WHAT IS CLAIMED:

1. A compound comprising a modified oligonucleotide 8 to 80 linked nucleosides in length having a nucleobase sequence comprising at least 8 contiguous nucleobases of any of the nucleobase sequences of SEQ ID NOs: 3-3383.

2. A compound comprising a modified oligonucleotide 9 to 80 linked nucleosides in length having a nucleobase sequence comprising at least 9 contiguous nucleobases of any of the nucleobase sequences of SEQ ID NOs: 3-3383.

3. A compound comprising a modified oligonucleotide 10 to 80 linked nucleosides in length having a nucleobase sequence comprising at least 10 contiguous nucleobases of any of the nucleobase sequences of SEQ ID NOs: 3-3383.

4. A compound comprising a modified oligonucleotide 11 to 80 linked nucleosides in length having a nucleobase sequence comprising at least 11 contiguous nucleobases of any of the nucleobase sequences of SEQ ID NOs: 3-3383.

5. A compound comprising a modified oligonucleotide 12 to 80 linked nucleosides in length having a nucleobase sequence comprising at least 12 contiguous nucleobases of any of the nucleobase sequences of SEQ ID NOs: 3-3383.

6. A compound comprising a modified oligonucleotide 16 to 80 linked nucleosides in length having a nucleobase sequence comprising the nucleobase sequence of any one of SEQ ID NOs: 3-3383.

7. A compound comprising a modified oligonucleotide having a nucleobase sequence consisting of any one of SEQ ID NOs: 3-3383.

8. A compound comprising a modified oligonucleotide 8 to 80 linked nucleosides in length complementary within nucleotides 4227-4244, 4227-4242, 4228-4243, or 4229-4244 of SEQ ID NO: 1 or within nucleotides 9667-9682, 11411-11426, or 18090-18105 of SEQ ID NO: 2.

9. A compound comprising a modified oligonucleotide 8 to 80 linked nucleosides in length having a nucleobase sequence comprising any one of SEQ ID NOs: 2021, 560, 559, 1330, 1540, or 3303.

10. A compound comprising a modified oligonucleotide having a nucleobase sequence consisting of any one of SEQ ID NOs: 2021, 560, 559, 1330, 1540, or 3303.

11. The compound of any one of claims 1-10, wherein the modified oligonucleotide comprises at least one modified internucleoside linkage, at least one modified sugar, or at least one modified nucleobase.

12. The compound of claim 11, wherein the modified internucleoside linkage is a phosphorothioate internucleoside linkage.

13. The compound of claim 11 or 12, wherein the modified sugar is a bicyclic sugar.

14. The compound of claim 13, wherein the bicyclic sugar is selected from the group consisting of: 4'-(CH_2)-O-2' (LNA); 4'-$(CH_2)_2$-O-2' (ENA); and 4'-$CH(CH_3)$-O-2' (cEt).

15. The compound of claim 11 or 12, wherein the modified sugar is 2'-O-methoxyethyl.

16. The compound of any one of claims 11-15, wherein the modified nucleobase is a 5-methylcytosine.

17. The compound of any one of claims 1-16, wherein the modified oligonucleotide comprises:

a gap segment consisting of linked deoxynucleosides;

a 5' wing segment consisting of linked nucleosides; and

a 3' wing segment consisting of linked nucleosides;

wherein the gap segment is positioned between the 5' wing segment and the 3' wing segment and wherein each nucleoside of each wing segment comprises a modified sugar.

18. A compound comprising a modified oligonucleotide 16 to 80 linked nucleosides in length having a nucleobase sequence comprising any one of SEQ ID NOs: 2021, 560, 559, 1330, 1540, or 3303, wherein the modified oligonucleotide comprises:

a gap segment consisting of linked deoxynucleosides;

a 5' wing segment consisting of linked nucleosides; and

a 3' wing segment consisting of linked nucleosides;

wherein the gap segment is positioned between the 5' wing segment and the 3' wing segment and wherein each nucleoside of each wing segment comprises a modified sugar.

19. A compound comprising a modified oligonucleotide 16-80 linked nucleobases in length having a nucleobase sequence comprising the sequence recited in any one of SEQ ID NOs: 1330 or 3303, wherein the modified oligonucleotide comprises:

a gap segment consisting of ten linked deoxynucleosides;

a 5' wing segment consisting of three linked nucleosides; and

a 3' wing segment consisting of three linked nucleosides;

wherein the gap segment is positioned between the 5' wing segment and the 3' wing segment; wherein each nucleoside of each wing segment comprises a cEt nucleoside; wherein each internucleoside linkage is a phosphorothioate linkage; and wherein each cytosine is a 5-methylcytosine.

20. A compound comprising a modified oligonucleotide 16-80 linked nucleobases in length having a nucleobase sequence comprising the sequence recited in any one of SEQ ID NOs: 559 or 560, wherein the modified oligonucleotide comprises:

a gap segment consisting of ten linked deoxynucleosides;

a 5' wing segment consisting of one linked nucleoside; and

a 3' wing segment consisting of five linked nucleosides;

wherein the gap segment is positioned between the 5' wing segment and the 3' wing segment; wherein the 5' wing segment comprises a cEt nucleoside; wherein the 3' wing segment comprises a cEt nucleoside, a 2'-O-methoxyethyl nucleoside, a cEt nucleoside, a 2'-O-methoxyethyl nucleoside, and a cEt nucleoside in the 5' to 3' direction; wherein each internucleoside linkage is a phosphorothioate linkage; and wherein each cytosine is a 5-methylcytosine.

