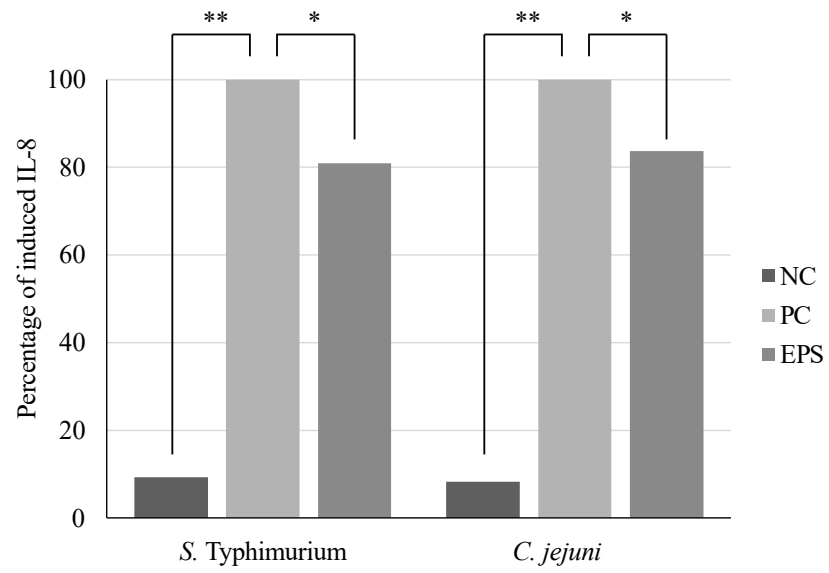
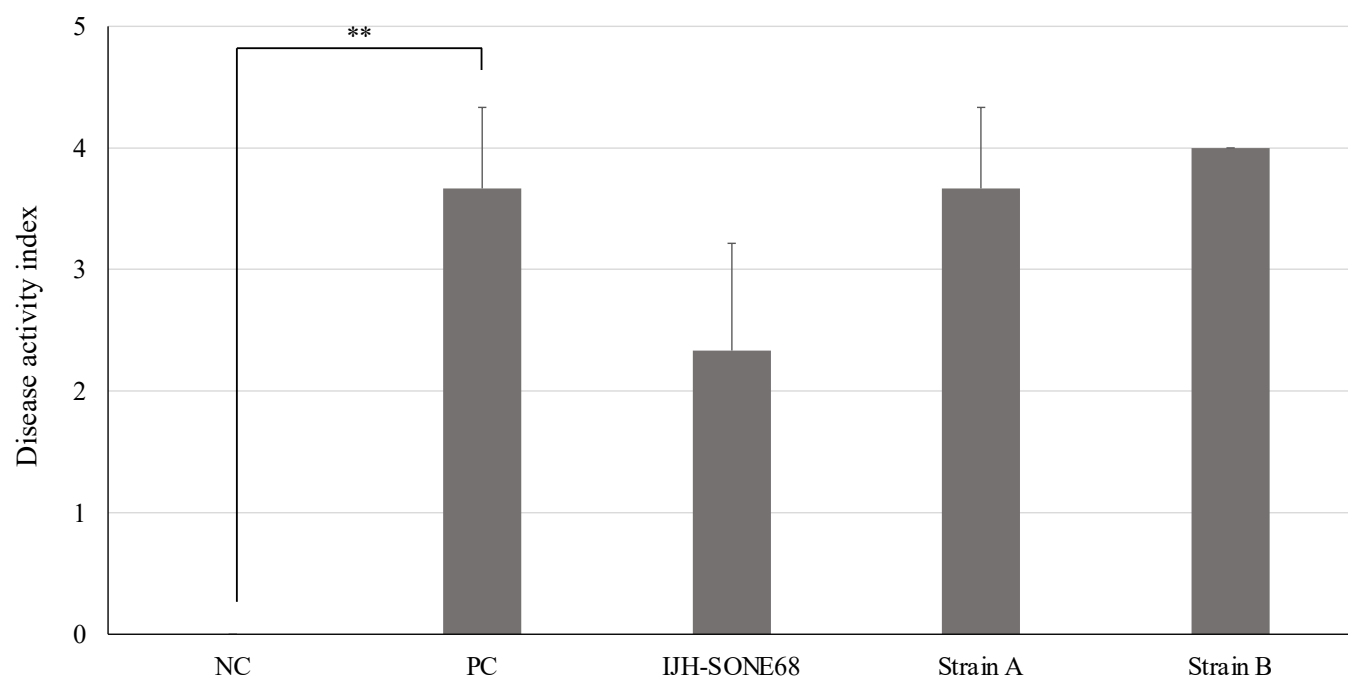


