

**Table S1: Fluorochrome-antibody conjugates.**

<b>Antibodies</b>	<b>Clone</b>	<b>Corporation</b>
CD3	SK7	BD
CD4	SK3	BD
CD5	BL1a	Beckman Coulter
CD8	SK1	BD
CD10	HI10a	BD
CD11b	ICRF44	BD
CD11c	S-HCL-3	BD
CD14	MφP9	BD
CD16	3G8	BD
CD19	SJ25C1	BD
CD20	L27	BD
CD21	B-ly4	BD
CD23	9P25	Beckman Coulter
CD24	SN3	eBioscience
CD25	2A3	BD
CD27	L128	BD
CD33	p67-6	BD
CD38	HIT2	BD
CD45	HI30	BD
CD45RA	L48	BD
CD56	NCAM16.2	BD
CD80	L307.4	BD
CD123	9F5	BD
Foxp3	259D/C7	BD
IL-17	N49-653	BD
HLA-DR	L243	BD
TCR $\alpha\beta$	WT31	BD
TCR $\gamma\delta$	11F2	BD

**Table S2. Lymphocytes Immunophenotype.**

<b>Lymphocyte subsets</b>	<b>Immunophenotype</b>
<b>B lymphocytes</b>	
B lymphocytes	CD19 <sup>+</sup>
Naïve B cells	CD10 <sup>-</sup> CD19 <sup>+</sup> CD20 <sup>+</sup> CD27 <sup>-</sup> CD38 <sup>-/+</sup> CD45 <sup>+</sup>
Memory B cells	CD10 <sup>-</sup> CD19 <sup>+</sup> CD20 <sup>+</sup> CD27 <sup>+</sup> CD38 <sup>-/+</sup> CD45 <sup>+</sup>
Transitory B cells	CD10 <sup>dim</sup> CD19 <sup>+</sup> CD20 <sup>+</sup> CD27 <sup>-</sup> CD38 <sup>hi</sup> CD45 <sup>+</sup>
Plasma cells	CD10 <sup>-</sup> CD19 <sup>+</sup> CD20 <sup>+</sup> CD27 <sup>++</sup> CD38 <sup>hi</sup> CD45 <sup>dim</sup>
<b>T lymphocytes</b>	
T lymphocytes	CD3 <sup>+</sup>
Helper/induced T cells	CD3 <sup>+</sup> CD4 <sup>+</sup>
Inhibit/cytotoxic T cells	CD3 <sup>+</sup> CD8 <sup>+</sup>
CD4 <sup>+</sup> CD8 <sup>+</sup> T lymphocytes	CD4 <sup>+</sup> CD8 <sup>+</sup>
CD4:CD8 ratio	CD4/CD8
Tregs	CD4 <sup>+</sup> CD25 <sup>+</sup> Foxp3 <sup>+</sup>
Th17	CD4 <sup>+</sup> IL-17 <sup>+</sup>
γδ T cells	CD3 <sup>+</sup> TCRγδ <sup>+</sup>
αβ T cells	CD3 <sup>+</sup> TCRαβ <sup>+</sup>
<b>NK cells</b>	
NK cells	CD3 <sup>-</sup> (CD56 <sup>+</sup> /CD16 <sup>+</sup> )
NK/T cells	CD56 <sup>+</sup> CD3 <sup>+</sup>

