Supplemental Figure Legends

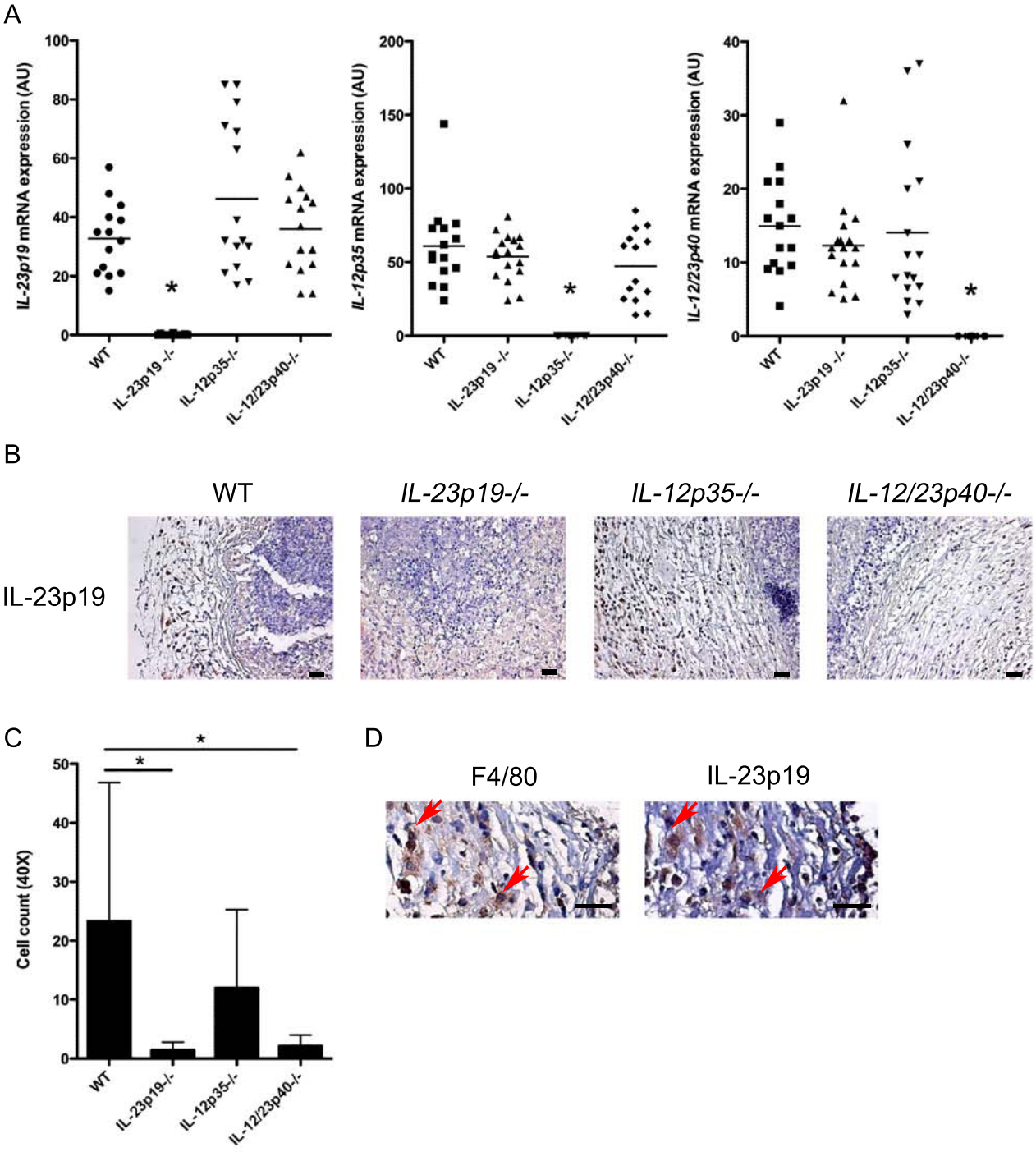
SUPPLEMENTAL FIGURE 1. *C. albicans* induces IL-12 and IL-23 expression within infected skin. *A*, *IL-23p19*, *IL-12p35*, and *IL-12/23p40* mRNA expression 24 hours following *C. albicans* skin infection in WT and the various knockout mice, as measured by Q-PCR. Each dot indicates the amount of mRNA transcript as measured by arbitrary units (AU) of a single specimen and horizontal bars denote the mean of scatter plots. * = $p < 0.001$ versus WT. Data was analyzed using Kruskal-Wallis test and Scheffe's F test. *B*, IL-23p19 staining of skin 4 days following infection with *C. albicans*. Scale bars = 0.025 mm. *C*, Quantification of IL-23p19+ cells in each of the 4 groups of mice shown in *B*. Data are expressed as mean ± SD. * = $p <$ 0.025 versus WT. Bar graphs were analyzed with Kruskal-Wallis test and Scheffe's F test. *D*, F4/80 and IL-23p19 staining of serial sections of WT mice skin 4 days following infection with *C. albicans*. Scale bars = 0.025 mm. Arrows indicate double positive cells.