**Supplementary Figure S1.** Effects of the IJH-SONE68-derived EPS mixture on the IL-8 levels of a pathogen-stimulated Caco-2 cell line. At least four replicates of all assays were performed. Abbreviations used in the figure: NC, negative control (without bacterial stimulation); PC, positive control (treated with an *S. Typhimurium* or *C. jejuni* suspension at a multiplicity of infection of 10); EPS, pre-incubated with an EPS mixture prior to pathogen stimulation. The statistical analyses were performed using the Tukey–Kramer multiple comparison test (\*,  $p < 0.05$ ; \*\*,  $p < 0.01$ ).

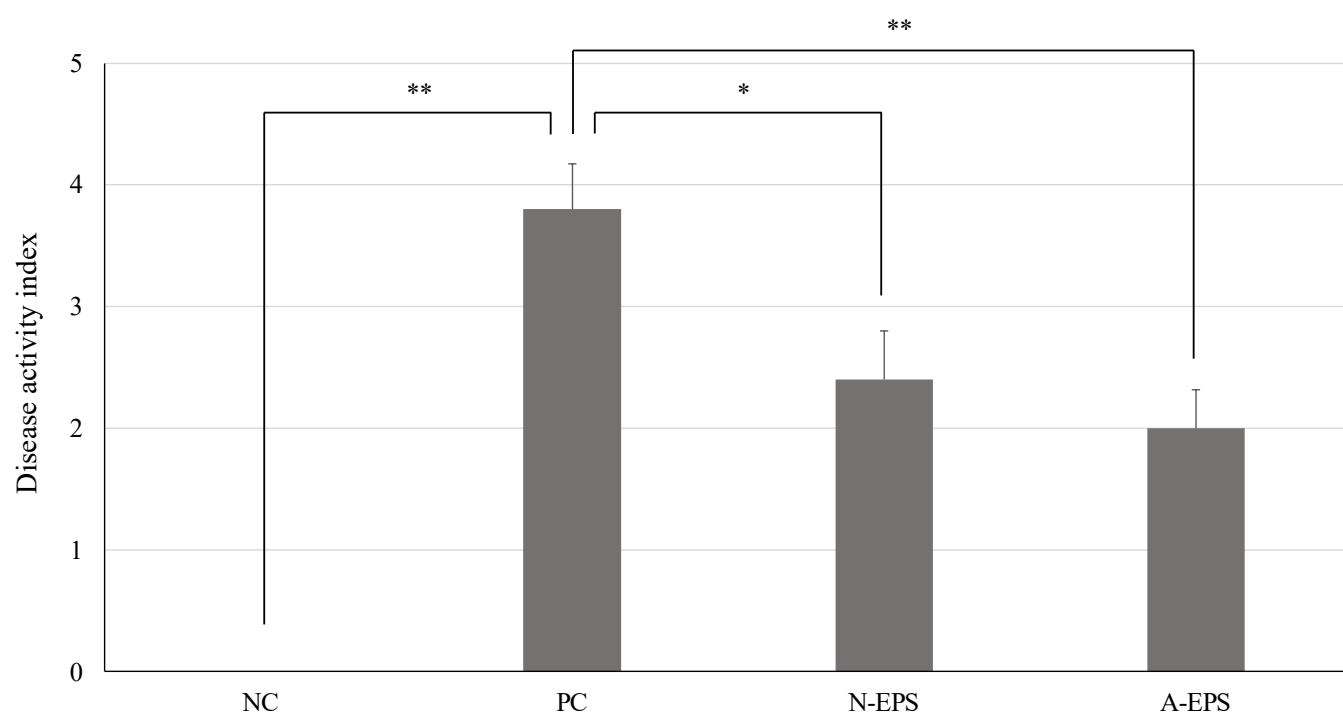


**Supplementary Figure S2.** Effects of LAB-derived EPSs in DSS-induced UC model mice on the changes in disease activity index. **(A)** Disease activity index at the last day of experimental period using IJH-SONE68- and other strains-derived EPSs. **(B)** Disease activity index at the last day of experimental period using IJH-SONE68-derived N-EPS and A-EPS. Abbreviations used in the figure: NC, negative control group (without UC induction); PC, positive control group (without treatment); N-EPS, UC induction with N-EPS treatment; A-EPS, UC induction with A-EPS treatment. The statistical analyses were performed using the Tukey–Kramer multiple comparison test (\* $p < 0.05$ , \*\* $p < 0.01$ , vs PC). Data are indicated by mean  $\pm$  S.E. ( $n = 3\text{--}5$ ).

