PSEUDOVIRUS

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Lassa Virus Pseudovirus

Catalog #: 1007-PP-001

Description:
The Lassa pseudovirus is a third-generation lentiviral vector pseudotyped with the glycoprotein from the Lassa virus strain Josiah (1976). It contains a firefly luciferase reporter system for sensitive quantification of viral entry.

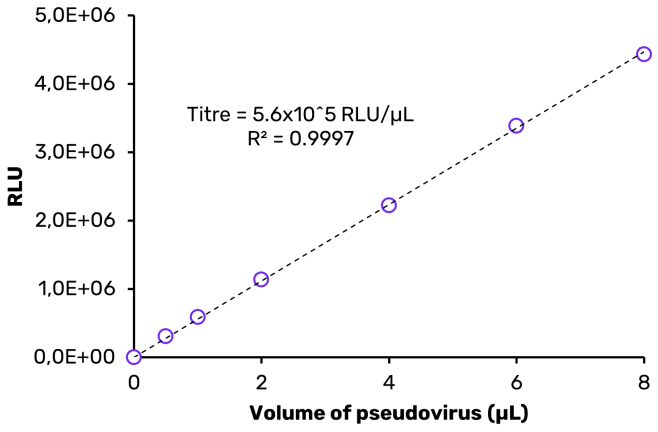
This pseudovirus is classified under biosafety level 2 (BSL- 2) and is not known or suspected to contain any replicative biological agents due to multiple safety modifications in the viral genome.

Formulation & Storage: Supplied in DMEM supplemented with 10% Fetal Bovine Serum. Store at -80°C. Avoid Thaw/freeze cycle.

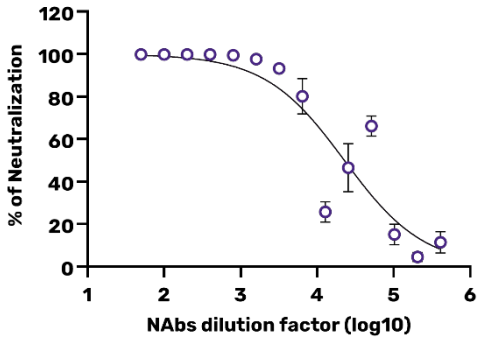
Notes & Usage Guidelines:
Recommended Dilution: 1:50 to 1:100
Luciferase Units for Assays: 300,000 to 600,000
Reporter: Luciferase
~No. of plates that can be tested with a single aliquot: 1 plate

Applications

Viral Titration:
A volume range of pseudovirus (0 – 0.5 – 1 – 2 – 4 – 6 – 8 – 10 µL/well) was mixed in a final volume of 50 µL of medium, in a 96-well plate. Then, 50 µL of medium containing 10,000 cells was seeded in each well. On the day of analysis, an additional 100 µL 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 µL of the cell lysate, using a microplate reader. Data are expressed in relative unit luminescence (RLU) as shown below.



Pseudovirus Neutralization Assay Protocol:
A monoclonal neutralizing antibody (Ab01102-10.0), at a starting dilution of 1/50, was serial diluted in a final volume of 50 µL of complete medium and incubated for 1 hour at 37 °C, with 1 µL of pseudovirus, in a 96-well plate. Then, an additional 50 µL containing 10,000 cells was seeded in each well and incubated for 72 hours. Finally, an additional 100 µL 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 µL 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) as shown below.



Certificate of analysis:
A hardcopy of datasheet sent along with the products. Please refer to it for detailed information. For older lots, refer to the applicable certificate of analysis that may be requested at services@ibtbioservices.com

Related Products:
IBT provides a wide array of anti-filovirus specific antibodies, recombinant proteins, and other infectious disease reagents. Please see our website, www.ibtbioservices.com for more details.