

AAV Concentrator

Description

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

Catalog Number

TR30027 (50ml)

TR30027L (4X50ml)

Protocol

• Harvest rAAV from the culture media and cells:

- Harvest cells and media by pipetting up and down to detach the cells on the dish about 48-72 hours post-transfection. Cells should be detached easily without Trypsin-EDTA. Pipet up cells and media into marked 50 mL centrifuge tube.
- Centrifuge at 500 × *g* for 5 min at 4°C.
- Transfer the supernatant in a new 50 mL centrifuge tube.
- Resuspend cells in 20 mL 1X sterile PBS. Freeze-thaw cells 3 times at -80°C and 37°C to release the virus into supernatant. Vortex the cell pellets in between the freeze-thaw cycle.
- Centrifuge the cell pellet at 3000 × *g* for 20 minutes at 4°C. Collect supernatant in a new 50 mL centrifuge tube.

• Mix AAV viral supernatants with AAV concentration solution:

- Open the AAV concentrator inside the hood.
- Add 1 volume of cold AAV Concentration Solution to every 4 volumes of AAV viral supernatant. Mix by gentle inversion.
Note: AAV Solution: Concentrator=4:1

• Incubation at 4°C or on ice:

- Incubate the mixture at 4°C for 1.5 hrs to overnight.
 - a. Longer incubation may increase the recovery rate.
 - b. AAV particles in AAV concentrator are stable for at least one week at 4°C.

• Centrifugation:

- Centrifuge at 3,500g for 30 min at 4°C, remove the supernatant carefully. The AAV particles appear as white pellet at the bottom of the tube. Do not disturb the white pellet.
- Re-centrifuge at 3,500g for 5 min at 4°C, remove the trace supernatant carefully.

• **Re-suspend the virus**

- Re-suspend the virus in cold, sterile PBS at 1/100 to 1/200 of the original sample volume by gently pipetting up and down. The virus will be ready for further purification or other downstream application

• **Storage of concentrated AAV particles**

- Aliquot and store at -80°C.

Storage of the Concentrator Product

Storage Condition: 4°C stable for 6 months;

Shipping Condition: Room temperature.

For Research Use Only.

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Result of a titer increase using OriGene AAV concentrator.

