

Supplementary figures

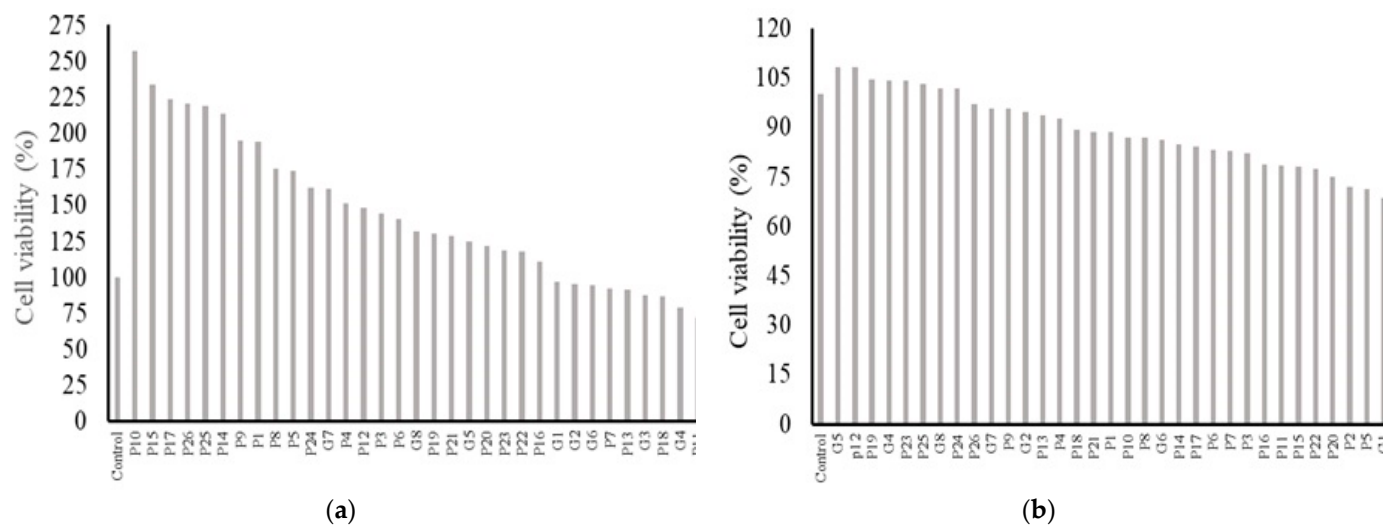
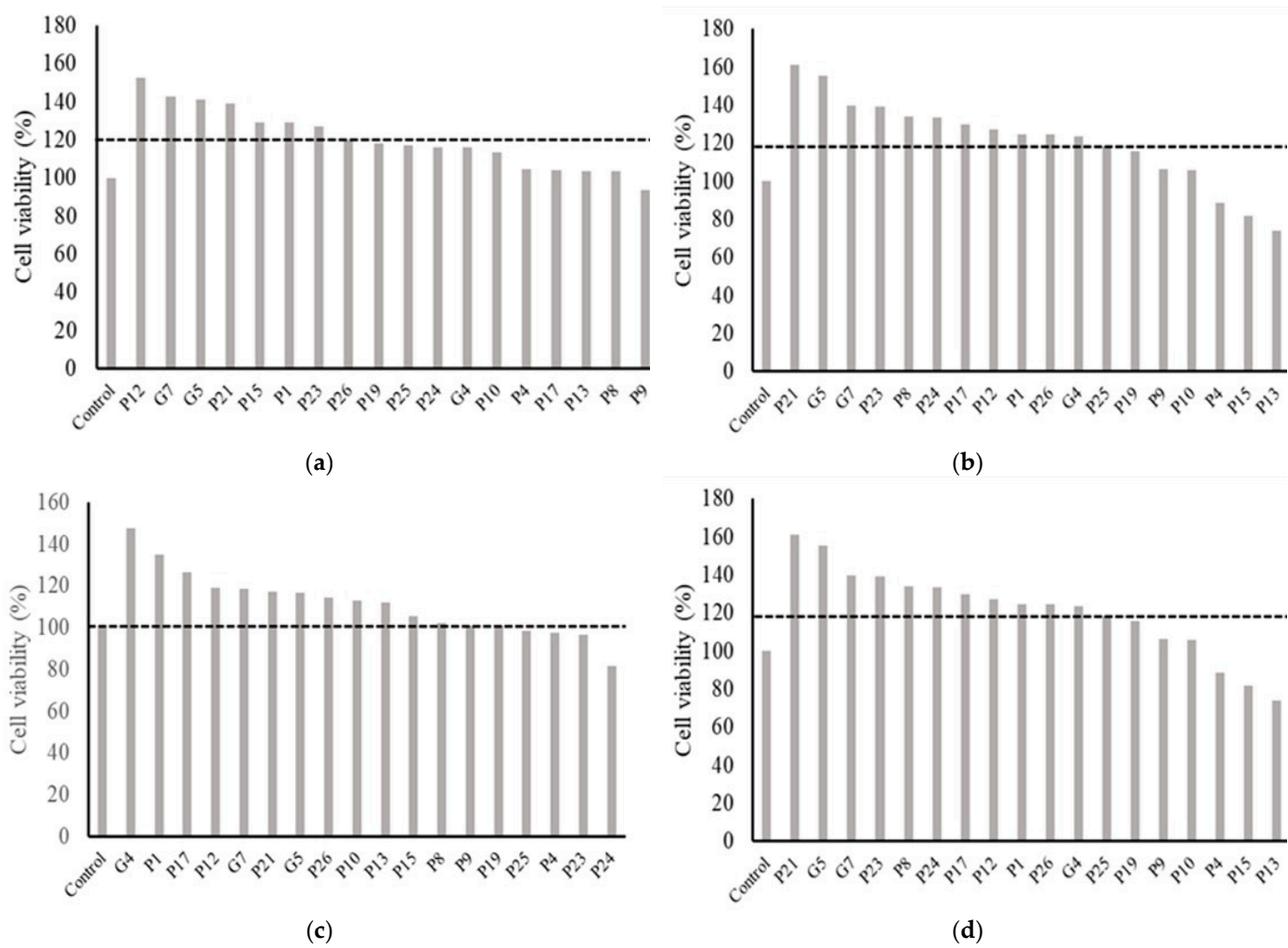
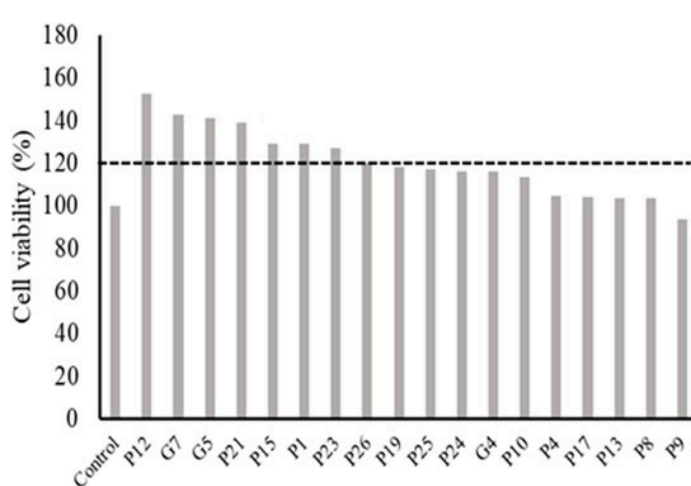
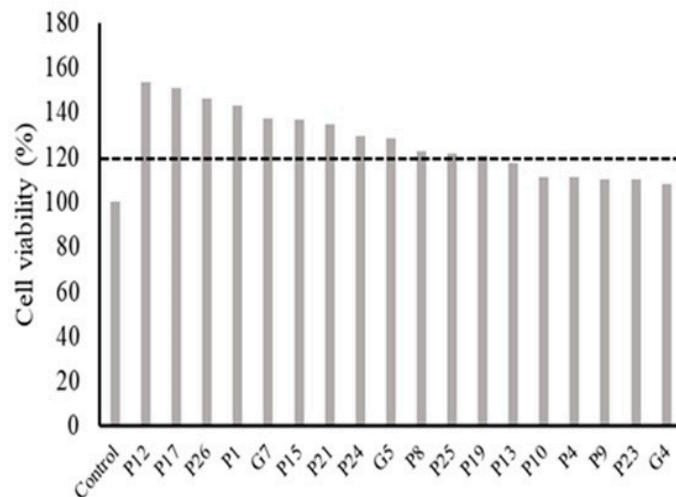


Figure S1. Preliminary screening of 34 potential cell-free supernatant (CFS) on improving cell viability of Caco-2 cells cultured in medium (a) with or (b) without 10% fetal bovine serum (FBS). Values represented mean \pm SD (n = 3).



