

CU01P077WO_ST25
SEQUENCE LISTING

<110> CureVac GmbH

<120> Composition comprising a complexed (m)RNA and a naked mRNA for providing or enhancing an immunostimulatory response in a mammal and uses thereof

<130> CU01P077WO

<160> 14

<170> PatentIn version 3.5

<210> 1

<211> 1365

<212> RNA

<213> Artificial sequence

<220>

<223> Description of sequence: mRNA sequence according to SEQ ID NO: 1, which exhibits a length of 1365 nucleotides and was termed "CAP-GgOva(GC)-muag-A70-C30".

<400> 1

gggagaaagc uuaccauggg cagcaucggg gccgcgucga uggaguucug cuucgacgug	60
uucaaggagc ugaaggucca ccacgccaac gagaacaucu ucuacugccc gaucgccauc	120
augagcgcgc ugcccauggu guaccugggc gccaaaggaca gaccccggac gcagaucaac	180
aagguggucc gcuucgacaa gcugcccggc uucggggacu cgaucgaggc gcagugcggc	240
accagcguga acgugcacag cucgcuccgg gacauccuga accagaucaac caagccgaac	300
gacgucuaca gcuucagccu ggccucgcgg cucuacgccg aggagcgcu cccgauccug	360
cccagauacc ugcagugcgu gaaggagcuc uaccggggcg ggcuggagcc gaucaacuuc	420
cagacggcgg ccgaccaggc ccgggagcug aucaacagcu ggguggagag ccagaccaac	480
ggcaucaucc gcaacguccu ccagccgucg agcguggaca gccagaccgc gauggugcug	540
gucaacgcca ucguguucaa gggccugugg gagaagacgu ucaaggacga ggacacccag	600
gccaugcccu uccgggugac cgagcaggag ucgaagccgg uccagaugau guaccagauc	660
gggcucuucc ggguggcgag cauggccagc gagaagauga agauccugga gcugccguuc	720
gccucgggca cgaugagcau gcucgugcug cugcccgcag aggucagcgg ccucgagcag	780
cuggagucga ucaucaacu cgagaagcug accgagugga ccagcagcaa cgugauggag	840
gagcgcaaga ucaaggugua ccucccgcg augaagaugg aggagaagua caaccugacg	900
ucgguccuga uggcgauggg gaucaccgac guguucagca gcucggccaa ccucagcggc	960
aucagcucgg ccgagagccu gaagaucagc caggcgguuc acgccgccca cgcggagauc	1020
aacgaggccg gccgggaggu cguggggucg gccgaggcgg gcguggacgc gccagcguc	1080
agcgaggagu uccgcgcgga cccccguuc cuguucugca ucaagcacau cgccaccaac	1140
gccgugcucu ucuucggccg gugcgugucg ccugaccac uaguuaauag acugacuagc	1200
ccgauggggc ucccaacggg ccuccuccc cuccuugcac cgagauuaau aaaaaaaaaa	1260
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaauuucc	1320

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cccccccccc cccccccccc ccccccccuc uagacaauug gaauu 1365

<210> 2
 <211> 1816
 <212> RNA
 <213> Artificial Sequence

<220>
 <223> Description of sequence: mRNA sequence according to SEQ ID NO: 2,
 which exhibits a length of 1816 nucleotides and was termed
 "T7TS-Ppluc(wt)-A70"

<400> 2
 gggagacaag cuuggcauuc cgguacuguu gguaaagcca ccauggaaga cgccaaaaac 60
 auaaagaaag gcccggcgcc auucuauccg cuggaagaug gaaccgcugg agagcaacug 120
 cauaaggcua ugaagagaua cgcccugguu ccuggaacaa uugcuuuuac agaugcacau 180
 aucgaggugg acaucacuua cgcugaguac uucgaaaugu ccguucgguu ggcagaagcu 240
 augaaacgau augggcugaa uacaaaucac agaaucgucg uaugcaguga aaacucucuu 300
 caauucuuua ugccgguguu gggcgcguaa uuuaucggag uugcaguugc gcccgcgaac 360
 gacauuuaua augaacguga auugcucaac aguaugggca uuucgcagcc uaccguggug 420
 uucguuucca aaaagggguu gcaaaaaauu uugaacgugc aaaaaaagcu cccaaucauc 480
 caaaaaauua uuaucaugga uucuaaaacg gauuaccagg gauuucaguc gauguacacg 540
 uucgucacau cucaucuacc ucccgguuuu aaugaauacg auuuugugcc agaguccuuc 600
 gauagggaca agacaauugc acugaucaug aacuccucug gaucuaucugg ucugccuaaa 660
 ggugucgcuc ugccucauag aacugccugc gugagauucu cgcaugccag agauccuauu 720
 uuuggcaauc aaaucauucc ggauacugcg auuuuaagug uuguuccauu ccaucacggg 780
 uuuggaauug uuacuacacu cggauauuug auauguggau uucgagucgu cuuaaугuau 840
 agauuugaag aagagcuguu ucugaggagc cuucaggauu acaagauuca aagugcgcug 900
 cuggugccaa ccuauucuc cuucuucgcc aaaagcacuc ugauugacaa auacgauuuu 960
 ucuaauuuac acgaaauugc uucugguggc gcuccccucu cuaaggaagu cggggaagcg 1020
 guugccaaga gguuccaucu gccagguauc aggcaaggau augggcucac ugagacuaca 1080
 ucagcuauuc ugauuacacc cgagggggau gauaaaccgg gcgcggucgg uaaaguuguu 1140
 ccauuuuuug aagcgaaggu uguggaucug gauaccggga aaacgcuggg cguaaucaaa 1200
 agaggcgaac ugugugugag agguccuauг auuauguccg guuauguaaa caauccggaa 1260
 gcgaccaacg ccuugauuga caaggauuga uggcuacauu cuggagacau agcuuacugg 1320
 gacgaagacg aacacuucuu caucguugac cgccugaagu cucugauuaa guacaaaggc 1380
 uaucaggugg cucccgcuga auuggaaucc aucuugcucc aacaccccaa caucuucgac 1440
 gcaggugucg caggucuucc cgacgaugac gccggugaac uccccgccgc cguuguuguu 1500
 uuggagcacg gaaagacgau gacggaaaaa gagaucgugg auuacgucgc cagucaagua 1560
 acaaccgcga aaaaguugcg cggaggaguu guguuugugg acgaaguacc gaaaggucuu 1620

