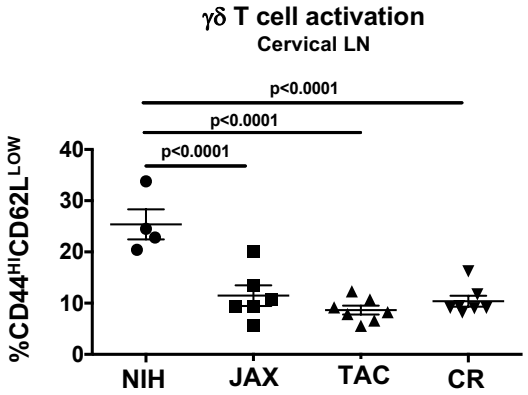

Figure S1 (refers to Fig 2). Higher frequency of activated γδ T cells in the cervical lymph nodes of NIH mice compared to commercial vendors. Single-cell suspensions of cervical lymph node cells were stained for the γδ TCR and activation markers, CD44 and CD62L. Each symbol represents an individual mouse, from 2 combined experiments. Significance was determined by ANOVA.

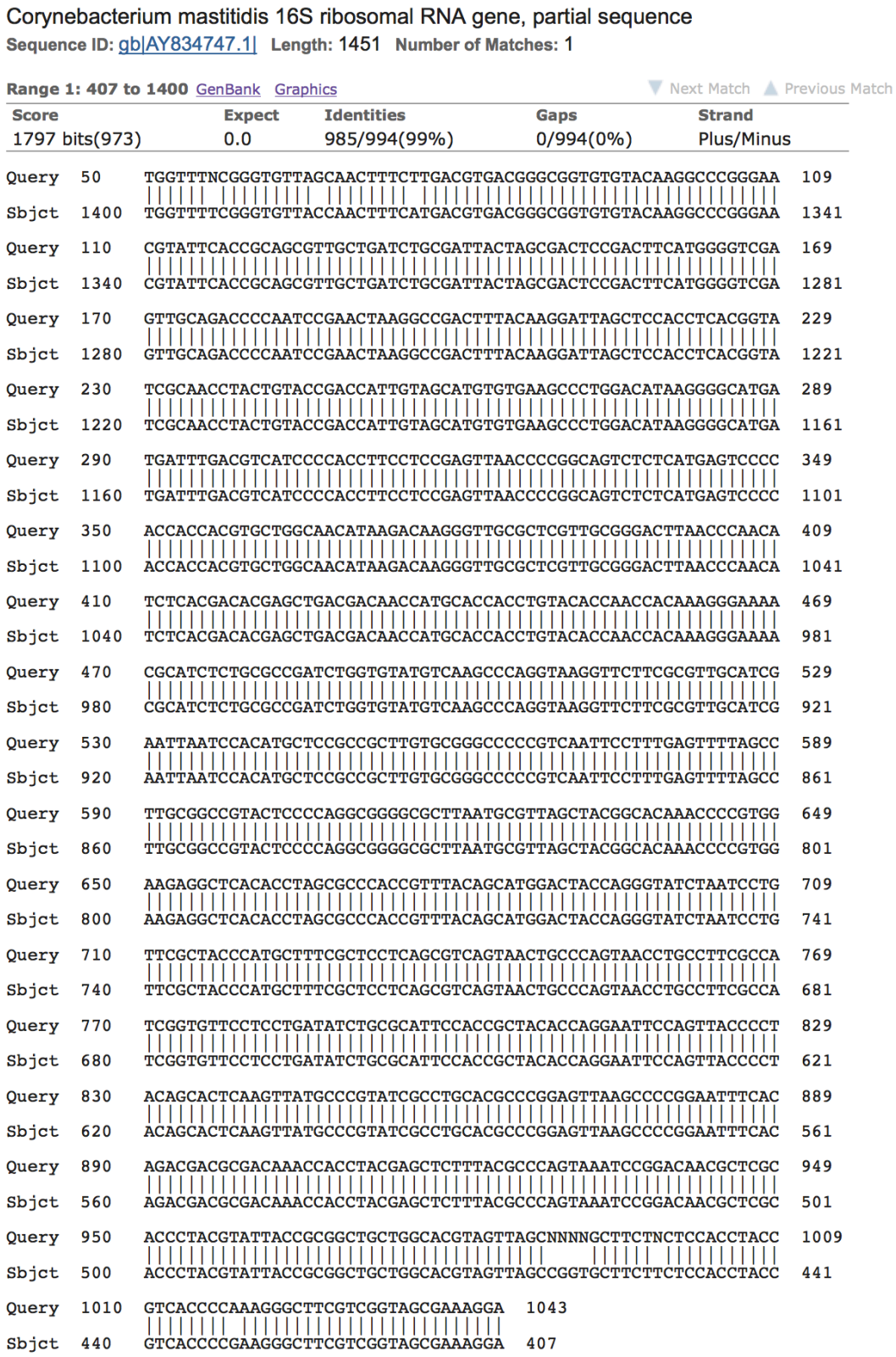

Figure S2 (refers to Fig 2). *C. mastitidis* from mouse conjunctiva closely aligns with *C. mastitidis* isolated from human conjunctiva. *C. mastitidis* was isolated and expanded from C57BL/6 conjunctiva. It was then grown to a pure population and Genewiz (LLC) provided the sequence. The sequence is representative of at least 10 isolated colonies from pure populations.

