

Supplementary Figure legends.

Figure S1. Effect of topical application of *S. aureus* on the cutaneous expression of neutrophil chemoattractants and antimicrobial peptides. A, B. Effect of topical application of *S. aureus* on the expression of neutrophil chemoattractants *Cxcl2* and *Cxcl3* (A) and antimicrobial peptides *Defb1*, *Defb3*, *Defb4*, and *Defb14* (B) in shaved skin and shaved and tape stripped (T/S) skin of BALB/c mice. **C.** Effect of topical application of *S. aureus* on the expression of neutrophil chemoattractants *Cxcl2* and *Cxcl3* and of antimicrobial peptides *Defb4*, and *Defb14* in shaved and T/S skin of *Il17*^{-/-} mice and WT controls. Results are representative of 2 independent experiments with 4-5 mice/group. ** $p < 0.005$, *** $p < 0.001$.

Figure S2. Flow cytometry gating strategy and quantitation of IL-17A producing TCR $\gamma\delta^+$ cells, CD4⁺ T cells and ILC3s in the skin of *S. aureus* infected mice. A, B. Representative (left) and quantitative (right) flow cytometry analysis of IL-17A producing TCR $\gamma\delta^+$ cells (CD45⁺CD3⁺TCR γ^+), CD4⁺ T cells (CD45⁺CD3⁺CD4⁺), and ILC3s (CD45⁺CD3⁻Lin⁻CD90⁺Rorc⁺) in shaved and tape stripped (T/S) skin of Balb/c mice 24 h after application of *S. aureus*. Results are representative of 1 experiment with 5 mice/group.

Figure S3. IL-4R blockade does not affect cutaneous *Il4* mRNA levels or percentages of basophils and TCR $\gamma\delta^+$ cells in the skin of *S. aureus* infected mice. A-B. Cutaneous expression of *Il4* (A) and percentages of basophils and TCR $\gamma\delta^+$ cells 24 h after topical application of 1×10^8 *S. aureus* to tape stripped skin of WT recipients of anti-IL-4R α antibody or IgG isotype control. Results in A-C are representative of 2 independent experiments with 4-5 mice/group.

