

**Data Sheet • Firefly Luciferase + IRES-mCherry Lentifact™ Lentiviral Particles •  
Cat Nos. LP-HLUC-LV177-0200, LP- HLUC-LV177-0205**

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

**Description**

- Produced with a standardized protocol using highly purified plasmids and EndoFectin-Lenti™ transfection and TiterBoost™ reagents. The protocol uses a third generation self-inactivating packaging system meeting BioSafety Level 2 requirements.
- CMV promoter for the expression of HLUC (humanized firefly luciferase) in target cells
- mCherry bicistronically coexpressed with FLUC
- Drug selection marker: none

**Contents and storage**

Provided as 1 vial of 200 µl or 5 vials of 200 µl of lentiviral particles with titers of ~4x 10<sup>8</sup> copies/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**

Lentivirus products were titrated using qRT-PCR, which determines the physical copy numbers of viral genomic RNA. We suggest that the customer estimate the transduction unit (TU or IFU) for the specific host cells based on the following formula before transduction:

TU=Titer (physical copy number)/100.

The customer should test the transduction at MOI=0.3, 1, 3, 5, 10 using TU for the best transduction efficiency.

**Overview of production**

The Firefly Luciferase + IRES-mCherry OmicsLink™ ORF lentiviral expression plasmid (GeneCopoeia Cat. No. EX-HLUC-LV177) 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 and stored at –80°C.

**User manual**

Please contact GeneCopoeia for a copy or download at:

[http://genecopoeia.com/product/lentiviral/pdf/packaging\\_kit\\_manual.pdf](http://genecopoeia.com/product/lentiviral/pdf/packaging_kit_manual.pdf)

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