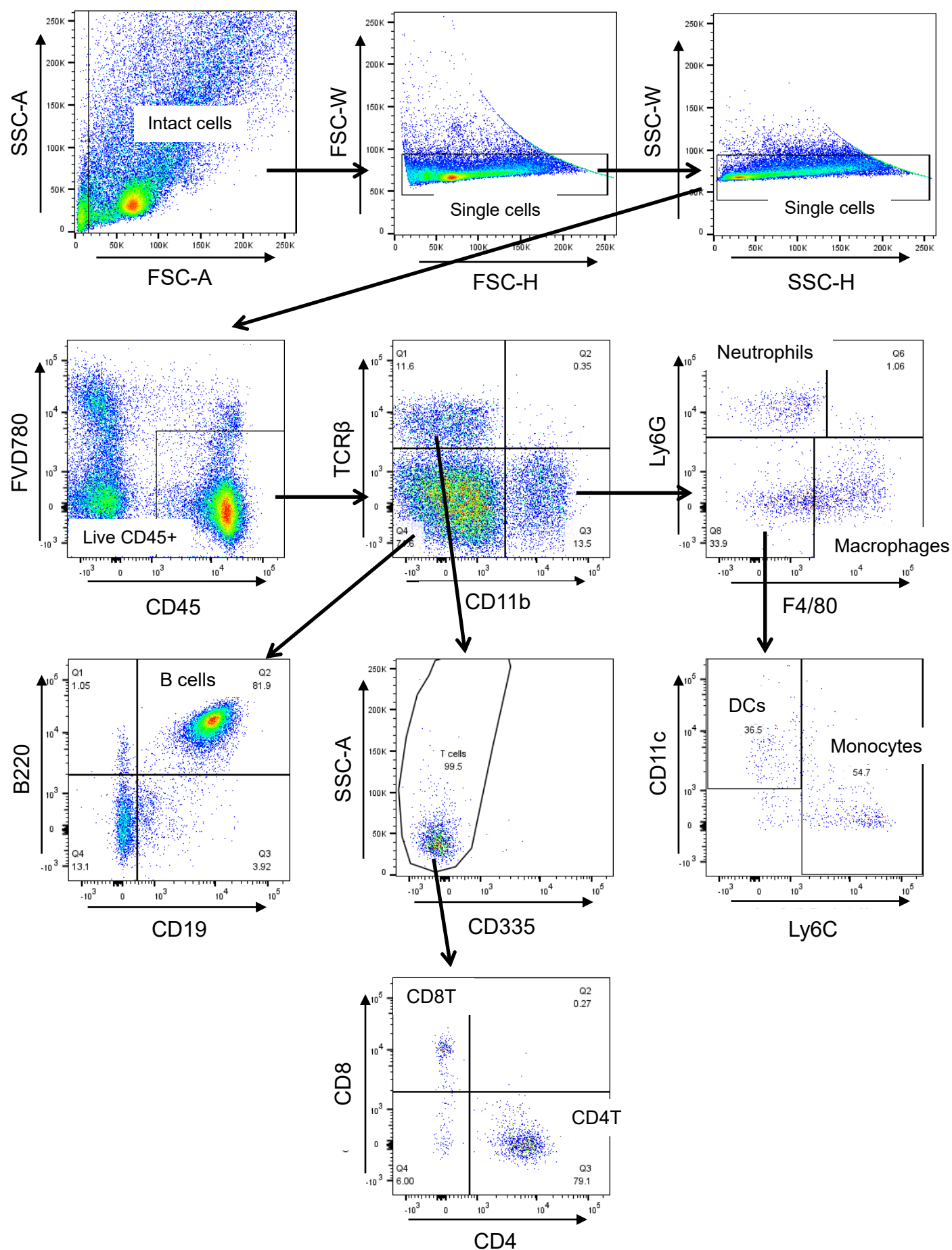
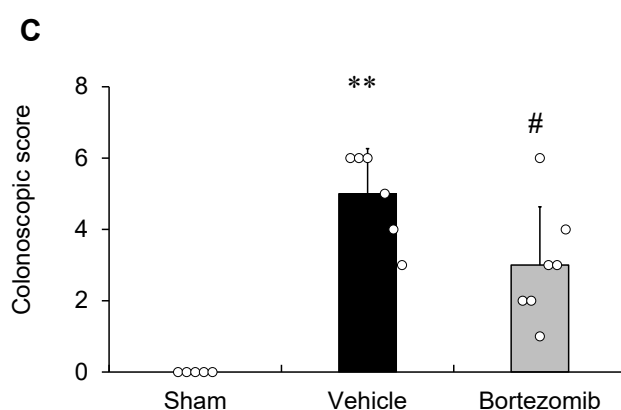
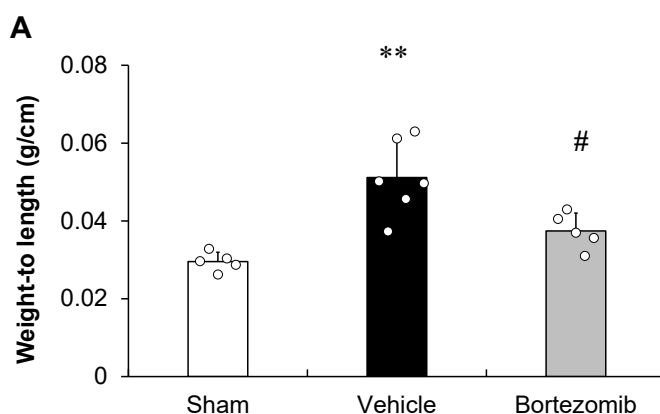




