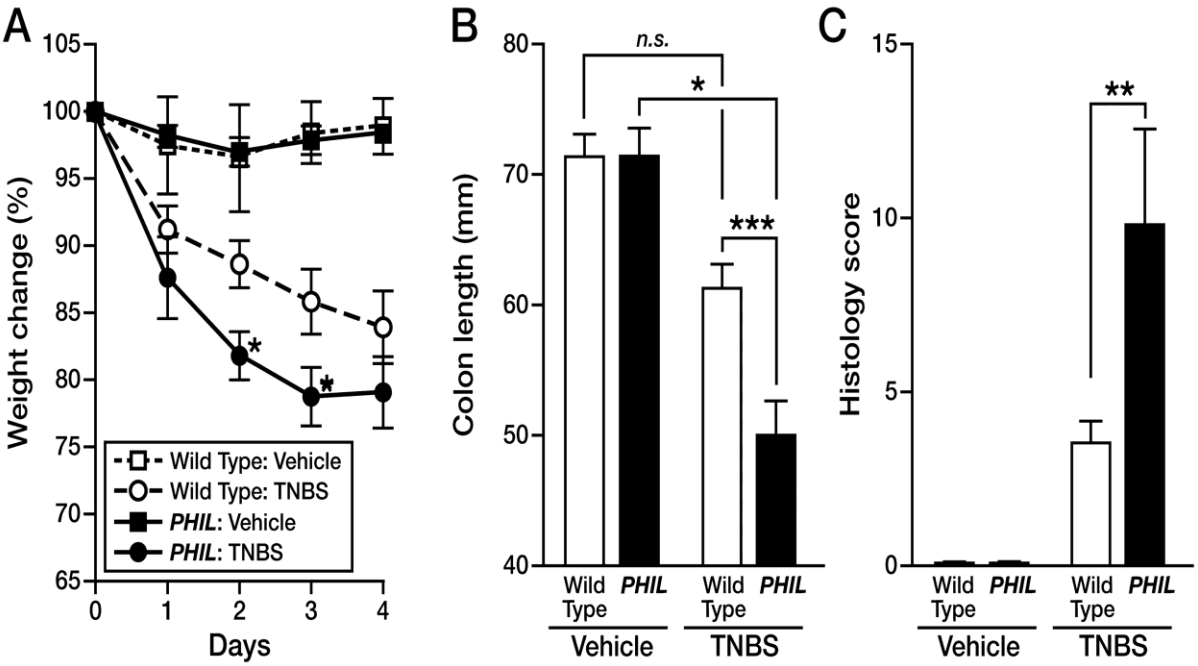
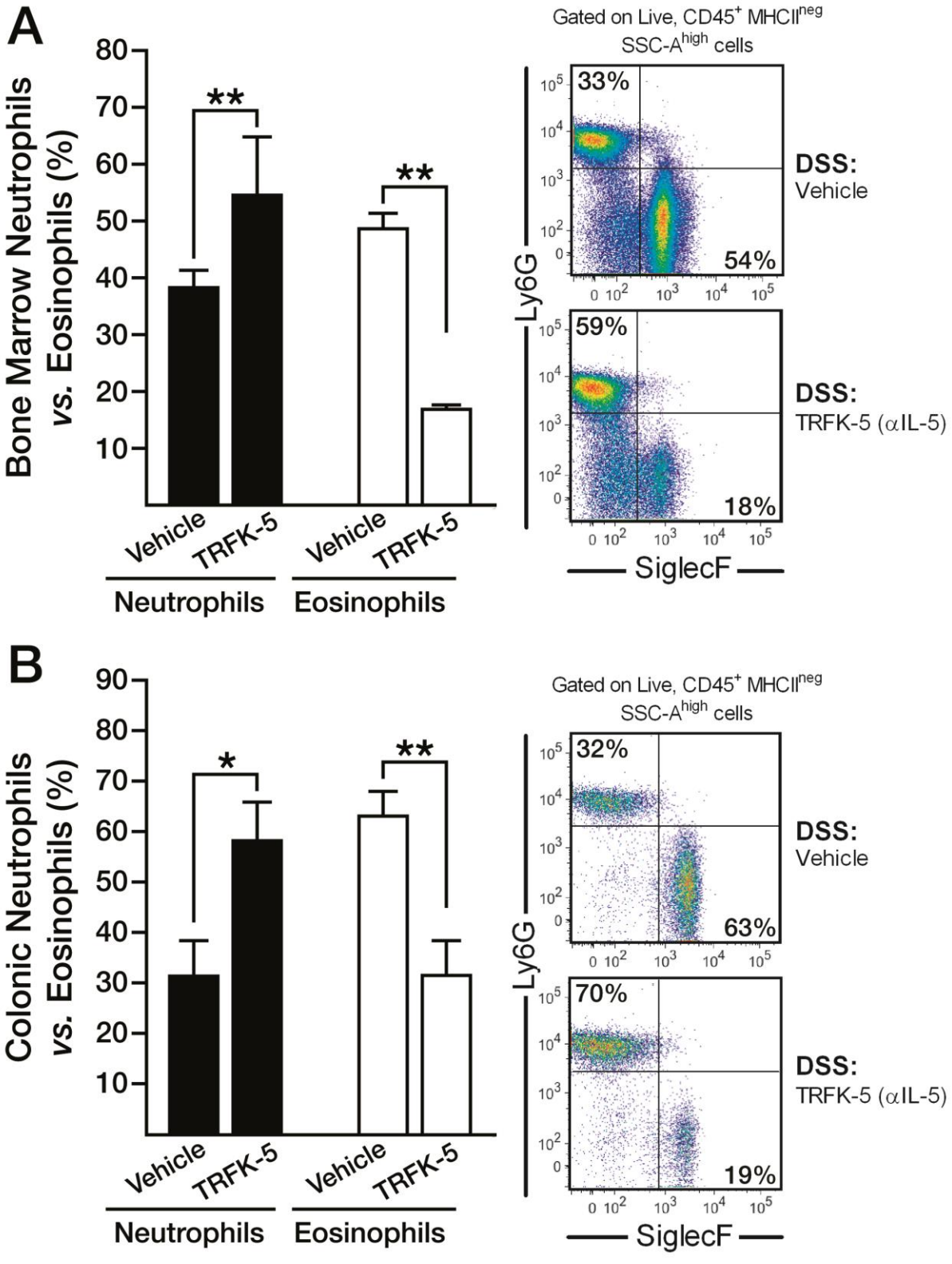
Supplementary Figures:

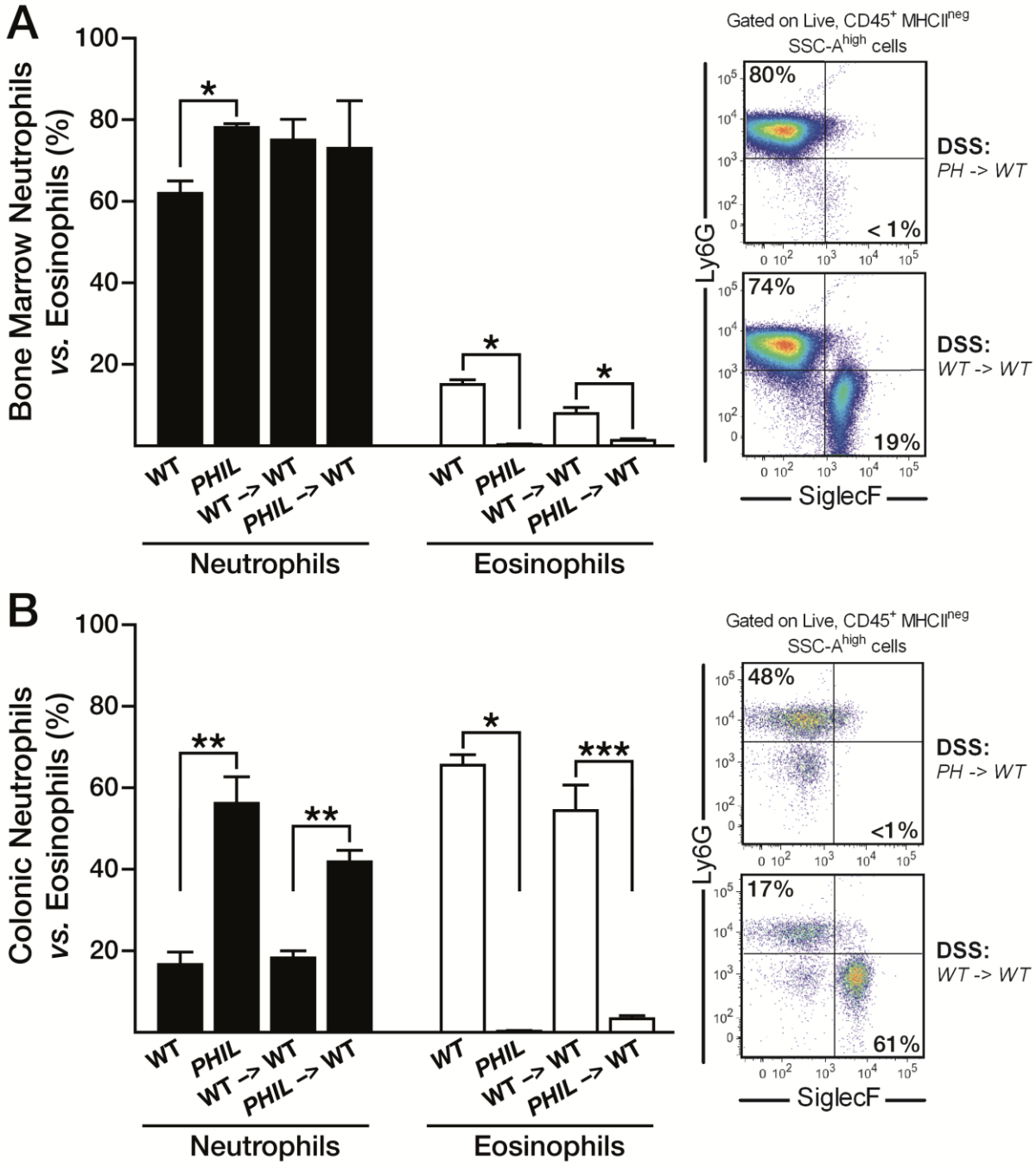
Supplementary Figure 1: Protective role for eosinophils in TNBS-colitis. TNBS or vehicle was administered to WT- and PHIL-mice. (A) Colitis induced weight loss as a percentage of day zero in WT and PHIL-mice. (B) Colon lengths were assessed upon sacrifice. (C) A histologic scoring tool was applied to H&E stained colon sections. All measures are following 4 days of colitis and data are expressed as means±SEM of 3-5 individual mice per group and represent 2-independent experimental repeats.



