

Cas9 nuclease Lentifect™ Purified Lentiviral Particles

Cat. No. LP604-100

(Old Cat. No. LPP- CP-LvC9NU-09-100)

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

Gene: Cas9 nuclease

Promoter: EF1 α

Tag: N/A

Reporter: eGFP

Resistance marker: Neomycin

Additional note: N/A

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.

Contents and storage

Provided as 1 vial of 100 μ l of purified Cas9 nuclease lentiviral particles with titers of $\sim 1 \times 10^7$ 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=30 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 Cas9 nuclease lentiviral expression plasmid (GeneCopoeia Cat. No. CP-LvC9NU-09) was co-transfected into 293Ta cells (GeneCopoeia Cat. No. LT008) with the Lenti-Pac 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:

<https://www.genecopoeia.com/wp-content/uploads/2018/03/Lentivirus-protocol-GeneCopoeia.pdf>

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