



Fig. S3 Ablation of Lepr⁺ cells led to fewer ISCs in colon. **a** Immunofluorescence for GFP (Lgr5) in the colons from *Lgr5^{eGFP}* and *Lepr-Cre;iDTR;Lgr5^{eGFP}* mice treated with DT for 10 consecutive days. Number of Lgr5⁺ cells per crypt was quantified (n=3). Scale bar: 25 μ m. **b** Immunofluorescence for Sox9 in the colon from *Lepr-Cre* and *Lepr-Cre;iDTR* mice treated with DT for 10 consecutive days. Number of Sox9⁺ cells per crypt was quantified (n=3). Scale bar: 25 μ m. **c** Intestinal organoid images from *Lepr-Cre* and *Lepr-Cre;iDTR* mice at 0, 24 and 96 hours after seeding. Intestinal organoid images from *Lepr-Cre* and *Lepr-Cre;iDTR* mice 5 days post-passaging. Mice were treated with DT for 10 consecutive days. Crypt cells were seeded at the same initial density. n=2 biologically independent experiments, 3 replicates each. Scale bar: 50 μ m. **d** Quantification of the organoid perimeter at indicated timepoints and the number of buds per organoid at 96 hours. Related to **c**. **e** Schematic depicting physical isolation of Lepr⁺ (GFP⁺) and Lepr⁻ (tdTomato⁺) cells. **f** Representative images of sorted Lepr⁺ and Lepr⁻ cells. Scale: 200 μ m. Values in the graphs represent means \pm SD. Unpaired student's t-test was used for calculating P values in **a**, **b** and **d**, ****P* < 0.001.