



## **EF1 $\alpha$ -SV40T (Puro) Lentifact™ Purified Lentiviral Particles**

**Cat No. LP722-25; LP722-100**

**Old Cat No. LPP-SV40T-Lv156-025-C, LPP-SV40T-Lv156-100-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.

### **Description**

GeneCopoeia Lentifact™ Lentiviral Particles are produced from a standardized protocol using 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 Lentifact particles include an EF1 $\alpha$  promoter for efficient expression of non-tagged, SV40 small T and 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 purified SV40T lentiviral particles with titers of  $\sim 1 \times 10^8$  TU/ml.

Lentifact particles are shipped on dry ice and must be stored at  $-80^\circ\text{C}$  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 SV40 Small T and Large T Antigen OmicsLink™ ORF lentiviral expression plasmid (GeneCopoeia Cat. No. EX-SV40T-Lv156) 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. LT001-01). Lentivirus-containing supernatants were harvested 48 hours after transfection and stored at  $-80^\circ\text{C}$ .

### **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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