SUPPLEMENTAL FIGURE 2. Impaired protein production of IL-17A and IL-22 in IL-23 deficient mice. IL-17A, IL-22, and IL-21 protein expression 48 hours following *Candida* skin infection in WT and the various knockout mice as measured by ELISA. Each dot indicates the level of protein (pg mL^{-1}) of a single specimen and horizontal bars denote the mean of scatter plots. * = $p < 0.025$ versus WT.

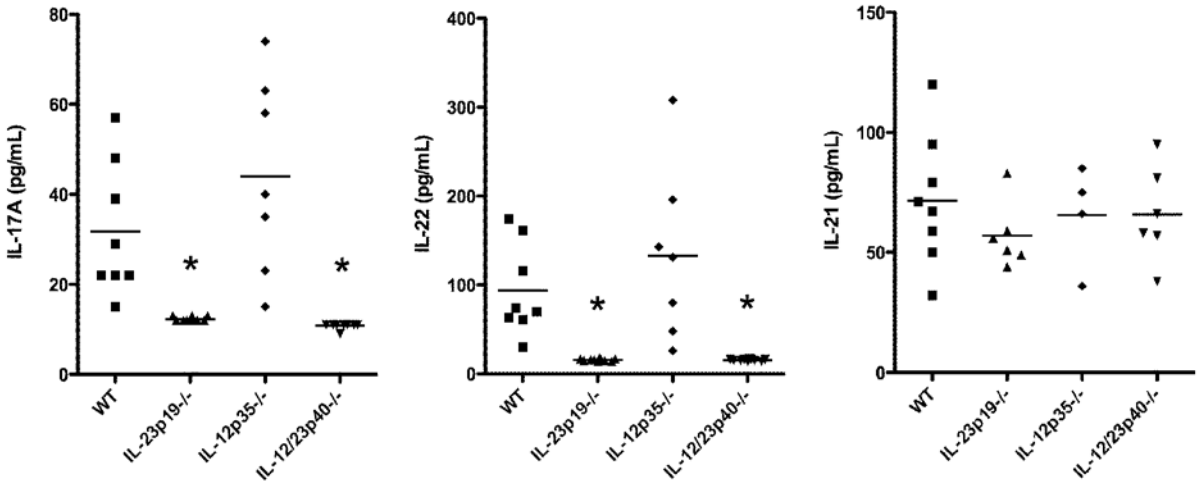
SUPPLEMENTAL FIGURE 3. *C. albicans* induces prominent epidermal hyperplasia overlying the infected dermis in *IL-17A*$^{-/-}$, *IL-22*$^{-/-}$ and WT mice. *A*, H&E staining of mouse skin 4 days following infection with *C. albicans*. Scale bars = 0.05 mm. *B*, Quantification of

epidermal hyperplasia in each of the 4 groups of mice shown above. Data are expressed as mean epidermal thickness (μm) ± SD. There were no statistical differences among the groups of mice.

SUPPLEMENTAL FIGURE 4. *A*, IL-17A, IL-22, and IL-21 protein expression 48 hours following *Candida* skin infection in WT and the various knockout mice as measured by ELISA. Each dot indicates single specimen and horizontal bars denote the mean of scatter plots. * = $p <$ 0.025 versus WT. Data was analyzed using Kruskal-Wallis test and Scheffe's F test. *B*, Anti-IL-17A, anti-IL-22 Ab-stained sections of skin 4 days following infection with *C. albicans*. Scale bars = 0.025 mm. *C*, Quantification of IL-17A+ and IL-22+ cells in each of the 3 groups of mice shown in *B*. * = $p < 0.025$, ** = $p < 0.001$. Bar graphs were analyzed using Kruskal-Wallis test and Scheffe's F test.



