1	Host-derived fecal microRNAs can indicate gut microbiota healthiness and ability to
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26 FIGURE LEGENDS

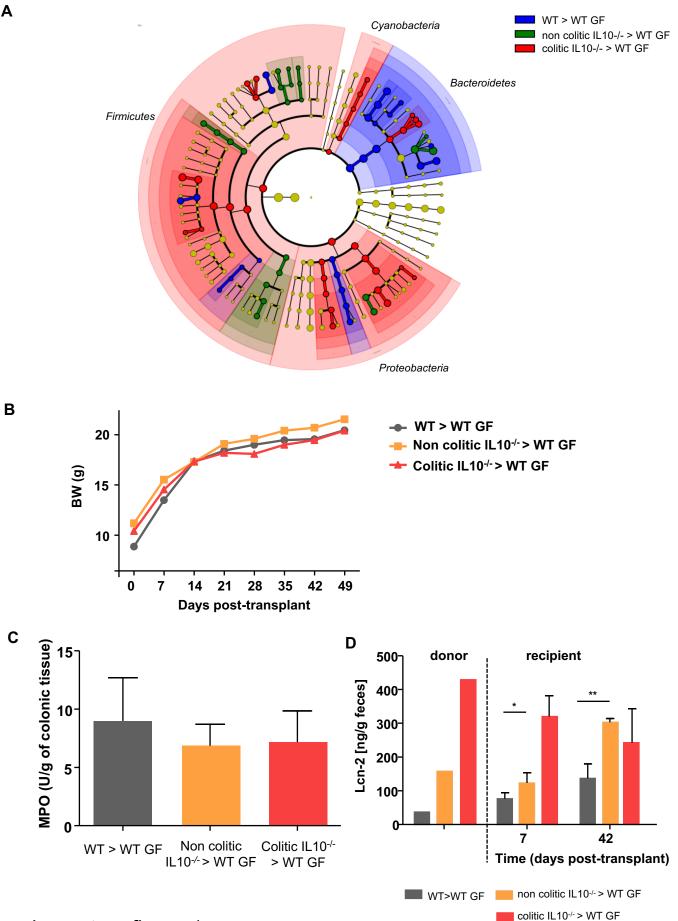
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Figure S1: Microbiota and inflammation in WT or IL10^{-/-} microbiota-conventionalized mice. 28 Three-weeks old male and female GF C57BL/6 mice were conventionalized via microbiota 29 transplant from single WT, non-colitic IL10^{-/-} or colitic IL10^{-/-} female donor mice. A, LEfSe (LDA 30 31 Effect Size) was used to investigate bacterial members that drive the differences in the fecal microbiota of WT, non-colitic IL10^{-/-} and colitic IL10^{-/-}. Taxonomic cladogram obtained from 32 33 LEfSe analysis of fecal 16S rRNA gene sequencing results, highlighting taxa found to be significantly altered between groups at D42. Blue: taxa enriched in the microbiota of WT 34 microbiota recipient mice, Green: taxa enriched in the microbiota of non colitic IL10-/- microbiota 35 recipient mice and red: taxa enriched in the microbiota of colitic IL10-/- microbiota recipient mice. 36 37 The brightness of each dot is proportional to its effect size (LDA score > 2.0). **B**, Body weight of conventionalized mice from transplant to euthanasia at D49. C, Colonic MPO levels at D49. D, 38 Levels of fecal lipocalin-2 (LCN-2) were monitored by ELISA. Data are presented as the means \pm 39 SEM (n=5 per group). Significance was determined by two-way ANOVA followed by Bonferroni 40 post-hoc test. **, p<0.01; *, p<0.05. 41

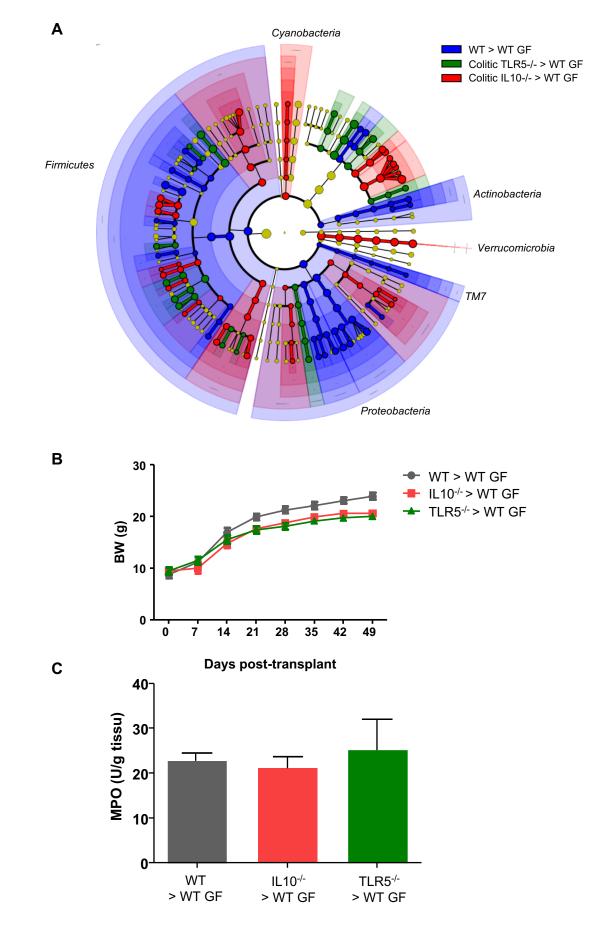
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Figure S2: Microbiota and inflammatory in WT or colitic IL10^{-/-} or TLR5^{-/-} microbiota-43 conventionalized mice. Three-weeks old male and female GF C57BL/6 mice were 44 conventionalized via microbiota transplant from single WT, colitic IL10^{-/-} or TLR5^{-/-} female donor 45 mice. B, LEfSe (LDA Effect Size) was used to investigate bacterial members that drive the 46 differences in the fecal microbiota of WT, IL10^{-/-} and TLR5^{-/-}. Taxonomic cladogram obtained 47 from LEfSe analysis of fecal 16S rRNA gene sequencing results, highlighting taxa found to be 48 significantly between groups at D42. Blue: taxa enriched in the microbiota of WT microbiota 49 50 recipient mice, Green: taxa enriched in the microbiota of colitic IL10-/- microbiota recipient mice and red: taxa enriched in the microbiota of colitic TLR5-/- microbiota recipient mice. The 51 brightness of each dot is proportional to its effect size (LDA score > 2.0). **B.** Body weight of 52 conventionalized mice from transplant to euthanasia at D49. C, Colonic MPO levels at day 49. 53 54 Data are presented as the means \pm SEM (n=5-8 per group). Significance was determined by twoway ANOVA. 55

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Supplementary figure 1



Supplementary figure 2