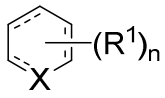
[0005] Thus, in an example, described herein is a method of producing recombinant adeno-associated virus (rAAV), the method comprising contacting a host cell with a solution comprising at least one compound of formula (I) or a salt thereof:


(I), wherein:

------ denotes a single bond or a double bond;

n is an integer selected from 1 to 5;

each R^1 is independently, for each occurrence, selected from the group consisting of -OH, C_{1-6}alkyl, C_{1-6}alkyl-OH, C_{1-6}alkyl-O-C_{1-6}alkyl, -O-C_{1-6}alkyl, -C(O)N(R^a)$_2$, and -C(O)OR^b;

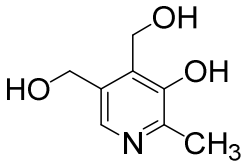
R^a is independently, for each occurrence, hydrogen or C_{1-6}alkyl;

R^b is independently, for each occurrence, hydrogen or C_{1-6}alkyl;

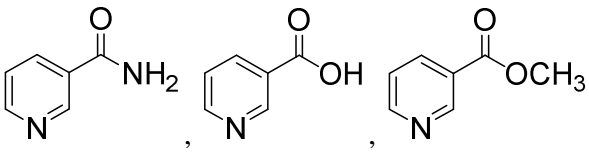
X is C$R^c R^d$ or N;

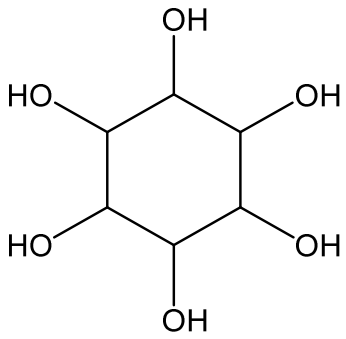
R^c and R^d are independently, for each occurrence, selected from the group consisting of hydrogen, C_{1-6}alkyl, -OH, and -O-C_{1-6}alkyl, wherein when R^c is hydrogen, R^d is selected from C_{1-6}alkyl, -OH, and -O-C_{1-6}alkyl, and when R^c is selected from C_{1-6}alkyl, -OH, and -O-C_{1-6}alkyl, R^d is hydrogen; and

wherein the at least one compound is not:

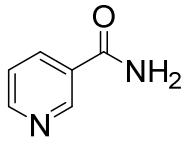

, or a salt thereof.

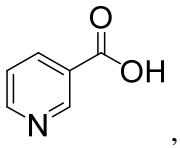
[0005a] In one aspect, the present disclosure refers to a method of producing recombinant adeno-associated virus (rAAV), the method comprising contacting a host cell with a solution comprising: (i) at least one compound or a salt thereof selected from the group consisting of:

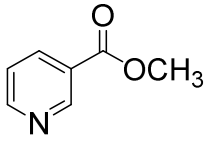

, and any combination(s) thereof, or (ii) at least one compound or a salt thereof of formula

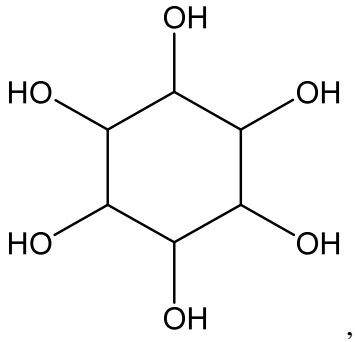


, and wherein the final concentration of the at least one compound or a salt thereof in the solution is between 1 mM and 10 mM.

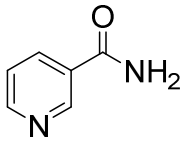
[0005b] In another aspect, the present disclosure refers to a method of increasing rAAV titer yield, the method comprising contacting a host cell with a solution comprising: (i) at least one compound or a salt thereof selected from the group consisting of: 

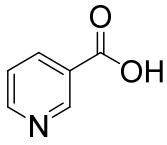
, 

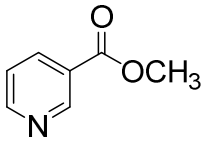
, 

, and any combination(s) thereof, or (ii) at least one compound or a salt thereof of formula 

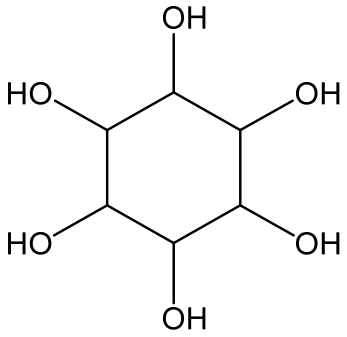
, and wherein the final concentration of the at least one compound or a salt thereof in the solution is between 1 mM and 10 mM.

[0005c] In another aspect, the present disclosure refers to a composition comprising a host cell and i) at least one compound selected from the group consisting of: 

, 

, 

, and any combination(s) thereof; or

ii) at least one compound or a salt thereof of formula 

,

wherein the concentration of the at least one compound or a salt thereof in the solution is between 1 mM and 10 mM; optionally wherein the host cell further comprises

a) a heterologous nucleotide sequence flanked by AAV inverted terminal repeats;

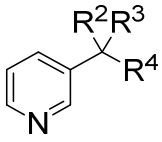
b) AAV rep and cap genes;

c) helper genes; or

d) a combination thereof.

[0006] In another example, described herein is a method of increasing rAAV titer yield, the method comprising contacting a host cell with a solution comprising a compound of formula (I) or a salt thereof.