21. A compound comprising a modified oligonucleotide 16-80 linked nucleobases in length having a nucleobase sequence comprising the sequence recited in any one of SEQ ID NOs: 1330 or 2021, wherein the modified oligonucleotide comprises:

a gap segment consisting of ten linked deoxynucleosides;

a 5' wing segment consisting of two linked nucleosides; and

a 3' wing segment consisting of four linked nucleosides;

wherein the gap segment is positioned between the 5' wing segment and the 3' wing segment; wherein each nucleoside of the 5' wing segment comprises a cEt nucleoside; wherein the 3' wing segment comprises a cEt nucleoside, a 2'-O-methoxyethyl nucleoside, a cEt nucleoside, and a 2'-O-methoxyethyl nucleoside in the 5' to 3' direction; wherein each internucleoside linkage is a phosphorothioate linkage; and wherein each cytosine is a 5-methylcytosine.

22. A compound comprising a modified oligonucleotide 16-80 linked nucleobases in length having a nucleobase sequence comprising the sequence recited in SEQ ID NO: 560, wherein the modified oligonucleotide comprises:

a gap segment consisting of nine linked deoxynucleosides;

a 5' wing segment consisting of two linked nucleosides; and

a 3' wing segment consisting of five linked nucleosides;

wherein the gap segment is positioned between the 5' wing segment and the 3' wing segment; wherein each nucleoside of the 5' wing segment comprises a cEt nucleoside; wherein the 3' wing segment comprises a cEt nucleoside, a 2'-O-methoxyethyl nucleoside, a cEt nucleoside, a 2'-O-methoxyethyl nucleoside, and a cEt

nucleoside in the 5’ to 3’ direction; wherein each internucleoside linkage is a phosphorothioate linkage; and wherein each cytosine is a 5-methylcytosine.

23. A compound comprising a modified oligonucleotide 16-80 linked nucleobases in length having a nucleobase sequence comprising the sequence recited in SEQ ID NOs: 2021, wherein the modified oligonucleotide comprises:

a gap segment consisting of nine linked deoxynucleosides;

a 5’ wing segment consisting of two linked nucleosides; and

a 3’ wing segment consisting of five linked nucleosides;

wherein the gap segment is positioned between the 5’ wing segment and the 3’ wing segment; wherein each nucleoside of the 5’ wing segment comprises a cEt nucleoside; wherein the 3’ wing segment comprises a 2’-O-methoxyethyl nucleoside, a 2’-O-methoxyethyl nucleoside, a 2’-O-methoxyethyl nucleoside, a cEt nucleoside, and a cEt nucleoside in the 5’ to 3’ direction; wherein each internucleoside linkage is a phosphorothioate linkage; and wherein each cytosine is a 5-methylcytosine.

24. A compound comprising a modified oligonucleotide 16-80 linked nucleobases in length having a nucleobase sequence comprising the sequence recited in SEQ ID NOs: 1540, wherein the modified oligonucleotide comprises:

a gap segment consisting of nine linked deoxynucleosides;

a 5’ wing segment consisting of two linked nucleosides; and

a 3’ wing segment consisting of five linked nucleosides;

wherein the gap segment is positioned between the 5’ wing segment and the 3’ wing segment; wherein each nucleoside of the 5’ wing segment comprises a cEt nucleoside; wherein the 3’ wing segment comprises a 2’-O-methoxyethyl nucleoside, a 2’-O-methoxyethyl nucleoside, a 2’-O-methoxyethyl nucleoside, a cEt nucleoside, and a cEt nucleoside in the 5’ to 3’ direction; wherein each internucleoside linkage is a phosphorothioate linkage; and wherein each cytosine is a 5-methylcytosine.

25. A compound comprising a modified oligonucleotide 16-80 linked nucleobases in length having a nucleobase sequence comprising the sequence recited in SEQ ID NOs: 560, wherein the modified oligonucleotide comprises:

a gap segment consisting of nine linked deoxynucleosides;

a 5’ wing segment consisting of two linked nucleosides; and

a 3’ wing segment consisting of five linked nucleosides;

wherein the gap segment is positioned between the 5’ wing segment and the 3’ wing segment; wherein each nucleoside of the 5’ wing segment comprises a cEt nucleoside; wherein the 3’ wing segment comprises a

2'-O-methoxyethyl nucleoside, a cEt nucleoside, a 2'-O-methoxyethyl nucleoside, a cEt nucleoside, and a 2'-O-methoxyethyl nucleoside in the 5' to 3' direction; wherein each internucleoside linkage is a phosphorothioate linkage; and wherein each cytosine is a 5-methylcytosine.

26. The compound of any one of claims 1-25, wherein the oligonucleotide is at least 80%, 85%, 90%, 95% or 100% complementary to SEQ ID NO: 1 or 2.

27. The compound of any one of claims 1-26, wherein the compound is single-stranded.

28. The compound of any one of claims 1-26, wherein the compound is double-stranded.

29. The compound of any one of claims 1-28, wherein the compound comprises ribonucleotides.

30. The compound of any one of claims 1-28, wherein the compound comprises deoxyribonucleotides.

31. The compound of any one of claims 1-30, wherein the modified oligonucleotide consists of 16 to 30 linked nucleosides.

