

S18 Table: The estimate parameters for the eight treated macaques using the increased antigen presentation mechanism with increased viral clearance for the three different effector cell source models. The intervals specify the range of the set of intervals to approximate the 95% confidence intervals (S1 and S3 Text).

Baseline source										
Macaque	r_T	m	p	K_B	K_P	ψ	γ	Ω	σ	$\ln(L)$
ROq14	0.23 (0.23–0.24)	2.42E-07 (2.10E-07–2.77E-07)	7049 (7003– 7165)	4.25E-01 (3.68E-01–4.25E-01)	N/A	8.79E-04 (8.32E-04–9.33E-04)	4.82 (4.78–5.00)	6.17E+05 (3.76E+05–7.21E+05)	0.82 (0.79–0.88)	-44.67
RDa15	0.17 (0.16–0.17)	9.36E-07 (8.69E-07–1.02E-06)	8433 (8413– 8553)	1.36E-01 (1.25E-01–1.52E-01)	N/A	1.85E-04 (1.68E-04–2.04E-04)	4.74 (4.42–5.00)	6.56E+04 (4.90E+04–1.91E+05)	0.48 (0.44–0.50)	-23.41
RFa15	0.17 (0.17–0.17)	5.57E-06 (5.33E-06–5.58E-06)	10073 (10036–10088)	1.14E-01 (1.04E-01–1.16E-01)	N/A	8.54E-04 (8.13E-04–9.33E-04)	2.40 (2.18–2.54)	6.76E-04 (6.03E-04–6.76E-04)	0.49 (0.49–0.50)	-23.32
RLn12	0.18 (0.17–0.18)	1.71E-06 (1.34E-06–1.72E-06)	8346 (8334– 8461)	1.14E-01 (1.04E-01–1.27E-01)	N/A	9.34E-04 (7.67E-04–1.00E-03)	4.49 (3.30–5.00)	5.89E-01 (4.19E-01–8.94E-01)	0.39 (0.37–0.42)	-17.30
RIId14	0.27 (0.27–0.27)	3.11E-07 (2.10E-07–4.64E-07)	8413 (7701– 8466)	5.43E-01 (3.27E-01–5.43E-01)	N/A	1.13E-04 (1.00E-09–1.30E-04)	4.58 (1.00–5.00)	6.95E+01 (4.45E-08–8.04E+01)	1.16 (1.10–1.60)	-63.00
ROo13	0.32 (0.31–0.33)	2.19E-07 (1.98E-07–2.75E-07)	7163 (7050– 7299)	6.23E-01 (4.16E-01–6.28E-01)	N/A	1.00E-06 (5.97E-07–1.49E-06)	1.00 (1.00–1.00)	5.62E-02 (1.45E-02–2.63E-01)	0.88 (0.83–1.04)	-50.44
RSd14	0.23 (0.21–0.35)	3.47E-07 (1.95E-07–5.13E-07)	7517 (7365– 7827)	3.12E-01 (2.39E-01–3.80E-01)	N/A	8.42E-05 (6.02E-08–8.96E-05)	1.72 (1.00–5.00)	3.66E+01 (2.22E-08–6.12E+01)	0.76 (0.71–1.08)	-43.42
ROv14	0.22 (0.22–0.22)	4.07E-06 (3.93E-06–4.37E-06)	9885 (9812– 9927)	1.31E-01 (1.26E-01–1.41E-01)	N/A	9.63E-05 (8.57E-05–9.71E-05)	2.64 (1.83–3.18)	8.03E+05 (4.30E+05–8.51E+05)	0.92 (0.90–0.93)	-51.85
Saturated source										
Macaque	r_T	m	p	K_B	K_P	ψ	γ	Ω	σ	$\ln(L)$
ROq14	0.19 (0.17–0.19)	2.28E-07 (1.18E-07–2.95E-07)	7267 (7110– 7494)	3.35E-01 (2.49E-01–3.51E-01)	1.38E-05 (1.16E-05–1.65E-05)	9.67E-04 (8.67E-04–1.00E-03)	4.85 (4.74–5.00)	2.16E+05 (1.55E+05–1.00E+06)	0.85 (0.75–0.97)	-46.65
RDa15	0.18 (0.18–0.18)	1.02E-05 (9.33E-06–1.09E-05)	8789 (8706– 8838)	7.68E-02 (7.58E-02–8.96E-02)	9.84E-02 (9.55E-02–1.00E-01)	7.90E-05 (5.83E-05–8.05E-05)	3.55 (2.11–5.00)	1.65E+05 (3.39E+04–4.23E+05)	0.52 (0.51–0.54)	-28.93
RFa15	0.15 (0.15–0.15)	4.15E-07 (3.72E-07–4.24E-07)	7004 (6985– 7121)	2.21E-01 (1.91E-01–2.21E-01)	5.88E-03 (5.72E-03–6.35E-03)	8.66E-04 (7.08E-04–9.33E-04)	4.24 (3.93–5.00)	1.41E-05 (1.02E-05–1.97E-05)	0.43 (0.42–0.47)	-22.49