**Table S3. Changes of serum antibody level before and after chemotherapy.**

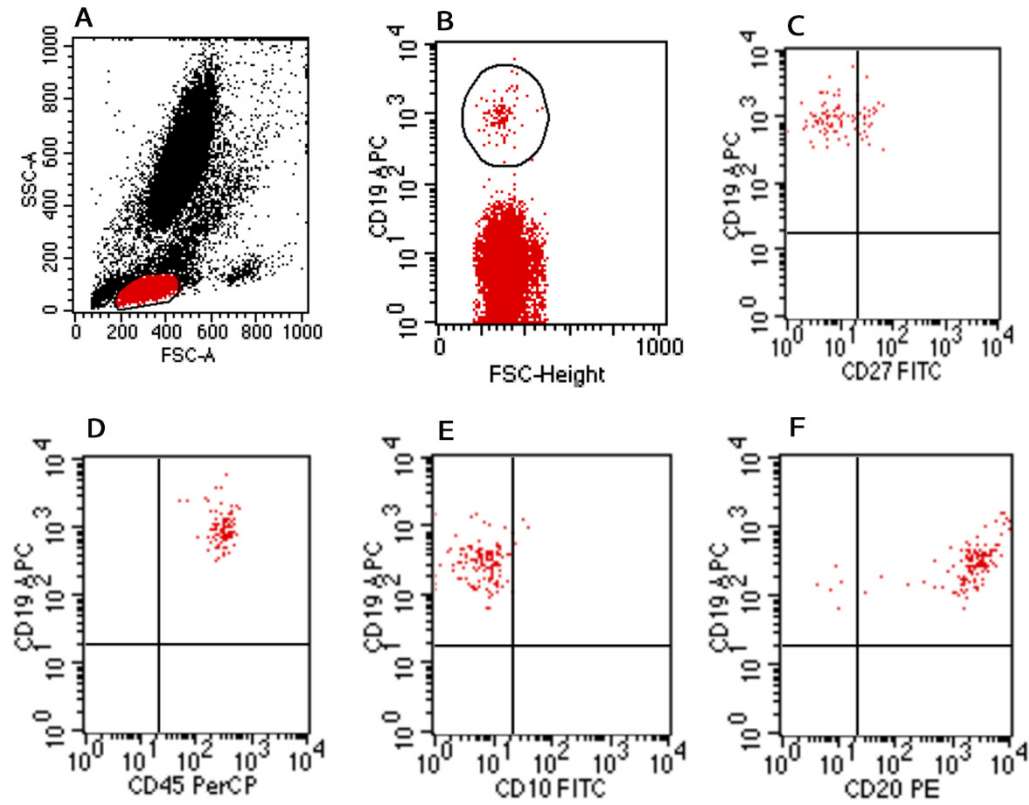
<b>Antibodies</b>	<b>Patient 1</b>		<b>Patient 2</b>		<b>Patient 3</b>	
	<b>before chemotherapy</b>	<b>after chemotherapy</b>	<b>before chemotherapy</b>	<b>after chemotherapy</b>	<b>before chemotherapy</b>	<b>after chemotherapy</b>
<b>anti-SARS-CoV-2</b>						
<b>IgM (AU/ml)</b>	< 10	268.06	< 10	< 10	< 10	< 10
<b>IgG (AU/ml)</b>	12.37	11.62	35.61	24.86	52.90	37.27
<b>anti-HBs IgG (mIU/ml)</b>	30.14	48.69	102.59	96.02	5.68	7.57

