

**Influenza H3 Pseudovirus  
A/Hong Kong/1/1968 (H3N2) strain**

**Luciferase reporter**

**Lot #240608**



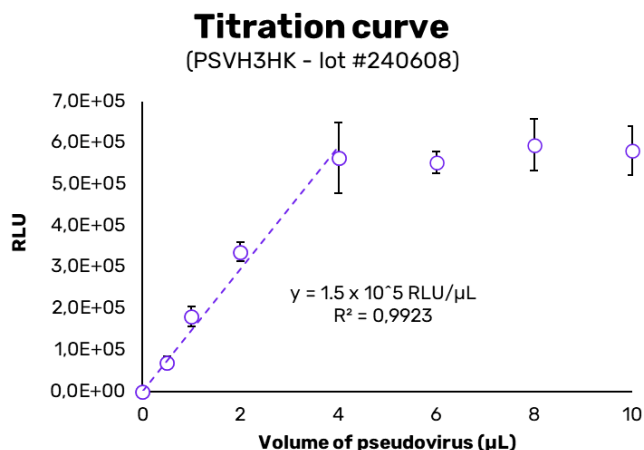
**Certificate of Analysis**

# 1. Summary

This certificate is a functional validation for the lot #240608 of an avian HA pseudotyped pseudovirus, A/Hong Kong/1/1968 (H3N2) strain. The titer is  $1.5 \times 10^5$  RLU /  $\mu\text{L}$ . A volume of 1 mL can be used to perform 1,000 reactions or 10 x 96-well plates, according to IVANO Bioscience’s protocol available upon request.

# 2. Transduction efficiency assay

**Target cells** HEK293T cells  
**Volume of pseudovirus** 0 – 0.5 – 1 – 2 – 4 – 6 – 8 – 10  $\mu\text{L}/\text{well}$   
**Detection signal** Luminescence (firefly luciferase)  
**Detection method** Microplate reader Biotek Synergy H1 (Gain: 135)



Volume of pseudovirus( $\mu\text{L}$ )	RLU 1	RLU 2	Mean RLU	CV RLU	Fold vs background
0	4,6E+01	4,0E+01	4,3E+01	4,2E+00	1,0E+00
0,5	8,1E+04	5,9E+04	7,0E+04	1,6E+04	1,6E+03
<b>1</b>	<b>1,6E+05</b>	<b>2,0E+05</b>	<b>1,8E+05</b>	<b>2,4E+04</b>	<b>4,2E+03</b>
2	3,2E+05	3,5E+05	3,4E+05	2,3E+04	7,9E+03
4	5,0E+05	6,3E+05	5,6E+05	8,6E+04	1,3E+04
6	5,3E+05	5,7E+05	5,5E+05	2,7E+04	1,3E+04
8	5,5E+05	6,4E+05	6,0E+05	6,2E+04	1,4E+04
10	5,4E+05	6,2E+05	5,8E+05	5,9E+04	1,4E+04

**Figure 1: Transduction efficiency curve**

A volume range of pseudovirus was mixed in a final volume of 50  $\mu\text{L}$  of medium, in a 96-well plate. Then, 50  $\mu\text{L}$  of medium containing 10,000 cells was seeded in each well. On the day of analysis, an additional 100  $\mu\text{L}$  of Bright-Glo™ Luciferase reagent was added in each well and incubated for 2 minutes. Data in relative unit luminescence (RLU) were obtained from the analysis of 150  $\mu\text{L}$  of the cell lysate, using a microplate reader. Data are expressed in relative unit luminescence (RLU).

## Conclusion

The Influenza H3 pseudovirus (#240608) can transduce the target cells. The titer is  $1.5 \times 10^5$  RLU/ $\mu\text{L}$ . Using 1  $\mu\text{L}/\text{reaction}$  of pseudovirus in a 96-well plate will yield a 1,000-fold increase in RLU compared to the background. Therefore, 1 mL of lot #240608 could be used to perform approximately 1,000 reactions or 10 x 96-well plates, according to IVANO Bioscience’s protocol (available upon request).

## 4. Additional information

### Intruction of use

We recommend determining the titer in your lab's conditions before performing any experiments.

Handle under biosafety level-2.

### Pseudovirus

3<sup>rd</sup> generation lentiviral vector, incompetent replication and non-toxic.

### Pseudotyping

Influenza hemagglutinin, strain A/Hong Kong/1/1968 (H3N2) (Gen-Bank: AAK51719.1)

### Pseudotyping sequence

```
MNTQILVFALIAIIPANADKICLGHHAVSNGTKVNTLTERGVEVVNATETVERTNIP  
RICKSGKRTVDLGGQCGLLGTITGPPQCDQFLEFSADLIERREGSDVCYPGKQVFN  
EEALRQILRESGGIDKEAMGFTYSGIRTNGATSACRRSGSSFYAEMKWLLSNTD  
NAAFPQMTKSYKNTRKSPALIVWGIHHSVSTAEQTKLYGSGNKLVTVGSSNYQ  
QSFVPSPGARPQVNGLSGRIDFWLMLNPNDTVTFSFNGAFIAPDRASFLRGKS  
MGIQSGVQVDANCEGDCHHSGGTIISNLPFQNIDSRVAVGKCPRYVKQRSLLLAT  
GMKNVPEIPKGRGLFGAIAAGFIENGWEGLIDGWYGFRHQNAQGEFTAADYKST  
QSAIDQITGKLNRLIEKTNQQFELIDNEFNEVEKQIGNVINWTRDSITEVWSYNAE  
LLVAMENQHTIDLADSEMDKLYERVKRLRENAEEDGTGCFEIFHKCDDDCMA  
SIRNNTYDHSKYREEAMQNRIDPDKLSSGYKDVILWFSFGASCIFILLAIMGLV  
FICVKNNGNMRCTICI
```

### Glycosylation origin

Human

### Reporter Protein

Firefly luciferase

### Storage

- 80 °C, avoid freeze/thaw cycles.

### For more information

[mathias.mangion@ivanobioscience.com](mailto:mathias.mangion@ivanobioscience.com)

Message object should contain:

“ Influenza H3 pseudovirus – #240608”.

### Intended use

For Research Use Only. Not for Use in Diagnostic Procedures.  
Not Meant for Resale.