

Supplemental Materials

Molecular Biology of the Cell

Contreras-Jurado et al.

Supporting information

List of antibodies used

| | Isotype | Dilution | Catalog number |
|---|---------|----------|----------------------------------|
| Anti-phospho-Smad1 (Ser463/465)/ Smad5(Ser463/465) Smad8 (Ser 426/428) | Rabbit | 1/100 | Cell signaling Technology 9511 |
| Anti-Active- β -Catenin (anti-ABC) Antibody | Mouse | 1/50 | Millipore 05-665 |
| Anti-Keratin 5 Polyclonal Antibody | Rabbit | 1/500 | Covance PRB-160P |
| Anti-c-Myc (phospho T358) | Rabbit | 1/50 | Abcam 131099 |
| Anti-Cytokeratin 14 Ab-1, Clone: LL002 | Mouse | 1/100 | Neomarkers MS-115 |
| Anti-trimethyl-Histone H3 (Lys9) | Rabbit | 1/100 | Millipore 07-442 |
| Anti-trimethyl-Histone H3 (Lys27) | Rabbit | 1/100 | Millipore 07-449 |
| Anti-acetyl-Histone H4 | Rabbit | 1/100 | Upstate 06-866 |
| Anti-Sox9 | Rabbit | 1/50 | Santa Cruz sc-20095 |
| Anti-Cytokeratin 15 | Mouse | 1/50 | Neomarkers MS-1068-P |
| Anti-CD34 | Rat | 1/50 | e-bioscience 14-0341-85 |
| Anti-BrdU-FITC conjugated | Mouse | 1/50 | Roche 11202693001 |
| Anti-CD49f-FITC conjugated | Mouse | 1/100 | BD Pharmingen 555735 |
| Anti-Cyclin D1 | Rabbit | | Neomarkers RM-9104-R7 |
| Anti-Mouse IgG-FITC conjugated | Donkey | 1/50 | Jackson ImmunoResearch 715-095-1 |
| Anti-Mouse IgG-Texas Red conjugated | Donkey | 1/500 | Jackson ImmunoResearch 711-075-1 |
| Anti-Rabbit IgG-FITC conjugated | Donkey | 1/50 | Jackson ImmunoResearch 711-095-1 |
| Anti-Rabbit IgG-Texas Red conjugated | Donkey | 1/500 | Jackson ImmunoResearch 711-075-1 |
| Anti-Rat IgG-Texas Red conjugated | Donkey | 1/500 | Jackson ImmunoResearch 712-075-1 |
| Avidin D-Texas Red | | 1/500 | Vector Lab A-2006 |
| Biotin Anti-rat IgG | Donkey | 1/500 | Jackson ImmunoResearch 712-065-1 |
| AF488-anti-rabbit IgG | Goat | 1/300 | Molecular Probes A11034 |
| AF647-anti-rabbit IgG | Goat | 1/300 | Molecular Probes A21245 |
| AF647-anti-rat IgG | Goat | 1/300 | Molecular Probes A21247 |
| Anti-rat PE | Goat | 1/100 | Jackson ImmunoResearch 712-116-1 |

List of primers used in qRT-PCR analysis

| | Amplification primers | |
|-----------|-------------------------|-------------------------|
| | Forward sequence 5'→3' | Reverse sequence 5'→3' |
| AXIN 2 | GAG AGT GAG CGG CAG AGC | CGG CTG ACT CGT TCT CCT |
| CYCLIN D1 | GAGATTGTGCCATCCATGC | CTCCTCTTCGCACTTCTGCT |
| GUSB | GAGGATCAACAGTGCCCAT | CAGCCTCAAAGGGGAGGT |
| C-MYC | CAGATCAGCAACAACCGCAA | GACGTTGTGTGTCCGCCTCT |
| LGR6 | AGCTTCAGCCGGGTCTCT | AGAGGTGGTTCCTGAGAGC |
| LGR5 | CTTCACTCGGTGCAGTGCT | CAGCCAGCTACCAAATAGGTG |
| SOX9 | CAGCAAGACTCTGGGCAAG | TCCACGAAGGGTCTCTTCTC |
| BLIMP1 | TGCGGAGAGGCTCCACTA | TGGGTTGCTTTCCGTTTG |
| LHX2 | CAGCTTGCGCAAAGACC | TAAAAGGTTGCGCCTGAACT |

| | | |
|--------|----------------------|---------------------|
| NFATC1 | TCCAAAGTCATTTTCGTGGA | CTTTGCTTCATCTCCCAGA |
|--------|----------------------|---------------------|

| | Specific retrotranscription primer |
|--------|------------------------------------|
| LGR5 | CAAACGGCCAAAAGTGAAT |
| LGR6 | AGAGCCCCTCAAAGCTTCTC |
| SOX9 | CGTTCTTCACCGACTTCCTC |
| BLIMP1 | TGGGGACACTCTTTGGGTAG |
| GUSB | CCTTGGGATACATGGAGGTG |
| LHX2 | GGTGGGGCTAGTCAAGTCTG |
| NFATC1 | TTGCGGAAAGGTGGTATCTC |

