



**Pseudovirus H5 (luciferase)**  
**A/Viet Nam/1194/2004 (H5N1)**  
**Lot #PsVL-H5VN9404-231223**



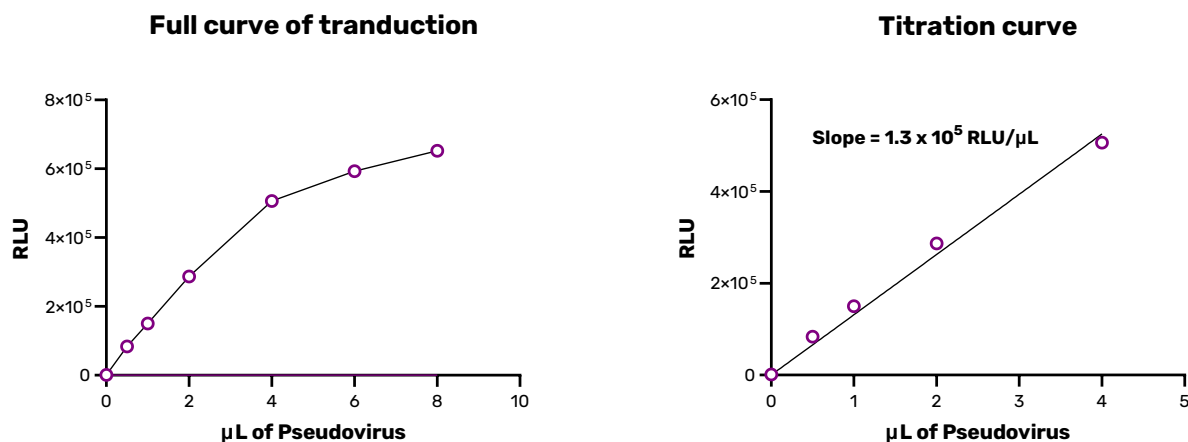
**Quality control report**

## 1. Summary

The lot number #PsVL-H5VN9404-231223 is a lentivirus-based pseudovirus pseudotyped with the HA protein of the A/Viet Nam/1194/2004 (H5N1) variant. This quality control report demonstrates that the lot #PsVL-H5VN9404-231223 is efficient for cell transduction and can be effectively neutralized by a standard neutralizing antibody.

## 2. Transduction efficiency assay

<b>Target cells</b>	HEK293-T cells
<b>Volume of pseudovirus</b>	0 - 0.5 - 1 - 2 - 4 - 6 and 8 $\mu\text{L}$ /well
<b>Detection signal</b>	Luminescence (firefly luciferase)
<b>Detection method</b>	Microplate reader



**Figure 1: Transduction efficiency curve**

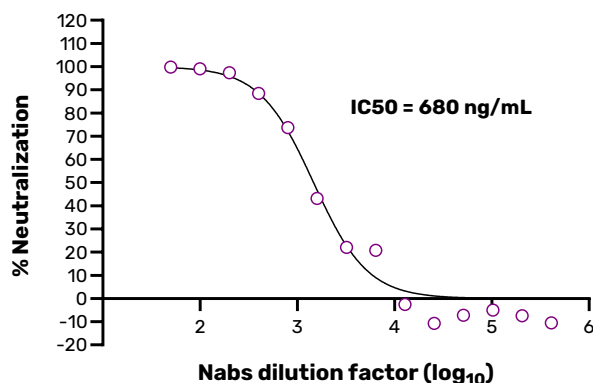
A volume range of pseudovirus was mixed in a final volume of 50  $\mu\text{L}$  of culture complete medium, in a 96-well plate. Then, an additional 50  $\mu\text{L}$  containing 20 000 HEK293-T cells was seeded in each well. Luc expression analysis was performed 72 hours post-infection by a luminescence microplate reader.

<b>Conclusion</b>	The H5 pseudovirus (#PsVL-H5VN9404-231223) can transduce the target cells. This batch titer is : $1.3 \times 10^5 \text{ RLU}/\mu\text{L}$ .
-------------------	--

### 3. Neutralization assay

<b>Target cells</b>	HEK293-T cells
<b>Volume of pseudovirus</b>	1 $\mu$ L/well
<b>Neutralizing antibody (Nabs)</b>	Anti-H5 surface glycoprotein - <a href="#">AB00798-10.0</a>
<b>Detection signal</b>	Luminescence (firefly luciferase)
<b>Detection method</b>	Microplate reader

#### Neutralization curve



**Figure 2: Neutralization curve**

A monoclonal neutralizing antibody ([AB00798-10.0](#)) at 1 mg/mL was serially diluted in a final volume of 50  $\mu$ L of complete medium and incubated for 1 hour at 37 °C, with 1  $\mu$ L of pseudovirus, in a 96-well plate. Then, an additional 50  $\mu$ L containing 20 000 HEK293-T cells was seeded in each well and incubated for 72 hours. Finally, an additional 100  $\mu$ L of [Bright-Glo™ Luciferase](#) buffer was added in each well and incubated for 2 minutes. Data in relative unit luminescence (RLU) were obtained from the analysis of 150  $\mu$ L of the cell lysate with a microplate reader. Raw data were analyzed using a log(inhibitor) vs normalized-response (variable slope) non-linear regression model in Prism v10 (GraphPad). Percentages of neutralization were normalized considering only cells into wells as 100% neutralization and cells transduced by pseudoviruses without any NABs as 0% neutralization. Data are representative of duplicates.

<b>Conclusion</b>	The H5 pseudovirus #PsVL-H5VN9404-231223 can be efficiently neutralized by neutralizing antibodies.
-------------------	---

---

### 3. Additional information

<b>Caution</b>	We recommend determining the optimal pseudovirus volume to use according to your specific experimental conditions
<b>Pseudovirus</b>	Replication incompetent. Handling in a BSL-2 laboratory
<b>Pseudotyping</b>	Influenza hemagglutinin H5 from the 2004 outbreak in Viet Nam (GENBANK: <a href="#">EF541402.1</a> )
<b>Glycosylation origin</b>	Human
<b>Reporter protein</b>	Firefly luciferase
<b>Storage</b>	- 80 °C, avoid freeze/thaw cycles
<b>For more information</b>	<a href="mailto:mathias.mangion@ivanobioscience.com">mathias.mangion@ivanobioscience.com</a> Message object should contain: "#PsVL-H5VN9404-231223 "