

# Retroviral Precipitation Solution Protocol

**Catalogue number:** VC200; 100 ml /VC225 250 ml /VC250 500 ml

## Applications

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

## Product Descriptions

Retrovirus Precipitation Solution is a mixture of polymers optimized for the precipitation of retroviral particles. It provides a simple, fast and highly efficient method for concentrating retroviral particles. The protocol involve mixing your retroviral supernatant with the Retrovirus Precipitation Solution, incubate for a short period, and spin the mixture in a standard centrifuge. You can increase your retrovirus titer by up to 100 fold as quick as in 4 hours, and obtain excellent recoveries without ultracentrifugation. The Retrovirus Precipitation Solution is a 5x solution.

## Protocol

1. Transfer the media containing retroviral 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 Retrovirus Precipitation Solution (4°C) to every 4 volumes of retrovirus-containing supernatant. (Example: 5ml Retrovirus Precipitation Solution with 20ml viral supernatant).
4. Mix well and refrigerate 3hrs to overnight. Retrovirus-containing supernatant mixed with Retrovirus Precipitation Solution are stable for up to 4 days at 4°C.
5. Centrifuge mixture at 1500 x g for 30 minutes at 4°C. After centrifugation, the 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 1500 x g for 5 minutes. Remove all traces of fluid by aspiration, taking great care not to disturb the precipitated retroviral particles in pellet.



7. Resuspend 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.

## 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.
Retroviral Packaging Mix	VP200	Produce high titers of replication-incompetent retroviruses.

