Supplemental Figure 1



Cytokeratin 17-positive follicles present within scar in C57BL/6J mice. Photomicrographs show cross-sectional histology of C57BL/6J strain regenerated skin ~12 days after wounding. Note K17-positive wound induced hair neogenesis (WIHN) indicated by the arrows. Sebaceous glands also form *de novo* after wounding (*). Depicted in insets are hair follicles within normal unwounded skin identified by positive cytokeratin 17 (K17) staining. This corroborates our use of whole-mount cytokeratin 17 immunohistochemistry shown in Fig 2a. Scale bar = 100µm.

Supplemental Figure 2



Diagram representation showing location of all gene expression probes and PCR primers used in *Ptgds* spice variant analysis.

Supplemental Figure 3



Sequencing of additional *Ptgds* splice variants demonstrates increased quantity of spliced transcript with complete removal of Exon 2 preferentially in Mixed strain mice.

(a) Representative PCR agarose gel depicting alternative splicing of *Ptgds* in mouse strains. Complete *Ptgds* is found in C57BL/6J, while spliced *Ptgds* products are more abundant in the Mixed strain (b) DNA sequencing was performed for the following band sizes: 371bp (Whole), and approximately 200bp. DNA sequence as determined by Sanger sequencing listed is that for ~200bp band missing exon 2. The junction between exon 1 and 3 is marked with * indicating the lack of exon 2 within the DNA sequence. (c) Pictorial representation of results illustrating that the 200bp fragment is Ptgds mRNA (NM_008962.2) and is lacking exon 2 sequence between 191-330bp within the mRNA sequence.