

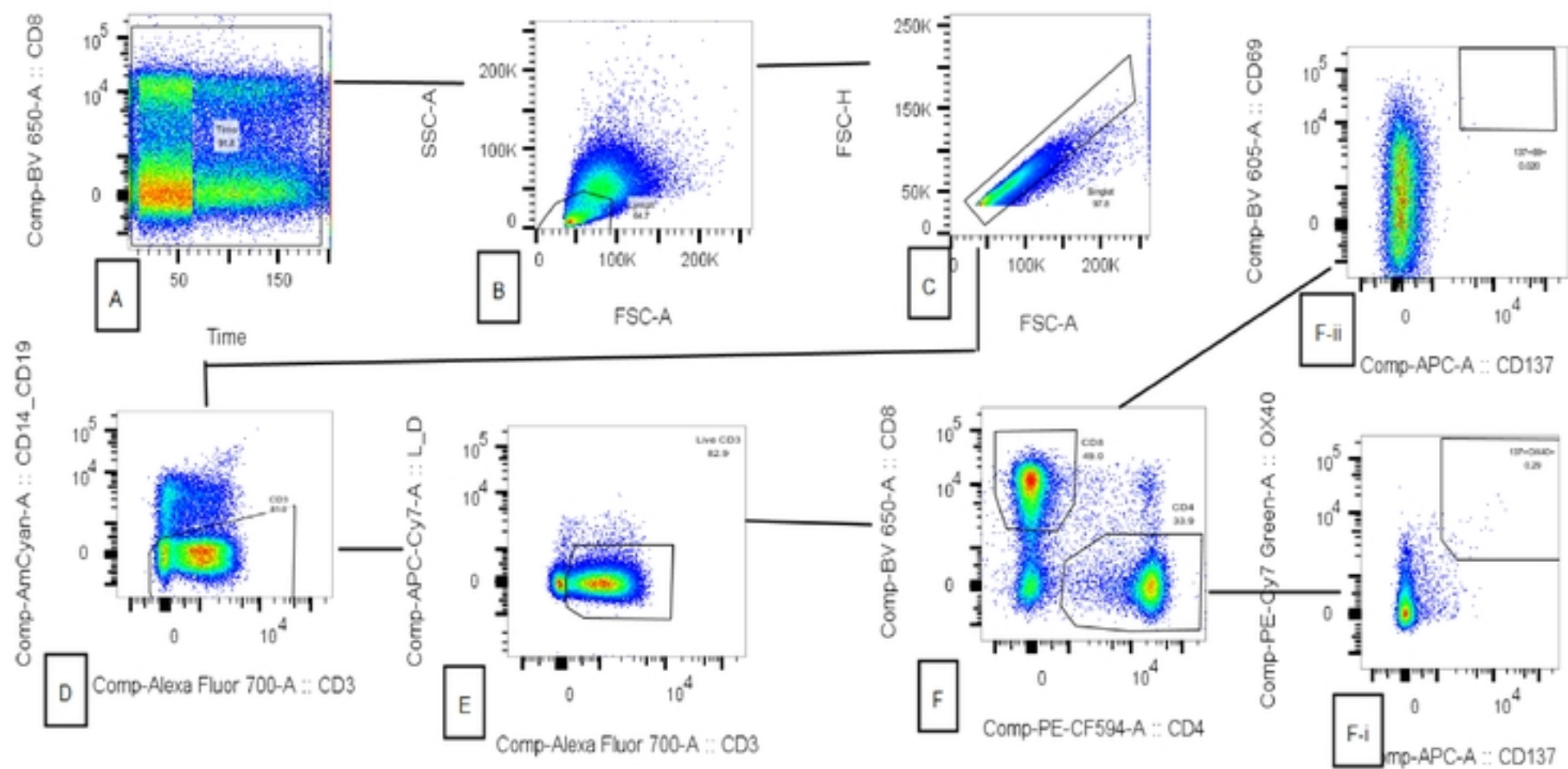
**Supplementary Table S1: AIM antibodies used for cell staining**

	Membrane Antibody	Fluorochrome	Clone/vendor/catalog
1	CD45RA	BV421	HI100/Biolegend/304130
2	CD14	V500	M5E2/BD/561391
3	CD19	V500	HIB19/BD/561121
4	Live/Dead		
5	CD8	BV650	RPA-T8/BioLegend/301042
6	CD4	PE-CF594	RPA-T4RUO/BD/62316
8	CCR7	FITC	G043H7/Biolegend/353216
9	CD69	PE	FN50/BD/555531
10	OX40	PE-Cy7	Ber-ACT35/Biolegend/350012
11	CD137	APC	4B4-1/BioLegend/309810
12	CD3	AF700	UCHT1/eBioscience/56-0038-42

medRxiv preprint doi: <https://doi.org/10.1101/2023.01.16.23284626>; this version posted January 20, 2023. The copyright holder for this preprint (which was not certified by peer review) is the author/funder, who has granted medRxiv a license to display the preprint in perpetuity. This article is a US Government work. It is not subject to copyright under 17 USC 105 and is also made available for use under a CC0 license.

**Supplementary Table S2: Hospitalized COVID + samples**

<i>COVID cohort, n=3</i>	CD4+ T cell Reactivity	% CD4+ Reactivity	CD8+ T cell Reactivity	% CD8 Reactivity
<i>CD4_Non-spike</i>	2	66.7%	1	33.3%
<i>CD4_Spike</i>	2	66.7%	2	66.7%
<i>CD8_A</i>	3	100.0%	3	100.0%
<i>CD8_B</i>	3	100.0%	1	33.3%
<i>Total Pools Reactive</i>				
<i>0</i>	0	0.0%	0	0.0%
<i>1</i>	0	0.0%	1	33.3%
<i>2</i>	1	33.3%	1	33.3%
<i>3</i>	0	0.0%	0	0.0%
<i>4</i>	2	66.7%	1	33.3%



**Supplementary Figure S1: Gating strategy (A-F) for detection of SARS-CoV-2 reactive CD4+ and CD8+ cells after PBMC stimulation:** Time gating was done to eliminate any artifact like air bubble (A), followed by a selection of lymphocyte population (B), and singlets (C). Live CD3+ cells were selected (D-E), then divided into CD4+ and CD8+ cells (F). Within CD4 and CD8 subsets, antigen-specific T cells were established through the upregulation of activation-induced markers OX40, CD69, and CD137. Percentages of OX40+CD137+ double-positive cells within the CD4 gate (F-i) and percentage of CD69+CD137+ within the CD8 gate (F-ii) showing activated cells, were gated out to be used for further analysis