

Supporting Information

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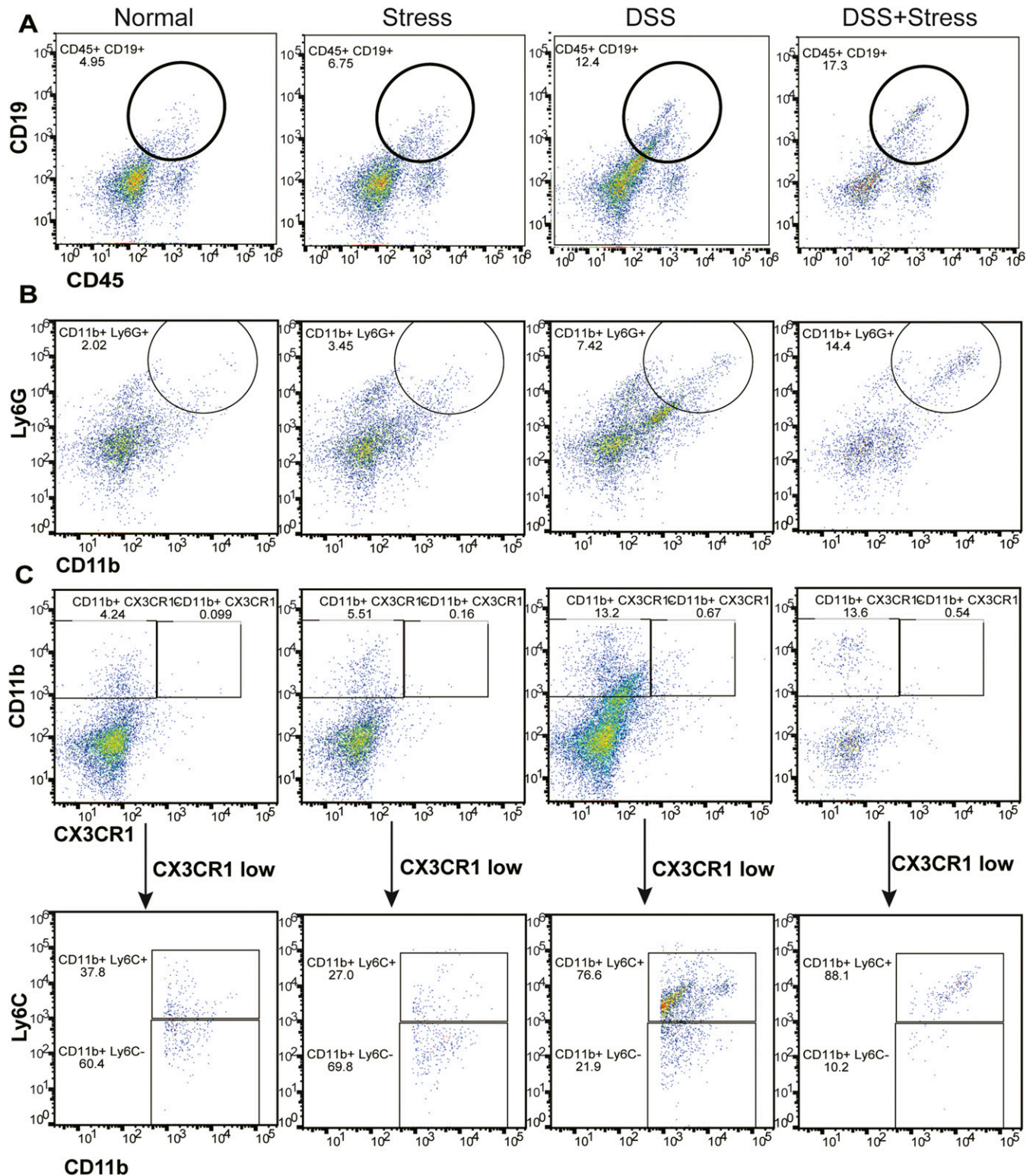


Fig. S1. Representative flow cytometry images in colonic lamina propria. (A) Representative flow cytometry images of B cells (CD45⁺, CD19⁺) in each group. (B) Representative flow cytometry images of NEUs (CD45⁺, Ly6G⁺) in each group. (C) Representative flow cytometry images of ly6c^{hi} macrophages in each group.

