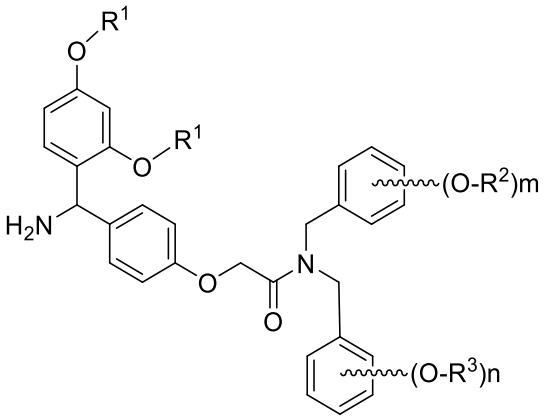
WHAT IS CLAIMED IS:

1. A compound having a structure of Formula (I):



(I),

wherein:

m and n are, independently, an integer from 1 to 5, and (m+n) ≥ 3;

R^1 is a C_{1-5} alkyl;

R^2 is independently at each occurrence an optionally substituted C_{10-30} alkyl; and

R^3 is independently at each occurrence an optionally substituted C_{10-30} alkyl,

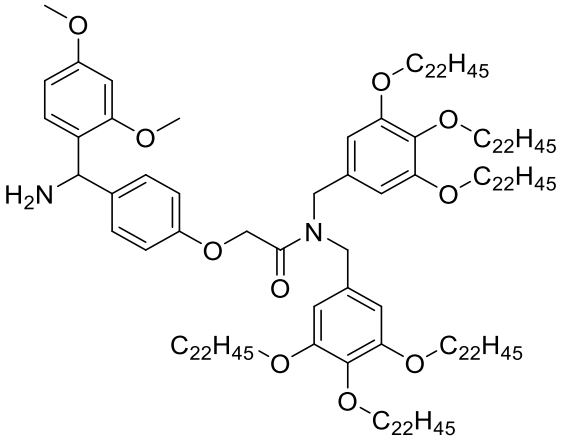
or a salt thereof.

2. The compound of claim 1, wherein R^1 is methyl.

3. The compound of claim 1, wherein R^2 is independently at each occurrence an optionally substituted C_{18-26} alkyl, and R^3 is independently at each occurrence an optionally substituted C_{18-26} alkyl.

4. The compound of claim 1, wherein each R^2 is independently an optionally substituted C_{22} alkyl and each R^3 is independently an optionally substituted C_{22} alkyl.

5. The compound of claim 1, wherein the compound has the structure of Formula (Ia):

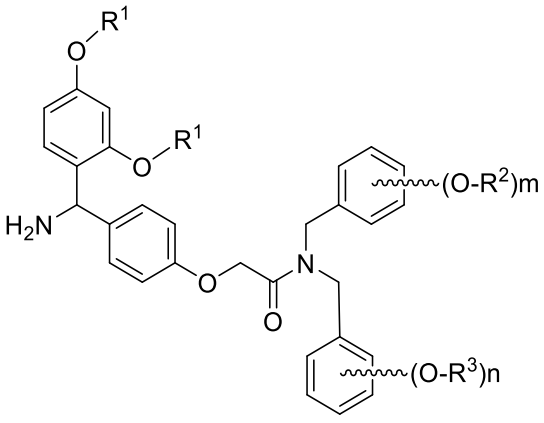


(Ia),

or a salt thereof.

6. A method of making a peptide or a peptidomimetic, the method comprising the steps of:

(a) providing a compound of Formula (I):



(I),

wherein:

m and n are, independently, an integer from 1 to 5, and (m+n) ≥ 3;

R^1 is C_{1-5} alkyl;

R^2 is independently selected at each occurrence thereof from an optionally substituted C_{10-30} alkyl; and

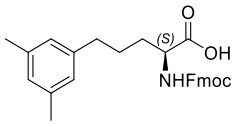
R^3 is independently selected at each occurrence thereof from an optionally substituted C_{10-30} alkyl,

or a salt thereof;

(b) providing a first amino acid (AA1); and

(c) coupling the first amino acid (AA1) to the compound of Formula (I) to form a peptide bond between the first amino acid (AA1) and the compound of Formula (I).

