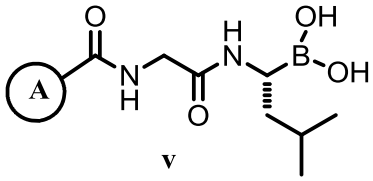
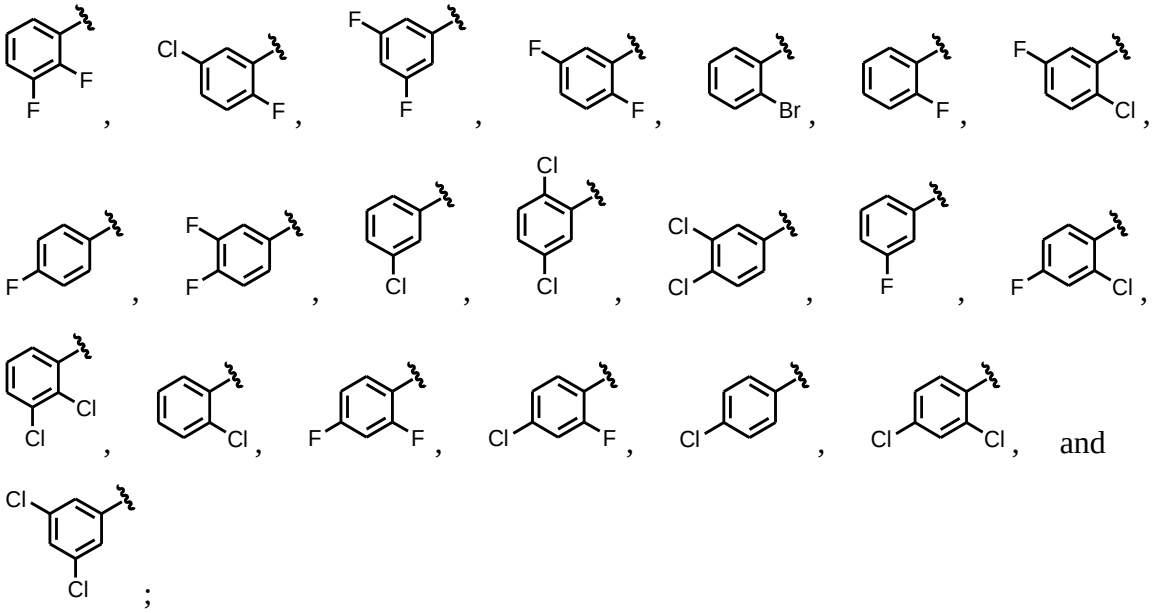
CLAIMS

1. A process for generating a compound of Formula (**v**)



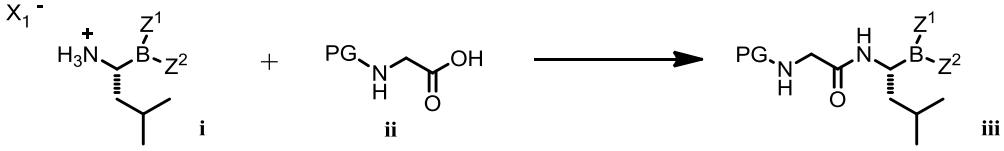
v

wherein Ring A is selected from the group consisting of



the process comprising:

(1) reacting a compound of Formula (**i**) with a compound of Formula (**ii**) to form a compound of Formula (**iii**)



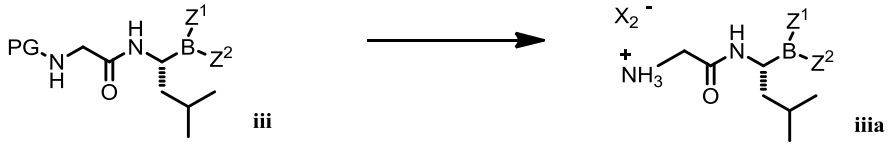
i **ii** **iii**

wherein PG is a protecting group;

wherein Z^1 and Z^2, together with the Boron atom to which they are attached, form a boronic ester protecting group;

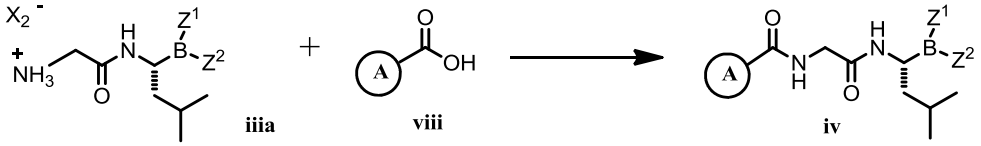
wherein X_1^- is a counter anion;

(2) deprotecting the compound of Formula (**iii**) to form a compound of Formula (**iiia**);



wherein X_2^- is a counter anion;

(3) reacting the compound of Formula (**iiia**) with a compound of Formula (**viii**) to form a compound of Formula (**iv**); and



(4) deprotecting the compound of Formula (**iv**) to form the compound of Formula (**v**).

