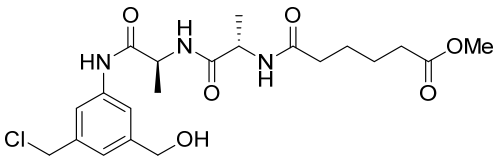
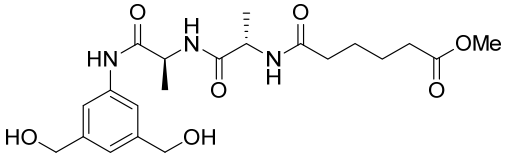
CLAIMS

1. A method of preparing a compound of formula (IIA):



(IIA),

comprising reacting a compound of formula (IA):



(IA)

with cyanuric chloride to form the compound of formula (IIA).

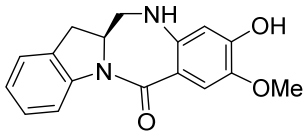
2. The method of claim 1, wherein 0.6 to 1.0 molar equivalent of cyanuric chloride relative to the compound of formula (IA) is used.

3. The method of claim 2, wherein between 0.7 and 0.8 molar equivalent of cyanuric chloride is used.

4. The method of claim 2, wherein 0.75 molar equivalent or 0.85 molar equivalent of cyanuric chloride is used.

5. The method of claim 1, wherein the reaction is carried out in DMF.

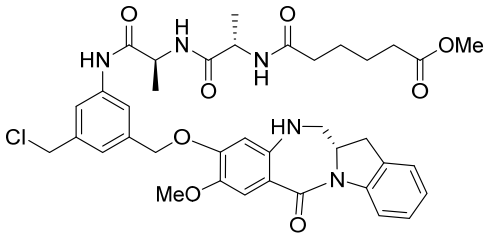
6. The method of claim 1, wherein the method further comprises reacting the compound of formula (IIA) with a compound of formula (a):



(a)

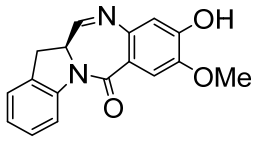
,

to form a compound of formula (IIIA):



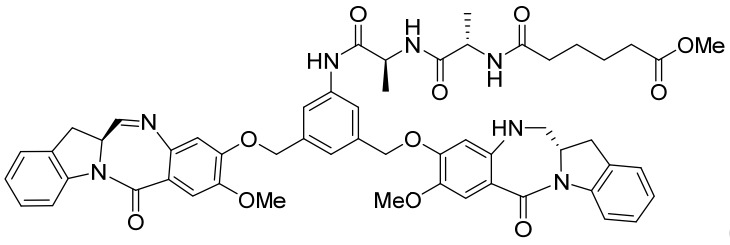
(IIIA).

7. The method of claim 6, wherein the method further comprises reacting the compound of formula (IIIA) with a compound of formula (b):



(b),

to form a compound of formula (IVA):



(IVA).

8. The method of claim 6, wherein the reaction between the compound of formula (IIA) and the compound of formula (a) is carried out in the presence of an alcohol activating agent and an azodicarboxylate.

9. The method of claim 8, wherein the alcohol activating agent is tributylphosphine or triphenylphosphine and the azodicarboxylate is selected from the group consisting of: diethyl azodicarboxylate (DEAD), diisopropyl azodicarboxylate (DIAD), 1,1'-(azodicarbonyl)dipiperidine (ADDP), and ditertbutyl azodicarboxylate (DTAD).

10. The method of claim 8, wherein the alcohol activating agent is triphenylphosphine and the azodicarboxylate is diisopropyl azodicarboxylate (DIAD).

11. The method of claim 10, wherein the triphenylphosphine and diisopropyl azodicarboxylate are mixed together first to form an triphenylphosiphosphine-azodicarboxylate

complex before mixing the complex with the compound of formula (IIA) and the compound of formula (a).

12. The method of claim 7, wherein the compound of formula (IIIA) is reacted with the compound of formula (b) in the presence of a base.