**“< 10” means a negative result.**

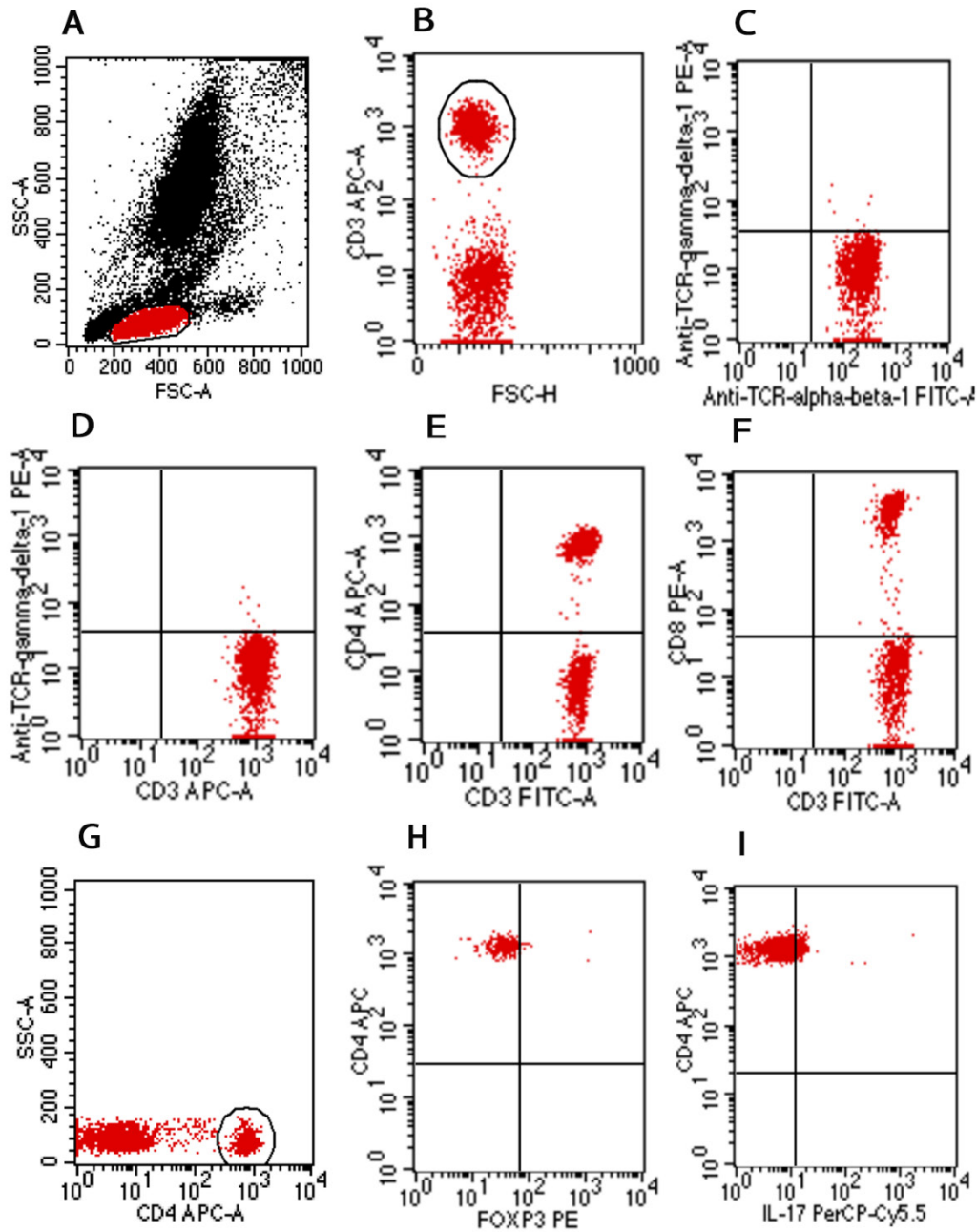
Antibodies	Patient 1		Patient 2		Patient 3		Patient 4		Patient 5		Patient 6	
	on admission	on discharge	on admission	on discharge	on admission	on discharge	on admission	on discharge	on admission	on discharge	on admission	on discharge
<b>anti-SARS-CoV-2</b>												
<b>IgM (AU/ml)</b>	123.41	12.76	37.8	<10	25.63	<10	127.37	50.62	98.33	32.71	207.64	98.32
<b>IgG (AU/ml)</b>	70.36	150.32	102.73	80.53	573.24	106.58	113.29	92.27	200.75	102.36	50.71	48.67
<b>anti-HBs IgG (mIU/ml)</b>	92.71	NA	79.33	NA	42.12	NA	129.84	NA	23.78	NA	140.31	NA

