

Table S24: IgG+ B cells detected as epitope-specific (KO-GT8++) response rate testing between vaccine and placebo recipients by time point. Testing was done using Barnard's test (two-sided, $\alpha = 0.05$) and p values less than 0.05 are highlighted.

	Sample Type	Response Rates (95% Wilson CI)	P Value
Placebo vs. 20μg			
Wk3 (V05)	FNA/IgG GC B cells	0/6 = 0.0% (0.0%, 39.0%) vs. 12/16 = 75.0% (50.5%, 89.8%)	0.0017
Wk4 (V06)	PBMCs/IgG memory B cells	0/12 = 0.0% (0.0%, 24.2%) vs. 18/18 = 100.0% (82.4%, 100.0%)	<0.0001
Wk8 (V07)	PBMCs/IgG memory B cells	0/12 = 0.0% (0.0%, 24.2%) vs. 18/18 = 100.0% (82.4%, 100.0%)	<0.0001
Wk9 (V07A)	Fresh PBMCs/IgD- PBs	0/12 = 0.0% (0.0%, 24.2%) vs. 18/18 = 100.0% (82.4%, 100.0%)	<0.0001
Wk10 (V08)	PBMCs/IgG memory B cells	0/12 = 0.0% (0.0%, 24.2%) vs. 17/17 = 100.0% (81.6%, 100.0%)	<0.0001
Wk11 (V09)	FNA/IgG GC B cells	0/5 = 0.0% (0.0%, 43.4%) vs. 12/14 = 85.7% (60.1%, 96.0%)	0.0006
Wk16 (V10)	PBMCs/IgG memory B cells	0/12 = 0.0% (0.0%, 24.2%) vs. 18/18 = 100.0% (82.4%, 100.0%)	<0.0001
Placebo vs. 100μg			
Wk3 (V05)	FNA/IgG GC B cells	0/6 = 0.0% (0.0%, 39.0%) vs. 13/16 = 81.2% (57.0%, 93.4%)	0.0007
Wk4 (V06)	PBMCs/IgG memory B cells	0/12 = 0.0% (0.0%, 24.2%) vs. 18/18 = 100.0% (82.4%, 100.0%)	<0.0001
Wk8 (V07)	PBMCs/IgG memory B cells	0/12 = 0.0% (0.0%, 24.2%) vs. 17/17 = 100.0% (81.6%, 100.0%)	<0.0001
Wk9 (V07A)	Fresh PBMCs/IgD- PBs	0/12 = 0.0% (0.0%, 24.2%) vs. 17/17 = 100.0% (81.6%, 100.0%)	<0.0001
Wk10 (V08)	PBMCs/IgG memory B cells	0/12 = 0.0% (0.0%, 24.2%) vs. 17/17 = 100.0% (81.6%, 100.0%)	<0.0001
Wk11 (V09)	FNA/IgG GC B cells	0/5 = 0.0% (0.0%, 43.4%) vs. 10/14 = 71.4% (45.4%, 88.3%)	0.0059
Wk16 (V10)	PBMCs/IgG memory B cells	0/12 = 0.0% (0.0%, 24.2%) vs. 16/16 = 100.0% (80.6%, 100.0%)	<0.0001
20μg vs. 100μg			
Wk3 (V05)	FNA/IgG GC B cells	12/16 = 75.0% (50.5%, 89.8%) vs. 13/16 = 81.2% (57.0%, 93.4%)	0.7840
Wk4 (V06)	PBMCs/IgG memory B cells	18/18 = 100.0% (82.4%, 100.0%) vs. 18/18 = 100.0% (82.4%, 100.0%)	1.0000
Wk8 (V07)	PBMCs/IgG memory B cells	18/18 = 100.0% (82.4%, 100.0%) vs. 17/17 = 100.0% (81.6%, 100.0%)	1.0000
Wk9 (V07A)	Fresh PBMCs/IgD- PBs	18/18 = 100.0% (82.4%, 100.0%) vs. 17/17 = 100.0% (81.6%, 100.0%)	1.0000
Wk10 (V08)	PBMCs/IgG memory B cells	17/17 = 100.0% (81.6%, 100.0%) vs. 17/17 = 100.0% (81.6%, 100.0%)	1.0000
Wk11 (V09)	FNA/IgG GC B cells	12/14 = 85.7% (60.1%, 96.0%) vs. 10/14 = 71.4% (45.4%, 88.3%)	0.5260
Wk16 (V10)	PBMCs/IgG memory B cells	18/18 = 100.0% (82.4%, 100.0%) vs. 16/16 = 100.0% (80.6%, 100.0%)	1.0000