Fig. S6

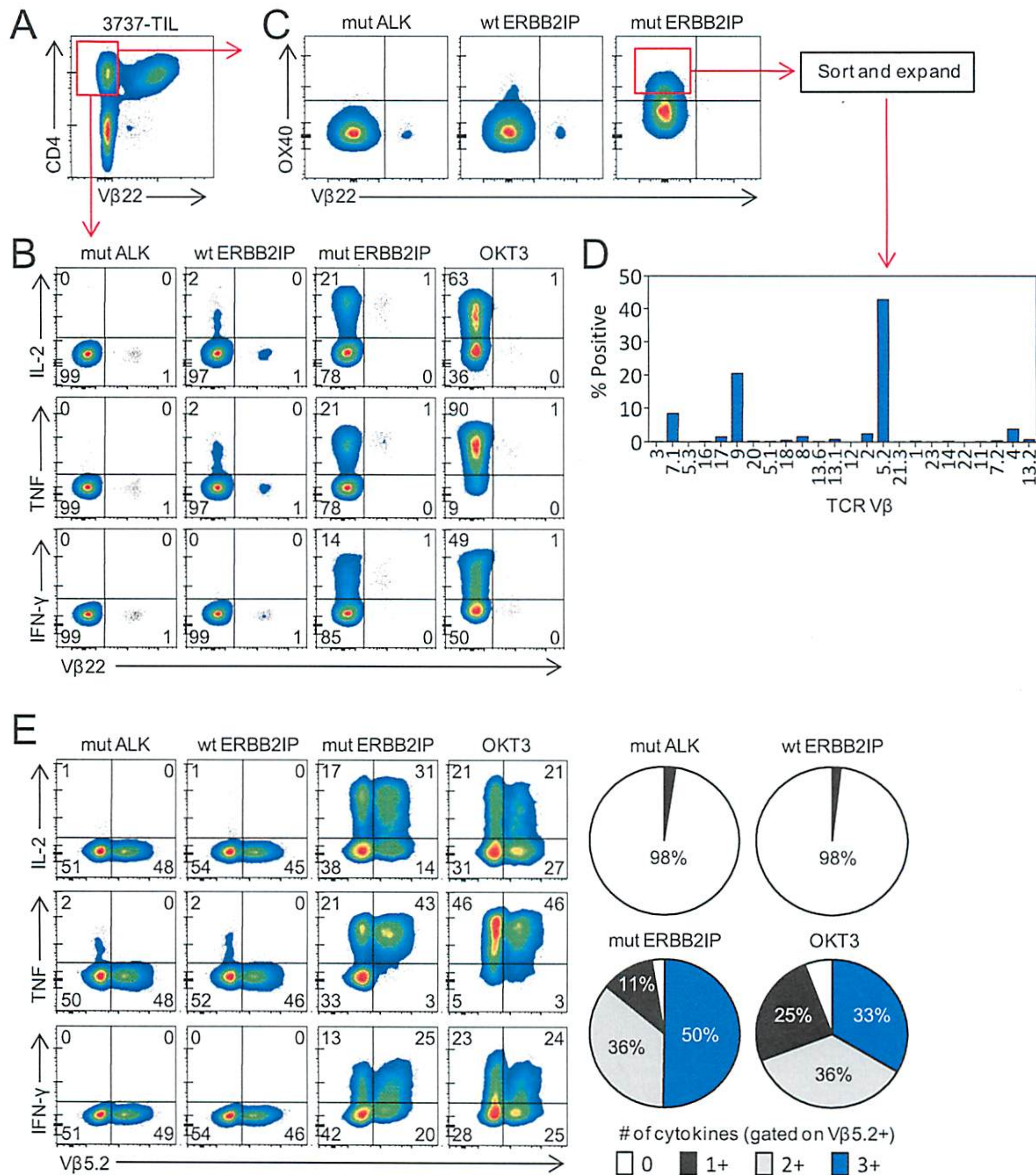

Fig. S6. Patient 3737-TIL contain Vβ22-negative ERBB2IP-mutation-reactive T cells. (**A**) CD4+ Vβ22-negative cells present in Patient 3737-TIL were sorted by FACS (red box). (**B-C**) These cells were then rested in IL-2 containing media for 2 days prior to being co-cultured with autologous B cells pulsed overnight with wild-type (wt) ERBB2IP, or mutated (mut) ALK or mut ERBB2IP 25-AA long peptides. (**B**) Flow cytometry was used to assess expression of Vβ22 and to detect intracellular production of IL-2, TNF, and IFN-γ in the CD4+ population at 6 h post-stimulation. (**C**) Flow cytometry was used to assess expression OX40 and Vβ22 in the CD4+ population at 24 h

post stimulation. Cells that upregulated OX40 were sorted (red box) and expanded, and the TCR-Vβ repertoire was analyzed by flow cytometry (**D**). Data are gated on live CD4+ cells. (**E**) The sorted cells described in (D) were co-cultured for 6 h with autologous B cells pulsed overnight with wt ERBB2IP, or mut ALK or mut ERBB2IP 25-AA long peptides. Flow cytometry was used to assess expression of Vβ5.2 and to detect intracellular production of IL-2, TNF, and IFN-γ in the CD4+ population. Pie charts display the percentage of Vβ5.2+ cells that expressed the indicated number of cytokines.