

**Fig. S1. Germline ablation of** Cdx2. (**A**) Overview of the targeting strategy used to generate the  $Cdx2^{fl}$  allele. The targeting construct contained 5.7 and 2.8 kb homology arms, loxP sites (triangles) flanking the Cdx2 5' UTR and exon 1, and a *neo* selection cassette flanked by FRT sites (ovals). Homologous recombination replaces the 15.1 kb Scal fragment with a 16.8 kb fragment, detectable by Southern blot analysis with 5' probe, and replaces the 6.9 kb Nhel fragment with an 8.6 kb fragment, detectable by Southern blot analysis with 3' probe. Homologous recombination also introduces a 247 bp P1/P2 PCR product (primer positions indicated), whereas the wild-type P1/P2 product is 107 bp. (**B**) Southern blot analysis of wild-type ES cell and a correctly targeted ES cell clone using the 5' probe. (**C**) Southern blot analysis of wild-type and targeted ES cell clone using P1 and P2 primers. (**E**) Overview of crossing schemes used to create Cdx2 germline null females and Cdx2 M null animals or embryos.