

TEST REPORT

Report Number	COA_INVITRO_20230504_AVT_EN_01
Client	NAEWOIKOREA
Date	May 04, 2023
Test Type	Antiviral testing
Test Specimen	NWK A-FV
Testing System	1. Virus: Infectious bronchitis virus 2. Host cell: Vero
Testing Method	ASTM E1052



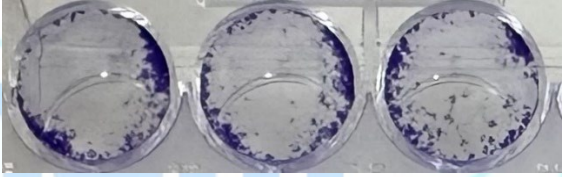
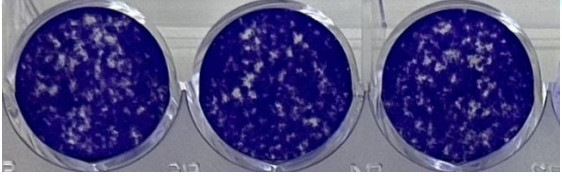
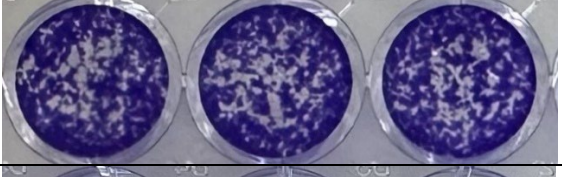
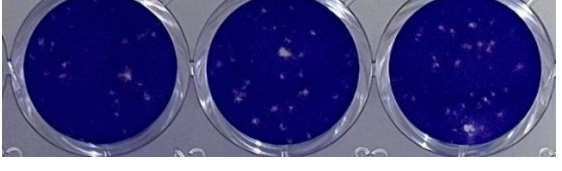
Test Result								
Concentration (Contact time)	Log reduction ¹	% reduction						
25% (2 hours)	1.2	93.3						
<table border="1"> <thead> <tr> <th colspan="2">Infectivity titer (PFU/ml)</th> </tr> </thead> <tbody> <tr> <td>Control group</td> <td>4.1 x 10⁷</td> </tr> <tr> <td>Experimental group</td> <td>2.8 x 10⁶</td> </tr> </tbody> </table>			Infectivity titer (PFU/ml)		Control group	4.1 x 10 ⁷	Experimental group	2.8 x 10 ⁶
Infectivity titer (PFU/ml)								
Control group	4.1 x 10 ⁷							
Experimental group	2.8 x 10 ⁶							

¹Log reduction of test group (Number of plaques in virus contact with test specimen) compared to control group (Number of plaques in virus without contact)

※ Log reduction conversion to percentage (%)

- 1. 1 log reduction = 90% reduction
- 2. 2 log reduction = 99% reduction
- 3. 3 log reduction = 99.9% reduction
- 4. 4 log reduction = 99.99% reduction
- 5. 5 log reduction = 99.999% reduction



Test Images	
Specimen	
Group	Plaque images
Virus (-)	
Control Virus (+)	(10^{-4}) 
	(10^{-5}) 
Experimental Virus (+)	(10^{-4}) 
	(10^{-5}) 

TEST REPORT

Report Number	COA_INVITRO_20230504_AVT_EN_02
Client	NAEWOIKOREA
Date	May 04, 2023
Test Type	Antiviral testing
Test Specimen	NWK A-FV
Testing System	1. Virus: Infectious bursal disease virus 2. Host cell: Vero
Testing Method	ASTM E1052


