TOOLSilent LentiPrecipitating Reagent

Cat. no.: VCT-KA00.
Storage: 4°C for 1 year.
Product size: 100 mL.

Introduction

TOOLSilent LentiPrecipitating Reagent 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. Its use involves a simple protocol: simply mix the lentiviral supernatant with TOOLSilent LentiPrecipitating Reagent, incubate for a short period, and centrifuge the mixture. The product allows for an up to 100-fold increase in lentivirus titer and completion within 4 h. It also allows for excellent recovery without ultracentrifugation. TOOLSilent LentiPrecipitating Reagent is a 5× solution and has the following advantages.

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

Protocol

1. Transfer the media containing lentiviral particles from plates to a sterile vessel and centrifuge the medium at 300 × g for 10 min to remove cell debris.
2. Filter the supernatant through a 0.45-µm filter.
3. Transfer the filtered supernatant to a sterile vessel and add 1 volume of cold TOOLSilent LentiPrecipitating Reagent (4°C) to every 4 volumes of lentivirus-containing supernatant (for example, add 5 mL of Lentivirus Precipitation Solution to 20 mL of viral supernatant).
4. Mix well and refrigerate for 3 h to overnight. The lentivirus-containing supernatant mixed with TOOLSilent LentiPrecipitating Reagent is stable for up to 4 days at 4°C.
5. Centrifuge mixture at 1500 × g for 30 min at 4°C. After centrifugation, the lentiviral particles may appear as a beige or white pellet at the bottom of the vessel.
6. Discard the supernatant. Spin down the residual solution through centrifugation at 1500 × g for 5 min. Remove all traces of fluid through aspiration, taking great care not to disturb the precipitated lentiviral particles in the pellet.
7. Resuspend lentiviral pellets in cold, sterile PBS or DMEM at 1/10 to 1/100 of the original volume and at 4°C.
8. Aliquot in cryogenic vials and store at −80°C until use.

The product is for research only. It is not for diagnostic and clinical use.