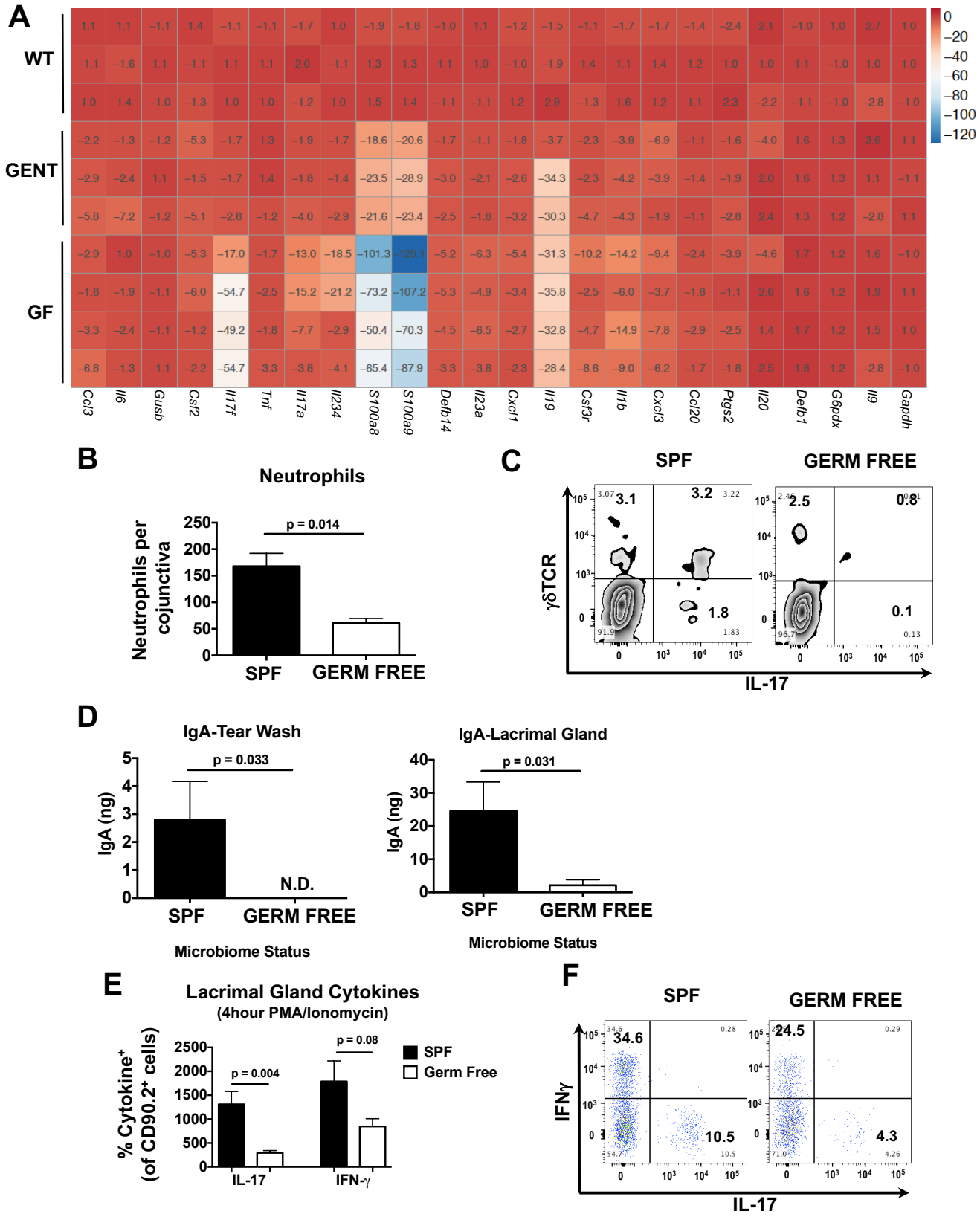

Figure S3 (refers to Fig 3). Germ free mice have a poorly developed ocular immune response. (**A**) Nanostring assessment of genes known to be regulated by IL-17 signaling. Each row represents bulk mRNA from a single mouse from two experiments. (**B-F**) Conjunctival tissue from WT or Germ Free (GF) mice was harvested, treated with collagenase, dispersed into single-cell suspensions and (**B**) assessed for neutrophil numbers directly *ex vivo or* (**C**) stimulated with PMA and ionomycin in the presence of brefeldin A for 4 hours. After stimulation intracellular IL-17A was assessed by flow cytometry. (**D**) Ocular surfaces were washed with 10 µl of PBS or lacrimal glands were homogenized in 500µl of PBS and IgA concentration was assessed using ELISA. (**E & F**) Lacrimal gland cells were stimulated with PMA and ionomycin in the presence of brefeldin A for 4 hours and IL-17 and IFNγ was assessed using flow cytometry. Bars represent the mean (**D**) concentration of IgA or (**E**) number of cytokine producing cells ± SEM from a pool of two experiments (n=6).