7. The method of claim 6, wherein the first amino acid (AA1) contains a protected amino group.

8. The method of claim 6, wherein the first amino acid (AA1) is 

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9. The method of claim 6 further comprising the step of:

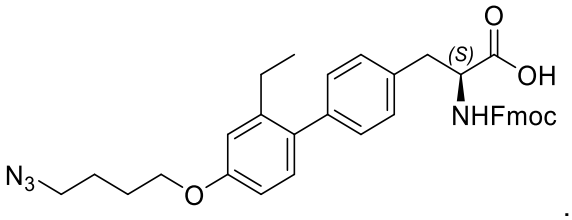
activating the chemical groups on the first amino acid (AA1) to prepare the first amino acid (AA1) for coupling with the compound of Formula (I) prior to step (c).

10. The method of claim 6 further comprising the steps of:

(d) removing the protecting group from the first amino acid (AA1);

(e) providing a second amino acid (AA2); and

(f) coupling the second amino acid (AA2) to the first amino acid (I-AA1) to form a peptide bond between the second amino acid (AA2) and the first amino acid (I-AA1-AA2).

11. The method of claim 10, wherein the second amino acid (AA2) is 

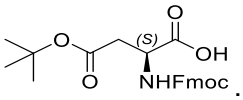
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12. The method of claim 10 further comprising the steps of:

(g) removing the protecting group from the second amino acid (AA2);

(h) providing a third amino acid (AA3); and

(i) coupling the third amino acid (AA3) to the second amino acid to form a peptide bond between the third amino acid (AA3) and the second amino acid (I-AA1-AA2-AA3).

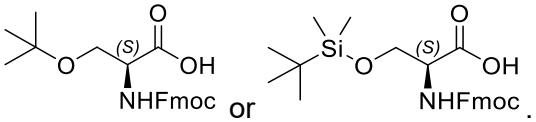
13. The method of claim 12, wherein the third amino acid (AA3) is .

14. The method of claim 12 further comprising the steps of:

(j) removing the protecting group from the third amino acid (AA3);

(k) providing a fourth amino acid (AA4); and

(l) coupling the fourth amino acid (AA4) to the third amino acid to form a peptide bond between the fourth amino acid (AA4) and the third amino acid (I-AA1-AA2-AA3-AA4).

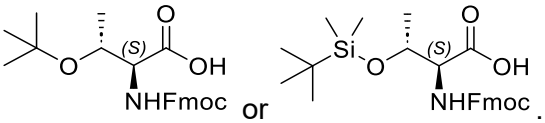
15. The method of claim 14, wherein the fourth amino acid (AA4) is .

16. The method of claim 14 further comprising:

(m) removing the protecting group from the fourth amino acid (AA4);

(n) providing a fifth amino acid (AA5); and

(o) coupling the fifth amino acid (AA5) to the fourth amino acid to form a peptide bond between the fifth amino acid (AA5) and fourth amino acid (I-AA1-AA2-AA3-AA4-AA5).

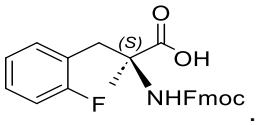
17. The method of claim 16, wherein the fifth amino acid (AA5) is .

18. The method of claim 16 further comprising:

(p) removing the protecting group from the fifth amino acid (AA5);

(q) providing a sixth amino acid (AA6); and

(r) coupling the sixth amino acid (AA6) to the fifth amino acid to form a peptide bond between the sixth amino acid (AA6) and the fifth amino acid (I-AA1-AA2-AA3-AA4-AA5-AA6).

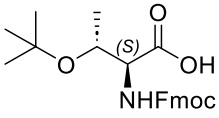
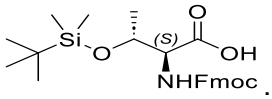
19. The method of claim 18, wherein the sixth amino acid (AA6) is .

20. The method of claim 18 further comprising:

(s) removing the protecting group from the sixth amino acid (AA6);

(t) providing a seventh amino acid (AA7); and

(u) coupling the seventh amino acid (AA6) to the sixth amino acid to form a peptide bond between the seventh amino acid (AA7) and the sixth amino acid (I-AA1-AA2-AA3-AA4-AA5-AA6-AA7).

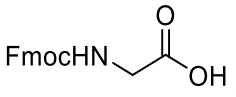
21. The method of claim 20, wherein the seventh amino acid (AA7) is  or .

