

WHAT IS CLAIMED IS:

1. A method for detecting adeno-associated virus serotype Anc80 in a sample, comprising:
 - (a) contacting the sample with: (i) a capture reagent that binds an adeno-associated virus (AAVx) or an adeno-associated virus serotype 8 (AAV8); and (ii) a detection reagent that binds an adeno-associated virus (AAVx);
 - (b) forming a binding complex comprising the capture reagent, the Anc80, and the detection reagent; and
 - (c) detecting the binding complex, thereby detecting the Anc80 in the sample.
2. The method of claim 1, wherein the capture reagent and/or the detection reagent is an antibody or antigen-binding fragment thereof.
3. The method of claim 1 or 2, wherein the capture reagent is immobilized on a surface, optionally wherein the surface is a multi-well plate, and the capture reagent is immobilized in a well of the multi-well plate.
4. The method of claim 3, wherein the capture reagent comprises biotin, and the surface comprises avidin or streptavidin.
- ~~5. The method of claim 3 or 4, wherein the surface is a multi-well plate, and the capture reagent is immobilized in a well of the multi-well plate.~~
- ~~6.5. The method of any one of claims 1 to 54, wherein the capture reagent binds AAVx, AAV8, and/or a viral particle of the Anc80.~~
- ~~7. The method of any one of claims 1 to 5, wherein the capture reagent binds AAV8.~~
- ~~8. The method of any one of claims 1 to 7, wherein the capture reagent binds to a viral particle of the Anc80.~~
- ~~9.6. The method of claim 75, wherein the capture reagent binds to VP3 of AAV8.~~

~~10.7.~~ The method of claim ~~96~~, wherein the capture reagent binds to an epitope within residues 580 to 600 of VP3, optionally wherein the capture reagent binds to LQSANT (SEQ ID NO:1).

~~11.~~ ~~The method of claim 10, wherein the capture reagent binds to LQSANT (SEQ ID NO:1).~~

~~12.8.~~ The method of any one of claims 1 to ~~117~~, wherein the detection reagent binds AAVx, AAV8, and/or a viral particle of the Anc80.

~~13.~~ ~~The method of any one of claims 1 to 11, wherein the detection reagent binds AAV8.~~

~~14.~~ ~~The method of any one of claims 1 to 13, wherein the detection reagent binds to a viral particle of the Anc80.~~

~~15.9.~~ The method of any one of claims 1 to ~~148~~, wherein the detection reagent comprises a binding partner of a detectable moiety, optionally wherein the detection reagent comprises biotin, and the detectable moiety comprises horseradish peroxidase conjugated to avidin or streptavidin.

~~16.~~ ~~The method of claim 15, wherein the detection reagent comprises biotin, and the detectable moiety comprises horseradish peroxidase conjugated to avidin or streptavidin.~~

~~17.10.~~ The method of claim 1, wherein the capture reagent binds AAV8, and the detection reagent binds AAVx.

~~18.11.~~ A kit comprising:

- (a) a capture reagent that binds an adeno-associated virus (AAVx) or adeno-associated virus serotype 8 (AAV8); and
- (b) a detection reagent that binds an adeno-associated virus (AAVx).

~~19.12.~~ The kit of claim ~~1811~~, wherein the capture reagent and/or the detection reagent is an antibody or antigen-binding fragment thereof.

