Supplementary information for IL-17A-producing γδT cells promote CTL responses against *L. monocytogene* infection by enhancing dendritic cell cross-presentation

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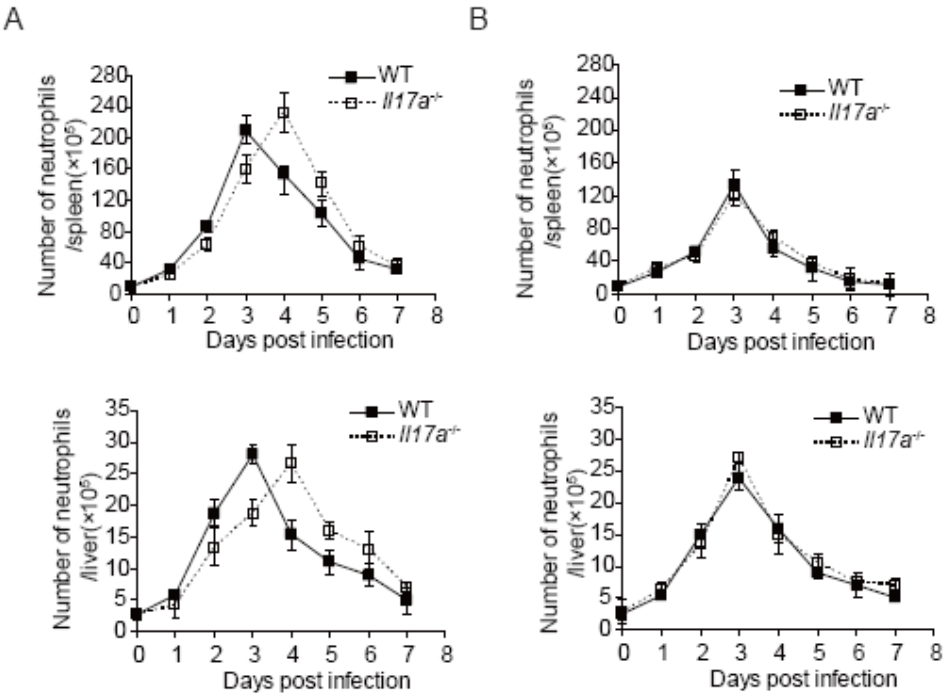

Figure. S1. Kinetics of neutrophils in the spleen and liver post *L. monocytogenes* infection.

Mice were infected with LM-OVA (A) or Δ*actA*$^{-/-}$ LM-OVA (B), Gr-1^{+}CD11b^{+} neutrophils were determined from day 0 to day 7. Data are means ± SD for five mice per group and are representative of three experiments.

