



Data Sheet • KLF4 Lentifact™ Lentiviral Particles • Cat Nos. LP-KLF4-LV105-0200, LP-KLF4-LV105-0205

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 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 a CMV promoter for efficient expression of non-tagged native KLF4 in target cells and use a **puromycin resistance marker** for selection of stably transduced cells.

Contents and storage

Provided as 1 vial of 200 µl or 5 vials of 200 µl of KLF4 lentiviral particles with titers of $\sim 1 \times 10^8$ copies/ml.

Lentifact 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

Lentivirus products were titrated using qRT-PCR, which determines the copy number of viral genomic RNA.

Overview of production

The KLF4 OmicsLink™ ORF lentiviral expression plasmid (GeneCopoeia Cat. No. EX-Z2836-Lv105) was constructed using GeneCopoeia proprietary RecJoin™ technology. This plasmid was co-transfected into 293Ta cells (GeneCopoeia Cat. No. CLv-PK-01) with the Lenti-Pac HIV Packaging Mix (GeneCopoeia Cat. No. HPK-LvTR-20). Lentivirus-containing supernatants were harvested 48 hours after transfection and stored at –80°C.

Important note: The KLF4 clones was updated and replaced with EX-Z5703-Lv105.

User manual

Please contact GeneCopoeia for a copy or download at:
http://genecopoeia.com/product/lentiviral/pdf/packaging_kit_manual.pdf

GeneCopoeia, Inc.
9620 Medical Center Drive, #101
Rockville, Maryland 20850
Tel: 301-762-0888 Fax: 301-762-8333
Email: inquiry@genecopoeia.com
Web: www.genecopoeia.com