

CLAIMS:

We claim:

1. An AAV vector comprising an AAV capsid protein comprising the sequence of any one of SEQ ID NOs: 2-19.
2. The AAV vector of claim 1, wherein the AAV vector comprises a vector genome encapsidated by an AAV capsid comprising the AAV capsid protein.
3. The AAV vector of claim 2, wherein the vector genome comprises a first inverted terminal repeat (ITR) and a second ITR.
4. The AAV vector of claim 3, wherein the vector genome comprises a transgene located between the first ITR and the second ITR.
5. The AAV vector of claim 4, wherein the transgene encodes a therapeutic RNA, a therapeutic protein, or a therapeutic polypeptide.
6. The AAV vector of claim 4, wherein the transgene encodes a gene-editing molecule.
7. The AAV vector of claim 6, wherein the gene-editing molecule is a nuclease.
8. The AAV vector of claim 7, wherein the nuclease is a Cas9 nuclease or a Cas12a nuclease.
9. The AAV vector of claim 6, wherein the gene-editing molecule is a single guide RNA (sgRNA).
10. An AAV capsid protein comprising the sequence of any one of SEQ ID NOs: 2-19.
11. A method of introducing a transgene into a cell, the method comprising: contacting the cell with the AAV vector of any one of claims 4-9.

12. Use of the AAV vector of any one of claims 4-9 in the manufacture of a medicament for delivering a transgene to a cell in a subject.
13. The method of claim 11 or use of claim 12, wherein the cell is a kidney cell.
14. The method according to claim 11 or the use according to claim 12, wherein the cell is in the spinal cord, dorsal root ganglion, brain, heart, lung, kidney, skeletal muscle, spleen, pancreas, small intestine, large intestine, or liver tissue of the subject.
15. The use of claim 12, wherein the subject has a kidney disease or kidney disorder.
16. The use of claim 12, wherein the subject is human.
17. The AAV vector of claim 4, further comprising a promoter operably linked to the transgene.
18. A plasmid comprising an AAV cap gene encoding the AAV capsid protein of claim 10.
19. The plasmid of claim 18, further comprising an AAV rep gene.
20. A cell line that stably expresses the AAV capsid protein of claim 10.
21. The cell line of claim 20, further expressing an AAV rep gene.