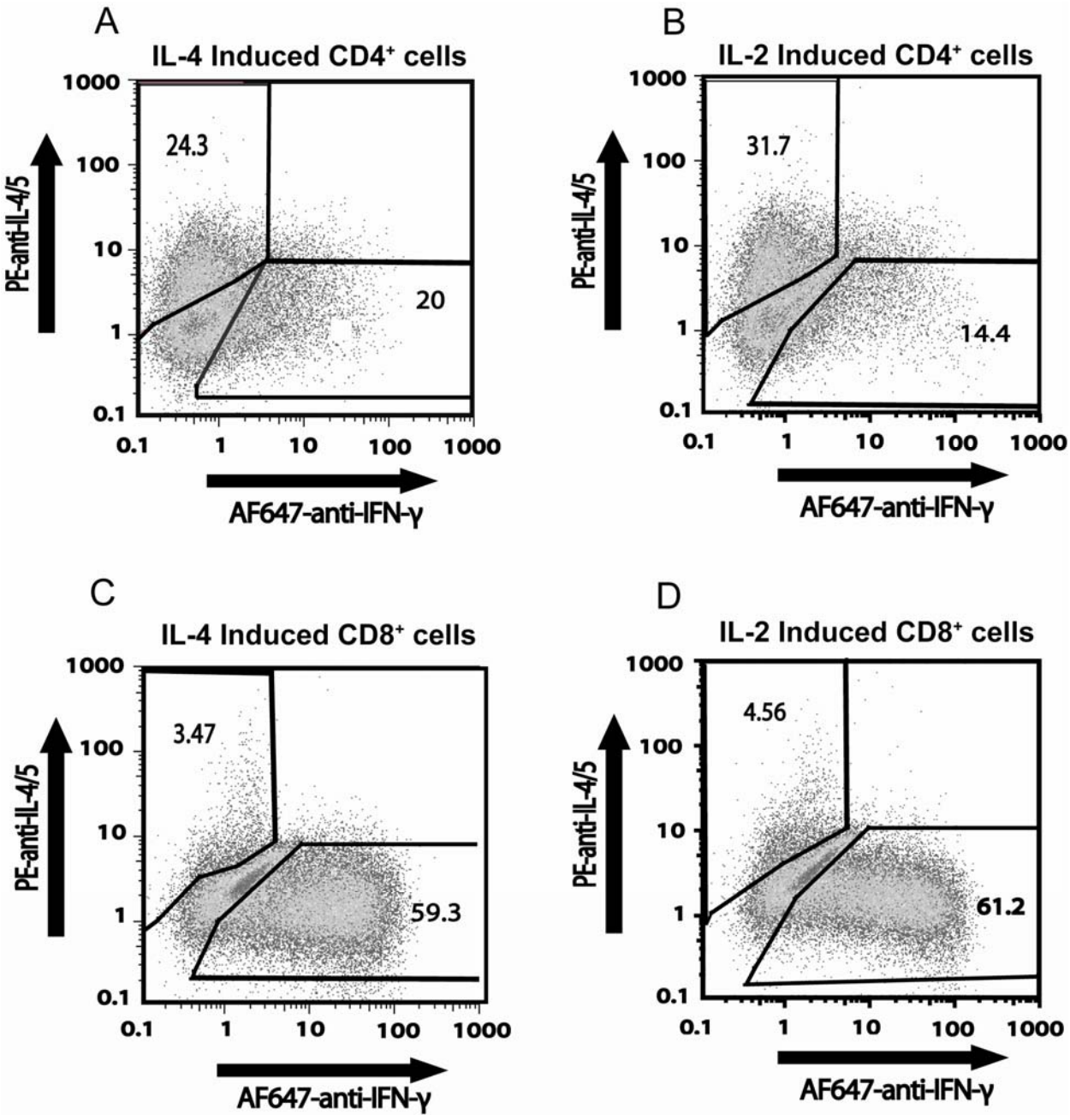

Supplemental Fig. 1. IL-4 induced CD8 CTLs contain little IL-4 or IL-5 and thus differ from the phenotype associated with type 2 (Tc2) CTLs. To determine if the IL-4 induced T cells expressed a type 2 phenotype, internal cytokine staining was performed on day 5 after initial induction. Cells were simultaneous stained for ILs 4&5 using PE-conjugated antibodies to increase potential detection of these type 2 cytokines, while Alexa Fluor 647 antibodies were used to detect IFN-γ. These cells were simultaneously stained with additional antibodies to CD4 and CD8 in the same reaction, so that CD4 and CD8 cells were stained identically for intracellular antigens. **(A and B) CD4 T cells.** The CD4+ T cells were gated and are displayed. The gates for PE anti-ILs and for IFN-γ were drawn based on cells stained with PE and AF-647 isotype control antibodies (not illustrated). The IL-4 induced culture had ~25% IL-4 and/or IL-5 positive cells that were negative for IFN-γ (Th2 cells) and 20% of the CD4+ T cells contained only IFN-γ (Th1 cells). For the IL-2 induced cells, the Th1 and Th2 populations were similar to the IL-4 induced cells. With IL-2, 32% of all CD4+ T cells were producers of IL-4 and IL-5, while 14% of the CD4 T cells populations were producers of IFN-γ. The intracellular staining was able to detect type 2 T helper cells was could be expected to detect "type 2 CTLs". **(C and D) CD8 T cells.** Only about 3% of the CD8 T cells of the IL-4 induced T cells expressed IL-4 or IL-5. In contrast, ~60% of all CD8+ T cells expressed high levels of IFN-γ. Staining for intracellular IL-4 & IL-5 and IFN-γ in the IL-2 induced T cell cultures was similar. The intracellular staining could detect Th2 cells but failed to detect Tc2 cells.