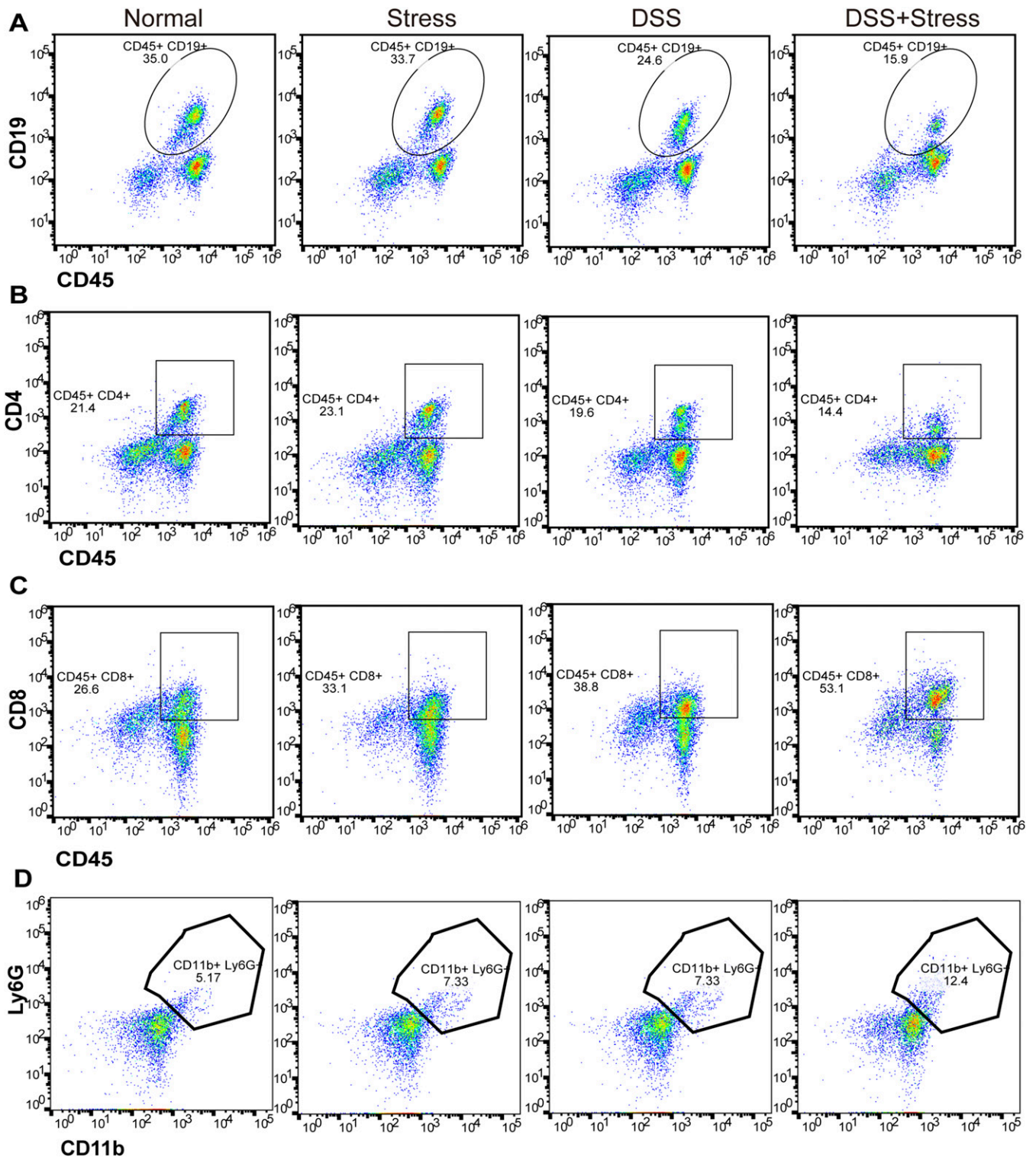


Fig. S2. Representative flow cytometry images in MLN. (A) Representative flow cytometry images of B cells (CD45⁺, CD19⁺) in each group. (B) Representative flow cytometry images of CD4⁺ T cells (CD45⁺, CD4⁺) in each group. (C) Representative flow cytometry images of CD8⁺ T cells (CD45⁺, CD8⁺) in each group. (D) Representative flow cytometry images of NEUs (CD45⁺, Ly6G⁺) in each group.

