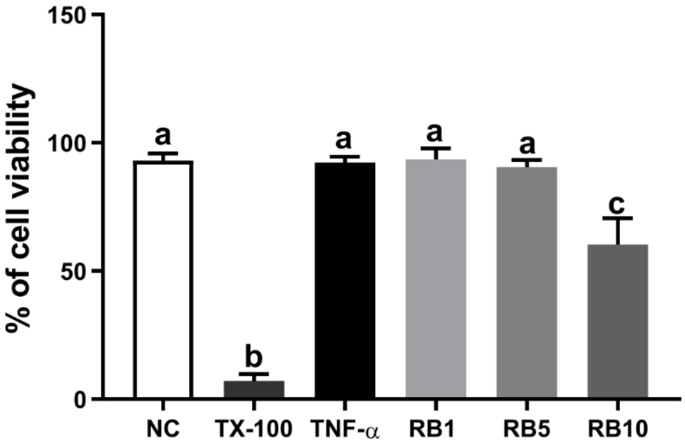
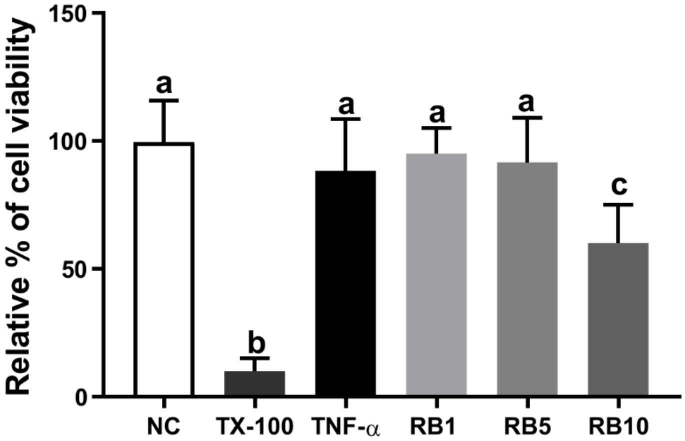
Supplementary Figure 1 (A-B). Effect of red raspberry on cell viability

