

**Table 1. Delivered dose as determined by back titration of inoculum following day 0 challenge.**

Virus/Lot no.	Target Dose	Back Titer
<b>PRVABC59 040516-BAS</b>	2.0x10 <sup>6</sup>	1.5x10 <sup>6</sup>
	2.0x10 <sup>5</sup>	1.8x10 <sup>5</sup>
	2.0x10 <sup>4</sup>	1.1x10 <sup>4</sup>
<b>IbH30656 041416-BAS</b>	2.0x10 <sup>6</sup>	7.8x10 <sup>5</sup>
	2.0x10 <sup>5</sup>	6.7x10 <sup>4</sup>
	2.0x10 <sup>4</sup>	5.5x10 <sup>3</sup>
<b>PLCaI_ZV 092616-BAS</b>	2.0x10 <sup>6</sup>	1.3x10 <sup>6</sup>
	2.0x10 <sup>5</sup>	1.8x10 <sup>5</sup>
	2.0x10 <sup>4</sup>	5.9x10 <sup>3</sup>

**Table 2. PRVABC59 genome copies in serum detected by quantitative RT-PCR.**

[illegible]

**Table 3. PLCal\_ZV genome copies in serum detected by quantitative RT-PCR.**

Animal	Dose	Sex	Day Post Infection (Genome Copies/mL)														
			0	1	2	3	4	5	6	7	8	9	10	15	20	25	30
5367	1.0x10 <sup>6</sup>	M	0.00E0	3.86E4	5.90E5	3.57E5	6.29E2	2.31E2	3.26E2	0.00E0	1.12E2	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0
5372	1.0x10 <sup>6</sup>	M	0.00E0	4.28E4	2.37E5	1.37E4	3.92E2	9.96E1	6.01E1	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0
5379	1.0x10 <sup>6</sup>	F	0.00E0	1.17E4	4.26E5	9.63E4	2.92E4	1.46E3	9.34E1	4.28E1	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0
5377	1.0x10 <sup>6</sup>	F	0.00E0	6.14E5	1.17E6	2.52E5	2.05E3	4.44E2	2.84E2	6.88E1	2.18E1	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0
<b>Average</b>			<b>0.00E0</b>	<b>1.77E5</b>	<b>6.06E5</b>	<b>1.80E5</b>	<b>8.07E3</b>	<b>5.59E2</b>	<b>1.91E2</b>	<b>2.79E1</b>	<b>3.35E1</b>	<b>0.00E0</b>	<b>0.00E0</b>	<b>0.00E0</b>	<b>0.00E0</b>	<b>0.00E0</b>	<b>0.00E0</b>
5369	1.0x10 <sup>5</sup>	M	0.00E0	3.11E3	5.41E4	7.08E4	6.47E2	2.87E2	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0
5358	1.0x10 <sup>5</sup>	M	6.68E1	2.43E3	5.39E4	2.22E5	2.29E5	3.16E3	8.66E1	4.26E1	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0
5380	1.0x10 <sup>5</sup>	F	0.00E0	7.04E3	9.03E4	9.11E4	3.21E4	1.15E3	1.22E2	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0
5384	1.0x10 <sup>5</sup>	F	1.26E1	7.72E3	1.56E5	1.67E5	5.90E4	8.15E2	2.28E2	6.41E1	0.00E0	0.00E0	0.00E0	0.00E0	2.89E1	0.00E0	0.00E0
<b>Average</b>			<b>1.99E1</b>	<b>5.08E3</b>	<b>8.86E4</b>	<b>1.38E5</b>	<b>8.02E4</b>	<b>1.35E3</b>	<b>1.09E2</b>	<b>2.67E1</b>	<b>0.00E0</b>	<b>0.00E0</b>	<b>0.00E0</b>	<b>0.00E0</b>	<b>7.23E0</b>	<b>0.00E0</b>	<b>0.00E0</b>
5370	1.0x10 <sup>4</sup>	M	0.00E0	3.60E2	9.78E3	7.53E4	2.00E5	2.83E4	7.20E2	3.56E2	0.00E0	5.71E1	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0
5359	1.0x10 <sup>4</sup>	M	7.07E1	1.12E2	3.19E3	2.42E4	2.42E4	2.21E5	2.74E4	7.75E2	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0
5392	1.0x10 <sup>4</sup>	F	0.00E0	2.93E2	1.68E3	3.88E4	7.05E5	7.02E5	2.20E4	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0
5383	1.0x10 <sup>4</sup>	F	0.00E0	1.28E2	7.13E3	6.25E4	8.26E4	9.46E5	7.55E4	1.23E3	1.04E2	0.00E0	6.50E1	0.00E0	0.00E0	0.00E0	0.00E0
<b>Average</b>			<b>1.77E1</b>	<b>2.23E2</b>	<b>5.45E3</b>	<b>5.02E4</b>	<b>2.53E5</b>	<b>4.74E5</b>	<b>3.14E4</b>	<b>5.90E2</b>	<b>2.60E1</b>	<b>1.43E1</b>	<b>1.63E1</b>	<b>0.00E0</b>	<b>0.00E0</b>	<b>0.00E0</b>	<b>0.00E0</b>

