



Avian Influenza H7 Pseudovirus

A/Shanghai/4664T/2013 (H7N9)

Luciferase reporter

Lot #240716



Certificate of Analysis

1. Summary

This certificate is a functional validation for the lot #240716 of an avian HA pseudotyped pseudovirus, strain A/Shanghai/4664T/2013 (H7N9). The titer is 2.2×10^5 RLU/ μ L. A volume of 1 mL of lot #240716 can be used to perform approximately 2,000 reactions or 20 x 96-well plates (according to the IVANO Bioscience protocol available upon request).

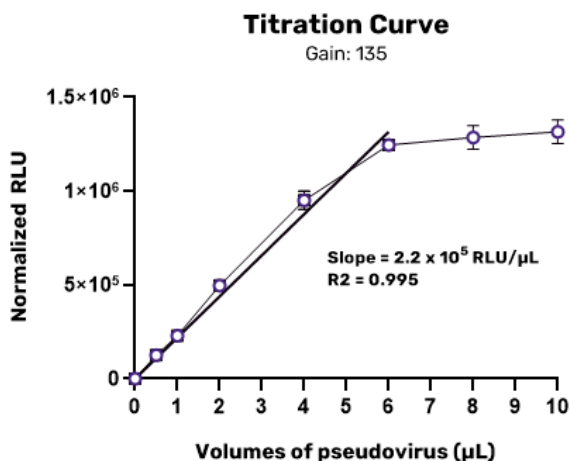
2. Transduction efficiency assay

Target cells HEK293-T cells

Volume of pseudovirus 0 - 0.5 - 1 - 2 - 4 - 6 - 8 - 10 μ L/well

Detection signal Luminescence (firefly luciferase)

Detection method Microplate reader Biotek Synergy H1 (Gain: 135)



Volumes of pseudovirus (μ L)	Raw Data Mean	Fold vs Background
0	7.90E+01	Background
0.5	1.25E+05	1.6E+03
1	2.30E+05	2.9E+03
2	4.97E+05	6.3E+03
4	9.51E+05	1.2E+04
6	1.25E+06	1.6E+04
8	1.28E+06	1.6E+04
10	1.31E+06	1.7E+04

Figure 1: Transduction efficiency curve

A volume range of pseudoviruses was mixed in a final volume of 50 μ L of culture complete medium, in a 96-well plate. Then, an additional 50 μ L containing 10,000 cells was seeded in each well. Luciferase expression analysis was performed 72 hours post-infection by a luminescence microplate reader.

Conclusion:

The H7 pseudovirus (#240716) can transduce the target cells. The titer is: 2.2×10^5 RLU/ μ L. Using 0.5 μ L/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 #240716 can be used to perform approximately 2,000 reactions or 20 x 96-well plates (according to the IVANO Bioscience protocol available upon request).

3. Additional information

Instruction of Uses	We recommend determining the titer in your lab's conditions before performing any experiments. Handle under biosafety level-2.
Pseudovirus	Replication incompetent. 3 rd generation lentiviral vector, incompetent replication and non-toxic.
Pseudotyping	Influenza hemagglutinin, strain A/Shanghai/4664T/2013 (H7N9) (GENBANK: KC853228.1).
Glycosylation origin	Human.
Reporter protein	Firefly luciferase.
Storage	- 80 °C, avoid freeze/thaw cycles.
For more information	mathias.mangion@ivanobioscience.com Message object should contain: "H7 - #240716".
Intended use	For Research Use Only. Not for Use in Diagnostic Procedures. Not Meant for Resale.