

## SUPPLEMENTARY FIGURES

**Figure S1.** (a, b) Relative mRNA expression for indicated genes in dorsal skin of WT, CIKS  $\Delta$ KC (a) and IL-19 KO mice (b) after IMQ or control treatment as indicated (\*p < 0.05; mean  $\pm$  SEM; n = 6 mice per group).

**Figure S2.** (a) Immunofluorescence images of sections from IMQ- or control- treated dorsal skin from WT and IL-20RB KO mice stained with DAPI (blue), anti-K5 (red) and anti-Ki67 (green). Epidermal Ki67 $^{+}$  cells were quantitated by counting fluorescent dots in 200  $\times$  200  $\mu$ m areas from different sections per mouse ( $n= 6-10$  mice per group; Scale bar 100 $\mu$ m). (b, c) Relative mRNA expression for indicated genes in dorsal skin (b) and skin-draining LNs (c) of IMQ- or control-treated WT and IL-20RB KO mice ( n = 8-12 mice per group). (d, e) Representative flow cytometric analyses of IMQ- or control-treated skin-draining LNs cells from WT and IL-20RB KO mice analyzed for expression of markers as shown. Numbers and percentages of IL-17A $^{+}$   $\gamma\delta$ T cells (d) and neutrophils (e) generated from flow cytometric analyses.( n= 6-12 mice per group) (\*p < 0.05, \*\*p < 0.01; mean  $\pm$  SEM).

**Figure S3.** (a) CCR2 expression on dendritic epidermal T cells (DETC, TCR $\gamma\delta$  $^{\text{hi}}$ ), dermal  $\gamma\delta$ T cells (CD45 $^{+}$ , TCR $\gamma\delta$  $^{\text{intermediate}}$ , TCRv $\gamma 4^{+}$ ) from IMQ-treated WT and CCR2 KO mice. (b) Representative flow cytometric analyses of IMQ- or control-treated dorsal skin cells from WT and CCR2 KO mice analyzed for expression of markers as shown. Numbers and percentages of IL-17A $^{+}$   $\gamma\delta$ T cells generated from flow cytometric analyses. (\*\*p < 0.01; mean  $\pm$  SEM; n = 3-6 mice per group).