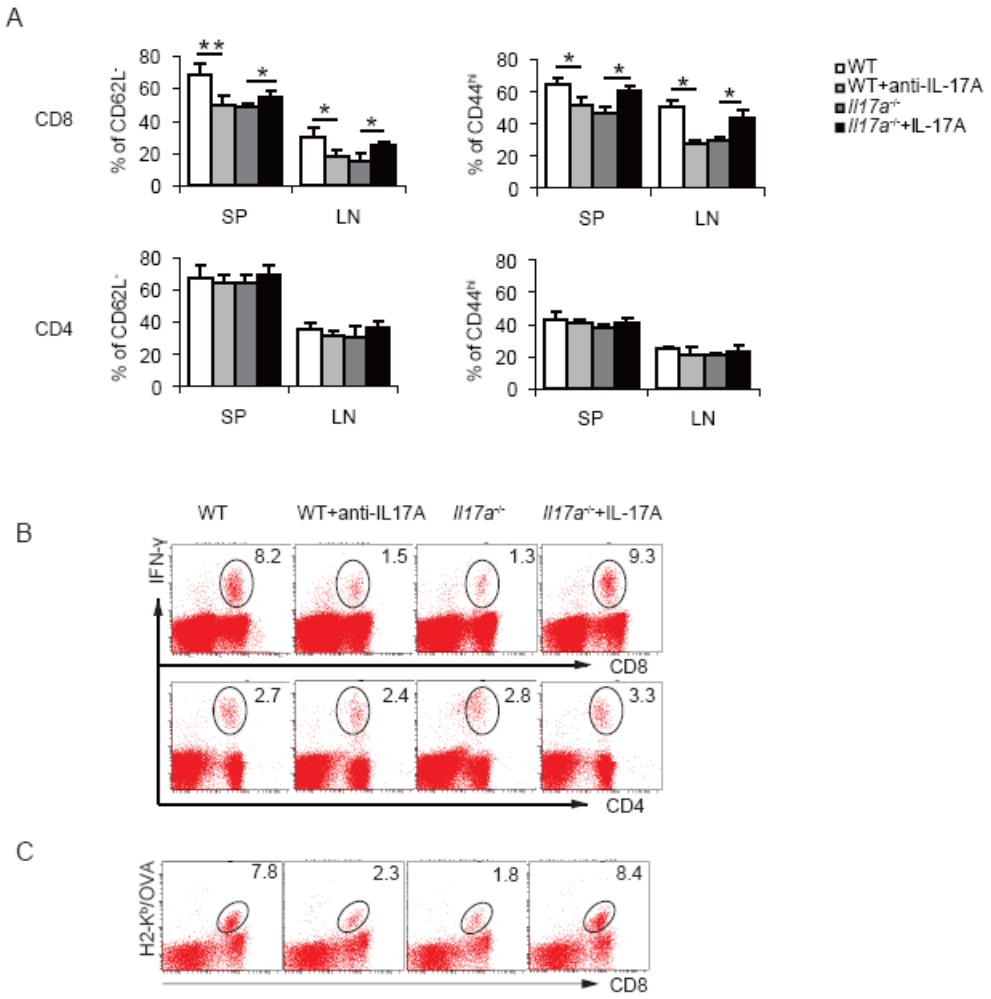

Figure. S2. Decreased generation of effector CTL once blockade of IL-17A *in vivo*

WT mice, WT mice injected with neutralizing anti-IL-17A mAb, *Il17a*$^{-/-}$ mice, and *Il17a*$^{-/-}$ mice supplemented with rmIL-17A were infected with Δ*actA*$^{-/-}$ LM-OVA. Seven days later, CD44^{hi} and CD62L^{lo} cells in CD8^{+} T (top) and CD4^{+} T population (bottom) were determined in the spleen and pooled LN (axillary, brachial, and inguinal) (A). OVA-specific CD8^{+} T cells were evaluated by intracellular staining (B) and H2-K^{b}/OVA tetramer staining (C). Ag specific CD8^{+} T cells were detected by re-stimulating with $OVA_{257-264}$ (B, top), and Ag specific CD4^{+} T cells with $LLO_{190-201}$ (B, bottom).

Data are means ± SD, and representative of three experiments. *P<0.05. **P<0.01.