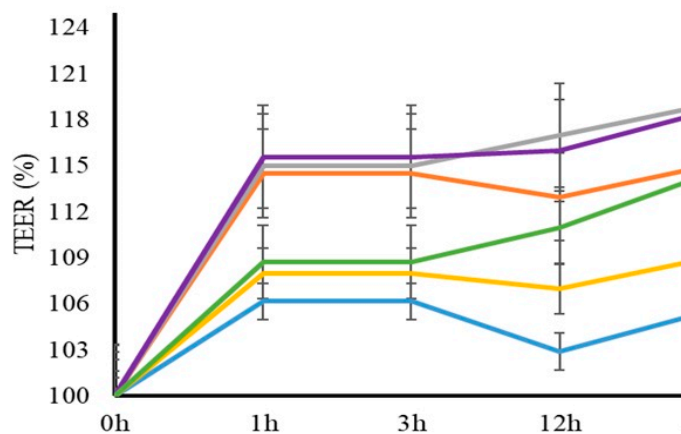


(e)

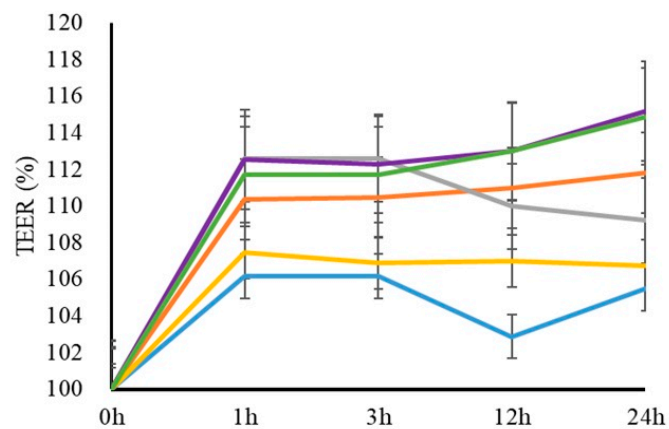


(f)

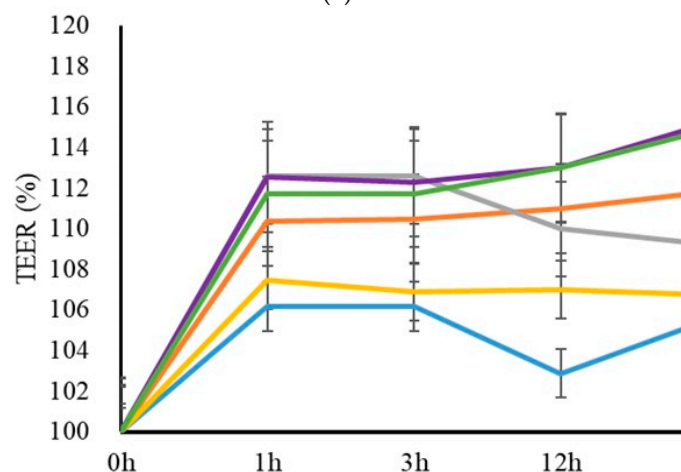
Figure S2. Effects of 18 different cell-free supernatants (CFS) on cell viability of Caco-2 cells. (a–c) 0.2%, 1% and 5% of CFS in cell culture with 10% FBS medium. (d–f) 0.2%, 1% and 5% of CFS in cell culture with serum-free medium. Values represented mean \pm SD (n = 3).



