Description:

Name: Lentiviral Packaging Mix

Cat. #: P904P

Application: For packaging Lentivirus. This product is for research use only.

Usage: For 100 mm dish of lentiviral packaging, mix 2.5 μg of lentiviral expression vector with 20 μl

of lentiviral packaging mix.

For 150 mm dish of lentiviral packaging, mix 5 µg of lentiviral expression vector with 40 µl

lentiviral packaging mix.

Product Lentiviral Packaging Mix is a ready-to-use 3rd generation HIV-based lentiviral packaging system

in which the plasmids express the elements required for lentiviral production. To produce high quality lentiviral particles, all you need is a lentiviral expression vector containing your gene

of interest.

Lentiviral Packaging Mix contains the essential packaging vectors containing the viral structure

proteins and the envelope vector to express the Vesicular Stomatitis Virus glycoprotein (VSVG). It is TAT-independent because it only supports lentiviral expression vector with a

chimeric 5' LTR, in which the HIV promoter is replaced with CMV or RSV.

Shipping / Storage: Ship at 4°C or RT; Store at -20 °C. This product is stable for 6 months when stored at-20 °C.

Freeze-thaw cycles should be minimized by dividing into single-use aliquots. Store aliquots in

the -20 °C freezer until ready for use.

Shelf Life: 6 months

Volume: 200 μl

Remark: The 3rd generation packaging system offers maximal biosafety as the lentiviral Rev gene is

supplied as an independent vector from other structure genes, further eliminating the possibility of reverse recombination of vectors into a replication competent viral particle. The third generation lentiviral packaging mix will only support lentiviral expression vector with a chimeric 5' LTR in which the HIV promoter is replaced with CMV or RSV, thus making it TAT-

independent.

Follow the recommended NIH BSL-2 guidelines for all materials containing Lentivirus.

Protocol

1. Transfer the media containing lentiviral particles from plates to a sterile vessel and centrifuge the medium at $300 \times g$ for 10 min. to remove cell debris.

- 2. Filter the supernatant through 0.45µm filter.
- 3. Transfer the filtered supernatant to a sterile vessel and add 1 volume of cold Lentivirus Concentration Solution (4°C) (Cat.# P904C) to every 4 volumes of lentivirus-containing supernatant. (Example: 5ml Lentivirus Precipitation

Solution with 20ml viral supernatant).

- 4. Mix well and refrigerate 3 hours to overnight. Lentivirus-containing supernatant mixed with Lentivirus Precipitation Solution (101Bio, Cat.# P904C) are stable for up to 4 days at 4°C.
- 5. Centrifuge the mixture at $1500 \times g$ for 30 minutes at 4°C. After centrifugation, the lentiviral particles may appear as a beige or white pellet at the bottom of the vessel.
- 6. Discard supernatant. Spin down residual solution by centrifugation at $1500 \times g$ for 5 minutes. Remove all traces of fluid by aspiration, taking great care not to disturb the precipitated lentiviral particles in pellet.
- 7. Resuspend lentiviral pellets in 1/10 to 1/100 of original volume using cold, sterile PBS or DMEM at 4°C.
- 8. Aliquot in cryogenic vials and store at -80°C until ready for use. Done.

Related products: (on Product Page, see Virus Products)

For COVID-19 research

- Infection Enhancer for COVID-19 research
- Ready-to-use SARS-CoV and SARS-CoV-2 Lentiviruses

HIV Reporter System

- HIV Rev-dependent Reporter Cells
- HIV Infectin[™] Enhancer (enhance infection rate 5-20 folds)

Virus Transduction Enhancer

- PV100 Virus Transduction Enhancer
- PV500 Virus Transduction Enhancer

Lentivirus

- Lentivirus 10X Titer-Up
- 293T Transfection Reagent for Lentivirus Packaging
- Lentivirus Packaging Kit

Retrovirus

- Retrovirus 10X Titer-Up
- 293T Transfection Reagent for Retrovirus Packaging
- Retrovirus Packaging Kit

page 2