

Nanog Lentifact™ Purified Lentiviral Particles •
Cat Nos. LPP-Z8298-Lv105-025-C, LPP-Z8298-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

GeneCopeia's 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 lentiviral particles include a CMV promoter for efficient expression of non-tagged, Nanog 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 of purified Nanog lentiviral particles with titers of $\sim 1 \times 10^8$ 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 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- $1\text{TU}=100$ 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 $\text{MOI}=0.3, 1, 3, 5, 10$ for their specific cell lines in order to get the best transduction efficiency.

Overview of production

The Nanog OmicsLink™ ORF lentiviral expression plasmid (GeneCopeia Cat. No. EX-Z8298-Lv105) was constructed using GeneCopeia proprietary RecJoin™ technology. This plasmid was co-transfected into 293Ta cells (GeneCopeia Cat. No. LT008) with the Lenti-Pac HIV Packaging Mix (GeneCopeia Cat. No. LT001). Lentivirus-containing supernatants were harvested 48 hours after transfection and stored at -80°C .

User manual

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

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