**Table S4. Changes of serum antibody level in COVID-19 recovered healthy people.**

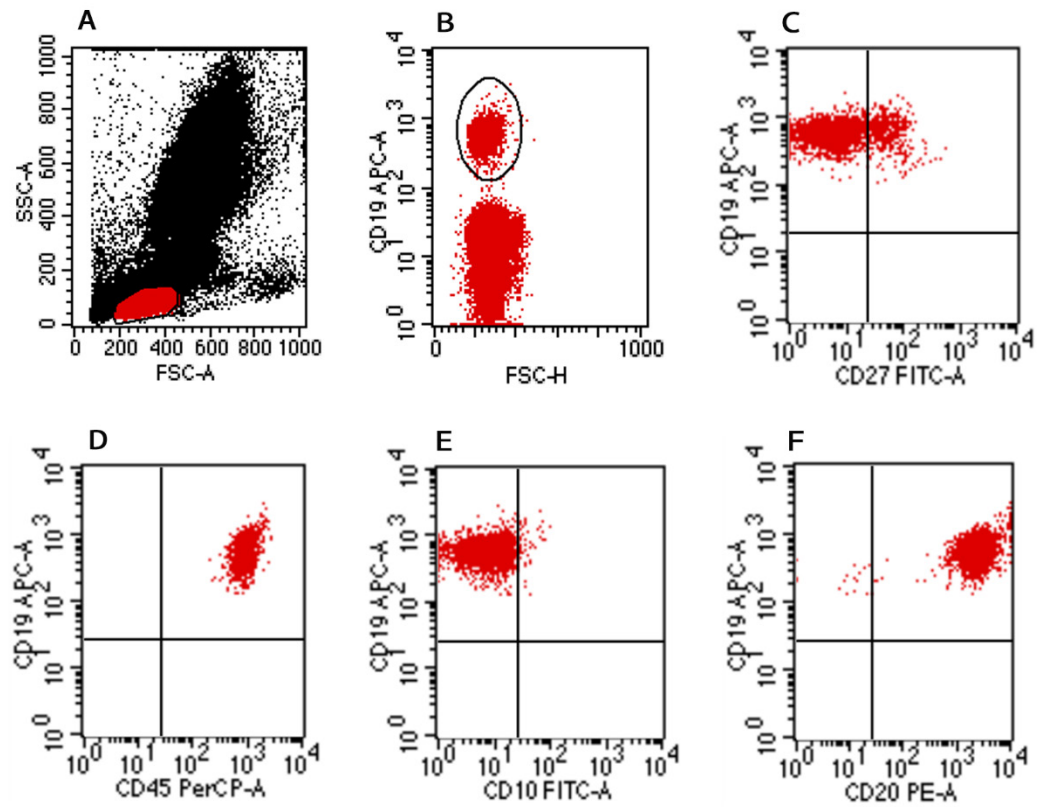
“<10” means a negative result.