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accggaac ucgacgcaag aaaaucaga gagauccuca uaaaggccaa gaagggcgga 1680
 aagaucgccg uguauuucua guaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1740
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aacugcaggu cgacucuaga ggaucggcg 1800
 guaccgagcu cgaauu 1816

<210> 3
 <211> 13
 <212> RNA
 <213> Artificial

<220>
 <223> Description of sequence: kozak-sequence

<400> 3
 gccgccacca ugg 13

<210> 4
 <211> 15
 <212> RNA
 <213> Artificial

<220>
 <223> Description of sequence: generic sequence of a stabilizing
 sequence of the general formula: (C/U)CCANxCCC(U/A)PyxUC(C/U)CC

<220>
 <221> variation
 <222> (1)..(1)
 <223> /replace="cytosine"

/replace="uracile"

<220>
 <221> misc_feature
 <222> (1)..(1)
 <223> n is a, c, g, or u

<220>
 <221> variation
 <222> (5)..(5)
 <223> /replace="cytosine"
 /replace="uracile"
 /replace="guanosine"
 /replace="adenosine", or any othe nucleic acid

<220>
 <221> repeat_unit
 <222> (5)..(5)
 <223> x = any number

<220>
 <221> misc_feature
 <222> (5)..(5)
 <223> n is a, c, g, or u

<220>
 <221> variation
 <222> (9)..(9)

<223> /replace="uracile"

/replace="adonosome"

<220>

<221> misc_feature

<222> (9)..(10)

<223> n is a, c, g, or u

<220>

<221> repeat_unit

<222> (10)..(10)

<223> x = any number

<220>

<221> variation

<222> (10)..(10)

<223> /replace="pyrimidine"

<220>

<221> variation

<222> (13)..(13)

<223> /replace="cytosine"

/replace="uracile"

<220>

<221> misc_feature

<222> (13)..(13)

<223> n is a, c, g, or u

<400> 4

nccanccnn ucnc

15

<210> 5

<211> 20

<212> RNA

<213> Artificial Sequence

<220>

<223> Description of sequence: nucleic acid of formula (I): G₁X_mG_n

<400> 5

gguuuuuuuu uuuuuuuggg

20

<210> 6

<211> 20

<212> RNA

<213> Artificial Sequence

<220>

<223> Description of sequence: nucleic acid of formula (I): G₁X_mG_n

<400> 6

ggggguuuuu uuuuugggg

20

<210> 7

<211> 40

<212> RNA

<213> Artificial Sequence

<220>

<223> Description of sequence: nucleic acid of formula (I): G₁X_mG_n

<400> 7

ggggguuuuuu uuuuuuuuuuuu uuuuuuuuuuuu uuuuuuuuuuuu 40

<210>	8
<211>	39
<212>	RNA
<213>	Artificial Sequence

<220>
<223> Description of sequence: nucleic acid of formula (I): $G_1X_mG_n$

<400> 8
gugugugugu guuuuuuuuu uuuuuuuugug ugugugugu 39

<210>	9
<211>	39
<212>	RNA
<213>	Artificial Sequence

<220>
<223> Description of sequence: nucleic acid of formula (I): $GlxMgN$

<400> 9
gguggguggg uuuuuuuuuu uuuuuuuggu ugguugguu 39

<210>	10
<211>	57
<212>	RNA
<213>	Artificial Sequence

<220>
<223> Description of sequence: nucleic acid of formula (I): Gl_xMg_n

<400> 10
ggggtttttttt ttttttttttgg gttttttttttt ttttttttgggt tttttttttttt ttttttggg 57

<210>	11
<211>	42
<212>	RNA
<213>	Artificial Sequence

<220>
<223> Description of sequence: nucleic acid of formula (I): $G_lX_mG_n$

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<400> 11
ggggtttttttt ttttttttttgg ggggtttttttt ttttttttttgg gg 42
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<210>	12
<211>	57
<212>	RNA
<213>	Artificial Sequence

<220>
<223> Description of sequence: nucleic acid of formula (I): ClX_mCn

<400> 12
 CCCCCCCCCC CCCCCCCCCC CCCCCCCCCC CCCCCCCCCC CCCCCCCCCC CCCCCC 57

<210>	13
<211>	51
<212>	RNA
<213>	Artificial Sequence

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<220>

<223> Description of sequence: nucleic acid of formula (I): C₁X_mC_n

<400> 13

ccccuuuuuuuu uuuuuuuuuuuu cuuuuuuuuuuu cccuuuuuuuu uuuuuuuuuu c

51

<210> 14

<211> 42

<212> RNA

<213> Artificial Sequence

<220>

<223> Description of sequence: nucleic acid of formula (I): C₁X_mC_n

<400> 14

ccccuuuuuuuu uuuuuuuuuuuu cccuuuuuuuu uuuuuuuuuuuu cc

42