Claims

1. A method for purifying viral particles of adeno-associated virus (AAV) from a sample comprising cells enclosing the viral particles by
a) contacting a suspension of the cells and the viral particles with an effective amount of a composition comprising an alkyldimethylamine oxide to promote cell lysis and release of the viral particles from the cells
b) isolating and/or purifying the viral particles,
wherein the concentration of a salt comprising a metal cation selected from K^+, Na^+, Li^+, Mg^{2+}, Ca^{2+} and an anionic component selected from F^-, SO_4^{2-}, HPO_4^{2-}, acetate, Cl^- in the mixture of the suspension of the cells and the viral particles with an effective amount of a composition obtained in step a) is between 0.05 and 1 mol/l.

2. Method according to claim 1 characterized in that the composition comprises LDAO (Lauryldimethylamine-N-Oxide) and/or TDAO (Tetradecyl Dimethylamine-N-Oxide) and sodium chloride.

3. Method according to claim 1 or claim 2, characterized in that in step a) the cells are contacted with the composition for 30 to 180 minutes.

4. Method according to one or more of claims 1 to 3, characterized in that the viral particles are recombinant adeno associated virus (AAV) particles.

5. Method according to one or more of claims 1 to 4, characterized in that the concentration of alkyldimethylamine oxide in the mixture of the suspension of the cells and the viral particles with an effective

amount of a composition obtained in step a) is between 1 and 4% (w/w).

6. Method according to one or more of claims 1 to 5, characterized in that the composition is an aqueous solution comprising an alkyldimethylamine oxide and sodium chloride.

7. Method according to one or more of claims 1 to 6, characterized in that the concentration of the alkyldimethylamine oxide in the composition is between 10% and 30% (w/w).

8. Method according to one or more of claims 1 to 7, characterized in that the concentration of sodium chloride in the composition is between 1 and 6 mol/l.

9. Method according to one or more of claims 1 to 8, characterized in that step b) comprises a filtration and/or centrifugation step.

10. Method according to one or more of claims 1 to 9, characterized in that the method of the present invention comprises one or more of the following steps:
- Clarification and filtration
- dialysis and diafiltration
- treatment with nuclease, e.g. RNase and/or DNase
- treatment with chloroform
- ion exchange chromatography
- affinity chromatography
- hydrophobic interaction chromatography
- centrifugation
- PEG precipitation