

Supplementary Table S3 The indicators of lymphocytes were measured in different time points during the SARS-CoV-2 vaccination process from the healthy volunteers using flow cytometry.

Sample ID	The measurement of lymphocytes before vaccination										The measurement of lymphocytes at 2 weeks after first dose										The measurement of lymphocytes at 1 week after second dose										The measurement of lymphocytes at 2 weeks after second dose									
	CD3	CD3CD8	CD3CD4	CD3CD4 CD8	CD16CD56	CD19	4/8Ratio	Lym	CD3	CD3CD8	CD3CD4	CD3CD4 CD8	CD16CD56	CD19	4/8Ratio	Lym	CD3	CD3CD8	CD3CD4	CD3CD4 CD8	CD16CD56	CD19	4/8Ratio	Lym	CD3	CD3CD8	CD3CD4	CD3CD4 CD8	CD16CD56	CD19	4/8Ratio	Lym	CD3	CD3CD8	CD3CD4	CD3CD4 CD8	CD16CD56	CD19	4/8Ratio	Lym
F01	85.03	38.25	44.13	1.16	4.68	9.31	1.15	4403	82.56	37.01	43.04	1.2	6.95	9.6	1.16	6576	83.91	35.91	44.88	0.67	5.48	9.06	1.25	5825	85.45	35.42	47.7	0.95	3.89	8.97	1.35	5706								
F02	58.91	16.27	39.34	0.62	26.68	12.97	2.42	5668	65.82	16.51	45.66	0.28	17.73	15.26	2.77	5725	66.3	15.27	47.41	0.36	17.42	15.12	3.11	6066	64.96	15.98	45.57	0.29	16.04	16.5	2.85	7480								
F03	75.53	34.47	37.36	2.5	14.01	9.8	1.08	5530	77.58	28.36	43.76	0.66	8.24	13.09	1.54	6806	75.8	31.9	37.55	1.27	10.66	12.9	1.18	4335	71.45	31.82	34.78	1.88	16.69	10.05	1.09	4638								
F04	71.22	28.93	41.51	1.69	17.79	9.9	1.43	3958	68.76	30.7	38.86	1.7	22	8.48	1.2	4069	71.08	25.45	44.92	1.59	16.92	9.72	1.76	3210	71.62	25.94	44.56	1.4	15.21	11.08	1.72	4845								
F05	71.75	23.99	38.45	0.74	17.39	10.18	1.6	3243	75	25.6	40.55	0.52	14.95	9.41	1.57	6900	76.4	24.26	45.54	0.95	12.09	10.76	1.88	3911	76.4	24.26	45.54	0.95	9.74	12.82	1.93	6583								
F06	71.18	33.56	35.81	1.18	13.41	13.7	1.07	5233	73.92	33.52	38.41	0.9	10.57	14.82	1.15	5126	72.12	33.54	37.35	1.12	9.31	16.34	1.11	4627	71.04	31.71	37.12	0.88	10.48	16.43	1.17	5477								
F07	58.74	22.67	32.52	0.3	30.09	9.87	1.43	4001	59.01	22.56	31.46	0.13	29.55	10.77	1.39	6065	69.71	25.96	38.99	0.17	16.22	11.66	1.5	7091	76.69	32.3	49.47	0	16.66	12.38	1.53	5295								
F08	66.4	21.8	42.25	0.63	24.02	8.55	1.94	4738	74.48	25.21	45.87	0.52	16.8	8.1	1.82	6680	70.1	22.5	44.78	0.55	17.39	9.76	1.99	3966	70.42	24.14	43.11	0.64	15.42	11.41	1.79	5767								
F09	72.67	26.74	41.62	0.45	14.64	12.19	1.56	4618	73.91	28.34	40.74	0.31	11.91	13.56	1.44	5979	74.1	24.43	46.72	0.44	8.42	14.61	1.91	4347	72.72	26.53	43.14	0.16	8.07	17.83	1.83	6762								
F10	63.26	19.01	38.79	0.56	26.71	7.7	2.04	4298	66.72	19.22	41.59	0.57	24.62	8.12	2.16	5468	73.45	21.36	49.25	0.88	9.89	13.03	2.31	4258	71.1	21.84	44.41	0.39	13.86	9.65	2.03	5325								
F11	71.97	28.38	40.53	0.24	10.81	16.75	1.43	4246	76.91	25.93	47.09	0.25	4.26	17.97	1.82	6744	71.56	27.45	40.56	0.38	10.65	16.73	1.48	4423	74.32	27.04	44.56	0.23	6.96	16.06	1.65	7458								
F12	76.88	36.39	33.47	0.41	11.43	10.59	0.92	3702	82.45	37.45	38.76	0.73	8.32	6.7	1.04	5962	75.96	34.73	35.49	1.15	7.07	11.57	1.02	4164	78.4	34.94	38.11	0.52	6.93	12.92	1.08	6772								
F13	63.12	24.91	33.79	0.55	29.53	6.75	1.36	3850	66.11	22.69	38.17	0.58	22.76	9.62	1.68	6966	68.35	26.08	36.13	0.51	13.19	11.78	1.39	4329	72.24	22.31	44.14	0.34	14.2	10.11	1.98	6429								
F14	61.1	26.64	28.38	0.3	33.28	4.67	1.07	5740	69.59	26.01	37.45	0.41	23.45	6.07	1.44	8120	76.65	28.48	42.91	0.41	14.29	7.71	1.51	6591	79.92	32.71	50.85	0.2	19.88	7.32	1.55	5246								
F15	70.12	29.18	36.75	0.73	18.79	10.01	1.26	3976	70.58	27.44	38.05	0.41	16.09	11.35	1.39	6098	69.92	28.99	38.24	1.29	15.47	9.88	1.32	5037	69.52	29.89	36.36	0.4	14.28	14.16	1.22	5762								
