

Figure S12: Antibiotic Treatment ameliorates the severity of acute pancreatitis in mice. (A) Stacked bar graph illustrating changes of the microbiota composition in duodenal samples of DEREG mice with AP +/- antibiotic and DT treatment. (B) We analysed bacterial load by 16S rRNA gene RT-qPCR analysis of isolated DNA from duodenal samples. Decreased Ct values indicate a higher bacterial load in the duodenum of mice with AP. Antibiotic treatment (+AB) significantly reduced the copy number of bacterial 16S rRNA gene in the duodenum of mice. (C) 16S rRNA gene sequencing analysis of duodenal samples from mice +/- treatment with antibiotics showed a reduction of bacterial 16S RNA gene sequences in all samples of antibiotic-treated animals. A stacked bar graph illustrates the number of reads for the most abundant taxa in the samples and shows a nearly complete reduction of facultative pathogens such as Escherichia/Shigella, Enterococcus, Klebsiella and Enterobacteriaceae. On the other hand, commensal bacteria like Lactobacillus were not affected by antibiotic treatment. (D) Histological scoring of pancreatic tissue for oedema, necrosis and inflammation showed a significant reduction of necrotic areas in animals with a depletion of Tregs or a treatment with antibiotics, while oedema and infiltration were not significantly affected. Statistical significance was determined by ANOVA test followed by a Bonferroni correction for multiple comparisons test, significance levels of p<0.05 are marked by an asterisk.