

Lentiviral particles for Firefly Luciferase

Catalog #: SP110-400

Lentiviral particles pseudotyped with full-length SARS-CoV-2 spike glycoprotein (California B.1.427/B.1.429) for transferring genes to a variety of mammalian cells expressing human ACE2 receptor on the cell surface.

Description

- Gene: Firefly Luciferase
- Promoter: CMV
- Tag: N/A
- Reporter : EGFP
- Resistance marker: Puromycin resistance gene
- Additional note: N/A

Contents and storage

Provided as 50 µl/vial

Titer 1: > 1×10⁶ TU/ml Titer 2: > 1×10⁸ RLU/ml

For lot-specific datasheet and titers, please visit http://www.igenebio.com/tech/datasheet/index.php

Lentivirus particles are shipped on dry ice and must be stored at -80 $^{\circ}$ C immediately upon receipt. Avoid repeated freeze-thaw cycles as this will reduce titers. Divide into useful aliquots if necessary and store at -80 $^{\circ}$ C.

Viral titer

The titers of Transduction Unit/ml (TU/ml) and Relative Fluorescent Unit/ml (RFU/ml) of the spike protein-pseudotyped lentiviral particles were provided for each particle, based on the transduction efficiency using GeneCopoeia's ACE2 and TMPRSS2/HEK293T stable cell line (Cat.# SL222).

The luciferase titer (RLU/ml) was based on the viral particle's firefly luciferase signal after transducing the ACE2 and TMPRSS2/HEK293T cells, and was determined using GeneCopoeia's Luc-Pair[™] Firefly Luciferase HS Assay Kit (Cat.# LF007). The eGFP transduction titer (TU/ml) was determined by the FACS sorting of the eGFP expressing ACE2 and TMPRSS2 /HEK293T cells after pseudotyped viral transduction.

The customer should test the transduction at MOI=0.3, 1, 3, 5, 10 for their specific cell lines in order to get the best transduction efficiency.

Overview of production

Identity of lentiviral transfer vector: pEZ-Lv201

The lentiviral particles were generated by following a standardized protocol using highly purified plasmids and

EndoFectin-Lenti[™] and TiterBoost[™] reagents.

The lentiviral transfer vector was co-transfected into 293Ta cells (Cat #: LT008) with Lenti-Pac SARS-CoV-2 Full Length Spike protein (California B.1.427/B.1.429) packaging mix(Cat#: LT064). The lentivirus particles were purified and stored at -80°C in aliquots (purified particles).

Quality control

The lentiviral expression construct was validated by full-length sequencing, restriction enzyme digestion and PCR-size validation using gene-specific and vector-specific primers. Product is confirmed free of bacteria, fungi and common Mycoplasma contamination.

User manual

Please contact GeneCopoeia for a copy or download at: Lenti-Pac[™] SARS-CoV-2 Spike protein-pseudotyped Lentivirus Packaging Kit

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