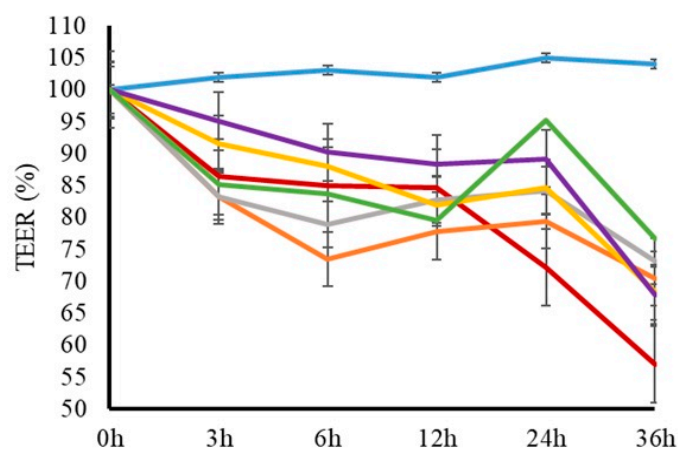
(a)



(b)



(c)



(d)

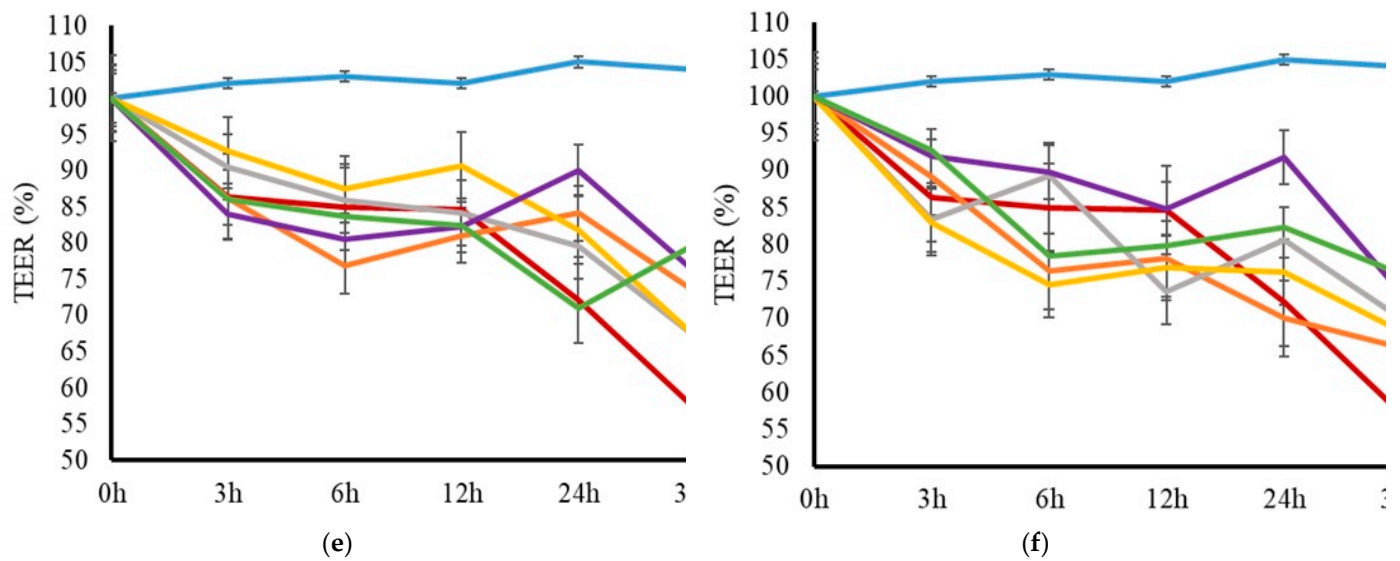


Figure S3. Effect of cell-free fermentation supernatants (CFS) on (transepithelial electrical resistance /TEER) of intestinal epithelial monolayer. (a–c) Cells were treated with PBS or 0.2%, 1%, and 5% CFS respectively at 0 h. TEER was measured and analyzed over 24h. (d–f) Cell were pre-treated with 3% DSS and then treated with PBS or concentration of 0.2%, 1%, and 5% CFS respectively at 0 h. TEER was measured and analyzed over 36 h. Values represented mean \pm SD (n = 3). Values represented mean \pm SD (n = 3).

