

Supplementary Materials: Topical Retinol Restores Type I Collagen Production in Photoaged Forearm Skin within Four Weeks

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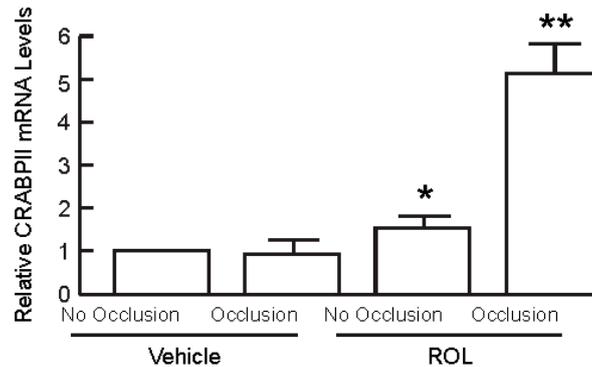


Figure S1. One-day ROL occlusion induces pronounced CRABP II mRNA expression. Vehicle or 0.4% ROL was applied on photoaged skin with or without occlusion for 24 h. Skin samples were obtained and total RNA was extracted. mRNA levels of CRABP II and 36B4 were quantified using RT-PCR. CRABP II mRNA levels were normalized to that of 36B4 ($n = 4$, * $p < 0.05$, ** $p < 0.01$).

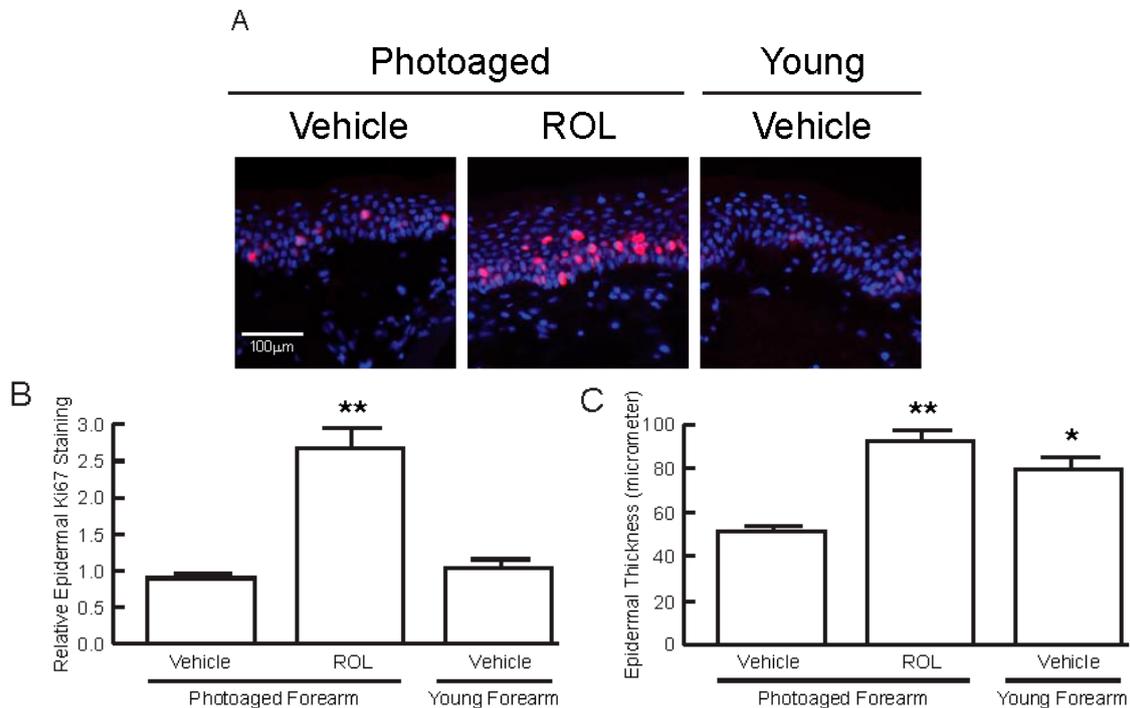


Figure S2. ROL markedly enhances basal keratinocyte proliferation and epidermal thickness at four weeks after treatment. (a) Ki-67 immunostaining shows nuclear Ki-67 staining (red) overlaps with DAPI-stained nuclei (blue) in the epidermis; (b) The bar graph shows fold changes of epidermal Ki-67 staining ($n = 6$, ** $p < 0.01$); (c) Epidermal thickness is presented as fold changes ($n = 6$, * $p < 0.05$).

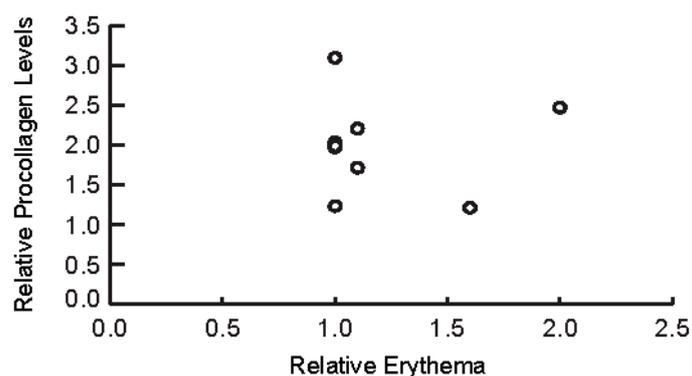


Figure S3. Lack of correlation between increased proCOL1 protein levels and erythema in ROL-treated skin. ROL or vehicle was applied, with 24 h occlusion, once weekly on photoaged forearm skin for four weeks. Skin redness was quantified by chromameter weekly. Relative redness of ROL-treated vs. vehicle-treated skin at one week after the last treatment (x axis) is plotted against relative increase of proCOL1 levels (y axis) determined by EIA ($n = 9$, $R^2 = 0.05$).



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