1A



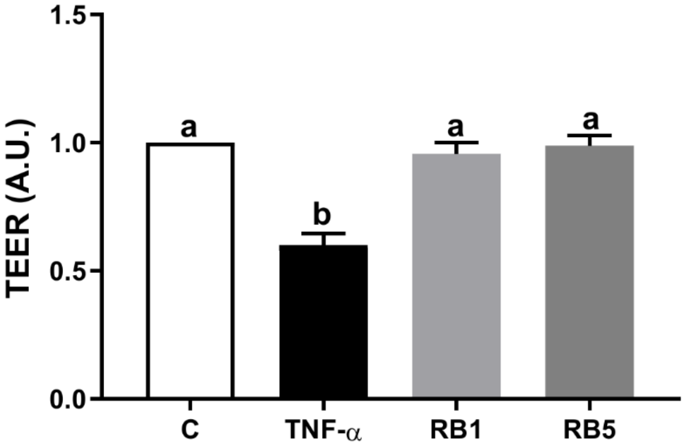
1B



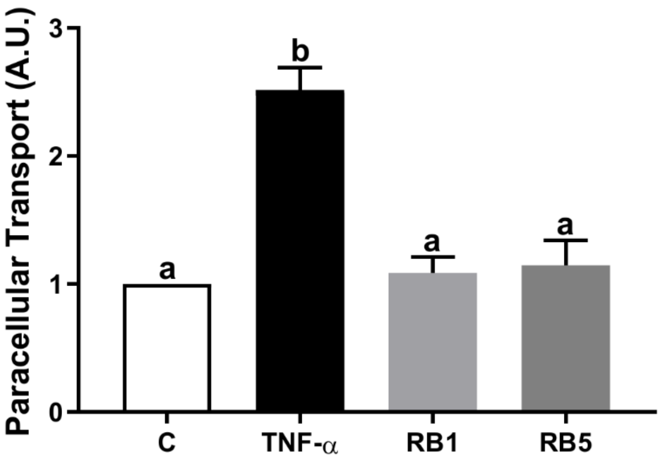
Supplementary Figure 1 (A-B) shows the effect of RB extract on cell viability assessed by trypan blue exclusion assay (1A) and MTT assay (1B). The data are expressed as the mean ± SD of % of viability for the trypan blue assay and relative % of viability for the MTT assays, derived from three independent experiments where every condition was tested in three-fold and six-fold, respectively. NC: negative control (without TNF-α); TX-100: TRITON-X 100® (positive control); TNF-α: tumor necrosis factor-alpha (10 ng/mL), RB1: red raspberry 1 mg/mL; RB5: red raspberry 5 mg/mL; RB10: red raspberry powder 10 mg/mL. Significant difference groups are denoted by different letters a,b,c ($p < 0.05$).

Supplementary Figure 2 (A-B). Effect of red raspberry on intestinal barrier integrity

2A



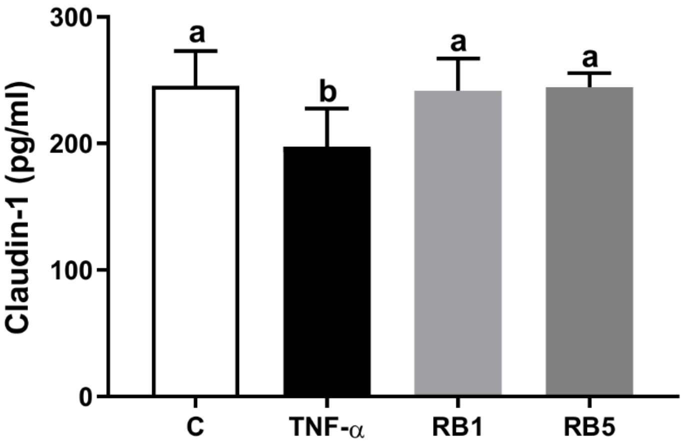
2B



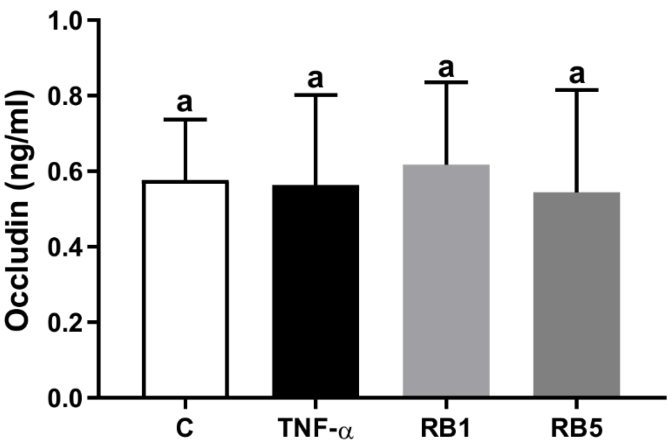
Supplementary Figure 2 (A-B). The impact of RB extracts on TEER (2A) and FITC-dextran (2B). The data presented are the mean ± SD of three independent experiments, with each condition tested in triplicate. NC: negative control (without TNF-α); TNF-α: tumor necrosis factor-alpha (10 ng/mL); RB1: red raspberry 1 mg/mL; RB5: red raspberry 5 mg/mL. Significant difference groups are denoted by different letters a,b ($p < 0.05$).