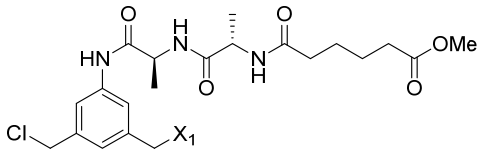
13. The method of claim 12, wherein the base is sodium carbonate, potassium carbonate, cesium carbonate, sodium hydride, or potassium hydride.

14. The method of claim 13, wherein the base is potassium carbonate.

15. The method of claim 7, wherein the reaction between the compound of formula (IIIA) and the compound of formula (b) is carried out in the presence of potassium iodide or cesium iodide.

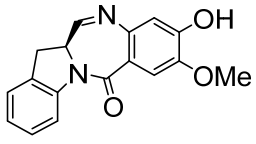
16. The method of claim 1, wherein the method further comprises the steps of:

i) reacting the compound of formula (IIA) with a sulfonating agent to form a compound of formula (VIA):



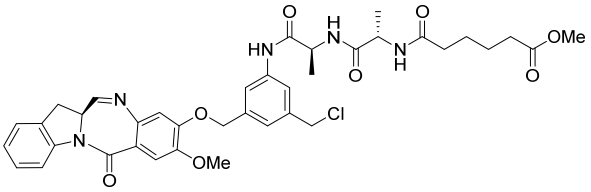
(VIA);

ii) reacting the compound of formula (VIA) with a compound formula (b):



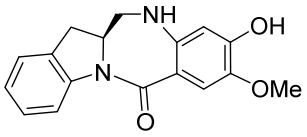
(b),

to form the compound of formula (VA):



(VA);

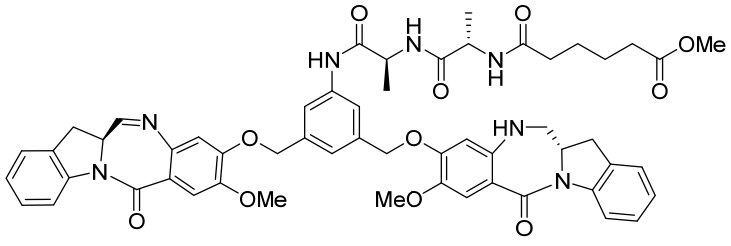
iii) reacting the compound of formula (VA) with a compound of formula (a):



(a)

,

to form a compound of formula (IVA):

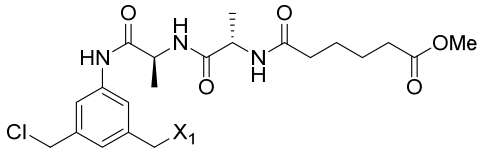


(IVA),

wherein X_1 is a sulfonate ester.

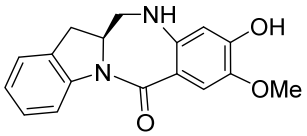
17. The method of claim 1, further comprising the steps of:

i) reacting the compound of formula (IIA) with a sulfonating agent to form a compound of formula (VIA):



(VIA);

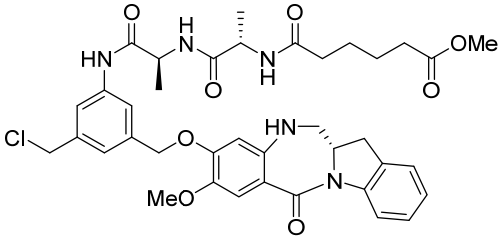
ii) reacting the compound of formula (VIA) with a compound of formula (a):



(a)

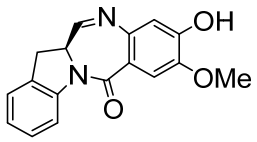
,

to form a compound of formula (IIIA):



