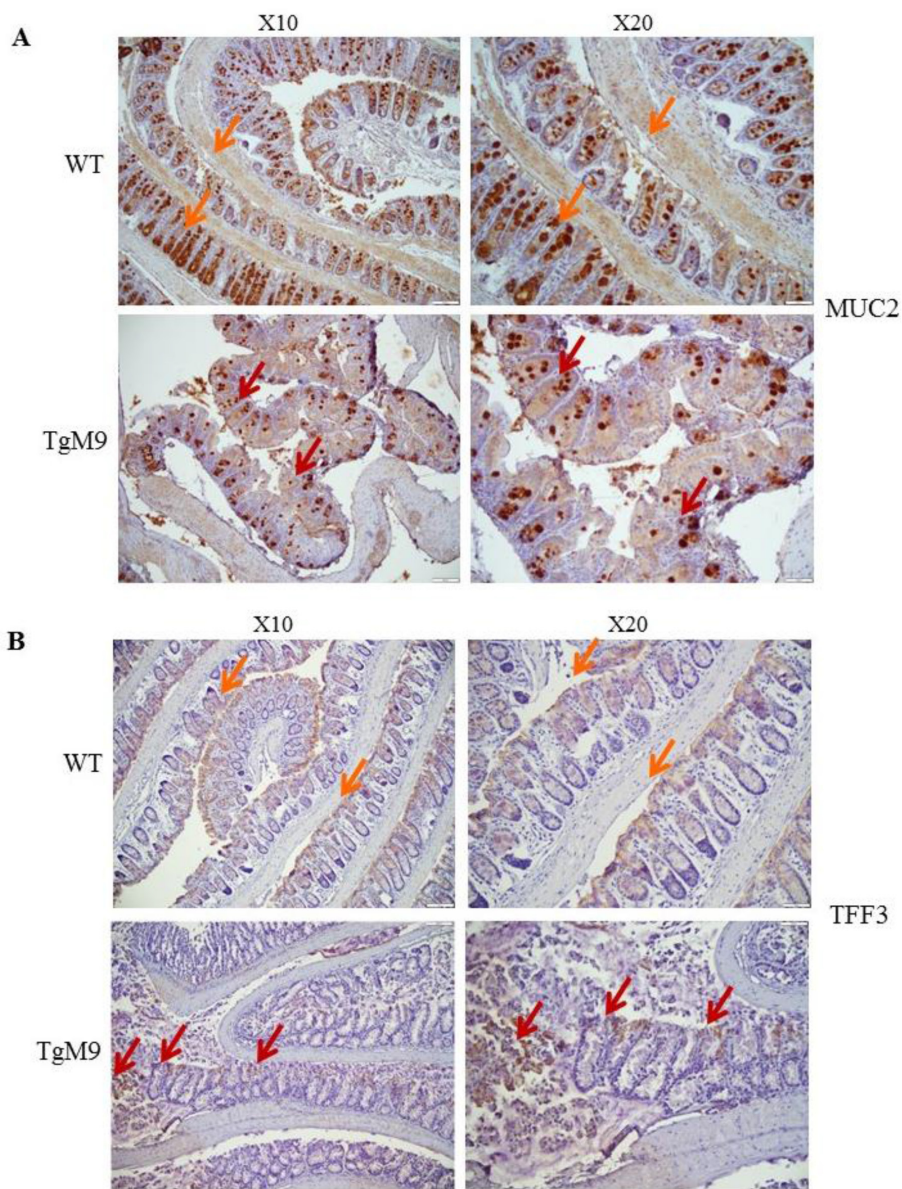


Matrix metalloproteinase MMP9 maintains epithelial barrier function and preserves mucosal lining in colitis associated cancer

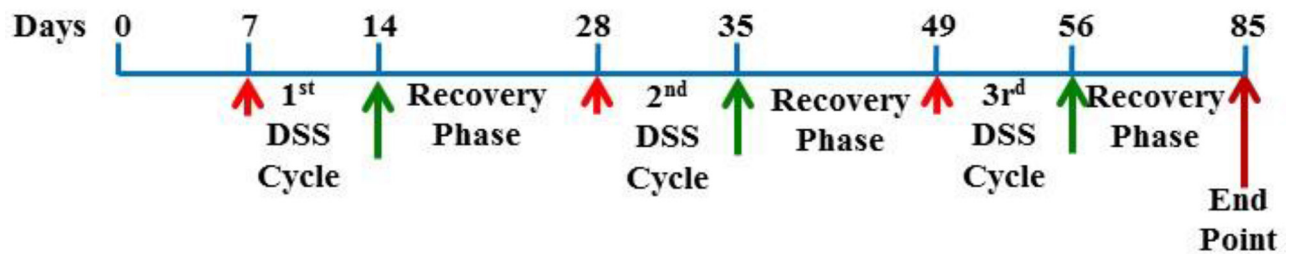
SUPPLEMENTARY MATERIALS



Supplementary Figure 1: MUC2 and TFF3 expressions in TgM9 mice and WTs without CAC. Immunostaining of the Swiss roll of the colons of TgM9 and WT mice (n=10 each group) with (A) anti-MUC2; (B) anti-TFF3. Red arrows indicate brown staining among TgM9 mice and orange arrows indicate brown staining among WT littermates exposed to water/ without CAC. Images are representative of two experiments.

Supplementary Table 1: Sequences of the QPCR primers used in the study

Gene	Forward (5'-3')	Reverse (5'-3')
<i>Firmicutes</i>	GGCAGCAGTRGGGAATCTTC	ACACYTAGYACTCATCGTT
<i>Bacteroidetes</i>	GGARCATGTGGTTTAATTCGATGAT	AGCTGACGACAACCATGCAG
<i>A. Muciniphila</i>	CAGCACGTGAAGGTGGGGAC	CCTTGCGGTTGGCTTCAGAT
<i>Reg3-a</i>	GGCACCGAGCCCAATG	GGATTTCTCTCCCATGCAAAGT
<i>Reg3-b</i>	ATACCCTCCGCACGCATTAGTT	AGG CCAGTTCTG CATCAAACCA
<i>Reg3-g</i>	TTCCTGTCCTCCATGATCAAAA	CATCCACCTCTGTTGGGTTCA
<i>S100A8</i>	CATCCACCTCTGTTGGGTTCA	CATCCACCTCTGTTGGGTTCA
<i>IL-22</i>	GTCAACCGCACCTTTATGCT	GTTGAGCACCTGCTTCATCA
<i>IL-6</i>	ACAAGTCGGAGGCTTAATTACACAT	TTGCCATTGCACAACCTCTTTTC
<i>IL-1β</i>	TCGCTCAGGGTCACAAGAAA	CATCAGAGGCAAGGAGGAAAAAC
<i>TNF-α</i>	AGGCTGCCCCGACTACGT	GACTTTCTCCTGGTATGAGATAGCAAA
<i>IFN γ</i>	CAGCAACAGCAAGGCGAAA	CTGGACCTGTGGGTTGTTGAC
<i>16s rRNA</i>	AGAGTTTGATCCTGGCTCAG	CTGCTGCCTCCCGTAGGAGT



Supplementary Figure 2: Schematic of CAC model used for the study. CAC was induced by three cycles of DSS (1 week long). Each DSS cycle was followed by two weeks of recovery cycle. End point of the experiment was day 85. Red arrows represent the start point of DSS cycle and green arrows represent the start point of recovery cycle.