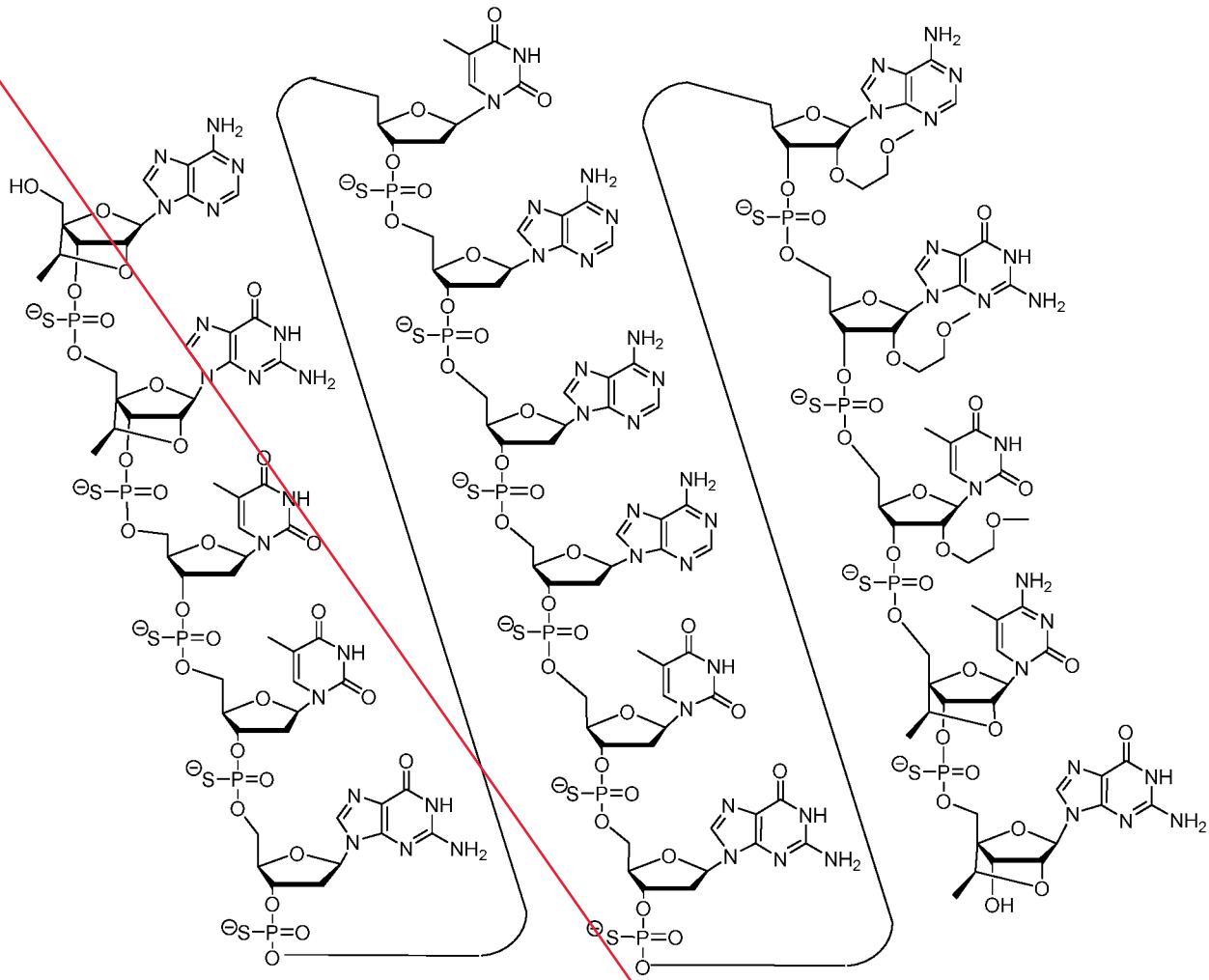
32. The compound of any preceding claim, wherein the compound consists of the modified oligonucleotide.

33. A compound consisting of a pharmaceutically acceptable salt of any of the compounds of claims 1-32.

34. The compound of claim 33, wherein the pharmaceutically acceptable salt is a sodium salt.

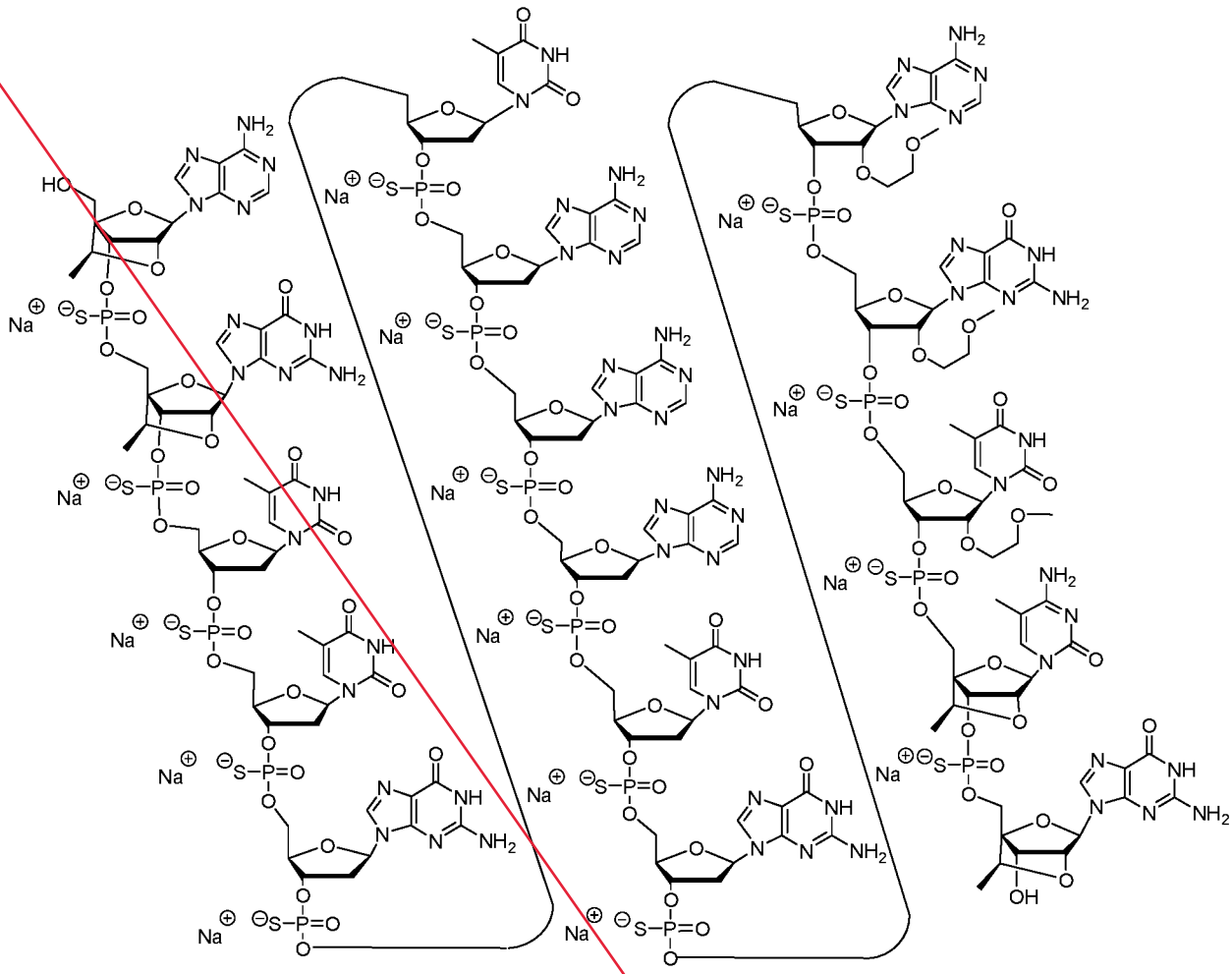
35. The compound of claim 33, wherein the pharmaceutically acceptable salt is a potassium salt.

