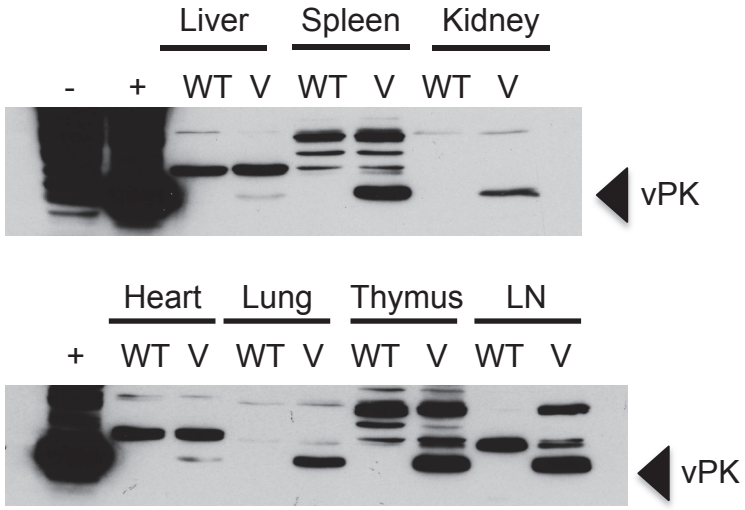
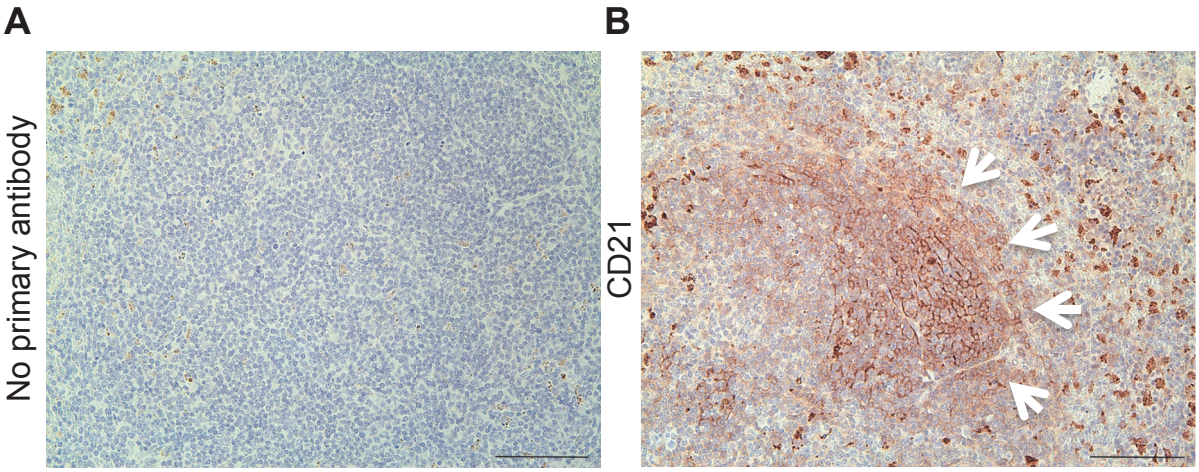
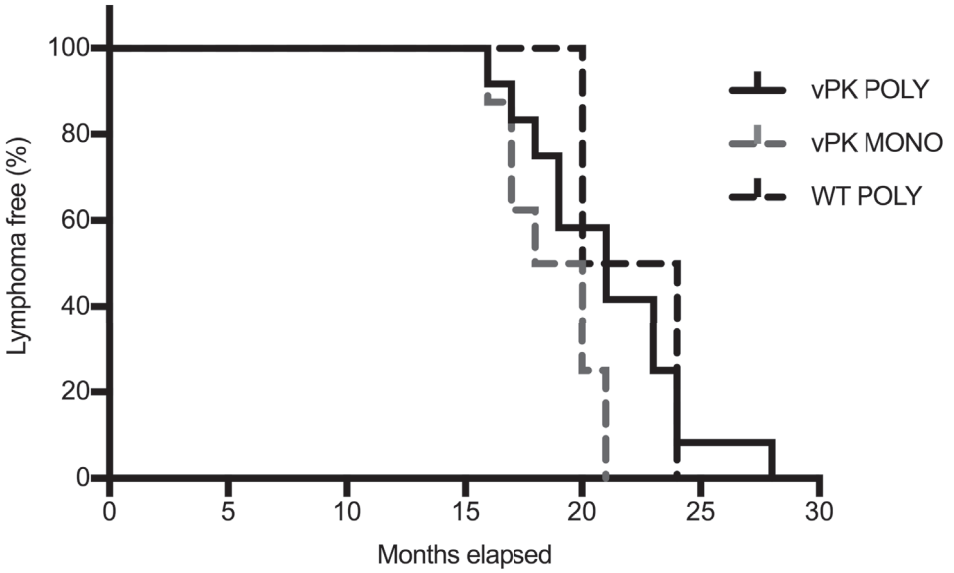