Supplementary Figure S1

Gating strategy for the analysis of colonic LP cells

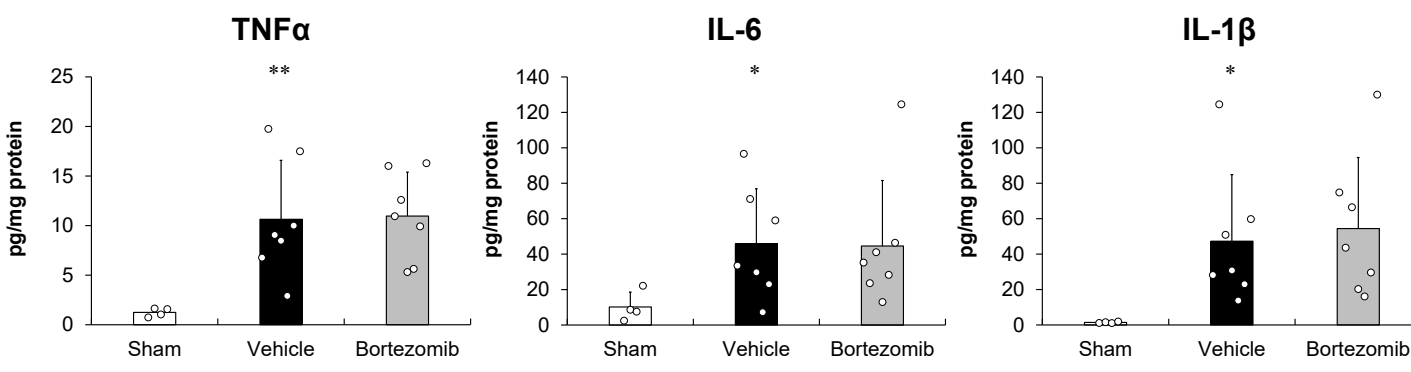


Supplementary Figure S2

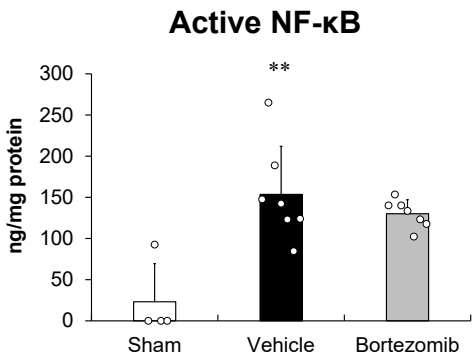
Effects of bortezomib on the progression of colitis.

