

Supplementary Table 1. Viral copy number (copies/ml) associated with each pure viral isolate.

NAHLN Pathogen	Surrogate Virus	Genome	Family	PCR CT value after extracted	Viral TCID50/mL to use for extraction	Estimated number of virus copies spiked (copies/ml)
Classical swine fever virus	Bovine viral diarrhea virus	RNA	<i>Flaviviridae</i> (<i>Pestivirus</i>)	17.98	39905.25	1.07E+11
Pseudorabies virus	Bovine herpesvirus 1	DNA	<i>Herpesviridae</i>	14.46	632455.53	1.48E+06
Porcine influenza A	Porcine influenza A	RNA	<i>Orthomyxoviridae</i>	32.56	35.00	1.20E+02
Foot and mouth disease virus	Porcine senecavirus A	RNA	<i>Picornaviridae</i>	15.00	12000.00	3.14E+08
African swine fever virus	Synthetic sequences “gBlocks”	DNA	<i>Asfarviridae</i>			