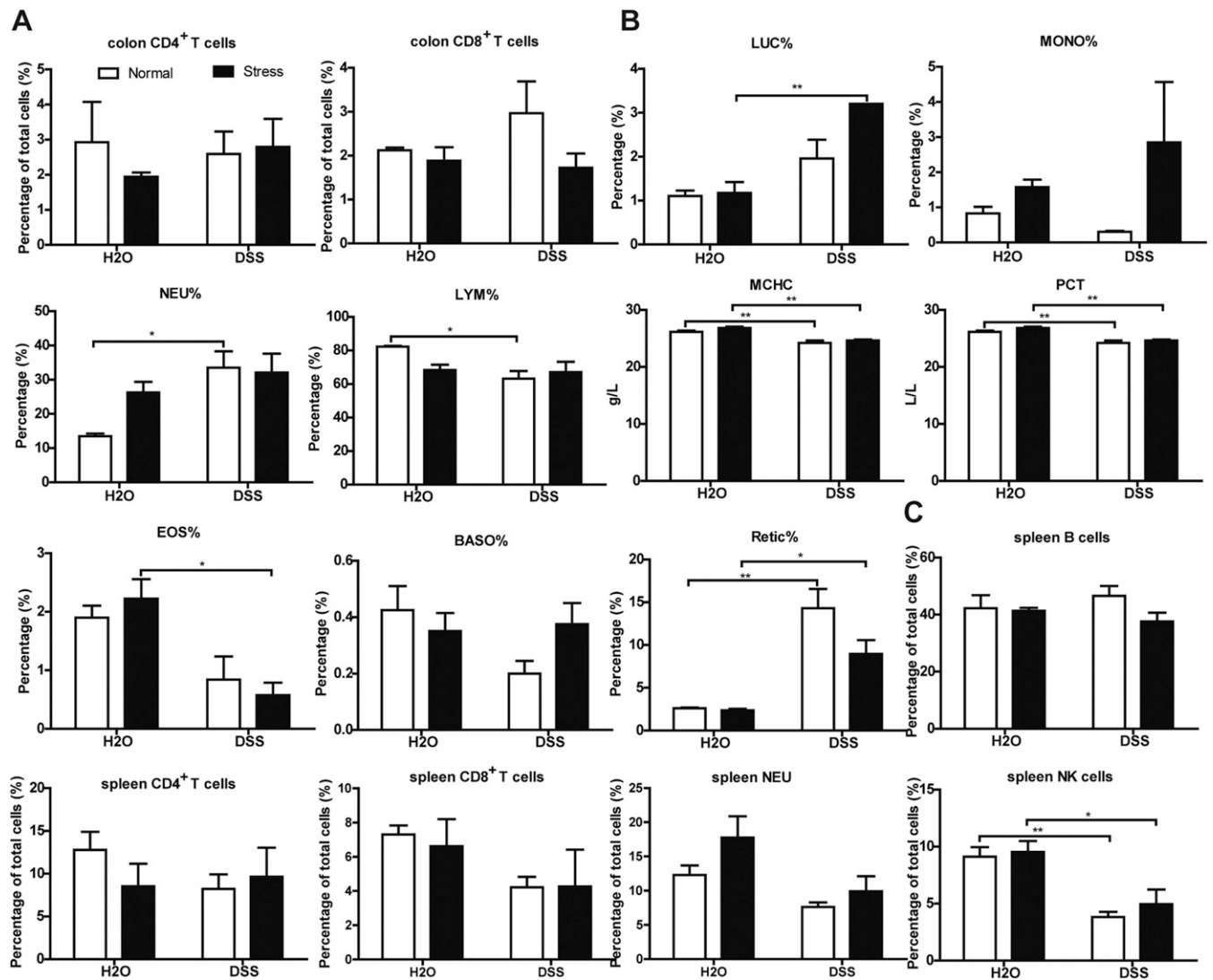


Fig. 53. Chronic stress disturbed the immune system. (A) Flow cytometric analysis of CD4⁺ T (CD45⁺, CD4⁺) and CD8⁺ T (CD45⁺, CD8⁺) cells in colonic lamina propria ($n = 4-5$). (B) Percentages of LUCs, MONO, NEUs, LYM, MCHC, PCT, EOS, BASO, and Retic in the peripheral blood detected by an automated hematology analyzer (ADVIA2120; Siemens; $n = 4-5$). (C) Flow cytometric analysis of B (CD45⁺, CD19⁺), CD4⁺ T (CD45⁺, CD4⁺), CD8⁺ T (CD45⁺, CD8⁺), NEU (CD45⁺, Ly6G⁺), and NK (CD45⁺, CD49b⁺) cells in spleen ($n = 4-5$; * $P < 0.05$ and ** $P < 0.01$). BASO, basophils; EOS, eosinophils; LYM, lymphocytotoxicity; MCHC, mean corpuscular hemoglobin concentration; MONO, mono-monocyte; PCT, platelets; Retic, reticulocyte.

