

VSVG Pseudoviral Particles

CATALOG NUMBER: PsLv-VSVG

Size: 1 mL

Product Description

VSVG Pseudoviral Particles are replication-deficient Lentiviral particles pseudotyped with the vesicular stomatitis virus glycoprotein (VSVG). These particles contain the firefly luciferase (FLuc) reporter gene, enabling quantification of infectivity via luminescence. Upon infection, FLuc is expressed in transduced cells, providing a sensitive readout of viral entry and gene expression.

This pseudovirus system is ideal for studying viral entry mechanisms, screening inhibitors, and quantifying neutralizing antibodies targeting VSVG.

Applications

When paired with eEnzyme's Firefly Luciferase Assay Kit (Catalog # [CA-L165](#)), these pseudoviral particles generate robust chemiluminescent signals for:

- **Antiviral Screening:** Identifying inhibitors of VSVG-mediated entry and translation
- **Neutralization Assays:** Quantify antibody activity against VSVG
- **Cell Entry Studies:** Investigate receptor-mediated uptake and trafficking

Key Features

- High signal-to-noise ratio
- HTS-compatible (96-, 384-, and 1536-well formats)
- Single reporter system for luminescence detection

Contents & Storage

- **Contents:** 1 mL per vial
- **Storage:** Store immediately at -70 °C upon receipt
- **Thawing Instructions:**
 - Thaw quickly at room temperature (<30 min)
 - Do not aliquot or refreeze
 - Use immediately
- **Shelf Life:** 6 months from shipping date when stored at -70 °C



ASSAY PROTOCOL

Cell Infection

1. Cell Seeding

- Seed HEK293 cells at 5×10^5 cells/mL in DMEM + 10% FBS + 20 μ g/mL Polybrene
- Add 50 μ L cells per well in 96-well plates (12.5 μ L for 384-well plates)

2. Infection

- Add 50 μ L VSVG pseudoviral particles per well (12.5 μ L for 384-well plates)
- Incubate for 48 hrs at 37 °C

Luciferase Activity Measurement

1. Do not remove supernatant.
2. Add 100 μ L luciferase assay reagent (25 μ L for 384-well plates)
3. Read luminescence using BioTek Synergy 2 plate reader (gain 220)

Representative Data

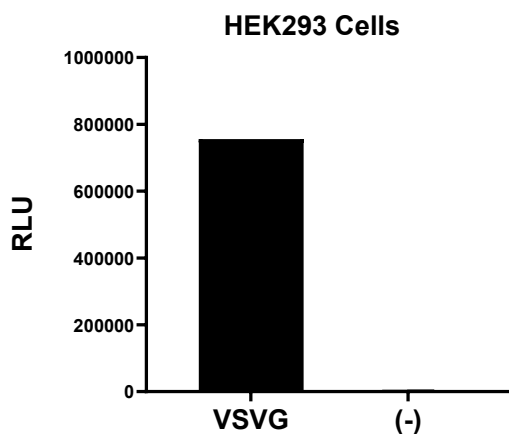


Figure 2. Luciferase activity in HEK293 cells infected with VSVG pseudoviral particles (384-well format)

- **VSVG:** Lentivirus pseudovirus with VSVG
- **(-):** Negative control (Lentivirus lacking VSVG envelope)

