

Supplementary Materials: Cellular Interactions and Formation of an Epithelial 'Nanocoating-Like Barrier' with Mesoporous Silica Nanoparticles

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1. Characterization of the RITC-NPs

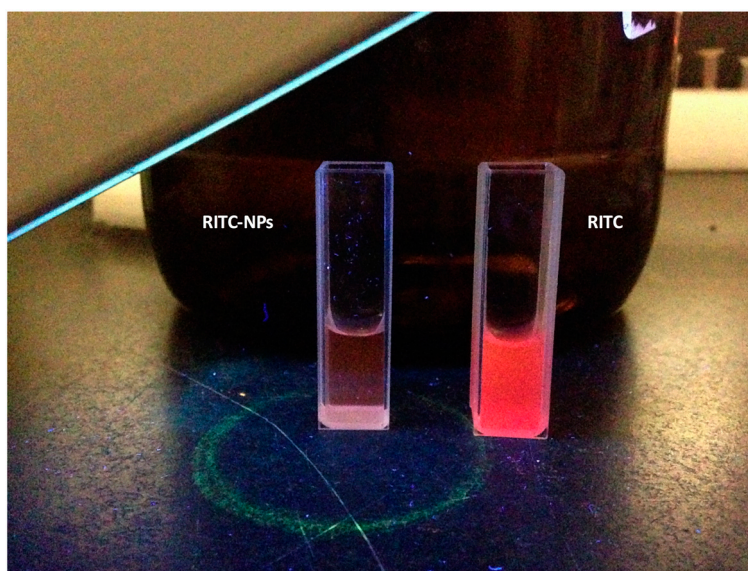


Figure S1. The fluorescence of the RITC-NP dispersion (100 $\mu\text{g/mL}$) and the RITC ethanol solution (28 $\mu\text{g/mL}$) under UV excitation.

2. The Histological Profiles of the RHGE and Porcine Ear Skin

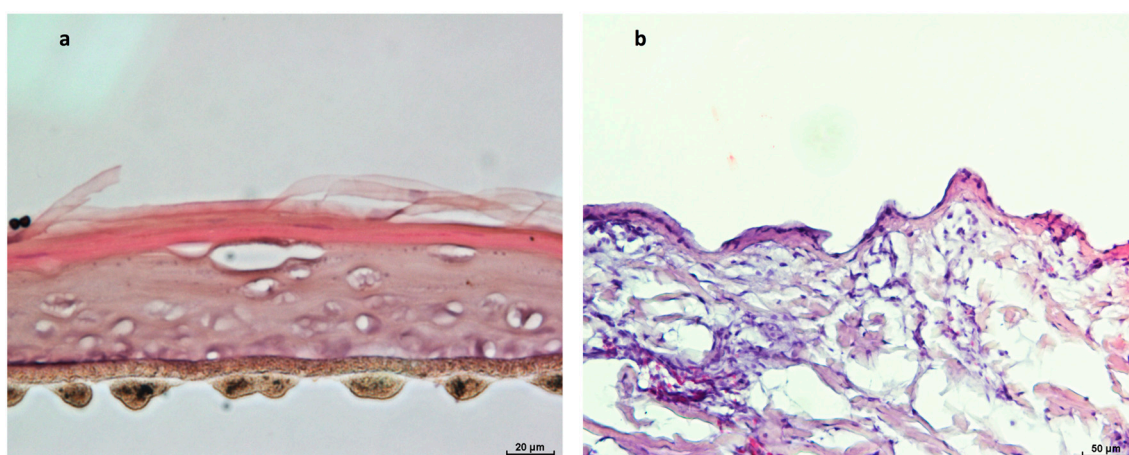


Figure S2. Histological images of the selected epithelial cryosections. Representative sections of RHGE (a) and isolated porcine ear skin (b) stained with hematoxylin and eosin (H&E) show the stratum corneum layer (red color) and the underlying epithelial cells (dark brown in RHGE and light blue in porcine ear skin).

3. The Presence of RITC-NPs in Hair Follicles of Porcine Ear Skin

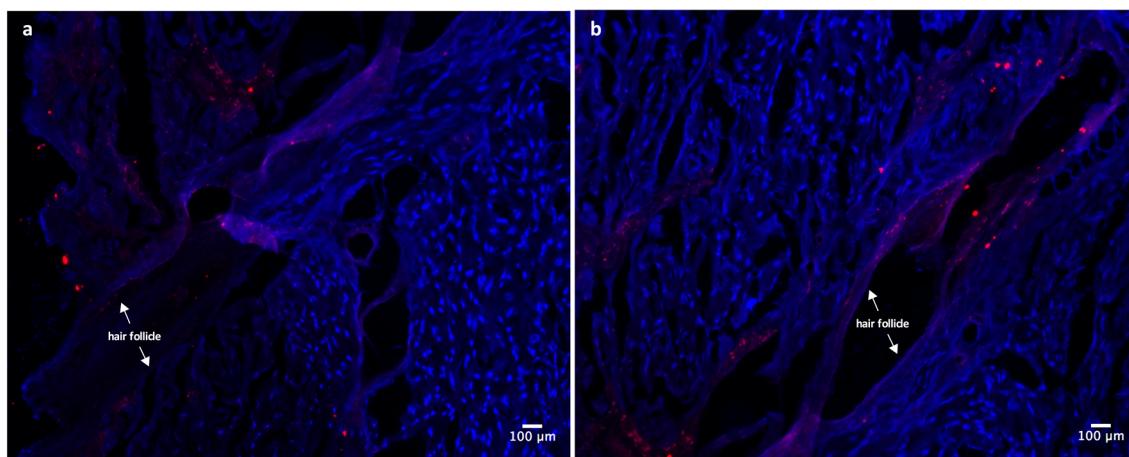


Figure S3. The fluorescent images of the RITC-NPs in upper (a) and lower (b) parts of a hair follicle of porcine ear skin after 24 h of treatment. The cell nuclei and RITC-NPs were detected by blue and red fluorescence, respectively.