Fig. S3. Genetic editing, viability and 3D confocal imaging of organoids.  (A) Viability of *Trp53*+/− organoids infected with the indicated sgRNA-lentiviruses (n = 4 for GFP-EV, *Trp53* and *Prkar1a*; n = 2 for *Axin1*). Error bars represent mean ± s.e.m. * p<0.05; ** p<0.01, two-sided unpaired Student’s t-test. (B) Viability of *Trp53*−/− organoids transduced with *Runx1* (n = 2), *Tgfbi* (n = 2), *Tiprl* (n = 3), *Mafb* (n = 4), *Nf1* (n = 4), *Ggt1* (n = 4), *Smad3* (n = 4), *Runx1t1* (n = 3) and *Pax6* (n = 2) sgRNAs. Error bars represent mean ± s.e.m. (C) Indel frequency in *Trp53*−/− organoids that were CRISPR/Cas9-edited for *Runx1*, *Tgfbi*, *Tiprl*, *Mafb*, *Nf1*, *Ggt1*, *Smad3*, *Runx1t1* and *Pax6* (n = 2 except *Ggt1* and *Pax6*, where n = 1). (D) Western blot analysis of *Trp53*−/− organoids for pGSK3α/β, GSK3α, pS6 and S6 expression following CRISPR/Cas9 editing for *Trp53*, *Prkar1a/Trp53*, *Axin1/Trp53* or *Pten/Trp53*. Probing for Gapdh provided the loading control (n = 2). (E) Whole-mount 3D confocal images (top) optical sections (bottom) of *Trp53*−/− organoids edited for *Pten/Trp53* or *Trp53* stained for K5, E-cadherin, F-actin and DAPI (n = 2 per genotype). Scale bar, 50 µm.