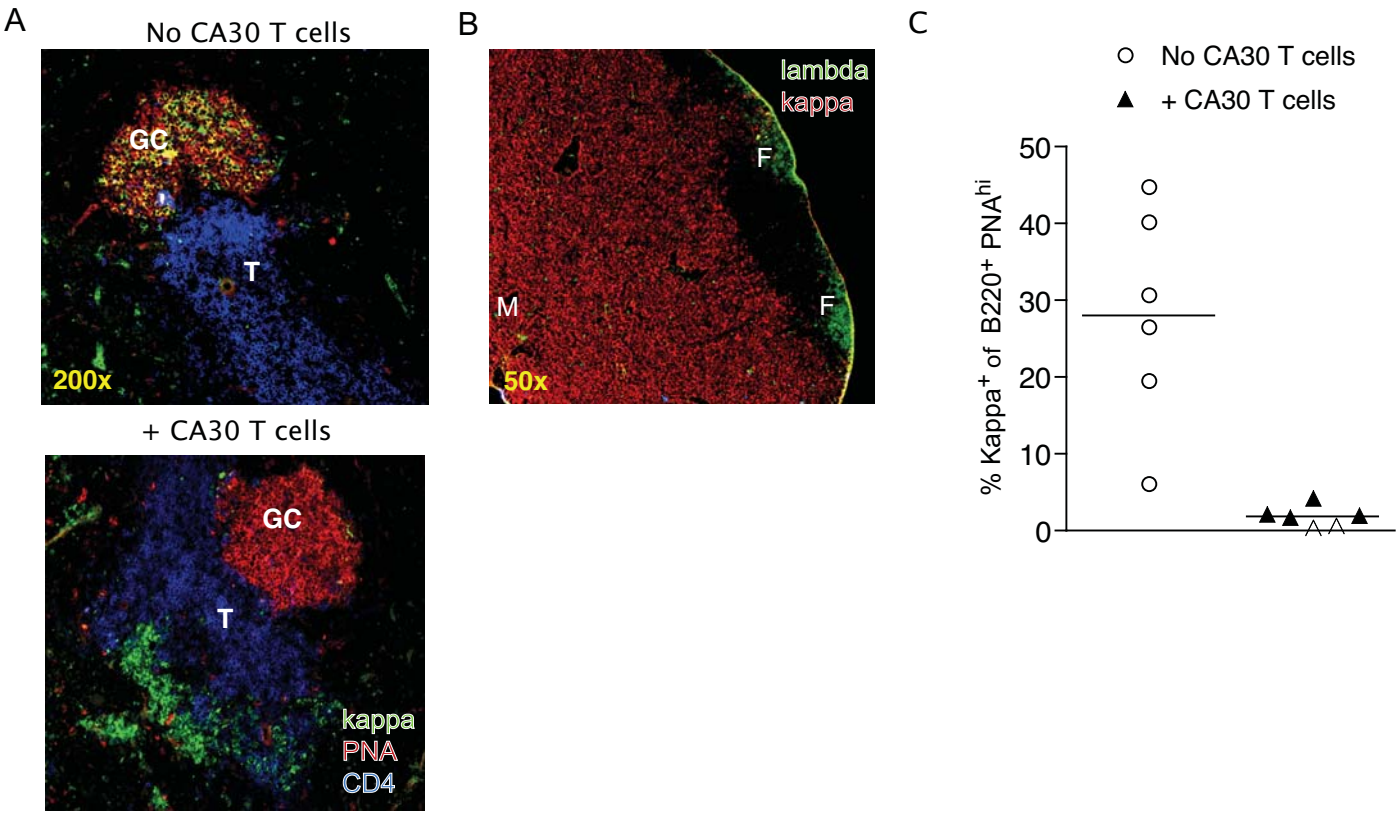
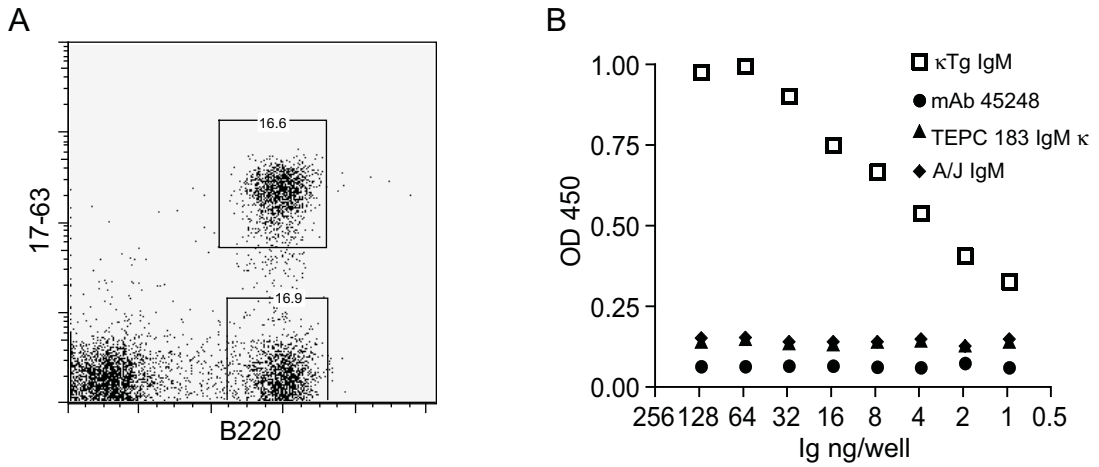
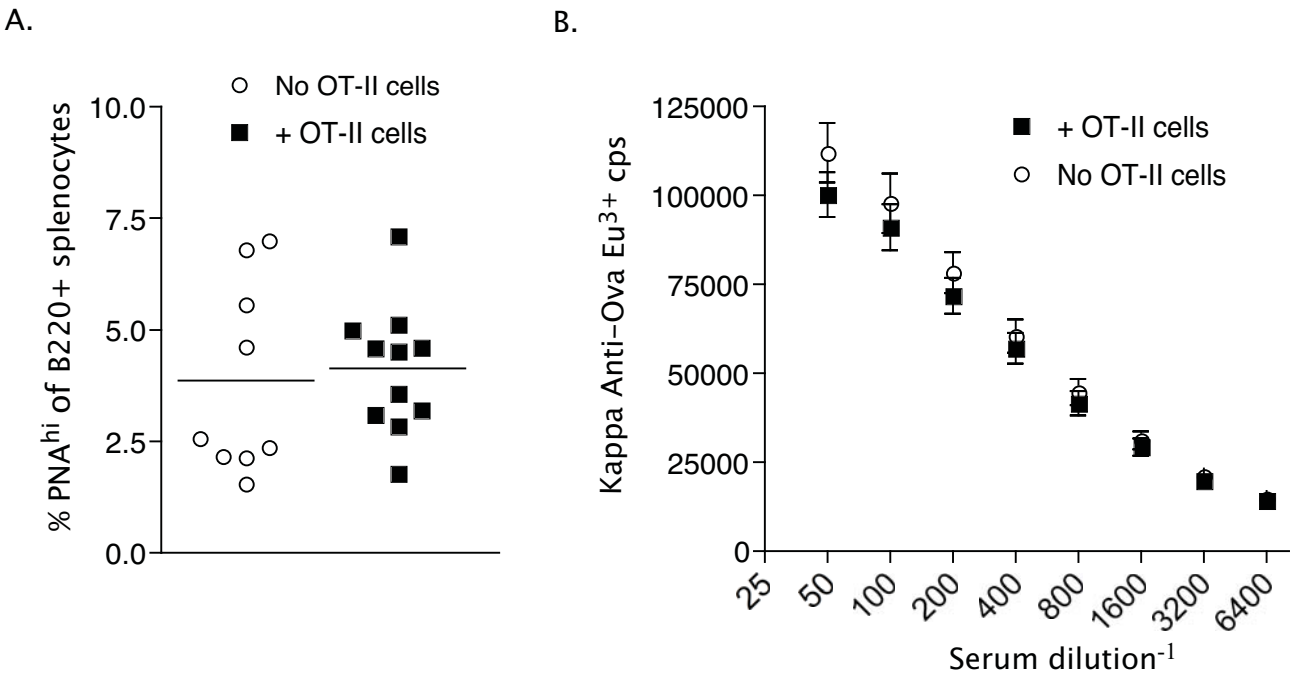


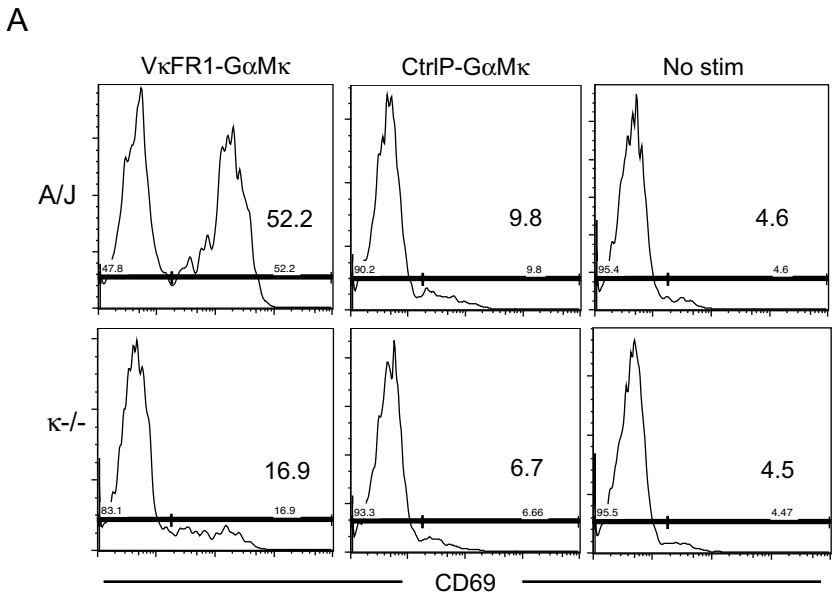
Supplemental Figure 1. (A) Representative images of day 14 splenic follicles from mice that received (right) or did not receive (left) 2.5 x 10^5 CA30 T cells along with 5 x 10^4 κTg splenocytes together on day 0, followed by immunization with GαMκ in alum. (B) Representative day 14 image showing λ+ and κ+ B cells within a lymph node taken from an adoptive transfer recipient that received 5.0 x 10^4 κTg splenocytes on day 0, was immunized with GαMκ, and received 2.5 x 10^5 CA30 T lymph node cells on day 7. F denotes follicle; M denotes medulla. Data in both (A) and (B) are representative of at least 3 independent experiments with 3-5 mice per group. (C) Recapitulation of the standard protocol with 5.0 x 10^4 κTg splenocytes transferred on day 0, followed by immunization with kappa light-chain specific antigen Protein L (50 µg). The