

Supplementary figures and tables

6.3.24

Supplementary Figures:

Supplemental Figure 1. Experimental procedure to isolate HSV-reactive CD4+ T cells.

Supplemental Figure 2. All prevalent and elicited dose 1 and dose 2 expanding clonotypes from skin and cross-detection in blood and arm.

Supplemental Figure 3. TRBV and TRBJ gene usage in blood, arm, and genital skin.

Supplemental Figure 4. Determination of UL-49 reactivity and HLA-DP restriction of transgenic, vaccine-expanded immunodominant TCR from P4.

Supplemental Figure 5. Gating strategy and CMP results to identify HSV-specificity of clonotypes.

Supplementary Tables:

Supplemental Table 1. Procedures and study visits.

Supplemental Table 2. Demographic characteristics of participants enrolled in the vaccine and preliminary arms.

Supplemental Table 3. Unique clonotypes identified as HSV-2-reactive in CD4+ T cells from blood and their detection in tissue.

Supplemental Table 4a. All prevalent clonotypes detected in blood and skin.

Supplemental Table 4b. All elicited clonotypes detected in blood and skin.

Supplemental Table 5. TRAV/TRAJ usage suggestive of MAIT cell derivation represent a small minority of the TCRA clonotypes detected in two participants over time.

Supplemental Table 6a. All prevalent clonotypes expanding over dose 1.

Supplemental Table 6b. All elicited clonotypes expanding over dose 1.

Supplemental Table 6c. All clonotypes expanding over dose 2.

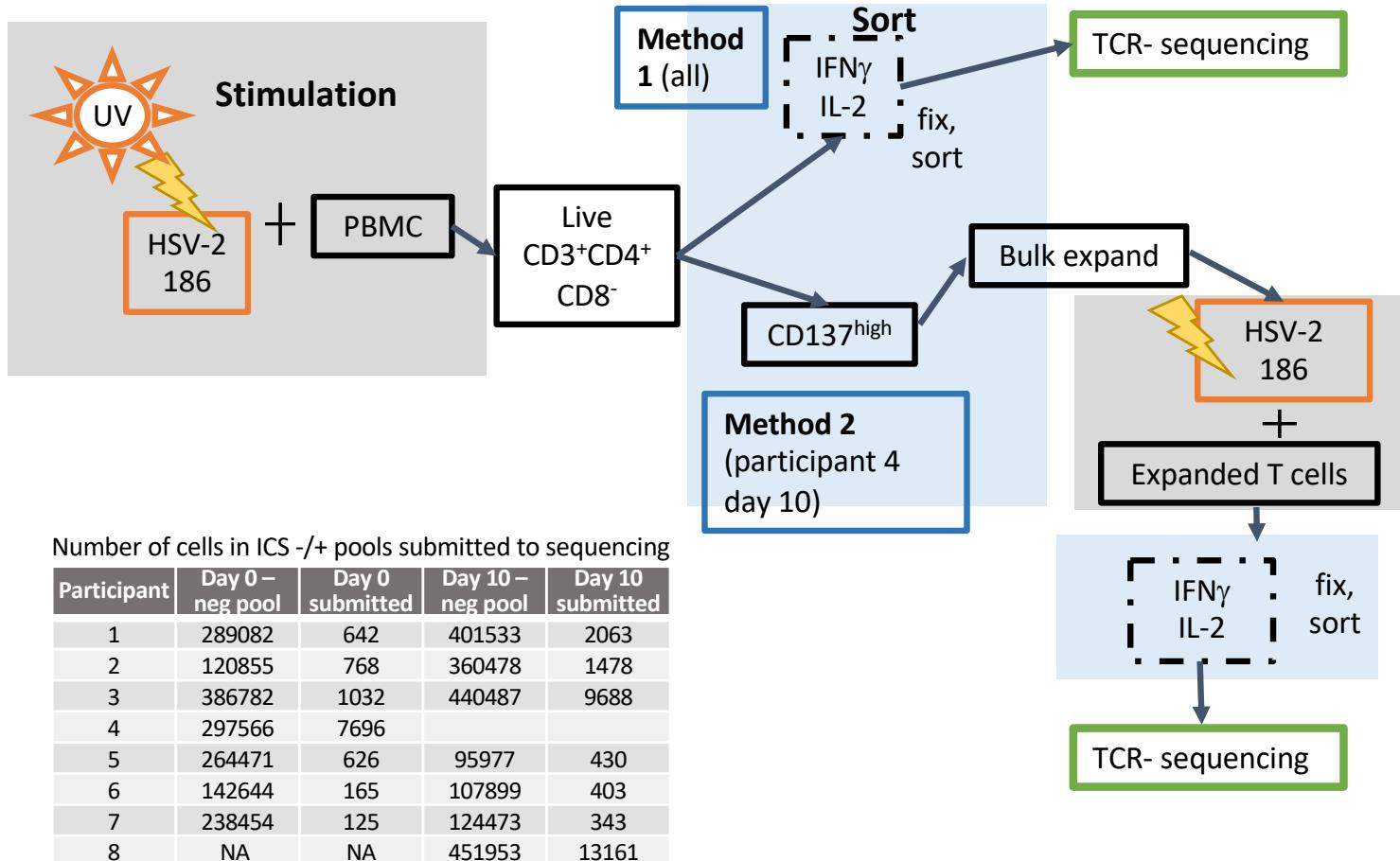
Supplemental Table 7. Detection of HSV-2 by genital-area swab (viral shedding) by study day.