36. A compound having the formula:

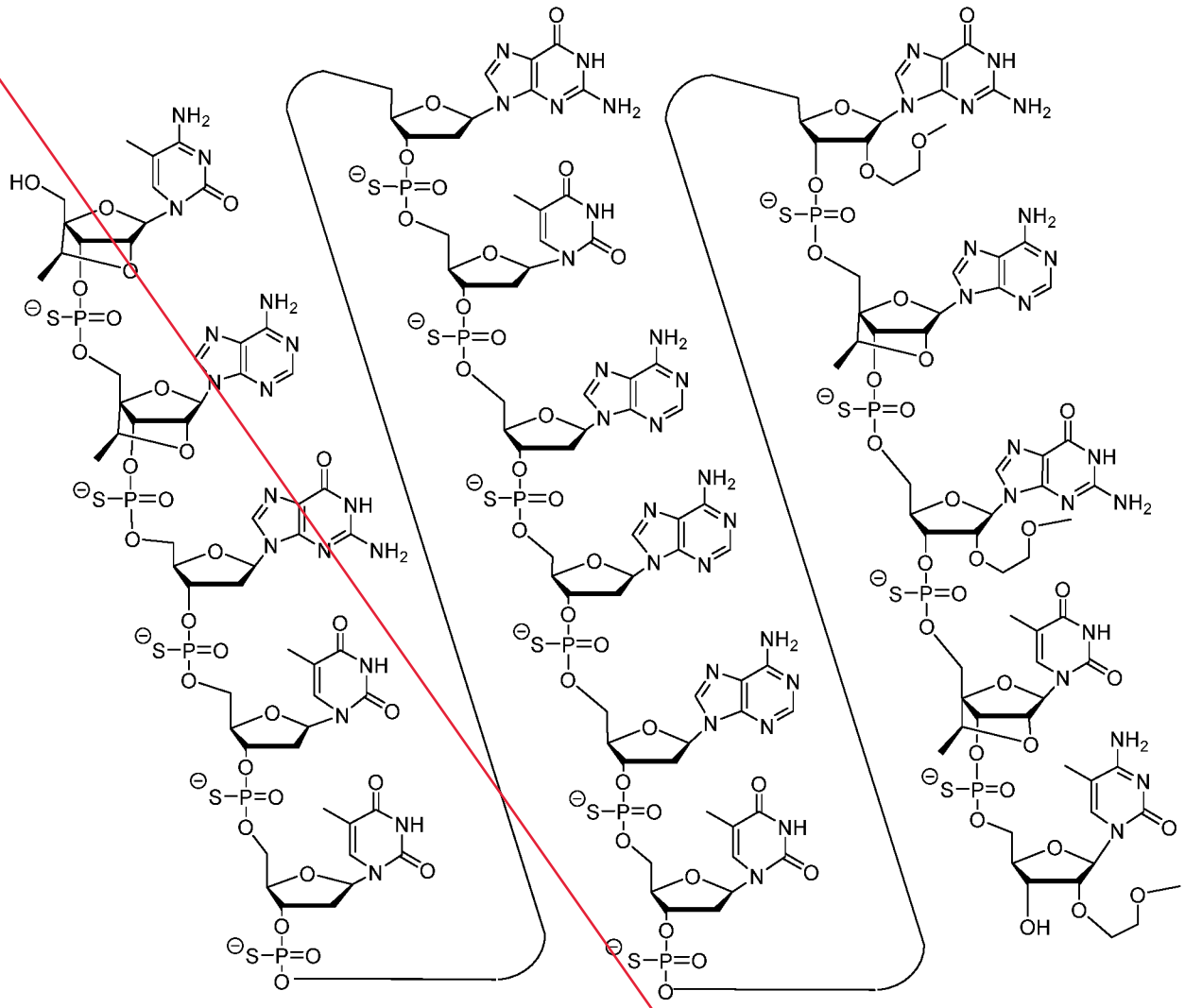


, or a salt thereof.

