Figure S1. Effects of *R. intestinalis* supernatant on Caco2 and BMMs (from TLR5<sup>-/-</sup> mouse) *in vitro*. (A) ELISA analysis of IL-6 in the supernatant of Caco2 cells induced with LPS for 24 h treated with PBS, M or S2. (B) ELISA analysis of IL-6 in the supernatant of BMMs induced with LPS for 12 h (from TLR5<sup>-/-</sup> mouse). \*\*P<0.01 vs. LPS. \*#P<0.01 vs. LPS + M; ns, not significant; BMM, bone marrow macrophages; IL-6, interleukin-6; LPS, lipopolysaccharide; M, medium; S2, 2X *R. intestinalis* supernatant; TLR5, Toll-like receptor 5.

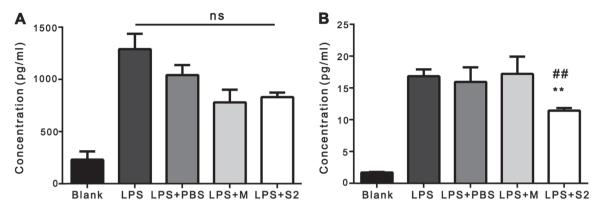
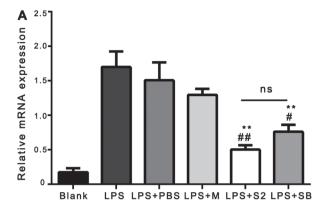


Figure S2. IL-6 expression in RAW246.7 macrophages treated with *R. intestinalis* supernatant and SB *in vitro*. (A) Reverse transcription-quantitative polymerase chain reaction analysis of IL-6 in RAW246.7 cells induced with LPS for 24 h treated with M or S2, SB (0.88 mM). (B) ELISA analysis of IL-6 in the supernatant RAW246.7 cells treated with LPS for 24 h in each group. \*\*P<0.01 vs. LPS. \*#P<0.01 vs. LPS + M; ns, not significant; LPS, lipopolysaccharide; M, medium; SB, sodium butyrate; S2, 2X *R. intestinalis* supernatant.



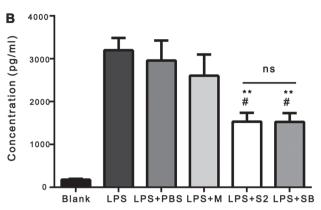


Table SI. Criteria for the disease activity index scores.

Score	Weight loss (%)	Stool consistency	Occult/bloody stools
0	(-)	Normal	Normal
1	1-5		
2	6-10	Loose	Occult +
3	11-15		
4	>15	Diarrhea	

Bloody stools Disease activity index score=(Combined score of weight loss, stool consistency and occult/bloody stools)/3.

Table SII. Criteria for the assessment of microscopic colonic damage.

Score	Criteria		
0	No inflammation		
1	Low level of lymphocyte infiltration with infiltration seen in <10% hpf, no structural changes observed		
2	Moderate lymphocyte infiltration with infiltration seen in 10-25% hpf, crypt elongation, bowel wall thickening which does not extend beyond mucosal layer, no evidence of ulceration		
3	High level of lymphocyte infiltration with infiltration seen in 25-50% hpf, high vascular density, thickening of bowel wall which extends beyond mucosal layer		
4	Marked degree of lymphocyte infiltration with infiltration seen in >50% hpf, high vascular density, crypt elongation with distortion, transmural bowel wall-thickening with ulceration		

Table SIII. List of primers employed for reverse transcription-quantitative polymerase chain reaction.

Primers	Forward	Reverse	
IL-6	5'-TCCATCCAGTTGCCTTCTTG-3'	5'-AAGCCTCCGACTTGTGAAGTG-3'	
STAT3	5'-ACATCTGCCTGGACCGTCTGG-3'	5'-AACAGCTCCACGATCCTCTCCTC-3'	
TNF-α	5'-GCGACGTGGAACTGGCAGAAG-3'	5'-GAATGAGAAGAGGCTGAGACATAGGC-3'	
GAPDH	5'-TCTGACGTGCCGCCTGGAGA-3'	5'-CAGCCCGGCATCGAAGGTG-3'	

IL, Interleukin; STAT3, signal transducer and activator of transcription 3; TNF- $\alpha$ , tumor necrosis factor- $\alpha$ .