ProMab Biotechnologies, Inc.

Protocol

LENTIVIRUS PRECIPITATION

OVERVIEW

The Lentivirus Precipitation Solution (cat. # VC100, ProMab Biotechnologies) is a mixture of polymer optimized for the precipitation of lentiviral particles. It provides a simple, fast and highly efficient method for concentrating lentiviral particles. In the simple protocol, you just mix 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 hours and obtain excellent recoveries without ultracentrifugation. The Lentivirus Precipitation Solution is a 5x solution.

PRECIPITATION PROCEDURE

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 0.45 μm 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 4 hours 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. Return the dish to cell culture incubator at 37°C with 5% CO_2.
8. Aliquot in cryogenic vials and store at - 80°C until ready for use.