A

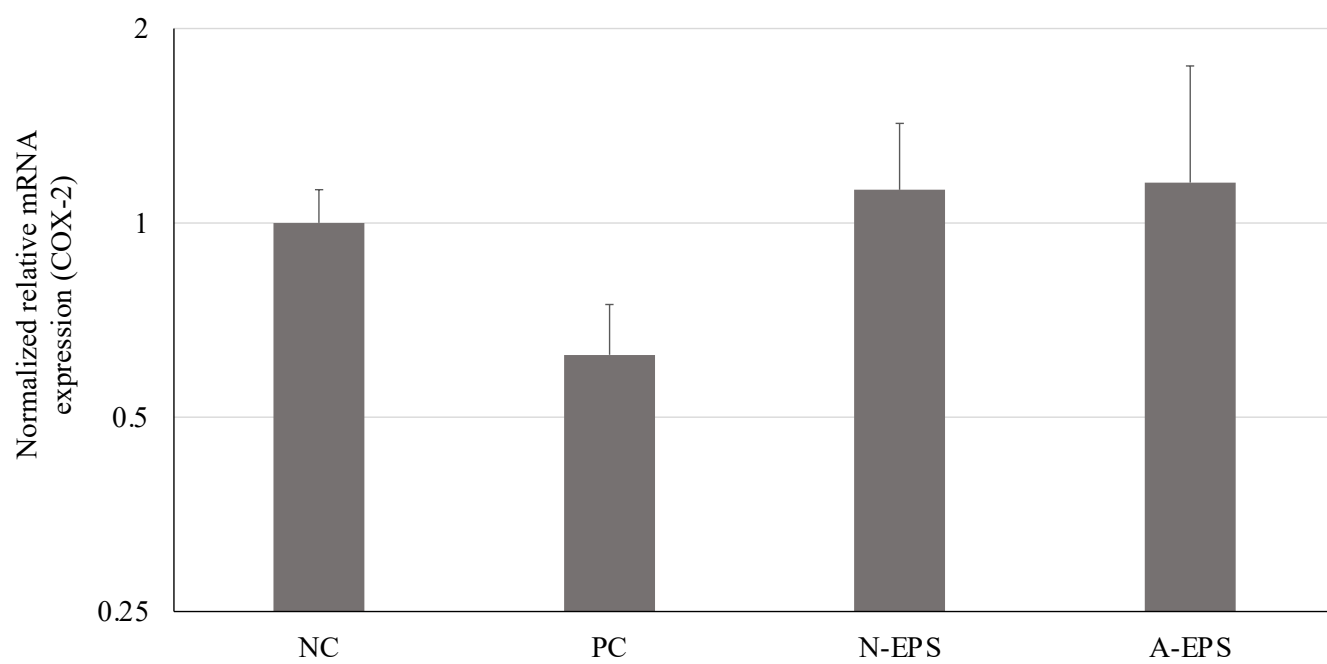


B

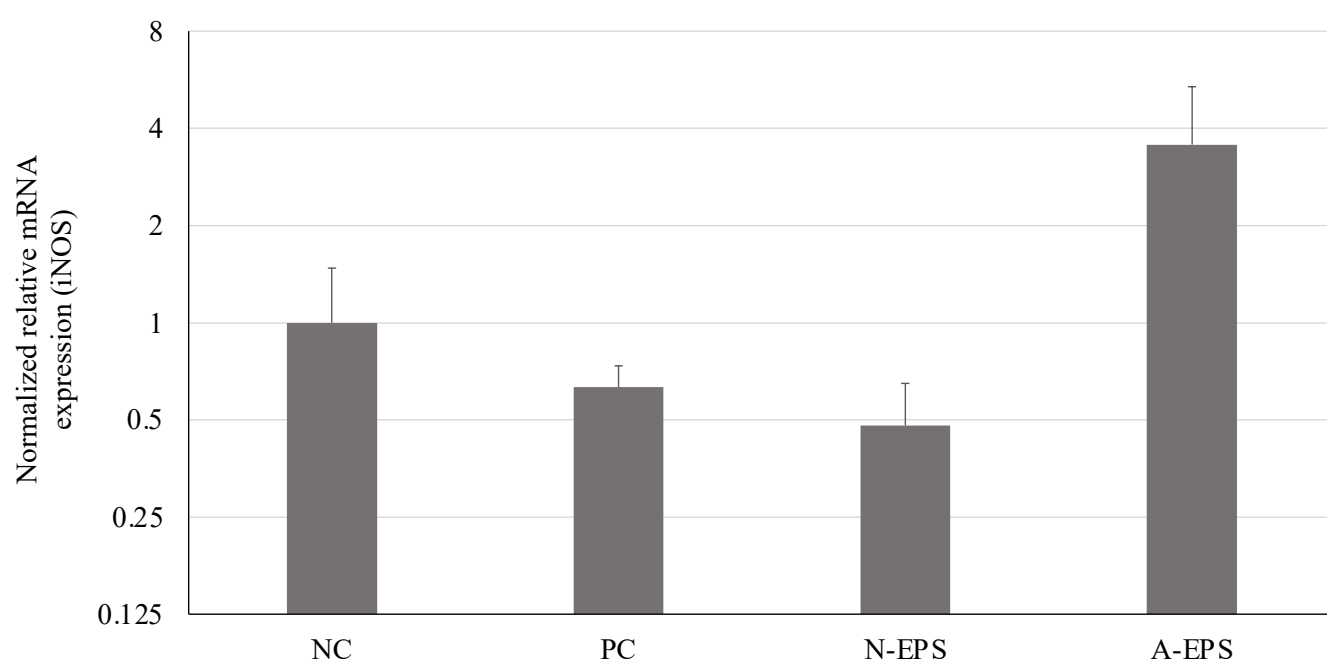


**Supplementary Figure S3.** Effects of IJH-SONE68-derived EPSs in DSS-induced UC model mice on the mRNA level of (A) COX-2, (B) iNOS, (C) TNF- $\alpha$ , (D) IL-6, (E) IL-12, (F) IL-17, and (G) IL-18 expressed in the colon tissue after 14 days of treatment. Each expression level was normalized to that of the  $\beta$ -actin gene (reference gene) using the  $\Delta\Delta C_T$  method. Abbreviations used in the figure: NC, negative control group (without UC induction); PC, positive control group (without treatment); N-EPS, UC induction with N-EPS treatment; A-EPS, UC induction with A-EPS treatment. Data are indicated by mean  $\pm$  S.E. ( $n = 4-5$ ).

