

Supplementary Figure S1

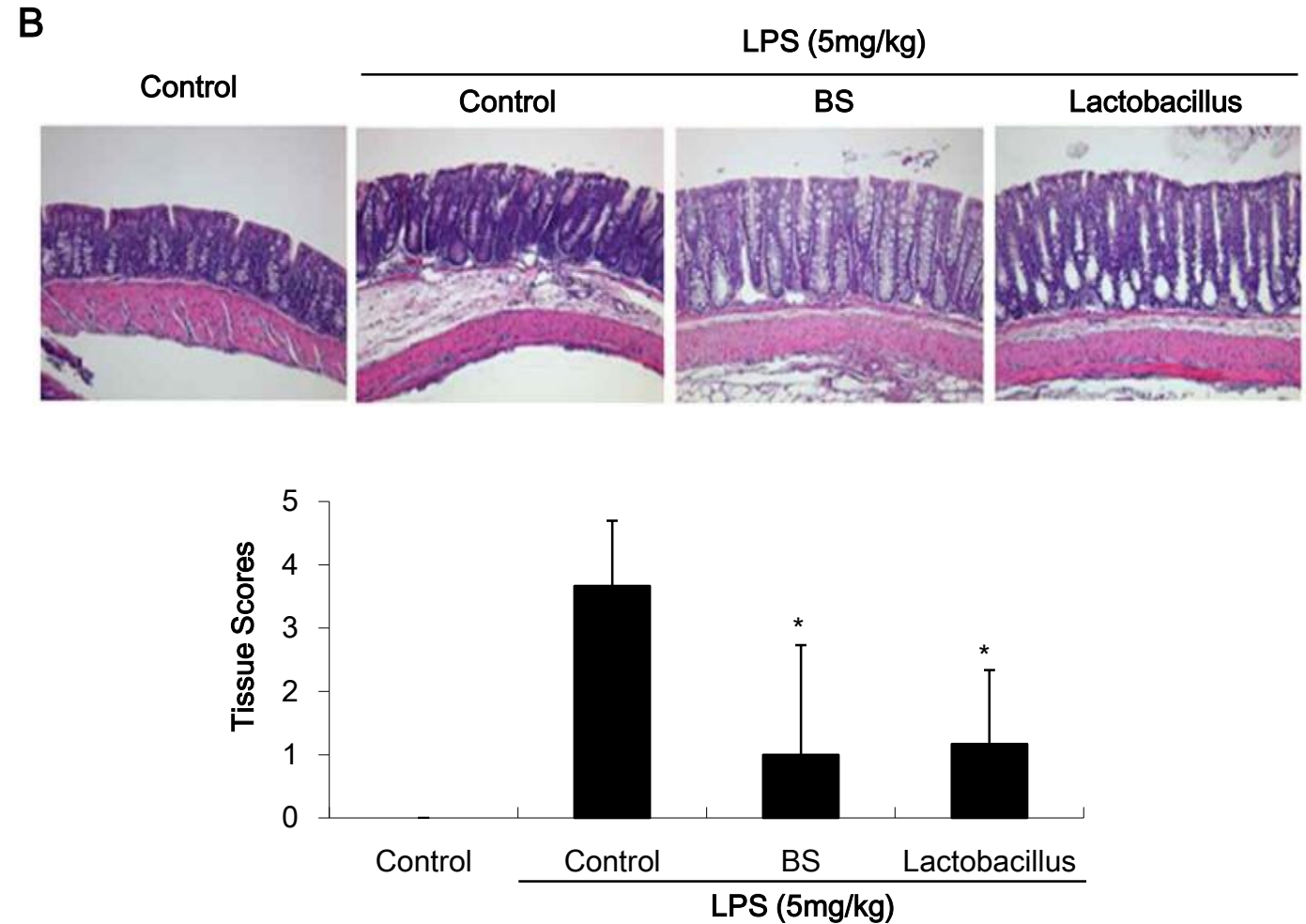
