

A**Control****B*****Pediococcus pentosaceus* IM96**

Figure S1. Antibacterial experiment of *P. pentosaceus* IM96 *In vitro*. (A) MRS liquid medium; (B) CFS of *P. pentosaceus* IM96.

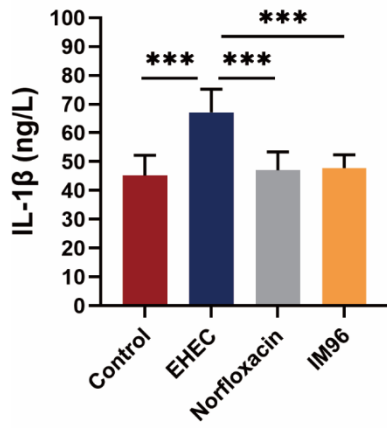
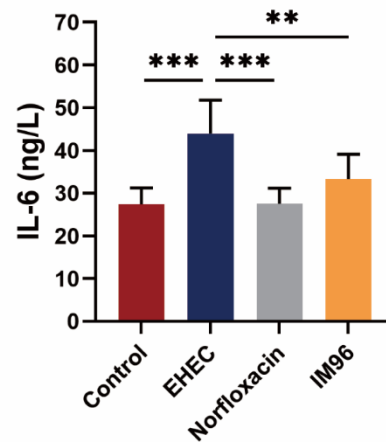
A**B**

Figure S2. *P. pentosaceus* IM96 relieved EHEC O157:H7-induced inflammation in serum of the mice. (A) IL-1 β ; (B) IL-6. All of the data are expressed as the mean \pm SD (n=8), ** $p < 0.01$, and *** $p < 0.001$.

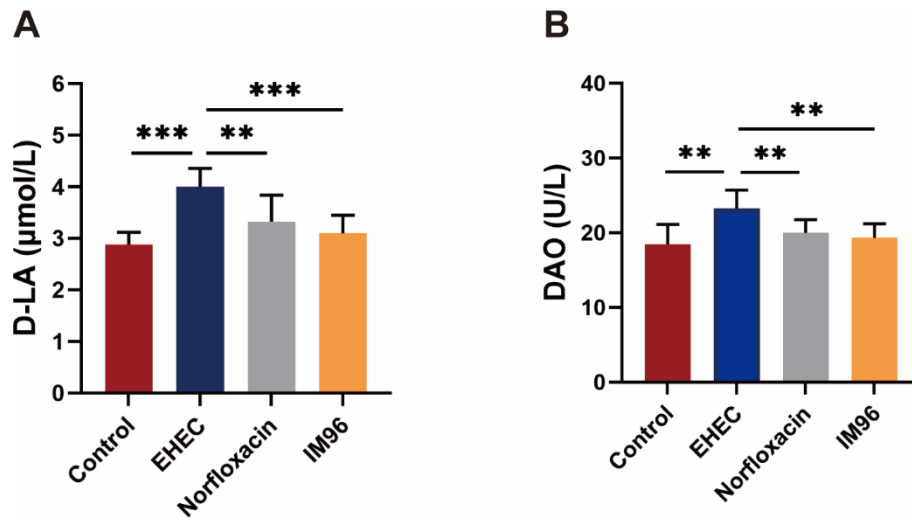


Figure S3. *P. pentosaceus* IM96 ameliorated the intestinal permeability disrupted by EHEC O157:H7. (A) D-LA; (B) DAO. All of the data are expressed as the mean \pm SD (n=8), ** $p < 0.01$, and *** $p < 0.001$.

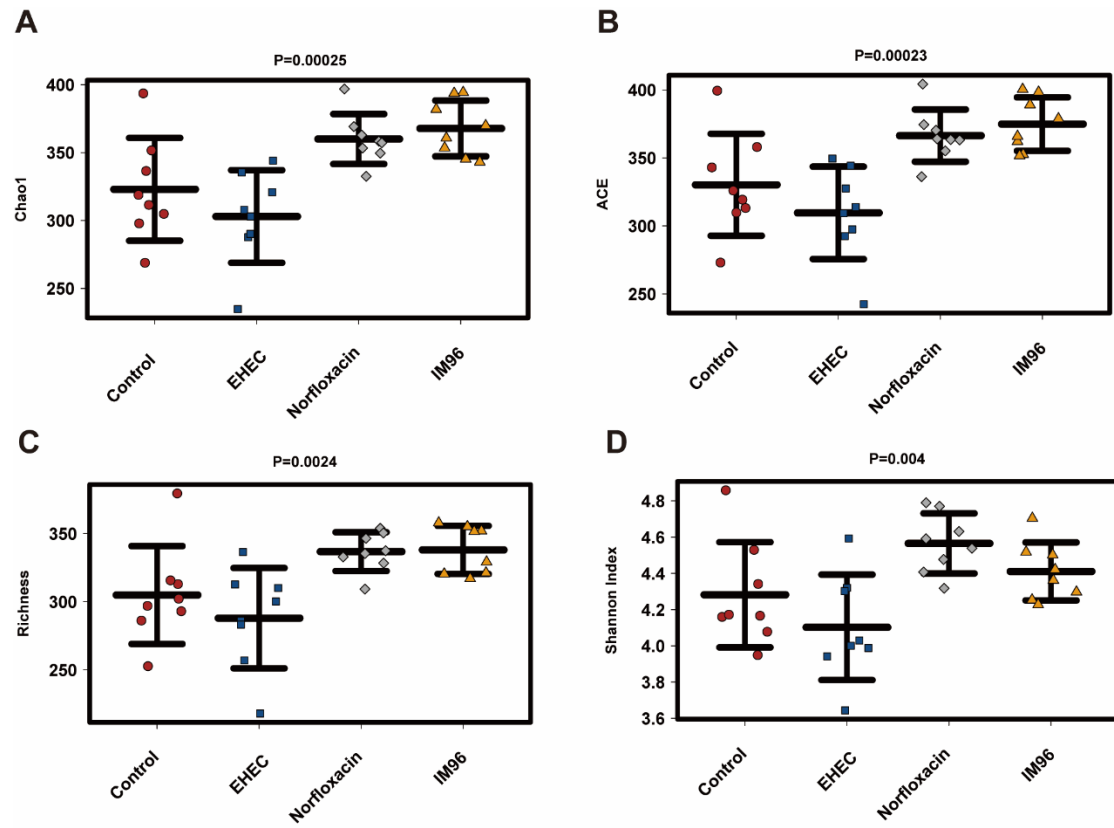


Figure S4. *P. pentosaceus* IM96 increased the alpha diversity of intestinal microbiota. (A) Chao1; (B) ACE; (C) Richness; (D) Shannon index.