**Table 4. IbH30656 genome copies in serum detected by quantitative RT-PCR.**

Animal	Dose	Sex	Day Post Infection (Genome Copies/mL)														
			0	1	2	3	4	5	6	7	8	9	10	15	20	25	30
5364	1.0x10 <sup>6</sup>	M	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	1.30E1	0.00E0	0.00E0	4.64E1	0.00E0
5373	1.0x10 <sup>6</sup>	M	0.00E0	1.19E2	5.26E2	1.77E1	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	4.24E1	0.00E0	0.00E0	0.00E0	0.00E0
5382	1.0x10 <sup>6</sup>	F	0.00E0	7.45E1	2.17E3	2.30E1	0.00E0	2.98E1	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0
5391	1.0x10 <sup>6</sup>	F	0.00E0	3.28E1	0.00E0	6.89E1	0.00E0	8.24E1	0.00E0	0.00E0	0.00E0	0.00E0	7.12E1	0.00E0	0.00E0	0.00E0	0.00E0
<b>Average</b>			<b>0.00E0</b>	<b>5.66E1</b>	<b>6.74E2</b>	<b>2.88E1</b>	<b>0.00E0</b>	<b>2.81E1</b>	<b>0.00E0</b>	<b>0.00E0</b>	<b>0.00E0</b>	<b>0.00E0</b>	<b>3.17E1</b>	<b>0.00E0</b>	<b>0.00E0</b>	<b>1.16E1</b>	<b>0.00E0</b>
5371	1.0x10 <sup>5</sup>	M	0.00E0	0.00E0	2.38E1	0.00E0	4.71E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0
5357	1.0x10 <sup>5</sup>	M	0.00E0	2.10E1	3.16E1	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0
5387	1.0x10 <sup>5</sup>	F	0.00E0	0.00E0	8.67E1	6.60E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	5.91E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0
5386	1.0x10 <sup>5</sup>	F	3.19E1	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0
<b>Average</b>			<b>7.98E0</b>	<b>5.25E0</b>	<b>3.55E1</b>	<b>1.65E0</b>	<b>1.18E0</b>	<b>0.00E0</b>	<b>0.00E0</b>	<b>0.00E0</b>	<b>0.00E0</b>	<b>1.48E0</b>	<b>0.00E0</b>	<b>0.00E0</b>	<b>0.00E0</b>	<b>0.00E0</b>	<b>0.00E0</b>
5361	1.0x10 <sup>4</sup>	M	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	2.25E1	0.00E0	0.00E0	0.00E0	0.00E0
5365	1.0x10 <sup>4</sup>	M	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0
5385	1.0x10 <sup>4</sup>	F	1.05E2	0.00E0	2.79E1	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0
5390	1.0x10 <sup>4</sup>	F	0.00E0	2.71E1	2.57E1	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0
<b>Average</b>			<b>2.63E1</b>	<b>6.78E0</b>	<b>1.34E1</b>	<b>0.00E0</b>	<b>0.00E0</b>	<b>0.00E0</b>	<b>0.00E0</b>	<b>0.00E0</b>	<b>0.00E0</b>	<b>0.00E0</b>	<b>5.63E0</b>	<b>0.00E0</b>	<b>0.00E0</b>	<b>0.00E0</b>	<b>0.00E0</b>

