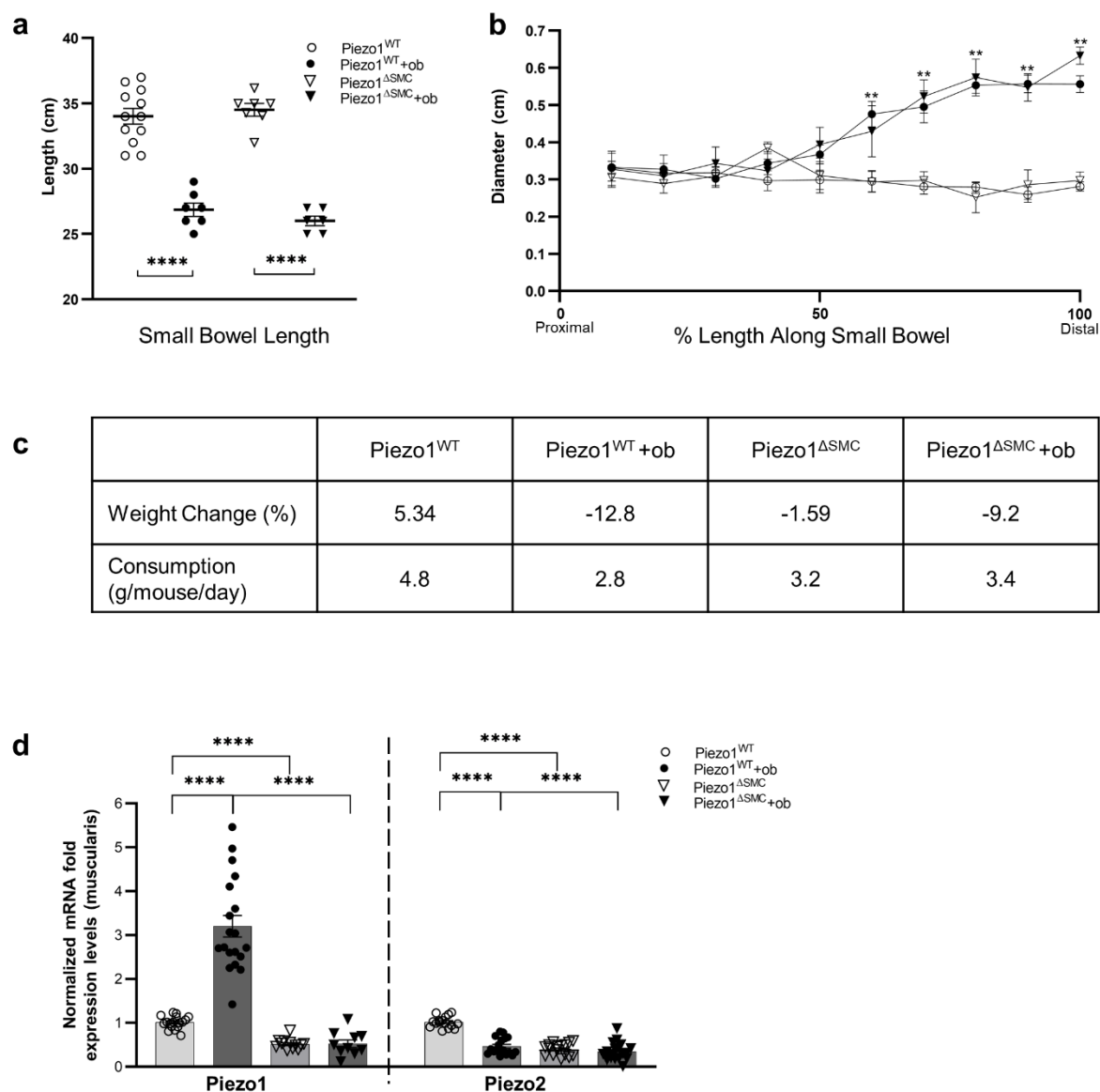
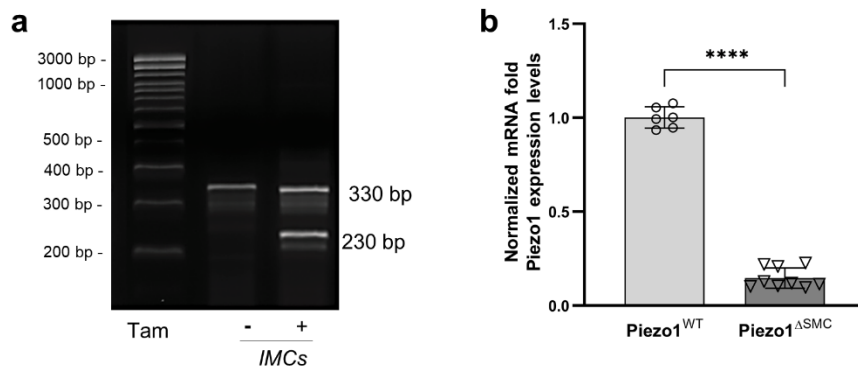


SUPPLEMENTARY FIGURES.



sFigure 1. Gross measurements of **(a)** length and **(b)** diameter across proximal to the distal small bowel and length of small bowel of Piezo1^{WT}, Piezo1^{WT+ob}, Piezo1^{ΔSMC}, and Piezo1^{ΔSMC+ob} mice. **(c)** Percent weight change and chow consumption the four groups of mice. **(d)** Piezo1 and Piezo2 mRNA levels in small bowel muscularis at baseline and with obstruction. Unpaired two-tailed t-test with Welch's correction with significance values as indicated: **p<0.001, ****p< 0.0001



sFigure 2. (a) PCR confirmation of KO, showing appropriate cleavage of the floxed Piezo1 gene following treatment of pups muscularis cells with 0.1 μ M of 4-OHT for 24h. **(b)** Piezo1 mRNA levels in muscularis cells following treatment with 0.1 μ M of 4-OHT for 24h. Unpaired two-tailed t-test with Welch's correction performed with significance values as indicated: **** $p < 0.0001$

Movie: Piezo1^{ΔSMC};mTmG 21-days post-Tam. External muscularis/ longitudinal layer - diagonal (left-to-right) membrane GFP-positive (green) briefly followed by tdTomato-positive (red) network within intermuscular region. Subsequent smooth muscle cells in the circular muscularis layer – diagonal (right-to-left) followed by vessels intertwined between crypts tdTomato-positive (red).