EF1α-SV40T (Puro) Lentifect™ Purified Lentiviral Particles
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 Lentifect™ 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 Lentifect particles include an EF1α 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 µl or 4 vials of 25 µl purified SV40T lentiviral particles with titers of ~1 x 10^8 TU/ml.

Lentifect 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 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°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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