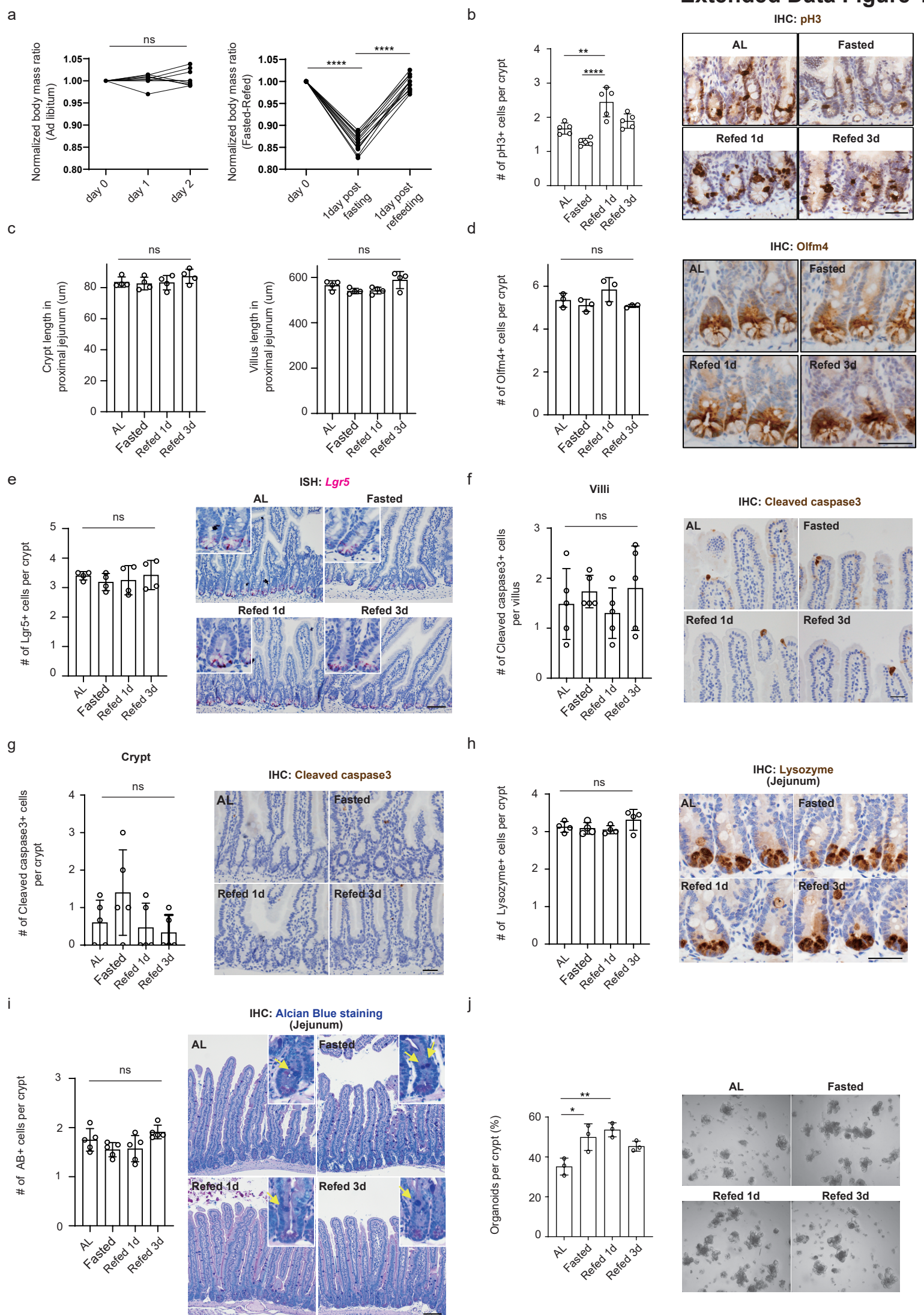
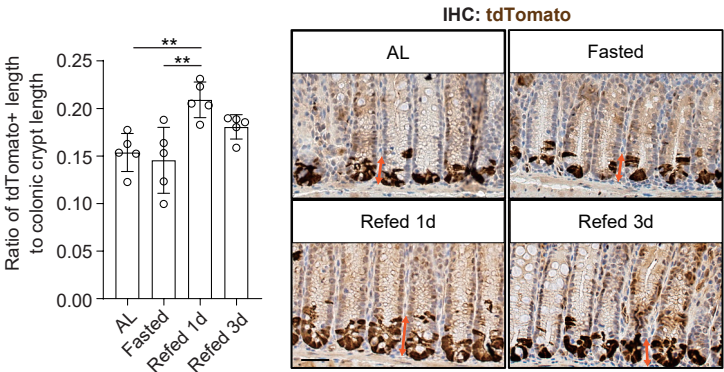


# Extended Data Figure 1



k

Colon





**Extended Data Fig. 1 Refeeding does not change the intestinal morphology, the number of ISCs, and differentiated cells**

- (a) Time course of normalized mass ratio during fasting and refeeding. AL mice (left) and 24h fasted-24h refed mice (right). n = 5 mice
- (b) Quantification (left) and representative images of phospho-H3<sup>+</sup> cells by IHC per jejunal crypt (right). Scale bar, 25  $\mu$ m
- (c) Length of crypt (left) and villi (right) in the jejunum.
- (d) Quantification (left) and representative images for OLFM4 per jejunal crypt (right). Scale bar, 25  $\mu$ m.
- (e) Quantification (left) and representative images of in situ hybridization (ISH, red) for *Lgr5* mRNA (right). Scale bar, 50  $\mu$ m.
- (f) (g) (h) (i) Quantification and representative images of Cleaved caspase3<sup>+</sup> cells in the villi (f) and crypt (g), Lysozyme<sup>+</sup> cells (h), Alcian Blue<sup>+</sup> cell (i) per jejunal crypt, scale bar, 25  $\mu$ m.
- (a) Organoid-forming assay for intestinal crypts isolated from AL, Fasted, Refed 1d, and Refed 3d mice. Quantification (left) and representative images show day 3 organoids (right). n = 3 mice per group, Scale bar, 200  $\mu$ m.
- (b) Quantification (left) and representative images of IHC for tdTomato (orange arrows, right) in the colon. n = 20 crypts per measurement. Scale bar, 25  $\mu$ m.

Data in dot plots were expressed as mean  $\pm$  SD, \*p < 0.05, \*\*p < 0.01, \*\*\*\*p < 0.0001,

ns = not significant, one-way ANOVA.