

Supplementary Data:

Table 1. PRVABC59 viral load in serum detected by quantitative RT-PCR (Genome Copies/mL) and Viral Plaque Assay (PFU/mL).

Group	Animal	Dose	Sex	Day Post Infection									
				1		2		3		4			
				RT-PCR	Plaque	RT-PCR	Plaque	RT-PCR	Plaque	RT-PCR	Plaque		
1	5366	1.0x10 ⁻⁴	M	-	-	1.63E4	6.25E1	1.80E4	2.50E1	9.70E3	5.75E2		
	5362	1.0x10 ⁻⁴	M	6.29E3	2.50E1	8.05E4	3.38E2	6.10E4	2.50E1	-	-		
	5388	1.0x10 ⁻⁴	F	-	-	9.60E4	2.50E2	1.12E5	6.25E1	8.82E4	0		
	5376	1.0x10 ⁻⁴	F	-	-	8.48E4	3.75E2	3.44E5	5.75E2	1.12E5	0		
2	5360	1.0x10 ⁻⁵	M	4.04E4	6.25E1	1.39E6	3.18E3	1.20E6	1.33E3	-	-		
	5368	1.0x10 ⁻⁵	M	2.64E4	1.25E2	2.39E5	9.25E2	1.39E5	2.88E2	-	-		
	5389	1.0x10 ⁻⁵	F	2.17E4	1.50E2	3.80E5	1.29E3	4.72E5	8.88E2	-	-		
	5378	1.0x10 ⁻⁵	F	6.22E4	6.25E1	1.26E5	4.00E2	5.66E4	3.75E1	-	-		
3	5374	1.0x10 ⁻⁶	M	2.21E5	1.50E2	6.07E5	1.13E3	-	-	-	-		
	5363	1.0x10 ⁻⁶	M	9.02E4	5.00E1	2.34E5	4.38E2	1.19E5	4.00E2	-	-		
	5375	1.0x10 ⁻⁶	F	2.41E5	6.25E1	1.47E5	2.13E2	2.54E4	1.25E1	-	-		
	5381	1.0x10 ⁻⁶	F	3.63E5	3.75E1	2.43E6	5.75E2	7.80E5	5.38E2	-	-		

Table 2. PLCal_ZV viral load in serum detected by quantitative RT-PCR (Genome Copies/mL) and Viral Plaque Assay (PFU/mL).

Group	Animal	Dose	Sex	Day Post Infection											
				1		2		3		4		5		6	
				RT-PCR	Plaque	RT-PCR	Plaque	RT-PCR	Plaque	RT-PCR	Plaque	RT-PCR	Plaque	RT-PCR	Plaque
4	5370	1.0x10 ⁴	M	-	-	-	-	7.53E4	1.00E2	2.00E5	2.50E1	2.83E4	0	-	-
	5359	1.0x10 ⁴	M	-	-	-	-	-	-	2.42E4	0	2.21E5	3.00E2	2.74E4	2.50E1
	5392	1.0x10 ⁴	F	-	-	-	-	3.88E4	0	7.05E5	8.38E2	7.02E5	1.25E2	-	-
	5383	1.0x10 ⁴	F	-	-	-	-	-	-	8.26E4	7.50E1	9.46E5	4.50E2	7.55E4	0
5	5369	1.0x10 ⁵	M	3.11E3	0	5.41E4	6.00E2	7.08E4	2.00E2	-	-	-	-	-	-
	5358	1.0x10 ⁵	M	-	-	5.39E4	1.00E2	2.22E5	2.50E1	2.29E5	2.50E1	-	-	-	-
	5380	1.0x10 ⁵	F	-	-	9.03E4	3.00E2	9.11E4	5.00E1	3.21E4	0	-	-	-	-
	5384	1.0x10 ⁵	F	-	-	1.56E5	1.88E2	1.67E5	6.25E1	5.90E4	0	-	-	-	-
6	5367	1.0x10 ⁶	M	3.86E4	1.75E2	5.90E5	1.55E3	3.57E5	1.00E2	-	-	-	-	-	-
	5372	1.0x10 ⁶	M	4.28E4	5.00E1	2.37E5	7.00E2	1.37E4	1.25E1	-	-	-	-	-	-
	5379	1.0x10 ⁶	F	-	-	4.26E5	1.00E2	9.63E4	1.25E1	2.92E4	0	-	-	-	-
	5377	1.0x10 ⁶	F	6.14E5	1.58E3	1.17E6	1.15E3	2.52E5	2.50E2	-	-	-	-	-	-