37. A compound having the formula:

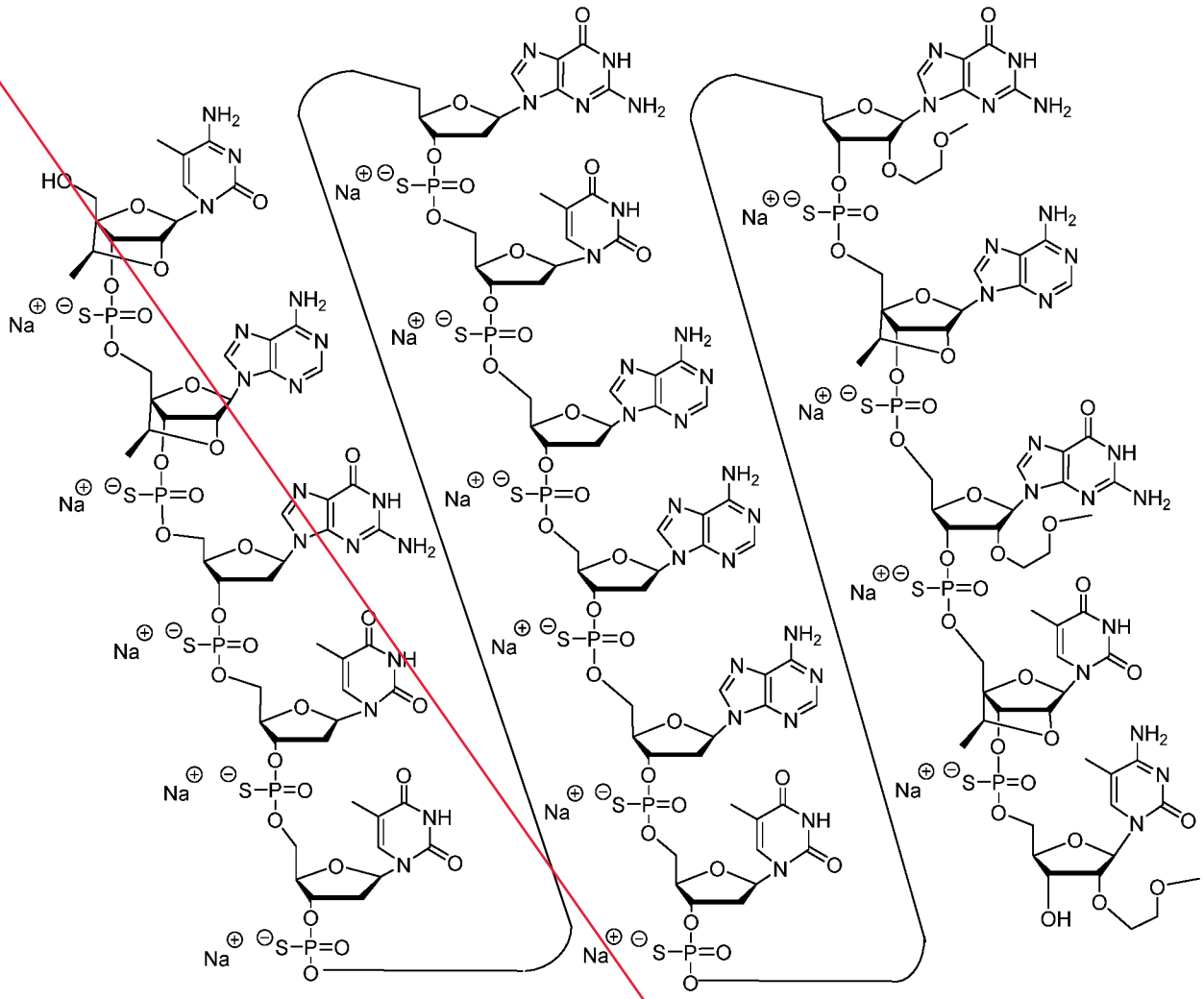


38. A compound having the formula:



, or a salt thereof.

39. A compound having the formula:



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40. A composition comprising the compound of any one of claims 1-39 and a pharmaceutically acceptable carrier.

41. A composition comprising a compound or modified oligonucleotide of any preceding claim, for use in therapy.

42. A method of treating or ameliorating cancer in an individual comprising administering to the individual a compound targeted to IRF4, thereby treating or ameliorating the cancer.

43. The method of claim 42, wherein the compound is an antisense compound targeted to IRF4.

44. The method of claim 42 or 43, wherein the cancer is a blood cancer, myeloma, multiple myeloma (MM), B cell malignancy, lymphoma, B cell lymphoma, T cell lymphoma, or leukemia.

45. The method of any of claims 42-44, wherein administering the compound inhibits or reduces cancer cell proliferation, tumor growth, or metastasis.

46. A method of inhibiting expression of IRF4 in a cell comprising contacting the cell with a compound targeted to IRF4, thereby inhibiting expression of IRF4 in the cell.

47. The method of claim 48, wherein the cell a cancer cell.

48. The method of claim 47, wherein the individual has a blood cancer, myeloma, multiple myeloma (MM), B cell malignancy, lymphoma, B cell lymphoma, T cell lymphoma, or leukemia.

49. A method of reducing or inhibiting cancer cell proliferation, tumor growth, or metastasis in an individual having cancer comprising administering a compound targeted to IRF4 to the individual, thereby reducing or inhibiting cancer cell proliferation, tumor growth, or metastasis in the individual.

50. The method of claim 49, wherein the individual has a blood cancer, myeloma, multiple myeloma (MM), B cell malignancy, lymphoma, B cell lymphoma, T cell lymphoma, or leukemia.

51. The method of any one of claims 46-50, wherein the compound is an antisense compound targeted to IRF4.

52. The method of any one of claims 46-51, wherein the compound is the compound of any one of claims 1-39 or composition of claim 40 or 41.

