Supplemental Figure 1. GK1.5 treatment results in functional removal of T cell help.

(A and B) Percent of live, CD4<sup>+</sup> T cells in the spleen (A) and blood (B) of MRL-*lpr* mice after 2 weeks of treatment with varying doses of GK1.5. Note that depletion was not further enhanced by higher doses of GK1.5.

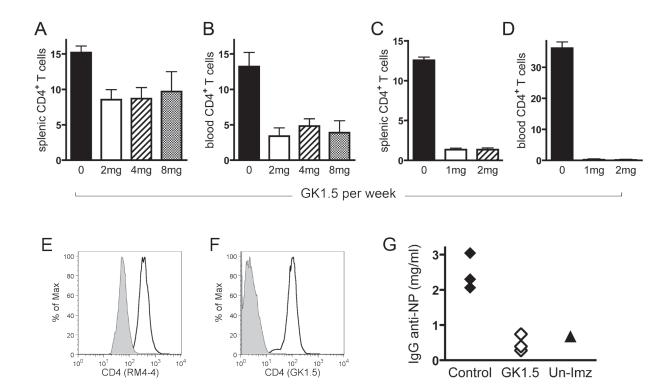
- (C and D) Percent of live, CD4<sup>+</sup> T cells in the spleen (C) and blood (D) of BALB/c mice after 1 week of treatment with varying doses of GK1.5.
- (E) Representative plot of CD4 expression (as detected by RM4-4 antibody) on the surface of live CD4<sup>+</sup> T cells in GK1.5-treated (grey) and control Ig-treated (white) mice.
- (F) Ex-vivo GK1.5 staining of live CD4<sup>+</sup> T cells in GK1.5-treated (grey) and control Igtreated (white) mice. Failure to stain T cells from GK1.-5-treated mice indicates that essentially all GK1.5 epitopes were covered in GK1.5-treated mice.
- (G) Functional analysis of T cells in GK1.5 treated (open diamonds) and control Igtreated mice (black diamonds). Mice were immunized with T-dependent antigen (NP-CGG in alum) and the IgG anti-NP response was measured by ELISA.

Supplemental Figure 2. Differentiation status of AM14 cells from WT and TLR-deficient mice given PL2-3.

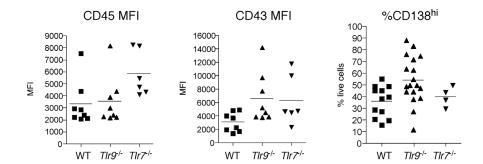
Expression of surface markers CD45, CD43, and CD138 on live, splenic AM14 plasmablasts (4-44\*, CD22<sup>lo</sup>) from Tg WT and Tg TLR-deficient mice. CD45: \*p=0.02; CD43: \*p=0.03; CD138: \*p=0.02, Mann Whitney test.

**Supplemental Figure 3. B cell intrinsic MyD88 is required for AM14 B cell proliferation.** *Myd88+/-* or *Myd88<sup>-/-</sup>* AM14 Tg B cells were labeled with CFSE and transferred into Balb/c mice that were then treated with anti-chromatin. Treatment groups are indicated above FACS plots. Top row: Co-staining for intracellular and surface 4-44 identifies transferred AM14 cells with minimal background (compare first 3 plots to the 4<sup>th</sup> "no cell" control). Numbers indicate percentages of live cells in the gates, revealing expansion only of MyD88-expressing cells given PL2-3. Bottom row: CFSE and CD22 expression on 4-44<sup>+</sup> cells gated as in top row. Percentages in quadrants are of the parent population. Data represent 1 x 10<sup>6</sup> events per sample. Doublets were

excluded. Cells excluding ethidium monoazide were considered to be live.



Herlands et al, Supplemental Figure 1



Herlands et al, Supplemental Figure 2