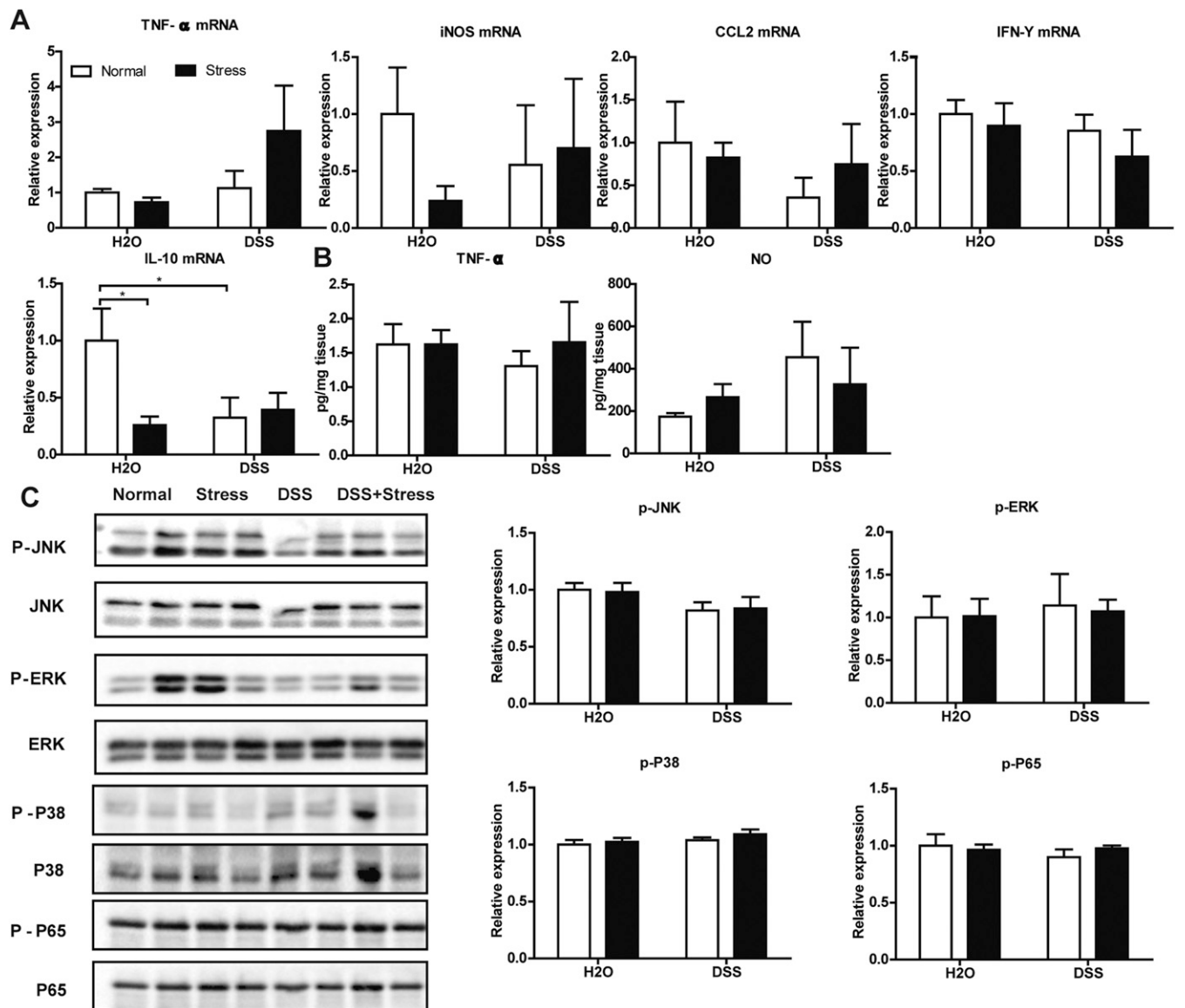


Fig. 54. Influence of chronic stress on inflammation. (A) RT-PCR results of TNF- α , iNOS, CCL2, IFN- γ and IL-10 in colon. Expression data were normalized to β -actin. (B) ELISA results of TNF- α and NO in colon. (C) Western blot results