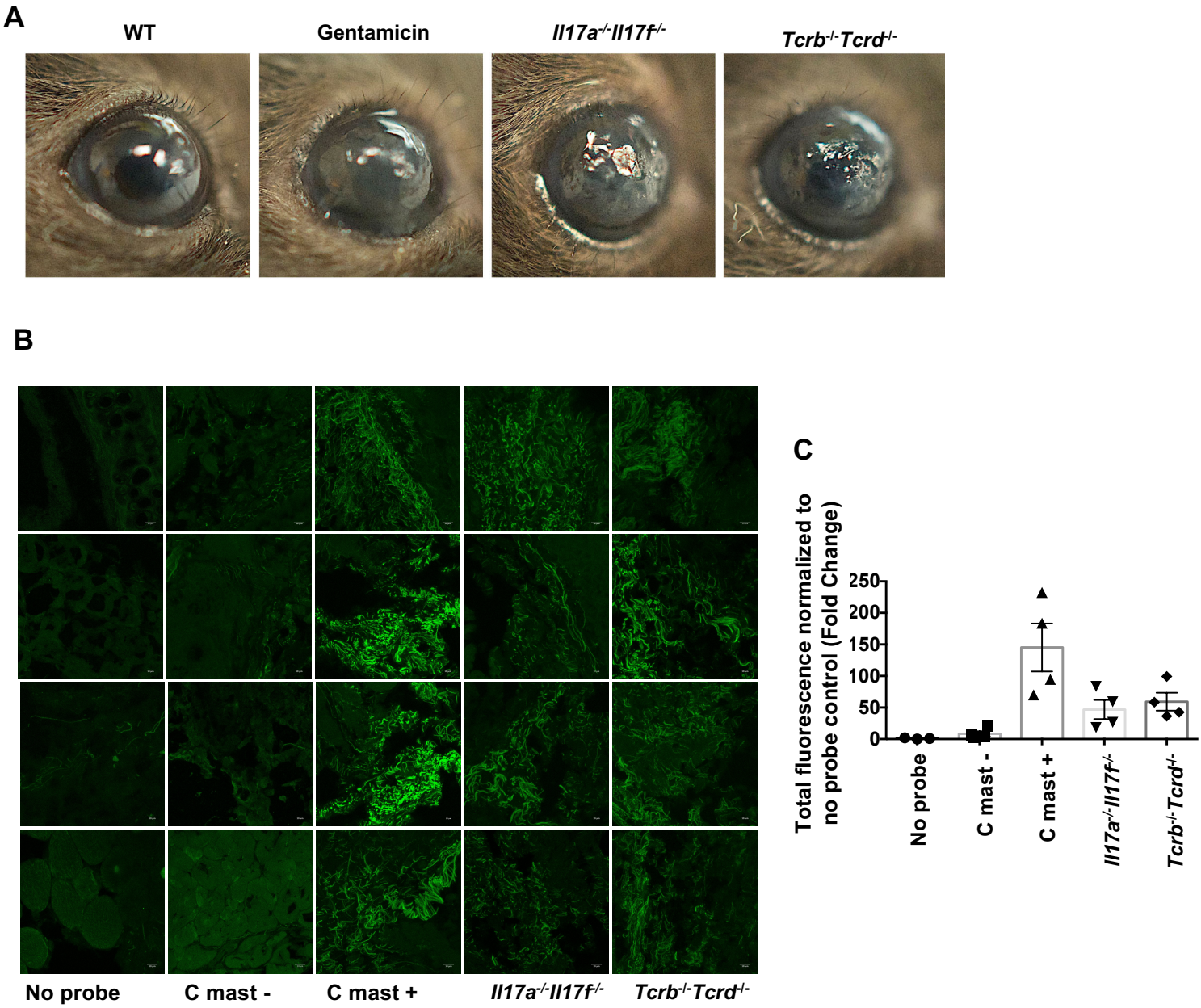

Figure S4 (refers to Figure 4). Immunedeficient mice are more susceptible to ocular infection with *C. albicans.* (**A**) WT mice were topically treated with PBS or gentamicin ophthalmic gel daily for 6 days. After 6 days, WT groups, *Il17a*$^{-/-}$ *Il17f*$^{-/-}$, and T*crb*$^{-/-}$T*crd*$^{-/-}$ mice were ocularly infected with 5 x 10^5 CFU of *Candida albicans*. Briefly, mice were anesthetized and the ocular surface was gently dabbed with gauze. *C. albicans* (strain SC5314) was then applied in 5µl of PBS and remained on the surface for 30 minutes until mice awoke. Fifteen hours after infection, mice were sacrificed. Images represent ocular pathology at the end point. (**B & C**) Frozen sections of whole eyes (with eyelids) were stained with fluorescent probes against *Corynebacterium spp.* Data are from 4 individual mice. Background from images in (**B**) was subtracted and despeckled using FIJI software. Images were converted to binary mode to allow region of interest generation and filament detection in the max image projection. Total fluorescence was then normalized to the 'no probe' control in (**C**). Each sample represents an individual mouse.