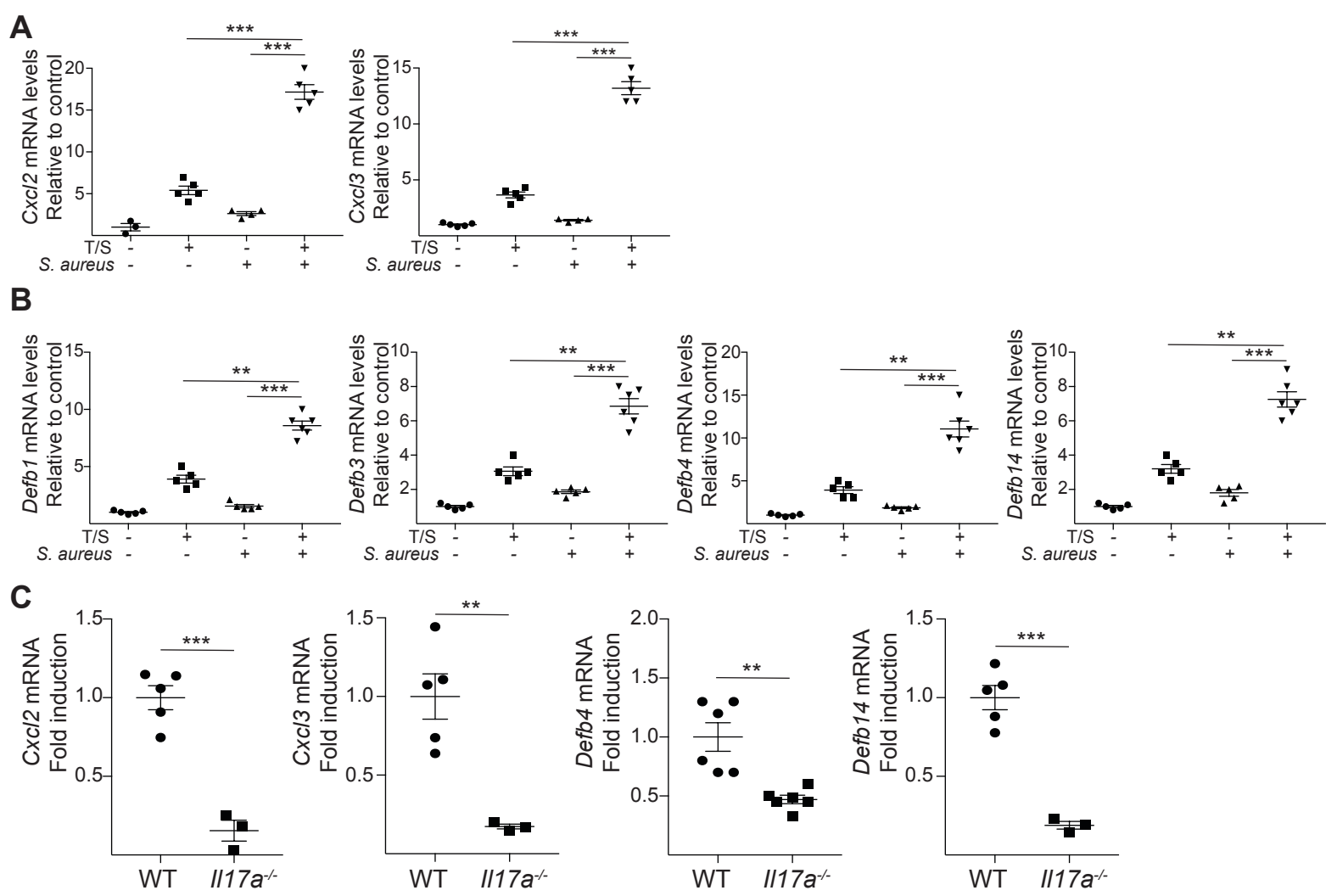


Figure S1

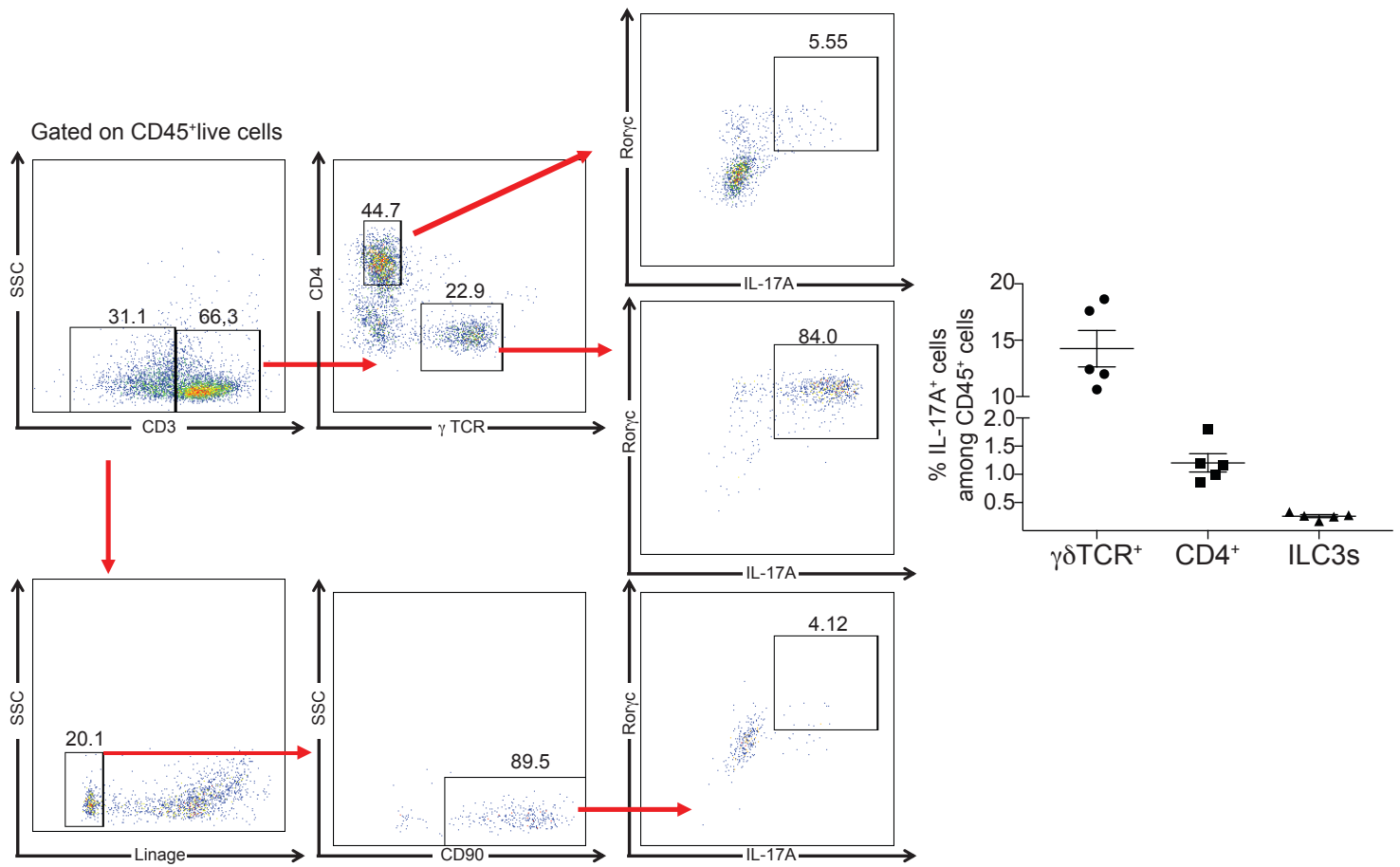
