

Figure S1. Tff2 expression in mouse tissues. (A) *Tff2* expression in the small intestine served as a control for relative quantification. *Tff2* expression was significantly upregulated in small intestinal polyps and the normal stomach compared to the small intestine (\*\* $P < 0.0001$ ; one-way analysis of variance and Dunnett's multiple comparisons test,  $n = 3$ ). (B) Western blot analysis of mouse tissue extracts; (a) Tff2 antibody and (b) Gapdh antibody; each lane was loaded with 50  $\mu\text{g}$  of protein extracted from the respective tissues, including the small intestine, colon, stomach, and intestinal polyps. Three mice were used in this study. Tff2, trefoil factor family member 2; Gapdh, glyceraldehyde-3-phosphate dehydrogenase.

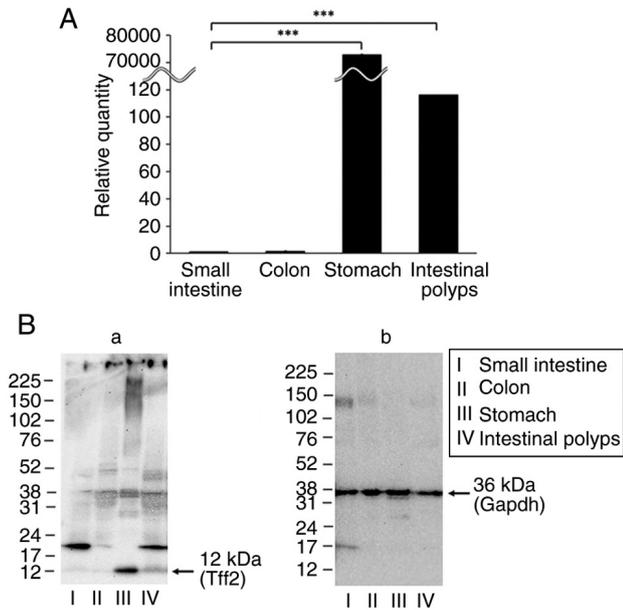


Figure S2. Validation of immunostaining with the TFF2 antibody was performed by transiently transfecting DLD-1 cells with *pcDNA 3.1/c-(K)-DYK-TFF2* (human *TFF2*) at pH 7.4. Additionally, mock cells were prepared by transiently transfecting DLD-1 cells with *pcDNA 3.1/c-(K)-DYK* (empty vector). P-values were calculated using relative quantification values via the nonparametric Mann-Whitney U test. (A) Relative comparisons using reverse transcription-quantitative polymerase chain reaction; *TFF2* expression in untransfected DLD-1 cells served as a control for relative quantification, with *GAPDH* as the reference gene. *TFF2* expression exhibited significant differences between mock or *hTFF2* transfected cells and untransfected cells as a control (\*\* $P < 0.0001$ ). Each assay was conducted in quadruplicate, and the bar and error bar represent the mean and standard error (SE), respectively. (B) Immunohistochemistry against TFF2; (a) to mitigate false positives or nonspecific binding, we omitted the primary antibodies and considered them as negative controls. (b) Images of DLD-1 cells in the presence of the TFF2 primary antibody. Cells were observed under x100 magnification (scale bar=10  $\mu\text{m}$ ). (C) Quantification of TFF2-specific DAB staining. (a) and (b) refer to those shown in (B). Quantification of DAB staining was performed using the ImageJ software, utilizing images from four different fields of view ( $P < 0.05$ ). TFF2, trefoil factor family member 2.

