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(54) Title **COMPOSITIONS AND METHODS FOR SYNTHESIZING 5 -CAPPED RNAS**

(56) References Cited:

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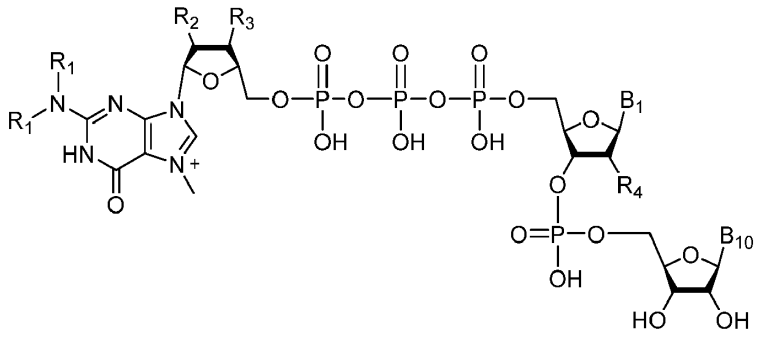
Enclosed is a translation of the patent claims in Norwegian. Please note that as per the Norwegian Patents Acts, section 66i the patent will receive protection in Norway only as far as there is agreement between the translation and the language of the application/patent granted at the EPO. In matters concerning the validity of the patent, language of the application/patent granted at the EPO will be used as the basis for the decision. The patent documents published by the EPO are available through Espacenet (http://worldwide.espacenet.com) or via the search engine on our website here: https://search.patentstyret.no/

Patentkrav

1. Forbindelse med den følgende struktur:



hvor:

B_1 er guanin;

B_{10} er en naturlig nukleosidbase;

R_1 er H eller metyl;

R_2 og R_3 er uavhengig av hverandre H, OH, alkyl, O-alkyl eller halogen; og

R_4 er H, OH eller O-metyl.

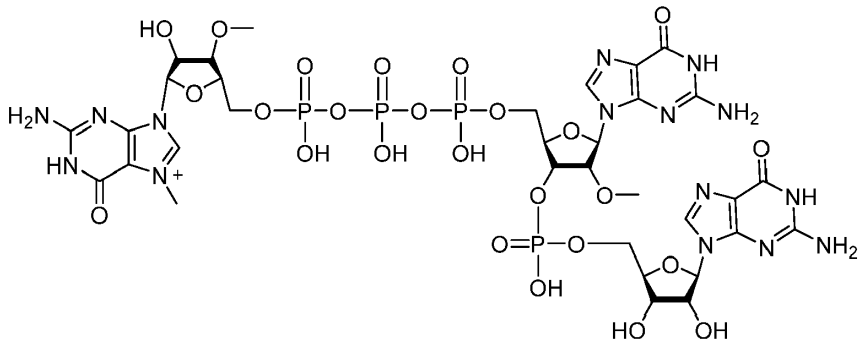
2. Forbindelse ifølge krav 1, hvor alkyl velges blant metyl, etyl, propyl, isopropyl, n-butyl, sec-butyl, isobutyl, tert-butyl, pentyl, isoamyl, heksyl, oktyl og dodekanyl.

3. Forbindelse ifølge krav 1, hvor O-alkyl velges blant O-metyl, O-etyl, O-propyl, O-isopropyl, O-n-butyl, O-sec-butyl, O-isobutyl, O-tert-butyl, O-pentyl, O-isoamyl, O-heksyl, O-oktyl og O-dodekanyl.

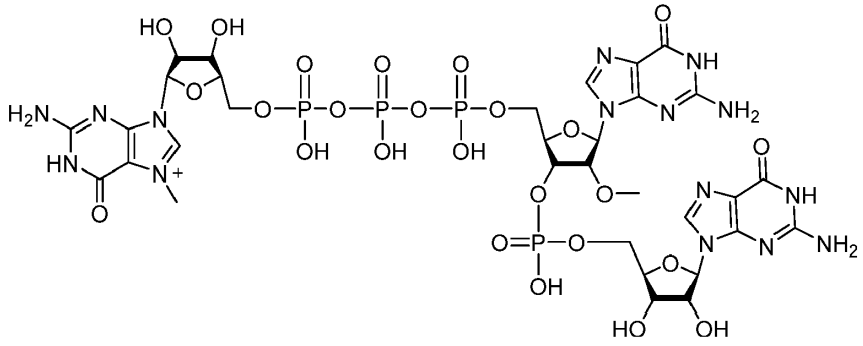
4. Forbindelse ifølge krav 1, hvor B_{10} er adenin, N^6-metyladenin, guanin, cytosin eller uracil.

5. Forbindelse ifølge krav 4, hvor B_{10} er adenin, guanin, cytosin eller uracil.

6. Forbindelse ifølge krav 1, som har strukturen:



7. Forbindelse ifølge krav 1, som har strukturen:



8. Forbindelse ifølge et hvilket som helst av kravene 1 til 7, hvor forbindelsen er en initierende capped oligonukleotidprimer.

9. Initierende capped oligonukleotidprimer ifølge krav 8, valgt blant ^{m7}GpppGpA, ^{m7}GpppGpC, ^{m7}GpppGpG, ^{m7}GpppGpU, $^{m7}G_{3'Ome}$pppGpA, $^{m7}G_{3'Ome}$pppGpC, $^{m7}G_{3'Ome}$pppGpG, $^{m7}G_{3'Ome}$pppGpU, $^{m7}G_{3'Ome}$pppG$_{2'Ome}$pA, $^{m7}G_{3'Ome}$pppG$_{2'Ome}$pC, $^{m7}G_{3'Ome}$pppG$_{2'Ome}$pG, $^{m7}G_{3'Ome}$pppG$_{2'Ome}$pU, ^{m7}GpppG$_{2'Ome}$pA, ^{m7}GpppG$_{2'Ome}$pC, ^{m7}GpppG$_{2'Ome}$pG og ^{m7}GpppG$_{2'Ome}$pU.

10. RNA-molekyl som omfatter den initierende capped oligonukleotidprimer ifølge krav 8 eller krav 9.

11. Celle som inneholder et RNA-molekyl som omfatter den initierende capped oligonukleotidprimer ifølge krav 8 eller krav 9.

12. Fremgangsmåte for fremstilling av en celle som inneholder et protein som er translatert fra et RNA-molekyl som omfatter den initierende capped oligonukleotidprimer ifølge krav 8 eller krav 9, omfattende innføring av nevnte RNA-molekyl som inneholder den initierende capped oligonukleotidprimer, i en celle som benytter nevnte RNA-molekyl for å produsere nevnte protein.

13. Farmasøytisk sammensetning som omfatter RNA-molekylet ifølge krav 10 og en farmasøytisk aksepterbar bærer.