

Supplemental Material

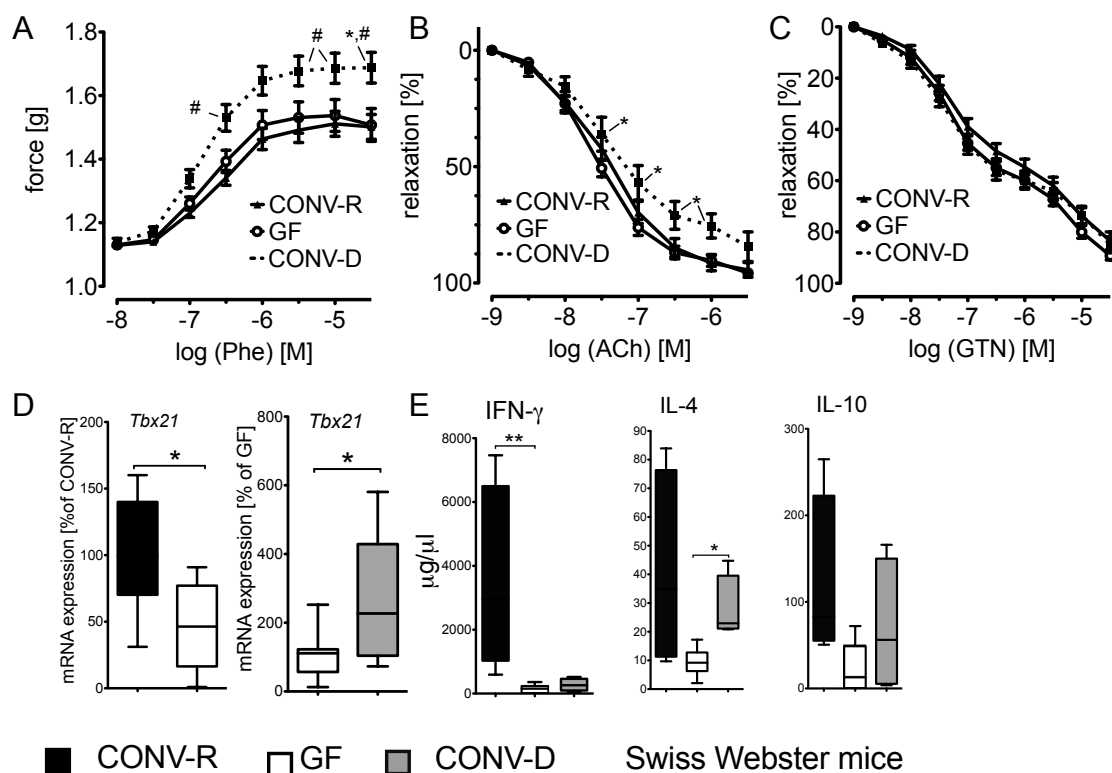


Figure S1: Vascular function in mice in the presence and absence of gut microbiota. **A-C**, Force evoked by aortic rings of GF, CONV-R and CONV-D mice following incubation with phenylephrine (vascular constriction, A) and vascular relaxation curves of aortas of GF, CONV-R and CONV-D mice following incubation with acetylcholine, ACh (endothelium-dependent vasorelaxation, B) and glyceryl trinitrate, NO (endothelium-independent vasorelaxation, C) are shown. In contrast to vascular constriction and endothelial function, smooth muscle dependent relaxation was unaffected by recolonization (Fig. 1C). Cumulative curves were analyzed by 2way-ANOVA and the maximal aortic evoked force was analyzed by 1-way ANOVA with Bonferroni post-hoc test, n=8-15 aortic rings per group. *, p<0.05 vs. GF; #, p<0.05 vs. CONV-R. **D**, *Tbx21* mRNA expression in CD4⁺ splenocytes of GF, CONV-

R and CONV-D mice given as percentage of CONV-R mice (left graph) and of GF mice (right graph). Student's t-test, n=5-8 per group (left) and Mann Whitney test, n=16 per group (right). **E**, ELISA of the serum for IFN- γ , IL-4 and IL-10 detection, Kruskal-Wallis test with Dunn's multiple comparison, n=4-6 mice per group.

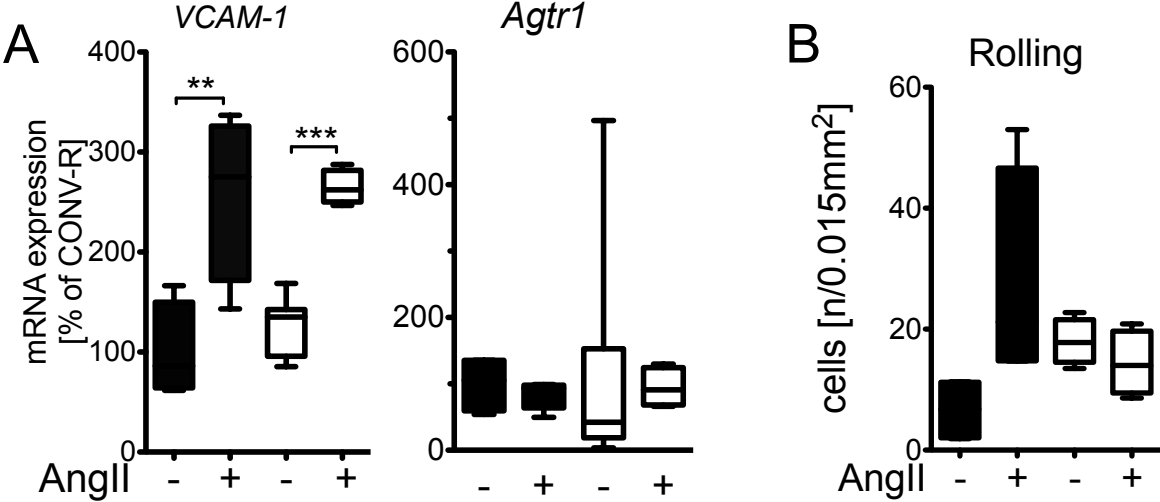


Figure S2: A, Aortic VCAM-1 and Agtr1 mRNA expression. Kruskal-Wallis test with Dunn's multiple comparison test, n=4-12 mice per group. **B**, Leukocyte rolling assessed by intravital videomicroscopy imaging of the carotid arteries. n=3-4 mice per group.