**Table 5. PRVABC59 genome copies in urine detected by quantitative RT-PCR.**

Animal	Dose	Sex	Day Post Infection (Genome Copies/mL)					
			5	10	15	20	25	30
5374	1.0x10 <sup>6</sup>	M	5.03E1	0.00E0	0.00E0	2.12E1	0.00E0	5.93E1
5363	1.0x10 <sup>6</sup>	M	0.00E0	6.84E1	8.55E1	0.00E0	0.00E0	0.00E0
5375	1.0x10 <sup>6</sup>	F	5.27E1	3.56E1	0.00E0	0.00E0	0.00E0	0.00E0
5381	1.0x10 <sup>6</sup>	F	1.72E1	3.77E1	4.04E1	0.00E0	0.00E0	0.00E0
<b>Average</b>			<b>3.01E1</b>	<b>3.54E1</b>	<b>3.15E1</b>	<b>5.30E0</b>	<b>0.00E0</b>	<b>1.48E1</b>
5360	1.0x10 <sup>5</sup>	M	0.00E0	0.00E0	0.00E0	5.84E1	6.10E1	6.98E1
5368	1.0x10 <sup>5</sup>	M	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	9.90E1
5389	1.0x10 <sup>5</sup>	F	0.00E0	0.00E0	0.00E0	0.00E0		0.00E0
5378	1.0x10 <sup>5</sup>	F	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	4.28E1
<b>Average</b>			<b>0.00E0</b>	<b>0.00E0</b>	<b>0.00E0</b>	<b>1.46E1</b>	<b>2.03E1</b>	<b>5.29E1</b>
5366	1.0x10 <sup>4</sup>	M	0.00E0	0.00E0	0.00E0	0.00E0	4.53E1	0.00E0
5362	1.0x10 <sup>4</sup>	M		0.00E0	5.94E1	0.00E0	5.85E1	0.00E0
5388	1.0x10 <sup>4</sup>	F	0.00E0	1.92E3	6.08E1	1.25E2	0.00E0	0.00E0
5376	1.0x10 <sup>4</sup>	F	0.00E0	0.00E0	0.00E0	1.50E2	0.00E0	0.00E0
<b>Average</b>			<b>0.00E0</b>	<b>4.80E2</b>	<b>3.01E1</b>	<b>6.88E1</b>	<b>2.60E1</b>	<b>0.00E0</b>

**Table 6. PLCaI\_ZV genome copies in urine detected by quantitative RT-PCR.**

Animal	Dose	Sex	Day Post Infection (Genome Copies/mL)					
			5	10	15	20	25	30
5367	1.0x10 <sup>6</sup>	M	0.00E0				0.00E0	
5372	1.0x10 <sup>6</sup>	M	0.00E0				0.00E0	0.00E0
5379	1.0x10 <sup>6</sup>	F	0.00E0				0.00E0	0.00E0
5377	1.0x10 <sup>6</sup>	F	0.00E0				0.00E0	0.00E0
<b>Average</b>			<b>0.00E0</b>				<b>0.00E0</b>	<b>0.00E0</b>
5369	1.0x10 <sup>5</sup>	M	0.00E0			0.00E0	0.00E0	2.07E2
5358	1.0x10 <sup>5</sup>	M	2.33E2			0.00E0	0.00E0	6.39E1
5380	1.0x10 <sup>5</sup>	F	0.00E0			0.00E0	0.00E0	
5384	1.0x10 <sup>5</sup>	F	0.00E0					
<b>Average</b>			<b>5.83E1</b>			<b>0.00E0</b>	<b>0.00E0</b>	<b>1.35E2</b>
5370	1.0x10 <sup>4</sup>	M	0.00E0	4.13E3		0.00E0	0.00E0	1.09E2
5359	1.0x10 <sup>4</sup>	M	0.00E0			0.00E0	0.00E0	1.95E2
5392	1.0x10 <sup>4</sup>	F	0.00E0			0.00E0	0.00E0	0.00E0
5383	1.0x10 <sup>4</sup>	F	0.00E0			0.00E0		
<b>Average</b>			<b>0.00E0</b>	<b>4.13E3</b>		<b>0.00E0</b>	<b>0.00E0</b>	<b>1.01E2</b>

