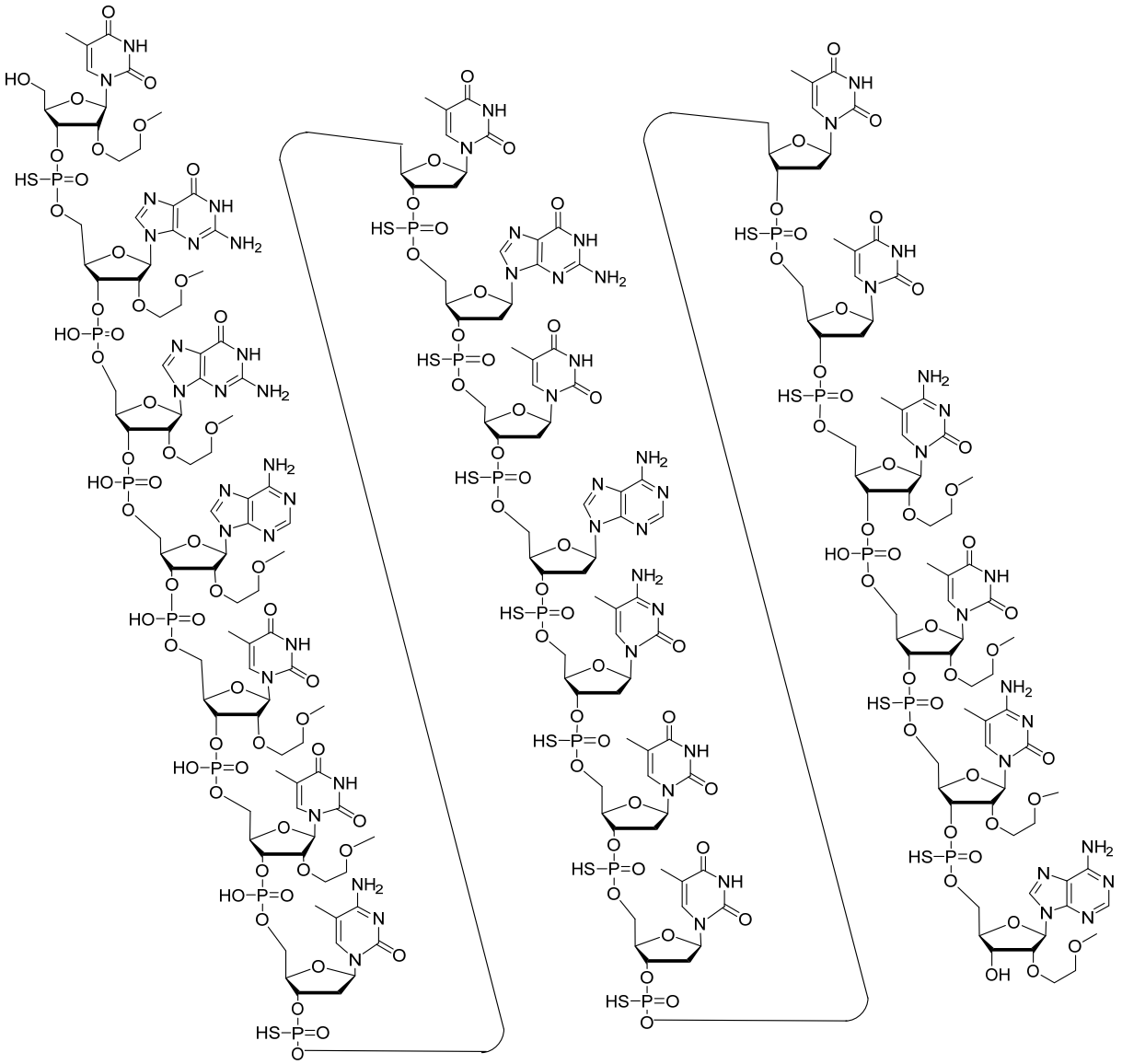
CLAIMS:

