Figure S1. Combination of DKK-1 and TGF- $\beta$ 1 inhibited cell viability by stimulating apoptosis in the outer root sheath of keratinocytes. Cells were treated with 50 ng/ml DKK-1, 50 ng/ml TGF- $\beta$ 1, or a combination of DKK-1 and TGF- $\beta$ 1 for 48 h. A CCK-8 assay was subsequently performed on day 2. Data are presented as the mean ± SD of three independent experiments. Statistically significant differences were determined using a one-way ANOVA followed by a Tukey's honestly significant difference test. \*\*\*P<0.001. DKK-1, Dickkopf-1; NT, non-treated control.

