Cellomics Technology
innovative tools for genetic engineering

EZ-Lenti Concentrator
(Cat. Con-10001-50, and Con-10001-200)

Introduction

The EZ-Lenti Concentrator (Cat.LVC-10001) provides a fast and simple method for concentrating lentiviral packaging supernatant. Concentration is achieved by mixing a lentiviral supernatant with this concentration reagent, followed by a short incubation step and centrifugation in a standard centrifuge. The process is easy to scale up for larger supernatant volumes.

No ultracentrifugation is required. The concentration procedure can be completed in as short as 1 hour, or for convenience, longer incubation can be used. The concentration step increases virus titer (IFU/ml) by 10-100 with minimal loss of material.

Protocol

1. Harvest lentiviral supernatant. Centrifuge at 500 g for 10 minutes to remove cell debris.

2. Collect the supernatant and filtered it through 0.45 µm CA or PES filter (optional).

3. Add one volume of 4xLV Concentration Solution to 3 volumes of virus-containing supernatant and incubate the mixture in ice water for 30 minutes to 2 hours depending on size of the container. Mix contents every 30 min.

   NOTE: We have tested incubation times as short as 15 minutes and up to 1 week at 4°C with minimal losses observed. Since cooling of the sample is essential, larger volumes (>100 ml) may require longer incubation times.

4. Centrifuge at 3700 g for 30 minutes (or at 1,500 x g for 45 minutes) at 4°C.

5. After centrifugation, an off-white pellet will be visible. Descant supernatant slowly, centrifuge again for 2 minutes. Remove extra liquid using 200 µl long tip.

6. Add 300 µl of 1xPBS solution to resuspend the virus pellet.

7. Aliquot in small aliquots and store at -70 °C until use.