- A) Distal colon weight-to-length ratio at the experimental endpoint as g/cm. Results are shown as mean $\pm$ SD with individual data. ** $p < 0.01$ vs. sham-treated group, # $p < 0.05$ by Student's t-test performed vs. vehicle-treated group (Student's or Aspin–Welch t-test). $n = 5\text{--}7$ animals per group.
- B) Representative colonoscopic pictures of the colon tissues of sham-, vehicle-, or bortezomib-treated mice.
- C) Colonoscopic scores of sham-, vehicle-, or bortezomib-treated mice at the experimental endpoint. Results are shown as mean $\pm$ SD with individual data. ** $p < 0.01$ vs. sham-treated group, # $p < 0.05$ vs. vehicle-treated group determined by Mann-Whitney U test. $n = 5\text{--}7$ animals per group.

A



B

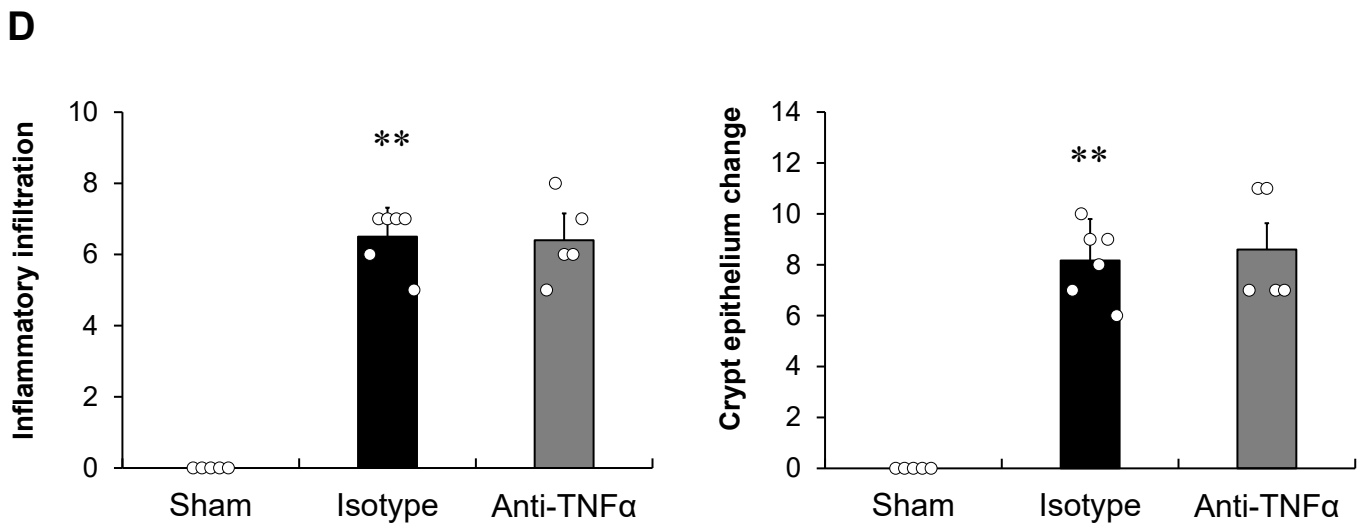
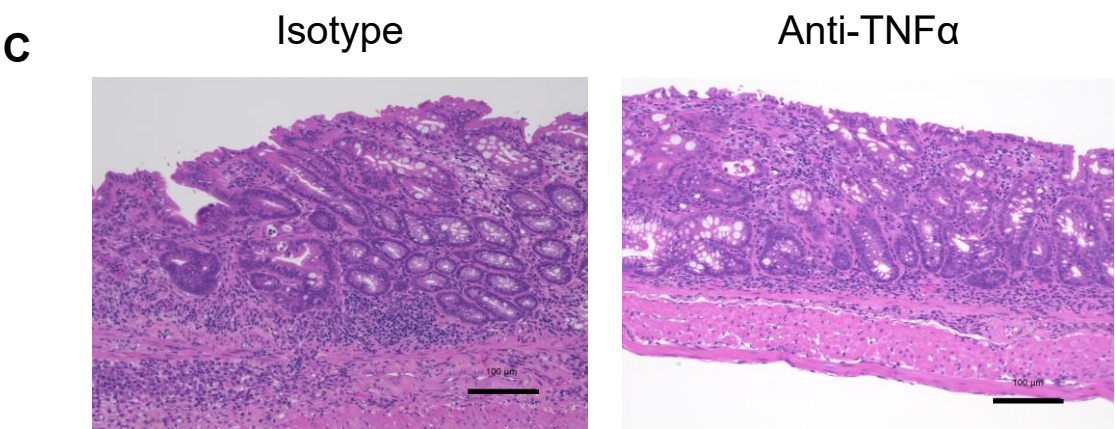
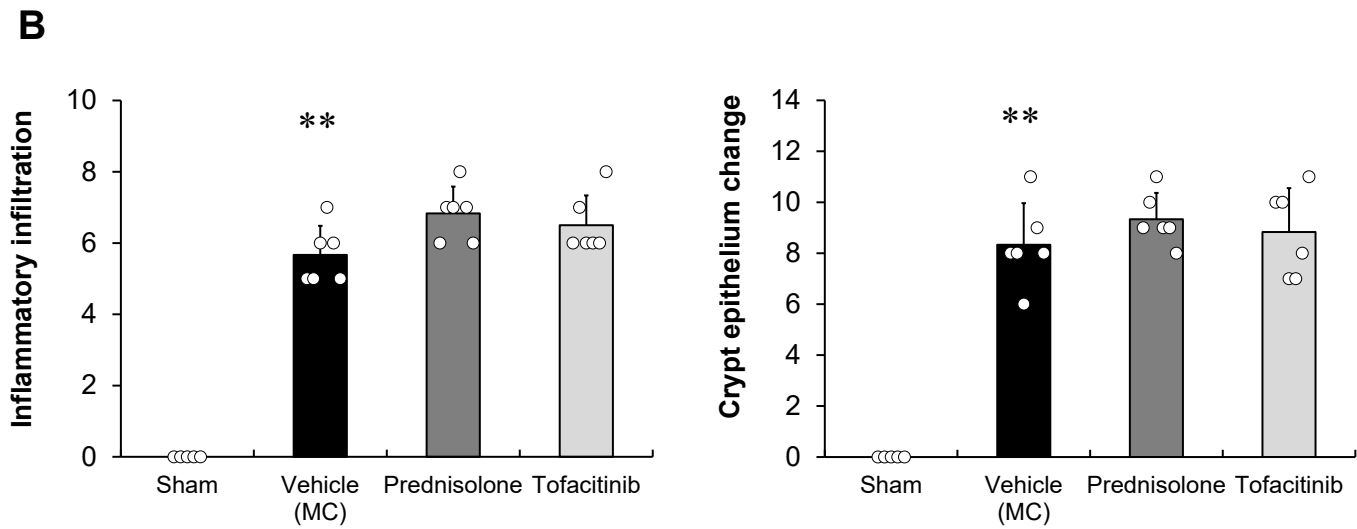
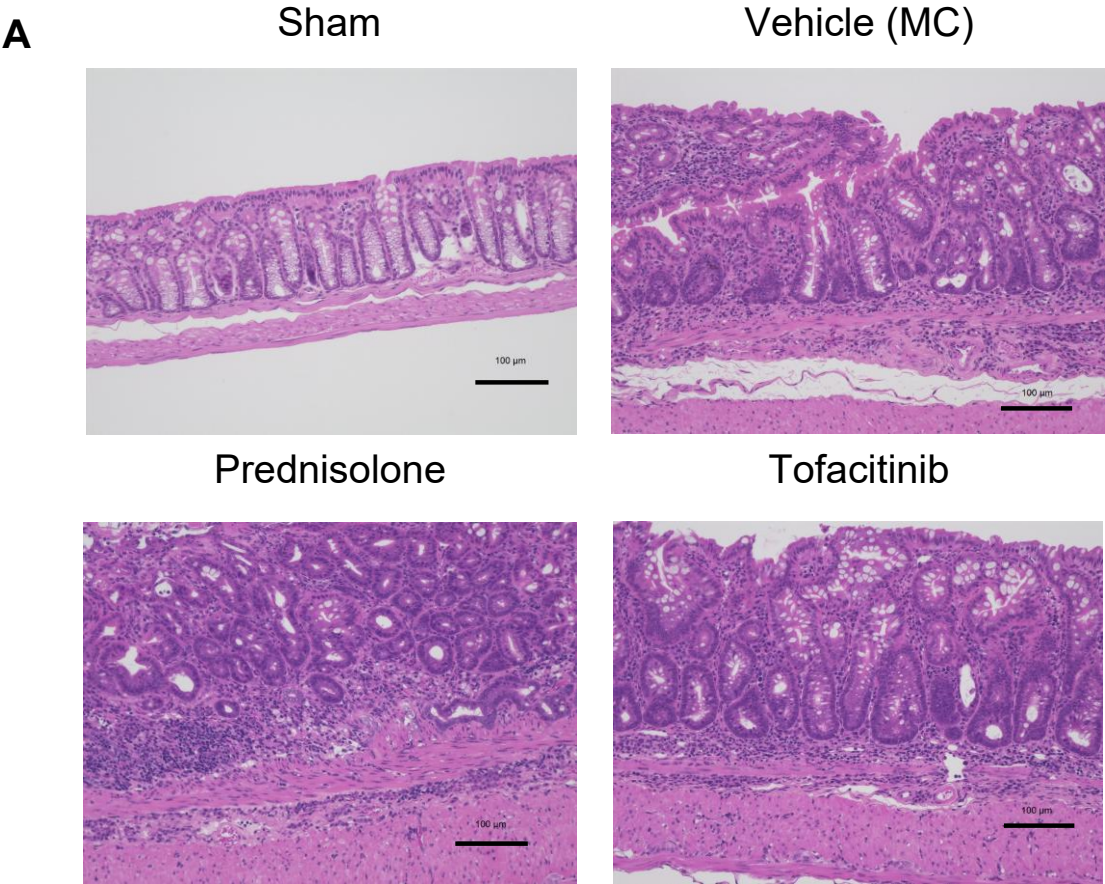