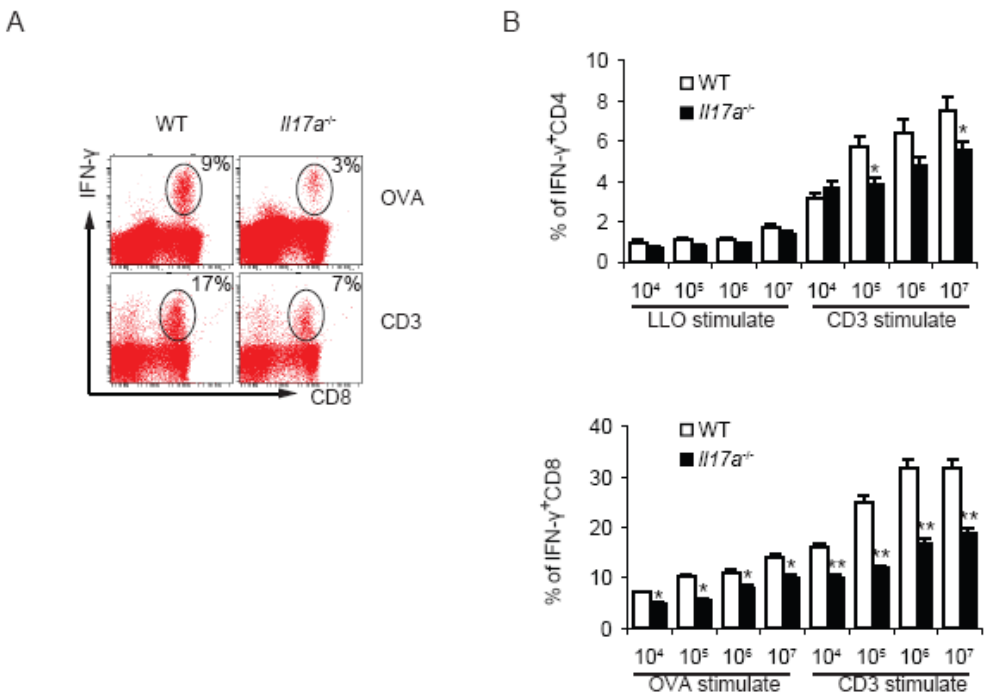

Figure. S3 Impaired $CD8^+$ T cells response after OVA immunization and infection with different doses of *L. monocytogene* in *Il17a*$^{-/-}$ mice

A, WT and *Il17a*$^{-/-}$ mice were immunized with 100 μg OVA plus CFA subcutaneously. Seven days later, percentage of IFN-γ producing $CD8^+$ T cells in splenocytes was determined after restimulated with $OVA_{257-264}$ or anti-CD3 mAb. B, Frequencies of IFN-γ^+ CD4 and CD8 T cells in WT and *Il17a*$^{-/-}$ mice infected with different doses of Δ*actA*$^{-/-}$ LM-OVA. Splenocytes were restimulated with peptide ($LLO_{190-201}$ for CD4 and $OVA_{257-264}$ for CD8 T cells) or anti-CD3 mAb. Data are representatives of three independent experiments.