~~20.13.~~ The kit of claim ~~18 or 1911 or 12~~, further comprising a capture surface, optionally wherein the capture surface is a multi-well plate, and the capture reagent is immobilized

- on a well of the multi-well plate, further optionally wherein the capture reagent comprises biotin, and the capture surface comprises avidin or streptavidin attached thereto.
- ~~21. The kit of claim 20, wherein the capture reagent comprises biotin, and the capture surface comprises avidin or streptavidin attached thereto.~~
- ~~22. The kit of claim 20 or 21, wherein the capture surface is a multi-well plate, and the capture reagent is immobilized on a well of the multi-well plate.~~
- ~~23.14.~~ The kit of any one of claims 18 to 2211 to 13, wherein the capture reagent binds AAVx, AAV8, and/or a capsid protein (VP) of the Anc80.
- ~~24. The kit of any one of claims 18 to 22, wherein the capture reagent binds AAV8.~~
- ~~25. The kit of any one of claims 18 to 24, wherein the capture reagent binds to a capsid protein (VP) of the Anc80.~~
- ~~26.15.~~ The kit of claim 2414, wherein the capture reagent binds to VP3 of AAV8, optionally wherein the capture reagent binds to an epitope within residues 580 to 600 of VP3, further optionally wherein the capture reagent binds to LQSANT (SEQ ID NO:1).
- ~~27. The kit of claim 26, wherein the capture reagent binds to an epitope within residues 580 to 600 of VP3.~~
- ~~28. The kit of claim 27, wherein the capture reagent binds to LQSANT (SEQ ID NO:1).~~
- ~~29.16.~~ The kit of any one of claims 18 to 2811 to 15, wherein the detection reagent binds AAVx, AAV8, and/or a viral particle of the Anc80.
- ~~30. The kit of any one of claims 18 to 28, wherein the detection reagent binds AAV8.~~
- ~~31. The kit of any one of claims 18 to 30, wherein the detection reagent binds to a viral particle of the Anc80.~~
- ~~32.17.~~ The kit of any one of claims 18 to 3111 to 16, further comprising a detectable moiety, and the detection reagent comprises a binding partner of the detectable moiety, optionally

wherein the detection reagent comprises biotin, and the detectable moiety comprises horseradish peroxidase conjugated to avidin or streptavidin.

~~33. The kit of claim 32, wherein the detection reagent comprises biotin, and the detectable moiety comprises horseradish peroxidase conjugated to avidin or streptavidin.~~

~~34.18.~~ The kit of any one of claims ~~18 to 33~~11 to 17, wherein the capture reagent, the detection reagent, or both, are lyophilized; or wherein the capture reagent, the detection reagent, or both, are provided in solution.

~~35. The kit of any one of claims 18 to 33, wherein the capture reagent, the detection reagent, or both, are provided in solution.~~

~~36.19.~~ The kit of any one of claims ~~18 to 35~~11 to 18, further comprising one or more of a buffer, an assay stop solution, a calibration reagent, a detectable moiety capable of binding to the detection reagent, and a detectable substrate.

~~37.20.~~ The kit of claim ~~18~~11, wherein the capture reagent binds AAV8, and the detection reagent binds AAVx.

~~38. A method of determining capsid titer of an adeno-associated virus in a cell suspension or cell lysate, the method comprising:~~

- ~~(a) subjecting the cell suspension or cell lysate to high performance liquid chromatography (HPLC), wherein the HPLC is performed with a resin that binds to a viral particle (VP) of the adeno-associated virus; and~~
- ~~(b) detecting the VP in the cell suspension or cell lysate, thereby determining capsid titer of the adeno-associated virus.~~

~~39. The method of claim 38, wherein the detecting comprises spectrophotometrically detecting capsid protein at 280 nm.~~

~~40. The method of claim 38, wherein the adeno-associated virus comprises a fluorescent moiety, and the detecting comprises fluorescence detection.~~

- ~~41. The method of any one of claims 38-40, wherein the cell lysate is an unpurified cell lysate or a partially purified cell lysate.~~
- ~~42. The method of any one of claims 38-41, wherein the HPLC is performed with the resin contained in a column having a volume of about 0.1 to about 1.0 mL.~~
- ~~43. The method of any one of claims 38-42, wherein the resin comprises an antibody or antigen-binding fragment thereof.~~
- ~~44. The method of any one of claims 38-43, wherein the adeno-associated virus comprises Anc80.~~