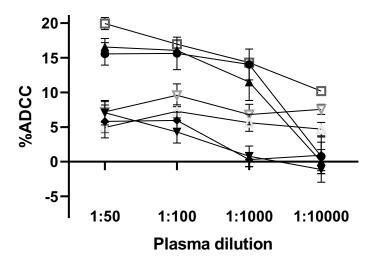
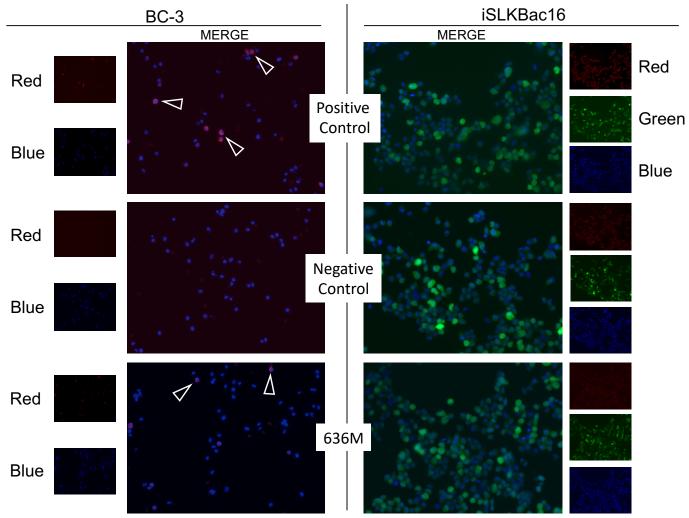
## Supplementary Table 1.

	ADCC+/n	Odds ratio	95% CI	p-value
KS status Control KS	16/38 8/30	- 0.5	- 0.1778-1.406	0.2113
HIV status HIV- HIV+	11/30 13/38	- 0.8982	- 0.3303-2.442	>0.9999
Sex Male Female	11/37 13/31	1.707	- 0.6010-4.392	0.3199
KSHV Neutralization <50% >50%	8/20 10/25	- 1.000	- 0.3011-3.321	>0.9999

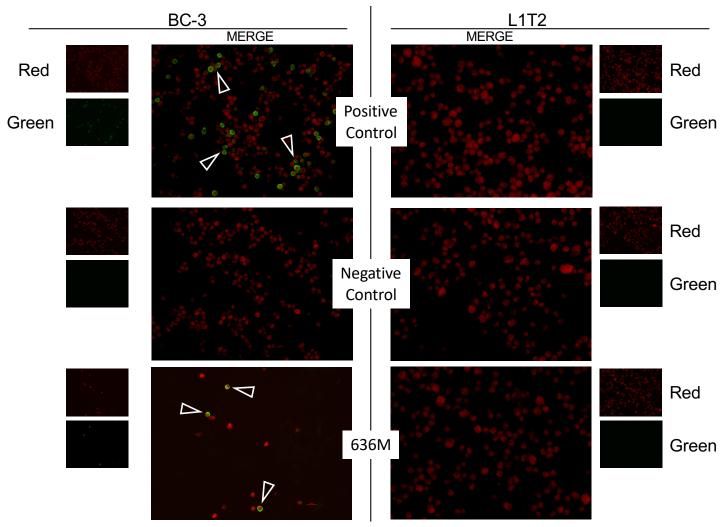
ADCC+, number of individuals with significant ADCC activity n, total number of individuals



**Supplemental Figure 1.** Titration of ADCC responses in KSHV seropositive individuals. Seven additional KSHV seropositive samples were screened for ADCC activity at varying dilutions. No evidence of a prozone effect was observed and individuals with weak responses did not show significantly increased responses at higher dilutions.



**Supplemental Figure 2.** KSHV antibody binding to BC3 and iSLKBAC16 cells. KSHV plasma binding was detected using an Alexafluor-647 conjugated antibody seen in red. DAPI was used to stain nuclei, and iSLKBAC16 cells co-express GFP. Each cell line was screened with positive and negative control plasma in addition to plasma from subject 636M, who demonstrated significant ADCC activity against BC3 cells.



**Supplemental Figure 3.** KSHV antibody binding to BC3 and L1T2. KSHV plasma binding was detected using a Cy-2 conjugated antibody seen in green. Evan's Blue (seen as red) was used as a cellular counterstain. Each cell line was screened with positive and negative control plasma in addition to plasma from subject 636M, who demonstrated significant ADCC activity against BC3 cells.