

CLAIMS

The invention claimed is:

1. A method of making an incretin analog of SEQ ID NO:6, the method comprising
5 the step of:
coupling, via hybrid liquid solid phase synthesis, four intermediate compounds
selected from the groups consisting of:
 - a. SEQ ID NOS:7, 8, 9 and 10,
 - b. SEQ ID NOS:7, 11, 12, and 10, and
 - 10 c. SEQ ID NOS:7, 13, 14 and 10.
2. A method of making an incretin analog of SEQ ID NO:6, the method comprising
the step of:
coupling, via hybrid liquid solid phase synthesis, three intermediate compounds
15 selected from the groups consisting of:
 - a. SEQ ID NOS:7, 13 and 15,
 - b. SEQ ID NOS:16, 17 and 10,
 - c. SEQ ID NOS:18, 12 and 10, and
 - d. SEQ ID NOS:7, 45 and 10.
- 20 3. A method of making an incretin analog of SEQ ID NO:6, the method comprising
the step of:
coupling, via hybrid liquid solid phase synthesis, two intermediate compounds
selected from the groups consisting of:
 - 25 a. SEQ ID NOS:15 and 19 and
 - b. SEQ ID NOS:18 and 20.
4. An intermediate compound comprising:
SEQ ID NO:7 or a pharmaceutically acceptable salt thereof.
- 30 5. An intermediate compound comprising:
SEQ ID NO:8 or a pharmaceutically acceptable salt thereof.

6. An intermediate compound comprising:
SEQ ID NO:9 or a pharmaceutically acceptable salt thereof.
7. An intermediate compound comprising:
5 SEQ ID NO:10 or a pharmaceutically acceptable salt thereof.
8. An intermediate compound comprising:
SEQ ID NO:11 or a pharmaceutically acceptable salt thereof.
- 10 9. An intermediate compound comprising:
SEQ ID NO:12 or a pharmaceutically acceptable salt thereof.
10. An intermediate compound comprising:
SEQ ID NO:13 or a pharmaceutically acceptable salt thereof.
- 15 11. An intermediate compound comprising
SEQ ID NO:14 or a pharmaceutically acceptable salt thereof.
12. An intermediate compound comprising:
20 SEQ ID NO:15, or a pharmaceutically acceptable salt thereof.
13. An intermediate compound comprising:
SEQ ID NO:16 or a pharmaceutically acceptable salt thereof.
- 25 14. An intermediate compound comprising:
SEQ ID NO:17 or a pharmaceutically acceptable salt thereof.
15. An intermediate compound comprising:
SEQ ID NO:18 or a pharmaceutically acceptable salt thereof.
- 30 16. An intermediate compound comprising:
SEQ ID NO:19 or a pharmaceutically acceptable salt thereof.

17. An intermediate compound comprising:
SEQ ID NO:20 or a pharmaceutically acceptable salt thereof.
18. An intermediate compound comprising:
5 SEQ ID NO:21 or a pharmaceutically acceptable salt thereof.
19. An intermediate compound comprising:
SEQ ID NO:22 or a pharmaceutically acceptable salt
- 10 20. An intermediate compound comprising:
SEQ ID NO:23 or a pharmaceutically acceptable salt thereof.
21. An intermediate compound comprising:
SEQ ID NO:24 or a pharmaceutically acceptable salt thereof.
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22. An intermediate compound comprising:
SEQ ID NO:25 or a pharmaceutically acceptable salt thereof.
23. An intermediate compound comprising:
20 SEQ ID NO:26 or a pharmaceutically acceptable salt thereof.
24. An intermediate compound comprising:
SEQ ID NO:27 or a pharmaceutically acceptable salt thereof.
- 25 25. An intermediate compound comprising:
SEQ ID NO:28 or a pharmaceutically acceptable salt thereof.
26. An intermediate compound comprising:
SEQ ID NO:38 or a pharmaceutically acceptable salt thereof.
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27. An intermediate compound comprising:

SEQ ID NO:39 or a pharmaceutically acceptable salt thereof.

28. An intermediate compound comprising:

SEQ ID NO:40 or a pharmaceutically acceptable salt thereof.

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29. An intermediate compound comprising Boc-

Y(Aib)EGT(α MeF(2F))TSD(4Pal)SI(α MeL)L (SEQ ID NO:30), or a pharmaceutically acceptable salt thereof.

10 30. An intermediate compound comprising:

SEQ ID NO:31 or a pharmaceutically acceptable salt thereof.

31. An intermediate compound comprising Q(Aib)EFI(D-Glu)(α MeY)LIEG (SEQ ID NO:32), or a pharmaceutically acceptable salt thereof.

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32. An intermediate compound comprising GPSSGAPPPS (SEQ ID NO:33), or a pharmaceutically acceptable salt thereof.

33. An intermediate compound comprising Boc-Y(Aib)EGT(α MeF(2F))TS (SEQ ID NO:34), or a pharmaceutically acceptable salt thereof.

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34. An intermediate compound comprising Q(Aib)EFI(D-Glu)(α MeY)LIEGGPSSGAPPPS-NH₂ (SEQ ID NO:35), or a pharmaceutically acceptable salt thereof.

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35. An intermediate compound comprising EFI(D-Glu)(α MeY)LIEGGPSSGAPPPS-NH₂ (SEQ ID NO:36), or a pharmaceutically acceptable salt thereof.

36. An intermediate compound comprising CQ(Aib)EFI(D-Glu)(α MeY)LIEGGPSSGAPPPS-NH₂ (SEQ ID NO:37), or a pharmaceutically acceptable salt thereof.

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37. An intermediate compound selected from the group consisting of SEQ ID NO:38, SEQ ID NO:39, SEQ ID NO:40, SEQ ID NO:41, SEQ ID NO:42, SEQ ID NO:43, SEQ ID NO:44, SEQ ID NO:45, SEQ ID NO:46, SEQ ID NO:47, SEQ ID NO:48, SEQ ID NO:49, SEQ ID NO:50, SEQ ID NO:51, SEQ ID NO:52, SEQ ID NO:53, SEQ ID NO:54, SEQ ID NO:56, SEQ ID NO:57, SEQ ID NO:58, SEQ ID NO:59, SEQ ID NO:60, SEQ ID NO:61, SEQ ID NO:62, or a pharmaceutically acceptable salt thereof.
38. A method of making an incretin analog of SEQ ID NO:29, the method comprising the step of:
- coupling, via hybrid liquid solid phase synthesis, intermediate compounds selected from the groups consisting of:
- SEQ ID NOS:7, 62, 42 and 31,
 - SEQ ID NOS:43, and 44.