

**Protocol • Lenti-Pac™ Lentivirus Concentration Solution • Cat. No. LPR-LCS-01**

**Description**

The Lenti-Pac™ Lentivirus Concentration Solution is designed for quick and simple concentration of lentiviral particles. The concentration is accomplished by mixing the proprietary reagent with the lentiviral supernatant, followed by a short incubation then centrifugation with an ordinary centrifuge.

- Recover up to 90% or more lentivirus
- Increase titer (Transduction Units/ml) by 10X – 100X
- Concentrate all types of lentiviral particles
- Whole process can be finished in as short as ~ 3 hours
- No ultracentrifugation is required

**Content and Storage**

| Component                              | Volume | Shipping Condition | Storage Condition                   |
|--|--------|--------------------|-------------------------------------|
| Lentivirus Concentration Solution (6X) | 50 ml  | Ice pack           | 4°C<br>Stable for at least 6 months |

**Protocol**

1. Collect the lentiviral supernatant and centrifuge at 2,000g for 10 mins at 4°C, or filter through a 0.45 µm filter, to remove cells and debris.  
**Note:** If using filters, use only cellulose acetate or polyethersulfone (PES) filters (low protein binding). Do not use nitrocellulose filters.
2. Mix lentiviral supernatants with Lenti-Pac™ Concentration Solution at the ratio of 5:1. Incubate at 0- 4°C for 2 hrs to overnight. Long incubation may increase the recovery rate.  
**Note:** The lentiviral particles are stable for several days at 0-4°C.
3. Centrifuge at 3,500g for 25 mins at 4°C.
4. Discard the supernatant carefully and do not disturb the virus pellet (the viral pellet may not be visible).
5. Re-suspend the virus using DMEM or PBS in 1/10 - 1/100 of the original sample volume by gently pipetting up and down.
6. Titrate the concentrated viral samples and store at -80°C in single-use aliquots.  
**Note:** One freeze & thaw cycle decreases the virus titer by 30-60%.