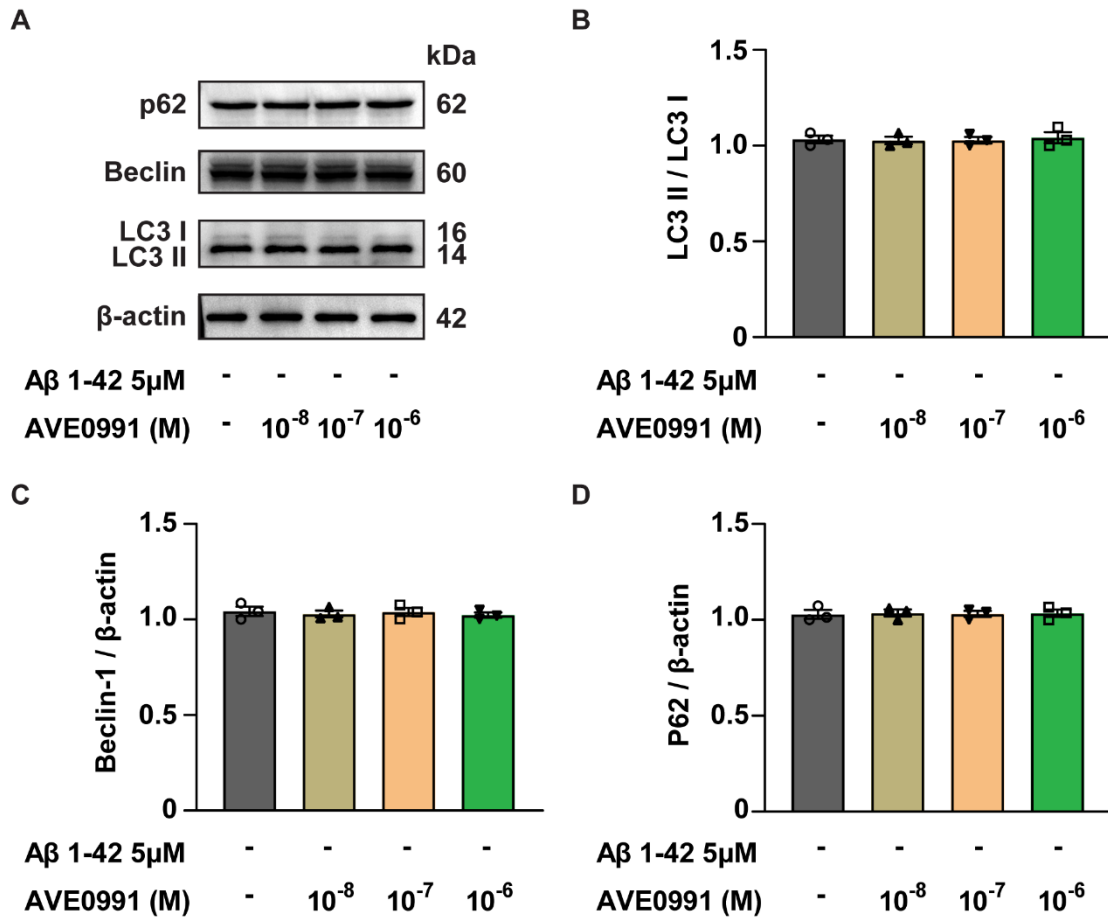
Supplementary Figure 2 The distribution of Mas1 (red) in astrocytes (GFAP/green) and microglia (Iba-1/white) in the brain cortex of APP/PS1 mice were detected via Immunofluorescence staining. Nuclei subjected to DAPI-staining. Scale bar, 20 μm .



Supplementary Figure 3 AVE 0991 had no influence on inflammatory cytokine levels in WT mice. The mRNA expressions of IL-1 β (**A**), IL-6 (**B**) and TNF- α (**C**) in the brain cortex of WT mice injected with AVE 0991 were detected by qRT-PCR (n = 6). The protein expressions of IL-1 β (**D**), IL-6 (**E**) and TNF- α (**F**) in the brain cortex of WT mice injected with AVE 0991 were measured by ELISA assay (n = 6). All data are presented as mean \pm SEM.



Supplementary Figure 4 AVE 0991 had no influence on inflammatory cytokine levels in normal astrocytes. The mRNA expressions of IL-1 β (A), IL-6 (B) and TNF- α (C) in normal astrocytes treated with AVE 0991 were detected by qRT-PCR (n = 3). The protein expressions of IL-1 β (D), IL-6 (E) and TNF- α (F) in normal astrocytes treated with AVE 0991 were measured by ELISA assay (n = 3). All data are presented as mean \pm SEM.



Supplementary Figure 5 AVE 0991 had no influence on autophagy-related proteins in normal astrocytes. (A) The protein expressions of LC3, Beclin-1 and P62 in normal astrocytes treated with AVE 0991 were evaluated by Western blot analysis. β-actin was used as the loading control (n = 3). Quantitative analysis of LC3 (B), Beclin-1 (C) and P62 (D) protein levels was shown as bar chart (n = 3). All data are presented as mean ± SEM.