



**Supplementary information Fig. S12 Combined treatment with VPA and EPZ6438 alleviates DSS-associated colitis**

**a**, Scheme of the therapeutic treatment with VPA/EPZ6438 on DSS-associated colitis in C57BL/6 mice.

**b, c**, Body weight (**b**) and disease activity index (**c**) of mice that received regular drinking water alone (Water group, black dotted line), or 2.5% DSS combined with vehicle treatment (Vehicle group, blue dotted line), or 2.5% DSS combined with VPA and EPZ6438 treatment (VPA/EPZ6438 group, orange dotted line) (n = 12 per group). *P* values were determined using one-way ANOVA and two-tailed Mann–Whitney test for body weight and disease activity index, respectively.

**d**, Colon length at day 12 after DSS induction (n = 6 per group). *P* values were determined using one-way ANOVA.

**e**, Representative H&E staining of colon sections, and corresponding histological scores at day 12 after DSS induction (n = 6 per group). Scale bars, 50  $\mu$ m. *P* values were determined by two-tailed Mann–Whitney test.

\*\*\* $P < 0.001$ ; \*\* $P < 0.01$ ; \* $P < 0.05$ . Experiments in c, d and e were independently replicated at least twice with similar results.