Supplementary Figure 3 (A-C). Effect of red raspberry on tight junction proteins

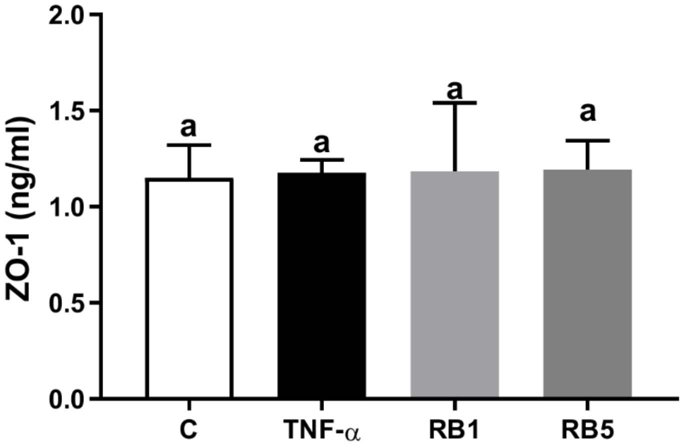
3A



3B



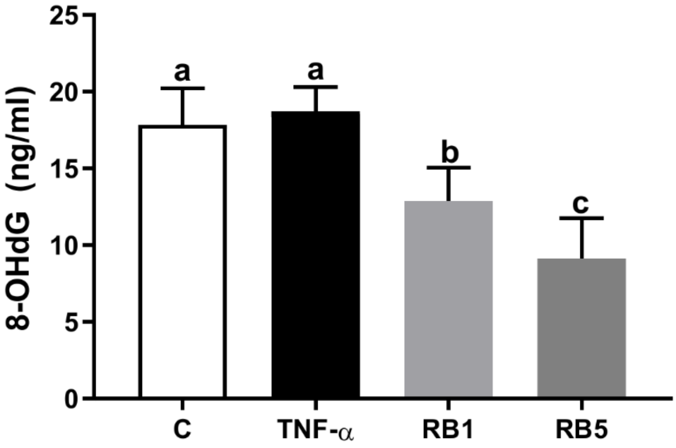
3C



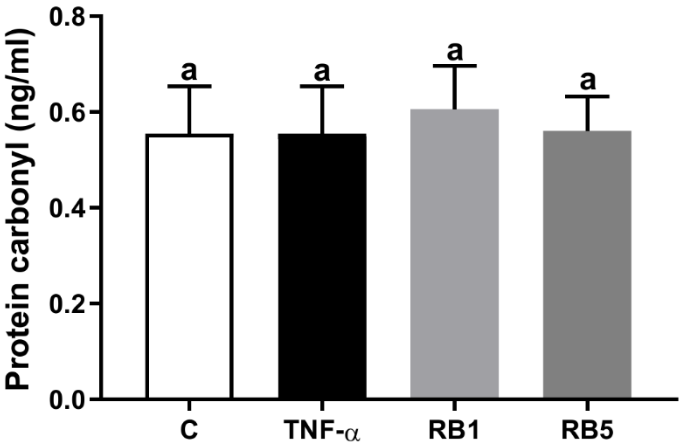
Supplementary Figure 3 (A-C). The impact of RB on the expression of claudin-1 (3A), occludin (3B), and zonula occludens (3C) proteins. The data presented are the mean ± SD of three independent experiments, with each condition tested in triplicate. ZO-1: zonula occludens, NC: negative control (without TNF-α); TNF-α: tumor necrosis factor-alpha (10 ng/mL); RB1: red raspberry 1 mg/mL; RB5: red raspberry 5 mg/mL. Significant difference groups are denoted by different letters a,b ($p < 0.05$).

Supplementary Figure 4 (A-B). Effect of red raspberry on oxidative stress markers

4A



4B



Supplementary Figure 4 (A-B). The impact of RB solutions on 8-OH-2-dG (4A) and protein carbonyl (4B). The data shown are the mean ± SD of three independent experiments, with each condition tested in triplicate. NC: negative control (without TNF-α); TNF-α: tumor necrosis factor-alpha (10 ng/mL); RB1: red raspberry 1 mg/mL; RB5: red raspberry 5 mg/mL. Significant differences are denoted by different letters a,b,c ($p < 0.05$).