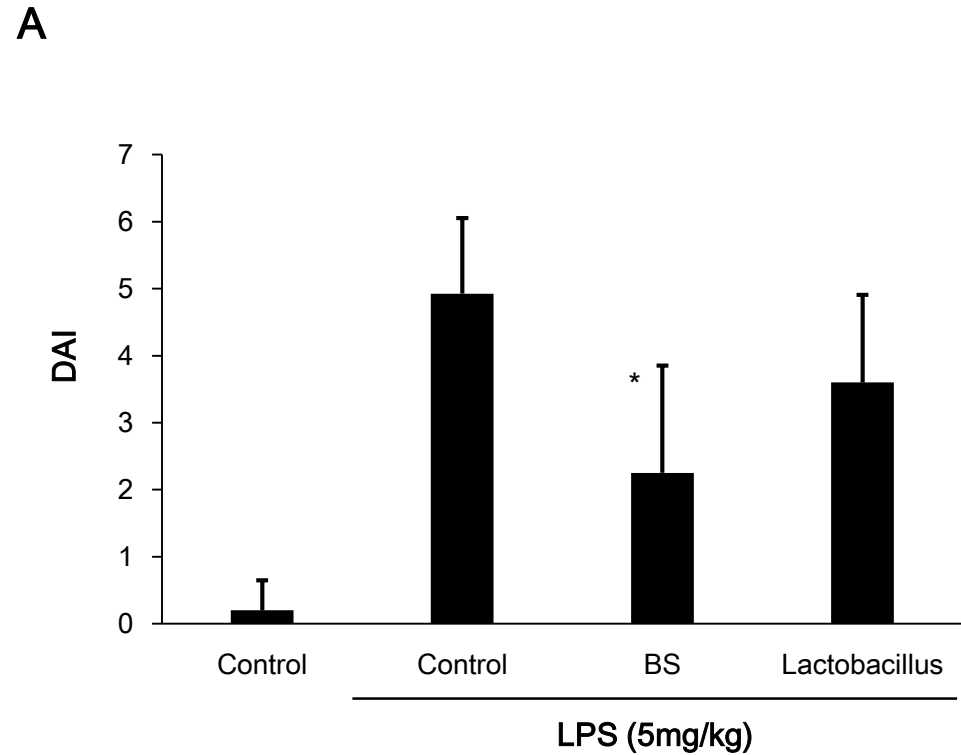
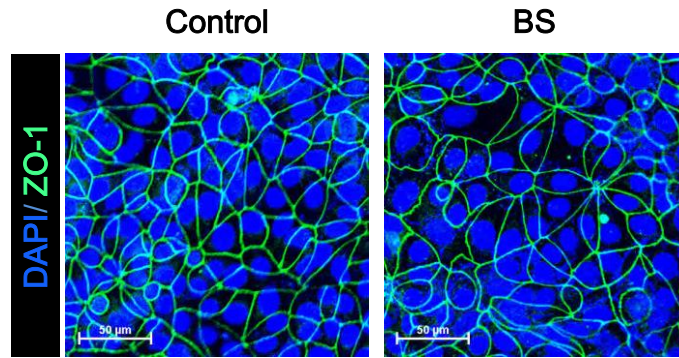