22. The method of claim 20 further comprising:

(v) removing the protecting group from the seventh amino acid (AA7);

(w) providing a eighth amino acid (AA8); and

(x) coupling the eighth amino acid (AA8) to the seventh amino acid to form a peptide bond between the eighth amino acid (AA8) and the seventh amino acid (I-AA1-AA2-AA3-AA4-AA5-AA6-AA7-AA8).

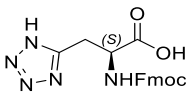
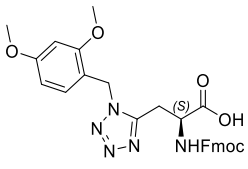
23. The method of claim 22, wherein the eighth amino acid (AA8) is .

24. The method of claim 22 further comprising:

(y) removing the protecting group from the eighth amino acid (AA8);

(z) providing a ninth amino acid (AA9); and

(aa) coupling the ninth amino acid (AA9) to the eighth amino acid to form a peptide bond between the ninth amino acid (AA9) and the eighth amino acid (I-AA1-AA2-AA3-AA4-AA5-AA6-AA7-AA8-AA9).

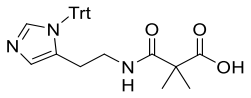
25. The method of claim 24, wherein the ninth amino acid (AA9) is  or .

26. The method of claim 24 further comprising:

(bb) removing the protecting group from the ninth amino acid (AA9);

(cc) providing a tenth amino acid (AA10); and

(dd) coupling the tenth amino acid (AA10) to the ninth amino acid to form a peptide bond between the tenth amino acid (AA10) and the ninth amino acid (I-AA1-AA2-AA3-AA4-AA5-AA6-AA7-AA8-AA9-AA10).

27. The method of claim 26, wherein the tenth amino acid (AA10) is .

28. The method of claim 26 further comprising:

repeating the steps of (i) removing the protecting group from the amino acid (AA_n);

(ii) providing a succeding amino acid (AA_{n+1}); and

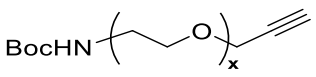
(iii) coupling the succeding amino acid (AA_{n+1}) to the amino acid (AA_n) to form a peptide bond between the succeding amino acid (AA_{n+1}) and amino acid (AA_n),

wherein said repeating is conducted from 1 to 100 times.

29. The method of claim 26 further comprising:

(ee) removing the protecting group from the tenth amino acid (AA10);

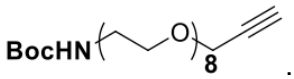
(ff) providing a compound of Formula (B):

,

wherein x is an integer from 1 to 15; and

(gg) coupling the compound of Formula (B) to the one of the amino acids in the peptide or the peptidomimetic to form a triazole ring.

30. The method of claim 29, wherein the compound of Formula (B) has the following Formula:

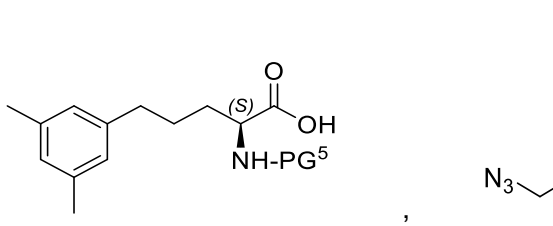


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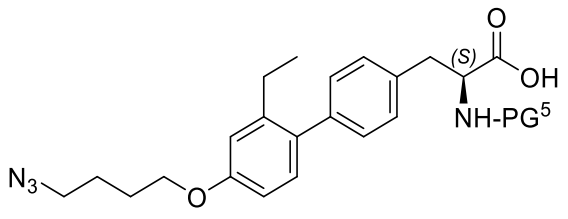
31. The method according to any one of claims 6-30 further comprising:

(hh) cleaving the peptide bond between the first amino acid (AA1) and the compound of Formula (I) to obtain the peptide or the peptidomimetic.

