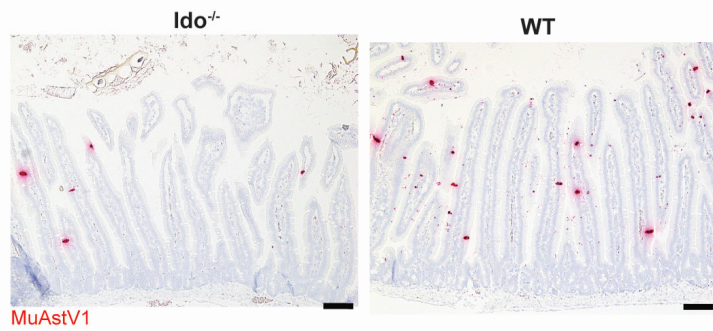
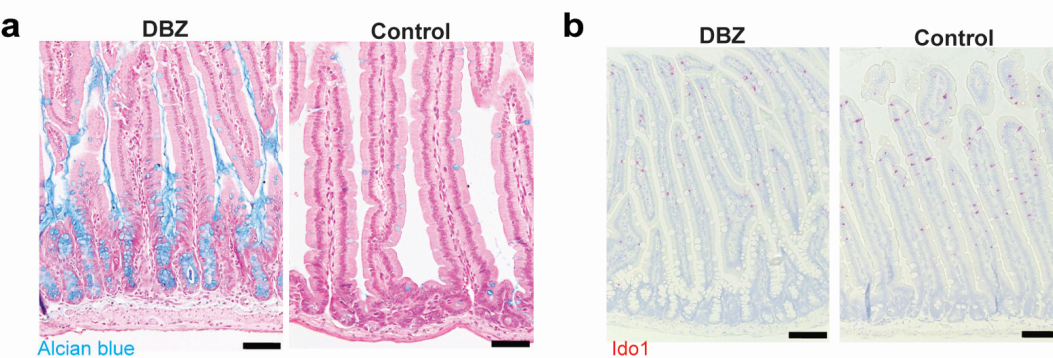


Supplemental Fig. 1 Relative expression of Ido1 in goblet cells from uninfected and infected animals. Analysis is from scRNA-seq dataset of duodenal epithelial cells collected at 6 dpi (n=4 animals/group).

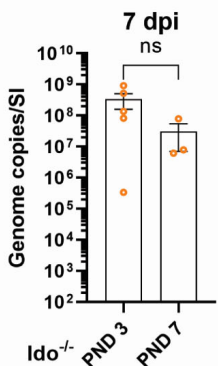


Supplemental Fig. 2 MuAstV1-positive staining of goblet cells in *Ido*^{-/-} and WT animals. Tissue sections of duodenum collected at 6 dpi (n=2 animals/group) show that goblet cells are targeted in both groups of infected animals. Scale bar= 100μm

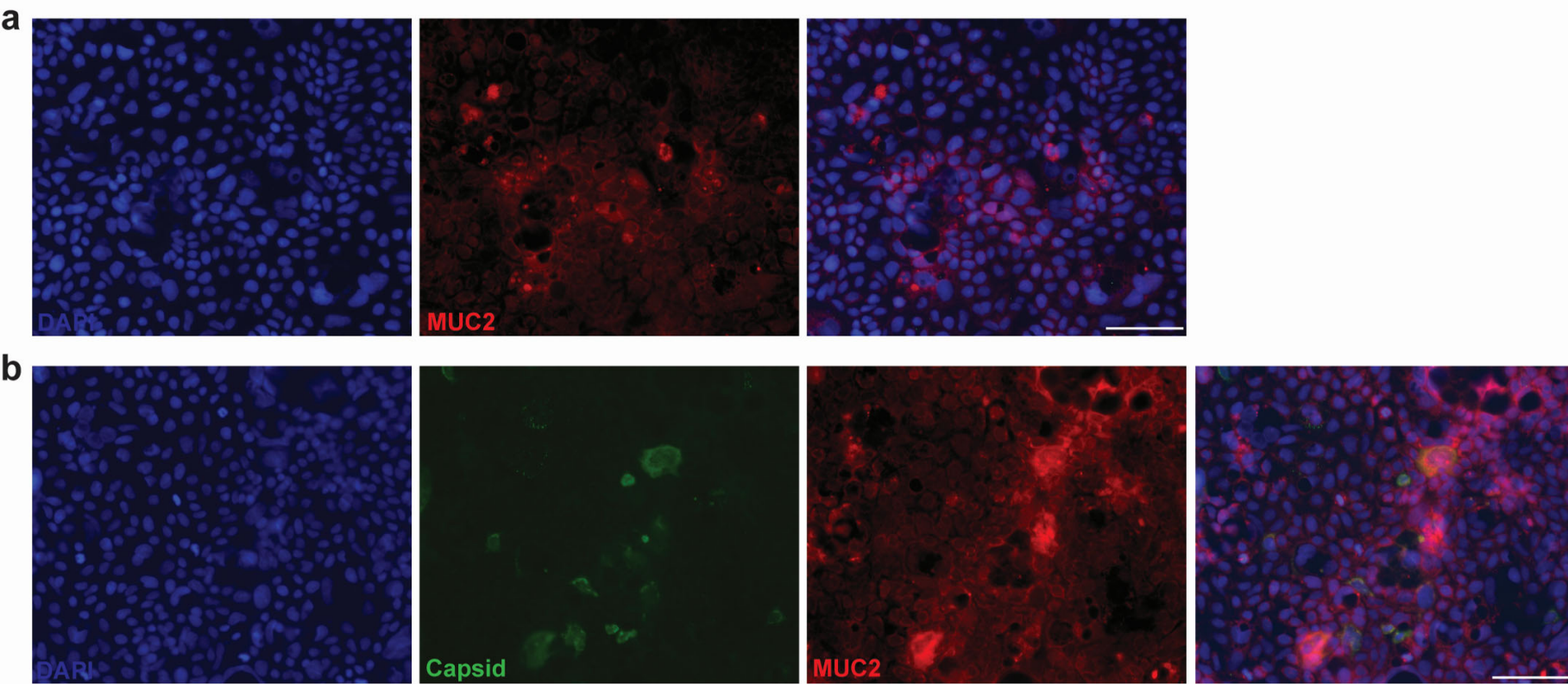


Supplemental Fig. 3 Control histology for DBZ treatments in WT animals.

a) Tissue sections of duodenum collected prior to infection (n=2 animals/group) show that DBZ induces goblet cells hyperplasia based on alcian blue, scale bar = 60μm. b) DBZ treatment does not induce an increase in Ido1-expressing goblet cells based on Ido1 ISH, scale bar = 100μm.



Supplemental Fig. 4 MuAstV1 infection in neonatal *Ido*^{-/-} animals. Neonatal mice infected at the post-natal days indicated had comparable virus levels detected in small intestines collected at 7 dpi. Comparison between groups was assessed by Mann-Whitney U. ns, non-significant.



Supplemental Fig. 5 Muc2-positive Caco-2 cells are infected by HAstV1 .

a) Caco-2 cells were cultured for 7 days before harvested and stained for MUC2 (red) and DAPI (blue). b) Caco-2 cells were infected with HAstV1 (MOI=0.1) at 6 days post-plating and harvested 24 hours following infection. Scale bar=90 μ m. Data represent individual wells run in at least 2 independent experiments.