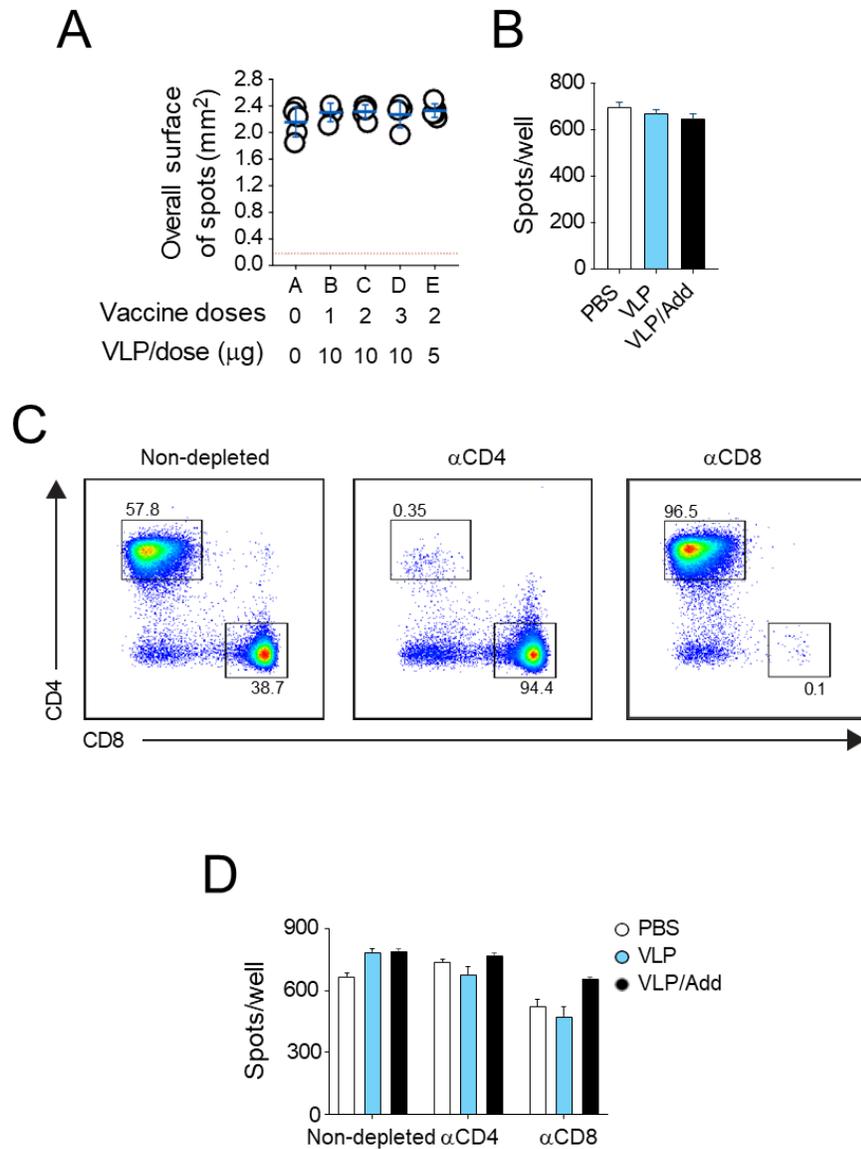


**Figure S1. Direct Ancestral-SARS-CoV-2 VLP and anti-RBD ELISA. (A)** ELISA performed with sera from mice 42 days after immunisation on plates coated with 20µg/mL of VLPs. **(B)** anti-RBD ELISA performed with sera from mice 42 days after immunisation on plates coated with 2µg/mL of purified Ancestral RBD.



**Figure S2. Splenocyte stimulation positive controls and T cell depletion efficiencies.** **(A)** Responses to the positive control, concanavalin A (5  $\mu\text{g}/\text{mL}$ ), by splenocytes in Figure 4A. Blue lines denote Mean  $\pm$  SD. **(B)** Responses to 5  $\mu\text{g}/\text{mL}$  concanavalin A by splenocytes in Figure 4C. Error bars denote SD. **(C)** Depletion efficiency in Figure 4E, measured by FACS by gating on  $\text{TCR}\beta^+$  cells and plotting  $\text{CD4}^+$  vs  $\text{CD8}^+$  cells. **(D)** Responses to 5  $\mu\text{g}/\text{mL}$  concanavalin A by splenocytes in Figure 4E. Error bars denote SD.

**Supplementary table S1.** Primers used to clone S, E and M genes individually from a single codon optimised SEM genetic construct

Gene	Primer Forward 5'-3'	Primer Reverse 5'-3'
Spike	CGGGTACCGCCACCATGTTTCGTGTTTCTGG	CGGCGGCCGCTCATCAGGTGTAGTGCAGTTTCACG
Envelope	GTGCCTGATCTGCTCGTGTGATGAGCGGCCGC	CGGCGGCCGCTCATCACACGAGCAGATCAGGCA
Membrane	CGGGTACCGCCACCATGGCCGACAGCAATGG	CGGCGGCCGCTCATCACTGCACCAGCAGTGC