

Firefly Luciferase Lentifact™ Purified Lentiviral Particles

Cat. No. LP466-025, LP466-100

(Old Cat. No. LPP-hLUC-Lv206-025-C, LPP-hLUC-Lv206-100-C)

Ready-to-use lentiviral particles for the transduction of a variety of mammalian cells including difficult-to-transfect, primary, stem and non-dividing cells.

Description

Gene: Firefly luciferase

Promoter: CMV

Tag: N/A

Reporter: mCherry

Resistance marker: Puromycin

Additional note: Puromycin and mCherry gene are co-expressed

GeneCopoeia Lentifact™ Lentiviral Particles are produced from a standardized protocol using purified plasmid DNA and the proprietary reagents, EndoFectin™ Lenti (for transfection) and TiterBoost™ solution. The protocol uses a third generation self-inactivating packaging system meeting BioSafety Level 2 requirements.

Contents and storage

Provided as 1 vial of 25 µl or 4 vials of 25 µl of purified hLUC-Lv206 lentiviral particles with titers of $\sim 1 \times 10^8$ TU/ml.

Lentifact particles are shipped on dry ice and **must be stored at -80°C immediately upon receipt**. Avoid repeated freeze-thaw cycles as this will reduce titers.

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.

Viral titer

The transduction unit (TU or IFU) of the lentiviral particles was estimated using the formula- 1TU=100 copies of viral genomic RNA. The physical copy numbers of the viral genomic RNA was determined using qRT-PCR. 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

The hLUC-Lv206 OmicsLink™ ORF lentiviral expression plasmid (GeneCopoeia Cat. No. EX-hLUC-Lv206) was co-transfected into 293Ta cells (GeneCopoeia Cat. No. LT008) with the Lenti-Pac HIV Packaging Mix (GeneCopoeia Cat. No. LT001). Lentivirus-containing supernatants were harvested 48 hours after transfection and stored at -80°C.

User manual

Please contact GeneCopoeia for a copy or download at:

<https://www.genecopoeia.com/wp-content/uploads/2018/03/Lentivirus-protocol-Genecopoeia.pdf>

GeneCopoeia, Inc.
9620 Medical Center Drive, Suite 101
Rockville, Maryland 20850
Tel: 301-762-0888 Fax: 301-762-8333
Email: inquiry@genecopoeia.com
Web: www.genecopoeia.com