53. The method of any of claims 42-52, wherein the compound is administered parenterally.

54. Use of a compound targeted to IRF4 for treating, preventing, or ameliorating a cancer associated with IRF4.

55. The use of claim 54, wherein the cancer is a blood cancer, myeloma, multiple myeloma (MM), B cell malignancy, lymphoma, B cell lymphoma, T cell lymphoma, or leukemia.

56. The use of claim 54 or 55, wherein the compound is an antisense compound targeted to IRF4.

57. The use of any one of claims 54-56, wherein the compound is the compound of any one of claims 1-39 or composition of claim 40 or 41.

58. Use of a compound targeted to IRF4 in the manufacture of a medicament for treating or ameliorating a cancer associated with IRF4.

59. The use of claim 58, wherein the cancer is a blood cancer, myeloma, multiple myeloma (MM), B cell malignancy, lymphoma, B cell lymphoma, T cell lymphoma, or leukemia.

60. The use of claim 58 or 59, wherein the compound is an antisense compound targeted to IRF4.

61. The use of any one of claims 58-60, wherein the compound is the compound of any one of claims 1-39 or composition of claim 40 or 41.

62. Use of a compound targeted to IRF4 in the preparation of a medicament for treating or ameliorating a cancer associated with IRF4.

63. The use of claim 62, wherein the cancer is a blood cancer, myeloma, multiple myeloma (MM), B cell malignancy, lymphoma, B cell lymphoma, T cell lymphoma, or leukemia.

64. The use of claim 62 or 63, wherein the compound is an antisense compound targeted to IRF4.

65. The use of any one of claims 62-64, wherein the compound is the compound of any one of claims 1-39 or composition of claim 40 or 41.

WHAT IS CLAIMED:

1. An oligomeric compound, or a salt thereof, comprising a modified oligonucleotide consisting of 16 linked nucleobases and having a nucleobase sequence consisting of the nucleobase sequence of SEQ ID NO: 2021, wherein the modified oligonucleotide comprises:

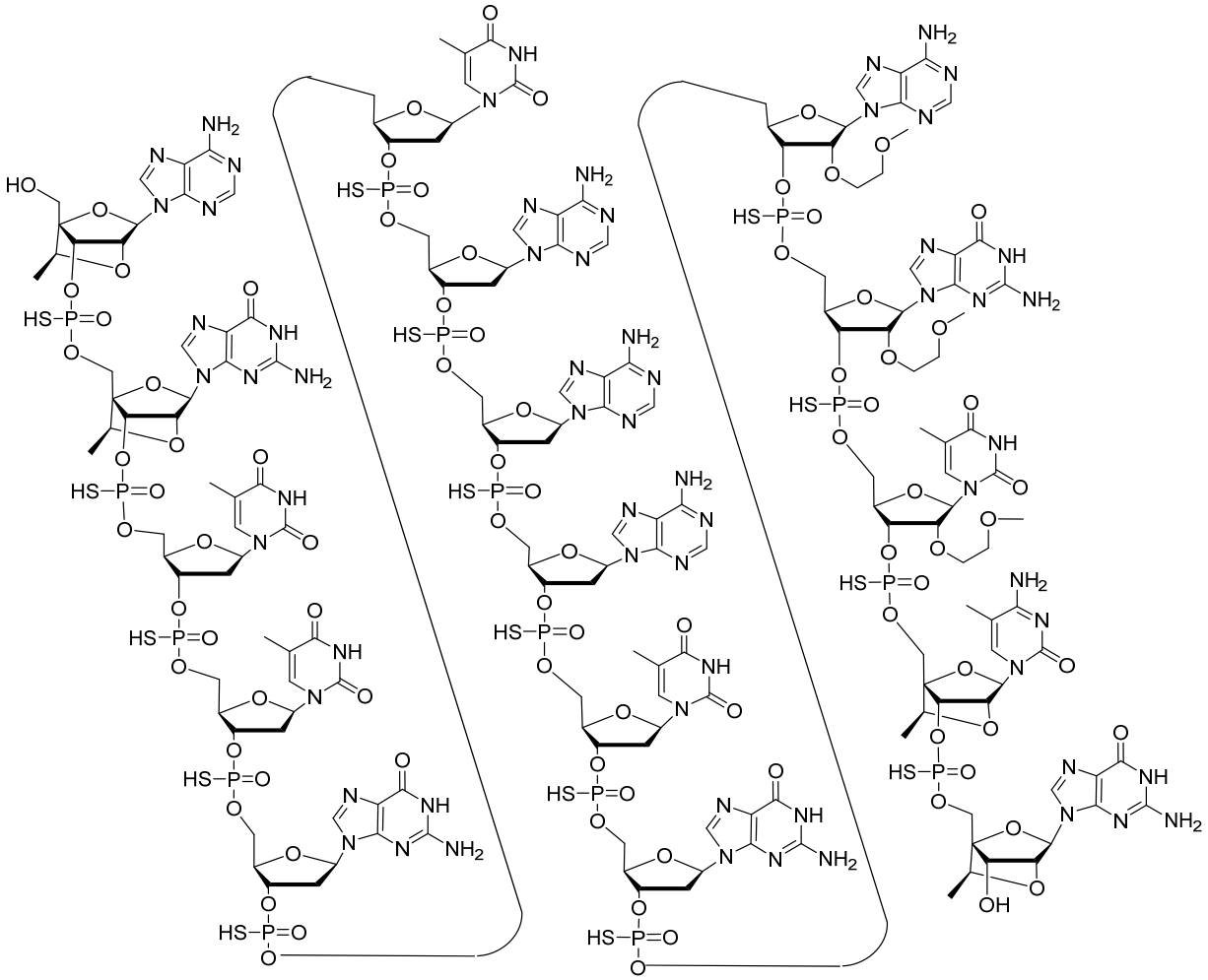
a gap segment consisting of nine linked deoxynucleosides;

a 5' wing segment consisting of two linked nucleosides; and

a 3' wing segment consisting of five linked nucleosides;

wherein the gap segment is positioned between the 5' wing segment and the 3' wing segment; wherein each nucleoside of the 5' wing segment comprises a cEt nucleoside; wherein the 3' wing segment comprises a 2'-O-methoxyethyl nucleoside, a 2'-O-methoxyethyl nucleoside, a 2'-O-methoxyethyl nucleoside, a cEt nucleoside, and a cEt nucleoside in the 5' to 3' direction; wherein each internucleoside linkage is a phosphorothioate linkage; and wherein each cytosine is a 5-methylcytosine.

