

**Firefly Luciferase Lentifact™ Purified Lentiviral Particles •  
Cat Nos. LPP-HLUC-Lv105-025-C, LPP-HLUC-Lv105-100-C**

Ready-to-use purified 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**

GeneCopoeia's Lentifact™ Purified Lentiviral Particles are produced from a standardized protocol using highly 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.

The lentiviral particles include a CMV promoter for efficient expression of non-tagged, firefly luciferase in target cells and use a puromycin resistance marker for selection of stably transduced cells.

**Contents and storage**

Provided as 1 vial of 25 µl or 4 vials of 25 µl of purified firefly luciferase lentiviral particles with titers of ~1 x 10<sup>8</sup> TU/ml.

Lentiviral 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 firefly luciferase OmicsLink™ ORF lentiviral expression plasmid (GeneCopoeia Cat. No. EX-hLUC-Lv105) was constructed using GeneCopoeia proprietary RecJoin™ technology. This plasmid 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. The virus was further purified, concentrated and stored at –80°C in aliquots.

**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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