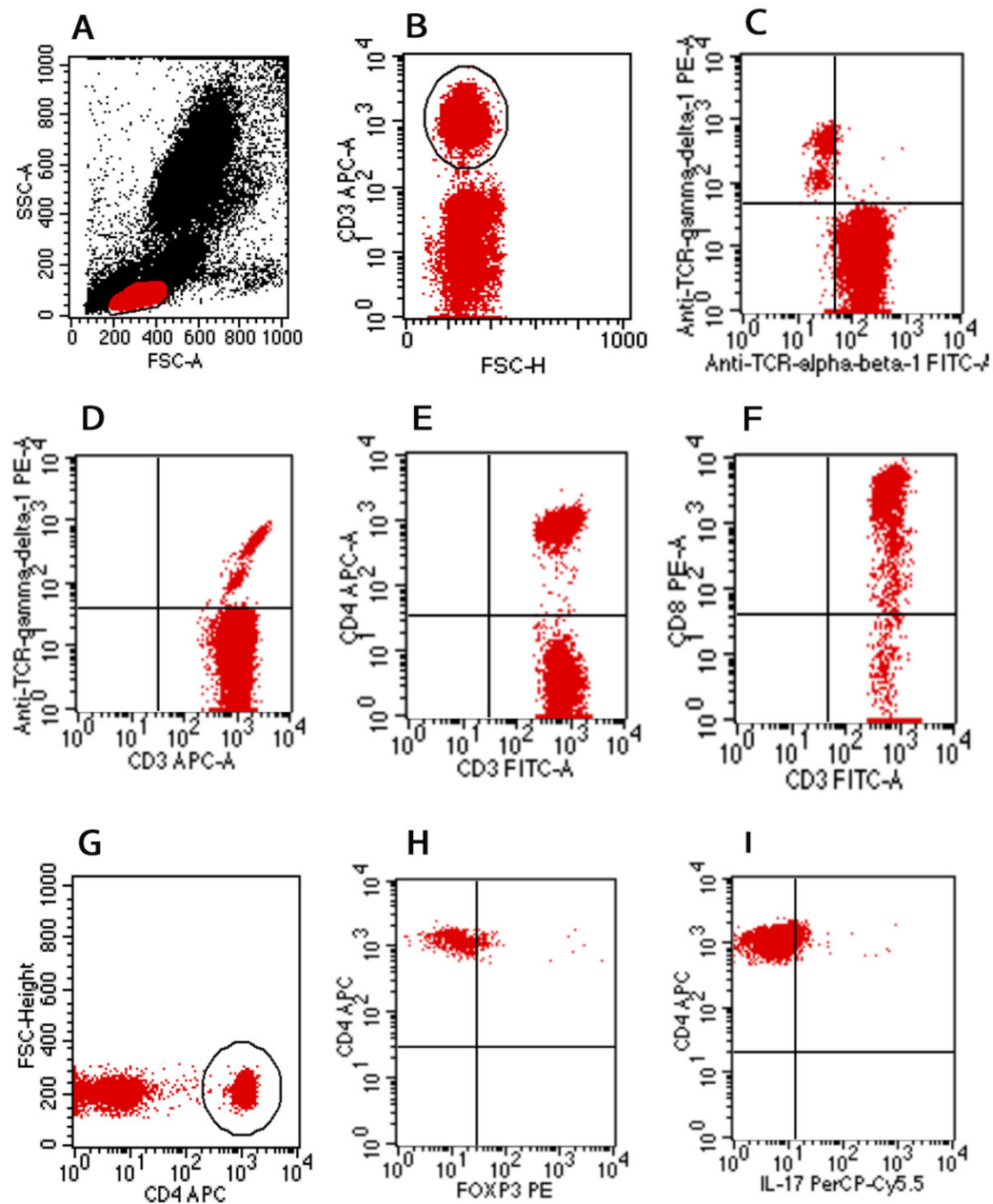
**Figure S1.** The data of the above pictures are from the COVID-19 recovered leukemia patients. (A) Lymphocytes were identified using forward and side scatter. (B) B lymphocytes were defined by the presence of CD19. (C-F) Further divided into naïve B lymphocytes (CD10-CD19+ CD20+ CD27-CD38-/+ CD45+), memory B lymphocytes (CD10- CD19+ CD20+ CD27+ CD38-/+CD45+), transitional B lymphocytes (CD10dimCD19+CD20+CD27-CD38hiCD45+) subsets. Since B lymphocytes are significantly reduced, not enough cell signals could be obtained.



**Figure S2.** The data of the above pictures are from the COVID-19 recovered leukemia patients. **(A)** Lymphocytes were identified using forward and side scatter. **(B)** T lymphocytes were defined by the presence of CD3. **(C-D)** Further divided into  $\alpha\beta$  T cells,  $\gamma\delta$  T cells, **(E)** CD3+CD4+ helper/induced T cells. **(F)** CD3+CD8+ inhibited/cytotoxic T cells. **(G)** CD4+T lymphocytes were defined and further divided into **(H)** Tregs and **(I)** TH17 cells.