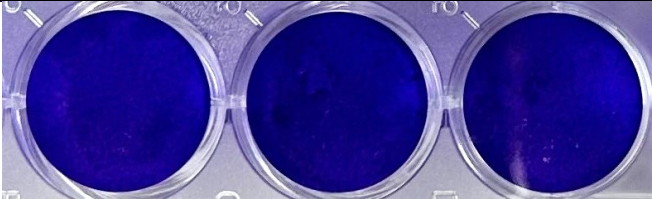
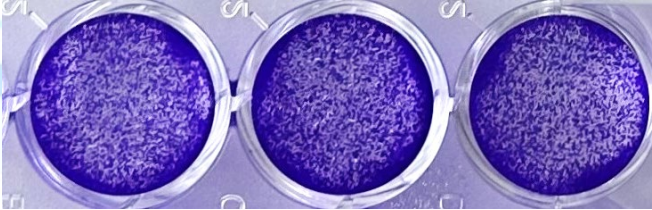
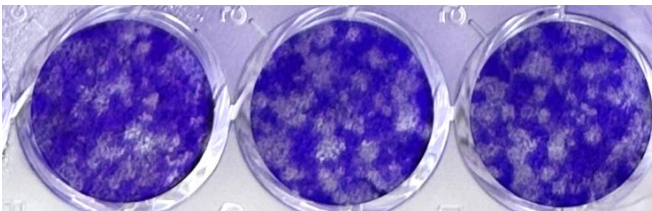
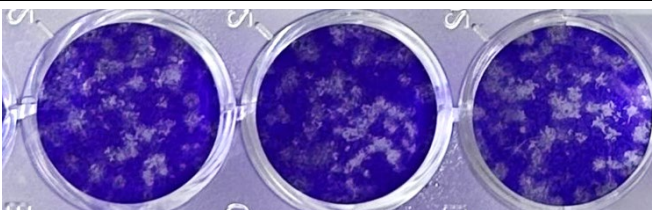
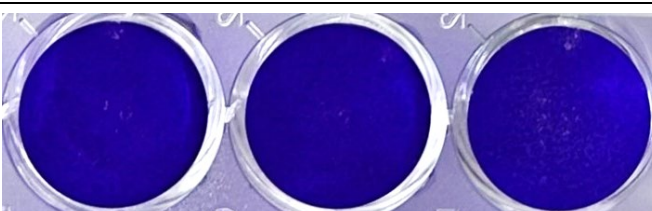
Test Result								
Concentration (Contact time)	Log reduction ¹	% reduction						
25% (2 hours)	1.4	95.6						
<table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th colspan="2">Infectivity titer (PFU/ml)</th> </tr> </thead> <tbody> <tr> <td>Control group</td> <td>8.9 x 10⁷</td> </tr> <tr> <td>Experimental group</td> <td>3.9 x 10⁶</td> </tr> </tbody> </table>			Infectivity titer (PFU/ml)		Control group	8.9 x 10 ⁷	Experimental group	3.9 x 10 ⁶
Infectivity titer (PFU/ml)								
Control group	8.9 x 10 ⁷							
Experimental group	3.9 x 10 ⁶							

¹Log reduction of test group (Number of plaques in virus contact with test specimen) compared to control group (Number of plaques in virus without contact)

※ Log reduction conversion to percentage (%)

- 1. 1 log reduction = 90% reduction
- 2. 2 log reduction = 99% reduction
- 3. 3 log reduction = 99.9% reduction
- 4. 4 log reduction = 99.99% reduction
- 5. 5 log reduction = 99.999% reduction



Test Images	
Specimen	
Group	Plaque images
Virus (-)	
Control Virus (+)	(10^{-4}) 
	(10^{-5}) 
Experimental Virus (+)	(10^{-4}) 
	(10^{-5}) 

TEST REPORT

Report Number	COA_INVITRO_20230504_AVT_EN_03
Client	NAEWOIKOREA
Date	May 04, 2023
Test Type	Antiviral testing
Test Specimen	NWK A-FV
Testing System	1. Virus: Porcine epidemic diarrhea virus 2. Host cell: Vero
Testing Method	ASTM E1052

Test Result								
Concentration (Contact time)	Log reduction ¹	% reduction						
25% (2 hours)	2.2	99.3						
<table border="1"> <thead> <tr> <th colspan="2">Infectivity titer (PFU/ml)</th> </tr> </thead> <tbody> <tr> <td>Control group</td> <td>2.2 x 10⁶</td> </tr> <tr> <td>Experimental group</td> <td>1.5 x 10⁴</td> </tr> </tbody> </table>			Infectivity titer (PFU/ml)		Control group	2.2 x 10 ⁶	Experimental group	1.5 x 10 ⁴
Infectivity titer (PFU/ml)								
Control group	2.2 x 10 ⁶							
Experimental group	1.5 x 10 ⁴							

¹Log reduction of test group (Number of plaques in virus contact with test specimen) compared to control group (Number of plaques in virus without contact)

※ Log reduction conversion to percentage (%)

- 1. 1 log reduction = 90% reduction
- 2. 2 log reduction = 99% reduction
- 3. 3 log reduction = 99.9% reduction
- 4. 4 log reduction = 99.99% reduction
- 5. 5 log reduction = 99.999% reduction



Test Images		
Specimen		
Group	Plaque images	
Virus (-)		
Control Virus (+)	(10 ⁻⁴)	
	(10 ⁻⁵)	
Experimental Virus (+)	(10 ⁻³)	
	(10 ⁻⁴)	