

# Firefly Luciferase + IRES-mCherry Lentifect™ Purified Lentiviral Particles ● Cat Nos. LPP-HLUC-Lv214-025-C, LPP-HLUC-Lv214-100-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 as well as in vivo use for transgenic animals.

## Description

- Produced with a standardized protocol using highly purified plasmids and EndoFectin-Lenti<sup>™</sup> transfection and TiterBoost<sup>™</sup> 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 co-expressed with FLUC
- Drug selection marker: none

### **Contents and storage**

Provided as 1 vial of 25 µl or 4 vials of 25 µl of lentiviral particles with titers of ~1 x 108 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 PCRsize 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 + IRES-mCherry OmicsLink<sup>™</sup> ORF lentiviral expression plasmid (GeneCopoeia Cat. No. EX-HLUC-Lv214) was constructed using GeneCopoeia proprietary RecJoin<sup>™</sup> technology. This plasmid was cotransfected into 293Ta cells (GeneCopoeia Cat. No. LT008) with the Lenti-Pac<sup>™</sup> 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: http://genecopoeia.com/product/lentiviral/pdf/packaging\_kit\_manual.pdf

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