



Fig. S1. H & E and immunohistochemical images of control IMQ(-) vs IMQ-treated IMQ(+) Balb/c mouse skin sections(A and C) and human control and lesional psoriatic skin (B and C). Images show activation of (A and B) PI3K, P44/42 and Stat3 upon pretreatment of mice skin with IMQ (+) compared with control IMQ (-) and upregulation of these markers in psoriatic skin lesions compared to normal skin. Staining of phospho-p44/42 (Thr²⁰²/Try²⁰⁴). Scale Bar =50 μ m. (C) High power magnification of a sections of PPAR β/δ staining of inflamed psoriatic skin lesion (top 2 images) and IMQ-induced Balb/c mice skin lesions(bottom 2 images) Prominently intense PPAR β/δ staining can be seen in the entire lesional epidermis of both human psoriasis and IMQ-induced psoriasiform dermatitis skin. From the basal to spinous layers the staining was mostly cytoplasmic with few cells showing nuclear staining. Very strong nuclear and cytoplasmic staining was observed through the differentiating compartments (Inset 150 μ m). By contrast in normal skin very weak cytoplasmic staining of PPAR β/δ and occasional nuclear staining was observed in the stratum granulosum. Additionally, a strong expression pattern was observed in IMQ-induced Balb/c mouse lesions. There was strong involvement of hair follicle and the entire epithelium showed both nuclear and cytoplasmic staining (top panel), compared to weak punctate suprabasal nuclear expression in control Balb/c mouse skin (bottom panel; inset 150 μ m).