Supplemental Table 8. All HSV-specific clonotypes from P4.

Supplemental Table 9. Paired HSV-specific TCR sequences with antigen specificity from P4.

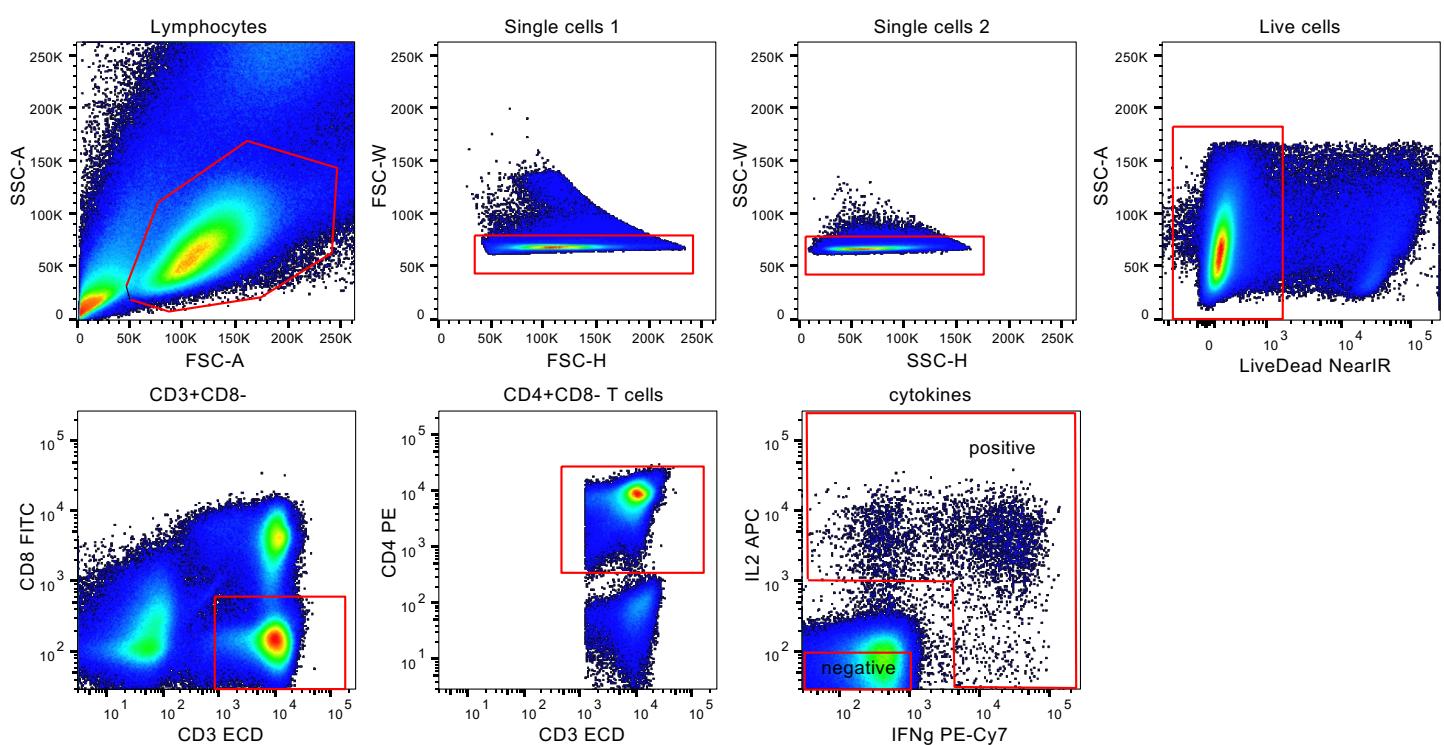
Supplemental Table 10. Sequence similar TCR clusters

