Lentivirus / Retrovirus Concentration Solution (5X)

Cat. #: P904C

Volume: 100 ml, for processing 400 ml lentivirus / retrovirus supernatant

Ship at Ambient temperature Store at 4°C Shelf Life: 12 months

Quality Control: Each lot is tested for sterility and successfully concentrating Lentriviral / Retroviral particles.

Product Description

Lentivirus Precipitation Solution 5X is a mixture of polymers optimized for the precipitation of lentiviral particles. It provides a simple, fast and highly efficient method for concentrating lentiviral particles. The protocol involves mixing your lentiviral supernatant with the Lentivirus Precipitation Solution, incubate for a short period, and spin the mixture in a standard centrifuge. It can increase the lentivirus titer by up to 100 folds as quick as in 4 hours and obtain excellent recoveries without ultracentrifugation. This solution is for research use only.

Efficient: up to 100 folds titer increase

Rapid: < 1-hour hands onEasy: No ultracentrifugation

Non-toxic: safe for all cell lines, including ES cells

Safety Precautions: Follow the recommended NIH guidelines for all materials containing BSL-2 organisms.

Protocol

- 1. Transfer the media containing Lentriviral / Retroviral particles from plates to a sterile vessel and centrifuge the medium at $300 \times g$ for 10 minutes to remove cell debris.
- 2. Filter the supernatant through a 0.45 μm filter.
- 3. Transfer filtered supernatant to a sterile vessel and add 1 volume of cold Lentivirus / Retrovirus Concentration Solution (4° C) to every 4 volumes of lentivirus / retrovirus-containing supernatant. Example: 5 ml Lentivirus / Retrovirus Concentration Solution with 20 ml viral supernatant.
- 4. Mix well and refrigerate for 4 hours to overnight. Lentivirus / Retrovirus-containing supernatant mixed with Lentivirus / Retrovirus Concentration Solution are stable for up to 4 days at 4°C.
- 5. Centrifuge mixture at 1,500 x g for 30 minutes at 4°C. After centrifugation, the Lentriviral / Retroviral 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 1,500 x g for 5 minutes. Remove all traces of fluid by aspiration, carefully, not to disturb the precipitated Lentriviral / Retroviral particles in pellet.
- 7. Resuspend Lentriviral / Retroviral 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