A

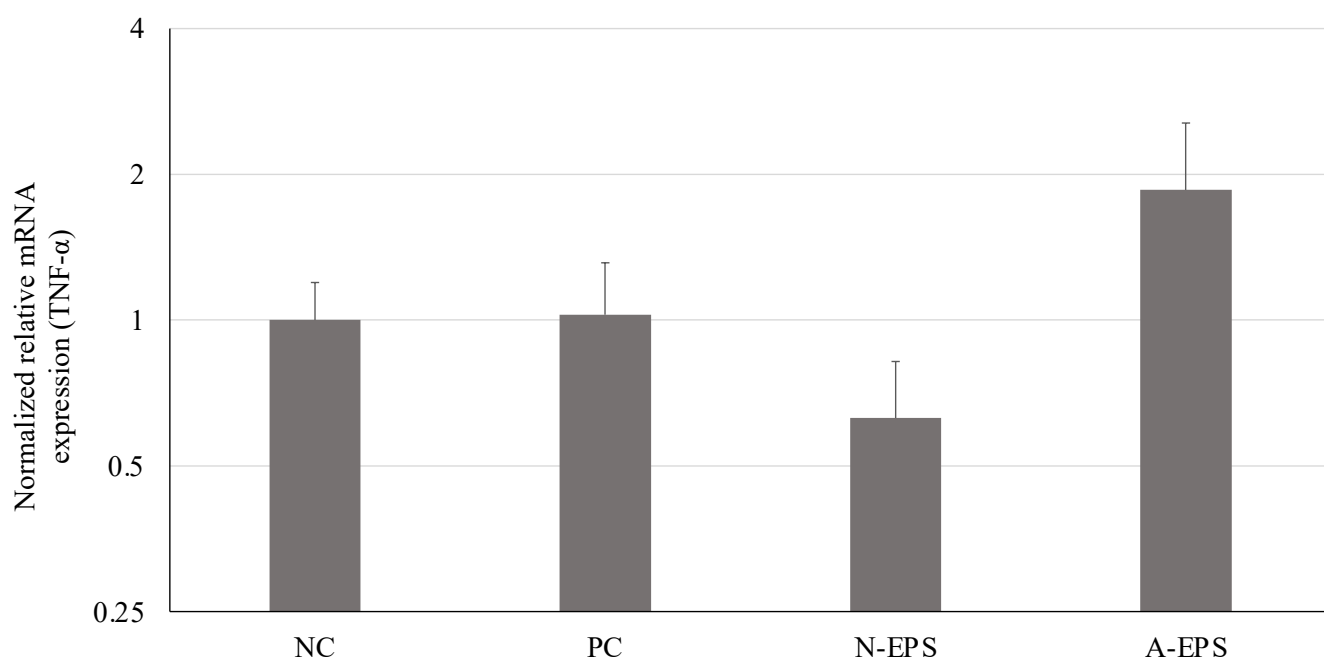


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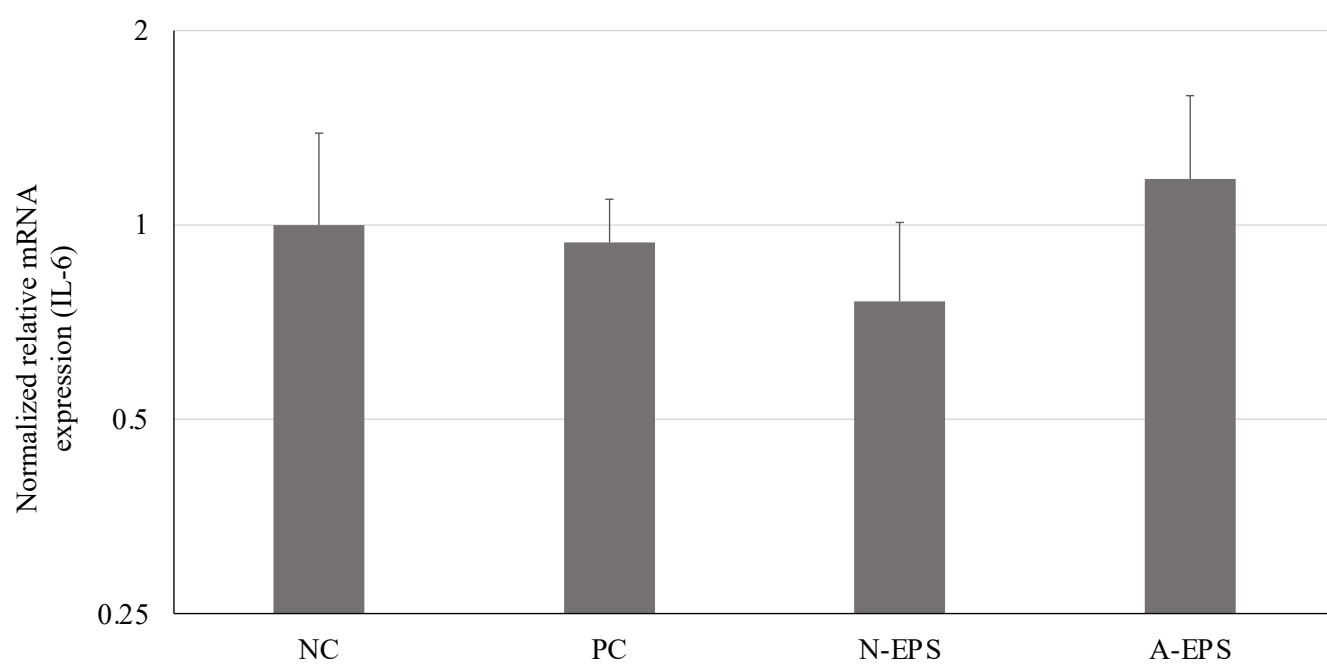