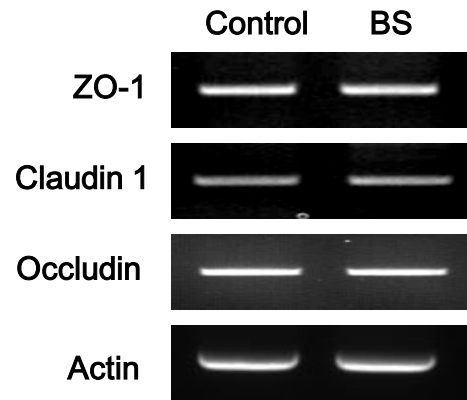
Figure S1. BS promotes recovery from LPS-induced colitis and inflammation in mice. (A) DAI of LPS (LPS, 5mg/kg of mouse by Intra-peritoneal injection) treated mice were scored. (B) Representative H&E stained histology from Control and BS-treated groups and statistical results. Mean value was significantly different from that of the LPS treated control group (* $P < 0.05$). BS, Fermented barley and soybean, DAI, disease activity index. LPS, Lipopolysaccharide

Supplementary Figure S2

A



B



C

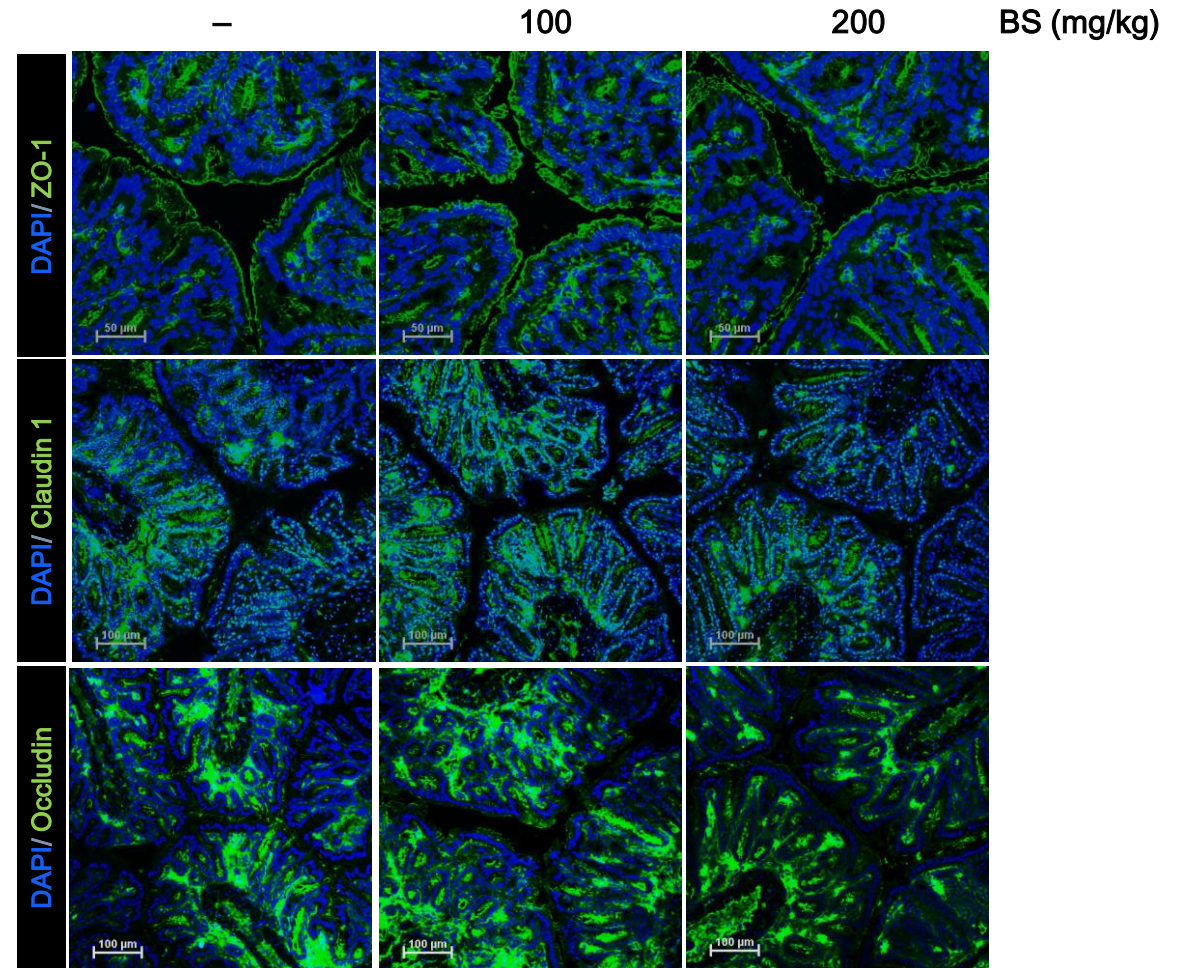


Figure S2. Basal intestinal barrier function in BS treatment. (A) Immunofluorescence of ZO-1 in Caco-2 cell monolayers incubated with BS for 48 h and images were collected by confocal microscopy. (B) RNA levels of ZO-1, Claudin 1, and Occludin in BS treated Caco-2 cells measured by semi-quantitative RT-PCR. (C) BS treated mouse colon tissues were used to determine ZO-1, Claudin 1 and Occludin distribution by immune fluorescence staining and images were collected by confocal microscopy. BS, Fermented barley and soybean,

