

# SV40 Small T & Large T Antigen Lentifect™ Purified Lentiviral Particles ● Cat Nos. LPP-SV40T-Lv105-025-C, LPP-SV40T-Lv105-100-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

GeneCopoeia's Lentifect<sup>™</sup> Lentiviral Particles are produced from a standardized protocol using purified plasmid DNA and the proprietary reagents, EndoFectin<sup>™</sup> Lenti (for transfection) and TiterBoost<sup>™</sup> 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, SV40 small T & large T antigen protein in target cells and use a puromycin resistance marker for selection of stably transduced cells.

## **Contents and storage**

Provided as 1 vial of 25  $\mu$ l or 4 vials of 25  $\mu$ l of purified SV40 small T & large T antigen 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 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 SV40 Small T & Large T Antigen OmicsLink<sup>™</sup> ORF lentiviral expression plasmid (GeneCopoeia Cat. No. EX-SV40T-Lv105) 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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