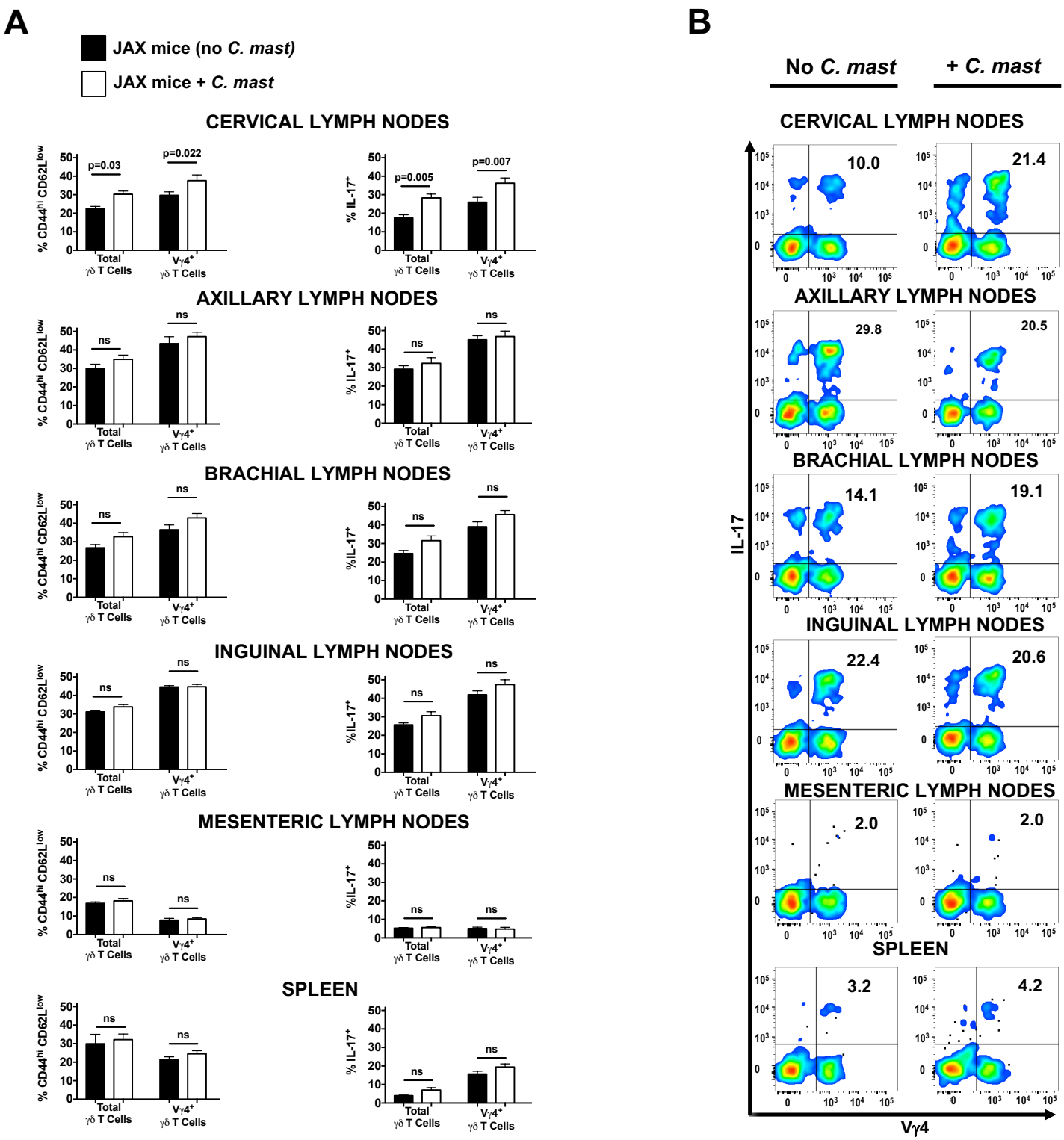

Figure S5 (refers to Fig 5). Colonization with *C. mast.* induces immunity only in local draining lymph nodes. Mice from JAX Laboratories were given PBS or were inoculated with 1 x 10^8 CFU of *C. mast.* once every three days, totaling three inoculations. After 3 weeks, cells from noted lymph nodes or spleen were stained for gd TCR and activation markers (CD44 and CD62L) or were stimulated for 4 hours with PMA and ionomycin in the presence of brefeldin A and were stained for γδ TCRs and intracellular IL-17. (A) Bars represent the mean (left) $CD44^{hi}CD62L^{low}$ % or (right) IL-17% of γδ T cells ± SEM. (B) Flow plots represent IL-17 production in $V\gamma4^+$ γδ T cells after stimulation. Data are pooled from two independent experiments (n = 6, JAX & 8 JAX + *C. mast*). Statistical significance was determined using ANOVA.

