

Table S41: Percent of IgG+ B cells or plasmablasts detected as VRC01-class, showing median and range values among detectable response participants for each time point and vaccine dose, and testing between vaccine dose among detectable response participants. Testing was done using the Wilcoxon rank-sum test (two-sided,  $\alpha = 0.05$ ) and p values less than 0.05 are highlighted. Median, minimum, and maximum values are presented by treatment group and time point.

	Sample Type	Sample Sizes	Median (Range)	P Value
<b>20µg vs. 100µg</b>				
Wk3 (V05)	FNA/IgG GC B cells	6 vs. 10	3.4912 [2.2902, 9.5071] vs. 3.0520 [0.2901, 12.0885]	0.7128
Wk4 (V06)	PBMCs/IgG memory B cells	17 vs. 17	0.0101 [0.0026, 0.0924] vs. 0.0221 [0.0014, 0.1649]	0.0447
Wk8 (V07)	PBMCs/IgG memory B cells	15 vs. 16	0.0031 [0.0007, 0.0492] vs. 0.0134 [0.0016, 0.0608]	0.0784
Wk9 (V07A)	Fresh PBMCs/IgD- PBs	7 vs. 10	0.4731 [0.1856, 0.9081] vs. 0.4963 [0.0858, 2.2943]	0.8868
Wk10 (V08)	PBMCs/IgG memory B cells	17 vs. 15	0.0878 [0.0214, 0.2148] vs. 0.1287 [0.0281, 0.6376]	0.0757
Wk11 (V09)	FNA/IgG GC B cells	3 vs. 8	3.9883 [0.0388, 8.7225] vs. 0.7294 [0.0440, 2.1283]	0.4970
Wk16 (V10)	PBMCs/IgG memory B cells	16 vs. 15	0.0266 [0.0030, 0.0826] vs. 0.0478 [0.0076, 0.2718]	0.0298