RLn12	0.19 (0.18–0.19)	1.81E-06 (1.38E-06–1.81E-06)	8186 (8006– 8330)	1.59E-01 (8.15E-02–1.80E-01)	3.85E-04 (3.18E-04–5.10E-04)	6.73E-04 (5.89E-04–7.69E-04)	4.71 (2.78–5.00)	5.77E+05 (1.40E+05–1.00E+06)	0.43 (0.42–0.49)	-20.49
RIId14	0.34 (0.27–0.36)	1.03E-07 (4.70E-08–1.15E-07)	6528 (6401– 6706)	6.99E-01 (3.89E-01–6.99E-01)	8.42E-03 (5.50E-04–1.26E-02)	5.43E-04 (3.09E-04–1.00E-03)	3.21 (1.00–5.00)	8.51E+05 (1.82E-02–1.00E+06)	1.19 (0.98–1.51)	-66.21
ROo13	0.32 (0.31–0.32)	2.43E-07 (2.17E-07–2.62E-07)	7152 (7039– 7207)	6.13E-01 (4.58E-01–6.16E-01)	5.18E-04 (4.71E-04–5.76E-04)	9.95E-07 (8.69E-07–1.15E-06)	1.00 (1.00–1.00)	2.40E-01 (9.33E-02–8.68E-01)	0.87 (0.80–1.01)	-49.78
RSd14	0.26 (0.26–0.27)	1.59E-06 (1.34E-06–1.69E-06)	7354 (7265– 7391)	2.46E-01 (2.28E-01–2.69E-01)	6.45E-02 (6.08E-02–7.39E-02)	8.92E-07 (7.83E-07–1.09E-06)	1.00 (1.00–1.00)	8.32E+03 (2.20E+03–9.33E+03)	0.72 (0.68–0.79)	-41.67
ROv14	0.27 (0.26–0.27)	3.84E-07 (2.95E-07–5.44E-07)	10688 (10568–11128)	3.58E-01 (2.63E-01–3.70E-01)	1.25E-05 (1.00E-05–1.43E-05)	1.00E-06 (8.59E-07–1.40E-06)	1.00 (1.00–1.00)	2.91E+02 (7.70E+01–3.87E+02)	0.86 (0.79–0.98)	-53.13
APC source										
Macaque	r_T	m	p	K_B	K_P	ψ	γ	Ω	σ	$\ln(L)$
ROq14	0.50 (0.48–0.55)	1.59E-07 (1.34E-07–2.68E-07)	4928 (4717– 4990)	8.60E-01 (5.21E-01–8.61E-01)	N/A	8.55E-04 (7.71E-04–1.00E-03)	4.78 (4.40–5.00)	1.26E-16 (1.00E-16–3.17E-15)	0.79 (0.71–1.05)	-45.67
RDa15	0.45 (0.44–0.45)	5.62E-08 (5.58E-08–6.20E-08)	4523 (4513– 4576)	9.31E-01 (8.82E-01–9.31E-01)	N/A	7.46E-04 (7.12E-04–8.37E-04)	1.00 (1.00–1.00)	7.78E+00 (6.69E+00–8.25E+00)	0.57 (0.56–0.61)	-34.63
RFa15	0.55 (0.37–0.55)	9.82E-08 (6.44E-08–1.58E-07)	4906 (4596– 5375)	4.08E-01 (2.25E-01–6.71E-01)	N/A	1.00E-03 (7.33E-04–1.00E-03)	1.00 (1.00–1.00)	4.00E+01 (2.18E+01–4.00E+01)	0.46 (0.40–0.78)	-25.73
RLn12	0.38 (0.37–0.42)	7.71E-08 (5.66E-08–1.00E-07)	4710 (4312– 4853)	2.52E-01 (2.19E-01–3.39E-01)	N/A	9.99E-04 (7.36E-04–1.00E-03)	4.05 (1.26–4.27)	4.00E+01 (1.59E+01–4.00E+01)	0.33 (0.30–0.38)	-11.35
RIId14	0.29 (0.17–0.55)	5.86E-08 (4.26E-08–1.82E-07)	7612 (4000– 7869)	2.92E-01 (6.28E-02–7.21E-01)	N/A	2.21E-05 (1.64E-05–1.00E-03)	4.98 (1.00–5.00)	3.81E+01 (1.67E+00–4.00E+01)	1.27 (1.19–1.78)	-70.29
ROo13	0.25 (0.25–0.26)	4.70E-08 (3.79E-08–7.44E-08)	7317 (7148– 7453)	5.73E-01 (3.83E-01–5.73E-01)	N/A	4.33E-04 (3.09E-04–5.20E-04)	2.54 (1.00–2.54)	2.58E+00 (2.48E+00–4.02E+00)	1.02 (1.01–1.19)	-59.53
RSd14	0.55 (0.52–0.55)	5.20E-08 (4.08E-08–9.38E-08)	5707 (5446– 5923)	2.79E-01 (1.69E-01–4.17E-01)	N/A	2.05E-05 (1.53E-05–2.63E-05)	1.00 (1.00–1.00)	3.97E+01 (3.11E+01–4.00E+01)	0.85 (0.77–1.09)	-48.84
ROv14	0.50 (0.19–0.55)	5.89E-08 (3.39E-08–9.73E-08)	5916 (5824– 6396)	2.84E-01 (1.79E-01–3.23E-01)	N/A	3.86E-04 (2.53E-04–1.00E-03)	1.00 (1.00–1.00)	2.85E+00 (1.20E+00–5.18E+00)	1.05 (0.79–1.48)	-58.78