

Supplemental information

Figure S1. Differentially regulated vitamin D3 target genes in DKO are overlapped with genes induced by wounding in the skin. The heat maps for vitamin D3 target genes for DKO were compared to the list of genes induced by wounding. We utilized our own wound expression profiling data to compare normal skin and wounded skin (24 h). Fold changes in DKO/CON (DKO) were aligned to the fold changes in wounded/control skin (Wound). Down-regulated vitamin D3 target genes shown by green (left, DKO) are frequently co-related to the up-regulated genes by wounds labeled by red in (right, Wound). The green denotes down-regulation, and red shows up-regulation. Colors in DKO heat map are slightly different compared to Figure 2A because the heat maps are generated by different methods.

Figure S2. Deletion of *Vdr* and *Casr* does not affect collagen deposition, myofibroblast numbers or matrix component expression in the wound.

(A) Masson Trichrome staining of the wounded skin excised 3d after wounding assessed in DKO and CON. The red bolt marks the edge of the wound. (B) Immunohistochemistry for α -SMA evaluated the localization of α -SMA positive myofibroblasts, with higher magnification in lower panels (brown signal with blue counter staining). (C) The mRNA expression of myofibroblast and matrix markers in DKO (closed bars) and CON (open bars) evaluated by microarray 3days after wounding (n=3).

Figure S3. Down-regulation of genes involved in β -catenin and E-cadherin (AJ) signaling in DKO.

Pathway analysis for DKO shows down-regulation of AJ genes, in which functional links of AJ signaling genes such as E-cadherin and β -catenin are shown. The green denotes down-regulation.

Fig. S1



Fig. S2

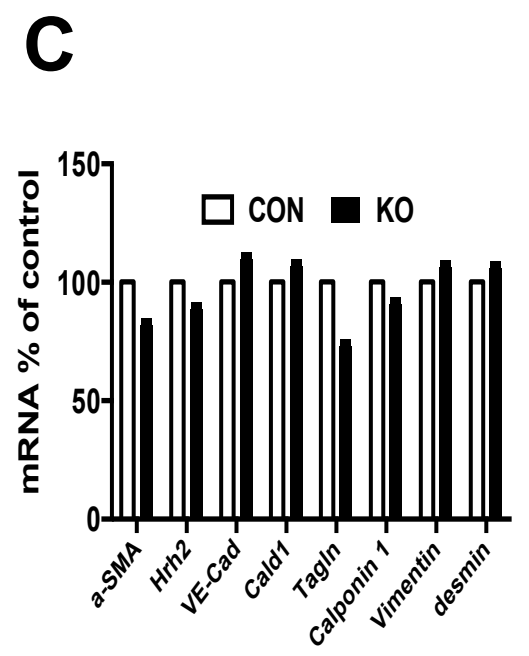
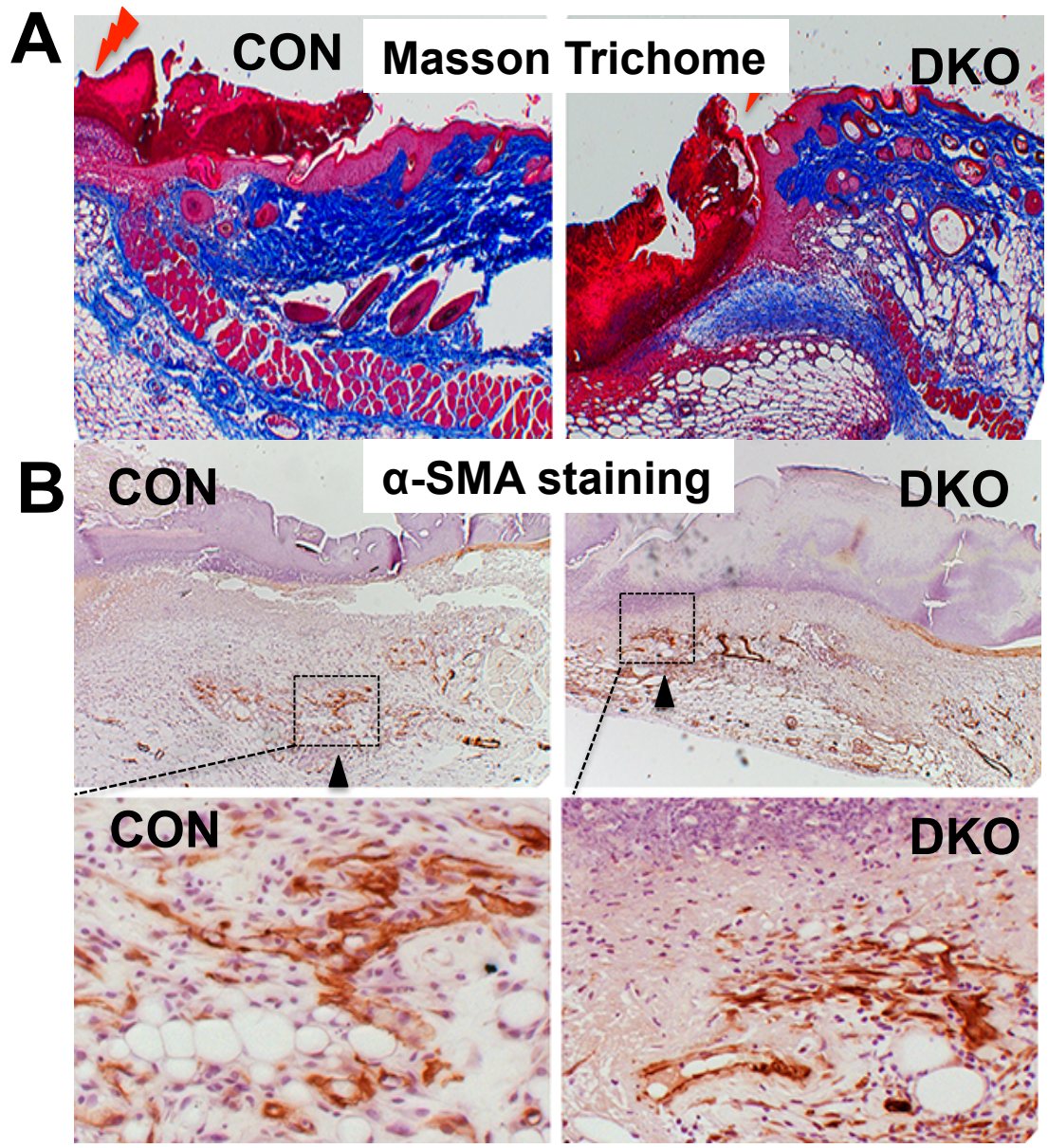


Fig. S3