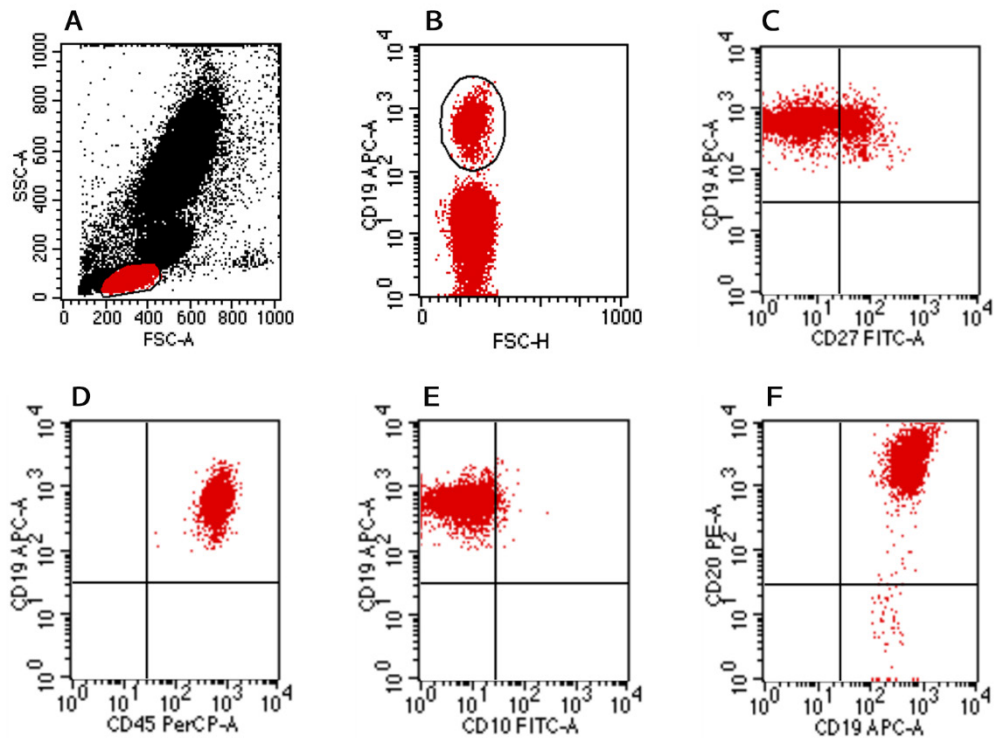


**Figure S3.** The data of the above pictures are from the COVID-19 recovered healthy people. **(A)** Lymphocytes were identified using forward and side scatter. **(B)** B lymphocytes were defined by the presence of CD19, **(C-F)** and further divided into naïve B lymphocytes (CD10-CD19+ CD20+ CD27-CD38-/+ CD45+), memory B lymphocytes (CD10- CD19+ CD20+ CD27+ CD38-/+CD45+), transitional B lymphocytes (CD10dimCD19+CD20+CD27-CD38hiCD45+) subsets.