[0007] In certain examples, the solution comprises at least one compound of formula (I-A) or a salt thereof:

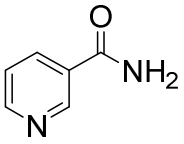


(I-A), wherein:

WHAT IS CLAIMED IS:

1. A method of producing recombinant adeno-associated virus (rAAV), the method comprising contacting a host cell with a solution comprising:

(i) at least one compound or a salt thereof selected from the group consisting of:



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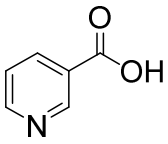

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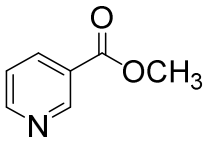
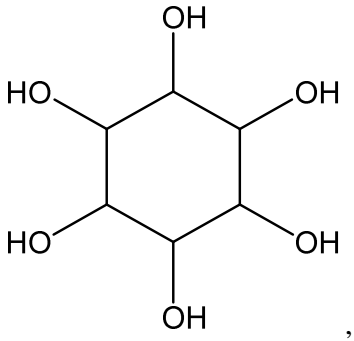


, and any combination(s) thereof, or

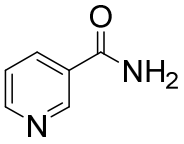


(ii) at least one compound or a salt thereof of formula ,

and wherein the final concentration of the at least one compound or a salt thereof in the solution is between 1 mM and 10 mM.

2. A method of increasing rAAV titer yield, the method comprising contacting a host cell with a solution comprising:

(i) at least one compound or a salt thereof selected from the group consisting of:



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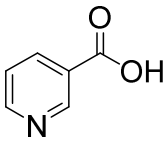

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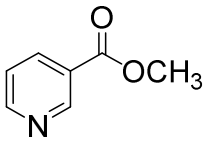
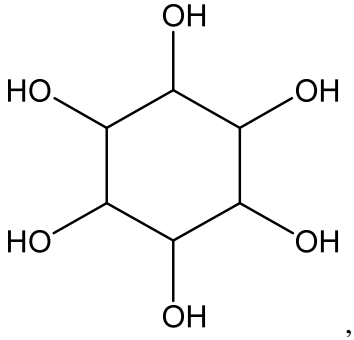


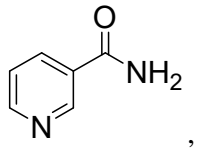
, and any combination(s) thereof, or



(ii) at least one compound or a salt thereof of formula ,

and wherein the final concentration of the at least one compound or a salt thereof in the solution is between 1 mM and 10 mM.

3. The method of claim 1 or 2, wherein the at least one compound or a salt thereof is:



,

optionally wherein the final concentration of the at least one compound or a salt thereof in the solution is between 3 mM and 5 mM.

4. The method of any one of claims 1-3, wherein the final concentration of the at least one compound or a salt thereof in the solution is sufficient to produce at least 1.2-fold greater quantities of secreted rAAV or total rAAV, compared to that produced by a host cell not contacted with a solution comprising the at least one compound or a salt thereof.

5. The method of any one of claims 1-4, wherein the host cell is contacted with the solution comprising the at least one compound or a salt thereof for at least 2 days.

6. The method of any one of claims 1-5, further comprising the steps of harvesting and purifying the rAAV.

7. The method of any one of claims 1-6, wherein the host cell is a mammalian cell or an insect cell.

8. The method of claim 7, wherein:
i) the host cell is a mammalian cell selected from the group consisting of HeLa, HEK293, COS, A549, BHK, and Vero cells; or
ii) the host cell is an insect cell selected from the group consisting of Sf9, Sf-21, Tn-368, and BTI-Tn-5B1-4 (High-Five) cells.

9. The method of any one of claims 1-8, wherein the host cell comprises i) a heterologous nucleotide sequence flanked by AAV inverted terminal repeats, ii) AAV rep and cap genes, iii) helper virus genes, or iv) a combination thereof.

10. The method of any one of claims 1-9, wherein the host cell produces at least 1.2-fold greater quantities of secreted rAAV or total rAAV compared to that produced by a host cell not contacted with a solution comprising the at least one compound or a salt thereof.

11. The method of any one of claims 1-10, wherein:

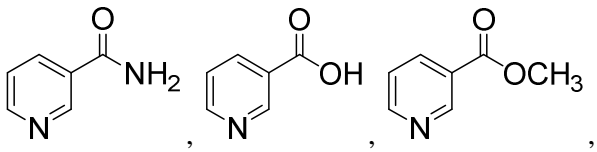
i) the solution comprises cell culture medium or production medium;

ii) the method comprises culturing of the host cell in a suspension culture or adherent culture; or

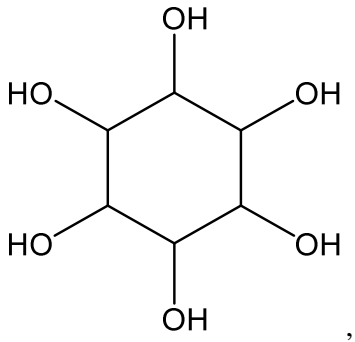
iii) the method comprises culturing of the host cell in a 1L to 2000L bioreactor.

12. A composition comprising a host cell and

i) at least one compound or a salt thereof selected from the group consisting of:



, , , and any combination(s) thereof; or



ii) at least one compound or a salt thereof of formula ,

wherein the concentration of the at least one compound or a salt thereof in the solution is between 1 mM and 10 mM;

optionally wherein the host cell further comprises

a) a heterologous nucleotide sequence flanked by AAV inverted terminal repeats;

b) AAV rep and cap genes;

c) helper genes; or

d) a combination thereof.