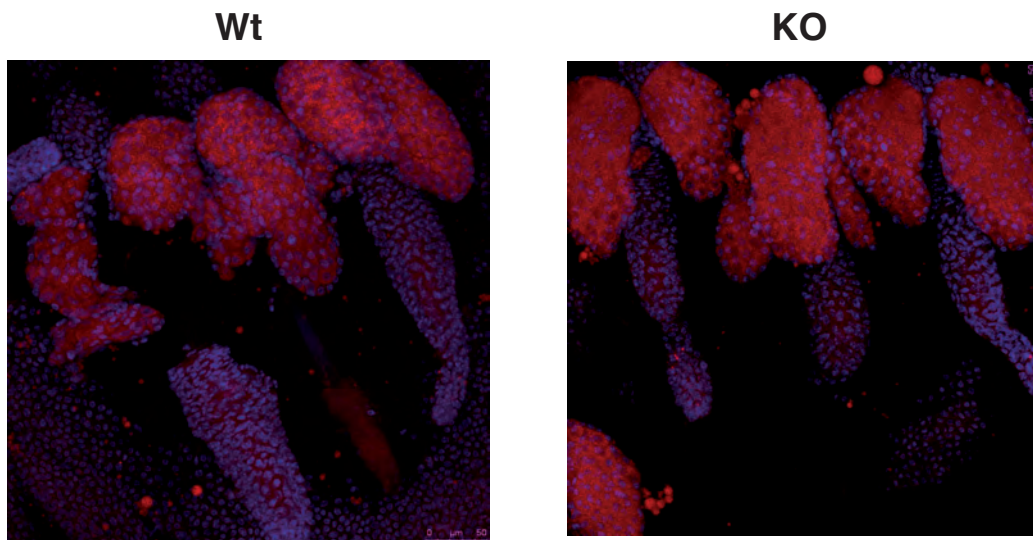


Fig. S1. Sebaceous glands are not altered in TR-deficient mice. Representative Nile Red staining of whole mounts of tail skin from Wt and KO mice. Nuclei were stained with DAPI and the merge images are shown.

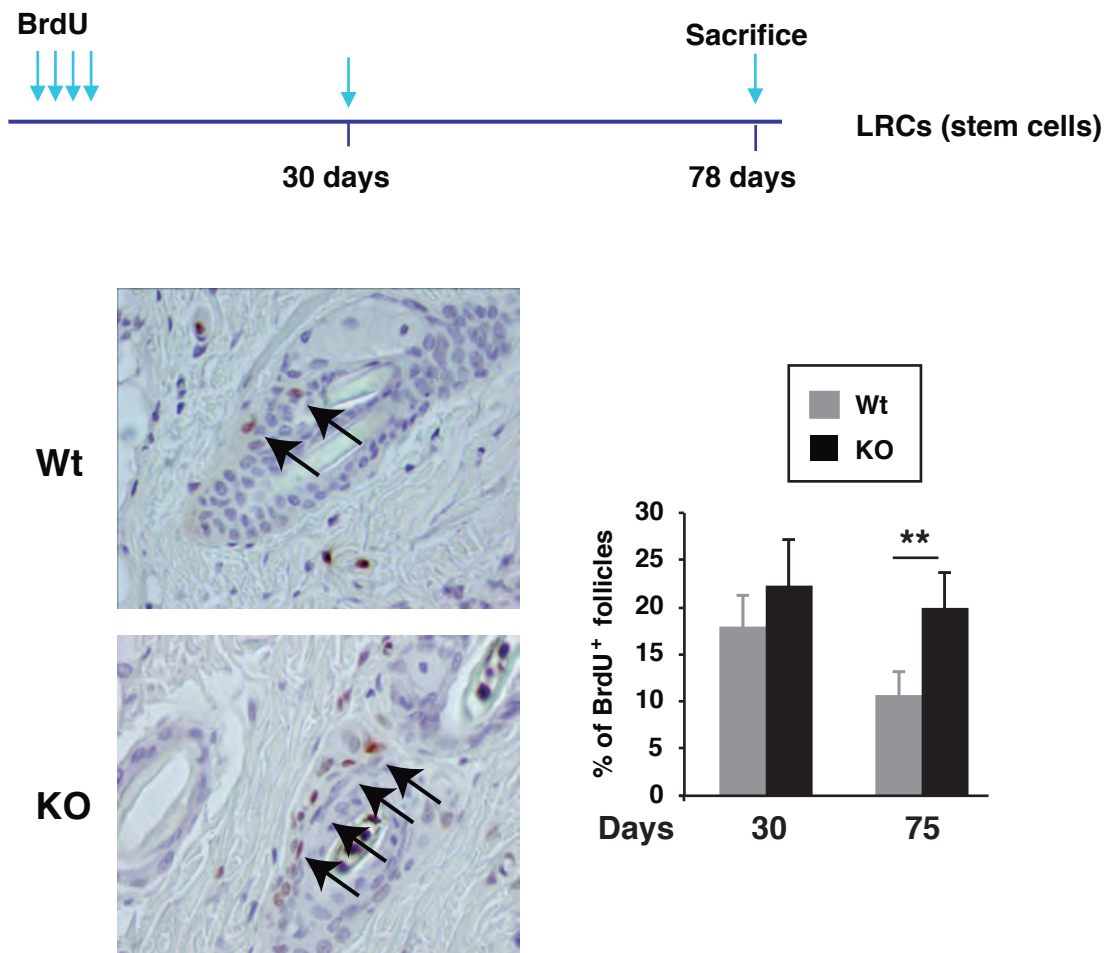


Fig. S2. Increased LRCs in the dorsal skin of TR-deficient mice. To identify label-retaining cells (LRC), 9-day-old WT and KO mice were injected with BrdU (50 mg/kg of body weight) every 12 hours for a total of four injections. Animals were sacrificed 30 and 75 days after inoculation and follicular BrdU incorporation in the dorsal epidermis was analyzed by immunohistochemistry. BrdU positive cells were identified as LRCs and the percentage of hair follicles containing LRCs was determined for each condition. The left panel shows representative images of the hair bulges obtained in Wt and TR KO at 75 days. Arrows indicate the presence of label retaining cells (LRCs). Quantification of the percentage of bulges containing LCRs is illustrated in the right panel. Five mice/point were used and at least 10 slides/animal were scored. Data are means \pm SD. **, $P < 0.01$ between Wt and KO mice.