Supplementary Figure 1.



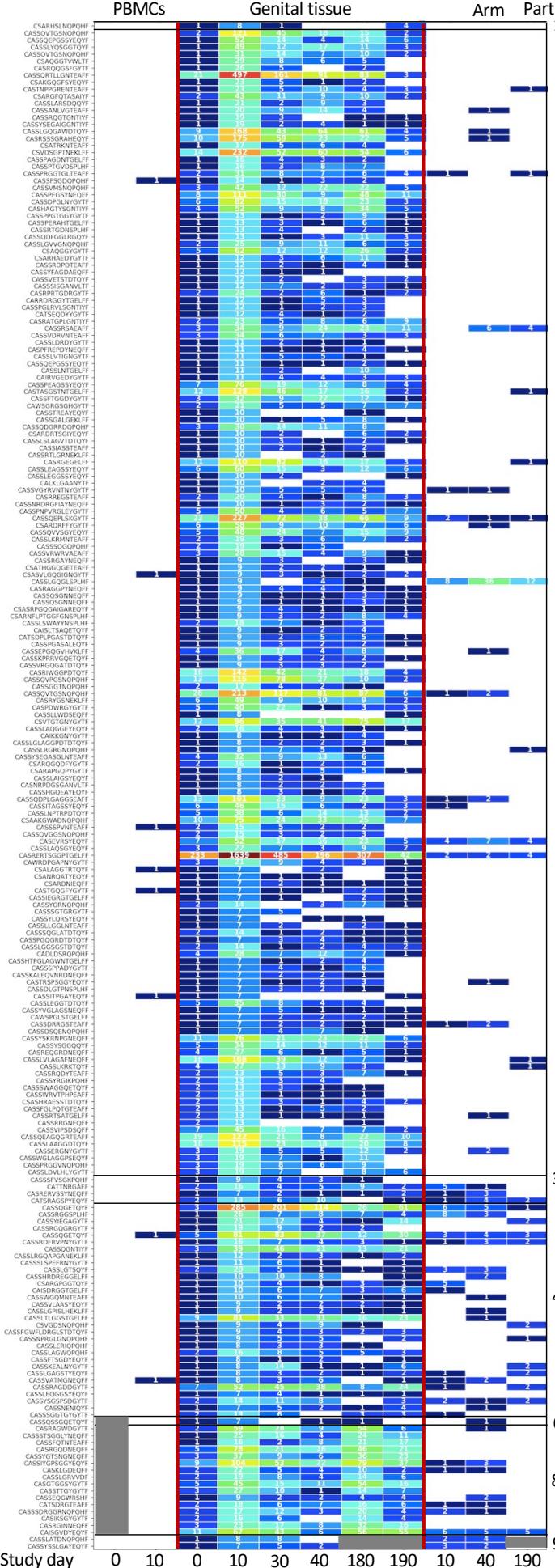
Example – Method 1

ICS fix/sort, Participant 2

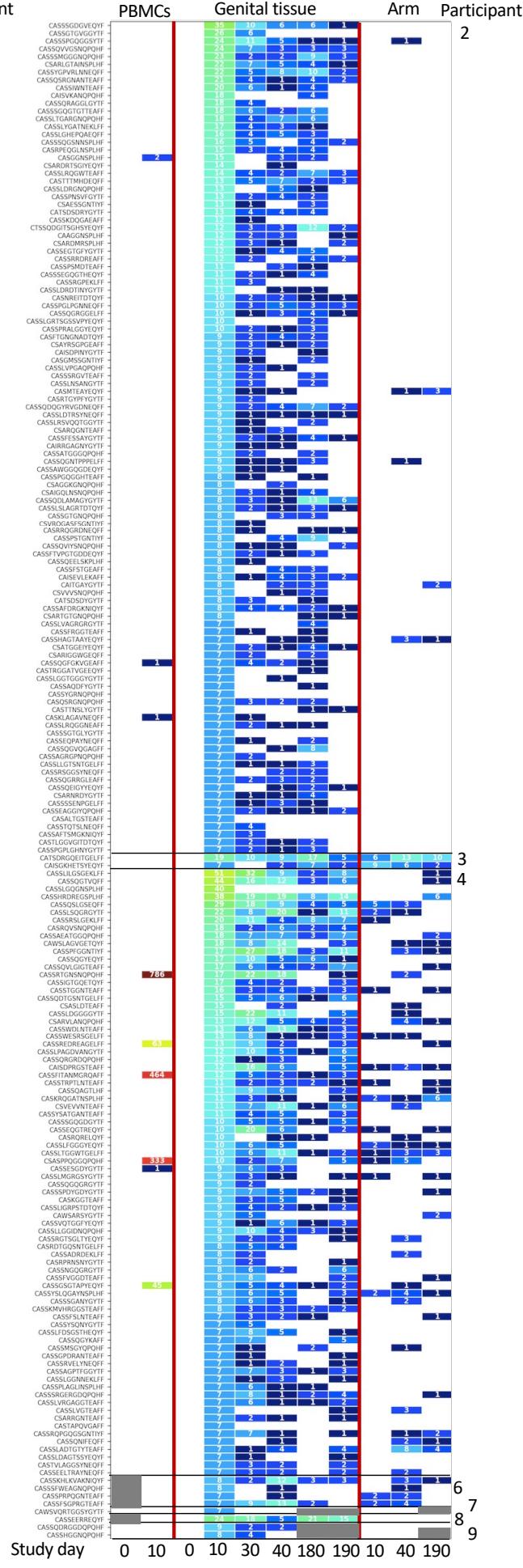


Supplementary Figure 2. All prevalent and elicited clonotypes expanding over dose 1