2. A modified oligonucleotide according to the following chemical structure:

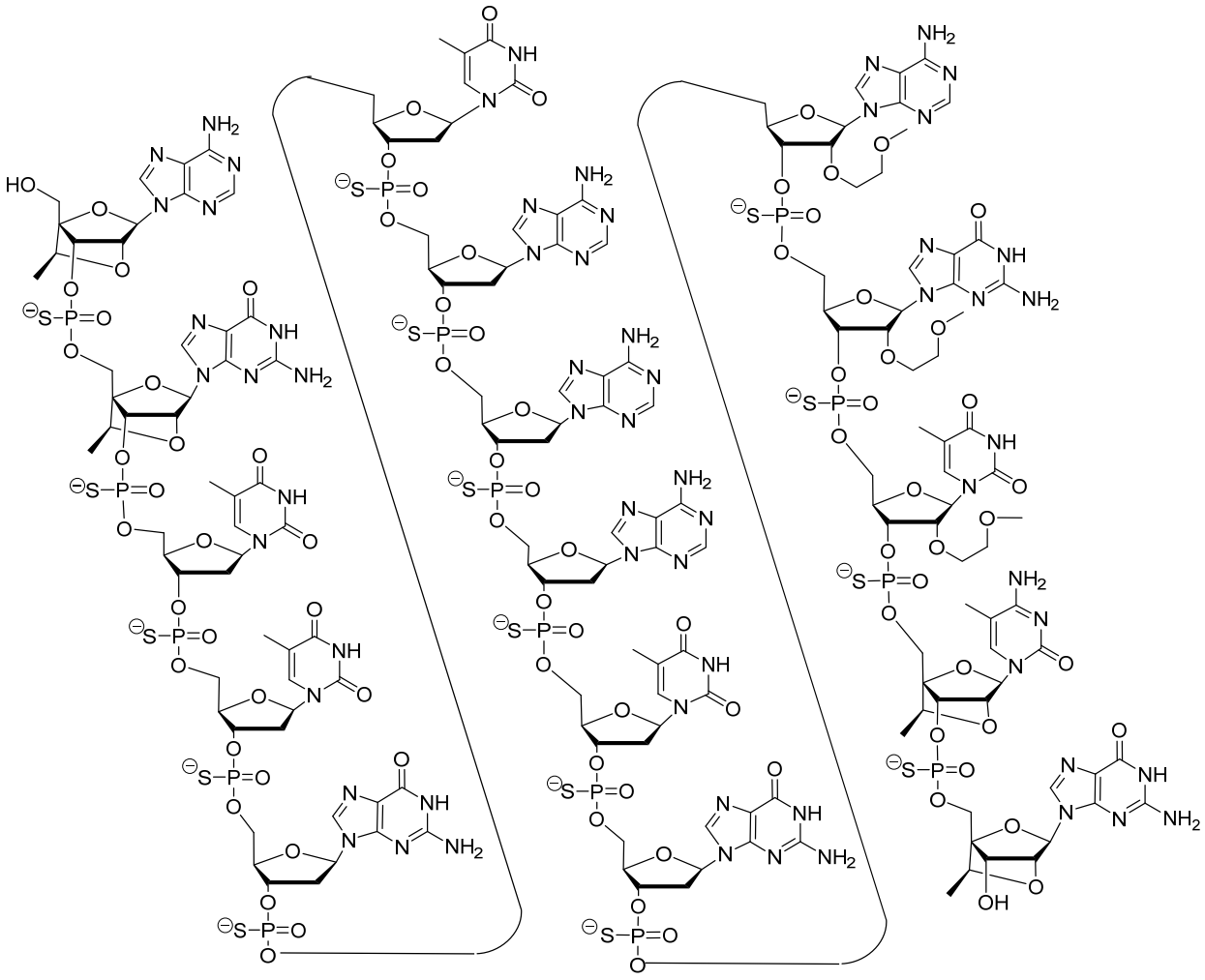


(SEQ ID NO: 2021), or a salt thereof.