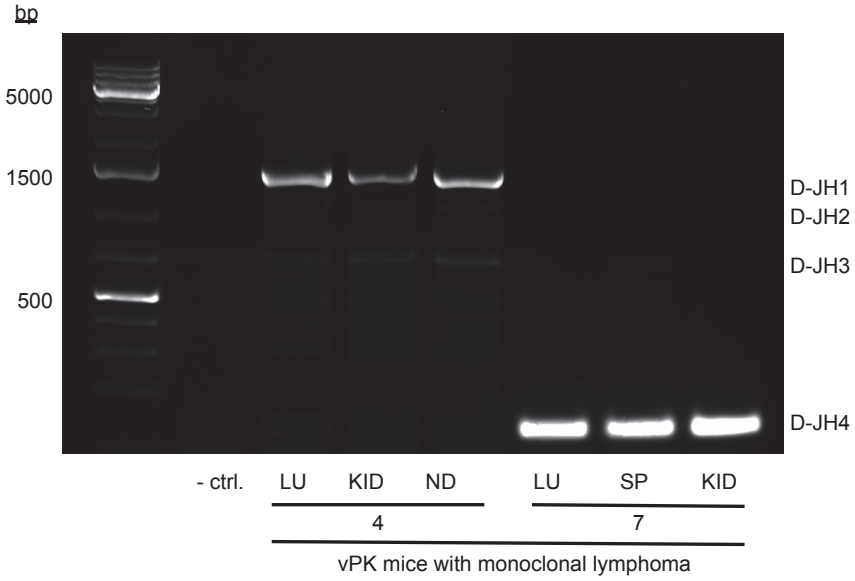
Supplemental Figure 1. vPK is expressed in multiple organs. vPK protein expression was determined by SDS-PAGE and Western blot using a vPK polyclonal antibody. The positive control is clarified lysate from HEK-293 cells that transiently express vPK. LN = lymph node