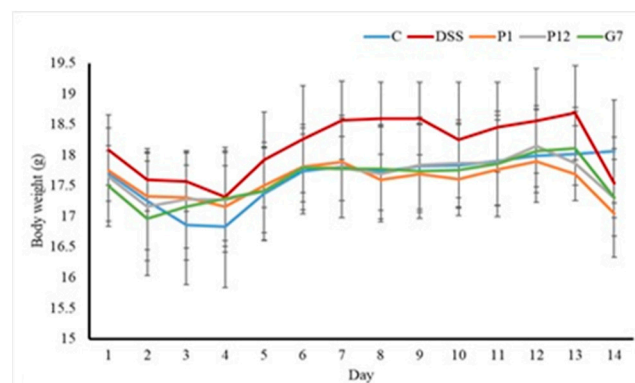
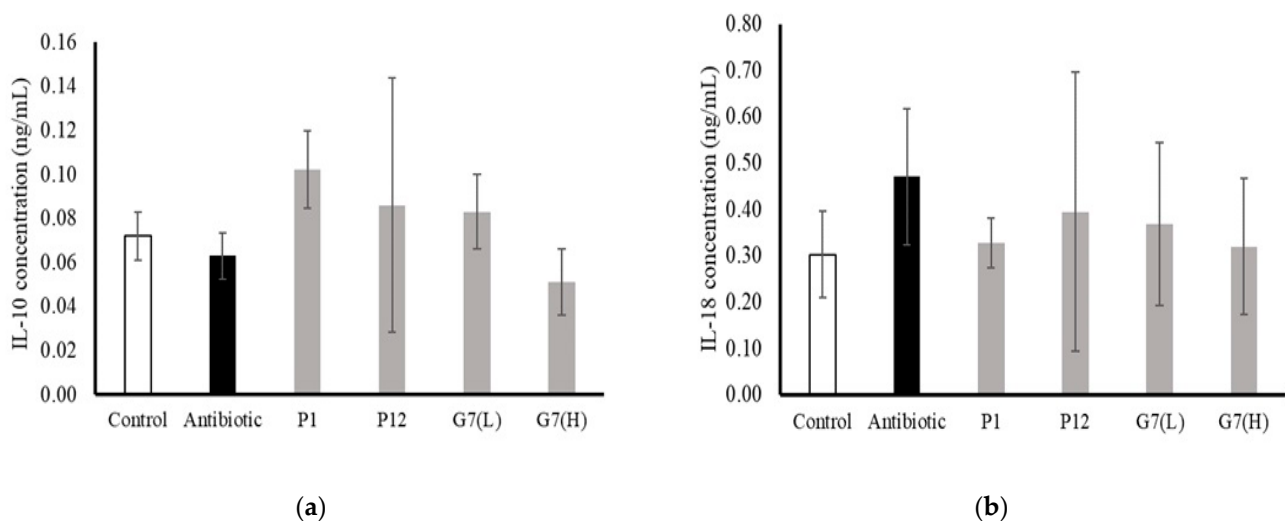


Figure S4. Effect of different cell-free fermentation supernatants (CFSs) on body weight changes in dextran sodium sulphate (DSS)-induced colitis mouse model. Results are expressed as mean \pm S.E.M. (n = 10). The different alphabetical superscripts are found statistically significant ($P < 0.05$).



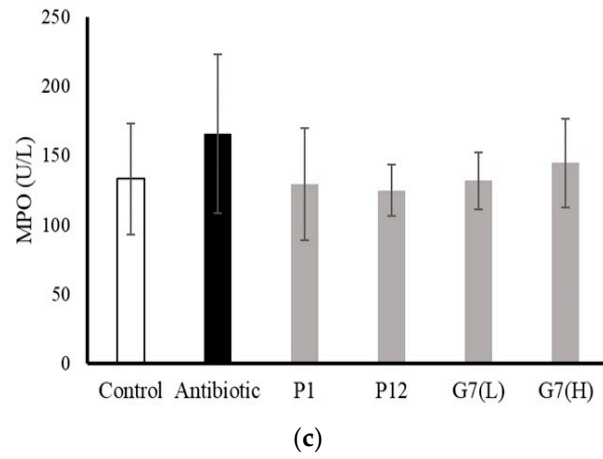


Figure S5. Effect of cell-free fermentation supernatants powder on serum cytokine concentration and MPO activity in weaned piglets. (a) IL-10, and (b) IL-18 (c) MPO activity. Values represented mean \pm SD (n = 8).