Table 3. Zika IgG ELISA data for Phase I of Natural History study

Phase I						Average		
Group	Challenge Dose (PFU/Animal)	Animal ID	Day			Day		
			10	15	30	10	15	30
1	1E4 PRVABC59	5366	218.6	1755.4	4126.5	606.4	3558.1	5573.2
		5362	1431.5	6357.5	5769.1			
		5388	399.1	2866.8	6739.0			
		5376	376.5	3252.6	5658.1			
2	1E5 PRVABC59	5360	938.2	2866.8	1925.1	1025.9	7121.5	5127.4
		5368	1789.8	8888.3	9018.7			
		5389	395.3	>12800	5337.8			
		5378	980.1	3930.8	4227.9			
3	1E6 PRVABC59	5374	2237.8	9421.6	>12800	1890.3	8559.7	10486.3
		5363	3174.6	>12800	>12800			
		5375	1383.7	5011.2	10741.7			
		5381	765.1	7006.0	5603.4			
4	1E4 PLCal_ZV	5370	542.0	>12800	>12800	294.9	8379.9	9341.2
		5359	<100	4008.0	8104.8			
		5392	345.0	>12800	6026.8			
		5383	192.6	3911.8	10433.2			
5	1E5 PLCal_ZV	5369	1101.3	>12800	>12800	732.3	7714.7	7151.4
		5358	633.1	6513.8	5769.1			
		5380	714.8	5576.2	5286.2			
		5384	480.0	5968.6	4750.5			
6	1E6 PLCal_ZV	5367	6837.9	>12800	>12800	3494.1	10039.1	7685.4
		5372	2360.6	9987.0	3950.0			
		5379	1925.1	4569.5	7572.1			
		5377	2852.9	>12800	6419.6			
7	1E4 IBH_30656	5361	123.8	732.4	371.1	106.0	562.3	414.2
		5365	<100	787.7	623.9			
		5385	<100	242.0	444.1			
		5390	<100	487.0	217.5			
8	1E5 IBH_30656	5371	173.1	1746.9	843.1	226.2	1039.7	520.8
		5357	395.3	1019.0	395.3			
		5387	227.2	980.1	511.3			
		5386	109.1	412.9	333.5			
9	1E6 IBH_30656	5364	765.1	3447.8	1664.1	717.2	3330.9	1790.4
		5373	1562.3	8263.8	4207.4			
		5382	313.1	768.8	885.1			
		5391	228.3	843.1	405.0			

Table 4. Zika IgG ELISA data for Phase II of Natural History study

Phase II					Average		
Group	Re-Challenge Dose (PFU/Animal)	Animal ID	Day		Day		
			50	75	50	75	
1	1E6 PRVABC59	5366	>12800	8104.8	10141.3	6110.5	Initial Challenge
		5360	3009.4	1878.9			1e4 PRVABC59
		5374	>12800	7833.9			1e5 PRVABC59
		5388	12731.8	7248.3			1e6 PRVABC59
		5389	6706.4	4891.0			1e4 PLCal_ZV
		5375	>12800	6706.4			1e5 PLCal_ZV
2	1E6 PLCal_ZV	5362	>12800	12426.4	12098.5	10423.0	1e6 PLCal_ZV
		5368	8591.2	7390.4			1e4 IBH_30656
		5363	>12800	>12800			1e5 IBH_30656
		5376	>12800	>12800			1e6 IBH_30656
		5378	>12800	11005.7			
		5381	>12800	6115.3			
3	1E6 PLCal_ZV	5370	>12800	>12800	11985.1	11247.5	
		5369	>12800	>12800			
		5367	>12800	>12800			
		5392	>12800	>12800			
		5380	>12800	9106.7			
		5379	7910.4	7178.2			
4	1E6 PRVABC59	5359	>12800	>12800	10672.3	7093.0	
		5358	8845.2	4867.3			
		5372	3988.5	3009.4			
		5383	>12800	3284.3			
		5384	>12800	5797.2			
		5377	>12800	>12800			
5	1E6 IBH_30656	5361	331.9	516.3	1203.5	1245.6	
		5371	1184.5	1156.1			
		5364	2205.5	1860.7			
		5385	924.6	1128.4			
		5387	1330.9	1219.5			
		5382	1243.4	1592.9			
6	1E6 PRVABC59	5365	1249.5	>12800	1431.7	10455.7	
		5357	1184.5	>12800			
		5373	3672.5	>12800			
		5390	302.6	4459.9			
		5386	1370.3	>12800			
		5391	811.0	7074.4			