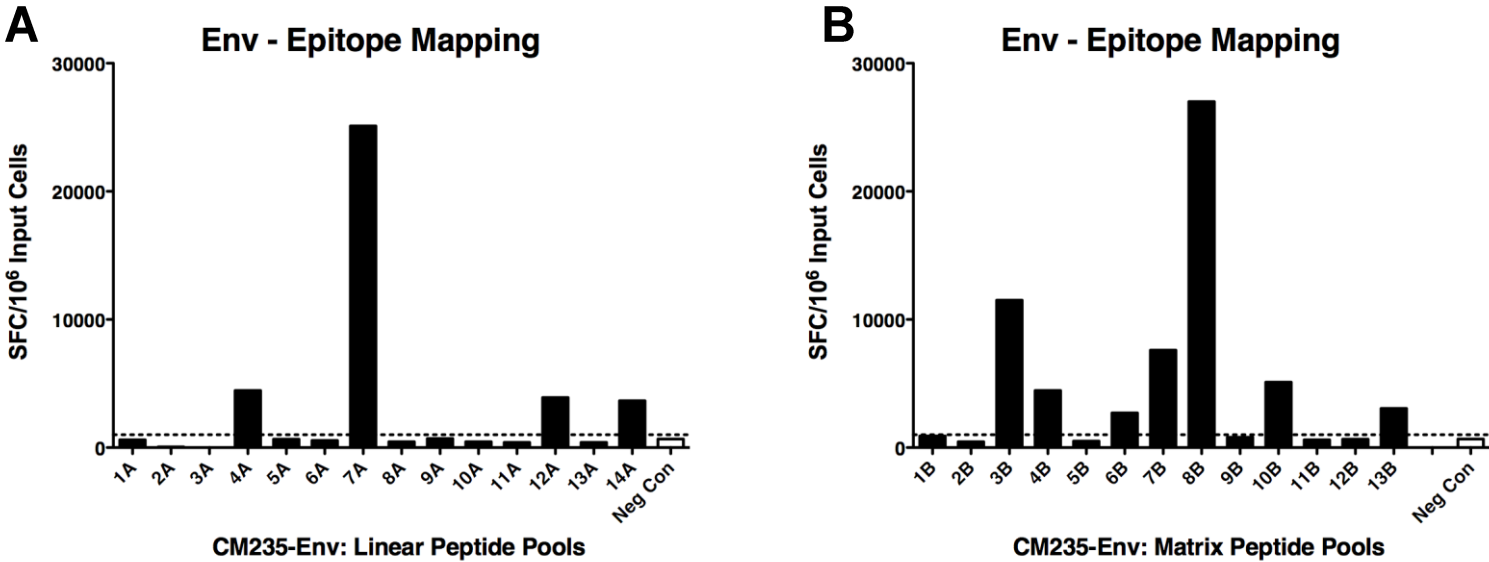


**Additional File 6:** Env epitope mapping for post-*in vitro* stimulated cells from a vaccine trial responder subject. PBMC from a vaccinee in the RV158 trial (received 3x rMVA-CMDR) were subjected two rounds of *in vitro* stimulation, first with rMVA-CMDR for 14 days, then with autologous, irradiated BLCL pulsed with peptide pools matching the Env (CM235) insert in the vaccine. Each stimulation cycle was 14 days, with rIL-7 added during the first week and rIL-2 added during the second week. Effector cells were tested for responses to a matrix of peptides (14 x 13 peptide pools) matching the Env insert sequence. Epitopes were counted and identified from the de-convoluted peptide matrix (panels A and B) in an IFN- $\gamma$  Elispot assay. Two epitopes were identified within the Env-specific effector cells and are shown in panel C.



**C** Mapped and identified Env epitopes. Sequences of the mapped Env epitopes are shown together with the percent 10-mer identity each epitope shares with the denoted number of intra-subtype (CR01\_AE) and global group M sequences.

Epitope	Sequence	Intra-subtype Env Coverage	Global Env Coverage
		111 Sequences	2230 Sequences
1	VHALFYKLDIVPIED	20.70%	6.9%
2	EKLKEHFNNKTIIFQ	0%	0%
3	EISNYTNQIYEILTE	45.10%	2.8%
4	EPDRSERIEEGGGEQ	30.6%	5.7%