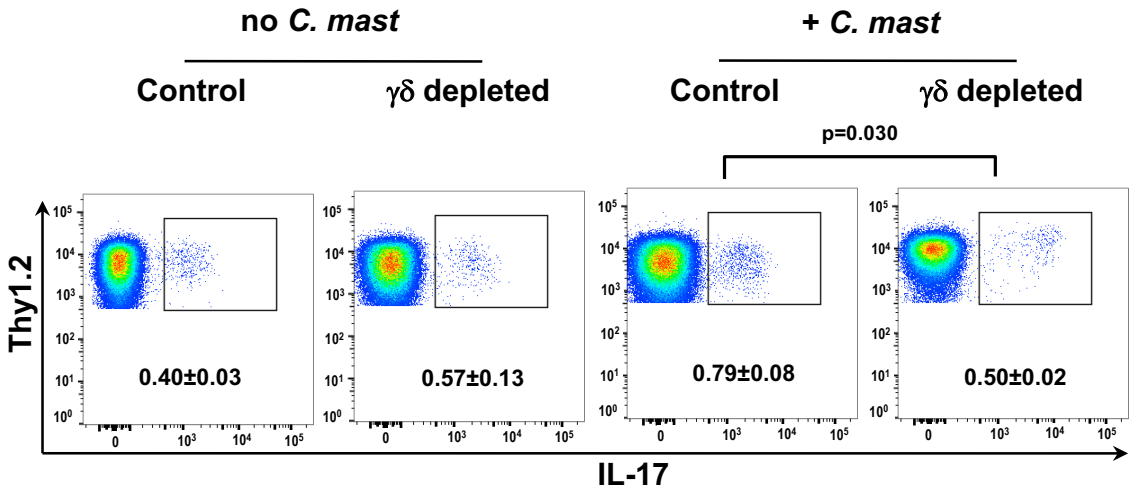

Figure S6 (refers to Fig 7). γδ TCR (UC7-13D5) depletion antibody reduces IL-17 in the draining lymph nodes. Mice from JAX Laboratories were given PBS or were inoculated with 1 x 10^8 CFU of *C. mast.* once every three days, totaling three inoculations. After 3 weeks, mice were depleted of γδ T cells using a 500 μg i.p. injection (UC7-13D5). After 4 days, mice were sacrificed and single-cell suspension of eye-draining lymph node cells were stimulated with PMA and ionomycin in the presence of brefeldin A for 4 hours. After stimulation, cells were stained for intracellular IL-17. The $CD90.2^+$ population is depicted and flow plots are representative of two experiments (n=3 per group). Numbers represent the mean frequency of $IL\text{-}17^+$ cells ± SEM.