a. Prevalent clonotypes

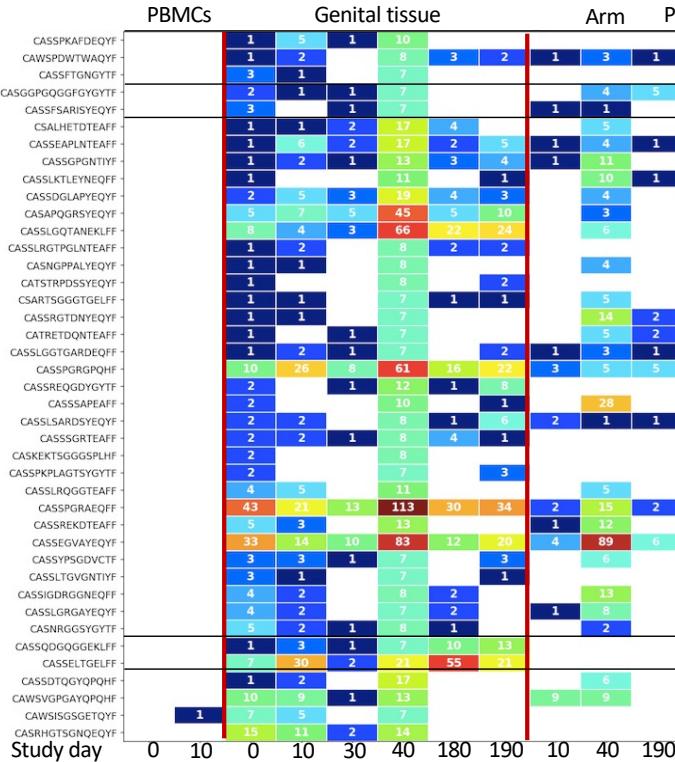


b. Elicited clonotypes

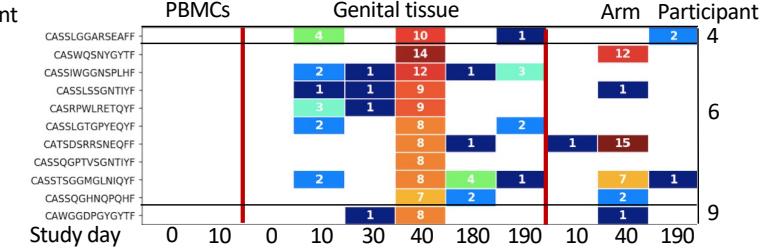


Supplementary Figure 2. All prevalent and elicited clonotypes expanding over dose 2