3. The oligomeric compound of claim 1, which is the sodium salt or the potassium salt.

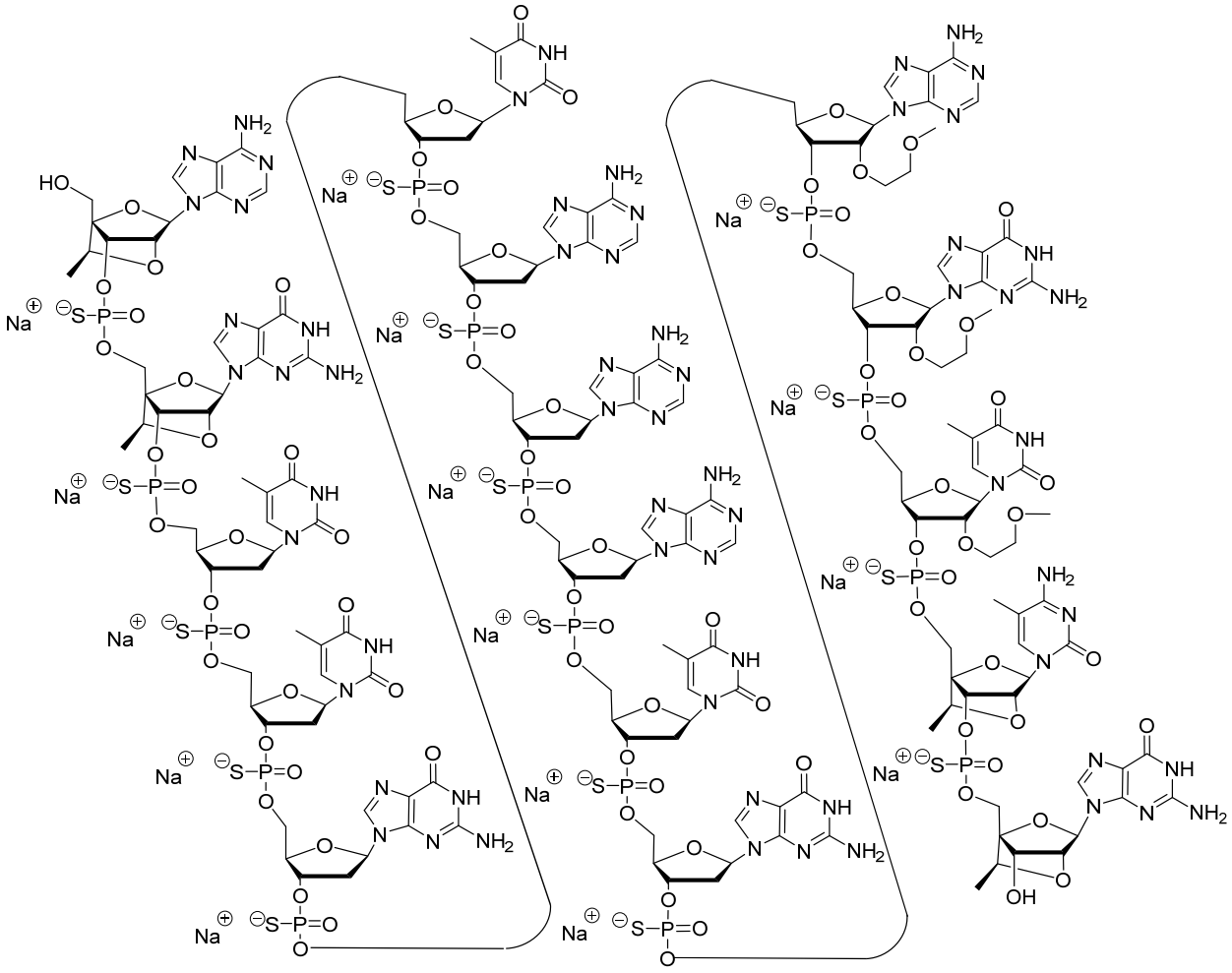
4. The modified oligonucleotide of claim 2, which is the sodium salt or the potassium salt.

5. A modified oligonucleotide, wherein the anion form of the modified oligonucleotide has the following chemical structure:



(SEQ ID NO: 2021).

6. A modified oligonucleotide according to the following chemical structure:



(SEQ ID NO: 2021).

7. A pharmaceutical composition comprising the oligomeric compound of claim 1 or claim 3, or the modified oligonucleotide of any one of claims 2, 4, 5, or 6, and a pharmaceutically acceptable carrier or diluent.

8. The pharmaceutical composition of claim 7, wherein the pharmaceutically acceptable carrier comprises water or phosphate-buffered saline (PBS).

9. The pharmaceutical composition of claim 8, consisting essentially of the oligomeric compound or modified oligonucleotide and water or PBS.

10. The oligomeric compound of claim 1 or claim 3, the modified oligonucleotide of any one of claims 2, 4, 5, or 6, or the pharmaceutical composition of any one of claims 7-9 for use in treating or ameliorating a disease associated with IRF4 in an individual, wherein the oligomeric compound, the modified oligonucleotide, or the pharmaceutical composition is to be administered to the indvidual, thereby treating or ameliorating the disease associated with IRF4.

11. The oligomeric compound, modified oligonucleotide, or pharmaceutical composition for use of claim 10, wherein the disease associated with IRF4 is cancer.

12. The oligomeric compound, modified oligonucleotide, or pharmaceutical composition for use of claim 11 wherein the cancer is a blood cancer, myeloma, multiple myeloma (MM), B cell malignancy, lymphoma, B cell lymphoma, T cell lymphoma, or leukemia.

13. The oligomeric compound, modified oligonucleotide, or pharmaceutical composition for use of any one of claims 10-12, wherein the administration of the compound inhibits or reduces cancer cell proliferation, tumor growth, or metastasis.

14. Use of the oligomeric compound of claim 1 or claim 3, the modified oligonucleotide of any one of claims 2, 4, 5, or 6, or the pharmaceutical composition of any one of claims 7-9 in the manufacture of a medicament for the treatment of a disease associated with IRF4.

15. The use of claim 14, wherein the disease associated with IRF4 is a cancer.

16. The use of claim 15, wherein the cancer is a blood cancer, myeloma, multiple myeloma (MM), B cell malignancy, lymphoma, B cell lymphoma, T cell lymphoma, or leukemia.

17. The use of any one of claims 14-16, wherein treatment of a disease associated with IRF4 inhibits or reduces cancer cell proliferation, tumor growth, or metastasis.

18. The oligomeric compound of claim 1 or claim 3, the modified oligonucleotide of any one of claims 2, 4, 5, or 6, or the pharmaceutical composition of any one of claims 7-9, for use as a medicament.