figure shows the percent of GC cells (B220+ PNA^{hi}) that are kappa + on day 14 in mice that received (triangle) or did not receive (o) CA30 T cells on day 7. These data are representative of two independent experiments.



Supplemental Figure 2. (A) Monoclonal antibody 17-63 (mAb17-63) discriminates κTg B cells from wild-type A/J B cells by FACS. A 1:1 mixture of κTg κ-/- and wild-type A/J splenocytes were labeled with anti-B220 and mAb17-63. (B) mAb17-63 specifically recognizes Ig containing the κTg light chain by ELISA. Various κ+ IgM samples were tested for their ability to bind mAb17-63-coated wells. Binding was detected with an anti-υ heavy chain-specific antibody. "κTg IgM" is a mAb that uses the same κ chain expressed by κTg B cells. "mAb45-248" is encoded by an unmutated version of the same Vκ gene used by κTg B cells. "TEPC183" is a murine IgM kappa (Sigma, St. Louis, MO). A/J IgM was affinity purified from A/J sera (~95% kappa).



Supplemental Figure 3. (A) Quantification of the percent of splenic GC cells (B220+ PNA^{hi}) among total B220+ cells at day 13 following immunization with 100 μg of OVA in alum (day 0) with (square) or without (o) transfer of 2.5 x 10^5 enriched OT-II transgenic CD4 T cells on day 7. (p=0.37 one-tailed t-test) (B) Serum κ+ antibody titers (to include both IgG and IgM) against OVA at day 13. Symbols represent mean values for each group (n = 9, No OT-II cells; n = 11, + OT-II cells) with SEM shown. Data are a composite of two independent experiments.



Supplemental Figure 4. (A) VκFR1-GαMκ and CtrlP-GαMκ were tested in vitro for their ability to activate naïve CA30 T cells upon BCR mediated uptake by wild-type A/J B cells. 1.0 x 10^5 enriched A/J or κ-/- B cells were incubated O/N with 5 x 10^4 enriched naïve CA30 T cells with 5 μg/ml of VκFR1-GαMκ, CtrlP-GαMκ, or media alone. After 14 hours of incubation, the percent of CD4+ Vβ8.1/8.2+ T cells expressing CD69 was determined by flow cytometry.
Data are representative of two independent experiments.