Supplementary figure captions

**SF.1 Effects of GABA on secretion of pro-inflammatory cytokines and cell cycle in ETEC-infected IPEC-J2 cells.** (A) Levels of IL-6, (B) IL-8, (C) IL-1β and (D) TNF-α (n=4). (E) Representative images of flow cytometry analysis for cell cycle (n=4). (F) Statistical analysis of cell count (%) (n=4). (G) Relative mRNA expression of Cyclin A1, (H) Cyclin B1, and (I) Cyclin D1 (n=4). Data are expressed as mean ± SD or SEM. Asterisks indicate statistically significantly differences as analyzed by one-way ANOVA (* P<0.05, ** P<0.01, *** P<0.001, **** P<0.0001).

**SF.2 Effects of GABA on growth performance and levels of serum pro-inflammatory cytokines in ETEC-infected piglets.** (A) ADG (n=6-8). (B) Feed:Gain ratio (n=6-8). (C) Levels of serum IL-6, (D) IL-8, (E) IL-1β and (F) TNF-α (n=6). Data are expressed as mean ± SD. Asterisks indicate statistically significantly differences as analyzed by one-way ANOVA (* P<0.05, ** P<0.01, *** P<0.001, **** P<0.0001).

**SF.3 A diagram for potential mechanism connecting to the autophagy pathway affected by GABA/ETEC treatment in this study.** Red: increase; Green: decrease; Grey: undetected; > promote; < inhibit.