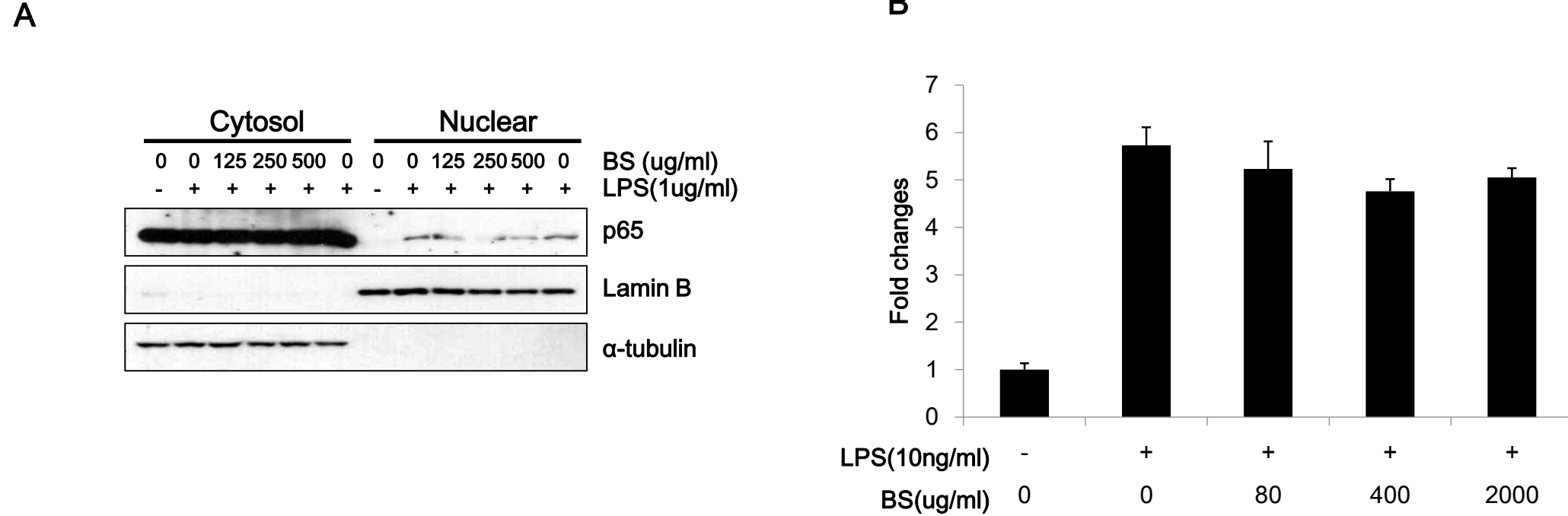


Figure S3. Effect of BS on the suppression of NF- κ B activity. (A) Western blot analysis of p65 nuclear trans-localization levels in the protein fractions of RAW 264.7 lysates. (B) The effects of BS on a NF- κ B reporter assay in HEK 293 cells that were activated by the addition of LPS. The luciferase activity was measured as relative light intensity, using a plate reader in the luminescence mode. BS, Fermented barley and soybean, LPS, Lipopolysaccharide

Supplementary Figure S4

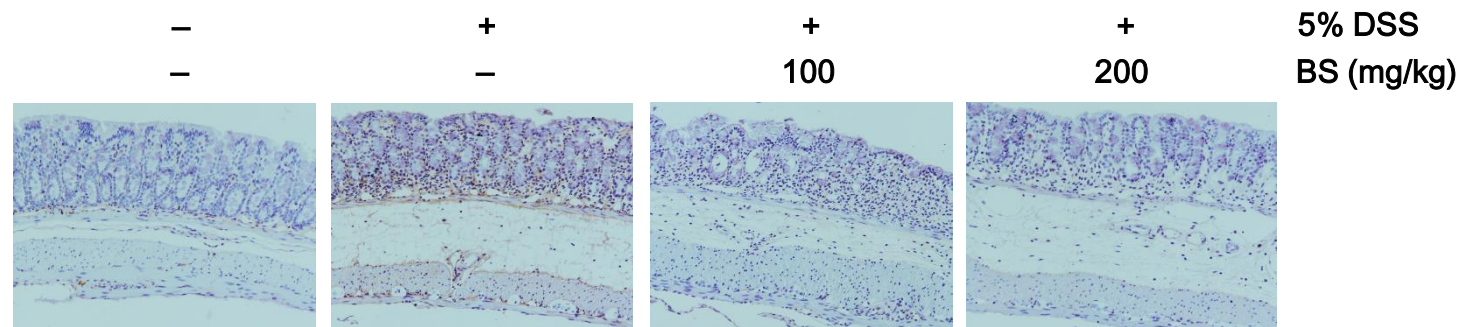


Figure S4. Immunohistochemical staining of IL-6 in sections from BS treated mouse colon. BS, Fermented barley and soybean