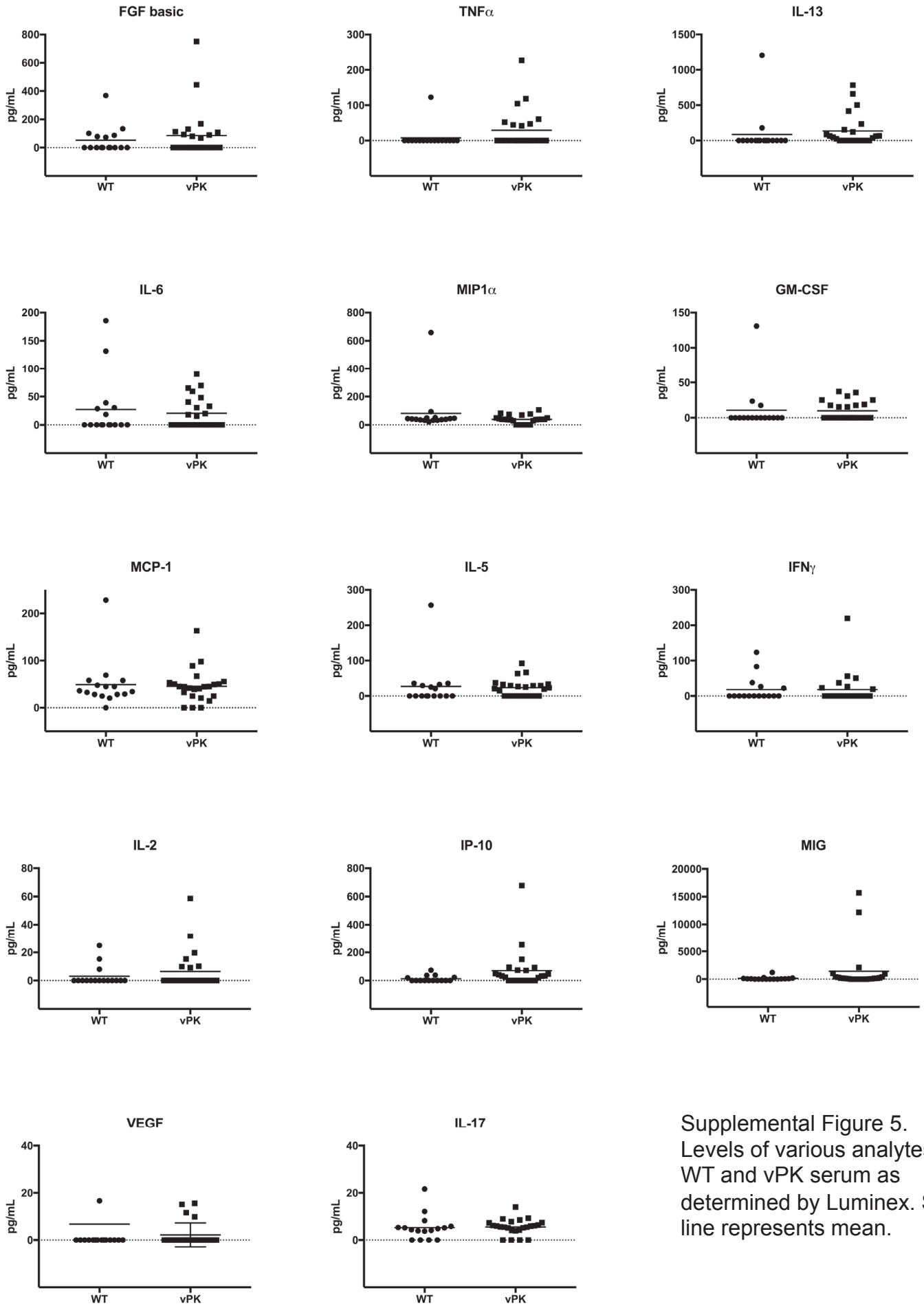
Supplemental Figure 2. (A) No primary antibody control for CD21. (B) CD21 expression in WT mouse spleen. Meshwork is indicated by white arrows. scale bar = 100 μm, 200X.