1. A modified oligonucleotide according to the following formula:

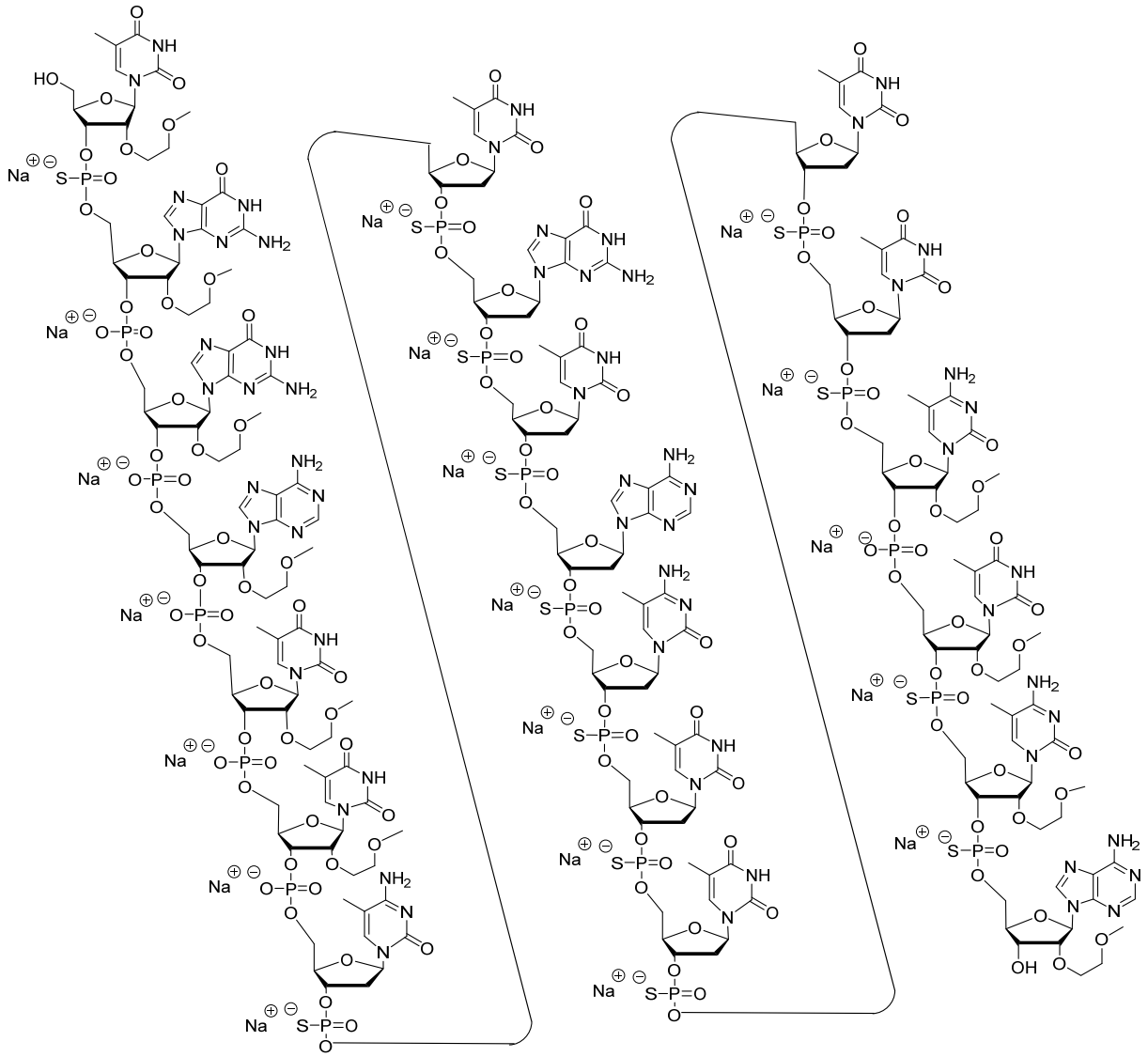


(SEQ ID NO: 3235)

or a salt thereof.

2. The modified oligonucleotide of claim 1, which is a sodium salt or a potassium salt of the formula.

3. A modified oligonucleotide according to the following formula:



(SEQ ID NO: 3235).

4. A chirally enriched population of modified oligonucleotides of claim 1, wherein the population is enriched for modified oligonucleotides comprising at least one particular phosphorothioate internucleoside linkage having a particular stereochemical configuration.

5. The chirally enriched population of claim 4, wherein the population is enriched for modified oligonucleotides comprising at least one particular phosphorothioate internucleoside linkage having the (*S*p) configuration.

6. The chirally enriched population of claim 4, wherein the population is enriched for modified oligonucleotides comprising at least one particular phosphorothioate internucleoside linkage having the (*R*p) configuration.

7. The chirally enriched population of claim 4, wherein the population is enriched for modified oligonucleotides having a particular, independently selected stereochemical configuration at each phosphorothioate internucleoside linkage.

8. The chirally enriched population of claim 7, wherein the population is enriched for modified oligonucleotides having the (*S*p) configuration at each phosphorothioate internucleoside linkage.

9. The chirally enriched population of claim 7, wherein the population is enriched for modified oligonucleotides having the (*R*p) configuration at each phosphorothioate internucleoside linkage.

10. The chirally enriched population of claim 4, wherein the population is enriched for modified oligonucleotides having at least 3 contiguous phosphorothioate internucleoside linkages in the *S*p-*S*p-*R*p configuration, in the 5' to 3' direction.

11. A population of modified oligonucleotides of claim 1, wherein all of the phosphorothioate internucleoside linkages of the modified oligonucleotide are stereorandom.

12. A pharmaceutical composition comprising the modified oligonucleotide of claim 1, and a pharmaceutically acceptable diluent or carrier.