Supplementary Figure S3

Effects of bortezomib on inflammatory cytokine production and NF- κ B activation

- A) Inflammatory cytokine levels in the colon tissues of the chronic DSS-induced colitis model. ELISA kits were used to measure the tumor necrosis factor (TNF)- α , IL-6, and IL-1 β levels in the colon tissues of mice.
- B) NF- κ B activation in the colon tissues of the chronic DSS-induced colitis model.

Results are shown as the mean $\pm$ SD with individual data. n = 4–7 animals per group. **p < 0.01, *p < 0.05 vs. sham-treated group determined by Student's or Aspin–Welch t-test performed



Supplementary Figure S4

Effects of anti-inflammatory drugs on the progression of colitis.

- A) Representative microphotographs of the colonic tissues of sham-, vehicle (MC)-, tofacitinib (100 mg/kg)-, or prednisolone (3 mg/kg)-treated mice (H&E stain). Scale bar, 100 μ m.
- B) Histological score at the experimental end point. Results are shown as mean $\pm$ SD with individual data. **p < 0.01 vs. sham-treated group determined by Mann – Whitney U test.
- C) Representative microphotographs of the colonic tissues of Isotype- or anti-TNF α antibody-treated mice (H&E stain). Scale bar, 100 μ m.
- D) Histological score at the experimental end point. Data are shown as mean $\pm$ SD with individual data. **p < 0.01 vs. sham-treated group determined by Mann–Whitney U test.