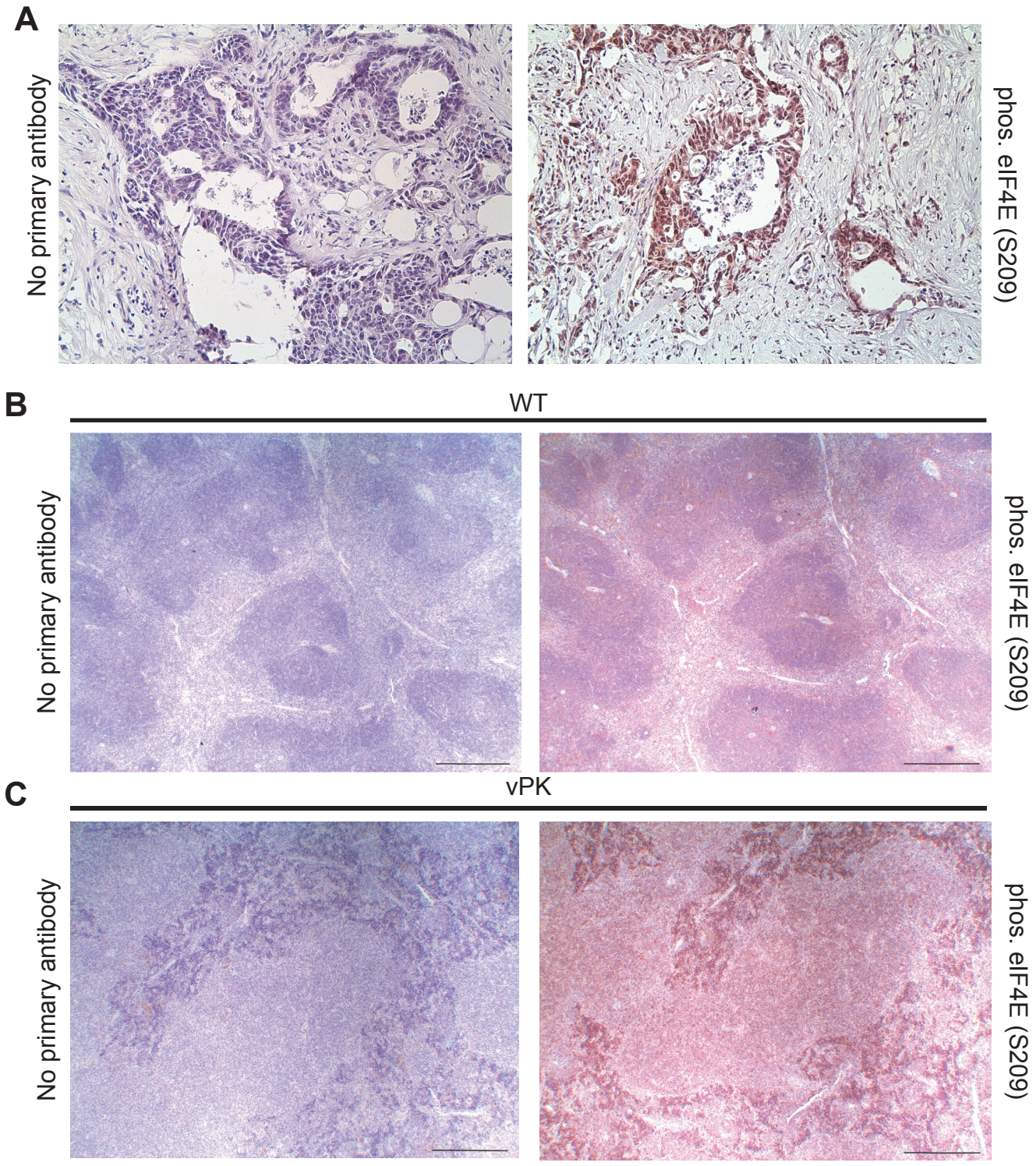
Supplemental Figure 3. Percent lymphoma free of aged vPK mice with either polyclonal (vPK POLY n = 12) or monoclonal lesions (vPK MONO n = 8) and aged WT with polyclonal lesions (WT POLY n = 2).



Supplemental Figure 4. D-JH segments of IgH in genomic DNA in various tissues from individual aged vPK mice with monoclonal B cell lymphoma. Numbers indicate individual mice. LU = lung, KID = kidney, ND = node, SP = spleen.



Supplemental Figure 5. Levels of various analytes in WT and vPK serum as determined by Luminex. Solid line represents mean.



Supplemental Figure 6. vPK lymphomas express elevated levels of phosphorylated eIF4E (S209) compared to age matched WT control. (A) Adenocarcinoma with no primary antibody (left) and adenocarcinoma showing positive expression of phosphorylated eIF4E (right). 100X (B) aged WT spleen with no primary antibody (left) and phosphorylated eIF4E levels in aged WT spleen (C) no primary antibody for aged vPK spleen with lymphoma (left) and phosphorylated eIF4E levels in aged vPK transgenic spleen with lymphoma (right). scale bar = 500 μm, 40X.

Table 1. Incidence of lymphoma in male and female aged WT and vPK transgenic mice

	WT / F	WT / M	vPK1 / F	vPK1 / M	vPK2 / F	vPK2 / M
Total, n	14	11	10	19	11	7
Non lymphoma	12	11	4	6	4	2
Lymphoma	2 (14%)	0	6 (60%)	13 (68%)	7 (64%)	5 (71%)