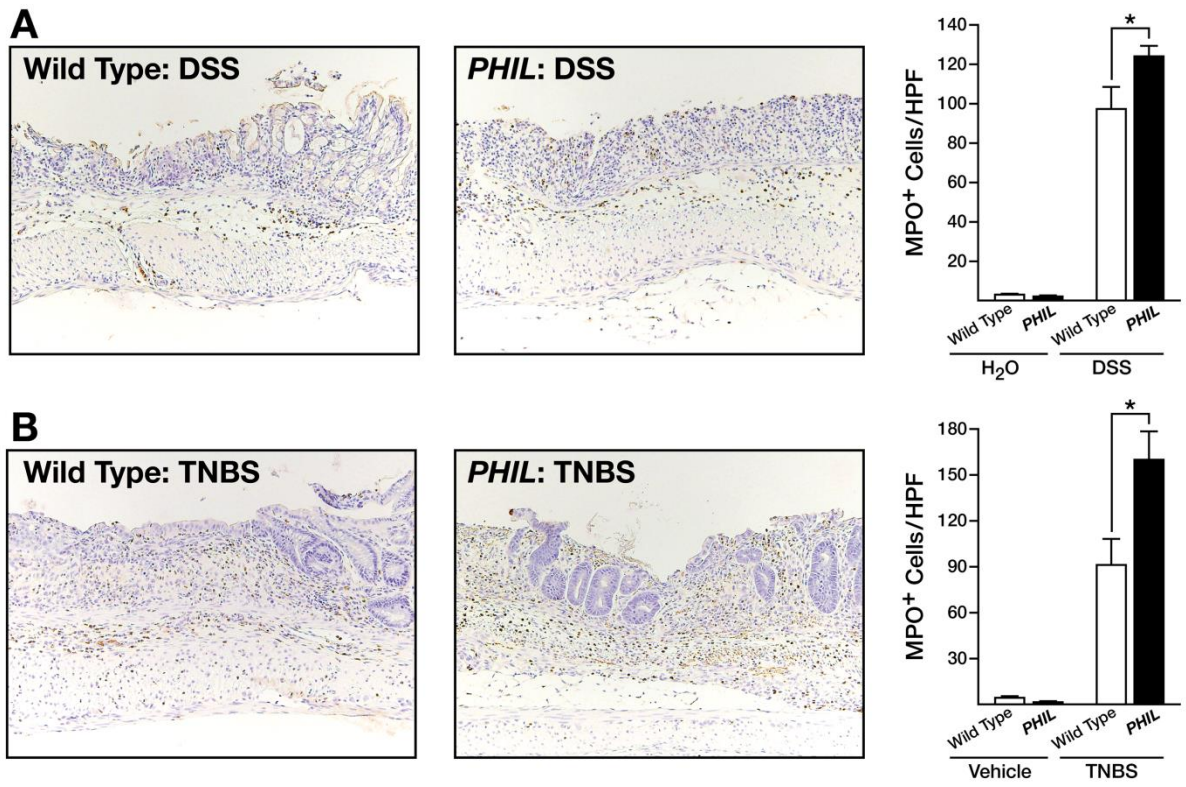
Supplementary Figure 2: Validation of anti-IL-5 (TRFK-5) depletion efficiency. WT-mice were treated with TRFK-5 antibody throughout the 6 day course of DSS-colitis. (A) Bone marrow and (B) colon lamina propria cells were extracted and assessed by flow cytometry for eosinophils and neutrophils. Data are expressed as means±SEM of 3-7 individual mice per group and represent 2-independent experimental repeats.



Supplementary Figure 3: Validation of bone marrow chimera efficiency. WT-mice underwent bone marrow chimera with PHIL or WT donors. Age and sex matched WT and PHIL-mice were also used as controls. DSScolitis was induced for 6 days and (A) bone marrow and (B) colon lamina propria cells were extracted and assessed by flow cytometry for eosinophils and neutrophils. Data are expressed as means±SEM of 3-7 individual mice per group and represent 2-independent experimental repeats.



Supplementary Figure 4: Neutrophil predominant infiltrate in eosinophil null mucosa in two models of acute colitis. Whole colon immunohistochemical analysis for infiltrating MPO positive neutrophils was performed comparing WT and PHIL-mice undergoing either (A) 6 days of DSS or (B) 4 days of TNBS-colitis. Quantification of absolute numbers of nucleated MPO-positive cells was completed. (A) Representative MPO immunohistochemistry (100X magnification) and quantitative assessments following DSS-colitis. (B) Representative MPO immunohistochemistry (100X magnification) and quantitative assessments of mice following TNBS-colitis. Data are expressed as means±SEM of 3-6 individual mice per group and represent 2-3-independent experimental repeats.



Supplementary Figure 5: In-situ hybridization localization of CXCL1 expression patterns in eosinophil null mucosa during acute colitis. WT-mice or PHIL-mice underwent 6 days of DSS-induced colitis. Colons were formalin fixed, paraffin embedded and in-situ hybridization analysis was performed. Representative images demonstrate CXCL1 expressing cells in equal proportion to both epithelial and lamina propria infiltrating cell sources in both WT and PHIL-mice (100X magnification).