c. Prevalent clonotypes



d. Elicited clonotypes



Study day

0 10 0 10 30 40 180 190

10 40 190

Study day

0 10

30

40

180

190

10

40

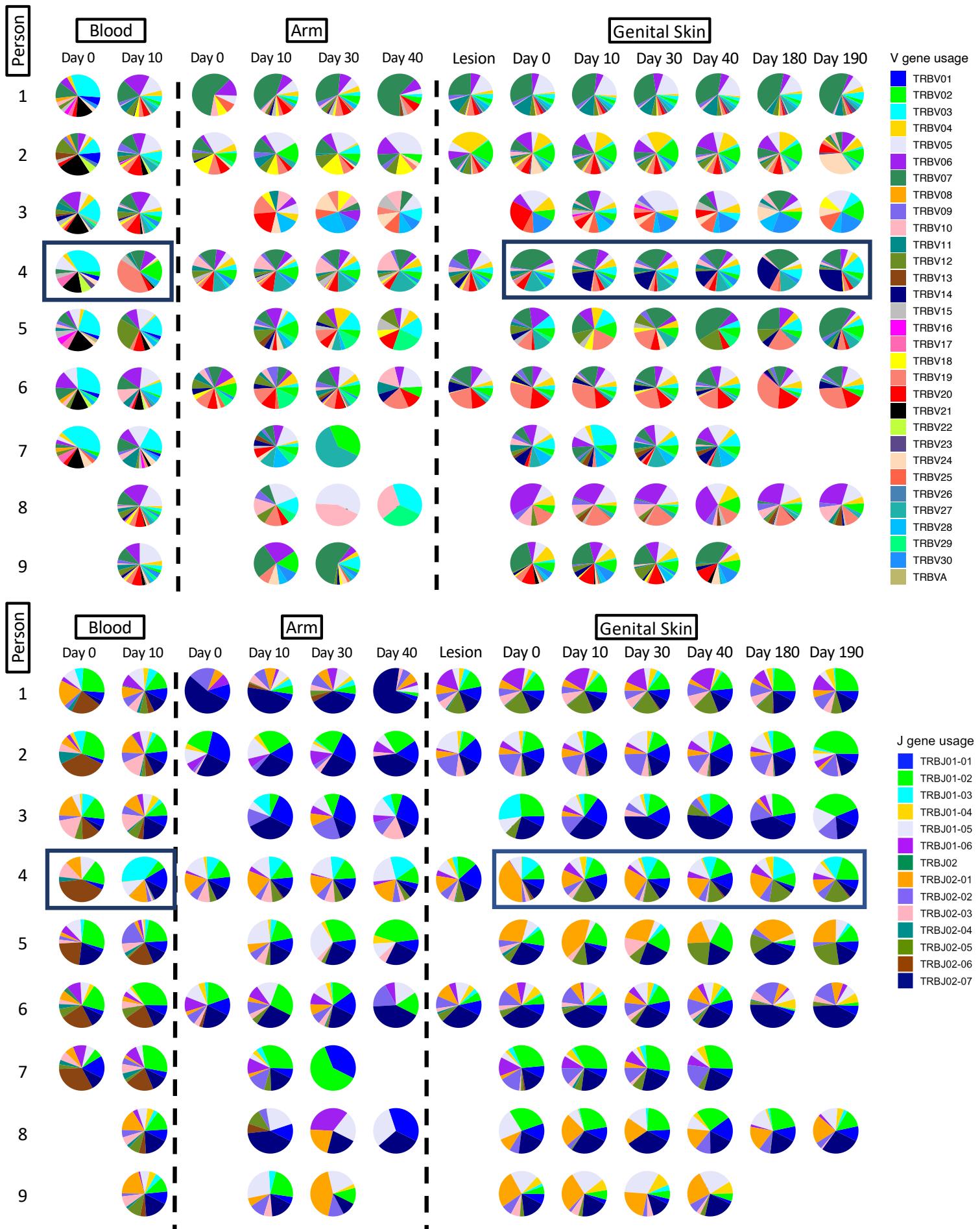
190

10

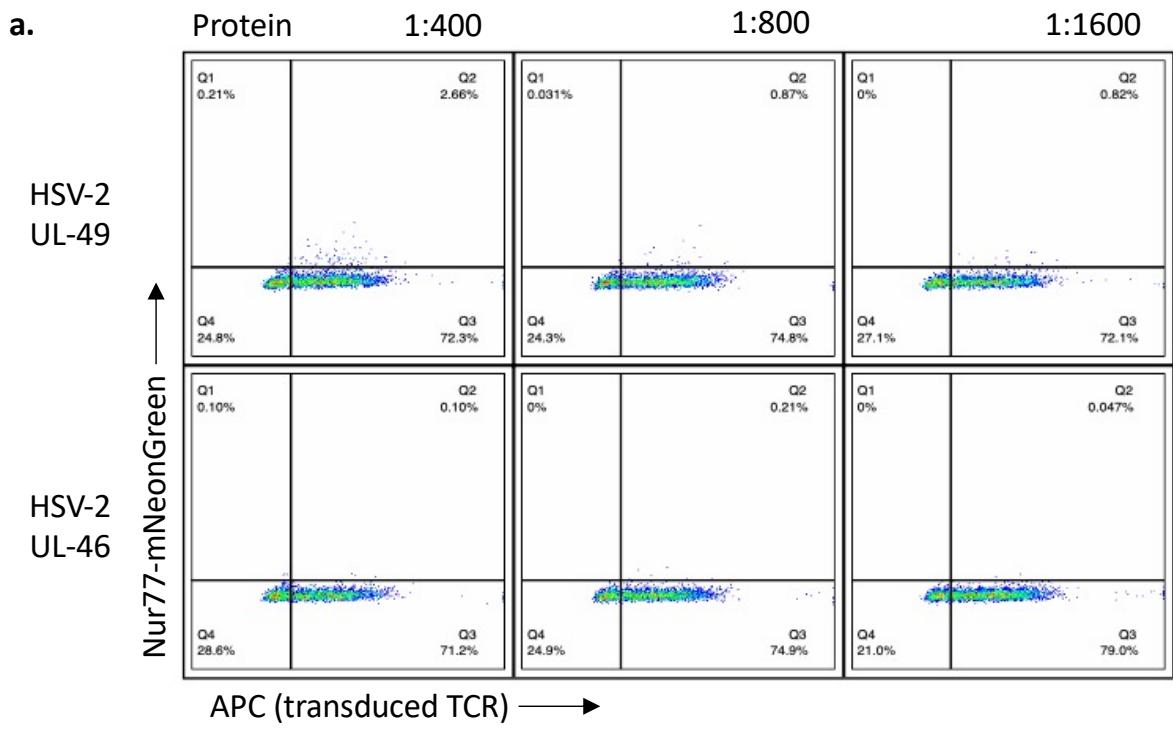
40

190

Supplementary Figure 3 – TRBV and TRBJ usage in all participants