2. The process of claim 1, wherein the reaction of step (1) is conducted in the presence of a peptide coupling reagent.

3. The process of claim 2, wherein the peptide coupling reagent is selected from the group consisting of a carbodiimide reagent, phosphonium reagent, and uranium reagent.

4. The process of claim 3, wherein the peptide coupling reagent is selected from one or more of the group consisting of dicyclohexylcarbodiimide (DCC), 1-(3-dimethylaminopropyl-3-ethylcarbodiimide (EDC), benzotriazol-1-yloxytris(dimethylamino)phosphonium hexafluorophosphate (BOP), *O*-(1H-benzotriazol-1-yl)-*N,N,N'N'*-tetramethyluronium tetrafluoroborate (TBTU) and N-Hydroxybenzotriazole (HOBt).

5. The process of claim 1, wherein the reaction of step (3) is conducted in the presence of a peptide coupling reagent.

6. The process of claim 5, wherein the peptide coupling reagent is selected from the group consisting of a carbodiimide reagent, phosphonium reagent, and uranium reagent.

7. The process of claim 6, wherein the peptide coupling reagent is selected from one or more of the group consisting of dicyclohexylcarbodiimide (DCC), 1-(3-dimethylaminopropyl-3-ethylcarbodiimide (EDC), benzotriazol-1-yloxytris(dimethylamino)phosphonium hexafluorophosphate (BOP), *O*-(1H-benzotriazol-1-yl)-*N,N,N'N'*-tetramethyluronium tetrafluoroborate (TBTU) and N-Hydroxybenzotriazole (HOBt).

8. The process of claim 1, wherein the reaction of step (1) is conducted in the presence of a solvent comprising a polar aprotic solvent.

9. The process of claim 8, wherein the polar aprotic solvent is selected from one or more of the group consisting of dichloromethane, tetrahydrofuran, and dimethylformamide.

10. The process of claim 1, wherein the reaction of step (3) is conducted in the presence of a solvent comprising a polar aprotic solvent.

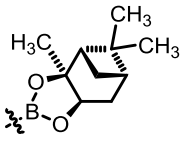
11. The process of claim 10, wherein the polar aprotic solvent is selected from one or more of the group consisting of dichloromethane, tetrahydrofuran, and dimethylformamide.

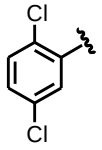
12. The process as in any one of claims 1-11, wherein PG is a protecting group selected from the group consisting of an acyl protecting group and a urethane protecting group.

13. The process of claim 12, wherein PG is a protecting group selected from the group consisting of formyl, acetyl, succinyl, methoxysuccinyl, *tert*-butoxycarbonyl (Boc), benzyloxycarbonyl (Cbz), and fluorenylmethoxycarbonyl (Fmoc).

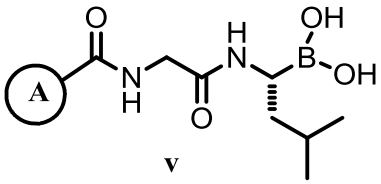
14. The process as in any one of claims 1-11, wherein X_1^- is $CF_3CO_2^-$.

15. The process as in any one of claims 1-11, wherein X_2^- is Cl^-.

16. The process as in any one of claims 1-11, wherein Z^1 and Z^2, together with the boron atom to which they are attached, form .