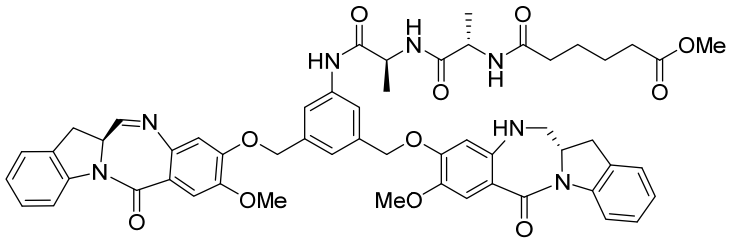
(IIIA); and

ii) reacting the compound of formula (IIIA) with a compound of formula (b):



(b),

to form a compound of formula (IVA):

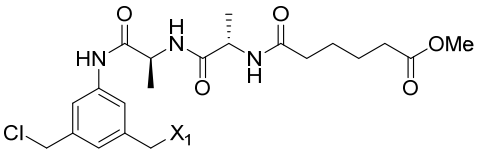


(IVA),

wherein X_1 is a sulfonate ester.

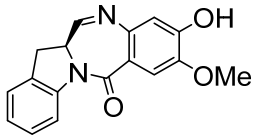
18. The method of claim 1, further comprising the steps of:

i) reacting the compound of formula (IIA) with a sulfonating agent to form a compound of formula (VIA):



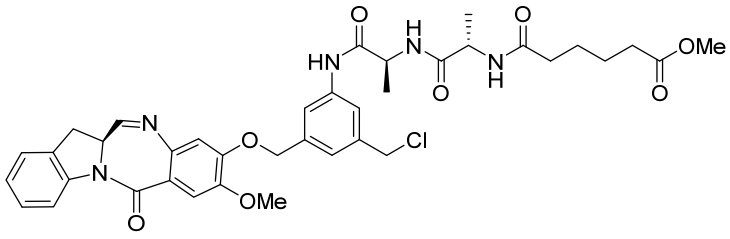
(VIA);

ii) reacting the compound of formula (VIA) with a compound of formula (b):



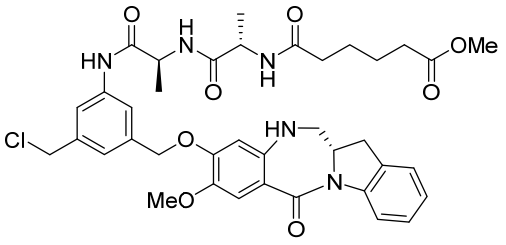
(b),

to form the compound of formula (VA):



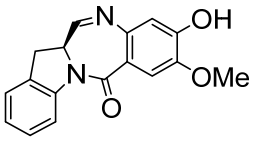
(VA);

iii) reacting the compound of formula (VA) with an imine reducing agent to form a compound of formula (IIIA):



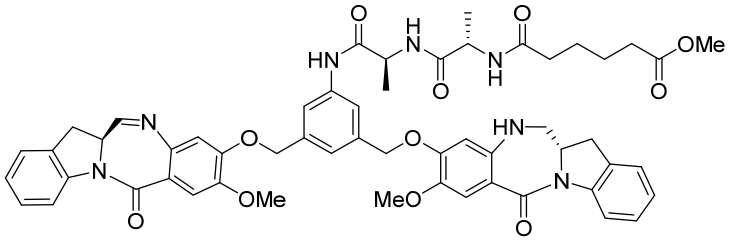
(IIIA); and

iv) reacting the compound of formula (IIIA) with a compound of formula (b):



(b),

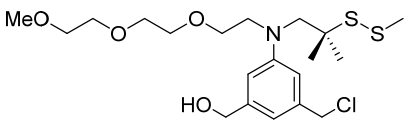
to form the compound of formula (IVA):



(IVA),

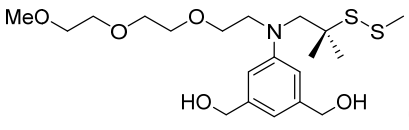
wherein X_1 is a sulfonate ester.

19. A method of preparing a compound of formula (IIB):



(IIB),

comprising reacting a compound of formula (IB):



(IB)

with cyanuric chloride to form the compound of formula (IIB).

20. The method of claim 19, wherein 0.6 to 1.0 molar equivalent of cyanuric chloride relative to the compound of formula (IB) is used.