Speedy Lentivirus Purification

Store at 18°C to 25°C

Cat. No.	Description	Quantity
LV999	Speedy Lentivirus Purification	100 ml

Product Description

Recombinant lentiviral vectors have been shown to be a powerful tool for stable gene transfer to both dividing and non-dividing cells *in vitro* and *in vivo*. Through years of experience with lentiviral vectors, **abm** has developed its own proprietary pLenti-combo packaging mix and an efficient protocol for rapid production of recombinant lentiviral vectors with titers up to 10^7IU/ml. The quickest and easiest way to purify and concentrate lentiviral particles up to 100x.

Shipping and Storage

This item is shipped at ambient room temperature and can be stored at 18°C to 25°C for up to 2 years.

Protocol Overview

The 293T cell line is widely used as the optimal cell line for lentivirus production. The health of 293T cells at the time of transfection is a critical factor for the success of lentivirus production. The use of "unhealthy" cells will negatively affect the transfection efficiency, resulting in lower titre lentiviral stocks. For optimal lentivirus production, follow the guidelines below to culture 293T cells before use in transfection:

- Ensure cell viability is greater than 90%.
- Do not allow cells to overgrowbefore passaging.
- Use cells that have been subcultured for less than 16 passages.
- Make sure 293T cells are free of mycoplasma contamination.

Protocol

1. Harvest lentiviral supernatant from culture. Centrifuge the collected supernatant at 2500 x g for 10 minutes to pellet the cell debris.
2. Filter the centrifuged supernatant through a 0.45 µm syringe filter (Millipore, Cat#SLHVR13SL) to a new tube.
3. For every 45 ml of the viral supernatant, add 5 ml of the Speedy Lentivirus Purification solution and mix thoroughly by inversion. Alternatively, mixing can be done on a rocking shaker at 4°C overnight.
4. Centrifuge at 7000 x g at 4°C for 1 hour to collect the viral particles.
5. Decant the supernatant completely. Be careful not to disturb the pellet.
6. Add 0.45 ml to 4.5 ml of serum-containing medium, depending on the concentration of virus needed, to re-suspend the viral pellet completely.
7. Aliquot the re-suspended virus immediately and store at -70°C.