



**Figure 4 - supplement 1.** RHOU Controls the Proper Shape of Early Basal Epidermal Progenitors Which in Turn is Needed for Tissue Development. (A) Immunofluorescence of sagittal sections from E18.5 transduced skins showing the lack of polarization of PCP markers (P-CADHERIN, NCAM and SHH). Representation from n=3 embryos. Scale bars, 25  $\mu$ m (B) Epidermal thickness is reduced in the absence of RHOU. (Left panel): Immunofluorescence of sagittal sections from E18.5 transduced skins. Scale bars, 25  $\mu$ m (Right panel): Quantifications of epidermal thickness. Error bars represents SEM from *shScr* n=8, *shRhou-504* n=4, *shRhou-505* n=9 embryos. Normal distribution of the data was determined using the Shapiro-Wilk test. Parametric independent two-tailed unpaired *t* test was used to compare the data. (C) Epidermal differentiation is delayed in the absence of RHOU. Immunofluorescence of sagittal sections from E16.5 transduced skins. RFP insets verifies transduction. Representation of n=3 embryos. (D) Barrier assays on E17.5 and E18.5 transduced animals. RFP and GFP immunofluorescence shows transduction of the animals. Representation of n=3 embryos per conditions.