

Supplementary Table S1

Clone	CAR T % [*]	%T cell Activation [#]	%Tscm [§]	%CD70 ^{&}	CD4/CD8 ratio	%Lysis (REH)	%Lysis (ACHN)	%Lysis (786O)
CAR 3	70.5	26.1	28.9	0.028	0.58	98.1	84.7	94.8
CAR 9	73.5	21.5	31.4	0.085	0.64	97.2	77.0	88.3
CAR 11	82.5	7.0	41.6	2.4	0.69	73.5	46.0	64.6
CAR 12	57.9	31.8	30.3	0.47	0.54	95.6	76.9	90.0
CAR 14	54.8	34.8	20.4	0.21	0.55	96.8	84.7	94.5
CAR 15	73.2	6.2	46.5	3.89	0.64	97.5	76.1	89.3
CAR 17	88.2	31.1	24.7	0.02	0.72	97.5	81.7	91.6
CAR 18	71.0	14.2	35.0	7.5	0.74	96.0	63.8	75.4
CAR 19	77.4	15.1	17.2	0.68	0.72	98.5	75.4	84.6
CAR 20	43.1	48.5	5.4	1.22	0.67	95.7	84.9	92.7
CAR 22	83.8	16.9	31.5	0.064	0.6	97.7	65.8	80.5
CAR 23	36.3	44	15.7	4.34	0.51	96.0	73.4	85.6
mean	67.7	24.8	27.4	1.7	0.6	95.0	74.2	86.0
median	72.1	23.8	29.6	0.6	0.6	97.0	76.5	88.8
CAR 1	57.6	12.9	26.3	76.6	0.87	70.7	80.7	90.2
CAR 2	63.5	3.0	32.3	46.4	0.84	38.6	39.3	55.4
CAR 4	70.8	4.6	46.8	29.3	0.75	5.2	24.6	76.2
CAR 5	63.9	1.3	77.0	13.1	0.52	13.9	7.0	11.9
CAR 6	63.9	21.7	25.2	68.2	0.93	71.7	77.1	90.0
CAR 7	35.7	1.6	63.8	20.8	0.67	10.4	1.1	8.4
CAR 8	67.5	1.3	59.4	20.5	0.68	12.5	8.9	32.6
CAR 10	34.8	6.4	28.1	52	0.77	59.2	41.5	36.9
CAR 13	58.5	2.0	50.4	32.3	0.77	12.7	-4.4	7.3
CAR 21	44.7	7.1	29.9	50.9	0.88	21.7	14.5	16.2
CAR 24	43.1	7.8	48.4	30.6	0.73	45.8	78.0	94.5
mean	54.9	6.3	44.3	40.1	0.8	32.9	33.5	47.2
median	58.5	4.6	46.8	32.3	0.8	21.7	24.6	36.9

Class 1

Class 2

^{*}CAR expression as determined by co-expression of BFP

[#]activation as a measure of 4-1BB/CD25 double positive expression

[§]stem cell memory population defined as CD62L positive, CD45RO negative

[&]expression of CD70 on CAR T cells detected using 41D12 antibody