Table S1 Primer sequences used for semi-quantitative RT-PCR analysis

Primer	Forward 5’-3’	Reverse 5’-3’
GAPDH	TGGAGAAACCTGCCAAGTATGA	TGGAAGAATGGGAGTTGCTGT
TNF-α	CTCATGCACCACCATCAAGG	ACCTGACCACTCTCCCTTTG
IL-1β	AGCTGGAGAGTGTGGATCCC	CCTGTCTTGGCCGAGGACTA
IL-6	CCACTTCACAAGTCGGAGGC	GGAGAGCATTGGAAATTGGGGT
IL-10	GCTCCAAGACCAAGGTGTCTACAA	CCGTTAGCTAAGATCCCTGGATCA
ZO-1	TGGGAACAGCACACAGTGAC	GCTGGCCCTCCTTTTAACAC
Claudin-1	AGCTGCCTGTTCCATGTACT	CTCCCATTTGTCTGCTGCTC
MUC2	GCTGACGAGTGGTTGGTGAATG	GATGAGGTGGCAGACAGGAGAC
Occludin	TGGCTATGGAGGCGGCTATGG	AAGGAAGCGATGAAGCAGAAGGC
GPR41	GTGACCATGGGGACAAGCTTC	CCCTGGCTGTAGGTTGCATT
GPR43	GGCTCCCTGCCAACCTGCTG	GTGCACAGGGGCAGGCTGAG

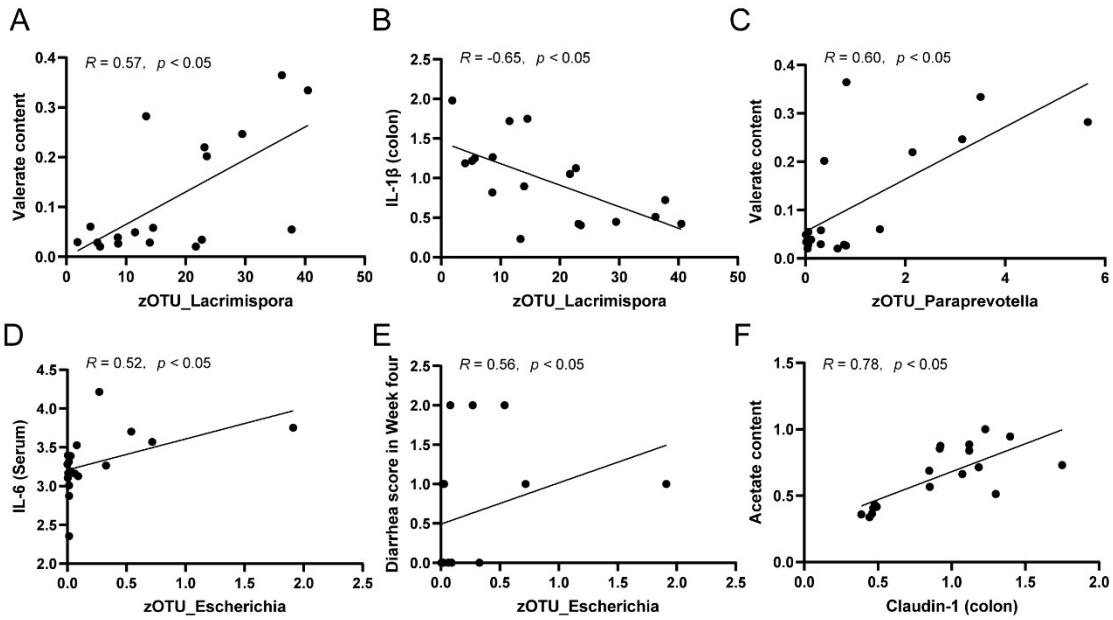

Figure S1 Correlation analysis between diarrhea index, gut microbiota, inflammation, and other biochemical indexes in EPEC-induced infant diarrhea.

(A) Correlation analysis between the abundance of *Lacrimispora* and the content of valerate in feces; (B) Correlation analysis between the abundance of *Lacrimispora* and the mRNA expression level of IL-1β in the colon; (C) Correlation analysis between the abundance of the abundance of *Paraprevotella* and the content of valerate in feces; (D) Correlation analysis between the abundance of *Escherichia* and the level of IL-6 in serum; (E) Correlation analysis between the abundance of *Escherichia* and the diarrhea score; (F) Correlation analysis between the mRNA expression level of Claudin-1 and the content of acetate in feces. Spearman's correlation analysis was performed by data of the CON group, EPEC group, and EPEC+2'-FL+LNnT group (n=6).