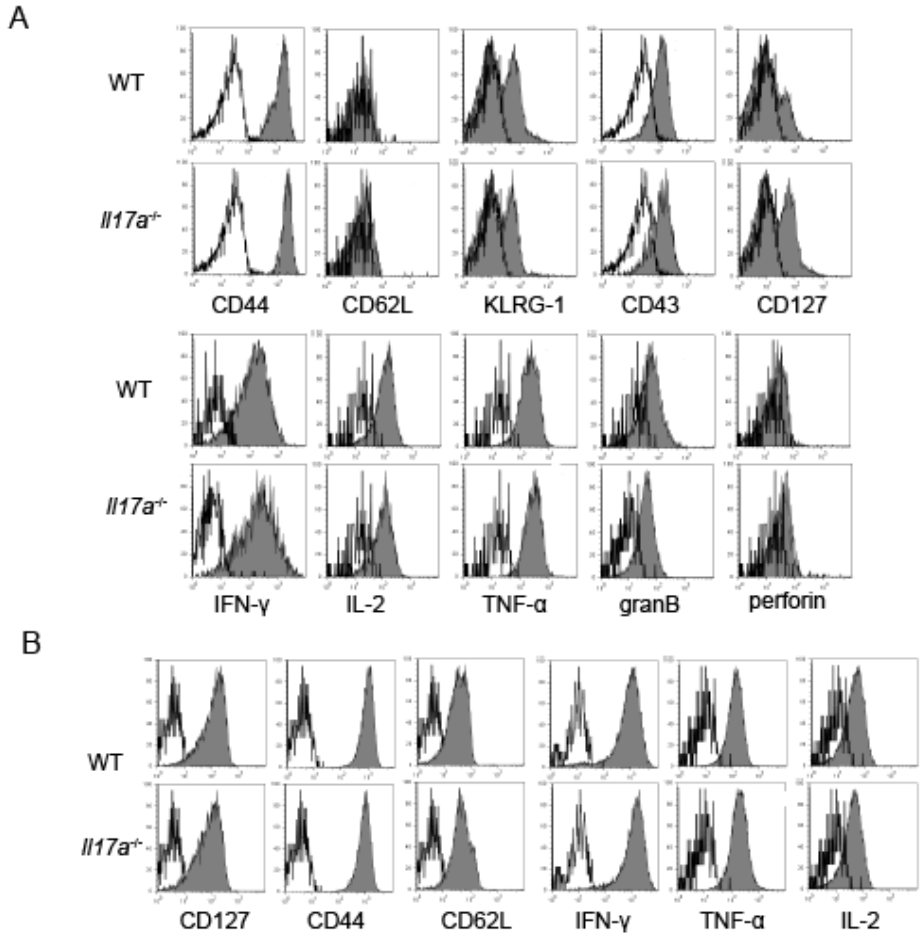

Figure. S4. Phenotype of effector and memory CD8$^+$ T cells in WT and *Il17a*$^{-/-}$ mice after *L. monocytogene* infection

WT and *Il17a*$^{-/-}$ mice were infected with Δ*actA*$^{-/-}$ LM-OVA. H2-K^b/OVA tetramer positive effector CD8$^+$ T cells were examined for their phenotype and cytokine production after restimulated with $OVA_{257-264}$ on day 7 and day 30. Unfilled histogram represents uninfected control. Data are representatives of at least 3 independent experiments.

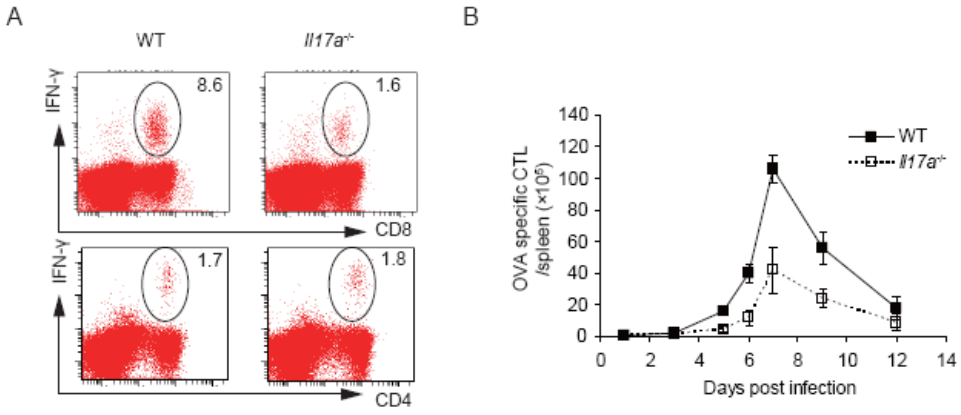

Figure. S5. Kinetics of antigen specific CD8$^+$ T cells in WT and *Il17a*$^{-/-}$ mice after virulent *L. monocytogenes* infection

WT and *Il17a*$^{-/-}$ mice were infected with LM-OVA, and then OVA specific CD8$^+$ T cells were determine by re-stimulating with $OVA_{257-264}$, and LLO specific CD4$^+$ T cells by restimulating with $LLO_{190-201}$. (A) Representative of antigen specific CD8 (top) and CD4 (bottom) T cells on day 7. (B) Kinetic of OVA specific CD8 T cells during infection. Data are means ± SD for five mice per group and are representative of three independent experiments with the same results.

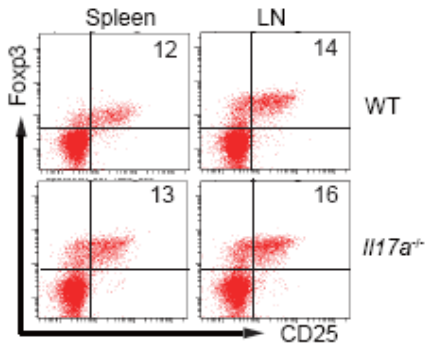

Figure. S6. Identical regulatory T cells response in WT and *Il17a*$^{-/-}$ mice after *L. monocytogenes* infection

WT and *Il17a*$^{-/-}$ mice were infected with Δ*actA*$^{-/-}$ LM-OVA, CD4^{+}Foxp3^{+}CD25^{+} regulatory T cells were determined both in the spleen and pooled LNs after 7 days. Numbers indicate the percentage of double positive cells in the gated CD4^{+} T cells. Data shown are representative of three independent experiments.