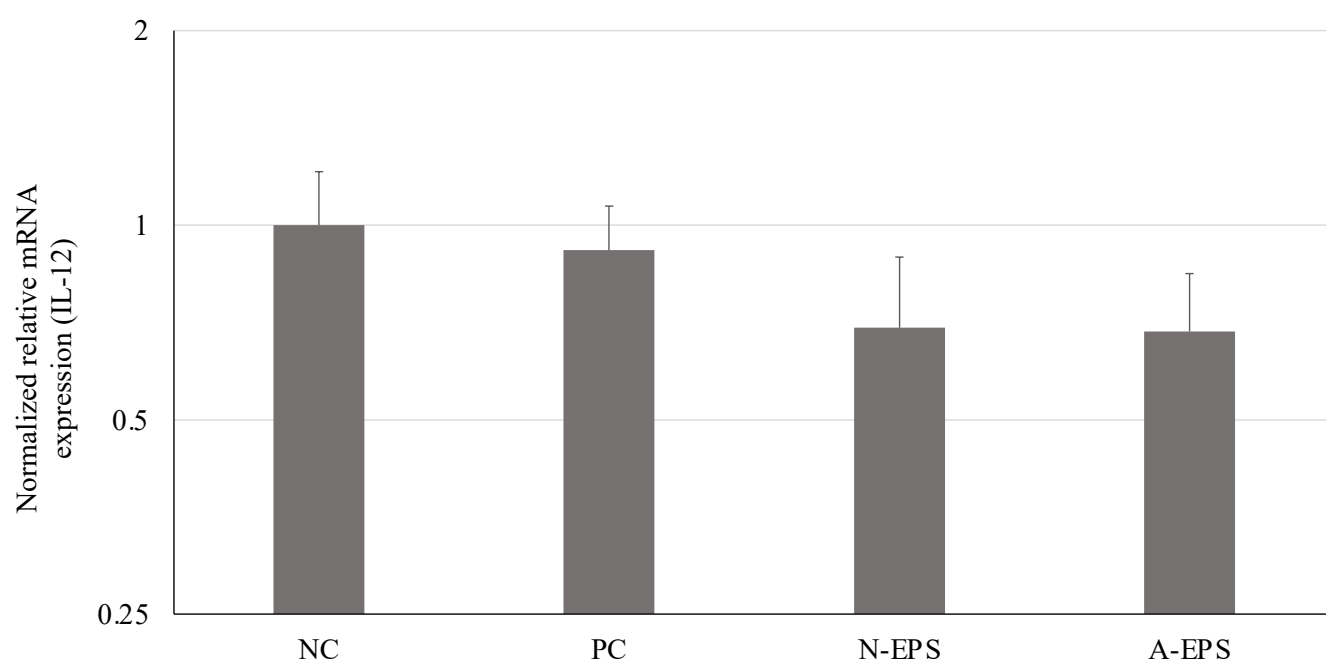
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