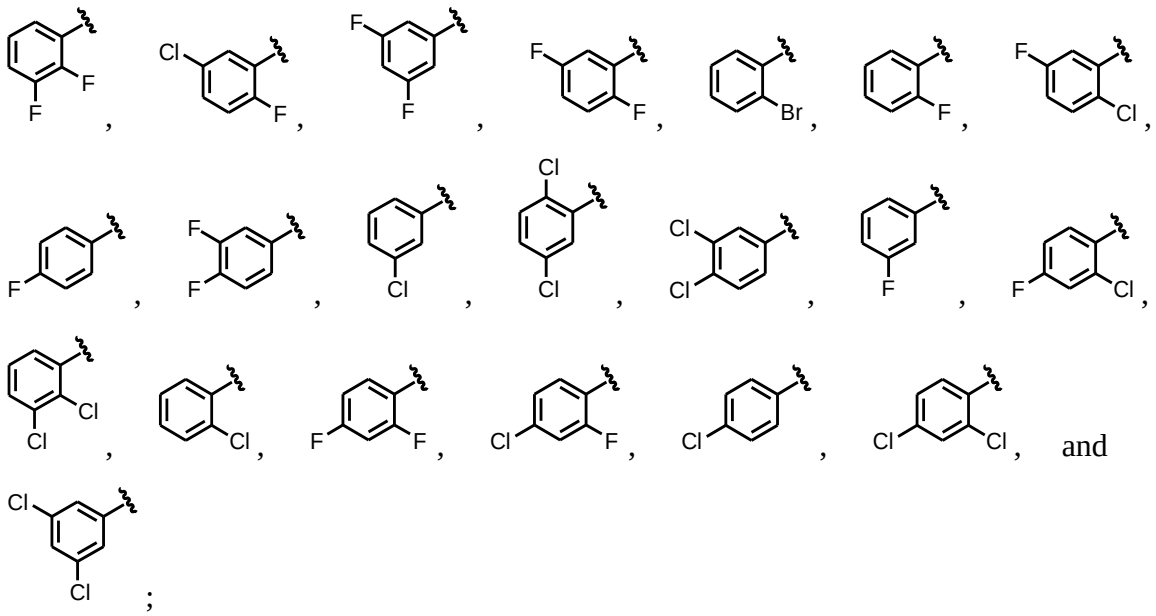
17. The process as in any one of claims 1-11, wherein Ring A is .

18. A process for generating a compound of Formula (**v**)



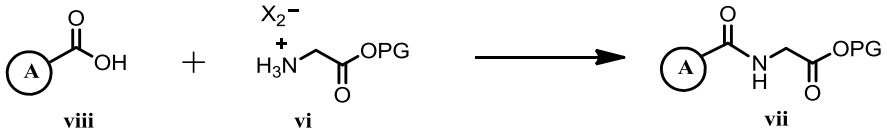
v

wherein Ring A is selected from the group consisting of



the process comprising:

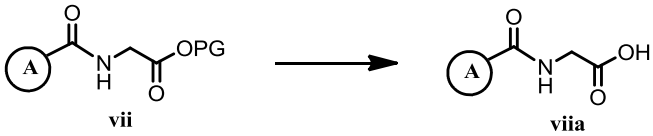
(1a) reacting a compound of Formula (**viii**) with a compound of Formula (**vi**) to form a compound of Formula (**vii**)



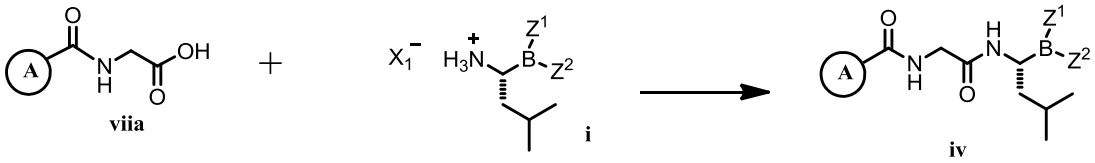
wherein PG is a protecting group;

wherein X_2^- is a counter anion;

(2a) deprotecting the compound of Formula (**vii**) to form a compound of Formula (**viia**);



(3a) reacting the compound of Formula (**viia**) with a compound of Formula (**i**) to form a compound of Formula (**iv**)



wherein Z^1 and Z^2, together with the Boron atom to which they are attached, form a boronic ester protecting group;

wherein X_1^- is a counter anion; and

(4) deprotecting the compound of Formula (**iv**) to form a compound of Formula (**v**).

19. The process of claim 18, wherein the reaction of step (1a) is conducted in the presence of a peptide coupling reagent.

20. The process of claim 19, wherein the peptide coupling reagent is selected from the group consisting of a carbodiimide reagent, phosphonium reagent, and uranium reagent.

21. The process of claim 20, wherein the peptide coupling reagent is selected from one or more of the group consisting of dicyclohexylcarbodiimide (DCC), 1-(3-dimethylaminopropyl-3-ethylcarbodiimide (EDC), benzotriazol-1-yloxytris(dimethylamino)phosphonium hexafluorophosphate (BOP), *O*-(1H-benzotriazol-1-yl)-*N,N,N'N'*-tetramethyluronium tetrafluoroborate (TBTU) and N-Hydroxybenzotriazole (HOBt).

22. The process of claim 18, wherein the reaction of step (3a) is conducted in the presence of a peptide coupling reagent.

23. The process of claim 22, wherein the peptide coupling reagent is selected from the group consisting of a carbodiimide reagent, phosphonium reagent, and uranium reagent.