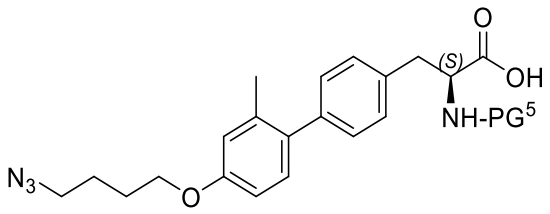
32. The method according to any one of claims 6-30, wherein each one of the first amino acid (AA1), the second amino acid (AA2), the third amino acid (AA3), the fourth amino acid (AA4), the fifth amino acid (AA5), the sixth amino acid (AA6), the seventh amino acid (AA7), the eighth amino acid (AA8), the ninth amino acid (AA9), the tenth amino acid (AA10), and succeding amino acid (AA_{n+1}) are independently selected from the group consisiting of



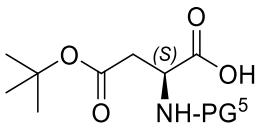
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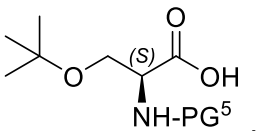
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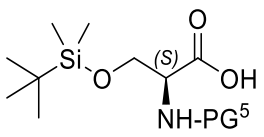
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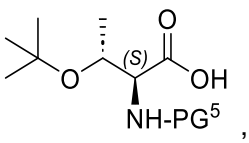
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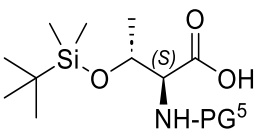
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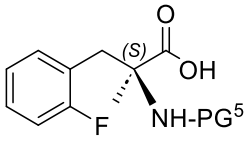
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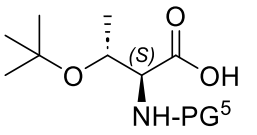
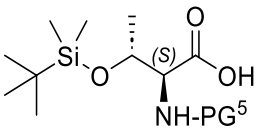
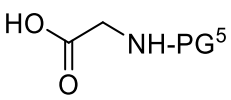
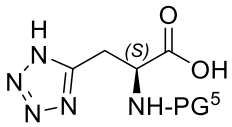
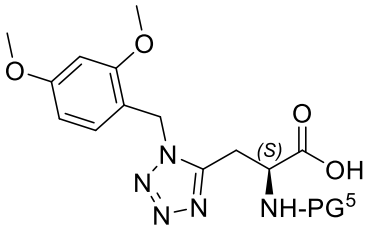
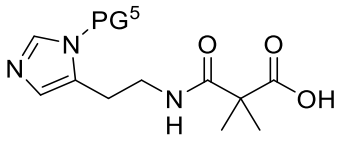
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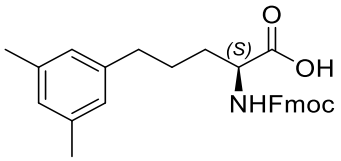
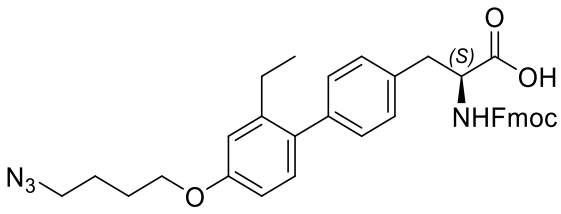
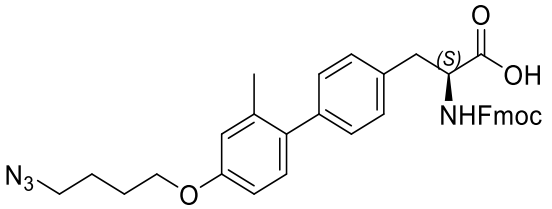
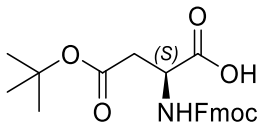
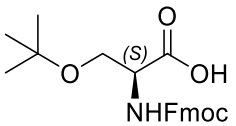
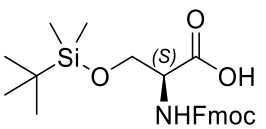
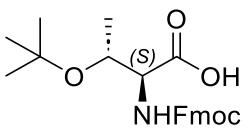
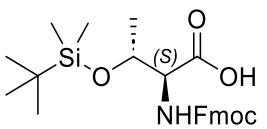
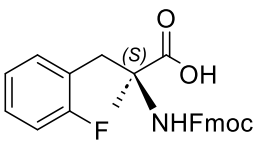
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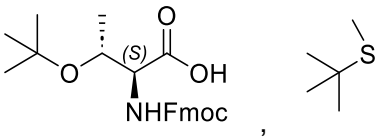
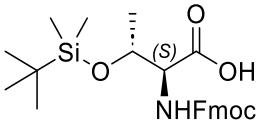
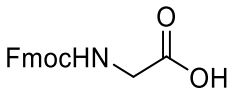
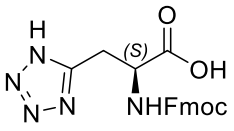
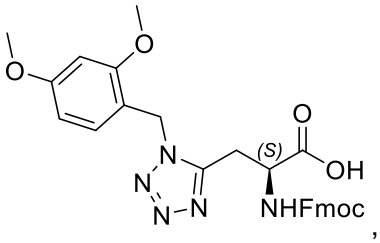
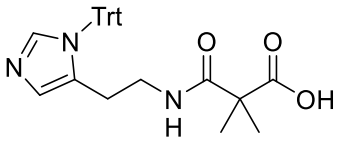