M01	77.86	29.96	41.09	0.11	15.34	5.86	1.37	4459	81.76	28.51	47.15	0.14	9.46	7.29	1.65	6490	78.72	27.13	46.12	0.52	11.4	9.43	1.7	4412	82.33	28.04	49.57	0.2	7.59	8.34	1.77	6548								
M02	66.29	27.43	36.11	0.84	17.83	15.31	1.32	2501	59.72	25.39	30.67	0.3	23.28	15.36	1.21	6293	68.35	26.08	36.13	0.51	13.19	11.78	1.39	4329	63.12	26.77	33.17	0.33	14.73	20.62	1.24	6747								
M03	48.49	24.29	21.26	0.67	41.86	7.52	0.88	3273	44.47	21.12	20.18	0.51	48.02	6.61	0.96	4540	51.96	24.5	24.15	0.54	38.53	7.63	0.99	5739	48.5	23.81	21.31	0.41	41.83	7.57	0.89	4913								
M04	67.83	32.13	27.6	0.65	20.33	9.82	0.86	2827	67.05	30.4	28.77	0.54	22.15	9.98	0.95	4049	70.58	33.83	29.88	0.62	15.11	13.15	0.88	4327	68.91	30.82	30.88	0.41	18.35	11.36	1	5140								
M05	75.8	30.9	39.76	0.3	14.55	8.45	1.29	3951	79.86	25.02	48.87	0.2	7.29	9.67	1.95	4500	81.38	23.04	52.15	0.31	4.65	11.33	2.96	4140	80.7	23.35	52.14	0.37	5.09	10.81	2.23	5362								
M06	68.19	31.14	32.72	0.49	19.03	12.09	1.05	3863	64.03	29.6	29.6	0.19	23.31	10.8	1	4835	79.28	32.27	41.09	0.55	18.02	11.53	1.27	4025	65.73	29.54	31.34	0.2	18.13	13.75	1.06	4908								
M07	63.2	26.74	33.21	0.48	21.87	13.01	1.24	5195	67.5	26.84	38.47	0.47	15.71	16.16	1.43	5742	68.22	25.75	35.76	0.58	16.18	15.39	1.39	5022	70.1	22.33	44.78	0.55	16.73	9.76	2.01	3986								
M08	57.27	23.78	30.47	0.51	21.61	10.57	1.28	4730	61.94	24.87	32.68	0.34	17.55	12.62	1.35	6103	60.36	24.53	32.25	0.27	19.27	18.92	1.31	4142	70.5	28.57	38.36	0.63	9.34	15.2	1.36	7145								
M09	67.54	26.54	37.52	0.28	14.96	15.44	1.41	3937	61.52	23.92	34.6	0.52	21.2	14.98	1.45	4821	67.24	25.58	39.47	0.51	13.57	17.3	1.54	4930	63.64	23.86	36.43	0.24	15.05	18.34	1.53	5528								
M10	63.97	23.28	35.56	0.52	25.92	9.3	1.53	3819	66.24	24.2	36.41	0.28	21.77	10.39	1.5	5388	63.95	22.63	35.4	0.39	22.74	11.74	1.56	5334	74.05	33.78	48.08	0.22	17.94	11.28	1.42	5331								
M11	76.28	31.05	36.98	0.28	12.26	11.11	1.19	3221	76.74	31.52	38.57	0.22	12.15	10.37	1.22	4493	79.28	32.27	41.09	0.55	8.62	11.53	1.27	4025	75.75	31.08	37.87	0.48	9.63	13.34	1.22	5855								
M12	71.02	32.08	36.09	0.54	14.64	13.22	1.13	4810	67.3	28.96	34.75	0.41	18.27	11.79	1.2	5665	71.17	31.61	35.72	1.15	10.98	16	1.13	4963	69.2	28.68	35.96	0.23	14.99	13.34	1.21	6910								
M13	49.62	24.34	22.21	0.23	32.91	15.79	0.91	4363	52.82	24.95	25.17	0.32	30.9	13.47	1.01	5559	57.52	27.02	27.79	0.36	22.08	18.24	1.03	6196	50.46	22.37	25.39	0.21	27.85	18.92	1.14	6586								
M14	55.75	28.37	24.68	0.41	26.39	17.31	0.87	4194	52.01	27.49	22.06	0.5	31.48	16.75	0.8	6370	56.4	28.28	24.8	0.41	24.31	17.99	0.88	5665	55.76	28.05	24.6	0.57	26.56	16.08	0.88	6617								
M15	45.71	14.46	28.79	0.14	41.67	10.13	1.99	4946	51.47	14.69	34.17	0.18	35.29	11.42	2.33	5543	56.57	16.82	37.53	0.25	30.2	12.31	2.23	5963	50.46	16.03	31.93	0.23	37.25	11.14	1.99	6288								
Mean	66.42333	27.256	34.9583	0.617	21.14767	10.92967	1.396	4236	67.932	26.47433	37.0187	0.476333	19.201	11.3863	1.45267	5737.53	70.233	26.9217	39.00167	0.642	15.1	12.81	1.51833	4844.4	69.79	27.12	39.689	0.472667	15.64567	12.921	1.51767	5913.633								
Standard deviation	9.039099	5.379678	5.81577	0.47884	8.8787076	3.111263	0.368254	798.7	9.5627	4.968588	7.09782	0.322382	9.455711	3.0402	0.430776	924.261	7.68163	4.8321	6.778944	0.355053	7.10977	3.0663	0.48851	904.229	8.926	4.95462	7.948821	0.380184	8.426919	3.4313	0.44435	876.4852								