Supplementary Figure 1. Further validation of anti–kazrin antibody (943-074).

(a) Quantitative RT-PCR of mRNA isolated from human keratinocytes transfected with a scrambled siRNA or two pooled siRNAs specific for all isoforms of kazrin. (b) Lysates of human keratinocytes transfected with scrambled siRNA or two pooled siRNAs specific for all isoforms of kazrin were blotted with a panel of pan-kazrin antibodies, including 943-074. (c) Quantitative RT-PCR of mRNA from lysates of wild-type mouse keratinocytes transfected with the siRNAs shown. The pooled siRNAs were used to knockdown kazrin in Figure 2e. (d) Lysates of keratinocytes from wild-type mice or litter-matched gt/gt mice were blotted with pan-kazrin antibody, rabbit non-immune serum, or rabbit secondary antibody alone. (b, d) GAPDH was used as a loading control.
Supplementary Figure 2. Desmoplakin and periplakin expression in skin of wild type (wt/wt) and kazrin flx/flx mice. Sections of adult back and tail skin from litter matched mice were stained with antibodies to desmoplakin or periplakin as indicated (green) and counterstained with DAPI (blue). Scale bars: 100µm.

Supplementary Figure 3. Kazrin expression in adult tail epidermis. Epidermal tail whole mounts from kazrin gt/gt mice were stained for X-gal to visualize endogenous kazrin during the stages of the hair cycle indicated. IFE: interfollicular epidermis; Inf: infundibulum; SG: sebaceous gland; IRS: inner root sheath. Scale bars: 100µm.
| Primer       | Sequence                                                                 |
|-------------|--------------------------------------------------------------------------|
| Exon 1 forward | AAGCTATGCGCGGACACTAC, CGCATCGATGGGGCGGTCCA or GACCATGGAGAACCATCAGC     |
| Exon 2 forward | AAGGACCTGGAGGAGTCACAG                                                   |
| Exon 3 reverse | TAAAAGGCGAGAAGACTGACC                                                   |
| Exon 4 forward | GAGTGAAGACGCAGTCAAAGGC                                                  |
| Exon 4 reverse | GTCGAAGCTCCCACCTCTCTC                                                   |
| Exon 5 reverse | GGACATCCTCCTGGTCAGAGTGG                                                 |
| Exon 6 forward | TCCGTCATCCTCTGATGCTTCT                                                  |
| Exon 7 reverse | GGTTTGTTAGTGGCTTTCTGA                                                   |
| Exon 10 forward | GGGAAGCACATACTCAGGAGA                                                  |
| Exon 11 reverse | CAGCTCTGGTGATGCTAGAGG                                                  |

Supplementary Table 1 Mouse kazrin primers