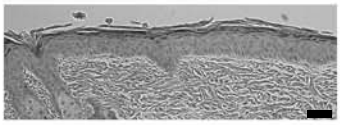
Supplemental Figure 1



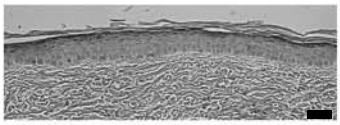
Supplemental Figure 2

A

WT

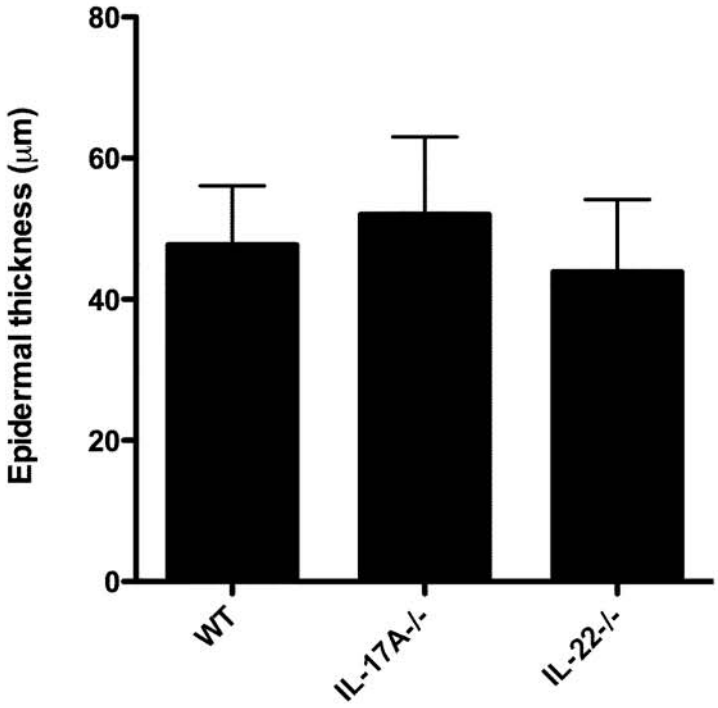


IL-17A-/-



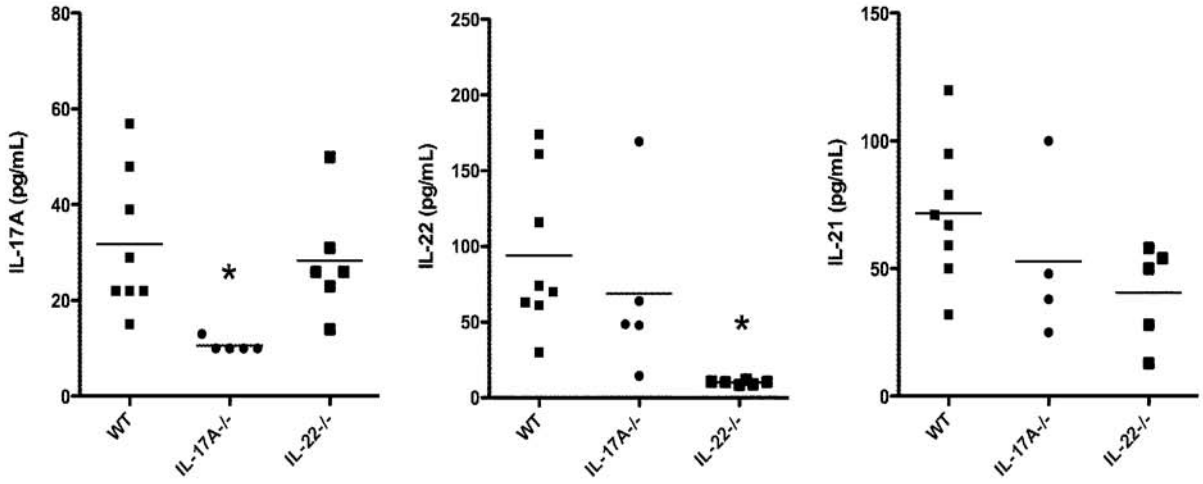
IL-22-/-

B

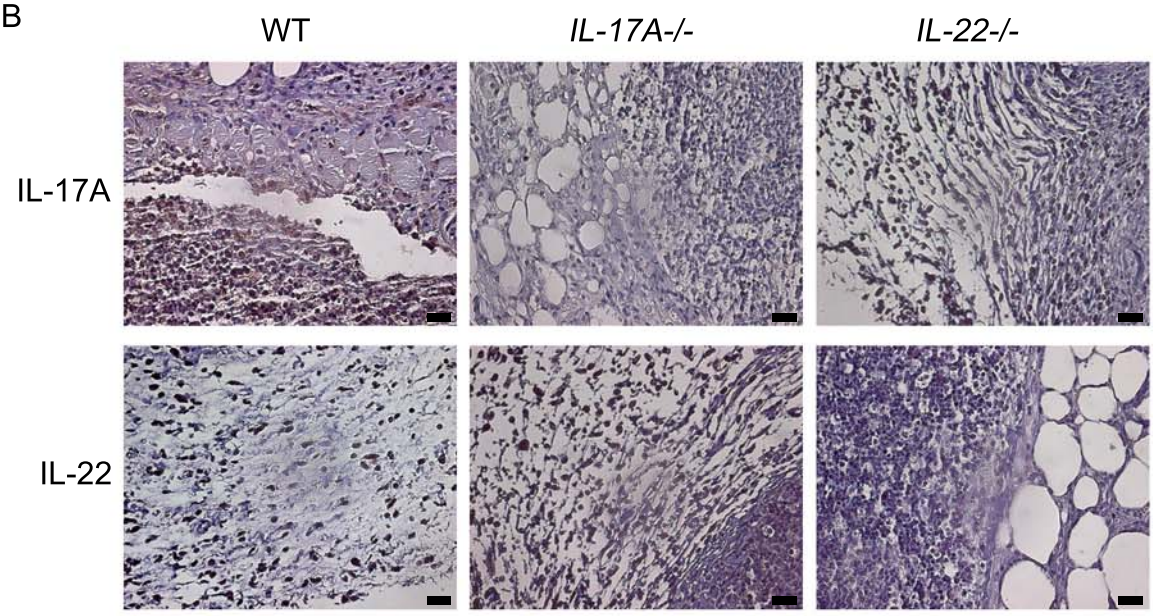


Supplemental Figure 3

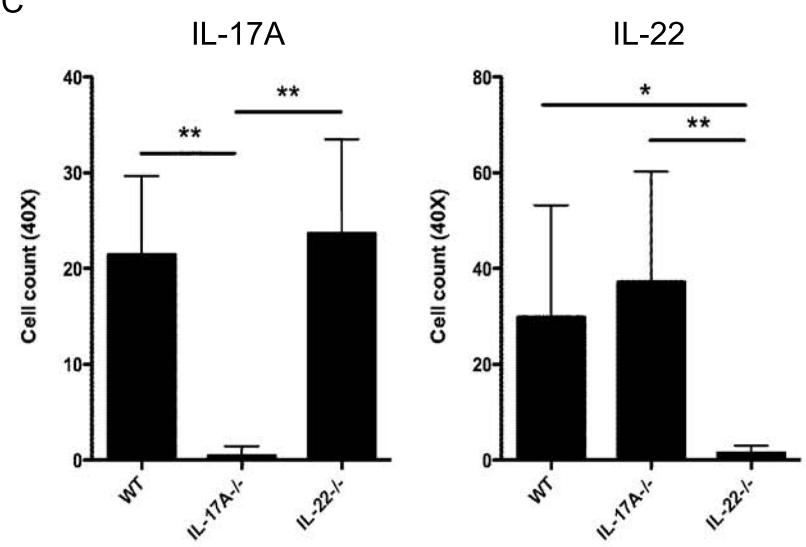
A



B



C



Supplemental Figure 4

SUPPLEMENTAL TABLE. Antibodies and conditions used for immunohistochemistry.

	Blocking	**Primary Ab**	**Secondary Ab**
IL-17A	10% goat serum in PBS	Santa Cruz #SC-7927, rabbit anti-IL-17, 1:400	Vector Laboratories #BA-1000, goat anti-rabbit IgG, 1:1000
IL-22	10% goat serum in PBS	Capralogics #CI-0144, rabbit anti-IL-22, 1:2000	Vector Laboratories #BA-1000, goat anti-rabbit IgG, 1:1000
IL-23p19	10% goat serum in PBS	Anaspec #54595, rabbit anti-IL-23, 1:400	Vector Laboratories #BA-1000, goat anti-rabbit IgG, 1:1000
CD3	Vector Laboratories #SP-5030 animal-free blocker	Santa Cruz #SC-1127, goat anti-CD3e, 1:1000	Vector Laboratories #BA-9500, horse anti-goat IgG, 1:2000
F4/80	5% goat serum and 0.2% BSA in PBS	BioLegend #122602, rat anti-F4/80, 1:50	Vector Laboratories #BA-9400, goat anti-rat IgG, 1:500
Gr-1	5% goat serum and 0.2% BSA in PBS	BD biosciences #550291, rat anti-Gr-1, 1:10	Vector Laboratories #BA-9400, goat anti-rat IgG, 1:500