13. The pharmaceutical composition of claim 12, comprising a pharmaceutically acceptable diluent, wherein the pharmaceutically acceptable diluent is phosphate-buffered saline (PBS) or artificial cerebrospinal fluid (aCSF).

14. The pharmaceutical composition of claim 12, wherein the pharmaceutical composition consists essentially of the modified oligonucleotide and phosphate-buffered saline (PBS) or artificial cerebrospinal fluid (aCSF).

15. An oligomeric compound comprising a modified oligonucleotide according to the following formula:-$T_{es}G_{eo}G_{eo}A_{eo}T_{eo}T_{eo}{}^{m}C_{ds}T_{ds}G_{ds}T_{ds}A_{ds}{}^{m}C_{ds}T_{ds}T_{ds}T_{ds}T_{ds}{}^{m}C_{eo}T_{es}{}^{m}C_{es}A_{e}$ (SEQ ID NO: 3235); wherein,

A = an adenine nucleobase,

^{m}C = a 5’-methyl cytosine nucleobase,

G = a guanine nucleobase,

T = a thymine nucleobase,

e = a 2’- MOE modified sugar,

d = a 2’-deoxyribose sugar,

s = a phosphorothioate internucleoside linkage, and

o = a phosphodiester internucleoside linkage.

16. A pharmaceutical composition comprising the chirally enriched population of modified oligonucleotides of claim 4, and a pharmaceutically acceptable diluent or carrier.

17. The oligomeric compound of claim 15, wherein the modified oligonucleotide is covalently linked to a conjugate group.

18. An oligomeric duplex comprising the modified oligonucleotide of claim 1.

19. An oligomeric duplex comprising the oligomeric compound of claim 15.

20. A pharmaceutical composition comprising the oligomeric compound of claim 15 and a pharmaceutically acceptable carrier or diluent.

21. The pharmaceutical composition of claim 20, comprising a pharmaceutically acceptable diluent, wherein the pharmaceutically acceptable diluent is phosphate-buffered saline (PBS) or artificial cerebrospinal fluid (aCSF).

22. The pharmaceutical composition of claim 20, wherein the pharmaceutical composition consists essentially of the oligomeric compound and phosphate-buffered saline (PBS) or artificial cerebrospinal fluid (aCSF).

23. A pharmaceutical composition comprising the oligomeric compound of claim 17 and a pharmaceutically acceptable carrier or diluent.

24. The pharmaceutical composition of claim 23, comprising a pharmaceutically acceptable diluent, wherein the pharmaceutically acceptable diluent is phosphate-buffered saline (PBS) or artificial cerebrospinal fluid (aCSF).

25. The pharmaceutical composition of claim 23, wherein the pharmaceutical composition consists essentially of the oligomeric compound and phosphate-buffered saline (PBS) or artificial cerebrospinal fluid (aCSF).

26. The chirally enriched population of claim 7, wherein the population is enriched for modified oligonucleotides having the (*R*p) configuration at one particular phosphorothioate internucleoside linkage and the (*S*p) configuration at each of the remaining phosphorothioate internucleoside linkages.

27. The modified oligonucleotide of claim 1, which is a potassium salt of the formula.

28. A pharmaceutical composition comprising the modified oligonucleotide of claim 3 and a pharmaceutically acceptable carrier or diluent.

29. The pharmaceutical composition of claim 28, comprising a pharmaceutically acceptable diluent, wherein the pharmaceutically acceptable diluent is phosphate-buffered saline (PBS) or artificial cerebrospinal fluid (aCSF).

30. The pharmaceutical composition of claim 28, wherein the pharmaceutical composition consists essentially of the modified oligonucleotide and phosphate-buffered saline (PBS) or artificial cerebrospinal fluid (aCSF).

31. A pharmaceutical composition comprising the modified oligonucleotide of claim 27 and a pharmaceutically acceptable carrier or diluent.

32. The pharmaceutical composition of claim 31, comprising a pharmaceutically acceptable diluent, wherein the pharmaceutically acceptable diluent is phosphate-buffered saline (PBS) or artificial cerebrospinal fluid (aCSF).

33. The pharmaceutical composition of claim 31, wherein the pharmaceutical composition consists essentially of the oligomeric compound and phosphate-buffered saline (PBS) or artificial cerebrospinal fluid (aCSF).

34. A pharmaceutical composition comprising the oligomeric duplex of claim 18 and a pharmaceutically acceptable carrier or diluent.

35. The pharmaceutical composition of claim 34, comprising a pharmaceutically acceptable diluent, wherein the pharmaceutically acceptable diluent is phosphate-buffered saline (PBS) or artificial cerebrospinal fluid (aCSF).

36. The pharmaceutical composition of claim 34, wherein the pharmaceutical composition consists essentially of the oligomeric duplex and phosphate-buffered saline (PBS) or artificial cerebrospinal fluid (aCSF).