of p-JNK, p-ERK, p-P38, and p-P65 in colon. Expression data were normalized to total JNK, ERK, P38, and P65 ($n = 5$; $*P < 0.05$).

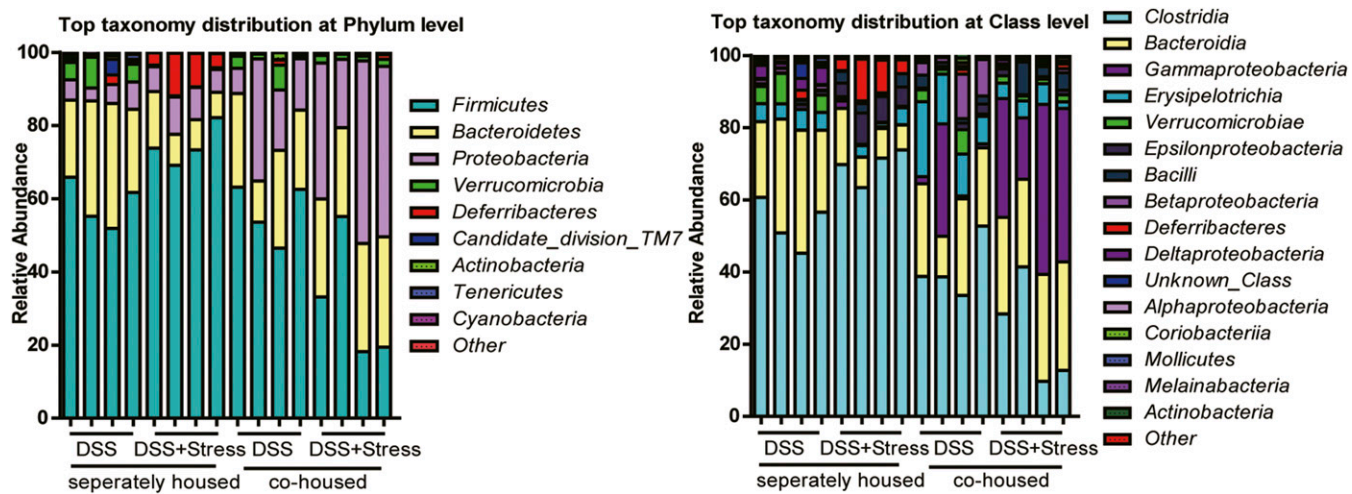


Fig. S5. Composition of microbiota at the phylum and class levels in separately housed or cohoused groups.