



Firefly Luciferase Lentifect™ Purified Lentiviral Particles • Cat No. LPP-hLUC-Lv214-025, LPP-hLUC-Lv214-100

Lentiviral particles pseudotyped with VSV-G protein 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:	IRES2- mCherry
Reporter:	mCherry
Resistance marker:	None
Additional note:	None

Contents and storage

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

Lentifect 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.

Viral titer

The transduction unit (TU or IFU) of the lentiviral particles was estimated using the formula- $1\text{TU}=100$ 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 lentiviral particles were generated by following a standardized protocol using highly purified plasmids and EndoFectin-Lenti™ and TiterBoost™ reagents.

The OmicsLink™ ORF lentiviral expression plasmid (GeneCopoeia Cat. No. EX-hLUC-Lv214) was constructed using GeneCopoeia proprietary RecJoin™ technology. This plasmid was co-transfected into 293Ta cells (GeneCopoeia Cat. No. CLV-PK-01) with the Lenti-Pac HIV Packaging Mix (GeneCopoeia Cat. No. HPK-LvTR-20). Lentivirus-containing supernatants were harvested 48 hours after transfection. The particles were purified and stored at -80°C in aliquots.

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:
http://genecopoeia.com/product/lentiviral/pdf/packaging_kit_manual.pdf

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

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