**Table 7. IbH30656 genome copies in urine detected by quantitative RT-PCR.**

Animal	Dose	Sex	Day Post Infection (Genome Copies/mL)					
			5	10	15	20	25	30
5364	1.0x10 <sup>6</sup>	M	0.00E0			0.00E0		
5373	1.0x10 <sup>6</sup>	M	0.00E0			0.00E0		
5382	1.0x10 <sup>6</sup>	F	0.00E0			0.00E0		
5391	1.0x10 <sup>6</sup>	F	0.00E0			0.00E0	0.00E0	
<b>Average</b>			<b>0.00E0</b>			<b>0.00E0</b>	<b>0.00E0</b>	
5371	1.0x10 <sup>5</sup>	M	0.00E0	0.00E0				
5357	1.0x10 <sup>5</sup>	M	0.00E0	0.00E0		0.00E0	0.00E0	
5387	1.0x10 <sup>5</sup>	F	0.00E0	0.00E0		0.00E0		
5386	1.0x10 <sup>5</sup>	F	0.00E0			0.00E0		
<b>Average</b>			<b>0.00E0</b>	<b>0.00E0</b>		<b>0.00E0</b>	<b>0.00E0</b>	
5361	1.0x10 <sup>4</sup>	M	1.97E1	0.00E0				
5365	1.0x10 <sup>4</sup>	M	0.00E0	0.00E0			0.00E0	
5385	1.0x10 <sup>4</sup>	F	0.00E0	0.00E0		0.00E0	0.00E0	
5390	1.0x10 <sup>4</sup>	F	0.00E0	0.00E0		0.00E0	0.00E0	
<b>Average</b>			<b>4.93E0</b>	<b>0.00E0</b>		<b>0.00E0</b>	<b>0.00E0</b>	

**Table 8. PRVABC59 genome copies in saliva detected by quantitative RT-PCR.**

Animal	Dose	Sex	Day Post Infection (Genome Copies/mL)					
			5	10	15	20	25	30
5374	1.0x10 <sup>6</sup>	M	2.73E1	3.60E1	0.00E0	3.73E1	0.00E0	0.00E0
5363	1.0x10 <sup>6</sup>	M	5.03E1	1.24E2	0.00E0	4.29E1	0.00E0	0.00E0
5375	1.0x10 <sup>6</sup>	F	0.00E0	0.00E0	0.00E0	3.39E1	0.00E0	0.00E0
5381	1.0x10 <sup>6</sup>	F	4.32E1	6.05E1	2.99E1	0.00E0	0.00E0	0.00E0
<b>Average</b>			<b>3.02E1</b>	<b>5.51E1</b>	<b>7.48E0</b>	<b>2.85E0</b>	<b>0.00E0</b>	<b>0.00E0</b>
5360	1.0x10 <sup>5</sup>	M	2.06E2	7.20E1	2.68E2	0.00E0	0.00E0	0.00E0
5368	1.0x10 <sup>5</sup>	M	3.57E3	0.00E0	0.00E0	0.00E0	2.13E1	0.00E0
5389	1.0x10 <sup>5</sup>	F	4.35E1	0.00E0	1.08E2	4.89E1	0.00E0	0.00E0
5378	1.0x10 <sup>5</sup>	F	5.68E1	0.00E0	5.47E1	7.15E1	0.00E0	0.00E0
<b>Average</b>			<b>9.70E2</b>	<b>1.80E1</b>	<b>1.08E2</b>	<b>3.01E1</b>	<b>5.33E0</b>	<b>0.00E0</b>
5366	1.0x10 <sup>4</sup>	M	0.00E0	0.00E0	1.35E2	0.00E0	1.58E1	0.00E0
5362	1.0x10 <sup>4</sup>	M	0.00E0	4.02E1	1.32E2	3.92E1	0.00E0	0.00E0
5388	1.0x10 <sup>4</sup>	F	6.83E1	0.00E0	7.90E1	0.00E0	0.00E0	0.00E0
5376	1.0x10 <sup>4</sup>	F	0.00E0	0.00E0	2.30E1	0.00E0	0.00E0	0.00E0
<b>Average</b>			<b>1.71E1</b>	<b>1.00E1</b>	<b>9.23E1</b>	<b>9.81E0</b>	<b>3.94E0</b>	<b>0.00E0</b>