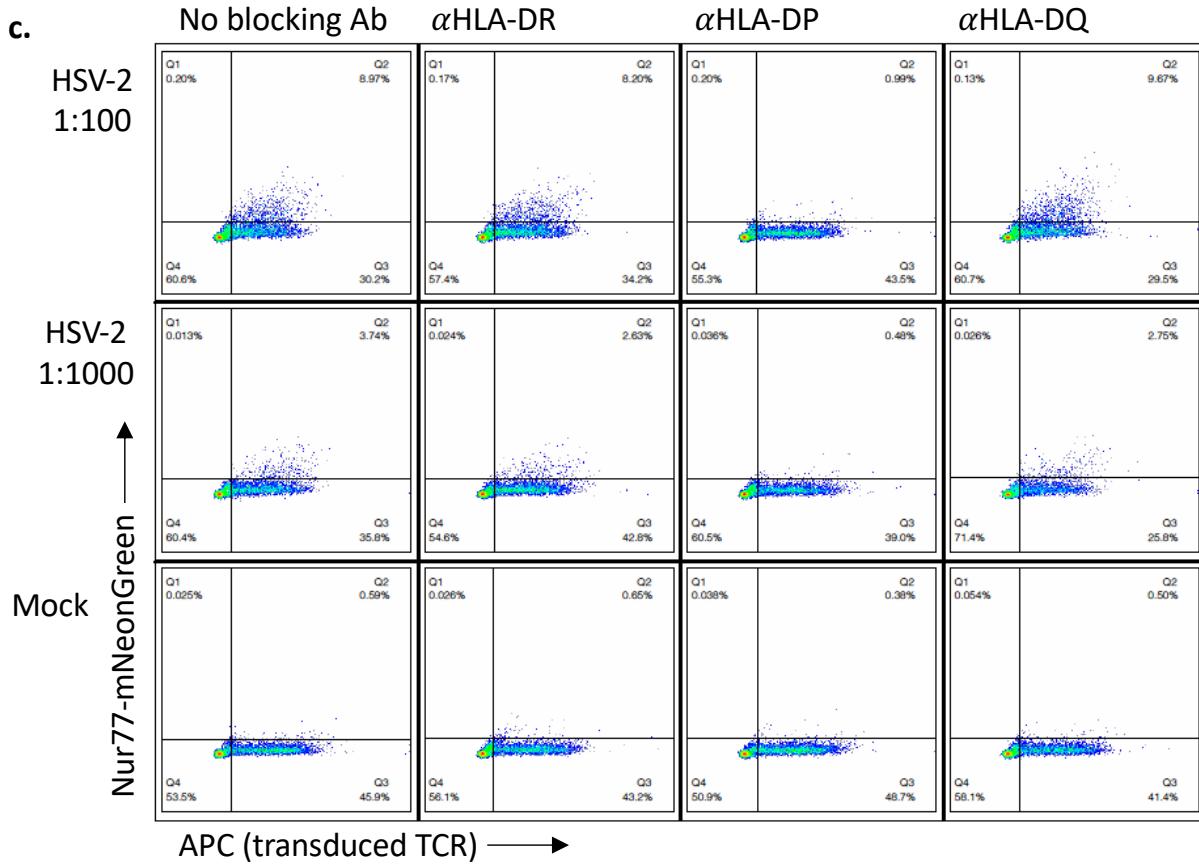
Supplementary Figure 4.



b.

81-93 ARPRRSASVAGSH

	Pool 9	Pool 10	Pool 11	Pool 12	Pool 13	Pool 14	Pool 15	Pool 16	Pool 17	Pool 18
81-93	0.302	38.5	0.277	0.204	0.178	0.373	0.255	0.304	0.201	0.174
	35.8	53.7	32.9	35.5	36.1	37.1	36.2	37.1	37.7	38.2
	8.21	41.7	5.25	5.56	5.95	5.97	7.75	6.62	6.89	7.82
	0.174	27.1	0.148	0.226	0.127	0.2	0.241	0.255	0.211	0.259
	0.358	32.3	0.25	0.257	0.126	0.101	0.16	0.233	0.0265	0.109
	0.232	40.8	0.154	0.129	0.104	0.183	0.0802	0.0524		0.27
	0.0518	39.7	0.154	0.257	0.176	0.283	0.321	0.208		
	0.129	32.3	0.103	0.256	0.0796	0.157	0.214			



Supplementary Figure 5.

