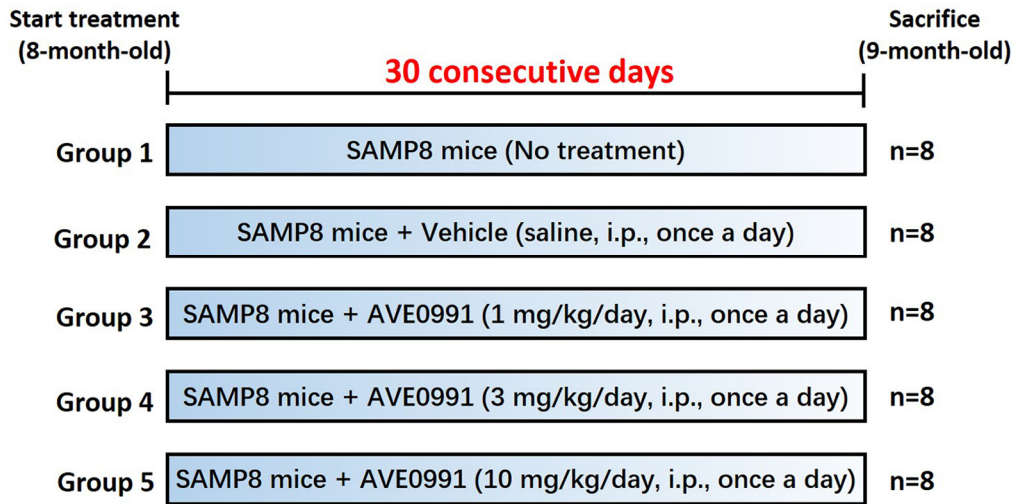
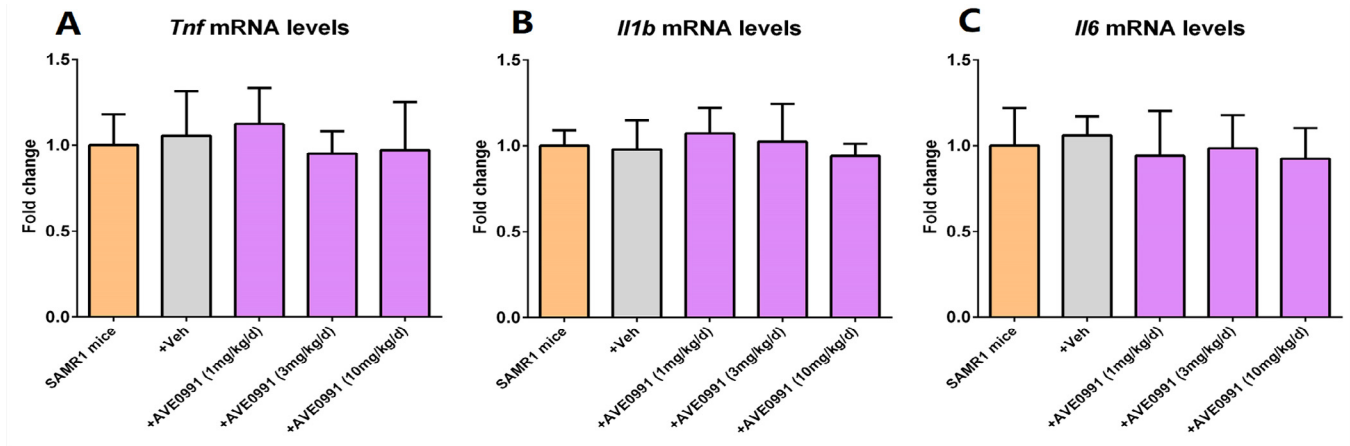


SUPPLEMENTARY MATERIAL



Supplementary Figure 1. Scheme of the animal experimental protocol. Eight-month-old SAMP8 mice were randomly allocated to five groups using a random number table generated by SPSS software (n=8 per group). They were injected intraperitoneally with vehicle (saline) or AVE0991 (1 mg/kg/day, 3 mg/kg/day or 10 mg/kg/day) once a day for 30 consecutive days.



Supplementary Figure 2. AVE0991 has no significant effect on inflammatory markers in the brains of SAMR1 control mice. In our preliminary experiments, eight-month-old SAMR1 mice were injected intraperitoneally with vehicle or AVE0991 (1, 3 or 10 mg/kg/day) for 30 days. Afterwards, mice were sacrificed for analysis. (A) The mRNA levels of *Tnf* in the brains were investigated by qRT-PCR. (B) The mRNA levels of *Il1b* in the brains were investigated by qRT-PCR. (C) The mRNA levels of *Il6* in the brains were investigated by qRT-PCR. *Gapdh* was used as an internal control, and data were expressed as a fold change relative to non-treated SAMR1 mice. All data were analyzed by one-way ANOVA followed by Tukey's post hoc test. Columns represent mean \pm SD (n=5 per group).

Supplementary Table 1. Oligonucleotide sequences.

| Primer | Sequence (5'-3') | GenBank accession number* |
|-----------------------|------------------------|---------------------------|
| <i>Arg1</i> forward | CTCCAAGCCAAAGTCCTTAGAG | NM_007482.3 |
| <i>Arg1</i> reverse | AGGAGCTGTCATTAGGGACATC | |
| <i>Gapdh</i> forward | CAACAGCAACTCCCCTCTTC | NM_001289726.1 |
| <i>Gapdh</i> reverse | GGTCCAGGGTTTCTTACTCCTT | |
| <i>Il1b</i> forward | GAAGAGCCCATCCTCTGTGA | NM_008361.3 |
| <i>Il1b</i> reverse | TTCATCTCGGAGCCTGTAGTG | |
| <i>Il6</i> forward | ACAAAGCCAGAGTCCTTCAGAG | NM_031168.1 |
| <i>Il6</i> reverse | CATTGGAAATTGGGGTAGGA | |
| <i>Il10</i> forward | AGGCGCTGTCATCGATTTCTC | NM_019467.2 |
| <i>Il10</i> reverse | TGCTCCACTGCCTTGCTCTTA | |
| <i>Mas1</i> forward | CATCTAGGACTGGGCAGAGC | NM_008552.5 |
| <i>Mas1</i> reverse | AGTCAGGAGGTGGAGAGCAA | |
| <i>Retnla</i> forward | TTGCAACTGCCTGTGCTTAC | NM_020509.3 |
| <i>Retnla</i> reverse | CAAGAAGCAGGGTAAATGGG | |
| <i>Tnf</i> forward | GTCTACTGAACTTCGGGGTGAT | NM_013693.3 |
| <i>Tnf</i> reverse | ATGATCTGAGTGTGAGGGTCTG | |

*The GenBank accession numbers were obtained from the NCBI.