24. The process of claim 23, wherein the peptide coupling reagent is selected from one or more of the group consisting of dicyclohexylcarbodiimide (DCC), 1-(3-dimethylaminopropyl-3-ethylcarbodiimide (EDC), benzotriazol-1-yloxytris(dimethylamino)phosphonium hexafluorophosphate (BOP), *O*-(1H-benzotriazol-1-yl)-*N,N,N'N'*-tetramethyluronium tetrafluoroborate (TBTU) and N-Hydroxybenzotriazole (HOBt).

25. The process of claim 18, wherein the reaction of step (1a) is conducted in the presence of a solvent comprising a polar aprotic solvent.

26. The process of claim 25, wherein the polar aprotic solvent is selected from one or more of the group consisting of dichloromethane, tetrahydrofuran, and dimethylformamide.

27. The process of claim 18, wherein the reaction of step (3a) is conducted in the presence of a solvent comprising a polar aprotic solvent.

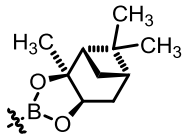
28. The process of claim 27, wherein the polar aprotic solvent is selected from one or more of the group consisting of dichloromethane, tetrahydrofuran, and dimethylformamide.

29. The process as in one of claims 18-28, wherein PG is a protecting group selected from the group consisting of an acyl protecting group and a urethane protecting group.

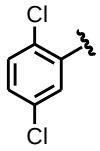
30. The process of claim 29, wherein PG is a protecting group selected from the group consisting of formyl, acetyl, succinyl, methoxysuccinyl, *tert*-butoxycarbonyl (Boc), benzyloxycarbonyl (Cbz), and fluorenylmethoxycarbonyl (Fmoc).

31. The process as in any one of claims 18-28, wherein X_1^- is $CF_3CO_2^-$.

32. The process as in any one of claims 18-28, wherein X_2^- is Cl^-.

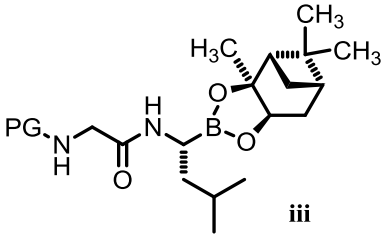
33. The process as in any one of claims 18-28, wherein Z^1 and Z^2, together with the boron atom to which they are attached, form 

.

34. The process as in any one of claims 18-28, wherein Ring A is 

.

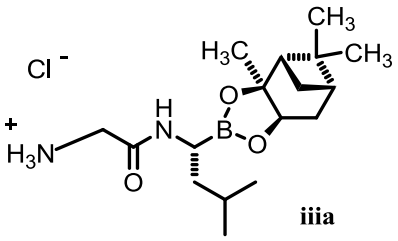
35. A compound of Formula (**iii**)



iii

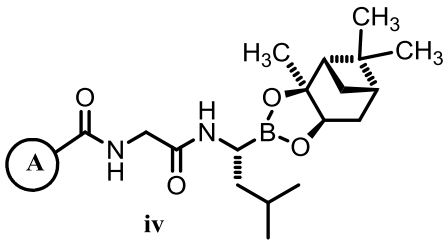
wherein PG is a protecting group.