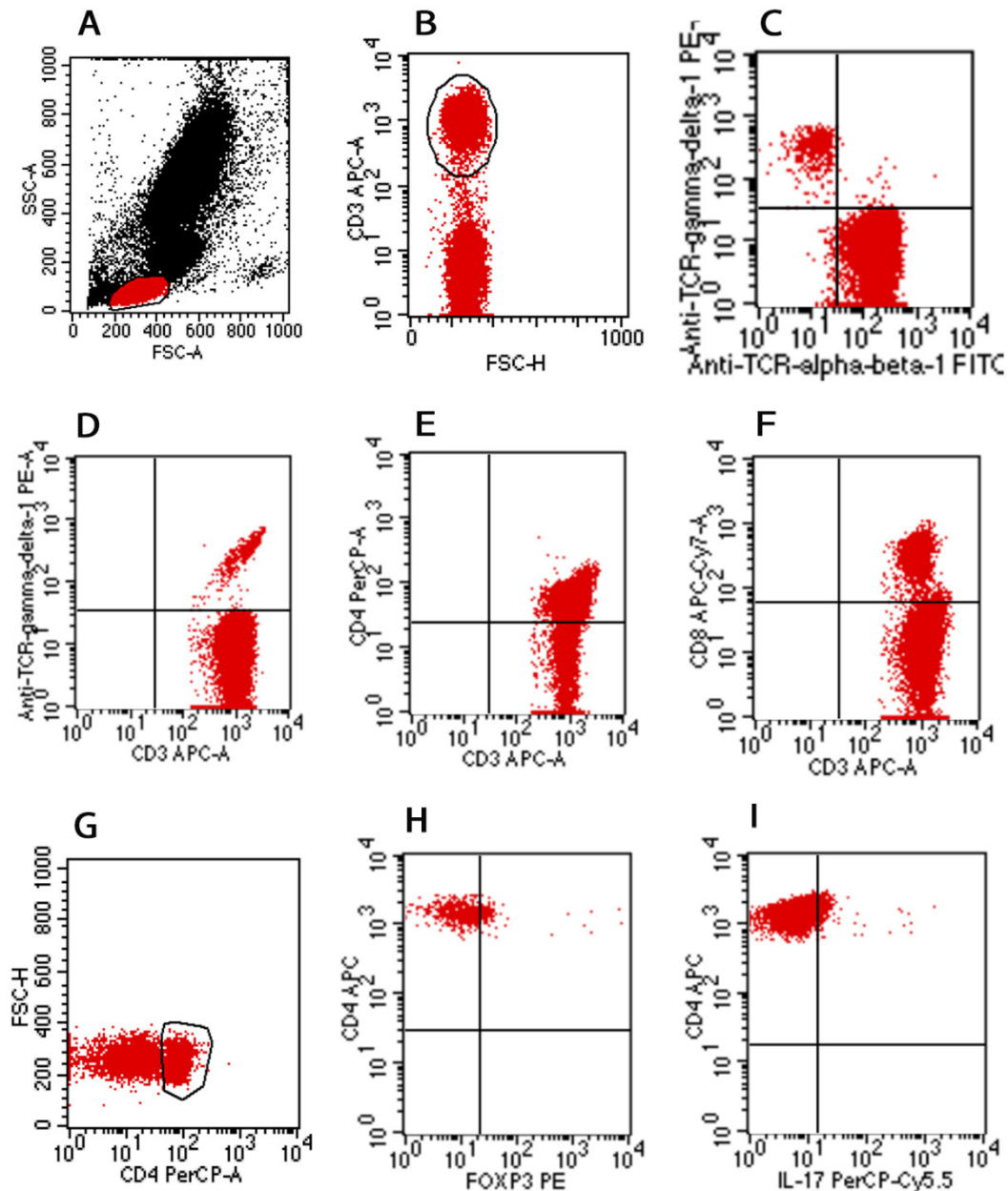


**Figure S4.** The data of the above pictures are from the COVID-19 recovered healthy people. **(A)** Lymphocytes were identified using forward and side scatter. **(B)** T lymphocytes were defined by the presence of CD3 and further divided into **(C-D)**  $\alpha\beta$  T cells,  $\gamma\delta$  T cells, **(E)** CD3+CD4+ helper/induced T cells, **(F)** CD3+CD8+ inhibited/cytotoxic T cells. **(G)** CD4+T lymphocytes were defined and further divided into **(H)** Tregs and **(I)** TH17 cells.





**Figure S5.** The data of the above pictures are from the normal uninfected healthy people. **(A)** Lymphocytes were identified using forward and side scatter. **(B)** B lymphocytes were defined by the presence of CD19, **(C-F)** and further divided into naïve B lymphocytes (CD10-CD19+ CD20+ CD27-CD38-/+ CD45+), memory B lymphocytes (CD10- CD19+ CD20+ CD27+ CD38-/+CD45+), transitional B lymphocytes (CD10dimCD19+CD20+CD27-CD38hiCD45+) subsets.



**Figure S6.** The data of the above pictures are from the normal uninfected healthy people. **(A)** Lymphocytes were identified using forward and side scatter. **(B)** T lymphocytes were defined by the presence of CD3 and further divided into **(C-D)**  $\alpha\beta$  T cells,  $\gamma\delta$  T cells, **(E)** CD3<sup>+</sup>CD4<sup>+</sup> helper/induced T cells, **(F)** CD3<sup>+</sup>CD8<sup>+</sup> inhibited/cytotoxic T cells. **(G)** CD4<sup>+</sup>T lymphocytes were defined and further divided into **(H)** Tregs and **(I)** TH17 cells.