**Table 9. PLCal\_ZV genome copies in saliva detected by quantitative RT-PCR.**

Animal	Dose	Sex	Day Post Infection (Genome Copies/mL)					
			5	10	15	20	25	30
5367	1.0x10 <sup>6</sup>	M	6.80E2	0.00E0	1.98E2	0.00E0		
5372	1.0x10 <sup>6</sup>	M	2.17E2	6.80E1	0.00E0	0.00E0		
5379	1.0x10 <sup>6</sup>	F	2.66E2	9.90E1	6.43E1	0.00E0		
5377	1.0x10 <sup>6</sup>	F	1.77E2	1.19E2	7.45E1	0.00E0		
<b>Average</b>			<b>3.35E2</b>	<b>7.15E1</b>	<b>8.43E1</b>	<b>0.00E0</b>		
5369	1.0x10 <sup>5</sup>	M	0.00E0	0.00E0	2.44E2	0.00E0		
5358	1.0x10 <sup>5</sup>	M	2.33E2	3.75E1	2.75E1	0.00E0		
5380	1.0x10 <sup>5</sup>	F	1.35E3	0.00E0	4.75E1	0.00E0		
5384	1.0x10 <sup>5</sup>	F	0.00E0	7.04E1	6.13E1	0.00E0		
<b>Average</b>			<b>3.97E2</b>	<b>2.70E1</b>	<b>9.52E1</b>	<b>0.00E0</b>		
5370	1.0x10 <sup>4</sup>	M	9.48E1	0.00E0	6.58E2	0.00E0		0.00E0
5359	1.0x10 <sup>4</sup>	M	8.97E1	0.00E0	0.00E0	0.00E0		0.00E0
5392	1.0x10 <sup>4</sup>	F	9.23E1	3.24E2	0.00E0	0.00E0		
5383	1.0x10 <sup>4</sup>	F	8.11E1	0.00E0	0.00E0	0.00E0		
<b>Average</b>			<b>8.94E1</b>	<b>8.09E1</b>	<b>1.65E2</b>	<b>0.00E0</b>		<b>0.00E0</b>

**Table 10. IbH30656 genome copies in saliva detected by quantitative RT-PCR.**

Animal	Dose	Sex	Day Post Infection (Genome Copies/mL)					
			5	10	15	20	25	30
5364	1.0x10 <sup>6</sup>	M						
5373	1.0x10 <sup>6</sup>	M						
5382	1.0x10 <sup>6</sup>	F						
5391	1.0x10 <sup>6</sup>	F						
<b>Average</b>								
5371	1.0x10 <sup>5</sup>	M						
5357	1.0x10 <sup>5</sup>	M						
5387	1.0x10 <sup>5</sup>	F						
5386	1.0x10 <sup>5</sup>	F						
<b>Average</b>								
5361	1.0x10 <sup>4</sup>	M						
5365	1.0x10 <sup>4</sup>	M						
5385	1.0x10 <sup>4</sup>	F						
5390	1.0x10 <sup>4</sup>	F						
<b>Average</b>								