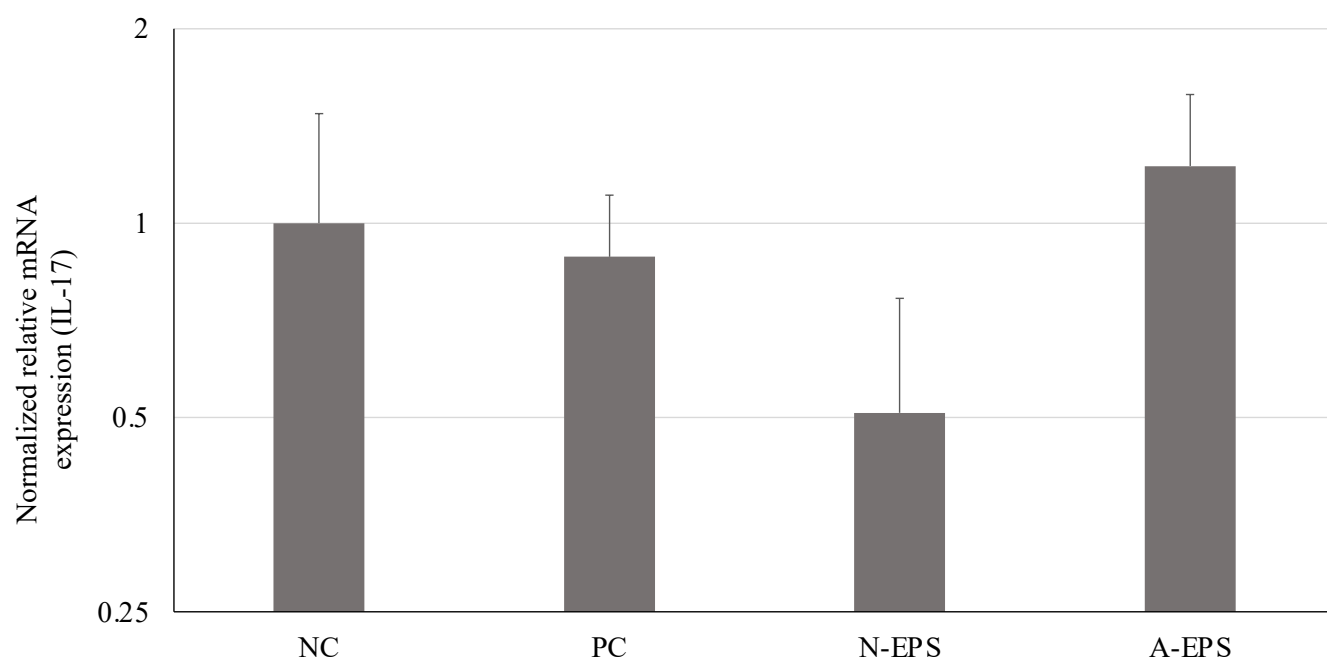
D



E



F



G

