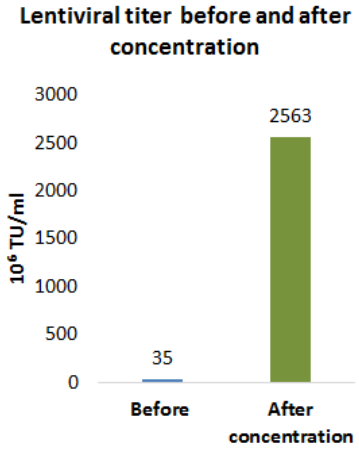
Lenti Concentrator

Description

The Lenti Concentrator is developed to concentrate lentiviral particles in a simple, quick and effective way. Just mix 4 volume of lentiviral supernatant with 1 volume of the Lentivirus Concentration Solution, incubate for a short time at 4^0C, then spin the mixture in a standard centrifuge. You'll increase your lentivirus titer up to 100 fold in 2 hours.



Advantages

- Increase viral titer up to 100x
- Fast, as short as 2 hours
- No ultracentrifugation is required

Content and Storage

Component	Volume	Shipping Condition	Storage Condition
Lentivirus Concentrator (5x)	50 mL (cat# TR30025) or 200 mL (cat# TR30026)	Room template	4°C stable for 6 months

Protocol

1. **Harvest lentiviral supernatant**: Collect the lentiviral supernatant, centrifuge at 500g for 10 min, then filter through 0.45 µm filter to remove any cell debris.

   Note: a. Peak lentivirus production is 48 hours post transfection.
   b. Use polyethersulfone (PES) low protein-binding filter. Do not use nitrocellulose filter as it binds lentivirus.

2. **Mix lentiviral supernatants with lenti concentration solution**: Transfer the lentiviral supernatants to 15 mL or 50 mL sterile conical centrifuge tubes depending on the volume; add 1 volume of cold Lenti Concentration Solution to every 4 volumes of lentiviral supernatant. Mix by gentle inversion. Note: open the lenti concentrator inside the hood.

   Note: The volume of Lenti Concentrator to be added equals to the volume of lentiivral supernatant divided by 4, i.e. 2 mL Lentivirus concentrator to 8 mL lentiviral supernatants.

3. **Incubation at 4°C or on ice**: Incubate the mixture at 4°C or on ice for 1.5 hrs to overnight.

   Note: a. Longer incubation may increase the recovery rate.
   b. The lentiviral particles in lenti concentrator are stable for at least one week at 4°C.

4. **Centrifugation**: Centrifuge at 3,500g for 25 min at 4°C, remove the supernatant carefully.

Note: The lentiviral particles appear as white pellet at the bottom of the tube. Do not disturb the white pellet.

5. **Re-centrifuge** at 3,500g for 5 min at 4°C, remove the trace supernatant carefully.

6. **Re-suspend** the virus in cold, sterile PBS at 1/100 of the original sample volume by gently pipetting up and down.

7. **Aliquot and store** at -80°C.

For Rearch Use Only, Not for use in diagnostic procedures.