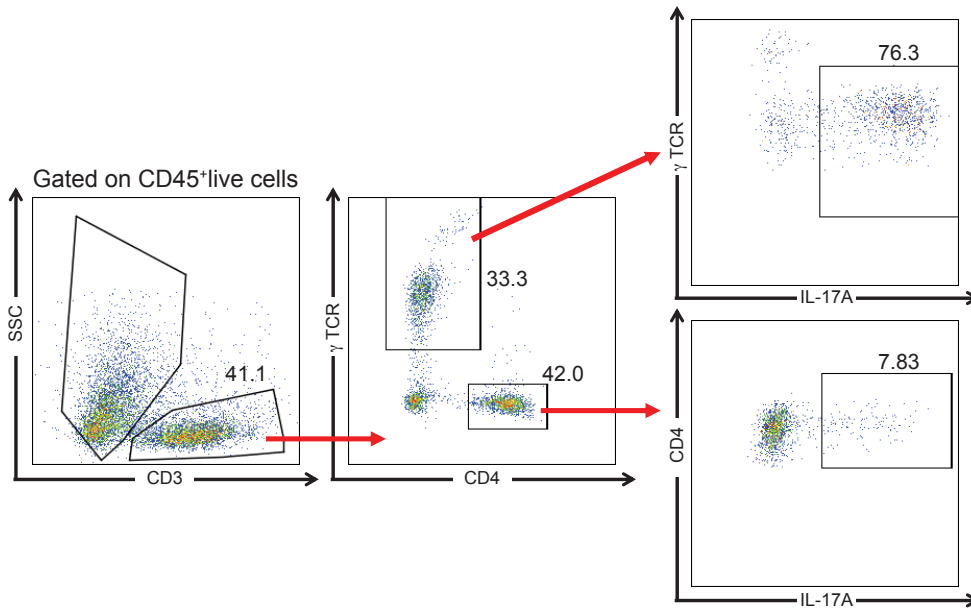


Figure S2

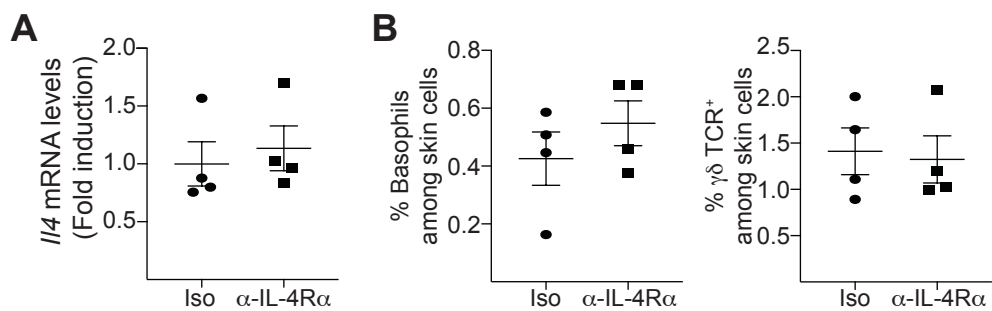


Figure S3