## Supplemental material

## Ray et al., http://www.jcb.org/cgi/content/full/jcb.201212140/DC1



Figure S1. **Epidermal-specific ablation of**  $\beta$ -catenin and cortical retention of plakoglobin. (A and B) Immunofluorescence analysis of  $\beta$ -catenin in e16.5 WT and  $\beta$ -catenin ( $\beta$ cat) cKO embryos. The dotted line indicates the basement membrane. (C and D) Immunofluorescence analysis of plakoglobin in the paws of e18.5 WT and  $\beta$ -catenin cKO embryos. Dotted lines or  $\beta$ 4-integrin staining indicates the basement membrane. (E and F) Localization of  $\alpha$ -catenin in paw skin of e18.5 WT or  $\beta$ -catenin cKO embryos. (G and H) Immunofluorescence localization of occludin in paw skin of e18.5 WT or  $\beta$ -catenin cKO embryos. (G and H) Immunofluorescence localization of occludin in paw skin of e18.5 WT or  $\beta$ -catenin cKO embryos. Bars, 10 µm.



Figure S2. Lack of change in differentiation or Wnt reporter activity in the interfollicular epidermis of  $\beta$ -catenin cKO embryos. (A–D) Immunofluorescence localization of keratin 1 (K1; A and B) and loricrin (C and D) in WT and  $\beta$ -catenin cKO paw skin. Dotted lines (A and B) or  $\beta$ 4-integrin staining (C and D) mark the basement membrane. (E and F) Back and paw skin of TCF/Lef-H2B-GFP reporter mice were sectioned and analyzed. Note the lack of interfollicular activity in both the back and paw skin. (top) Activity within the hair follicle serves as an internal control. Bars, 10 µm.



Figure S3. Diagram and photo of the apparatus used for cell stretch experiments.

A ZIP file is provided that contains two MATLAB programs that identify the cell-cell junction and determine its mean intensity.