



**Fig. S7. Increased abundance of *Mucispirillum* in inflamed colonic areas in *Nod2*<sup>-/-</sup>*Cybb*<sup>-/-</sup> mice.** (A) Representative images of colonic sections before (left panels) and after (right panels) laser microdissection. Red lines indicate inflamed areas, while green lines show uninflamed areas. Two representative mice are shown. (B) The presence of *Mucispirillum* in laser-captured colonic not-inflamed (NI) and inflamed (I) areas from 4 week-old Tac-DKO mice was quantified and normalized to GAPDH expression. Data are mean ± SEM of at least 4 individual mice; data are pooled from two independent experiments. \*\*P=0.0040 by Two-tailed Mann-Whitney test. (C and D) Presence of *Mucispirillum* in spleen (C) and liver (D) harvested from 4-week old Tac-

DKO I (n=5), Tac-DKO NI (n=5), Jax-DKO (n=5), Tac-WT (n=5), Jax-WT (n=5), Tac-*Nod2*<sup>-/-</sup> (n=4) and Tac-*Cybb*<sup>-/-</sup> (n=4). Results were normalized to GAPDH expression. Feces from Tac-DKO mice were utilized as positive control for the presence of *Mucispirillum*. Results are mean ± SEM. Data pooled from five independent experiments. \*\*\*\*P<0.0001 by One-way ANOVA followed by Tukey's multiple comparisons test.