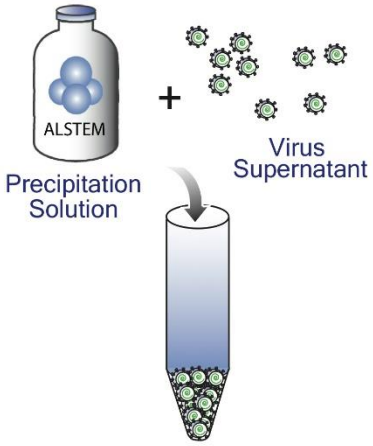
# Lentivirus Precipitation Solution

**Catalogue number**: VC100; 100 ml / VC125 250 ml /VC150 500 ml

**Description:**

Lentivirus Precipitation Solution 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 involve mixing your lentiviral supernatant with the Lentivirus Precipitation Solution, incubate for a short period, and spin the mixture in a standard centrifuge. You'll increase your lentivirus titer by up to 100 fold as quick as in 4 hrs, and obtain excellent recoveries without ultracentrifugation. The Lentivirus Precipitation Solution is a 5x solution.




**Highlights:**

- Easy-to-use: simply mix
- No ultracentrifugation required
- Easily scale up for large volumes
- Up to 100 fold concentration increase
- Cost effective spin protocol for efficient viral concentration
- Non-toxic: safe for all cell lines, including ES cells

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| Volume | 100 ml / 250 ml / 500 ml |
| Shipping | Ambient temperature |
| Storage and Stability | Store at 4 °C. This product is stable for 6 months when stored as directed. |
| Quality Control | Each lot of Lentivirus Precipitation Solution is tested for sterility and successful precipitation of Lentiviral particles. |

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| Safety Precautions | Follow the recommended NIH guidelines for all materials containing BSL-2 organisms |
| Restricted Use | For Research Use Only. Not for use in diagnostic or therapeutic procedures. |

**Related Products:**

| Products | Catalogue number | Description |
|---|---|---|
| ViralBoost Reagent | VB100 | A novel cocktail of small molecules that can enhance viral production. |
| Virus Protection Medium | VF010 | Preserve functional viral particles during repetitive freeze-thaw cycles. |
| TransPlus™ Virus Transduction Enhancer | V020 | Mixture of polymers optimized for the infection of lentivirus or retrovirus to most cells. |
| NanoFect Transfection Reagent | NF 100 | Nanotechnology-based reagent providing efficient gene delivery for most cell types. |
| Lentiviral Packaging Mix | VP100 | Ready-to-use 3rd generation HIV-based lentiviral packaging system. |

**Applications:**

Lentivirus Precipitation Solution is optimized for concentrating lentiviral particles in 4 hours without ultracentrifugation.

**Documents:**

**Protocol:**

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

2. Filter the supernatant through 0.45µm filter.

3. Transfer filtered supernatant to a sterile vessel and add 1 volume of cold Lentivirus Precipitation Solution (4°C) to every 4 volumes of lentivirus-containing supernatant. (Example: 5ml Lentivirus Precipitation Solution with 20ml viral supernatant).

4. Mix well and refrigerate 3hrs to overnight. Lentivirus-containing supernatant mixed with Lentivirus Precipitation Solution are stable for up to 4 days at 4°C..

5. Centrifuge mixture at 1500 × 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 × 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.

**Product Specification Sheet**

**Certificate of Analysis**

**Publications:**


- J.Y. Lee *et al.*, YAP-independent mechanotransduction drives breast cancer progression. *Nat Commun* **10**, (2019).
- E. Mailer *et al.*, The autophagy protein ATG9A promotes HIV-1 infectivity. *Retrovirology* 16 (2019).
- V. Achuthan *et al.*, Capsid-CPSF6 Interaction Licenses Nuclear HIV-1 Trafficking to Sites of Viral DNA Integration. *Cell Host Microbe* **24**, (2018).
- B. Adamson *et al.*, Approaches to maximize sgRNA-barcode coupling in Perturb-seq screens. *bioRxiv* (2018).
- R. Hsieh et al., CDK19 is a Regulator of Triple-Negative Breast Cancer Growth. *bioRxiv* (2018).
- E. Shifrut *et al.*, Genome-wide CRISPR Screens in Primary Human T Cells Reveal Key Regulators of Immune Function. *Cell* **175**, (2018).
- P. Younan *et al.*, Role of Transmembrane Protein 16F in the Incorporation of Phosphatidylserine Into Budding Ebola Virus Virions. *J Infect Dis* **218**, (2018).
- M. Puray-Chavez *et al.*, Multiplex single-cell visualization of nucleic acids and protein during HIV infection. *Nat Commun* **8**, (2017).