36. A compound of Formula (**iiia**)



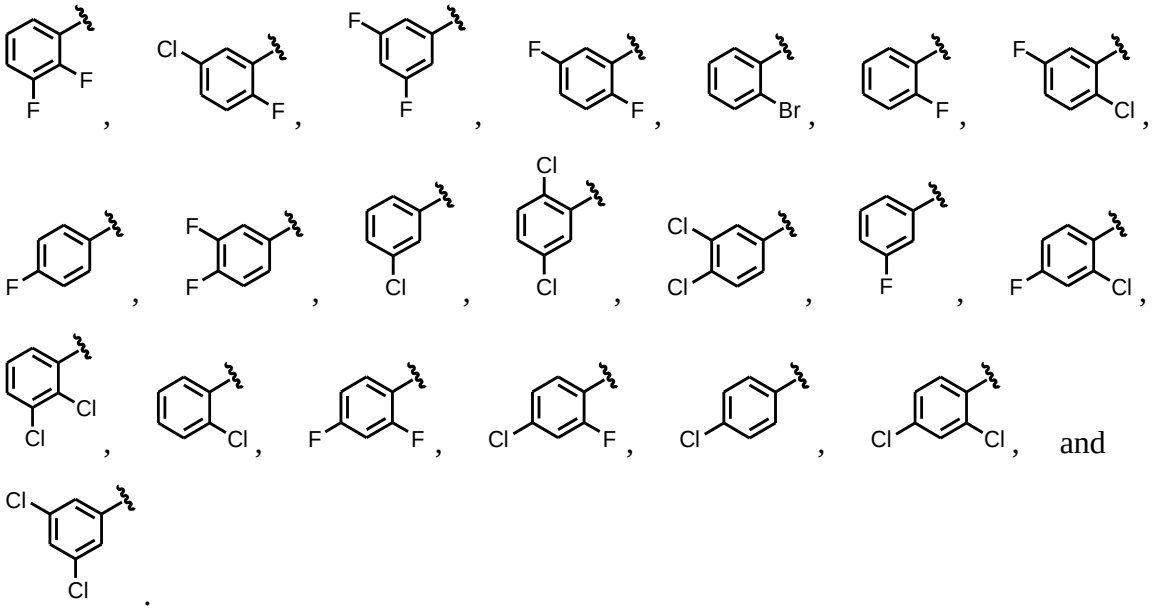
iiia

37. A compound of Formula (**iv**)

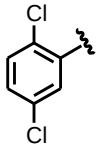


iv

wherein Ring A is selected from the group consisting of

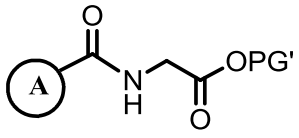


and



38. The compound of claim 37, wherein Ring A is .

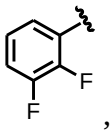
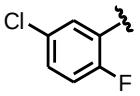
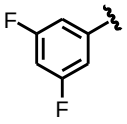
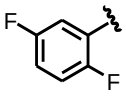
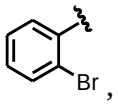
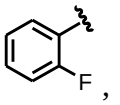
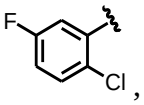
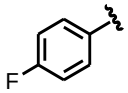
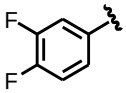
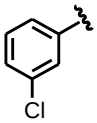
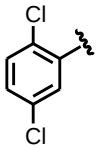
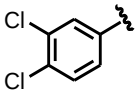
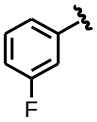
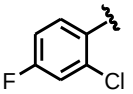
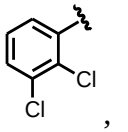
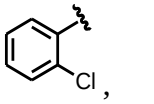
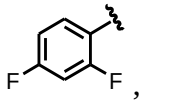
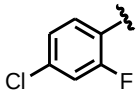
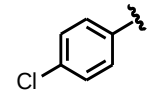
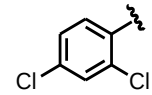
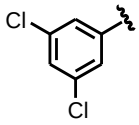
39. A compound of Formula (**vii**)

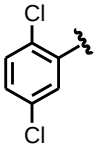


vii

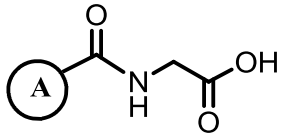
wherein PG is a protecting group; and

Ring A is selected from the group consisting of

, , , , , , , , , , , , , , , , , , ,  and .

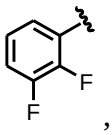
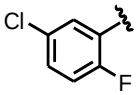
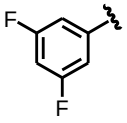
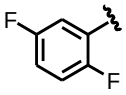
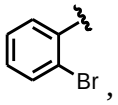
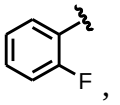
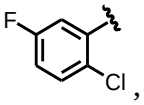
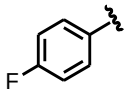
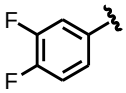
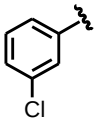
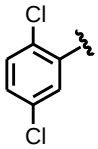
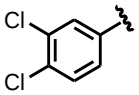
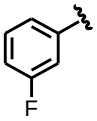
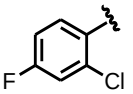
40. The compound of claim 19, wherein Ring A is .

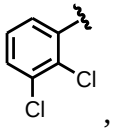
41. A compound of Formula (**viia**)

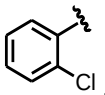


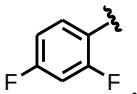
viia

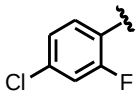
wherein Ring A is selected from the group consisting of

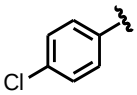
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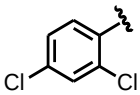


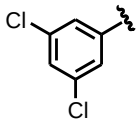
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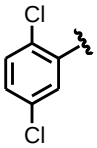
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, and 

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42. The compound of claim 41, wherein Ring A is 

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