Supporting Information

Goodwin et al. 10.1073/pnas.1010203108

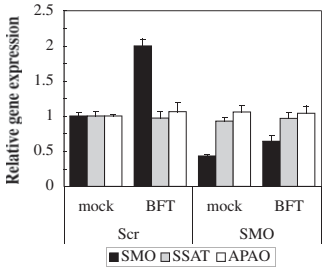

Fig. S1. *Bacteroides fragilis* toxin (BFT) effect on control and spermine oxidase (SMO) knockdown T84 cells. A lentiviral system was used to generate stable control (Scr) and SMO knockdown (SMO) T84 cell lines. The Scr cell line retained its SMO induction in response to BFT, whereas moderate reduction in SMO expression was achieved in the knockdown line. BFT has no effect on spermidine/spermine-N^1-acetyltransferase (SSAT) or N^1-acetylpolyamine oxidase (APAO) gene expression.

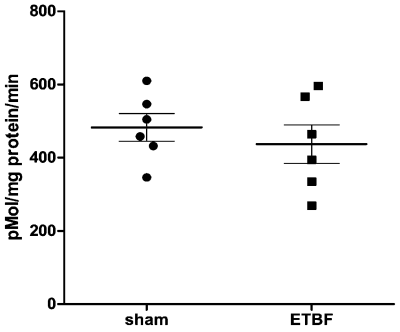

Fig. S2. Bacterium enterotoxigenic *Bacteroides fragilis* (ETBF) infection does not induce SSAT enzyme activity. C57BL/6 mice were inoculated with ETBF and killed after 5 d, a time point associated with robust induction of SMO. SSAT enzymatic activity assay was performed on flash-frozen cecum tissue from six mice each from the sham and ETBF groups.

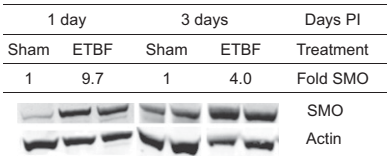

Fig. S3. SMO expression is elevated in cecum nuclear extracts from ETBF-infected mice. C57BL/6 mice were inoculated with ETBF, killed at the indicated time points, and nuclear extracts were prepared from cecum tissue as described (1). SMO protein levels, normalized to β-actin, were determined using quantitative fluorescent Western blotting as described in *Materials and Methods*.

1. Wu S, et al. (2009) A human colonic commensal promotes colon tumorigenesis via activation of T helper type 17 T cell responses. *Nat Med* 15:1016e1022.

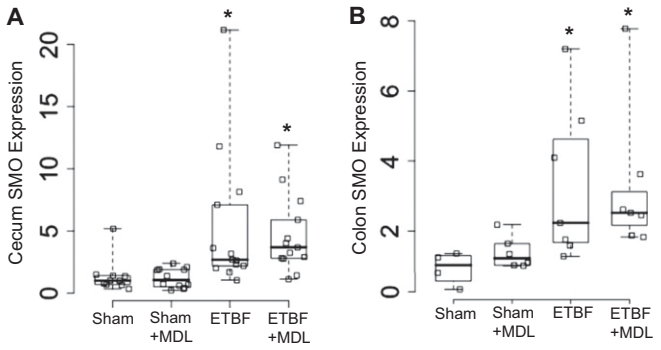

Fig. S4. ETBF induces *Smo* gene expression in cecum and colon tissues of C57BL/6 mice. C57BL/6 mice were sham or ETBF inoculated for 1 wk before sacrifice and *Smo* gene expression was measured by qRT-PCR was performed as described in *Materials and Methods*. Plot whiskers indicate lower and upper limits of dataset; boxes are bounded by first and third quartiles of data; and heavy lines denote median *Smo* expression (median of sham group was set at 1). Relative gene expression in cecum (*A*, 10–13 mice per group from two independent experiments) and colon (*B*, 4–8 mice per group from two independent experiments) tissues for each mouse is plotted as an open box. ETBF-infected groups exhibited 2.2- to 3.7-fold increases in *Smo* expression compared with sham (*$P < 0.05$ vs. sham group by Mann–Whitney–Wilcoxon *u* test).

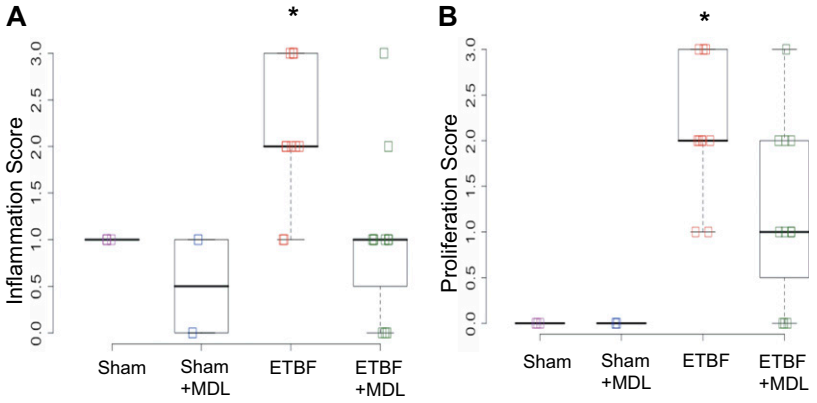

Fig. S5. Effect of MDL 72527 on ETBF-induced inflammation and proliferation. Min mice were sham or ETBF inoculated and killed after 6 wk (n = 5–11 per group). H&E-stained intestinal tissue was scored as described in *Materials and Methods* and differences in median scores between groups were evaluated by Mann–Whitney–Wilcoxon *u* test. *$P < 0.05$ vs. sham, sham+MDL, and ETBF+MDL.