, and

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wherein PG^5 is a suitable protecting group.

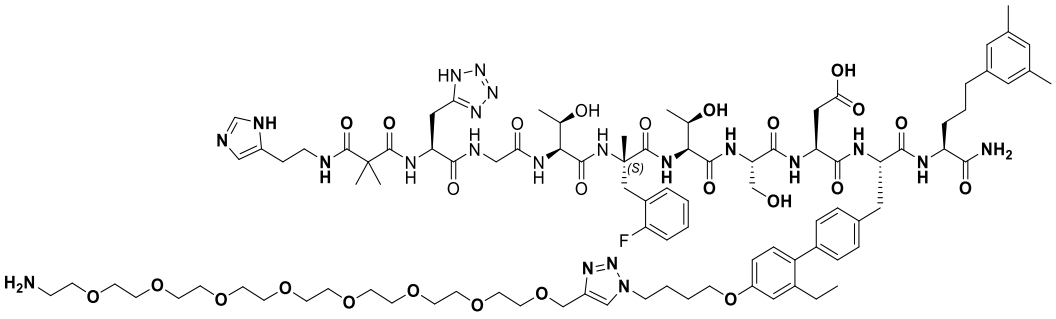
33. The method according to claim 32, wherein PG^5 is independently selected at each occurrence from the group consisting of triphenylmethyl (Trt), allyloxycarbonyl (Alloc), benzyloxycarbonyl (Cbz), tert-butyloxycarbonyl (Boc), and 9-fluorenylmethoxycarbonyl (Fmoc).

34. The method according to any one of claims 6-30, wherein each one of the first amino acid (AA1), the second amino acid (AA2), the third amino acid (AA3), the fourth amino acid (AA4), the fifth amino acid (AA5), the sixth amino acid (AA6), the seventh amino acid (AA7), the eighth amino acid (AA8), the ninth amino acid (AA9), the tenth amino acid (AA10), and succeding amino acid (AA_{n+1}) are independently selected from the group consisiting of

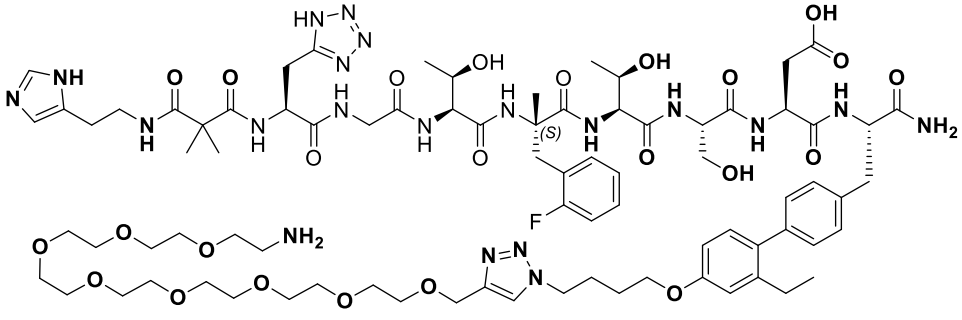

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35. The method of claim 31, wherein the peptidomimetic has a Formula:


, or a salt thereof.

36. The method of claim 31, wherein the peptidomimetic has a Formula:


, or a salt thereof.